Community Experience Distilled

Alfresco Share

Enterprise Collaboration and Efficient Social Content Management

CIGNEX DATAMATICS Making Open Source Work™

Amita Bhandari Pallika Majmudar
Vinita Choudhary

[PACKT] PUBLISHING open source* community experience distilled

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BIRMINGHAM - MUMBAI

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She has earned a Masters degree in Computer Applications from Gujarat University, India. She has co-authored two books on Alfresco titled *Alfresco 3 Web Content Management* and *Alfresco 3 Enterprise Content Management*.

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Our special thanks to our families and friends.

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> I would like to thank Packt Publishing for another great opportunity to work again on a very interesting project about Alfresco.

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He started his career with CIGNEX Datamatics in the year of 2004. CIGNEX Datamatics (subsidiary of Datamatics Global Services Ltd.) has been the global leader in Commercial Open Source & SAP Connect solutions for over 10 years. CIGNEX Datamatics provides open source solutions by addressing enterprise requirements across Content Management, Portals & Social Collaboration, e-Commerce, Document Management, Records Management, Digital Asset Management, Business Process Management, Business Intelligence & Analytics, ERP, CRM, Enterprise Mobility, and SOA. The company has expertise in applications and tools such as Alfresco, Liferay, SAP, Magento, Sybase, Adobe, Pentaho, Compiere, Drupal, Intalio, JBoss, and Mulesource.

I would like to thank and dedicate my efforts for this book to my guru H.D.H. Pramukh Swami Maharaj.

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Sapenov founded Cloudcor in 2008. Cloudcor® provides industry leaders and professionals cutting edge insights into cloud computing through expert conferences, research, analysis, and commentary, as well as providing a platform to network with leading experts in the cloud computing industry. UP and Cloud Slam conferences, produced by Cloudcor, Inc.®, are the world's first and largest hybrid format cloud computing events. For more information visit `http://up-con.com` and `http://cloudslam.org`.

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I'd like to thank my parents for giving me life and supporting all my initiatives, my wife, Saule and my sons, Asan and Aidos for being tactful during my work on this book.

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He was also involved in reviewing the book *Alfresco 3 Cookbook*.

> I would like to thank my parents, who taught me that being analytical without emotions, provides only a limited view of the world and its wonder; my wife Payal, who taught me that reason without passion, is insufficient to bring fulfillment.

Sherwin John Calleja-Tragura is currently a Java-JEE Expert and Trainer and also an Alfresco enthusiast. He took MS Computer Science units at the University of the Philippines, Los Baños. He has done several web development projects focusing on Spring MVC, Struts 1 and 2, JQuery, and Hibernate. He was a Technical Consultant before in several huge companies in Manila with emphasis on performance analysis and code optimization. Moreover, he has a strong background on numerical and symbolic computation using Maple and Matlab.

> I would like to thank special people, Genesis Ramos and Geoffrey Mathew Domino, for always being supportive to my career. I would also like to thank Owen for being there always.

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Table of Contents

Chapter 3: Alfresco Share Architecture 61

Chapter 4: Administering Share and Configuring Authentication Access 89

Preface

For a while now, we have been hearing a lot about collaboration in Enterprise space. We speak day in and day out to our customers who have recognized the need to have a tool for use within their organization for better and efficient collaboration. We talk to customers who have done implementations of proprietary software, and have faced all kinds of challenges including vendor lock-in, rigid code base, and expensive upgrades. In our previous book, *Alfresco 3 Enterprise Content Management*, we had first introduced Share. Alfresco had just introduced its collaboration tool back then. The aim clearly was to provide an open source alternative to Microsoft SharePoint, Documentum, Interwoven, and similar software. It is, after all, the most popular open source Java based CMS with over 1.5 million downloads, 50,000 live sites, 74,000 community members, and with more than 150 application extensions in forge.

Share has since evolved and has become a competent tool for collaboration functions within an enterprise. The impressive roadmap which Alfresco provides promises an exciting possibility as it is created using completely open standards. We at CIGNEX Datamatics have implemented Alfresco for many enterprises. We became the Platinum System Integration partner of Alfresco. As part of our implementation, we also train our customers, so that they are equipped with all the information required to manage their systems. We have trained many users, administrators, and developers in Alfresco. This book distils the hands-on approach of our training courses into a concise, practical book.

We have taken a sample and tried to build a case study around it to provide an easier, practical understanding of Alfresco Share. There are step by step examples. We have explained how the out-of-the-box features can best be made use of, as well as the other options that are available, and how they fit into the overall picture. Our aim is to help you take advantage of this book by setting up an efficient and an effective collaboration system for your company and customers.

Your feedback is very valuable to us. You can contribute by reporting any errors you find in the book, making suggestions for new content that you'd like to see in future updates, commenting, and blogging about it.

What this book covers

Chapter 1, *Building a Corporate Collaboration Strategy* includes an overview of Share and how best it can fit your requirements. It explains various use cases of using Share for your document management, records management, web content management, and collaboration requirements, and also a future roadmap.

Chapter 2, *Installation and Configuration* includes tips to choose the right installation for you, and also installation of the software and explains how we start using it.

Chapter 3, *Alfresco Share Architecture* describes how Alfresco Share is built on top of Spring Surf and is intimately connected with this infrastructure technology. It talks about different types of web script used in Share and the flow of accessing the Repository using the web script. It also focuses on how the content is stored in the Alfresco Repository and helps in understanding Share Configuration Architecture.

Chapter 4, *Administering Share and Configuring Authentication Access* describes how Share Administrators are able to manage user access in Alfresco Share. Users will learn that Alfresco can be integrated easily into a variety of authentication systems. It also describes various administrative features like Node browser, manage deleted items, publishing of content, and various Repository features.

Chapter 5, *Managing and Configuring a Site* talks about managing Alfresco Share content and collaborating data related to a project, or area of interest, that is grouped together into something called a site. It explains about managing the site and membership of users. It will also give an introduction about the different themes that can be used for building a site. It describes the dashboard entry page similar to that of the user dashboard, which contains information specific to the site. This chapter explains how site managers are able to customize the site dashboard.

Chapter 6, *Collaboration Features in Share* talks about a number of built-in social media collaboration tools, like wikis, blogs, and data list entries and how project members can contribute content and share their expertise with other site members by creating entries on the site wiki, blogs, and so on. It also explains the features like creating events and managing them, various links, and discussion forums.

Chapter 7, *Document Library* includes using Alfresco as a smart document library; automatic version tracking and control. Folder creation, document uploading, content permissions, and access are explained.

Chapter 8, *Implementing Workflow* explains how business rules can be applied to documents within the document library to automate the movement of documents through business processes. The automated flow of documents through complex business processes and how it can be initiated from within Share is also detailed.

Chapter 9, Configuring Share helps users to manage customization easily and also describes some of the advance configurations for site management.

Chapter 10, Packaging and Deploying Share explains how to set up a development environment. It also talks about project structure to be followed in Share and different approaches for deploying custom code.

What you need for this book

The default installation of Alfresco software requires installing the Windows Enterprise version downloaded from the location (`http://support.alfresco.com/ics/support/default.asp?deptID=15026`). You can also download community version from `http://wiki.alfresco.com/wiki/Download_Community_Edition`. Select the download package, and you will be asked for the username and password of the Alfresco Content Community.

At the time of writing this book the latest version was Alfresco Enterprise 4.0 and installer file `Alfresco-enterprise-4.0.o-installer-win-x64.exe`.

This installer will install:

- Java Development Kit (JDK) [If no JDK is installed on your machine]
- Apache Tomcat
- Portable Open Office 3
- Alfresco Explorer web application, packaged as a Web Archive (WAR)
- Alfresco Share web application, packaged as a Web Archive (WAR)
- SharePoint protocol support
- Postgres SQL
- Swftools
- ImageMagick

To install and run Alfresco, you need at least 500 MB disk space and 512 MB RAM on the desktop or server.

Who this book is for

If you are a business user or content manager looking to implement a collaboration strategy for your enterprise, then this book is for you. This book is not a developer guide. It focuses on business needs rather than technical syntax. However, it helps in understanding the capabilities of Alfresco Share through case study.

Alfresco is particularly suitable for Business Users who want, or need, to set up a flexible Enterprise Collaboration for their clients, be that for demonstration or multiple site generation for various business needs. It will help you set up an infrastructure for supporting multiple sites using Alfresco Share, enabling a shortened development cycle and making the best use of collaborative features. This book gets you to that result quickly and effectively.

Although no knowledge of Alfresco is presumed, exposure to XML, templating language, YUI and concepts of web scripts and Document Management will help you to get the most from this book.

Conventions

In this book, you will find a number of styles of text that distinguish between different kinds of information. Here are some examples of these styles, and an explanation of their meaning.

There are three styles for code. Code words in text are shown as follows: "Note that the `scheduled-action-services-context.xml` file has two blocks of XML configuration."

A block of code will be set as follows:

```
<cm:person view:childName="cm:person">
<cm:userName>fredb</cm:userName>
<cm:firstName>Fred</cm:firstName>
<cm:lastName>Bloggs</cm:lastName>
<cm:email>fredb@alfresco.org</cm:email>
```

When we wish to draw your attention to a particular part of a code block, the relevant lines or items will be made bold:

```
<property name="stores">
  <list>
    <value>workspace://SpacesStore</value>
  </list>
</property>
<property name="queryTemplate">
  <value>PATH:"/app:company_home"</value>
</property>
<property name="cronExpression">
  <value>0 0/15 * * * ?</value>
</property>
<property name="jobName">
```

```
      <value>jobD</value>
    </property>
    <property name="jobGroup">
      <value>jobGroup</value>
    </property>
```

Any command-line input and output is written as follows:

```
> chmod a+x ./alfresco-<version>-linux-community.bin
```

New terms and important words are introduced in a bold-type font. Words that you see on the screen, in menus or dialog boxes for example, appear in our text like this: "Go to a space and add a file by clicking on the **Add Content** link."

> Warnings or important notes appear in a box like this.

> Tips and tricks appear like this.

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1

Building a Corporate Collaboration Strategy

Today's enterprise scenario emphasizes efficient teamwork for greater productivity. This requires collaboration of inter and intra team levels. The fundamental concept behind collaboration is that groups can achieve more than individuals can. Collaboration allows individuals with complementary areas of expertise to create better results, faster than before. With this chapter, the aim is to introduce you to Alfresco Share, to create a collaborative framework for your enterprise. In this chapter, you will learn through a case study.

By the end of this chapter, you will have learned about:

- Collaboration capabilities in Alfresco Share
- Creating a strategy for developing collaborative tools
- Types of Alfresco Share collaboration sites

Alfresco Share

Alfresco Share, also referred to in the book as just **Share**, is built on the enterprise-class document repository that Alfresco offers, and delivers out-of-the-box collaborative content management. It simplifies the capturing, sharing, and retrieval of information across virtual teams. Teams, or project members, can rapidly find relevant content, experts, look at past or similar projects, and keep on top of any relevant changes to make them more efficient.

Share is focused on collaboration tasks and it includes integration with popular Blogging, Wiki, and Forum/Discussion products out-of-the-box. It provides a great interface into a more traditional document management library (think folders) as well. Keep in mind that all the site content and documents are stored in the Alfresco Repository.

Share is an independent client application, which accesses the repository through web scripts. It is built on the Alfresco Spring Surf platform. Share provides a paradigm for creating collaborative applications by aggregating Surf components and incorporating new Surf components as they are developed. Alfresco Share is a web application that runs on a separate machine apart from the repository.

With Share, users modify workspaces to fit their collaborative requirements inside, or outside, the organization. Peers can be invited to share and collaborate around the project and its content. With the addition of Share, Alfresco delivers a "Web 2.0" application leveraging Flash and AJAX with a polished interface any business person will enjoy.

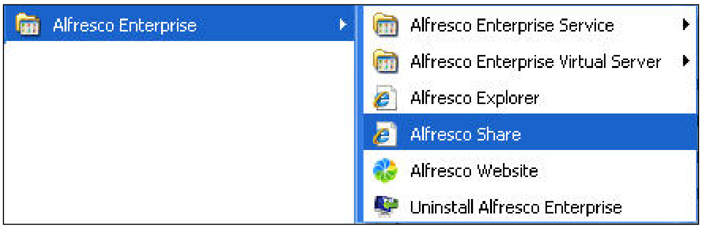
Features such as Document Library, Search, Activity Feeds, Virtual Teams, personalized dashboard, N-tier Architecture, Content Management Interoperability Services (CMIS) support make it a really competent tool for collaborative content management. Share also offers you:

- Simple online editing of MS Office documents
- A document previewer, including zoom, auto fit page/width, thumbnails, and full screen view to allow easy viewing and reading of content without requiring any download
- Favorite sites: Sites can be added to a personal list of favorite sites to allow quick access
- New calendar, including drag-and-drop event updates, overlapping event support
- New links components for capturing links to URLs
- One button click access to the Alfresco Repository

The URL to access the Share application is different from the URL used for Alfresco Explorer. The Alfresco Share application can be launched in a web browser using the following link:

```
http://<server name>/share/.
```

If you have already installed Alfresco in Windows, then you can invoke the Alfresco Share application by selecting the application as shown in the following screenshot:


Alfresco Enterprise
Alfresco Enterprise Service
Alfresco Enterprise Virtual Server
Alfresco Explorer
Alfresco Share
Alfresco Website
Uninstall Alfresco Enterprise

Collaboration capabilities of Alfresco Share

Share allows you to collaborate easily contents and projects with a globally dispersed team through its modern, browser-based interface. Alfresco Share offers a great experience for team collaboration because it builds on top of Alfresco's well proven and scalable content services that enable true ECM capabilities.

Share offers users, developers, and administrators a host of features. The simple and intuitive dashboard of Alfresco Share gives the users a bird's-eye view of what to expect. The dashboards offered are the Share User's Dashboard and Site Dashboard. The dashboards are easy to configure. A host of layout templates are available to choose from, along with a drag-and-drop dashboard customization, whereby the user can place the dashlets of choice in the column of choice. Site activities, site and user profiles, calendars, RSS feeds, and so on are available for users. Share supports multitenancy which allows the same instance of Alfresco to behave like separate instances for multiple tenants hosted on it.

Site management with Alfresco Share is fairly simple with customizable page components. Some of these are: Site Finder which aids in searching for public sites. Managed, e-mail-based, invite processes for existing users or new (non-registered) users to join the site are available. New users can automatically register. Managing pending and accepted site invites and cancelling invites are possible. A user managed personal lists of favorite sites for quick access and site profile information is at hand to the logged in user.

The Alfresco Share user interface is an AJAX-driven UI which is built using the Yahoo YUI Library. Dynamic panel resizing is possible. Share has drag-and-drop layouts for dashboard and calendar. Inbuilt Adobe Flash Document Previews allow zoomed, thumbnail, and full screen views of the document content. Share also gives a thumbnail view of the content. The URLs can be bookmarked and e-mailed.

The search in Alfresco Share is powered by the **Lucene Search** engine `(http://lucene.apache.org/java/docs/index.html)`. Share offers a *Google style* simple search, where a single search box searches across all site contents, including metadata and full text. You can search within a particular site, or across all sites.

An Alfresco Share collaboration site has a number of site components. Some of these are document library, blog, wiki, calendar, discussion, and links.

Document library

The Share document library has a hierarchical (tree) structure with folders and subfolders which allows for drill-down browsing. You have the option of uploading files one by one, or performing a bulk upload from your local drive, or the Alfresco Repository. The documents in these folders have an associated thumbnail. The thumbnails are generated automatically for a wide range of formats, including MSOffice, OpenOffice, Image, and PDF. A complete Flash-based document preview is available. No download or client application launch is required to make use of this functionality.

Simple editing support for MS Office documents is available. For this, the user's machine must have Windows and IE6+ browser for best compatibility. Commenting, moving, copying multiple items in a single operation, audit trail, and versioning are offered.

You can filter the list of files based on tags, recently added/modified, files you/others are editing, and so on. Rich document metadata, including name, title, description, MIME type, tags, and RSS feeds for recent changes is also included. Fine-grained permissions based on roles and other parameters can also be defined.

Blog

Easy to create blog posts with commenting and RSS features are included out-of-the-box in Alfresco Share. Users can subscribe to RSS feeds for the latest blog posts. It is possible to filter a list of blog posts based on *tags*, *draft*, *latest*, and *published internally* or *externally*. External blogs can be very easily configured through Alfresco Share and the content can, thereby, be published externally as well. Blogging sites including TypePad and WordPress are supported out-of-the-box. Finding old posts based on published dates, and so on, is possible through the **Blogs Archive**.

Calendar

The calendar in Share offers multiple views such as day, week, month, and agenda. Creating an event and specifying the details can be done by clicking on the **Add Event** button. You can drag-and-drop events to update the event listing. Tagging and filtering of events is also available. The Share calendar also supports iCal `(http://en.wikipedia.org/wiki/ICal).`

Discussions

Users can create their own discussion topics and post their queries and responses. Threaded discussions can be created in Share and users can be invited to participate in the same. These discussions are dynamically filtered by tags, latest topic, most popular, all topics and users' own topics. RSS feeds are also available for subscription.

Wiki

Share allows for simple wiki page creation. A GUI-driven page editing is also possible. A standard wiki markup for page linking is at hand due to the **cross-page linking** feature. Users can create a target page automatically, even if currently it is a blank page. To do this, click on the link to the target. It opens the target page and editing can be done.

The wiki pages are automatically versioned and a version history is maintained. The previous versions of the page are available for viewing. Automatic redirect links are created when the target page has been renamed.

Dynamic wiki page filtering based on tags, recently modified, recently added, users' own pages, and main page is offered.

Links

Users can capture links (URLs) to any location. Links can be specified to open in the same or new window or tab. Tags included with the links, links added by the user, and most recently added are the various ways by which links can be filtered.

Lists

Users can create and share lists of items. Lists are used to capture any tabular information and are shared with team members, removing the need to use spreadsheets as list management tools. These lists can be of different types. A number of these like contacts, data, and so on are pre-defined in Share.

Strategizing for developing efficient collaboration

Enterprises are planning, or are already in the middle of, deploying a collaboration technology to their organization at a global level. Most organizations are looking for ways to reduce costs, create efficiencies, consolidate multiple repositories of information, innovate, connect people globally, change corporate culture, and simplify the end user experience.

Strategizing for effective implementation of collaboration across an organization can add a lot of value to the practices in place. Important steps in such a case are:

Business context definition

Defining collaboration as synchronous or asynchronous is not enough, and neither is making a decision to invest in Technology A or Technology B.

The best approach to deploying any collaboration technology is to have a business context in mind. Multipurpose collaboration platforms offer many features and capabilities. Part of a strong strategy is having a focused business context around social networking, team spaces, communities of practice, project management, knowledge management, business process management, and so on.

Demonstration of real business value and evangelizing that throughout your organization, to further drive the adoption and creation of a perception of the collaboration technology as a productivity tool is vital.

Recognizing and applying the technology in a specific business context will help stakeholders see how collaboration can alleviate business pain points, surface information, and impact employee engagement and morale.

Organization structuring

It is important to identify the levels at which the collaboration strategy is to be applied. Is the collaboration external, internal, global, or regional? Permission levels and access rights are also important. This is because information otherwise can be messed within these eco-systems, combining confidential information with more public content.

Defining your audience, the type of information to collaborate on, and the overall scope of the collaboration is important. This will help to focus your efforts on, deployment, or investigation of a collaboration technology, as these platforms all offer several components from social computing to team sites to portals and workflows.

It may happen that once you understand the degree of openness, you may also realize that third-party solutions for administration or security might just be a mandatory requirement to protect the intellectual property and sensitive information.

Be specific

Often—while planning projects—goals and objectives tend to be high level and don't really provide a concrete definition of success. Project management needs to be effective. Setting the right goals and objectives will ensure stakeholders, decision makers, and users are on the same page when determining if the collaboration strategy is a success.

Usually, the specific results which users and executives expect to see include:

- Cost reduction
- Competitive edge
- Is the objective just to improve collaboration within project management
- External collaboration with business partners or clients is effective
- Better employee engagement
- Better search-ability of information and documents
- Compliant
- Executive dashboards
- Or, all of the above

Information sharing, communications, social networking, and an integrated user experience across all tools should be the criteria to evaluate the technology to be used. Prioritizing and assessing gap assessment concerning global operations, regional deployments, and local administrators are needed. Not only could pricing and licensing terms be attractive, but benefits may also accrue in the areas of service and support.

Collaboration is generally unstructured when compared to traditional and more structured taxonomies of document or knowledge management. No matter how you have defined your collaboration strategic goals, there is ONE objective you MUST have as part of your overall strategy: a standard information architecture and governance of the collaboration platform needs to be put into place. These are necessary for any successful collaboration strategy and deployment.

Benefiting with Alfresco Share

The following are the benefits of Alfresco Share:

- Alfresco Share supports rapid application development with components produced using lightweight, standards-based scripting.
- Organizations can use the existing investments in hardware and software because of Alfresco's open standards architecture.

- With Alfresco Share, you have an Alfresco that has been built on leading industry standards, including; REST web services, RSS, Atom publishing, JSON, OpenSearch, OpenSocial, OpenID, Web Services, JSR 168 Portlets, JSR 170 level 2, JSF, CIFS, FTP, WebDAV, SQL, ODF, and CMIS.
- You can bring together virtual teams consisting of colleagues, partners, and customers with user invitations and easy control of permissions for better collaboration.
- Alfresco's open source subscription model allows customers to implement an enterprise-wide collaboration tool at a low cost, without incurring huge expenses with the traditional licensing models.
- Share supports most standard interfaces such as IMAP, CIFS, SharePoint Protocol, and so on, and does not require users to install any software or a plugin on their local machine.
- Alfresco was the first ECM platform to offer Microsoft Office SharePoint Protocol support. Delivering lower cost collaboration with no additional client installation required and allowing choice for hardware, database, operating system, application server, and portal products.

Types of Alfresco Share collaboration sites

An Alfresco Share site is a collaborative area for a project or some tasks undertaken. These can be both public and private sites.

Private sites are visible only to site members. A Site Manager must extend an invitation for you to join the site in order for you to become a member of the private site.

Public sites can be viewed by all, but be worked on only by site members. The work that can be done includes working with Wiki pages, Discussion topics, content in the Document Library; creating events in the site Calendar; creating, commenting on, and publishing Blog posts, internal and external. The tasks that can be performed by a member user depend on the role assigned. In order to become a site member, you can either make a request to join the site or accept an invitation to the site from a Site Manager.

When a site appears in your search site results, and is marked as *Moderated*, you can send a request to join the site. This is the site that has a restricted membership, and can only be accessed if the site administrator grants the access.

From the **Sites** option on the toolbar, you can create a new site or display the **Site Finder** component. This component allows you to search for a particular site or display a list of all sites you can access; the sites created by you, sites (public and private) of which you are a member and Share public sites. From the site list, you can enter a site, delete a site, and manage your site membership by joining or leaving individual sites.

Team collaboration site

This is a site which is used mostly by users from within the organization. These include people that are a part of a project team, department, and so on. This helps various team members to collaborate easily on a long term or a short-term basis.

External collaboration site

This is a site which can be used by people form within an organization, and outside of it. The users here may be invited by the site administrator to be a part of the site. This sort of site is useful if there are members from different areas working together and need a constant information sharing. The users can be invited to be a part of the site or can request to be made members of the site.

A Case Study to explain Alfresco Share as a collaborative framework

You can use Alfresco Share to build a collaborative framework, where teams can collaborate; to create content, review content items through discussions, share content, and discuss general topics and ideas.

We will use the case study of a marketing site created for a new product. This will be a case study that will be used throughout the book as the basis for explaining various concepts. This site will be a resource available to both internal and external members of the company. It will be a private site and membership will be by invitation only. Members share information on the joint marketing of a new product. Members collaborate on the design and creation of new product positioning documents. The marketing strategies, the various activities and events planned around the marketing of the product, and the marketing material such as brochures, presentations and so on, will be the sort of content stored in the content repository for the site. The site centralizes contacts and event information and provides for viewing the status of the product marketing activities.

With this case study, we will:

- Set up an admin dashboard and add credentials
- Create a collaboration site for the marketing team
- Prepare the site for collaboration
- Invite users to the site
- View the site activities

Understanding the requirements

The new product site will focus on various marketing activities to be undertaken for the promotion of the site.

The product site should be efficient enough to enable collaboration between its members. They should be able to document the various plans and strategies. The documents, presentations, plans, and other details should be available to other members, as per their roles and access rights.

Members should be able to have discussion around various strategies and action items. Blogging should be possible and publishing the posts to an external blog site would be another advantage.

Links to competitors' sites, and other useful external content, should be captured and accessible from the site dashboard.

Users should be able to see the site calendar and be aware of any important events, meetings, and deadlines. This should also be available to them in their mailbox. Strong workflows to capture the information flow are required. This should help ensure that tasks are completed on time.

The administrator should be able to keep track of the content and know, at all times, who is working on what piece of information.

Document versioning, transformation, task scheduling etc are all features that are required.

The above details will form the basis of the marketing site that we shall create. We will see in the later chapters how Share handles these and how some of the functionality can be customized and extended to suit the user's parameters.

Understanding the users of the marketing site

We envision two types of users for the new product marketing site that we are going to create. These will be users from within the organization and external users who have permission to access the site and its content.

Permissions define access rights on spaces and contents. Out-of-the-box, Alfresco supports extensive permission settings on spaces and contents. A more detailed description is provided in later chapters in the book.

Permissions are identified by a string. A particular permission, for example `ReadChildren`, may be granted or denied to an authority: a user, group, administrator, owner, and so on. The children of a node, subfolders, or files in a folder will inherit permissions from their parents. Therefore, by default, the files in a folder will inherit their permissions from the folder. Permissions set on a node take precedence over permissions set on the parent nodes. Permissions inheritance may be turned off for any node.

A permission group is a convenient grouping of permissions such as `Read` made up of `ReadProperties` and `ReadChildren`. Each one of these permissions is applicable to node, space, space properties, subspace, content, content properties, and business rules. The following are typical permissions groups:

- `Read`
- `Edit`
- `Add`
- `Delete`

Roles are a collection of permissions assigned to a user. Each role comprises of a set of permissions. Alfresco provides out-of-the-box support for the following roles:

- **Consumer** can read the content
- **Editor** can read and edit the content
- **Contributor** can read and add to the content
- **Collaborator** can read, edit and add to the content
- **Coordinator** can read, edit, add to and delete the content (full access)

Alfresco roles and permissions may be extended to support your requirements.

The Share site roles are as follows:

Site consumer	Read
Site contributor	Read, upload
Site collaborator	Read, upload, checkout, edit
Site manager	Full control

Internal users

There will be an administrator of the site. This may, or may not, be the same as the administrator of the Alfresco System. This will be a person who is an employee of the organization developing the new product. The administrator will have the right to create the site. This user will then invite people who he/she wants to be the member of this site and define their roles in the site.

The invited members will see the invite when they log into the Alfresco Share system, and if the solution is integrated with the mail server, a notification of the invite can be sent as an e-mail too.

The users who accept the invite will be listed as *Site Members* and will have access to the site and the content, as per their permissions and roles.

In this case, the internal users will be members from the marketing department, sales department, product development team, strategists, and so on.

External users

Alfresco Share also lets you invite external users, or users that are not part of the organization, to be a part of your site. The name and the e-mail address of the user needs to be specified and an e-mail notification will go to the user to inform them of the invite and the role.

The people from an external branding agency, market research agency, vendors, and partners, if applicable, may be invited as members of this site.

In the following chapters, we will see how the site is created, customized, members added, definition of roles and permissions, and collaboration activities in action.

Summary

Employees are adopting social tools to effectively interact personally with others at an astounding rate. Tools that enable the same type of peer-to-peer network building among employees are enterprise-ready, but most enterprise collaboration strategies are not ready. For enterprises, it is important to understand what value the social collaboration tools add to traditional collaboration in order to build or update the organization's collaboration strategy.

The Alfresco Share framework is best suited for collaboration. You can define collaboration at an organizational level or at the department level or at a smaller group level. You can also define individuals on a space (on an ad-hoc basis) and allow them to collaborate on the content. You can share your content with external systems or users using the outbound RSS syndication features of Alfresco.

Leveraging Flash and AJAX with a richer user interface for the more traditional document management library Share offers a very intuitive user experience. Share's ability for rapid user site creation, site user invitation, permissions, and management is noteworthy.

Encouraging a culture of collaboration across the organization is required to effectively implement collaboration solutions that include social collaboration.

In the next chapter, you will learn about the pre-requisites and components for installing Share on different operation systems such as Mac, Windows, and Linux, and the various configurations and validations required to use Alfresco Share.

2
Installation and Configuration

The beauty of Alfresco lies in the way it can be included in your preferred environment. It does not ask for a change in your existing setup. The pre-requisites for installing Alfresco are basic. It supports a broad technology stack. This chapter is aimed at enabling you to understand and carry out various aspects of the Alfresco Share installation and configuring various components around it.

A basic understanding of Alfresco architecture, various installation options, and the key terminologies used are all a part of this chapter. The Alfresco development environment needs to be set in place before we can work with the tools.

The installation procedures can also vary depending on the kind of system you have in place to set up and configure Alfresco. First, we will go through the installation procedures for a Microsoft Windows-based system. Linux and Mac-based systems also follow similar steps. We will go into the details of the same, later in the chapter.

At the end of this chapter, you will have learned the following:

- Pre-requisites for the installation
- Configuring the Alfresco setup
- Setting up the Alfresco development environment

Which installation option is suitable for you?

Alfresco is a 100 percent open source software developed using open standards. It can be operated on various operating systems, relational databases, application servers, web browsers, portals, and it supports various languages.

Enterprise and community editions

Alfresco currently provides two types of product download options: community and enterprise. The latest release of Alfresco has an Enterprise Edition, as well as a Community Edition.

Both the options have the same code base and features, and are 100 percent open source. For both the options, you can use Alfresco documentation (wiki), community support (forums), and community contributed add-on products. **Alfresco Community Lab Network** is free. Alfresco Enterprise Network includes the CPU license fee.

The Alfresco Community Labs Network is an unsupported product and is mainly designed for developers and technical enthusiasts in non-critical environments. Alfresco Community Lab releases Early and Often and renders a daily build, offering the latest functionality. It doesn't provide scalability, high availability certifications. I would recommend this to use as the research vehicle for new features and as the platform for the Alfresco Community, and consider it as a test drive before you install.

If you are implementing Alfresco for a Major Corporation, financial, insurance, government or healthcare organization, I would recommend you go for Alfresco Enterprise Network support. The primary benefit is that with the support of Alfresco, and its certified partners, you would get a stable, reliable, certified, and supported application with a warranty and indemnity. Your Alfresco version will be certified on all available stacks such as Linux, Windows, MySQL, Oracle, and so on. You will benefit from Alfresco support, which includes problem resolution, compatibility advice, migration advice, and upgrade support. For mission critical applications,
you will get 24 x 7 support from Alfresco experts.

> We have used Alfresco Enterprise Version 3.4.3 for the purpose of this book. You can download the community version of Alfresco 3.4.3 from the following URL:
>
> `http://wiki.alfresco.com/wiki/Download_and_Install_Alfresco`.
>
> You can download the enterprise version on Alfresco 3.4.3 from the following URL:
>
> `http://support.alfresco.com`.

Operating Systems—Windows, Linux, UNIX, MacOS

Choosing an operating system to run Alfresco will be based on various factors. For some companies, it depends on in-house expertise. For example, if you have administrators and IT staff who can easily manage business applications running on Microsoft windows platform, then your choice could be to go with the Windows operating system. For some companies, it is based on the integration requirements with the existing systems.

If you do not have any preferences, I would recommend you go with the Linux operating system for production use. The Linux source code is freely distributed. Tens and thousands of programmers have reviewed the source code to improve performance, eliminate bugs, and strengthen security. No other operating system has ever undergone this level of review. The key advantages of Linux are as follows:

- The best technical support available
- No vendor lock-in
- Runs on a wide range of hardware
- Exceptionally stable
- Supports many tools and applications you need
- Interoperates with many other types of computer systems
- Low total cost of ownership

Databases—Oracle, MS SQL Server, PostgreSQL, Apache iBATIS

If the Microsoft Windows operating system is the OS of choice, then the natural choice for you could be the MS SQL Server. If you already have an Oracle license, then the Oracle database is also an option. Alfresco now comes bundled with, and supports, the PostgreSQL database.

Alfresco has started using Apache iBATIS. It also is no longer using Hibernate from Version 3.4 onwards. The use of iBATIS allows a better level of control over the data access layer. This ensures scalability and support for large repositories and large deployments which Alfresco handles.

If you do not have any database preference, it is recommended that you go with the PostgreSQL database which is bundled with the Alfresco you procure.

Application servers—Tomcat, JBoss

Alfresco runs on any J2SE 5.0 compliant application server. Hence, there are no application server specific dependencies. However, it is important to make a choice of application server before moving into production.

Alfresco uses the **Spring** framework and not the Enterprise Java Beans (EJB) framework. Therefore, there is no dependency on JBoss or any other application server which provides the EJB container. Spring is an open-source application framework for Java/JEE. The Alfresco Repository uses the Spring Framework as the core foundation of its architecture. If you are developing a standalone application, then Tomcat might be a good option. Apache Tomcat powers numerous large-scale and mission-critical web applications across a diverse range of industries and organizations. It is the most widely accepted web application server on the market.

On the other hand, you must consider using the JBoss application server, which has the highest market capture (more than 35 percent) in J2EE-based application servers in the world. JBoss internally uses Tomcat and hence, you get the benefits of the Tomcat servlet engine as well.

Alfresco utilizes JBoss cache's ability to distribute and maintain data caches, making it possible to build large-scale systems that outperform traditional enterprise content management systems. Alfresco also utilizes the clustering, failover, and load balancing facilities of the JBoss application server to increase scalability. Alfresco's business process management features are powered by the JBoss JBPM tool.

If you have already invested in JBoss, then Alfresco provides a complementary industry-leading enterprise content management technology to the JBoss enterprise middleware system suite.

Portals (optional)—JBoss Portal, Liferay

It is optional for you to go with a portal of your choice; if you already have an enterprise portal you can integrate Alfresco with it. If you do not have a portal in place and you would like to leverage the portal framework, then you can consider using either the JBoss portal or the Liferay portal. Both of these are based on J2EE technology; both of them are open source and open standards-based and both of them have the Alfresco built-in support.

The **JBoss Portal** provides an open source platform for hosting and serving a portal's web interface, publishing and managing its content, and customizing its experience. While most packaged portal frameworks help enterprises launch portals more quickly, only the JBoss Portal delivers the benefits of a zero-cost, open source license combined with a flexible and scalable underlying platform.

Liferay is the most downloaded and popular open source portal with 40,000+ downloads per month. It runs on top of any J2EE servlet such as Tomcat, so a full installation of JBoss is not required, but can run against most full application-servers out-of-the-box including JBoss, JRun, BEA, WebLogic, and Orion. It has a complete set of web service interfaces to the portal. Liferay supports 800+ portlets (products) and has a wider adoption in the market.

Accessing the application

No installation or configuration is required for the Alfresco user interface. Any number of web browsers can connect to the application without prior client installation costs. The out-of-the-box installation comes with Alfresco Share and the Alfresco Share web client where you can connect to the Alfresco Repository through web-based applications.

Apart from these applications, Alfresco out-of-the-box installation supports various client applications to access the Alfresco content with web services or protocols such as FTP, WebDAV, CIFS:

- **File Transfer Protocol** (**FTP**): It is useful to transfer files from your local file system to the remote server.
- **WWW Distributed Authoring and Versioning** (**WebDAV**): It is primarily designed for editing and managing files on remote web servers in a structured way. For example, an application like Adobe Photoshop can directly open and edit a file in the Alfresco content repository. This gives you the flexibility of using your own favorite editor to edit the content on the Alfresco server.
- **Common Internet File System** (**CIFS**): It maps the Alfresco content as your local file system folder.
- **Web Services**: Most of the ECM products, in the market-store content are in a proprietary format, which is like a "black box". The Alfresco content is stored as per the JCR (Java Content Repository-JSR 170) open standards. Any JCR-compliant client application can read the content which is stored in the Alfresco Repository. This is one of the key selling points of Alfresco. An API is provided, out-of-the-box, so that you could connect to the Alfresco Repository from your applications through web services or JCR integration.

Software requirements

Depending on your system, you can install Alfresco by using one of the following methods:

- Using an installation wizard, which contains the required software and components you need
- Using a standard `WAR` file to deploy on an existing application server

There are a number of different installation options available to you, each of which you can choose, depending on what is already installed on your system. By choosing an installation file that contains only the necessary components, this lets you reduce your download time. For example, if you already have a JDK installed, you can download an installation file that does not contain JDK. The following is the list of software you need on your machine before you install Alfresco:

Component	Recommendation
Java SE Development Kit (JDK)	The `JAVA_HOME` environment variable must be set to the location of the JDK installation. JDK 6 by Sun Microsystems is the recommended version.
Application server	Alfresco runs within an application server. Alfresco runs within Tomcat. An Alfresco-Tomcat bundle is also available for the installation. Alfresco can also be installed on other application servers such as JBoss, WebLogic, and WebSphere. If you wish to install Alfresco within another application server, use the Alfresco WAR file.
Database	Alfresco comes preconfigured with the PostgreSQL database. You also have the option of using one of the supported databases.
OpenOffice.org	Alfresco uses OpenOffice for transforming documents from one format to another, for example, a text file to a PDF file. If you do not install OpenOffice, you will not have access to the transformation functionality. Use the latest (stable) version of OpenOffice.org.
ImageMagick	Alfresco uses ImageMagick for image previews.
Flash Player	Flash Player Version 10.x is required to upload multiple files and view Flash previews. If Flash is not installed, then the bulk upload option will not be visible.
SWF Tools	If you do not install SWF Tools, you will not see PDF previews. Alfresco Share uses the PDF2SWF utility for previewing PDF files.

Production environment verification

Let's take a look at the architecture on which Alfresco will run, and also for verifying the production environment prior to installing Alfresco.

Architecture validation

Carry out the following steps:

1. Check if your preferred environment is supported by Alfresco. A support stack list is available on `www.alfresco.com.`
2. Validate the hardware in terms of the CPU and I/O subsystems. This will help ensure a good response time.
3. Tune your database. Alfresco does not provide support to tune and maintain your database. It will have to be carried out by the Database Administrator at your end.
4. Ensure your OS is on the Alfresco Support Stack list.
5. Tune JVM and verify that it is certified to be used with your Alfresco.

Validating the environment

Carry out the following steps:

1. Check that the server host name can be resolved in DNS.
2. Validate the listening ports and the JVM Version. JVM 1.6 is the required version.
3. Check the directory names for spaces.
4. Check the read and write properties of the directory that will be the Alfresco Repository.
5. Verify the database connections. Validate that the character encoding for the Alfresco database is UTF-8.
6. Ensure that the MySQL storage engine for Alfresco is InnoDB.
7. If you plan to install third-party tools such as OpenOffice and ImageMagick separately, ensure that you have the appropriate versions. OpenOffice needs Version 3.1 or newer and ImageMagick Version 6.2 or newer.

Installation files

There are a number of installation files available to choose from, based on your preference depending on what is already installed on your system.

The setup wizard's option installs all the components you need for running Alfresco. All the recommended software is installed and the configurations are set. When you install Alfresco using the setup wizards, it runs within an instance of the Tomcat application server. Use this file if no Alfresco component is installed on your system.

If you want to install Alfresco within an existing Tomcat or another application server, use the Alfresco WAR file. If you use the WAR file to install Alfresco, you must install the required additional components manually.

Installing Alfresco using the setup wizards

This is the easiest way to install Alfresco. The wizard installs all the software and components that you require for running Alfresco.

Installation folder structure

Let's take a look into the installation directory `<alfresco_installation_folder>` to look at the folders:

- `alfresco`: All the shortcuts to installing, uninstalling, starting and stopping Alfresco as a Windows service, and restarting, stopping and starting of Alfresco as a normal console application, from the **Start** menu of Windows points to this folder.
- `alf_data`: All the Alfresco content and Lucene indexes are stored in this directory.
- `amps`: All the **AMP** extension files are required to be put here and then use the **apply_amps** script to perform the update.
- `bin`: This directory contains the sub-installations of Alfresco. The main installation scripts in the `alfresco` directory calls the subscripts in this folder to start the sub Alfresco `Tomcat` component of the installation, creating, and setting up the permissions for the Alfresco PostgreSQL database. This folder is very useful for people going for the manual installation rather than using an installer.

- `extras`: Contains additional files such as space template for the records management file plan which can be imported into the Alfresco Repository.
- `java`: As is evident by the name, it contains the Java Development Kit. All the Alfresco development is done using Java as the core programming language.
- `licenses`: This directory contains the licenses for Alfresco, PostgreSQL, Apache, and licenses for the other third-party applications used inside Alfresco.
- `tomcat`: Again, as evident from the name, this directory holds the Tomcat installation where the Alfresco application is deployed as a WAR file. You can see the `alfresco.war and share.war` files in the `webapps` subfolder of this directory.
- `Postgresql`: This directory contains the scripts and other essential database related files and folders.
- `openoffice`: This directory contains the entire portable office suite installation that is used for word processing, spreadsheet processing, and so on.
- `virtual-tomcat`: This folder contains the customized tomcat, which is used for previewing the files in WCM.
- The `README` file gives information about using CIFS and some troubleshooting tips.

You can uninstall the program by clicking on the `uninstall.exe` application.

Installing on Windows

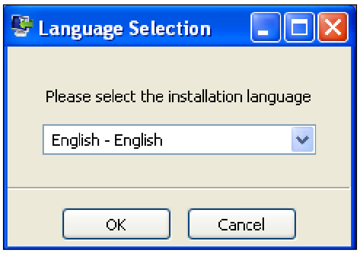
This installation wizard installs Alfresco and additional software, including OpenOffice, JDK, SWFTools, ImageMagick, and Tomcat. The following steps are based on the assumption that this is the first Alfresco installation on your machine.

You can choose to download one of the following installation files:

- For 32-bit systems: `alfresco-enterprise-3.4.3-installer-win-x32.exe`
- For 64-bit systems: `alfresco-enterprise-3.4.3-installer-win-x64.exe`

Now you can carry out the following steps:

1. Double-click on the downloaded file. Under the **Setup Alfresco Enterprise** window, click on **Next**.
2. Select the installation language, as shown in the following screenshot. This sets the language to be used for the remainder of the installation wizard:



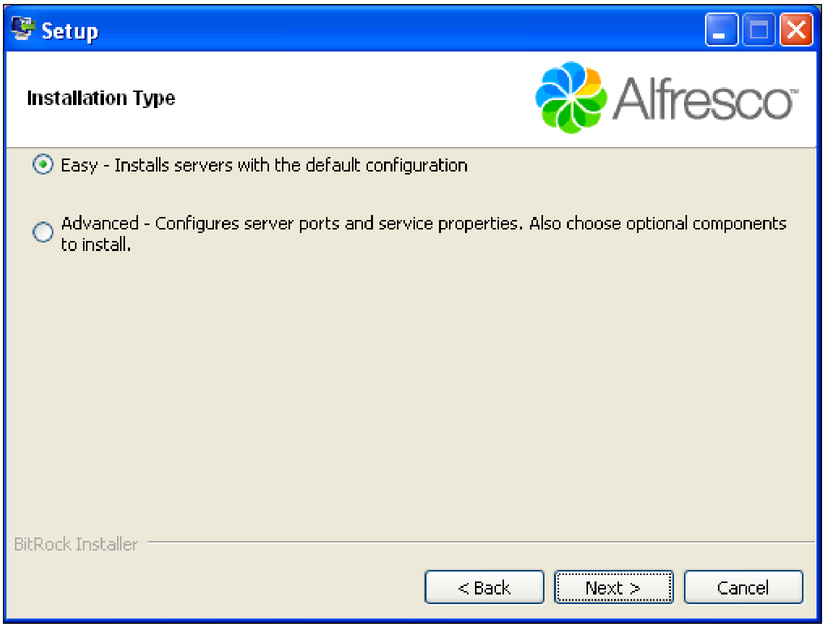
Language Selection

Please select the installation language

English - English

3. In the **Installation Type** window, you can choose either of the following options:
   - **Easy**: Installs Alfresco with the default configuration settings
   - **Advanced**: Installs Alfresco with configurable server ports and service properties

   The default installation type option is **Easy**; click on **Next**, as shown in the following screenshot:



Setup

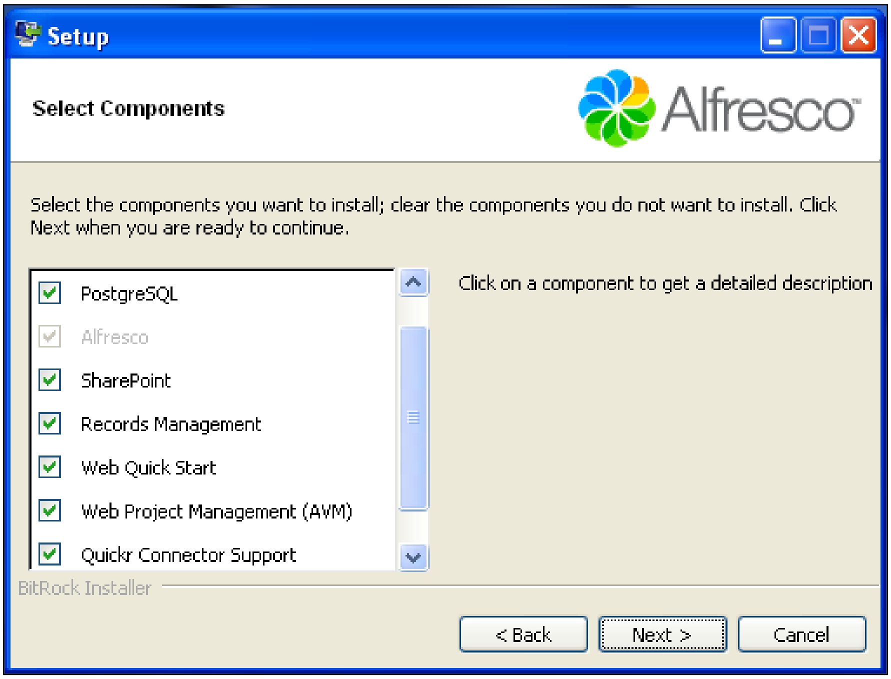
Installation Type

● Easy - Installs servers with the default configuration

○ Advanced - Configures server ports and service properties. Also choose optional components to install.

4. In the **Select Components** window, select the components that you want to install. You can select from the following list of components:
    - SharePoint
    - Records Management
    - Web Quick Start
    - Web Project Management (AVM)
    - Quickr Connector Support
    - OpenOffice

    These are depicted in the following screenshot:



Select Components

Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.

☑ PostgreSQL
☑ Alfresco
☑ SharePoint
☑ Records Management
☑ Web Quick Start
☑ Web Project Management (AVM)
☑ Quickr Connector Support

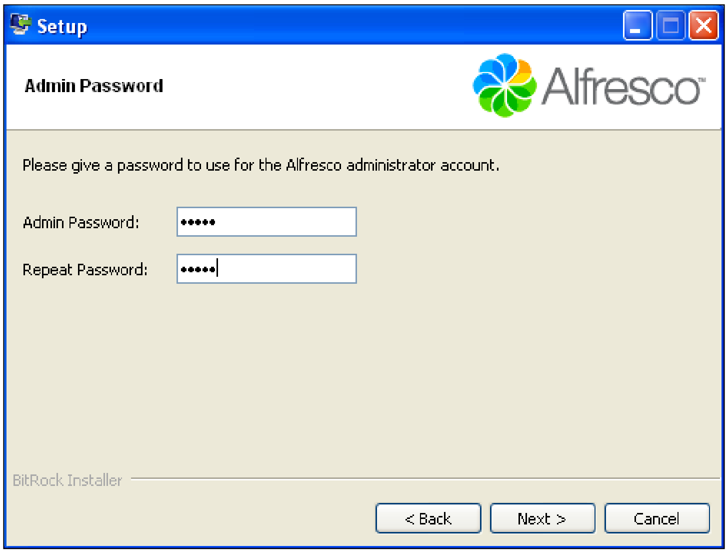
Click on a component to get a detailed description

The following components are installed by default and you cannot deselect them:

- PostgreSQL
- Java
- Alfresco

Once you have selected the options to install, click on **Next**.

5. Under the **Installation folder** window, click on **Next** to accept the default location; for example, the default location is `C:\Alfresco`. Alternatively, click on the 📂 icon to choose another location.
6. In the **Database Installation** window, you can choose to use the bundled PostgreSQL database, which is installed with Alfresco, or use an existing database instance. Choose the bundled PostgreSQL database, and then click on **Next**.
7. In the **PostgreSQL Credentials** window, type a root password for the bundled PostgreSQL database. Confirm the password.
8. In the **Admin Password** window, type a password. Repeat the password, and then click on **Next**. This sets the password for the Alfresco Administrator user account (admin), as shown in the following screenshot:



Admin Password

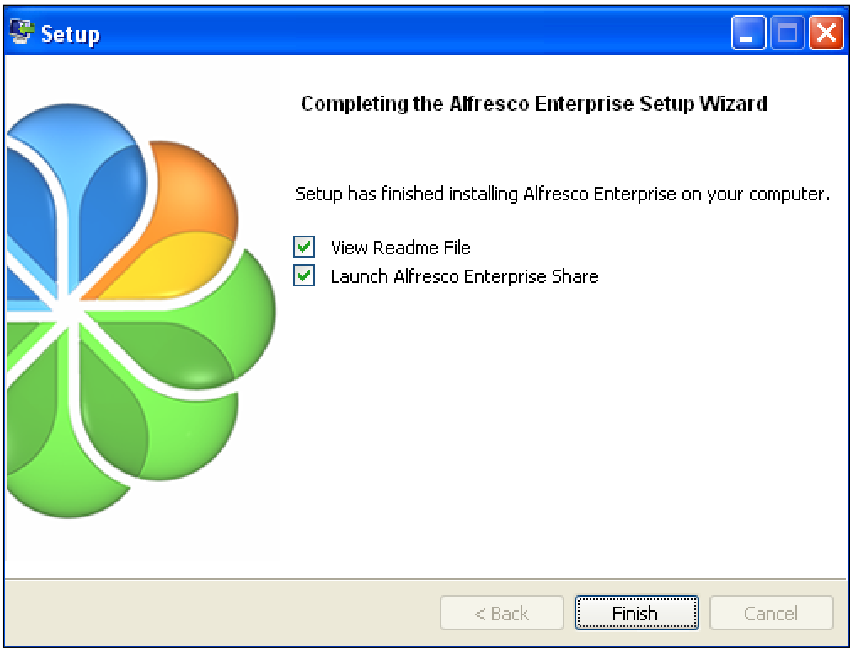
Please give a password to use for the Alfresco administrator account.

Admin Password: •••••

Repeat Password: •••••

9. If you are installing the Quickr Connector Support component, the **Quickr Content Services** window will be displayed. Enter the host and port details for your Quickr server, and then click on **Next**. For example, the default is `localhost` and the port number is `6060`. These settings are added to the configuration file for Quickr. This is optional.
10. Under the **Ready to Install** window, click on **Next**; the **Installing** window is displayed showing the progress of the installation.

11. Under the **Completing the Alfresco Enterprise Setup Wizard** window, click on **Finish**, as shown in the following screenshot. By default, when you click on **Finish**, the `Readme` file will be displayed, click on **OK**:



Completing the Alfresco Enterprise Setup Wizard

Setup has finished installing Alfresco Enterprise on your computer.

☑ View Readme File

☑ Launch Alfresco Enterprise Share

12. Log on to Alfresco Share as the admin user. Enter the password that you specified in the **Admin Password** window. The Alfresco server is launched automatically as a Windows service.

    In order to manage the server, open the **Control Panel Services** window. The services that must be running for Alfresco are as follows:

    - `alfrescoPostgreSQL`
    - `alfrescoOpenOffice`
    - `alfrescoTomcat`

    If you did not automatically launch Alfresco at the end of the installation wizard, to start Alfresco you need to start all three services. Use the `servicerun start` script in the installation directory. Alternatively, select **All Programs** | **Alfresco Enterprise** | **Alfresco Enterprise Service** | **Start Alfresco Enterprise Service**.

13. In order to stop Alfresco completely, you must stop all three services. Use the scripts in the installation directory to start or stop the services: `servicerun start` and `servicerun stop`.

> You can also start your Alfresco instance by using the startup.bat file. At times, one may encounter memory related errors. In order to correct this, you need to include the following line of code in the catalina.bat file:
>
> ```
> set JAVA_OPTS=-server -Xms512M -Xmx768M
> -XX:MaxPermSize=512m.
> ```

Installing on Linux

The installation wizard for Red Hat Linux installs the software and components that you require for running Alfresco. Here, we have assumed that you are installing Alfresco for the first time. If you have already installed Alfresco and the server is running, you may be prompted to enter alternative port numbers for the components and services that you install, when you run this installation wizard again.

Go to the **Downloads** area, and download the following installation file: alfresco-enterprise-3.4.3-installer-linux-x64.bin. Execute the downloaded file, and carry out the following steps:

1. On the **Setup Alfresco Enterprise** window, click on **Next**.
2. On the **Installation Type** window, choose how you want to use the setup wizard. There are two types of installation in the setup wizard: **Easy**, with the default options and configurations; and **Advanced**, where you can set the ports and choose the components to be installed, and configure service properties. For the **Easy** setup:
    - On the **Installation folder** window, click on **Next** to accept the default location.
    - On the **Admin Password** window, enter a password for the administrator user (admin). Repeat the password, and then click on **Next**.
    - Click on **Next** through the remaining windows in the setup wizard.
    - Click on **Finish** to complete the installation. Go to the step for the **Completing the Alfresco Enterprise Setup Wizard** window and launching Alfresco Share.

    In order to complete the **Advanced** setup wizard, select **Advanced**, and then click on **Next**. Follow the steps mentioned here to complete the installation with the **Advanced** option.

3. On the **Select Components** window, select the components that you want to install. Deselect the components that you do not want to install.
4. You can select from the following components:
    - Java
    - PostgreSQL
    - SharePoint
    - Records Management
    - Web Quick Start
    - Web Project Management (AVM)
    - Quickr Connector Support
    - OpenOffice
5. You cannot deselect the Alfresco component because it is installed by default; click on **Next**.
6. Under the **Installation folder** window, click on **Next** to accept the default location. Alternatively, click the 📂 icon to choose another location.
7. The **Database Server Parameters** window prompts you to enter a port number for your database.
8. Under the **Tomcat Port Configuration** window, enter the following Tomcat configuration parameters:
    - Web Server Domain
    - Tomcat port
    - Tomcat Shutdown port
    - Tomcat SSL Port
    - Tomcat AJP Port
9. Default values for each of these are given.
10. Now enter the port number for the Alfresco FTP server, RMI service.
11. To set the password for the Alfresco Administrator user account, on the **Admin Password** window, type a password. Repeat the password, and then click on **Next**.
12. Optionally, if you are installing SharePoint Protocol Support, Quickr Connector Support component, or the OpenOffice component, enter the relevant details of the ports and servers.

13. On the **Service Startup Configuration** window, you are presented with two options for starting up the Alfresco services. These are:
    - **Manual**: Sets the services to be started manually.
    - **Auto**: Sets the services to start up automatically when you start your machine.
14. Select the services start up option, and then click on **Next**.
15. Click on **Next** under the **Ready to Install** window. The Installing window displays, showing the progress of the installation.
16. On the **Completing the Alfresco Enterprise Setup Wizard** window, click on **Finish**. By default, when you click on **Finish**, the `Readme` file will be displayed; click on **OK**.
17. The Alfresco server starts and then Alfresco Share launches in your default browser.
18. Log on to Alfresco Share as the admin user. Enter the password that you specified in the **Admin Password** window.
19. The Alfresco server is launched automatically as a service named `alfresco`. This service comprises the following individual services:
    - `postgresql`
    - `tomcat`
20. If you did not automatically launch Alfresco at the end of the setup wizard, to start Alfresco, you need to start all the services. Manually start the Alfresco server: `service alfresco start`. To start only the Tomcat service: `service alfresco start tomcat`.
21. In order to fully stop Alfresco, you must stop all the services: `service alfresco stop`.

> (Optional) If you deployed previous versions of Alfresco, you can remove any temporary files created by your application server.

Installing Alfresco on Tomcat

If you have an existing Tomcat application server that you want to use to install Alfresco, you can use the Web Archive (WAR) bundle to install Alfresco. This can be used for any platform. For this type of an installation, you must ensure that the required software, a JDK, a supported database, an application server, and the additional Alfresco components are installed on the machine.

Installing the Tomcat application server

In this section, we will help you understand how to install an instance of Tomcat 6.0.26 manually and modify it to use the correct directory structure and files for Alfresco.

These steps describe the installation directory for Tomcat as `<TOMCAT-HOME>`. It is recommended that you name the required directories as `shared/classes` and `shared/lib` because these are the path names used within full Alfresco installations. You can substitute alternative names for these directories.

Now carry out the following steps:

1. Download the Tomcat Version 6.0.26 from `http://tomcat.apache.org`. Install Tomcat by following the instructions included in the release.
2. Create the directories required for an Alfresco installation:
    - Create the `shared/classes` directory
    - Create the `shared/lib` directory
3. Open the `<TOMCAT-HOME>/conf/catalina.properties` file and change the value of the `shared.loader` property to the following:

    ```
    shared.loader=${catalina.base}/shared/classes,${catalina.base}/
    shared/lib/*.jar
    ```

    If you have used alternative names for the directories, you must specify these names in the `shared.loader` property.
4. Copy the JDBC drivers for the database you are using to `lib/`.
5. Edit the `<TOMCAT_HOME>/conf/server.xml` file. Set the character encoding to UTF-8 on the Tomcat connector. By default, Tomcat uses ISO-8859-1 character encoding when decoding URLs that are received from a browser. This may cause problems when creating, uploading, and renaming files with international characters.
6. Locate the Connector section, and then add the `URIEncoding="UTF-8"` property, as follows:

    ```
    <Connector port="80" protocol="HTTP/1.1" URIEncoding="UTF-8"
    connectionTimeout="20000" redirectPort="8443" />
    ```
7. Save the `server.xml` file.

Configuring PostgreSQL

Here we will see the settings to be done in the PostgreSQL configuration wizard. These will enable the PostgreSQL instance to work with Alfresco.

Configuration wizard Window	Setting
Server type	This will also determine the memory allocation. Select **Dedicated PostgreSQL Server Machine**.
Database usage	Choose **Transactional Database Only**. This creates a database. InnoDB is the storage engine in this case.
InnoDB tablespace	Select the default drive and path
Concurrent connections	Select **Decision Support (DSS) OLAP**. This sets the number of concurrent connections to the server.
Networking and strict Mode	Accept the default networking options **Enable TCP/IP networking**, **Port Options Number 3306**, and the **Enable Strict Mode**, which will be the default server SQL mode.
Character set select	**Best Support for Multilingualism** sets the default character set to be UTF-8.
Security options	Select **Modify Security Settings**. Type the root password `admin`, and then retype the password.

Installing the Alfresco WAR

The Alfresco WAR file will distribute a set of files, JavaServer Pages, servlets, Java classes, XML files, tag libraries, and static web pages that will constitute it. It also has additional commands, configuration files, and licenses for a manual installation. If you already have installed JDK, a supported database, an application server, and the additional Alfresco components, you can use this method of Alfresco installation:

1. Browse to the Alfresco Enterprise download area, and download the **alfresco-enterprise-3.4.3.zip** and specify a location for the download.
2. Extract the WAR file. The WAR bundle will extract into the following directory structure:
   - `bin`
   - `licenses`
   - `web-server`
3. The WAR bundle also contains the `README.txt` file. The following table shows files that are contained within the suggested subdirectories for the Tomcat application server:

/bin folder

File	Description
`Win32NetBIOS.dll`	Required for CIFS
`Win32NetBIOSx64.dll`	Required for CIFS on 64-bit Windows
`Win32Utils.dll`	Required for CIFS
`Win32Utilsx64.dll`	Required for CIFS on 64-bit Windows
`alfresco-bm.jar`	The JCR Benchmarking toolkit
`alfresco-mmt.jar`	The Alfresco Module Management Tool (MMT)
`apply_amps.bat`	The Windows batch file for the Tomcat application server installs, used to apply all AMP files in the `<installLocation>` directory
`apply_amps.sh`	The Linux script file for the Tomcat application server installs, used to apply all AMP files in the `<installLocation>` directory
`clean_tomcat.bat`	The Windows batch file for cleaning out temporary application server files from previous installations
`clean_tomcat.sh`	The Linux script for cleaning out temporary application server files from previous installations

1. The `/licenses` directory contains the following structure: 3rd-party. This directory contains the third-party license files.
2. The `web-server` directory contains the following structure:

/conf folder

File	Description
`catalina.properties`	Used to define property settings for Tomcat
`context.xml`	Used to define context element settings for Tomcat for controlling certain behaviors for the application and the JNDI settings
`server.xml`	Used to define server configuration elements for Tomcat

/lib folder

File	Description
`postgresql-9.0-801.jdbc4`	PostgreSQL database JDBC connector file

/shared

File	Description
`classes/alfrescoglobal.properties.sample`	The global properties file, which is used for Alfresco configuration properties
`/classes/alfresco`	Contains the Alfresco directory structure for the configuration override files, including the `extension` and `web-extension` directories

/webapps folder

File	Description
`alfresco.war`	The Alfresco WAR file
`share.war`	The Alfresco Share WAR file

1. Move the `alfresco.war` file and `share.war` files to the appropriate location for your application server. For Tomcat, move the `.war` files to the `<TOMCAT_HOME>/webapps` directory.
2. Edit the `/shared/classes/alfresco-global.properties.sample` file with your configuration settings.
3. Save the file without the `.sample` extension.
4. Move the `alfresco-global.properties` file to `<classpathRoot>`. In case of using the Tomcat server, `<TOMCAT_HOME>/shared/classes`.

Deploying Share into Tomcat

You can run Share on a separate Tomcat instance. This section talks about the same. These instructions are for Windows deployments. Linux deployments also follow these steps.

1. Install a new Tomcat instance.
2. Modify the `/conf/server.xml` file for the new Tomcat instance as follows:

   Change the port number in the line:

   ```
   <Server port="<server port number>" shutdown="SHUTDOWN">
   ```

3. Change the port number in the section:

   ```
   <!-- Define a non-SSL HTTP/1.1 Connector on port 8080 -->
   <Connector port="<connector port number>">"...>
   ```

4. Move the `share.war` file from the original Tomcat `\webapps` directory to the new Tomcat `/webapps` directory.
5. Start the original Tomcat using the Alfresco supplied batch files.
6. Check that a copy of the `commons-el.jar` file is in the Share Tomcat `lib` directory.
7. If you are running the Share Tomcat on a separate machine, modify the override file in the Share Tomcat `web-extension` directory, as follows:
    - Open the `share-config-custom.xml` file
    - Change any instance of the server and port to the correct name or IP address of the Alfresco server. `http:// <Server name>:<server port>`
8. Save the file without the `.sample` extension.
9. Start the new Share Tomcat. You can use copies of the Alfresco supplied batch files, or your own methods.

Installing Alfresco components

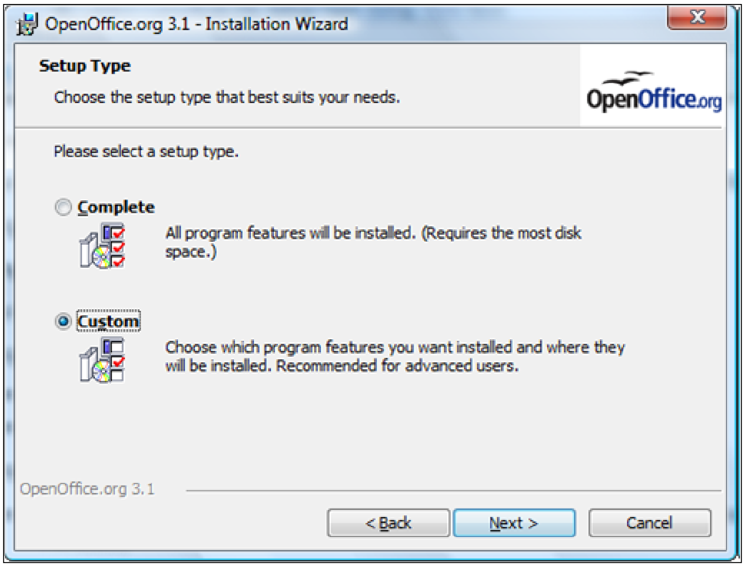
This section describes how to install components that integrate with Alfresco. If you choose **Install by Components**, then you can select and install the components. These can be installed any time before or after installing Alfresco. This section will take you through the installation of these components.

Installing OpenOffice

Within Alfresco, you can transform a document from one format to another; for example, a text file to a PDF file. In order to have access to these transformation facilities in Alfresco, you must install OpenOffice. This is optional, and can be done any time after Alfresco is installed. If you installed Alfresco using an installation wizard, OpenOffice may already be installed.

1. Download the latest (stable) version of OpenOffice for your platform from `http://download.openoffice.org`.
2. When prompted, specify a download destination. Browse to the location of your downloaded file, and install the application.
3. A wizard guides you through the installation.
4. Accept the license agreement, and then click on **Next**.
5. Enter customer information as appropriate, and then click on **Next**.

6. Select **Setup type** as **Custom**, and then click on **Next**, as shown in the following screenshot:



OpenOffice.org 3.1 - Installation Wizard

Setup Type

Choose the setup type that best suits your needs.

Please select a setup type.

○ **Complete**

All program features will be installed. (Requires the most disk space.)

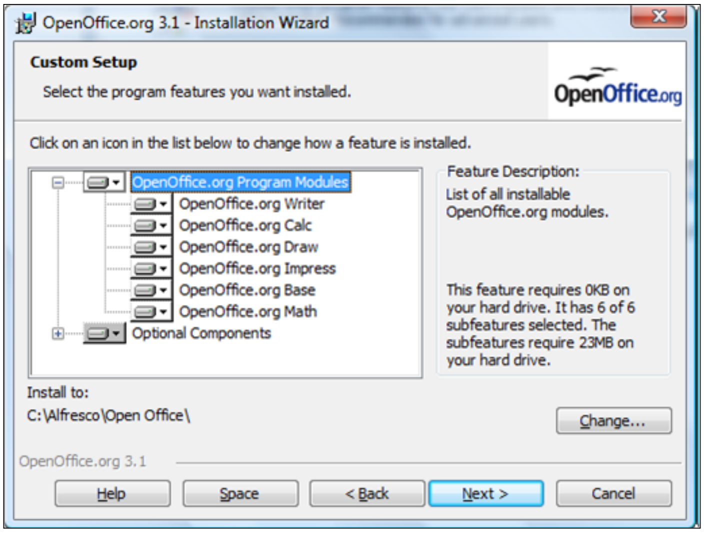
● **Custom**

Choose which program features you want installed and where they will be installed. Recommended for advanced users.

OpenOffice.org 3.1

7. Change the installation directory to:
   - Windows: `c:\Alfresco\OpenOffice`
   - Linux: `/opt/alfresco/OpenOffice`

8. Optionally, select the files for which you want OpenOffice to be the default application, and then click on **Next**, as shown in the following screenshot:



OpenOffice.org 3.1 - Installation Wizard

Custom Setup

Select the program features you want installed.

Click on an icon in the list below to change how a feature is installed.

- OpenOffice.org Program Modules
  - OpenOffice.org Writer
  - OpenOffice.org Calc
  - OpenOffice.org Draw
  - OpenOffice.org Impress
  - OpenOffice.org Base
  - OpenOffice.org Math
- Optional Components

Feature Description:

List of all installable OpenOffice.org modules.

This feature requires 0KB on your hard drive. It has 6 of 6 subfeatures selected. The subfeatures require 23MB on your hard drive.

Install to:

C:\Alfresco\Open Office\

OpenOffice.org 3.1

9. Start one of the OpenOffice programs for the initial registration, and then close the program.
10. Modify the `ooo.exe` property in the `<classpathRoot>/alfresco-global.properties` file to point to the OpenOffice binary `office.exe`.
11. For Windows, set the path using the `\\` separator or use the forward slash (/) Unix path separator. For example: `c:\\Alfresco\\OpenOffice\\soffice.exe`, or `c:/Alfresco/OpenOffice/soffice.exe`.
12. For Solaris, ensure that the `<configRoot>/classes/alfresco/subsystems/OOoDirect/default/openoffice-transform-context.xml` file can start.
13. Remove the quotes from the connection string values: `<value>-accept=socket,host=localhost,port=8100;urp;StarOffice.ServiceManager</value><value>- env:UserInstallation=file:///${ooo.user}</value>`.
14. If the Alfresco server is running, [stop and start], or restart the server.

Installing ImageMagick

In order to enable image manipulation in Alfresco, you must install and configure ImageMagick. Alfresco uses ImageMagick to manipulate images for previewing. If you installed Alfresco using one of the installation wizards, ImageMagick will already be installed:

1. Verify if ImageMagick is already installed on your system by running the `convert` command, which is part of ImageMagick and usually located in `/usr/bin` (on Linux).
2. If ImageMagick is not installed on your system, browse to the ImageMagick download site and install the appropriate package for your platform.
3. Modify the `img.root` and `img.exe` properties in the `<classPathRoot>/alfrescoglobal.properties` file to point to the ImageMagick root directory. For example, on Windows:
    - Set the `img.root` property to `img.root=C:/Alfresco/ImageMagick`
    - Set the `img.exe` property to `img.exe=C:/Alfresco/ImageMagick/bin/convert.exe`

    For Linux:
    - Set the `img.root` property to `img.root=/ImageMagick`
    - Set the `img.exe` property to `img.exe=/ImageMagick/bin/convert.exe`

    Ensure that you do not include a slash (/) at the end of the path, for example, `/ImageMagick/`.

Installing Microsoft Office add-ins

This section describes how to install Alfresco add-ins for Microsoft® Office applications, such as Word, Excel, and PowerPoint. The Alfresco add-ins have been designed with Microsoft Office 2003 in mind, however, they are also compatible with Microsoft Office 2007. Before you start, make sure that:

- The **.NET Programmability Support** option is installed for each of the Office applications that you are installing the add-ins (such as Word, Excel, and PowerPoint). To find these options, run the Office setup program and expand the list of available options for each application. You may require your original Office 2003 install media to add these required components.
- The installing user has Windows administrator privileges.
- Any Microsoft Office applications on your system are NOT running, including Outlook if you use Word as an e-mail editor. If you are running Office 2007 on Windows Vista, note that Microsoft has rewritten the WebDAV parts of Vista which means you will experience READ ONLY access to the Alfresco Repository over WebDAV. This is a known problem with Vista and affects many applications, including Microsoft's own SharePoint server. There is no known workaround at the time of writing. CIFS access is unaffected and works as it does with Windows XP. Therefore, use CIFS to obtain read/write access to Alfresco using Windows Vista.

Now carry out the following steps:

1. Browse to the Alfresco Community Edition download area.
2. Run the Microsoft setup file: `alfresco-community-office2003-addins-3.2.zip`.

   This example refers to the Office installer that installs all three Add-ins. You can also use individual installers to add Alfresco to one of the three Office applications. These individual installers are as follows:

   - `alfresco-community-word2003-addin-3.2.zip`
   - `alfresco-community-excel2003-addin-3.2.zip`
   - `alfresco-community-powerpoint2003-addin-3.2.zip`
3. Run `setup.exe`.
4. If required, the setup program will download the required components from the Microsoft website. These components are .NET 2.0 framework, and Visual Studio 2005 Tools for Office Second Edition runtime. The setup is complete.

5. Run the Office application, for example, Word.
6. A Welcome window with configuration options displays. You can return to the configuration options at any time using the link at the bottom of the **Add-In** window.
7. In the **Web Client URL** field, enter the location of Alfresco Explorer, for example, `http://server:8080/alfresco/`.
8. In the **WebDAV URL** field, append `webdav/` to the Alfresco Explorer URL, for example, `http://server:8080/alfresco/webdav/`.
9. In the **CIFS Server** field, enter the path to the CIFS server. The add-in will try to autocomplete this value, but you should verify it for the correct address, for example, `\\server_a\alfresco\ or \\servera\alfresco\`.
10. If you intend to use the CIFS interface to save documents through the add-in, it is very important that you are authenticated automatically. Limitations in the Microsoft Office APIs mean that an error is shown instead of an authentication dialog box, if the Alfresco CIFS interface rejects your connection attempt. If you are not in an enterprise environment, where it may not be possible to configure automatic authentication, you can map a network drive to the Alfresco CIFS interface instead.
11. In the **Authentication** area, enter your Alfresco username and password.
12. The add-in will always try to automatically log you into Alfresco in order to present your checked out documents (that were checked out) and your assigned tasks. If you are using the CIFS interface, authentication is usually automatic. However, sometimes the add-in needs to present your Alfresco username and password for authentication. It is recommended that you enter, and save, your Alfresco credentials. All values are stored in the Windows registry and your password is encrypted against casual hacking attempts.
13. Click **Save Settings**.

Installing the Flash Player

Alfresco Share uses the Flash Player for viewing Flash previews, and also when you use the multi-file upload facility. This is optional and may be installed after you have installed Alfresco. Carry out the following steps:

1. Browse to the Adobe Flash Player download website: `http://www.adobe.com/products/flashplayer`.
2. Download the latest (stable) version of Flash Player for your platform.

3. Browse to the location of your downloaded file and install the application. A wizard guides you through the installation.
4. When the installation is complete, click **Close**.

Installing SWF Tools

Alfresco Share uses the PDF2SWF utility of the SWF Tools for previewing PDF files. The PDF2SWF utility generates one frame per page. In the flash movie, the text is completely formatted. To install the PDF2SWF utility, you must install the complete SWF Tools.

Installing SWF Tools on Windows

This section describes the steps used to install the SWF Tools on Windows:

1. Download the latest (stable) version of the SWF Tools for your platform. The Windows version is designated with the suffix `.exe`. Download a version post 0.8.1 from 2007 because it does not support a few functionalities which Alfresco needs to render the preview.
2. Browse to the location of your downloaded file and install the application. A wizard guides you through the installation.
3. Accept the license agreement and click on **Next**.
4. Select the installation directory. Select whether you want to install the SWF Tools for all users or only for the current user. Click on **Next** to begin the installation process.
5. By default, the options to **Create start menu** and **Create desktop shortcut** are selected, click on **Finish**.
6. Modify the `swf.exe` property in the `alfresco-global.properties` file. This will point to the SWF Tools root directory. Make sure that you do not include a slash (/) at the end of the path.

Installing SWF Tools on Linux

For Linux, there is no binary version, so you need to compile a development snapshot. You can download and install all of the required packages using the following command:

```
yum install zlib-devel libjpeg-devel giflib-devel freetype-devel gcc
gcc-c++
```

Carry out the following steps:

1. Download the latest version of the SWF Tools for your platform. The Unix version is designated with the suffix `.tar.gz`. Download a version post 0.8.1 from 2007-02-28 because it (previous versions do not) does not support a few functionalities which Alfresco needs to render the preview. The following version has been tested and verified by Alfresco as being fully functional: `http://www.swftools.org/swftools-2008-10-08-0802.tar.gz`.
2. Unpack the `tar.gz` file. The install file contains detailed instructions on how to compile and install the SWF Tools.
3. Change to the directory containing the source code.
4. Type the following command to configure the package for your system:

   ```
   ./configure
   ```

5. If you see a message on Red Hat Linux that states your operating system is unknown, then use the following setting:

   ```
   ./configure-build=x86_64-pc-linux-gnu
   ```

6. If you have an issue on Solaris with the lame libs, you can disable the making of portions of SWF Tools that use lame. Use the following setting to do this:

   ```
   ./configure -disable-lame
   ```

7. Type the following command to compile the package:

   ```
   make
   ```

8. Type the following command to install the programs, data files, and documentation:

   ```
   make install
   ```

9. By default, the files are installed to the `/usr/local/bin` directory.
10. Modify the `swf.exe` property in the `alfresco-global.properties` file to point to the SWF Tools root directory. Ensure that you do not include a slash (/) at the end of the path.

Installing TinyMCE language packs

The language pack is supplied in the default Alfresco install. This is used for translations. This includes English, Catalan, Croatian, Czech, Danish, German, Spanish, Greek, Finnish, French, Italian, Japanese, Dutch, Polish, Portuguese, Portuguese (Brazilian), Russian, Swedish, Turkish, Simplified Chinese.

The language used switches according to the browser locale. If you have a translation that is not provided with Alfresco, then you must add the appropriate TinyMCE language pack for the translation to work correctly. If you installed Alfresco using one of the installation wizards, the default language packs are already installed.

1. Browse to the TinyMCE website: `http://tinymce.moxiecode.com/download_i18n.php` and download the required TinyMCE language pack.
2. Unpack the language file:
    - For Share, unpack to: `<TOMCAT_HOME>/webapps/share/modules/editors/tiny_mce`
    - For Explorer, unpack to: `<TOMCAT_HOME>/webapps/alfresco/scripts/tiny_mce`
3. Ensure that the browser cache is cleared.

Installing an Alfresco Module Package

An **Alfresco Module Package** (**AMP**) is used to distribute the additional functionality for Alfresco. It consists of a bundle of code, content model, content, and the directory structure. This section describes how to install an AMP in an Alfresco WAR using the **Module Management Tool** (**MMT**). The MMT is used to install and manage AMP files, and it is included in the Alfresco installers. The MMT is also available as a separately downloadable JAR file from the Alfresco release download area (`alfresco-enterprise-3.4.4.zip`).

For Tomcat, alternatively, run the `apply_amps.bat` command, which is in the root Alfresco directory. This batch file applies to all the AMP files that are located in the `amps` directory.

1. Browse to the `/bin` directory:
    - Windows: `C:\Alfresco\bin`
    - Linux: `/opt/alfresco/bin`
2. Run the following command:

```
java -jar alfresco-mmt.jar install <AMPFileLocation>
  <WARFileLocation>[options]
```

Please specify the option in the preceding command as per the details mentioned in the following table. The various options for the same are also listed:

Option	Description
`<AMPFileLocation>`	The location of the AMP file that you want to install.
`<WARFileLocation>`	The location of the WAR file for your Alfresco installation.
`-verbose`	Install command [options]. Enables detailed output containing what is being updated and to where it is being copied.
`-directory`	Install command [options]. Indicates that the AMP file location specified is a directory. All AMP files found in the directory, and its subdirectories, are installed.
`-force`	Install command [options]. Forces installation of AMP regardless of the currently installed module version.
`-preview`	Install command [options]. Previews the installation of AMP without modifying the WAR file. It reports the modifications that will occur on the WAR without making any physical changes, for example, the changes that will update existing files. It is good practice to use this option before installing the AMP.
`-nobackup`	Indicates that the WAR will not be backed up before the AMP is installed.

3. This command installs the files found in the AMP into the Alfresco WAR. If the module represented by the AMP is already installed and the installing AMP is of a higher release version, then the files for the older version are removed from the WAR and replaced with the newer files. The following commands show examples of how to install the `example-amp.amp`, and assumes that the AMP file is in the same directory as the WAR file:

```
java -jar alfresco-mmt.jar install example-amp.amp alfresco.war -
  preview
```

4. Review the modification to check the changes that will update any existing files.
5. The following example will install the AMP file:

```
java -jar alfresco-mmt.jar install example-amp.amp alfresco.war -
  verbose
```

6. The modified Alfresco WAR can then be redeployed back into your application server. On restarting the application server, the console will show that the custom class was initialized during the startup.
7. Verify that the AMP is installed using the MMT list command. For example:

   ```
   java -jar alfresco-mmt.jar list <WARFileLocation>.
   ```

8. This command provides a detailed listing of all the modules currently installed in the WAR file specified. When the repository is now started, the installed module configuration will be detected. The repository will now be bootstrapped to include the new module functionality and data. It is not recommended that you overwrite an existing file in an AMP unless necessary.
9. The MMT makes a backup copy of the updated file and stores it in the WAR. When an update of the module occurs and the old files are removed, this backup will be restored prior to the installation of the new files. The `alfresco.war` file is backed up and the copy is stored in a new file named `alfresco.war.bak` in the same directory as that of the original `.war` file.

Installing the Firefox extension

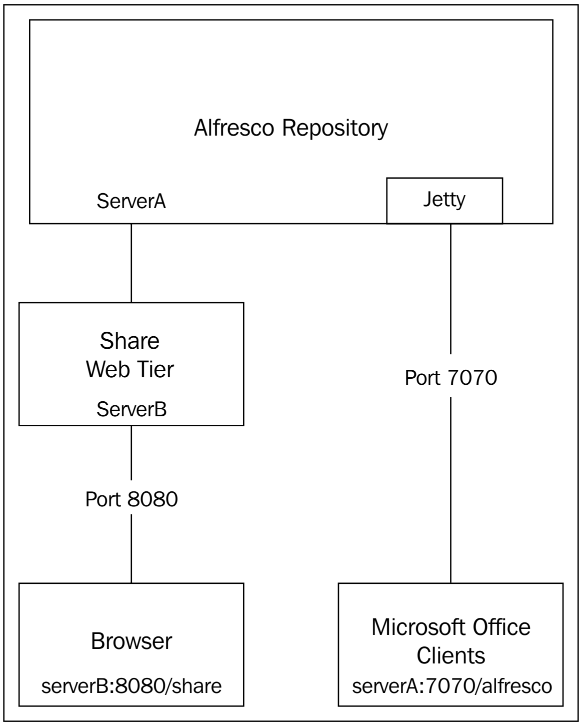
The Firefox extension allows access to the network folder for an Alfresco space from the Firefox browser. To access the network folder for a space in the Firefox browser, you must install the Alfresco Firefox extension through the following steps:

1. Go to the URL: `http://sourceforge.net/projects/alfresco`. Click on **Download** to display the available Alfresco Content Management downloads.
2. Locate **Firefox extension** and click on **Download**. Click on the link **alfrescoext-0.91.xpi**.
3. In the list of download sites, click on **Download** for the site nearest to you. Allow permission to install the extension.

Installing Microsoft Office SharePoint Protocol Support

The Microsoft Office SharePoint Protocol Support offers Microsoft users a greater choice by providing a fully-compatible SharePoint repository that allows the Microsoft Office Suite applications to interact with Alfresco as if it was SharePoint. This enables your users to leverage the Alfresco Repository directly from Microsoft Office.

You can also use Microsoft Office SharePoint Protocol Support to enable the online editing for Office documents within Alfresco Share. It enables your users to modify Office files without checking them in and out. Alfresco locks the file while it is being modified, and releases the lock when the file is saved and closed. This feature is, however, available once the Microsoft SharePoint Protocol Support is installed. The following diagram shows the architecture of the SharePoint Protocol Support in relation to an Alfresco installation:



The SharePoint Protocol Support architecture embeds a Jetty Web Server within the Alfresco Repository. The Microsoft Office clients communicate directly with the Jetty server using WebDAV-like calls with proprietary extensions and on a different port number from Alfresco Share. This port number can be configured in the SharePoint Protocol Support properties files.

Installing the SharePoint Protocol Support AMP

The SharePoint Protocol support functionality is installed from an Alfresco AMP. If you use the Windows or Linux installers to install Alfresco, the SharePoint Protocol Support is installed by default. These instructions describe how to install the SharePoint Protocol Support into the Alfresco WAR. When you install this file, it responds to the SharePoint requests from Office and, therefore, allows Alfresco to appear as the SharePoint server.

> Note: If you installed Alfresco using an installation wizard, the SharePoint protocol may already be installed.

1. Shut down your Alfresco server.
2. Browse to the download area and download the `vti-module.amp` file.
3. Move the file to the `amps` directory.
4. Install the `vti-module.amp` file into the `alfresco.war` file using the Module Management Tool (MMT). The vti-module.amp file holds the functionality for the SharePoint connector. For Tomcat, alternatively, run the `apply_amps.bat` command, which is in the root Alfresco directory. This batch file applies to all the amps that are located in the `amps` directory.
5. Start your Alfresco server to expand the directory structure.
6. Verify that you have applied the SharePoint AMP to Alfresco by checking that you have the following directory:

   ```
   /webapps/alfresco/WEB-INF/classes/alfresco/module/org.alfresco.
   module.vti/context.
   ```

Configuring the SharePoint Protocol Support

The SharePoint Protocol Support functionality uses the properties in the default configuration file named `vti.properties` in `<TOMCAT_HOME>/webapps/alfresco/WEB-INF/classes/alfresco/module/org.alfresco.module.vti/context`.

Custom properties and overrides can be set in the `alfresco-global.properties` file. Ensure that you have applied the SharePoint Protocol Support AMP:

1. Open the `alfresco-global.properties` file.

2 Add the following properties:

```
vti.server.port=7070
vti.alfresco.deployment.context=/alfresco
vti.alfresco.alfresoHostWithPort=http://your-host:8080
vti.share.shareHostWithPort=http://your-share-host:8080
```

The following table describes the properties:

Property	**Description**
`vti-server.port`	Use this property to configure on which port the SharePoint server listens. The default port number is `7070`.
`vti.alfresco.deployment.context`	Use this property to specify the URL that you enter in the Microsoft Office Shared Workspace. The default is set to `/alfresco`. For example, the default / alfresco sets the URL to: `http://<servername>:<server port>/alfresco`.
`vti.alfresco.alfresoHostWithPort`	Use this property to specify the IP address, or the hostname of the Alfresco server. Replace your host with the location of your Alfresco server.
`vti.share.shareHostWithPort`	Use this property to specify the Share instance. Replace your-share-host with the location of your Share instance. This property includes the prefix `http://` which allows for HTTPS support.

The `vti.properties file` in `<TOMCAT_HOME>/webapps/alfresco/WEB-INF/classes/alfresco/module/org.alfresco.module.vti/context` contains the full list of properties.

Do not change the properties in this file; use only the `alfresco-global.properties` file.

3. Save the `alfresco-global.properties` file.
4. Restart your Alfresco server. The Microsoft SharePoint Protocol Support functionality is installed and configured.

Extending Alfresco

Alfresco can be extended to develop the required functionality. The `alfresco-global.properties` file in the Alfresco bundle has the customizations required to carry out the extension.

The alfresco-global.properties file has sample settings for running Alfresco. Details such as index and content data locations, database connection and driver properties, third-party software locations, and so on are all contained in the file.

Based on your selected method of installation, the alfresco-global.properties file is modified automatically or manually. Installation by using the WAR file requires the file to be modified manually and installing using the wizard automatically modifies the settings.

Modifying the global properties file

Let's now take a look at how to modify the alfresco-global.properties file to carry out customizations to extend Alfresco.

If you are using a Windows-based system, replace the path separator character with \\ or / (forward slash), to edit the alfresco-global.properties file. You will also need to use folder names such as My_Home instead of My Home by manually escaping the space.

1. Go to the <classpathroot> directory.
2. Open the alfresco.global.properties.sample file. To make modifications, remove the comment character #.
3. Include a root location for storing content binaries and index files in the dir.root property, for example, dir.root=C:/Alfresco/alf_data.
4. Now set the database connection properties.

Property	Description
db.username=alfresco	The username will be the name of the main user of the Alfresco database and it will be used to authenticate with the database.
db.passowrd=alfresco	This will be the password for the above user and will also be used to authenticate with the database.

Other database properties can also be configured. The other tools and software that are configured with Alfresco also need to have their location specified. This can also be done in the alfresco-global.properties file.

Property	Description
ooo.exe=	It specifies the OpenOffice installation location.
ooo.enabled=	It specifies if using the Direct OpenOffice subsystem.

Property	Description
`jodconverter.officeHome=`	It specifies the location of the OpenOffice installation for `jodconverter` transformations. Remove the # before `ooo.enabled=false` and `jodconverter.enabled=true` to use the JODConverter.
`jodconverter.portNumbers=`	The port numbers used by each `jodconverter` processing thread are specified by this. The number of processes will be equal to the number of ports.
`jodconverter.enabled=`	It specifies if using the `jodconverter`; set the property to `jodconverter.enabled=true` if using this property.
`img.root=`	It specifies the ImageMagick installation location.
`swf.exe=`	It specifies the SWF tools installation location.

The properties for the database are grouped into sections for various databases such as MySQL, Oracle, SQL Server, and PostgreSQL.

5. Uncomment the `db.driver` and `db.url` properties for the database that you require.
6. Select a JDBC driver used with the connection type.
7. Now add the global custom configurations.
8. Save your file without the *.sample* extension.
9. Restart your Alfresco server for the configuration changes to take effect.

Running Alfresco

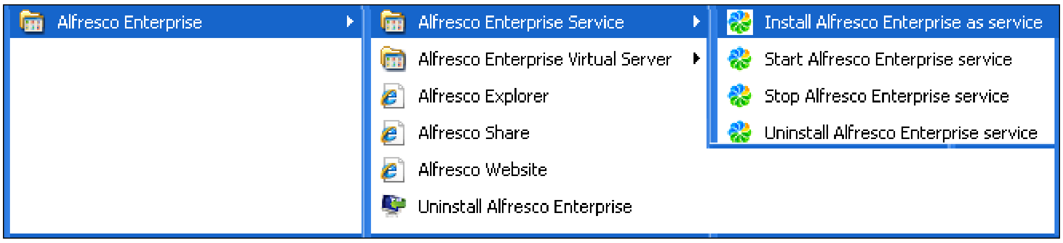
This section describes how to start and stop the following:

- Alfresco server
- Alfresco Share

> Note: Before running Alfresco, you may need to modify the configuration settings. If you have installed Alfresco using one of the installation wizards, the configuration is set for you.

Starting and stopping Alfresco as a console application

The options for starting and stopping Alfresco as a console application can be viewed by clicking on **Start** | **All Programs** | **Alfresco Enterprise**, as shown in the following screenshot:


Alfresco Enterprise
Alfresco Enterprise Service
Alfresco Enterprise Virtual Server
Alfresco Explorer
Alfresco Share
Alfresco Website
Uninstall Alfresco Enterprise
Install Alfresco Enterprise as service
Start Alfresco Enterprise service
Stop Alfresco Enterprise service
Uninstall Alfresco Enterprise service

These options are discussed as follows:

- **Alfresco Enterprise Service**: This option is used to start and stop Alfresco. It also starts and stops the PostgreSQL server and the Tomcat application server.
- **Alfresco Enterprise Virtual Server**: This option is used to start and stop the Alfresco Virtual server. It also starts and stops the Virtual Tomcat application server.
- **Alfresco Explorer**: This option is used to open the Alfresco Web Client in the browser.
- **Alfresco Share**: This option is used to open Alfresco Share in the web browser.
- **Alfresco Website**: This option is used to open the Alfresco website in the web browser.

Alternatively, you can always start, stop, and restart the Tomcat application server, and the PostgreSQL database server, manually by going to their respective directories. It gives more control to the user. However, the console option gives batch files to perform the start/stop procedures in a consolidated way relieving the user of any unwanted errors.

Starting the Alfresco server

Once you have installed Alfresco, you can test the installation by starting the server.

For Windows:

- Browse to `C:\alfresco` and double-click on `alf_start.bat`
- Alternatively, if you installed Alfresco using the installer, from the **Start** menu, select **All Programs | Alfresco Community Edition | Start Alfresco Server**

A command prompt opens with a message indicating that the server has started.

```
INFO: Server startup in nnnn ms.
```

For Linux: Browse to `/opt/alfresco/` and run `alfresco.sh` start.

The default shell is `sh`. You can edit the `alfresco.sh` file to change to your preferred shell.

Starting Alfresco Share

Once you have installed Alfresco, you can start Alfresco Share by using a browser.

1. Browse to the location of your Alfresco installation.
2. If you installed Alfresco on your local machine:
    - Browse to `http://localhost:<server ip port>/share`; in Windows, alternatively, you can click on the **Start** menu and select **All Programs | Alfresco Community Edition | Alfresco Share**. Alfresco Share opens.
    - Log in using admin as the default user name and password.

Stopping the Alfresco server

For Windows:

- Use `shutdown.bat` to stop alfresco
- Alternatively, click on the **Start** menu, and select **All Programs | Alfresco Community Edition | Stop Alfresco Server**

This will cause the command prompt that opened during startup to close. Alfresco has now stopped.

For Linux: Browse to `/opt/alfresco/`, and run `alfresco.sh stop`.

Configuring Alfresco as a Windows service

You can also configure Alfresco as a Windows service in a standard Alfresco/Tomcat installation. With the default installation, Alfresco is bundled as a web application that launches within Tomcat. In order to configure Alfresco to run as a Windows service, you need to ensure that Alfresco and JDK 6 are installed on your machine.

1. Open a command prompt.
2. To install Alfresco as a Windows service, enter the following commands (we assume here that Alfresco is installed at `c:\alfresco` for Tomcat 6):

```
       cd c:\alfresco\tomcat\bin
       service.bat install alfresco
       tomcat6 //IS//Tomcat6 --DisplayName="Alfresco Server" \
     --Install="C:\Program Files\Tomcat\bin\tomcat6.exe" -Jvm=auto
\
     --StartMode=jvm --StopMode=jvm \
     --StartClass=org.apache.catalina.startup.Bootstrap --
       StartParams=start \
     --StopClass=org.apache.catalina.startup.Bootstrap
--StopParams=stop
```

3. To edit your service settings, enter the following commands (for Tomcat 6):

```
       cd c:\alfresco\tomcat\bin
       tomcat6w.exe //ES//alfresco
```

4. Locate the service named **Alfresco Server** in the Services panel.
5. Start the **Alfresco Server** service. You can uninstall the service using the following commands:

```
       cd c:\alfresco\tomcat\bin
       service.bat uninstall alfresco
```

To start the service, locate the service named **Alfresco Server** in your **Windows Service** control panel, and start Alfresco from this control panel.

Summary

Alfresco can be installed using a number of different methods, as per your preference. You can install Alfresco as a standard Web Archive (WAR) file to deploy on your existing application server, or as a bundle that includes a preconfigured Tomcat server, the Alfresco WAR (alfresco.war), batch files, database setup scripts, and a sample extensions folder.

The various flavors of installations mentioned in this chapter are aimed to help you select the best suited for your purpose and optimize your development experience with Alfresco WCM.

3
Alfresco Share Architecture

So far, you have gone through an overview of Alfresco Share and the installation steps. This chapter aims at enabling you to understand the architecture of Share in the form of the **Spring Surf Framework** and configuring various components around it. You will also have a basic understanding of the Alfresco Share structure. This chapter covers the flow of accessing the Alfresco Repository using **web scripts**. It also focuses on how the content is stored in the Alfresco Repository.

In this chapter, you will cover the following topics:

- Overview of Alfresco Repository
- Spring Surf Framework
- Alfresco Spring Surf Architecture
- Alfresco Share Structure
- Working with Alfresco Share Surf Framework
- Understanding the flow of accessing Alfresco Repository using Web Script
- How data is stored in Alfresco Repository
- Share Configuration Architecture
- Client Applications using the Alfresco Surf platform

An overview of the Alfresco Repository

Alfresco Share leverages the Alfresco Repository for the storage and retrieval of the content. Alfresco, as a content application server, manages and maintains the content repository. The Alfresco Repository is considered as a content repository that stores, searches, accesses, and controls the content. Alfresco has chosen to store metadata in a database and content in a filesystem. The content is stored in a binary format and the metadata of the content, or the folder structure or users-specific details, are stored in the database.

The Alfresco Repository actually provides three APIs, namely Foundation Services, JCR, and Web Services for accessing and storing the content.

- **Foundation services** provide a set of local Java Interfaces covering all capabilities which are ideal for clients who wish to embed the repository. Foundation services such as Node Service, Content Service, and Search Service are used for storage and retrieval of the content.
- **JCR** (**Content repository API for Java Technologies**) is a standard Java API (as defined by JSR-170) for accessing content repositories.
- **Alfresco Web Services** supports remote access and bindings to any client environment, not just Java, but PHP, Ruby, Microsoft .NET, and so on. Web Services, implemented according to the principles of the REST architectural style, is the newer concept used by Alfresco applications such as Alfresco Share, Records Management, and Web Quick Start to store and retrieve large amounts of content.

The two main Alfresco applications are as follows:

- **Alfresco Explorer**: It is the original application built with the Alfresco System to manage the content. Explorer lets you browse the repository, set up rules and actions, and manage the content and its metadata, associations, and classifications. Alfresco Explorer was built using **Java Server Faces** and is integrated into the content application server. Explorer is tightly tied up with the backend repository using Foundation Services. The issue with this client is that it has to be run on the same server where the repository is running. It is neither scalable, nor secure, as it is tied with the repository directly. In order to overcome this, Alfresco has come up with another user interface, that is, Alfresco Share.
- **Alfresco Share**: It is the next-generation user interface built entirely with the REST-based web services, Alfresco Web Script technology, and can be used to extend the application. Share is loosely coupled and not required to run on the same server where the repository is running. Share applications can be deployed on separate application servers. They can be separable from the Alfresco Repository. Share, as a frontend application, utilized the Alfresco Surf Platform to provide the underlying presentation framework and connect to the backend server, that is, the Alfresco Repository through the Spring Surf Framework.

The Spring Surf framework

Surf is the extension of the Spring framework, that is, building new Spring framework applications or plugging into existing Spring web MVC (**Model-View-Controller**) applications.

Spring Surf follows an MVC framework. Surf can be used with other Spring Web MVC technologies such as Tiles, Grails, and Web Flow. It provides a highly extensible and customizable web framework for page layout and component framework for building web applications. It has the ability to quickly create dynamic websites using concepts such as pages, templates, themes, and components. It leverages web-enabled tools that make it possible for users with little technical knowledge to manage dynamic websites. The Spring Surf platform was designed considering the following points:

- Lightweight scripting and to make reuse of components; no server restart or content reloading is required, you only need to refresh
- Easy to customize by using XML configuration files
- Integrates well with Alfresco Share—it reads and writes from the Alfresco Repository
- Equipped with an out-of-the-box and extensible **site dispatcher**, site construction model
- Requests and responses are handled through RESTful APIs
- Works well with two-tier architecture, separating the content service from the presentation tier.

The Surf platform consists of several integrated parts. In order to help facilitate this, the Spring Surf framework uses a lightweight XML-driven model to store all model objects that make up the website. Model objects are things such as pages, templates, components, themes, and chrome.

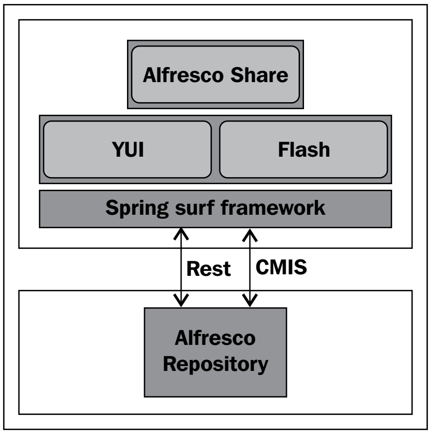
Surf allows you to take a page and split it up into templates and components. This allows for a total separation of the look and feel of the components. Templates make it possible to define a page layout once, and then reuse it across a large set of pages. In each of these template languages, the essential goal is to lay out the placement of regions (or slots) into which components can be bound. Both the template and the component have renderers to generate outputs. You can also build your own renderers, or make use of the out-of-the-box renderers such as JSP, FTL (FreeMarker Templates), and HTML. Most of the Surf components use web scripts as renderers. Web scripts featuring rich underlying API for extensions, no Java coding or server restarts, are the most common and the most powerful rendering facility.

In order to find more information about Spring Surf, refer to the following URL:

`http://wiki.alfresco.com/wiki/Spring_Surf`.

Alfresco Spring Surf Architecture

Alfresco Share is built on top of the Spring Surf framework. Alfresco Share built with Spring Surf can be considered as a standalone and deployed on any application server. The Surf architecture can also be scaled across multiple application servers and they can all communicate with the same (or multiple) Alfresco Repository servers. With a RESTful API, web scripts are used to remotely connect to the Alfresco Repository, as the Alfresco Surf Architecture is a lightweight, scriptable web framework built on top of Alfresco Web Scripts technology and templating runtime. The Alfresco Share User Interface (UI) is AJAX and Flex-driven, built using the Yahoo Library and Adobe Flash for dynamic upload and preview of content and other information. This is depicted in the following diagram:



YUI is a free open source Java Script framework and uses techniques such as DOM scripting, DHTML, and AJAX. It helps in building richly interactive web applications with the use of utilities and controls, written with JavaScript and CSS. YUI consists of several CSS components and dozens of JavaScript components, all of which are designed for rapid creation of web applications running in all major web browsers. Fast, scalable, and robust applications can be built using YUI. It provides a rich set of widgets and utilities such as animation, drag-and-drop, image loader, menu, paginator, uploader, and many others.

Mainly, it has the following six components:

1. YUI Core
2. YUI Utilities
3. YUI Widgets
4. CSS Resources
5. Development tools
6. Build Tool

> In order to have more information about YUI, visit the following URL:
>
> `http://developer.yahoo.com/yui/`.

The **Alfresco Flash Previewer** offers viewers the ability to view both Flash SWF files and image formats, such as JPEG, PNG, or GIF. Share uses the Flash Player to upload multiple files and viewing Flash previews, Microsoft Office, OpenOffice, and PDF files are also configured out-of-the-box to be previewed with the viewer, by first converting the file into PDF and then to Flash. It means that if the content is of any other type, then Alfresco converts the content into PDFs using the OpenOffice SDK. Those intermediate PDF files are then converted into Flash SWF objects using the **PDF2SWF** (a **PDF to SWF converter**) utility that is part of **SWFTools**. In the same way, if there is a file format that needs to be previewed, it can be added if there is a tool that exists to convert the file into either PDF or SWF formats. A call to the Alfresco Repository is made to retrieve the Flash and if the preview does not already exist, it will be generated. The software that detects and checks for a valid version of the Flash Player in the browser, and embeds the Alfresco Flash Previewer object on the web page, is called **SWFObject**. Alfresco uses SWFObject 1.5, that is part of YUI 2.0. The installation of the Flash Player, or SWFTools, can be done at any time, even after installing Alfresco.

We will understand in detail about the Surf MVC followed by Alfresco Share.

The Surf MVC architecture

The MVC architecture is a way of decomposing an application into three parts: the model, the view, and the controller. It is used for interactive web applications. Here, we will understand the MVC in the context of Spring Surf.

The controller can be considered as **Dispatcher Servlet**. It is responsible for rendering the view. It considers the incoming request context and decides what, and how, to render. It constructs the page view by looking at the related model components/templates to render using different possible rendering engines. The dispatcher can receive requests from an object, specific page, or a type of page:

- **The Surf model**: This can be considered as the Model of the Surf MVC. Model is an entity which holds data. The Surf platform uses a lightweight XML-driven model, to store all model objects, which is implemented by the majority of common websites and web application object types. XML files are effectively bound together to allow a page to be loaded and rendered. You can also define your own object model and extend the out-of-the-box object models such as pages, templates, components, chromes, and themes.
- **View (renderers)**: View is for the presentation layer. The model objects such as components, templates, pages can be rendered using any of Surf's supported rendering engines, which internally return data in HTML/XML/JSON and many more formats.

The view can be constructed using several rendering engines. These include the following:

- **Web scripts**: Web scripts are used most commonly to render components. Web scripts follow an MVC architecture. The web scripts takes the advantage of JavaScript (behaves as a controller), FreeMarker (for presentation processing), and Model objects (for business logic). The controller can be JavaBean or a combination of both (JavaScript and JavaBean) and is responsible for performing the required business logic and populating the model with data, and then forwarding the request to the view. Web scripts can be stored in the specified location `<install-application> | tomcat | webapps | share | WEB-INF | classes | alfresco | site-webscripts`.
- **JSP**: The JSP renderer is used to render either components or templates, and provide you with access to the Java language and the Surf platform Java API.
- FreeMarker: FreeMarker is a template engine used to generate the output based on templates. FreeMarker can be stored in the specified location `<install-application> | tomcat | webapps | share | WEB-INF | classes | alfresco | templates`.

For more information about web scripts, visit the following URL:

`http://wiki.alfresco.com/wiki/Web_Scripts`.

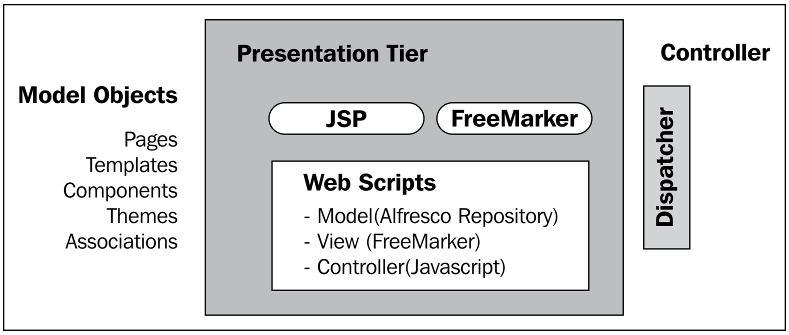
For detailed information about templates, visit the following URL:

`http://wiki.alfresco.com/wiki/Template_Guide`.

Surf MVC can be used to create single-tier and two-tier applications. Tiers can be considered as a physical deployment of different application layers.

A single-tier Surf application

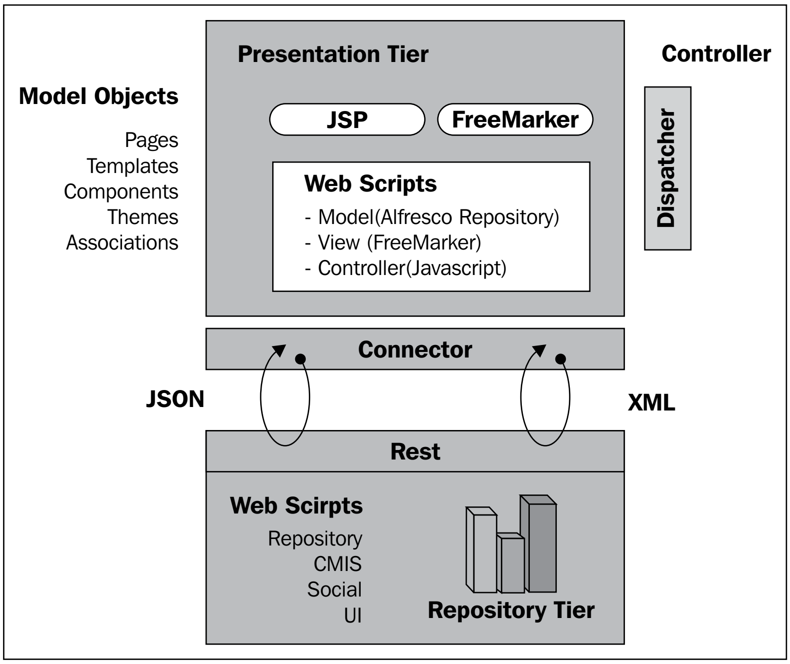
The user interface of a web application, the middleware, and the data access all contain in one package, a system where all these layers are bundled together on a single server and is generally single-tier. The single-tier architecture has the interface, business logic, and database highly coupled. Installing Surf as is, with just the page layout and component framework is a single-tier. A single-tier application also follows MVC where Model (represents objects such as pages, components, and templates), Controller (Dispatcher servlet), and renderer (FTL and web scripts). In this case, the renderer code will be heavy, and rather than depending on other parties, it will call the user interface framework, will manipulate data, and will create data in the form of HTML or XML. If we have a complex user interface, it makes sense to have a logical separation. In that case, we can develop applications using two-tiers:



A two-tier Surf application

With two-tier client/server architectures, the user system interface (client) is usually located in the user's desktop environment and the database management services are usually in a server that is a more powerful machine that services many clients. Processing management is split between the user system interface environment and the database management server environment. In a two-tier application, we separate the data retrieval and data presentation parts. Alfresco Share can be considered as a two-tier application and Share can be remotely connected to a different Alfresco Repository using web scripts.

Therefore, one set of web scripts (Data Web script), will be responsible for data retrieval and sending them in JSON, XML (Atom), or any other serialized data format present on the repository tier. Another set of web scripts (Presentation Web Scripts) with some UI framework may be **YUI** (**Yahoo User Interface**) will call those Data Web Scripts and would be responsible for rendering data in an HTML format present on the presentation tier. This is depicted in the following diagram:



The Alfresco Share structure

We have seen that Alfresco Share has been built on the Spring Surf framework. In order to facilitate the creation of the Alfresco Share application or customizing it, it is required to arrange the structure in a similar manner as required by the Spring Surf framework itself. In order to do this, you will end up with the same structure in your application's root directory. The following subfolders should be placed inside the `<install-application>` | `tomcat` | `webapps` folder:

- `/ share /css`
- `/ share /components`
- `/ share /modules`

- / share /themes
- / share /YUI
- / share /js
- / share /templates

Basically, all the preceding folders, except `YUI`, will have the CSS and JavaScript files, required by the modules, pages, and components. If you want to change the look and feel, then we have to modify these files. However, we don't modify any files in the `YUI` folder. All the YUI libraries are stored in the `YUI` folder. We already discussed about Share using YUI for a more interactive rich user experience.

So far, we have learned about where files should be placed for describing the presentation semantics (look and formatting) of a site. Now we will see how the business logic can be applied for constructing a site. The actual configuration and business logic are defined within another folder inside `<install-application> | tomcat | webapps | share | WEB-INF | classes`. There the following subfolders are placed as follows:

- /alfresco/site-data
- /alfresco/templates
- /alfresco/site-webscripts

These are the ones that are required for constructing a site. Let's learn more about these folders in detail:

- `site-data`: Alfresco Share uses the Surf page-based model to provide navigation between different areas of the application. This folder contains various model objects. The object model defines multiple template instances that dictate how pages are "put together" from their constituent parts, or components. This mechanism allows the behavior, or appearance, of individual page components to be modified as required without needing to redefine each page where a component appears. It represents the model objects containing information about the site construction. Model defines pages, page layouts, and components within a page. We already have an overview about models in the previous section. In the Surf framework, models are represented in the form of XML. XML files are effectively bound together to allow a page to be loaded and rendered. These XML files are stored in subdirectories in the specified location `<install-application> | tomcat | webapps | share | WEB-INF | classes | alfresco | site-data`.

Within this directory, you will see the following subdirectories, one for each type of model object that is managed by the Surf platform:

- `/site-data/chrome`
- `/site-data/components`
- `/site-data/configurations`
- `/site-data/content-associations`
- `/site-data/page-associations`
- `/site-data/page-types`
- `/site-data/pages`
- `/site-data/presets`
- `/site-data/template-instances`
- `/site-data/template-types`
- `/site-data/themes`

Let's have an overview about these elements. Out of the following, mostly used objects are pages, template instances, and components:

Objects	Description
Configuration	A configuration object is a collection of XML, mostly used by the internal system. It is defined for a site.
Component	A component is an instance of a component type that has been "bound" into a region such as a title, header, footer, and so on.
Template instance	It points to FreeMarker renderer classes.
Template type	It specifies FreeMarker or web scripts as the renderer.
Page	A page is a navigation page in a web application. It consists of templates and components.
Page association	The page association objects allows you to link two pages together.
Content association	It associates a document to the page. It can associate either a specific document or all documents of a specific type and can be associated to a page instance or to a page type.
Chrome	Chrome describes the border element around a region or a component. Using chrome, you can also include styling elements and drag-and-drop capabilities into a page.
Themes	Themes provide the default CSS and image assets to be used across all pages.
Presets	Presets are used to generate the default collaboration of any site.

- `templates`: Alfresco Share uses the FreeMarker rendering engine to render templates. Templates can be used in conjunction with the web scripts, or individually as well. FTL is used to process the logic and generate the output in an HTML format. It is fairly easy to integrate into any application. It is easy to learn the templating language and you will find a lot of documentation on the Internet. The templates are stored in subdirectories in the specified location `<install-application> | tomcat | webapps | share | WEB-INF | classes | alfresco | Templates`.
- `site-webscripts`: It will have the web scripts, which are used, as rendition. We have already discussed that the web script is one of the most commonly used rendering engines in Alfresco Share. With web scripts, you can build your own RESTful interface by using lightweight scripting technologies such as JavaScript and FreeMarker. We can say that a Share application is a collection of web script clients assembled as components through a template to create a page. Also, Share as the frontend, and Alfresco DM (Document Management) as the backend, these two web applications, are coupled together using web scripts. RESTful web script is a very suitable and flexible solution to integrate Alfresco with any other application, and is most likely the best solution out of all of the available options. These web scripts are stored in subdirectories in the specified location `tomcat | webapps | share | WEB-INF | classes | alfresco | site-webscripts`. It provides access to the content held within the Alfresco Content Repository. There are broadly two kinds of web scripts:
    - **Presentation Web Scripts**: It allows to build user interfaces, such as dashlets, in Alfresco Share, a portlet for a JSR-168 portal, a website, or a custom application. Presentation Web Scripts are also called as **web tier web scripts.** Unlike Data Web Scripts, Presentation Web Scripts can be hosted on the Alfresco Repository server, or on a separate presentation server. When hosted separately, the Presentation Web Scripts communicate with Data Web Scripts using remote call through JavaScripts. Some of the examples of Presentation Web Scripts in Alfresco Share are document library, create content, and workflows. You can find the Presentation Web Scripts by going to the following address:

      `http://<server-name>/share/service/index`.

- **Data web scripts**: It encapsulates access and modification of content/data held in the repository; therefore, they are provided and exposed only by the Alfresco Repository Server. They provide a repository interface for client applications to query, retrieve, update, and perform processes typically using document formats, such as XML and JSON. Data Web Scripts are also called as **repository tier web scripts** You can find the Data Web Scripts by going to the following address:

  `http://<server-name>/alfresco/service/index`.

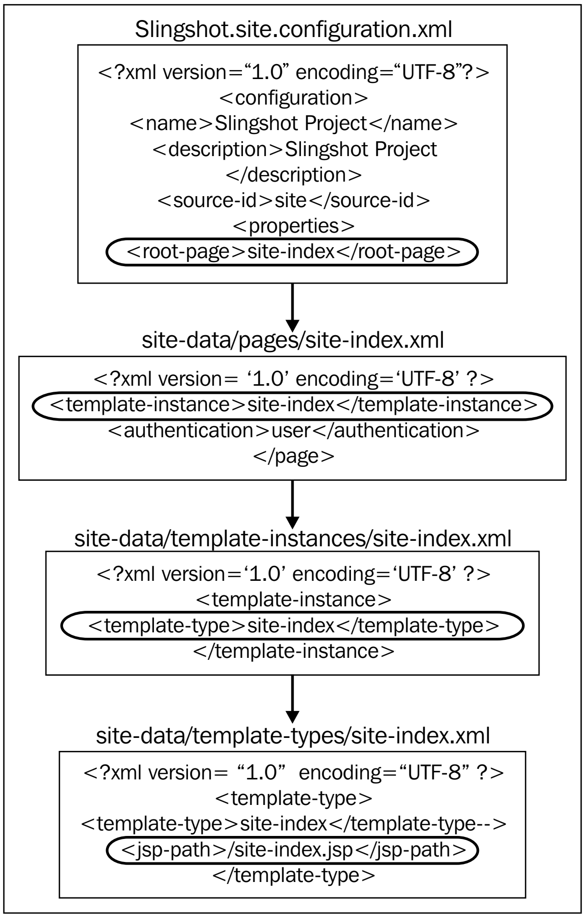
Working with the Alfresco Share Surf framework

We have understood the structure of the Alfresco Share application. Now we will understand the flow of how an Alfresco Share application is built with the use of the Spring Surf framework. In order to create any page for a site, you are required to follow these steps:

1. Create a site configuration file.
2. Create pages.
3. Create page template instances.
4. Create page templates.
5. Create components.

The site configuration is just a small XML file used with a few attributes such as the description, source, and the default page. It is responsible for loading a root page. Pages are XML files that define the template instance and have some attributes such as title, description, and authentication. Page template instances are, again, XML files that load the template types. The template types are the ones which make templates and components available to the all the pages. Page templates can be, for example, FreeMarker templates and components can be, for example, web scripts.

Let us understand how the root page is loaded for Alfresco Share with the following diagram:



Slingshot.site.configuration.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
<name>Slingshot Project</name>
<description>Slingshot Project
</description>
<source-id>site</source-id>
<properties>
<root-page>site-index</root-page>
```

site-data/pages/site-index.xml

```
<?xml version= '1.0' encoding='UTF-8' ?>
<template-instance>site-index</template-instance>
<authentication>user</authentication>
</page>
```

site-data/template-instances/site-index.xml

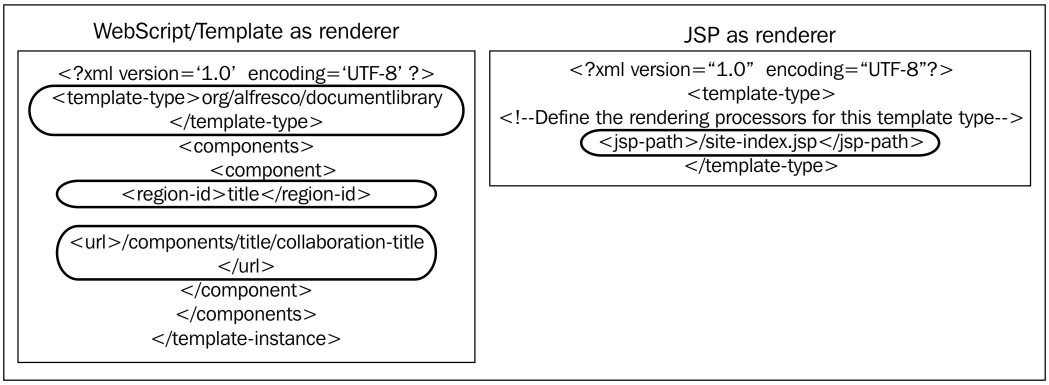
```
<?xml version='1.0' encoding='UTF-8' ?>
<template-instance>
<template-type>site-index</template-type>
</template-instance>
```

site-data/template-types/site-index.xml

```
<?xml version= "1.0"  encoding="UTF-8" ?>
<template-type>
<template-type>site-index</template-type-->
<jsp-path>/site-index.jsp</jsp-path>
</template-type>
```

The preceding diagram states the complete flow of how the page is displayed. In the diagram, you can notice, the renderer is JSP. The JSP renderer is rarely used in Alfresco Share. This was a pretty simple flow to understand. Most of the time, Share uses web scripts for renditions.

However, the flow of defining a page remains the same, but the template instance consists of templates and components. Components shall be created using web scripts. Two code snippets are shown in the following image to differentiate the use of web scripts and JSP. The JSP renderer is quiet easy to define as compared to web scripts:



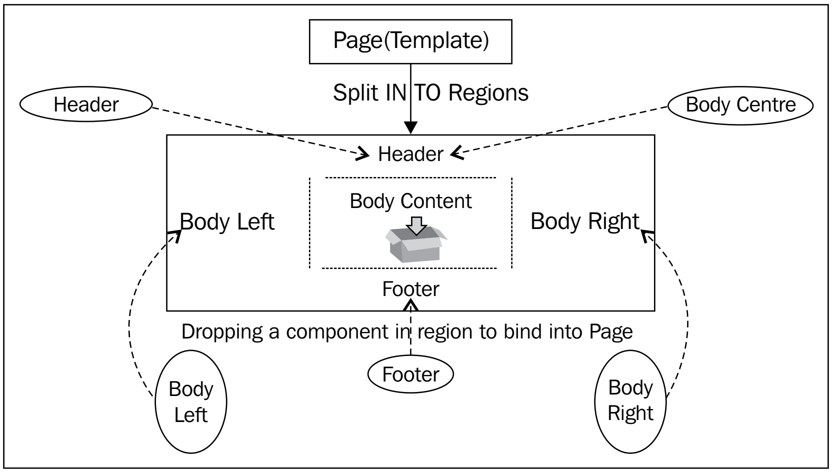
WebScript/Template as renderer

```
<?xml version='1.0' encoding='UTF-8' ?>
<template-type>org/alfresco/documentlibrary
</template-type>
<components>
<component>
<region-id>title</region-id>
<url>/components/title/collaboration-title
</url>
</component>
</components>
</template-instance>
```

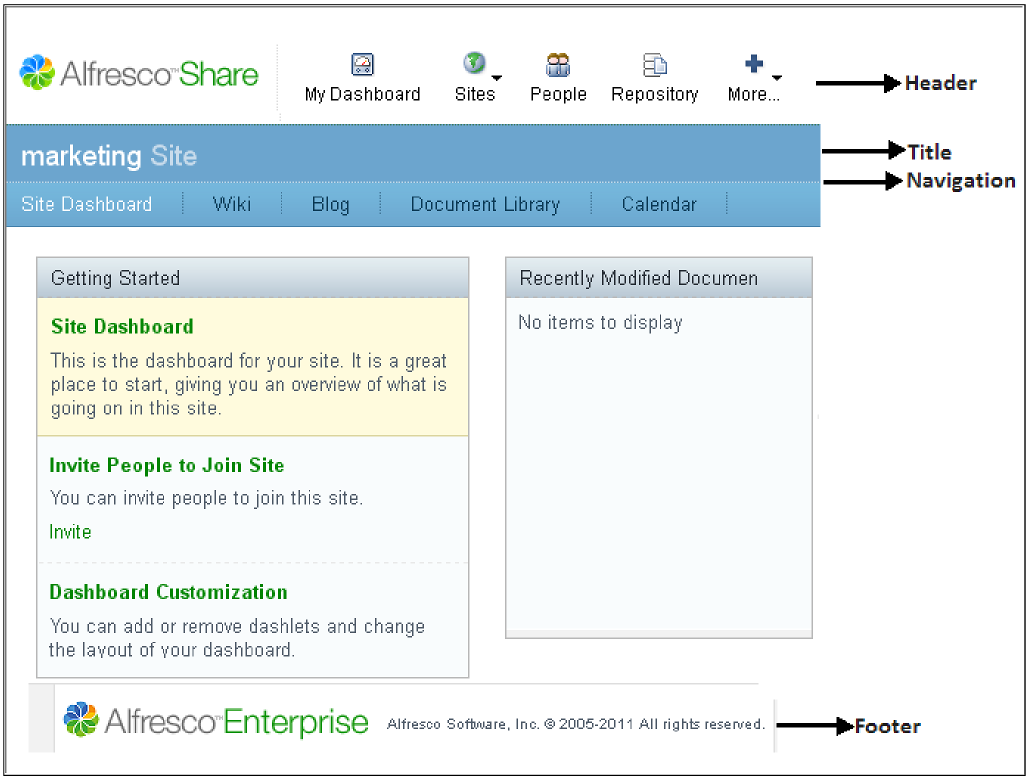
JSP as renderer

```
<?xml version="1.0" encoding="UTF-8"?>
<template-type>
<!--Define the rendering processors for this template type-->
<jsp-path>/site-index.jsp</jsp-path>
</template-type>
```

From the preceding diagram, we have learned to define web scripts. There are three things which are highlighted with reference to that: template type, region, and URL. The template type can be considered as a template in a page. A template contains a number of regions that have been defined with a `region-id`. Regions has nothing in it, but it holds a component. A component is defined with the URL. This is how a component is bound onto a page. A component is logically called as web scripts. Please find in the following diagram, a page splitting into regions and the way components are dropped within that region:



Every page in Alfresco Share consists of various components that are placed into regions such as Header, Title, and Footer as shown in the following screenshot:



Site Dashboard

This is the dashboard for your site. It is a great place to start, giving you an overview of what is going on in this site.

Invite People to Join Site

You can invite people to join this site.

Invite

Dashboard Customization

You can add or remove dashlets and change the layout of your dashboard.

No items to display

Alfresco Software, Inc. © 2005-2011 All rights reserved.

In the preceding screenshot, a page is split into various regions (**Header**, **Navigation**, and **Footer**) and components are placed within those regions in a form of webscripts. The Surf framework binds the component to the specific region of a page and also specifies the scope (it can be global, page, template). Using regions, one can decide what should be the position of the component to be placed in the page. For instance, footer should always be at the bottom of the page and header should always be at the top of the page. This is how various components are created with the use of presentation-tier web scripts and are placed in various regions.

Accessing Alfresco Repository using web scripts

Alfresco Share can be considered as a rich user interface for the Alfresco Repository. Share communicates with the Repository using REST-based Web Services, that is, web scripts. We have learned about two types of web scripts and know that Alfresco Share is built on a two-tier architecture. If we summarize all the sections, we can say that the Presentation Web Script on the client side (Alfresco Share) would retrieve data from the server side (Alfresco Repository) through Data Web Scripts. As the Data Web Script resides on a remote server, we have to configure Surf/Alfresco Share to search the location for web scripts. The configurations are provided in `<install-application> | tomcat | shared | classes | alfresco | web-extension | share-config-custom.xml.sample`. Rename the file by removing the `.sample` from the extension and you will find the following block of code in the specified file. Make the highlighted changes in the `endpoint-url` to the point to the Alfresco Repository:

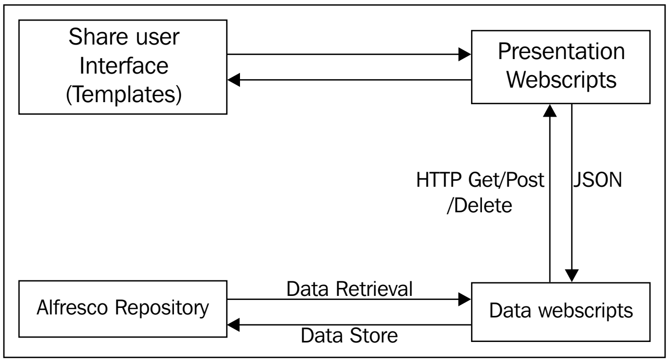
```
<config evaluator="string-compare" condition="Remote">
  <remote>
    <endpoint>
      <id>alfresco-noauth</id>
      <name>Alfresco - unauthenticated access</name>
      <description>Access to Alfresco Repository Web Scripts that
                    do not require authentication</description>
      <connector-id>alfresco</connector-id>
      <endpoint- url>http://localhost:8080/alfresco/s</endpoint-url>
      <identity>none</identity>
    </endpoint>

    <endpoint>
      <id>alfresco</id>
      <name>Alfresco - user access</name>
      <description>Access to Alfresco Repository Web Scripts that
                    require user authentication</description>
      <connector-id>alfresco</connector-id>
      <endpoint-url>http://localhost:8080/alfresco/s</endpoint-url>
      <identity>user</identity>
    </endpoint>
    <endpoint>
      <id>alfresco-feed</id>
      <name>Alfresco Feed</name>
      <description>Alfresco Feed - supports basic HTTP authentication
                    via the EndPointProxyServlet</description>
      <connector-id>http</connector-id>
      <endpoint-url>http://localhost:8080/alfresco/s</endpoint-url>
```

```
        <basic-auth>true</basic-auth>
        <identity>user</identity>
      </endpoint>
    </remote>
  </config>
```

Once the configuration has been made, the next step is to call the Data Web Script from the Presentation Web Script residing on Alfresco Share. The logic for calling the Data Web Script has to be defined in the JavaScript (being a controller) of the Presentation Web Script. The following is the small code snippet, which shows how the Data Web Script is called, and the data is processed by the template for displaying. In the previous paragraph, we configured the end point by defining the ID and the end point URL to access the Alfresco Repository. The same ID we have to use to get the connector object. With this object, we can access the Data Web Script. The result of the Data Web Script has to be passed through the model of Presentation Web Script. The template of the Presentation Web Script is going to modify this result and will use this data for displaying on the site:

```
function main()
{
  var connector = remote.connect("alfresco");
  var result = connector.get("/api/actionConstraints?name=ac-email-
                              templates");
  var templates = [];
  if (result.status == 200)
  {
    templates = eval('(' + result + ')').data[0].values;
  }
  model.templates = templates;
}
```

The following diagram explains how Presentation Web Scripts and Data Web Scripts interact with each other:

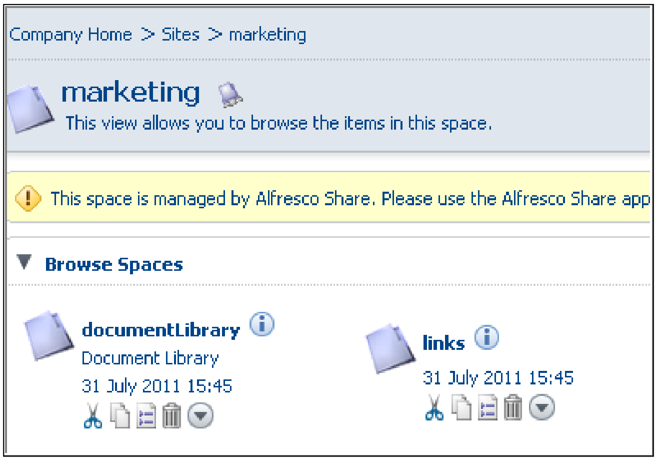


How data is stored in the Alfresco Repository

Alfresco is considered as a huge content repository. The content is physically stored in a `.bin` format, which could be traversed respectively through the folders date-wise, but the file names are generated as a random alphanumeric string. All the files (`.pdf`, `.doc`, `.jpeg`, `.txt`, and so on) are stored respectively in `.bin` files only. The users, folders, metadata, and workflows are stored in a database. Details about how to configure a database is already provided in *Chapter 2*, *Installing and Setting up Alfresco Share*. Alfresco uses neither the complex schema nor high frequency requests as it indexes most of its content, metadata using Lucene/Solar. It heavily uses Hibernate/iBATIS and EHCache for fetching and storing the data. Indexes are also stored physically. The index, implemented with Lucene, can also be located on a very fast physical drive.

In Share, each page of the Share site corresponds to an Alfresco Space. Therefore, each time a site is created, the following spaces are automatically created in the Alfresco Explorer.

You will find the following spaces in the **Company Home | Sites** folder when you are logged in to the Alfresco Explorer. Refer to the following screenshot:



Company Home > Sites > marketing

marketing

This view allows you to browse the items in this space.

This space is managed by Alfresco Share. Please use the Alfresco Share app

Browse Spaces

documentLibrary
Document Library
31 July 2011 15:45

links
31 July 2011 15:45

If you create a blog, wiki, discussion, or an update calendar, you will find more spaces in the folder. Alfresco Share uses the Alfresco Repository to store data.

Share configuration architecture

Share is highly configured and customizable. You can configure various aspects of an Alfresco Share application such as:

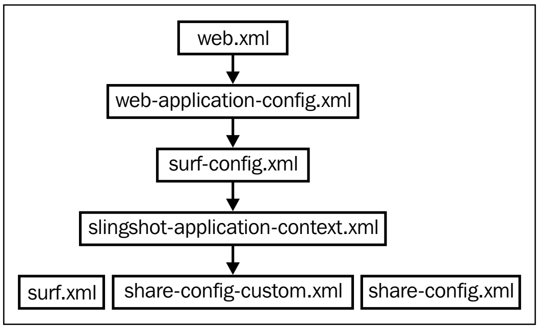
- Creating a custom content
- Managing more aspects
- Editing metadata
- Customizing forms
- Configuring workflows
- Debugging an application for client scripts in the browser
- Configuring the application's environment mode to development which helps to disable Spring Surf caches
- Compiling Rhino JavaScript
- Configuring a separate Alfresco Share server for quicker restart

We will also learn, in this section, how you can debug the client-side or the server-side JavaScript, what are the possible ways to override the existing files and how Alfresco Share can handle the JavaScript files.

Share configurations

The default value for Share configuration properties are defined in `share-config.xml` located at `<install-application>` | `tomcat` | `webapps` | `share` | `WEB-INF` | `classes` | `alfresco`. However, the custom configuration files should be provided as an extension and can be placed inside the `<install-application>` | `<tomcat>` | `shared` | `classes` | `alfresco` | `web-extension` folder. The entire configuration related details could be added/modified in `share-config-custom.xml`. In the `web-extension` folder, there is already a `share-config-custom.xml.sample` file placed, which can be considered for reference and can prove advantageous for the customizations. Let's understand how the configuration file is loaded during the start up of the server.

The share-config.xml file is loaded from slingshot-application-context.xml placed at <install-application> | tomcat | webapps | share | WEB-INF | classes | alfresco, which, in turn is loaded from surf-config.xml placed at <install-application> | tomcat | webapps | share | WEB-INF | classes. This file is again loaded from web-application-config.xml located at <install-application> | tomcat | webapps | share | WEB-INF | classes and this file is loaded from web.xml placed at <install-application> | tomcat | webapps | share | WEB-INF. web.xml contains the information needed by the servlet container of the web application to run and is considered as a simple configuration setup file for the root of web-app. The following diagram explains the flow of how files are loaded:



Most of the configurations can be placed in various folders under the web-extension folder. However, there are a few exceptions, such as client-side JavaScript, CSS, and image files that must be visible to the client browser of the application and are accessible by placing them under respective folders inside <install-application> | tomcat | webapps | share. However, this approach has a drawback in that Alfresco could overwrite the changes if you redeploy a WAR file. Instead, it is recommended to package the customization and deploy it as an AMP or through a JAR file. We will learn more about the packaging and deploying in the last chapter of the book titled *Packaging and Deploying Share*.

Extending Share

Consider if you want to make changes in the existing web scripts of Alfresco Share. It is not advisable to make changes in the existing file. With earlier versions, there was a need to copy the existing files with the same structure in the <install-application> | <tomcat> | shared | classes | alfresco | web-extension folder and make the changes in the code. With Alfresco, Version 4.0, there are new ways that provide the extension in a much easier way. It provides the following benefits:

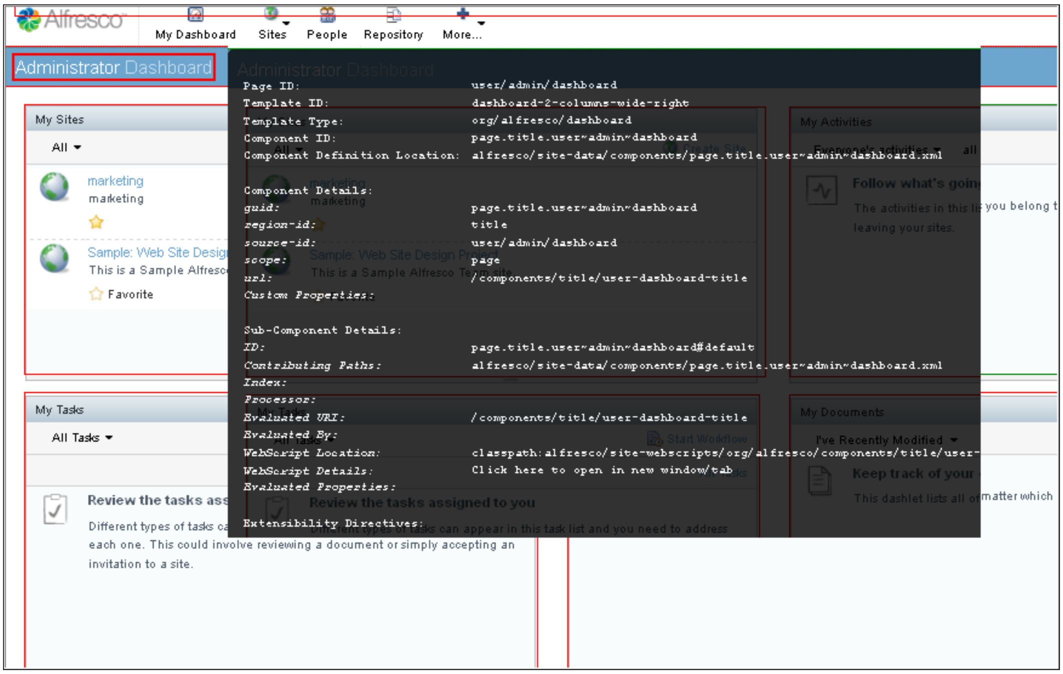
- Extending Share without knowing any details about Share with the use of SurfBug

- Customizing the existing Share user interface without making changes in the existing files; easy approach of overriding the existing Share components
- Extending Share with new functionalities
- Using a modular approach

Overview of SurfBug

SurfBug is a Spring Surf debug tool that helps in identifying the files about the components and pages placed within the site. The most challenging task is to provide complete information about the files and properties that define them. This can be enabled using `http://<server-name>/share/page/surfBugStatus`.

Log in to Alfresco Share (`http://<server-name>:<port>/share`) and go to the web scripts home page, that is, `http://<server-name>:<port>/share/service/index`, scroll to the bottom and click on **Enable SurfBug**. The page refreshes and the button changes to **Disable SurfBug**. Now go to the Alfresco Share window and refresh the page. The user dashboard has some red boxes, indicating the subcomponents and parent components that are present on the page. When you click on any box, a pop up is displayed, as shown in the following screenshot, with all the required information about that component. This makes our work easy as we have the much needed information in place:



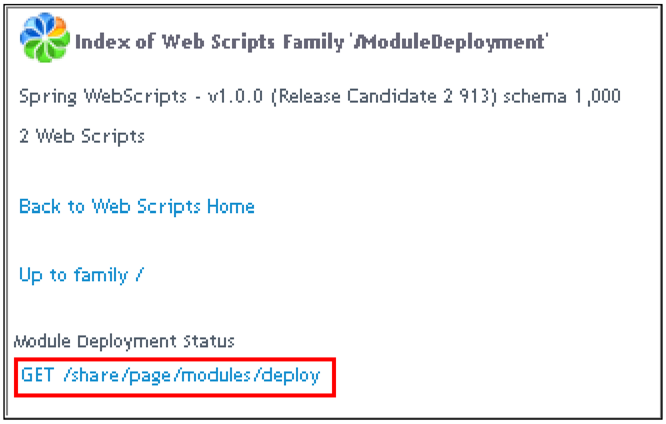
```
Page ID:                        user/admin/dashboard
Template ID:                    dashboard-2-columns-wide-right
Template Type:                  org/alfresco/dashboard
Component ID:                   page.title.user~admin~dashboard
Component Definition Location:  alfresco/site-data/components/page.title.user~admin~dashboard.xml

Component Details:
guid:                           page.title.user~admin~dashboard
region-id:                      title
source-id:                      user/admin/dashboard
scope:                          page
url:                            /components/title/user-dashboard-title
Custom Properties:

Sub-Component Details:
ID:                             page.title.user~admin~dashboard#default
Contributing Paths:             alfresco/site-data/components/page.title.user~admin~dashboard.xml
Index:
Processor:
Evaluated URI:                  /components/title/user-dashboard-title
Evaluated By:
WebScript Location:             classpath:alfresco/site-webscripts/org/alfresco/components/title/user-
WebScript Details:              Click here to open in new window/tab
Evaluated Properties:

Extensibility Directives:
```

Suppose you want to hide the preceding highlighted title bar, that is **Administrator Dashboard** from the **User's Dashboard** page. Carry out the following steps:

1. As we already discussed, any customization or configuration has to be provided as an extension and can be placed inside the `<install-application>` | `<tomcat>` | `shared` | `classes` | `alfresco` | `web-extension` folder. Create a `site-data` | `extensions` folder inside `web-extension`.
2. Create an XML file named `title-extension.xml`, add the following code into the file, and save the changes:

```
<extension>
  <modules>
    <module>
      <id>Title Bar (Hide Title)</id>
      <components>
        <component>
          <region-id>title</region-id>
          <source-id>user/{userid}/dashboard</source-id>
          <scope>page</scope>
          <sub-components>
            <sub-component id= "default" >
              <evaluations>
                <evaluation id= "titleId" >
                  <render> false </render>
                </evaluation>
              </evaluations>
            </sub-component>
          </sub-components>
        </component>
      </components>
    </module>
  </modules>
</extension>
```

3. Restart the server. Login to Alfresco Share (`http://<server-name>:<port>/share`) and go to the web scripts home page that is `http://<server-name>:<port>/share/service/index`, and click on **Browse Module Deployment Web Scripts**. It takes you to the following screen and click on the highlighted box:



Index of Web Scripts Family '/ModuleDeployment'

Spring WebScripts - v1.0.0 (Release Candidate 2 913) schema 1,000

2 Web Scripts

Back to Web Scripts Home

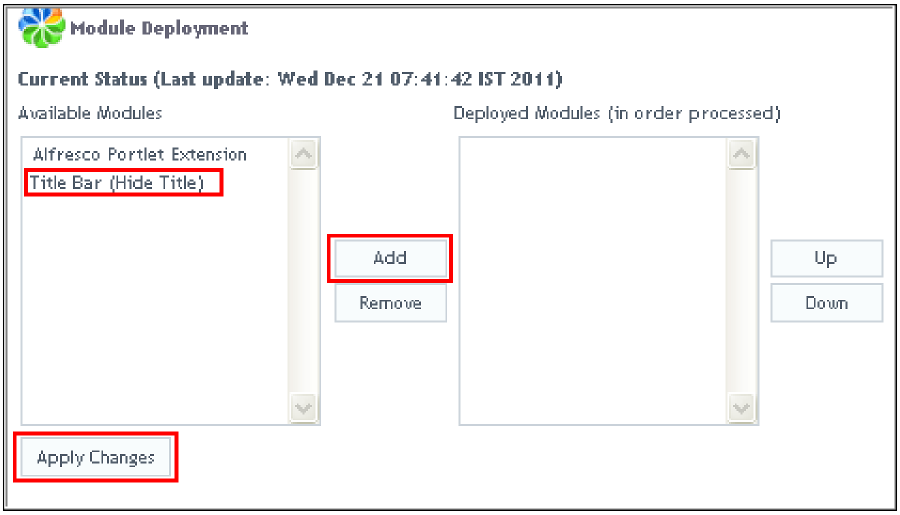
Up to family /

Module Deployment Status

GET /share/page/modules/deploy

4. Another page opens up and you will see your deployed module in the left side box. Click on the **Add** button and finally **Apply Changes**. The following module page also opens by hitting the following address directly:

   `http://<server-name>:<port>/share/page/modules/deploy`



Module Deployment

Current Status (Last update: Wed Dec 21 07:41:42 IST 2011)

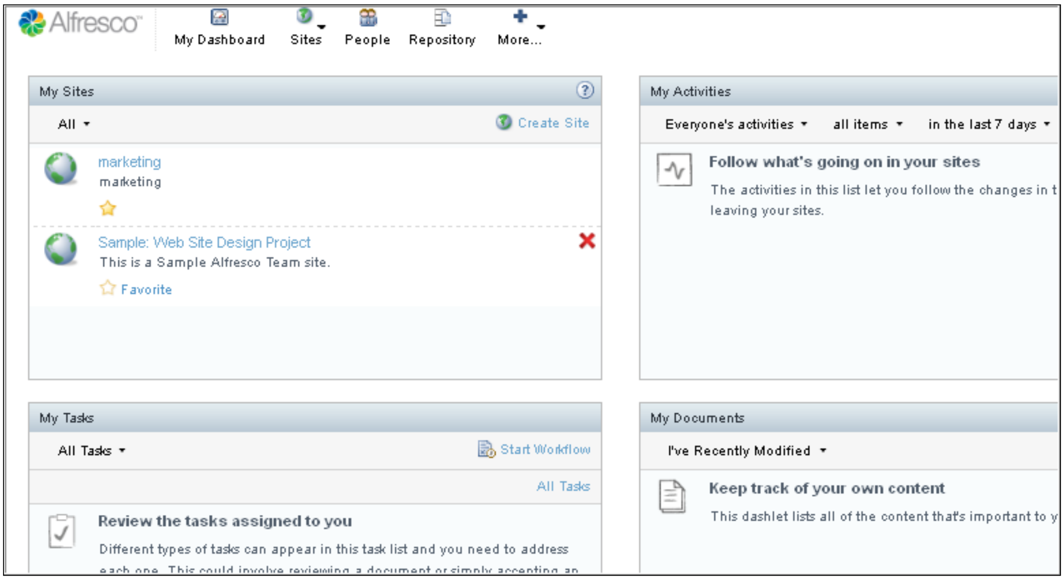
Available Modules

Alfresco Portlet Extension

Title Bar (Hide Title)

Deployed Modules (in order processed)

5. After applying the changes, refresh the share **User's dashboard** page. We will not be able to see the title bar anymore on that page, as shown in the following screenshot:



This is a Sample Alfresco Team site.

Follow what's going on in your sites

The activities in this list let you follow the changes in t leaving your sites.

Review the tasks assigned to you

Different types of tasks can appear in this task list and you need to address each one. This could involve reviewing a document or simply accepting an

Keep track of your own content

This dashlet lists all of the content that's important to y

6. If you want to show the title bar, you can go to the **Module Deployment** page and remove the module from the right side box. Apply the changes and refresh the **User's dashboard** page.

This was just a small example of how easy it is to extend or customize Share.

The following are the few possible customizations that can be achieved with the help of SurfBug and use of a modular approach:

- Adding a content onto the Alfresco Share page
- Customizing labels of the components
- Customizing the Alfresco Share FreeMarker templates
- Customizing JavaScript controllers
- Hiding or displaying any component
- Making use of evaluators to show components on the basis of any condition, such as for a specific user or a site

JavaScript minification

Share is extensively using client-side JavaScript. By default, Alfresco is configured to look for minified JavaScript files. JavaScript minification is the process of removing all unnecessary characters from the source to minimize the file size, without changing the JavaScript's functionality. This helps in improving the site's performance. You are required to deploy both the original and minified version of the JavaScript file. You will find the following code in most of the FreeMarker templates to include the JavaScript file:

```
<@templateHeader>
  <@script type="text/javascript" src="${page.url.context}/res
     /components/discussions/discussions-common.js">
   </@script>
</@>
```

With the `@script` tag, Alfresco looks for the minified version of the same JavaScript. It replaces the reference of `*.js` file with `*-min.js` file. Therefore, if you have not created a `*-min` version of your JavaScript file, it is not going to work. There are a few approaches you can use to make the JavaScript work:

- You can copy and rename the JavaScript file by putting `-min.js` in the same folder. It should be used only while testing our code.
- You can make use of YUI compressors to create a minified JavaScript file. The YUI compressor is a build-process component written in Java that minifies your JavaScript and CSS. It is a JavaScript and CSS minifier designed to be 100 percent safe and yields a higher compression ratio than most other tools. In the last chapter, *Deploying Share*, we have used the YUI compressor to compress JavaScript. Please check `build.xml` that compresses JavaScript with the use of YUI compressing Jars.
- You can configure Alfresco Share not to look for the minified JavaScript version by replacing the `@script` tag to a simple `script` tag. Primarily, `alfresco-template.ftl`, located under the `tomcat` | `webapps` | `share` | `WEB-INF` | `classes` | `alfresco` | `templates` | `org` | `alfresco` | `include` folder, can be modified for replacing `-min.js` to `.js`. You can change the logic by removing that replacement. They have defined a `SCRIPT` macro over there. This can be disabled in the development environment, so you don't have to take care of the additional process of minification and should be enabled in the production environment.

This should be used carefully as Alfresco Share uses a normal JavaScript file while debugging and a minified version for actual action. Otherwise, turning debug on and off will give different results.

> In order to find more details about the YUI compressor, visit the following URL:
>
> `http://developer.yahoo.com/yui/compressor/`.

JavaScript debugging

Alfresco Share provides a way to debug an application. The client and server-side JavaScript can be debugged easily. JavaScript debuggers help find and squash errors in your JavaScript code. By using a debugger, you can look deep into the code as it runs. It will allow you to run the code, one line at a time, and each time, either adding extra code on the fly (without editing the original file), or checking how variables change in the run of the program. Debuggers let you pause the execution at any time and can see the value of complex objects and variables and inspect those. The first essential step in debugging your code is getting your hands on a debugger. Some of the debuggers are mentioned as follows:

- **Client JS debugging**: For the client-side JavaScript, you can use Firebug (Firefox), Inspector (Safari), Opera dragonfly debugger (Opera). Firebug is mainly used for client-side debugging. Firebug's script file sorts and organizes files into a very clean list that will help you find any file in a snap.
- **Server JS debugging**: For the server-side JavaScript, one can use the web script JavaScript debugger. This can be enabled by using `http://<server-name>/share/page/api/javascript/debugger`.

Applications using the Alfresco Surf platform

Including Share, there are many applications which are presently being built on top of the Surf platform. The other client applications leveraging the Spring Surf framework are:

- **Alfresco Records Management**: Alfresco Records Management is a customizable example of a dynamic website built-in Spring Surf, but with an Alfresco Share Content Repository for a full-featured content management built right in. It can help in capturing and managing vital information. It allows users to file and declare new documents as corporate records, much of which resides in business documents, e-mails, financial reports, and so on.

- **Alfresco Network**: Provides access to Alfresco news, ticket details, and resolution, and new services, such as the knowledge base and the web component library. This is available to the Alfresco Enterprise users.
- **Alfresco Web Editor**: It is based on the Spring Surf framework and provides access to users to make edits in the Alfresco content directly within a web page.

All of these applications are presently being built on top of the Surf platform. The Surf platform itself is a product that our community and customers may wish, and are encouraged, to use in building their own web applications.

Summary

In this chapter, we learned:

- The Alfresco Spring Surf architecture and the ways Surf enables the rapid creation of websites.
- Alfresco Share follows a specific structure, which has to be followed while customizing it.
- You can access the Alfresco Repository which can reside on other servers through the REST-based Web Service (web scripts).
- Share provides a way to configure it by developing most of the components in the `web-extension` folder. Minified JavaScripts are used to improve performance. Debugging options are available to make the development faster.

In the next chapter, you will learn about managing users and groups of an Alfresco Share application. You will also understand the concepts and the underlying framework behind the Alfresco security model and will understand various security models.

4

Administering Share and Configuring Authentication Access

In the previous chapters you must have got the idea of what is Alfresco Share and the high level architecture of Alfresco Share. Now it's time to jump into the Alfresco Share application. In this chapter, and the following chapters, you will learn how you can use Alfresco Share to build collaborative sites and see what you can do with the Alfresco Share user interface.

In this chapter, we will discuss about managing the users and groups of the Alfresco Share application. You will also understand the concepts and the underlying framework behind the Alfresco security model. The Alfresco security model is flexible and allows you to choose either its built-in security or an external security model defined by your organization, by using systems such as LDAP and Active Directory. You will understand various security models and learn to choose the one that is most suited to your enterprise's requirements. The Alfresco membership system is highly scalable and can cater to a number of users and content managers. We will also discuss various administrative features in the later sections of this chapter.

In this chapter, you will learn:

- Managing system users
- Searching users using people finder
- Updating a user profile
- Managing groups
- The user dashboard and customizing a personal dashboard
- Configuring authentication subsystems
- Administrative functions

The Alfresco security model

A content management system requires a membership system that allows its users to access content, set their preferences, and receive notifications and alerts. Members of the system can collaborate with other members by selectively sharing documents and sharing ideas by using discussion forums. Through the workflow mechanism, members can control and follow the business process.

Traditional membership models address basic authentication (who can access) and authorization (what they can do). Alfresco extends this model by providing capabilities to manage groups and subgroups of members, member attributes, and member workspaces. It also provides a set of administrative tools to configure and control the membership.

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Users and groups

Users are individual members, whereas **groups** are the logical categorization of users.

Users and groups are stored in the Alfresco Repository and these users can login via Alfresco Share also. In Alfresco, a user is identified by a unique user ID, also known as the log in ID. The administrator is like a super user of the system. There can be more than one administrator user.

Alfresco groups, logically a group is a set of users in the system for security and collaboration purposes. A group can have any number of sub-groups. There is a default group called **EVERYONE**, which represents all the users of the system.

A user can belong to more than one group and sub-group. A group can have more than one user. A user belonging to a sub-group will automatically belong to the parent group. This is how a typical organization's hierarchy works. An employee belongs to a particular department, or some times more than one department. Hence, you can consider different departments as different groups.

Authentication

Alfresco imposes authentication using the username and password pair. Authentication is performed at the following entry points to the Alfresco Repository:

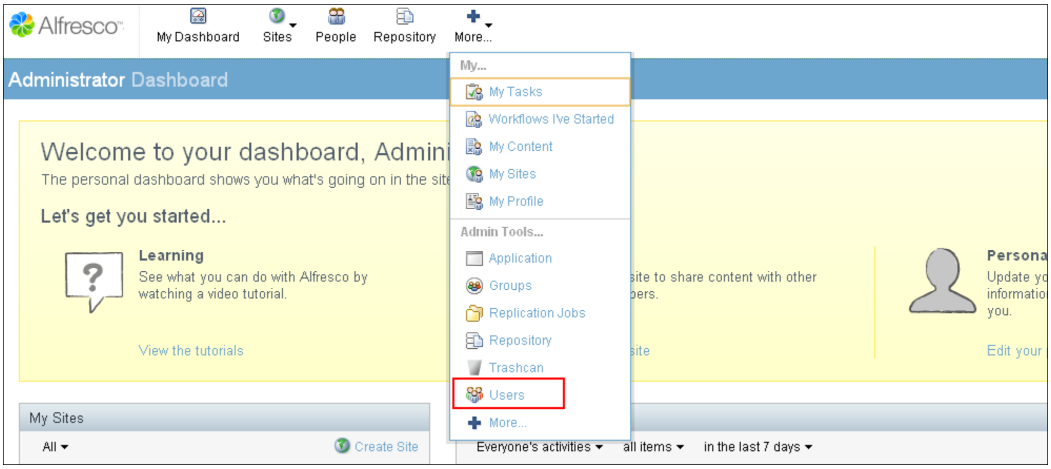
- Web client
- CIFS
- FTP
- WebDAV
- Web services
- Spring beans exposed as public services in Java

When a call is made to the Repository through the public service API, the caller must first be authenticated. This can be done by logging in using a username and password to validate a user. Some applications and authentication mechanisms may support single sign-on. For example, a user can access the Alfresco Repository through Alfresco Share or another application through the web services protocol. No matter how a user or an external system connects to Alfresco, they all should go through the same authentication process to access data from the Alfresco Repository.

Managing system users

You have to log in to Alfresco Share as an administrator (admin) to create accounts for each Alfresco user. Only an administrator user can manage user accounts.

In Share, for user management, expand the **More** menu on the toolbar and click on **Users** option in the **Tools** list:



Welcome to your dashboard, Admini

The personal dashboard shows you what's going on in the site

Let's get you started...

See what you can do with Alfresco by watching a video tutorial.

site to share content with other bers.

Update yo informatio you.

Only administrator users will have this link. Once you click on this link, you can see the screen for managing users. From this screen you can create new users, as well as searching for existing users, accessing the profile of users, and deleting users.

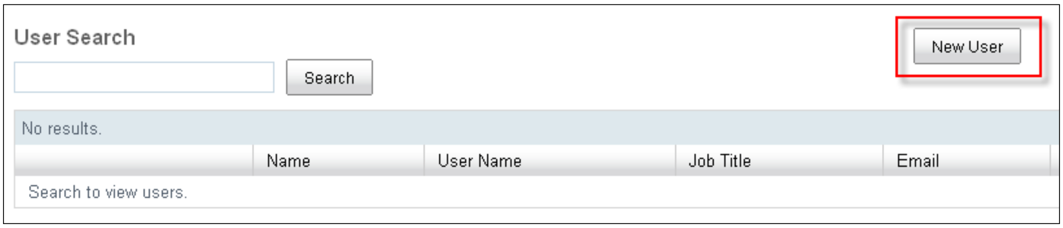
Creating new users

To add users, you need to know the user ID, password, and other primary details as listed as follows, which are mandatory to create any new user:

- First Name
- Last Name
- E-mail ID (valid corporate e-mail)
- User name (login ID)
- Password

The steps to create a new user are as follows:

1. Expand the **More** menu on the toolbar to open the **Admin Console**.
2. Click on **Users** in the tools list.
3. Click on the **New User** button as displayed in the following figure:

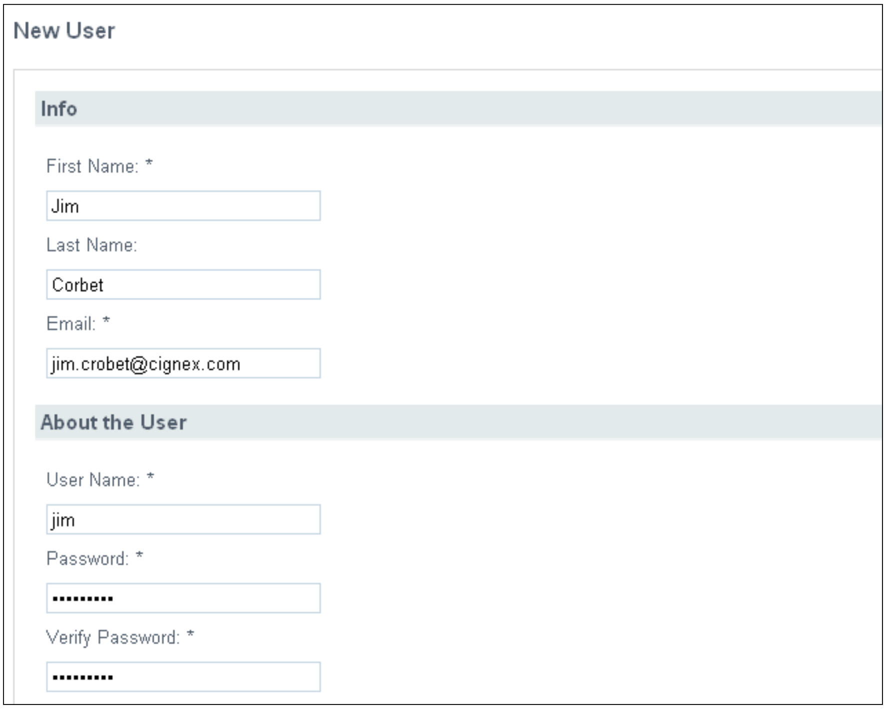


User Search

No results.

	Name	User Name	Job Title	Email
Search to view users.				

4. Once you click on the **New User** button, you will see the form to fill up the information for creating a new user:



New User

Info

First Name: *

Jim

Last Name:

Corbet

Email: *

jim.crobet@cignex.com

About the User

User Name: *

jim

Password: *

•••••••••

Verify Password: *

•••••••••

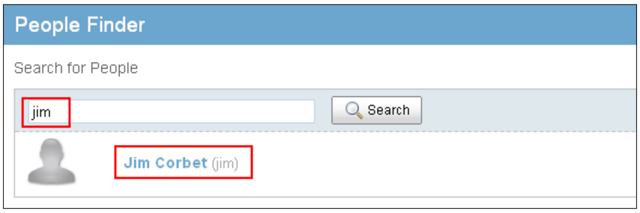
Other user details like Contact Information, Company Details, and so on are also captured in a user profile in Alfresco Share. In the following section for Updating the User Profile we will see how the user can provide these details.

Searching for people using People Finder

The People Finder page component enables you to search for a particular user. To search the any user, follow these steps:

1. Click **People** on the toolbar.
2. The People Finder page component appears.
3. In the search box, you can type the full, or partial name, of the user you want to search.
4. Refer to the search tips provided on the People Finder page to perform more complex searches by both name and property.

5. Click **Search**. The results list appears beneath the search box and displays all users matching the search criteria provided:



6. In this list, click a username to display that user's profile. The user details are organized across three pages: Info, Sites, and Content.
7. Navigate the pages to view the details for the selected user.

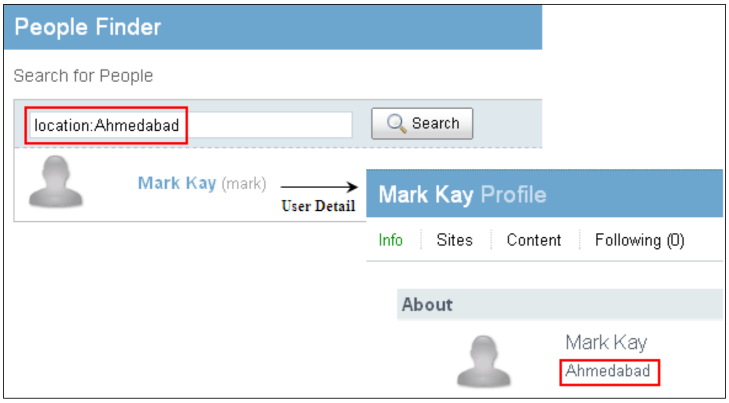
> You must enter a minimum of one (1) character to search and the search is not case sensitive.

Searching by property from the People Finder component

On the People Finder component page, you can refer to the search tips provided to perform more complex searches by both name and property. For example, let's search for a user whose location is Ahmedabad. So in this case we are searching for the user by its property and here property is location.

The syntax is: `<property_name>:<value>`

Hence, in our example, the search string should be `location:Ahmedabad`. If you search with this, it will give the resultant users having their location set as Ahmedabad:

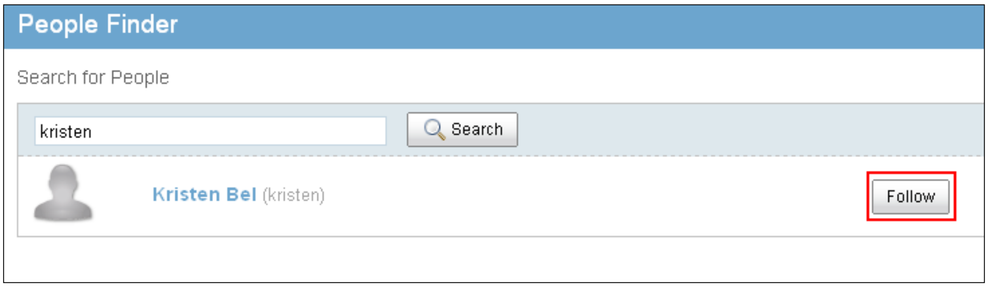


Following user

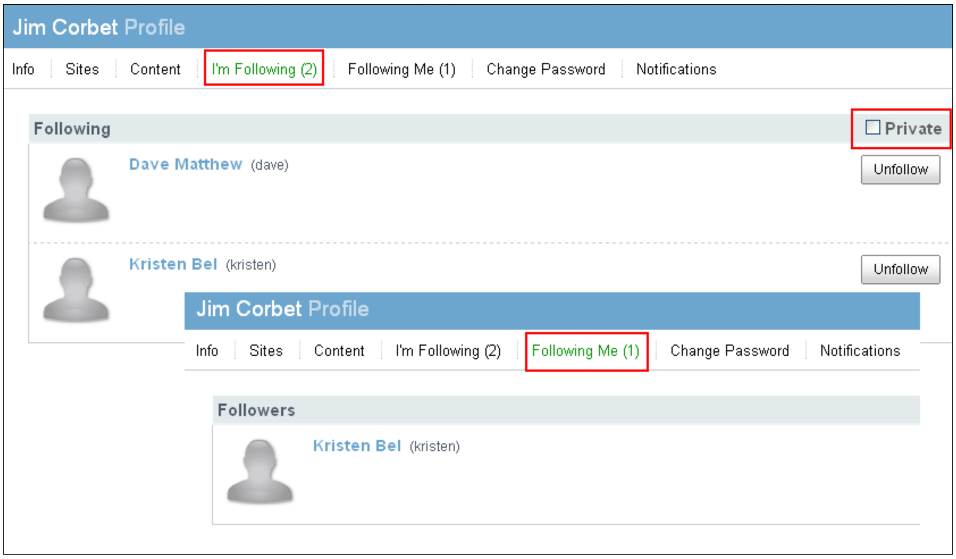
This feature allows you to follow other users whose activities might be of interest to you..

To follow any user perform the following steps:

1. Search for the people you want to follow using people finder as discussed in the previous section.
2. Click on the **Follow** button with the resultant user's list:



3. Another option is to follow any user from the user's Profile page. There is also a Follow button on the info page on the user's profile.
4. You can see the users you are following from your profile page under the **I'm Following** section.
5. To see who is following you, check the **Following Me** section on Profile page.



6. The **Private** checkbox allows you to make your followers list private, which restricts other users from viewing this.

Updating a user profile

Once the user is created, the user himself can update the profile. The admin user also can update the profile for any other user, but can update only limited details.

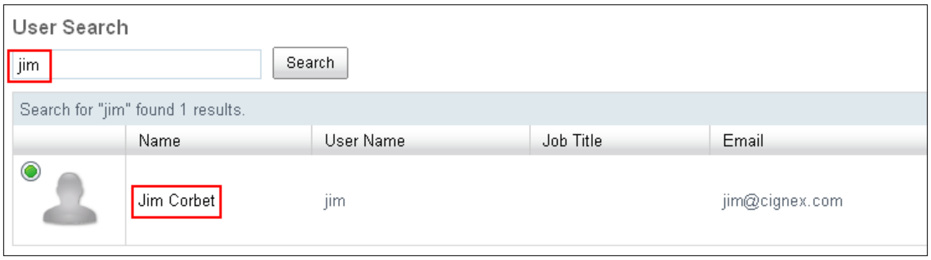
Updating another user's profile

The admin user can update the profile for any other user, but can update only the following details:

- First Name
- Last Name
- Email
- Quota
- Groups
- Disable Account
- Photo

To update the profile for any user by admin, perform the following steps:

1. Expand the **More** menu on the toolbar.
2. Click **Users** in the tools list.
3. Search for the user whose details you want to update:



User Search

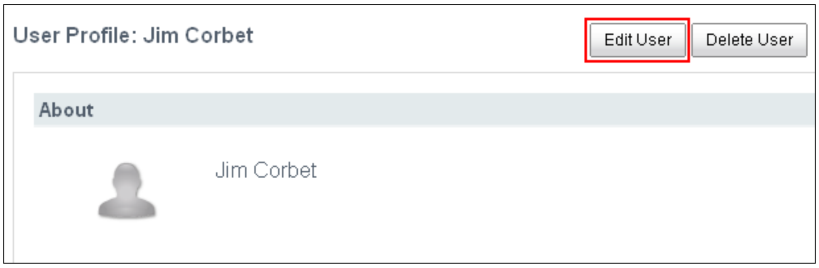
jim

Search for "jim" found 1 results.

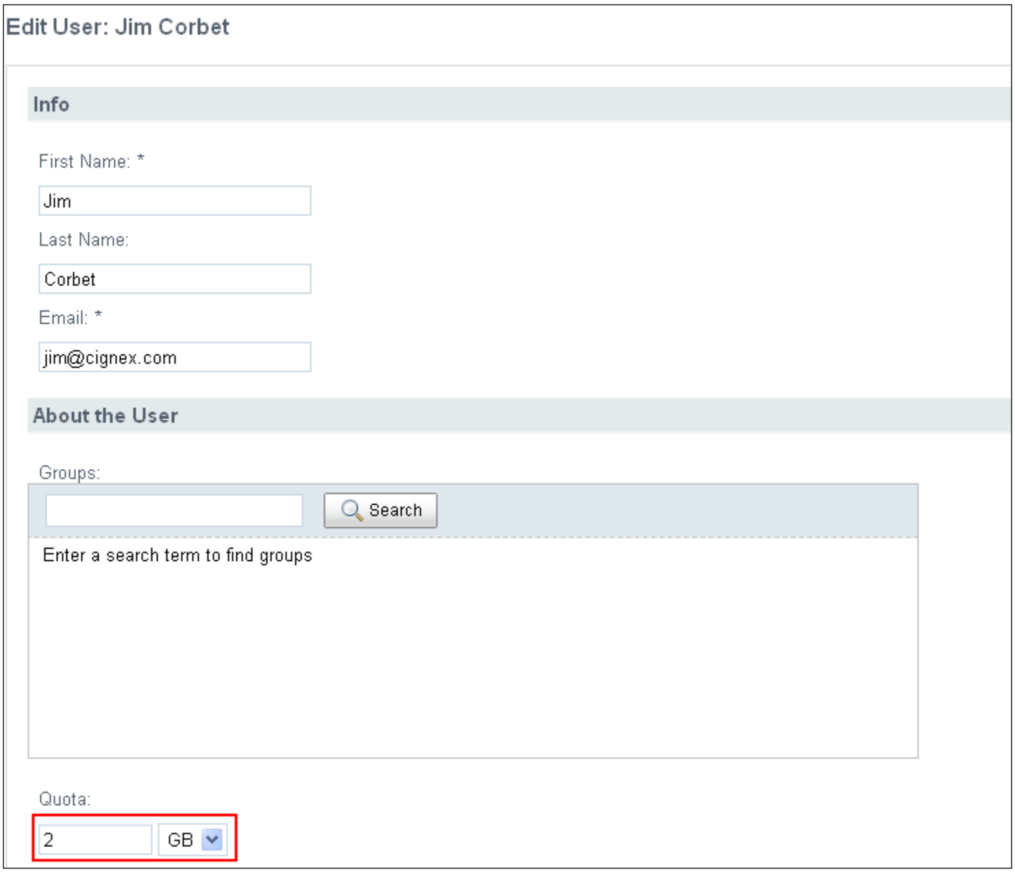
	Name	User Name	Job Title	Email
	Jim Corbet	jim		jim@cignex.com

4. Click on the name of the user, it will open a page with that user's details.

5. Click on the **Edit User** icon, as shown in the following figure:



6. On this page you can update this user's details. For example, let's update the **Quota** for this user:



First Name: * Jim

Last Name: Corbet

Email: * jim@cignex.com

Groups:

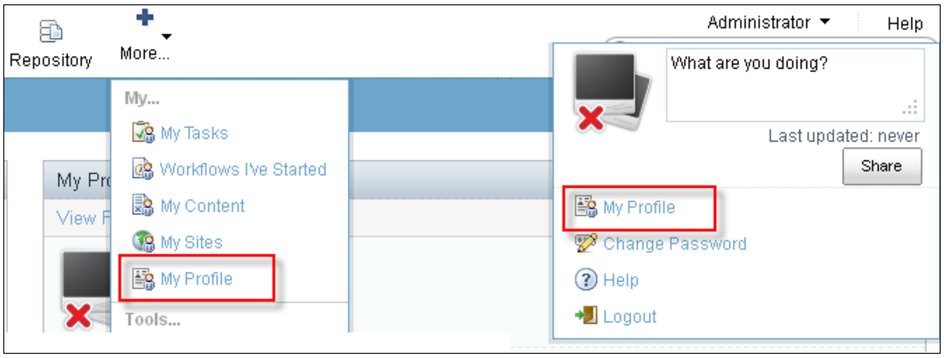
Enter a search term to find groups

Quota: 2 GB

7. Once done with the changes, click on the **Save Changes** button to save the changes.

Updating the user's own profile

There are two ways to access the user's own profile. You can find the **My Profile** option in the **More** menu on the toolbar and also in the drop down menu from the upper-right corner where the username is displayed:

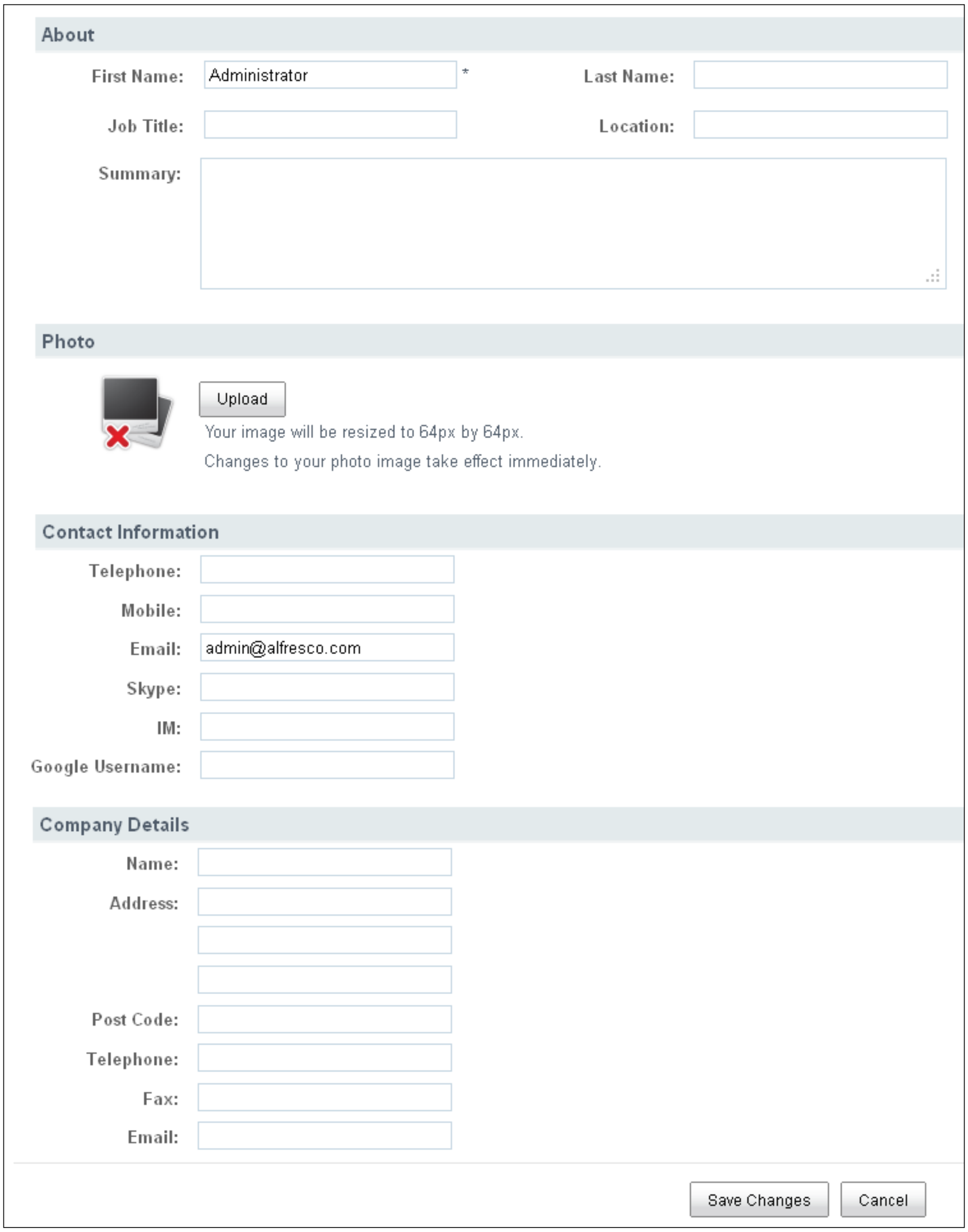


Once you click on **My Profile**, click on the **Edit Profile** button.

The following list mentions other information, which can be filled up while editing the user's own profile:

- Quota (maximum limit to upload the data by a particular user)
- Photo
- Location
- Job Title
- Summary
- Groups (groups to which this user belongs)
- Contact Information
- Telephone
- Mobile
- Skype
- IM
- Google Username
- Company Details
- Name
- Address
- Post Code
- Telephone

- Fax
- Email



About

First Name: Administrator *

Last Name:

Job Title:

Location:

Summary:

Photo

Your image will be resized to 64px by 64px.

Changes to your photo image take effect immediately.

Contact Information

Telephone:

Mobile:

Email: admin@alfresco.com

Skype:

IM:

Google Username:

Company Details

Name:

Address:

Post Code:

Telephone:

Fax:

Email:

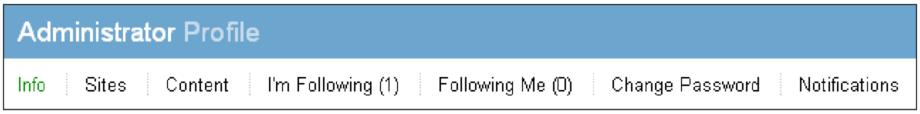
Edit the user's profile details, making changes, and adding new information as desired. Once done with the changes, click on the **Save Changes** button to update the profile.

To upload a photo to display with your profile, perform the following steps:

1. Click **Upload** in the **Photo** section. Click **Browse** on the **Upload File** page.
2. Browse and upload the image. The selected file appears in the **Upload File** page. Click **Remove** to delete the file listed.
3. Click **Upload File(s)** to upload the picture.
4. If a profile picture already exists, uploading a new photo will replace the existing picture.
5. Click **Save Changes** to save the profile details. The **User Profile** page now displays your updated user profile.

Other profile settings

On the user's profile page, along with the basic information of the user, there are other tabs available which display the other relevant information for the current user, as shown in the following screenshot:



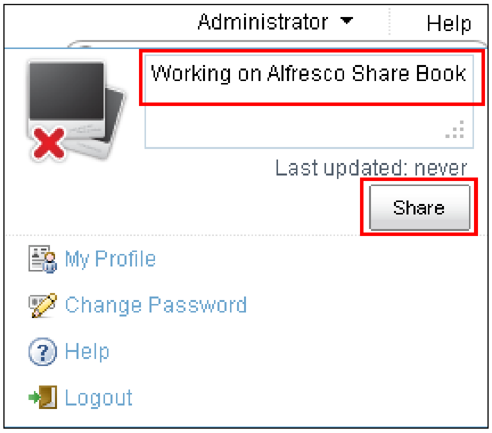
- **Sites**: This section lists the sites of which the current user is a member
- **Content**: Which displays the recently added and modified content by the current user
- **I'm Following**: This section displays the list of users who are followed by current user along with the option to **Unfollow** that user
- **Following Me**: This section displays the users who are following the current user
- **Change Password**: This allows the password to be changed
- **Notifications**: Allows to enable/disable e-mail notifications, which sends the e-mails informing the user of certain events like invitations to join the sites, recent site activities, and so on

Updating a user's status

There is one field called Status in the user menu, which allows you to share your status with your colleagues. You can set your own status to what you are doing or working on. Whatever status you set, your colleagues can see it with your name when it appears in the site dashboard and in the **People Finder** page.

Follow the given steps to set your status:

1. On the toolbar, expand the user menu. The status field displays your current update. The length of time since your last status update is displayed beneath this field.
2. Provide your status in the field, as shown in the following figure:



Working on Alfresco Share Book

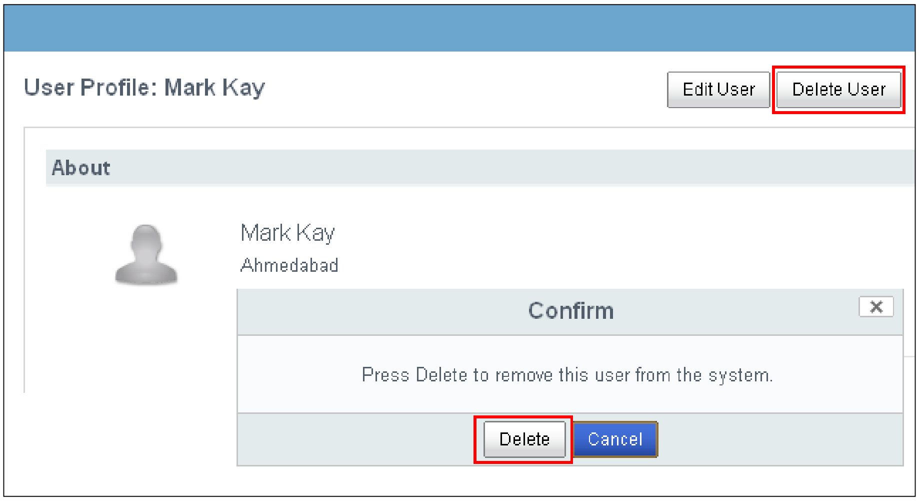
3. Click on the **Share** button, which will share your status with other users.

Deleting a user

Only the Administrator can delete existing user accounts from Alfresco. To retain the user account while denying the user access to the application, consider simply disabling the user account. Only when you want to delete the user permanently, use the Delete a user feature. To delete a user perform the following steps:

1. On the toolbar, expand the **More** menu and click **Users** in the Tools list. The **User Search** page appears.
2. Search for the user you want to delete.
3. Click on the username in the search results, which will open the **User Profile** page.

4. On the **User Profile** page, there will be a button for deleting the user:



Press Delete to remove this user from the system.

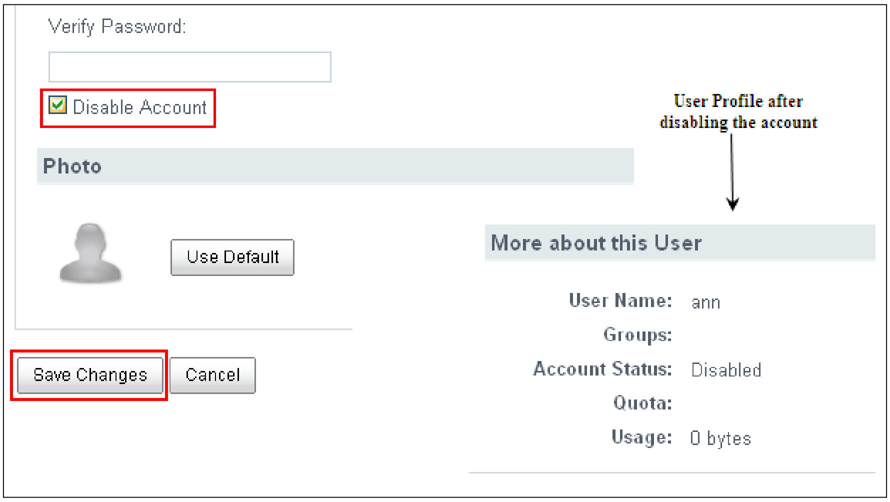
5. Click on the **Delete** button. A message prompts you to confirm the deletion.
6. Click **Delete**.
7. This will delete the user from the Alfresco Repository itself.

Disabling a user

Only the Administrator can disable any user account in Alfresco. To retain the user account but just denying the user access to the application, you should disable that user's account. It will disable the user's account in the Alfresco Repository itself. The steps to disable a user are as follows:

1. On the toolbar, expand the **More** menu and click **Users** in the Tools list. The **User Search** page appears.
2. Search for the user whose account you want to disable.
3. Click on the username in the search results, which will open the **User Profile** page.

4. On the **User Profile** page, there will be a button to edit the user profile:



Verify Password:

☑ Disable Account

Photo

User Profile after disabling the account

More about this User

User Name: ann

Groups:

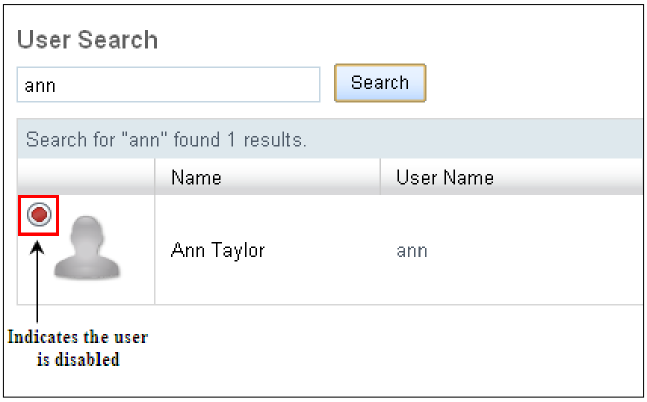
Account Status: Disabled

Quota:

Usage: 0 bytes

5. Click on the **Edit User** button.
6. On the Edit user page, click **Disable Account**. A checkmark indicates the account for the current user will be disabled.
7. Click **Save Changes**.
8. Verify on the **User Profile** page, the **Account Status** appears as **Disabled**.

On the **User Search** page, you can see the red dot for this user, listed in the search results list, which indicates that the user account is disabled, as shown in the following figure:



User Search

ann

Search for "ann" found 1 results.

	Name	User Name
●	Ann Taylor	ann

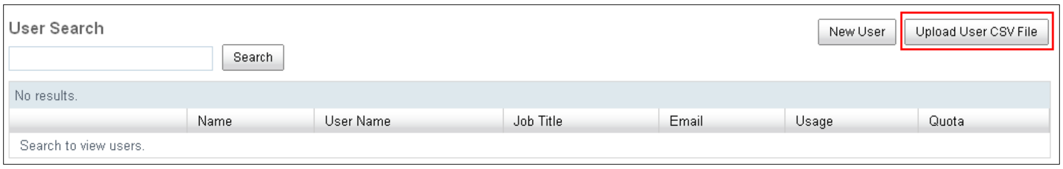
Indicates the user is disabled

Importing users

When initially we are creating users in the system, sometimes we may need to import multiple users. Alfresco allows importing user's details in a CSV (Comma Separated Values) file format. You can prepare CSV file and then on the user's page, there is an option to import the users by uploading this file.

> The order of the user's details in the CSV file should be as follows:
>
> User Name, First Name, Last Name, E-mail Address, Password, Company, Job Title, Location, Telephone, Mobile, Skype, IM, Google User Name, Address, Address Line 2, Address Line 3, Post Code, Telephone, Fax, Email.

1. Create the CSV file according to the above structure with the users' details.
2. Go to the **User** page which will open the **User Search** page.
3. Click on the button **Upload User CSV File**.
4. Upload the CSV file with the user's details.



No results.

	Name	User Name	Job Title	Email	Usage	Quota
Search to view users.						

Managing groups

In *Chapter 1*, *Building a Corporate Collaboration Strategy*, we had discussed about the case study of marketing site for a new product. There will be users from within the organization, and external users, who have permission to access the site and its content. Here, internal users will be members from different departments like the marketing department, sales department, product development team, strategists and so on. You can consider these different departments as different groups. Groups will logically form a set of users for better collaboration.

So, now we will see how to create groups in Alfresco Share and also how to associate users to the groups in this section. When you create any group in Share, it will be created in the Alfresco Repository. Hence, you can manage them from the Repository as well.

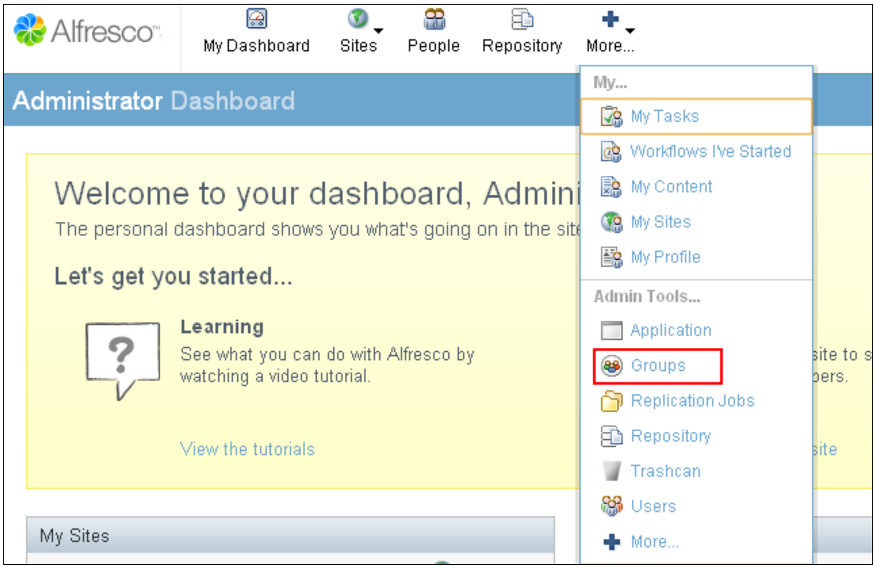
Alfresco comes with three default user groups called EVERYONE, ALFRESCO_ADMINISTRATORS, and EMAIL_CONTRIBUTORS.

The **EVERYONE** group logically includes all the system users irrespective of the groups they belong to.

The **ALFRESCO_ADMINISTRATORS** group contains all the administrator users. In Alfresco, you can have more than one admin user. Any user who is member of this group can act as an administrator in Share.

The **EMAIL_CONTRIBUTORS** group is required to allow permissions to be handled at a high level by the administrator as an e-mail arriving at the Alfresco e-mail server is unauthenticated. By default, this group contains the admin user.

In Share, for groups management, expand the **More** menu on the toolbar and click on the **Groups** option in the **Admin Tools** list:

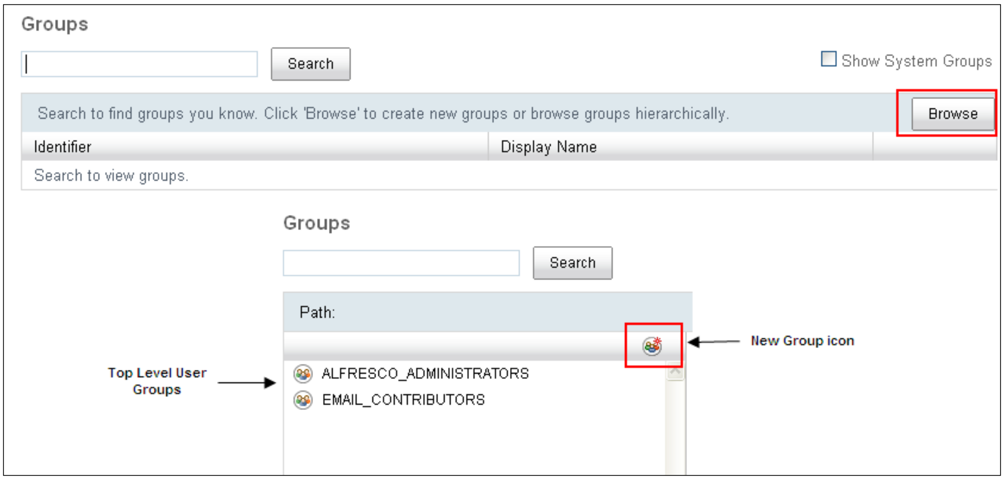


Creating groups

In Alfresco, only the administrator can create and manage the groups. The following steps explain how to create a new group in Alfresco Share:

1. On the toolbar, expand the **More** menu and click **Groups** in the **Admin Tools** list.

2. On the Groups page, click on **Browse**. The leftmost pane displays all top-level user groups:

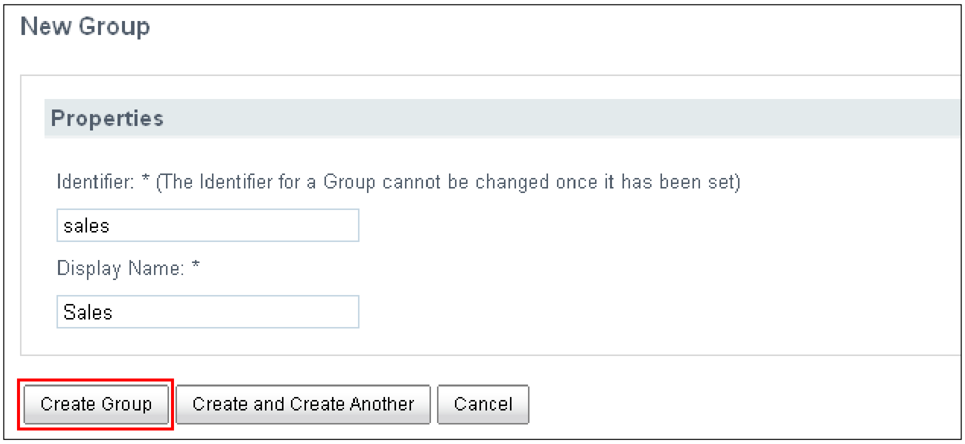


Search to find groups you know. Click 'Browse' to create new groups or browse groups hierarchically.

Identifier	Display Name
Search to view groups.	

ALFRESCO_ADMINISTRATORS
EMAIL_CONTRIBUTORS

3. To create a top-level group, click the **New Group** icon at the top of the initial pane.
4. The **New Group** page appears. Fields marked with an asterisk (*) are required.
5. Complete the required details:



Identifier: * (The Identifier for a Group cannot be changed once it has been set)

sales

Display Name: *

Sales

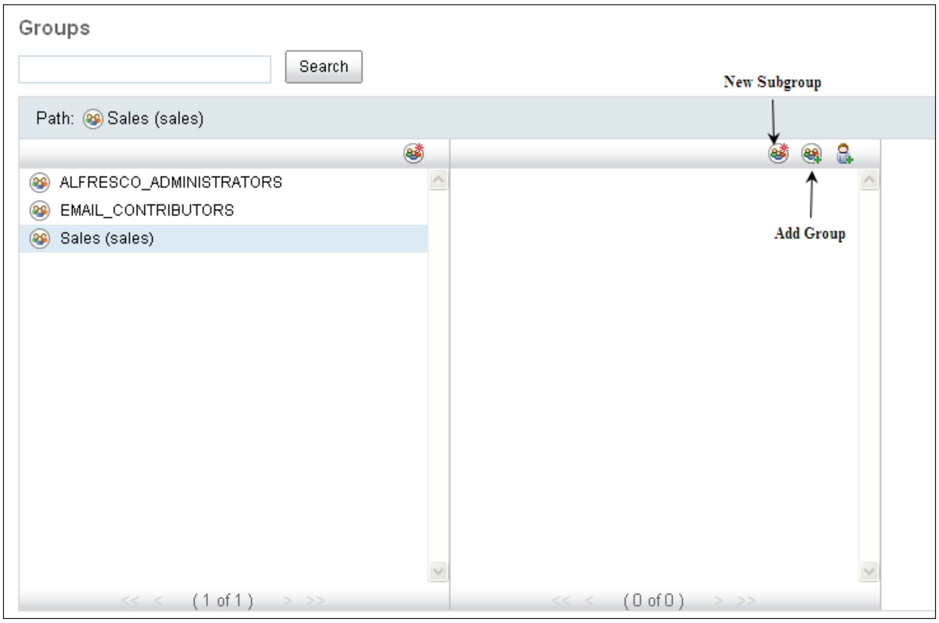
6. Click **Create Group**.

7. If you want to immediately create another group at the same level, click **Create and Create Another**. This creates the group specified and clears the fields without returning you to the **Groups** page.

Creating a sub group

You can also create a sub group within a group. In that way, you can have a structured hierarchy of groups. If any user is a member of a sub group, it will also be a member of all parent groups.

- Navigate to the user group where you want to create the new group.
- To create a subgroup, browse the group structure to locate the desired parent group. Select this group and then click the New Subgroup icon at the top of the pane immediately to the right, as shown in the following screenshot:



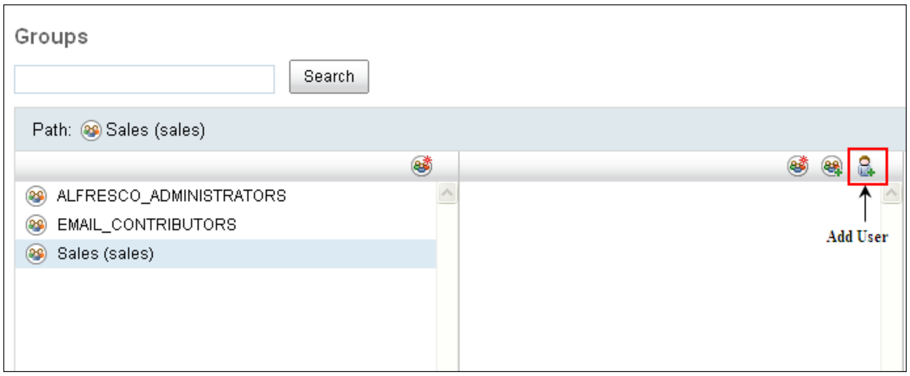
Managing group membership

You can assign users to the group. One user can be a member of multiple groups and, at the same time, one group can have multiple users. Let's add the user we had created in previous section (pallika) to the newly created group **Product Development**.

On the toolbar, expand the **More** menu and click **Groups** in the **Admin Tools** list. On the **Groups** page, click **Browse**. The leftmost pane displays all the top-level user groups.

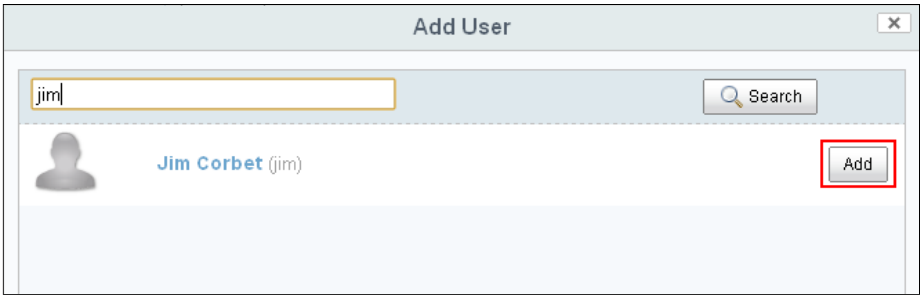
Navigate the group structure to locate the user group in which you want to add users. Click the user group to select it. Here, click on the Product Development group.

Click on the **Add User** icon in the right pane:



Using the search feature provided, locate the user you want to add to the selected group. Here, search for the user `Jim`.

Click the **Add** button to add that user to the group:

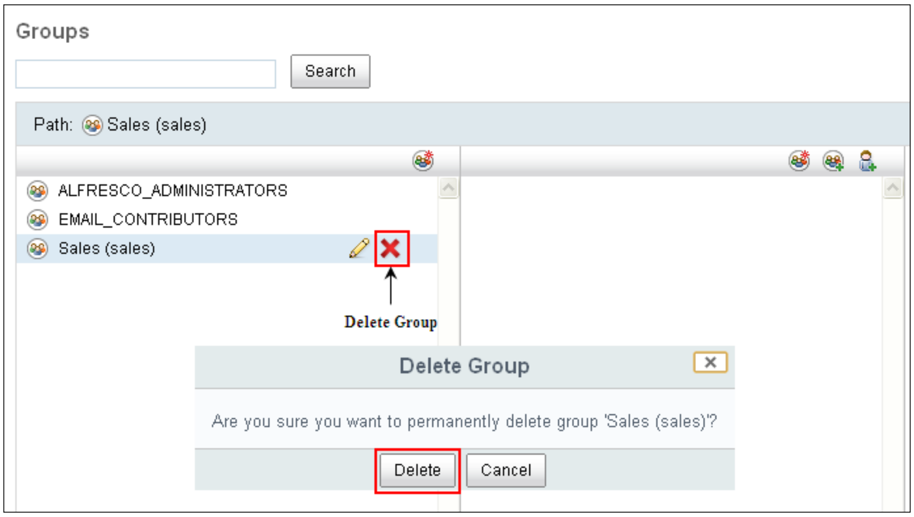


Deleting groups

To remove the groups from the system, the administrator user can delete the group. To delete the group:

1. On the toolbar, expand the **More** menu and click **Groups** in the **Admin Tools** list.
2. On the **Groups** page, click Browse. The leftmost pane displays all the top-level user groups.

3. Navigate the group structure to locate the group you want to delete. You can also use the search feature to locate the group.
4. Mouse hover the group name to see its available actions:



Are you sure you want to permanently delete group 'Sales (sales)'?

5. Click the **Delete Group** icon. A message prompts you to confirm the deletion.
6. Click the **Delete** button.
7. This will also delete all the sub groups of this main group.

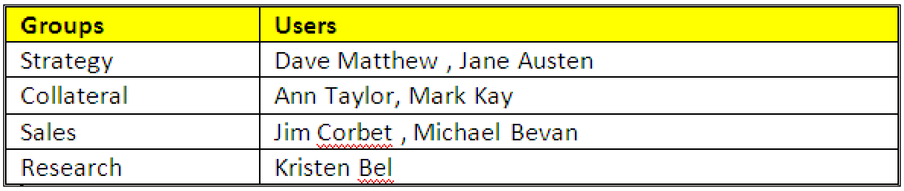
The users of the marketing site

We will be using the below users and groups throughout the book for our case study of a marketing site for new product. As it was explained in *Chapter 1*, *Building a Corporate Collaboration Strategy*, there are two types of users, Internal and External. In this chapter, we will create internal users and groups. We will discuss about external users and how they can access our site in the next chapter.

Groups: Strategy, Collateral, Sales, Research

Users: Dave Matthew, Jane Austen, Mark Kay, Ann Taylor, Michael Bevan, Jim Corbet, Kristen Bel

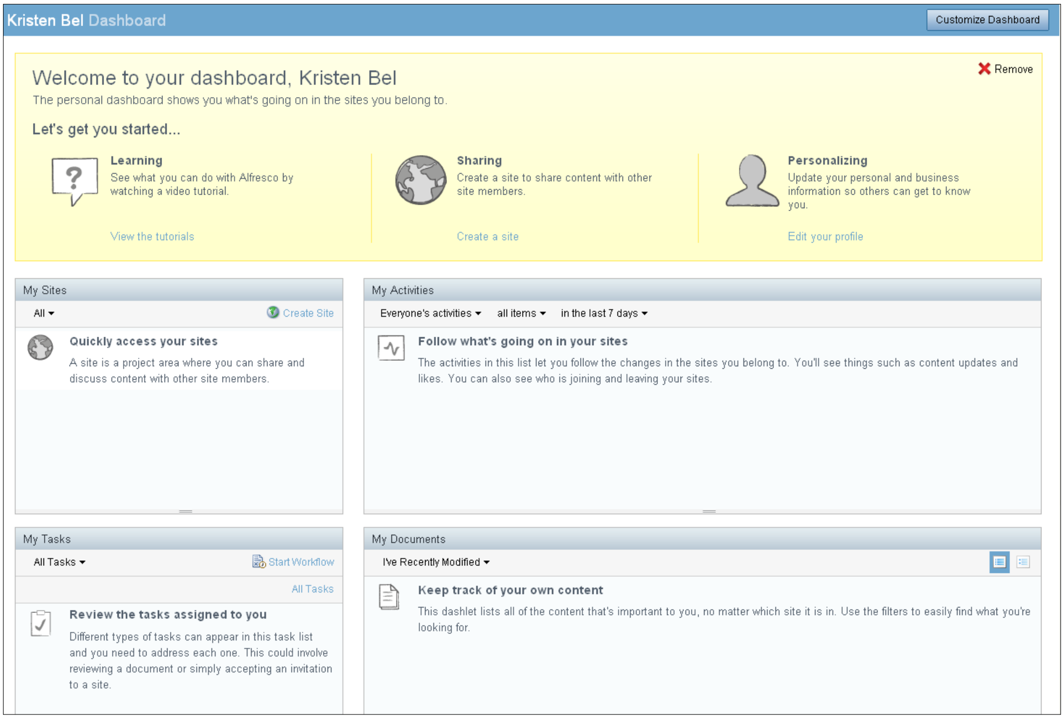
The following table shows the membership of the users to the groups. Create these users and groups in Share and also add users to the respective groups. We will be using these users and groups throughout the book:



Groups	Users
Strategy	Dave Matthew , Jane Austen
Collateral	Ann Taylor, Mark Kay
Sales	Jim Corbet , Michael Bevan
Research	Kristen Bel

User dashboard

Dashboard is the home page for the user. This is the first page you see when you login to the Share application. Your personal dashboard consists of dashlets that allow you to track all information relevant to you. These dashlets appear on your personal dashboard. Each dashlet provides a summarized view of a page. However, the presence of a corresponding page is not mandatory. Wherever a page exists, it generates the contents of the related dashlet. Following is the default share dashboard for any new user created:



Kristen Bel Dashboard

Welcome to your dashboard, Kristen Bel

The personal dashboard shows you what's going on in the sites you belong to.

Let's get you started...

Learning
See what you can do with Alfresco by watching a video tutorial.
View the tutorials

Sharing
Create a site to share content with other site members.
Create a site

Personalizing
Update your personal and business information so others can get to know you.
Edit your profile

My Sites

Quickly access your sites
A site is a project area where you can share and discuss content with other site members.

My Activities

Follow what's going on in your sites
The activities in this list let you follow the changes in the sites you belong to. You'll see things such as content updates and likes. You can also see who is joining and leaving your sites.

My Tasks

Review the tasks assigned to you
Different types of tasks can appear in this task list and you need to address each one. This could involve reviewing a document or simply accepting an invitation to a site.

My Documents

Keep track of your own content
This dashlet lists all of the content that's important to you, no matter which site it is in. Use the filters to easily find what you're looking for.

Alfresco Share provides many other dashlets apart from the default dashlets added in the dashboard, as shown in the previous figure. The list of out-of-the-box available dashlets is as follows:

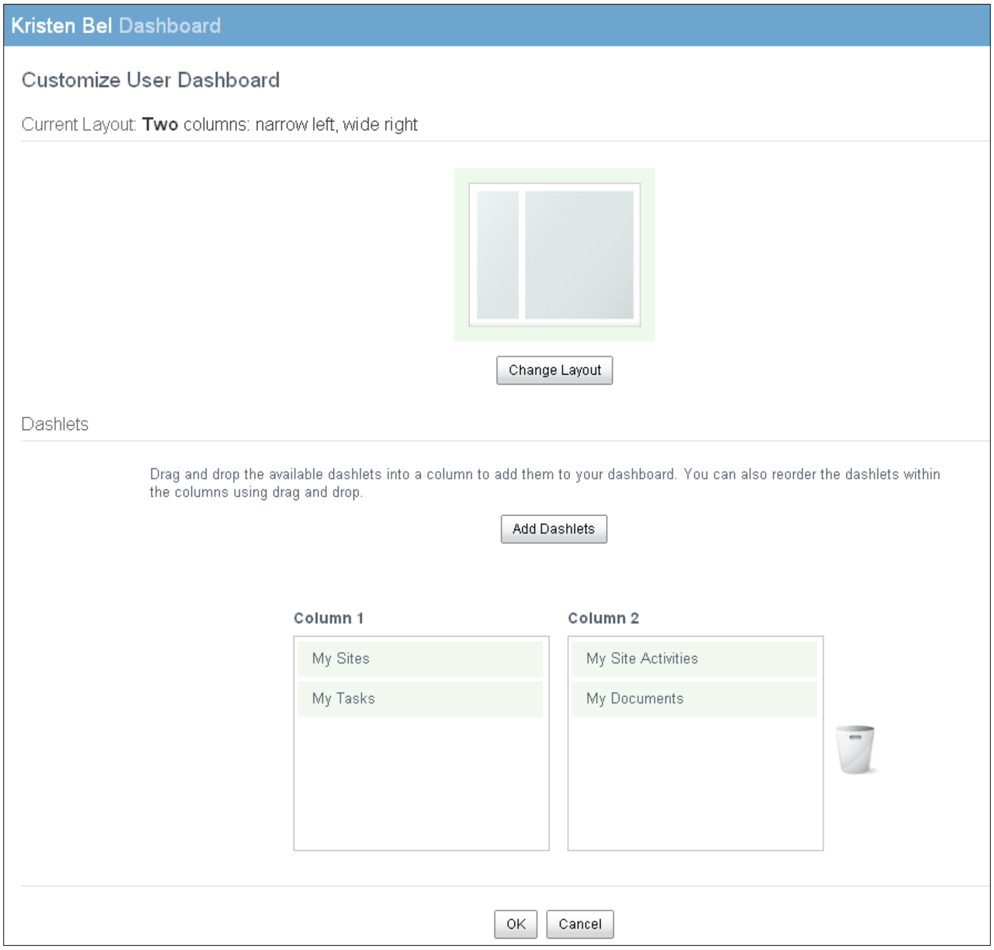
- **Getting Started**: This dashlet displays information for getting started and provides links to perform common tasks.
- **My Limited Profile**: My Profile contains a summary of the personal details provided in your user profile.
- **My Sites**: This dashlet displays all sites that you have either created, or are a member of. You can access a site from this dashlet. Creation or deletion of a site can be done using this dashlet.
- **My Calendar**: This dashlet provides a list of events that you have created, as well as events for each site of which you are a member.
- **My Tasks**: My Tasks displays a list of all your incomplete tasks.
- **My Site Activities**: This dashlet maintains the most recent activities that have been performed in any site that you are a member of.
- **My Documents**: This dashlet allows you to view files from all Document Libraries that may be of particular interest to you, organized into three categories: Favorites, I'm Editing, and I've Modified.
- **My Workspace**: This dashlet displays all Document Workspace sites of which you are a member. You can enter and delete a Document Workspace from this dashlet.
- **My Meeting Workspaces**: My Meeting Workspaces dashlet displays all Meeting Workspace sites of which you are a member. You can enter and delete a Meeting Workspace from this dashlet.
- **Web View**: The Web View dashlet can be configured to display any website. The Configure link enables you to change the website as desired.
- **Content I'm Editing**: Content I'm Editing displays all files you currently have checked out from any Document Library.
- **Alfresco Network**: Alfresco Network is a portal that gives Alfresco Share customers access to the latest Alfresco news.
- **RSS Feed**: The RSS Feed dashlet is configured to display the Alfresco website feed. This is a default setting.
- **CMIS Feed**: This dashlet displays links specific to the Content Management Interoperability Services (CMIS) specification and implementation.
- **Records Management Config**: The Records Management dashlet displays links for creating, accessing, and configuring the Records Management site. This dashlet is available only when the Records Management module is installed.

It's very easy to create your own custom dashlet if you don't find your suitable dashlet or information in these out-of-the-box available dashlets. Creating custom dashlets is out of the scope of this book hence, we will not discuss it here.

Customizing the personal dashboard

You can customize your personal dashboard to suit your purpose. You can modify the dashboard layout, select the personal dashlets to appear in your dashboard, or configure the display order of the selected dashlets.

To customize a dashboard, click on the **Customize Dashboard** button on the user's dashboard:



Kristen Bel Dashboard

Customize User Dashboard

Current Layout: **Two** columns: narrow left, wide right

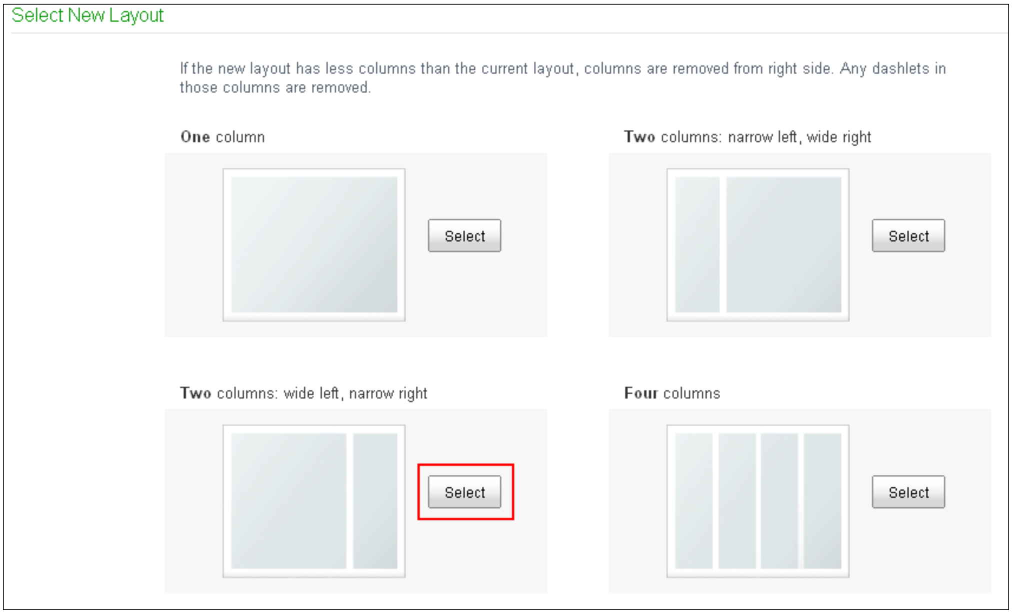
Dashlets

Drag and drop the available dashlets into a column to add them to your dashboard. You can also reorder the dashlets within the columns using drag and drop.

Change the dashboard layout

The default layout is three columns. You can change this default layout. Each user can have its own layout for his/her dashboard. To change the default layout perform the following steps:

1. Click on the **Customize Dashboard** button on the dashboard.
2. In the first section, **Current Layout** shows the currently selected layout, as shown in the previous figure.
3. Click the **Change Layouts** button to display all other available dashlet layouts:



Select New Layout

If the new layout has less columns than the current layout, columns are removed from right side. Any dashlets in those columns are removed.

One column
Select
Two columns: narrow left, wide right
Select
Two columns: wide left, narrow right
Select
Four columns
Select

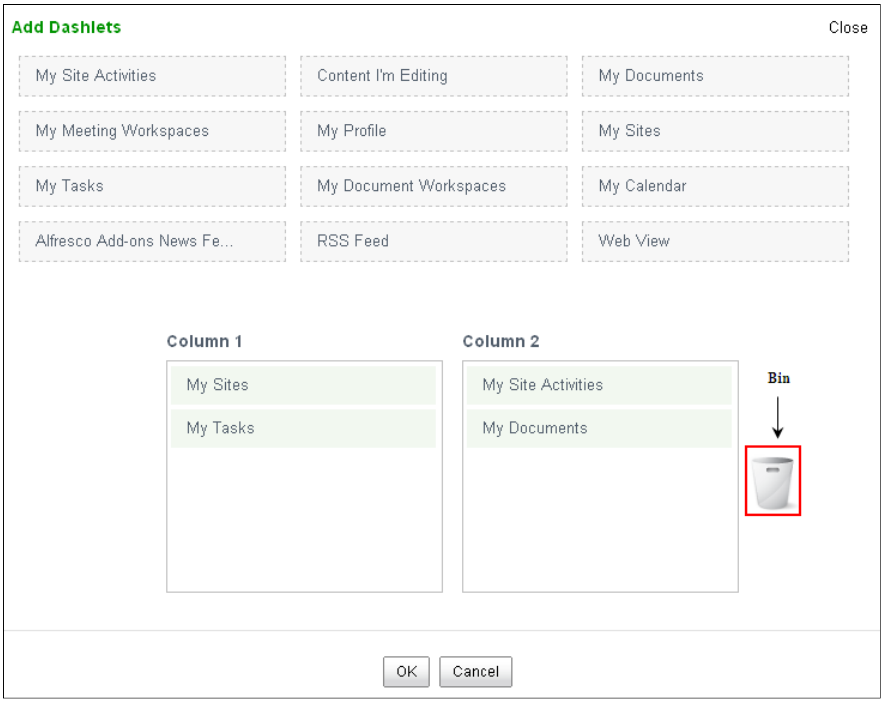
4. You can select a layout by clicking on it, or on the **Select** button beside it.

Configure dashlets and display order

To add dashlets perform the following steps:

1. Click **Add Dashlets** to display the available dashlets.
2. Click the desired dashlet in the **Add Dashlets** section and drag it to the desired column.
3. To remove a dashlet, click on and drag the dashlet to the **Bin**.

4. Click and drag the dashlets up and down within, and across, columns to change the display order. Also, you can select the dashlet and click the *Delete* key to remove any dashlet:



5. Click **OK** to save your changes. Now your dashboard is customized as per your selections and will display the selected dashlets, in the order specified.

> By default, a user can configure a maximum of 5 dashlets per column for a User dashboard. Based on the number of columns chosen for the dashlet layout, the maximum number of dashlets can be displayed for a dashboard.

Configuring authentication subsystems

Alfresco imposes authentication through user login ID and password. This is where you choose a security model such as Alfresco's built-in membership system, NTLM (Windows NT LAN Manager), or LDAP (Lightweight Directory Access Protocol), and so on. It also supports chaining of multiple authentication systems. Hence, you can combine the strength of a variety of authentication protocols with Alfresco.

Alfresco has introduced Authentication as one of the subsystems from version 3.2. A subsystem is a configurable module responsible for a sub-part of Alfresco functionality and one of them is authentication. Through this you can configure any authentication mechanism very easily.

The security model you choose will be based on the requirements of your enterprise. Let us consider the following sample scenarios:

Scenario 1: Let's say your requirement is to build an extranet as a standalone application to share documents with the customers. There are around 500 customers who will be accessing the site and you would like to control and manage the security. You need to have a flexible and highly scalable membership system. In this scenario, an out-of-the-box Alfresco membership system would be able to solve the problem.

Scenario 2: Let's consider a scenario where you are working in an IT department of a large university. Over the years, the various departments have developed their own sites with local authentication and authorization. The university has a directory-based central authentication system. How can you consolidate all the sites and provide a central point of authentication and authorization for all our sub-sites? In this scenario, it would make sense to configure Alfresco with LDAP for centralized identity management.

Scenario 3: In an enterprise you may have various systems such as customer support, ERP, proprietary content management systems, and open source ECM Alfresco. The employees have different accounts on all these different systems and it is becoming unmanageable. In this kind of scenario, you are looking at a single sign-on solution to access all our systems with one login ID and password.

Different authentication subsystems that are available are as follows:

- **alfrescoNTLM**: This is Native Alfresco Authentication. It performs authentication based on user and password information stored in the Repository.
- **ldap**: Authentication and user registry export via the LDAP protocol (OpenLDAP).
- **ldap-ad**: Authentication and user registry export from Active Directory via the LDAP protocol.
- **passthru**: Authentication via a Windows domain server which replaces the standard user database, to authenticate users accessing it. This saves having to create user accounts within Alfresco.

- **Kerberos**: Authentication via a Kerberos Realm. The Java Authentication and Authorization Service (JAAS) is used within the Kerberos subsystem to support Kerberos authentication of usernames and passwords. You may choose to use Kerberos against an Active Directory server, in preference to LDAP or NTLM as it provides strong encryption without using SSL. It would still be possible to export user registry information using a chained LDAP subsystem.
- **external**: Authentication via an external SSO mechanism or any other external system.

Configuring LDAP for centralized identity management

The LDAP directory is the central authentication engine for the enterprise, and serves as a Yellow Pages for user access, and profile information. The biggest advantage of LDAP is that your enterprise can access the LDAP directory from almost any computing platform, using any one of the increasing numbers of readily available LDAP-aware applications. In fact, LDAP is finding much wider industrial acceptance because of its status as an Internet standard.

You can use LDAP with any directory server, such as iPlanet, Novell's eDirectory, Microsoft's Active Directory, or OpenLDAP. If you are planning to implement an LDAP directory in your organization, you may consider OpenLDAP, Active Directory, or eDirectory. OpenLDAP is a stable and widely accepted open source directory server.

LDAP configuration with Active Directory

This is the most widely used authentication mechanism. Microsoft Active Directory supports LDAP based authentication. This example addresses the more advanced goal of delegating authentication responsibility to a centralized directory server. To integrate Alfresco with an active directory server, you simply need to include an instance of the ldap-ad subsystem types in the authentication chain. In this example, we will implement the authentication chain with ldap-ad and the default Alfresco authentication. Perform the following configuration steps:

1. Copy the `ldap-ad` configuration folder from **<install_application>** | **tomcat** | **webapps** | **alfresco** | **WEB-INF** | **classes** | **alfresco** | **subsystems** | **Authentication**.
2. to **<install_application>** | **shared** | **classes** | **alfresco** | **subsystems** | **Authentication** | **ldap-ad**.
   (Create the folder hierarchy if doesn't exist.)

3. Rename the folder `ldap-ad` located at **<install_application>** | **shared** | **classes** | **alfresco** | **subsystems** | **Authentication** | **ldap-ad** to **ldap-ad1**.
4. Edit the `ldap-ad-authentication.properties` file located at **<install_application>** | **shared** | **classes** | **alfresco** | **subsystems** | **Authentication** | **ldap-ad** | **ldap-ad1** for standard configuration. Set proper values for the following properties:
    - ldap.authentication.active=true
    - ldap.authentication.userNameFormat=%s@cignex.com
    - ldap.authentication.java.naming.provider.url=ldap://ahm.cignex.com:389
    - ldap.authentication.java.naming.security.authentication=simple
    - ldap.authentication.defaultAdministratorUserNames=admin
5. Edit the file `ldap-ad-authentication-context.xml` located at **<install_application>** | **shared** | **classes** | **alfresco** | **subsystems** | **Authentication** | **ldap-ad** | to replace

    ```
    <import resource="../common-ldap-context.xml" />
    with <import
    resource="../../../../../../../../webapps/alfresco/WEB-
    INF/classes/alfresco/subsystems/Authentication/common-ldap-
    context.xml" />.
    ```

6. Modify `alfresco-global.properties` located at **<install_application>** | **tomcat** | **shared** | **classes**, add the following line to enable chaining of authentication with ldap-ad:

    ```
    authentication.chain=alfrescoNtlm1:alfrescoNtlm,ldap-ad1:ldap-ad.
    ```

7. Once these configurations are done, you need to restart the server.

You can refer to the wiki link: `http://wiki.alfresco.com/wiki/Alfresco_Subsystems` for more details on configuring different subsystems.

Administrative functions

We already discussed user and group management. Now in this section, we will discuss some more administrative functions available in Share. Share Admin Console is a browser-based console, which allows the Alfresco Administrator to manage administrative operations through the UI itself.

Configuring themes

When you start Alfresco Share, whatever default look and feel you are seeing is set by a default theme. In this section, we will talk about out-of-the-box themes available and how a user can apply a different theme than the default one. We will also discuss how one can edit the existing theme and also create new themes for corporate branding and use it in Share.

List of themes available out-of-the-box

Share themes consist of a directory containing a CSS and images files, and they can be located in the theme directory,

<install_application> | tomcat | webapps | share |WEB-INF | classes | alfresco | site-data | themes.

The default theme is called `default.xml`. Other out-of-the-box themes available in Share include:

- Blue theme (default)
- Yellow theme
- Green theme
- High contrast black
- Google Docs theme

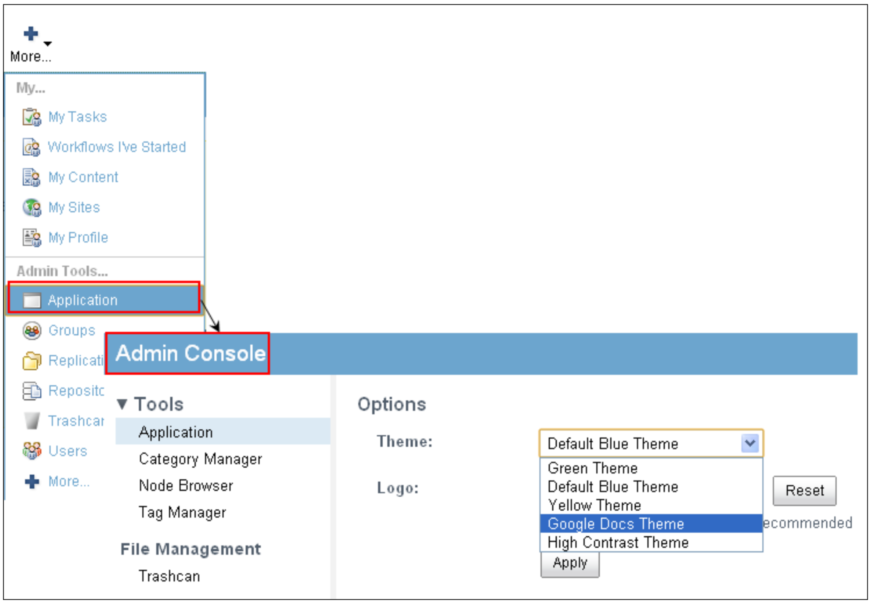
How to change the Alfresco Share global theme

Only an Application Administrator user can change the default Share theme. Any change to the theme will affect all users of the Alfresco instance from the next time that they log in, or from a browser refresh. Also, this will be applicable to all the sites of an Alfresco instance.

To change the global theme perform the following steps:

1. Expand the **More** menu on the toolbar, and click **Application** in the Admin **Tools** list. This will open the **Options** page.

2. It will allow you to choose the new theme from the available options:



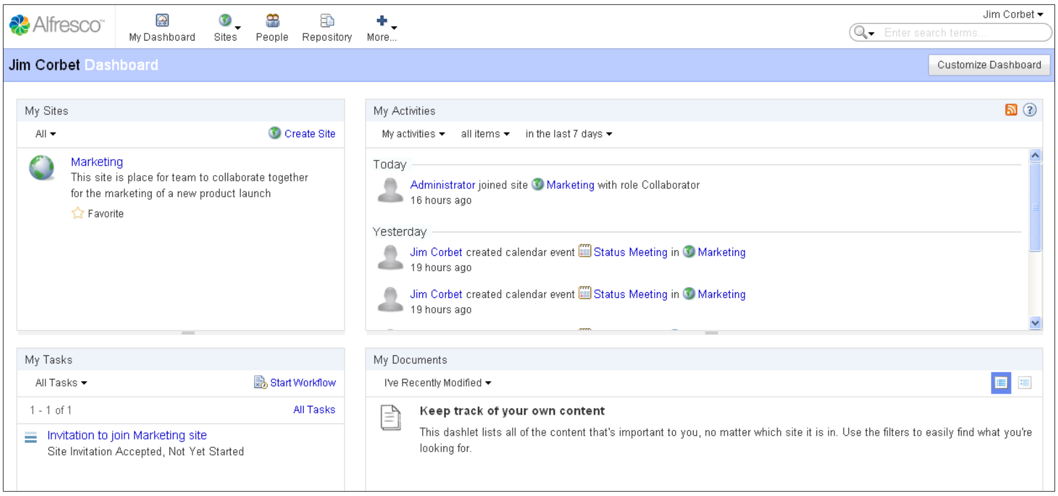
Theme: Default Blue Theme

- Green Theme
- Default Blue Theme
- Yellow Theme
- Google Docs Theme
- High Contrast Theme

3. Select **Google Docs Theme**.
4. Click **Apply**.

The new theme displays in Share and this persists across sessions.

Google Docs Theme:



Jim Corbet Dashboard

Marketing
This site is place for team to collaborate together for the marketing of a new product launch

Today

Administrator joined site Marketing with role Collaborator
16 hours ago

Yesterday

Jim Corbet created calendar event Status Meeting in Marketing
19 hours ago

Jim Corbet created calendar event Status Meeting in Marketing
19 hours ago

1 - 1 of 1

Invitation to join Marketing site
Site Invitation Accepted, Not Yet Started

Keep track of your own content

This dashlet lists all of the content that's important to you, no matter which site it is in. Use the filters to easily find what you're looking for.

What characteristics can be modified as part of a theme

A theme consists of some CSS files, an image directory, and a directory for assets for YUI. To create a new look, change the `presentation.css` file and, if required, replace or add images to the `/images` directory.

In this section, we will try to change one of the existing themes. Let's change the Green theme:

Open the `presentation.css file` located at **<install_application>** | **tomcat** | **webapps** | **share** |**themes** | **Greentheme**.

Locate the properties at the end of the `presentation.css` file.

Edit the following four properties:

1. color
2. background
3. background-color
4. border

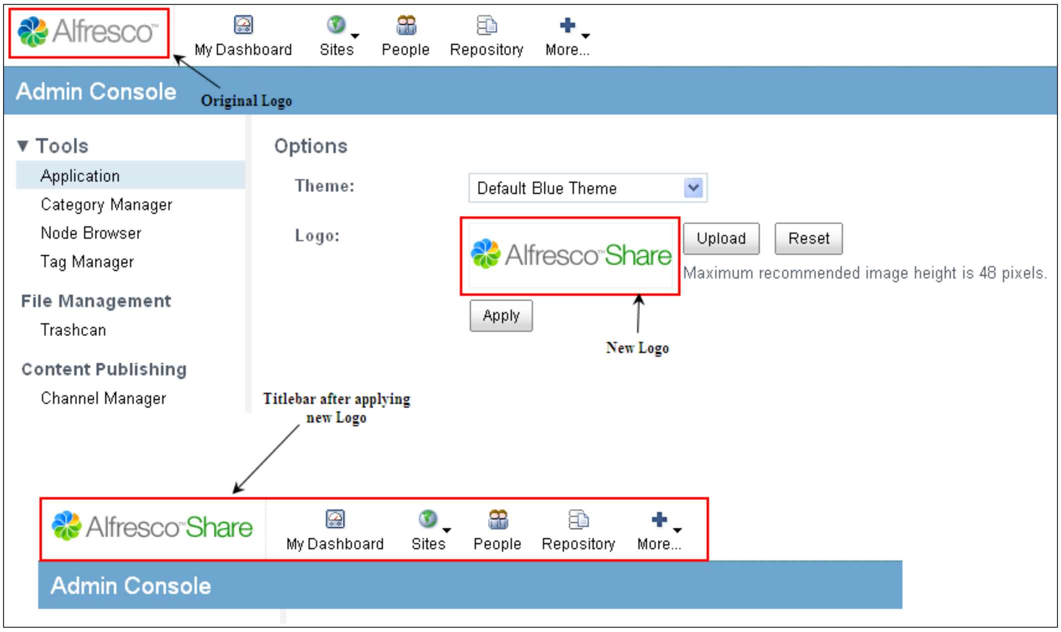
Any change to these properties will change the theme.

> You can refer to the wiki link: `http://wiki.alfresco.com/wiki/Alfresco_Share#Themes` to get more details on creating your own new theme.

Changing the Alfresco logo

To change the default Alfresco logo which appears on the top left corner of Share, perform the following steps:

1. Open the **Admin Console** by expanding the **More** menu on the toolbar, and click **Application** in the **Tools** list. This will open the **Options** page.
2. Click on **Upload** to browse the new logo; once the new logo file is uploaded, click on the **Apply** button. It will change the logo in the title bar to the new uploaded logo:



> If you want to revert back to the default logo of the Alfresco, click on the **Reset** button, which will reset the Alfresco Share logo to the original logo.

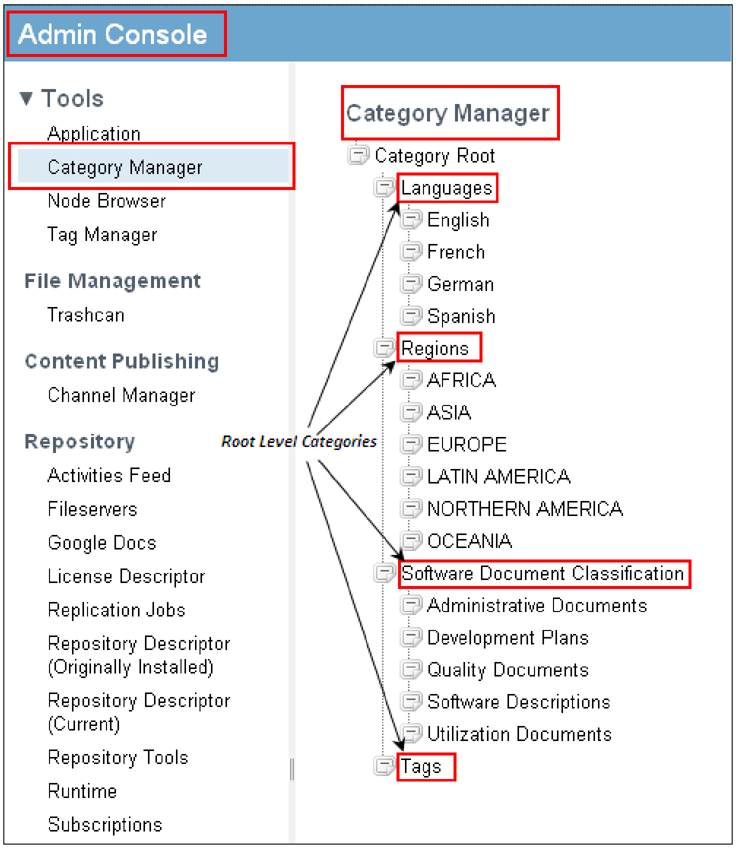
Managing categories

An Administrator can manage the categories in the system using this feature. Any content can be categorized to the predefined categories. Some predefined categories are already there in Alfresco. A category can have sub categories. You can also create your own custom category.

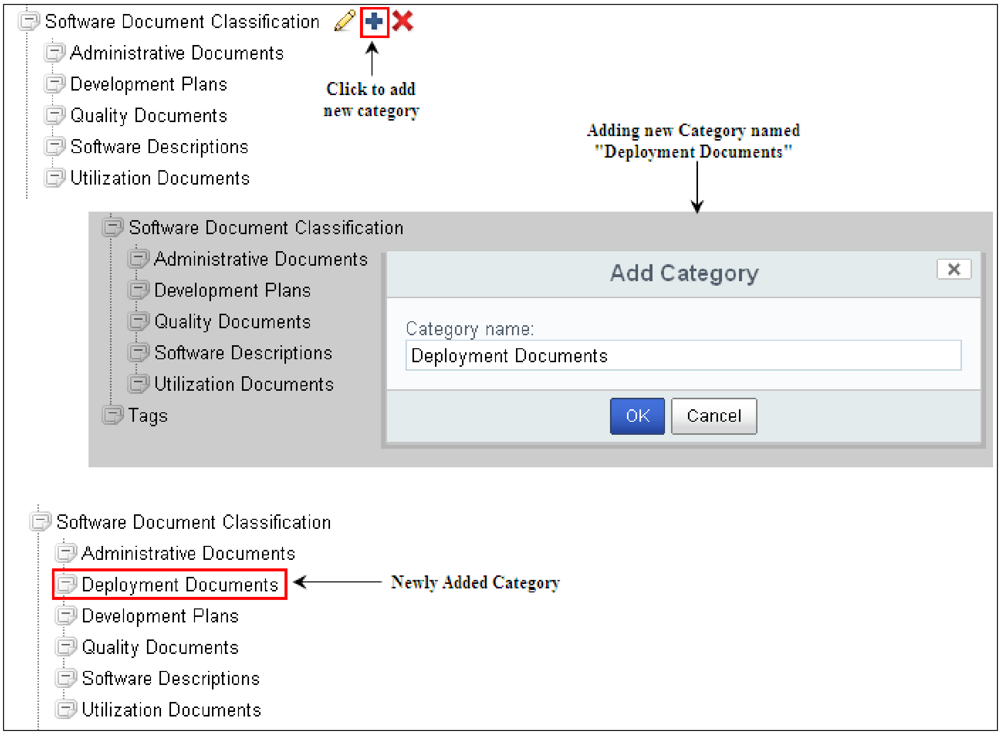
To Manage categories perform the following steps:

1. Open the **Admin Console** by expanding the **More** menu on the toolbar, and click **Category Manager** in the **Tools** list. This will open the **Category Manager** page.

2. The **Category Manager** page will display the existing category tree structure, as shown in the following figure:



3. To add a new category or sub category, mouse hover on the parent category within which you want to create a new category. Click on the **Add Category** icon, provide the name of the new category and then click on **OK**:



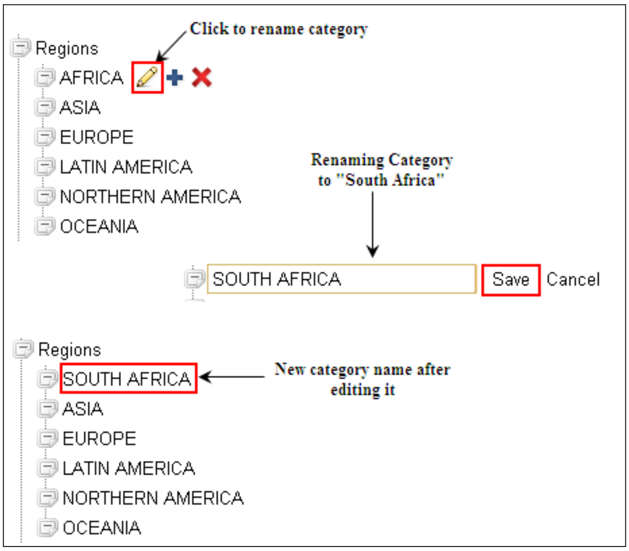
Click to add new category

Adding new Category named "Deployment Documents"

Category name: Deployment Documents

Newly Added Category

4. To rename an existing category, mouse hover on the category, which you want to rename, click on **Edit Category** icon, provide the new name of the category and then click on **OK**:



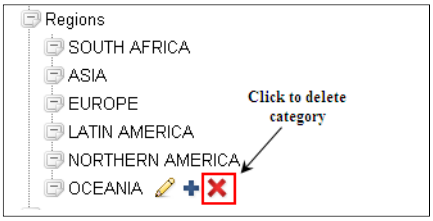
Click to rename category

Renaming Category to "South Africa"

SOUTH AFRICA

New category name after editing it

5. To delete any category, mouse hover on the category which you want to delete, click on the **Delete Category** icon. When asked for confirmation, click on the **Delete** button.



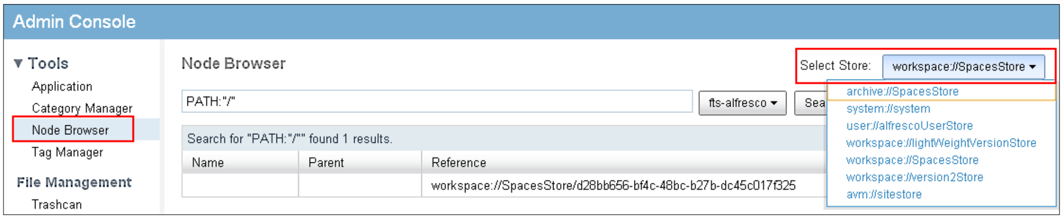
Node browser

The node browser allows users to browse the Alfresco Repository and also perform different search operations. This feature is more useful to developers, which helps them for debugging while customizing the application.

Browsing node browser

To browse the node browser perform the following steps:

1. There is an option **Select Store** on the **Node Browser** page to select the store which you want to browse:



PATH:"/"

Search for "PATH:"/"" found 1 results.

Name	Parent	Reference
		workspace://SpacesStore/d28bb656-bf4c-48bc-b27b-dc45c017f325

2. Once you select the store, the node which is displayed there is the root node of the selected store. After clicking on that, you can browse it and see the details like properties, aspects, children, parents, associations, source associations, and permissions of the current node.

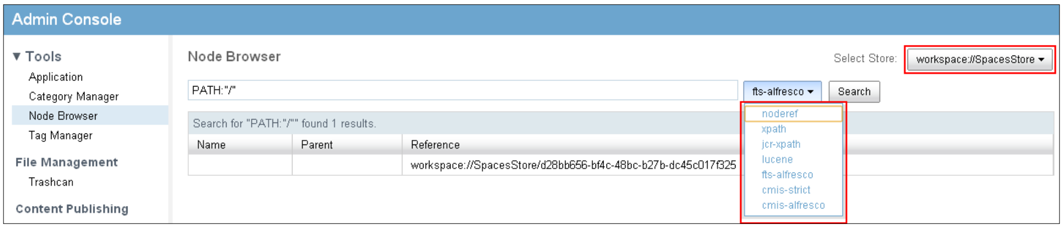
Searching using the node browser

The node browser allows users to perform different search queries. There are different search type/protocols available; which you can use to perform the search. The different search types include:

- noderef
- xpath

- jcr-xpath
- lucene
- fts-alfresco
- cmis-strict
- cmis-alfresco

1. Click on **Node Browser** on the **Admin Console** page.
2. Select the desired Search type and the Store in which you want to perform the search.
3. Provide the search query (using the search syntax based on the search type you have selected) in the field provided and click on the **Search** button. It will display the resultant nodes there:



PATH:"/"

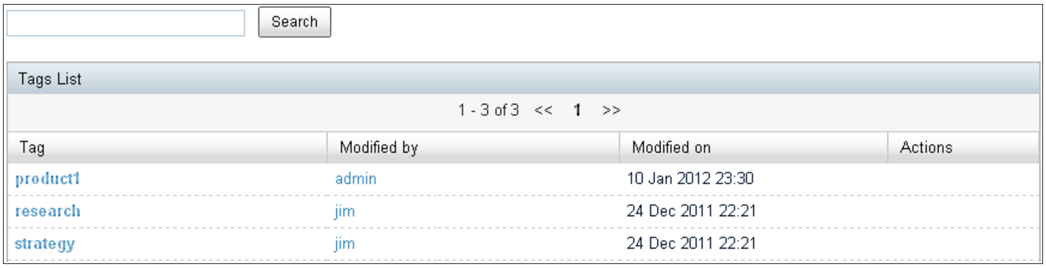
Search for "PATH:"/"" found 1 results.

Name	Parent	Reference
		workspace://SpacesStore/d28bb656-bf4c-48bc-b27b-dc45c017f325

Tag Manager

The **Tag Manager** page on the **Admin Console** allows you to manage the content tags.

- It lists all the tags associated to any content of any site with the details like Tag Name, Creator, or Last modifier of that tag and the last modified date of the tag:



Tag	Modified by	Modified on	Actions
product1	admin	10 Jan 2012 23:30	
research	jim	24 Dec 2011 22:21	
strategy	jim	24 Dec 2011 22:21	

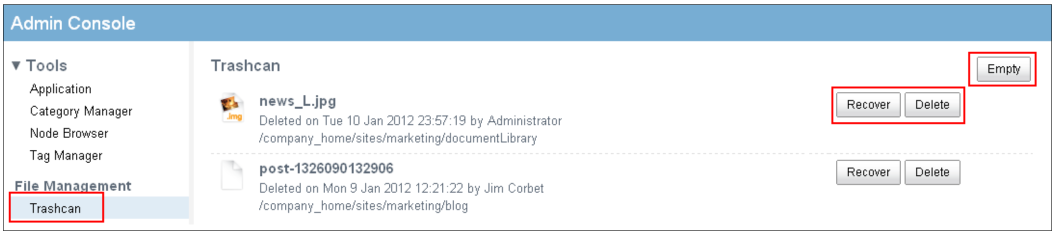
- Click on the **Tag** name to see all the content associated to that tag.
- To edit a tag, mouse hover the tag name you want to edit, click on the **Edit** icon and provide the new name of the tag. This will update the tag name in all the content in which it was tagged earlier.

- To Delete a tag, mouse hover the tag you want to delete, click on the **Delete** icon. It will delete the tag from the system and also remove from the content in which it was tagged earlier.
- You can also perform a search for any tag using the search box on the Tag Manager page.

Managing deleted items

An Administrator can manage the deleted items from the Trashcan page on the **Admin Console**.

1. Click on **Trashcan** under the **File Management** section on the **Admin Console**:



news_L.jpg
Deleted on Tue 10 Jan 2012 23:57:19 by Administrator
/company_home/sites/marketing/documentLibrary

post-1326090132906
Deleted on Mon 9 Jan 2012 12:21:22 by Jim Corbet
/company_home/sites/marketing/blog

2. Here you can see the list of all deleted items from any site by any user.
3. There are two options available for all deleted items:
   - **Delete**: Click on this button to permanently delete that particular item.
   - **Recover**: Click on this button to recover this deleted item, this will move the item back to its original location.
4. To permanently delete all the items from Trashcan, click on the **Empty** button.

Content publishing

Content publishing is a very interesting feature in Alfresco Share for social collaboration, which allows you to publish your content that is stored in Alfresco to other social media websites like Facebook, YouTube, and so on.

To publish the content to these websites, two steps are required: Creating the Publishing Channel and Publishing the existing Content using the appropriate channel.

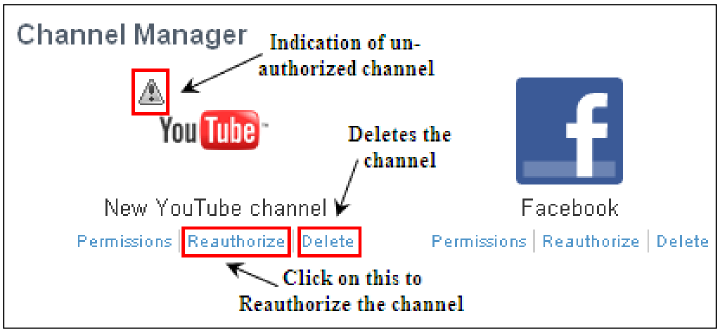
Managing channels

As discussed in the previous section, to publish the content to social websites, the first step is to create the publishing channel. There are different channels supported by Alfresco Share which include:

- Facebook
- Flickr
- LinkedIn
- SlideShare
- Twitter
- YouTube

To Create a new Channel perform the following steps:

1. Click on the **Channel Manager** page on the **Admin Console**.
2. Click on the **New** button and select the desired channel from the available channels. Let's select **YouTube** as a channel.
3. The next step is to provide the credential details for the chosen channel to authorize it.
4. You can authorize the channel later also by clicking on the **Reauthorize** option, as shown in the following screenshot:


Channel Manager
Indication of un-authorized channel
YouTube
Deletes the channel
New YouTube channel
Permissions | Reauthorize | Delete
Facebook
Permissions | Reauthorize | Delete
Click on this to Reauthorize the channel

To delete an existing Channel perform the following steps:

1. Click on the **Delete** icon to delete any existing channel, as shown in the previous screenshot.
2. It will ask for confirmation and then it deletes the channel.

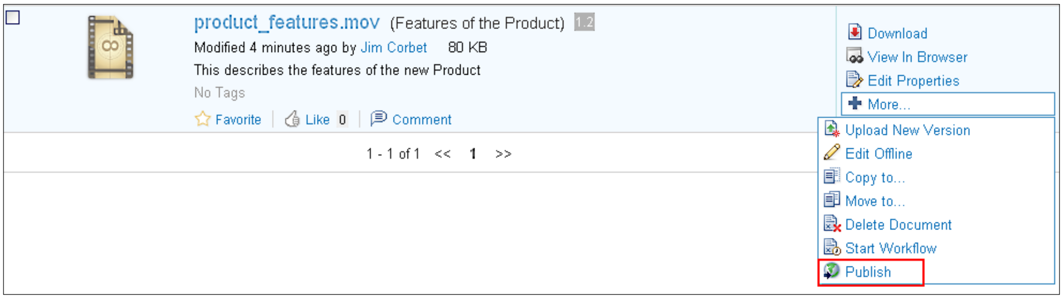
To provide permissions for a channel perform the following steps:

1. Click on the **Permissions** icon to manage the permissions for any channel.
2. There are two options to set permissions: inherit permissions and set local permissions.
3. Inherit permissions
    - By default the inherited permissions are enabled.
    - To disable it, click on the **Inherit Permissions** button.
4. Set local permissions
    - Click on the **Add User/Group** button to set the local permissions.
    - Once you click on this, it will allow you to search for the user or group and add it.
    - Once you add it, you can provide the desired role for that user/group.

Publishing content

Once the channel is created, you can publish your content to social websites using this channel.

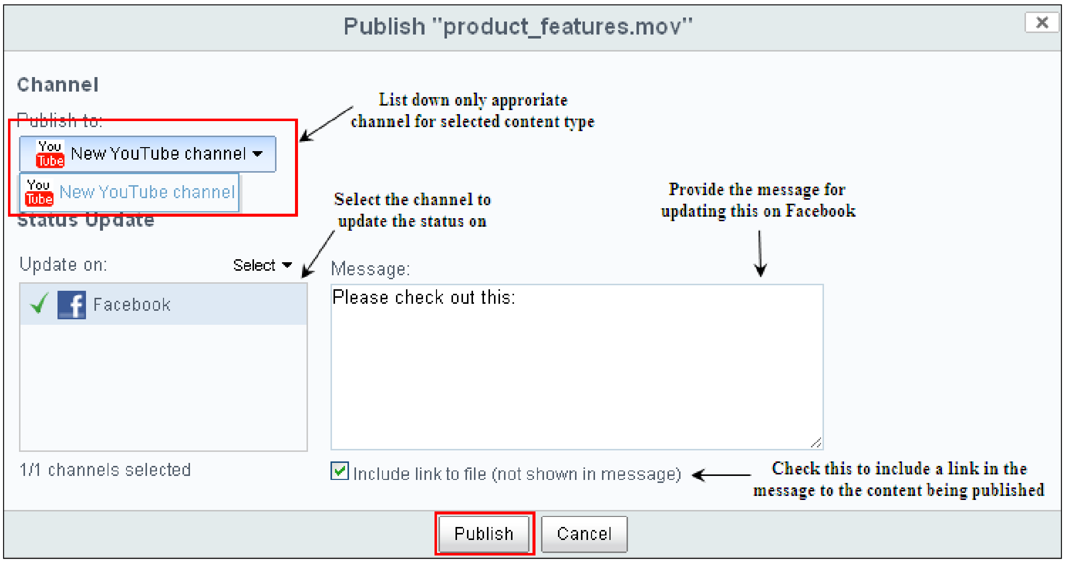
1. Go to the Document library and navigate to the content you want to publish.
2. Mouse hover to that content to display the different actions, click on **More** and then **Publish**:



product_features.mov (Features of the Product) 1.2
Modified 4 minutes ago by Jim Corbet 80 KB
This describes the features of the new Product
No Tags

3. Once you click on **Publish**, you will see the `publish <<content name>>` dialog.
4. Select the channel as **New YouTube channel**, which we just created to publish this video on YouTube; here you will see only the appropriate authorized channels based on your content type.

5. If you want to update the status on any other channels, you can select it in the **Update on** list. Select **Facebook** here and provide the appropriate message, which will be displayed on Facebook:



Publish "product_features.mov"

Channel

Publish to: New YouTube channel

Status Update

Update on: Select

✓ Facebook

1/1 channels selected

Message: Please check out this:

☑ Include link to file (not shown in message)

Publish Cancel

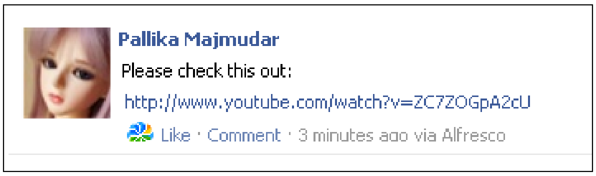
List down only approriate channel for selected content type

Select the channel to update the status on

Provide the message for updating this on Facebook

Check this to include a link in the message to the content being published

6. Once done, click on the **Publish** button, it will start publishing the video. You can track the publishing status and history from the Publishing History section on the Details page.
7. Once it is published, you can check the status update on Facebook with the link of the video uploaded on YouTube, as shown in the following screenshot:



Pallika Majmudar

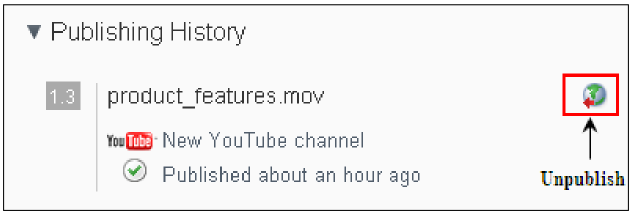
Please check this out:

http://www.youtube.com/watch?v=ZC7ZOGpA2cU

Like · Comment · 3 minutes ago via Alfresco

8. To remove published content
9. If you want to un-publish this video, go to the Details page of the content and locate the currently published version from the Publishing History section.

10. Click on **Unpublish** icon as shown. It will remove the video from the published channel and change the status to Unpublished:



▼ Publishing History

1.3 product_features.mov

New YouTube channel

Published about an hour ago

Unpublish

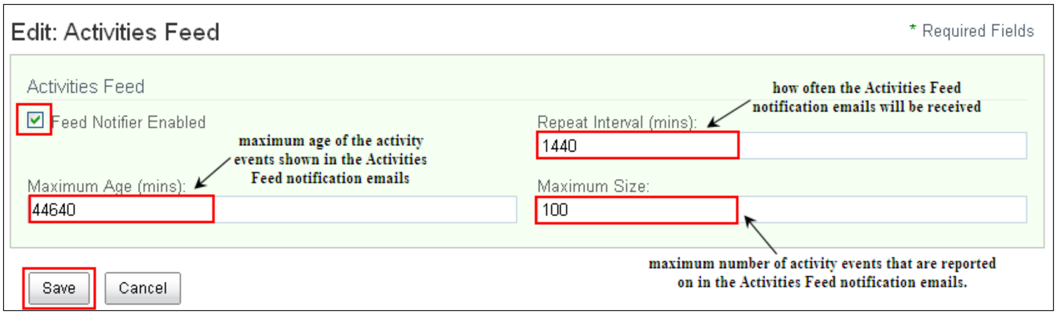
Repository features

In this section, we will discuss about the configuration of some of the Repository features, which can be controlled from the Admin Console. Alfresco Share allows configuring activity feeds, different file systems like CIFS, Google Docs, Replication jobs, and so on from the Admin Console.

Activity feed

Activity feed is a setting for configuring activity e-mails, which is being sent to the Administrator. To enable this, follow the given steps:

1. On the **Activities Feed** page on the **Admin Console**, check the **Feed Notifier Enabled** checkbox to activate the e-mails for the activity feed.
2. You can also configure other properties like frequency of e-mails and number of items shown in the e-mail and so on, as shown in the following screenshot:



Edit: Activities Feed

* Required Fields

Activities Feed

☑ Feed Notifier Enabled

Repeat Interval (mins): 1440

Maximum Age (mins): 44640

Maximum Size: 100

Save Cancel

how often the Activities Feed notification emails will be received

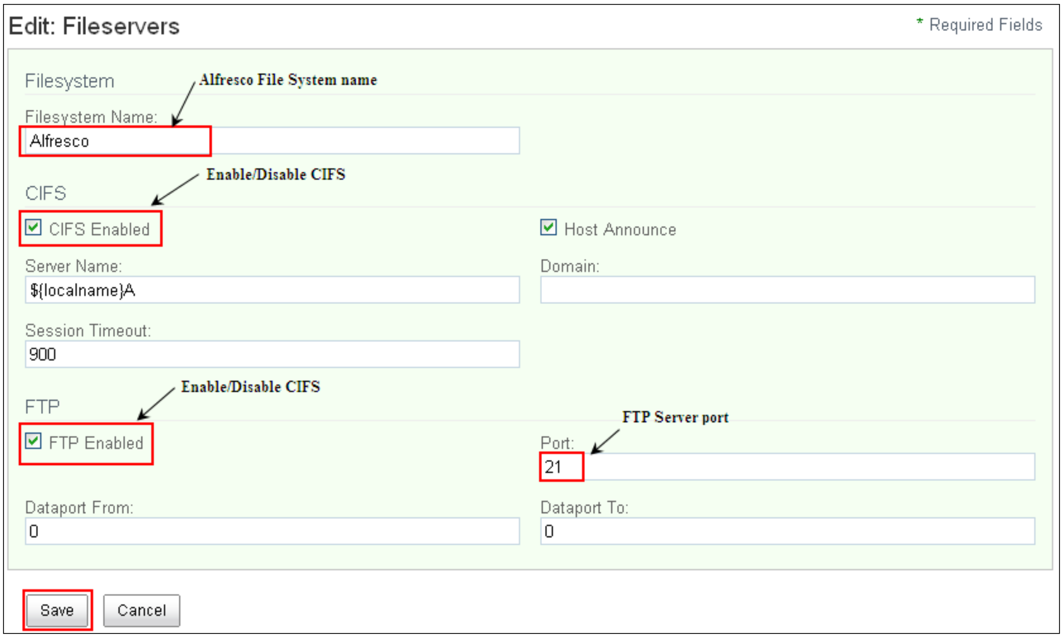
maximum age of the activity events shown in the Activities Feed notification emails

maximum number of activity events that are reported on in the Activities Feed notification emails.

File servers

Alfresco supports different protocols like CIFS, FTP, and so on to access the Alfresco Repository. The **Fileservers** page on **Admin Console** allows you to configure the properties for CIFS and FTP for Alfresco File System.

1. Click on the **Fileservers** page on the **Admin Console**.
2. Click on the **Edit** button to configure the file server properties.
3. From here, you can enable/disable CIFS and FTP. You can also handle the following properties:
4. For CIFS, you can configure different properties like **Server Name** (host name for the Alfresco CIFS server), **Session Timeout** (in seconds), **Domain** (Workgroup to which the server belongs), and so on.
5. For FTP, you can configure **Port** (on which FTP server to listen to), **Dataport From** and **Dataport To**:



Edit: Fileservers

* Required Fields

Filesystem

Filesystem Name: Alfresco

CIFS

☑ CIFS Enabled

☑ Host Announce

Server Name: ${localname}A

Domain:

Session Timeout: 900

FTP

☑ FTP Enabled

Port: 21

Dataport From: 0

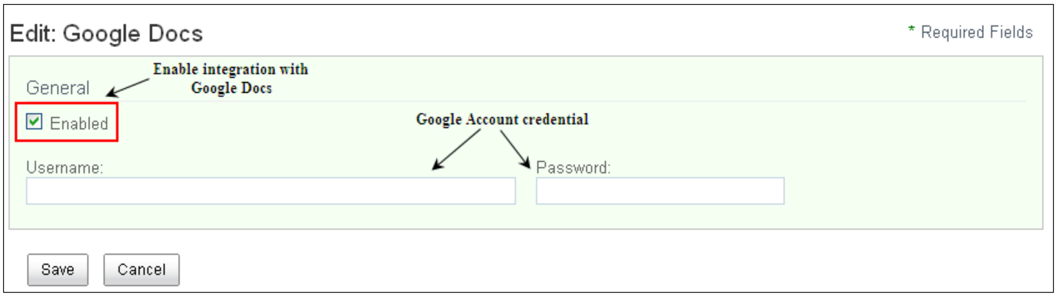
Dataport To: 0

Google Docs

Alfresco provides a way to integrate the documents stored in the Alfresco Repository with Google Docs. By default, Google Docs are not enabled in Alfresco Share.

To enable it, perform the following steps:

1. Click on **Google Docs** on the **Admin console** page.
2. Click on the **Edit** button and check the **Enabled** checkbox to enable Google Docs.
3. Provide the username and password of your Google account:



Edit: Google Docs

* Required Fields

General

☑ Enabled

Username:

Password:

Enable integration with Google Docs
Google Account credential
Save
Cancel

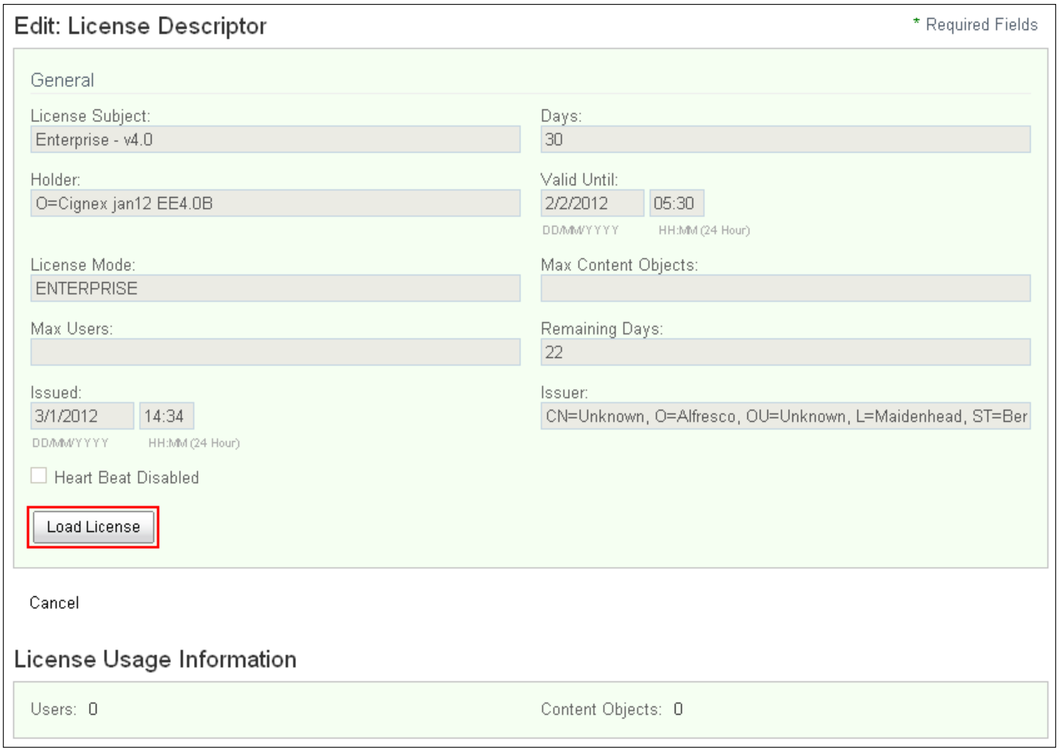
4. Once this is enabled, you need to add the **Google Docs Editable** aspect on the content and then you will be able to check out the content to Google Docs.

More details on editing the documents with Google Docs and updating it back to Alfresco will be discussed in *Chapter 9*, *Configuring Share*.

> Integration with Google Docs supports only Word documents, Excel sheets, and PowerPoint Presentations of Office 2003 formats.

License Descriptor

License Descriptor is a page where you can see the details of your already loaded license. It shows the details like **Days** (number of days of the license subscription), **Valid Until** (the date and time when your license expires), **License Mode** (type of license that is issued), and so on. You need to purchase the licenses appropriate to the number of users, content objects, and your support requirements. Once you get the license file, you can load it from this page by clicking on the **Load License** button. As soon as you upload the license with the `.lic` extension, it will be automatically renamed to the `.lic.installed` extension:



Edit: License Descriptor

* Required Fields

General

License Subject: Enterprise - v4.0

Days: 30

Holder: O=Cignex jan12 EE4.0B

Valid Until: 2/2/2012 05:30
DD/MM/YYYY HH:MM (24 Hour)

License Mode: ENTERPRISE

Max Content Objects:

Max Users:

Remaining Days: 22

Issued: 3/1/2012 14:34
DD/MM/YYYY HH:MM (24 Hour)

Issuer: CN=Unknown, O=Alfresco, OU=Unknown, L=Maidenhead, ST=Ber

□ Heart Beat Disabled

License Usage Information

Users: 0

Content Objects: 0

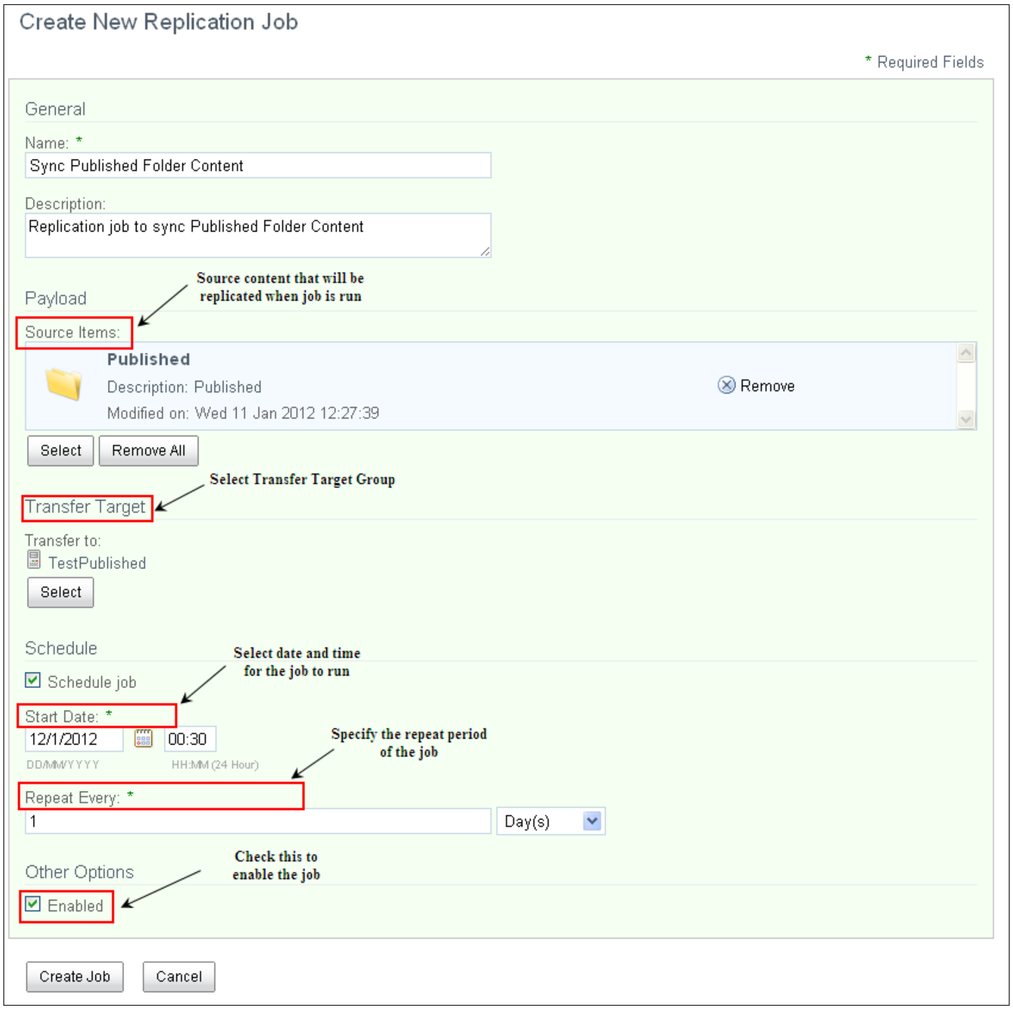
Replication jobs

The replication job tool in Share allows a user to schedule a job, which specifies the content to be replicated and the target location for the replicated content. In the target repository, replicated content is read only which ensures the integrity of the content.

To create a new replication job perform the following steps:

1. Click on the **Replication Jobs** page on the **Admin Console**.
2. Click on the **Create Job** button.

3. Provide all the details like job **Name**, **Source Items**, **Transfer Target**, and schedule the time and frequency, as shown in the following screenshot:



Create New Replication Job

* Required Fields

General

Name: *
Sync Published Folder Content

Description:
Replication job to sync Published Folder Content

Payload

Source Items:

Published
Description: Published
Modified on: Wed 11 Jan 2012 12:27:39

Source content that will be replicated when job is run

Transfer Target

Transfer to:
TestPublished

Select Transfer Target Group

Schedule

☑ Schedule job

Start Date: *
12/1/2012 00:30
DD/MM/YYYY HH:MM (24 Hour)

Select date and time for the job to run

Repeat Every: *
1 Day(s)

Specify the repeat period of the job

Other Options

☑ Enabled

Check this to enable the job

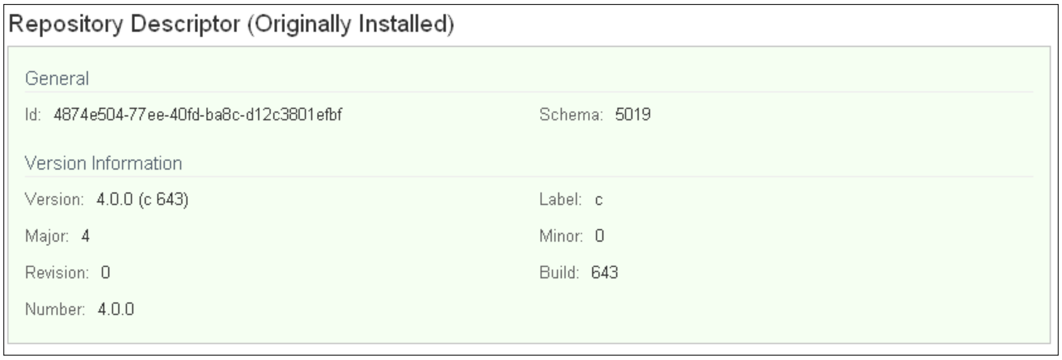
4. Based on the time and frequency specified, this job will be executed and the content will be replicated. There is one button, Run Job, which allows a user to manually run a replication job at any time.

Repository Descriptor

The Repository Descriptor shows the details of the Alfresco Repository in a read-only mode, you cannot edit anything here. This includes the details like, **Schema** in use, **Major/Minor** version number, **Build** number, **Version** and version **Label**, and so on.

There are two kinds of Repository Descriptor pages available on the **Admin Console**:

- The Repository Descriptor (Originally Installed) displays the details about the repository when it was installed initially
- The Repository Descriptor (Current), as the name suggests displays the details (same properties) with the latest information about the current repository



Repository Descriptor (Originally Installed)

General

Id: 4874e504-77ee-40fd-ba8c-d12c3801efbf

Schema: 5019

Version Information

Version: 4.0.0 (c 643)

Label: c

Major: 4

Minor: 0

Revision: 0

Build: 643

Number: 4.0.0

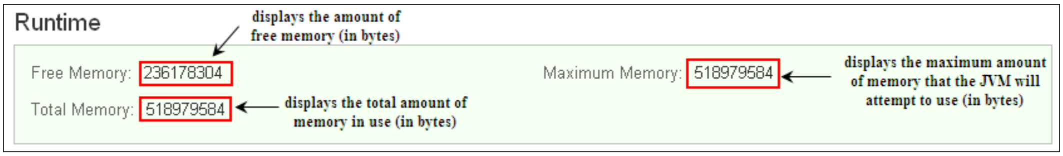
Repository dump

The configuration changes you do using the Admin Console, that is the current values of the running system are stored in an area on the JMX interface. Sometimes, it is very convenient to have a dump of these settings for some particular point of time, specially when talking to Alfresco Support for troubleshooting any issue.

From the **Repository Tools** page on the **Admin Console**, you can download the JMX dump in ZIP format by clicking on **Download JMX Zip Dump**.

Runtime

The **Runtime** page on the **Admin Console** shows the properties, which show the details of memory in the system:



Runtime

Free Memory: 236178304

Total Memory: 518979584

Maximum Memory: 518979584

displays the amount of free memory (in bytes)

displays the total amount of memory in use (in bytes)

displays the maximum amount of memory that the JVM will attempt to use (in bytes)

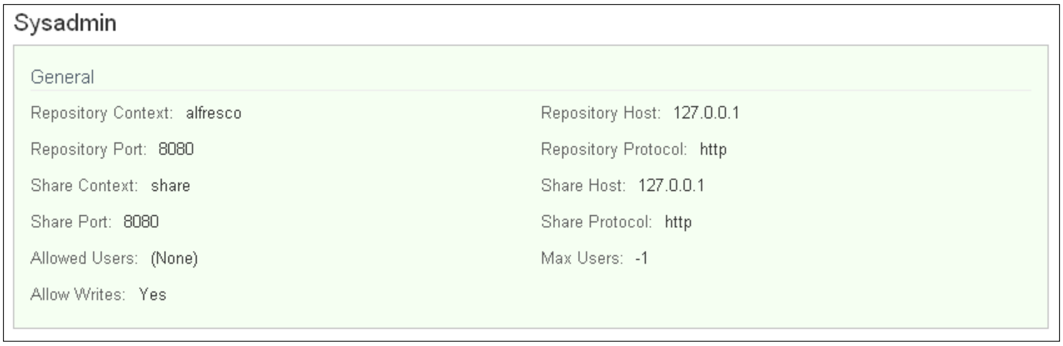
Subscriptions

The **Subscriptions** page in the **Admin Console** allows you to enable or disable the subscriptions, which is responsible for the Follow feature for users to follow each other in Share.

By default, this is enabled which allows users to follow other users. If you disable this, users will not be able to follow other users and on the user's profile page, **I'm Following** and **Following Me** options will not be visible. To disable this, click on the **Edit** button, which will open the **Edit: Subscription** page. On this page, deselect the **Enabled** checkbox and click on the **Save** button.

System administration properties

The **Sysadmin** page under the **Admin Console** displays the properties for the server administration in read-only format. This page displays the port, host, and protocol, and other details for Repository and Share:



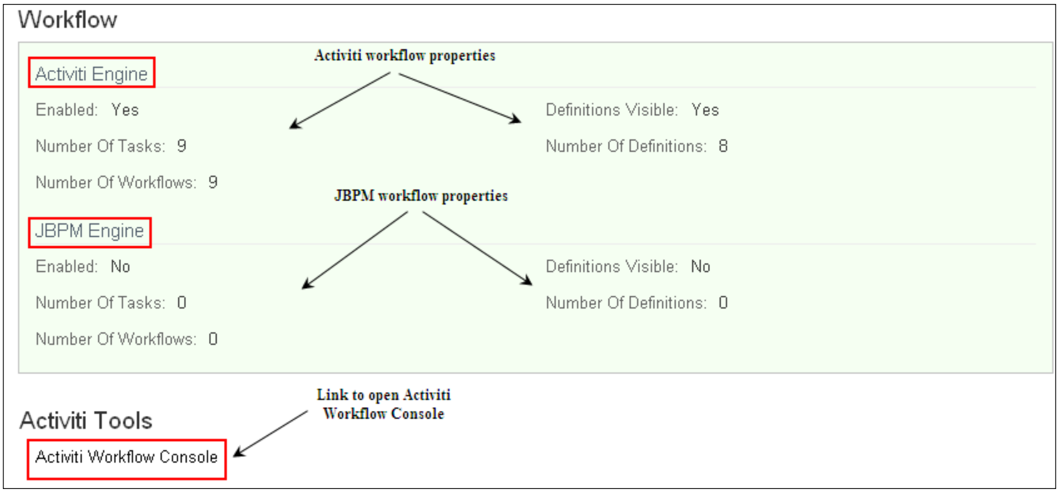
Sysadmin

General

Repository Context: alfresco
Repository Host: 127.0.0.1
Repository Port: 8080
Repository Protocol: http
Share Context: share
Share Host: 127.0.0.1
Share Port: 8080
Share Protocol: http
Allowed Users: (None)
Max Users: -1
Allow Writes: Yes

Workflow

The **Workflow** page under the **Admin Console** shows the workflow properties in read-only form. Alfresco workflows run on an embedded Activiti workflow engine. JBPM workflow engine, which was used in older versions of Alfresco, is still shipped with the new version of Alfresco, but Alfresco recommends using the Activiti workflow engine for new workflows. In case you have upgraded to the new version, JBPM can be enabled to migrate existing workflows:



Workflow

Activiti Engine

Enabled: Yes

Number Of Tasks: 9

Number Of Workflows: 9

Definitions Visible: Yes

Number Of Definitions: 8

JBPM Engine

Enabled: No

Number Of Tasks: 0

Number Of Workflows: 0

Definitions Visible: No

Number Of Definitions: 0

Activiti Tools

Activiti Workflow Console

Activiti workflow properties

JBPM workflow properties

Link to open Activiti Workflow Console

There is also a link to the **Activiti Workflow Console**. From this console, a user can perform the following activities:

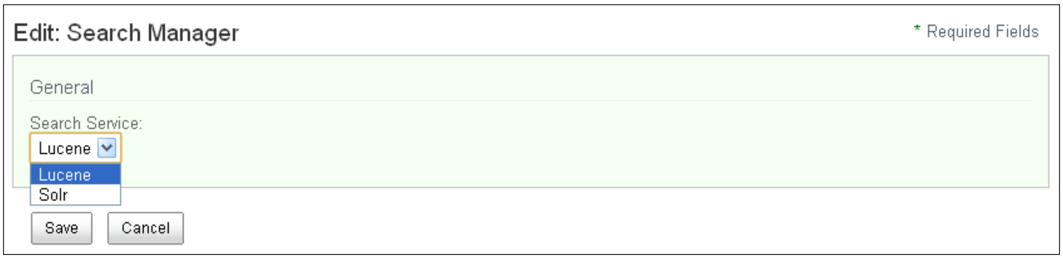
- View deployed process definitions
- View task variables
- Manage deployments
- Examine the process database

Search

The **Search** page on the **Admin Console** allows users to manage search related properties and configure settings from the screen. These settings are configured in Alfresco files by default, which can also be edited from here.

Search manager

This page allows users to select which search mechanism (Lucene/Solr) to use:



Edit: Search Manager

* Required Fields

General

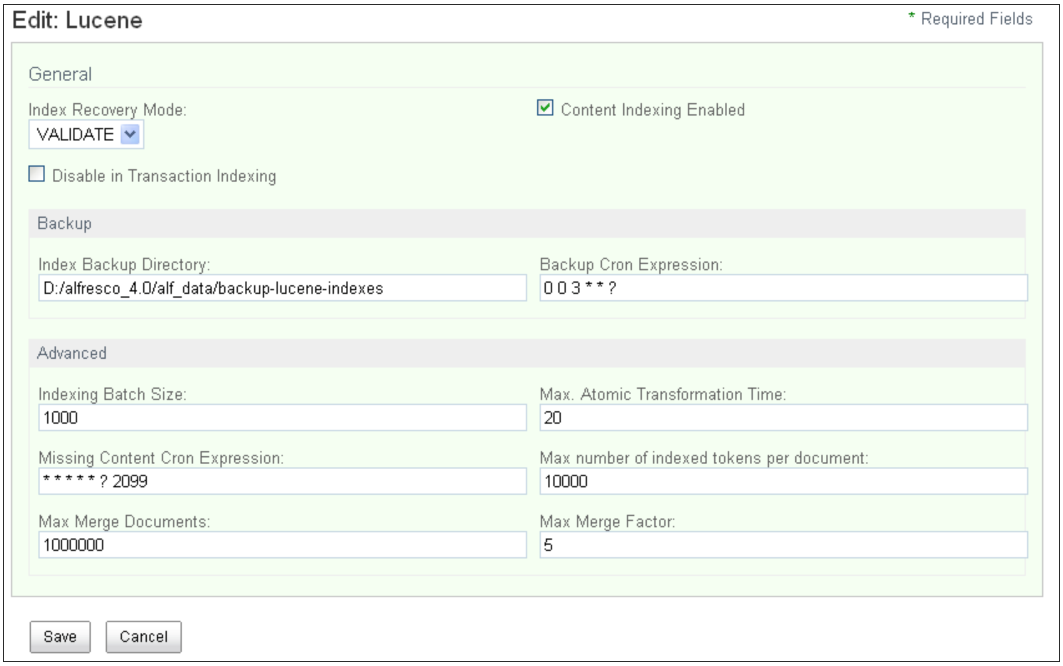
Search Service: Lucene

Solr search configuration

If solr is used as a search engine then on the solr page, you can see all solr related configurations.

Lucene search configuration

This page shows the settings and configurations for a lucene search. Users can edit the settings like Index recovery mode, Index backup location, and CRON expression, and other advanced lucene properties:



Edit: Lucene

* Required Fields

General

Index Recovery Mode: VALIDATE

☑ Content Indexing Enabled

□ Disable in Transaction Indexing

Backup

Index Backup Directory: D:/alfresco_4.0/alf_data/backup-lucene-indexes

Backup Cron Expression: 0 0 3 * * ?

Advanced

Indexing Batch Size: 1000

Max. Atomic Transformation Time: 20

Missing Content Cron Expression: * * * * * ? 2099

Max number of indexed tokens per document: 10000

Max Merge Documents: 1000000

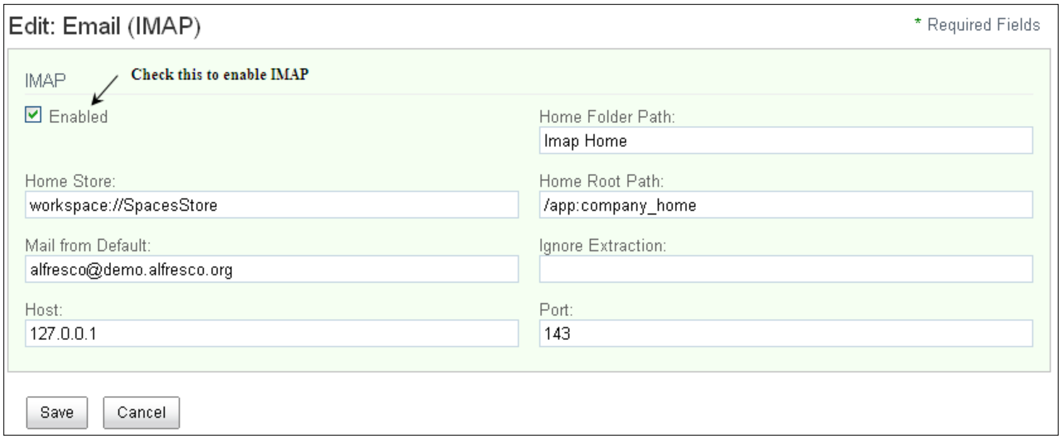
Max Merge Factor: 5

E-mail configurations

E-mail related configurations for IMAP, inbound, and outbound can be configured from the **Admin Console**. These settings are done in the configuration files in Alfresco, which can also be edited from this section from the browser itself.

IMAP e-mail configurations

The **Email (IMAP)** page under the section **Email** on the **Admin Console** allows you to configure IMAP e-mails. It has different properties like **Home Folder Path** (the folder name for IMAP mount), **Home Root Path** (the default location for IMAP mount point), **Mail From Default**, **Host**, **Port**, and so on, which can be configured from this page, as shown in the following screenshot:



Edit: Email (IMAP)

* Required Fields

IMAP

Check this to enable IMAP

☑ Enabled

Home Folder Path: Imap Home

Home Store: workspace://SpacesStore

Home Root Path: /app:company_home

Mail from Default: alfresco@demo.alfresco.org

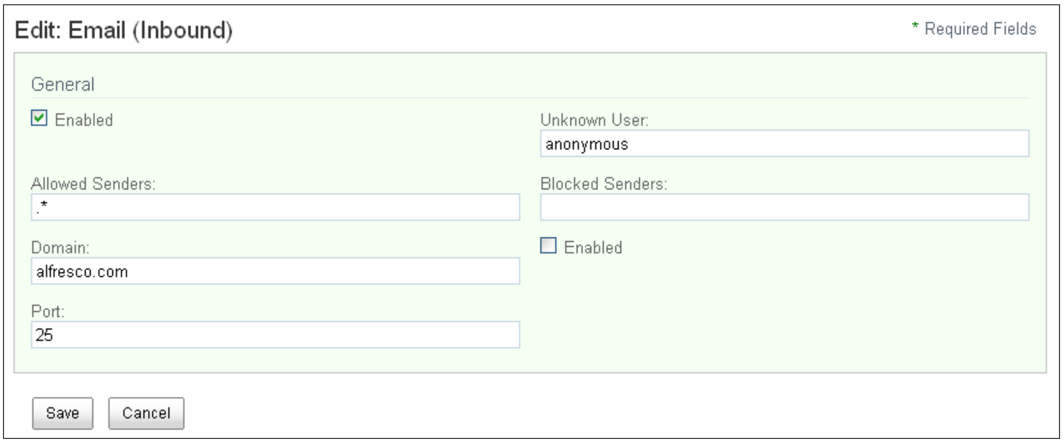
Ignore Extraction:

Host: 127.0.0.1

Port: 143

Inbound e-mail configurations

You can configure inbound e-mail related configurations from the **Email (Inbound)** page under the **Email** section on the **Admin Console**. From here, you can enable/disable inbound e-mails and also the related properties like **Domain**, **Port**, senders details (allowed and blocked senders), and so on:



Edit: Email (Inbound)

* Required Fields

General

☑ Enabled

Unknown User: anonymous

Allowed Senders: .*

Blocked Senders:

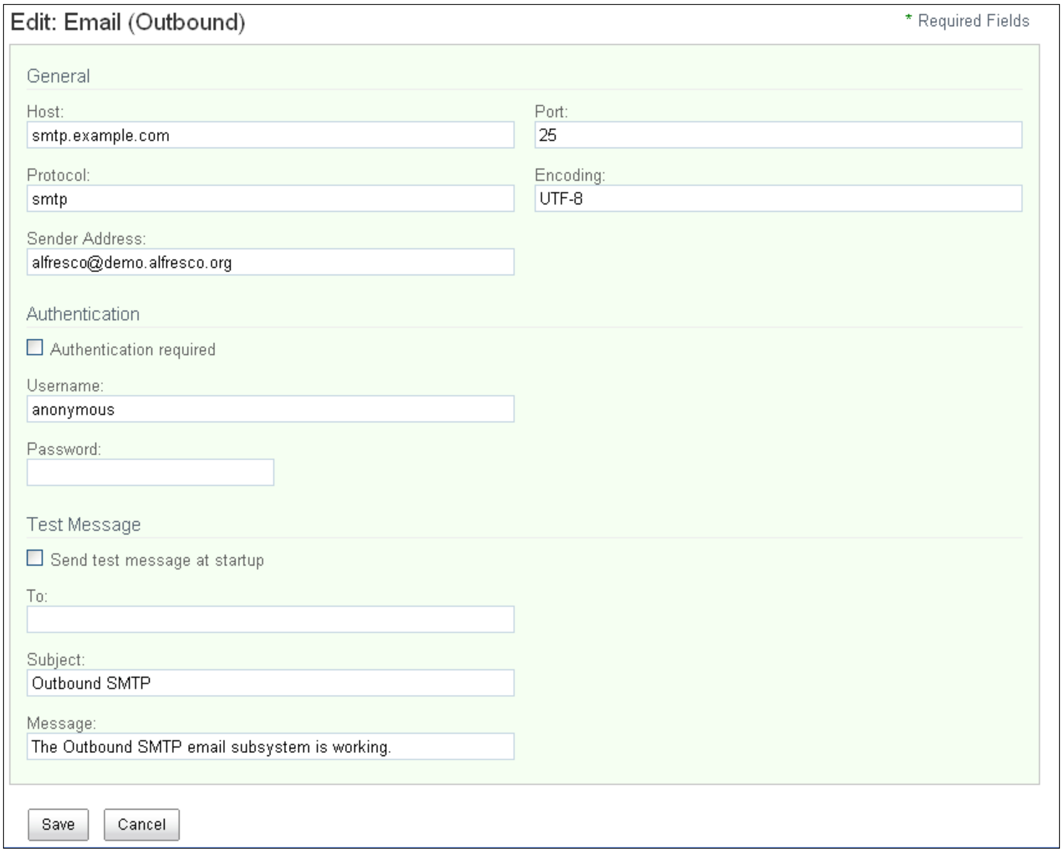
Domain: alfresco.com

☐ Enabled

Port: 25

Outbound

The same way, you can also configure outbound e-mail related configurations from the **Email (Outbound)** page under the **Email** section on the **Admin Console**. From here, you can enable/disable outbound e-mails and also the related properties like **Host**, **Port**, **Protocol**, **Authentication** details, and so on:



Edit: Email (Outbound)

* Required Fields

General

Host: smtp.example.com

Port: 25

Protocol: smtp

Encoding: UTF-8

Sender Address: alfresco@demo.alfresco.org

Authentication

□ Authentication required

Username: anonymous

Password:

Test Message

□ Send test message at startup

To:

Subject: Outbound SMTP

Message: The Outbound SMTP email subsystem is working.

Transformations

This section on the **Admin Console** has different pages for different transformations:

- **OpenOffice**: It displays the open office location properties
- **Image Magick**: It displays the location of the installed version of Image Magick
- **Pdf2swf**: It displays the location of the installed version of SWT Tools

The previous properties are read-only, which is just to allow users to check the location related details for all these transformations supported by Alfresco instance.

Summary

Alfresco Share is using Alfresco as a Repository to store user information. The Alfresco security framework is very secure, flexible, scalable, and customizable. You can manage Alfresco Share users and groups with the administrative rights from Share UI. Authentication is possible using the Alfresco built-in membership system, as well as using NTLM and LDAP. Authentication subsystems configuration allows you to configure any of these authentication mechanisms or chaining of multiple systems also. An Administrator can perform various administrative functions using the Admin Console in Alfresco Share. In the next chapter, we will discuss about creating, managing, and configuring a Site in Alfresco Share.

5
Managing and Configuring a Site

Now, you are all set to start collaborating in Share. In the previous chapter, we discussed about the users and groups in Alfresco share and also configuring the Authentication system. Hence, your system is ready with the proper authentication system and required users and groups. Now we can talk about how these users can collaborate together as a team for some projects by creating a site. Creating a site in Share is a way to collaborate within the team on specific projects or tasks.

In this chapter, we will create a site for our case study of a Marketing site, which needs to be created for launching a new product. This site will be available to both internal and external members of the company. It will be a private site and membership will be by invitation only. Members collaborate on the design and creation of new product positioning documents. The marketing strategies, the various activities, and events planned around the marketing of the product and the marketing material such as brochures, presentations, and so on. The site centralizes contact and event information, and provides the viewing of the status of the products marketing activities.

The product site should be efficient enough to enable collaboration between its members. They should be able to document the various plans and strategies. The documents, presentations, plans, and other details should be available to other members, as per their roles and access rights.

We will also discuss configuring a site. A site has many pages such as Wiki, Blogs, Document Library, Calendars, and so on. We will discuss in brief about all these pages of a site. We will cover the Site Dashboard and different out-of-the-box available dashlets, along with how to customize a site dashboard.

In this chapter, you will learn:

- Managing sites (create, edit, delete site)
- Site membership and inviting users to the site for collaboration
- Configuring a Site
- Overview of site pages such as Wiki, Blogs, Calendar, Document Library and so on
- Site dashboard
- Different out-of-the-box dashlets and configuring a dashboard

Managing sites

A site is a collaborative area for a project or some task undertaken. Imagine a scenario where any business user is able to set up their project site quickly and able to invite the users with specific roles, hence allowing the project team to collaborate with each other. What was earlier a customized solution is now offered out-of-the-box with Alfresco Share.

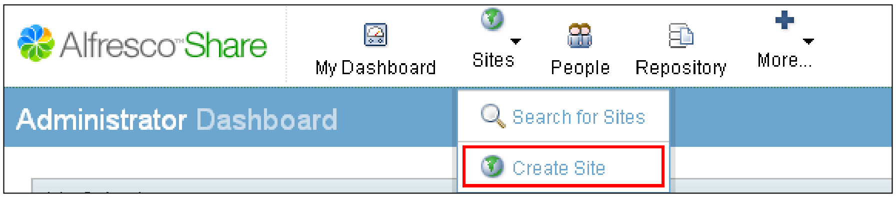
Create a new site

You can create a site from anywhere in the application using the **Sites** option on the toolbar. You can make the site a public, private, or moderate site. We will discuss more about these different types of site in the next section. The person who is creating a site will become the site manager. A site can have multiple managers.

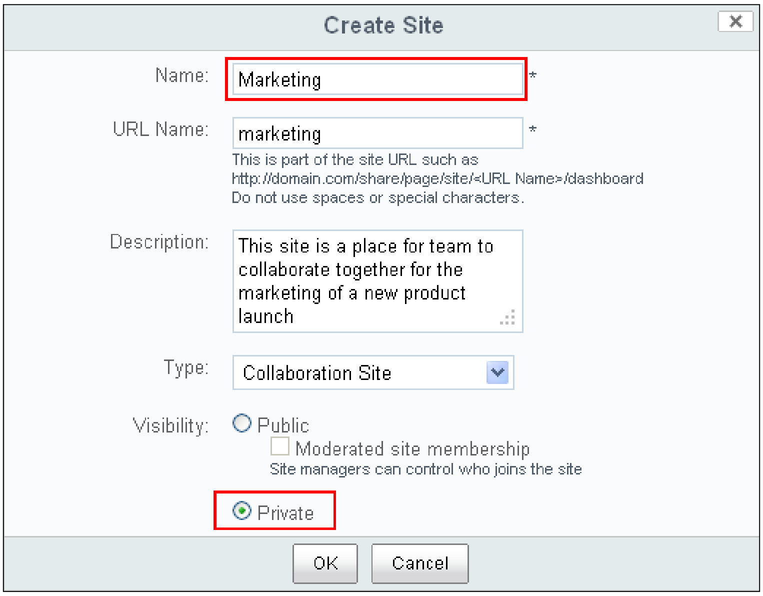
Let's create a site for our case study of marketing project. This is the same site that we will be using through the book for further discussions of site pages and the various activities you can perform in a site with different roles.

The steps to create a new site are as follows:

1. Expand the **Site** menu on the toolbar.
2. Click on **Create Site** in the tools list:



3. This will open the **Create Site** dialog, as shown in the following screenshot:



Create Site ✕

Name: Marketing *

URL Name: marketing *

This is part of the site URL such as
http://domain.com/share/page/site/<URL Name>/dashboard
Do not use spaces or special characters.

Description: This site is a place for team to collaborate together for the marketing of a new product launch

Type: Collaboration Site

Visibility: ○ Public

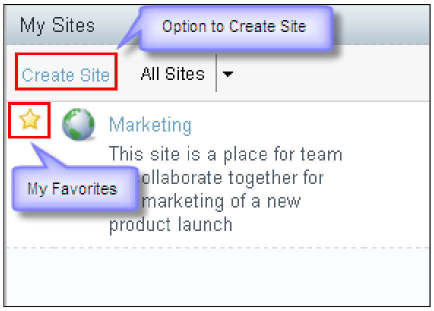
□ Moderated site membership

Site managers can control who joins the site

● Private

OK Cancel

4. Provide the required details marked with (*) such as **Name**, **URL Name**, **Description**, and so on. The site **Name** is a descriptive name that is displayed as the title of your site. **URL** will be part of the site's URL, therefore, do not use space or any special characters such as `*, <, >, \, /, ., ?, :, |`.
5. Specify the site's **Visibility** as **Private**. We will discuss more about different visibilities in the next section.
6. Once done with filling up all the details, click on the **OK** button. This will create a site and the site's dashboard will be displayed. We will talk more about the site's dashboard and different dashlets in the next chapter.
7. You can see this newly created site in the **My Sites** dashlet on your dashboard. Furthermore, this site will be automatically added to the **My Favorites** list:



My Sites

Option to Create Site

Create Site All Sites ▾

☆ Marketing

This site is a place for team ollaborate together for marketing of a new product launch

My Favorites

Note: One more option to create a site is from your personal dashboard: **Create Site** link on the **My Sites** dashlet.

Site visibility

When you create a site, you need to specify a visibility for the site. The following are the different levels of site visibility supported by Alfresco:

1. Public: The site will be visible to all. Anyone can search for this site and can join the site.
2. Private: The site will only be visible to the creator of the site. Any other user cannot even search for this site except for an Alfresco administrator. Only site managers can invite the members to join the site.
3. Moderate: The site is visible to all, but the site manager controls the membership of a site and who can join the site. Everyone can see the site in a search and send request to join that site. Once the site manager approves this request, the user will be a member of that site.

This visibility of a site can be changed in the future by the site manager after the site is created.

Entering a site

You can enter a site from the **My Sites** dashlet on your personal dashboard. This dashlet lists all sites that you created, or of which you are a member. If this dashlet is not available on your dashboard, then you can configure it by clicking on the **Customized Dashboard**.

If the site you want to enter is not listed on the **My Sites** dashlet, then you can search for it using the **Site Finder** page. If the desired site does not exist, then click on **Create Site** on this dashlet to create it.

To enter a site:

1. Click on **My Dashboard** on the toolbar if your personal dashboard is not already displayed.
2. On the **My Sites** dashlet, click on the **Marketing** site you wish to enter. The application displays the **Marketing** site. We will discuss more about the Site Dashboard and dashlets in detail later in this chapter.

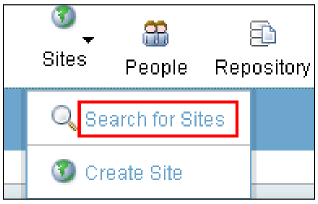
Searching for sites

The Site Finder component allows you to search the existing sites in Share.

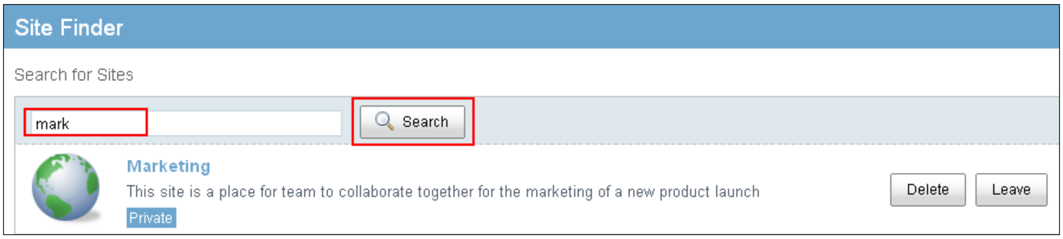
This feature is used to search for a particular public or moderate site. This displays a list of sites you have the permission to access. From this list you can join or leave the sites; and delete the site if you are a site manager.

To search for the site:

1. Expand the **Sites** menu on the toolbar.
2. Click on **Search for Sites** in the tools list:



3. It will display the **Site Finder** page.
4. In the search box, type the name (full or partial) of the site you want to search for. Let's search for marketing sites, which we have just created with the partial search term as mark.
5. Click on the **Search** button:



Marketing

This site is a place for team to collaborate together for the marketing of a new product launch

6. The results list appears beneath the search box and displaying all existing sites matching the criteria entered. This list includes all public and moderate sites, sites created by you, and private sites of which you are a member. To enter a site from this page, click on the site name.
7. To the right of a site in the site results, you can see two actions **Delete** and **Leave**, because the current user is already a member of this site with a content manager role.

8. The different actions can be as follows:

    - **Delete** option will be available to the site manager to delete the site.
    - **Leave** action will be available to only those who are already a member of this site. And, at any point in time, the user themselves can decide to leave the membership of that site by clicking on this **Leave** button.
    - **Join** action will be available with the site which is public and you are not already a member of this site. By clicking on this option, you can become a member of that site.
    - **Request to Join** action will be available when the site is moderate and if you are not already a member of that site. By clicking on this, you can request the site manager to join this site and once approved, you can be a member of that site.

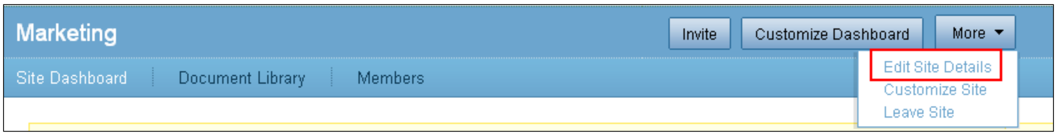
Editing site detail

You can edit the name and description from anywhere in the site. You can also change the access (public or private) for the site. Only site managers can edit site details.

To edit the site details:

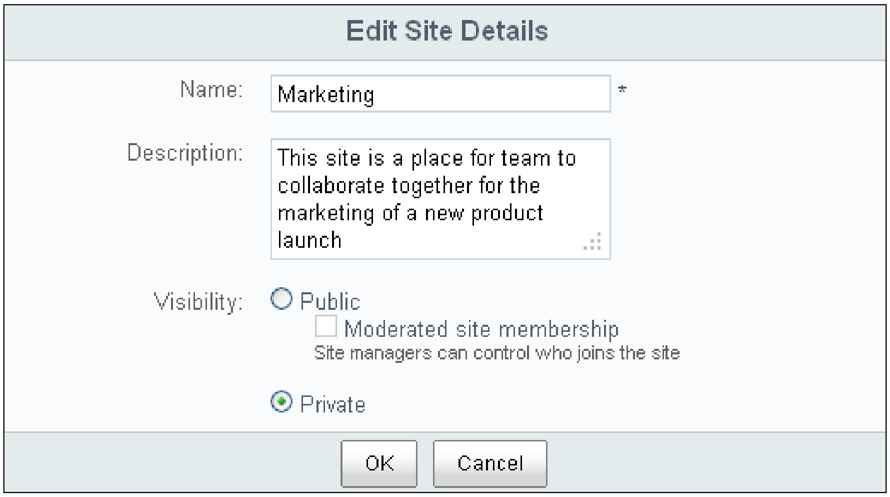
Enter the **Marketing** site from your personal dashboard.

1. On the dashboard banner, click on the **Edit Site Details** in the **More** menu:



2. The **Edit Site Details** page displays the current details for this site.
3. Make the desired changes to the site **Name** and **Description**.

4. You can also change the site access from here, if desired:



Edit Site Details

Name: Marketing *

Description: This site is a place for team to collaborate together for the marketing of a new product launch

Visibility: ○ Public

□ Moderated site membership

Site managers can control who joins the site

● Private

5. Click on **OK**. The site dashboard displays the updated details on the banner and the Site Profile dashlet.

> Note: Site URL is a non-editable field, which cannot be modified once the site is created.

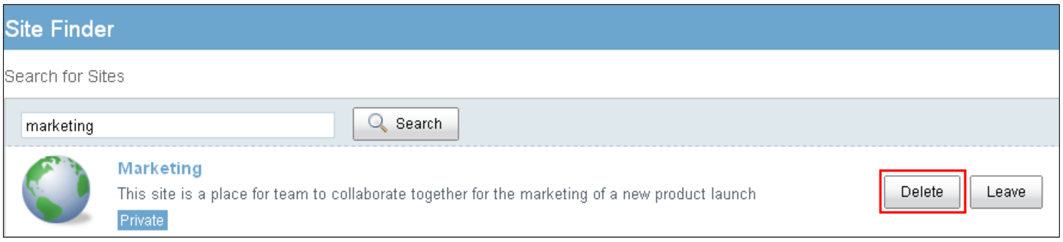
Deleting site

Only site managers can delete existing sites from Alfresco Share. Delete a site to permanently remove it from the repository. Deleting a site also removes all site content, including the document library content, Wiki pages, Blog posts, discussion topics, related links, calendar events, and data lists.

To delete a site use the following steps:

1. Expand the **Sites** menu on the toolbar.
2. Click on **Search for Sites** in the Tools list. It will open the **Site Finder** page.

3. Search for the site you want to delete:


Site Finder
Search for Sites
marketing
Search
Marketing
This site is a place for team to collaborate together for the marketing of a new product launch
Private
Delete
Leave

4. The results list will be displayed beneath the search box.
5. You will be able to see the **Delete** button if you have permission to delete a particular site.
6. Click on **Delete** for the site you want to delete. A confirmation message prompts you to confirm the deletion.
7. Click on **Delete** to delete the selected site. A message informs you that the selected action deletes all site content.
8. Click on **Yes**. The selected site is deleted in its entirety.

Specifying favorite sites

My Favorites sites will be displayed in the **Sites** menu on the toolbar for easy and quick access from anywhere in the application. The star to the left of the site name, on the **My Sites** dashlet, indicates whether the site is marked as favorite or not. By default, standard sites display with a star outline. Once tagged as a favorite, the site displays a solid star. Sites created by you are automatically added to your **My Favorites** list. You can tag any number of sites in this way.

1. To add a site in the **My Favorites** list: Click a star outline to mark the site as a favorite.
2. To remove a site from the **My Favorites** list: Click a solid star to remove the site from the **My Favorites** list.

Site membership

In this section we will discuss how to manage the members of a site. This section also describes how any user can join or leave the site by themselves, along with the options to invite the users to join the site. We will also talk about the different roles of a site member and permissions associated to those roles.

Joining and leaving a site

Here we will discuss how users can search for, and find, sites to join on their own. On the Site Finder page you can manage your site membership by joining and leaving sites.

To join/leave the Site:

1. On the **toolbar**, expand the **Sites** menu.
2. Click on **Search for Sites** and it will open a **Site Finder** page.
3. Search for a specific site, if you directly Click on **Search**, it will display all sites you have permission to access.
4. The results list appears beneath the search box. In the results list, the following are the three options available:
    - **Join** –will allow you to become a member of a public site.
    - **Request to Join** –will allow you to request membership in a moderated public site.
    - **Leave** – will allow you to remove yourself as a member from a site.

Internal and external users

There are two types of users who can be a member of a site, internal users and external users.

Internal users

There will be an administrator of the site. This will be a person, who is an employee of the organization developing the new product. The administrator will have the right to create the site. This user will then invite the people who he wants to be the members of this site and define their roles in the site.

The invited members will see the invitation when they log in to the Alfresco Share system and if the solution is integrated with the mail server, a notification of the invite can be sent as an e-mail too. In the last section of this chapter, we will see how e-mail can be configured.

The users, who accept the invite, will be listed as Site Members and will have access to the site and the content, as per their permissions and roles.

In this case, the internal users will be members from the marketing department, sales department, product development team, strategists, and so on.

How to invite these internal users to the site will be discussed later in this chapter.

External users

Share also let you invite external users to be a part of your site. The name and the e-mail address of the user needs to be specified and an e-mail notification will go to the user to inform them of the invite and the role.

The people from an external branding agency, market research agency, vendors, and partners if applicable may be invited as members of this site.

How to invite these external users to the site will be discussed later in this chapter.

Roles and permissions

Alfresco uses roles to determine what a user can and cannot do within a Share site. Each role is associated with the permissions. The following sections describe the Share user permissions. In general, permissions apply as follows:

Role	**Permissions**
Manager	Full Control
Collaborator	Read, Upload, Create, Checkout, Edit
Contributor	Read, Upload, Create
Consumer	Read
Administrator	Read, Upload, Create, Checkout, Edit, Delete

Managing site membership

In the **Members** component for a site the links for three different pages are available beneath the site banner. These are as follows:

People:

- This is the default selection and displays the **Search for Site Members** page and is visible to all the site members with any role. On this page, you can search for a particular site member and view a list of all site members with their respective roles.
- Only the site manager has permission to invite new members to join the site, change a member's role or to remove a site member.

Groups:

- This links to the page that allows to Search for Site Groups. On this page, you can search for a site group and view a list of all groups. This page is accessible to all the site members with any role.

- Only the site manager has permission to access the additional functionalities, such as to add a new group to the site, change an existing group's role, and to remove a site group.

Pending invites:

- This link displays the **Manage Pending Invites** page. This page is accessible only to the site members having a site manager role.
- On this page, site managers can view the users that have been invited to join the current site and can cancel a pending invitation.

Inviting members to the site

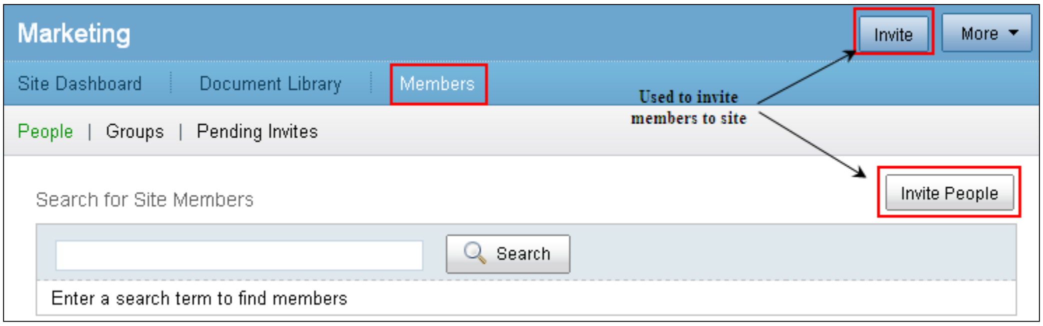
Once you are done with the setup of your collaborative site, you can start inviting people to join it. The site manager can send invitations to both internal and external users to join the site and also can assign the roles within the site.

Inviting internal users to a site

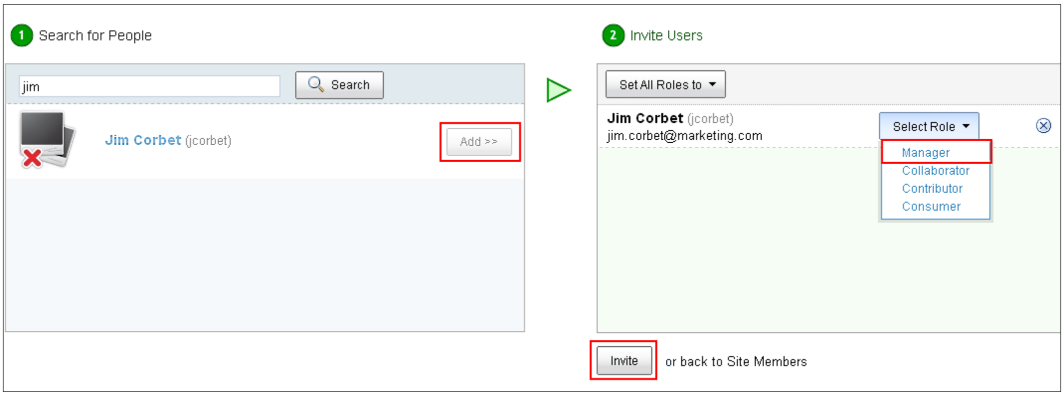
As we discussed in the preceding section, for our case study of the marketing site, the internal users will be the users from the marketing department, sales department, and so on. Let's invite these users to the marketing site with specific roles. The users, which are part of Alfresco, already created in Alfresco, are called **Internal users**. In *Chapter 4*, *Managing a Site in Share*, we have already created these required users, so we will be using the same internal users to invite to the site. Only site managers can invite the users to a site.

To invite internal users to the site:

1. Click on **Invite** on the site's banner. It will display the **Invite member** page. One more option is you can click on the **Members** component for a site and there you can find button called **Invite People**:


Marketing
Invite
More
Site Dashboard
Document Library
Members
Used to invite members to site
People | Groups | Pending Invites
Search for Site Members
Invite People
Search
Enter a search term to find members

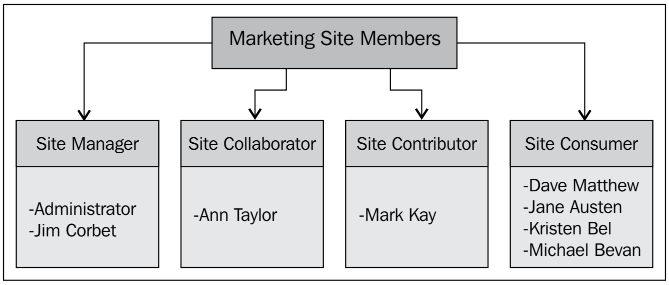
2. On the Invite page, in the **Search for People** section, you can provide the full or partial name of the internal user you want to invite and click on **Search**:



3. Here we will invite **Jim Corbet** as site manager. Therefore, in step 1, search for user **jim**, Click on the **Add** button and in the second step, assign **Manager** role to this user as mentioned in the preceding screenshot.
4. At the end, click on the **Invite** button which will send an e-mail notification to the invited member, that is, Jim Corbet.
5. And this user will also get a task to **Accept** the invitation. The user can see this task in the **My Tasks** dashlet on his personal dashboard.
6. Once the user accepts this invitation, this user will now be a member of this site with a specified role.

> If you are inviting multiple users at once with the same role, then you can select the desired role from the **Set All Roles to** drop down and apply this role to all the users added at once.

We will be inviting all required users with the specified role, as mentioned in the following figure and will be using these site members through the book:



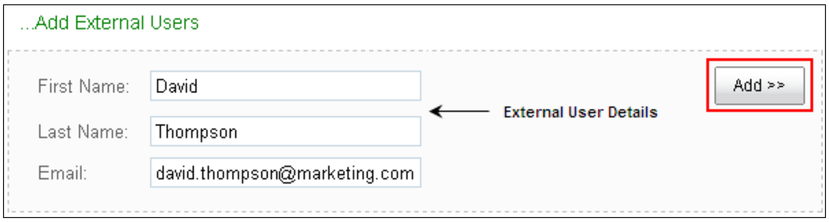
Inviting external users to a site

External users are the users who are not part of Alfresco. In our case study, the people from an external branding agency, market research agency or vendors, and so on, are external users. These users are not really users who are part of your system, but they need to be a part of your new site. In this scenario, we will be using concepts of inviting external users to the site.

Only site managers can invite the users to a site.

To invite external users to the site:

1. Click on **Invite** on the Site banner. It will display the **Invite member** page. One more option is you can click on the **Members** component for a site and there you can find the **Invite People** button.
2. On the **Invite** page, in the **Add External Users** section, you need to provide the **First Name**, **Last Name**, and the **Email** address of the external user you want to invite to this site and click on **Add**. Here, we will invite David Thompson as an external user with the role of Consumer, as shown in the following screenshot:



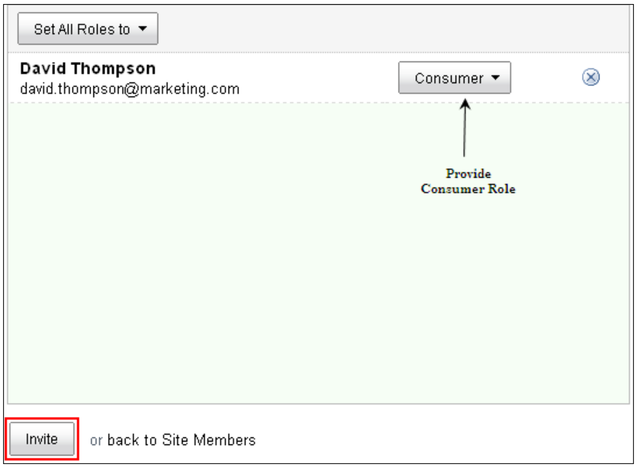
...Add External Users

First Name: David

Last Name: Thompson

Email: david.thompson@marketing.com

3. In the second step, assign **Consumer** role to this user, as follows:



David Thompson
david.thompson@marketing.com

Consumer

4. At the end, click on the **Invite** button, which will send an e-mail notification to the invited member.
5. And this user will also get a link in the e-mail.
6. Once the user accepts this invitation, this user will now be a member of this site with a specified role.

> In order to send and receive site invitations for internal and external users the appropriate options must be set for outbound e-mails. Only the system administrator can configure these settings, we will see how these configurations are done in the next section of this chapter.

Configuring Alfresco to send outbound e-mail

As discussed in the preceding section, for share invitations to work correctly, configuration of outbound e-mail is necessary. If you do not set the e-mail configuration, then when you invite a user to a site, the user will not receive the assigned task notification.

The e-mail subsystem allows you to configure outbound e-mail settings. The file `<install_application> | tomcat | webapps | alfresco | WEB-INF |classes | alfresco | subsystems | email | OutboundSMTP | OutboundSMTP.properties` contains the outbound e-mail configuration.

The following is the list of properties with the default values:

`mail.host`: Specifies the name of the SMTP host. The default is `smtp.alfresco.com`

`mail.port`: Specifies the port number on which the SMTP service runs (the default is `25`).

`mail.username`: Specifies the username of the account from which you want e-mails to be sent.

`mail.password`: Specifies the password for the username.

`mail.encoding`: Specifies encoding for e-mail. The default is `UTF-8`.

`mail.from.default`: Specifies the e-mail address from which all e-mail notifications are sent. Default is `admin@alfresco.com`

`mail.smtp.auth`: Specifies whether your authorization is required. The default is `false`.

`mail.protocol`: Specifies the default protocol to be used for e-mail. The default is `smtp`.

You can override these configuration settings and provide your own values as well. For example, if you want to change the host for mail. You need to put your configuration in `alfresco-global.properties` file located at `<install_application | tomcat | shared |` classes.

```
mail.host=<the name of your SMTP host>
```

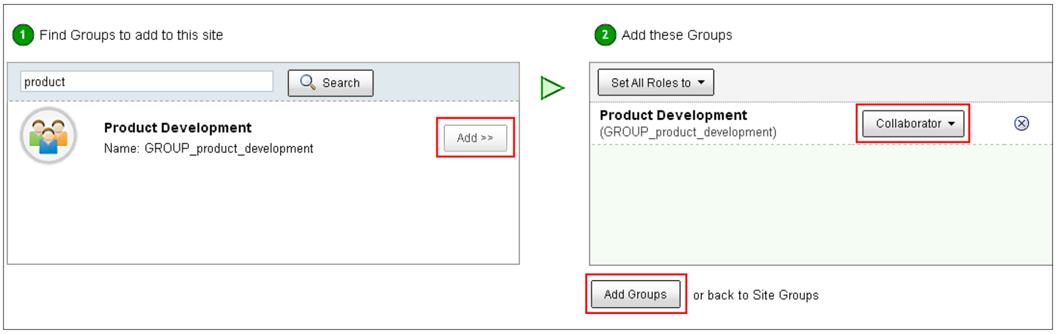
Adding groups to a site

Inviting multiple users one by one at a time, with the same role to join your site, can be a time consuming and tedious job. To save time you can add existing user groups to the current site.

For example, Product Development is a group, which is responsible for this new product development. And this group will have many users and each user needs to have the same role as the collaborator on this *Marketing* site. So, we should add this group to the site instead of inviting each user to the site individually.

The process of adding a group involves searching for the group, assigning a role to the group as a whole, and then adding the group. Unlike adding users, no invitation is extended to the users in the selected group; the group is added immediately. The same roles of user's Manager, Collaborator, Contributor, and Consumer are available for groups too. All the users of the group will be assigned specific roles, as follows:

1. In the **Members** component for a site the links for three different pages are available beneath the site banner. Click on the **Groups** page over there.
2. Click on **Add Groups**.
3. Search for the group you want to add. Here we will search for Product and it will list down Product Development group in the search result. Click on the **Add** icon, this will add the group in the right pane (**Add these Groups** section):



1 Find Groups to add to this site

product

Search

Product Development
Name: GROUP_product_development

Add >>

2 Add these Groups

Set All Roles to ▾

Product Development
(GROUP_product_development)

Collaborator ▾

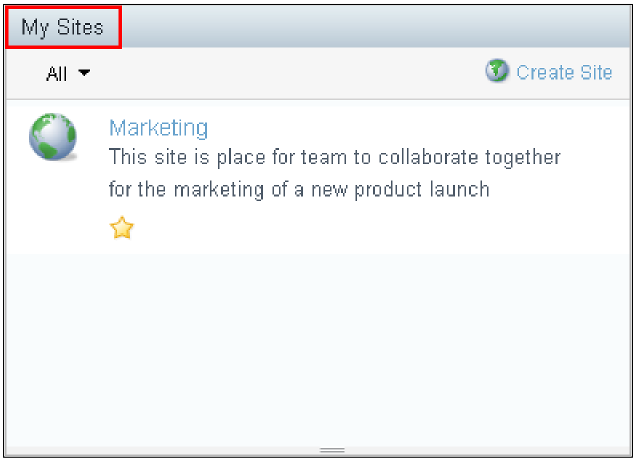
Add Groups

or back to Site Groups

4. Assign the role as Collaborator and click on the **Add Groups** button.

How users can see which sites they are currently members of

To check the list of sites of which a current user is member of, user can use the My Site Dashlet on his personal dashboard:



Marketing

This site is place for team to collaborate together for the marketing of a new product launch

Changing the role of a site member or site group

Only site managers can change the role of a site member or group. To do so,

1. Go to the **Members** component of a desired site, select **People** or **Groups** to display the respective search page.
2. Search for the site member or group whose role you want to change for the current site.
3. The page displays the search results. A button to the right of the member/group name indicates the assigned role.
4. Click the button displaying the currently assigned role. A list displays the available roles: Manager, Collaborator, Contributor, and Consumer.
5. Click on the appropriate new role for the site member.
6. It will display a message on the screen after successful completion of changing of the role.

Removing a site member or site group

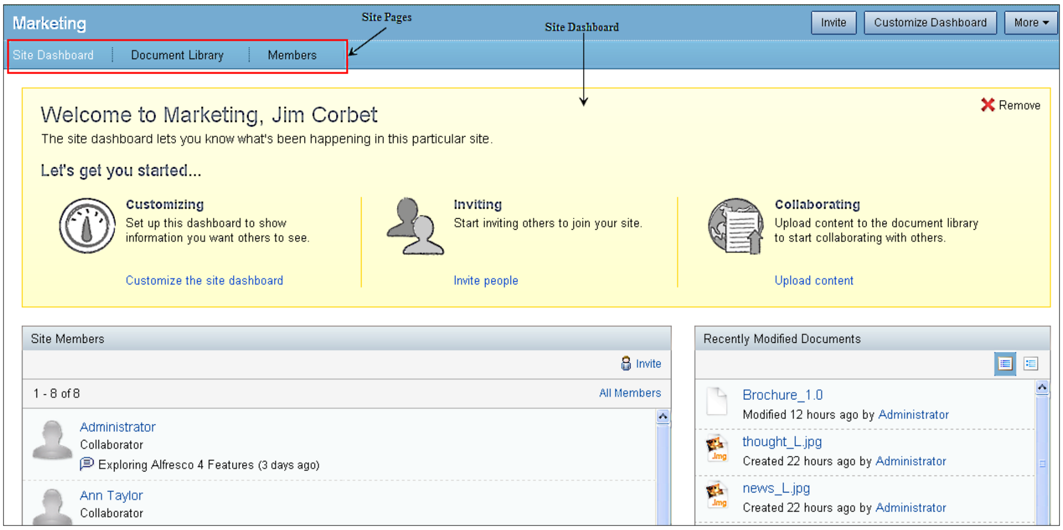
Only site managers can remove any member, or a group, from the site member. To do so,

1. Go to the **Members** component of a desired site, select **People** or **Groups** to display the respective search page.
2. Search for the site member or group you want to remove from the site.
3. Click on the **Remove** button displayed on the right of the user, or group, you want to remove.

> Once removed, the user or group no longer has access to the site or any content of the site. If the site is public, then the user can choose to rejoin it.

Configuring a site

In this chapter, we will discuss about different pages of the sites and configuration of the site with the desired pages. We will also go through the Site Dashboard and how one can customize it. The following is the screenshot of a site with the site dashboard and all the default site pages on top:



Welcome to Marketing, Jim Corbet

The site dashboard lets you know what's been happening in this particular site.

Let's get you started...

Customizing Set up this dashboard to show information you want others to see.

Customize the site dashboard

Inviting Start inviting others to join your site.

Invite people

Collaborating Upload content to the document library to start collaborating with others.

Upload content

Site Members

Invite

1 - 8 of 8 All Members

Administrator
Collaborator
Exploring Alfresco 4 Features (3 days ago)

Ann Taylor
Collaborator

Recently Modified Documents

Brochure_1.0
Modified 12 hours ago by Administrator

thought_L.jpg
Created 22 hours ago by Administrator

news_L.jpg
Created 22 hours ago by Administrator

Site pages

By default, sites include Document Library and Members pages. If you have noticed, the *Marketing* site, which we created in the previous section, was having the above components available by default with that site. Other available pages are Wiki, Blogs, Calendar, Links, Data Lists, and Forum pages. The members of this site can collaborate with each other via these different components.

However, you can customize the site to contain any combination of these components. If you want to add or remove any of these components for a site, then it is possible to configure it.

The following section provides the overview of all these pages. In the next chapter, we will discuss all of these pages in detail with the examples.

Wiki

The site wiki allows members of the site to create pages for a collaborative purpose within a website. Within the wiki you can create, delete, rename, and edit the wiki pages.

The Wiki page has the default view as **Wiki Page List**, which displays a summary of all pages created for the current site's wiki. A browsing pane on the left side of the page enables you to populate the wiki list based on some filters, such as **Recently Added**, **Recently Modified**, and so on. Selecting a page in the wiki list displays the entire wiki page in the page view.

When you enter the Wiki page, the page view displays the wiki main page. Click on **Wiki Page List** to display the wiki list.

Blog

Site members can create, edit, and add comments to blog postings. The Blog page enables you to add commentary, descriptions of events, and other material related to your site. The postings can be saved as drafts and then, when ready, published to the internal blog. Members can also choose to publish posts to an external blogging site, including WordPress and TypePad.

To work with or perform operations on the Blog, you must be on the desired blog page. A browsing pane on the left side of the blog page enables you to populate the blog posts based on some filters such as **Latest**, **Current user's Drafts**, **Current user's Published**, and so on.

Document Library

Document Library enables you to gather and store information and collaboratively manage any content related to a site, such as documents, media files, and graphics.

Document Library provides features such as bulk uploading of content, previewing of content, assigning workflow to any content. You can also define your own folder structure in document library to manage your content in a more organized way. A browsing pane on the left side of the document library page enables you to display the content based on some filters such as **Recently Modified**, **Recently Added**, **Document current user is editing**, and so on.

Calendar

The Calendar page enables you to schedule and track events related to the current site. Site members can create events that display on the calendar for all site users to view.

You can view the calendar by day, week, or month. The **Agenda** view displays upcoming events. The tasks in this section assume you are in the Calendar page of the desired site.

Links

The links page allows the site members to compile a list of web links that are related to the site or that might be of interest to the site members. These can be internal links pointing to Share pages or external links pointing to any web address.

Discussions

The topics on a discussion page can take the form of questions or comments with threaded discussions. Site members can use the Discussions page to post user-generated content related to a site.

Members of a site can create new topics and can also reply to a posting to take part in a discussion on a specific topic.

Data lists

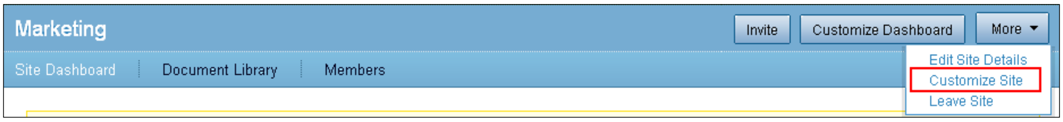
The data lists component is used when you want to store any list of data which is relevant to your site for example, contact details, Task list, To-do list, and so on. Site Members can work with their own lists and can also contribute to lists created by other site members.

Customizing site pages

Customizing a site enables you to choose the pages you want to include for the site. By default, all components listed above are included when you create a site. Only the site manager can customize the site.

To customize a site:

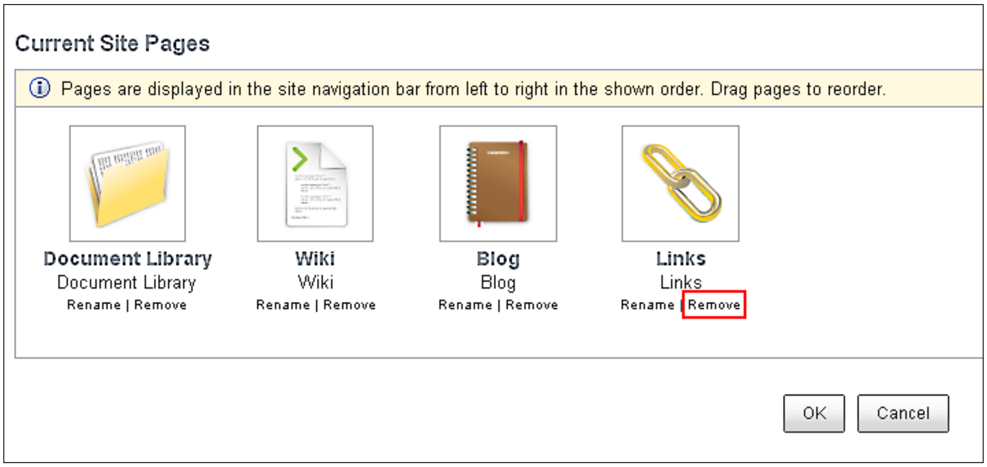
1. Enter the desired site, *Marketing*.
2. On the dashboard banner, click on **Customize Site** in the **More** menu:



3. The **Customize Site** page displays the current pages for this site.

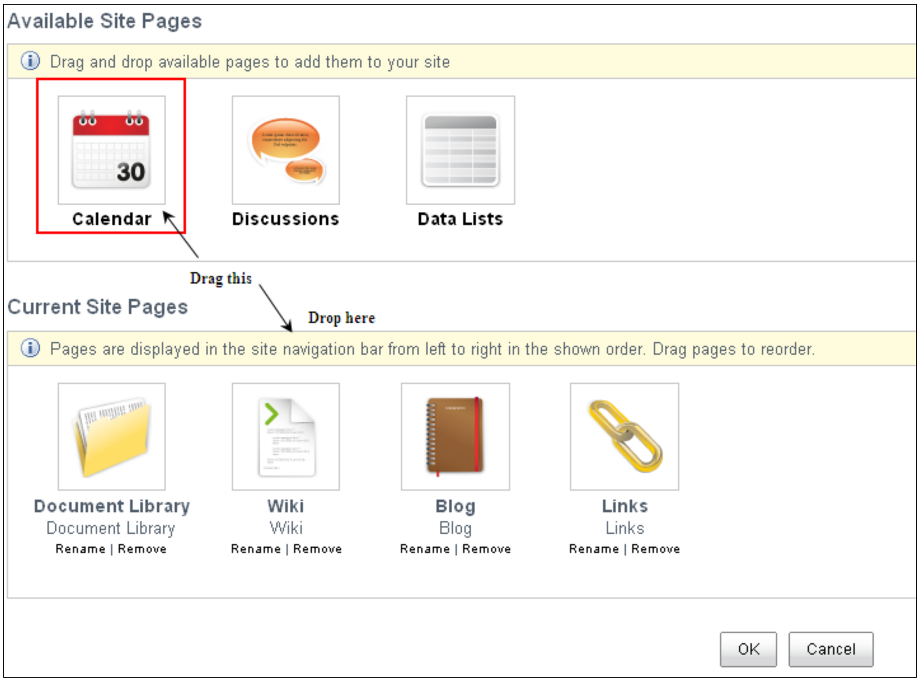
To remove a page from the site

1. For example, if you want to remove the Links page for the "*Marketing*" site, then click on the **Remove** link beneath the page **Links**:



To add a page to the site

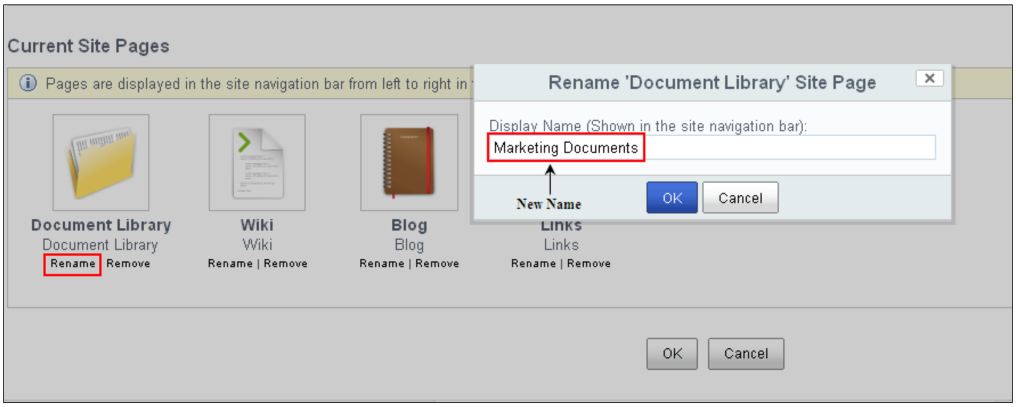
1. If you are creating any new custom page, or if you have removed any of the existing out-of-the-box pages, then you can add that page in the site.
2. Drag and drop the desired pages from the **Available Site Pages** section to **Current Site Pages**, as shown in the following screenshot:



3. Click on **OK** to save your changes.

To rename a page of a site

1. For any particular site, you can rename the pages of the site. To rename the page, Click on the **Rename** link and provide the new name. Let's rename **Document Library** to **Marketing Documents**:

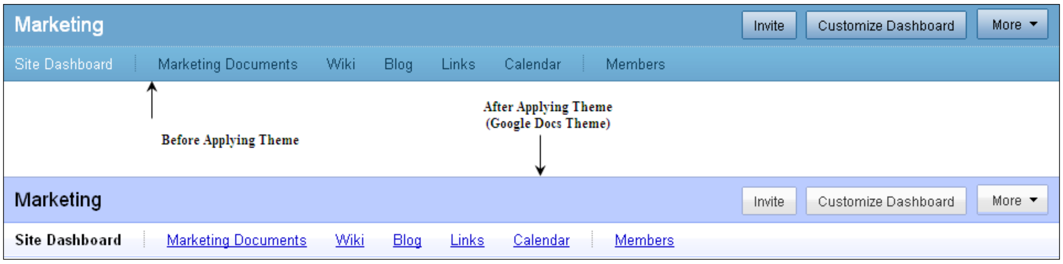


Display Name (Shown in the site navigation bar): Marketing Documents

How to apply themes for a particular Site

The default theme for any site will be the same theme, which is chosen for the Share Application. Site Manager can change the theme for a particular site as well. Let's select the theme for our Marketing site as "Google Docs Theme". To apply "Google Themes" to Marketing Site, in the Customize Site page,

- Go to the **Customize Site** page.
- Select **Google Docs Theme** from the **Site Theme** drop down.
- Click on **OK**.
- The new theme will be applied to the Marketing site. The following screenshot shows the different layout of a site in different themes:



Site Dashboard

The Site Dashboard is like a homepage for any site. When you navigate to your site, the first screen, landing page, you are seeing is the Site Dashboard.

Dashlets

The site dashboard is a landing page for any site, which consists of different site dashlets. The siite dashboard displays the related information of a site in an organized manner.

When you customize the *Marketing* site dashboard, you can specify the desired dashlets; each selected dashlet is displayed as a pane on the dashboard. In the following section, we will describe all of the out-of-the-box available dashlets.

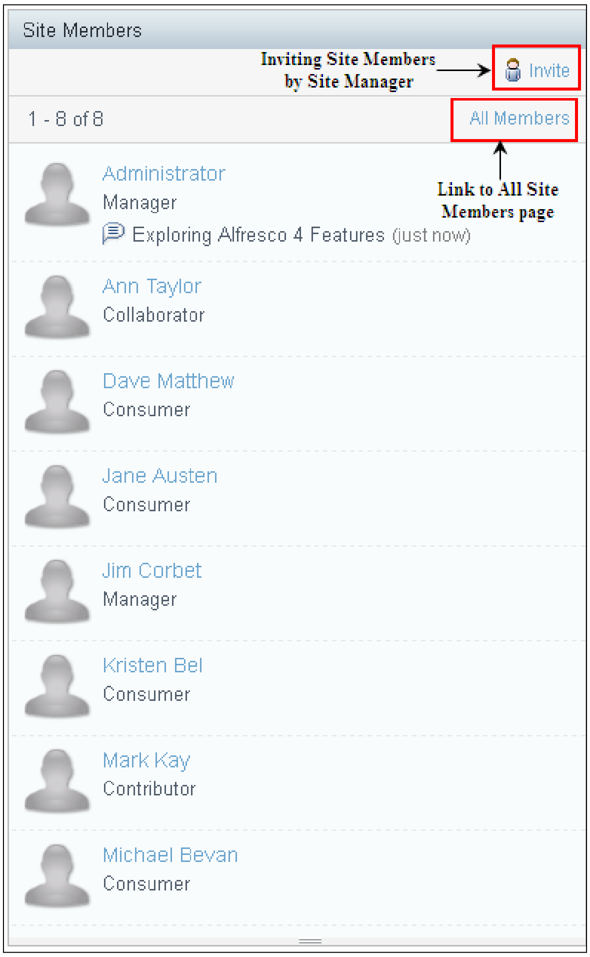
Default site dashlets

When you create any new site, it includes the following dashlets on the Site Dashboard by default if you don't customize it:

Site members

The site member's dashlet lists the members of the current site with the details of their assigned roles.

Site manager can also invite other site members directly from this dashlet using the **Invite** link. The **All Members** link links to the site member's page where you can search for any site members. In the following screenshot, it shows all the members of the *Marketing* site with their assigned roles:



Site Members

Inviting Site Members by Site Manager

Invite

1 - 8 of 8

All Members

Link to All Site Members page

Administrator
Manager
Exploring Alfresco 4 Features (just now)

Ann Taylor
Collaborator

Dave Matthew
Consumer

Jane Austen
Consumer

Jim Corbet
Manager

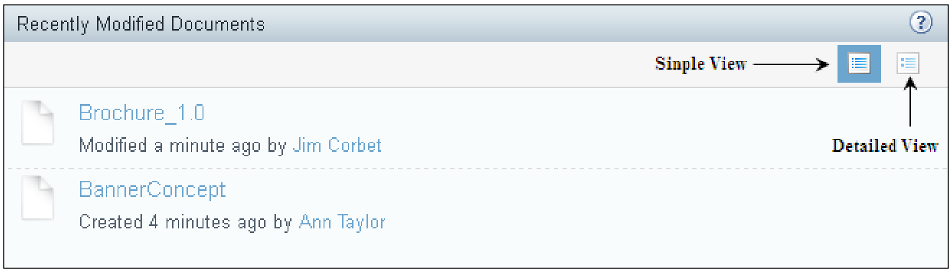
Kristen Bel
Consumer

Mark Kay
Contributor

Michael Bevan
Consumer

Recently modified documents

The recently modified documents dashlet lists the content in this site's library that has been added or edited in the past seven days. You can choose a simple or detailed view for this dashlet. In the detailed view, you see extra features that allows you to like an item, or mark it as a favorite. If you click on that document, then you will be directly jumped to the details page of that document where you can read it, add comments, view the document properties, and also perform various actions on that document:



Recently Modified Documents

Brochure_1.0
Modified a minute ago by Jim Corbet

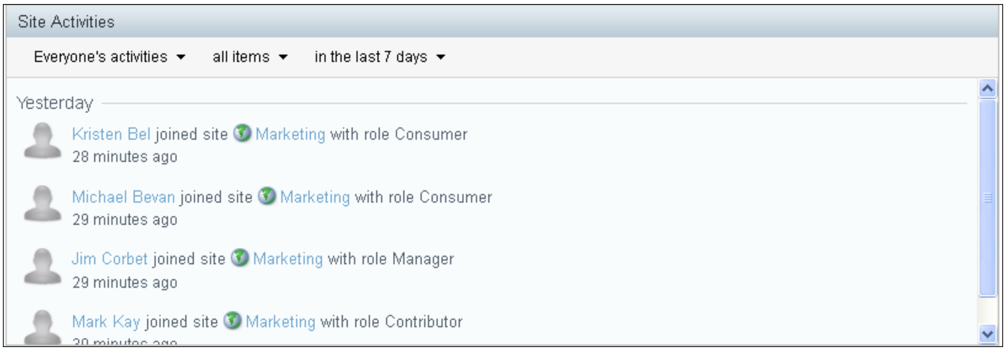
BannerConcept
Created 4 minutes ago by Ann Taylor

Site activities

This dashlet tracks the most recent activities that have been performed in this site by the site members. It provides different filters for the following:

1. Time period - of what time period you want to see the activities like today, last 7 days, last 14 days, last 28 days.
2. Whose activities you want to see - everyone's, yours, or other users'.
3. Which items activity log you want to see, such as all items, status updates, comments, content, memberships, and so on.

An RSS feed is also available on this dashlet; a user can subscribe to the feed to automatically receive the activity updates:



Site Activities

Everyone's activities ▾ all items ▾ in the last 7 days ▾

Yesterday

Kristen Bel joined site Marketing with role Consumer
28 minutes ago

Michael Bevan joined site Marketing with role Consumer
29 minutes ago

Jim Corbet joined site Marketing with role Manager
29 minutes ago

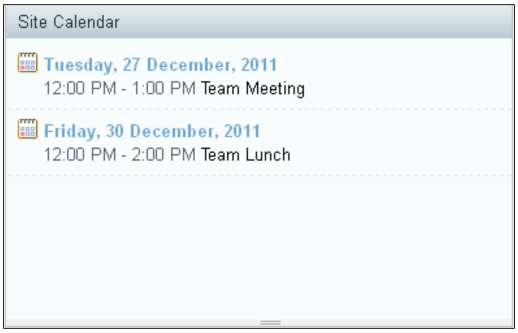
Mark Kay joined site Marketing with role Contributor
30 minutes ago

Other dashlets

Other dashlets are also available that you can configure to display on any site dashboard. How to configure the site dashboard will be discussed in a later section of this chapter. In this section, we will discuss about other out-of-the-box available dashlets for the site.

Site calendar

The site calendar dashlet contains a rolled-up view of upcoming events for the *Marketing* site. By clicking on a particular event, you can see the details of that event:



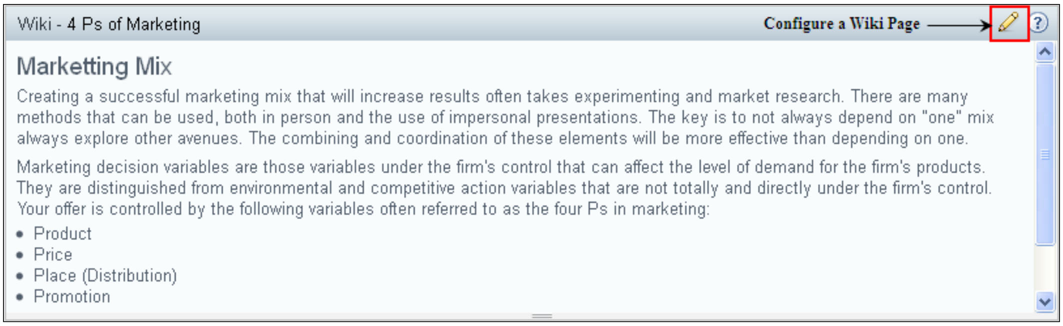
Site Calendar

Tuesday, 27 December, 2011
12:00 PM - 1:00 PM Team Meeting

Friday, 30 December, 2011
12:00 PM - 2:00 PM Team Lunch

Wiki

The Wiki dashlet displays the specified wiki page. The **Configure** link on the dashlet enables you to select the desired page that you want to be displayed on the dashlet. Let's configure one of the wiki pages we have already created for the *Marketing* site by clicking on the **Configure** link. Creation of the wiki page will be covered in detail in next chapter:



Wiki - 4 Ps of Marketing

Configure a Wiki Page

Marketting Mix

Creating a successful marketing mix that will increase results often takes experimenting and market research. There are many methods that can be used, both in person and the use of impersonal presentations. The key is to not always depend on "one" mix always explore other avenues. The combining and coordination of these elements will be more effective than depending on one.

Marketing decision variables are those variables under the firm's control that can affect the level of demand for the firm's products. They are distinguished from environmental and competitive action variables that are not totally and directly under the firm's control. Your offer is controlled by the following variables often referred to as the four Ps in marketing:

- Product
- Price
- Place (Distribution)
- Promotion

Site links

The site links dashlet displays the web links compiled by site users. There is also an icon along with all the links, which allows you to go to the detail of any particular link. You can also create a new link from this dashlet itself:

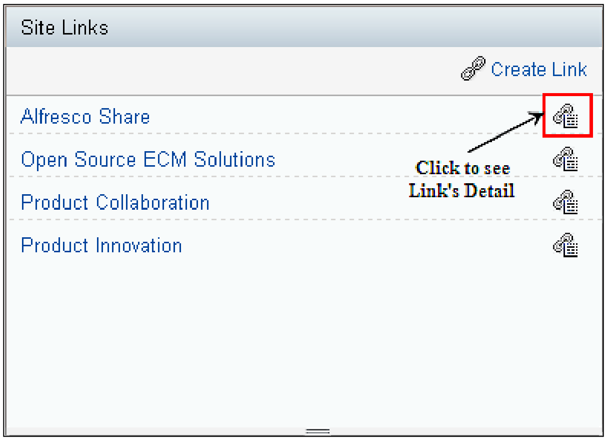
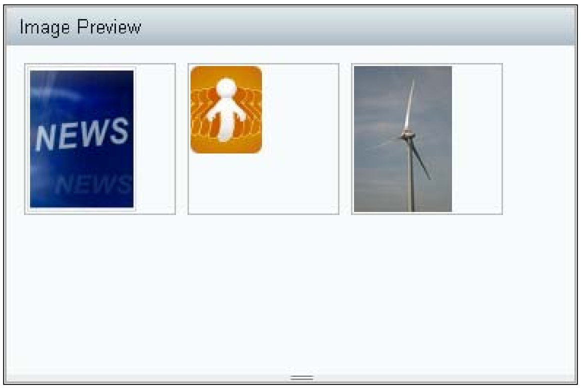


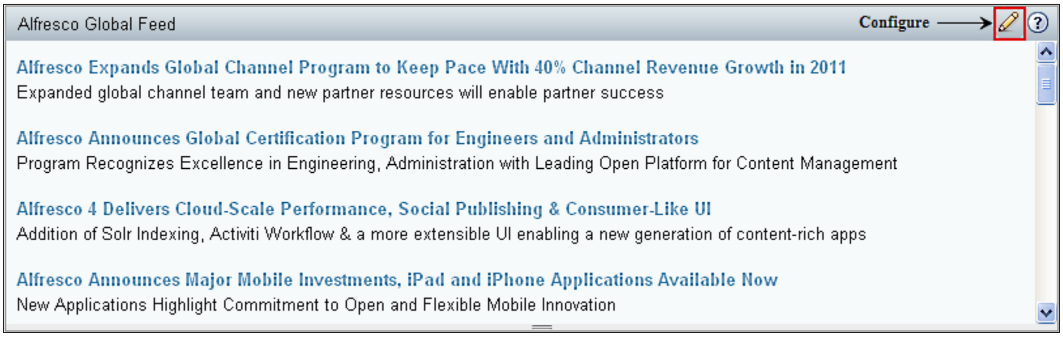
Image preview

The image preview dashlet displays a thumbnail of all images contained in the site's library. You can also download an image directly from the dashlet, as follows:



RSS feed

The RSS feed dashlet, by default, is configured to display the Alfresco website feed. You can also configure other RSS feeds by clicking on the **Configure** link:



Alfresco Expands Global Channel Program to Keep Pace With 40% Channel Revenue Growth in 2011
Expanded global channel team and new partner resources will enable partner success

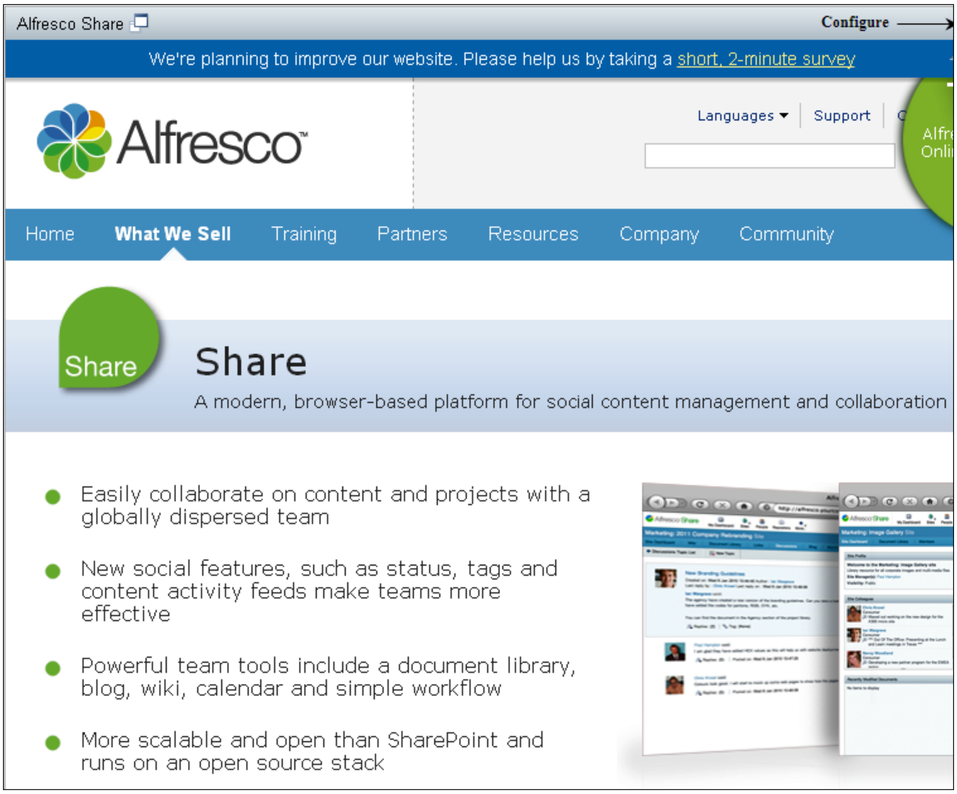
Alfresco Announces Global Certification Program for Engineers and Administrators
Program Recognizes Excellence in Engineering, Administration with Leading Open Platform for Content Management

Alfresco 4 Delivers Cloud-Scale Performance, Social Publishing & Consumer-Like UI
Addition of Solr Indexing, Activiti Workflow & a more extensible UI enabling a new generation of content-rich apps

Alfresco Announces Major Mobile Investments, iPad and iPhone Applications Available Now
New Applications Highlight Commitment to Open and Flexible Mobile Innovation

Web view

The web view dashlet shows your favorite web site in a dashlet. You can configure any website page to be displayed in this dashlet. When you configure it, you need to provide the title and the web page link. The title will be displayed as a dashlet title and by clicking on it; it will open that site page in a new window:



We're planning to improve our website. Please help us by taking a short, 2-minute survey

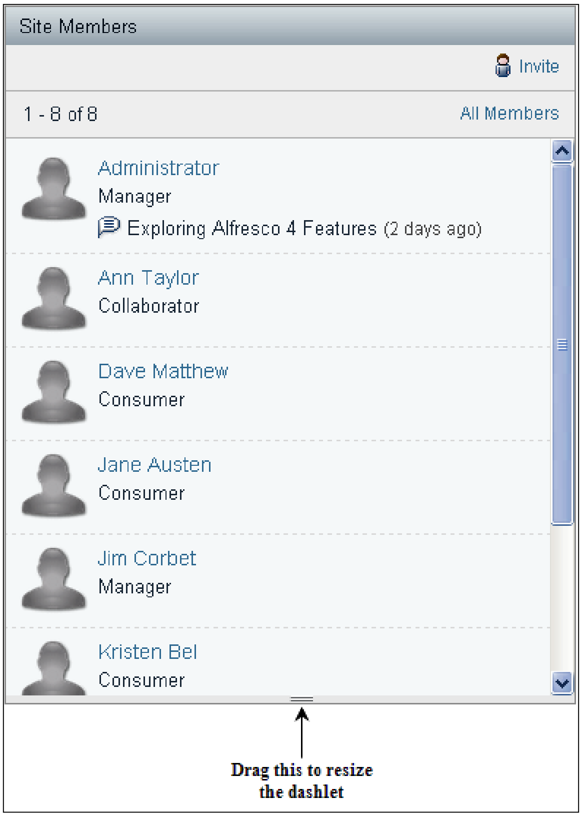
Share

A modern, browser-based platform for social content management and collaboration

- Easily collaborate on content and projects with a globally dispersed team
- New social features, such as status, tags and content activity feeds make teams more effective
- Powerful team tools include a document library, blog, wiki, calendar and simple workflow
- More scalable and open than SharePoint and runs on an open source stack

Resizing a dashlet:

A site manager can resize most dashlets. Click and drag the resizing bar on the bottom edge of a dashlet until it is the height you want. This preference is saved so the site dashboard displays to all users the way that you configure it:



Site Members

Invite

1 - 8 of 8

All Members

Administrator
Manager
Exploring Alfresco 4 Features (2 days ago)

Ann Taylor
Collaborator

Dave Matthew
Consumer

Jane Austen
Consumer

Jim Corbet
Manager

Kristen Bel
Consumer

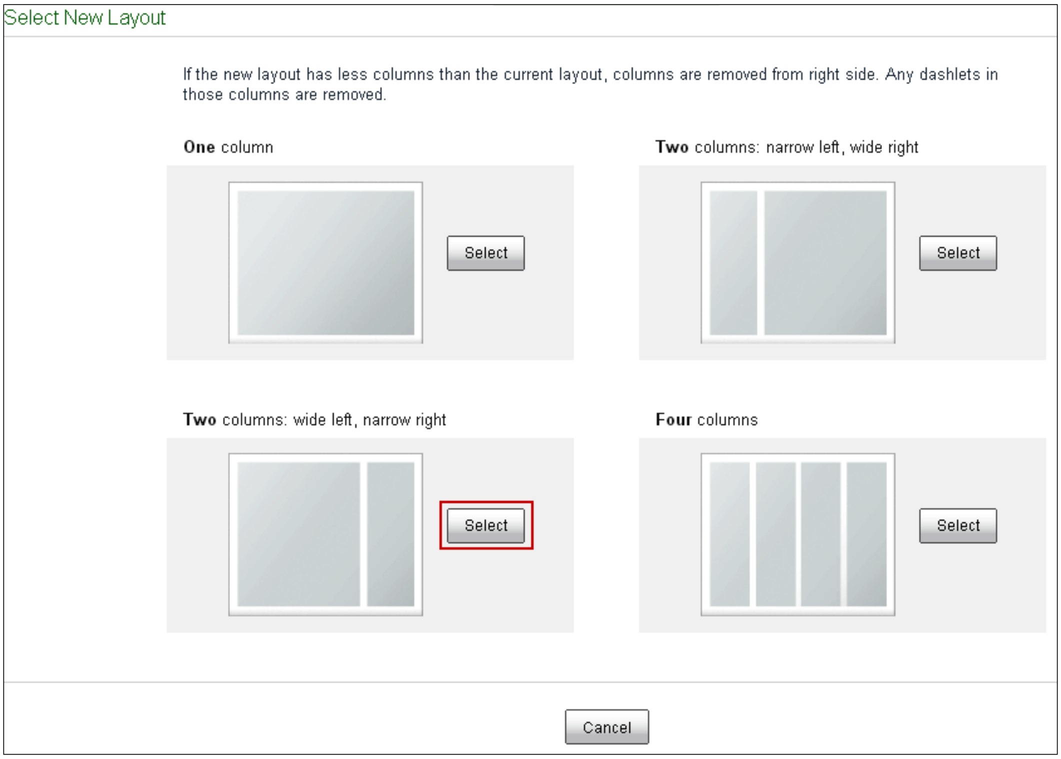
Customizing Site Dashboard

The dashboard for the *Marketing* site is an interactive user interface that contains information specific to the site. Similar to your personal dashboard, site information is organized and displayed in dashlets, which represent the configured pages.

For each site, you can modify the dashboard appearance, select the site dashlets to appear on the dashboard or configure the display order of the selected dashlets. Only the site manager of any site can customize the Site Dashboard. Whatever customization the site manager does for the site dashboard it will be available to all the other members of the site.

To customize the site dashboard:

1. Enter the desired site, *Marketing*.
2. On the dashboard banner, click on **Customize Dashboard** to display the **Customize Site Dashboard** page. The image in the **Current Layout** section represents the currently selected layout. The dashlets section displays the currently selected dashlets as they will appear on the site dashboard.
3. Change the site dashboard appearance (layout):
4. Click on **Change Layout** to display the available dashboard layouts. Click on the graphic of the desired layout or click on **Select** to the right of it. Let's select two columns: wide left, narrow right, as shown in the following screenshot:



Select New Layout

If the new layout has less columns than the current layout, columns are removed from right side. Any dashlets in those columns are removed.

One column

Two columns: narrow left, wide right

Two columns: wide left, narrow right

Four columns

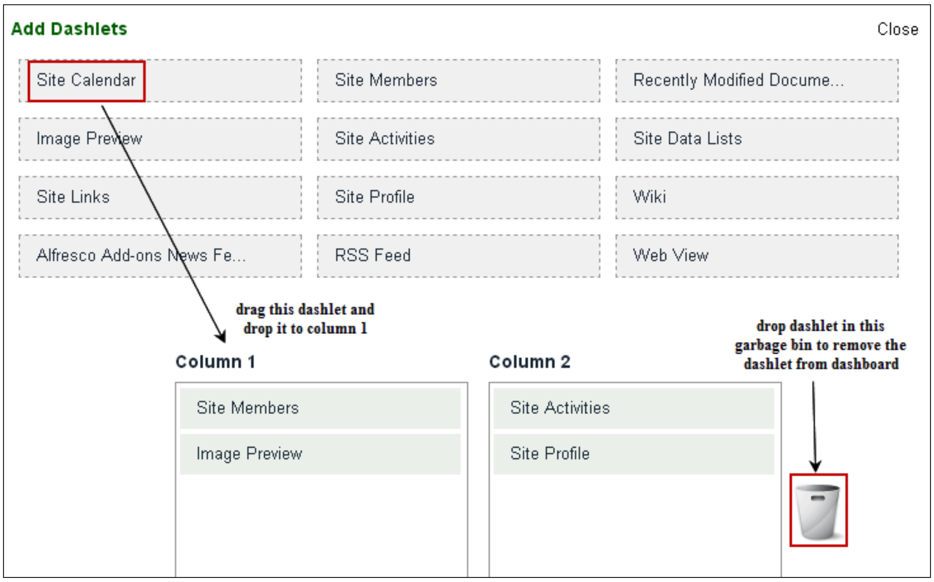
There are four different layouts available, apart from the default three columns layout:

- One Column
- Two Columns: narrow left, wide right

- Two Columns: wide left, narrow right
- Four columns

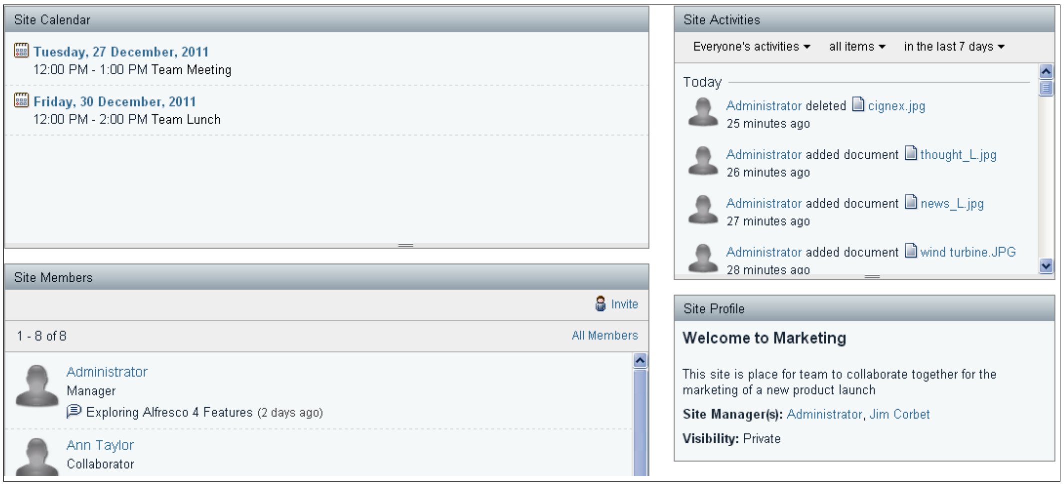
Configure the site dashlets:

1. Click on **Add Dashlets** to display the available dashlets.
2. To add a dashlet, click the desired dashlet in the **Add Dashlets** section and drag it to the desired column.
3. To remove a dashlet, click the unwanted dashlet and drag it to the garbage bin. Furthermore, you can select the dashlet and click the **Delete** key to remove any dashlet.
4. Click and drag the dashlets within and across columns to configure the display order:



5. Click on **OK** to save your changes. You return to the site dashboard, displaying the selected pages in the order configured.

The following screenshot is of the dashboard after customizing it, changing the layout to two columns and adding/removing some of the dashlets.



Site Calendar

Tuesday, 27 December, 2011
12:00 PM - 1:00 PM Team Meeting

Friday, 30 December, 2011
12:00 PM - 2:00 PM Team Lunch

Site Members

Invite

1 - 8 of 8 All Members

Administrator
Manager
Exploring Alfresco 4 Features (2 days ago)

Ann Taylor
Collaborator

Site Activities

Everyone's activities ▾ all items ▾ in the last 7 days ▾

Today

Administrator deleted cignex.jpg
25 minutes ago

Administrator added document thought_L.jpg
26 minutes ago

Administrator added document news_L.jpg
27 minutes ago

Administrator added document wind turbine.JPG
28 minutes ago

Site Profile

Welcome to Marketing

This site is place for team to collaborate together for the marketing of a new product launch

Site Manager(s): Administrator, Jim Corbet

Visibility: Private

> By default, a user can configure a maximum of five dashlets per column for a User Dashboard. Based on the number of columns chosen for a dashlet layout, the maximum number of dashlets can be displayed for a dashboard.

Summary

This chapter was focusing on managing and configuring a collaborative site in Alfresco Share. We also introduced the different pages available for any site; we will be discussing these pages in detail in the next chapter. We also talked about Site Dashboard and different out-of-the-box available dashlets along with customizing the dashboard with a desired set of dashlets and layout.

6
Collaboration Features in Share

Alfresco Share offers a number of such features out-of-the-box. These are features that ensure effective task management. These are completely customizable if need be. The numerous technologies and tools that Alfresco supports ensures that no, or minimal, change be made to the enterprise's existing infrastructure.

Enterprises have a number of tasks that require its people to be able to effectively manage their tasks and schedules. For the purpose of managing intra- and inter-team events, a variety of collaboration tools like calendars, forums, and so on are available. More often than not, there are tools independent of each other, or they may not be compatible with existing systems that are in place.

In this chapter, we shall understand the various collaborative features like wiki, blogs, Data Lists, calendar, discussions, and lists features that Share has on offer.

By the end of this chapter, you will have learned about:

- Wiki pages and blogs in Share
- Creating and Managing Data Lists
- Creating events in Alfresco Share
- Effective collaboration through discussions

The wiki page

The wiki page list displays a summary of all pages created for the current site's wiki. A browsing pane on the left side of the page enables you to populate the wiki list with a subset of the wiki content. Selecting a page in the wiki list displays the entire wiki page in the page view.

When you enter the wiki page, the page view displays the wiki main page. Click **Wiki Page List** to display the wiki list.

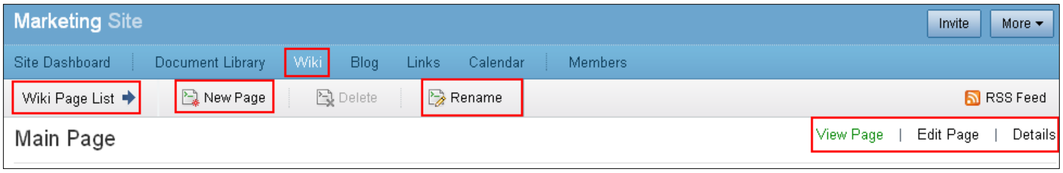
You can create, delete, view details for, and edit a wiki page in both views. To perform some of the operations on a wiki page like renaming a page, you must be on the wiki page.

How to access the wiki page

Accessing the wiki page gives you access to all wiki content. Within the wiki you can create, delete, rename, and edit the wiki pages. You can perform most actions from both the wiki list and the page view.

To access the wiki page, perform the following steps:

1. Enter the **Marketing Site**..
2. On the banner, click **Wiki**. The wiki page appears, displaying the main wiki page for this site in the page view. In this view, the actions you can perform on the current wiki page appear as buttons beneath the banner (**New Page**, **Delete**, **Rename**) and as links at the top right of the content area (**View Page**, **Edit Page**, **Details**):



3. Click **Wiki Page List** to display the wiki list. The wiki list displays a summary of all pages in the wiki for the current site. In this view, the actions you can perform on a wiki page appear as buttons beneath the banner (only **New Page** is available in this view) and as links to the right of each page summary.

Browsing the wiki pages

Assuming that you are on the wiki page of the **Marketing Site**, the browsing pane to the left of the wiki page list enables you to filter the wiki content to make locating specific wiki pages more manageable.

The wiki page list displays all wiki pages in the current site, organized chronologically. The most recent page appears at the top of the list.

The browsing pane on the left side of the page enables you to display a subset of the wiki content by selecting a specific view or a tag. Whether browsing by view or tag, the wiki list displays a summary of all pages matching the selected option. The summary includes the wiki page name, author, creation and modification dates, a sample of the content, and the tags associated with the page.

The browsing pane provides the following views:

- **Recently Modified**: In this view, the user can see the pages modified recently, for instance pages modified in the past seven days.
- **All**: This displays all pages created in the wiki for the current site.
- **Recently Added**: This displays the pages created recently, like in the past seven days.
- **My Pages**: In this view, the user can see the pages created by himself/herself.
- **Tags**: This displays all tags currently associated with one or more wiki pages. By clicking on an individual tag, the user can see all the wiki pages tagged with that particular tag.

To browse the wiki pages perform the following steps:

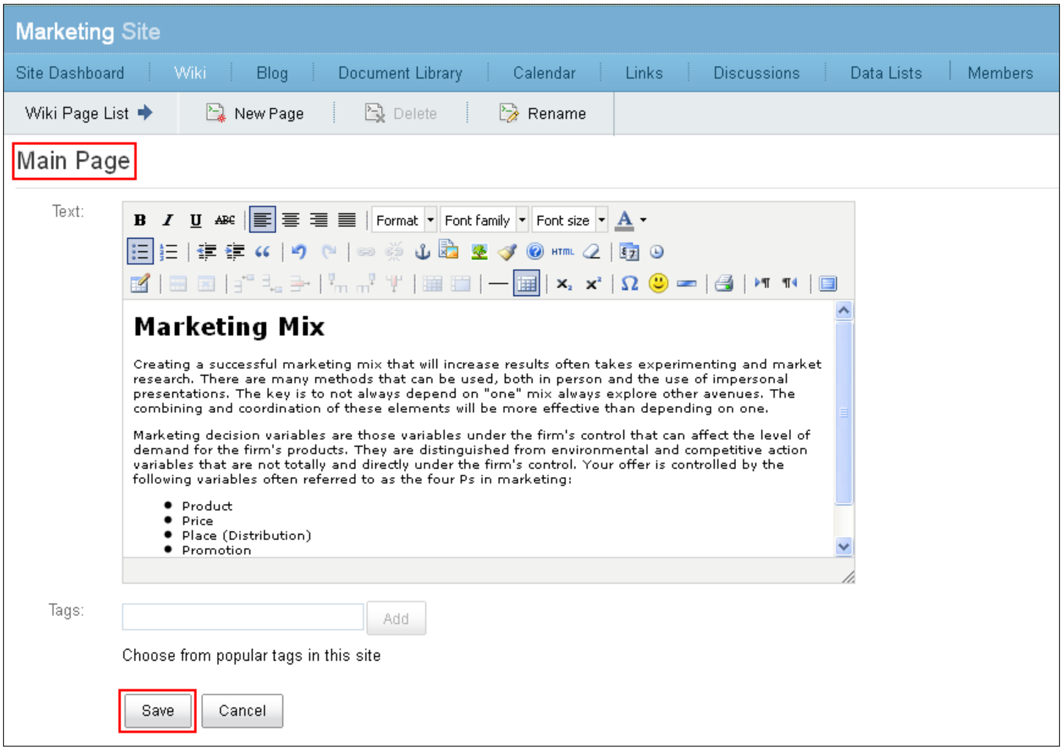
1. Click **Wiki Page List** on the page view to navigate to the wiki list, if it is not already displayed.
2. Select the desired option in the browsing pane.
3. In the **Pages** list, click the view representing the wiki pages you want to display. The wiki list displays all pages in the current site that correspond to the selection.
4. In the **Tags** list, click the tag of interest. The wiki list displays all pages in the current site associated with the selected tag.
5. In the wiki list, click a wiki page title to display that full page. The selected wiki page appears in the page view.

Creating the wiki main page

When any new site is created with a wiki page, it contains a main wiki page, which will be, by default, empty. And this can be considered as an introductory page for the site wiki.

To add content to the wiki main page perform the following steps:

1. Click **Main Page** beneath the banner if the main page is not already displayed. Click **Edit Page**.
2. Type the content for the main page in the **Text** box. Use the formatting features provided to markup the content, insert bulleted and numbered lists, and include hyperlinks:



Marketing Mix

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Marketing decision variables are those variables under the firm's control that can affect the level of demand for the firm's products. They are distinguished from environmental and competitive action variables that are not totally and directly under the firm's control. Your offer is controlled by the following variables often referred to as the four Ps in marketing:

- Product
- Price
- Place (Distribution)
- Promotion

Optionally, add tags for the main page.

3. Type tags in the box provided and click **Add**. To add multiple tags, separate each tag with a space.
4. Click **Choose from popular tags in this site** to display the existing tags used in this site. Click a tag to associate it with the main page.
5. The newly associated tags appear beneath the **Text** box. Click a tag to remove it. Click **Save**. The page view displays the main page.

Creating a new wiki page

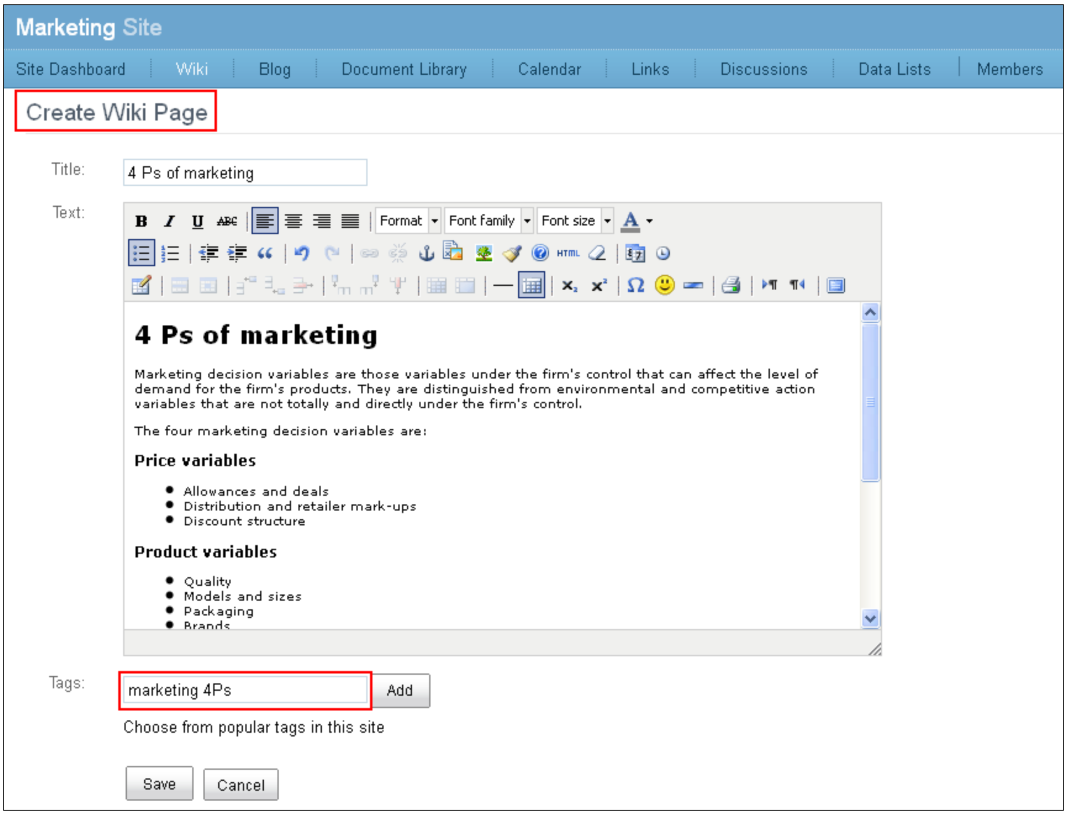
You can create a new wiki page from both the wiki list and the page view.

To create a new wiki page perform the following steps:

1. Click **New Page** to create the wiki page.
2. Enter a **Title** for the page. When your title contains a disallowed character, like some special characters, such as quotation marks, periods, colons, and asterisks (*), the **Save** button is disabled.
3. Type the wiki page content in the **Text** box. Use the formatting features provided to markup the content, insert bulleted and numbered lists, and include hyperlinks. To create a link to another wiki page, type **Page Name**. If the page indicated does not exist, Share creates it; however, this is an empty wiki page and it will not appear in the wiki list until you select **Edit Page** and provide content for it.

   Optionally, add tags for the wiki page.
4. Type a tag or multiple tags, separated by a space, in the box provided and click **Add**. Click **Choose from popular tags in this site** to display the existing tags used in this site. Click a tag to associate it with the new wiki page.
5. The newly associated tags appear beneath the **Text** box. Click a tag to remove it.

6. Click **Save**. The new wiki page appears as users will see it. Click **Wiki Page List** to return to the wiki list:



Title: 4 Ps of marketing

Text:

4 Ps of marketing

Marketing decision variables are those variables under the firm's control that can affect the level of demand for the firm's products. They are distinguished from environmental and competitive action variables that are not totally and directly under the firm's control.

The four marketing decision variables are:

Price variables

- Allowances and deals
- Distribution and retailer mark-ups
- Discount structure

Product variables

- Quality
- Models and sizes
- Packaging
- Brands

Tags: marketing 4Ps

Choose from popular tags in this site

Editing a wiki page

Adding and editing wiki content happens in a simple browser. You can perform this task from both the wiki list and the page view.

To edit a wiki page perform the following steps:

1. Click **Edit** for the page you want to modify. If the wiki page you want to edit is already open in the page view, simply click **Edit Page**. The content of the selected wiki page displays in an editing box.
2. Make the required changes to the content. To create a link to another wiki page, type **Page Name**. If the page indicated does not exist, Share creates it; however, this is an empty wiki page and it will not appear in the wiki list until you select **Edit Page** and provide content for it.

To edit the tags for this wiki page perform the following steps:

1. To add a new tag, type a tag in the box provided and click **Add**. To add multiple tags, separate each tag with a space.
2. To add an existing tag, click **Choose from popular tags in this site** to display the tags used in this site. Click a tag to associate it with the wiki page.
3. To remove an existing tag from the set beneath the **Text** box, click the tag you want to remove. Click **Save**. The page view displays the updated wiki page.

Renaming a wiki page

You can rename a wiki page in the page view. When you rename a wiki page, the updated page retains the page history. Share creates a new page with the original page name; this page links to the updated page.

To rename a wiki page perform the following steps:

1. Click the title of the page that you want to rename. Click **Rename**. The Rename page opens.
2. Type the new name for the wiki page. Click **Save**.

The page view reflects the name change and this wiki page retains the page history of the original page. Share creates a new page with the original page name, which links to the updated page.

Deleting a wiki page

Delete a wiki page you no longer want to appear in the wiki for the current site. You can perform this task from both the wiki list and the page view.

To delete a wiki page perform the following steps:

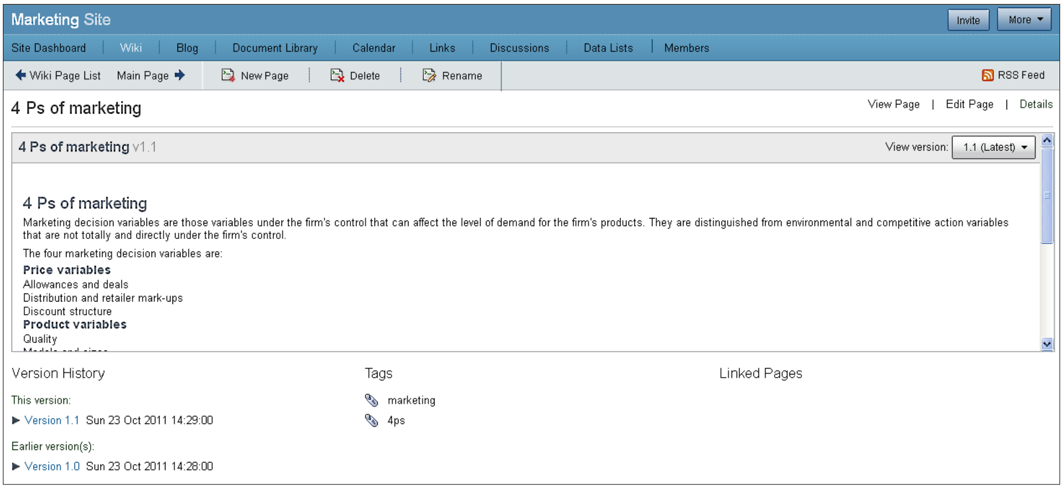
1. In the wiki list, locate the wiki page you want to delete.
2. Click **Delete** for that page. If the wiki page you want to delete is already open in the page view, simply click **Delete** on that page. A message prompts you to confirm the deletion.
3. Click **Yes** to delete the current wiki page.

Viewing the wiki page details

View the details for a wiki page to see the version history, view the tags associated with the page, and list the wiki pages that link to the selected page. You can view the page details from both the wiki list and the page view.

To view the wiki page details perform the following steps:

1. Click **Details** for the page whose details you want to view. If the wiki page you want to view is already open in the page view, simply click **Details** on that page. The page view displays the wiki page content in an expanded form to include the **Version History**, **Tags**, and **Linked Pages**. From this page, you can click **Edit Page** to make any necessary changes.
2. Click **View Page** to hide the details. The wiki page displays in the page view:



4 Ps of marketing

4 Ps of marketing v1.1

4 Ps of marketing

Marketing decision variables are those variables under the firm's control that can affect the level of demand for the firm's products. They are distinguished from environmental and competitive action variables that are not totally and directly under the firm's control.

The four marketing decision variables are:

Price variables
Allowances and deals
Distribution and retailer mark-ups
Discount structure
Product variables
Quality

Version History

This version:
▶ Version 1.1 Sun 23 Oct 2011 14:29:00

Earlier version(s):
▶ Version 1.0 Sun 23 Oct 2011 14:28:00

Tags

marketing
4ps

Linked Pages

For more details on the Alfresco Share wiki feature, refer to the link: `http://docs.alfresco.com/4.0/index.jsp?topic=%2Fcom.alfresco.enterprise.doc%2Fconcepts%2Fwiki-intro.html`.

The Blog page

Site members can create, edit, and add comments to blog postings. The Blog page enables you to add commentary, descriptions of events, and other material related to your site.

The postings can be saved as drafts and then, when ready can be published. The blogs can be published as an internal blog and also to an external blogging site, including WordPress and TypePad. We will discuss more about how you can configure your blog to get published on external blog sites from Alfresco Share in a later section of this chapter.

How to access a Blog page

Accessing the Blog page enables you to view all published blog posts for the **Marketing Site**. Within the blog, you can create new posts, as well as edit, publish, and delete posts you created. You can also add comments to existing blog posts.

To access the Blog page perform the following steps:

1. Enter the **Marketing Site**. On the banner, click **Blog**. The Blog page appears. The default view, **Latest**, is selected and the post list displays a summary of the posts created or edited in the past seven days. The summary includes the post title, date and time the post was published (if applicable), the author who created the post, a sample of the content, the number of replies to the post, and the tags associated with the post.
2. The **Previous** and **Next** navigation buttons help move through multiple pages of posts.
3. Click **Simple List** to display only the title of the posts. Click **Detailed List** to display the summary view.

Browsing the blog

The browsing feature in the Blog page enables you to filter the blog posts. This allows you to more easily navigate the blog content.

A subset of the blog posts by selecting a specific view, a period of time (month), or a tag is displayed on the left hand browsing pane.

The **Posts** list in the browsing pane provides the following views/filters:

- **All**: In this view, the user can see all posts in the blogs.
- **Latest**: This view displays only the posts created, or modified, recently like in the past seven days.
- **My Drafts**: Here, the user can see the posts created by himself/herself that are saved as drafts (not yet published).
- **My Published**: This view displays the posts created and published, either externally or internally, by the current user.
- **Published Externally**: In this view, all posts that have been published to an external blog are displayed.
- **Archives**: This view organizes posts by month and year. This will have further sub lists of month and year.
- **Tags**: Here, the list displays all tags currently associated with one or more blog posts. By clicking on an individual tag, the user can see all the posts tagged with that particular tag.

To browse the blog posts perform the following steps:

1. Select the desired option in the browsing pane. In the **Posts** list, click the view representing the posts you want to view. The post list displays all blog posts in the current site that correspond to the selection.
2. In the **Archives** list, click the month of interest. The post list displays all blog posts in the current site published during that month.
3. In the **Tags** list, click the tag of interest. The post list displays all posts in the current site associated with the selected tag.
4. Click **Simple List** to display only the title of the posts. Click **Detailed List** to display the summary view.

Creating a blog post

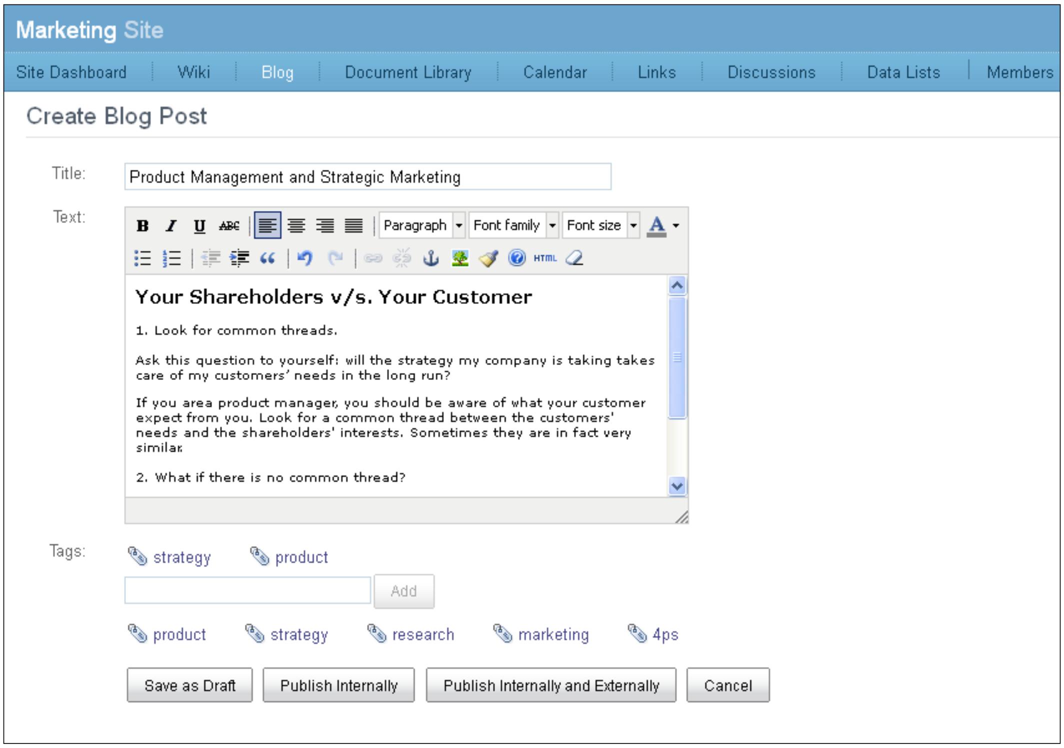
Create a new blog post to add information or a commentary related to the current site.

When you create a new post, you can save it as a draft without publishing it, or you can immediately publish it to the blog on the **Marketing Site**. You also have the option of publishing the post to both the internal blog and a configured external blog.

To create a new post perform the following steps:

1. Click **New Post**. The **Create Blog Post** page appears. Type a **Title** for the post.
2. Type the post content in the **Text** box. Use the formatting features provided to markup the content, insert bulleted and numbered lists, and include hyperlinks.

   Optionally, add tags for the blog post:
3. Type a tag in the box provided and click **Add**. To add multiple tags, separate each tag with a space.
4. Click **Choose from popular tags in this site** to display the existing tags used in this site. Click a tag to associate it with the new post:



Create Blog Post

Title: Product Management and Strategic Marketing

Text:

Your Shareholders v/s. Your Customer

1. Look for common threads.

Ask this question to yourself: will the strategy my company is taking takes care of my customers' needs in the long run?

If you area product manager, you should be aware of what your customer expect from you. Look for a common thread between the customers' needs and the shareholders' interests. Sometimes they are in fact very similar.

2. What if there is no common thread?

Tags: strategy product

The newly associated tags appear beneath the **Text** box. Click a tag to remove it.

To save or publish the new blog post perform the following steps:

1. Click **Save as Draft** to save the post without publishing it. The post will not appear in the post list.
2. Click **Publish Internally** to publish the post to the internal blog, making it available for other users of this site.
3. Click **Publish Internally and Externally** to publish the post to both the internal and external blogs.
4. The new post appears as users will see it. The text (Draft) appears after the title if the post remains unpublished. Click **Go to Post List** to return to the main view.

Editing a blog post

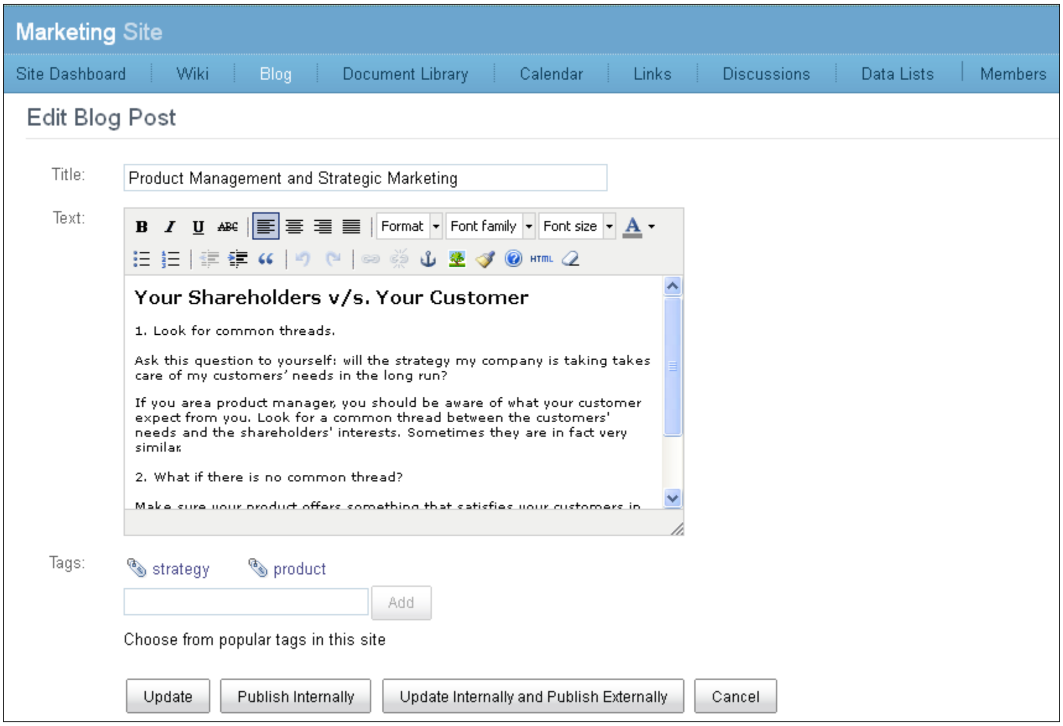
Only the **Marketing** Site Manager, and the user who created the blog post, can edit it to modify or add to its content.

To edit an existing post perform the following steps:

1. In the post list, locate the blog post you want to edit. Click **Edit**. The Edit Blog Post page appears displaying the selected post.
2. Make the desired changes to the post title and content.

To edit the tags for this post perform the following steps:

1. To add a new tag or multiple tags, each separated with a space, type a tag in the box provided and click **Add**.
2. To add an existing tag, click **Choose from popular tags in this site** to display the tags used in this site. Click a tag to associate it with the new blog post.
3. To remove an existing tag from the set beneath the **Text** box, click the tag you want to remove:



Edit Blog Post

Title: Product Management and Strategic Marketing

Text:

Your Shareholders v/s. Your Customer

1. Look for common threads.

Ask this question to yourself: will the strategy my company is taking takes care of my customers' needs in the long run?

If you area product manager, you should be aware of what your customer expect from you. Look for a common thread between the customers' needs and the shareholders' interests. Sometimes they are in fact very similar.

2. What if there is no common thread?

Make sure your product offers something that satisfies your customers in

Tags: strategy product

To save or publish the updated blog post perform the following steps:

1. Click **Update** to save the changes. Click **Publish Internally** to save the changes and publish the post to the internal blog, making it available for other site members. This option appears only for draft posts.
2. Click **Update Internally and Publish Externally** to publish the post to both the internal and external blogs.
3. The updated post appears as users will see it. The text (updated) appears after the title. Click **Go to Post List** to return to the main view.

Viewing a blog post

Browsing the blog displays either a summary view or a simple list of the existing posts in the main window of the Blog page. Viewing a post allows you to see the full contents of the post.

You can perform actions on a post from the main page, but viewing a post enables you to confirm that you have selected the correct post before performing irreversible actions, such as deleting and publishing the post.

While the same actions are available in both views (**Edit**, **Publish Externally**, and **Delete**), you must view a post to add a comment to it.

To view a blog post perform the following steps:

1. Browse the blog posts to locate the post you want to view.
2. Click the title of the post or click **Read** beneath the post. If the main page displays posts in a simple list, you must click the title of the post. The post view displays the selected blog post, along with any related comments.
3. Click **Go to Post List** to return to the main view.

Deleting a blog post

Delete a blog post to permanently remove it from the blog of the **Marketing Site.** Deleting a post also deletes all of its comments. Only a Site Manager and the user who created the blog post can delete it.

To delete a post perform the following steps:

1. In the post list, locate the blog post you want to delete.
2. Click **Delete**. A message prompts you to confirm the deletion of the selected post. Click **Delete**. A message indicates the selected blog post has been deleted.

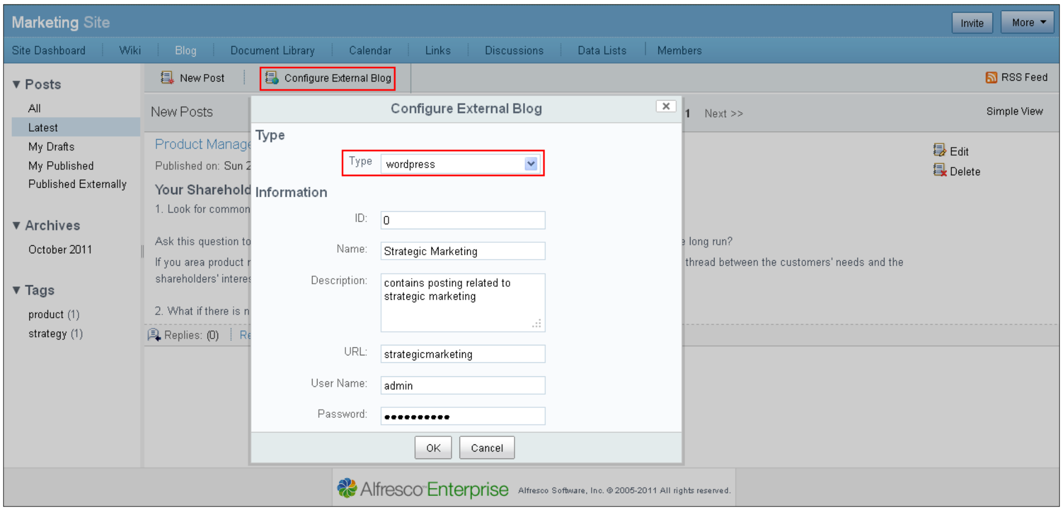
Configuring the external blog

In addition to creating blog posts and publishing them internally within the site, you can publish the blog posts to an existing WordPress or TypePad blog. To publish the site blogs externally, you must configure the external blog details.

To configure an external blog perform the following steps:

1. Click **Configure External Blog**. The Configure External Blog page appears.
2. In the **Type** list, select the appropriate option:
    - Select **WordPress** to configure the external blog to run on the WordPress blog publishing system.
    - Select **TypePad** to configure the external blog to run on a TypePad blogging service.
3. Complete the remaining fields with the details of the external blog.

4. The **User Name** and **Password** provided must be the user details of the author, or administrator, responsible for posting the external blog. Click **OK**:



Type: wordpress

ID: 0

Name: Strategic Marketing

Description: contains posting related to strategic marketing

URL: strategicmarketing

User Name: admin

Password: ●●●●●●●●●●

Publishing a post to an external blog

In addition to publishing a blog post to the internal blog of the **Marketing Site**, you can publish a post to a configured external blog. To publish a draft post externally, you must also publish it internally.

To publish a post externally perform the following steps:

1. In the post list, locate the blog post you want to publish externally. Click **Publish Externally**. Optionally, open the post to perform this action.

A message indicates the selected blog post is published.

Working with comments

Adding comments to a blog post can help make a site blog interactive. People can comment on the post and provide their views or comments for any blogs written by other users. While all users with access to the **Marketing Site** can view the blog conversations, only site members can add comments.

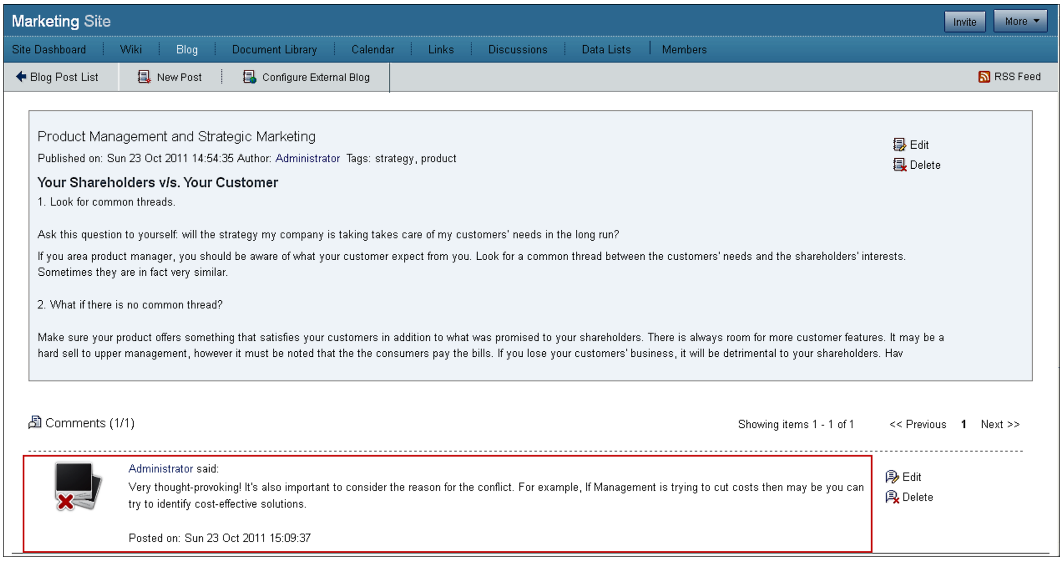
The number of replies added to a post is displayed in the post list beneath the post summary. You must view a post to add, view, and manage the related comments.

Adding a comment to a post

In the Blog page, you can add a comment to reply to any published blog post.

To add a comment perform the following steps:

1. In the post list, locate the blog post to which you want to add a comment.
2. Click the post title to view the post. The post view displays the selected blog post, along with any related comments.
3. Type the post comment in the **Add comment** box. Use the formatting features provided to markup the content, insert bulleted and numbered lists, and include hyperlinks.
4. Click **Create comment**. The comment displays beneath the post. Click **Go to post list** to return to the main view:



Product Management and Strategic Marketing

Published on: Sun 23 Oct 2011 14:54:35 Author: Administrator Tags: strategy, product

Your Shareholders v/s. Your Customer

1. Look for common threads.

Ask this question to yourself: will the strategy my company is taking takes care of my customers' needs in the long run?

If you area product manager, you should be aware of what your customer expect from you. Look for a common thread between the customers' needs and the shareholders' interests. Sometimes they are in fact very similar.

2. What if there is no common thread?

Make sure your product offers something that satisfies your customers in addition to what was promised to your shareholders. There is always room for more customer features. It may be a hard sell to upper management, however it must be noted that the the consumers pay the bills. If you lose your customers' business, it will be detrimental to your shareholders. Hav

Comments (1/1)   Showing items 1 - 1 of 1   << Previous 1 Next >>

Administrator said:

Very thought-provoking! It's also important to consider the reason for the conflict. For example, If Management is trying to cut costs then may be you can try to identify cost-effective solutions.

Posted on: Sun 23 Oct 2011 15:09:37

Editing a comment

You can edit a blog comment to modify or add to its content. Only a Site Manager, and the user who created the comment, can edit it.

To edit a comment perform the following steps:

1. In the post list, locate the blog post containing the comment you want to edit. Click the post title to view the post. The post view displays the selected blog post and the related comments.

2. Click **Edit** to the right of the comment you want to change. The **Edit Comment** box appears, displaying the selected comment.
3. Make the desired changes to the comment. Click **Update**. The updated comment displays beneath the post.
4. Click **Go to Post List** to return to the main view.

Deleting a comment

Delete a comment to permanently remove it from a blog post. Only a Site Manager, and the user who created the comment, can delete it.

To delete a comment perform the following steps:

1. In the post list, locate the blog post containing the comment you want to delete. Click the post title to view the post. The post view displays the selected blog post and the related comments.
2. Click **Delete**. A message prompts you to confirm the deletion of the selected comment.
3. Click **Delete**. A message indicates the selected comment has been deleted. Click **Go to Post List** to return to the main view.

Data Lists

The Data Lists component allows site members to create and manage lists of data relevant to the site. Users can work with their own lists and can also contribute to lists created by other site members. Data Lists let you keep track of team information that lends itself to being managed by classic web form interactions and displayed in sortable columns. You can probably think of a lot of examples of things your team needs to track that don't make sense in a blog or a document library or maybe need a little more structure than the wiki. For such scenarios, you can make use of Data Lists. There are some out-of-the-box lists are available, you can also create custom Data Lists, this will be discussed in *Chapter 8*, *Configuring Share*.

> For more details on the Alfresco Share blogs feature, refer to the link: `http://docs.alfresco.com/4.0/index.jsp?topic=%2Fcom.alfresco.enterprise.doc%2Fconcepts%2Fblog-intro.html`.

How to access Data Lists

You can access the Data Lists component by clicking on the **Data Lists** site page for any site, which displays the lists, created for the current site.

The **Lists** section of the browsing pane displays the data lists for the current site. Once you select a list to view you can choose any of the filters to display specific list items within that list. Following are the different filters available:

- **All**: In this view, the user can see all data lists created for this site
- **Recently Added**: This displays the lists created recently, like in the past seven days
- **Recently Modified**: In this view, user can see the lists modified recently, for instance lists modified in the past seven days
- **Created by Me**: This view displays only the lists created by the current user

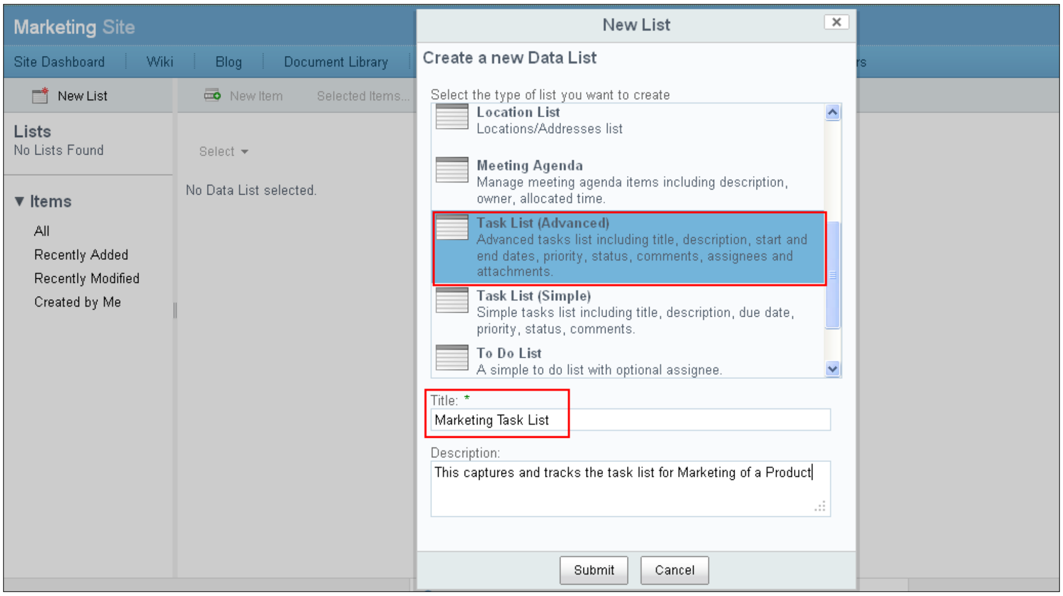
Creating a new list

You can create a new list for the current site, which will be specific to the site.

To create a new list perform the following steps:

1. Click on the **New List** button in the header, which will open the **New List** dialog box.
2. On the **Create a New Data List** screen, a different predefined list will be available. Select the type, of which you want to create a list.
3. Provide a **Title** and **Description** for the list. This title should be unique, hence, it will not allow a duplicate title.
4. Click the **Save** button.

Here, let's create a list of To Do Task List, in this task list we can maintain and track the list of tasks the marketing team has to do for a new product launch. It allows you to create a task with basic details, along with advance details like Start Date, End Date, Priority, Assignee, and so on. For this select **Task List (Advanced)** as the type of list:



New List

Create a new Data List

Select the type of list you want to create

Location List
Locations/Addresses list

Meeting Agenda
Manage meeting agenda items including description, owner, allocated time.

Task List (Advanced)
Advanced tasks list including title, description, start and end dates, priority, status, comments, assignees and attachments.

Task List (Simple)
Simple tasks list including title, description, due date, priority, status, comments.

To Do List
A simple to do list with optional assignee.

Title: *
Marketing Task List

Description:
This captures and tracks the task list for Marketing of a Product

The name of this new list, which you created, will appear in the **Lists** section of the browsing pane. Click the list name to display the list in the main view. A new list contains no list items.

Editing list details

You can modify the task details like Title or Description by Editing List. The user who has created the list, and the users having Site Manager or Site Collaborator roles can edit task list.

To edit a list perform the following steps:

1. Position your cursor over the list you want to edit in the browsing pane.
2. It will display the actions, click on the **Edit Details** action.
3. The **Edit List Details** dialog box appears which will display the current list details.
4. Click on **Save** once you are done with the desired changes to the title or description.

Deleting a list

If you want to remove the list permanently from the site, you can delete a list. The user who has created the list, and the users having a Site Manager role, can edit task list.

To Delete a list perform the following steps:

1. Position your cursor over the list you want to delete in the browsing pane
2. It will display the actions, click on the **Delete** action.
3. A message prompts you to confirm the deletion of the selected list.
4. Click **Delete**.

List items

Once you are done with list creation, you would like to add items (records) to that list. You can add items to both your own lists and also the lists created by other site members. You can also edit or delete list items.

With this items for the Tasks Lists, you can track different tasks with the assignees and due date. The users/assignees also can update this task with the status or any comments they have.

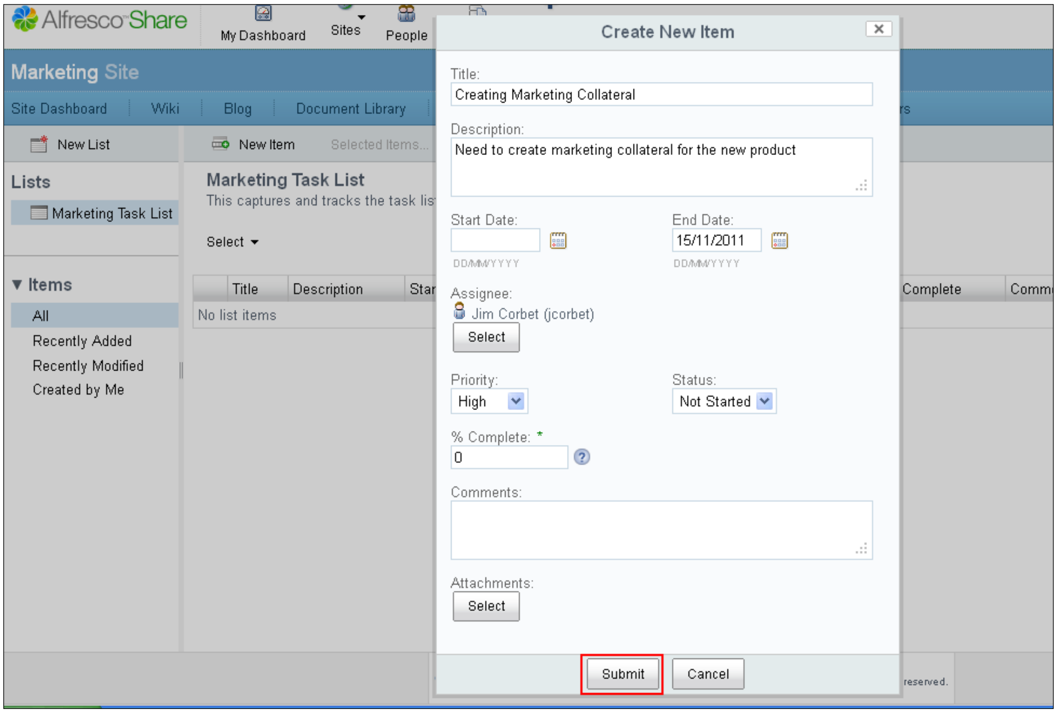
Creating a list item

Create list items to populate an existing data list.

To create a new item perform the following steps:

1. Select the list of which you want to create items.
2. Click the **New Item** button.
3. The **Create New Item** dialog box appears. Based on the type of list selected currently, the fields will be displayed on this page
4. Here, for the Tasks List, it will have fields like **Title**, **Description**, **Start Date**, **End Date**, **Assignee**, **Priority**, **Status**, **% Complete**, **Comments**, and **Attachments**.
5. Fill up the desired information.
6. Fields marked with an asterisk (*) are mandatory fields.

7. Click **Submit**:



Create New Item

Title: Creating Marketing Collateral

Description: Need to create marketing collateral for the new product

Start Date: DD/MM/YYYY

End Date: 15/11/2011 DD/MM/YYYY

Assignee: Jim Corbet (jcorbet)

Select

Priority: High

Status: Not Started

% Complete: * 0

Comments:

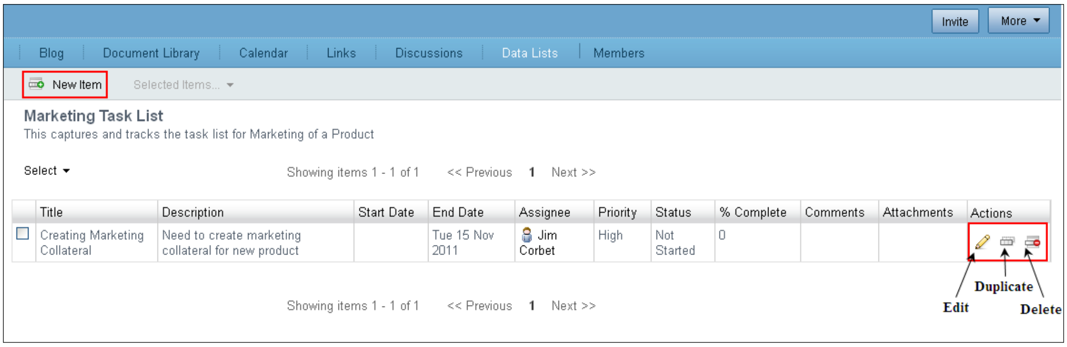
Attachments:

Select

Submit Cancel

Actions for the list item

You can edit, delete, or duplicate (copy) the list item:



Marketing Task List

This captures and tracks the task list for Marketing of a Product

Showing items 1 - 1 of 1 << Previous 1 Next >>

	Title	Description	Start Date	End Date	Assignee	Priority	Status	% Complete	Comments	Attachments	Actions
□	Creating Marketing Collateral	Need to create marketing collateral for new product		Tue 15 Nov 2011	Jim Corbet	High	Not Started	0			

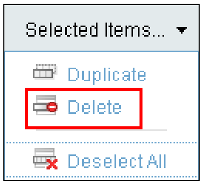
Showing items 1 - 1 of 1 << Previous 1 Next >>

To edit the list item perform the following steps:

1. To edit a list item, select the list and position your cursor on the list item you want to modify.
2. It will display different actions in the **Actions** column, click on the **Edit** icon.
3. The **Edit Data Item** dialog will appear, you can make your desired changes.
4. Once done, click on **Save**.
5. You can see the updated item in the list.

To delete the list item perform the following steps:

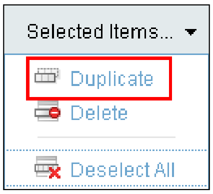
1. To delete a list item, select the list and position your cursor on the list item you want to delete.
2. It will display different actions in the Actions column, click on the **Delete** icon.
3. A message prompts you to confirm the deletion of the list item.
4. Click on **Delete**.
5. If you want to delete multiple items at once, you can select the desired items by clicking on the checkboxes against each item and then click on **Delete** action in the **Selected Items** menu:



To duplicate the list item perform the following steps:

1. You can also copy the list item with all the details.
2. To duplicate (copy) a list item, select the List and position your cursor on the list item you want to copy.
3. It will display different actions in the Actions column, click on **Duplicate** icon.
4. The new item will be created identical to the selected list item.
5. You can edit the newly copied item if required.

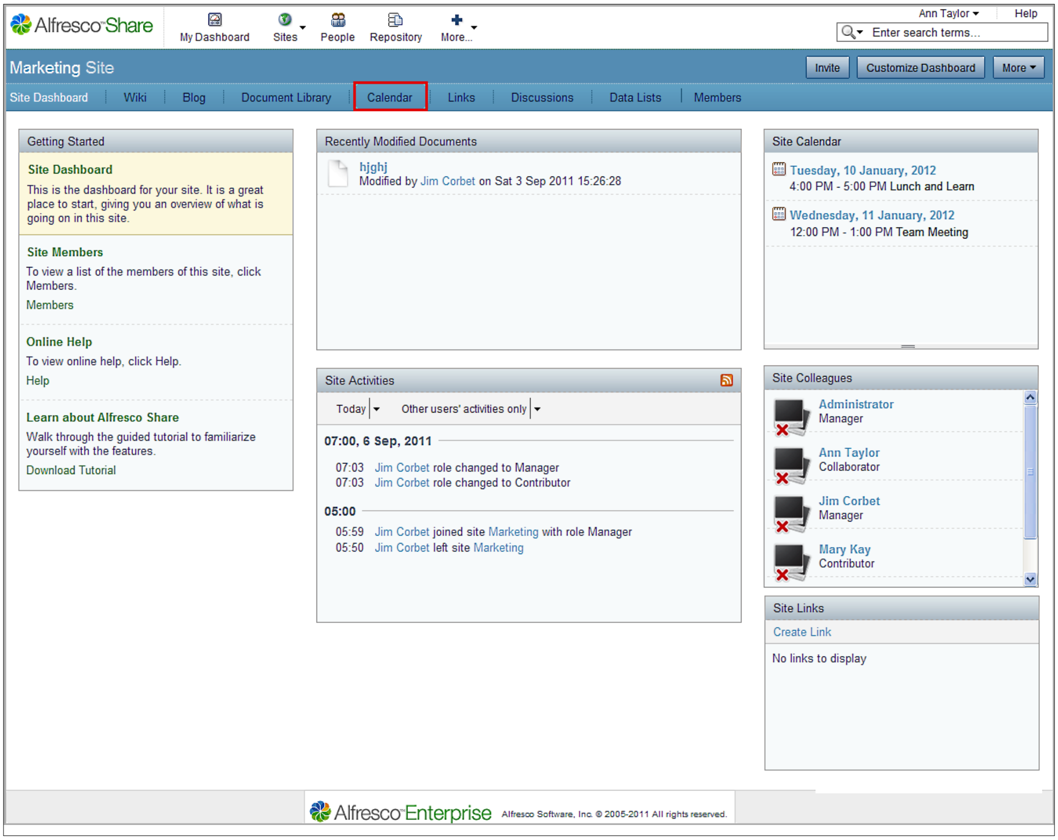
6. If you want to duplicate multiple items at once, you can select the desired items by clicking on the checkboxes against each item and then click on **Duplicate** action in the **Selected Items** menu:



Site Calendar

This calendar is specific to the site. It has all the calendar functions. Events can also be created in this calendar. It also has the iCal functions.

1. On the site navigation bar below the site name is the tab for calendar:



Getting Started

Site Dashboard

This is the dashboard for your site. It is a great place to start, giving you an overview of what is going on in this site.

Site Members

To view a list of the members of this site, click Members.

Members

Online Help

To view online help, click Help.

Help

Learn about Alfresco Share

Walk through the guided tutorial to familiarize yourself with the features.

Download Tutorial

Recently Modified Documents

hjghj
Modified by Jim Corbet on Sat 3 Sep 2011 15:26:28

Site Activities

Today | Other users' activities only

07:00, 6 Sep, 2011

07:03 Jim Corbet role changed to Manager
07:03 Jim Corbet role changed to Contributor

05:00

05:59 Jim Corbet joined site Marketing with role Manager
05:50 Jim Corbet left site Marketing

Site Calendar

Tuesday, 10 January, 2012
4:00 PM - 5:00 PM Lunch and Learn

Wednesday, 11 January, 2012
12:00 PM - 1:00 PM Team Meeting

Site Colleagues

Administrator
Manager

Ann Taylor
Collaborator

Jim Corbet
Manager

Mary Kay
Contributor

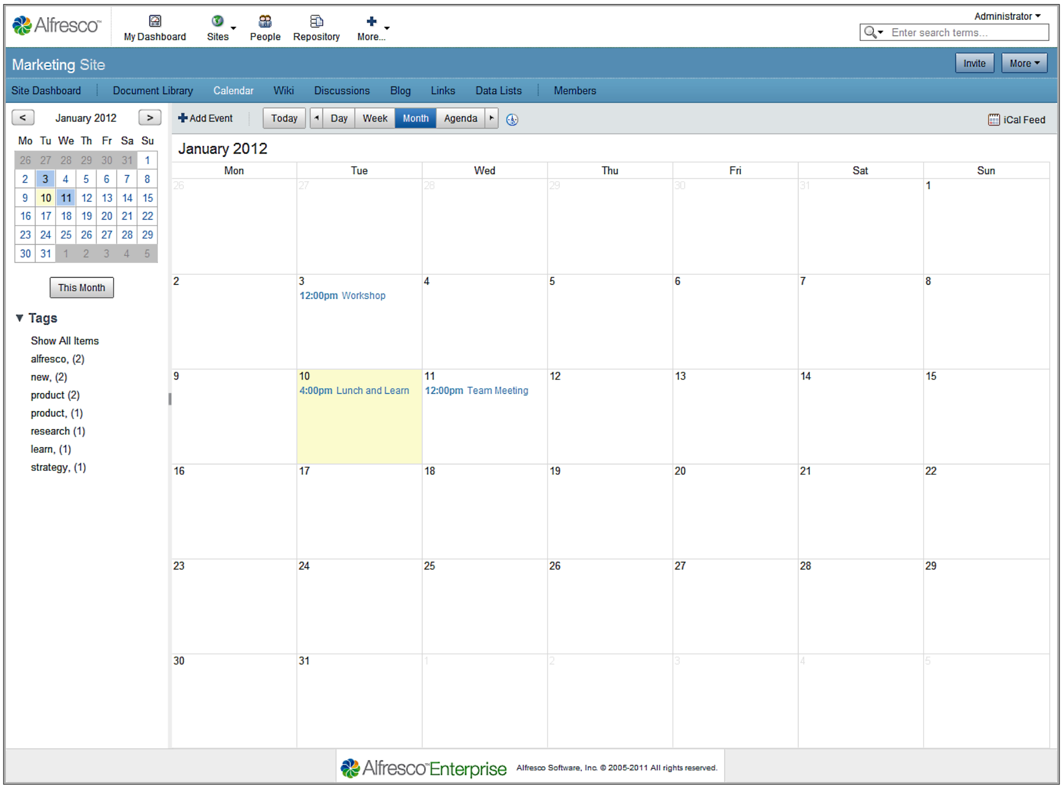
Site Links

Create Link

No links to display

Alfresco Enterprise Alfresco Software, Inc. © 2005-2011 All rights reserved.

2. Clicking on the **Calendar** tab, opens up the calendar page:



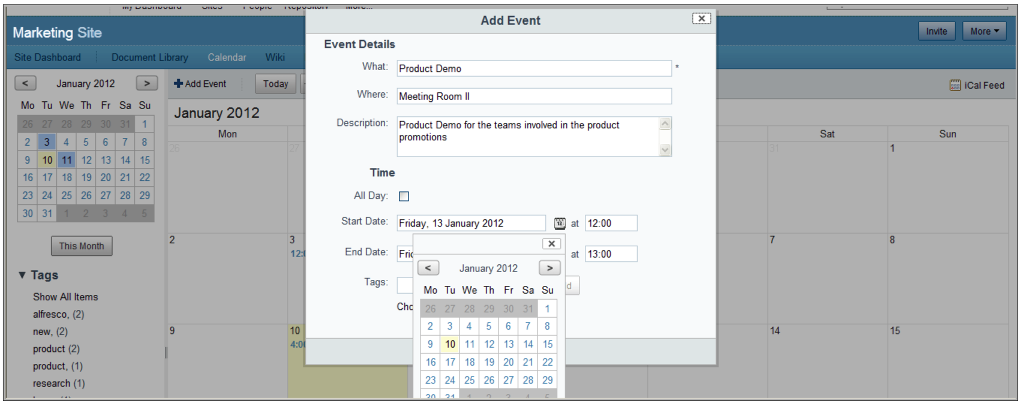
3. The default view is the **Month** view. You also have the option of viewing your calendar in the **Day** and the **Week** view.

4. The **Previous** and **Next** buttons take the user through the next day/week/month depending on the calendar view selected.

5. On the left hand side is a mini view of the calendar with the current date highlighted. The tags used through the calendar are listed below the mini view.

6. On the top bar is a button to create an event. Clicking on the **Add Event** button will take you through the steps to create an event.

Adding an event



Add Event

Event Details

What: Product Demo

Where: Meeting Room II

Description: Product Demo for the teams involved in the product promotions

Time

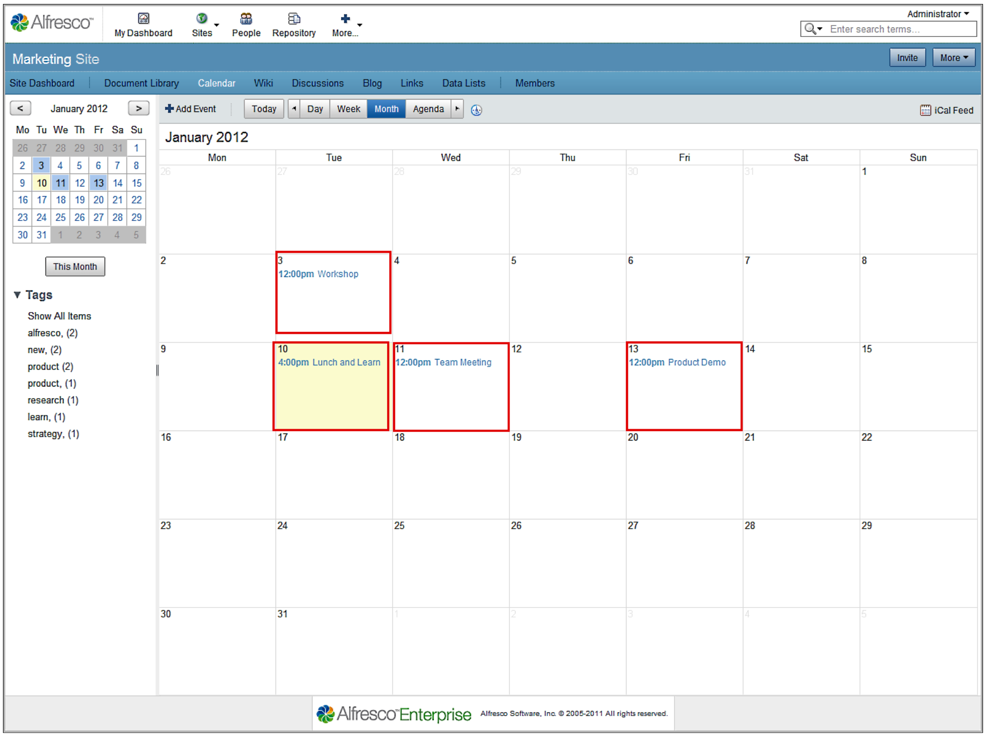
All Day: □

Start Date: Friday, 13 January 2012 at 12:00

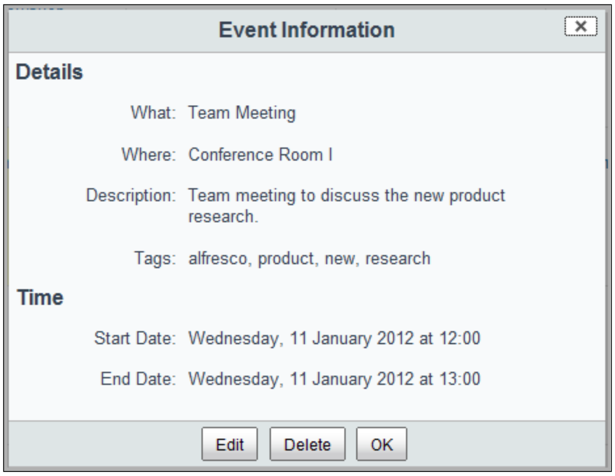
End Date: Fri at 13:00

Tags:

1. Fill up the details of the event like what the event is, where is it going to be, start and end date, and time. You can also add tags. There can also be selected form tags that may already be in the system.
2. Click **OK** to create the event. This event now reflects in the site calendar. Based on their permissions, the members of the site will be able to view the event:



3. Clicking on the event name in the calendar will open up a window that will display the event related information:



Event Information

Details

What: Team Meeting

Where: Conference Room I

Description: Team meeting to discuss the new product research.

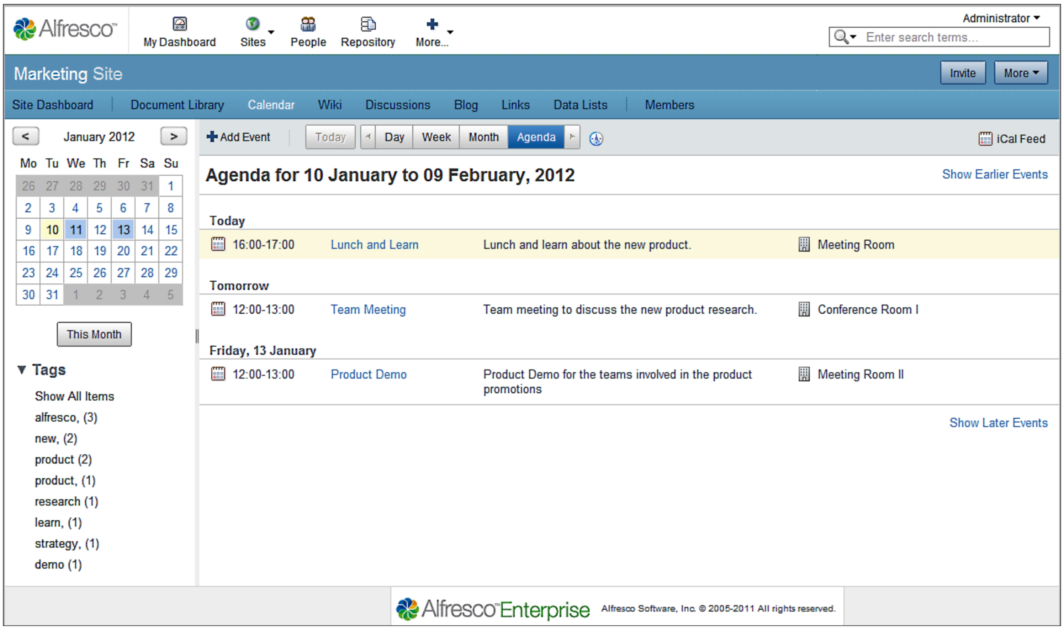
Tags: alfresco, product, new, research

Time

Start Date: Wednesday, 11 January 2012 at 12:00

End Date: Wednesday, 11 January 2012 at 13:00

4. If the user clicks on the **Agenda** button on the top, they are taken to the agenda starting with the current day:



Agenda for 10 January to 09 February, 2012

Show Earlier Events

Today

16:00-17:00 Lunch and Learn — Lunch and learn about the new product. — Meeting Room

Tomorrow

12:00-13:00 Team Meeting — Team meeting to discuss the new product research. — Conference Room I

Friday, 13 January

12:00-13:00 Product Demo — Product Demo for the teams involved in the product promotions — Meeting Room II

Show Later Events

Tags

Show All Items
alfresco, (3)
new, (2)
product (2)
product, (1)
research (1)
learn, (1)
strategy, (1)
demo (1)

There are links, **Show Earlier Events** and **Show Later Events** which can be used to view events earlier and after the ones that are displayed.

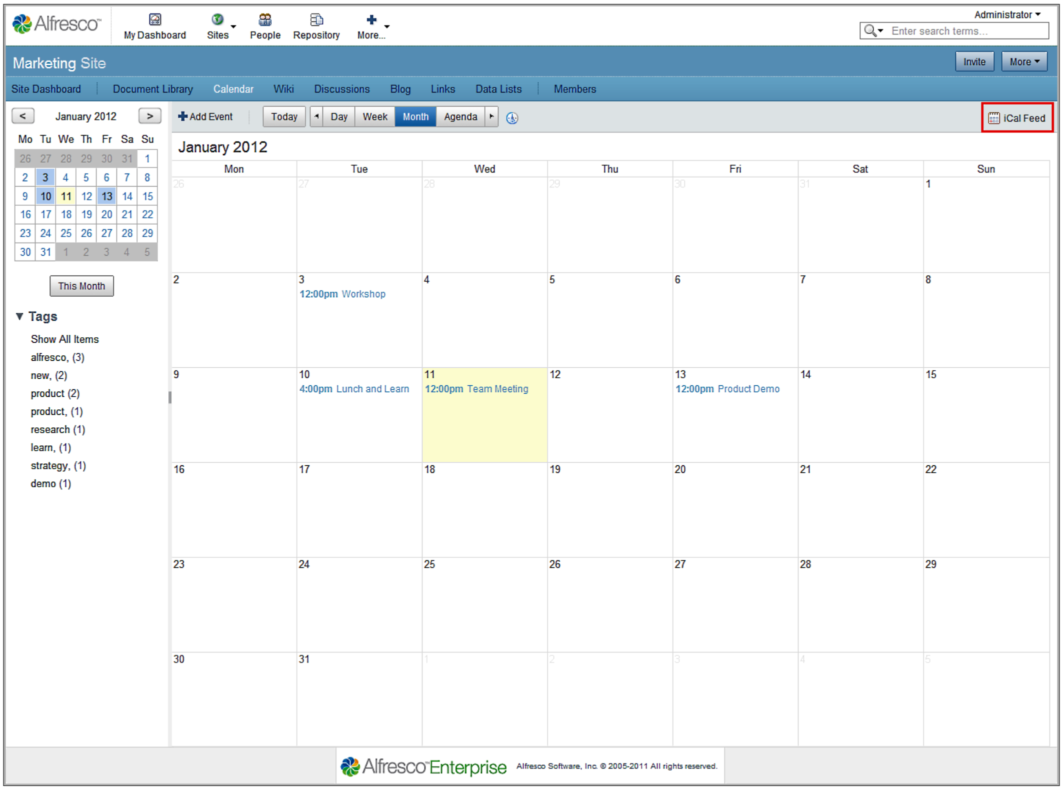
The current day event is highlighted in the list.

A new event can also be added by clicking on a specific date. Hovering the mouse over a date will show up a ✚ icon. Clicking on this will pop up the **Add Event** window where you can add the event details.

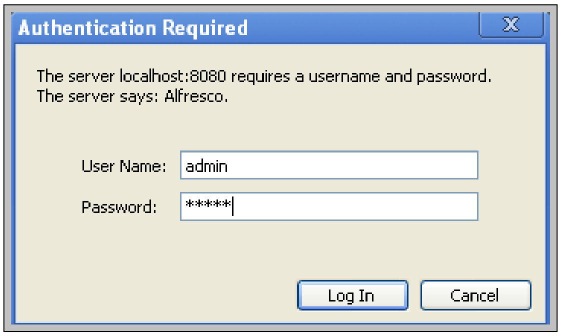
iCal feed

Alfresco Share has an iCal feed function. This is an out-of-the-box feature of Alfresco. This feature helps users to import their Share calendar events to their Microsoft Outlook calendar and vice versa. For the Outlook calendar to be shared on your Alfresco system, you need to have the Outlook and Alfresco systems integrated. You can right-click on the calendar of events in Outlook and select Share. You can select your Alfresco system. This will share the Outlook calendar on your Alfresco site as well. Other mail servers can also be configured to work with this. Taking the MS Exchange Server as the example, iCal is used as follows:

1. To use the feature click on the **iCal Feed** button:



2. This will take the user to an authentication page where they need to log in using their Share credentials:



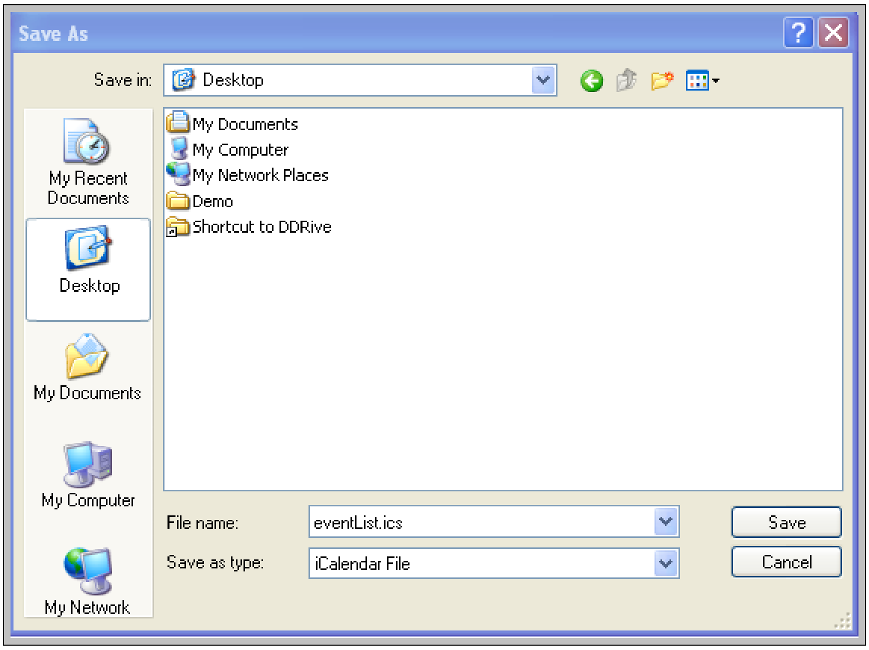
Authentication Required

The server localhost:8080 requires a username and password.
The server says: Alfresco.

User Name: admin

Password: ******

3. Click on **Log In**. This will open up a window which will ask the user for the location to save the `eventList.ics` file that is created:



Save As

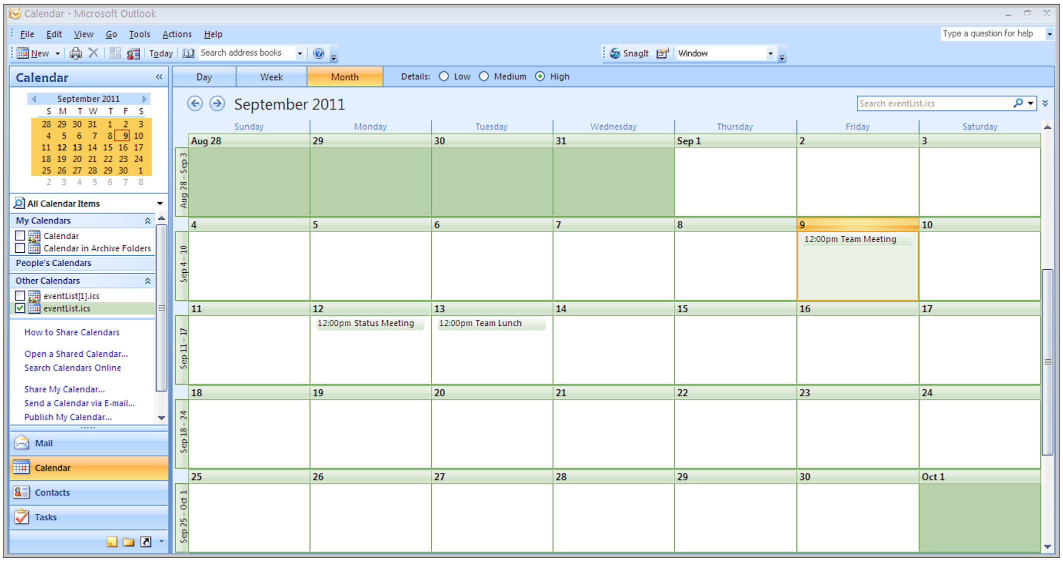
Save in: Desktop

My Documents
My Computer
My Network Places
Demo
Shortcut to DDRive

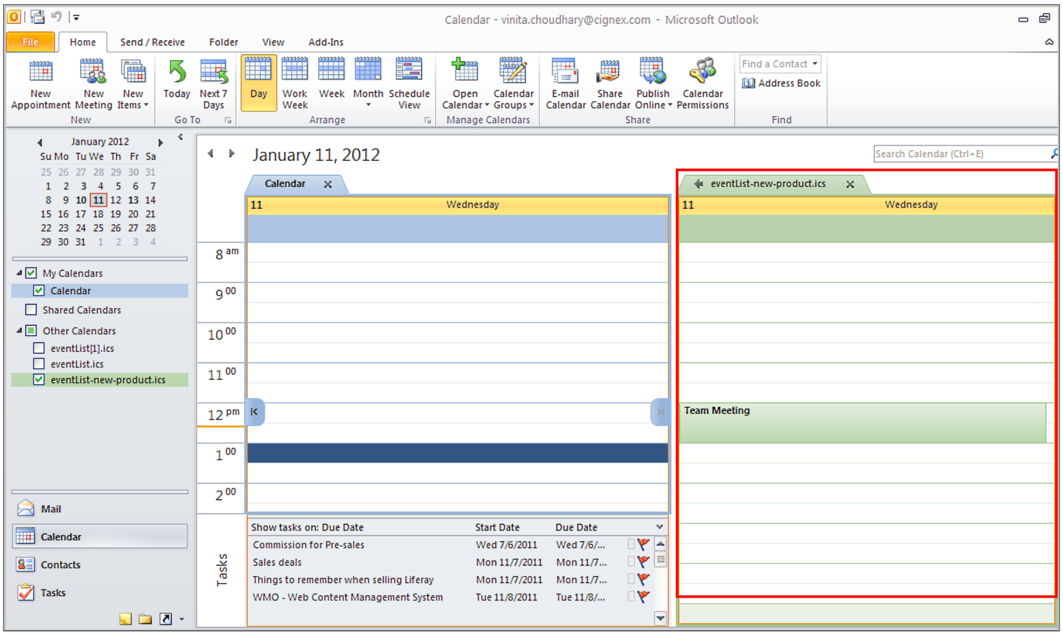
File name: eventList.ics

Save as type: iCalendar File

4. Click **Save**. Once the file has been saved, double-click the file. It will open up the calendar on your MS Outlook, as shown in the following screenshot:



The calendar in Outlook appears as a separate tab, as shown in the following screenshot:



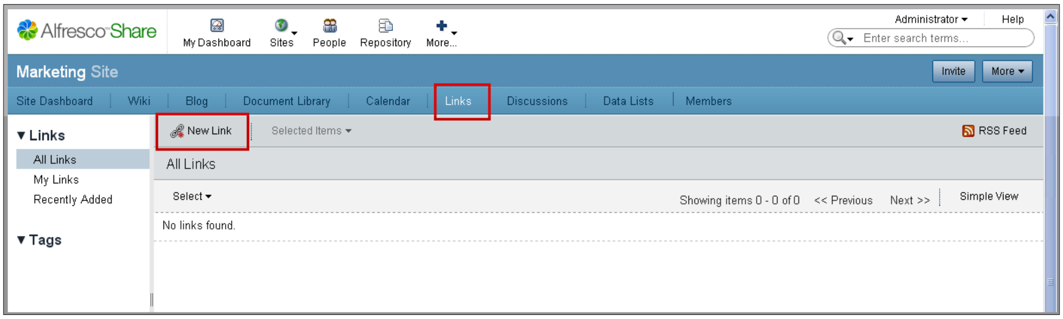
Show tasks on: Due Date	Start Date	Due Date
Commission for Pre-sales	Wed 7/6/2011	Wed 7/6/...
Sales deals	Mon 11/7/2011	Mon 11/7...
Things to remember when selling Liferay	Mon 11/7/2011	Mon 11/7...
WMO - Web Content Management System	Tue 11/8/2011	Tue 11/8/...

5. The events for the day/month/week will be listed in the calendar, based on the view that is selected.

Links

This is a nice feature from Share's kitty. It allows the users to list the hyperlinks or URLs of information that they deem useful for collaboration on the site. To create links you need to do the following

1. Click on **Links**:

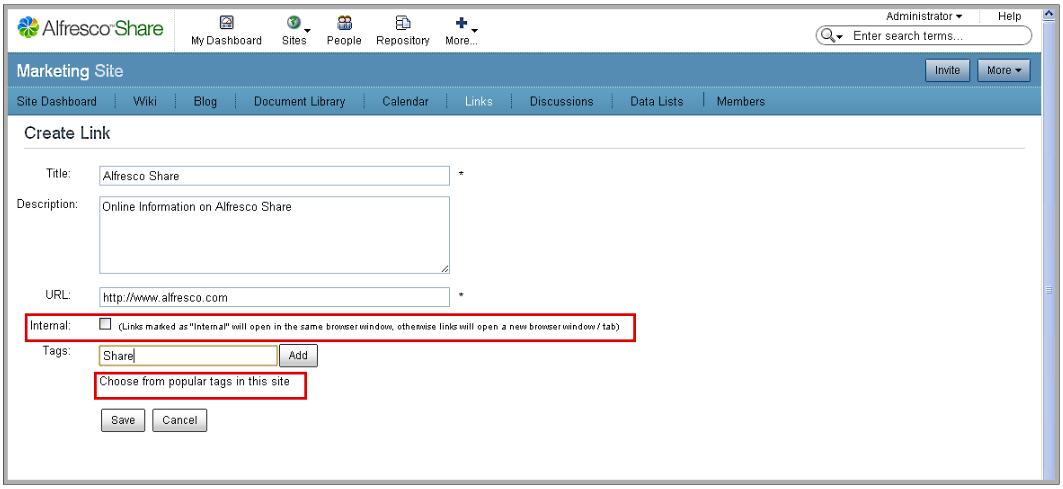


Showing items 0 - 0 of 0

No links found.

The **New Link** button lets users create new links.

2. A **Create Link** window opens up, where the user needs to fill up the details of the link. The user can also specify if the link is internal or external by checking the box. The user can also add tags to the link. They can create new tags or select from the existing ones:



Title: Alfresco Share *

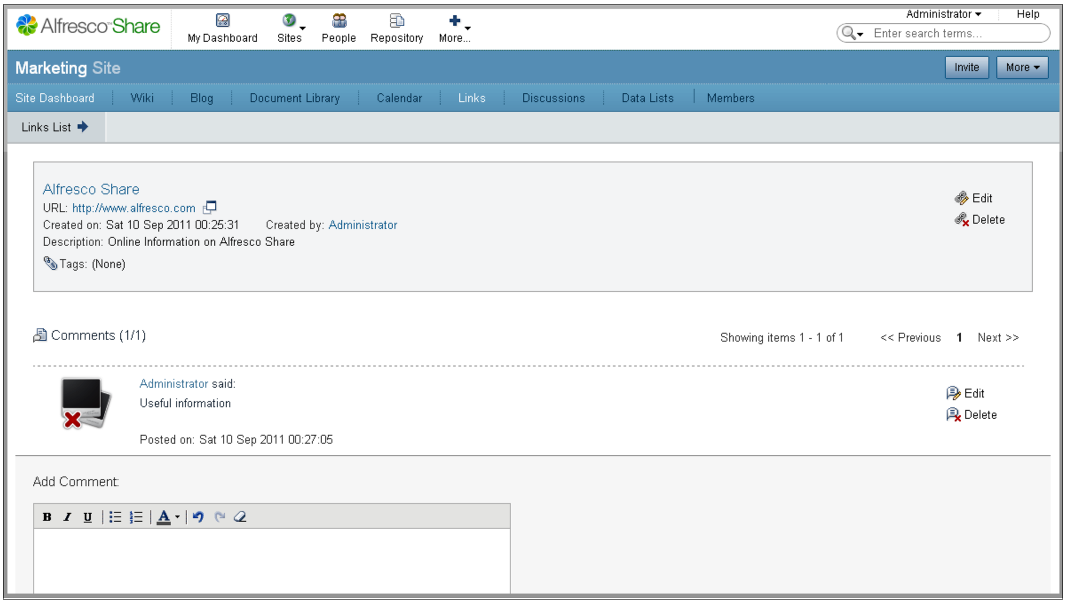
Description: Online Information on Alfresco Share

URL: http://www.alfresco.com *

Internal: □ (Links marked as "Internal" will open in the same browser window, otherwise links will open a new browser window / tab)

Tags: Share

3. Click on **Save**. The new link shows up with all the details of its creation. The users that see the link have the option of commenting on it:

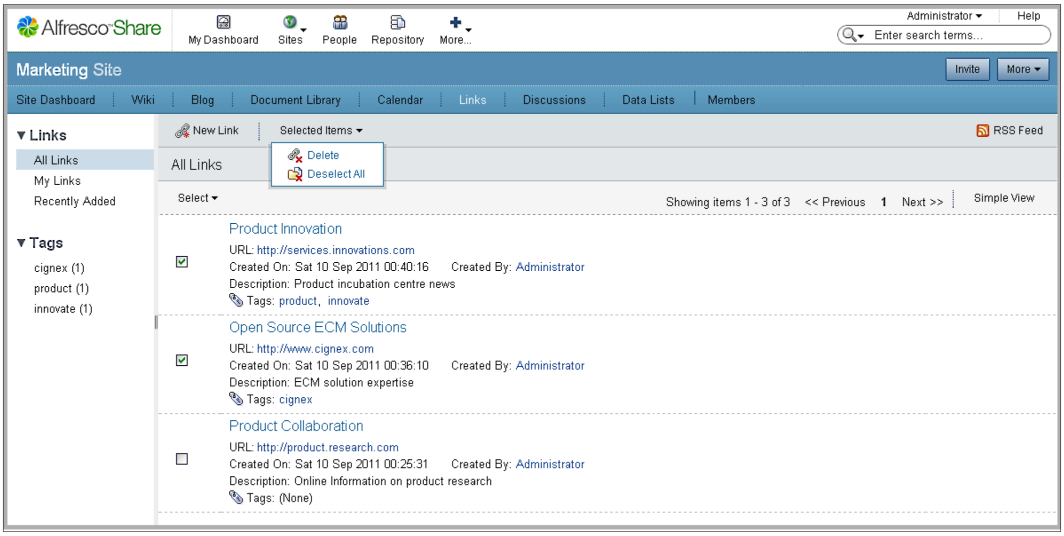


Alfresco Share
URL: http://www.alfresco.com
Created on: Sat 10 Sep 2011 00:25:31 Created by: Administrator
Description: Online Information on Alfresco Share
Tags: (None)

Administrator said:
Useful information

Posted on: Sat 10 Sep 2011 00:27:05

4. Click on the **Links List** link and it will take you to the page that lists all the lists created with their details. Links can be viewed by the most recently added, the users own links, and all the links that have been created:



☑ Product Innovation
URL: http://services.innovations.com
Created On: Sat 10 Sep 2011 00:40:16 Created By: Administrator
Description: Product incubation centre news
Tags: product, innovate

☑ Open Source ECM Solutions
URL: http://www.cignex.com
Created On: Sat 10 Sep 2011 00:36:10 Created By: Administrator
Description: ECM solution expertise
Tags: cignex

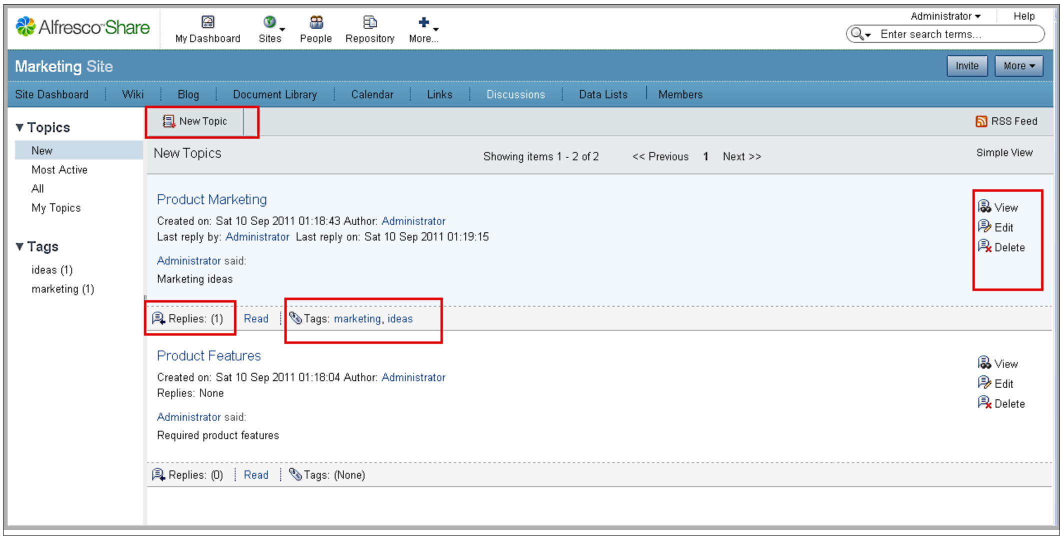
☐ Product Collaboration
URL: http://product.research.com
Created On: Sat 10 Sep 2011 00:25:31 Created By: Administrator
Description: Online Information on product research
Tags: (None)

5. The links that have been created by the user can be edited or deleted by them.
6. The links are displayed in a paginated manner just like the rest of the content like documents, wikis, blogs, and so on.

Discussions

Discussion with the team members is an important aspect of collaboration. Share provides users a forum to share ideas and work together. To create a new discussion thread perform the following steps:

1. Click on the **Discussions** tab on the top navigation bar. The following screen opens up:



Product Marketing

Created on: Sat 10 Sep 2011 01:18:43 Author: Administrator

Last reply by: Administrator Last reply on: Sat 10 Sep 2011 01:19:15

Administrator said:

Marketing ideas

Product Features

Created on: Sat 10 Sep 2011 01:18:04 Author: Administrator

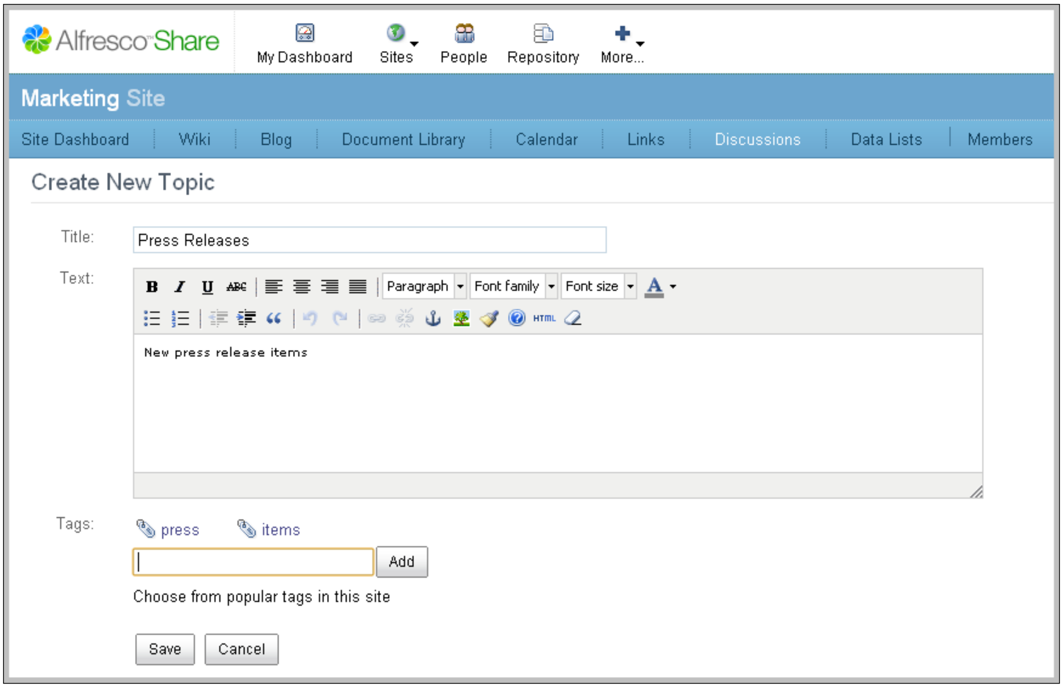
Replies: None

Administrator said:

Required product features

2. The various discussion topics are listed in a paginated manner. The users can see the replies posted to the topics, as well as the tags associated with the topic.
3. Also, if a user has created a discussion topic then they will be able to edit, delete, and also view the topic. The remaining users can do the same, based on their roles and permissions.

4. Click on **New Topic** to create a new topic of discussion. A window opens where the details of the topic, including the title and the tags and description can be filled in. A WYSIWYG editor is available to the users to describe the topic:



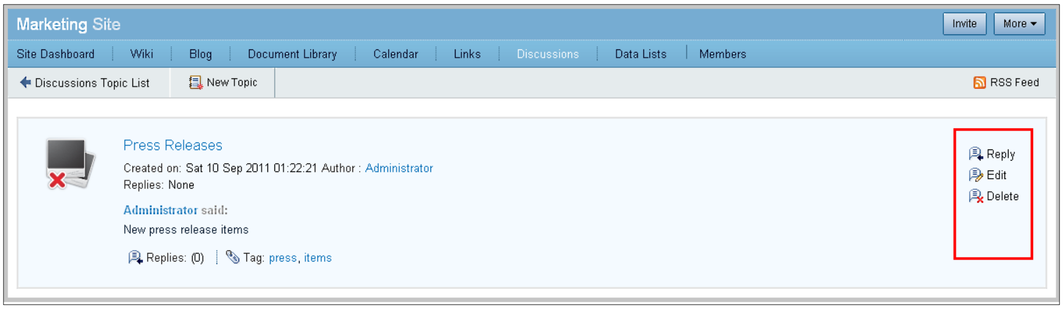
Create New Topic

Title: Press Releases

Text: New press release items

Tags: press items

5. Click **Save** to create the topic of discussion:



Press Releases

Created on: Sat 10 Sep 2011 01:22:21 Author : Administrator

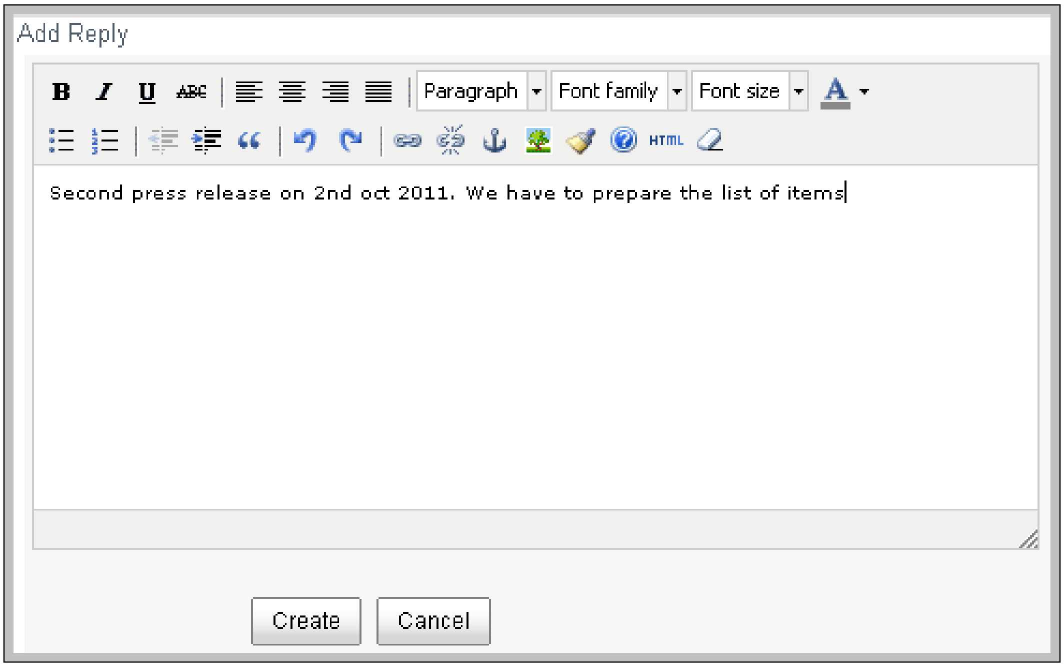
Replies: None

Administrator said:

New press release items

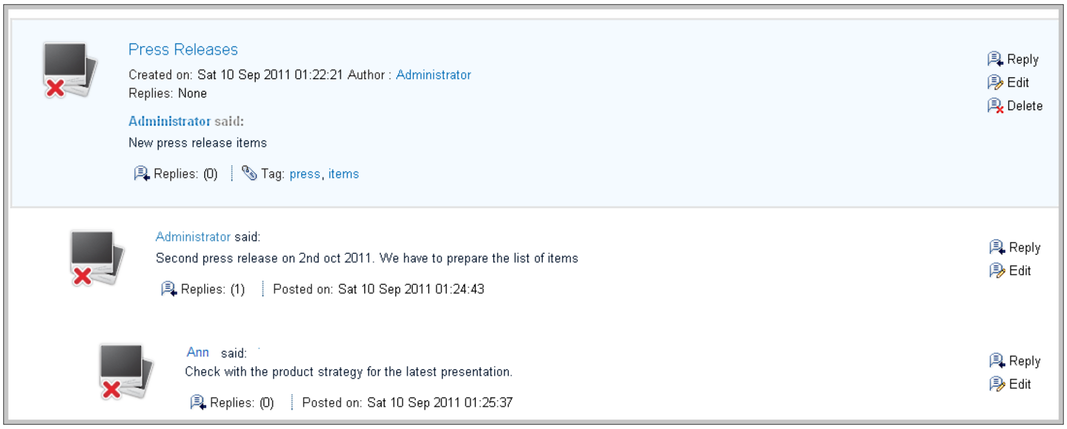
Replies: (0) | Tag: press, items

6. Click on **Reply** to reply to a discussion. A WYSIWYG editor window is provided for the same. Click on **Create** to post the reply:



Second press release on 2nd oct 2011. We have to prepare the list of items

7. A topic will have a sequence of replies, as shown in the following screenshot during the course of the discussion:



Press Releases

Created on: Sat 10 Sep 2011 01:22:21 Author : Administrator

Replies: None

Administrator said:

New press release items

Replies: (0) | Tag: press, items

Administrator said:

Second press release on 2nd oct 2011. We have to prepare the list of items

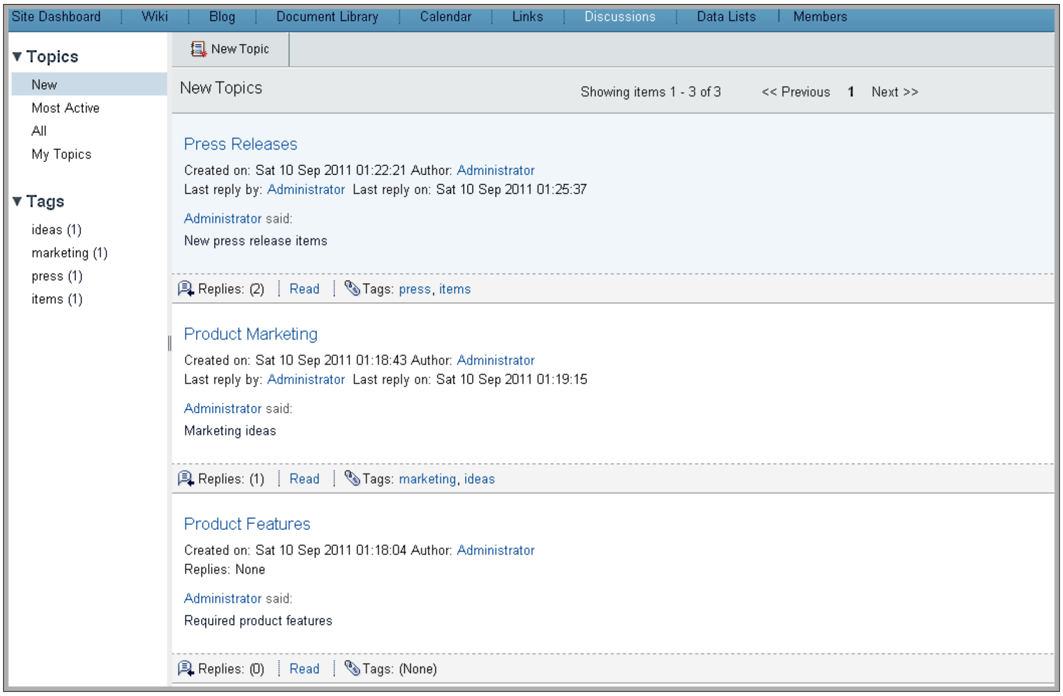
Replies: (1) | Posted on: Sat 10 Sep 2011 01:24:43

Ann said:

Check with the product strategy for the latest presentation.

Replies: (0) | Posted on: Sat 10 Sep 2011 01:25:37

8. Click on the **Discussion Topic List** link to go to the window that lists all topics of discussion on the site. These can be viewed as a complete list or sorted on the basis of the latest, most active, or users own topics. The discussions appear as a paginated list of topics with a reply option and a concise view of the number of replies and associated tags, if any:



New Topics   Showing items 1 - 3 of 3   << Previous 1 Next >>

Press Releases
Created on: Sat 10 Sep 2011 01:22:21 Author: Administrator
Last reply by: Administrator Last reply on: Sat 10 Sep 2011 01:25:37
Administrator said:
New press release items
Replies: (2) | Read | Tags: press, items

Product Marketing
Created on: Sat 10 Sep 2011 01:18:43 Author: Administrator
Last reply by: Administrator Last reply on: Sat 10 Sep 2011 01:19:15
Administrator said:
Marketing ideas
Replies: (1) | Read | Tags: marketing, ideas

Product Features
Created on: Sat 10 Sep 2011 01:18:04 Author: Administrator
Replies: None
Administrator said:
Required product features
Replies: (0) | Read | Tags: (None)

Summary

In this chapter, we discussed about how effectively the team can collaborate with the help of different tools like wiki and blogs. Data List also can be used to capture some of the information, which is more like row based and not in the form of pages or documents.

Teams can benefit from using the task scheduling and discussion features. It can help them provide the right information and inputs at the right moment. Links can be effectively used to maintain a quarry of useful relevant information for the teams' reference.

In the next chapter, we will take a look at the Document Library feature, its benefits and the different ways in which users can benefit from using the document library.

7
Document Library

Locating information is crucial to carrying out enterprise tasks successfully. Often, at times the delay, or lack of such information, causes communication problems between employees in the same organization. This is because they do not have easy access to the documents and the information that they need. Usually, there are paper and electronic documents and there is no single point that informs what is where.

Over time the number of documents keeps increasing. Not categorizing or classifying these documents does not help. Storage and indexing of these is important for the timely use and location of the documents.

Poor document management can lead to a significant loss of time.

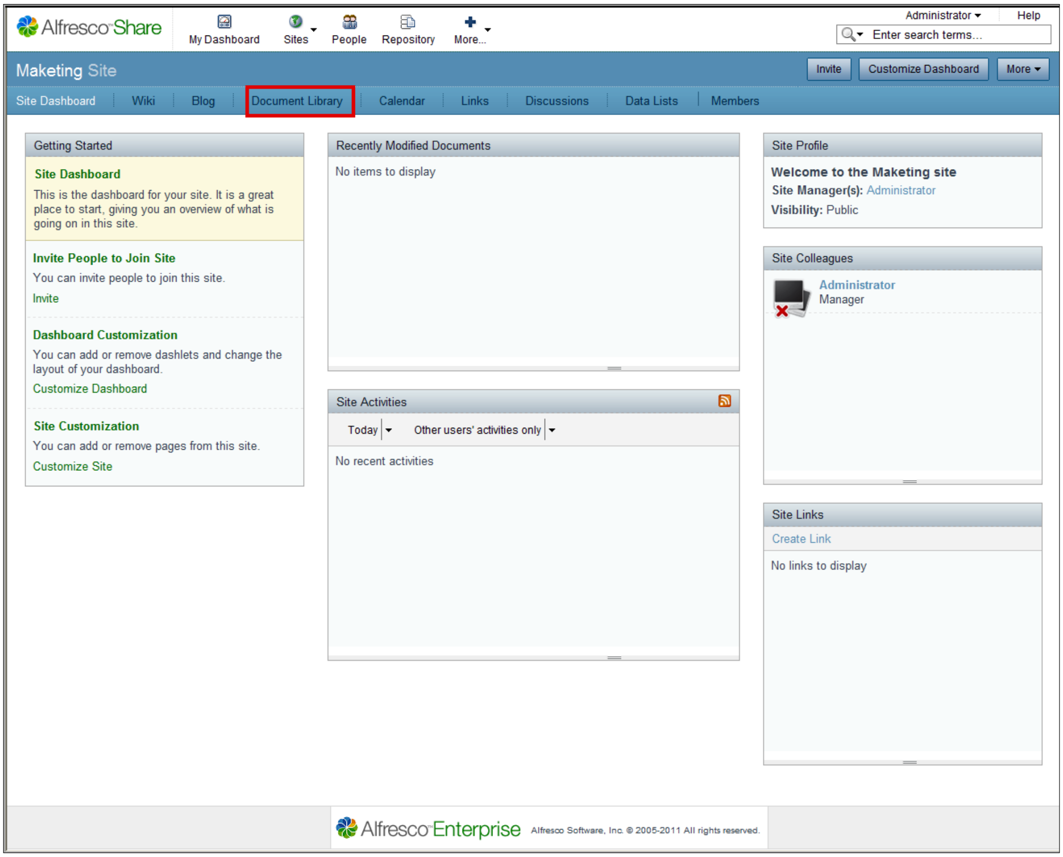
Alfresco Share has a document library function to cater to the wide ranging document library capabilities. The Document Library page component enables you to store and collaboratively manage any content related to a site, such as documents, media files, and graphics.

By the end of this chapter you will have a clear idea of the following:

- Creating and managing documents
- Versioning
- Tagging documents
- Ways to access the document library

The Document Library page

When the user clicks on and opens the site page, the document library is a tab on the top navigation:



Site Dashboard

This is the dashboard for your site. It is a great place to start, giving you an overview of what is going on in this site.

Invite People to Join Site

You can invite people to join this site.

Dashboard Customization

You can add or remove dashlets and change the layout of your dashboard.

Site Customization

You can add or remove pages from this site.

No items to display

Welcome to the Maketing site

Site Manager(s): Administrator

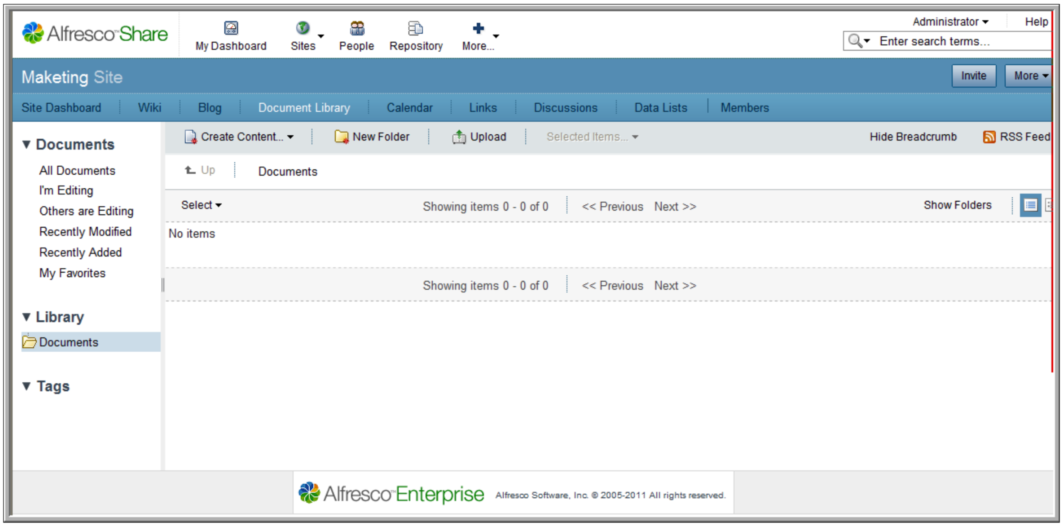
Visibility: Public

No recent activities

No links to display

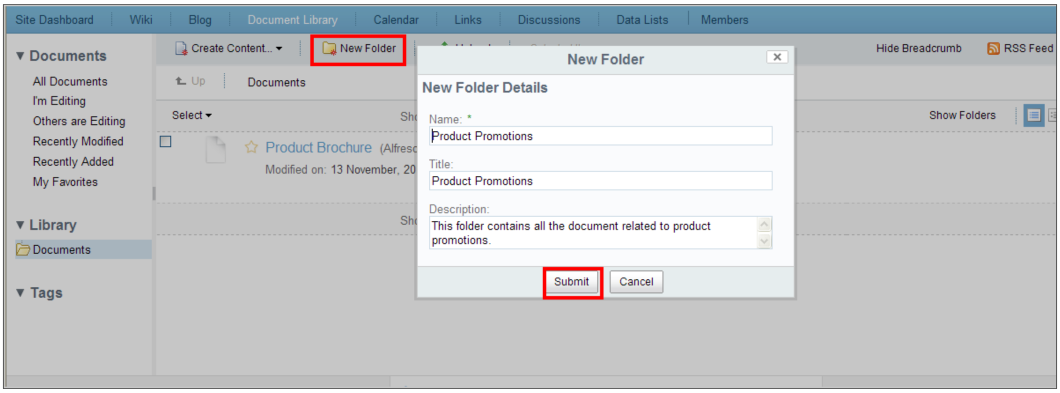
Alfresco Software, Inc. © 2005-2011 All rights reserved.

Clicking on the **Document Library** tab opens up the document library page. This page allows the user to create content, upload content from the system, view recent, and user's own documents. The tags that have been used for the various documents in the library are listed too. Users can also see the document library structure, as per the access and permission they have. This document library structure is a tree like structure that lists the folders and the subfolders present:



Creating folders and folder hierarchy

Users can also create folders and sub folders if they have the permission to do so. To create a folder, the user needs to click on the **New Folder** tab on top:



Name: * Product Promotions

Title: Product Promotions

Description: This folder contains all the document related to product promotions.

A new folder pop up page opens. Fill in the details for the new folder and click on **Submit** to create the folder.

The new folder is now listed in the document library's folder structure. To create/upload a document in a folder, select the folder and then either click on **Create content** or **Upload**.

To create a sub folder within a folder, click on the folder name and then select the **Create folder** button. The steps to create the sub folder are the same as when creating a folder. The new folder created will be placed within the folder that was selected.

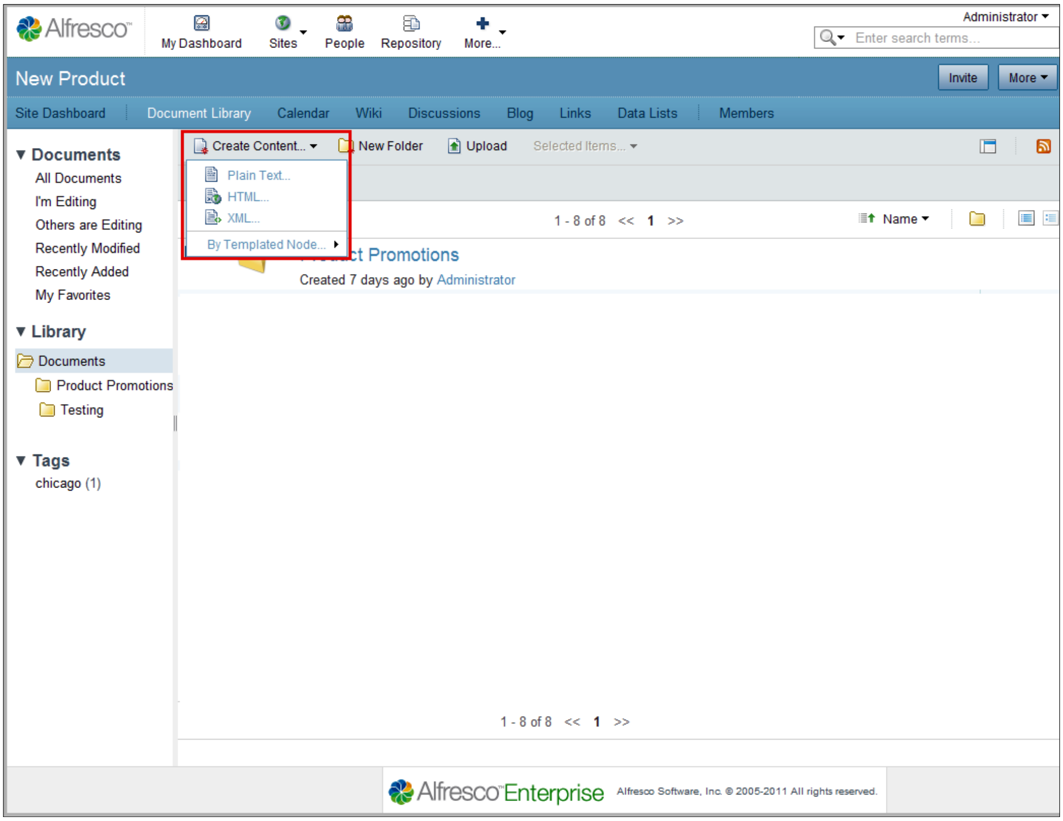
Uploading files and creating documents

Content and information can be stored in the document library. This information can be stored in the library by creating the content in the Share interface, or by uploading a pre-existing content from the user's own system.

We shall first look at creating content in Share.

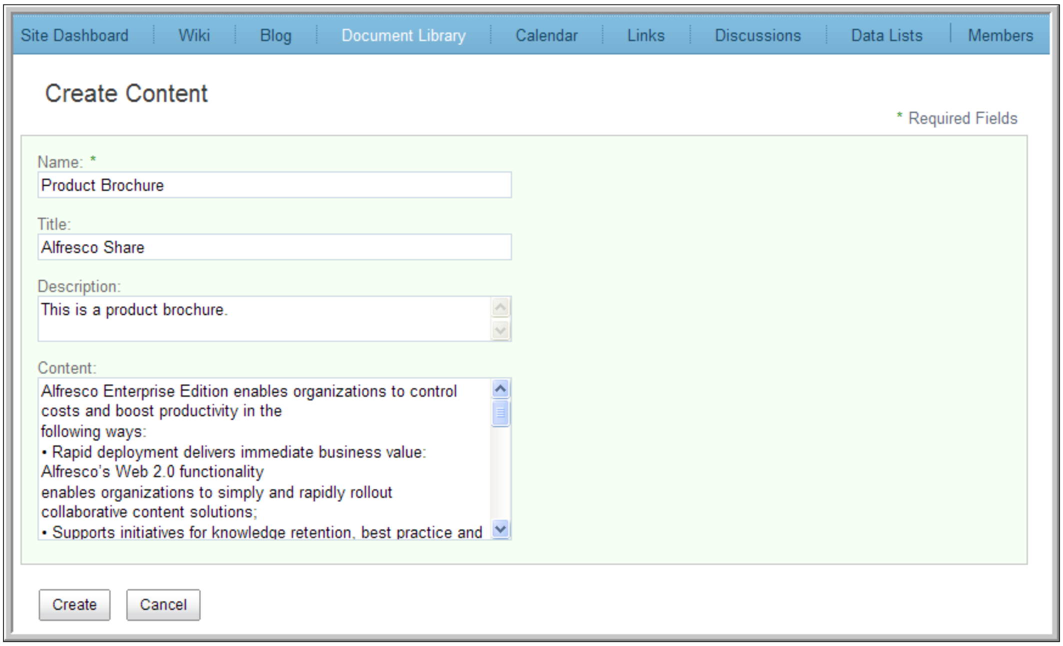
Creating content in the Document Library

To create content in the Share Document Library, click on the **Create content** tab at the top:



Users can select the kind of content they want to create by selecting from the drop down. They can choose from plain text, HTML, and XML. For this example, we shall create plain text content. You can also create Google Docs spreadsheets, presentations, and documents.

1. Select plain text from the drop down. This will open a page that allows users to create content.
2. The following page opens up:



Create Content

* Required Fields

Name: *
Product Brochure

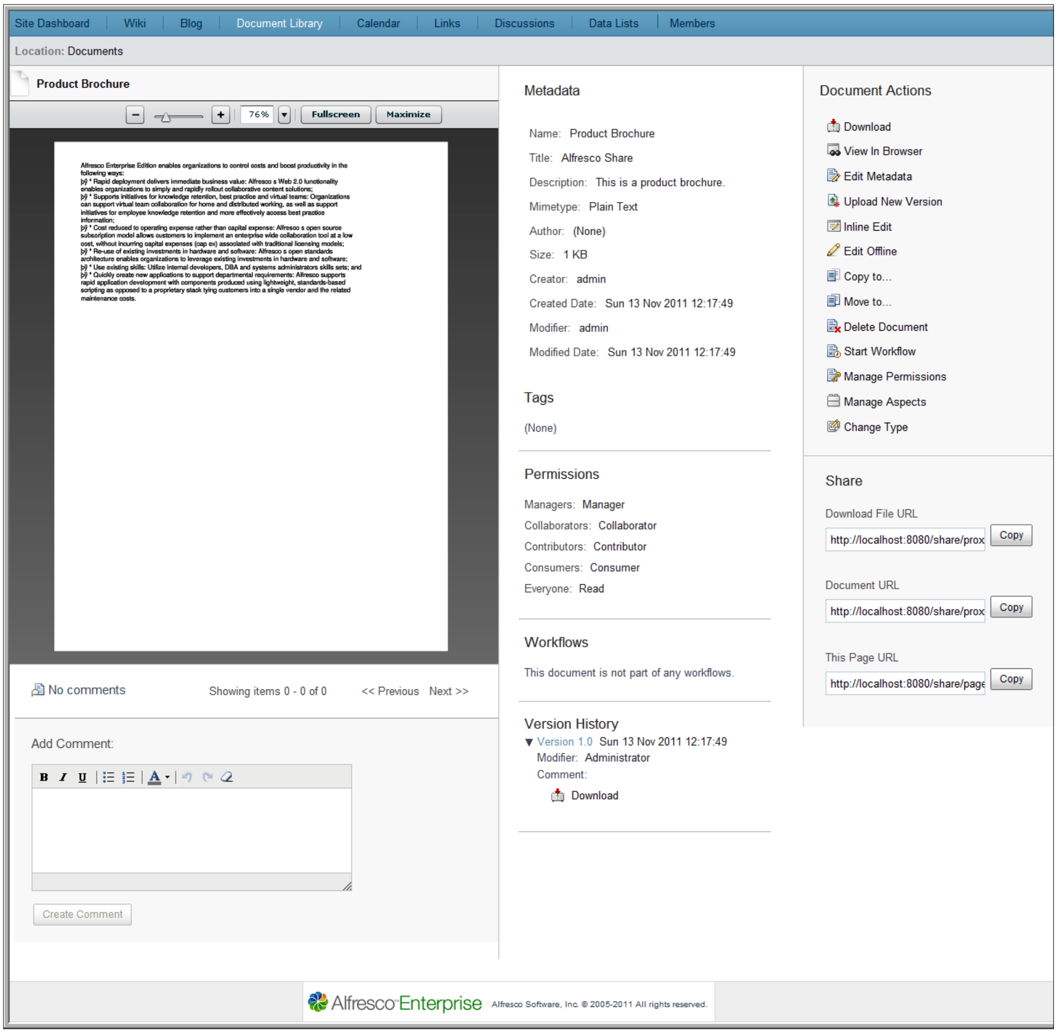
Title:
Alfresco Share

Description:
This is a product brochure.

Content:
Alfresco Enterprise Edition enables organizations to control costs and boost productivity in the
following ways:
• Rapid deployment delivers immediate business value: Alfresco's Web 2.0 functionality
enables organizations to simply and rapidly rollout collaborative content solutions;
• Supports initiatives for knowledge retention, best practice and

3. Users are required to fill in the fields to create content. The only mandatory field on this page is **Name**. Users can create a blank content and come back later and fill in the rest of the fields. The Name does not support the following special characters: `* " < > \ / . ? :` and `|`. When the name contains a disallowed character the **Create** button is disabled.

4. Click on **Create** to create the content. If you do not want to create the content, then click on **Cancel**:



Location: Documents

Product Brochure

Alfresco Enterprise Edition enables organizations to control costs and boost productivity in the following ways:
þÿ * Rapid deployment delivers immediate business value: Alfresco s Web 2.0 functionality enables organizations to simply and rapidly rollout collaborative content solutions;
þÿ * Supports initiatives for knowledge retention, best practice and virtual teams: Organizations can support virtual team collaboration for home and distributed working, as well as support initiatives for employee knowledge retention and more effectively access best practice information;
þÿ * Cost reduced to operating expense rather than capital expense: Alfresco s open source subscription model allows customers to implement an enterprise wide collaboration tool at a low cost, without incurring capital expenses (cap ex) associated with traditional licensing models;
þÿ * Re-use of existing investments in hardware and software: Alfresco s open standards architecture enables organizations to leverage existing investments in hardware and software;
þÿ * Use existing skills: Utilize internal developers, DBA and systems administrators skills sets; and
þÿ * Quickly create new applications to support departmental requirements: Alfresco supports rapid application development with components produced using lightweight, standards-based scripting as opposed to a proprietary stack tying customers into a single vendor and the related maintenance costs.

Metadata

Name: Product Brochure
Title: Alfresco Share
Description: This is a product brochure.
Mimetype: Plain Text
Author: (None)
Size: 1 KB
Creator: admin
Created Date: Sun 13 Nov 2011 12:17:49
Modifier: admin
Modified Date: Sun 13 Nov 2011 12:17:49

Tags

(None)

Permissions

Managers: Manager
Collaborators: Collaborator
Contributors: Contributor
Consumers: Consumer
Everyone: Read

Workflows

This document is not part of any workflows.

Version History

▼ Version 1.0 Sun 13 Nov 2011 12:17:49
Modifier: Administrator
Comment:

Share

Download File URL
http://localhost:8080/share/prox

Document URL
http://localhost:8080/share/prox

This Page URL
http://localhost:8080/share/page

5. The page that comes up shows the various document details and a document preview.

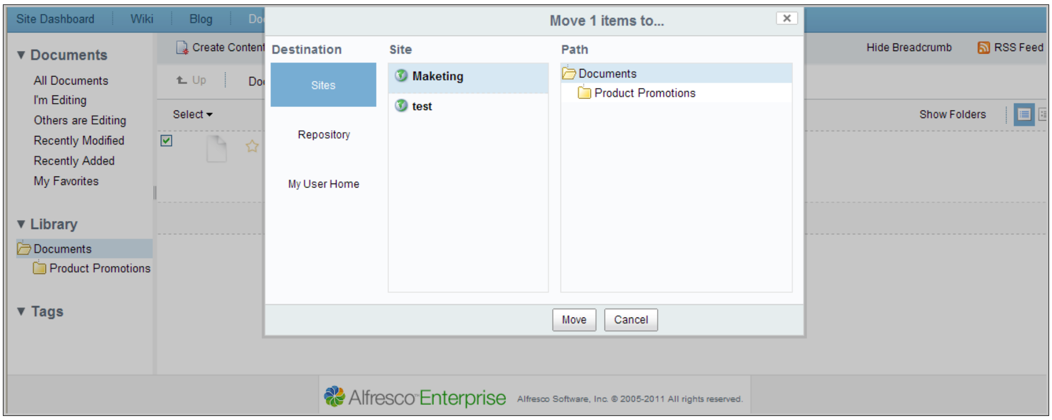
The metadata associated with the document created are listed. Any changes to these can be done via the **Edit Metadata** action in the **Document Action** section.

The document tags, permissions, workflows, versions, and so on are all listed too. These can also be changed from the Documents Action section.

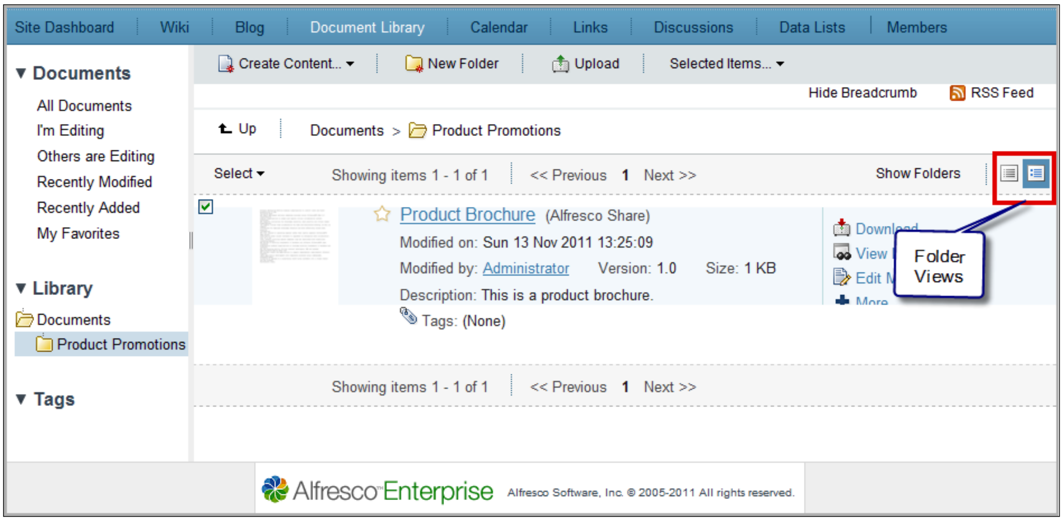
This content is currently in the root folder of the document library. You can also move, copy, and delete the document. Users can also manage permissions at the document level and assign the document to a workflow.

For all of the preceding actions, click on the checkbox beside the document name and select the document. This will make the **Selected Items** tab active. Clicking on the **Selected Items** tab will give a drop down list that lists the various actions that can be performed on a document.

To move the selected document to another folder, click on **Move to**. This will open a page that lists the folders and you can select the folder you want to move the document to:



After selecting the folder where you want to move the document, click on the **Move** button to move the document or on **Cancel** to cancel the action:



Modified on: Sun 13 Nov 2011 13:25:09
Modified by: Administrator Version: 1.0 Size: 1 KB
Description: This is a product brochure.
Tags: (None)

The document is now a part of the **Product Promotions** folder. Furthermore, the document inside the folders can have two kinds of views, simple and detailed view. These views can be seen by selecting from the folder views, as highlighted in the previous image.

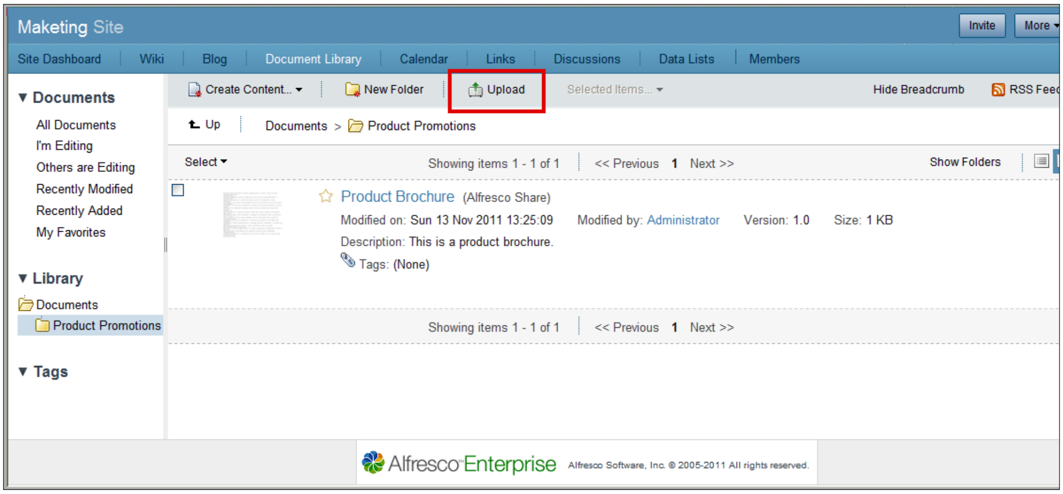
The simple view gives an icon besides the document to indicate the type of document, MS Word, PDF, or any other. It also gives the details of the creator of the document and the date on which it was created. The detailed view gives a thumbnail image of the document. Besides the information in the simple view, the detailed view also informs of the version, size, document tags, and a description of the document.

The documents in a folder are listed in a paginated manner. Furthermore, on mouse over on a document, or on selecting a document, the various document actions available are listed.

Uploading Content in the Document Library

Content that already exists in the user's system can also be uploaded into the document library. Alfresco provides a built-in flash uploader. This requires installation of Adobe Flash player on your machine. If the flash player is not installed, then multi-file uploading is not possible and an HTML file uploader takes its place and lets you upload documents, one at a time.

1. Click on the **Upload** tab in the document library, as follows:



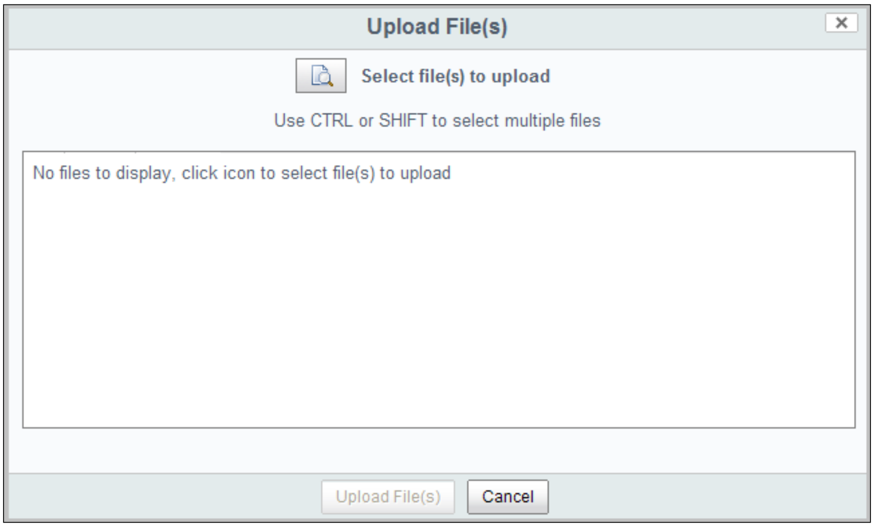
Product Brochure (Alfresco Share)

Modified on: Sun 13 Nov 2011 13:25:09 Modified by: Administrator Version: 1.0 Size: 1 KB

Description: This is a product brochure.

Tags: (None)

2. A new pop up window opens up which allows users to upload documents. Users can upload a single document or multiple documents:



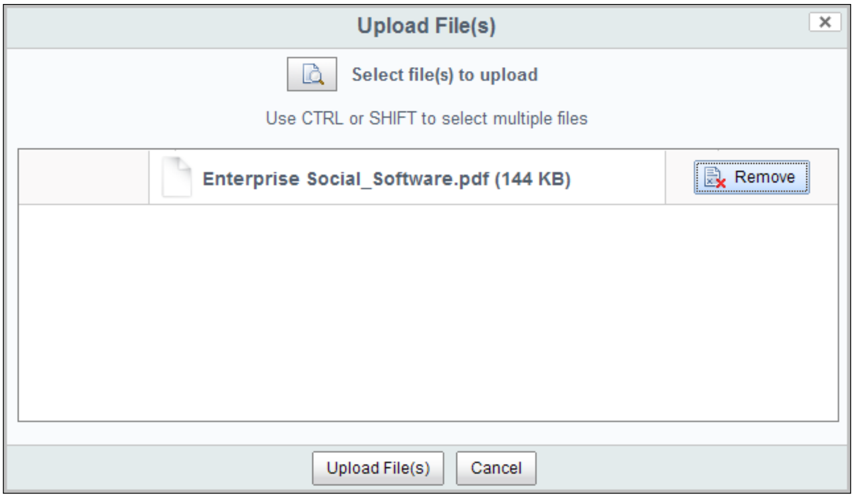
Upload File(s)

Select file(s) to upload

Use CTRL or SHIFT to select multiple files

No files to display, click icon to select file(s) to upload

3. Click on the 🔍 icon to upload existing file(s) from the system. Users can browse the system and locate the files to be uploaded, as shown in the following screenshot:



Upload File(s)

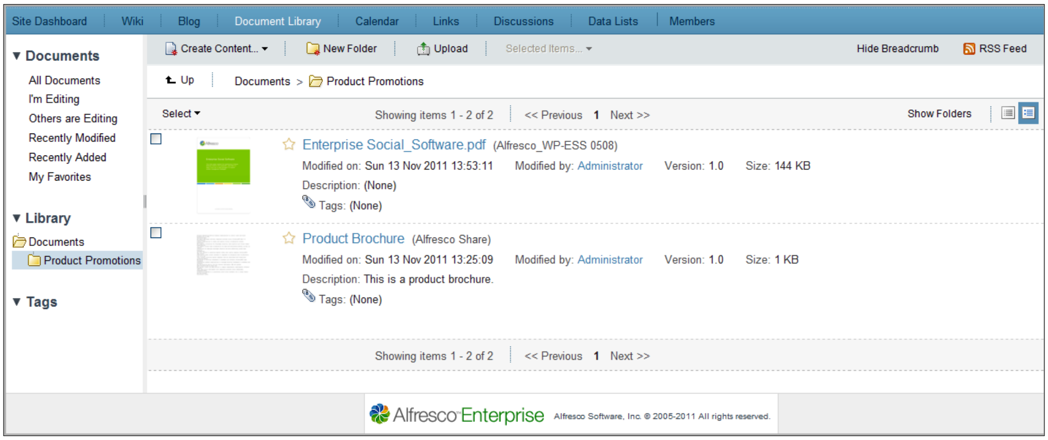
Select file(s) to upload

Use CTRL or SHIFT to select multiple files

Enterprise Social_Software.pdf (144 KB)

4. Click on the **Upload File(s)** button to upload existing file(s) from the system.

5. The document is now a part of the document library and is in the folder that was specified, as follows:



Showing items 1 - 2 of 2 << Previous 1 Next >>

Enterprise Social_Software.pdf (Alfresco_WP-ESS 0508)
Modified on: Sun 13 Nov 2011 13:53:11 Modified by: Administrator Version: 1.0 Size: 144 KB
Description: (None)
Tags: (None)

Product Brochure (Alfresco Share)
Modified on: Sun 13 Nov 2011 13:25:09 Modified by: Administrator Version: 1.0 Size: 1 KB
Description: This is a product brochure.
Tags: (None)

Showing items 1 - 2 of 2 << Previous 1 Next >>

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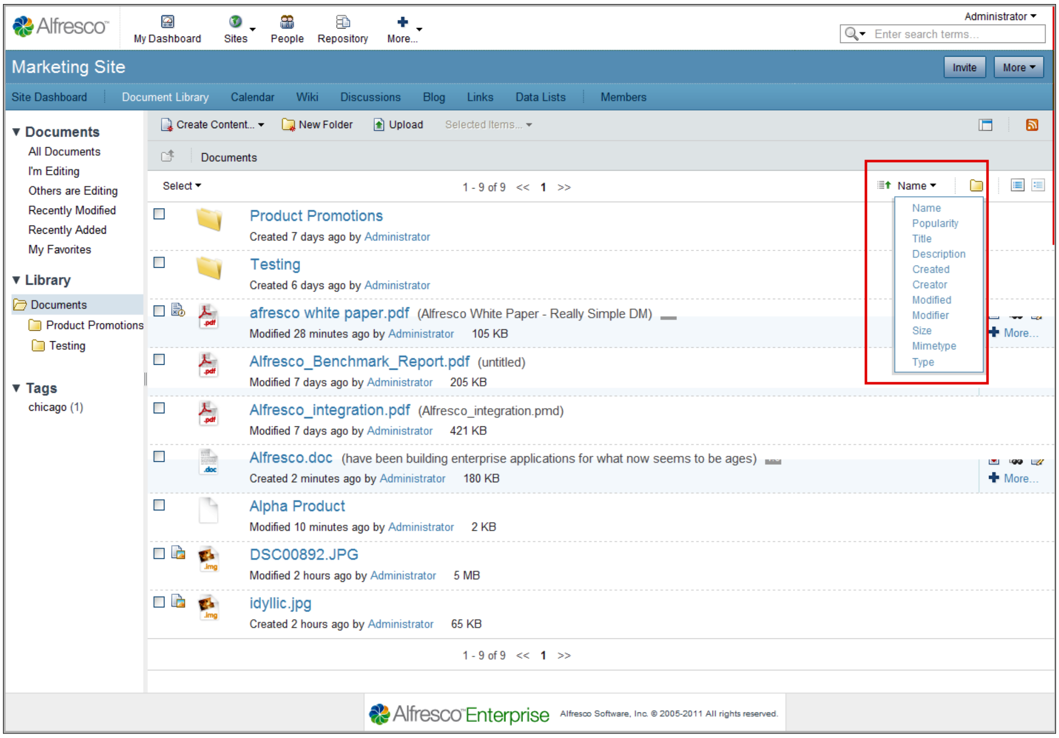
Sorting Content in the Document Library

Alfresco provides a feature of sorting the content of the document library based on different sorting parameters:



1 - 9 of 9 << 1 >>

Product Promotions
Created 7 days ago by Administrator

Testing
Created 6 days ago by Administrator

afresco white paper.pdf (Alfresco White Paper - Really Simple DM)
Modified 28 minutes ago by Administrator 105 KB

Alfresco_Benchmark_Report.pdf (untitled)
Modified 7 days ago by Administrator 205 KB

Alfresco_integration.pdf (Alfresco_integration.pmd)
Modified 7 days ago by Administrator 421 KB

Alfresco.doc (have been building enterprise applications for what now seems to be ages)
Created 2 minutes ago by Administrator 180 KB

Alpha Product
Modified 10 minutes ago by Administrator 2 KB

DSC00892.JPG
Modified 2 hours ago by Administrator 5 MB

idyllic.jpg
Created 2 hours ago by Administrator 65 KB

1 - 9 of 9 << 1 >>

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Some of the parameters for the sorting are name, popularity, description of the document, creator of the document, date of creation, size, and so on.

Document details page

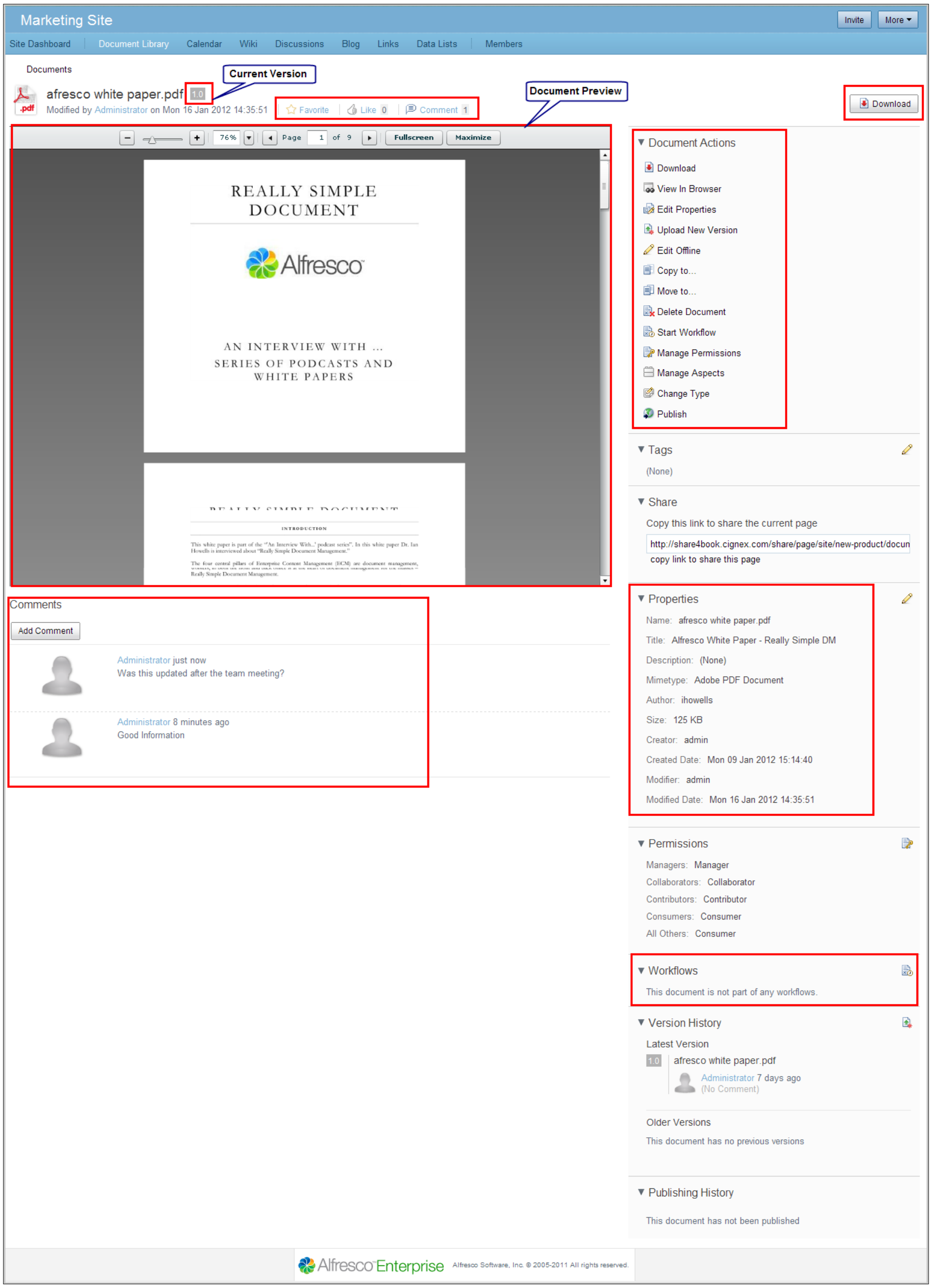
The document details page gives all the relevant information about the document. This page gives a bird's eye view of the document, associated metadata and tags, permissions, discussions around the document via comments, various document actions that can be carried out, associated workflows, and version history.

This page has a flash previewer for previewing the document. The preview also allows for a custom zoomed view of the document.

Various document access URLs are also mentioned.

The metadata associated with the document are listed in the metadata section.

Users access the document based on the roles and permissions defined for the document in the **Permissions** section on the page:



afresco white paper.pdf 1.0

Modified by Administrator on Mon 16 Jan 2012 14:35:51

Tags

(None)

Share

Copy this link to share the current page

http://share4book.cignex.com/share/page/site/new-product/docun

copy link to share this page

Comments

Administrator just now
Was this updated after the team meeting?

Administrator 8 minutes ago
Good Information

Properties

Name: afresco white paper.pdf
Title: Alfresco White Paper - Really Simple DM
Description: (None)
Mimetype: Adobe PDF Document
Author: ihowells
Size: 125 KB
Creator: admin
Created Date: Mon 09 Jan 2012 15:14:40
Modifier: admin
Modified Date: Mon 16 Jan 2012 14:35:51

Permissions

Managers: Manager
Collaborators: Collaborator
Contributors: Contributor
Consumers: Consumer
All Others: Consumer

Workflows

This document is not part of any workflows.

Version History

Latest Version

1.0 afresco white paper.pdf
Administrator 7 days ago
(No Comment)

Older Versions

This document has no previous versions

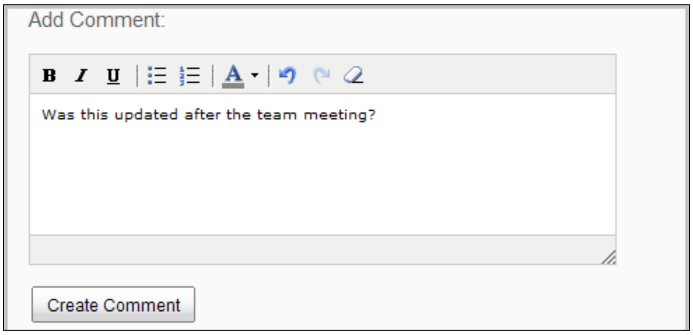
Publishing History

This document has not been published

Comment on a document

Users that have the permissions to access the document can add their comments on the document.

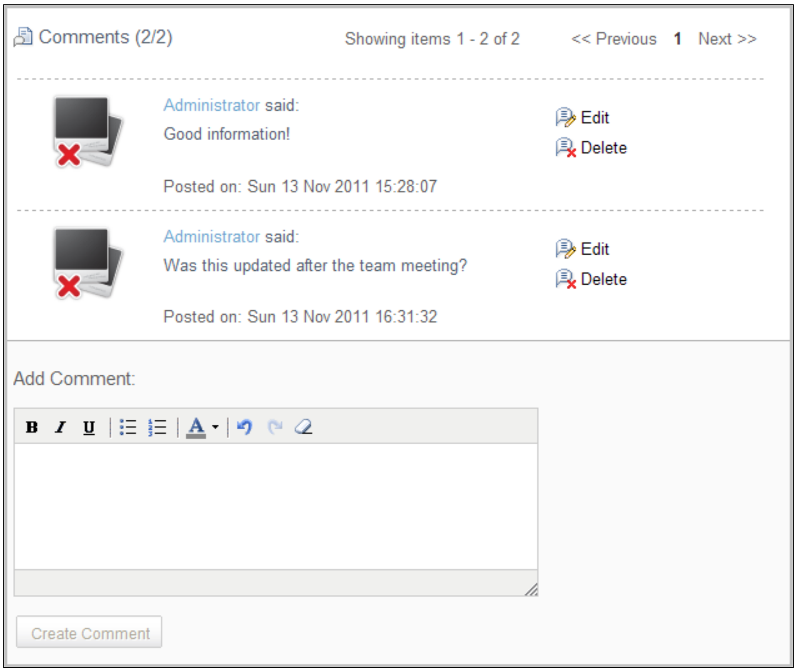
1. To add a comment, write your comment in the **Add Comment** section, as follows:



Add Comment:

Was this updated after the team meeting?

2. Click on the **Create Comment** button.
3. The comment is added in the list of comments on the page, as follows:



Comments (2/2) Showing items 1 - 2 of 2 << Previous 1 Next >>

Administrator said:
Good information!

Posted on: Sun 13 Nov 2011 15:28:07

Administrator said:
Was this updated after the team meeting?

Posted on: Sun 13 Nov 2011 16:31:32

Add Comment:

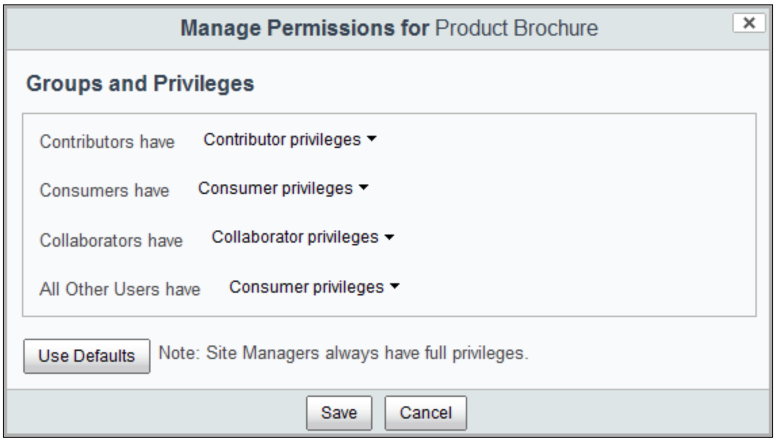
4. The creator of the comment can also **Edit** or **Delete** the comment.

Permissions

Users can allow user permissions on a document based on their roles. By default, Alfresco Share has four roles in addition to an Everyone role. The various roles have been discussed in a previous chapter.

To manage permissions for these roles the user should click on **Manage Permissions** in Document Actions.

This will open the following pop up window:



Manage Permissions for Product Brochure

Groups and Privileges

Contributors have Contributor privileges

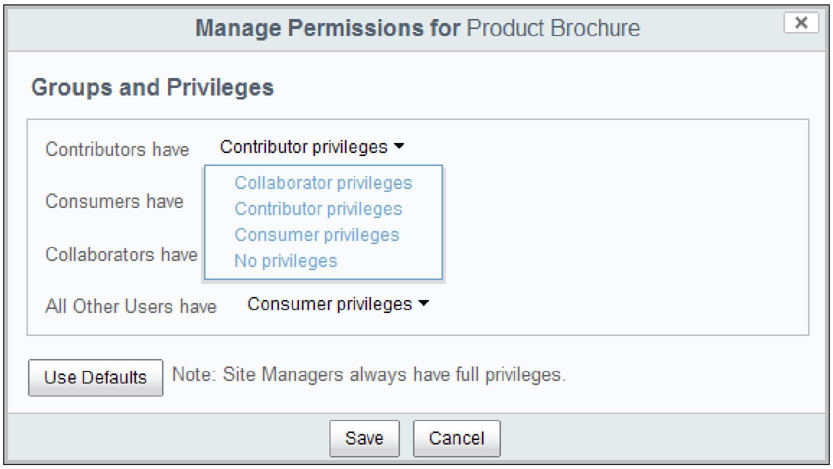
Consumers have Consumer privileges

Collaborators have Collaborator privileges

All Other Users have Consumer privileges

Note: Site Managers always have full privileges.

Users can click on the down arrow besides each role privilege and change the permissions. Click on **Save** to save the change:



Manage Permissions for Product Brochure

Groups and Privileges

Contributors have Contributor privileges

Consumers have

Collaborators have

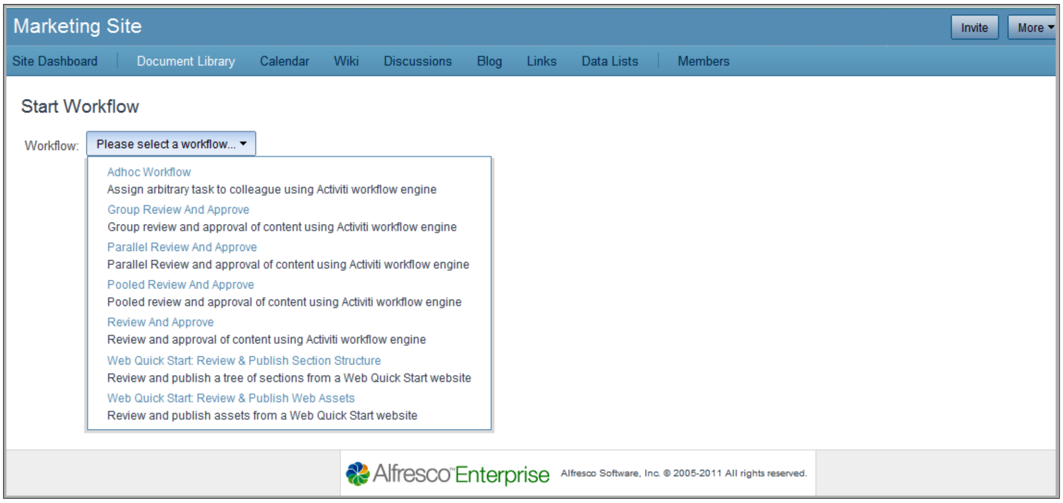
All Other Users have Consumer privileges

Note: Site Managers always have full privileges.

The new permission set will now reflect in the **Permissions** section.

Workflows

Workflows can be assigned at a document level in Alfresco Share. To manage workflows, click on **Start Workflow** in the **Document Actions** section. This will open a page where the user will be asked to select a workflow:



Start Workflow

Workflow: Please select a workflow...

Adhoc Workflow
Assign arbitrary task to colleague using Activiti workflow engine
Group Review And Approve
Group review and approval of content using Activiti workflow engine
Parallel Review And Approve
Parallel Review and approval of content using Activiti workflow engine
Pooled Review And Approve
Pooled review and approval of content using Activiti workflow engine
Review And Approve
Review and approval of content using Activiti workflow engine
Web Quick Start: Review & Publish Section Structure
Review and publish a tree of sections from a Web Quick Start website
Web Quick Start: Review & Publish Web Assets
Review and publish assets from a Web Quick Start website

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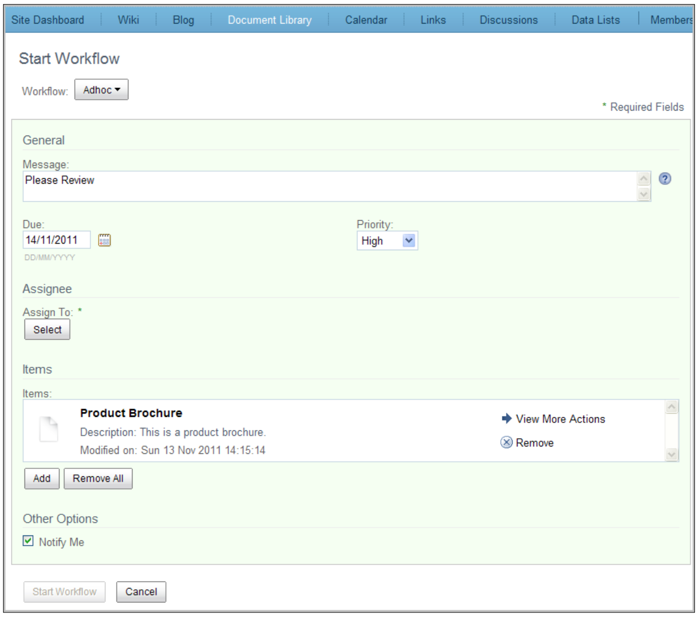
Here, we see a list of workflows that are a part of the Share system. There are Adhoc, parallel, and serial workflows. For this example, we select the Adhoc workflow. This is essentially a single step approve or reject workflow:



Start Workflow

Workflow: Adhoc

* Required Fields

General

Message:
Please Review

Due:
14/11/2011
DD/MM/YYYY

Priority:
High

Assignee

Assign To: *

Items

Items:

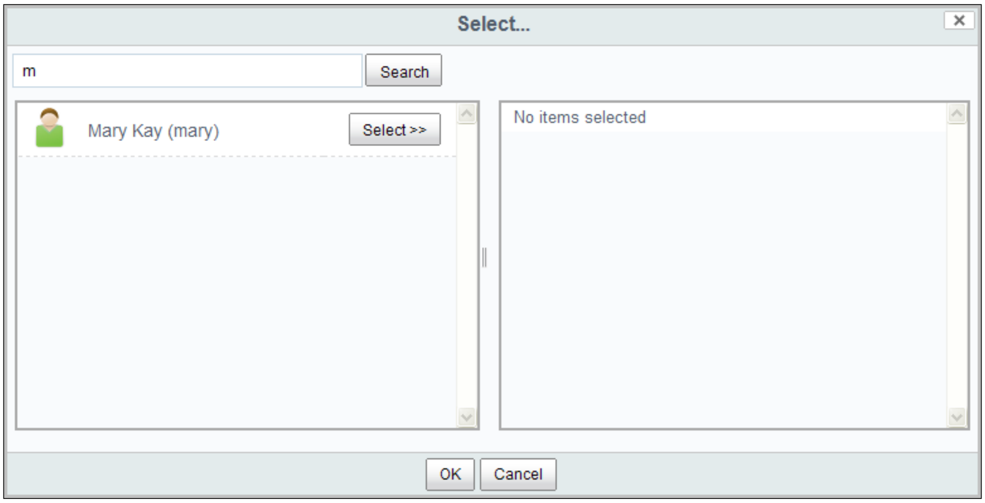
Product Brochure
Description: This is a product brochure.
Modified on: Sun 13 Nov 2011 14:15:14

Other Options

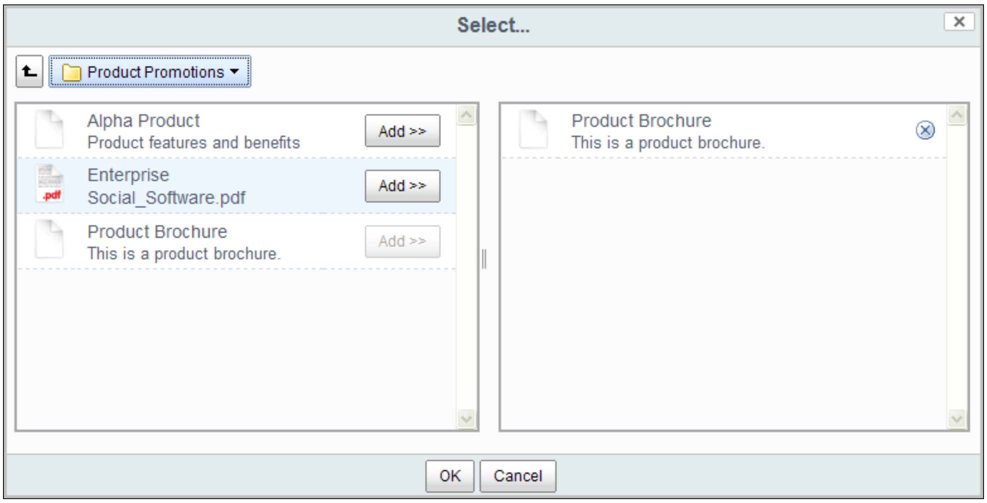
☑ Notify Me

The message to be sent along with the workflow task needs to be put into the message section. The due date, if any, can be selected by clicking on the 📅 icon and selecting a date. The task priority can be selected from an option of high, medium, or low from the drop down priority list.

The next step is to select an assignee for the task. Click on the **Select** button in the **Assign To** section. This opens up a new window, as follows:

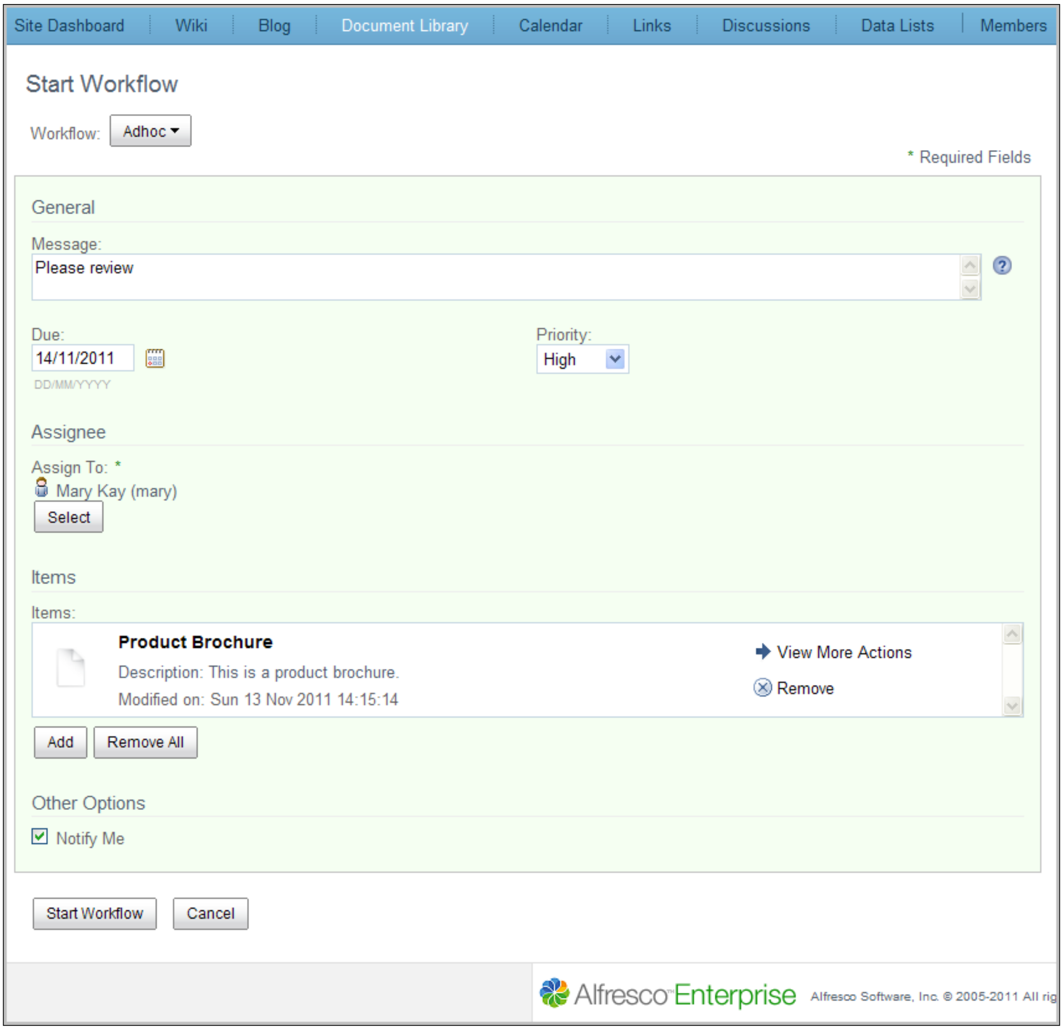


Search for and select the user. Click on **OK** to confirm the selection:



Other documents and resources may be added to this by clicking on **Add**. Remove all, removes any document, and so on that has been included here.

Click on **Notify** me to get an e-mail, or any other such notification. Please note that to get an e-mail notification, the e-mail server must be configured and integrated with the Share system:



Start Workflow

Workflow: Adhoc

* Required Fields

General

Message: Please review

Due: 14/11/2011 DD/MM/YYYY

Priority: High

Assignee

Assign To: *
Mary Kay (mary)

Items

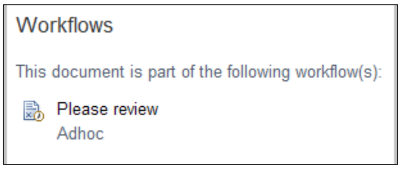
Items:

Product Brochure
Description: This is a product brochure.
Modified on: Sun 13 Nov 2011 14:15:14

Other Options

☑ Notify Me

Click on **Start Workflow** to start a workflow on the document. The workflow that the document has been assigned to will be added to the document details page now:

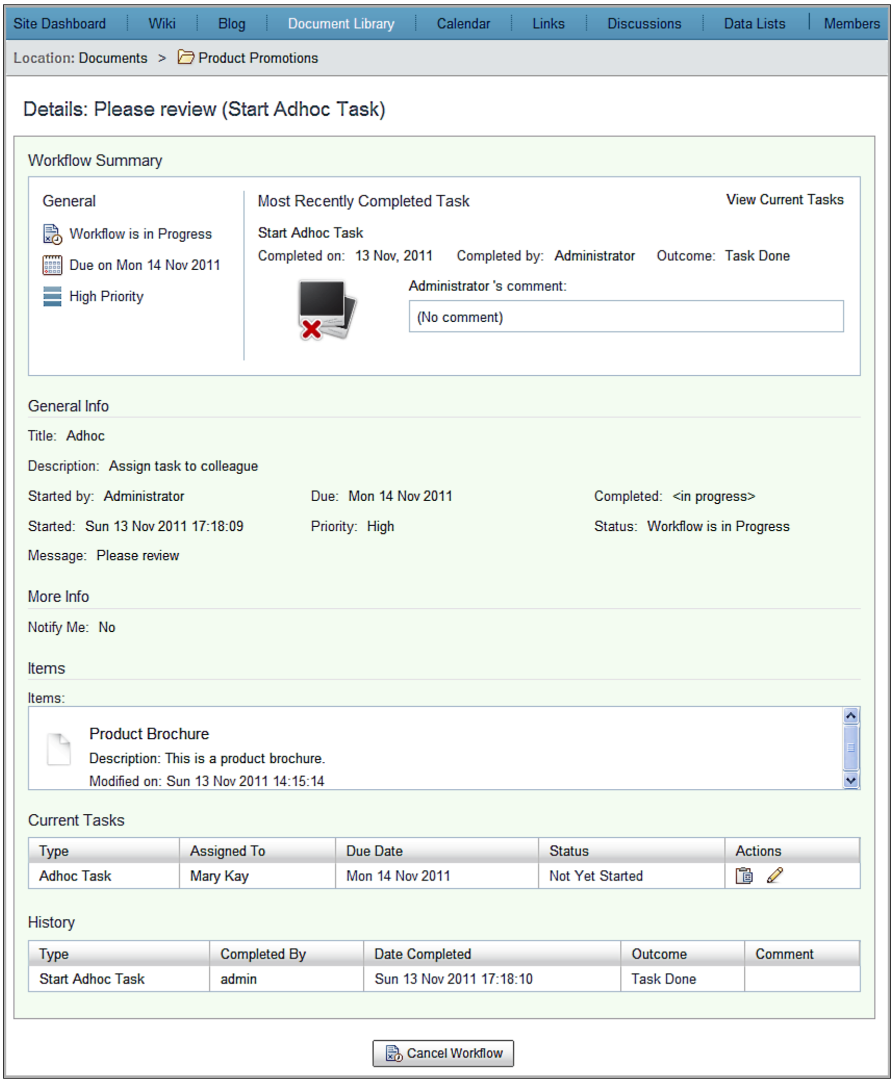


Workflows

This document is part of the following workflow(s):

Please review
Adhoc

Clicking on the workflow message will open the workflow details page, as follows:



Site Dashboard | Wiki | Blog | Document Library | Calendar | Links | Discussions | Data Lists | Members

Location: Documents > Product Promotions

Details: Please review (Start Adhoc Task)

Workflow Summary

General

Workflow is in Progress

Due on Mon 14 Nov 2011

High Priority

Most Recently Completed Task

View Current Tasks

Start Adhoc Task

Completed on: 13 Nov, 2011 Completed by: Administrator Outcome: Task Done

Administrator 's comment:

(No comment)

General Info

Title: Adhoc

Description: Assign task to colleague

Started by: Administrator Due: Mon 14 Nov 2011 Completed: <in progress>

Started: Sun 13 Nov 2011 17:18:09 Priority: High Status: Workflow is in Progress

Message: Please review

More Info

Notify Me: No

Items

Items:

Product Brochure
Description: This is a product brochure.
Modified on: Sun 13 Nov 2011 14:15:14

Current Tasks

Type	Assigned To	Due Date	Status	Actions
Adhoc Task	Mary Kay	Mon 14 Nov 2011	Not Yet Started	📋 ✎

History

Type	Completed By	Date Completed	Outcome	Comment
Start Adhoc Task	admin	Sun 13 Nov 2011 17:18:10	Task Done	

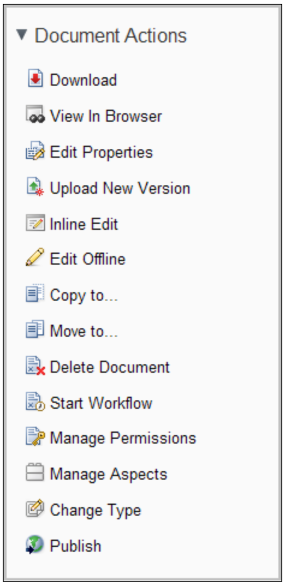
The workflow details page gives a summary of the workflow task. Any comments by the person that started the workflow and general information of the task are listed too. It also tells the user if notifications will be provided. The resources for the workflow task, history, and current tasks are also listed.

The user, if he/she is the creator of the workflow, has the option of cancelling the workflow by clicking on the **Cancel Workflow** button.

Workflows are detailed in another chapter in this book and, hence, not covered here.

Document actions

A number of actions are available for the user to do for a document. These are also listed in the **Document Details** page:



The following table lists the document actions and the consequences. For each of the actions a new window opens which allows the user to carry out the desired task:

Document Actions	Consequence
Download	Click on Download to download the document onto your system.
View in Browser	Click on View in Browser to view the document in the browser.
Edit Properties	Document properties can be edited by clicking on this
Upload New Version	A new document version can be uploaded through Edit Properties.

Document Actions	Consequence
Edit Offline	When you click on Edit Offline the document is downloaded on your system as a working copy and the document on Share is locked to prevent any editing. The document actions that remain are Edit Metadata, Upload New Version, Inline Edit, Download, View in browser, View Original Document, Start Workflow, and Cancel Editing. View Original Document lets users preview the original document. In this case users see the document action View Working Copy.
Copy to…	Copies the document to a specified location.
Move to…	Moves the document to a specified location.
Delete Document	Deletes the document upon confirmation.
Start Workflow	Starts a document workflow as per the user's selection.
Manage Permissions	Manages permissions based on the user's roles.
Manage Aspects	Aspects for the document can be managed from here.
Change Type	The content type can be changed by clicking on this. It will open up a window which will give a drop down list for the user to select the type from.
Publish	You can publish the document library content to various social media sites. Alfresco also has the provision for you to publicize this through posing messages on Facebook, Twitter, and LinkedIn.

Document versioning

Any document that is created or uploaded in the document library is versioned and, by default, is stored as version 1.0.

Clicking on a document name will open the **Document Details** page. On this page, the version history of the document is also maintained.

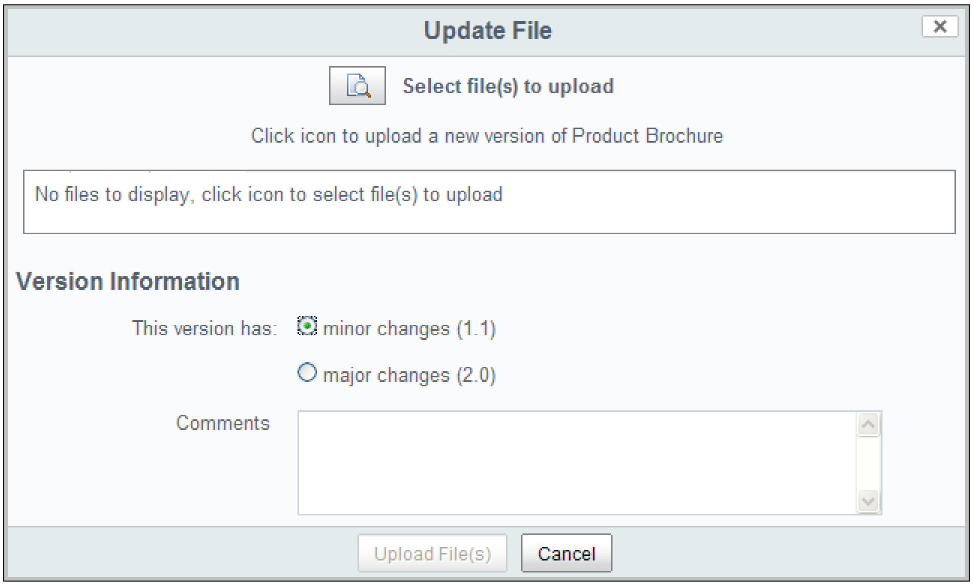
Managing versions can be done in the following two ways:

1. Upload a new version of the document. This can be done from the Upload New Version action listed in Document Actions.
2. Edit document and save the changed document as a new version.

Upload a new version

In the document details page, click on the **Upload New Version** action in the document actions listed.

This will open an **Update File** pop up window, as follows:



Update File

Select file(s) to upload

Click icon to upload a new version of Product Brochure

No files to display, click icon to select file(s) to upload

Version Information

This version has: ● minor changes (1.1)

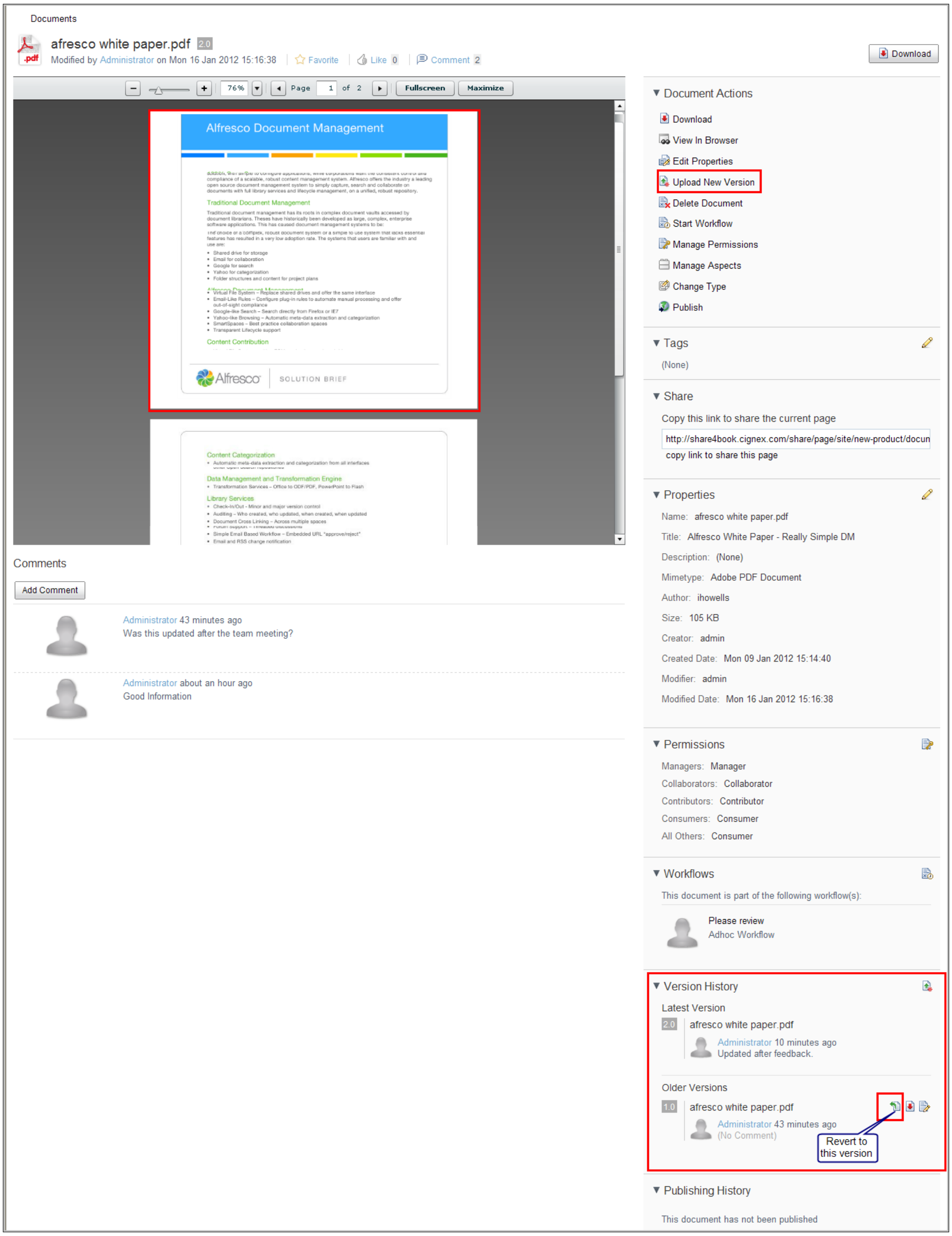
○ major changes (2.0)

Comments

Once the file has been selected, choose whether the new version has minor or major changes and the versioning will be carried out in the Share system accordingly. Click on **Upload File(s)**.

Users can also add their comments for added information on the updated file.

The **Document Details** page of the updated document opens up. The version number of the document is now updated in the version history:



afresco white paper.pdf

Modified by Administrator on Mon 16 Jan 2012 15:16:38

Comments

Administrator 43 minutes ago
Was this updated after the team meeting?

Administrator about an hour ago
Good Information

▼ Document Actions

- Download
- View In Browser
- Edit Properties
- Upload New Version
- Delete Document
- Start Workflow
- Manage Permissions
- Manage Aspects
- Change Type
- Publish

▼ Tags

(None)

▼ Share

Copy this link to share the current page

http://share4book.cignex.com/share/page/site/new-product/docun

copy link to share this page

▼ Properties

Name: afresco white paper.pdf
Title: Alfresco White Paper - Really Simple DM
Description: (None)
Mimetype: Adobe PDF Document
Author: ihowells
Size: 105 KB
Creator: admin
Created Date: Mon 09 Jan 2012 15:14:40
Modifier: admin
Modified Date: Mon 16 Jan 2012 15:16:38

▼ Permissions

Managers: Manager
Collaborators: Collaborator
Contributors: Contributor
Consumers: Consumer
All Others: Consumer

▼ Workflows

This document is part of the following workflow(s):

Please review
Adhoc Workflow

▼ Version History

Latest Version

2.0 afresco white paper.pdf
Administrator 10 minutes ago
Updated after feedback.

Older Versions

1.0 afresco white paper.pdf
Administrator 43 minutes ago
(No Comment)

▼ Publishing History

This document has not been published

Updating a new version after editing

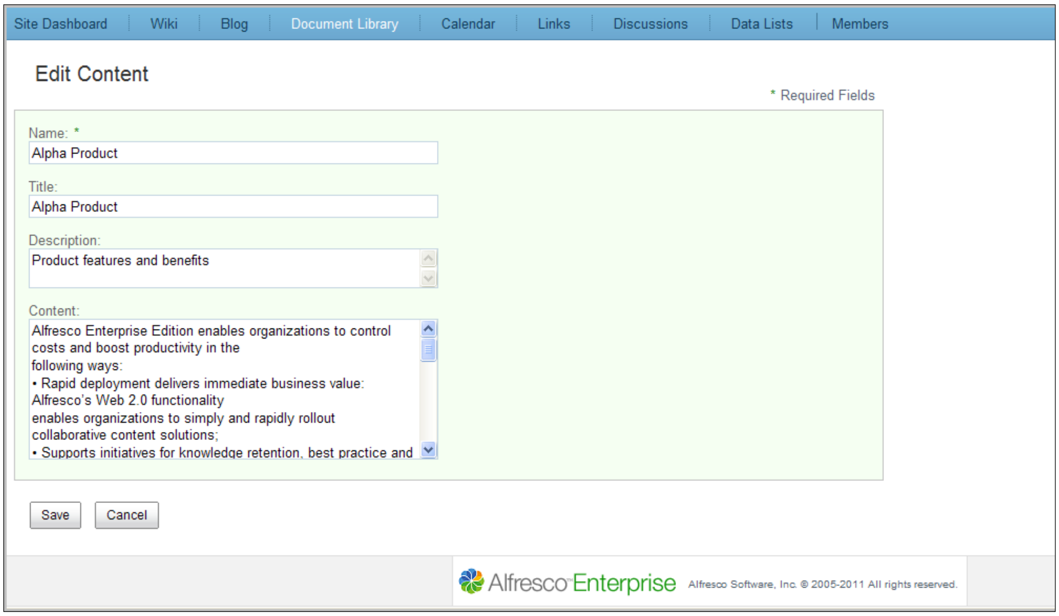
The users can also update the version when they have edited and updated a document. They can make the changes to the document and save it. They need to specify if the change is a minor one or a major change.

Alfresco provides intelligent editing features. Inline editing is available only for content that is created in Alfresco. For content such as MS Word, editing can be done online or offline. For content such as PDFs only offline editing is available.

Inline editing

Users can choose to edit a document inline by opening a document in a WYSIWYG editor. The document can also be edited offline by downloading it on to the user's system and then editing it.

Click on **Inline Edit** in **Document Actions**. This opens the document in the **Inline Edit** page:



Edit Content

* Required Fields

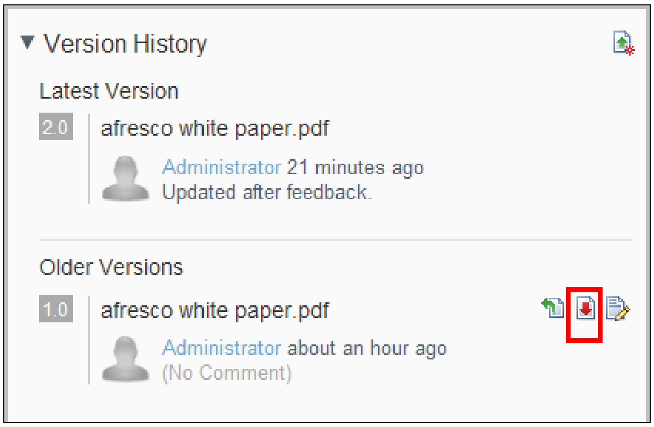
Name: *
Alpha Product

Title:
Alpha Product

Description:
Product features and benefits

Content:
Alfresco Enterprise Edition enables organizations to control costs and boost productivity in the following ways:
• Rapid deployment delivers immediate business value: Alfresco's Web 2.0 functionality enables organizations to simply and rapidly rollout collaborative content solutions;
• Supports initiatives for knowledge retention, best practice and

Make the required changes and save the document by clicking on **Save**. Now in the **Document Details** page, the version history lists the new version, as follows:



▼ Version History

Latest Version

2.0 afresco white paper.pdf

Administrator 21 minutes ago
Updated after feedback.

Older Versions

1.0 afresco white paper.pdf

Administrator about an hour ago
(No Comment)

Online edit

SharePoint Protocol needs to be configured to enable this feature. However, it is important to note that there is a known issue with Office 2003 and 2007. The documents open as read-only in Internet Explorer for all versions before Vista SP1.

Furthermore, to use online edit in Windows 7, you must set `BasicAuthLevel` in the registry. Basic authentication is disabled in Office 2010. To enable it, you must create, or edit, the following registry key:

```
HKCU\Software\Microsoft\Office\14.0\Common\Internet:
  BasicAuthLevel=2.
```

Kerberos authentication can also be used. Set the `vti.server.external.host` and `vti.server.external.port` properties in the `alfresco-global.properties` file. This will set the values to the externally resolvable host and port name that SharePoint clients will communicate with. These properties default to the host machine's local name and port 7070, respectively. Share will use these to generate the `Edit Online` link. The document is opened using the SharePoint module.

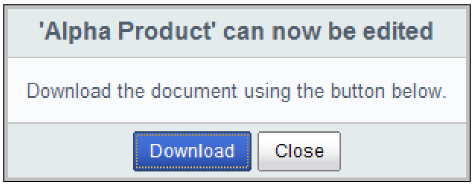
Enabling the **Online Edit** option allows you to bypass the tasks of downloading the item to your computer and then updating the repository version with the changes. Navigate to the space containing the content item you want to make changes to, they are as follows:

1. Click the ✎ icon to edit the item online. Once this is clicked, the item is locked to prevent others from making changes to the item at the same time. It is locked by you.

2. An online editor opens up. This now displays the content you have selected to edit. It is a working copy of the content.
3. Edit the document. Click on **Save** to save the changes you have made.
4. At any time, you can click the ✎ icon. This cancels the editing task and unlocks the item without saving any changes that may have been made.
5. The working copy of the item displays the updated timestamp. You can leave the item locked if you plan to work on it again, or you can unlock it so that it is available to other users.
6. Click the ✎ icon once you are done editing. This will unlock the document and add the updates to the repository.

Offline editing

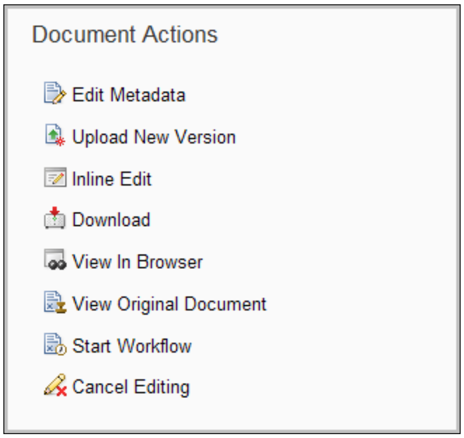
Click on **Edit Offline** in **Document Actions** to edit the document offline. This creates a working copy of the document and locks the document for editing by any other user until the editing is done:



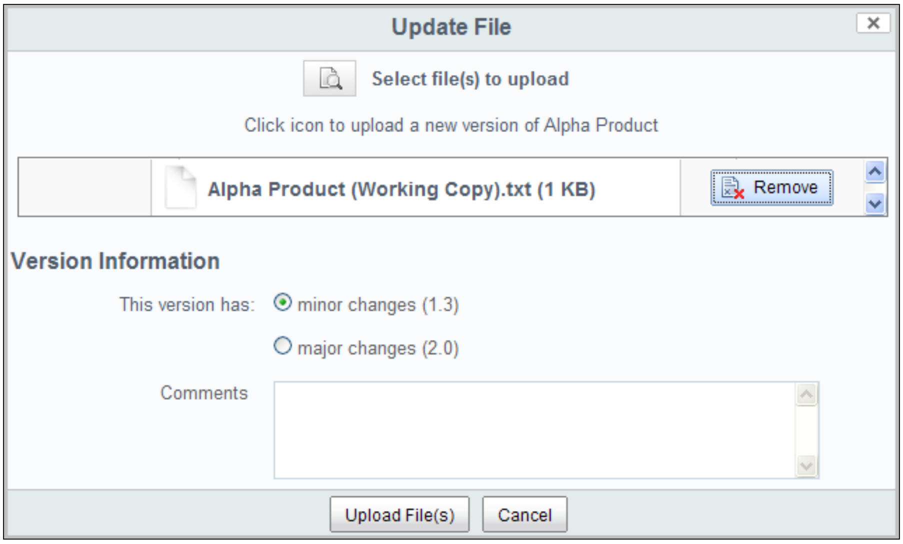
'Alpha Product' can now be edited

Download the document using the button below.

Download the document to a desired location and then edit the document. The document actions that can be performed include uploading the new version, view original version, view in browser, assign workflow, and so on. The user can also cancel the editing:



Once the document has been edited, users can click on **Upload New Version** to upload the updated document. Click on **Upload File(s)** to upload the revised document. Users can add their comments to add more information, as shown in the following screenshot:



Update File

Select file(s) to upload

Click icon to upload a new version of Alpha Product

Alpha Product (Working Copy).txt (1 KB)

Version Information

This version has: ● minor changes (1.3)

○ major changes (2.0)

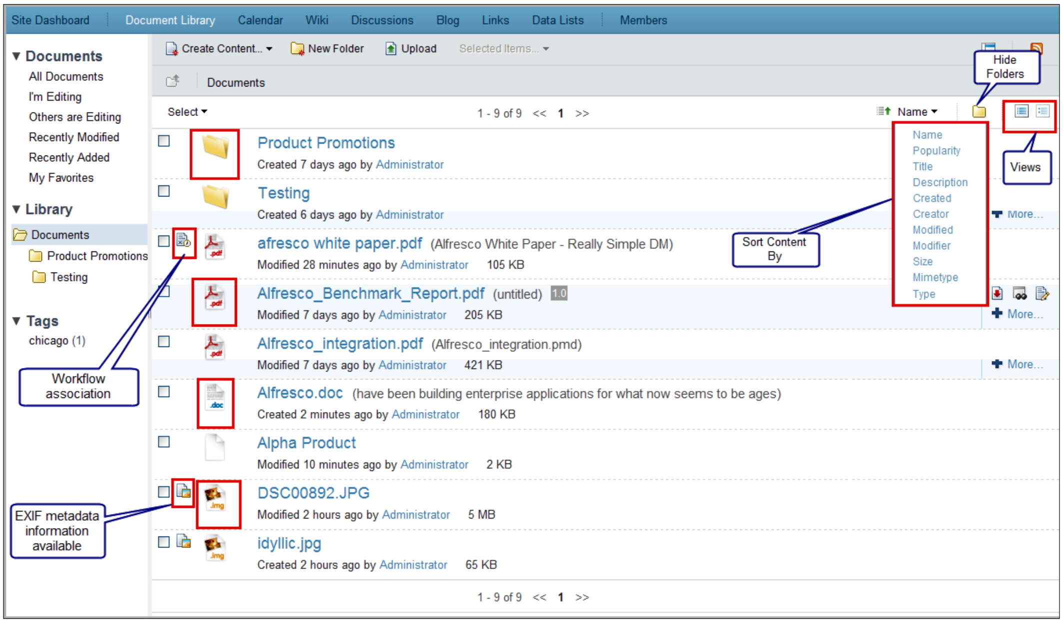
Comments

This is, again, reflected in the version history in the **Document Details** page.

Thumbnails and universal viewing with web previews

The documents in the library are listed in the library. Each document has a thumbnail, or an icon, besides its name and description depending on the folder view that is selected. In the simple view, the icons represent the type of document, PDF, Word, and so on.

In the detailed view, every document has a thumbnail beside it, as follows:



□ Product Promotions
Created 7 days ago by Administrator

□ Testing
Created 6 days ago by Administrator

□ afresco white paper.pdf (Alfresco White Paper - Really Simple DM)
Modified 28 minutes ago by Administrator 105 KB

□ Alfresco_Benchmark_Report.pdf (untitled)
Modified 7 days ago by Administrator 205 KB

□ Alfresco_integration.pdf (Alfresco_integration.pmd)
Modified 7 days ago by Administrator 421 KB

□ Alfresco.doc (have been building enterprise applications for what now seems to be ages)
Created 2 minutes ago by Administrator 180 KB

□ Alpha Product
Modified 10 minutes ago by Administrator 2 KB

□ DSC00892.JPG
Modified 2 hours ago by Administrator 5 MB

□ idyllic.jpg
Created 2 hours ago by Administrator 65 KB

Hide Folders

Views

Sort Content By

Workflow association

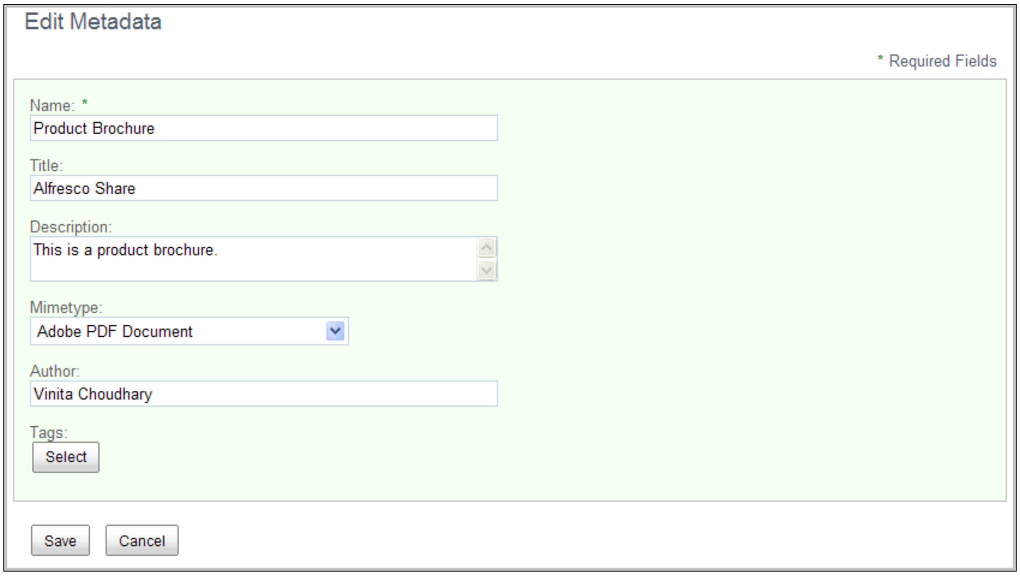
EXIF metadata information available

If a document has an active workflow associated, an icon is displayed besides the thumbnail to represent this. Similarly, if external information about an image is available, it is represented by an icon beside the image icon.

Clicking on the **View in Browser** action in the **Documents** action, or on the actions that appear besides the document on move over, opens the document in the browser.

Tagging documents

To tag documents, click on **Edit Metadata** in the **Document Actions** section. This will open a window where metadata can be edited and tags can be added:



Edit Metadata

* Required Fields

Name: *
Product Brochure

Title:
Alfresco Share

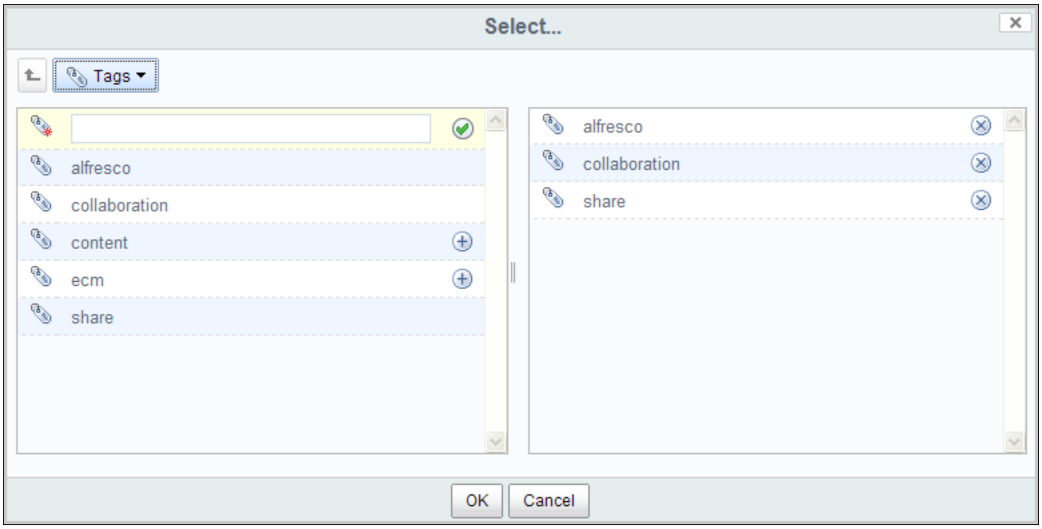
Description:
This is a product brochure.

Mimetype:
Adobe PDF Document

Author:
Vinita Choudhary

Tags:

To add tags, click on the **Select** button, as shown in the following screenshot:

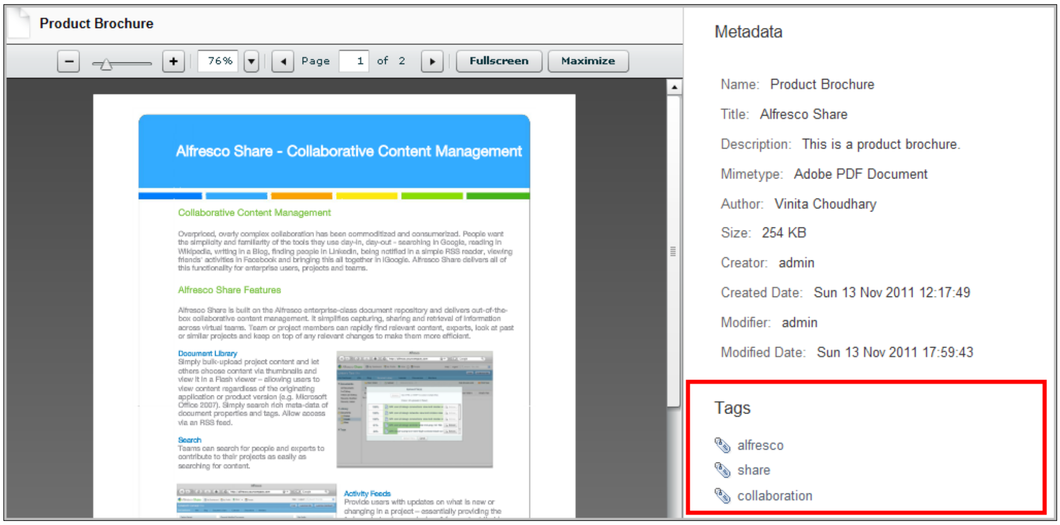


Select...

alfresco
collaboration
content
ecm
share

alfresco
collaboration
share

This will attach the tags selected with the document. Now, the tags will appear listed in the **Document Details** page:



Alfresco Share - Collaborative Content Management

Collaborative Content Management

Overpriced, overly complex collaboration has been commoditized and consumerized. People want the simplicity and familiarity of the tools they use day-in, day-out - searching in Google, reading in Wikipedia, writing in a Blog, finding people in LinkedIn, being notified in a simple RSS reader, viewing friends' activities in Facebook and bringing this all together in IGoogle. Alfresco Share delivers all of this functionality for enterprise users, projects and teams.

Alfresco Share Features

Alfresco Share is built on the Alfresco enterprise-class document repository and delivers out-of-the-box collaborative content management. It simplifies capturing, sharing and retrieval of information across virtual teams. Team or project members can rapidly find relevant content, experts, look at past or similar projects and keep on top of any relevant changes to make them more efficient.

Document Library
Simply bulk-upload project content and let others choose content via thumbnails and view it in a Flash viewer – allowing users to view content regardless of the originating application or product version (e.g. Microsoft Office 2007). Simply search rich meta-data of document properties and tags. Allow access via an RSS feed.

Search
Teams can search for people and experts to contribute to their projects as easily as searching for content.

Activity Feeds
Provide users with updates on what is new or changing in a project – essentially providing the

Metadata

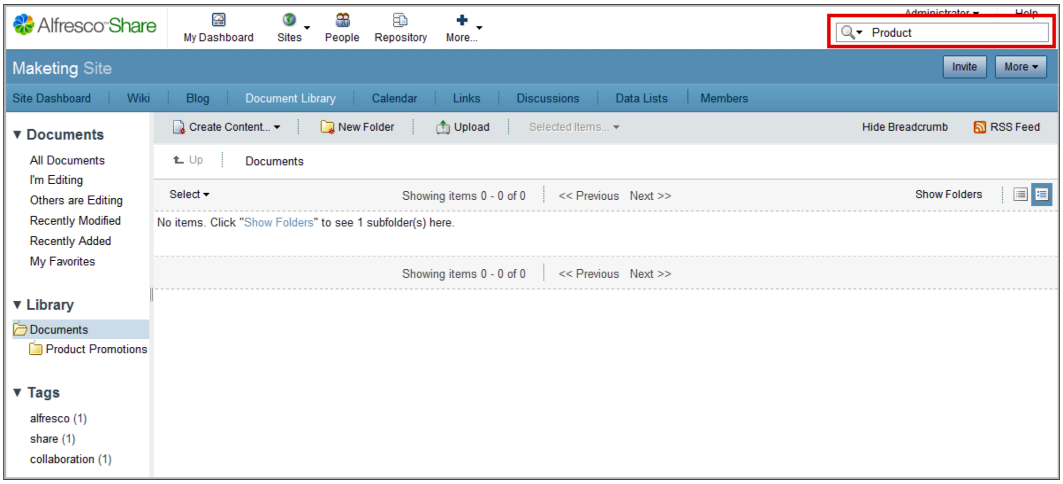
Name: Product Brochure
Title: Alfresco Share
Description: This is a product brochure.
Mimetype: Adobe PDF Document
Author: Vinita Choudhary
Size: 254 KB
Creator: admin
Created Date: Sun 13 Nov 2011 12:17:49
Modifier: admin
Modified Date: Sun 13 Nov 2011 17:59:43

Tags

alfresco
share
collaboration

Search for documents

Searching for documents is efficiently carried out by the Lucene search engine, which powers the search in Alfresco. The search results display the term that was searched for not only in the file/document name, but also if the term is within the document:



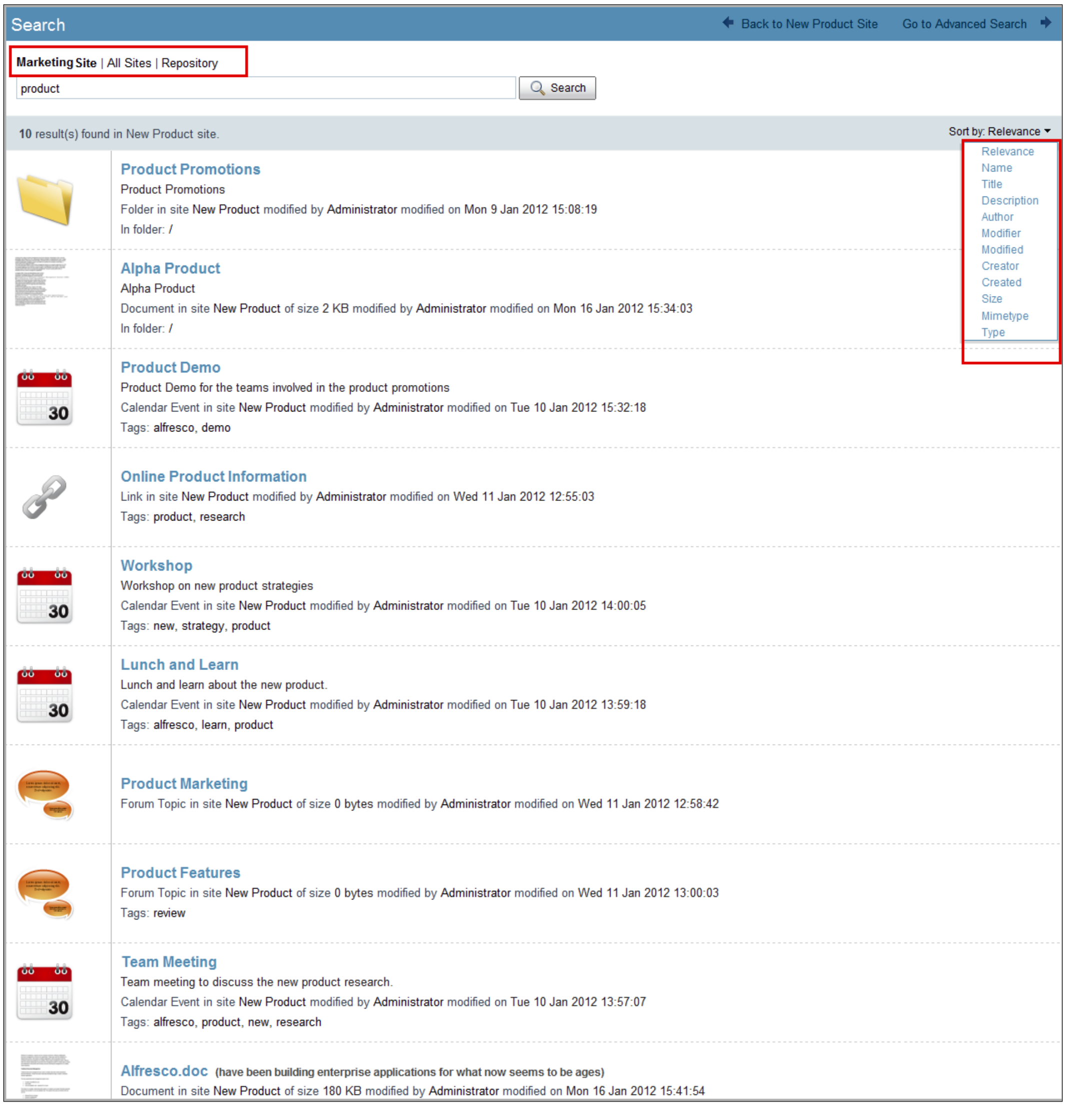
Product

Showing items 0 - 0 of 0

No items. Click "Show Folders" to see 1 subfolder(s) here.

Showing items 0 - 0 of 0

The search is carried out through the system and the search results are displayed in a paginated manner. The search results can be sorted based on the current site, all sites or the entire repository by selecting from the tabs on top:



10 result(s) found in New Product site.

Product Promotions
Product Promotions
Folder in site New Product modified by Administrator modified on Mon 9 Jan 2012 15:08:19
In folder: /

Alpha Product
Alpha Product
Document in site New Product of size 2 KB modified by Administrator modified on Mon 16 Jan 2012 15:34:03
In folder: /

Product Demo
Product Demo for the teams involved in the product promotions
Calendar Event in site New Product modified by Administrator modified on Tue 10 Jan 2012 15:32:18
Tags: alfresco, demo

Online Product Information
Link in site New Product modified by Administrator modified on Wed 11 Jan 2012 12:55:03
Tags: product, research

Workshop
Workshop on new product strategies
Calendar Event in site New Product modified by Administrator modified on Tue 10 Jan 2012 14:00:05
Tags: new, strategy, product

Lunch and Learn
Lunch and learn about the new product.
Calendar Event in site New Product modified by Administrator modified on Tue 10 Jan 2012 13:59:18
Tags: alfresco, learn, product

Product Marketing
Forum Topic in site New Product of size 0 bytes modified by Administrator modified on Wed 11 Jan 2012 12:58:42

Product Features
Forum Topic in site New Product of size 0 bytes modified by Administrator modified on Wed 11 Jan 2012 13:00:03
Tags: review

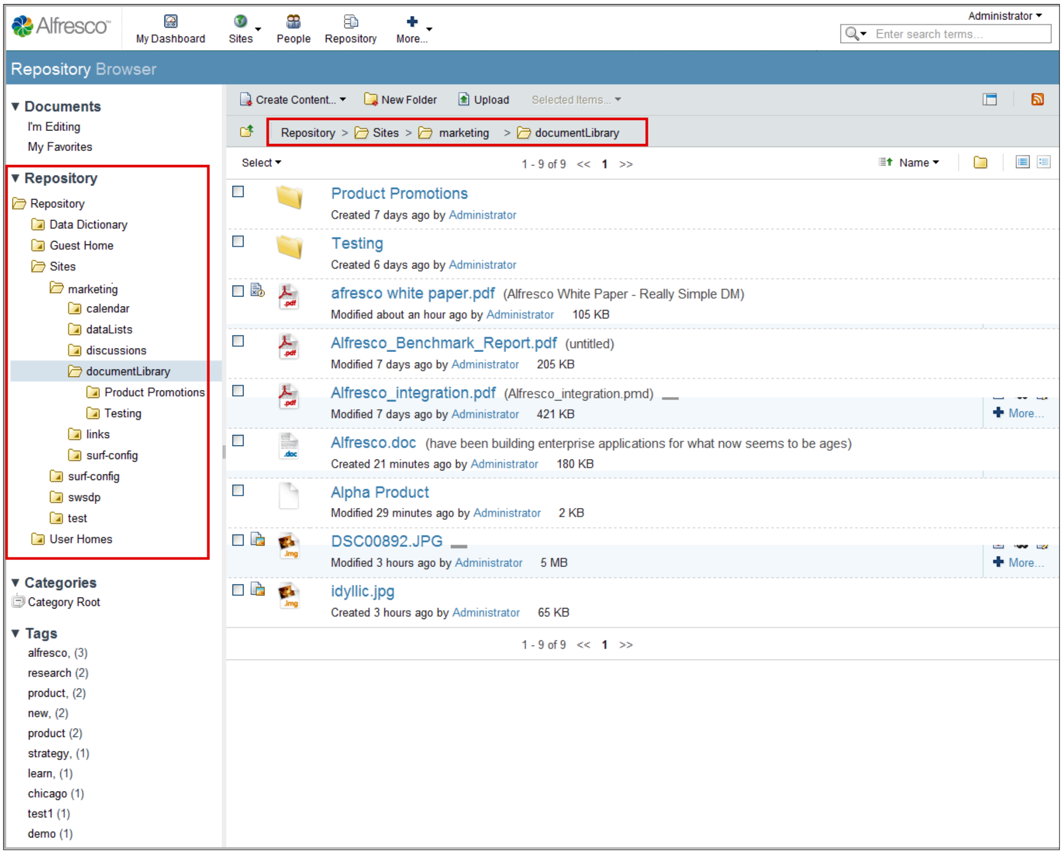
Team Meeting
Team meeting to discuss the new product research.
Calendar Event in site New Product modified by Administrator modified on Tue 10 Jan 2012 13:57:07
Tags: alfresco, product, new, research

Alfresco.doc (have been building enterprise applications for what now seems to be ages)
Document in site New Product of size 180 KB modified by Administrator modified on Mon 16 Jan 2012 15:41:54

The search results can be sorted based on various parameters such as relevance, name, author, created, size, and so on.

Accessing the Repository

Click on the **Repository** button on the top navigation bar to access the repository, as shown in the following screenshot:



□ Product Promotions
Created 7 days ago by Administrator

□ Testing
Created 6 days ago by Administrator

□ afresco white paper.pdf (Alfresco White Paper - Really Simple DM)
Modified about an hour ago by Administrator 105 KB

□ Alfresco_Benchmark_Report.pdf (untitled)
Modified 7 days ago by Administrator 205 KB

□ Alfresco_integration.pdf (Alfresco_integration.pmd)
Modified 7 days ago by Administrator 421 KB

□ Alfresco.doc (have been building enterprise applications for what now seems to be ages)
Created 21 minutes ago by Administrator 180 KB

□ Alpha Product
Modified 29 minutes ago by Administrator 2 KB

□ DSC00892.JPG
Modified 3 hours ago by Administrator 5 MB

□ idyllic.jpg
Created 3 hours ago by Administrator 65 KB

The document library of the site can be accessed by going in to the Sites folder and selecting the relevant site. Clicking on the **document Library** thereafter will allow users access to the folders and documents of the site's document library.

Summary

As seen in this chapter, the document library in Share is an easy to use feature which has many benefits for the teams collaborating on various tasks. The features of tagging enable a better search. Workflows, permission, and aspects can be easily managed through the document actions available.

The next chapter is on implementing workflows in Alfresco Share. Here we shall learn how the documents, and other content, are put through the workflow and the various options available to use.

8
Implementing Workflow

Workflow is an automation of a business process, during which documents are passed from one participant to another for action, according to a set of procedural rules. Every content management system implementation will have workflow requirements. For some companies, a workflow could be a simple approval process and for some companies it could be a complex business process management. Alfresco simple workflow can be configured to automatically apply actions to documents within folders. Business rules can be applied to documents within the document library to automate the movement of documents through business processes. This chapter explains how advanced workflows can be initiated from within Share and the use of simple workflows built in through Share.

By the end of this chapter, you will learn how to:

- Create and apply rules to folders in the document library, to enable a simple workflow
- Initiate a new advanced workflow from the list of predefined workflows
- Track open workflows
- Assign documents and properties to the workflow
- Take ownership of a task
- Reassign a task
- Change the workflow state
- List tasks assigned to you and tasks completed by you

Introduction to the Alfresco workflow process

Alfresco includes two types of workflows out-of-the-box. One is the **s**imple workflow, which is content-oriented, and the other one is the advanced workflow, which is task-oriented.

The **simple workflow** process in Alfresco is the movement of documents through various folders. It is simple, in that each workflow definition is restricted to a single state. Multiple states are represented by loosely tying multiple workflow definitions. Loose coupling is achieved by attaching a workflow definition to a folder and a workflow instance to a content item. A content item is moved, or copied, to a new folder, at which point a new workflow instance is attached based on the workflow definition of the folder. A workflow definition is unaware of other related workflow definitions. The good thing about it is that end users can configure the workflow without any technical skills or developer support.

The advanced workflow process is task-oriented, where you create a task, attach documents to be reviewed, and assign it to appropriate reviewers. You can track the list of tasks assigned to you and the tasks initiated by you. You can change the status of the tasks, reassign the tasks to other users, and cancel a task. You can send various notifications to all the parties involved and track the tasks to closure.

You can use out-of-the-box features provided by both the workflows, or you can create your own custom advanced workflow as per the business processes of your organization.

So far, we have learned how to create a site, users, and store documents for a site in Alfresco Share. In addition, we also know that we are going to develop a marketing site for a product with the help of this book. Now, we will see how we can start the workflow on those documents. In this chapter, we will implement the processes that go through a series of approvals and rejections until the final draft is prepared to publish and distribute collaterals such as brochures, presentations, flyers, banners, posters, and so on, to understand the concepts of simple and advanced workflows.

Simple workflows

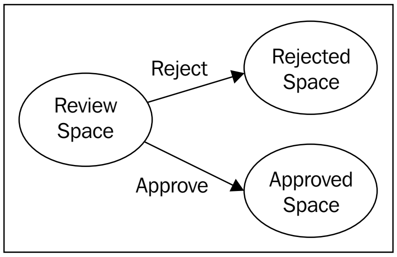
For example, consider a banner needed for a marketing site that moves through various groups of users for designing and approval before publishing. This can be implemented by using a simple workflow in Share.

In this case, you have to create folders for each group and allow the banner to move through various folders with two steps: approve and reject. Each folder is secured, allowing only users of that group to edit the banner and to move it to the next level in the workflow process. The workflow process is so flexible that you could introduce new steps for approval into the operation without changing any code.

Out-of-the-box features

The simple workflow is implemented as an aspect, which could be attached to any document in a folder through a business rule. Workflows can also be invoked on individual content items and folders as actions.

A workflow has two steps: one is the approve step and the other is the reject step. A simple workflow is easy to define. You can refer to the following diagram to understand the concept of defining a workflow. Consider that a workflow is defined for the documents in a folder named `Review`. It is defined with just two steps: approve and reject. Users belonging to the `Review` folder can act upon the document. If they reject it, then the document moves to a folder named `Rejected` and if they approve it then the document moves to a folder called `Approved`. You can define the names of the folders and the users on the folders, as per your business requirements. You can also rename the steps approve and reject:



Defining and using simple workflows

The process to define and use simple workflows in Share is as follows:

- Identify folders and set security on those folders
- Define your workflow process
- Add workflow to the content in those folders accordingly
- Select the e-mail template and people to send e-mail notifications to
- Test the workflow process

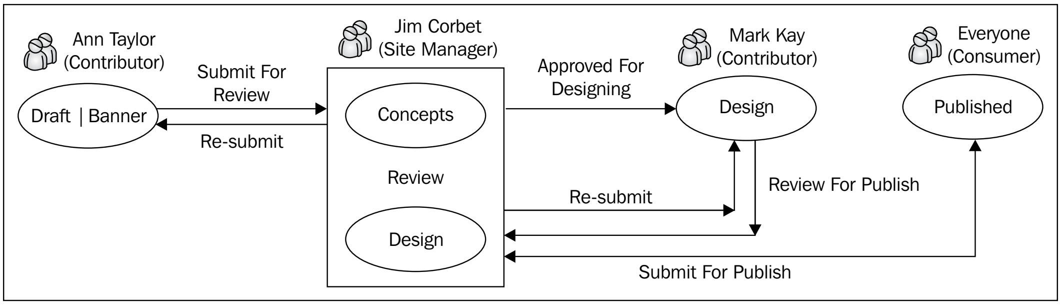
Take an example of reviewing and approving a banner for a marketing site. In order to initiate a process, prepare a draft of concepts for a banner. Send the draft for a review. If it is approved, it goes to the designing team to start working on the design and if rejected it goes back to draft it again. Once the designing team is ready with a design, it again goes for a review. If it is approved, it goes for publishing, otherwise it will go back to design.

Identifing spaces and security

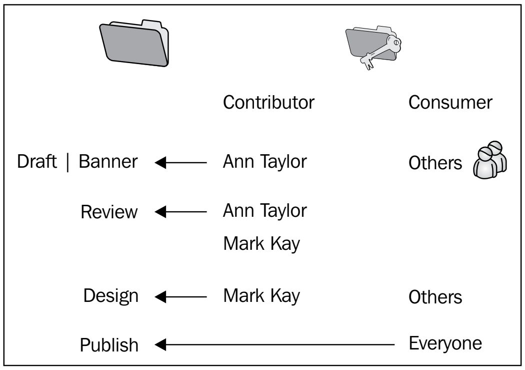
If you go to the `marketing` folder of a site, you will notice the following subspaces:

- `Draft`: This folder contains initial drafts of concepts for collaterals including brochures, presentations, flyers, banners, posters, and so on, which are being edited. Now, create two more folders inside the `Draft` folder as `Banner` and `Brochure`. Set security in such a way that a few selected users such as *Ann Taylor*, who is a collaborator for a site and acts as a contributor to the `Draft | Banner` folder and can add and edit documents in the space. Being a contributor of this space, *Ann* can add the content, but cannot edit content on which she has not initially contributed. In addition, *Ann* can provide comments for any document in this space and *Mark Kay*, who is a contributor for the site, acts as a consumer to this folder as *Mark* is not involved in creating concepts of the collateral.
- `Review`: This folder contains all the collaterals under review. Now, create two more folders inside the `Review` folder as `Concepts` and `Design`. Set security such that *Ann Taylor*, who is a collaborator of a site, acts as a contributor of this folder and has the permission to move her own created concepts from the `Draft | Banner` folder to the `Review | Concepts` folder for a review.
- `Design`: This folder is to draft a design of collaterals after the concept is reviewed and approved. Set the security on this space such that *Ann Taylor*, who is a collaborator of a site, can act as a consumer for this folder, as *Ann* does not design the collaterals. *Mark Kay* is the one who is going to design collaterals. *Mark* is already a contributor for a site.
- `Published`: This space contains all the collaterals that are approved and visible to others. Nobody should add and edit the documents while they are in the `Published` space. Set security such that the collaborator and contributor of a site act as a consumer for not allowing editing and adding of any content.

The following diagram illustrates the simple workflow design and users acting on those folders:



The following diagram illustrates the permissions of users on those folders. Set the security on these subspaces as mentioned:



For more information about securing spaces, refer to *Chapter 7*, *Document Library*.

For more information about creating users, refer to *Chapter 4*, *Administering Share and Configuring Authentication Access*.

Defining the workflow process

Now that you have identified the spaces, the next step is defining your workflow process.

We will configure the workflow to all the banners in the `Draft | Banner` space. When a user selects the approve action named *Submit for Review* on a document, the document moves from the `Draft | Banner` space to the `Review | Concepts` space.

Let's configure the workflow to all the banners in the `Review | Concepts` space. When a user selects the approve action named *Approved for Designing* on a document, the document moves from the `Review | Concepts` space to the `Design` space. Similarly, when a user selects the reject action named *Re-submit* on a document, it moves back from the `Review | Concepts` space to the `Draft | Banner` space.

Let's configure the workflow to all the banners in the `Design` space. When a user selects the approve action named *Review for Published* on a document, the document moves from the `Design` space to the `Review | Design` space.

Let's configure the workflow to all the banners in the `Review | Design` space. When a user selects the approve action named *Approve for Published* on a document, the document moves from the `Review | Design` space to the `Published` space. Similarly, when a user selects the reject action named *Re-submit* on a document, it moves from the `Review | Design` space to the `Design` space.

You can have as many review steps (folders) as needed and you can choose the workflow action names as per your business requirements.

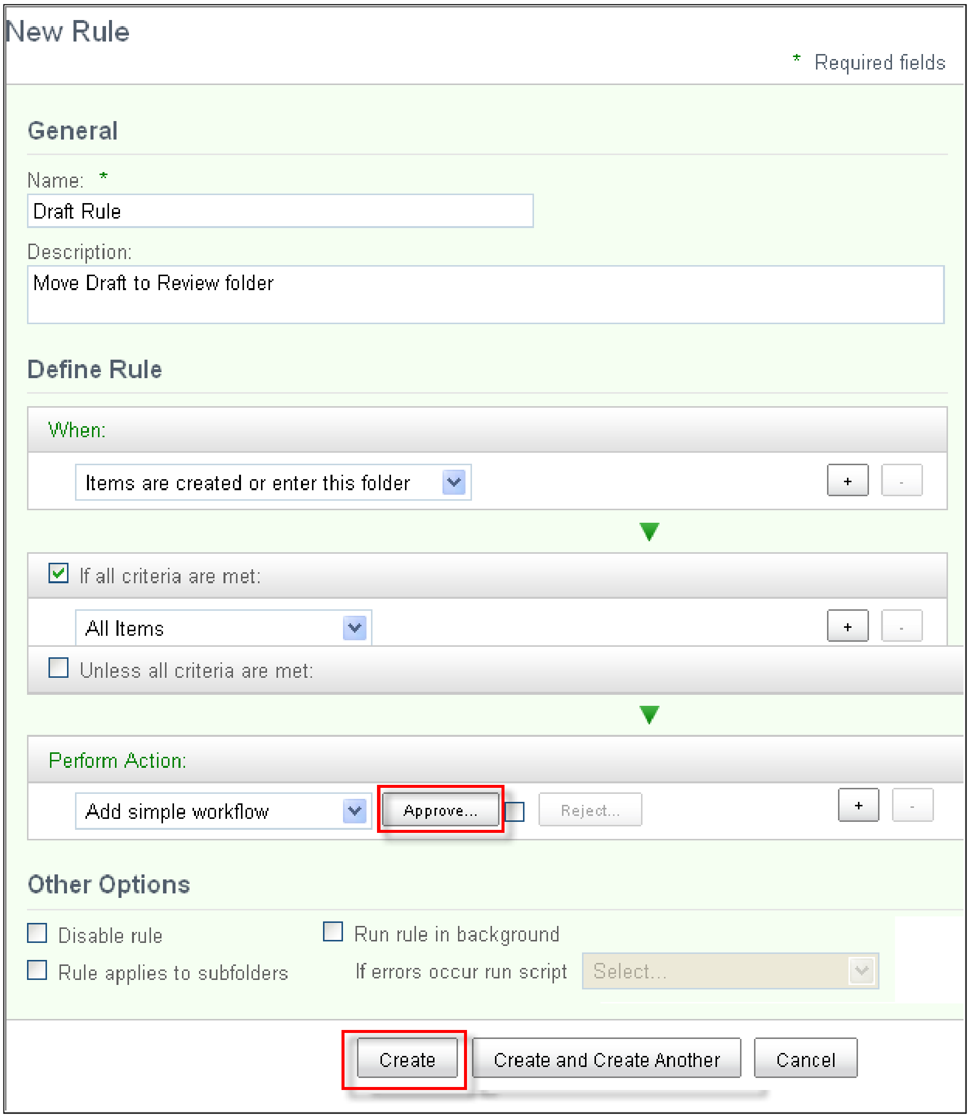
Adding a simple workflow to items

Now that you have defined your workflow process, the next step is to add a workflow to the documents in these spaces. As we want to add workflows to all documents, we have to create business rules on that folder. If we don't follow this, then we have to apply a workflow on each document, which can become a tedious task.

In order to add a workflow to the **marketing | Draft | Banner** space, carry out the following steps:

1. Login in as **Jim Corbet** who is the site manager of this site. Ensure that you are in the `Marketing | Draft | Banner` space of a marketing site.
2. Click on **Folder Actions | Manage Rules**.
3. Click on the **Create Rules** link and you will see the **New Rule** page.

4. Add the details, as shown in the following screenshot:



New Rule

* Required fields

General

Name: * Draft Rule

Description: Move Draft to Review folder

Define Rule

When: Items are created or enter this folder

☑ If all criteria are met: All Items

☐ Unless all criteria are met:

Perform Action: Add simple workflow

Other Options

☐ Disable rule

☐ Rule applies to subfolders

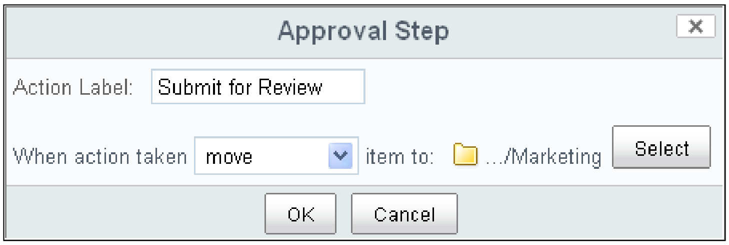
☐ Run rule in background

If errors occur run script Select...

Click on the **Approve** button and provide the workflow step name as **Submit For review**.

1. Select **move** as the action and click on the **Select** button to select the `Review | Concepts` folder.
2. Click on the **OK** button.

3. The workflow for the `Draft | Banner` space does not require the reject step. Hence, don't select a checkbox for **Reject**, click on the **Create** button to create a rule for the `Draft | Banner` folder:



Approval Step

Action Label: Submit for Review

When action taken: move item to: .../Marketing

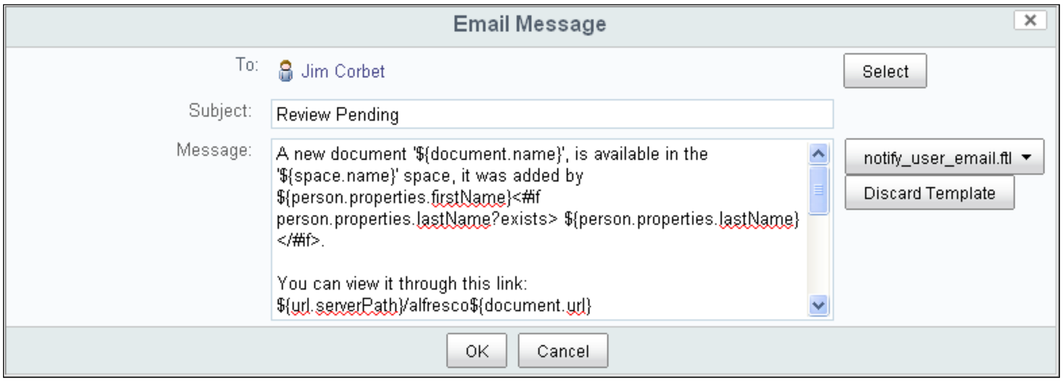
4. Go to the `marketing | Review | concepts` space of a marketing site and follow the steps 2-4 steps to create rules. Remember, this space has both **Approve** and **Reject** actions. Provide a workflow step name as **Approve for Designing** that moves the content to the `Design` folder on the **Approve** action. Provide the **Re-submit** for **Reject** action which moves the content to the `Draft | Banner` space.
5. Now go to the `marketing | Design` space of a marketing site and follow the 2-4 steps to create the rules. Remember this space has only **Approve** actions.
6. Provide the workflow step name as **Review for Publish** that moves the content to the `Review | Design` folder on **Approve** action.
7. Go to the `marketing | Review | Design` space of a marketing site and follow the 2-4 steps to create the rules**.** Remember this space has both **Approve** and **Reject** actions. Provide a workflow step name as **Approve for Publish** that moves the content to the `Published` folder on the **Approve** action. Provide the **Re-submit** for **Reject** action, which moves the content to the `Design` space.

Sending notifications to reviewers for approval

You can send notifications by an e-mail to reviewers whenever the content needs approval. For our case study, let's consider **Jim Corbet** as a reviewer. The SMTP e-mail settings shall be configured to run this rule. You can find details about the configuration in *Chapter 5*, *Managing and Configuring a Site*. Carry out the following steps to send an e-mail notification, when a document gets into the **Review** space:

1. Ensure that you are in the `Marketing | Review` folder of a site.
2. Click on the **Folder Actions | Manage Rules**.
3. Click on the **Create Rule** link and you will see the **New Rule Page**.
4. Select the **Send email** action. Select **Message**.

5. You will notice an **Email Message** dialog box opening up, as shown in the following screenshot:



To: Jim Corbet

Subject: Review Pending

Message:

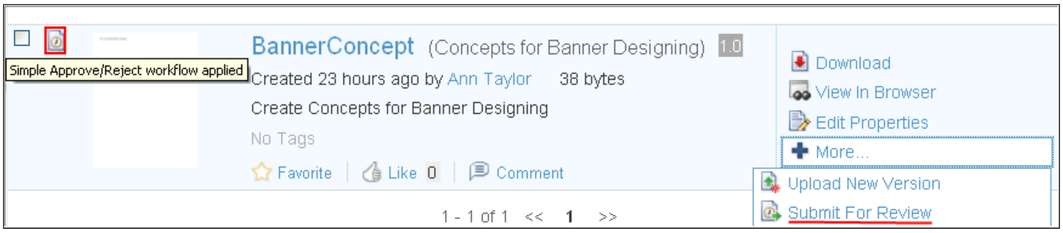
```
A new document '${document.name}', is available in the
'${space.name}' space, it was added by
${person.properties.firstName}<#if
person.properties.lastName?exists> ${person.properties.lastName}
</#if>.

You can view it through this link:
${url.serverPath}/alfresco${document.url}
```

6. Search and select the reviewer's name as an e-mail recipient and click on the **Add** button. Provide an appropriate subject for the e-mail. As an e-mail message, you can either provide your own text or use the built-in e-mail template (`notify_user_email.ftl`), as shown in the preceding screenshot.
7. Click on **OK** and select the checkbox to apply the rules to the subfolders, and then click on the **Create** button.

Testing the simple workflow

In order to test the workflow process, let's log in with the **Ann Taylor** user and go to the `Draft` | `Banner` space and upload a concept for the banner. You will notice the available workflow actions in the **More** drop-down menu, as shown in the following screenshot. When you click on the **Submit for Review** action, the document will be moved automatically to the `Review` | `Concepts` space as per the workflow rule:



BannerConcept (Concepts for Banner Designing) 1.0

Created 23 hours ago by Ann Taylor 38 bytes

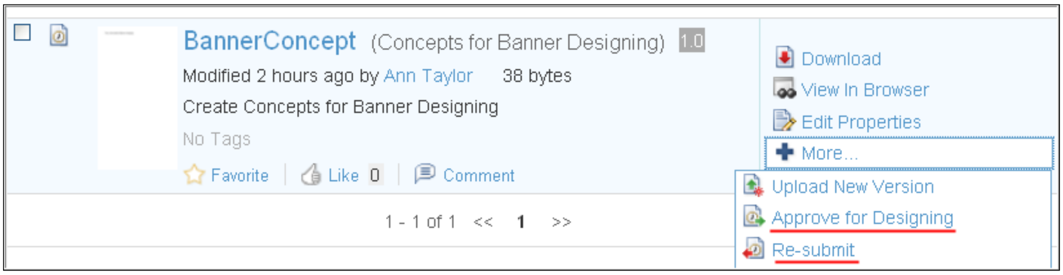
Create Concepts for Banner Designing

No Tags

When the document moves into the `Review` | `Concepts` space, two business rules will be applied.

One business rule is to send an e-mail notification to the reviewer indicating to him or her that the document is pending approval. If your e-mail server is configured right, then **Jim Corbet** will receive e-mail notifications with information about the document.

The second business rule is the workflow on all the incoming documents to this space. When **Jim Corbet** logs in, he will notice the workflow actions in the **More** drop-down menu, as shown in the following screenshot:

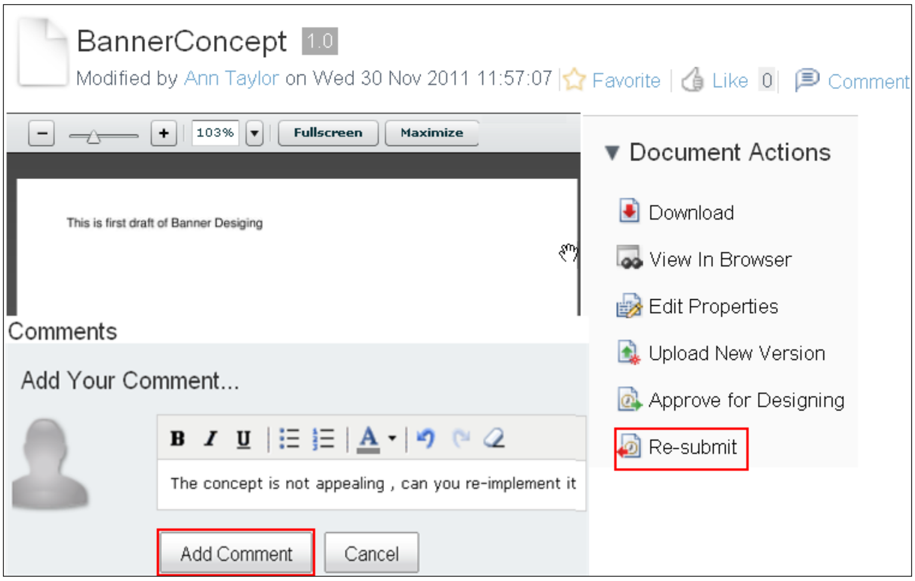

BannerConcept (Concepts for Banner Designing) 1.0

Modified 2 hours ago by Ann Taylor 38 bytes

Create Concepts for Banner Designing

No Tags

If the reviewer is fine with the concepts, then he can click on the **Approve for Designing** action and the document will be moved to the `Design` space automatically. If the reviewer requires more details, or is not satisfied with the concept, then he can click on the **Re-submit** action to send the document to the original author to edit and re-submit. Add comments to the concept and select the **Re-submit** action to draft it again. The document moves back to the `Draft | Banner` space:


BannerConcept 1.0

Modified by Ann Taylor on Wed 30 Nov 2011 11:57:07

This is first draft of Banner Desiging

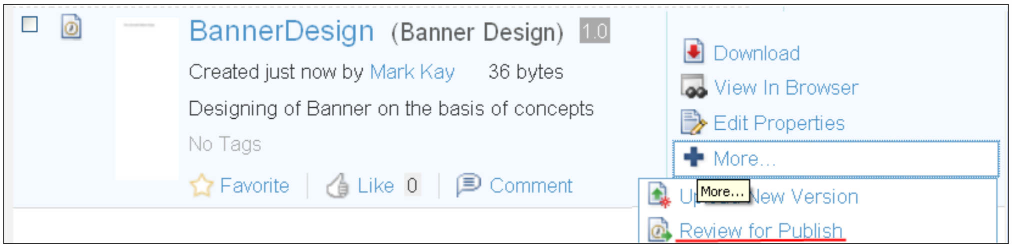
Comments

Add Your Comment...

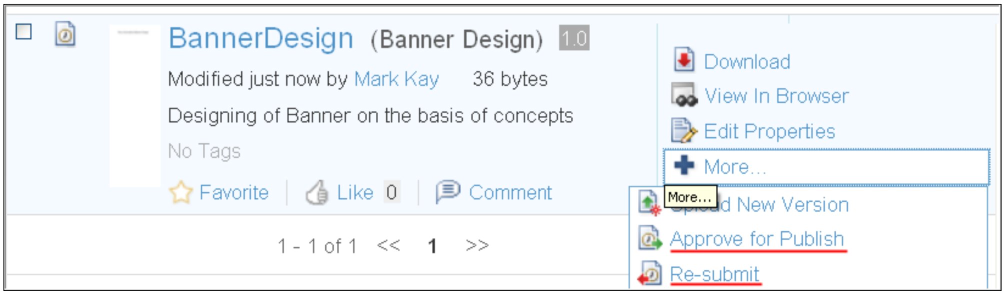
The concept is not appealing , can you re-implement it

Log in as **Ann Taylor**, create another banner with the name **BannerConcept_1.1** in the `Draft | Banner` space, make the changes, and start the workflow process all over again. The document moves back to the `Review | Concept` folder. **Jim Corbet** is going to review it again and he selects the **Approve for Designing** action this time.

When **Mark Kay** logs in, he will notice the concept in the `Design` folder. Create another draft of the design based on the concept and start a workflow to review the design. Select the **Review for Publish** action in the **More** drop-down menu, as shown in the following screenshot. This will move the document to the `Review | Design` space:



When **Jim Corbet** logs in, he will notice the design in the `Review | Design` space and will have the workflow actions in the **More** drop-down menu, as shown in the following screenshot. Select the **Approve for Publish** action and the design will be moved to the `Published` folder. If the reviewer requires more details, or is not satisfied with the design, then he can click the **Re-submit** action to send the document to the original author to edit and re-submit:



- When the document is in the `Published` state, it is typically visible to all the required employees as it is already reviewed and approved, but no one has the permission to add or edit the final draft.

Advanced workflows

Simple workflows are good to implement content-oriented workflow processes. However, there are certain limitations of the simple workflow which are as follows:

- Unable to create multi-state workflow definitions
- Restricted to one or two exit transitions (approve, reject)
- Unable to define parallel workflows
- Reliance on the folder structure for multi-stage workflow and action triggering
- No notion of a task or an assignment
- No way to add logic for decisions or other more complex constructs; conditional decision making/conditional transition is not possible in simple workflows

In order to resolve these limitations, Alfresco has embedded the Activiti **BPMN** (**Business Process Model and Notion**) 2.0, **BPM** (**Business Process Management**) engine in addition to the **JBPM** (**JBoss Business Process Management**) engine into its core. By default, Alfresco is configured with Activiti. The JBPM engine can be used with minor configuration changes. Activiti process definitions are written in BPMN 2.0 and are deployed and managed in exactly the same way as the JBPM process definitions. Alfresco provides the same set of pre-defined process templates for Activiti and JBPM.

Activiti is a light-weight workflow and BPM Platform targeted at business users, developers, and system administrators. It provides a fast and reliable BPMN 2 process engine for Java. It is open source and distributed under an Apache license. Activiti is based on open standards and is integrated well with Alfresco.

JBPM is an open source, standalone workflow engine. It can run in any servlet container—it does not require JBoss Application Server. The JBPM engine is responsible for managing deployed processes, instantiating and executing processes, persisting process state and metadata to a relational database (through hibernate), and tracking task assignments, and task lists. JBPM is built on the idea that any process can be described as a graph or a set of connected nodes. JBPM is a flexible, extensible workflow management system with an intuitive process language to express business processes graphically in terms of tasks, wait states for asynchronous communication, timers, and automated actions.

Workflows can be defined with process definitions using an XML-based language named **JPDL** (**Java Process Definition Language**) and BPMN 2.0.

BPMN 2.0 is an open standard developed by the **Object Management Group** (**OMG**) to provide a notation that is easily understandable by all business users: business analysts designing processes, developers implementing technology to perform those processes, and business people managing and monitoring those processes. BPMN creates a standardized bridge for the gap between the business process design and process. BPMN 2.0 process definition models can be exchanged between graphical editors, and executed on any BPMN 2.0 compliant engine, such as Activiti. BPMN 2.0 includes a graphical designer tool. The Activiti Eclipse Designer, or any other BPMN 2.0-compliant modeler, can be used as a workflow process engine.

JPDL is an intuitive process language to express business processes graphically in terms of tasks, wait states for asynchronous communication, timers, and automated actions. To bind these operations together, JPDL has the most powerful and extensible control flow mechanism. JPDL has minimal dependencies and can be used as easily as using a Java library. JPDL also includes a graphical designer tool. The JBPM process designer can be used as an Eclipse plugin.

> To have more information on Activiti refer to, `http://www.activiti.org/`.
>
> To have more information on JBPM refer to, `http://www.jboss.org/jbpm`.

Workflow user interactions

As a user, you will be able to perform the following interactions using the Alfresco Share interface (that is, web browser):

- Start the workflow:
    - Select from a list of pre-defined workflows
    - Attach resources (additional related documents)
    - Assign users to the workflow
    - Can start without attachment also
- List my tasks (what have I have to do?)
- Perform tasks
- View associated task resources (if any)
- Change task states
- Mark tasks done (or other outcome)

- Look back (trail of steps up to my task assignment)
- Look forward (why hasn't something happened yet?)
- Re-assign a task to someone else
- Take ownership of the task (if it is assigned to my group)
- Cancel the workflow I have started
- Filter tasks based on due dates, when started, priorities, and workflow type
- New inbox dashlet
- Start the workflow, filter tasks by priority, due dates, personal and pooled tasks, and view and edit tasks actions
- View the task and workflow details

Out-of-the-box features

The advanced workflow process is task-oriented, where you create a task, attach documents to be reviewed, and assign it to appropriate reviewers. It could also be implemented using business rules.

There are five advanced workflows available out-of-the-box:

1. **Adhoc task-based workflow**: Assign arbitrary tasks to colleagues on an adhoc basis using the Activiti workflow engine.
2. Group review and approve: Assign tasks to a group for review and approval.
3. Parallel review and approve: Assign tasks to colleagues for review and approval.
4. Pooled review and approval of content: Assign tasks to colleagues for review and approval. In this case, you can select more than one reviewer, but only one of the colleagues will approve or reject and the task will be submitted to the initiator.
5. Review and approve: Assign tasks to a colleague for review. In this case, you can select only one reviewer.

Let's take an example to implement the advance workflow for a marketing site. We have a requirement to promote new products on the marketing website. The hardest task in marketing is to get the prospect's attention before they switch to another site, trash your e-mail, or throw your brochure in the recycling bin—and this is where a good graphic design gives you the edge. The marketing group decides to design and distribute brochures to everyone. A group of selected people design the brochure.

The brochure is sent simultaneously to a group of reviewers. Reviewers act on this brochure, provide the feedback, and send it back to the initiator. The initiator may make the changes and finalize the design of the brochure. This requirement cannot be achieved with the simple workflow, as all users want to review and provide feedback to the originator. The originator considers everyone's reviews and creates a final draft.

The preceding requirements can be implemented using the following two workflows:

1. Group Review and Approve
2. Parallel Review and Approve

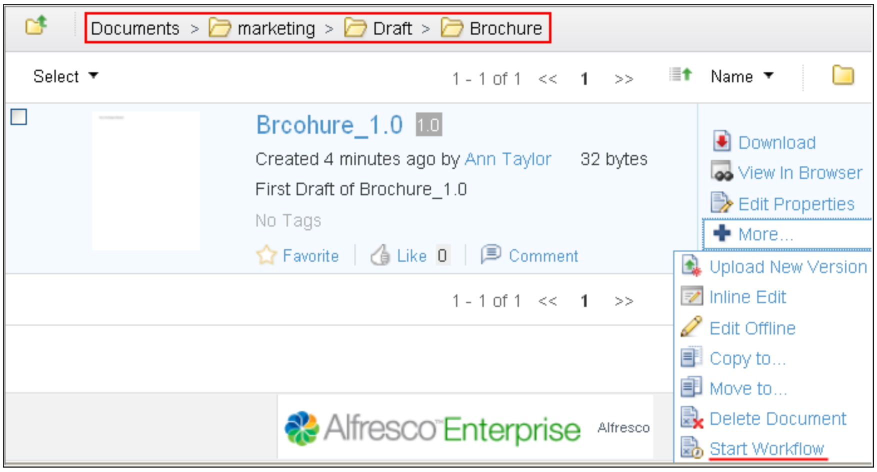
We will implement the Group Review and Approve workflow, as we want to send to a group of people for a review. If we have reviewers who belong to a different group, or are just individual users, we can choose Parallel Review and Approve.

For more information about creating groups, refer to *Chapter 4, Administering Share and Configuring Authentication Access*.

The following screenshot explains the process of initiating a Group Review and Approve workflow. *Ann Taylor* designs a brochure in the `marketing` | `Draft` | `Brochure` space and starts the workflow by providing the important information such as due date to complete the task, priority of the task, and assign the document to a strategy group to review and approve.

Carry out the following steps to configure the adhoc workflow:

1. Click on the document's **More** icon and click on the **Start Workflow** link, as shown in the following screenshot:



Documents > marketing > Draft > Brochure

Select ▾ 1 - 1 of 1 << 1 >> Name ▾

□ Brcohure_1.0 1.0

Created 4 minutes ago by Ann Taylor 32 bytes

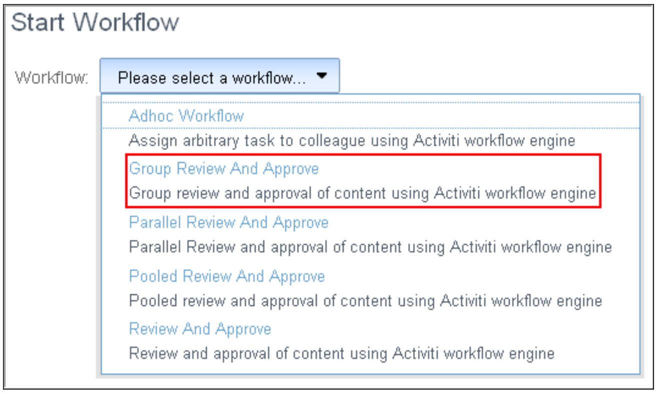
First Draft of Brochure_1.0

No Tags

Favorite Like 0 Comment

1 - 1 of 1 << 1 >>

2. This wizard lists all the available workflows. From the list of available workflows, select the **Group Review And Approve** option, as shown in the following screenshot:



Start Workflow

Workflow: Please select a workflow...

Adhoc Workflow
Assign arbitrary task to colleague using Activiti workflow engine

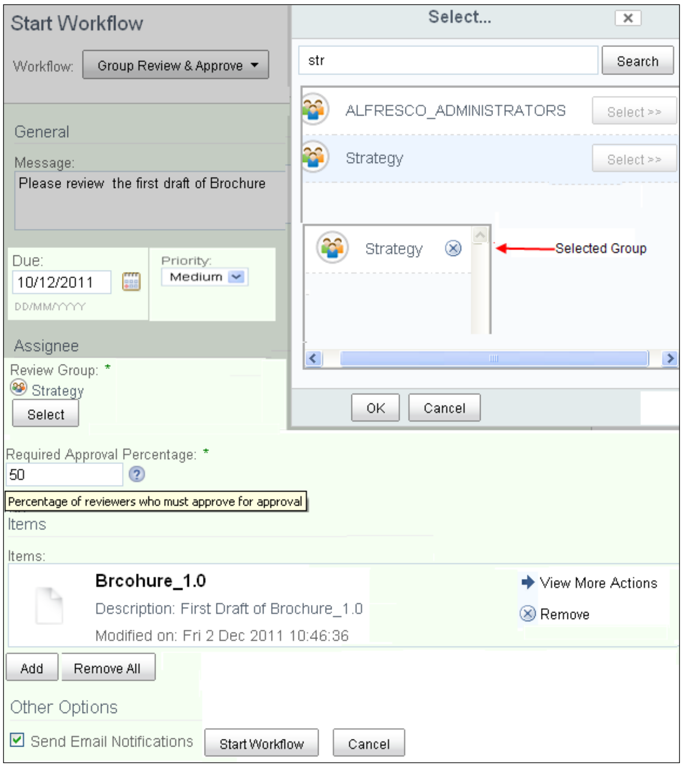
Group Review And Approve
Group review and approval of content using Activiti workflow engine

Parallel Review And Approve
Parallel Review and approval of content using Activiti workflow engine

Pooled Review And Approve
Pooled review and approval of content using Activiti workflow engine

Review And Approve
Review and approval of content using Activiti workflow engine

3. You will see the **Start Workflow** page of the **Group Review And Approve** workflow, as shown in the following screenshot. Provide a meaningful description for the task; choose the **Priority** and the **Due** date:



Start Workflow

Workflow: Group Review & Approve

General

Message:
Please review the first draft of Brochure

Due: 10/12/2011 DD/MM/YYYY

Priority: Medium

Assignee

Review Group: *
Strategy

Select

Select...

str

Search

ALFRESCO_ADMINISTRATORS Select >>

Strategy Select >>

Strategy

Selected Group

OK Cancel

Required Approval Percentage: *
50

Percentage of reviewers who must approve for approval

Items

Items:

Brcohure_1.0
Description: First Draft of Brochure_1.0
Modified on: Fri 2 Dec 2011 10:46:36

View More Actions
Remove

Add Remove All

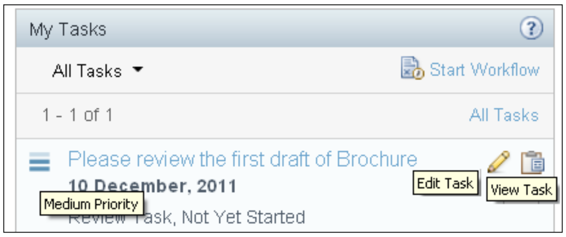
Other Options

☑ Send Email Notifications

Start Workflow Cancel

4. Select the **Review** Group from the list of groups by searching for the **Strategy** group. You can also add or remove the resources (documents) to this workflow by clicking on the **Add** or **Remove All** button, as shown in the preceding screenshot. This helps if you want to send a set of documents as one bunch for approval. Once you fill up the entire relevant information, click on the **Start Workflow** button to start the workflow process.

5. Login as **Dave Mathew**. **Dave** and **Jane** are members of this group. Both users will get the task in their dashlet. The **My Tasks** dashlet lists all your pending tasks as shown in the following screenshot:

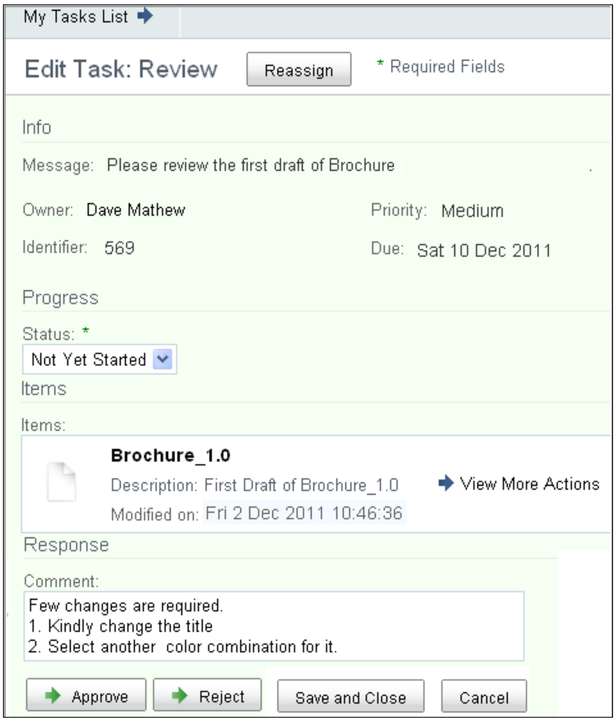


Please review the first draft of Brochure

10 December, 2011

Review Task, Not Yet Started

6. Click on the **Edit Task** icon as shown in the preceding screenshot. View the document, provide comments if any, and click on the **Approve** button, as shown in the following screenshot:



Message: Please review the first draft of Brochure

Owner: Dave Mathew

Priority: Medium

Identifier: 569

Due: Sat 10 Dec 2011

Status: * Not Yet Started

Items:

Brochure_1.0

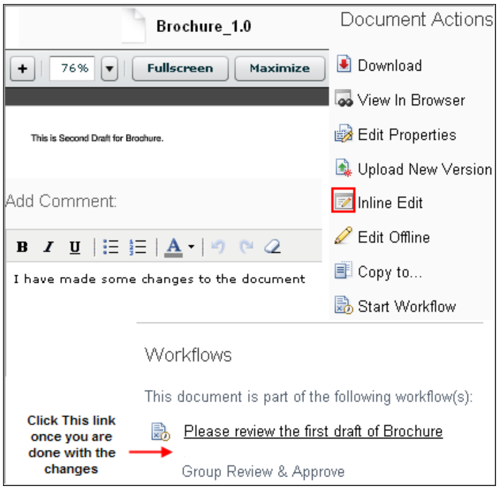
Description: First Draft of Brochure_1.0

Modified on: Fri 2 Dec 2011 10:46:36

Comment:

Few changes are required.
1. Kindly change the title
2. Select another color combination for it.

7. Now login as **Jane Austen** and view the task list. You have a few minor changes to the attached brochure, or you want to update another version of the document. In that case, you can click on **View More Actions**. You will see a detail page of the document; make the desired changes to the document by clicking on the **Inline Edit** tab, and save those changes. Click on the workflow link to navigate to the **View Task** page, as shown in the following screenshot:



This is Second Draft for Brochure.

I have made some changes to the document

Workflows

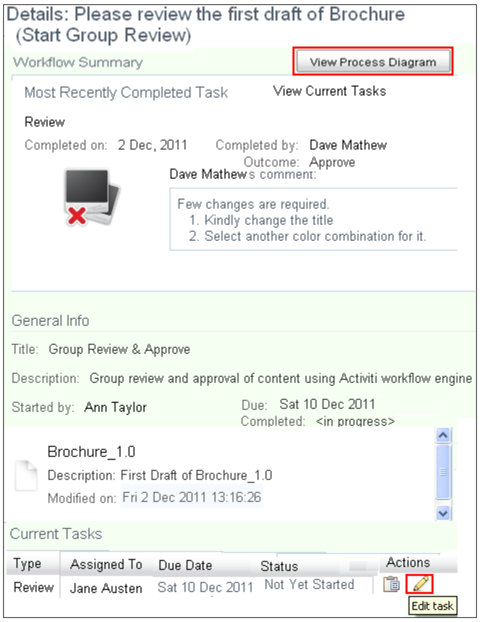
This document is part of the following workflow(s):

Please review the first draft of Brochure

Group Review & Approve

Click This link once you are done with the changes

8. Clicking on the preceding workflow link, the following page comes up. From this page, you can edit tasks:



Details: Please review the first draft of Brochure (Start Group Review)

Workflow Summary

Most Recently Completed Task

Review

Completed on: 2 Dec, 2011 Completed by: Dave Mathew

Outcome: Approve

Dave Mathew's comment:

Few changes are required.
1. Kindly change the title
2. Select another color combination for it.

General Info

Title: Group Review & Approve

Description: Group review and approval of content using Activiti workflow engine

Started by: Ann Taylor Due: Sat 10 Dec 2011

Completed: <in progress>

Brochure_1.0

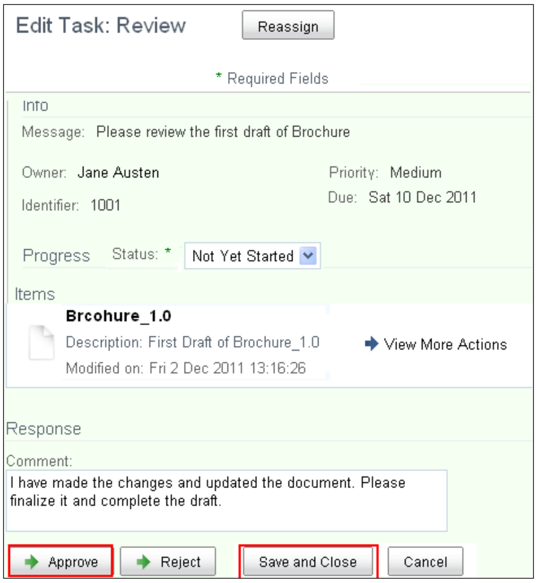
Description: First Draft of Brochure_1.0

Modified on: Fri 2 Dec 2011 13:16:26

Current Tasks

Type	Assigned To	Due Date	Status	Actions
Review	Jane Austen	Sat 10 Dec 2011	Not Yet Started	

9. Fill in the required details, and click on **Approve** to complete the workflow, as shown in the following screenshot:



Edit Task: Review

* Required Fields

Info

Message: Please review the first draft of Brochure

Owner: Jane Austen

Priority: Medium

Identifier: 1001

Due: Sat 10 Dec 2011

Progress Status: * Not Yet Started

Items

Brcohure_1.0

Description: First Draft of Brochure_1.0

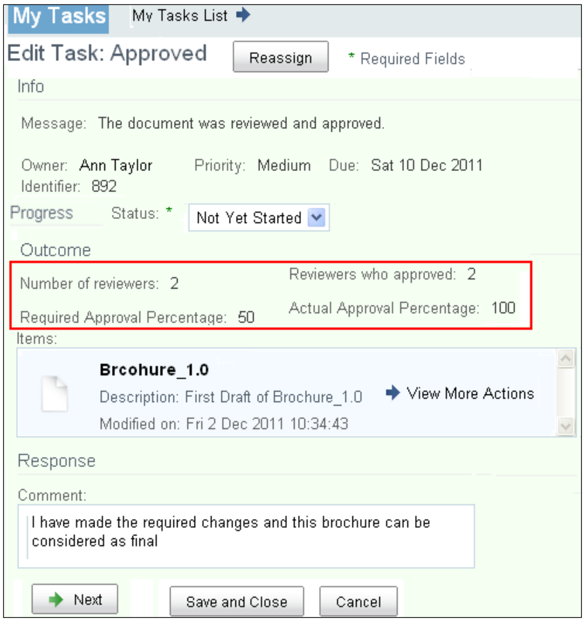
Modified on: Fri 2 Dec 2011 13:16:26

Response

Comment:

I have made the changes and updated the document. Please finalize it and complete the draft.

10. Now, log in as **Ann Taylor** and you will see tasks in your inbox. Open the task details, make the final changes, and click on **Next** to complete the task, as depicted in the following screenshot:



My Tasks My Tasks List

Edit Task: Approved

* Required Fields

Info

Message: The document was reviewed and approved.

Owner: Ann Taylor Priority: Medium Due: Sat 10 Dec 2011

Identifier: 892

Progress Status: * Not Yet Started

Outcome

Number of reviewers: 2

Reviewers who approved: 2

Required Approval Percentage: 50

Actual Approval Percentage: 100

Items:

Brcohure_1.0

Description: First Draft of Brochure_1.0

Modified on: Fri 2 Dec 2011 10:34:43

Response

Comment:

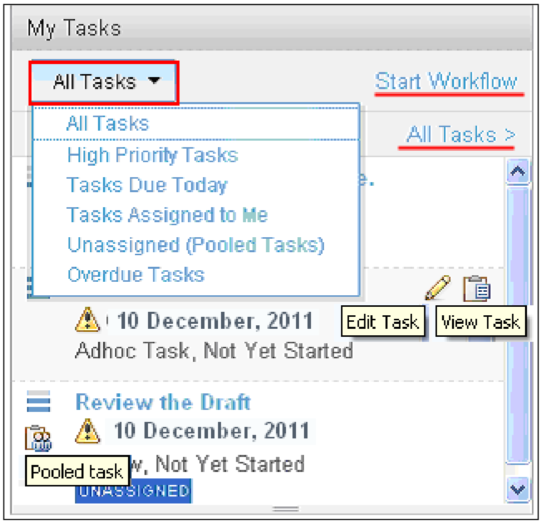
I have made the required changes and this brochure can be considered as final

Out-of-the-box features of the workflow

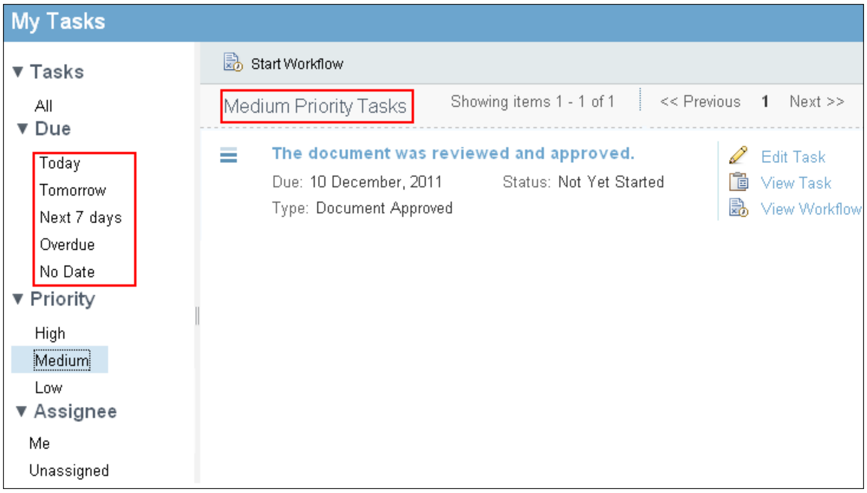
In this section, we will discuss various workflow capabilities, including start workflow, viewing the task details, viewing the workflow details, reassigning a task, saving and closing, and canceling a task. We will also discuss how filtering of tasks is possible.

New inbox dashlet

When you are logged in, the first thing that is displayed is the user dashboard. The dashboard is user configurable and contains many dashlets. If you don't find the **My Tasks** dashlet, you can add a dashlet using **Customize Dashboard**. In the following screenshot, you may notice the new task listed in the **My Tasks** window. You can filter tasks based on high priority, due tasks, overdue tasks, pooled tasks, and assigned tasks. Additionally, you can start the workflow from this dashlet, view details of tasks, and edit tasks:



You can also click on **All Tasks** to look at a more detailed page. In the following screenshot, you may notice additional filters for the **Due** date such as filter based on **Today**, **Tomorrow**, **Next 7 days**, **No Date**, and so on. You can also view the workflow detail for a particular task:



My Tasks

▼ Tasks

All

▼ Due

Today

Tomorrow

Next 7 days

Overdue

No Date

▼ Priority

High

Medium

Low

▼ Assignee

Me

Unassigned

Start Workflow

Medium Priority Tasks | Showing items 1 - 1 of 1 | << Previous 1 Next >>

The document was reviewed and approved.

Due: 10 December, 2011 Status: Not Yet Started

Type: Document Approved

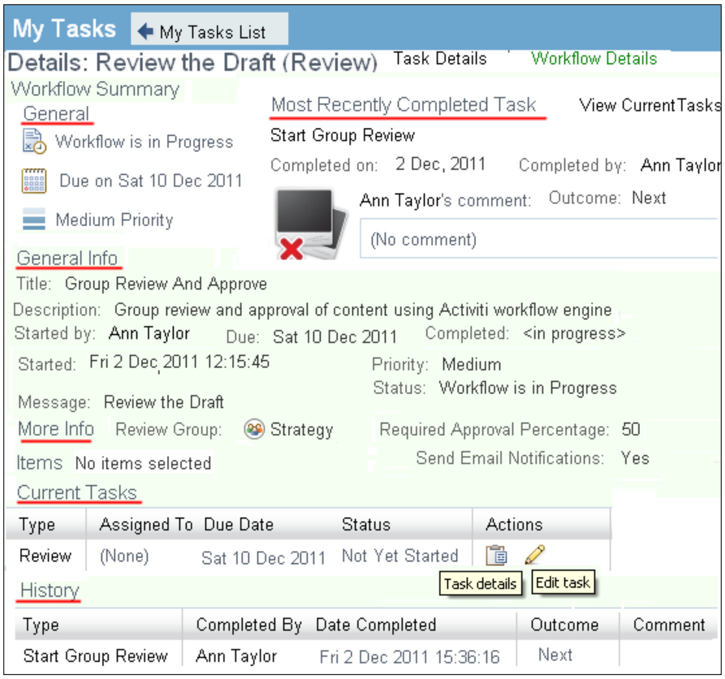
Edit Task

View Task

View Workflow

Viewing the workflow detail page

When you click on a workflow details link, you can get information about all tasks associated with that instance, you will know the history of tasks, who all the reviewers for this document, what is the approval percentage, previous review comments, and most recently completed tasks. Additionally, you can edit tasks from here as well:



My Tasks ← My Tasks List

Details: Review the Draft (Review) Task Details Workflow Details

Workflow Summary

General

Workflow is in Progress

Due on Sat 10 Dec 2011

Medium Priority

Most Recently Completed Task View Current Tasks

Start Group Review

Completed on: 2 Dec, 2011 Completed by: Ann Taylor

Ann Taylor's comment: Outcome: Next

(No comment)

General Info

Title: Group Review And Approve

Description: Group review and approval of content using Activiti workflow engine

Started by: Ann Taylor Due: Sat 10 Dec 2011 Completed: <in progress>

Started: Fri 2 Dec 2011 12:15:45 Priority: Medium

Status: Workflow is in Progress

Message: Review the Draft

More Info Review Group: Strategy Required Approval Percentage: 50

Send Email Notifications: Yes

Items No items selected

Current Tasks

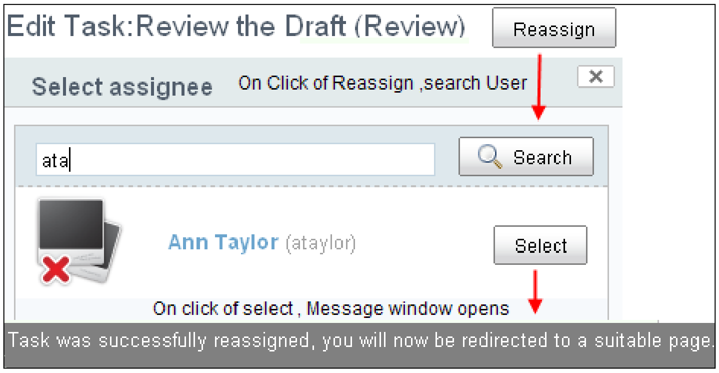
Type	Assigned To	Due Date	Status	Actions
Review	(None)	Sat 10 Dec 2011	Not Yet Started	Task details Edit task

History

Type	Completed By	Date Completed	Outcome	Comment
Start Group Review	Ann Taylor	Fri 2 Dec 2011 15:36:16	Next	

Reassigning a task

For various business reasons, you can reassign the task by clicking on the **Reassign Task** button. Once you click on the **Reassign Task** button, you will see the **Reassign Task** window, as shown in the following screenshot. You can search for the users and reassign the task to an appropriate user:



On Click of Reassign ,search User

On click of select , Message window opens

Task was successfully reassigned, you will now be redirected to a suitable page.

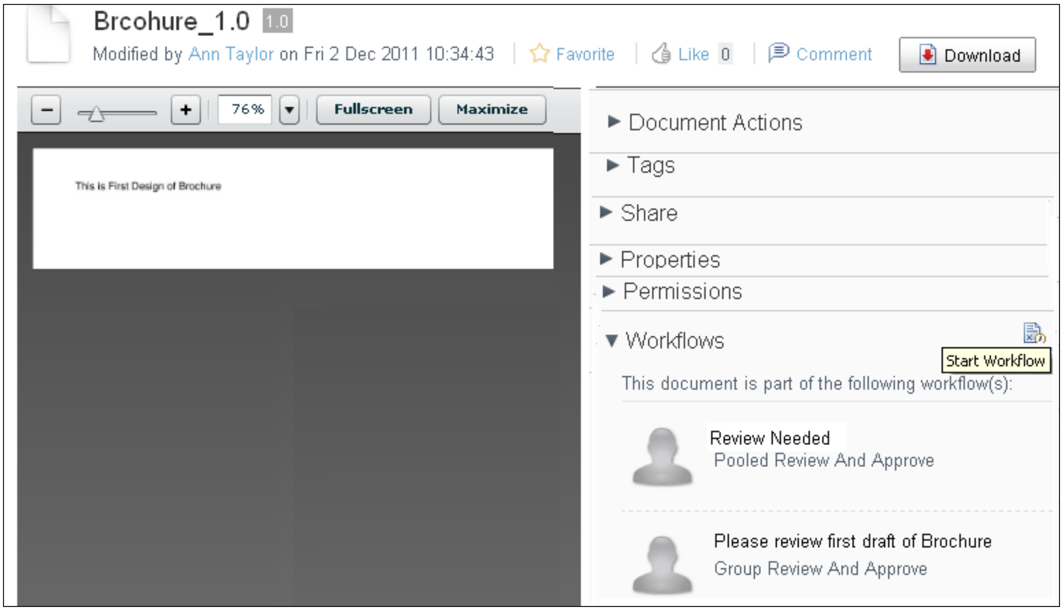
Save and Close

At times, it becomes important to save the changes as you may not have time, or with any other reason you are not able to complete information in one go. In such a case, you can save the changes of the workflow by clicking on the **Save and Close** button. The next time you open the task details page, you will find your changes. Suppose you don't want to work on a task at present, you can cancel the task by clicking on the **Cancel** button. These two buttons are available in the **Task detail** page.

Workflow information in the document details page

For a specific document in your space, you can find out the workflow details by clicking on the document itself. You will be able to view the details page of the document.

The document's details page lists down metadata, actions, version history, permissions, and workflow details as shown in the following screenshot. If you click on those links, you will find workflow details associated with this document for your reference:



This document is part of the following workflow(s):

Review Needed
Pooled Review And Approve

Please review first draft of Brochure
Group Review And Approve

Summary

Alfresco Share includes two types of workflows out-of-the-box. One is the simple workflow, which is content-oriented and the other one is the advanced workflow, which is task-oriented.

The simple workflow feature of Alfresco enables you to define a simple approve-reject workflow for your documents. The e-mail templates and notification business rules are helpful to notify all the people involved in the workflow process. You can also implement complex workflows by chaining the spaces with multiple approve and reject steps.

The complex task-oriented workflow requirements can be handled by the advanced workflow features. You can create a task, attach multiple documents, and send it to multiple people for a review. Using the dashboard views, you can view all the tasks assigned to you, all the tasks you have assigned to others, and can view workflow details of the task.

9
Configuring Share

So far we have learnt about Alfresco Share's out-of-the-box features. There may be a need of customization at times. Small customizations can be achieved with configurations also. This chapter helps users to describe some of the configurations for Site Management. It aims at enabling you to understand how the system can be configured. Simple configurations can change the user interface behavior and appearance.

At the end of this chapter you will have learnt how to do the following:

- Introduction to content model
- Configure content types and aspects in Alfresco Share
- Using the advance search option to locate custom property
- Configure advanced workflows
- Configure the Data List
- Enabling Google Docs
- Manage a number of actions on the document library's content
- Create custom actions
- Hiding the Repository from Share
- Customizing metadata template
- Defining status indicators

We have already discussed in *Chapter 3*, *Alfresco Share Architecture* the Alfresco Share configuration architecture and how configuration files should be provided as extensions and placed in the form of the file `share-config-custom.xml`. We will see throughout the chapter how default values for share configuration properties, that are specified in `share-config.xml`, can be overridden in `share-config-custom.xml` found in the web-extension folder of Share placed under the folder `<tomcat>/shared/classes/alfresco/web-extension`. Out-of-the-box, there are mainly five configurations files of which we can override the configurations in `share-config-custom.xml`:

- `share-config.xml`
- `share-datalist-form-config.xml`
- `share-form-config.xml`
- `share-workflow-form-config.xml`
- `share-documentlibraray-config.xml`

> Please take a note to make all the below configurations in `share-config-custom.xml` located at **<install-share-app>** | **tomcat** | **shared** | **classes** | **alfresco** | **web-extension**.

Introduction to content model

In the previous chapters you were able to create content that had standard properties such as name, description, title, creation date, and author. You were able to add aspects such as effectivity, Dublin core metadata to the content either using business rules or directly by applying Manage Aspect action. What if you need to have custom properties that are very specific to your business? What if you need to have custom content that handles the data and business rules in a way to suit your business needs? Alfresco content model is highly configurable and easily extendable as per your business requirements. You can define your own custom properties and custom content to extend the capabilities of your business application, which can then expose through the Share user interface. First, you will need to configure the Repository with your custom model definition. So, we will briefly discuss content model here.

Custom configuration

The Alfresco Repository supports storage, management, and retrieval of content. It supports a rich Data Dictionary that defines the properties, associations, and constraints of content to manage the structure of its content. The Repository Data Dictionary is, by default, pre-populated with definitions that describe common content constructs such as folders, files, and metadata schemes. However, the Data Dictionary is extendable allowing the Repository to manage new types of content since each business application will have its own content requirements.

Configuration files for the default content model

The core Alfresco configuration files are present in the application `war` file and get expanded out once the server starts. This location, referred to as `<configRoot>` located at **<install-app> | tomcat | webapps | alfresco | WEB-INF | classes**.

A Content Model is a collection of related content types and aspects. The default configuration files for the content model maintained by Alfresco are contained in the **<configRoot> | alfresco | model** folder.

The Alfresco Repository is also primed with several models that are described as follows:

- `contentModel.xml`: This model describes the Content Domain Model such as Folder, File, Person, Category, and Dublin Core
- `systemModel.xml`: This model describes system-level Repository concepts
- `applicationModel.xml`: This model describes the Alfresco Application model
- `dictionaryModel.xml`: This model describes the Dictionary Meta-model

Several other models, to support the implementation of services, are defined by the Repository such as user management, versioning, actions, and rules. You can examine the other configuration files in the `<configRoot>/alfresco/model` folder.

Configuration files for custom content model

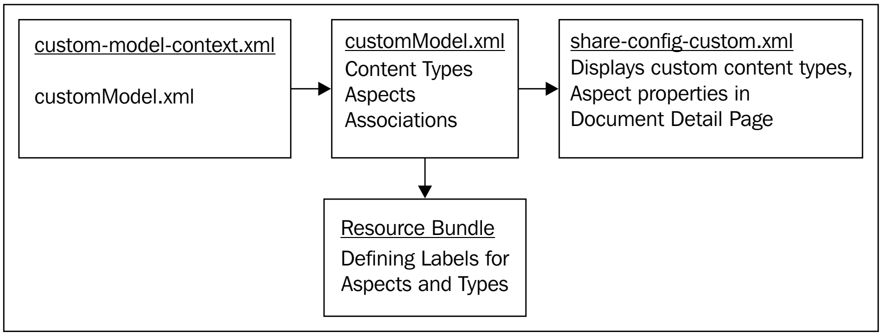
You can override, or extend, the Alfresco content model by placing the custom configuration files in a folder. This location, referred to as `extension`, is located at **<install-app> | tomcat | shared | classes | alfresco | extension**.

When you install Alfresco, the sample custom-content files are copied to the `extension` folder for your reference. You can also examine the sample custom-configuration files in the `extension` folder.

The steps to define a custom model in the `extension` folder are as follows:

1. Create a custom model context file.
2. Create a custom model file.
3. Create a custom share configuration file.
4. Use `i18n` labels for all text strings that appear in the user interface.

The custom model context file lists the custom model files. The custom model files define the custom content types, aspects, and associations. The custom share configuration file contains information to display these custom content types, aspects, and associations. The resource bundle defines labels for custom content types, aspects, and associations .The relationship between these files is shown in the following figure:



Custom model context file

The custom model context file lists one or more custom model files. Create a custom model context file and name the file as `<your-custom-model-name>-context.xml`, for example `custom-model-context.xml`. It is very important for you to note that the Alfresco server recognizes the context files that end with `–context.xml`.

The following is the content of the `custom-model-context.xml.sample` file in the `extension` folder. Note that the custom model context file defines `customModel.xml` as the custom model file.

```
<?xml version='1.0' encoding='UTF-8'?>
<!DOCTYPE beans PUBLIC '-//SPRING//DTD BEAN//EN' 'http://www.
springframework.org/dtd/spring-beans.dtd'>
```

```
<beans>
  <!--  Bootstrap model -->
  <bean id="custom_dictionaryBootstrap" parent="dictionaryModelBootstr
ap" depends-on="dictionaryBootstrap">
    <property name="models">
      <list>
        <value>alfresco/extension/custom-content-model.xml</value>
      </list>
    </property>
  </bean>
</beans>
```

Custom model file

The custom model file contains the definitions for the custom content types, aspects, and content associations.

A copy of the `customModel.xml` file already exists in the `extension` folder. If you examine the `customModel.xml` file, you will notice a custom namespace for all the variables called `mar`. Hence, every `custom` variable will have a prefix `mar` in this file, as shown in the following code snippet:

```
<namespace prefix="mar" uri="http://marekting.com" />
```

The following code snippet is the sample code for defining a type:

```
<types>
  <type name="mar:brochure">
  <title>Types of Brochure</title>
  <parent>cm:content</parent>
  <properties>
    <property name="mar:brochureId">
      <title>Brochure ID</title>
      <type>d:text</type>
    </property>
    <property name="mar:size">
      <title>Brochure Size</title>
      <type>d:text</type>
    </property>
    <property name="mar:layouts">
      <title>Brochure Layouts</title>
      <type>d:text</type>
    </property>
    <property name="mar:types">
      <title>Types Of Brochures</title>
      <type>d:text</type>
      <default>Catalogs</default>
      <constraints>
        <constraint ref="mar:typesOfBrochures" />
      </constraints>
    </property>
  </properties>
</type>
```

As discussed you can deploy the custom content model by placing both the files `custom-model-context.xml` and `custom-model.xml` at **<install-app> | tomcat | shared | classes | alfresco | extension**.

Let us create a content model with a new content type called **Create Brochure** and aspect called as **Create Banner** in the Repository. No need to restart the server at this time.

In the next section, we will see how we can configure custom content types and aspects in Alfresco Share and use of the resource bundle to display labels. Once the configurations have been made, we will restart the server to see if the content model is deployed properly and the custom properties are visible through Alfresco Share.

> For more details about the Content Model, please refer to `http://wiki.alfresco.com/wiki/Data_Dictionary_Guide`.
>
> Download the files related to the Content Model from Packt's website.

Configure custom content types and aspects in Share

Assuming we have already created a content model with a new content type called **Create Brochure** and aspect called as **Create Banner** in the Repository.

The next step is to make sure Alfresco Share recognizes this new custom content and displays various custom properties in the Share user interface. In order to make this happen you need to configure the Share config file `share-config-custom.xml`.

Open the `share-config-custom.xml` file and add the following lines of code:

```
<!-- How to add Custom Type and Aspect -->
<config evaluator="string-compare" condition="DocumentLibrary" >
  <aspects>
    <!-- Custom aspects that a user can see -->
    <visible>
    <aspect name="mar:banner" />
    </visible>
    <addable>
    </addable>
    <removeable>
    </removeable>
  </aspects>
  <types>
    <type name="cm:content">
      <!-- Define your custom type -->
      <subtype name="mar:brochure"/>
    </type>
  </types>
</config>
```

The previous code snippet ensures that the `brochure` content type is listed when you create new content and the `banner` is listed while managing aspects.

In the previous code snippet, you might have also noticed two elements called `<addable>` and `<removable>`. If addable and removable tags are left empty, then they are similar to visible tags. If something is added into it, then these tags take precedence over visible tags. Suppose you have a condition that once you have added the aspect on the content, you don't want to remove that aspect anyhow. In that case, you can add the aspect in an addable tag and don't add it in a removable tag. If you added it in a removable tag that means you can remove the aspect after applying it. Please see the next code snippet for this. With this code, you can only remove the **Create Banner** and **Versionable** aspects. Please note, other aspects cannot be removed once applied to the document.

```
<aspects>
  <visible>
    <aspect name="mar:banner" />
  </visible>
  <addable>
    <aspect name="emailserver:aliasable" />
    <aspect name="cm:taggable" />
    <aspect name="app:inlineeditable" />
    <aspect name="gd:googleEditable" />
    <aspect name="cm:versionable" />
    <aspect name="mar:banner" />
  </addable>
  <removeable>
    <aspect name="cm:versionable" />
    <aspect name="mar:banner" />
  </removeable>
</aspects>
```

If you want to override the original configuration of `DocumentLibrary`, in this case you can make use of the replace tag, otherwise the custom types and aspect will be added to the original one.

```
<config evaluator="string-compare" condition="DocumentLibrary"
replace ="true">
```

Now, you may also like to display the properties of the custom types and aspect. Add the following XML code. The following code snippet ensures that the properties are available to view and edit in the edit metadata page for document on which the **Banner** aspect is applied:

```
<config evaluator="aspect" condition="mar:banner">
  <forms>
    <form>
      <field-visibility>
        <show id="cm:name" />
        <show id="cm:title" />
        <show id="cm:description" />
        <!-- Metadata for  custom content type-->
        <show id="mar:bannerId"/>
        <show id="mar:positioning"/>
        <show id="mar:color"/>
        <show id="mar:borders"/>
      </field-visibility>
    </form>
  </forms>
</config>
```

Using similar lines of code you can also write for the **Brochure** content:

```
<!--Configure properties to view in document detail page for custom
content type -->
<config evaluator="node-type" condition="mar:brochure">
  <forms>
    <form>
      <field-visibility>
        <show id="cm:name" />
        <show id="cm:title" />
        <show id="cm:description" />
        <!-- Metadata for  custom content type-->
        <show id="mar:bannerId"/>
        <show id="mar:bannerColor"/>
        <show id="mar:bannerType"/>
      </field-visibility>
      <appearance>
```

```
          <field id ="mar:bannerId" label="Banner Id "/>
          <field id ="mar:bannerColor" label="Color"/>
          <field id ="mar:bannerType" label="Type"/>
        </appearance>
      </form>
    </forms>
  </config>
```

There are various display options that can be configured for the look and feel of the properties. Following is a brief description about some of the elements, which are majorly used and a small code snippet associated with them:

Appearance: In the previous code, with the use of appearance, we can define a label for each property that will be used while displaying. Basically, appearance element defines the look and feel of the controls that make up the form:

```
<appearance>
  <field id ="mar:bannerId" label="Banner Id "/>
</appearance>
```

Set: It is used to configure a group of fields that will all be displayed together:

```
<appearance>
<set id="info" appearance="" template="/org/alfresco/
  components/form/2-column-set.ftl" />
<field id="bpm:workflowDueDate" label-id="workflow.field.due"
  set="info" />
</appearance>
```

Control: It is basically a combination of label and field and is configured with the use of templates, as shown in the following code snippet. It describes how the field should appear when displayed. Each data type in the data dictionary model has been associated with a control type, these control types determine how a field should appear when displayed. The target of a control type is a FreeMarker template that controls the display. This design gives you great flexibility in configuration and customization of forms. It is also possible to change the default template used for a particular data type throughout the forms system.

```
<appearance>
  <field id="bpm:workflowDescription" label-
    id="workflow.field.message">
    <control template="/org/alfresco/components/form/controls
      /textarea.ftl">
      <control-param name="style">width: 95%</control-param>
    </control>
  </field>
</appearance>
```

For-mode: You can also configure whether you want the metadata to be only for view, or you want to edit those metadata also. For-mode can be used to decide when to display the metadata. If neither option is used that means the metadata can be used for both viewing and editing:

```
<field-visibility>
  <show id="cm:modified" for-mode="view" />
  <show id="cm:taggable" for-mode="edit" force="true" />
</field-visibility>
```

You may also want to change the label for the type and aspect itself. In order to make this happen we have to create a properties file. Let's create a `marketing.properties` file under the folder hierarchy **<install-app>** | **tomcat** | **shared** | **classes** | **alfresco** | **messages** and add the following line of code:

```
type.mar_brochure = Marketing Brochures
aspect.mar_banner= Marketing Banners
```

Also you have to load this property file. For that you may have to create another file called `custom-slingshot-application-context.xml` under the folder hierarchy **<install-share-app>** | **tomcat** | **shared** | **classes** | **alfresco** | **web-extension** and add the following line of code to load the property file:

```
<?xml version='1.0' encoding='UTF-8'?>
<!DOCTYPE beans PUBLIC '-//SPRING//DTD BEAN//EN'
  'http://www.springframework.org/dtd/spring-beans.dtd'>
<beans>
  <bean id="webscripts.test.resources"
    class="org.alfresco.i18n.ResourceBundleBootstrapComponent">
    <property name="resourceBundles">
      <list>
        <value>alfresco.messages.marketing</value>
      </list>
    </property>
  </bean>
</beans>
```

Downloading the example code

You can download the example code files for all Packt books you have purchased from your account at `http://www.packtpub.com`. If you purchased this book elsewhere, you can visit `http://www.packtpub.com/support` and register to have the files e-mailed directly to you.

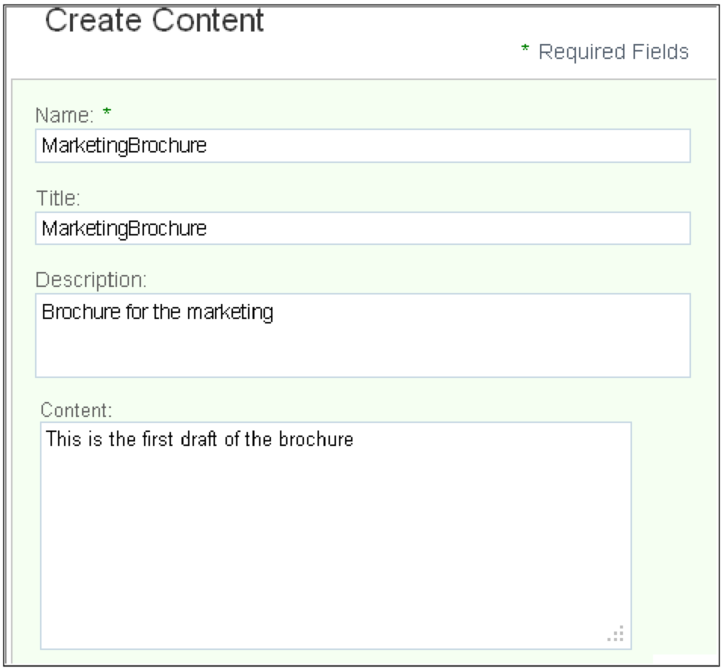
After making changes to the configuration file, you have to restart the server to see the effects.

[Download the complete code snippet from the Packt website]

Add custom content

In this section, we will see how we can add custom type to a sample brochure. Details about creating content are mentioned in *Chapter 7*, *Document Library*. Follow the given steps to create a `Marketing Brochure` content of custom type:

1. Log in as `Jim Corbet` and go to the **Marketing** site and create content called **MarketingBrochure** in the **Marketing | Draft | Brochure space**.
2. In the folder, click the **Create Content** link to create a text document, as shown in the following screenshot:



Create Content

* Required Fields

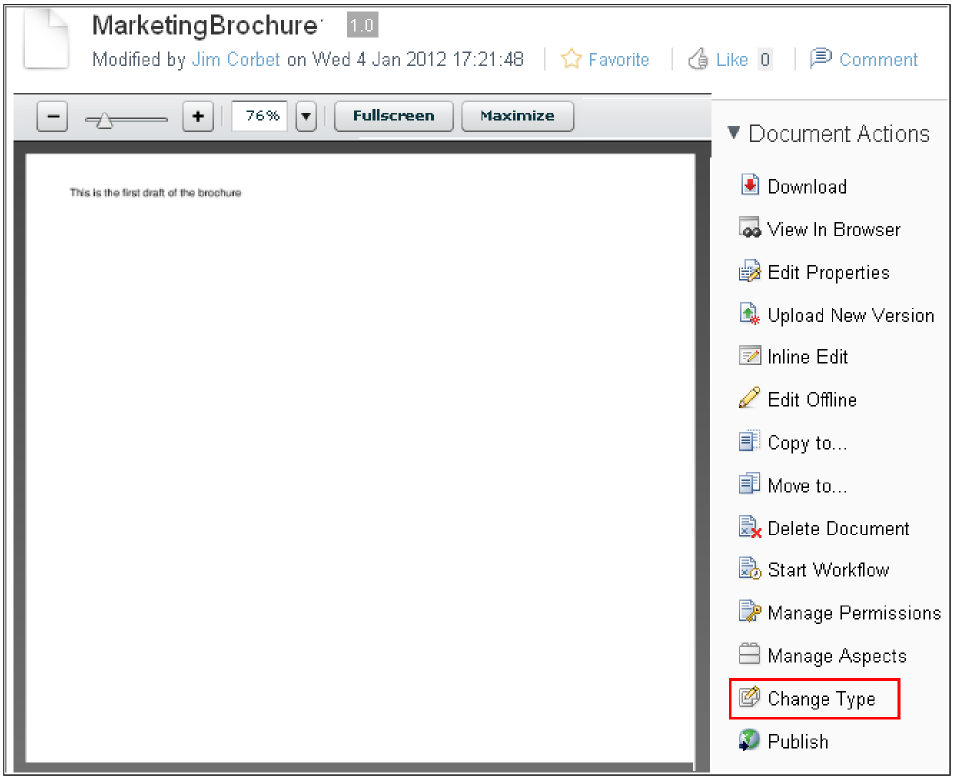
Name: *
MarketingBrochure

Title:
MarketingBrochure

Description:
Brochure for the marketing

Content:
This is the first draft of the brochure

3. On clicking the **Create** button, you will see the **Document Detail** page with metadata and **Document Actions**. As of now, default metadata's are visible. Now, to apply custom properties you have to change the type of content. Out-of-the-box, Document Library only supports content and folder types. To apply custom content type click the **Change Type** action, as shown in the following screenshot:

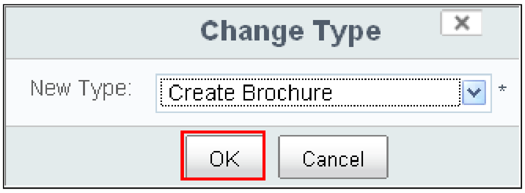


MarketingBrochure 1.0

Modified by Jim Corbet on Wed 4 Jan 2012 17:21:48

This is the first draft of the brochure

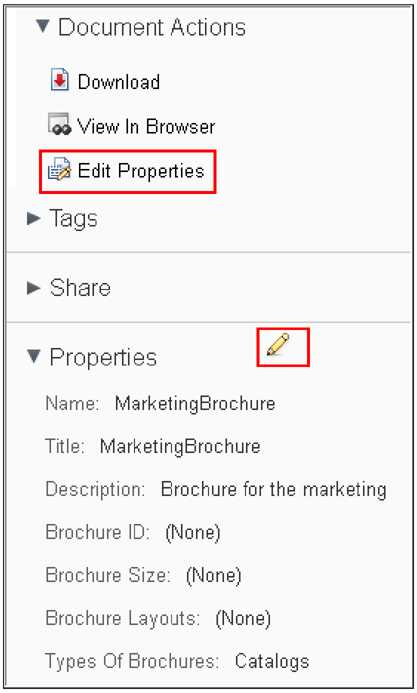
4. You will find a small pop-up window that will allow selecting type to be applied to the document, as shown in the following screenshot. The configuration has been already discussed in the previous section. Select **Create Brochure** as **Type** from the drop-down list. Click the **OK** button to confirm. Once type is applied, you can not revert back to an older content type:



Change Type

New Type: Create Brochure *

5. Refresh the page and you will see the updated **Properties** associated with the content, as shown in the following screenshot:



▼ Document Actions

Download

View In Browser

Edit Properties

▶ Tags

▶ Share

▼ Properties

Name: MarketingBrochure

Title: MarketingBrochure

Description: Brochure for the marketing

Brochure ID: (None)

Brochure Size: (None)

Brochure Layouts: (None)

Types Of Brochures: Catalogs

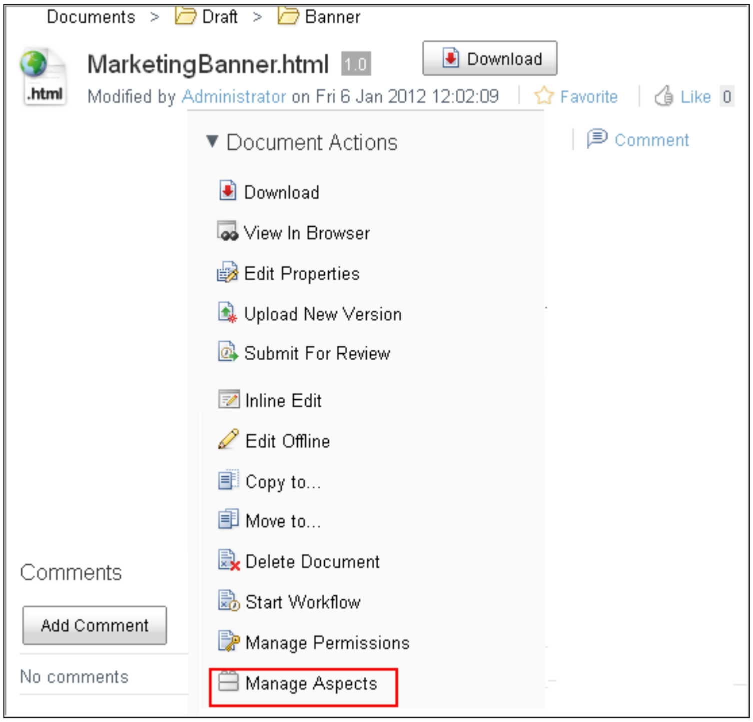
6. You can modify properties as required, by clicking the **Edit Properties** action and save the changes.

Add custom aspect

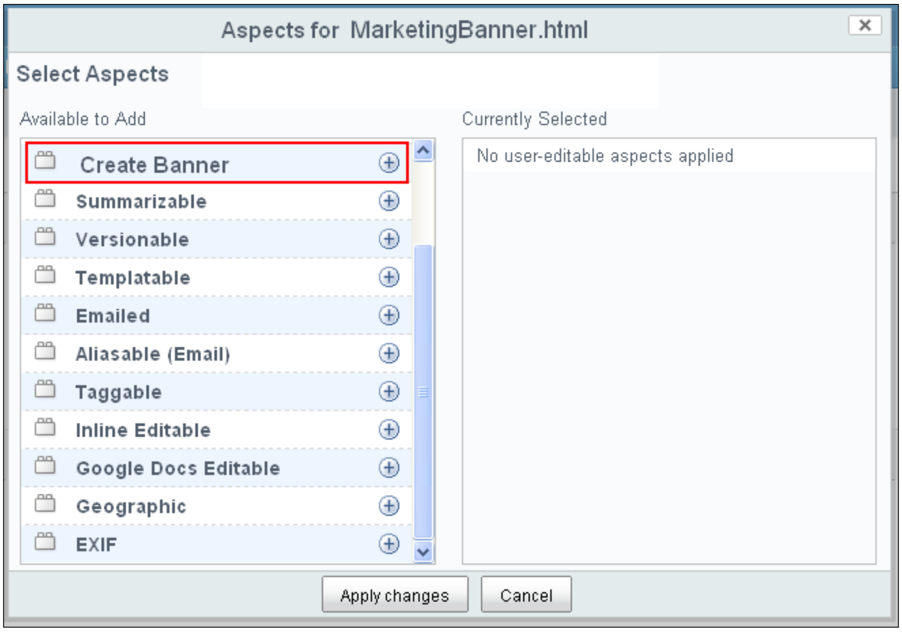
We have already covered, in the previous section, about how to configure custom aspect through the Share configuration file. On your personal computer, create a sample banner in HTML format and save it as a `MarketingBanner.html` file. Follow the given steps to upload your banner content and add custom aspect to it:

1. Log in as **Jim Corbet** and Go to the **Marketing** site and add a content called `MarketingBanner` in the **Marketing | Draft | Banner space**.
2. In the space header, click the **Upload** link. The **Add Content** dialog appears.

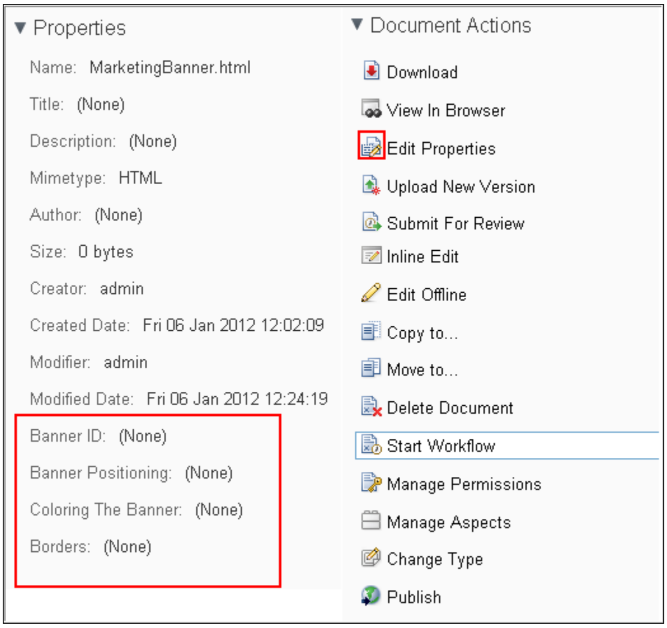
3. To specify the file that you want to upload, click the **Select file(s) to upload** button. In the **File Upload** dialog box, browse to the file you have created earlier on your personal computer (`MarketingBanner.html`) and click the **Upload File(s)** button.
4. A message informs you that your upload was successful.
5. Go to the detail page of the document and select **Manage Aspects** to apply the custom aspect to the document, as shown in the following screenshot, or you can select **Manage Aspects** action from the **More Actions** menu at the right side of the document:



6. A module window opens that will allow selecting aspect to be applied to the document, as shown in the following screenshot. Add **Create Banner** from the list. Click the **Apply Changes** button to confirm:



7. Go to the **Document Detail** page of the document and you will see the updated **Properties** associated with the content, as shown in the following screenshot. You can modify properties, as required, by clicking the **Edit Properties** action:


▼ Properties

Name: MarketingBanner.html

Title: (None)

Description: (None)

Mimetype: HTML

Author: (None)

Size: 0 bytes

Creator: admin

Created Date: Fri 06 Jan 2012 12:02:09

Modifier: admin

Modified Date: Fri 06 Jan 2012 12:24:19

Banner ID: (None)

Banner Positioning: (None)

Coloring The Banner: (None)

Borders: (None)

Configure advanced search

In the previous chapters we have already learnt how the advanced search form can be used. As we have defined custom content and property, we may have the need to search those custom properties also. You can configure the advanced search so that different content types, including your own custom types are searchable. The following block of code adds the list of forms and labels used to represent in the user interface of the advance search form:

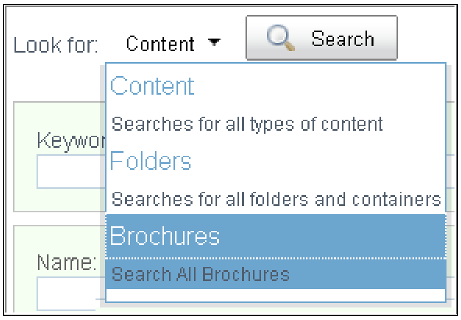
```
<config evaluator="string-compare" condition="AdvancedSearch">
  <advanced-search>
    <forms>
      <form label="Brochure Search" description="Searching
        Brochures"> mar:brochure
      </form>
    </forms>
  </advanced-search>
</config>
```

Inject the following lines of code in the same block where the properties are defined. This code will display the properties on which the search is possible. You can also apply an appearance element to change the look and feel of any custom fields, which can also make searching easier. For example, to search on the modified date, it may be more appropriate to display a date range control:

```
<config evaluator="model-type" condition="mar:brochure">
  <forms>
    <form id="search">
      <field-visibility>
        <show id="mar:brochureId"/>
       <show id="mar:size"/>
       <show id="mar:layouts"/>
       <show id="mar:types"/>
      </field-visibility>
    </form>
  </forms>
</config>
```

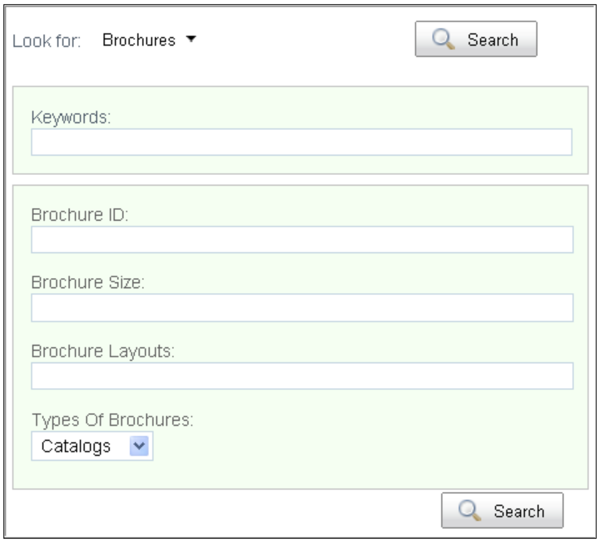
Follow the given steps to search properties of the Brochure type:

1. Log in as any user and select the **Advanced Search** from the search option located in the toolbar.
2. When the advanced search user interface is displayed, select the **Brochure** content from the **Look For** menu:



Content
Searches for all types of content
Folders
Searches for all folders and containers
Brochures
Search All Brochures

3. Select the **Brochures** from menu and you will see all the custom fields that we have configured:



Keywords:

Brochure ID:

Brochure Size:

Brochure Layouts:

Types Of Brochures:
Catalogs

4. Enter the appropriate values and click the **Search** button to get the results with those values.

Configure an advanced workflow

Workflow provides two forms that can be configured; these are the start workflow form and the edit task form and within that the workflow details form. The start form is shown only once when the workflow is first started, the edit form is shown every time a user opens a task. The workflow can be configured at all the stages. Additionally, if you want to hide your custom deployed workflow, or any specific task of that workflow, this can be made easily with small configurations. We will see in the further sections about various configurations related to the workflow.

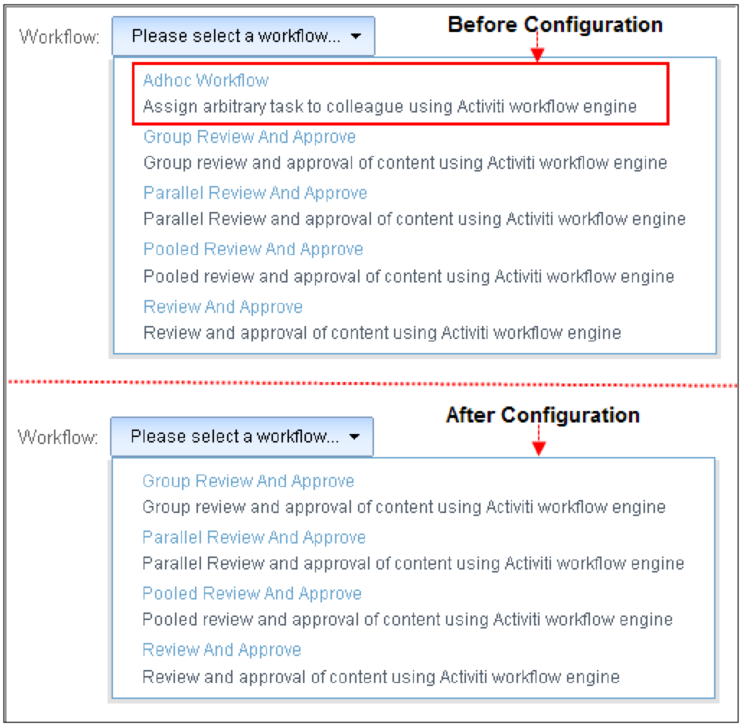
Hide workflows and tasks

The workflow, or any specific task of that workflow, can be excluded easily with configurations. In this example, we are hiding the Adhoc workflow from the list of workflows. You can also hide a particular task from a specific workflow.

The following lines of code can be used to exclude a workflow, or any specific task:

```
<config evaluator="string-compare" condition="Workflow">
  <!-- Workflow list that you want to exclude-->
  <hidden-workflows>
    <workflow name="activiti$activitiAdhoc"/>
  </hidden-workflows>
  <!-- Hide all the task of particular workflow model
  <hidden-tasks>
    <task type="wf:completedAdhocTask"/>
  </hidden-tasks> -->
</config>
```

After the configurations, restart the server and go to **Start Workflow**. You will notice the Adhoc workflow is not present now. In the following diagram you can find the difference:



Adhoc Workflow
Assign arbitrary task to colleague using Activiti workflow engine
Group Review And Approve
Group review and approval of content using Activiti workflow engine
Parallel Review And Approve
Parallel Review and approval of content using Activiti workflow engine
Pooled Review And Approve
Pooled review and approval of content using Activiti workflow engine
Review And Approve
Review and approval of content using Activiti workflow engine

Group Review And Approve
Group review and approval of content using Activiti workflow engine
Parallel Review And Approve
Parallel Review and approval of content using Activiti workflow engine
Pooled Review And Approve
Pooled review and approval of content using Activiti workflow engine
Review And Approve
Review and approval of content using Activiti workflow engine

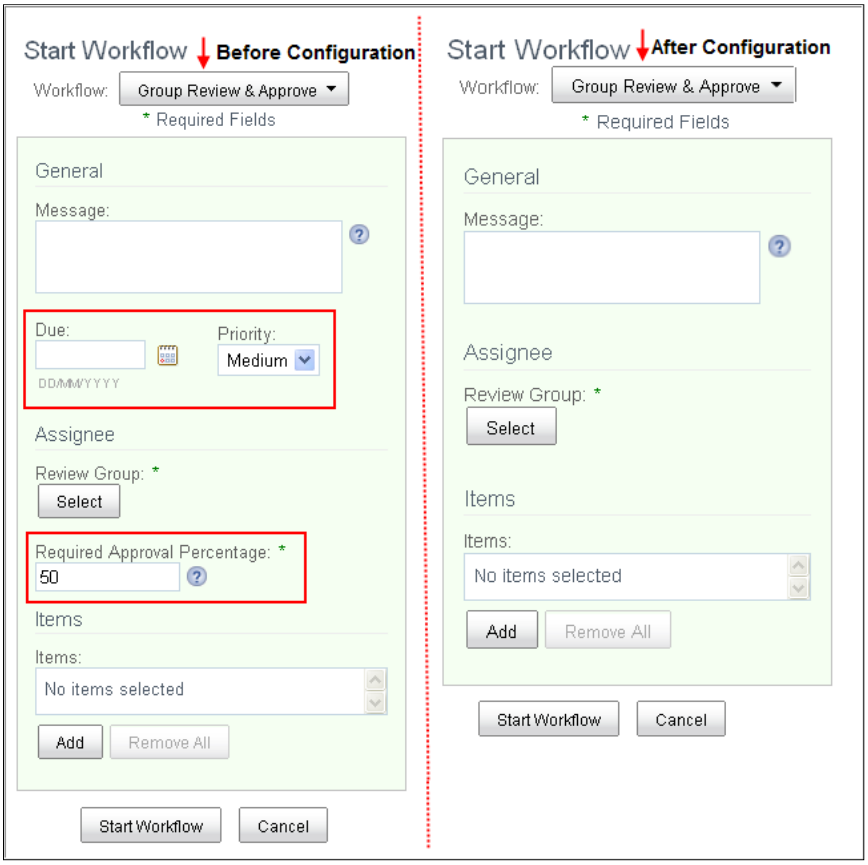
Configure the start workflow page

Let us learn in this example how the starting page of the workflow can be configured. We will take an example of out-of-the-box workflow called **Group Review and Approve**. Suppose you don't want to show some of the properties to be displayed on the start page of the workflow like **Due** date, **Priority** and so on, this can be achieved with configuration. If you want to check the files related to this workflow, you can check in **<install-app>** | **tomcat** | **webapps** | **alfresco** | **WEB-INF** | **classes** | **alfresco** | **workflow** | `parallelreview_group_processdefiniton.xml` and configuration related to the workflow can be checked in **<install-app>** | **tomcat** | **webapps** | **share** | **WEB-INF** | **classes** | **alfresco** | `share-workflow-form-config.xml`.

Add the following block of code to show some of the properties in the start workflow form. Kindly notice the highlighted changes. The form configuration for this page is driven from the name of the workflow definition. In this case it is `activiti$activitiParallelGroupReview` and the evaluator used is `string-compare`. The form is actually generated for the start task for the workflow definition, this is the task that defines the metadata you wish to be entered when the workflow is started.

```
<config evaluator="string-compare" condition="
  activiti$activitiParallelGroupReview " replace="true">
  <forms>
    <form>
      <field-visibility>
        <show id="bpm:workflowDescription" />
        <!-- <show id="bpm:workflowDueDate" /> -->
        <!--<show id="bpm:workflowPriority" />-->
        <show id="bpm:groupAssignee" />
        <!--<show id="wf:requiredApprovePercent" />-->
        <show id="packageItems" />
      </field-visibility>
    </form>
  </forms>
</config>
```

After the configurations, restart the server and go to **Start Workflow**. Select the **Group Review And Approve** workflow. You will notice there are only a few properties displayed. In our code, we have commented on **Due** date, **Priority**, and **Required Approval Percentage**. Select the **Assignee** and fill the other metadata. Click the **Start Workflow** button to start the workflow. With the following diagram you can find the difference:



Start Workflow – Before Configuration

Workflow: Group Review & Approve
Due: DD/MM/YYYY
Priority: Medium
Review Group: *
Required Approval Percentage: * 50
Items: No items selected

Start Workflow – After Configuration

Workflow: Group Review & Approve
Review Group: *
Items: No items selected

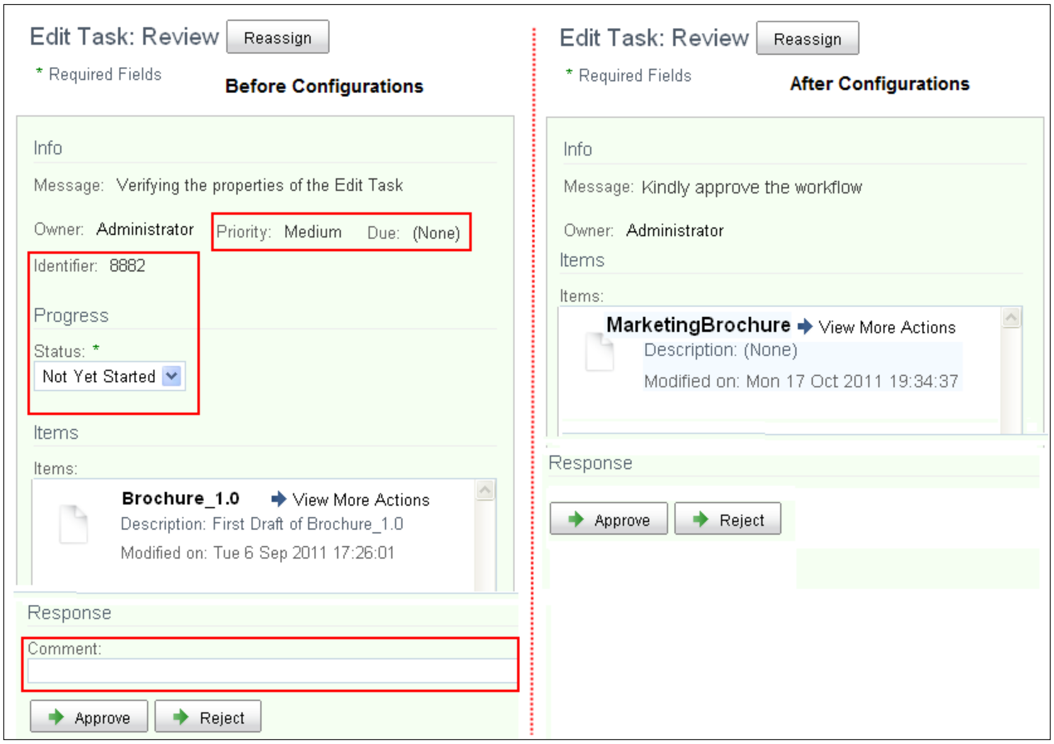
Configure view and edit task form

In this section we will use the same example of an out-of-the-box workflow called **Group Review and Approve**. In addition to the start workflow page configuration, let us try to configure view and edit task of the workflow.

Add the following block of code to show some of the properties in the edit task form. Kindly notice the highlighted changes. The form configuration for this page is driven from the name of the task. In this case, it is `wf:activitiReviewTask` and the evaluator used is `task-type`. The form is actually generated for the edit/view task for the workflow definition.

```
<config evaluator="task-type" condition=" wf:activitiReviewTask"
  replace="true">
  <forms>
    <form>
      <field-visibility>
        <show id="message" />
        <show id="taskOwner" />
        <!--<show id="bpm:priority" />
        <show id="bpm:dueDate" />
        <show id="bpm:taskId" />-->
        <!-- <show id="bpm:status" />-->
        <show id="packageItems" />
        <!-- <show id="bpm:comment" /> -->
        <show id="transitions" />
      </field-visibility>
      <appearance>
        <set id="" appearance="title" label-id=
          "workflow.set.task.info" />
        <set id="info" appearance="" template="/org/alfresco
          /components/form/3-column-set.ftl" />
        <set id="items" appearance="title" label-
          id="workflow.set.items" />
        <set id="response" appearance="title" label-
          id="workflow.set.response" />
        <field id="message">
          <control template="/org/alfresco/components/form/
            controls/info.ftl" />
        </field>
        <field id="packageItems" set="items" />
        <field id="transitions" set="response" />
      </appearance>
    </form>
  </forms>
</config>
```

After the configurations, restart the server. Now we have already started this workflow in the previous section, so go to **All Tasks**. Select the current task of that workflow. You will notice **Priority**, **Status**, **Comment**, and **Due** date are not visible after the configuration changes. In our code, we have commented on **Due** date, **Priority**, **Status**, and **Comment**. With the following diagram you can find the difference:



Edit Task: Review

* Required Fields

Before Configurations

Info

Message: Verifying the properties of the Edit Task

Owner: Administrator Priority: Medium Due: (None)

Identifier: 8882

Progress

Status: *

Not Yet Started

Items

Items:

Brochure_1.0 View More Actions

Description: First Draft of Brochure_1.0

Modified on: Tue 6 Sep 2011 17:26:01

Response

Comment:

Edit Task: Review

* Required Fields

After Configurations

Info

Message: Kindly approve the workflow

Owner: Administrator

Items

Items:

MarketingBrochure View More Actions

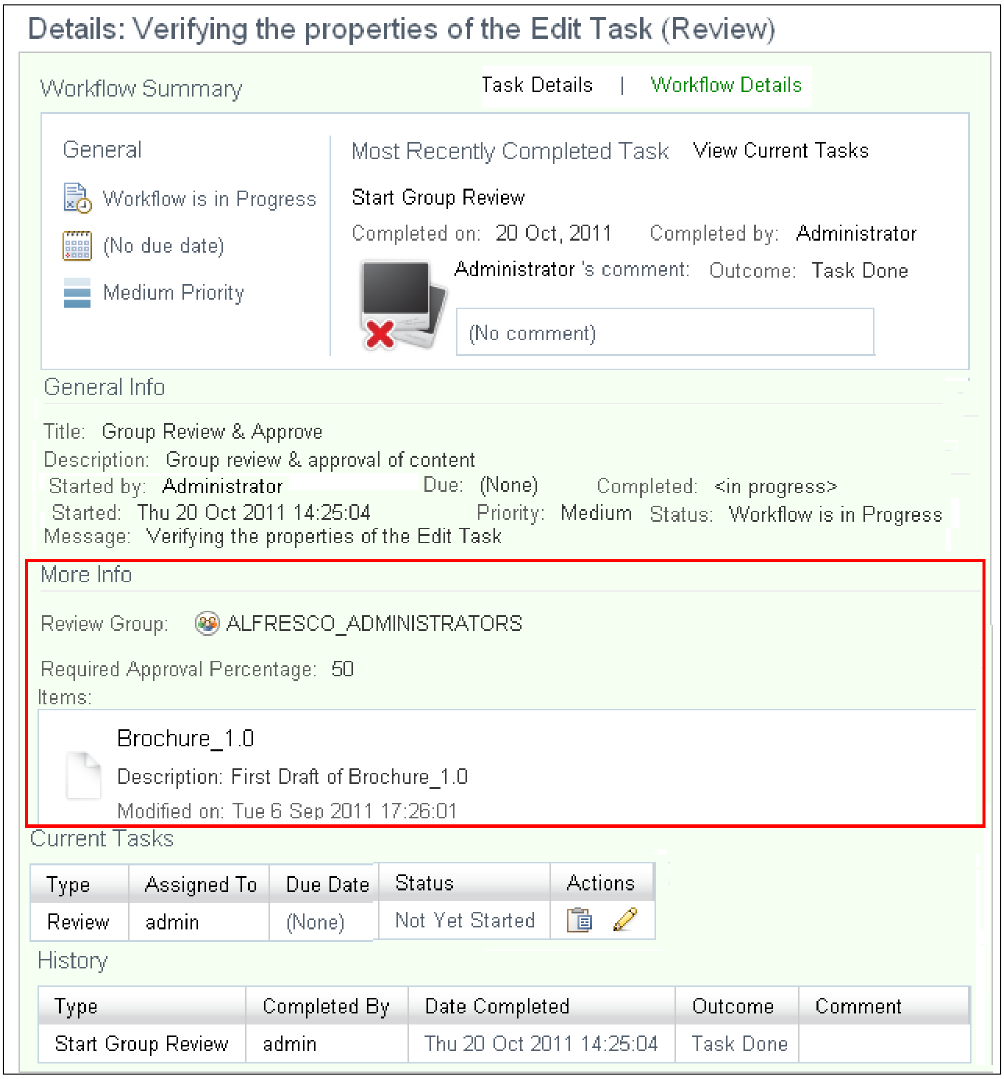
Description: (None)

Modified on: Mon 17 Oct 2011 19:34:37

Response

Configure the workflow detail form

In this section also, we will use the same example of an out-of-the-box workflow called **Group Review and Approve**. We have already seen configurations of the start workflow page and view/edit task of the workflow. In the following screenshot, the highlighted section of the page can be configured:



Details: Verifying the properties of the Edit Task (Review)

Workflow Summary

General

Workflow is in Progress

(No due date)

Medium Priority

Most Recently Completed Task

Start Group Review

Completed on: 20 Oct, 2011 Completed by: Administrator

Administrator 's comment: Outcome: Task Done

(No comment)

General Info

Title: Group Review & Approve

Description: Group review & approval of content

Started by: Administrator Due: (None) Completed: <in progress>

Started: Thu 20 Oct 2011 14:25:04 Priority: Medium Status: Workflow is in Progress

Message: Verifying the properties of the Edit Task

More Info

Review Group: ALFRESCO_ADMINISTRATORS

Required Approval Percentage: 50

Items:

Brochure_1.0

Description: First Draft of Brochure_1.0

Modified on: Tue 6 Sep 2011 17:26:01

Current Tasks

Type	Assigned To	Due Date	Status	Actions
Review	admin	(None)	Not Yet Started	

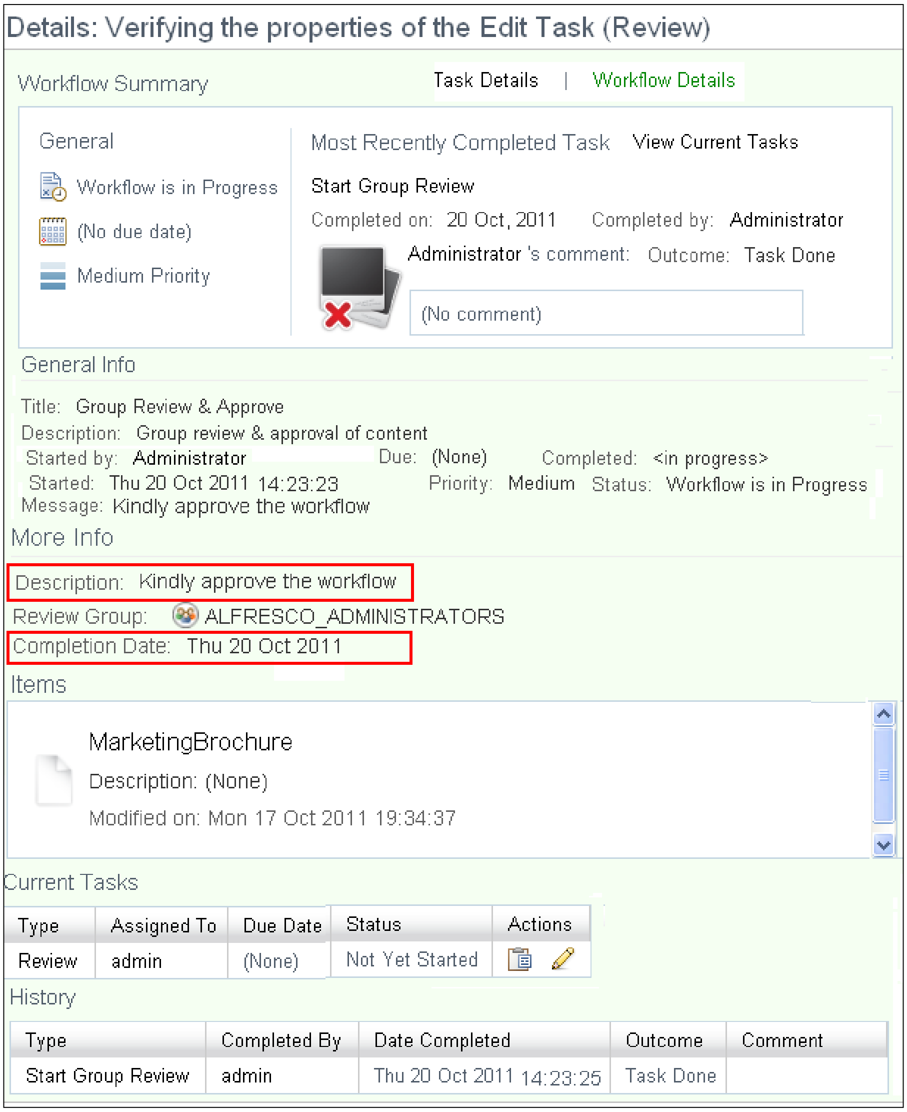
History

Type	Completed By	Date Completed	Outcome	Comment
Start Group Review	admin	Thu 20 Oct 2011 14:25:04	Task Done	

Add the following block of code to configure the workflow detail form. The form being displayed in the **Workflow Details** page is assigned a specific form id of workflow details. The form displayed is always for the start task of the workflow. The start task is used to collect the overall workflow metadata and therefore, contains all the values the user entered when the workflow was initiated. The form area can, therefore, be configured to show any custom metadata available to the start task. Kindly notice the highlighted changes. The form configuration for this page is similar to the Edit Task form but defined with specific form ID.

```
<config evaluator="task-type" condition="wf:submitGroupReviewTask">
  <forms>
    <form id="workflow-details">
      <field-visibility>
        <show id="bpm:groupAssignee" />
        <show id="bpm:workflowDescription" />
        <show id="bpm:completionDate" />
        <!-- <show id="wf:requiredApprovePercent" />-->
        <show id="packageItems" />
      </field-visibility>
      <appearance>
        <set id="" appearance="title" label-
          id="workflow.set.workflow.more_info" />
        <set id="items" appearance="title" label-
          id="workflow.set.items" />
        <field id="bpm:groupAssignee" label-
          id="workflow.field.review_group" />
        <field id="wf:requiredApprovePercent" />
        <field id="packageItems" set="items" />
      </appearance>
    </form>
  </forms>
</config>
```

After the configurations, restart the server. Click the **All Tasks** action through the **My Tasks** dashlet. Select the **ViewWorkflow** action of the same task. You will notice **Description**, **Completion Date** is added and **Required Approval Percentage** is not visible after the configuration changes. You can compare the previous and the following screenshot to see the difference:



Details: Verifying the properties of the Edit Task (Review)

Workflow Summary

Task Details | Workflow Details

General

Workflow is in Progress

(No due date)

Medium Priority

Most Recently Completed Task View Current Tasks

Start Group Review

Completed on: 20 Oct, 2011 Completed by: Administrator

Administrator 's comment: Outcome: Task Done

(No comment)

General Info

Title: Group Review & Approve

Description: Group review & approval of content

Started by: Administrator Due: (None) Completed: <in progress>

Started: Thu 20 Oct 2011 14:23:23 Priority: Medium Status: Workflow is in Progress

Message: Kindly approve the workflow

More Info

Description: Kindly approve the workflow

Review Group: ALFRESCO_ADMINISTRATORS

Completion Date: Thu 20 Oct 2011

Items

MarketingBrochure

Description: (None)

Modified on: Mon 17 Oct 2011 19:34:37

Current Tasks

Type	Assigned To	Due Date	Status	Actions
Review	admin	(None)	Not Yet Started	

History

Type	Completed By	Date Completed	Outcome	Comment
Start Group Review	admin	Thu 20 Oct 2011 14:23:25	Task Done	

Configure Data Lists

We have already learned in the previous chapter about the Data List and use of it. There may be cases where you want to have your own Data List. In this section, we will see how we can create a new Data List. Creating your own Data List involves two steps:

1. Define and deploy a custom content model for your new Data List type, making sure it inherits from `dl:dataListItem`.
2. Configure the Data List in the Alfresco Share application to display the metadata from the custom Data List in the create forms, edit forms as well as in the datagrid.

Basically the Data Lists provide multiple forms, one for creating a data list item, one for editing a data list item and a third one for the datagrid. The datagrid form controls the display list and allows you to configure which properties are shown in this view. We will see the configuration for all one by one.

Let us define a Content Model in the Alfresco Repository called **Marketing Collateral Design List** with properties like **Collateral Title**, **Description**, **type**, **priority**, and **Collateral Id**.

Once you are finalized with the Content Model, we have to add the following block of code to create a new Data List

Configure the new Data List

Configuration of the Data List is similar to configuring Content Type and Aspect. We have to take care of the evaluator to be used and condition should be name of a type defined in Content Model. Add the following block of code to create a new data list:

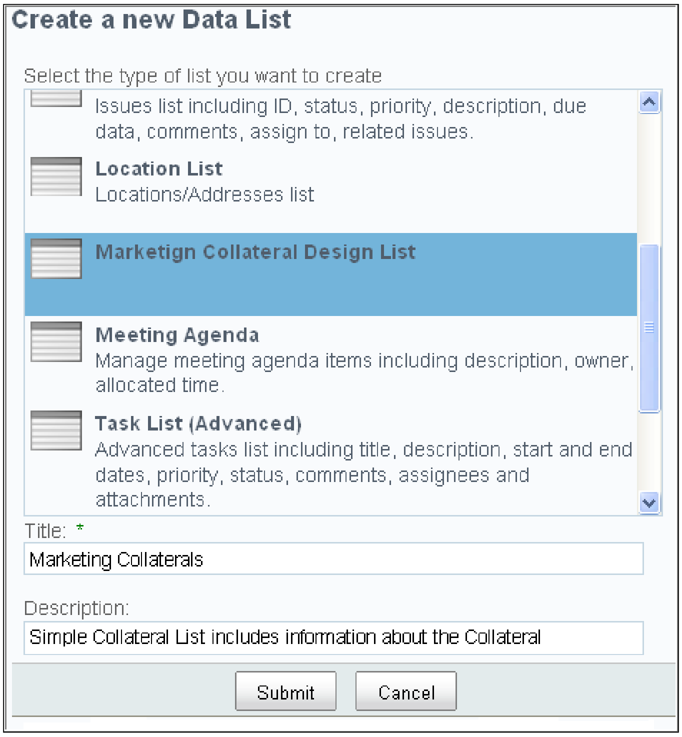
```
<!-- mar:collateralsList type (Creating Data Lists) -->
<config evaluator="model-type" condition="mar:collateralsList">
  <forms>
  <!-- Create item form -->
    <form>
      <field-visibility>
        <show id="mar:collateralsTitle" />
        <show id="mar:collateralsType" />
        <show id="mar:description" />
        <show id="mar:collateralId" />
        <show id="mar:priority" />
      </field-visibility>
      <appearance>
        <field id="mar:description">
```

```
            <control template="/org/alfresco/components/form
              /controls/textarea.ftl" />
          </field>
        </appearance>
      </form>
    </forms>
  </config>
```

After the configurations, restart the server.

Follow the given steps to create a new list:

1. Go to Data Lists and click **New List** .You will notice **Marketing Collateral Design List** as shown in the following screenshot. Fill the values of **Title** and **Description** and click **Submit** to create a new Data List:



Create a new Data List

Select the type of list you want to create

Issues list including ID, status, priority, description, due data, comments, assign to, related issues.

Location List
Locations/Addresses list

Marketign Collateral Design List

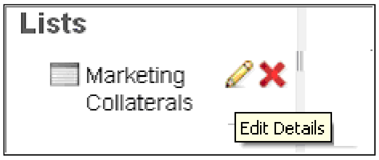
Meeting Agenda
Manage meeting agenda items including description, owner, allocated time.

Task List (Advanced)
Advanced tasks list including title, description, start and end dates, priority, status, comments, assignees and attachments.

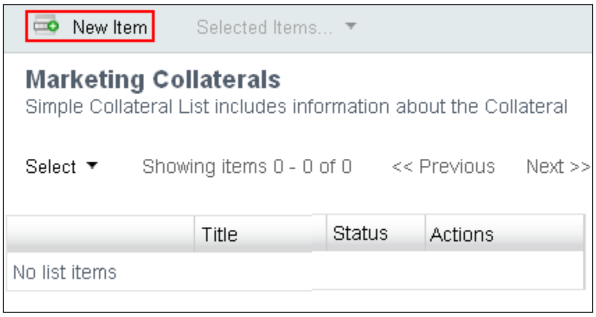
Title: *
Marketing Collaterals

Description:
Simple Collateral List includes information about the Collateral

2. You will see the new list created as shown in the following screenshot:



3. Select the list and click **New Item** to add values for the list, as shown in the following screenshot:

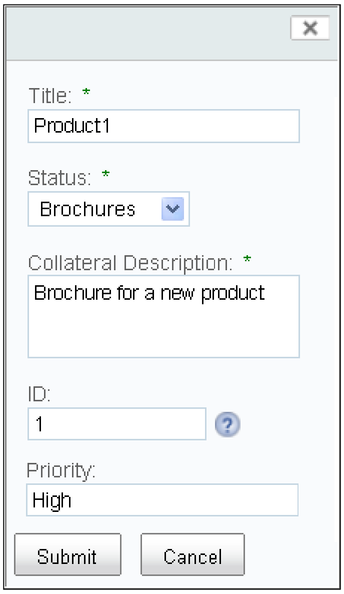


Marketing Collaterals
Simple Collateral List includes information about the Collateral

Showing items 0 - 0 of 0

No list items

4. Populate the values, as show in the following screenshot, and click **Submit**:



Title: * Product1

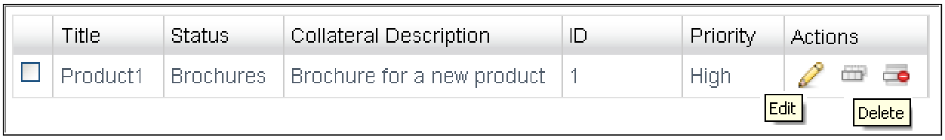
Status: * Brochures

Collateral Description: * Brochure for a new product

ID: 1

Priority: High

5. On clicking of **Submit** you will find all the values with the list created:



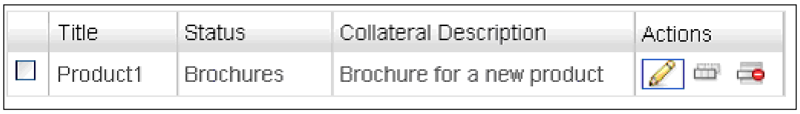
	Title	Status	Collateral Description	ID	Priority	Actions
□	Product1	Brochures	Brochure for a new product	1	High	

Configure the DataGrid

The DataGrid is a graphical representation of elements created through the Data List. The DataGrid has its own form called datagrid. In order to provide configuration for the datagrid you need to specify this as a form ID. In the previous screenshot we can see all the properties. Suppose you want to display only a few properties, in this case a configuration change in required. When you add the following code, it will show a subset on the properties in a datagrid view:

```
<config evaluator="model-type" condition="mar:collateralsList">
  <forms>
  <!-- Data Grid view -->
    <form id="datagrid">
      <field-visibility>
        <show id="mar:collateralsTitle" />
        <show id="mar:collateralsType" />
        <show id="mar:description" />
      </field-visibility>
    </form>
  </forms>
</config>
```

After the configurations, restart the server. Click the same list that we have created. You will find only a few properties are visible this time, as shown in the following screenshot:



	Title	Status	Collateral Description	Actions
□	Product1	Brochures	Brochure for a new product	

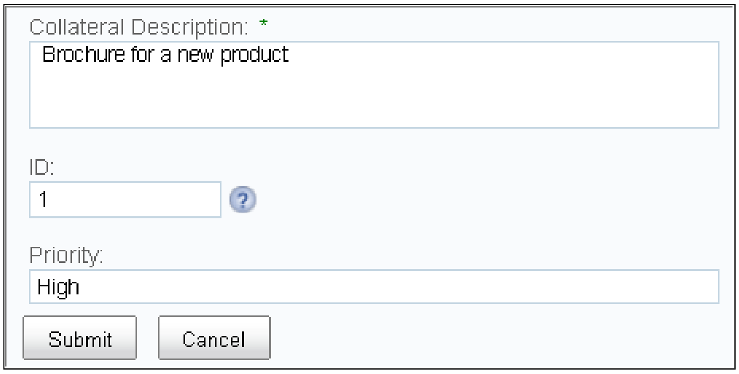
Configure the Edit Data List

In this example, we will see how we can configure the Data List while editing. You can decide what you would like to edit and keeping that in mind, you can display only those properties for editing.

This can be achieved in a similar manner as creating the Data List .The only thing to be considered is value of the evaluator which should be of `node-type` .Add the following block of code to allow only a few properties to be modified:

```
<config evaluator="node-type" condition="mar:collateralsList">
  <forms>
  <!-- Create item form -->
    <form>
      <field-visibility>
        <show id="mar:description" />
        <show id="mar:collateralId" />
        <show id="mar:priority" />
      </field-visibility>
      <!-- <create-form template="../data-lists/forms/datalist-
        new.ftl" />-->
      <appearance>
        <field id="mar:description">
          <control template="/org/alfresco/components/
            form/controls/textarea.ftl" />
        </field>
      </appearance>
    </form>
  </forms>
</config>
```

After the configurations, restart the server. Click the same list that we have created. Click on the **Edit** icon to modify the list. You will find that only a few properties are visible this time, as shown in the following screenshot:



Collateral Description: *
Brochure for a new product

ID:
1

Priority:
High

Enabling Google Docs

Alfresco Share provides a way to integrate documents in Google Docs. This is the exciting feature that enables you to provide access to users to view documents, edit documents, and allow comments through Google Docs. If you don't want any user to edit the document, you can provide access to allow comments on the document. Once it's been added by Google to your Google Docs account, to give comment-only access to your document, click on the **Share** button. From there, add in the contact you'd like to share your document with, and select **Can comment**. Similarly, you can provide access to other users to view and edit it by selecting **Can edit and Can view**. Let us discuss how can we work with Google Docs.

There are two ways in which you can configure Google Docs:

1. Through the Admin Console you can easily configure your Google account. This is already covered in *Chapter 4*, *Administering Share and Configuring Authentication Access*.
2. Configure Google Docs properties mentioned below using `alfresco-global.properties` located at **<install-app> | tomcat | shared | classes**:

```
googledocs.googleeditable.enabled=true
googledocs.application.name=Alfresco ECM system
googledocs.url=https://docs.google.com/feeds/default/private/full
googledocs.downloadurl=https://docs.google.com/feeds/download
googledocs.username=<username>@gmail.com>
googledocs.password=<password>
googledocs.spreadsheet.service.name=wise
mail.host=<host name>
mail.port=<port-no>
```

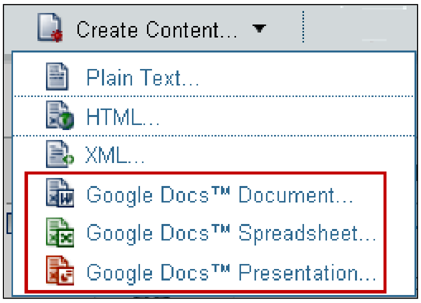
You will have to add the following block of code in `share-config-custom.xml` to enable Google Docs. It is disabled by default.

```
<config evaluator="string-compare" condition="DocumentLibrary"
  replace="true">
  <google-docs>
  <enabled>true</enabled>
    <creatable-types>
      <creatable type="doc">application/msword</creatable>
      <creatable type="xls">application/vnd.ms-excel</creatable>
      <creatable type="ppt">application/vnd.ms-powerpoint</creatable>
    </creatable-types>
  </google-docs>
</config>
```

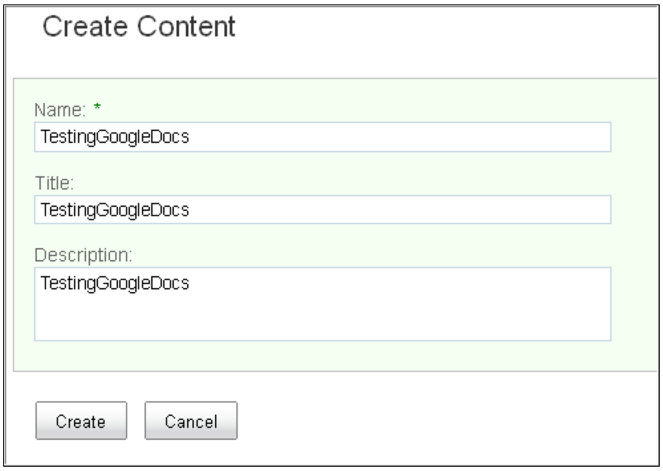
After the configurations, restart the server. Go to the **DocumentLibrary** of the site.

Follow the steps to create Google Docs:

1. Click the **Create Content** menu and you will find three more options added to the list, as shown in the following screenshot:



2. Click any of the above highlighted actions and **Create Content** of that type as show in the following screenshot:

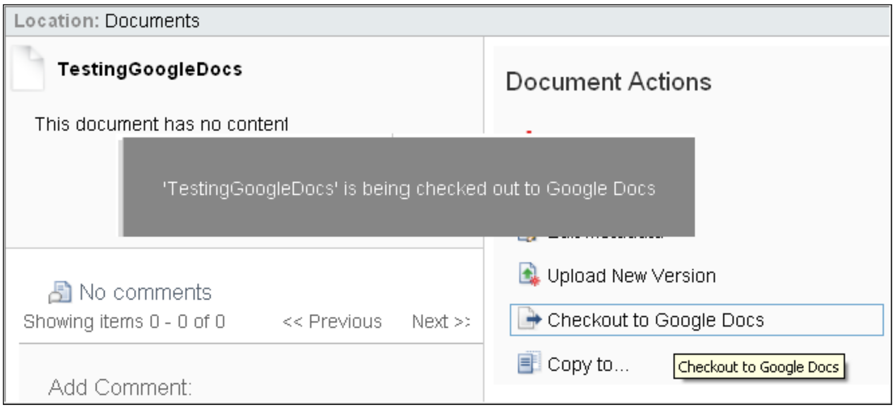

Create Content

Name: * TestingGoogleDocs

Title: TestingGoogleDocs

Description: TestingGoogleDocs

3. On clicking **Checkout to Google Docs** action, you will see the following message:

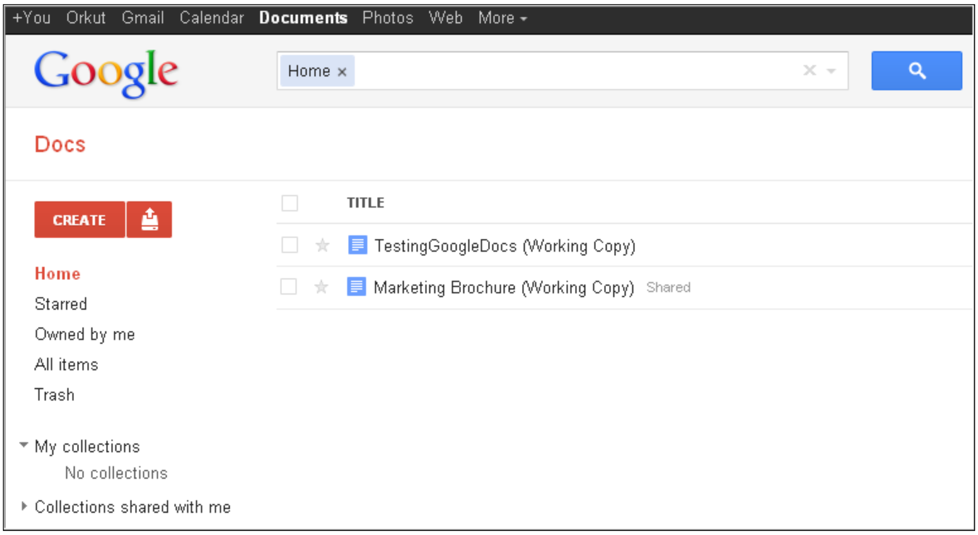


'TestingGoogleDocs' is being checked out to Google Docs

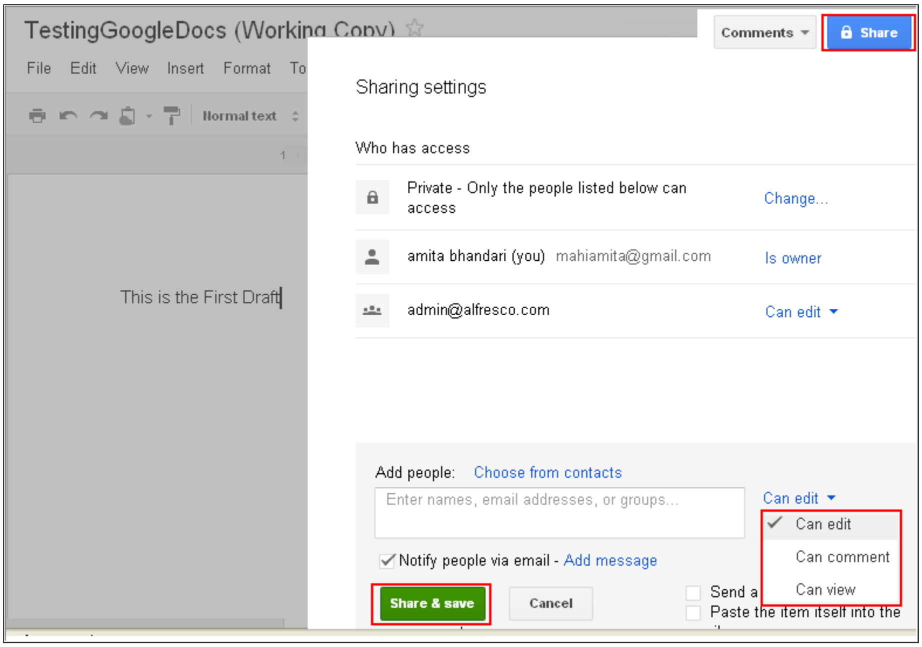
4. After successful checkout, you will see the following message on your screen:

This document has been uploaded by you to Google Docs for editing.

5. Now you can work with that document by logging in to your Google account.



6. You can click **Share** button and add people to share this document and provide access to users.


TestingGoogleDocs (Working Copy)
Comments
Share
File Edit View Insert Format To
Normal text

This is the First Draft

Sharing settings

Who has access

Private - Only the people listed below can access — Change...

amita bhandari (you) mahiamita@gmail.com — Is owner

admin@alfresco.com — Can edit

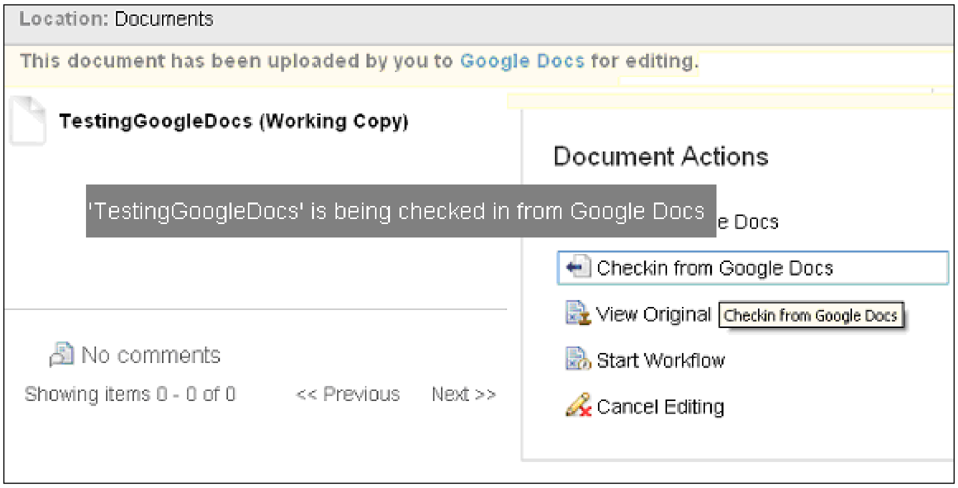
Add people: Choose from contacts

Enter names, email addresses, or groups...

☑ Notify people via email - Add message

Can edit
✓ Can edit
Can comment
Can view
□ Send a
□ Paste the item itself into the
Share & save
Cancel

7. Once changes are made in the document, you can save this document and check-in the document through Alfresco Share. You will find the updated document.


Location: Documents

This document has been uploaded by you to Google Docs for editing.

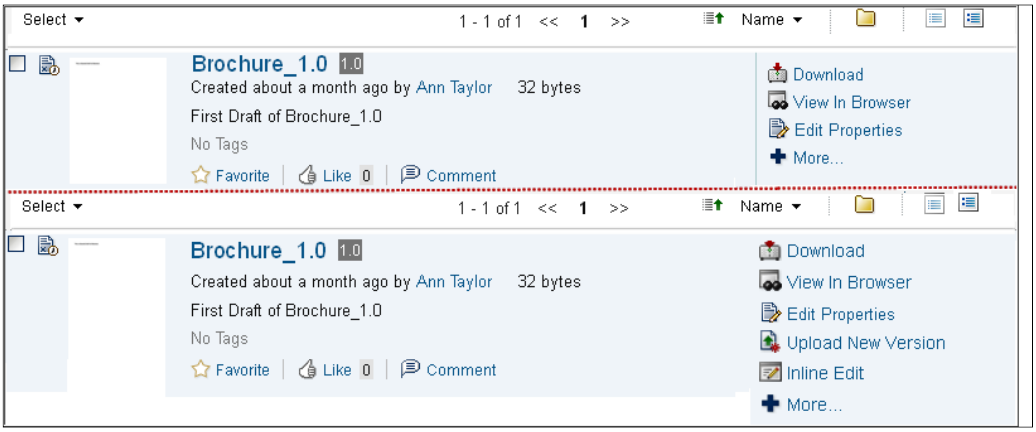
TestingGoogleDocs (Working Copy)

'TestingGoogleDocs' is being checked in from Google Docs

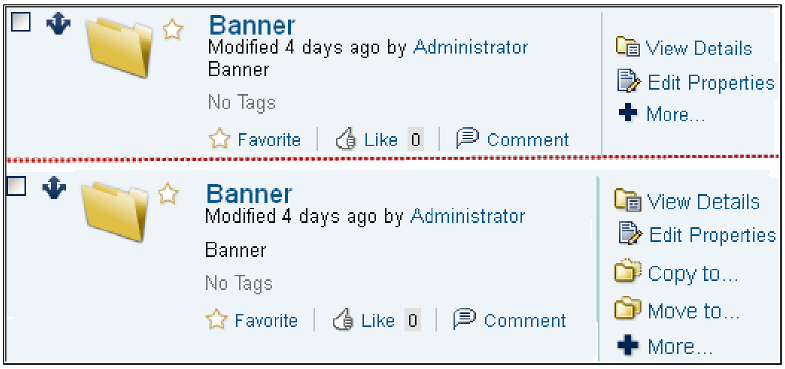
Manage the number of actions on the document library's content

The number of actions for the document and folder are always predefined. With a small customization, we can change the number of actions on the document and folder.

By default for a document, only three actions are visible. After the changes one can see five actions as shown in the following screenshot:



Similarly, for folders by default, two actions are visible. After the changes one can see four actions as shown in the following screenshot:



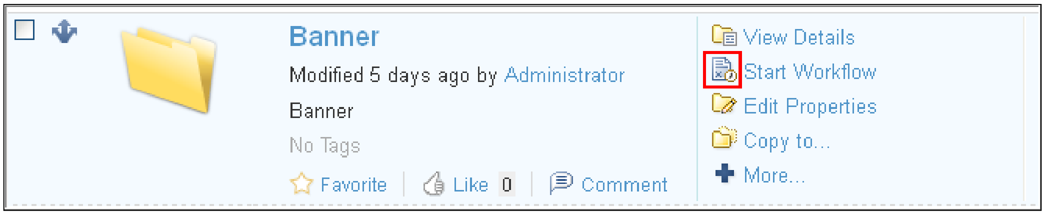
For this, we have to make changes in `documentlist.js`. Search for this variable `splitAt` and make the highlighted changes. The `documentlist.js` is located at **<install-app> | tomcat | webapps | share | components | documentlibrary**.

Replace `var splitAt = jsNode.isContainer ? 2 : 3;` with `var splitAt = jsNode.isContainer ? 4 : 5;`

Best practice says that we should not make changes in the existing file. Follow the instructions and package structure provided in the next chapter to learn how we can overwrite changes in the existing file.

Custom actions

Alfresco Share provides a number of actions which users may execute against a particular item stored in a site component, such as Edit, Manage Permissions, and Delete, usually found in the component's list view. The Document Library provides a small framework to allow additional actions to be defined easily. They may then be added to the **Document Library** browse view or the **Document Detail** screen with a configuration. In this example, we will see how we can add an action to the folder. In the following screenshot, **Start Workflow** is the new action which we have added:

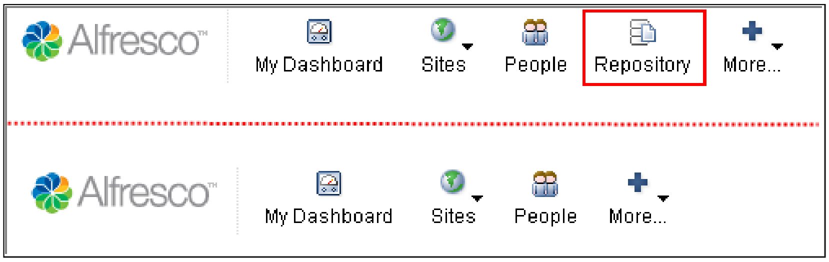


For this, we have to configure in `share-config-custom.xml` Add the following block of code:

```
<config evaluator="string-compare" condition="DocLibActions" >
  <actionGroups >
    <actionGroup id="folder-browse" >
      <action index="280" id="document-assign-workflow" />
    </actionGroup>
    <actionGroup id="folder-details">
      <action index="280" id="document-assign-workflow" />
    </actionGroup>
  </actionGroups>
</config>
```

Hiding the Repository from Share

We can access Alfresco Repository from Alfresco Share. This feature allows users to access the Data Dictionary folder or guest home and can explore various navigation options, for example, folders and categories, tags, and filters. Users can access various sites, although they are not member of that site. Users can copy files to the Share document library without any Repository permission. Share configuration provides a way to restrict users to access the Alfresco Repository by editing `share-config-custom.xml`:

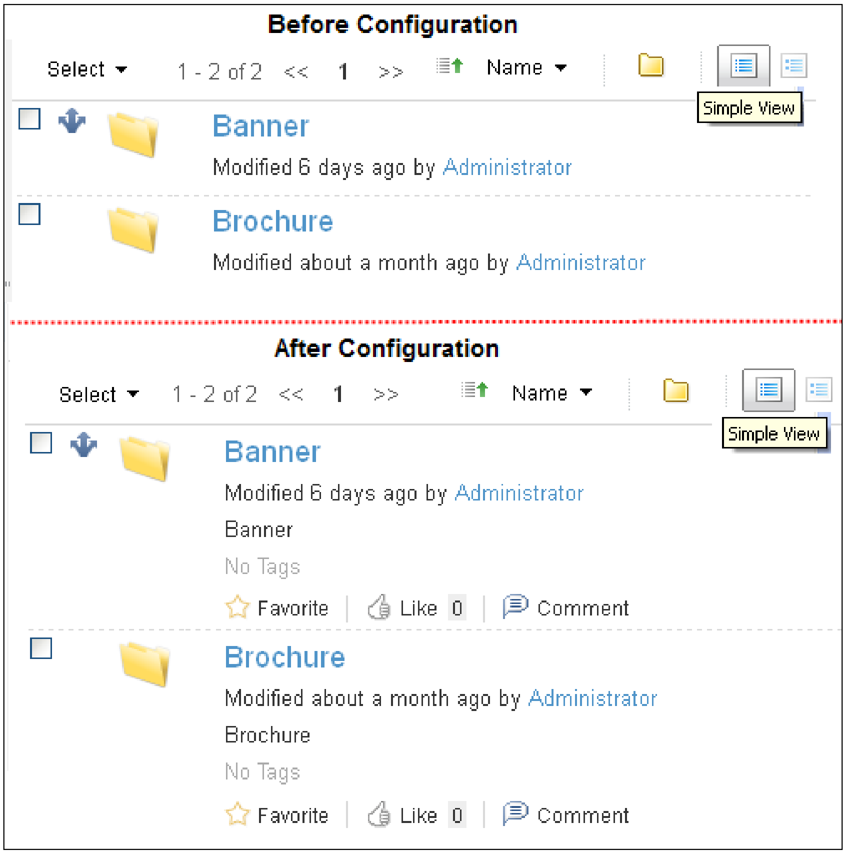


Add the following block of code in the `share-config-custom.xml` file:

```
<config replace="true">
  <header>
    <app-items>
      <!-- defaults: icon="{id}.png" label="header.{id}.label"
        description="header.{id}.description" -->
      <item type="link" id="my-dashboard">{userdashboardpage}</item>
      <item type="js" id="sites">Alfresco.module.Sites</item>
      <item type="link" id="people">/people-finder</item>
      <!-- <item type="link" id="repository" condition
        ="conditionRepositoryRootNode">/repository</item>-->
      <item type="container" id="more">
      <container-group id="my">
        <item type="link" id="my-tasks">/my-tasks</item>
        <item type="link" id="my-workflows">/my-workflows</item>
        <item type="link" id="my-content">/user/user-content</item>
        <item type="link" id="my-sites">/user/user-sites</item>
        <item type="link" id="my-profile">{userprofilepage}</item>
      </container-group>
      <container-group id="tools" permission="admin">
        <item type="link" id="application">/console/admin-
          console/application</item>
        <item type="link" id="groups">/console/admin-
          console/groups</item>
        <item type="link" id="replication-jobs" condition=
          "!conditionEditionTeam">/console/admin-console/
          replication-jobs</item>
        <item type="link" id="repository">/console/admin-
          console/repository</item>
        <item type="link" id="trashcan">/console/admin-
          console/trashcan</item>
        <item type="link" id="users">/console/admin-
          console/users</item>
        <item type="link" id="more">/console/admin-console/</item>
      </container-group>
    </item>
  </app-items>
  <user-items>
    <item type="container" id="user" icon="" description="">
      <container-group id="usermenu" label="">
        <item type="user" id="status">{userprofilepage}</item>
        <item type="link" id="my-profile">{userprofilepage}</item>
        <item type="link" id="change-password" condition
          ="user.capabilities.isMutable">/user/change-password</item>
        <item type="external-link" id="help">{share-help}</item>
        <item type="link" id="logout" condition
          ="!context.externalAuthentication">/dologout</item>
      </container-group>
    </item>
  </user-items>
  <dependencies>
    <css src="/modules/create-site.css" />
    <css src="/modules/header/sites.css" />
    <js src="/modules/create-site.js" />
    <js src="/modules/header/sites.js" />
  </dependencies>
  </header>
</config>
```

Customizing the metadata template

Alfresco Share provides a way to customize metadata rendered under files and folders on the document library browse view. This gives the flexibility to configure properties as you like for each content. In the following example we will see how we can configure properties for files and folders for a simple view:



Before Configuration

Banner

Modified 6 days ago by Administrator

Brochure

Modified about a month ago by Administrator

After Configuration

Banner

Modified 6 days ago by Administrator

Banner

No Tags

Brochure

Modified about a month ago by Administrator

Brochure

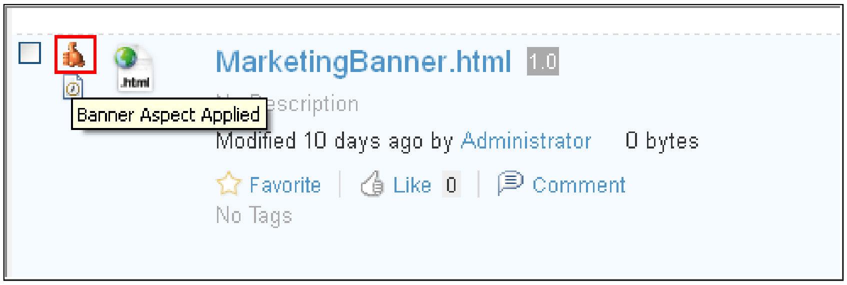
No Tags

Add the following block of code in the `share-config-custom.xml` file:

```
<config evaluator="string-compare" condition="DocumentLibrary"  >
  <metadata-templates>
    <template id="default">
      <line index="10" id="date">{date}{size}</line>
      <line index="20" id="description"
        view="simple">{description}</line>
      <line index="30" id="tags" view="simple">{tags}</line>
      <line index="40" id="categories" view="simple" evaluator=
        "evaluator.doclib.metadata.hasCategories">{categories}</line>
      <line index="50" id="social" view="simple">{social}</line>
    </template>
  </metadata-templates>
</config>
```

Defining status indicators

Status indicators is a way to mark the presence of any configuration on a specific document or to capture the state of any document. For example, you have seen a small icon when rules are applied or a workflow is configured. In the same line, we will see an example of how to know whether the custom aspect "bar:manner" has been applied on any document. We have already applied this aspect on a few documents through the previous section. You will see a small icon added against each document on which the Banner aspect is applied:



Add the following block of code in the `share-config-custom.xml` file:

```
<config evaluator="string-compare" condition="DocumentLibrary"  >
  <indicators>
    <indicator id="banner" index="10" icon="banner-16.png"
      label="Banner Aspect Applied">
      <evaluator>evaluator.doclib.indicator.banner</evaluator>
    </indicator>
  </indicators>
</config>
```

Edit the `custom-slingshot-application-context.xml` file located at **<install-share-app>** | **tomcat** | **shared** | **classes** | **alfresco** | **web-extension**. You have to add the following entry before `</beans>`:

```
<bean id="evaluator.doclib.indicator.banner"
  class="org.alfresco.web.evaluator.HasAspectEvaluator">
  <property name="aspects">
    <list>
      <value>mar:banner</value>
    </list>
  </property>
</bean>
```

Add any image of 16x16 dimension under the folder hierarchy **<install-share-app>** | **tomcat** | **webapps** | **share** | **components** | **documentlibrary** | **indicators** and rename the image to `banner-16.png`.

> You can download the complete code snippet from the Packt website. You can download the complete project and add it into Eclipse. The project has all the required details about the configurations we have made in this chapter.

Summary

This chapter explains about various configurations that can be made by changes in the XML file. It explains about:

- How to configure Content Types and Aspects in Share and search those custom properties
- Configure an advanced workflow at form levels
- Creating custom forms through the use of Data List
- Working on Share documents through Google Docs
- Managing a number of actions from the lists of actions
- Restricting access to the Alfresco Repository from Share
- Customizing the metadata template on the Document Library browse view
- Defining new status indicators for the document
- In the next chapter we will learn about packaging Share

10
Packaging and Deploying Share

So far, we have learned about Alfresco Share's out-of-the-box features. There may be a need for customization at times. The Alfresco development environment needs to be set in place before we can work with any customization. This chapter explains how to set up the development environment. It also talks about different approaches for deployment and practices to be followed in Share. It is good to know about development before we learn how to customize Share.

In this chapter, you will learn the following topics:

- Setting up the development environment
- Installing Eclipse
- Configuring the Alfresco SDK using Eclipse
- Configuring a project for development
- Creating a project structure
- Deployment approaches
- Building an application

Setting up the development environment

In this chapter, we will learn about how to set up the development environment before customizing any functionality or implementing a new feature. The first thing is to finalize a development tool to be used for developing the code. Development tools help in developing the code faster, easier, and with less effort.

There are various tools available in the market. Out of them, Eclipse is the widely used Integrated Development Environment and allows for a convenient and rapid development of web applications. Even the Alfresco SDK distribution includes Eclipse projects that can easily be imported into Eclipse. We shall learn about the Eclipse installation in the next section.

Installing Eclipse

As we will be using Eclipse as a development tool for customization, in this section, we will talk about the installation of Eclipse. Download the Eclipse Europe file `eclipse-jee-europa-winter-win32.zip` from the following URL:

`http://eclipse.org/downloads/moreinfo/jee.php`.

You can refer to the following URL for the installation steps:

`http://www.cs.umd.edu/class/spring2006/cmsc132/EclipseTutorial/install.html`.

The next step after the installation is to configure a project for the development in Eclipse.

Configuring the Alfresco SDK using Eclipse

Alfresco provides the Alfresco **SDK** (**Software Development Kit**) to a developer for customizing or extending the Alfresco platform. It minimizes the efforts and helps in the timely building of the application. The SDK bundle is provided with each release of Alfresco. The following steps explain how to configure the Alfresco SDK:

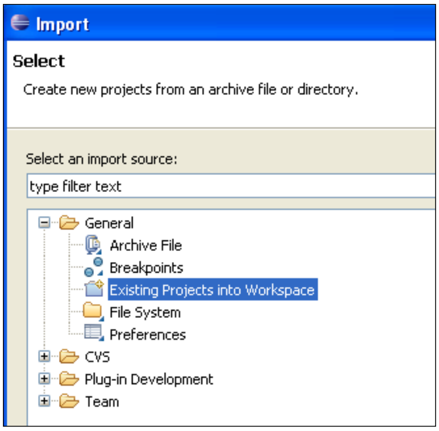
1. Download the Alfresco SDK from the following URL:

   `http://wiki.alfresco.com/wiki/Community_file_list_4.0.b`.

2. Alternatively, you can also download it from the following URL:

   `http://support.alfresco.com/ics/support/default.asp?deptID=15026`.

3. Unpack the Alfresco SDK to any folder.
4. Import the Alfresco SDK projects into Eclipse.
5. From the Eclipse main menu, go to **File | Import**. The **Import** dialog opens, as shown in the following screenshot. Select **General | Existing Projects into Workspace** and click on the **Next** button:



Import

Select

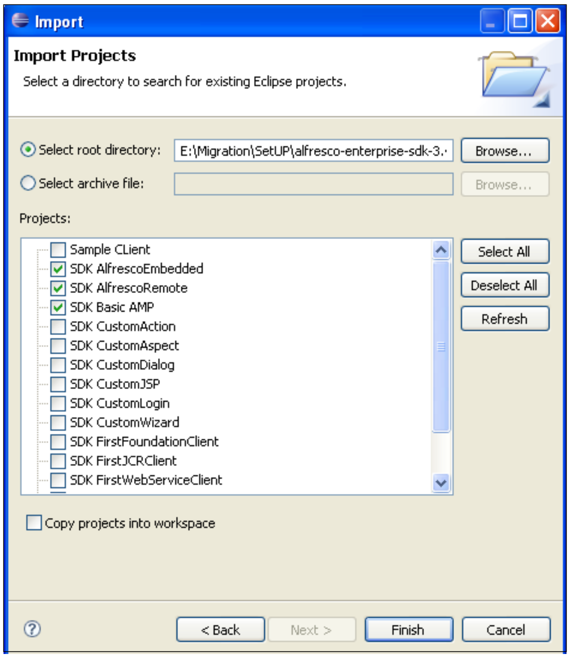
Create new projects from an archive file or directory.

Select an import source:

type filter text

- General
  - Archive File
  - Breakpoints
  - Existing Projects into Workspace
  - File System
  - Preferences
- CVS
- Plug-in Development
- Team

6. Select the **Select root directory** option and click on **Browse** to navigate to the folder where you have unpacked the Alfresco SDK and click on **OK**. You will find a list of SDK projects, as shown in the following screenshot. These sample projects help in developing the Alfresco extension modules. You can import projects of your choice, but you must import at least the SDK Alfresco Embedded and SDK Alfresco Remote projects to run other sample projects or develop your own extension module:



Import

Import Projects

Select a directory to search for existing Eclipse projects.

● Select root directory: E:\Migration\SetUP\alfresco-enterprise-sdk-3.· Browse...

○ Select archive file: Browse...

Projects:

- □ Sample CLient
- ☑ SDK AlfrescoEmbedded
- ☑ SDK AlfrescoRemote
- ☑ SDK Basic AMP
- □ SDK CustomAction
- □ SDK CustomAspect
- □ SDK CustomDialog
- □ SDK CustomJSP
- □ SDK CustomLogin
- □ SDK CustomWizard
- □ SDK FirstFoundationClient
- □ SDK FirstJCRClient
- □ SDK FirstWebServiceClient

Select All | Deselect All | Refresh

□ Copy projects into workspace

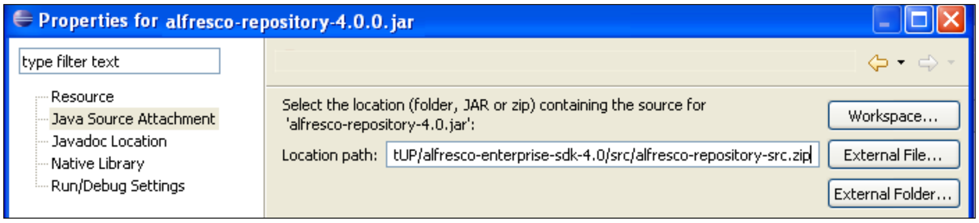
< Back | Next > | Finish | Cancel

7. Once you click on **OK**, you will find the projects in the Package Explorer.

Associating the source code and Java doc libraries

Developers would also wish to have access to the Alfresco source code and Java documentation to study and customize new requirements. Once the Alfresco SDK Project is imported into Eclipse, carry out the following steps to associate the source code and java documentation:

1. Expand the SDK Alfresco Embedded project in Eclipse.
2. Go to **Referenced Libraries** and right-click on **alfresco-repository-4.0 jar** and select **Properties** from the pop-up menu.
3. The **Properties** dialog opens up, as shown in the following screenshot, select **Java Source Attachment** from the tree menu. Click on **External File** and go to the **SRC** directory of the unpacked Alfresco SDK folder. Select the `alfresco-repository-src.zip` file and click on **Open**:

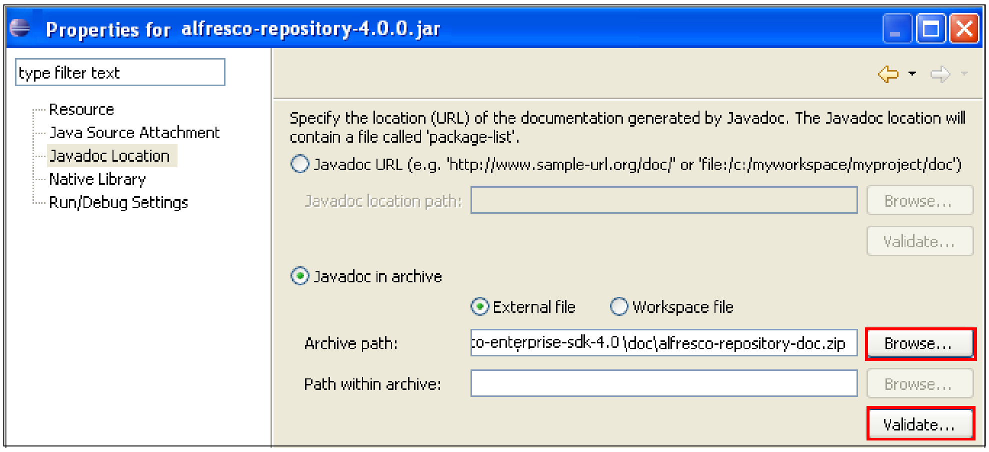


Properties for alfresco-repository-4.0.0.jar

Select the location (folder, JAR or zip) containing the source for 'alfresco-repository-4.0.jar':

Location path: tUP/alfresco-enterprise-sdk-4.0/src/alfresco-repository-src.zip

4. Now associate Java docs. In the same **Properties** dialog, select **Javadoc Location**. In the **Javadoc Location** panel, select the **Javadoc in archive** option and click on **Browse**.
5. Navigate to the **doc** folder of the Unpacked SDK directory. Select `alfresco-repository-doc.zip` and click on **Open**:



Properties for alfresco-repository-4.0.0.jar

Specify the location (URL) of the documentation generated by Javadoc. The Javadoc location will contain a file called 'package-list'.

○ Javadoc URL (e.g. 'http://www.sample-url.org/doc/' or 'file:/c:/myworkspace/myproject/doc')

Javadoc location path:

● Javadoc in archive

● External file ○ Workspace file

Archive path: :o-enterprise-sdk-4.0\doc\alfresco-repository-doc.zip

Path within archive:

6. Click on **Validate** to validate the Javadoc location, and then click on **OK** to view the Javadoc in a web browser, or **Cancel** if not.
7. Finally, click on **OK** to close the **Properties** dialog.
8. Once the source code and Javadoc have been attached, the **alfresco-repository.jar** icon changes to include a small document.
9. You will be now able to see the source code attached to this jar and Javadoc for further information. You can repeat the similar steps for other jars for which you wish to get the source code.

Configuring the project for development

In this section, we will learn to set up the development environment for any Alfresco Share project. We can create a project by using the following two approaches:

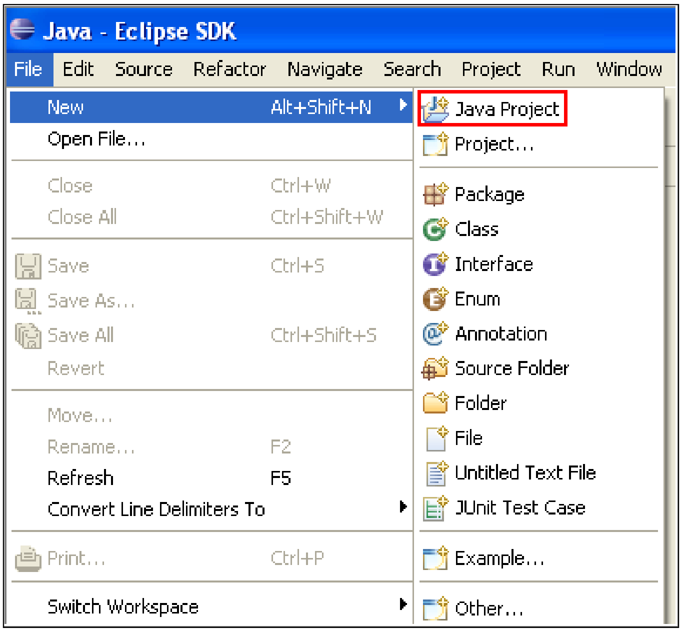
- With the use of Maven, one can manage all Alfresco custom modules. Using Maven archetypes and the embedded Jetty app server, you could have an Alfresco application running with just two command lines standard commands. The usage of Maven Alfresco archetypes can solve the issue of developing an extension/customization in an unstructured manner and will also build the application in less time. This is actually a straightforward way to start a development project on Alfresco Share. The following URL provides all the information needed to build an application through Maven:

  `http://wiki.alfresco.com/wiki/Managing_Alfresco_Lifecyle_with_Maven`.
- You can create a project through Eclipse. We will see how we can create a project in Eclipse and build the configure path in Eclipse.

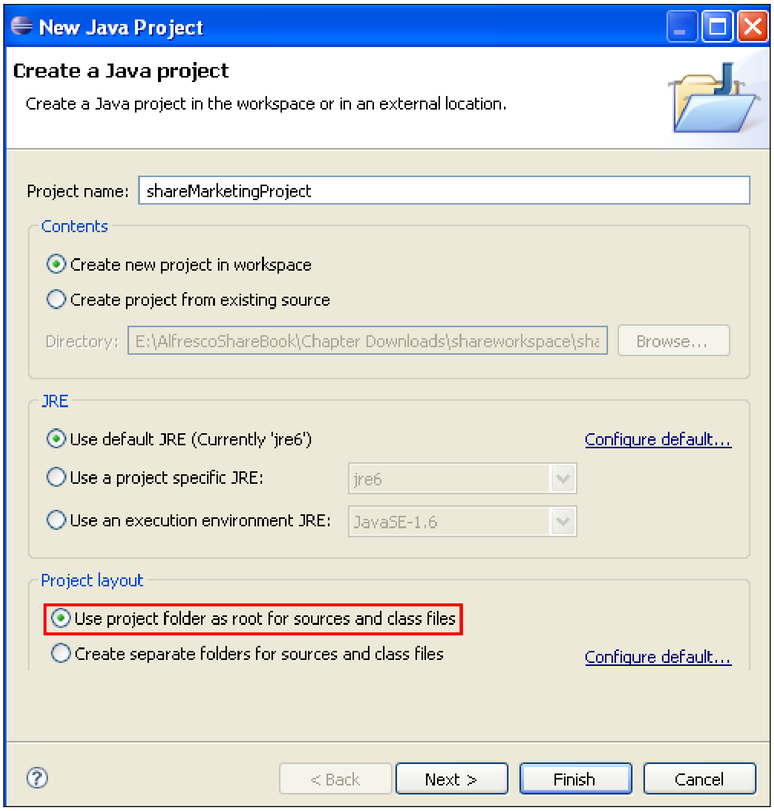
Go to the installed Eclipse folder and open Eclipse by double-clicking on the **Eclipse** icon. It will ask you to select the workspace. Create a new folder named `shareworkspace` and browse to that folder while asking for the workspace.

Eclipse will now start. Now we need to set up a new project in eclipse. The following steps explain how to create a Java project in Eclipse:

1. Go to **File** | **New**. Select **Java Project** from the new project wizard, as shown in the following screenshot:



2. In the next screen, provide the **Project name** as **shareMarketingProject** and select the **Create new project in workspace** option. Remember to select the highlighted option in **Project layout** and click on the **Finish** button, as shown in the following screenshot:



New Java Project

Create a Java project

Create a Java project in the workspace or in an external location.

Project name: shareMarketingProject

Contents

● Create new project in workspace

○ Create project from existing source

Directory: E:\AlfrescoShareBook\Chapter Downloads\shareworkspace\sha

JRE

● Use default JRE (Currently 'jre6')

○ Use a project specific JRE: jre6

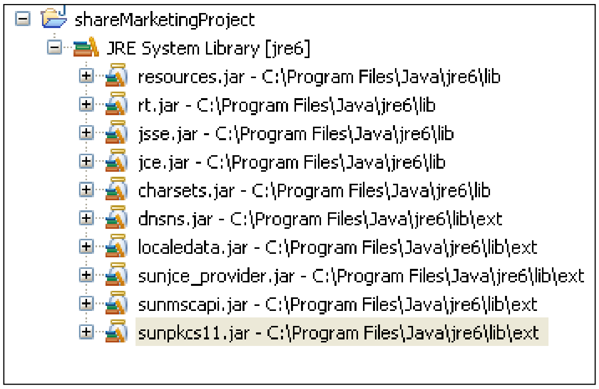
○ Use an execution environment JRE: JavaSE-1.6

Project layout

● Use project folder as root for sources and class files

○ Create separate folders for sources and class files

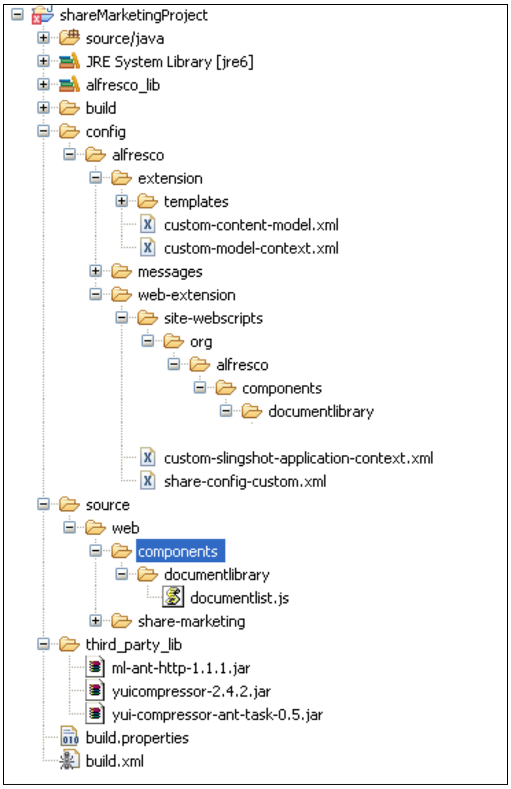
3. The project named **shareMarketingProject** will be created and you will find a JRE library with the required JAR files attached for this project (I assume that you have already installed the JDK on your machine, as mentioned in *Chapter 2, Installing and Setting up Alfresco Share*).
4. Check the **Package Explorer** window, as shown in the following screenshot:



```
shareMarketingProject
  JRE System Library [jre6]
    resources.jar - C:\Program Files\Java\jre6\lib
    rt.jar - C:\Program Files\Java\jre6\lib
    jsse.jar - C:\Program Files\Java\jre6\lib
    jce.jar - C:\Program Files\Java\jre6\lib
    charsets.jar - C:\Program Files\Java\jre6\lib
    dnsns.jar - C:\Program Files\Java\jre6\lib\ext
    localedata.jar - C:\Program Files\Java\jre6\lib\ext
    sunjce_provider.jar - C:\Program Files\Java\jre6\lib\ext
    sunmscapi.jar - C:\Program Files\Java\jre6\lib\ext
    sunpkcs11.jar - C:\Program Files\Java\jre6\lib\ext
```

Creating a project structure

This section describes how to create a project structure to use with Alfresco Share. The following screenshot shows the possible folder structure for the Share customization:



```
shareMarketingProject
  source/java
  JRE System Library [jre6]
  alfresco_lib
  build
  config
    alfresco
      extension
        templates
        custom-content-model.xml
        custom-model-context.xml
      messages
      web-extension
        site-webscripts
          org
            alfresco
              components
                documentlibrary

        custom-slingshot-application-context.xml
        share-config-custom.xml
  source
    web
      components
        documentlibrary
          documentlist.js
      share-marketing
  third_party_lib
    ml-ant-http-1.1.1.jar
    yuicompressor-2.4.2.jar
    yui-compressor-ant-task-0.5.jar
  build.properties
  build.xml
```

Create the following folder structure for the project as mentioned in the preceding screenshot.

In order to create a folder in an Eclipse project: Select the web project for the root level folder, or select the parent-level folder and right-click, click on **New** | **Folder**. Provide the folder name and click on **Finish**. We will understand the importance of each folder in the coming section.

- `/config/alfresco/extension`: Place all your Alfresco Repository configuration related files in this folder. In the case of Alfresco Share customization, repository-tier web scripts (also known as Data Web Scripts) can be placed in a folder hierarchy as per the standard web script packaging techniques. The web scripts should be added in the following directory: `config/alfresco/extension/templates/webscripts`.

- `/config/alfresco/web-extension`: Place all your Share extension configuration files in this folder. The `share-config-custom.xml` file is used for advanced configurations and customizations shall be kept inside `config/alfresco/web-extension`. Web-tier web scripts (also known as UI Web Scripts) can be placed inside `config/alfresco/web-extension/site-webscripts` with the proper package structure. For example, in the previous chapter, we have used the existing `documentlist.get.config.xml` file located at `<share-app>/WEB-INF/classes/alfresco/site-webscripts/org/alfresco/components/documentlibrary/`. You will find in the preceding screenshot that we have used the same package structure within the `web-extension` folder. You can also keep your new UI Web Scripts inside this folder.
- `/source/java`: In Share, mainly there are JavaScript backed web scripts, but if you want to create Java backed repository-tier web scripts, you can put all your Java classes in this folder with the respective package structure.
- `/source/web`: You can add client-side resources such as JavaScript, CSS, and image files within the `source/web` directory in the project. Please remember to always have a defined package structure to keep your files. You will find in the preceding screenshot that we have used the same package structure within the `source/web` folder.
- `/third-party-lib`: You can place any external JAR files inside this folder to be used by the project.
- `/alfresco-lib`: This folder will have all Alfresco jars. The following section will describe how to add JARs into the `/alfresco-lib` folder and configure the build path to compile java files that are utilizing Alfresco libraries.

Configuring the build path

Up to this point, our **shareMarketingProject** had no dependencies other than the Java runtime libraries. Now you need to configure the build path, so when you create any Java files that are utilizing Alfresco libraries, it can automatically be compiled by Eclipse. For that, make sure that the **Project | Build Automatically** option is checked, and to configure the build path for the project, carry out the following steps:

1. Right-click on the project name, that is, **shareMarketingProject** and select **Build Path | Add Libraries**.
2. Select **User Library**, click on **Next**.

3. Click on the **User Libraries** button and in the **User Libraries** screen, click on the **New** button.
4. Provide the name of the library as **alfresco_lib** and click on **OK**.
5. Select that library name and click on **Add JARs**. Select all the JARs from the Alfresco installed folder, **tomcat/lib** and add those to this library. Also, select all the JARs from `tomcat/webapps/alfresco/WEB-INF/lib` folder and add those to this library. Once this is done, click on **OK**.
6. Finally, you can click on the **Finish** button.

There is another option available. As we have imported the SDK Alfresco Embedded project in Eclipse, we can reference that project to our current new project. The SDK Alfresco Embedded project contains all of the Alfresco libraries needed to build a custom module. In order to configure the build path using SDK Alfresco Embedded, carry out the following steps:

1. Right-click on the project name, that is, **shareMarketingProject** and select **Build Path | Projects**.
2. Click on the **Add** button.
3. Under the **Required Project Selection** screen, select **SDK Alfresco Embedded**, and click on **OK**.
4. Click on **OK** to complete the build path configurations.

Now the setup is ready. In the next section, we will see how we can build the application and deploy our customizations into Alfresco Share.

Deployment approaches

There are a couple of deployment approaches, which can be used for installing customizations. Choosing an approach to deploy the code will depend on how complex your extension is and will be based on various factors. For example, deploying the code on the development server is different from deploying it on the production server. For the development server, you are required to test the code repeatedly. No one would be really interested in creating the JAR or the AMP file every time with the changes and restart the server as needed. Developers would like to save time by placing the files directly in the folder and refreshing those files without starting the server. Considering all the possible factors, I have listed down three approaches that can be used for deploying customizations. In the coming sections, my focus would not be to explain what are AMP, JAR, or ZIP files; in fact, it is about what should be used based on requirements.

Using JAR to deploy the code

JAR is mainly designed to facilitate the packaging of applications into a single archive. You can assemble all the configuration and resource files in a JAR file structure. The mechanism was introduced in Alfresco 3.3 onwards that allows Share extension (containing repository and web-tier web scripts, Spring/Surf configuration, and static assets) to be added to the servlet in a single library. Using this, you can keep your customization separate from the Alfresco code.

If your Alfresco and Share are deployed in the same Tomcat instance, you can keep the JAR file in the shared folder. However, in most cases, Share and Alfresco will be running completely on separate nodes, in that case, you can put the JAR into their `WEB-INF/lib` folder. I find one more advantage with JAR is that, suppose your project has many modules to be deployed one by one, you can deploy those modules with different JARs. If at any point of time you want to remove one module, it is as easy as removing just a JAR file. Another advantage is that your configurations will not be overwritten as they are placed in different JARs.

Using AMP (Alfresco Module Package)

An AMP file is zip compressed and consists of a collection of code, XML, images, CSS, JavaScripts, and so on that collectively extend the functionality, or data, provided by the standard Alfresco Share application. Installing customizations using AMPs into the Alfresco Repository is pretty straightforward. AMP files can be deployed into an existing Share application file using the Alfresco **Module Management Tool** (**MMT**). The only point to be considered is to map the structure of your AMP file to the Alfresco Share WAR when the MMT installs the AMP file.

Using this mechanism, files will be placed directly into the `webapp` structure, rather than the extension mechanisms used by the JAR and ZIP files that ensure files are placed outside the `webapp` for safety during upgrades. Another issue I see is the overwriting of configurations: one AMP may overwrite the configurations of another AMP and it would be tedious to detect the issue. AMP is useful when you are working with extensions that are more complex.

> For more information about AMP, refer to the following URL:
> `http://wiki.alfresco.com/wiki/AMP_Files`.

Using ZIP

ZIP is a simple, archive format that stores multiple files. You can assemble all the configuration and resource files into an existing Tomcat installation. This is basically used when you are developing a code that allows you to reload changes without restarting Tomcat.

Building an application

We already discussed various approaches that can be used for deploying customization and building the application.

There are many Java built tools available for the Java programmers. These tools help the programmer to build their project efficiently. Build tools automate the repetitive process and allow the programmer to concentrate on the project development. They also reduce the overall build time. Build tools make the build process happen in just a single-click. We will use **Apache ANT** which is a Java-based build tool for building the application from Eclipse.

There are a number of steps required to transform the source into a deployable software solution. In general, a build tool allows developers and build managers to describe the build process. In a build, a few steps may need to be executed before others, or they may be independent of others. In summary, a build tool provides a mechanism to describe the operations and structure of the build process to deploy the code.

Integrating ANT with Eclipse

As we are using Eclipse for our development environment, we will learn how we can integrate ANT with Eclipse for the build process. First, we need to create a new build file in Eclipse.

Creating the `Build.xml` file:

1. Right click on the project name **shareMarketingProject** in Package Explorer.
2. Select **New | File**.
3. In the **File Name** box, provide **build**.xml, click on the **Finish** button.
4. Enter the targets for ANT Build in this file and save it. You can have build targets for compiling the code, packaging the JAR file, and so on. The build file we will use for our examples throughout the book will look like:

```
<project basedir="." default="dist-jar" name="Share Customization
    Build Script">
```

```
<!-- Property default values. May be overridden using above
       files or via command-line args -->
  <property name="jar.name" value="share-marketing.jar" />
  <property name="zip.name" value="share-marketing.zip" />
  <property name="amp.name" value="share-marketing.amp" />
  <property name="alfresco.extension.jar" value="alfresco-
     marketing-extension.jar"/>
</project>
```

Download the complete project, including `build.xml`, from the Packt website.

Here, in this build file, we have used some of the properties that we need to define in the `build.properties` file.

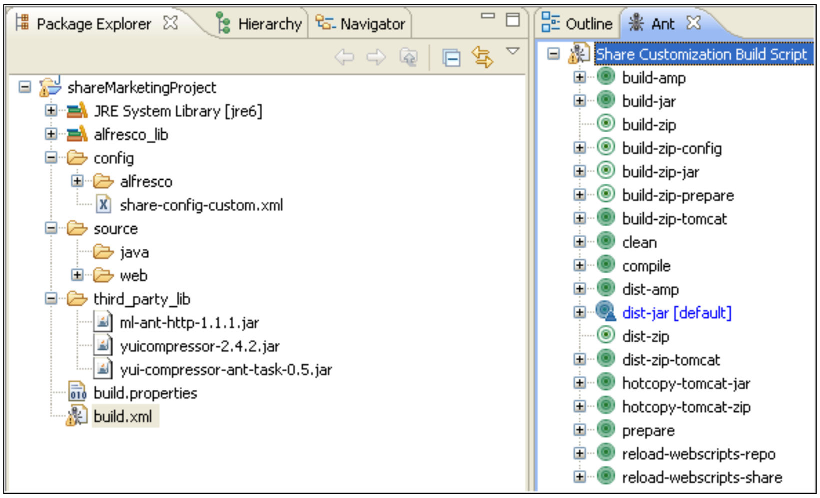
Creating the build.properties file

The purpose of this file is to provide properties required by `build.xml` that are likely to be changed. For example, properties such as the home directory of Tomcat, or an application, name of application, and so on, can be mentioned in this file.

`alfresco.tomcat.home=E:/Alfresco4/tomcat.`

In this file, you can change the values for the properties accordingly. The `build.xml` file will read the properties from this file.

When you create the `build.xml` file, you can see all the targets for the build file in **Ant view** at the right side in Eclipse, as shown in the following screenshot:



shareMarketingProject
JRE System Library [jre6]
alfresco_lib
config
alfresco
share-config-custom.xml
source
java
web
third_party_lib
ml-ant-http-1.1.1.jar
yuicompressor-2.4.2.jar
yui-compressor-ant-task-0.5.jar
build.properties
build.xml

Share Customization Build Script
build-amp
build-jar
build-zip
build-zip-config
build-zip-jar
build-zip-prepare
build-zip-tomcat
clean
compile
dist-amp
dist-jar [default]
dist-zip
dist-zip-tomcat
hotcopy-tomcat-jar
hotcopy-tomcat-zip
prepare
reload-webscripts-repo
reload-webscripts-share

Running the ANT target

There are three different ways to run a particular build target.

The first approach:

- Right-click on **build.xml** in the Package Explorer
- Select **Run** | **Ant Build**. This will run the default target for the Ant Build and gives you the results in the Eclipse's Console view

The second approach:

- Right-click on **build.xml** in the Package Explorer
- Select **Run** | **Ant Build...** with ellipsis (three dots)
- From the Ant launch configuration dialog screen, choose the target which you want to run from the available list of all targets of the build file, and click on **Run**

The third approach:

- Go to **Windows** | **Show View** | **Ant**

(If Ant is not available there, then click on **Other** and select **Ant** from there)

- You will see **Ant view** on the right side in Eclipse
- Drag your **build.xml** file from the **Package Explorer** to this **Ant View**
- Double-click on the target you want to run from **Ant View**

The Ant build script `build.xml` can be used to help you distribute your customizations for testing or deployment. A few targets are defined which can be used for various purposes:

- Use the `build-jar` target to build a JAR file in the `dist` directory, suitable for deploying on any Share 3.3+ installation.
- Use the `hotcopy-tomcat-jar` target to copy the JAR file containing the customizations into a local Tomcat installation on your system. You will need to specify the location of your Tomcat installation by defining the variable `alfresco.tomcat.home` when you call the script.
- Use the `hotcopy-tomcat-zip` target to copy all the individual configuration and resource files into a local Tomcat installation on your system for testing. Unlike `hotcopy-tomcat-jar`, this method allows you to reload changes to your files without having to restart the Tomcat server, and so is better suited for development. Again, you have to specify the location of your Tomcat installation.

- Use the `reload-webscripts-repo` target to reload the Alfresco Repository Web Scripts. Otherwise, whenever you update any web scripts, you have to hit the **Refresh Web Scripts** button on the scripts index page.
- Use the `reload-webscripts-share` target to reload the Alfresco Share Web Scripts. This target also has the same purpose as discussed for the `reload-webscripts-repo` target.

Summary

This chapter explained how to set up the development environment and create a project structure for Share. It also discussed building the application using ANT to help automate some of the mundane tasks. It also explained the different approaches to be used for deploying the code, that is, through JAR or AMP or ZIP files. The JAR will be used for simple customizations and for deploying the code on production. Amp can be used for complex requirements and use the ZIP file during the development, which will not force the server to start repeatedly.

Index

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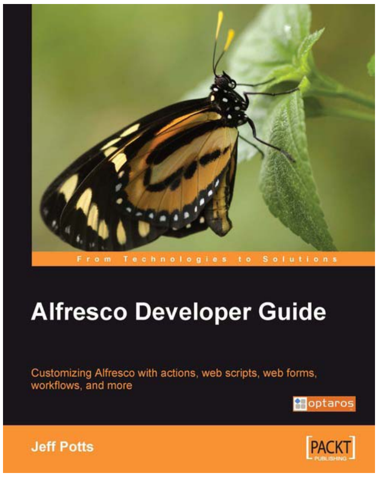
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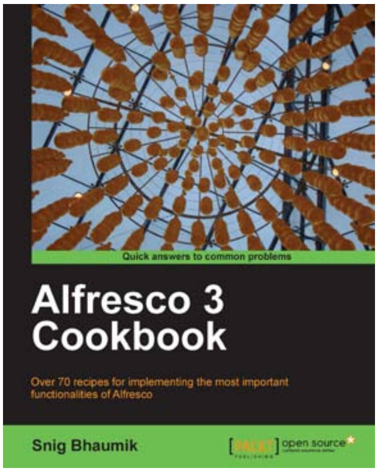
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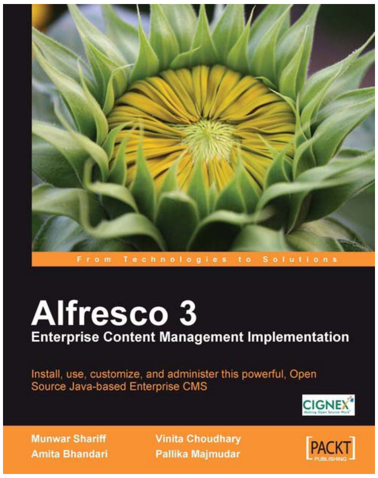
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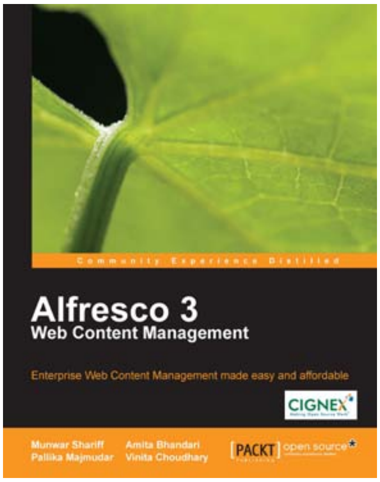

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