

# Salesforce Winter '09 Release Notes





# Table of Contents

About the Release Notes.....	3
Summary of Winter '09 Features and Impact on Salesforce Users.....	3
<b>Salesforce Applications.....</b>	<b>9</b>
Salesforce Ideas Enhancements.....	9
Case Teams.....	18
HTML Messages for the Customer Portal.....	27
Salesforce Content Support for Google Docs.....	28
Storage Enhancements.....	31
Salesforce Mobile Enhancements.....	33
Drag-and-Drop Scheduling.....	42
Partner Portal Enhancements.....	43
Salesforce to Salesforce Enhancements.....	47
Campaign Influence.....	50
Additional Salesforce Application Enhancements.....	52
<b>Force.com Platform.....</b>	<b>59</b>
Force.com Sites.....	59
Syndication Feeds for Sites.....	75
Schedule and Email Reports.....	81
Visualforce Enhancements.....	84
Visualforce Email Templates.....	89
Apex Enhancements.....	91
Force.com Web Services API Enhancements.....	92
Force.com Development as a Service.....	95
Force.com Connect Offline: Custom Object Tabs.....	101
Force.com Connect for Outlook: Streamlined Contact Associations.....	102
Force.com Connect for Lotus Notes: Streamlined Contact Associations.....	102
Additional Force.com Platform Enhancements.....	103



## About the Release Notes

The Release Notes are a comprehensive user guide for the latest release of Salesforce. Unlike a traditional release notes document that includes only a simple list of enhancements, the Salesforce Release Notes give you everything you need to get up and running with the new features and enhancements in the latest release.

### What's Included in the Release Notes

For every new major enhancement, the Release Notes provide:

- A brief, high-level description of the functionality
- Implementation tips to help you get started with setup and administration
- Best practice tips to help you maximize the benefit of the functionality
- Complete end-to-end instructions on how to set up and use the functionality



Beyond the major new features, the Additional Enhancements sections include a list and brief description of every other enhancement or functional change included in the latest release—everything from new user permissions, to workflow enhancements, to new operators for formulas, to additional fields that are available in standard reports.










Let the Release Notes be your guide to success with the latest release from salesforce.com!

## Summary of Winter '09 Features and Impact on Salesforce Users

Winter '09 includes features that will immediately impact all Salesforce users when the release occurs. You may want to communicate these changes to the users in your organization before the release so that they are prepared for any changes that might affect them. Other features require direct action by a Salesforce administrator before your users can benefit from the new functionality.

The following table summarizes the Winter '09 features and whether they will have an immediate impact on users:

Feature	Automatically visible to all users. No setup required.	Not automatically visible. Feature is enabled but requires some setup.	Contact salesforce.com to enable this feature.
<a href="#">Salesforce Ideas Enhancements</a>	 <p>An internal community is automatically set up for all Salesforce users to post ideas. Displaying a community in a Customer or Partner Portal requires additional setup.</p>		
<a href="#">Ideas Multi-select Categories Field</a>		 <p>This feature is automatically enabled and visible to new organizations. Existing</p>	

Feature	Automatically visible to all users. No setup required.	Not automatically visible. Feature is enabled but requires some setup.	Contact <a href="https://www.salesforce.com">salesforce.com</a> to enable this feature.
		organizations need to enable this feature.	
<a href="#">Ideas HTML Editor</a>		 This feature is automatically enabled and visible to new organizations. Existing organizations need to enable this feature.	
<a href="#">Case Teams</a>			
<a href="#">HTML Messages for the Customer Portal</a>			
<a href="#">Salesforce Content Support for Google Docs</a>			
<a href="#">Storage Enhancements</a>			
<a href="#">Salesforce Mobile for iPhone</a>		 iPhone users must install Salesforce Mobile from Apple's App Store.	
<a href="#">Version 11.0 of Salesforce Mobile for BlackBerry</a>		 BlackBerry users must download the newest version of the Salesforce Mobile client application.	
<a href="#">Visualforce Mobile</a>		 BlackBerry users must download the newest version of the Salesforce Mobile client application.	
<a href="#">Mobile Web Tabs</a>		 BlackBerry users must download the newest version of the Salesforce	

Feature	Automatically visible to all users. No setup required.	Not automatically visible. Feature is enabled but requires some setup.	Contact salesforce.com to enable this feature.
		Mobile client application.	
Mobile View Criteria Enhancements		✓	
Record Ownership Filter Enhancement for Activities	✓		
Partner Portal Enhancements		✓	
Salesforce to Salesforce Enhancements	✓ If Salesforce to Salesforce is already enabled, no additional setup is required.		
Campaign Influence		✓	
Budgeting and Planning Fields for Campaign Hierarchies		✓	
Mass Removal of Campaign Members from Campaigns	✓		
"Edit Case Comments" Permission		✓	
"Transfer Cases" Permission		✓	
Notify Case Owners when Case Ownership Changes Setting		✓	
Email-to-Case Now Supports the CC and BCC Fields of Inbound Email	✓		
Email-to-Case Preserves File Extensions on Attachments	✓		
Email-to-Case Excludes Zero-Byte Attachments from Cases	✓		
Salesforce Call Center Supports the *, #, and + Characters	✓		
Salesforce Call Center No Longer Automatically Displays Incoming Calls As Records Over Active Calls	✓		
Click-and-Create Events		✓	
Converting Existing Files to Google Docs		✓	

Feature	Automatically visible to all users. No setup required.	Not automatically visible. Feature is enabled but requires some setup.	Contact salesforce.com to enable this feature.
Email to Salesforce Enhancements		✓	
Account Lookup During Lead Conversion	✓		
Choosing Lead Status Defaults During Lead Conversion		✓	
Opportunity Dependent Fields and Custom Save Logic	✓		
Drag-and-Drop Scheduling		✓	
Force.com Sites			✓
Syndication Feeds for Sites		✓  Force.com Sites must be enabled.	
Schedule and Email Reports		✓	
Visualforce Enhancements		✓	
Visualforce Email Templates		✓	
Apex Enhancements		✓	
Force.com Web Services API Enhancements		✓	
Force.com Development as a Service Enhancements		✓	
Force.com Connect Offline: Custom Object Tabs		✓	
Force.com Connect for Outlook: Streamlined Contact Associations		✓	
Force.com Connect for Lotus Notes: Streamlined Contact Associations		✓	
Images Supported in Dashboard Emails for Lotus Notes		✓	
Support for Tagging Dashboards		✓	
Support for New Logical Operators		✓	
Support for Self Relationships in Cross-Object Formulas		✓	



Feature	Automatically visible to all users. No setup required.	Not automatically visible. Feature is enabled but requires some setup.	Contact salesforce.com to enable this feature.
Language Support			
Improved Component Management			
Custom Objects Managed Package Field Changes			
Custom Report Types Managed Packaged Changes			
Managed Folders and Letterheads Editable and Deleteable in the Subscriber's Organization			
Removing a Released Component from a Managed Package			
Field Management			
Protected Components			
Password Strength Checker			
SAML Start and Logout Pages			
User License Enhancements for Developer Edition Organizations	 To receive the additional user license types, sign up for a new Developer Edition organization.		
Support for Activities, Workflow, and Approval Processes on Junction Objects			
Recall Actions for Approval Processes			
Case Comments Workflow			
Community Nickname User Field			
Default Values for Encrypted Custom Fields on User Records			
Salesforce Platform and Salesforce Platform Light Users Can Enable Connect Offline		 New organizations can provide Connect Offline licenses to platform users. Existing	

Feature	Automatically visible to all users. No setup required.	Not automatically visible. Feature is enabled but requires some setup.	Contact <a href="https://salesforce.com">salesforce.com</a> to enable this feature.
		organizations do not have this ability.	

# SALESFORCE APPLICATIONS

## Salesforce Ideas Enhancements

Available in: **Professional**, **Enterprise**, **Unlimited**, and **Developer** Editions

Winter '09 provides several major enhancements to Salesforce Ideas:

### Force.com Sites Support

Force.com Sites enables you to create a public Salesforce Ideas site that is directly integrated with your Salesforce organization. For more information, refer to [Force.com Sites](#) on page 59.

### Syndication Feeds

Syndication feeds enable users to subscribe to changes within Salesforce Ideas and receive updates in external news readers.

### Merge Ideas

As more users contribute to a community, the number of duplicate ideas often increases. Duplicate ideas make it difficult to measure feedback because votes and comments are spread out over many similar ideas. Now, Salesforce Ideas administrators can merge ideas and combine their votes, which makes it easier to measure the true popularity of an idea.

### Demote Ideas

Community members can now demote an idea to subtract 10 points from its overall score and decrease the idea's overall popularity ranking.

### Multi-select Categories Field

A new multi-select `Categories` field is available that allows community members to associate more than one category with an idea. The `Categories` field is automatically enabled for new organizations in Winter '09. Organizations that existed prior to the Winter '09 release need to enable this new field manually.

### Status Field

Administrators can now assign a status to an idea. An idea's status helps community members track the progress of the idea. For example, "Under Review", "Reviewed", "Coming Soon", and "Now Available" are common status values an administrator can define and assign to ideas. An idea's status appears next to the idea's title for all community members to see.

### Ideas HTML Editor

The Salesforce Ideas HTML editor gives users WYSIWYG HTML editing capabilities when they post or comment on an idea, allowing them to:

- Insert an image by specifying the image URL
- Insert hyperlinks
- Change paragraph alignment
- Create bulleted and numbered lists

### Community Nickname

All Salesforce user records now have a required `Community Nickname` field that contains a unique name for identifying the user in the Salesforce Ideas online community. This field allows up to 40 alphanumeric characters.

A user's community nickname displays at the bottom of an idea's detail page when the user votes for that idea. In addition, users can click their community nickname on the Ideas tab to view their Recent Activity page.

For each existing user, Salesforce creates a default community nickname based on the user's alias. If the alias is not unique within an organization, Salesforce adds a four digit random number to the end of the alias to form the community nickname.

### Community Expert

Salesforce Ideas administrators can now select certain people to be experts within a community. A community expert is a member of the community who speaks credibly and authoritatively on behalf of your organization. When a community expert posts a comment or idea, a unique icon (★👤) displays next to his or her name so other community members can easily identify credible information within the community. The Salesforce administrator can designate as many community experts as necessary.

### Recent Activity Page

The new Recent Activity page allows community members to quickly view activity that relates to their participation within the community. For example, the Recent Activity page lists all the ideas the user has voted for and created, as well as all the comments posted to their ideas. The Recent Activity page replaces the Inbox in previous versions of Salesforce Ideas.

### Comment Validation

Administrators can now create validation rules on the `Comment` field. You can use validation rules to prevent community members from using offensive language when posting comments. For more information, search for "Useful Validation Formulas" in the Salesforce online help.

### Delete Vote

With Winter '09, administrators can delete votes using the API. Deleting a vote erases all records that the vote ever happened.

Specifically, deleting a vote does the following:

- Removes 10 points from the idea's overall score.
- Removes the user's name from the Last 100 Votes section on the idea's detail page.

For more information, refer to the `delete()` call in the [Force.com Web Services API Developer's Guide](#).

### Display Communities in Specific Portals

Salesforce Ideas administrators can now specify which customer and partner portals have access to a community instead of automatically displaying a community to all portal users.

### Implementation Tips

- Salesforce Ideas is automatically enabled for new organizations and can be accessed from the Force.com app menu. In addition, the Internal Ideas community is active on the Ideas tab so your Salesforce users can begin posting and sharing ideas immediately. If you want to disable Salesforce Ideas, see "Customizing Salesforce Ideas Settings" in the Salesforce online help.
- Internal users (those with access to Salesforce) can view every community that an administrator creates. Administrators can choose to also display specific communities to Customer Portal and Partner Portal users.

### Best Practices

- If your organization has multiple communities, make sure you are in the correct community when browsing and posting ideas. You can use the drop-down menu at the top of the Ideas tab to view ideas in a different community.
- After you post an idea, you cannot change the community associated with your idea.
- To ensure that each community has its own unique list of ideas, you cannot post an idea to multiple communities.

# About Salesforce Ideas Enhancements

## Merging Ideas

User Permissions Needed	
To merge multiple ideas:	"Edit" on ideas

### Overview

As more users contribute to a community, the number of duplicate ideas often increases. Duplicate ideas make it difficult to measure feedback because votes and comments are spread out over many similar ideas. The best way to resolve this issue is to merge duplicate ideas together so one idea becomes the master to one or more child ideas.

Note the following about merging ideas:

- All votes belonging to child ideas are transferred to the master idea. If the same community member votes for two ideas that are eventually merged, only the vote for the master idea is kept; the vote for the child idea is discarded.
- Once you merge ideas they cannot be separated.
- Users can only vote for and add comments to a master idea. Child ideas become read-only.
- You cannot merge ideas in separate communities.
- Deleting a parent idea automatically deletes all child ideas. Child ideas cannot be deleted individually.
- The master idea does not inherit the status and category values of its child ideas.
- When an idea is merged and becomes a child idea, the child idea still appears on the Ideas Submitted page but not on any other pages in a community member's Recent Activity .

### Merging Ideas

To locate duplicate ideas and merge them together:

1. On the Ideas tab, click the title of an idea that you want to merge.
2. On the idea's detail page, click **Find Duplicates**. Salesforce searches all the ideas within the community and displays the five ideas with titles that most closely match the current idea's title.
3. If the Possible Duplicates list does not contain any ideas that you want to merge, enter keywords in the **Search for Duplicates** field and click **Search**. Salesforce displays a new list of possible duplicate ideas.
4. From the Possible Duplicates list, select the ideas that you want to merge.

To view the details of a possible duplicate idea, click the idea's title. Use your browser's back button to return to the search results.

5. Click **Merge with Current Idea**.
6. Select the idea that you want to be the master idea, and click **Merge**.
7. Click **OK** to complete the merge.

## Defining Picklist Values for the Categories and Status Fields

User Permissions Needed	
To define picklist values:	"Customize Application"

### Overview

For community members to assign categories to an idea or be able to view an idea's status, the Salesforce Ideas administrator needs to define picklist values for the `Categories` and `Status` fields.

Categories are administrator-defined values that help organize ideas into logical sub-groups within a community. The View Category drop-down list on the Ideas tab allows users to filter ideas by category, and the `Categories` picklist on the Post Ideas page lets users add categories to their ideas.

An idea's status helps community members track the progress of the idea. For example, "Under Review", "Reviewed", "Coming Soon", and "Now Available" are common status values an administrator can define and assign to ideas. An idea's status appears next to the idea's title for all community members to see.



**Note:** If the `Category` field is displayed (instead of `Categories`), then your community members can only assign a single category to an idea. To allow them to assign multiple categories to an idea, enable the `Categories` field on the **Setup > Customize > Ideas > Settings** page.

### Defining Picklist Values

To define picklist values for the `Categories` and `Status` standard fields:

1. Click **Setup > Customize > Ideas > Fields**.
2. Click **Edit** next to the `Categories` or `Status` standard field.
3. On the picklist edit page, click **New** to add new picklist values to the standard field. You can also edit, delete, reorder, and replace picklist values. For more information on these tasks, see "Updating Picklists" in the Salesforce online help.



**Note:** Once you add picklist values to the `Categories` or `Status` field, the field will always require at least one picklist value. This means you can delete picklist values until there is one remaining for the field.

4. Add one or more picklist values (one per line) in the provided text area.
5. Select the communities that you want to include the new picklist values.
6. Click **Save**.
7. To specify a default value for the `Categories` or `Status` fields, see "Selecting Picklist Values and Defaults for a Community" in the Salesforce online help.



**Note:** Do not use the **Edit** link on the Fields page to specify a default value for `Categories` or `Status`. You can only specify a default value from the Community Detail page.

8. To be able to assign a status to ideas and display an idea's status to community members, select the `Show Status Field` checkbox on the **Setup > Customize > Ideas > Fields Layout** page.

Once you select this checkbox, you can assign a status to any idea when you post a new idea or edit an existing idea. For more information, see "Posting and Editing Ideas" in the Salesforce online help.

## Tips for Using the Salesforce Ideas HTML Editor

User Permissions Needed	
To view the Ideas tab:	"Read" on ideas
To view and vote for ideas:	"Read" on ideas
To create ideas and add comments to ideas:	"Create" on ideas
To edit ideas and edit comments on ideas:	"Edit" on ideas

The Salesforce Ideas HTML editor gives users WYSIWYG HTML editing capabilities when they post or comment on an idea, allowing them to:

- Insert an image by specifying the image URL
- Insert hyperlinks
- Change paragraph alignment
- Create bulleted and numbered lists


The Salesforce Ideas HTML editor is enabled by default for most organizations. If your organization does not have the Salesforce Ideas HTML editor enabled, an administrator can enable it as described in "Customizing Salesforce Ideas Settings" in the Salesforce online help.

### Implementation Tips

Before enabling the Salesforce Ideas HTML editor, note the following:



**Caution:** Once you enable the Salesforce Ideas HTML editor, you cannot disable it.

- If you use the Salesforce Ideas HTML editor to edit and save an idea description or comment that was in text format, Salesforce saves the description or comment in HTML format.
- HTML tags you enter into the HTML editor will display to users as text when the idea is saved.
- In list views and search results, Salesforce displays only the first 255 characters of an idea's description or comment. This number includes HTML tags.
- In related lists, search results, and hover details, Salesforce does not display ideas and comments with HTML formatting or images.
- Each HTML idea description has a maximum size of the 32 KB. Each comment has a maximum size of 4 KB.
- Hyperlinks open in a new browser window when users click on them.
- To insert an image, click  and enter the URL of the image. Optionally, enter a description that appears when a user hovers over the image. The image must have a URL that Salesforce can access.
- Images do not show up in list views and reports.
- You cannot disable individual features of the Salesforce Ideas HTML editor. For example, if you enable the Salesforce Ideas HTML editor, you cannot disable its hyperlink and image capabilities.
- The HTML editor supports all languages that Salesforce supports.
- For security purposes, the Salesforce Ideas HTML editor only allows the tags and attributes listed in "Supported HTML Tags and Attributes" in the Salesforce online help. Salesforce automatically removes unsupported tags and attributes when you save an idea description or comment. Salesforce also removes potentially malicious HTML. Note that Salesforce does not notify users when unsupported or potentially malicious HTML is removed.
- The HTML editor does not support JavaScript or Cascading Style Sheets (CSS).

## Supported HTML Tags and Attributes

The Salesforce Ideas HTML editor supports the following tags:

- `<a>`
- `<abbr>`
- `<acronym>`
- `<address>`
- `<b>`
- `<bdo>`
- `<big>`
- `<blockquote>`
- `<br>`
- `<caption>`
- `<cite>`
- `<code>`
- `<col>`
- `<colgroup>`
- `<dd>`
- `<del>`
- `<dfn>`
- `<div>`
- `<dl>`
- `<dt>`
- `<em>`
- `<font>`
- `<h1>`
- `<h2>`
- `<h3>`
- `<h4>`
- `<h5>`
- `<h6>`
- `<hr>`
- `<i>`
- `<img>`
- `<ins>`
- `<kbd>`
- `<li>`
- `<ol>`
- `<p>`
- `<pre>`
- `<q>`
- `<samp>`
- `<small>`
- `<span>`
- `<strike>`
- `<strong>`
- `<sub>`



- <sup>
- <table>
- <tbody>
- <td>
- <tfoot>
- <th>
- <thead>
- <tr>
- <tt>
- <ul>
- <var>

The above tags can include the following attributes:

- alt
- background
- border
- colspan
- face
- height
- href
- rowspan
- size
- src
- style
- width

The above attributes can include URLs that begin with the following:

- http:
- https:
- file:
- ftp:
- mailto:
- / for relative links

## Creating and Editing Communities

User Permissions Needed	
To create or edit a Salesforce Ideas community:	"Customize Application"

To create a new community or edit the details of an existing community:

1. Click **Setup** ► **Customize** ► **Ideas** ► **Communities**, and then click **Edit** or **New**.
2. Enter a unique name for your community.

If you have more than one community, the community whose name comes first in the alphabet is the community that is displayed when users first visit the Ideas tab. For example, if you have a community named Jeans and another named T-shirts, the Jeans community is the default community that appears when users first go to the Ideas tab.

3. Optionally, enter a description in plain text. HTML and other markup languages are not supported.
4. Select the **Active** checkbox to display the community to your Salesforce Ideas users.  
Communities cannot be deleted, so if you need to hide a community, make sure **Active** is not selected.
5. To add a group of experts to this community, select a public group from the **Experts Group** drop-down list. For information on creating public groups, see "Creating and Editing Groups" in the Salesforce online help.
6. Use the **Portal** drop-down list to specify in which portal you want this community displayed. If you only want this community displayed to internal Salesforce users and not to Customer Portal or Partner Portal users, select **Do Not Display in Portal**.  
To make a community publicly available, you must select the Customer Portal that you plan to expose publicly using Force.com Sites.
7. Click **Save**.

### Community Expert Overview

A community expert is a member of the community who speaks credibly and authoritatively on behalf of your organization. When a community expert posts a comment or idea, a unique icon (★👤) displays next to his or her name so other community members can easily identify credible information within the community. The Salesforce administrator can designate as many community experts as necessary.

Before you select a public group to be community experts, note the following:




- A community expert can be an employee of your organization who is responsible for providing official responses to the community, or a community expert can be someone outside your organization who is active within the community and knowledgeable about the subject matter.
- The only difference between a community expert and other community members is the unique icon that displays next to the community expert's name. Community experts do not have any extra permissions beyond what is specified in their user profile.
- Community experts must be part of a public group and that public group must be specified in the **Experts Group** drop-down list. You may need to create a public group for each community if the experts within those communities are different.
- If a community is displayed in a Customer Portal or Partner Portal, you can use a cascading style sheet (CSS) to change the icon associated with the community expert. When creating a new portal, specify your CSS in the **Header** of your portal and use the `expertUserBadge` class to reference the new background image for the community expert. We recommend the community expert icon be no larger than 16 by 16 pixels. For more information, see "Creating Partner Portals" in the Salesforce online help and "Enabling Customer Portal Login and Settings" in the Salesforce online help.

## Viewing Your Recent Activity Page

User Permissions Needed	
To view the Ideas tab:	"Read" on ideas
To view and vote for ideas:	"Read" on ideas
To create ideas and add comments to ideas:	"Create" on ideas
To edit ideas and edit comments on ideas:	"Edit" on ideas


Your Recent Activity page contains a summary of all the recent activity that relates to your participation within a community. To view your Recent Activity page, go to the Ideas tab and click your **Community Nickname** link on the right side of the page. To view the Recent Activity page of another community member, click the community member's name that appears below any idea or comment they have posted.

The Recent Activity page uses the following icons to identify the various types of activity within the community:

-  identifies the ideas you have submitted.
-  identifies the ideas you have voted on.
-  identifies the comments you have posted to ideas as well as the comments other users have posted to your ideas.

For additional detail, click the following links located on the left side of the Recent Activity page:

- Ideas Submitted lists the ideas you have posted to this community. The most recent idea appears first.
- Ideas Voted On lists the ideas in this community that you have either promoted or demoted.
- Recent Replies displays the most recent comment posted to each of your ideas, as well as the most recent comment posted to each idea you have previously commented on. This section is not displayed when viewing another community member's recent activity.

To quickly determine the number of recent replies you have received, look next to the recent replies icon () in the upper right corner of the Ideas tab. This icon only appears when you have received a new reply.




**Note:** You cannot upload your own picture to replace the default image.

## Subscribing to Syndication Feeds for Ideas

User Permissions Needed	
To view the Ideas tab:	"Read" on ideas
To view and vote for ideas:	"Read" on ideas
To create ideas and add comments to ideas:	"Create" on ideas
To edit ideas and edit comments on ideas:	"Edit" on ideas

Syndication feeds enable users to subscribe to changes within Salesforce Ideas and receive updates in external news readers. For users to be able to subscribe to Salesforce Ideas syndication feeds, the following prerequisites are necessary:

- Salesforce Ideas must be exposed publicly using Force.com Sites. For more information, see "About Force.com Sites" in the Salesforce online help.
- The `Categories` field must be enabled in Salesforce Ideas. This field is enabled by default for some organizations. For more information, see "Enabling the Categories Field" in the Salesforce online help.

To subscribe to a syndication feed, click the feeds icon () on the following Ideas pages:

- Popular Ideas subtab
- Recent Ideas subtab
- Top All-Time subtab
- Comments subtab

This feed lists comments separately even when they belong to the same idea, whereas the Comments subtab groups comments for a single idea together and only shows the number of recent comments for that idea.

- Recent Activity page

To subscribe to a feed that includes all the comments posted by a specific community member, click the community member's name that appears below any idea or comment he or she has posted. Then click the feeds icon on the community

member's Recent Activity page. When you subscribe to another community member's Recent Activity feed, the feed only includes recent comments from that community member and no other user.



**Note:** Child ideas (ideas that have been merged with a master idea) are not included in any feeds. Only master ideas are included.

## Case Teams

Available in: **Enterprise, Unlimited, and Developer** Editions

With Winter '09, you can quickly add teams of users to cases so that multiple people can help resolve customer inquiries. You can also create a workflow for case teams so that specific team members are automatically notified when a case is updated and commented upon. Furthermore, administrators can predefine case teams for users and determine the level of access each team member has to a case, such as Read/Write or Read/Only. Case teams easily enable you and your organization to fully communicate and collaborate on solving customer issues.

### Implementation Tips

- Customer Portal users can view the Case Team Members related list if it is included on case page layouts associated with their profile. However, Customer Portal users cannot update case teams or view case team role details on cases. For more information, see "Customizing Page Layouts" in the Salesforce online help.
- Case teams are not available for the Partner Portal.
- Case teams are not the same as account teams or sales teams. Account teams work together on accounts, while sales teams work together on opportunities.
- You cannot delete case team roles; however, you can delete users from the Case Team Members related list on cases.
- By default, case owners have full access to cases they own. Case team roles do not update case owners access level to cases.
- You can add contacts and Customer Portal users to roles that have Read/Write access on cases. However, only Customer Portal users can access cases, as contacts cannot log in to Salesforce. For more information, see "Enabling the Customer Portal for Contacts and Person Accounts" in the Salesforce online help.
- Case teams are not visible in the Self-Service portal. Furthermore, you cannot add Self-Service portal users to a case team (except as contacts). For more information, see "Setting Up Self-Service" in the Salesforce online help.
- When you delete a predefined case team, the case team is automatically removed from all cases with which it is associated. Furthermore, you cannot retrieve deleted predefined case teams from the Recycle Bin. For more information, see "Recycle Bin" in the Salesforce online help.
- When you delete a member from a predefined case team, the user is automatically removed from all cases with which he or she is a member of that case team.
- Currently, you cannot report on case teams.
- When you remove a user or a predefined case team from a case, you can add the user or predefined case team back to the case at any time.
- You cannot add a user to a case team if he or she is already on the case team. For example, if you add a predefined team to a case that includes a member already on the team, then that member is automatically removed from the predefined team when it is added to the case.
- The possible access levels a case team member can have on a case, as defined by your administrator via case team roles, include:

Access Level	Description
Read/Write	User can view and edit the record, and add associated records, notes, and attachments to it.
Read Only	User can view the record, and add associated records to it. They cannot edit the record or add notes or attachments.
Private	User cannot access the record in any way.

### Best Practices

- Currently, you can create an unlimited amount of roles for case teams. Yet, because case team roles cannot be deleted, we recommend that you create no more than 20 roles so that users do not have too many roles to choose from when working with case teams.
- You cannot replace a case role; however, you can update a role or create a new one.
- You cannot delete a predefined case team if it is associated with an assignment rule. To delete the predefined case team, you must first remove it from any assignment rules. For more information, "Setting Up Assignment Rules" in the Salesforce online help.
- You can filter case lists by case teams where you are a member. Simply select the *My Case Teams* filter on case list views. For more information, see "Creating Custom List Views" in the Salesforce online help.
- Create workflow alerts to notify case team members when a case is updated or commented upon. For more information, see "Setting Up Email Alerts for Case Team Members" in the Salesforce online help.

## About Case Teams

### What is a Case Team?

A case team is a team of users that work together on a case. For example, your case team may include a support rep, support manager, and a product manager.

You can build a case team on the Case Team related list of a case. When selecting a team member, choose a role to indicate the role the person plays on the case. Case team roles determine the level of access each case team member will have to the case. For example, you can choose a role that gives some team members Read Only access and others Read/Write access to the case. Furthermore, administrators can set up workflow alerts to specify what actions on a case will send an email notification to case team members. For example, an administrator could set up workflow alerts to send notifications to case team members when a new case comment is added to a case.

Users with the "Customize Application" permission can predefine case teams. Predefined case teams can include the users that you normally work with on your cases. Administrators have the option to create assignment rules that automatically add predefined case teams to all cases that match assignment rule criteria. For more information, see "Setting Up Assignment Rules" in the Salesforce online help.

You can filter case lists by case teams where you are a member. Simply select the *My Case Teams* filter on case list views. For more information, see "Creating Custom List Views" in the Salesforce online help. Currently, you cannot report on case teams.



**Note:** Case teams are not the same as account teams or sales teams. Account teams work together on accounts, while sales teams work together on opportunities.

## Setting Up Case Teams

User Permissions Needed	
To set up case teams:	"Customize Application"
To add team members:	"Edit" on cases

A case team is a team of users that work together on a case. For example, your case team may include a support rep, support manager, and a product manager.

Every member of a case team has a role that he or she plays for the case, such as "Customer Contact" or "Case Manager". Roles determine access to the case, like Read Only or Read/Write access, and whether the member in the role is visible to users in the Customer Portal.

To set up case teams:

1. Define case team roles.
2. Add the Case Team related list to case page layouts.

The Case Team related list enables users to add case team members and predefined case teams to cases.

3. Optionally, predefine case teams so that users can easily add the users they usually work with to cases.
4. Set up workflow alerts to specify what actions on a case will send an email notification to case team members.
5. Optionally, create assignment rules so that when a case matches assignment rule criteria, a predefined case team is automatically added to the case.

### Tips on Setting Up Case Teams

Consider the following when setting up case teams:

- Case teams are not available for the Partner Portal.
- Customer Portal users can view the Case Team related list if it is included on case page layouts associated with their profile. However, Customer Portal users cannot update case teams or view case team role details on cases. For more information, see "Customizing Page Layouts" in the Salesforce online help.

## Defining Case Team Roles

User Permissions Needed	
To set up case teams:	"Customize Application"
To add team members:	"Edit" on cases

A case team is a team of users that work together on a case. For example, your case team may include a support rep, support manager, and a product manager. Every member of a case team has a role that he or she plays for the case, such as "Customer Contact" or "Case Manager". Roles determine access to the case, like Read Only or Read/Write access, and whether the member in the role is visible to users in the Customer Portal.

To access the Case Team Roles page, click **Setup** ► **Customize** ► **Cases** ► **Case Teams** ► **Case Team Roles**. From the Case Team Roles page, click the appropriate links to perform the following actions:

### Create Team Roles

To create a case team role:

1. Click **New**.
2. Enter a name for the role.
3. From the `Case Access` picklist, select the role's level of access to cases. The possible access levels are:

Access Level	Description
Read/Write	User can view and edit the record, and add associated records, notes, and attachments to it.
Read Only	User can view the record, and add associated records to it. They cannot edit the record or add notes or attachments.
Private	User cannot access the record in any way.

4. Optionally, select `Visible in Customer Portal` if you want the users in this role visible to Customer Portal users viewing cases.

Customer Portal users included in a case team can view themselves on the Case Team related list of cases, even if they are in a role where the `Visible in Customer Portal` checkbox is not selected.

5. Click **Save**. Alternatively, click **Save & New** to save the role and begin creating another new role.

After you create case team roles, you can predefine case teams. For more information, see "Predefining Case Teams" in the Salesforce online help.

### Update Team Roles

To update a case team role:

1. Click **Edit** next to the name of the case team role you wish to update.
2. Update the appropriate fields.
3. Click **Save**.

### Tips on Defining Case Team Roles

Consider the following when defining case team roles:

- You cannot delete case team roles; however, you can delete users from the Case Team related list on cases.
- By default, case owners have full access to cases they own. Case team roles cannot update case owners access level to cases.
- You can add contacts and Customer Portal users to roles that have Read/Write access on cases. However, only contacts enabled as Customer Portal users can access cases, as contacts cannot log in to Salesforce. For more information, see "Enabling the Customer Portal for Contacts and Person Accounts" in the Salesforce online help.
- Currently, you can create an unlimited amount of roles for case teams. Yet, because case team roles cannot be deleted, we recommend that you create no more than 20 roles so that users do not have too many roles to choose from when working with case teams.
- You cannot replace a role with another role; however, you can update a role or create a new one.

## Predefining Case Teams

User Permissions Needed	
To set up case teams:	"Customize Application"
To add team members:	"Edit" on cases

A case team is a team of users that work together on a case. For example, your case team may include a support rep, support manager, and a product manager.

After you define case team roles, you can predefine case teams so that users can quickly add a team of specific users to the Case Team Members related list on cases.

To access the Predefined Case Teams page, click **Setup** > **Customize** > **Cases** > **Case Teams** > **Predefined Case Teams**. From the Predefined Case Teams page, click the appropriate links to perform the following actions:


### Create Predefined Case Teams

To create a predefined case team:


1. Click **New**.
2. Enter a name for the team.
3. Optionally, enter a description for the team.
4. Click **Save**. Alternatively, click **Save & New** to save the predefined team and begin predefining another case team.
5. Optionally, add team members.

### Add Team Members to Predefined Case Teams

To add a new member to a predefined case team:

1. Select the name of the predefined case team.
2. Click **Add Team Member**.
3. Select the type of user from the **Team Member** picklist, either User, Contact, or Portal User; then click the Lookup icon () to choose a specific user to add to the team.

Contacts can only view cases via a Customer Portal. To enable contacts to access a Customer Portal, see "Enabling the Customer Portal for Contacts and Person Accounts" in the Salesforce online help.

4. Click the Lookup icon () in the Member Role field to select the case team role to apply to the team member.  
Every member of a case team has a role that he or she plays for the case, such as "Customer Contact" or "Case Manager". Roles determine access to the case, like Read Only or Read/Write access, and whether the member in the role is visible to users in the Customer Portal. For more information, see "Defining Case Team Roles" in the Salesforce online help.
5. Click **Save**. Alternatively, click **Save & New** to save the predefined team and begin adding another member to the team.

### Update Predefined Case Teams

To update a predefined case team:

1. Click **Edit** next to the name of the predefined case team you wish to update.

Optionally, click **Del** to delete the predefined case team.

When you delete a predefined case team, the case team is automatically removed from all cases with which it is associated. Furthermore, you cannot retrieve deleted predefined case teams from the Recycle Bin. For more information, see "Recycle Bin" in the Salesforce online help.



2. Update the appropriate fields.
3. Click **Save**.

### Update Predefined Case Teams Members

To update the team members on a predefined case team:

1. Select the name of the predefined case team.
2. Click:
  - **New Member** to add a new member to the team.
  - **Edit** next to the name of a team member to update that team member's role.

Every member of a case team has a role that he or she plays for the case, such as "Customer Contact" or "Case Manager". Roles determine access to the case, like Read Only or Read/Write access, and whether the member in the role is visible to users in the Customer Portal. For more information, see "Defining Case Team Roles" in the Salesforce online help.

- **Del** next to the name of a member who you want to remove from the team.

When you delete a member from a predefined case team, the user is automatically removed from all cases with which he or she is a member of that case team.

- A member's name to view that user's details.

If you have the "Manage Users" permission, you can update the user's details and reset the user's password from the user's detail page. For more information, see "Editing Users" in the Salesforce online help.

3. Click **Save** where necessary.

### Tips on Predefining Case Teams

Consider the following when predefining case teams:

- You cannot delete a predefined case team if it is associated with an assignment rule. To delete the predefined case team, you must first remove it from any assignment rules. For more information, "Setting Up Assignment Rules" in the Salesforce online help.
- When you delete a predefined case team, the case team is automatically removed from all cases with which it is associated. Furthermore, you cannot retrieve deleted predefined case teams from the Recycle Bin. For more information, see "Recycle Bin" in the Salesforce online help.
- When you delete a member from a predefined case team, the user is automatically removed from all cases with which he or she is a member of that case team.

## Setting Up Email Alerts for Case Team Members

User Permissions Needed	
To set up case teams:	"Customize Application"
To create or change workflow rules:	"Customize Application"
To create or change email alerts:	"Customize Application"

A case team is a team of users that work together on a case. For example, your case team may include a support rep, support manager, and a product manager.

You can set up email alerts for case team members so that each time a case is updated or created, team members associated with the case are automatically notified.

To set up email alerts for members on case teams:

1. Create email templates with which to notify case team members. For more information, see "Managing Email Templates" in the Salesforce online help.

Optionally, enter merge fields in the template subject and text body. These fields will be replaced with information from your records when you send an email. For details about using merge fields, see "About Merge Fields" in the Salesforce online help.

2. Set up workflow rules that specify what actions on a case trigger email notifications to case team members:

- a. Click **Setup** ► **Create** ► **Workflow & Approvals** ► **Workflow Rules**.
- b. On the workflow rules list page, click **New Rule**.
- c. Choose **Case** from the **Select object** picklist and click **Next**.
- d. Enter a rule name.
- e. Optionally, enter a description for the rule.
- f. Choose the evaluation criteria.

We recommend that you select the **Every time a record is created or edited** evaluation criteria because this ensures that every case is evaluated as to whether it should trigger notifications to case team members.

- g. Enter your rule criteria.

We recommend that you choose **criteria are met** and select the filter criteria that a case must meet to trigger notifications to case team members. For example, set the filter to **Case: Status equals New** if you want case team members to receive a notification each time a case's status is set to **New**.

- h. Optionally, enter advanced filter conditions.
- i. Click **Save & Next**.

3. Add email alerts to the workflow rule so that notifications are sent to case team members when actions on cases match rule criteria:

- a. Click **Add Workflow Action** and choose **New Email Alert** from the drop-down button.
- b. Enter a description for the email alert.

The object is read only if the new email alert is associated with a workflow rule for a particular object.

- c. Choose an email template.
- d. Select the type of recipients who you want to receive this email alert.

Optionally, select **Case Team** from the **Recipient Type** picklist to choose all users with a particular case team role as recipients.

The recipients that match your search results appear in the **Available Recipients** list.

- e. Select the recipients who you want to receive this email alert in the **Available Recipients** list and click **Add** to add them to the **Selected Recipients** list.
- f. Optionally, enter up to five additional email addresses.
- g. Click **Save**.

4. Activate the workflow rule and its associated email alert:

- a. Click **Setup** ► **Create** ► **Workflow & Approvals** ► **Workflow Rules**.
- b. Click **Activate** next to the name of the rule.



**Note:** You can click **Deactivate** at any time to prevent the rule from firing when its conditions are met; however, if you deactivate a rule that has pending actions, Salesforce completes those actions as long as the record that triggered the rule is not updated.



**Tip:** For more information on workflow rules and email alerts, see:

- "Creating Workflow Rules" in the Salesforce online help
- "Managing Workflow Rules" in the Salesforce online help
- "Creating Email Alerts for Workflow and Approvals" in the Salesforce online help
- "Managing Email Alerts" in the Salesforce online help

## Adding Case Team Members

User Permissions Needed	
To set up case teams:	"Customize Application"
To add team members:	"Edit" on cases

To build a case team, select a case and add case team members to that case.

To add case team members to a case:

1. View the case.
2. Click **New Member** in the Case Team Members related list.

Optionally, click **Add Predefined Team** and select the Lookup icon (🔍) to choose a case team predefined by your administrator. Then, click **Save**. For more information, see "Predefining Case Teams" in the Salesforce online help.

3. Select the type of user from the **Team Member** picklist, either User, Contact, or Portal User; then click the Lookup icon (🔍) to choose a specific user to add to the team.
4. Click the Lookup icon (🔍) in the Member Role field to select the case team role to apply to the team member.

Every member of a case team has a role that he or she plays for the case, such as "Customer Contact" or "Case Manager". Roles determine access to the case, like Read Only or Read/Write access, and whether the member in the role is visible to users in the Customer Portal.

5. Click **Save**. Alternatively, click **Save & New** to add the user to the case team and begin adding additional users to the case team.

### Tips on Adding Users to Case Teams

Consider the following when adding users to case teams:


- You cannot add a user to a case team if he or she is already on the case team. For example, if you add a predefined team to a case that includes a member already on the team, then that member is automatically removed from the predefined team when it is added to the case.
- Contacts can only view cases via a Customer Portal. To enable contacts to access a Customer Portal, see "Enabling the Customer Portal for Contacts and Person Accounts" in the Salesforce online help.
- Customer Portal users can view the Case Team related list if it is included on case page layouts associated with their profile. However, Customer Portal users cannot update case teams or view case team role details on cases. For more information, see "Customizing Page Layouts" in the Salesforce online help.
- You can filter case lists by case teams where you are a member. Simply select the **My Case Teams** filter on case list views. For more information, see "Creating Custom List Views" in the Salesforce online help. Currently, you cannot report on case teams.
- The possible access levels a case team member can have on a case, as defined by your administrator via case team roles, include:

Access Level	Description
Read/Write	User can view and edit the record, and add associated records, notes, and attachments to it.
Read Only	User can view the record, and add associated records to it. They cannot edit the record or add notes or attachments.
Private	User cannot access the record in any way.

## Updating Case Team Members

User Permissions Needed	
To set up case teams:	"Customize Application"
To update team members:	"Edit" on cases

You can update case team members on a case.

1. View the case.
2. On the Case Team related list, click:
  - **Edit** next to the name of a team member to update that team member's role.  
Every member of a case team has a role that he or she plays for the case, such as "Customer Contact" or "Case Manager". Roles determine access to the case, like Read Only or Read/Write access, and whether the member in the role is visible to users in the Customer Portal. For more information, see "Defining Case Team Roles" in the Salesforce online help.
  - **Del** next to the name of a member who you want to remove from the team.
  - **Remove** next to the name of a predefined case team you want to remove from the case.
  - **New Member** to add a new member to the team. For more information, see "Adding Case Team Members" in the Salesforce online help.
  - **Add Predefined Team** and select the Lookup icon () to choose a case team predefined by your administrator. Then, click **Save**. For more information, see "Predefining Case Teams" in the Salesforce online help.
3. Click **Save** where necessary.

### Tips on Updating Case Team Members

Consider the following when updating case team members:

- You cannot add a user to a case team if he or she is already on the case team. For example, if you add a predefined team to a case that includes a member already on the team, then that member is automatically removed from the predefined team when it is added to the case.
- When you remove a user or a predefined case team from a case, you can add the user or predefined case team back to the case at any time. For more information, see "Adding Case Team Members" in the Salesforce online help.
- Contacts can only view cases via a Customer Portal. To enable contacts to access a Customer Portal, see "Enabling the Customer Portal for Contacts and Person Accounts" in the Salesforce online help.
- Customer Portal users can view the Case Team related list if it is included on case page layouts associated with their profile. However, Customer Portal users cannot update case teams or view case team role details on cases. For more information, see "Customizing Page Layouts" in the Salesforce online help.

- The possible access levels a case team member can have on a case, as defined by your administrator via case team roles, include:

Access Level	Description
Read/Write	User can view and edit the record, and add associated records, notes, and attachments to it.
Read Only	User can view the record, and add associated records to it. They cannot edit the record or add notes or attachments.
Private	User cannot access the record in any way.

## Case Team Fields

User Permissions Needed	
To set up case teams:	"Customize Application"
To add team members:	"Edit" on cases

Here is a description of the fields (in alphabetical order) that are stored for each case team member:

Field	Description
Case Access	The level of access that a team member has to the case. The access level can be Read/Write, Read Only, or Private; but it cannot be less than your organization's default case sharing access.
Member Name	The name of a user listed as part of the case team.
Member Role	The role that the team member plays for the case, for example, "Case Manager".

## HTML Messages for the Customer Portal

Available in: **Enterprise** and **Unlimited** Editions

In Winter '09, the Customer Portal includes the ability to configure custom-language HTML messages that display to portal users based on their language settings.

### Implementation Tips

- To add an image to an HTML file, upload a file with an image file extension (for example, .jpg, .bmp, or .gif) in the Documents tab. Enter the image details, select the **Externally Available Image** checkbox, and click **Save**. In the Documents tab, click the name of the image file to view it. Right-click the image and select **Properties**. In the **Location** section under **Image Properties**, locate the servlet portion of the image URL, for example: `/servlet/servlet.ImageServer?id=OrgId&oid=DocumentId`, where *OrgId* and *DocumentId* are

populated with your organization's ID and image ID. Use this portion of the URL to reference your image in an HTML file.

## About HTML Messages for the Customer Portal

### Configuring Multilingual HTML Messages

If your organization has multiple languages enabled, you can upload HTML messages in any of the languages supported by Salesforce and configure the messages to display in the portal based on portal user language settings. For example, you can upload an HTML message in French to display on the Home tab for portal users with French language settings, and an HTML message in English to display on the Home tab for portal users with English language settings.

Note the following before configuring multilingual HTML messages:

- Before you can add a multilingual HTML message to a portal, you must upload the HTML-formatted file in the Documents tab. For information, see "Uploading and replacing Documents" in the Salesforce online help.
- Even if configured, portal HTML messages will not display on the Ideas, Reports, Content, or Solutions tabs.

To configure multilingual HTML messages:

1. To configure a display language for the Partner Portal, click **Setup > Customize > Partners > Settings**. To configure a display language for the Customer Portal, click **Setup > Customize > Customer Portal > Settings**.
2. Click the name of the portal to edit.
3. Click **Add New Language** in the Assigned Languages related list.
4. Select a language from the Language drop-down list.
5. Click the lookup icon (🔍) next to a tab name, then select the HTML message to display on that tab. Optionally repeat this step for each tab that you want to display an HTML message.
6. Click **Save**.

For information about editing language settings for portal users, see "Managing Users" in the Salesforce online help.

## Salesforce Content Support for Google Docs

Salesforce Content is available in: **Professional**, **Enterprise**, and **Unlimited** Editions

Google Apps is available in all editions

In Winter '09, Salesforce Content provides support for Google Docs™, making it easy to share, publish, and capture feedback on Google Docs within your business. This enables you to access all types of files and documents from a single, searchable location and ensure that they receive the feedback and tracking benefits provided by Salesforce Content features such as votes, comments, and subscriptions.

You can associate Google docs with a workspace in two ways:

- Use the Contribute tab in Salesforce Content to add a new or existing Google doc.
- Use the Add Google Doc to Salesforce browser button when a Google doc is open in your Google Apps account.



**Note:** To use these features, you must:

- Be a licensed Salesforce Content user.
- Enable Google Apps.

- Activate the `Add Google Docs to Salesforce` service on the Google Apps page. To get to the Google Apps page, click **Setup** ► **Google Apps** ► **Settings**.

## About Salesforce Content Support for Google Docs

### Adding New Google Docs to a Salesforce Content Workspace

Create a new Google doc and publish it into a workspace, sharing that document with other members of that workspace.

1. On the **Contribute** tab, choose **New Document**, **New Spreadsheet**, or **New Presentation** from the **Add Google Doc** drop-down button. You may be prompted to log in to Google Apps.
2. Enter a name for your document, spreadsheet, or presentation and click **Create Google Doc**. The blank Google doc opens and you can begin adding your text. The **Describe** and **Publish** dialog in Salesforce Content also opens.
3. In the **Describe** and **Publish** dialog:
  - a. Optionally, provide a description of your Google doc. The description provides at-a-glance information for users who view the doc's content details page in Salesforce Content.
  - b. Choose a workspace.
  - c. Optionally, choose a language. The **Language** drop-down list is displayed if multi-language support is enabled. If you do not choose a language, Salesforce Content associates your content with your personal language setting. If users restrict their content searches to a particular language, only content associated with that language is displayed in the search result set.
  - d. To publish the content on behalf of another author, choose that author from the drop-down list.
  - e. Tag your content. Your tagging permission depends on the tagging rule assigned to the workspace:
    - If the workspace does not have a tagging rule or if your administrator assigned the open tagging rule, you can enter tags in the **Tags** field. As you type a tag, Salesforce Content autosuggests tags based on your **My Recent Tags** list and the **Popular Tags** section on the **Workspaces** tab. The **My Recent Tags** list on the **Contribute** window shows the 20 tags you have used most recently. Click a tag to add it to the **Tags** field automatically.
    - If your administrator assigned the guided tagging rule, you can choose from the list of suggested tags or enter a new tag. Click a suggested tag to add it to the **Tags** field automatically.
    - If your administrator assigned the restricted tagging rule, you must choose from the list of suggested tags. When you select a tag it turns green.
  - f. If multiple content types are available, choose one from the drop-down list. The content type determines which custom fields appear for you to categorize and define your content.
  - g. After completing any custom fields, click **Publish** to save the Google doc to its Salesforce Content workspace, or click **Cancel** to save the doc to your unpublished content queue. From there you can delete the doc from Salesforce Content or publish it later. Once a Google doc is published in Salesforce Content, all workspace members can search for the doc and provide feedback such as comments and votes.



**Note:** While you have your Google doc open, remember to share it with other Google Apps users in your organization. Only users with access to the Google doc in their Google Apps account can open the doc from Salesforce Content.

### Adding Existing Google Docs to a Salesforce Content Workspace

If you have an existing Google doc, you can publish it into a workspace:

1. On the **Contribute** tab, choose **Add Existing** from the **Add Google Doc** drop-down button. A list of all the Google docs in your Google Apps account displays.



2. Optionally, limit your list of docs by entering a search term or choosing to view only documents, presentations, or spreadsheets.
3. Select the Google doc that you want to add to Salesforce Content and click **Contribute**.
4. Optionally, edit the title of your Google doc and/or add a description.
5. Choose a workspace.
6. Optionally, choose a language. The `Language` drop-down list is displayed if multi-language support is enabled. If you do not choose a language, Salesforce Content associates your content with your personal language setting. If users restrict their content searches to a particular language, only content associated with that language is displayed in the search result set.
7. To publish the content on behalf of another author, choose that author from the drop-down list.
8. Tag your content. Your tagging permission depends on the tagging rule assigned to the workspace:
  - If the workspace does not have a tagging rule or if your administrator assigned the open tagging rule, you can enter tags in the `Tags` field. As you type a tag, Salesforce Content autosuggests tags based on your My Recent Tags list and the Popular Tags section on the Workspaces tab. The My Recent Tags list on the Contribute window shows the 20 tags you have used most recently. Click a tag to add it to the `Tags` field automatically.
  - If your administrator assigned the guided tagging rule, you can choose from the list of suggested tags or enter a new tag. Click a suggested tag to add it to the `Tags` field automatically.
  - If your administrator assigned the restricted tagging rule, you must choose from the list of suggested tags. When you select a tag it turns green.
9. If multiple content types are available, choose one from the drop-down list. The content type determines which custom fields appear for you to categorize and define your content.
10. After completing the custom fields, click **Publish** to publish the content to its workspace or **Cancel** to save the content in your Content Ready for Publishing list. To remove unpublished content from this list, select the checkboxes as needed and click **Delete selected**.

### Adding Google Docs to a Salesforce Content Workspace from your Google Apps Account

By installing a browser button, you can publish Google docs into Salesforce Content from your Docs home page in your Google Apps account. To install the browser button, see the Salesforce online help.

To associate a Google doc with Salesforce Content from the Docs home page:

1. Open a Google doc.
2. Click the **Add Google Doc to Salesforce** browser button.
3. In the Salesforce Content message window at the top of the page, click **Publish your Google Doc into Salesforce Content**. The message only displays if you are a member of a Salesforce Content workspace and have a workspace permission that allows you to contribute content.
4. In the Describe and Publish window, add a title for your Google doc and, optionally, a description.
5. Choose a workspace.
6. Optionally, choose a language. The `Language` drop-down list is displayed if multi-language support is enabled. If you do not choose a language, Salesforce Content associates your content with your personal language setting. If users restrict their content searches to a particular language, only content associated with that language is displayed in the search result set.
7. To publish the content on behalf of another author, choose that author from the drop-down list.
8. Tag your content. Your tagging permission depends on the tagging rule assigned to the workspace:
  - If the workspace does not have a tagging rule or if your administrator assigned the open tagging rule, you can enter tags in the `Tags` field. As you type a tag, Salesforce Content autosuggests tags based on your My Recent Tags list and the Popular Tags section on the Workspaces tab. The My Recent Tags list on the Contribute window shows the 20 tags you have used most recently. Click a tag to add it to the `Tags` field automatically.



- If your administrator assigned the guided tagging rule, you can choose from the list of suggested tags or enter a new tag. Click a suggested tag to add it to the `Tags` field automatically.
  - If your administrator assigned the restricted tagging rule, you must choose from the list of suggested tags. When you select a tag it turns green.
9. If multiple content types are available, choose one from the drop-down list. The content type determines which custom fields appear for you to categorize and define your content.
  10. After completing any custom fields, click **Publish**. All workspace members can now search for this doc and provide feedback such as comments and votes.



**Note:** While your Google doc is open, remember to share it with other Google Apps users in your organization. Only Google Apps users with whom the doc is shared can view and edit the doc.

## Storage Enhancements

Available in: All Editions

Winter '09 introduces cost-effective improvements to storage management. Salesforce has increased default file storage limits and made it more economical to store files as attachments, in the Documents tab, or in Salesforce Content.

### About Storage Enhancements

Previously, all organizations received general storage, complimentary document storage, and if applicable, Salesforce Content storage. Now, Salesforce storage is divided into two categories: data storage and file storage.

File storage includes files in attachments, the Documents tab, and Salesforce Content. Data storage includes all other records:

- Accounts
- Assets
- Campaigns
- Cases
- Case Teams
- Contacts
- Contracts
- Custom objects
- Email messages
- Events
- Forecast items
- Google docs
- Ideas
- Leads
- Notes
- Opportunities
- Price book entries
- Price books
- Products
- Solutions
- Static resources

- Tags: Tag applications
- Tags: Unique tags
- Tasks

Each Edition includes a minimum amount of data storage and file storage. Professional, Enterprise, and Unlimited Editions receive a per-user storage amount multiplied by the number of users in the organization if the result is greater than the minimum storage amount. Using data storage as an example, an EE org with 600 users would receive 12,000 MB (12 GB) of data storage, because 20 MB per user multiplied by 600 users is 12,000 MB. A smaller organization, for example a PE org with 20 users, would receive 1 GB of data storage because 20 MB per user multiplied by 20 users is only 400 MB, which is less than the 1 GB minimum allotted to all PE orgs.

The values in the Storage Allocation Per User License column below apply to Salesforce CRM and Salesforce Platform user licenses. The Salesforce Platform Light user license provides 1 MB of data storage and 1 MB of file storage.



**Note:** The only feature license that provides additional storage is Salesforce Content User; each Salesforce Content User license provides an additional 500 MB of file storage.

Salesforce Edition	Data Storage Minimum per Organization	File Storage Minimum per Organization	Storage Allocation Per User License
Personal	20 MB (approximately 10,000 records)	20 MB	N/A
Group	1 GB	1 GB	N/A
Professional	1 GB	1 GB	20 MB of data storage and 100 MB of file storage
Enterprise	1 GB, plus 2 MB for each Silver Partner license and 5 MB for each Gold Partner license	1 GB	20 MB of data storage and 100 MB of file storage
Unlimited	1 GB, plus 2 MB for each Silver Partner license and 5 MB for each Gold Partner license	1 GB	120 MB of data storage and 100 MB of file storage
Developer	20 MB	20 MB	N/A

For custom user licenses, contact salesforce.com to determine whether these licenses provide additional storage.

### Storage Allotments for Existing Organizations

If your organization signed up for Salesforce prior to the Winter '09 release, use the following example to help determine how much data storage and file storage are available to your organization in Winter '09.

Xavier Corporation is an Enterprise Edition organization with 100 Salesforce users. In Summer '08, it had 2000 MB of general storage. In Winter '09, Xavier Corp receives data storage equal to its previous amount of general storage, in this case 2000 MB of data storage. Additionally, Xavier Corp receives 10,000 MB of file storage, because 100 MB of file storage is granted per user license for Enterprise Edition organizations and Xavier Corp has 100 users (100 MB x 100 users = 10,000 MB). Of the 2000 MB of general storage in Summer '08, Xavier Corp was using 500 MB for records and 1000 MB for documents, leaving 500 MB available. In Winter '09, Xavier Corp has 1500 MB of data storage available (2000 MB total - 500 MB for existing data), and 9,000 MB of file storage available (10,000 MB total - 1,000 MB for existing files).

To increase your storage allocation, you can purchase user licenses or add-on file storage. For pricing information, contact [salesforce.com](https://www.salesforce.com). For customers that have previously purchased additional storage, the additional storage amount is also upgraded to data and file storage. For example, if you purchased 500 MB of add-on storage, in Winter '09 you have 500 MB of data storage plus 500 MB of file storage.

To view your organization's storage usage, click **Setup** ► **Data Management** ► **Storage Users**.

## Salesforce Mobile Enhancements

Available in: **Unlimited** and **Developer** Editions

Available for an additional cost in: **Professional** and **Enterprise** Editions

The Winter '09 release includes several new features that improve the capabilities of Salesforce Mobile. These include:

- [Salesforce Mobile for iPhone](#)
- [Version 11.0 of Salesforce Mobile for BlackBerry](#)
- [Visualforce Mobile](#)
- [Mobile Web Tabs](#)
- [Mobile Tab Management](#)
- [Mobile Dashboards](#)
- [Mobile Object Permissions](#)
- [Mobile PIN Login Security](#)
- [Mobile View Criteria Enhancements](#)
- [Record Ownership Filter Enhancement for Activities](#)
- [Mobile Support for Account Contact Roles](#)

## About Salesforce Mobile Enhancements

### Salesforce Mobile for iPhone

Salesforce Mobile for the iPhone combines the effortless navigation of the iPhone with the unparalleled power of the Salesforce Mobile platform.

From building custom iPhone applications to accessing your CRM data, Salesforce Mobile for the iPhone lets you scroll, tap, and find exactly what you need. Create and edit contacts and other records, log calls and emails, and make the most of your time away from the office. Your critical customer information is instantly accessible through the iPhone's familiar touch screen format.

### Installing Salesforce Mobile for iPhone

Salesforce Mobile is available for download from Apple's App Store. To use the App Store, your iPhone or iPod touch must be connected to the Internet. You also need an iTunes™ Store account to download applications. If you do not already have an iTunes Store account, open iTunes on your computer and select **Store** ► **Account** to set one up.

To download Salesforce Mobile from the App Store:

1. From the Home screen of your iPhone or iPod touch, tap the App Store icon.
2. Tap **Search**.

3. Tap the **Search** field to open the keyboard. Type **salesforce**.
4. Tap **Salesforce Mobile** in the list of search results.
5. Tap **Salesforce Mobile** to view information about the application.
6. Tap **Free**, and then tap **Install**.



**Note:** It does not cost money to download the application from the App Store. However, to use Salesforce Mobile on your device, you need an Unlimited Edition Salesforce account or an Enterprise or Professional Edition Salesforce account with a mobile license.

7. Enter your iTunes Store account and password and tap **OK**.

After you begin downloading Salesforce Mobile, its icon appears on your Home screen and shows the status of the download and installation.

8. The first time you launch Salesforce Mobile on your device, you must activate your Salesforce account by logging in and downloading data. Verify that your phone is connected to a network. For greater performance and reliability, use a Wi-Fi network instead of a cellular network when activating Salesforce Mobile.
9. Tap the Salesforce icon on the Home screen.
10. Tap **I Accept**.
11. On the activation screen, enter your Salesforce Mobile username and password. Tap **Done** to close the keyboard.
12. Tap **Activate**.



**Caution:** Do not close the Salesforce Mobile window or let the device lock during the activation process.

13. The application opens after Salesforce accepts your username and password and downloads your records.

After installation, you might have to set up a passcode accessing the application. See [Mobile PIN Login Security](#) on page 40.

## Using Salesforce Mobile for iPhone

To learn how to use Salesforce Mobile for iPhone, see the [Salesforce Mobile User Guide for iPhone](#).

## Version 11.0 of Salesforce Mobile for BlackBerry

Version 11.0 of Salesforce Mobile for BlackBerry is generally available, and it includes the following new features:

- [Visualforce Mobile](#)
- [Mobile Web Tabs](#)
- [Mobile Dashboards](#)
- [Mobile PIN Login Security](#)



**Important:** Version 11.0 and later of Salesforce Mobile for BlackBerry is not supported by the legacy Apex Mobile console. In order to take advantage of the features in the new BlackBerry client application, administrators still using the legacy console must migrate all of their mobile profiles to the Mobile Administration Console in the Salesforce setup pages. For more information about migrating to the Mobile Administration Console, contact [salesforce.com](mailto:salesforce.com).

## Upgrading Salesforce Mobile for BlackBerry

You can upgrade to the latest version of Salesforce Mobile by installing the new client application on your device. To upgrade to Version 11.0 of the BlackBerry client application:

1. In the mobile application, open the menu and select **System Info**.
2. Open the menu and select **Upgrade**.

If the **Upgrade** menu option is not available, an older version of the mobile application is installed on your device. Open your web browser and navigate to the following URL: <http://mobile.salesforce.com/setup>.

3. Click **Download** to download the installation program.
4. After the installer downloads, click **Run**.
5. Click **OK** to launch the browser and continue the installation process.
6. Click **OK** to verify you understand that a firewall prompt may appear after the download.

The download page for the mobile application displays.

7. Click **Download** to install the mobile application.
8. When prompted to allow an HTTP connection, select the `tp.mobile.salesforce.com` checkbox. Scroll down and click **Allow this connection**.
9. After the application installs successfully, a confirmation message appears. Click **OK** to close it.
10. Close the browser.



**Note:** If you are upgrading from an older version of the mobile application, you may have to activate your Salesforce account on the device after the upgrade. Accept the license agreement, enter your username and password, and wait for your records to download from Salesforce.

## Visualforce Mobile

Visualforce Mobile fills the gap between the limitations of the current “object-only” mobile client technology and the near-limitless features of the Salesforce desktop application. Using a mobile browser, administrators can mobile enable tabs and other features previously available only on the desktop version of Salesforce. This capability greatly extends the customizability of the mobile application.

By creating a Visualforce page and mobilizing it, administrators can create any kind of form or wizard and make it instantly available as a tab in the mobile application. Administrators can also take advantage of specific features available on mobile Web browsers.

As wireless network coverage broadens and data capacity improves, Salesforce Mobile will be redeveloped to more fully leverage the mobile Web. BlackBerry is the first platform to support this new capability, with other mobile platforms to follow.

It is important to note that most mobile browsers have technical limitations concerning display size, scripts, processor speed, and network latency. Review the following considerations before mobilizing your Visualforce tabs to ensure that they are compatible with mobile browsers.

### Visualforce Mobile Tab Considerations

Consider the following when defining a mobile Visualforce tab:

- Visualforce Mobile is only available for BlackBerry. If you mobilize a Visualforce tab, keep in mind that Windows Mobile and iPhone users cannot view the tab in the mobile application.
- The minimum BlackBerry operating system requirement for Visualforce tabs is 4.2.
- All Visualforce pages contain JavaScript, even if you do not build the pages using JavaScript code. In order for BlackBerry users to view Visualforce pages, JavaScript must be enabled on the smartphones. The BlackBerry administrator can globally enable JavaScript from the BlackBerry Enterprise Server. Users can also enable JavaScript on a BlackBerry smartphone by opening the BlackBerry browser, selecting **Options ► Browser Configuration**, and then selecting the **Support JavaScript** checkbox.
- BlackBerry administrators should be aware that the download size setting on the BlackBerry Enterprise Server affects how much data can be pushed to the device. Check that the download size setting is appropriate, and be sure to test your Visualforce pages before deploying them to your mobile users.

- Because the display size is limited on mobile browsers, we recommend redesigning the Visualforce page to optimize it for mobile users.
- In the mobile application, the Visualforce page is embedded in a tab, so you should avoid using tabs for navigation in mobile Visualforce pages.
- The embedded browser in Salesforce Mobile does not have built-in navigation. If your Visualforce page is a wizard, you should provide navigation links that allow users to return to the previous page and advance to the next page.
- Even if you know that the mobile browser supports the JavaScript in your Visualforce page, keep your use of JavaScript to a minimum. Mobile devices generally have slow network connections, and too many scripts running on a page creates a poor user experience. To minimize the amount of JavaScript on your mobile Visualforce pages, try to build them using mostly WML and HTML.
- User agent inspection can be executed in a custom controller to support multiple devices. You can do this by inspecting the appropriate result of the `getHeaders()` method on the current page reference.

## Enabling Visualforce Tabs for Salesforce Mobile

When you build or edit the Visualforce tab, select the `Mobile Ready` checkbox in the wizard to verify that the Visualforce page displays and functions properly on a mobile phone. Selecting the checkbox adds the tab to the list of available tabs for your mobile configurations. See [Mobile Tab Management](#) for information on how to mobilize tabs.

To find out more about developing Visualforce pages, see the [Visualforce Developer's Guide](#).

## Mobile Web Tabs

Winter '09 offers greater ability to customize the mobile application. You can now mobilize web tabs to make other websites available in Salesforce Mobile and extend your business applications to mobile users.

It is important to note that most mobile browsers have technical limitations concerning display size, scripts, processor speed, and network latency. Review the following considerations before mobilizing your web tabs to ensure that they are compatible with mobile browsers.

### Mobile Web Tab Considerations

Consider the following when defining a mobile web tab:

- The ability to mobilize web tabs is only available for BlackBerry. If you mobilize a web tab, keep in mind that Windows Mobile and iPhone users cannot view the tab in the mobile application.
- The minimum BlackBerry operating system requirement for web tabs is 4.2.
- The tab type must be URL. The mobile application cannot run s-controls.
- Some web pages contain JavaScript and Flash, but not all mobile browsers support them. The BlackBerry browser has limited support for JavaScript and no support for Flash.
- In order for BlackBerry users to view JavaScript web pages, JavaScript must be enabled on the smartphones. The BlackBerry administrator can globally enable JavaScript from the BlackBerry Enterprise Server. Users can also enable JavaScript on a BlackBerry smartphone by opening the BlackBerry browser, selecting **Options ► Browser Configuration**, and then selecting the **Support JavaScript** checkbox.
- Before mobilizing the web tab, navigate to the target URL on one of your organization's mobile devices to verify that it works as expected in a mobile browser. If users cannot accomplish the necessary tasks on the web page from a mobile browser, do not mobilize the web tab.

## Enabling Web Tabs for Salesforce Mobile

When you build or edit the web tab, select the `Mobile Ready` checkbox in the wizard to verify that the web page displays and functions properly on a mobile phone. Selecting the checkbox adds the tab to the list of available tabs for your mobile configurations. See [Mobile Tab Management](#) for information on how to mobilize tabs.

To find out how to build a web tab in Salesforce, see "Creating Web Tabs" in the Salesforce online help.

## Mobile Tab Management

Tab Management lets you decide which tabs should be enabled on the mobile device and in what order they appear. You can also specify different tabs for different users, depending on what information those users need to access.

### Managing Mobile Tabs

User Permissions Needed	
To view mobile configurations:	"View Setup and Configuration"
To manage mobile tabs:	"Manage Mobile Configurations"

For each mobile configuration, you can select the tabs that appear in the mobile application and define the order of the tabs. The available tabs for a mobile configuration include:

- Standard object tabs
- Custom object tabs
- Visualforce tabs that have been enabled for the mobile application
- Web tabs that have been enabled for the mobile application

By default, tabs in the mobile application reflect the Salesforce website—if an object's tab is hidden on the website, it is hidden in the mobile application. However, if the tab is exposed in at least one Salesforce application that is available to the user on the website, then the tab is available to the user in the mobile application.



**Note:** If you customize mobile tabs, the tabs you select for the mobile configuration are sent to users' mobile devices even if the tabs have not been added to an application. Although the tabs are sent to the device, they only display in the mobile application if users have permission to view the tab.

There are several reasons you might want to hide an object's tab in the mobile application even though the object records are sent to the device. The mobile application has much less screen space to display a row of tabs, so occasionally administrators choose to reduce the amount of tabs on the device. Also, sometimes a custom object has a relationship to a standard object, and users access the custom object record from the parent object record. In that case, you could mobilize the custom object but hide the tab.

To begin managing the tabs for a mobile configuration, click **Setup ► Mobile Administration ► Mobile Configurations**, and then click the name of a mobile configuration.

- To view the tabs for a mobile configuration, scroll down to the Mobile Tabs related list. If you have not customized the configuration's tabs, the related list displays a message indicating that the default tab behavior is used for the configuration.
- To select the tabs and define their order for the first time, click **Customize Tabs**. See [Customizing Mobile Tabs](#).
- To change the tab setup for a mobile configuration, click **Edit**.
- To delete the mobile tab setup and use the default tab behavior, click **Reset to Default**.



## Customizing Mobile Tabs

User Permissions Needed	
To view mobile configurations:	"View Setup and Configuration"
To customize mobile tabs:	"Manage Mobile Configurations"

To edit the tabs for a mobile configuration:

1. Click **Setup ► Mobile Administration ► Mobile Configurations**, and then click the name of a mobile configuration.
2. In the Mobile Tabs related list, click **Customize Tabs** to define mobile tabs for the first time. If you have already set up the mobile tabs, click **Edit**.
3. Select tabs from the Available Tabs list, and click the **Add** arrow to add them to the mobile configuration.
4. In the Selected Tabs list, choose tabs and click the **Up** and **Down** arrows to arrange the tabs in the order they should appear in the mobile application.
5. Click **Save**.

## Mobile Dashboards

Mobile Dashboards are a perfect fit for managers and field employees who want to get a quick peek at their dashboard data while away from the office.

Administrators can mobilize the Dashboards tab and instantly give users access to all their Salesforce dashboards. Dashboards are an enormously popular feature in Salesforce, and the opportunity to access this important data while on the move greatly enhances the power of Salesforce CRM management information.

Currently, dashboards are only available in the BlackBerry mobile client application.

## Setting Up Mobile Dashboards

You can make the Dashboards tab available in Salesforce Mobile by adding it to the tabs for a mobile configuration. Mobile dashboards allow field users to keep up with corporate metrics and key performance indicators even when they do not have access to a computer.

Note the following about mobile dashboards:

- The Dashboards tab in the mobile application launches an embedded browser to display the dashboards.
- Due to screen size limitations, mobile dashboards display in a single column.
- Links to custom report details are disabled in mobile dashboards.
- The first time a user visits the Dashboards tab in Salesforce Mobile, the mobile application requests the last dashboard the user viewed on the Salesforce website. Depending on the strength of the cellular or WiFi signal, it could take several moments before the dashboard displays on the page.
- Due to limitations of older BlackBerry browsers, dashboards do not automatically refresh in the mobile application. Users can request a dashboard refresh by clicking the **Refresh** button.
- Users are able to work offline in the mobile application. Without a wireless connection, users can see the last viewed dashboard, but they cannot refresh the dashboard or select a different one.
- The minimum BlackBerry operating system requirement for mobile dashboards is 4.5. Mobile dashboards are compatible with versions 4.2 and 4.3, but tables in the dashboards might not display properly.

To enable mobile dashboards:

1. Click **Setup ► Mobile Administration ► Mobile Configurations**, and then click the name of a mobile configuration.



2. In the Mobile Tabs related list, click **Customize Tabs** to define mobile tabs for the first time. If you have already set up the mobile tabs, click **Edit**.
3. Select **Dashboards** from the Available Tabs list, and click the **Add** arrow to add it to the mobile configuration. The Available Tabs list includes standard object tabs, custom object tabs. It can also include web and Visualforce tabs.



**Caution:** If you have not yet customized tabs in the mobile configuration, you must select all the tabs that should appear in the mobile application, not just the Dashboards tab.

4. In the Selected Tabs list, choose the Dashboards tab and click the **Up** and **Down** arrows to define where the Dashboards tab should appear in the mobile application.
5. Click **Save**.

## Working with Dashboards in Salesforce Mobile

Selecting the Dashboards tab in Salesforce Mobile displays the dashboard you most recently viewed. To view a different dashboard, choose a dashboard from the View Dashboard drop-down list, and then click **Go**. This drop-down list includes dashboards in all dashboard folders to which you have access.

The data in each dashboard is as current as the date and time displayed in the **As of** field at the top of the dashboard. To refresh a dashboard:

1. Click the **Refresh** button.
2. Wait a few minutes to give the mobile application time to receive the updated information from Salesforce. You can leave the dashboard and perform other functions in Salesforce Mobile while the data refreshes.
3. Return to the dashboard and click **Reload**.

## Mobile Object Permissions

User Permissions Needed	
To view mobile configurations:	"View Setup and Configuration"
To edit mobile object properties:	"Manage Mobile Configurations"

Winter '09 offers even more control over how users interact with data in Salesforce Mobile. Administrators can now override the standard and custom object permissions for mobile users.

The mobile client application inherits the user's permissions from Salesforce. Some administrators want to further restrict the permissions of users when they access Salesforce data in the mobile application, usually due to limitations of the client application or the possibility of user error. For example, users can inadvertently delete a record because they don't realize that deleting a record in the mobile application also deletes the record on the Salesforce website. If this is a concern, administrators can prevent users from deleting records in the mobile application, regardless of their standard and custom object permissions on the website. Also, the client application does not support all of the Salesforce website's features, like s-controls and Apex scripting. If your business process for an object is not completely supported by Salesforce Mobile, you might choose to prevent mobile users from updating those records in the mobile application.

Mobile object properties are customized per mobile configuration. To edit mobile object properties:

1. Click **Setup ► Mobile Administration ► Mobile Configurations**.
2. Click the name of the mobile configuration you want to modify.
3. In the Mobile Object Properties related list, click **Edit** next to an object name.

Only objects you mobilized in the configuration's data set appear in the related list. You cannot change the properties of the user object.

4. In the Permissions section, select which permissions to remove from mobile users for this object. Use the **Deny Create**, **Deny Update**, or **Deny Delete** checkboxes to prevent users from creating, editing, or deleting records in the mobile application.



**Note:** You can also customize mobile page layouts from the Edit Mobile Configuration page. The ability to exclude fields for mobile objects was introduced in a previous release. In Winter '09, you exclude fields on the same page as you remove mobile permissions. For more information about customizing mobile page layouts, see "Editing Mobile Object Properties" in the Salesforce online help.

5. Click **Save** when finished.

## Mobile PIN Login Security

The Mobile PIN Login feature enhances security for mobile customers by substituting a unique four-digit PIN in place of the Salesforce username and password. With the Mobile PIN Login, users' devices can be securely paired with their Salesforce accounts once, eliminating the need for subsequent username and password authentication. In addition, supporting two-factor or delegated authentication security schemes becomes a straightforward process. As more large customers overhaul their internal security policies and practices, such advances become increasingly important.

This feature is available for the iPhone and BlackBerry, with other mobile platforms to follow.

## Setting Your Passcode

For security, your mobile session times out after ten minutes of inactivity. You must use a passcode—which is different than your Salesforce password—to access the mobile application after it locks. You are prompted to set up this passcode when you log in to Salesforce Mobile for the first time.



**Note:** The default timeout value is ten minutes. Your administrator can change the timeout value to a different time interval or remove it so that the application never locks.

To set up your passcode in the BlackBerry client application:

1. Install or upgrade Salesforce Mobile. See the [Salesforce Mobile User Guide for BlackBerry](#) for instructions.

After your Salesforce records download to your device, you are prompted to create your passcode.

2. Click **OK**.
3. Enter your passcode, then click **OK**. The passcode can be between 5 and 32 characters. Do not include any spaces.
4. Enter your passcode again for confirmation, then click **OK**.

To set up your passcode in the iPhone client application:

1. Install or upgrade Salesforce Mobile. See the [Salesforce Mobile User Guide for iPhone](#) for instructions.

After your Salesforce records download to your device, you are prompted to create your passcode.

2. Enter your five-digit passcode.
3. Enter your passcode again for confirmation.

## Notes about Passcodes

- Your passcode never expires; however, if you or your administrator choose to erase the Salesforce data on your device, you are prompted to create a new passcode after re-activating your Salesforce Mobile account.

- In cases where you incorrectly type your passcode, you have ten attempts to enter the correct passcode before you are prompted to change it.
- In the iPhone application, there is no way to reset your passcode. If you forget it, enter an incorrect passcode ten times until you fail the passcode attempts, and then create a new passcode.
- In the BlackBerry application, click **Deactivate** in the passcode popup window if you forget your passcode. The mobile application erases the Salesforce data on your device. After you enter your Salesforce username and password to reactivate your mobile account and download data, you are prompted to create a new passcode.

## Mobile View Criteria Enhancements

Some of the `$User` merge fields are available when defining filters for mobile custom views in Winter '09. In mobile configurations, you can use these merge fields to synchronize records where the user is linked to a record but is not the record owner. You can use the merge fields to define a view based on the record owner; for example, you might create a view that displays the current user's accounts with a rating of "Hot".

The following table describes the available user merge fields:

Merge Field	Description
<code>\$User.ID</code>	References the ID of the current user. This merge field can be applied to fields that contain a user lookup. The valid operators for this merge field are Equals and Not Equal To. When creating mobile view filters that reference an owner field, you can only use the <code>\$User.ID</code> merge field.
<code>\$User.Username</code>	References the username of the current user. This merge field can be applied to any text or lookup field, except picklists. The valid operators for this merge field are Equals, Not Equal To, Greater Than or Equal, Less Than or Equal, Contains, Does Not Contain, and Starts With.
<code>\$User.Firstname</code>	References the first name of the current user. This merge field can be applied to any text or lookup field, except picklists. The valid operators for this merge field are Equals, Not Equal To, Greater Than or Equal, Less Than or Equal, Contains, Does Not Contain, and Starts With.
<code>\$User.Lastname</code>	References the last name of the current user. This merge field can be applied to any text or lookup field, except picklists. The valid operators for this merge field are Equals, Not Equal To, Greater Than or Equal, Less Than or Equal, Contains, Does Not Contain, and Starts With.
<code>\$User.Fullname</code>	References the first and last name of the current user. This merge field can be applied to any text or lookup field, except picklists. The valid operators for this merge field are Equals, Not Equal To, Greater Than or Equal, Less Than or Equal, Contains, Does Not Contain, and Starts With.

## Record Ownership Filter Enhancement for Activities

In Winter '09, the **All Records** ownership option is no longer available for tasks and events when they are parent data sets in a mobile configuration. The option is still available when tasks and events are child data sets. This enhancement helps prevent failed data synchronization due to filter queries that take too long to run.

If your mobile configuration includes tasks and events as parent data sets and their filter criteria is defined using the **All Records** ownership option, you must select a different ownership option the next time you edit the mobile configuration's data sets. For information about creating and editing data sets, see "Defining Data Sets" in the Salesforce online help.

## Mobile Support for Account Contact Roles

This feature was removed from Winter '09, but it will be available in a future release.

## Drag-and-Drop Scheduling

Available in: **All Editions**


With Winter '09, you can quickly create events from account, contact, and lead list views without leaving the page. You can save time and clicks by using drag-and-drop scheduling to drag records from list views to weekly calendar views to create events associated with records.






## About Drag-and-Drop Scheduling

### Working with Drag-and-Drop Scheduling

User Permissions Needed	
To enable drag-and-drop scheduling:	"Customize Application"
To create events:	"Edit Events"

Drag-and-drop scheduling enables you to create events associated with records by dragging records from list views on to weekly calendar views and entering the details of the event in an overlay. This allows you to schedule events without leaving the list view page. Drag-and-drop scheduling is available on list views for accounts, contacts, and leads.

After your administrator sets up drag-and-drop scheduling, you can click the  **Open Calendar** link at the bottom of a list view to display a weekly view of a calendar underneath the list. Then, you can drag a record from the list to a time slot on the calendar to quickly create an event associated with the record. When the calendar is open, you can:

- Select the **Change** link to switch to any calendar to which you have access
- Click the Previous Week () and Next Week () icons to view the previous or next weeks in the calendar
- Click the Date Picker icon () to choose a specific date on which to view the calendar
- Select the **This Week** link to view the current week in the calendar
- Select the **Show Weekends** checkbox to display weekends on the calendar
- Click the Close icon () to close the calendar at any time. Alternatively, you can click the  **Close Calendar** link at the bottom of the list view to close the calendar.
- Drag the bar in between the list view and calendar to resize the height of either one

### Setting Up Drag-and-Drop Scheduling

Users with the "Customize Application" permission can set up drag-and-drop scheduling. To set up drag-and-drop scheduling:

1. Define event mini page layouts to include the fields you want users to update in the event edit overlay:

- a. Click **Setup** ► **Customize** ► **Activities** ► **Event Page Layouts**
- b. Select an events page layout name.
- c. Click **Mini Page Layout**.
- d. Select which fields to display in the event edit overlay.

For more information, see "Defining Mini Page Layouts" in the Salesforce online help.

- e. Click **Save**.

2. Update your organization's user interface settings to include drag-and-drop scheduling:


- a. Click **Setup** ► **Customize** ► **User Interface**.
- b. Select the **Enable Drag-and-Drop Scheduling on List Views** checkbox.

To select the **Enable Drag-and-Drop Scheduling on List Views** checkbox, you must select the **Enable Drag-and-Drop Editing on Calendar Views** and **Enable Click-and-Create Events on Calendar Views** checkboxes. For more information, see "Customizing User Interface Settings" in the Salesforce online help.

- c. Click **Save**.

### Tips on Drag-and-Drop Scheduling

Consider the following for drag-and-drop scheduling:

- The  **Open Calendar** link only appears at the bottom of list views for accounts, contacts, and leads.
- Drag-and-drop scheduling is not available for the Console tab, group events, recurring events, or accessibility mode.
- List views that include drag-and-drop scheduling may take slightly longer than usual to display.
- We recommend adding the **All Day Event** field to the event mini page layout, as that field is not automatically added to event mini page layouts. The **All Day Event** field allows users to specify whether an event lasts all day.
- Drag-and-drop scheduling includes enhanced lists; however, you do not need to enable enhanced lists for drag-and-drop scheduling to work. For more information, see "Working with Enhanced Lists" in the Salesforce online help.
- When you drag the bar in between the list and calendar to resize either one, the size is automatically saved for all views in which you use drag-and-drop scheduling. You can resize the list and calendar at any time.

## Partner Portal Enhancements

Available in: **Enterprise** and **Unlimited** Editions

The Partner Portal includes a number of enhancements in Winter '09, including the following:

### Display HTML messages in supported languages

You can now upload HTML messages in any of the languages supported by Salesforce and configure them to display on portal tabs based on portal user language settings. For example, you can upload a French-language HTML message to display on the Home tab for portal users with French language settings, and an English-language HTML message to display on the Home tab for portal users with English language settings.

### Mobile access for partner users

Portal users can now view and modify Partner Portal data on mobile devices using the Salesforce Mobile client application.

### Calendar and events in the Partner Portal

Portal users can use the calendar and create, edit, and view events. In addition, you can now assign events to Partner Portal users.

## Implementation Tips

To add an image to a HTML message in the Partner Portal:

1. In the Documents tab, upload a file with an image file extension (for example, .jpg, .bmp, or .gif).
2. Enter the image details.
3. Select the `Externally Available Image` checkbox.
4. Click **Save**.
5. In the Documents tab, click the name of the image file you uploaded.
6. Right-click the image and select **Properties**.
7. Note the image URL in the Location section under Image Properties, for example: `/servlet/servlet.ImageServer?id=OrgId&oid=DocumentId`, where *OrgId* and *DocumentId* are populated with your organization's ID and image ID.
8. Use the servlet portion of the URL to reference your image in an HTML file. For example: ``.

## About Partner Portal Enhancements


### Configuring Multilingual HTML Messages

If your organization has multiple languages enabled, you can upload HTML messages in any of the languages supported by Salesforce and configure the messages to display in the portal based on portal user language settings. For example, you can upload an HTML message in French to display on the Home tab for portal users with French language settings, and an HTML message in English to display on the Home tab for portal users with English language settings.

Note the following before configuring multilingual HTML messages:

- Before you can add a multilingual HTML message to a portal, you must upload the HTML-formatted file in the Documents tab. For information, see "Uploading and replacing Documents" in the Salesforce online help.
- Even if configured, portal HTML messages will not display on the Ideas, Reports, Content, or Solutions tabs.

To configure multilingual HTML messages:

1. To configure a display language for the Partner Portal, click **Setup > Customize > Partners > Settings**. To configure a display language for the Customer Portal, click **Setup > Customize > Customer Portal > Settings**.
2. Click the name of the portal to edit.
3. Click **Add New Language** in the Assigned Languages related list.
4. Select a language from the Language drop-down list.
5. Click the lookup icon () next to a tab name, then select the HTML message to display on that tab. Optionally repeat this step for each tab that you want to display an HTML message.
6. Click **Save**.

For information about editing language settings for portal users, see "Managing Users" in the Salesforce online help.

### Mobile Access for Partner Users

You can enable your partner users to view and modify Partner Portal data on their BlackBerry®, iPhone™, Treo™, or Windows Mobile® devices using the Salesforce Mobile client application. By granting mobile access to your partner users, you provide them with the flexibility to access their Partner Portal data from any location, at any time. For a full overview of the Salesforce Mobile client application, see [What is Salesforce Mobile?](#)

Prior to setting up Salesforce Mobile for partner users to access Partner Portal data on mobile devices, you must configure partner user accounts and purchase mobile licenses for each Partner Portal user that will be using Salesforce Mobile. Partner

user profiles must be assigned to at least one active Partner Portal before partner users can use Salesforce Mobile. If a user profile is assigned to multiple Partner Portals, only the first assigned Partner Portal will be accessible using Salesforce Mobile.

Due to memory and screen size limitations of mobile devices, Salesforce Mobile uses data sets, or subsets of Salesforce data, to determine the information that is available to mobile users. Partners using Salesforce Mobile will only be allowed to view objects they are able to view in the Partner Portal, even if Salesforce Mobile is configured with data sets that are less restrictive. Conversely, access to Partner Portal data can be limited by configuring more restrictive Salesforce Mobile data sets.

For information about configuring mobile access for partner users, see [Configuring Mobile Access For Partner Users](#).

### Setting Up Mobile Access For Partner Users

You can allow partner users to access Partner Portal data on mobile devices using the Salesforce Mobile application.

Tips for setting up mobile access for partner users:

- Prior to setting up Salesforce Mobile for partner users to access Partner Portal data on mobile devices, you must configure partner user accounts and purchase mobile licenses for each Partner Portal user that will be using Salesforce Mobile. Partner user profiles must be assigned to at least one active Partner Portal before partner users can use Salesforce Mobile. If a user profile is assigned to multiple Partner Portals, only the first assigned Partner Portal will be accessible using Salesforce Mobile.
- Custom mobile list views will not affect list views in the Partner Portal.
- If you make User data sets available in Salesforce Mobile, partners will be able to assign objects to their partner account users and all internal users. If you do not make User data sets available, partners will only be able to assign objects to internal or partner account users that are associated with records that you have made available on the mobile device.

To configure mobile access for partner users:

1. Install the Salesforce Mobile client application.
2. Enable partner users to use Salesforce Mobile.
3. Define the data sets that will be made available to partner users on mobile devices.
4. Test the mobile configuration to verify that the data sets are properly configured.
5. Optionally customize or restrict objects available in Salesforce Mobile.
6. Optionally create custom mobile list views.
7. Send partner users an email with instructions for using Salesforce Mobile.

### Enabling Calendar and Events on the Home tab

You can allow partner users to view a calendar and list of scheduled events on the Home tab of the Partner Portal. The calendar and events in the Partner Portal work the same as the calendar and events on the Home tab of Salesforce, with the following exceptions: spell check, event updates, enhanced list views, drag-and-drop scheduling, and hover details are not supported in the Partner Portal. To allow portal users to view the calendar on the Home tab, add it to the home page layout for the desired partner profiles. For information about editing the home page layout, see [Customizing Home Tab Page Layouts](#).

Portal users can view tasks and events from their calendar. Additionally, portal users with the "Edit Events" user permission enabled in their user profile can create, edit, and delete events. For information about editing user permissions, see [Creating and Editing Profiles](#).

### Events for Partner Users

If you have added the calendar to the Home page layout for Partner Portal users, you can assign events to them, and Partner Portal users with the "Edit Events" permission enabled in their user profile can create and edit their own events. For information about adding the calendar to the Partner Portal, see [Customizing Your Partner Portal Tabs](#). For information about editing user profiles, see [Creating and Editing Profiles](#). Note that the following event and calendar features are not supported in the Partner Portal: spell check, event updates, enhanced list views, drag-and-drop scheduling, and hover details.

To assign events to partner users:



1. Begin creating an event by doing one of the following:
  - From the Calendar section of the Home tab, click **New Event**.
  - From the Open Activities related list of an associated record, click **New Event**.
  - On the day view of the calendar, click on a time to create an event for that time. Alternatively, double-click a time slot to enter the details of the event in an interactive overlay. Note that your administrator controls the availability of click-and-create events; see "Enable Click-and-Create Events on Calendar Views" in the Salesforce online help.
  - On the week view of the calendar, click the Add Event Icon (+) next to a date to create an event on that date. Alternatively, double-click a time slot to enter the details of the event in an interactive overlay. Note that your administrator controls the availability of click-and-create events; see "Enable Click-and-Create Events on Calendar Views" in the Salesforce online help.
  - On the month view of the calendar, click the Add Event Icon (+) next to a date to create an event on that date.
  - On a multi-user calendar, select the users to invite, and click **New Event**.
2. Select Partner User from the `Assigned To` drop-down list, then enter the name of the partner user or click the lookup icon (🔍) to search for a partner user.
3. Enter the details of the event, including the subject, start date and time, and end date and time. If multiday events are enabled for your organization, you can create events that last up to 14 days.
4. Optionally, click **Check Spelling** to spell-check the contents of the `Description` field. Note that the **Check Spelling** button must be enabled by your administrator; see "Customizing Activity Settings" in the Salesforce online help.



**Note:** Spell checker does not support double-byte languages, such as Japanese. Spell checker is not supported in the Partner Portal.

5. Optionally, select `Create recurring series of events` to specify how often the event repeats. For details, see "Creating Recurring Events" in the Salesforce online help.



**Note:** Each occurrence in a series of recurring events cannot last longer than 24 hours. Once the recurring event series is created, you can extend the length of individual occurrences beyond 24 hours, if multiday events are enabled. See "Customizing Activity Settings" in the Salesforce online help.

6. Optionally, set a reminder on the event by selecting `Reminder` and choosing how long before the event you want to be reminded.



**Note:** Reminders are not supported in the Partner Portal.

7. Optionally, click **Add Invitees** to make the event a group event to which users, contacts, leads, or resources are invited. For details, see "Creating Group Events" in the Salesforce online help.
8. Click **Save**. Alternatively, click **Save & New Task** to save the event and create a new task or **Save & New Event** to save and create an additional event.

The partner user that the event is assigned to will be able to view the event from the Partner Portal. For information about how your partners can create and edit events in the Partner Portal, download the [Partner Portal User Help](#).

## Partner Portal Language Support

The following languages are now supported by Salesforce:

- Czech
- Hungarian
- Polish



- Turkish

### Partner Portal Licenses

The Bronze Partner License is not available for purchase after July 2008. Bronze Partner Licenses that were purchased before July 2008 are still supported.

## Salesforce to Salesforce Enhancements

Available in: **All Editions**

Salesforce to Salesforce includes a number of enhancements in Winter '09, including the following:

### Available in all editions

Salesforce to Salesforce is now available free of charge in all editions.

### Sharing related records

You now have the option to share related records when you share a parent record with a Salesforce to Salesforce connection. When your connection accepts the parent record, the related records are automatically accepted, provided that certain criteria are met. If the automatic acceptance criteria are not met, your connection can still manually accept the child records in their organization. For example, you can share an account and its related opportunities, contacts, and orders. When a connection accepts the account, the related opportunities, contacts, and orders will be automatically accepted.

### Sharing multiple records

You can now share multiple records with a Salesforce to Salesforce connection from a standard or custom list view. For example, if you have 150 opportunities in one of your regions, from a list view that displays those opportunities, you can share all of them with a connection in that region.

### Sending mass invitations

You can now invite multiple contacts to connect with your organization using Salesforce to Salesforce from a standard or custom contacts list view.

### Validation rules

`Received Connection Name` has been added to the validation rules for accounts, opportunities, contacts, leads, tasks, and custom objects. To avoid interference from validation rules when accepting a record shared by a connection, you can now set the `Received Connection Name` field not equal to null, meaning that validation rules will not apply to records from a connection.

### Lookup field mapping

You can map lookup fields to text fields that have a length of 80 or more characters. If your connection edits a lookup field that you have mapped to a text field, the text field will be updated with their changes.

### Junction object support

Junction objects - custom objects with two master-detail relationships - are now supported using Salesforce to Salesforce.

### Implementation Tips

- You can only forward records that you or your subordinates own; System Administrators can forward all records.


### Best Practices

- Instead of sharing records separately, share child records along with a parent record. This will result in child records being automatically associated with the parent record in your connection's organization.

# About Salesforce to Salesforce Enhancements

## Sharing A Single Record

To forward a single record and its related records to a connection:

1. Select the record's detail page.
2. In the External Sharing related list, click the forward button. For example, on an opportunity, click **Forward this Opportunity**.
3. Select the connection(s) that you want to forward the record to in the Available Connections list.
4. Click the Add arrow () to move the connection(s) to the Selected Connections list.




**Important:** If you make the record available to more than one connection, the first connection to accept the record will be the only connection that has access to it. After a record has been accepted, you can no longer make it available to another organization. However, if you stop sharing the record with that connection, you can then share it with another connection.

5. Optionally select **Send Notification Email (new invitees only)** to send an email notifying the connection's representative that you have forwarded the record to them. Only new recipients of the record will receive the notification email. Connections that you previously forwarded the record to will not receive another email.
6. Optionally select the checkboxes next to related record types you want to forward with the master record.
7. Click **Save**.

The record and any related records you selected are forwarded to the connection(s) you specified. If you forwarded the record to multiple connections, the first connection to accept the record will be the only connection that has access to it. For information about sharing related records separately, see Forwarding Related Records to a Connection.

## Sharing Multiple Records

To forward multiple records to a connection:

1. Select the tab of the record type you want to forward. For example, to forward opportunity records, select the Opportunities tab.
2. Select a list view from the View drop-down list, then click **Go!**.
3. In the list view, select the checkboxes next to the records you want to forward. To select all records, select the checkbox in the column header.
4. Click **Forward to Connections**.
5. Select the connection(s) that you want to forward the record to in the Available Connections list.
6. Click the Add arrow () to move the connection(s) to the Selected Connections list.



**Important:** If you make the record available to more than one connection, the first connection to accept the record will be the only connection that has access to it. After a record has been accepted, you can no longer make it available to another organization.

7. Optionally select **Send Notification Email (new invitees only)** to send an email notifying the connection's representative that you have forwarded the record to them. Only new recipients of the record will receive the notification email. Connections that you previously forwarded the record to will not receive another email.
8. Optionally select the checkboxes next to the related record types you want to forward with the master records.
9. Click **Save**.

The records and any related records you selected are forwarded to the connection(s) you specified. If you forwarded the record to multiple connections, the first connection to accept the record will be the only connection that has access to it.

### Rules for Automatically Accepting Related Records From a Connection

When you share records using Salesforce to Salesforce, you can also share child records. When you accept a record from a connection, or when your connection accepts a record from you, the child records can be automatically accepted provided that certain criteria are met. Similarly, when a child record is shared at a later time using the **Forward** link in the related list, and the parent record has already been accepted, the child record can be automatically accepted.

In order for a child record to be accepted automatically, the following criteria must be met:

- The parent record must already be accepted in your organization.
- The record must be related as a child to the parent record.
- The child record cannot have two master records.
- The child record cannot have multiple relationships to the same parent record.



**Important:** When child records are accepted automatically, there may be a slight delay before they are visible in the related list of the parent record. Additionally, when a child record is shared using the **Forward** link in the related list of a parent record, there may be a slight delay before the Sent Connection Name displays.

If a child record does not meet the criteria for automatic acceptance, it will need to be manually accepted from its object tab. For example, an opportunity record will need to be accepted from the Opportunities tab. A child record that needs to be manually accepted will display with the parent record name so that it can be properly assigned. For more information, see [Automatically Accepting Related Records From a Connection](#).

### Sending Mass Invitations

You can now invite multiple connections from a standard or custom contacts list view.

To invite multiple business partners to connect using Salesforce to Salesforce:

1. Click the **Contacts** tab.
2. Select a standard or custom list view, then click **Go!**.
3. In the list view, select the checkboxes next to the contacts you want to invite. To select all contacts, select the checkbox in the column header.



**Important:** Make sure that your contacts' email addresses are valid; otherwise, your invitations may be sent to the wrong recipients.

4. Click **Invite to Connect**.
5. Choose a user to manage the connection.
6. Click **Save & Send Invite**.

# Campaign Influence

Available in: **Enterprise, Unlimited, and Developer** Editions

Available for an additional cost in: **Professional** Edition

In the past, an opportunity could only be associated with one campaign. However, it's common for several campaigns to influence an opportunity, so the new Campaign Influence feature allows you to track the influence of multiple campaigns on one opportunity.

Influential campaigns display in the Campaign Influence related list on an opportunity. Campaigns can be associated with an opportunity manually in the Campaign Influence related list or automatically when the campaign is related to a contact that is assigned a contact role on an opportunity prior to the opportunity close date. Association rules and the Campaign Influence Time Frame offer additional methods for automatically identifying influential campaigns. The `Primary Campaign Source` field on opportunities, formerly the `Campaign Source` field, shows you the campaign that had the most influence on an opportunity.



**Note:** The opportunities fields of the campaign statistics section on a campaign detail page will only be populated for the campaign designated as the primary campaign source. For example, if you have an email campaign and a telemarketing campaign that both influenced the same opportunity, and you designated the email campaign as the primary campaign source, the campaign statistics opportunities fields will only be populated for the email campaign.

## Implementation Tips

- Using association rules, you can customize the criteria that campaigns must meet in order to be considered influential to an opportunity. For example, if you want to require that a campaign member must have responded to the campaign, you can create an association rule that requires the `Responded` field to equal `true`.
- You can specify the maximum number of days after a campaign is first associated to a contact on an opportunity and before an opportunity is created, during which the campaign will be considered influential to the opportunity. For example, if you specify a Campaign Influence Time Frame of 15 days and one of your contacts becomes a member of a campaign on June 1, the campaign is considered influential to any opportunity that is created and associated with the contact by June 15.

# About Campaign Influence

## Setting up Campaign Influence

You can configure influential campaigns to be automatically added to opportunities. When automatic association is enabled, influential campaigns are added to opportunities when a campaign is related to a contact that is assigned a contact role on an opportunity prior to the close date of the opportunity. For example, if you have an email campaign with a member who is assigned a contact role on an open opportunity, the email campaign will be added to the Campaign Influence related list for that opportunity.

You can set a Campaign Influence Time Frame that specifies the maximum number of days between the campaign first associated date and the opportunity created date, during which a campaign is considered influential. For example, if you specify a Campaign Influence Time Frame of 15 days and one of your contacts becomes a member of a campaign on June 1, the campaign is considered influential to any opportunity that is created and associated with the contact by June 15. Use the association rules to configure additional criteria that campaigns must meet to be automatically associated to an opportunity.

When automatic association is disabled, users must manually add influential campaigns to opportunities using the Campaign Influence related list. For information about manually adding influential campaigns to opportunities, see "Using the Campaign Influence Related List" in the Salesforce online help.



**Note:** Before you set up campaign influence, add the Campaign Influence related list to the opportunities page layout for the appropriate profiles. The Campaign Influence related list is already added to the opportunities page layout for customers who signed up for a new Salesforce organization after the launch of the Winter '09 release, which occurred in October 2008.

To set up automatic association for campaign influence:

1. Click **Setup** ► **Customize** ► **Campaigns** ► **Campaign Influence**.
2. Select **Enabled**.
3. In the **Campaign Influence Time Frame** field, optionally specify the maximum number of days between the campaign first associated date and the opportunity created date.



**Note:** Campaigns associated to a contact prior to this time frame will not be considered influential. The maximum campaign influence time frame is 9,999 days. If you do not want to specify a campaign influence time frame, leave the **Campaign Influence Time Frame** field blank.

4. Optionally, define additional criteria that must be met in order for a campaign to be automatically associated. For more information, see "Entering Filter Criteria" in the Salesforce online help.
5. Click **Save**.

Campaigns will be automatically added to the Campaign Influence related list on opportunities when they meet the criteria you specified.

To disable automatic association for campaign influence:

1. Click **Setup** ► **Customize** ► **Campaigns** ► **Campaign Influence**.
2. Select **Disabled**.
3. Click **Save**.


### Adding, Editing, and Deleting Influential Campaigns

The Campaign Influence related list on an opportunity detail page provides information about campaigns that have influenced the opportunity. From the Campaign Influence related list, you can add, edit, and delete influential campaigns. For information about customizing the Campaign Influence related list, see "Customizing Related Lists" in the Salesforce online help.

Consider the following information before adding, editing, or deleting influential campaigns:

- Though multiple campaigns can be influential, only one campaign can be designated as the primary campaign source on the opportunity.
- The opportunities fields of the campaign statistics section on a campaign detail page will only be populated for the campaign designated as the primary campaign source. For example, if you have an email campaign and a telemarketing campaign that both influenced the same opportunity, and you designated the email campaign as the primary campaign source, the campaign statistics opportunities fields will only be populated for the email campaign.
- When you select the **Primary Campaign Source** checkbox, the **Primary Campaign Source** field on the opportunity detail page is updated with the name of the primary campaign. It is possible that workflow and Apex rules on opportunities can be triggered by this change

To add influential campaigns from the Campaign Influence related list:

1. View the detail page of an opportunity.
2. Click **Add Campaign** in the Campaign Influence related list.
3. Enter a campaign name in the **Campaign name** field or click the  icon to search for a campaign.

4. Optionally select the `Primary Campaign Source` checkbox to designate the campaign as the primary campaign.
5. Click **Save**.

For information about customizing filter criteria to automatically add influential campaigns to opportunities, see "Configuring Campaign Influence" in the Salesforce online help.

To edit influential campaigns:

1. View the detail page of an opportunity.
2. Click **Edit** next to the campaign you want to edit in the Campaign Influence related list.
3. Optionally select or deselect the `Primary Campaign Source` checkbox.
4. Click **Save**.

To delete influential campaigns:

1. View the detail page of an opportunity.
2. Click **Del** next to the campaign you want to delete in the Campaign Influence related list.
3. Click **OK**.

## Additional Salesforce Application Enhancements

### Campaign Enhancements

Winter '09 includes the following enhancements for campaigns:

#### Budgeting and Planning Fields for Campaign Hierarchies

Campaign hierarchies, introduced in Spring '08, allow you to group campaigns together to analyze related marketing efforts more efficiently. Winter '09 provides new budgeting and planning fields for campaign hierarchies. These aggregate fields for parent and child campaigns can be added to the Campaign Hierarchy related list, and include:

- `Total Actual Cost in Hierarchy`
- `Total Budgeted Cost in Hierarchy`
- `Total Expected Revenue in Hierarchy`
- `Total Num Sent in Hierarchy`

The process for making the fields visible depends on your Salesforce edition. For Enterprise, Unlimited and Developer editions, use field-level security. As you make a campaign hierarchy field visible, Salesforce displays the field's value in the **Hierarchy Total** section of the Campaign Hierarchy related list. For Professional Edition, add the campaign hierarchy fields to the campaign page layout; the fields will appear on the page layout and in the **Hierarchy Total** section of the Campaign Hierarchy related list.



**Note:** The campaign hierarchy fields provide aggregate data for a parent campaign and all the campaigns below it in the campaign hierarchy, regardless of whether a user has sharing rights to a particular campaign within the campaign hierarchy. Therefore, consider your organization's campaign sharing settings when enabling campaign hierarchy fields. If you do not want users to see aggregate hierarchy data that includes campaigns to which the users do not have access, you can choose to remove any or all of the campaign hierarchy fields from the Campaign Hierarchy related list. If you do not add the campaign hierarchy fields to the related list or page layout, you can still access these fields on reports.

#### Mass Removal of Campaign Members from Campaigns

Previously, you could only remove a campaign member on the lead or contact detail page. With Winter '09, you can remove multiple members from a campaign at one time using the Mass Remove Campaign Members wizard:

1. View the campaign detail page for the campaign you want to update.
2. Click **Manage Members**.
3. Click either **Remove Members - Existing Contacts** or **Remove Members - Existing Leads**.
4. Choose the campaign members that you want to remove from the campaign:
  - a. Check the boxes for the records you want to select. Optionally, check the box in the column header to select all currently displayed items. Note that up to 250 records can display on the page at a time.
  - b. Click **Remove from Campaign**.
  - c. Click the letter links or the **Next Page** and **Previous Page** links to view other list pages, and continue removing members in the same manner.



**Note:** A confirmation message keeps a running tally of the total number of members removed during this session of the wizard. Any members already removed during this wizard session are shown with a read-only check mark next to them.

- d. Optionally, modify the display by choosing a different list view or creating a new list view. Note that you can define custom list views that restrict results according to campaign name and optionally also by member status. See "Creating Custom List Views" in the Salesforce online help.
5. When you are finished removing members from your campaign, click **Done** to exit the wizard.

## Case Enhancements

### "Edit Case Comments" Permission

Now, Group, Professional, Enterprise, Unlimited, and Developer Editions can select the new "Edit Case Comments" permission on custom profiles. This permission enables users to update, delete, and make public comments that they have added to cases. Previously, users needed the "Modify All Data" permission to update and delete their own case comments; however, that permission also allows users to update case comments created by other users. Note that the "Edit Case Comments" permission is not available for portal profiles. For more information on case comments, see "Case Comments" in the Salesforce online help.

To add the "Edit Case Comments" permission to a profile:

1. Click **Setup** ► **Manage Users** ► **Profiles**.
2. Select a custom profile.
3. Click **Edit**.
4. Select the `Edit Case Comments` checkbox.
5. Click **Save**.

Note that all profiles with the "Edit Case Comments" permission automatically include the "Edit" permission on cases.

### "Transfer Cases" Permission

Now, all Editions can select the "Transfer Cases" permission on custom profiles. This permission enables users to transfer ownership of cases to other users. Previously, users needed the "Manage Cases" permission to transfer ownership of cases to other users; however, that permission also allows users to perform actions on multiple cases in a list view. Note that the "Transfer Cases" permission also requires the "Create" permission on cases. Furthermore, all profiles with the "Manage Cases" permission automatically include the "Transfer Cases" permission.

To add the "Transfer Cases" permission to a profile:

1. Click **Setup** ► **Manage Users** ► **Profiles**.
2. Select a custom profile.



3. Click **Edit**.
4. Select the `Transfer Cases` checkbox.
5. Click **Save**.

Consider the following when adding the "Transfer Cases" permission to a user profile:

- When a user transfers ownership of a case to another user, any open activities on the case are also transferred to the new case owner.
- Users with the "Transfer Cases" permission can transfer ownership of cases that they own or cases that are manually shared with them. For more information, see "Sharing Cases" in the Salesforce online help.

#### **Notify Case Owners when Case Ownership Changes Setting**

Now, Professional, Enterprise, Unlimited, and Developer Editions can specify that the `Send Notification Email` checkbox on cases is automatically selected when users change a case owner to another user. This helps prevent users from forgetting to notify other users that they are the new owner of a case.

Click **Setup** ► **Customize** ► **Cases** ► **Support Settings** ► **Edit**, select the `Notify Case Owners when Case Ownership Changes` checkbox, and click **Save**.

Note that selecting this checkbox does *not* specify that the `Send Notification Email` checkbox is automatically selected when users change a case owner to a queue. For more information, see "Managing Queues" in the Salesforce online help.

#### **Email-to-Case Now Supports the CC and BCC Fields of Inbound Email**

Previously, Email-to-Case auto-populated case fields when the routing address settings were included in the `To` field of an inbound email. Now, Salesforce automatically extends this functionality to include the `CC` and `BCC` fields of inbound email. Note that Salesforce processes the routing address of an email in the following order and stops at the first match:

1. `To`
2. `CC`
3. `BCC`

For more information about Email-to-Case, see "Setting Up Email-to-Case" in the Salesforce online help.

#### **Email-to-Case Preserves File Extensions on Attachments**

Now, file extensions, such as `.doc`, `.jpeg`, and `.xls` remain on attachments associated with inbound email that is converted to cases. Previously, Email-to-Case automatically removed file extensions on attachments with file names over eighty characters.

#### **Email-to-Case Excludes Zero-Byte Attachments from Cases**

Now, attachments of zero-byte size on email messages converted to cases are not added as attachments to cases. Instead, zero-byte attachments are logged as error messages in the Email-to-Case agent. For more information, about the Email-to-Case agent, see [http://wiki.apexdevnet.com/index.php/Email\\_To\\_Case](http://wiki.apexdevnet.com/index.php/Email_To_Case).

#### **Case Comments Workflow**

Now, you can create workflow rules for case comments so that case comments automatically trigger outbound messages or update fields on the cases with which they are associated. For example, you can create a workflow rule so that when a case comment is added to a case, the case's `Status` changes from `Closed` to `New`.

To create such a workflow rule:

1. Click **Setup** ► **Create** ► **Workflow & Approvals** ► **Workflow Rules** to access the workflow rules list page.



2. On the workflow rules list page, click **New Rule**.
3. Select Case Comment in the `Select object` drop-down list.
4. Click **Next**.
5. Enter a rule name. Optionally, enter a description for the rule.
6. Select the evaluation criteria.
7. Choose criteria are met.
8. Enter the following criteria: `Case Comment: Published equals True AND Case: Status equals Closed`.
9. Click **Save & Next**.
10. Click **Add Workflow Action** and choose **New Field Update**.
11. Enter a name for your workflow field update. Optionally, enter a description for the workflow field update.
12. Select Case in the `Field to Update` drop-down list.
13. Choose Status in the second `Field to Update` drop-down list.
14. Select New in the `A specific value` field to specify the new field value.
15. Click **Save**.
16. Select **Done**.
17. Click **Activate**.

Note the following when creating workflow rules for case comments that automatically update the fields on their associated cases:

- For more information about creating workflow rules, see "Creating Workflow Rules" in the Salesforce online help.
- To insert case merge fields in the formula of a workflow rule, click **Insert Field** on the Rule Criteria section and choose Case Comment.
- Note what is and is not triggered on cases when case comments update case fields:

Triggered	Not Triggered
Workflow rules	Assignment rules
Validation rules	Auto-response rules
Roll up summary fields	
Escalation rules	
Apex triggers	

This enhancement is available in Enterprise, Unlimited, and Developer Editions.

## Salesforce Call Center Enhancements

### Salesforce Call Center Supports the \*, #, and + Characters

Now, you can enter and save the \*, #, and + characters in setup fields for Salesforce Call Center. Previously, an error message displayed if you entered and saved \*, #, and + in setup fields, such as the **Outbound Prefix** field.

### Salesforce Call Center No Longer Automatically Displays Incoming Calls As Records Over Active Calls

Incoming calls no longer automatically display on your screen as records over active calls. For example, Call Center does not display a full-screen record for an incoming call if a first call is already active.

## Click-and-Create Events

Now, users of all Salesforce Editions can create events on day and weekly calendar views by double-clicking a specific time slot and entering the details of the event in an interactive overlay. The fields available in the event detail and edit overlays are defined in a mini page layout. For details on configuring the event detail and edit overlays, see "Defining Mini Page Layouts" in the Salesforce online help.

Administrators can control whether this functionality is available for their organizations by clicking **Setup** ► **Customize** ► **User Interface** and selecting or deselecting the **Enable Click-and-Create Events on Calendar Views** checkbox. Note that you must select the **Enable Drag-and-Drop Editing on Calendar Views** checkbox before you can select the **Enable Click-and-Create Events on Calendar Views** checkbox.

Recurring events and group events are not supported for click-and-create events. For more information, see "Creating Recurring Events" in the Salesforce online help and "Creating Group Events" in the Salesforce online help.

## Converting Existing Files to Google Docs

In Spring '08, Salesforce introduced the ability to associate Google docs with Salesforce records in all editions. Now, in addition to creating a blank Google doc from within Salesforce, you can convert file types such as Microsoft Word® to Google docs with the click of a button.

If the Add Google Doc to Salesforce service is activated for your organization and you have a Google Apps account, use the following steps to create a new Google doc from an existing file:

1. Display the record detail page where you want to associate the Google doc.
2. On the Google Docs, Notes, & Attachments or Google Docs & Attachments related list, click the **Add Google Doc** drop-down button and choose **New Document**, **New Spreadsheet**, or **New Presentation**.
3. Click the **Create using an existing file** radio button and browse to select the file you want to convert. Salesforce can convert the following file types to Google docs:
  - Microsoft Word® (doc), text (txt), rich-text format (rtf), OpenDocument text (odt), or StarOffice™ document (swx) files up to 500 KB each
  - Microsoft Excel® (xls), comma-separated value (csv), or OpenDocument spreadsheet (ots) files up to 1 MB each
  - Microsoft PowerPoint® (ppt or pps) files up to 10 MB each
4. Enter a name for the doc and click **Create Google Doc**.
5. When notified that you are leaving Salesforce and entering Google Apps, click **Continue**. A Google document, spreadsheet, or presentation is automatically created from your file.



**Tip:** While you have your Google doc open, remember to share it with other Google Apps users in your organization. Only users with access to the Google doc in their Google Apps account can view the doc from the record detail page.

## Email to Salesforce Enhancements

Winter '09 provides filter enhancements for Email to Salesforce.

### Assign Email Activities to all Duplicate Records

When an Email to Salesforce contains lead or contact information that matches duplicate records, users can now choose to assign the email to all matching records. Previously, users could only choose between assigning the email to the record with the most activities or the record with the earliest creation date.

### Add Emails to Activity History on Opportunities

When you use Email to Salesforce to send an email from a company-provided or third-party email account, you can now save the email to the activity history on an opportunity in Salesforce.

If you configure Email to Salesforce to associate emails to matching opportunities, Salesforce searches the **To** and **CC** fields for the email addresses of your contacts. If contacts are found, Salesforce saves the email to the Activity History related list on all open opportunities for which the contact is assigned a contact role.

To configure Email to Salesforce:

Before you can use your Email to Salesforce address, you must configure it as follows:

1. Click **Setup** ► **Email** ► **My Email to Salesforce**.



**Tip:** It is recommended that you add your Email to Salesforce address to the address book of your email client for easy retrieval.

2. In **My Acceptable Email Addresses**, enter any email addresses you will use to send email. Separate multiple email addresses with commas.



**Important:** Your Email to Salesforce address only accepts email from addresses you list. If you do not list any email addresses, email sent to your Email to Salesforce address will not be associated to any records.

3. Configure Email to Salesforce to add emails as activities to matching opportunities, leads, contacts, or all three.
4. If you selected leads or contacts, choose how Email to Salesforce should process emails containing lead or contact information that matches duplicate records. Email to Salesforce can add the email activity to all matching records, to the oldest duplicate record, or to the record that has greatest number of activities.
5. If you selected leads or contacts, optionally configure Email to Salesforce to create a task that enables you to choose which record to associate the email with if no matching records are found. If this option is not selected, Email to Salesforce will ignore emails that do not have matching records.
6. Optionally configure Email to Salesforce to send you a confirmation email when emails are successfully associated.
7. Click **Save**.

To use your Email to Salesforce address:

To associate an email with a matching lead, contact, or opportunity:

1. Compose an email from a third-party email account that you designated in **My Acceptable Email Addresses** field on the **My Email to Salesforce** setup page.
2. Enter your Email to Salesforce address in the **BCC** field of your email.
3. Enter desired recipients in the **To**, **CC**, and **BCC** fields.
4. Send the email.

### Add Emails to Activity History on Salesforce Records

When you use Email to Salesforce to send an email from a company-provided or third-party email account, you can now save the email to the activity history on any individual record in Salesforce, including custom records, as long as the record type supports activities.

You do not need to configure Email to Salesforce to associate emails to matching records. Salesforce searches emails sent to your Email to Salesforce address for a record ID, then looks for the record. If the record is found, Salesforce adds the email to the Activity History related list on that record.

To associate an email with an individual record:

1. Compose an email from a third-party email account that you designated in **My Acceptable Email Addresses** field on the **My Email to Salesforce** setup page.

2. In Salesforce, locate the record ID of the record you want the email associated with. The record ID is the 15-digit, case-sensitive, alphanumeric code that displays at the end of the URL for a record. For example, if you view the detail page of a campaign record, the URL will look similar to this:  
<https://na1.salesforce.com/701D0000000HQZy>; the record ID for this record is 701D0000000HQZy.
3. In the subject line or body of the email, type `ref:` followed by the record ID. For example: `ref: 701D0000000HQZy`.



**Note:** Record IDs can either be typed on a separate line or within the email body text if surrounded by `()`, `[]`, or `{}`. For example: `(ref: 701D0000000HQZy)`. Multiple record IDs must be separated with commas, for example: `ref: 701D0000000HQZy, 801D0000000IRAz, 901D0000000JSBa`.

4. Enter your Email to Salesforce address in the **To**, **CC**, or **BCC** fields of your email.
5. Optionally enter additional recipients in the **To**, **CC**, or **BCC** fields.
6. Send the email.

## Lead Enhancements

### Account Lookup During Lead Conversion

Previously, a user converting a lead could only create a new account or update an existing account with the same name. In Winter '09, users also have the option of assigning a converted lead to any existing account.

### Choosing Lead Status Defaults During Lead Conversion

If your organization uses record types, you can create a lead process that allows you to provide different `Lead Status` values for different record types. Previously, the `Lead Status` value shown during lead conversion corresponded to the default record type of the record owner, rather than the record type of the lead. In Winter '09, you can configure the `Lead Status` values to correspond to the record type of the lead upon conversion. To prevent the `Lead Status` from changing to the new owner's default value during lead conversion:

1. Click **Setup** ► **Customize** ► **Leads** ► **Settings**.
2. Click **Edit**.
3. Select `Do Not Change Lead Status Values to New Owner's Record Type on Lead Conversion`.



**Note:** This option is on by default for customers who sign up for a new Salesforce organization after the launch of the Winter '09 release.

## Opportunity Dependent Fields and Custom Save Logic

With the Winter '09 release, Salesforce has fixed the way that dependent fields are evaluated by custom save logic. Previously, dependent fields were evaluated too late in the save process, causing custom logic to use the old value of the field. For example, if a user edited an opportunity and changed the `Stage` to `Closed`, the `isClosed` field was updated, but not before a validation rule was run. Therefore, the validation rule did not recognize the opportunity as closed.

With Winter '09, dependent fields are always up-to-date, so that custom logic, such as validation rules, workflow field updates, triggers, etc., always use the current value of the field.

# FORCE.COM PLATFORM

## Force.com Sites

Available in: **Enterprise, Unlimited, and Developer** Editions



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Force.com provides a comprehensive development platform for building on-demand applications. While the robust set of tools available for the platform has made it easy to develop custom applications, making those applications available to the general public has been a difficult task. In the past, publishing your application to the Web involved significant overhead: Web servers, Web pages, data validation, and data synchronization. No matter how closely your public applications were integrated with your organization, it was still vastly different than running them natively on Force.com servers.

With the Winter '09 release, salesforce.com introduces a powerful new tool for taking your applications public: Force.com Sites.

Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password. Publicly expose any information stored in your organization through a branded URL of your choice. Match the site's look and feel to your company's brand. Sites are hosted on Force.com servers and are built on native Visualforce pages, so there are no data integration, validation, or synchronization issues. Administrators can enable [syndication feeds](#) for their sites. Sites also comes with built-in registration and login logic that allows you to associate your site with any Customer Portal. Users can move seamlessly from your public site to the authenticated Customer Portal environment.

Force.com Sites brings the speed and ease of the Force.com platform to any Web user, including prospects, employees, and customers. Build e-commerce sites, recruiting sites, registration sites, catalogs, directories, and [Salesforce Ideas](#) sites. Force.com Sites opens up a world of possibilities for public applications.

### Implementation Tips

- Create a branded, top-level domain, such as `http://www.mycompanyideas.com`, by registering through a registrar like `GoDaddy.com`. Create CNAME records to redirect your branded domain and subdomains to your Force.com domain without exposing the `force.com` name in the URL. It can take up to 48 hours for the domain to be available on the Internet. Branded, top-level domains are not supported for Developer Edition and Developer Sandboxes.
- If you choose to create a branded top-level domain or subdomain through a domain name registrar, the CNAME record that you provide to that registrar must be your Force.com domain name and not the site URL. For example, if you entered "mycompany" when registering your Force.com domain, the CNAME must be `mycompany.force.com`, not the full value of the site URL.
- For Enterprise and Unlimited Editions, only Salesforce Ideas sites can be created.
- For Developer Edition, the maximum number of sites per domain is one.
- For Enterprise and Unlimited Editions, the maximum number of sites per domain is 100.
- The number of sites you can create depends on the number of site licenses you have.
- For security purposes, Force.com Sites enforce the following maximum daily limits:

Organization Type	Bandwidth Limit (per day)	CPU Limit (per day)
Developer Edition and Pre-Release Organizations	500 MB	10 minutes
Developer Sandboxes	1 GB	30 minutes
Production Organizations	40 GB	60 hours

Bandwidth is calculated as the number of bytes served and received from the site. CPU is calculated as total server time required to generate pages for the site.

- Force.com Sites does not support the use of Person Accounts for self registration.
- Force.com Sites is not packageable. You cannot package sample code, Visualforce pages, Apex classes, or components for a site.
- If the `Require Secure Connections (HTTPS)` checkbox on the Session Settings page is selected, and the `Require Non-Secure Connections (HTTP)` checkbox on the Login Settings page is not selected, users logging in to the associated Customer Portal from the Force.com site will see the `secure.force.com` domain. For example, if you registered `mycompany.force.com` as your custom domain, the URL changes to `https://mycompany.secure.force.com` upon login.
- The construction of the secure URLs for your Force.com sites depends on the type of organization they are built on. In the following examples, the domain prefix is "mycompany," the sandbox name is "mysandbox," the instance name is "na1," and the sandbox instance name is "cs1 ":

Organization Type	Secure URL
Developer Edition	<code>https://mycompany-developer-edition.na1.force.com</code>
Developer Sandbox	<code>https://mycompany.mysandbox.cs1.force.com</code>
Production	<code>https://mycompany.secure.force.com</code>

The domain prefix for Developer Edition must contain 22 characters or fewer. The secure URL is displayed on the Login Settings page.

### Best Practices

- Force.com sites use Visualforce pages for all site and error pages. Force.com includes some standard Visualforce pages that you can use, including the IdeasHome page and various error pages. You can also edit or replace them with your company-branded Visualforce pages to construct your site.
- Set Login Hours on the Public Access Settings page to set the hours during which users can access the site.
- Set Login IP Ranges on the Public Access Settings page to restrict the IP address ranges from which you can access the site. Force.com sites ignore company-wide IP range restrictions in order to provide public access; however, you can restrict the IP ranges on the Public Access Settings page.
- salesforce.com recommends setting the sharing to private for the objects on which you grant "Read" access for your Force.com site. This ensures that users accessing your site can view and edit only the data related to your site.
- Be careful not to expose any information that you do not want to make public.

# About Force.com Sites Enhancements

## About Force.com Sites



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Salesforce organizations contain valuable information about partners, solutions, products, users, ideas, and other business data. Some of this information would be useful to people outside your organization, but only users with the right access and permissions can view and use it. In the past, to make this data available to the general public, you had to set up a Web server, create custom Web pages (JSP, PHP, or other), and perform API integration between your site and your organization. Additionally, if you wanted to collect information using a Web form, you had to program your pages to perform data validation.

With Force.com Sites, you no longer have to do any of those things. Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password. You can publicly expose any information stored in your organization through a branded URL of your choice. You can also make the site's pages match the look and feel of your company's brand. Because sites are hosted on Force.com servers, there are no data integration issues. And because sites are built on native Visualforce pages, data validation on collected information is performed automatically. You can also enable users to register for or log in to an associated Customer Portal seamlessly from your public site.

The following examples illustrate a few ways that you can use Force.com Sites:

- Create a Salesforce Ideas site—Use Force.com Sites to host a public community forum for sharing and voting on ideas about your company, services, or products. Salesforce Ideas sites can be made public using Force.com Sites.
- Publish a support FAQ—Provide helpful information on a public website where customers can search for solutions to their issues.
- Create a store locator tool—Add a public tool to your portal that helps customers find stores in their area.
- Publish an employee directory—Add an employee directory to your company's intranet by creating a site restricted by IP range.
- Create a recruiting website—Post job openings to a public site and allow visitors to submit applications and resumes online.
- Publish a catalog of products—List all of your company's products on a public website, with model numbers, current prices, and product images pulled dynamically from your organization.

### The Force.com Domain

For each of your sites, you determine the URL of the site by establishing the site's domain name. You can choose one of the following domain options:

- Use your Force.com domain name, which is your unique *domain prefix* plus `force.com`. For example, if you choose "mycompany" as your domain prefix, your domain name would be `http://www.mycompany.force.com`. The name is case-sensitive.



**Note:** Your Force.com domain name is used for all the sites that you create. For example, your company could create one public site for partners, another for developers, and a third for support. If your company's domain is `http://www.mycompany.force.com`, those three sites might have the following URLs:

- ◇ `http://mycompany.force.com/partners`
- ◇ `http://mycompany.force.com/developers`
- ◇ `http://mycompany.force.com/support`



- Create a branded, top-level domain, such as `http://www.mycompanyideas.com`, by registering through a registrar like GoDaddy.com. Create CNAME records to redirect your branded domain and subdomains to your Force.com domain without exposing the `force.com` name in the URL. It can take up to 48 hours for the domain to be available on the Internet. Branded, top-level domains are not supported for Developer Edition and Developer Sandboxes.



**Note:** The construction of the secure URLs for your Force.com sites depends on the type of organization they are built on. In the following examples, the domain prefix is "mycompany," the sandbox name is "mysandbox," the instance name is "na1," and the sandbox instance name is "cs1 ":

Organization Type	Secure URL
Developer Edition	<code>https://mycompany-developer-edition.na1.force.com</code>
Developer Sandbox	<code>https://mycompany.mysandbox.cs1.force.com</code>
Production	<code>https://mycompany.secure.force.com</code>

The domain prefix for Developer Edition must contain 22 characters or fewer. The secure URL is displayed on the Login Settings page.

## Setting Up Force.com Sites

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"
To edit public access settings for Force.com Sites:	"Manage Users"

Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

To set up a Force.com site:

1. First, enable Force.com Sites for your organization. Before you contact your salesforce.com representative, see Force.com Sites Considerations for important information about the feature.
2. Click **Setup** ► **Develop** ► **Sites**.
3. Register a custom Force.com domain for your organization. For more information, see Registering a Custom Force.com Domain.
4. Create and configure your site. For more information, see Creating and Editing Force.com Sites and Configuring Force.com Sites.
5. Develop Visualforce pages for your site and customize or replace out-of-box error pages. Associate these pages with your site. For more information, see Managing Force.com Site Pages, Assigning Force.com Site Error Pages.
6. Choose a site template. Use the lookup field to find and select a template that you've developed, or use the out-of-box template provided. The site template provides the page layout and stylesheet for your site and overrides any formatting inherited from the associated Customer Portal.
7. Enable the Customer Portal for login and self-registration, then associate it with your site. For more information, see Associating a Customer Portal with Force.com Sites.
8. Modify public access settings if you want. For more information, see Public Access Settings for Force.com Sites.



- When you are ready to make your site public, click **Activate** on the Site Details page. You can also activate your site from the Site Edit and Sites pages.

## Registering a Custom Force.com Domain

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"

Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

To get started, register your company's Force.com domain. This one domain name is used for all the sites that you create. Even if you register a branded top-level domain for your Force.com site, you must choose a Force.com domain. The branded URL will be redirected to the Force.com domain. For more information, see "The Force.com Domain" in the Salesforce online help.

To register your Force.com domain:

- Click **Setup** ► **Develop** ► **Sites**.
- Enter a unique name for your Force.com domain. The name is case-sensitive. Only alphanumeric characters are allowed. Salesforce.com recommends using your company's name or a variation, such as "mycompany."



**Caution:** You cannot modify your Force.com domain name after you have registered it.

- Click **Check Availability** to confirm that the domain name you entered is unique. If it is not unique, you are prompted to change it.
- Read and accept the Force.com Sites Terms of Use by selecting the checkbox.
- Click **Register My Force.com Domain**. After you accept the Terms of Use and register your Force.com domain, the change is tracked in your organization's setup audit trail.



**Note:** The construction of the secure URLs for your Force.com sites depends on the type of organization they are built on. In the following examples, the domain prefix is "mycompany," the sandbox name is "mysandbox," the instance name is "na1," and the sandbox instance name is "cs1 ":

Organization Type	Secure URL
Developer Edition	<code>https://mycompany-developer-edition.na1.force.com</code>
Developer Sandbox	<code>https://mycompany.mysandbox.cs1.force.com</code>
Production	<code>https://mycompany.secure.force.com</code>

The domain prefix for Developer Edition must contain 22 characters or fewer. The secure URL is displayed on the Login Settings page.

## Creating and Editing Force.com Sites

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"


Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

After registering your Force.com domain, create Force.com sites using the following steps:

1. Click **Setup** ► **Develop** ► **Sites**.
2. Click **New**.
3. On the Site Edit page, define the following:

Field	Description
Site Label	The name of the site as it appears in the user interface.
Site Name	The name used when referencing the site in the Force.com Web Services API. This name must only contain alphanumeric characters and cannot contain any spaces.
Site Type	The license type for this site. Depending on your license, displays as either "Ideas Site" or "Generic Site."
Site Description	An optional description of the site.
Site Contact	The user who will receive site-related communications from the site's visitors and salesforce.com.
Default Web Address	The unique Force.com URL for this site. Force.com provides the first part of the URL based on the domain name that you registered; you must add a unique site name to the end. Unless you configure a custom Web address through a domain name registrar, this is the URL that the public will use to access your site.
Custom Web Address	<p>The optional branded top-level domain name that you registered with a third-party domain name registrar. The custom Web address acts as an alias to your Force.com address. To enable a custom Web address, create a CNAME record with that registrar. If you have not registered this address with a registrar, entering a value in this field has no effect. Custom Web addresses are not available in Developer Edition or Developer Sandboxes.</p> <p> <b>Note:</b> If you choose to create a branded top-level domain or subdomain through a domain name registrar, the CNAME record that you provide to that registrar must be your Force.com domain name and not the site URL. For example, if you entered</p>

Field	Description
	"mycompany" when registering your Force.com domain, the CNAME must be mycompany.force.com, not the full value of the site URL.
Active	The option that activates your site when you are ready to make it available to the public. You can also activate your site from the Sites and Site Details pages. When the site is inactive, users will see the page specified in the Inactive Site Home Page field.
Active Site Home Page	<p>The landing page that users are directed to when this site is active. Use the lookup field to find and select the Visualforce page that you developed for your site's home page. Choose the UnderConstruction page if you just want to test your site.</p> <p> <b>Note:</b> For Salesforce Ideas sites, you must use the IdeasHome page. The "look and feel" for your Salesforce Ideas site will be inherited from its associated Customer Portal, unless you select a site template.</p>
Inactive Site Home Page	The landing page that users are directed to when this site is inactive. Use the lookup field to find and select the page that you want to use. You can, for example, select a page to indicate that the site is under construction or down for maintenance.
Site Template	The template that provides the page layout and stylesheet for your site. The site template overrides any formatting inherited from the associated Customer Portal. Use the lookup field to find and select a template that you've developed, or use the out-of-box template provided.
Enable Feeds	The option that displays the Syndication Feeds related list, where you can create and manage syndication feeds for users on your public sites. For more information, see "About Syndication Feeds" in the Salesforce online help.

#### 4. Click **Save**.

## Managing Force.com Sites

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"

Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

To get started using Force.com Sites, click **Setup ► Develop ► Sites**. From this page, you can:

- Register your Force.com domain, if you have not yet done so.
- View all sites hosted on your Force.com domain.
- Click **New** to create a new site.
- Click **Edit** to make changes to an existing site.
- Click **Activate** or **Deactivate** to change the active status for your site.



**Caution:** Be careful not to expose any information that you do not want to make public.

- Click the site's label to view that site's details.
- Click the site's URL to open that site in a browser.

Managing Force.com Site Pages

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Force.com sites use Visualforce pages for all site and error pages. Force.com includes some standard Visualforce pages that you can use, including the IdeasHome page and various error pages. You can also edit or replace them with your company-branded Visualforce pages to construct your site.

All pages that you want to expose on a site must be associated with that site. If a page is not listed under Site Pages, an authentication or page-not-found error is displayed based on the existence of the page.

To enable Visualforce pages for your site:

1. Click **Setup ► Develop ► Sites**.
2. Click the name of the site you want to modify.
3. Click **Edit** on the Site Pages related list.
4. Use the **Add** and **Remove** buttons to enable/disable Visualforce pages for your site.
5. Click **Save**.

## Assigning Force.com Site Error Pages

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Force.com sites use Visualforce pages for all site and error pages. Force.com includes some standard Visualforce pages that you can use, including the IdeasHome page and various error pages. You can also edit or replace them with your company-branded Visualforce pages to construct your site.

Set the error pages for your site using the following steps:

1. Click **Setup** ► **Develop** ► **Sites**.
2. Click the name of the site you want to modify.
3. Click **Page Assignment** on the Error Pages related list.
4. Using the lookup fields, assign Visualforce pages for each of the standard error conditions listed.
5. Click **Save**.
6. On the Site Details page, click **Preview** to view the associated page as it would appear in a browser.

## Public Access Settings for Force.com Sites

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"
To edit public access settings for Force.com Sites:	"Manage Users"



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Public access settings control what public users can do on each site. Set the public access settings for your site using the following steps:

1. Click **Setup** ► **Develop** ► **Sites**.
2. Click the name of the site you want to control.
3. Click **Public Access Settings**.

From the Profile page, you can:

- Click **Edit** to set the public access permissions for your site. Depending on your license type, different permissions are allowed for the site:
  - ◊ For Salesforce.com Ideas sites, by default, "Read" permission on ideas is enabled. You can also grant "Read" and "Create" on accounts, contacts, and documents; and "Read," "Create," "Edit," and "Delete" on all custom objects.
  - ◊ For general sites, you can grant "Read" and "Create" permissions on all standard objects except products, pricebooks, and ideas; and "Read," "Create," "Edit," and "Delete" on all custom objects.

All permissions that are not set by default must be set manually.



**Note:** salesforce.com recommends setting the sharing to private for the objects on which you grant "Read" access for your Force.com site. This ensures that users accessing your site can view and edit only the data related to your site.

- Click **Edit** on the Login Hours related list to set the hours during which users can access the site.
- Click **New** on the Login IP Ranges related list to restrict the IP address ranges from which you can access the site. Force.com sites ignore company-wide IP range restrictions in order to provide public access; however, you can restrict the IP range here.
- Click **Edit** on the Enabled Apex Class Access related list to select Apex controllers and methods for your site. Controllers and methods that are already associated with your site's Visualforce pages are enabled by default. For more information, see Force.com Sites-Related Apex Methods and Expressions.
- Click **Edit** on the Enabled Visualforce Page Access related list to select Visualforce pages for your site. Changes made here are reflected on the Site Pages related list on the Site Details page, and vice versa.

## Managing Force.com Site Login and Registration Settings

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Use login settings if you want to let users register for and log in to your Customer Portal from your public Force.com site. For example, users browsing through an Ideas site can register and login directly from that site, and as authenticated users, they can then vote, add comments, and participate in the Ideas community. When users successfully log in, they leave the public site and enter the Customer Portal seamlessly.

Force.com sites provide built-in registration and login logic. Default Force.com-branded Visualforce pages are associated with registration, login, forgot password, and password change processes. You can modify these pages or replace them with your own.

The following default login and registration pages are provide by default:

Page Name	Description
SiteLogin	Default login page. Used to log users in to the associated Customer Portal from your Force.com site .
SiteRegister	Default registration page. Used to register new users for the associated Customer Portal from your Force.com site.
SiteRegisterConfirm	Default registration confirmation page. The page that users see on successful registration.



**Note:** The login and registration forms must be secure. Set the `forceSSL` attribute to `true` for these forms. However, salesforce.com recommends that you set `forceSSL` to `false` for forms accessed by users who have already been authenticated, such as Customer Portal users. Since the `forceSSL` attribute forces a redirect to a secure URL, authenticated users would encounter an error.

The built-in registration process:

- Checks new user information against existing users for the Customer Portal associated with the site
- Checks to see if a contact already exists for the new user
- Creates a new contact, if one doesn't already exist, and associates it with the account for the site



**Important:** You must update the SiteRegisterController with the Account ID using the following steps:

1. Click **Setup** ► **Develop** ► **Apex Classes**.
2. Click **Edit** next to SiteRegisterController.
3. Find the `private static Id PORTAL_ACCOUNT_ID = '<Account_ID>';` line and insert the ID for the account that you want to associate with new users. The line should look similar to this:

```
private static Id PORTAL_ACCOUNT_ID = '001DoooooolQpyk';
```

4. Click **Save**.

- Enables the Customer Portal for the new user and sends an email confirmation message
- Optionally, allows users to create passwords on the registration page, avoiding the standard email confirmation process

The built-in login process:

- Checks to see whether the site is enabled for logins
- Checks to see whether the user is a valid user for the site
- Resets forgotten passwords for users

Enable public login and registration for your Customer Portal using the following steps:

1. Click **Setup** ► **Develop** ► **Sites**.
2. Click the name of the site you want to control.
3. Click **Login Settings**.
4. Click **Edit**.
5. From the Enable Login For list, select a Customer Portal to associate with your site. The Customer Portal you choose must have the `Login Enabled` and `Self-Registration Enabled` checkboxes selected. Force.com Sites leverages the following Customer Portal settings:
  - `Logout URL` is used if you want to take users to a specific page on logout. If this value is left blank, users are taken to the page specified in the `Active Site Home Page` field for your site.
  - `New User Template` is used on self-registration if a password is not provided.
  - `Lost Password Template` is used for the forgot password process.
  - `Header, Footer, Logo, and Login Message` are used for the IdeasHome page look and feel.
  - `Default New User License, Default New User Role, and Default New User Profile` are used for self-registration.
6. Select a **Change Password Page**. A default page is provided, but you can select your own page instead, using the lookup field.
7. Select the `Require Non-Secure Connections (HTTP)` checkbox if you want to override your organization's security settings and exclusively use HTTP when logging in to the Customer Portal from your site. If this checkbox is not selected, the `Require Secure Connections (HTTPS)` setting found at **Setup** ► **Security Controls** ► **Session Settings** is used to determine the security level.

The following table illustrates the relationship between these settings.

Site-Level Security: Require Non-Secure Connections (HTTP)	Org-Level Security: Require Secure Connections (HTTPS)	Description
Not checked	Not checked	<ul style="list-style-type: none"> <li>Org can use either HTTP or HTTPS</li> <li>Site uses HTTP for the post-login session</li> </ul>
Checked	Not checked	<ul style="list-style-type: none"> <li>Org can use either HTTP or HTTPS</li> <li>Site uses HTTP for the post-login session</li> </ul>
Not checked	Checked	<ul style="list-style-type: none"> <li>Org uses only HTTPS</li> <li>Site uses HTTPS for the post-login session</li> <li>Upon login, users see the <code>secure.force.com</code> domain</li> </ul>
Checked	Checked	<ul style="list-style-type: none"> <li>Org uses only HTTPS</li> <li>Site uses HTTP for the post-login session</li> </ul>



**Attention:** If the `Require Secure Connections (HTTPS)` checkbox on the Session Settings page is selected, and the `Require Non-Secure Connections (HTTP)` checkbox on the Login Settings page is not selected, users logging in to the associated Customer Portal from the Force.com site will see the `secure.force.com` domain. For example, if you registered `mycompany.force.com` as your custom domain, the URL changes to `https://mycompany.secure.force.com` upon login.

Customers using Single Sign-On to login to sites can use the optional `refURL` URL parameter to retain the custom domain name after login. This parameter has no effect if `Require Non-Secure Connections (HTTP)` has been set for the site or `Require Secure Connections (HTTPS)` has been set for the organization. An example URL using `refURL` is: `http://mysite.secure.force.com/SiteLogin?refURL=http://mysite.com`.

#### 8. Click **Save**.



**Note:** For Salesforce Ideas, the community associated with the Customer Portal must have one or all portals selected in the `Show In Portal` drop-down list.



## Associating a Customer Portal with Force.com Sites

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

You can enable users to register for or log in to an associated Customer Portal seamlessly from your Force.com site.

1. First, enable the Customer Portal for login and self-registration using the following steps:
  - a. Click **Setup** ► **Customize** ► **Customer Portal** ► **Settings**.
  - b. If you have not enabled your Customer Portal, click **Edit** next the portal you want and select the `Enable Customer Portal` checkbox and click **Save**.
  - c. Click **Edit** for the Customer Portal you want to modify.
  - d. Configure the Customer Portal as follows:
    - Select the `Login Enabled` checkbox.
    - Select the `Self-Registration Enabled` checkbox.
    - Select a user for the `Administrator` field.
    - Optionally, set the `Logout URL`. If this isn't set, users are taken to the site home page on logout.
    - Select `Customer Portal User` for both the `Default New User License` and `Default New User Profile` fields.



**Note:** Depending on your portal license, you may want to select a different profile for the `Default New User Profile` field.

- Select User for the `Default New User Role` field.
  - Click **Save**.
2. Next, associate the site pages with the default Customer Portal User using the following steps:
    - a. Click **Setup** ► **Customize** ► **Customer Portal** ► **Settings**.
    - b. Click the name of the Customer Portal that you want to associate with your site.
    - c. Under Self-Registration Settings, click the **Customer Portal User** link next to `Default New User Profile`.
    - d. Scroll down to the `Enabled Visualforce Page Access` section and click **Edit**.
    - e. Add the appropriate public site pages to the `Enabled Visualforce Pages` list. This allows the default Customer Portal User to view these pages.



**Note:** By default, Customer Portal users can see all pages enabled for the associated public site, so you only have to enable the pages that require authentication.

3. Finally, associate your site with the login-enabled Customer Portal using the following steps:
  - a. Click **Setup** ► **Develop** ► **Sites**.
  - b. Click the site label of the site you want to configure.
  - c. Click **Login Settings**.

- d. Click **Edit**.
- e. From the `Enable Login For` menu, select the name of the Customer Portal for which you want to allow login. You are also prompted to select the `Change Password Page`.
- f. Click **Save**.

For more information, see [Managing Force.com Site Login and Registration Settings](#).



**Note:** For Salesforce Ideas sites, you must associate the community with a Customer Portal and choose the IdeasHome page as the active site home page. Ideas won't be visible to the public until a Customer Portal has been associated with that community. To do this, use the following steps:

1. Click **Setup** ► **Customize** ► **Ideas** ► **Communities**.
2. Click **Edit** next to the community you want to make public.
3. From the `Show In Portal` menu, select the portal to use for this community. You can choose to show the community in all portals.

## Force.com Sites-Related Apex Methods and Expressions

User Permissions Needed	
To create and edit Force.com Sites:	"Customize Application"




**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See [Force.com Sites Considerations](#) for more information.

### Force.com Apex Methods

Force.com provides the following Apex methods for use with Force.com sites:

Name	Arguments	Return Type	Description
<code>changePassword</code>	String <i>newpassword</i> String <i>verifynewpassword</i> String <i>oldpassword</i>	System.PageReference	Changes the password of the current user.
<code>createPortalUser</code>	sObject <i>user</i> String <i>accountId</i> String <i>password</i>	Id	Creates a portal user for the given account and associates it with the site's portal. Note that the <code>nickname</code> field is required for the user sObject when using the <code>createPortalUser</code> method.
<code>forgotPassword</code>	String <i>username</i>	Boolean	Resets the user's password and sends an email to the user with their new password. Returns a value indicating whether the password reset was successful or not.
<code>getCurrentSiteUrl</code>		String	Returns the site URL for the current request (for example, <code>http://myco.com/</code> or <code>https://myco.force.com/prefix/</code> ).

Name	Arguments	Return Type	Description
getCustomWebAddress		String	Returns the top-level domain URL of the current custom site.
getDomain		String	Returns the domain of the current site.
getErrorMessage		String	Returns an error message for the current page if it is a designated error page for the site; otherwise, returns an empty string
getName		String	Returns the name of the current site.
getOriginalUrl		String	Returns the original URL for this page if it is a designated error page for the site; otherwise, returns an empty string.
getPrefix		String	Returns the URL path prefix of the current site. For example, if your site URL is <code>mycompany.force.com/partners</code> , <code>partners</code> is the path prefix.
getTemplate		System.PageReference	Returns the template name associated with the current site; returns null if no template has been designated.
isLoginEnabled		Boolean	Returns <code>true</code> if login is enabled for the site.
isPasswordExpired		Boolean	Returns <code>true</code> if the portal password is expired.
isRegistrationEnabled		Boolean	Returns <code>true</code> if registration is enabled for the site.
login	String <i>username</i> String <i>password</i> String <i>startUrl</i>	System.PageReference	Allows users to log in to the current site with the given username and password, then takes them to the <code>startUrl</code> .   <b>Note:</b> Do not include <code>http://</code> or <code>https://</code> in the <code>startUrl</code> . If you do, you cannot log in.

### Force.com Sites-Related Expressions

Force.com also provides the following expressions to use on Visualforce pages, email templates, and s-controls:

Merge Field	Description
{!\$Site.Name}	Returns the API name of the current site
{!\$Site.Domain}	Returns the Force.com domain name for your organization
{!\$Site.CustomWebAddress}	Returns the value of the Custom Web Address field for the current site
{!\$Site.OriginalUrl}	Returns the original URL the user attempted to access, in the case when an error page is displayed
{!\$Site.CurrentSiteUrl}	Returns the value of the site URL for the current request
{!\$Site.LoginEnabled}	Returns <code>TRUE</code> if the current site is associated with an active login-enabled Customer Portal; otherwise returns <code>FALSE</code>

Merge Field	Description
{!\$Site.RegistrationEnabled}	Returns TRUE if current the site is associated with an active self-registration-enabled Customer Portal; otherwise returns FALSE
{!\$Site.IsPasswordExpired}	Returns TRUE if the currently logged-in user's password is expired
{!\$Site.AdminEmailAddress}	Returns the value of the Site Contact field for the current site
{!\$Site.Prefix}	Returns the path of the Default Web Address for the current site
{!\$Site.Template}	Returns the value of the Site Template field for the current site
{!\$Site.ErrorMessage}	Returns error IDs or handled error messages thrown by the application
{!\$Site.ErrorDescription}	Returns the Apex exception error description



**Note:** To use these expressions, the Force.com Sites feature must be enabled for your organization. You must also use them within the context of your public site; otherwise, a null value is returned.

## Force.com Sites Considerations



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See Force.com Sites Considerations for more information.

Before creating and using Force.com Sites, consider the following:

- For Enterprise and Unlimited Editions, only Salesforce Ideas sites can be created.
- For Salesforce Ideas to use Force.com Sites, the organization must have an active Customer Portal associated with that Salesforce Ideas community. Otherwise, users will encounter errors.
- Force.com Sites is available as Developer Preview in Developer Edition only.
- For Developer Edition, the maximum number of sites per domain is one.
- For Enterprise and Unlimited Editions, the maximum number of sites per domain is 100.
- For security purposes, Force.com Sites enforce the following maximum daily limits:

Organization Type	Bandwidth Limit (per day)	CPU Limit (per day)
Developer Edition and Pre-Release Organizations	500 MB	10 minutes
Developer Sandboxes	1 GB	30 minutes
Production Organizations	40 GB	60 hours

Bandwidth is calculated as the number of bytes served and received from the site. CPU is calculated as total server time required to generate pages for the site.

- If you choose to create a branded top-level domain or subdomain through a domain name registrar, the CNAME record that you provide to that registrar must be your Force.com domain name and not the site URL. For example, if you entered "mycompany" when registering your Force.com domain, the CNAME must be `mycompany.force.com`, not the full value of the site URL.
- Branded, top-level domains are not supported for Developer Edition and Developer Sandboxes.

- If the `Require Secure Connections (HTTPS)` checkbox on the Session Settings page is selected, and the `Require Non-Secure Connections (HTTP)` checkbox on the Login Settings page is not selected, users logging in to the associated Customer Portal from the Force.com site will see the `secure.force.com` domain. For example, if you registered `mycompany.force.com` as your custom domain, the URL changes to `https://mycompany.secure.force.com` upon login. For more information, see [Managing Force.com Site Login and Registration Settings](#).
- Customers using Single Sign-On to login to sites can use the optional `refURL` URL parameter to retain the custom domain name after login. This parameter has no effect if `Require Non-Secure Connections (HTTP)` has been set for the site or `Require Secure Connections (HTTPS)` has been set for the organization. An example URL using `refURL` is: `http://mysite.secure.force.com/SiteLogin?refURL=http://mysite.com`.
- The number of sites you can create depends on the number of site licenses you have.
- If you have used all of your Force.com site licenses, you may still create inactive sites, but you cannot activate them.
- Force.com Sites does not support the use of Person Accounts for self registration.
- Force.com Sites does not support Salesforce Content at this time.
- On self-registration through a Force.com site:
  - ◊ Validation rules are enforced on user creation.
  - ◊ Validation rules are ignored on contact creation.
- Authenticated and non-authenticated users may see different error messages for certain conditions—for example, on Apex exceptions.
- Force.com Sites is not packageable. You cannot package sample code, Visualforce pages, Apex classes, or components for a site.
- If you change an existing site name for a site, the guest user name and the guest profile name are not updated automatically. Make sure to keep them in sync manually, or you will encounter errors.

## Syndication Feeds for Sites

Available in: **Enterprise**, **Unlimited**, and **Developer** Editions

Winter '09 introduces support for syndication feeds in [Force.com Sites](#). *Syndication feeds* give users the ability to subscribe to changes within [Force.com Sites](#) and receive updates in external news readers. Simply by defining a SOQL query and mapping, you can syndicate changes to public data to end users. You can create one or more syndication feeds for your organization's public sites or any Visualforce page.



**Note:** To enable Force.com Sites, contact your salesforce.com representative. The Force.com Sites feature is available as Developer Preview in Developer Edition. See [Force.com Sites Considerations](#) for more information.

# About Force.com Syndication Feeds for Sites

## About Syndication Feeds

User Permissions Needed	
Create, edit, or delete a feed definition:	"Modify All Data"
Subscribe to a feed	No special user permission required

*Syndication feeds* give users the ability to subscribe to changes within Force.com Sites and receive updates in external news readers. Simply by defining a SOQL query and mapping, you can syndicate changes to public data to your end users. You can create one or more syndication feeds for your organization's public sites or any Visualforce page. The syndication feed displays the records specified by a SOQL query. Users can subscribe to the feed and view the feed when they visit the site or page.

### Validating Feeds Security

When a user subscribes to a feed, the information is run in a guest user context. This means that you must ensure the guest user has access to all and only the records appropriate for a guest use before defining any queries.

To validate feeds security:

- Edit the public access setting for the site to make sure the guest user has the correct object permissions and field-level security settings. For more information, see "Public Access Settings for Force.com Sites" in the Salesforce online help.
- Create sharing rules to control which records the guest user has access to. For more information, see "Setting Your Organization Wide Default Sharing Model" in the Salesforce online help.

After adjusting public access and field-level security settings to ensure the objects you wish to include in a feed are available to the guest user, perform any of the following feeds-related tasks:

- To create a new feed, click **New**.
- To view the definition of an existing feed, click the feed name.
- To edit an existing feed, click **Edit**.
- To delete an existing feed, click **Delete**.
- To test the validity of a feed, click **Run Test**. If any errors exist in the query definition or mapping, error messages are displayed.

## Defining Syndication Feeds

User Permissions Needed	
Create, edit, or delete a feed definition:	"Modify All Data"
Subscribe to a feed	No special user permission required

*Syndication feeds* give users the ability to subscribe to changes within Force.com Sites and receive updates in external news readers. Simply by defining a SOQL query and mapping, you can syndicate changes to public data to your end users. You can create one or more syndication feeds for your organization's public sites or any Visualforce page. The syndication feed displays the records specified by a SOQL query. Users can subscribe to the feed and view the feed when they visit the site or page.

Define a syndication feed, including what records are returned, and which data from the records is displayed:

#### Name

A descriptive name for this feed, which distinguishes it from other feeds you may create. Use only letters, numbers, or the underscore character "\_". Do not use more than one underscore character in a row.

#### Description

Describe the feed. For example, "Account first name, last name, and region for the last ten accounts created or edited."

#### Query

The SOQL query that defines which records are returned to the syndication feed. To ensure fast performance, some limitations on the SOQL query are imposed:

- If the SOQL query does not specify a limit, then no more than 20 records are returned.
- Only the first 200 records are returned regardless of what the SOQL query specifies.
- If the SOQL query does not have an ORDER BY value specified, records are ordered by the LastModifiedDate value if there is one, or by SystemModstamp value if not
- COUNT is not supported.
- *Aggregate* queries are not supported. For example, this query cannot be used in a syndication feeds SOQL query:

```
SELECT Name, (SELECT CreatedBy.Name FROM Notes) FROM Account
```

For more information about aggregate relationship queries, see the aggregate query examples in [Force.com Web Services API Developer's Guide](#).

- You can use *bind variables*, a variable whose value is supplied in the URL. For more information, see "Using Bind Variables for Queries and Mapping" in the Salesforce online help.



**Note:** The guest user must have appropriate sharing and field-level security access or you cannot save your query, because the Force.com platform verifies access and sharing before saving.

#### Mapping

Because syndication feeds use the ATOM web publishing protocol, you must provide a mapping value that matches objects and fields on the returned records with ATOM constructs. Note that all values must be string literals. For more information about mapping elements, see "ATOM-Object Mapping" in the Salesforce online help.

You can use *bind variables*, a variable whose value is supplied in the URL. For more information, see "Using Bind Variables for Queries and Mapping" in the Salesforce online help.

#### Max Cache Age Seconds

Because many users may access a feed at the same time, Salesforce caches the feed data, for 3600 seconds by default. You can modify this to a minimum of 300 seconds, or for as long as you wish. Query results that are older than the time specified here are dropped, and a new query is run on the next request for that information, that is, the next time a user opens a page containing a feed that they have subscribed to.

#### Active

Select this checkbox to make the feed available for subscription. Once a feed is active, users have the option of subscribing to it.

### ATOM-Object Mapping

You must specify a mapping in the syndication feed definition. The mapping relates ATOM constructs such as entry title to the corresponding value in a record, for example, "Account Name." A full set of mappings represents a news feed, and the

query represents the content of each news item in a feed. For example, Lead records created today or Contacts with updated Account information.

A *feed element* is the envelope for each part of a news item, and an *entry element* is the contents of the envelope.

Mapping also allows you to apply short labels to various fields for display purposes.

.

The following table lists each ATOM and object element and explains what values should be provided:

Feed Element	Entry Element	Description
fa		Required only if ea (entry author) is not specified. Feed author. For example, fa: "Acme Feed Author Admin Mary" shows the feed author as Admin Mary.
fid		Optional (because default value is supplied). Id of the feed. By default, this value is the public site URL. If you specify a value, it must be a valid internationalized resource identifier (IRI). An IRI is a URL generalized to allow the use of Unicode.
fl		Optional (because default value is supplied). Feed link. For example, fl: "http://www.salesforce.com". News readers usually interpret this element by linking the feed title to this URL.
fst		Optional. Feed subtitle. For example, &map=ft: "Newest Opportunities", fst: "Western Division" shows the feed title Newest Opportunities and subtitle Western Division.
ft		Required. Feed title. For example, ft: "Newest Opportunities".
	ea	Required only if fa (feed author) is not specified. Entry author. For example, ea: "Account created by: " + Account.CreatedBy .
	ec	Required. Entry content. For example, ec: "description for " Name " Description shows the value of the Name field with additional text. The output of a feed for this example resembles the following:  description for Ajax Industries Description
	ect	Optional. Entry content of type text, html, or xhtml. For example, ect: html for HTML content. Default is text.
	el	Optional. Entry link. Must be a valid URI. This value is usually a link to another representation of the content for the entry. For example, the link could be to a record in the Salesforce user interface. News readers usually interpret this element by linking the entry title to this URL For example, el: "Account.Url".
	es	Optional. Entry summary. An optional summary of the entry content. For example, et: Account.Name, es: Account.Name + "'s account number, website, and description", ec: Account.Number + " " + Account.Website + " " + Account.Description  If not specified, news readers display the content defined using the ec element.
	est	Optional. Entry summary of type text, html, or xhtml. For example, est: html for HTML content. Default is text. Do not specify a value unless es has been specified.
	et	Required. Entry title, a field name. For example, et: Name.



Feed Element	Entry Element	Description
	eu	<p>Optional. By default, the required ATOM element &lt;updated&gt; value is automatically provided by the <code>LastModifiedDate</code> of the main entity being queried; usually the object in the main <code>FROM</code> clause of the SOQL query. This value indicates the last time an entry or feed was modified. If you wish to change this default behavior, you can specify a different object or field's <code>LastModifiedDate</code> be used. For example:</p> <ul style="list-style-type: none"> <li>• <b>Query:</b> <code>SELECT Id, Name, MyDate__c FROM AccountMapping</code> <b>Parameter:</b> <code>eu: MyDate__c</code></li> <li>• <b>Query:</b> <code>SELECT Id, Lastname, Account.LastModifiedDate FROM ContactMapping</code> <b>Parameter:</b> <code>eu: Account.LastModifiedDate</code></li> </ul>

The following example shows a valid mapping values for a syndication feed:

```
ft: "Harry Potter", et: Name, ec: "description for " Name "<br>" Description, el: "/" Id,
ect: html
```

Feeds are displayed in the guest user context of the public site where they are displayed. Therefore, if you have used custom labels to manage internationalization, and specified labels in your mapping, users see those labels displayed in the language of the guest user. For more information, see "Custom Labels and Feeds" in the Salesforce online help.

You can only use string literals in feed mapping. You cannot use, for example, date literals such as `TODAY` or `LAST_WEEK`.

After you have defined a feed, you should test it, and then make the feed active by selecting the `Active` checkbox as described above. For more information about testing, see "Testing Feeds" in the Salesforce online help.

### Using Bind Variables for Queries and Mapping

You can use *bind variables* in the `WHERE` clause of the SOQL query. Bind variables must be in the following form:

```
{!var_name}
```

The following query uses a bind variable named `accountID`.

```
SELECT Name, Description
FROM Account
WHERE Id = {!accountID}
```

Note that this is not the literal name of the field, but an arbitrary name. At run time, the value for `accountID` is passed to the query from the URL. This feed is accessed from the following URL and passes in the `account ID` as part of the query string parameter:

```
site_URL/services/xml/My'Account'Feed?accountId=0013000000BmP4x
```

You can also use bind variables for mapping values.

The following implementation details apply to the use of bind variables for queries:

- You cannot use more than 20 bind variables in a feed definition, queries and mapping combined.
- The bind variable name cannot be more than 100 characters.

- You can use a bind variable only on the right side of a filter operation to represent part of a string. Because it represents part of a string, it must be in quotes. For example, the following is a valid query:

```
SELECT Id, Name FROM Account WHERE Name = '{!myBindVariable}'
```

The following queries are not valid, because the bind variable is not in a valid position, and is not functioning as the variable for a literal string:

```
SELECT Id, Name FROM Account WHERE {!myFieldName} = 'Joe'
SELECT Id, {!myFieldName} FROM Account WHERE IsDeleted = false
```

- You cannot use a bind variable to represent a field name. This means a bind variable cannot be use on the left side of a filter operation.
- You cannot use a bind variable to change the meaning or structure of a query for security reasons. Any special characters you specify in the bind replacement value are interpreted as literal characters when the query is evaluated.

## Custom Labels and Feeds

For feeds that need to be localized into different languages, you can use custom labels to define the string in multiple languages. Then in the mapping definition, you simply refer to the custom label. When a request come in, the custom label inspects the guest user language and return the translated text, which is used in the mapping.

Custom labels can be specified in a field with the following syntax:

```
map_element_name: "{!$LABEL.custom_label_name}"
```

Use the following procedure to specify a custom label in a feed:

- Create a custom label using the information in "Adding or Editing Custom Labels" in the Salesforce online help. You may wish to name the custom label after the mapping element that takes its value, for example `feedTitle` for the `ft` element.
- Enter the values for all supported languages.
- Specify the custom label in the feed mapping.

For example, assume that you create a feed containing information on all the houses your company is trying to sell. For English users, the title of the feed should be "The Houses," but for Spanish users, the title of the feed should be "Las Casas." You would create a custom label, for example, `feedTitle`. In English, its value is "The Houses," and the Spanish value is "Las Casas". Then, in the feed mapping definition, specify the following for the feed title `fc`:

```
ft: "{!$LABEL.feedTitle}"
```

## Visualforce and Feeds

To add a feed to a Visualforce page, use the Visualforce standard HTML features. For example, assuming the Visualforce page is located in the base directory of the site, it can contain a tag like the following

```
<A HREF="/xml/services/theFeedName">My feed</A>
```

The text `My feed` links to the feed.

If you want to link the feed from an image, include an inline image tag similar to the following:

```
<A HREF="/xml/services/theFeedName"></A>
```

You must upload your own image.

To add the icon to the address bar, add the link tag to the <head> tag of the Visualforce page:

```
<link href='URI of feed'
      type='application/x.atom+xml'
      rel='feed'
      title='A nice descriptive title' />
```

For more information about Visualforce, see the [Visualforce Developer's Guide](#)

## Testing Feeds

User Permissions Needed	
Create, edit, or delete a feed definition:	"Modify All Data"
Subscribe to a feed	No special user permission required

Test the feed definition you have created before enabling it for customers.

To test a feed:

1. After creating a feed, navigate to **Setup ► Sites** and click the site for which you've defined the feed. Alternatively, you can navigate to the feed detail page any number of ways, including clicking the feed name from the site detail page.
2. Click **Preview** for the feed you wish to test.
3. If one or more bind variables have been used in the feed, a dialog appears. Enter a test value for each bind variable.
4. A dialog appears allowing you to create a bookmark for the feed with the bind variable values you specified. You can save the bookmark, or cancel the dialog.
5. The values returned by your feed are displayed. Verify that the results are what you expected.

## Schedule and Email Reports

Available in: **Professional, Enterprise, Unlimited, and Developer** Editions

With Winter '09, Salesforce offers the ability to email data to users who do not have the time to check reports. Now you can schedule reports to run and have the results automatically emailed in HTML format to Salesforce users. For example, you can schedule a report to run every Friday at 3:00 PM and have the results emailed to several Salesforce users.

### Implementation Tips

- To allow users to schedule reports in your organization, add the "Schedule Reports" permission to the users' profiles. By default, the "Schedule Reports" permission is enabled in the standard System Administrator profile.
- Your organization is limited to no more than 200 scheduled reports and editions have different daily limits.
- Scheduled reports run in the time zone of the user who schedules the report. For example, if the `Time Zone` field on your user record is set to Pacific Standard Time, and you schedule a report to run every day at 2:00 PM, then the report runs every day at between 2:00 PM and 2:29 PM Pacific Standard Time.
- If you schedule a report to run on a specific day of every month, the report runs only on months that have that specific day. For example, if you schedule a report to run on the 31st day of every month, then the report runs only on months that have 31 days. To schedule a report on the last day of every month, choose last from the `On day of every month` drop-down list.

- To email a report to other users, the report must be in a public folder with access granted to the other users. This is because other users cannot access reports in your personal folders.
- The report runs within 30 minutes of the time you select for `Preferred Start Time`. For example, if you select 2:00 PM as your preferred start time, the report runs any time in between 2:00 PM and 2:29 PM, depending on how many other reports are scheduled at that time.
- For reports to run as scheduled, the user in the `Running User` field must have access to the folder in which the report is stored.
- Scheduling reports is not tracked in the audit trail history.

### Best Practices

- Inform users that they can view the reports received in their email clients even when the email clients are not connected to the Internet.
- Instruct users that they can click the report name in emailed reports to log in to Salesforce and view the reports directly.
- Delete report schedules you no longer use so that you do not reach the 200 scheduled reports limit for your organization.

## About Scheduling Reports

### Scheduling a Report

User Permissions Needed	
To schedule and email a report:	"Schedule Reports"
To delete the scheduled report run:	"Modify All Data"

You can schedule reports to run and have the results automatically emailed in HTML format to Salesforce users. For example, you can schedule a report to run every Friday at 3:00 PM and have the results emailed to several Salesforce users.

To schedule a report:


1. On the Reports tab, click the report name or click **Create New Custom Report** to create a new report. For more information, see "Creating a Custom Report" in the Salesforce online help.
2. Click **Run Report** and choose **Schedule Future Runs...** from the drop-down button.
3. If you are creating a new report, Salesforce displays the Save Report page:
  - a. In the `Report Name` field enter a name for the report.
  - b. Optionally, enter a report description.
  - c. The `Report Unique Name` field is automatically completed based on the `Report Name` field value. The name is a unique identifier used to refer to the report when using the Force.com API. If defined, the `Namespace Prefix` field shows the package identifier used by the Force.com API.
  - d. From the `Report Folder` drop-down list, select the folder in which to save the report. To email a report to other users, the report must be in a public folder with access granted to the other users. This is because other users cannot access reports in your personal folders. For more information, see "Managing Folders" in the Salesforce online help.
  - e. Click **Save & Continue to Schedule**.
4. Salesforce displays the Schedule Report page. The user in the `Running User` field determines the report's level of access to data. This bypasses all security settings, giving all users who can view the report access to data they might not be able to see otherwise. For reports to run as scheduled, the user in the `Running User` field must have access to the folder in which the report is stored.

5. Select a notification setting to email the report at the scheduled time:
  - Select **To me** to send the report to the email address specified on your Salesforce user record.
  - Select **To me and/or others...** to email the report to additional users. You can send reports only to email addresses included on Salesforce user records. For more information, see "Editing Users" in the Salesforce online help.
6. Schedule the report:
  - In the **Frequency** field, select how frequently to run the report. Select **Daily**, **Weekly**, or **Monthly** and then refine the frequency criteria.
  - In the **Start** and **End** fields, specify the dates during which you want to schedule the report. To enter the current date, click on the link showing the current date.
  - You must select a start time for running the report. Next to **Preferred Start Time**, click **Find available options...** to choose a start time.


Your preferred start time may not be available if other users have already selected that time to schedule a report.

7. If you made changes to the report definition in the report wizard before scheduling the report, you can choose whether to save any unsaved report definition changes when you save the report schedule. To save report definition changes, select **Save report modifications with this schedule**. To discard report definition changes and save the report schedule, select **Discard report modifications**.
8. Click **Save Report Schedule** to schedule the report.

To change the schedule of when a report runs:

1. On the Reports tab, click the  icon next to the scheduled report.
2. Make the required changes on the Schedule Report detail page.
3. Click **Save Report Schedule**.

To delete a report schedule:

1. On the Reports tab, click the  icon next to the scheduled report.
2. Click **Unschedule Report**.


The report's schedule is cancelled and *not* sent to the Recycle Bin. You can reschedule the report when you choose to do so.



**Note:** Users with the "View Setup and Configuration" permission can view all scheduled reports for their organization on the All Scheduled Jobs page. To view the All Scheduled Jobs page, click **Setup** ► **Monitoring** ► **Scheduled Jobs**. Users with "Modify All Data" permission can click **Del** next to a specific scheduled report to unschedule the report.

## Tips on Scheduling Reports

Consider the following when scheduling a report to run:

- On the Reports tab, hover over the  icon to see how frequently and when a scheduled report is set to run. Note that users without the "Schedule Reports" permission can see this icon and information.
- Your organization is limited to no more than 200 scheduled reports and editions have different daily limits. For detailed information, see "App Setup Limits" in the Salesforce online help.
- Scheduled reports run in the time zone of the user who schedules the report. For example, if the **Time Zone** field on your user record is set to Pacific Standard Time, and you schedule a report to run every day at 2:00 PM, then the report runs every day at between 2:00 PM and 2:29 PM Pacific Standard Time.
- If you schedule a report to run on a specific day of every month, the report runs only on months that have that specific day. For example, if you schedule a report to run on the 31st day of every month, then the report runs only on months that have 31 days. To schedule a report on the last day of every month, choose last from the **On day of every month** drop-down list.

- The report runs within 30 minutes of the time you select for `Preferred Start Time`. For example, if you select 2:00 PM as your preferred start time, the report runs any time in between 2:00 PM and 2:29 PM, depending on how many other reports are scheduled at that time.
- For reports to run as scheduled, the user in the `Running User` field must have access to the folder in which the report is stored. For more information, see "Managing Folders" in the Salesforce online help. You need "View All Data" permission to specify a running user other than yourself. If you do not have this permission, you can:
  - ◇ Create a schedule with yourself as the running user.
  - ◇ Edit a schedule with a running user different from yourself and save it with the same running user, but not change the running user.
- Scheduling reports is not tracked in the audit trail history.

### Tips on Emailing Scheduled Reports

Consider the following when scheduling reports:

- To email a report to other users, the report must be in a public folder with access granted to the other users. This is because other users cannot access reports in your personal folders. For more information, see "Managing Folders" in the Salesforce online help.
- Report recipients can click the report name in emailed reports to log in to Salesforce and view the report directly.
- Report charts are not included in emailed reports. To email a chart of the report, create a dashboard and schedule a dashboard refresh. See "Scheduling a Dashboard Refresh" in the Salesforce online help.
- Outlook 2007 limitation: Report emails containing tables more than 22 inches wide or with more than 63 columns may not display properly.
- The maximum size for emailed reports is 10 MB. Try the following techniques to reduce the amount of data in your report:
  - ◇ Filter for your own records, rather than all records.
  - ◇ Limit the scope of the data to a specific date range.
  - ◇ Exclude unnecessary columns from your report.
  - ◇ Hide the report details.

## Visualforce Enhancements

Available in: **Group, Professional, Enterprise, Unlimited, and Developer** Editions

Custom controllers and standard controller extensions are not supported in **Group** or **Professional** Editions.

Winter '09 introduces several new features that enhance the capabilities of previous versions of Visualforce. For detailed information on these new features see the [Visualforce Developer's Guide](#).

The following enhancements are generally available:

### Standard list controllers

Using Visualforce and a standard list controller, you can leverage standard Salesforce behavior, such as pagination, item selection, and mass action buttons, to create list pages similar to any object's home page. For more information on standard list controllers, see [Standard List Controllers](#) on page 87.

### Display translatable custom labels using expressions in Visualforce pages

You can use expression language to display custom Salesforce labels on your Visualforce. For example, if you have created a custom label called `CustomAccountName` to display the that label in a Visualforce pages, use `<apex:outputText value="{!$Label.CustomAccountName}" />`. Using these expressions

instead of text in your page allows you to translate labels within Salesforce and use those translated labels in your Visualforce pages.

### Packaging support for Visualforce pages, static resources, and controllers

You can now create managed and unmanaged packages containing Visualforce pages, static resources, and controllers.

### Dynamically specify the `template` attribute on `apex:composition` components

When you use an `<apex:composition>` component, you can now define the `template` attribute dynamically by using expression language to reference a page or `PageReference`. This allows you to dynamically control the information included on a page

### Dynamically specify the `pageName` attribute `apex:include` components

When you use an `apex:include` component, you can now define the `pageName` attribute dynamically by using merge-field syntax to reference a page or `PageReference`. This allows you to dynamically control the included information in a page.

### `System.PageReference` has moved from being a system method to the `ApexPages` namespace

The method `System.PageReference` has been replaced with `ApexPages.PageReference`. `System.PageReference` will continue to work, so there is no impact on existing code.

### `apex:inputFile` component

You can use the new component `apex:inputFile` to upload files using Visualforce and make those files into attachments on records, a document record, or as an Apex Blob.

### `apex:enhancedList` component

In Winter '09, you can use the new component `apex:enhancedList` to access the list view for an object. This component is similar to `apex:listViews`, only with several additional attributes, such as `height` and `rowsPerPage`. Use `apex:enhancedList` when you want to display an enhanced list view to the end-user, or you want better control over the display of a list view. See also "Working with Enhanced Lists" in the Salesforce online help for more information about how an enhanced list displays to the end-user.

### Use "+" to concatenate strings in expressions

You can now use the plus (+) character to concatenate strings within expressions in Visualforce pages.

### `tabStyle` attribute on `apex:page` and `apex:pageBlock` components can use a Visualforce custom tab style

If you have created a custom Visualforce tab, you can now use it as the basis for your `apex:page` or `apex:pageBlock` components visual styling. Set the `tabStyle` attribute on the component to the name of the tab, followed by `__tab`. For example, to use the styling of a Visualforce tab with the name `Source` and a label `Sources`, use `tabStyle="Source__tab"`

### `access` attribute on `apex:component` and `apex:attribute` can be used to limit which namespaces a component can be used in

The `access` attribute on `apex:component` and `apex:attribute` indicates whether the component or attribute can be used outside of any page in the same namespace as the component. Possible values are "public" (default) and "global." Use `global` to indicate that the component can be used outside of the component's namespace.



**Note:** Components with this designation are subject to the deprecation policies described for managed packages.

### `list` action added to standard and standard list controllers

In Winter '09, you can use the new `list` action with standard and standard set controllers to access a standard list page for an object, based on the most recently used list filter for that object. For example, if the standard controller is `contact`, and the last filtered list that the user viewed is `New Last Week`, the



contacts created in the last week are displayed. With a standard set controller, if you specify a value for the `filterId` property, that is used to display the list instead of the last used list filter.

### Custom buttons and links can now refer to a Visualforce page

In addition to being able to create a custom button or link to an URL, s-control, or JavaScript action, you can now create a custom link or button to a Visualforce page.

### `apex:inputField` and `apex:outputField` now support HTML fields

HTML fields, like the detail field on Solutions, are now supported by `apex:inputField` and `apex:outputField`. When `apex:inputField` is used with an HTML field, a WYSIWYG HTML editor appears, which allows the user to modify the HTML.

The following components have been added to support Visualforce email templates:

#### **`messaging:attachment` component**

Creates an attachment and appends it to the email.

#### **`messaging:emailHeader` component**

Defines a custom header for the email.

#### **`messaging:emailTemplate` component**

Defines a Visualforce email template. All email template tags must be wrapped inside a single `emailTemplate` component tag, similar to how an `<apex:page>` tag encloses other Visualforce pages.

#### **`messaging:htmlEmailBody` component**

The HTML version of the email body. The data rendered by this component will be labeled with a MIME type of "text/html". All non-Action, non-Input generating Visualforce tags can be used within the `htmlEmailBody` tag.

#### **`messaging:plainTextEmailBody` component**

The plain text (non-HTML) version of the email body. The data rendered by this component will be labeled with a MIME type of "text/plain". Declarative and execution Visualforce control tags, such as the repeat and variable components, can be children of this tag.

## Browser Security Settings and Visualforce

Some Visualforce pages are run from \*.force.com servers. If you set your browser's trusted sites to include \*.salesforce.com, you must also add \*.force.com to the list.

Depending on your browser and browser settings, you may see an error similar to the following on some pages:

Your browser privacy settings have prevented this page from showing some content. To display this content you need to change your browser privacy settings to allow "Third Party" cookies from the domain mypages.na1.visual.force.com. Alternatively, if your browser is Internet Explorer, you can add mypages.na1.visual.force.com. to your trusted sites list in the security options page.

Salesforce includes a Platform for Privacy Preferences Project (P3P) header on some pages. The header is composed of the following settings:

### **Purpose**

CUR - Information is used to complete the activity for which it was provided.

### **Category**

STA - Mechanisms for maintaining a stateful session with a user or automatically recognizing users who have visited a particular site or accessed particular content previously; for example, HTTP cookies.

### **Recipient**

OTR - Legal entities following different practices. Users cannot opt-in or opt-out of this usage.

If your browser is configured to support P3P, this header allows all Visualforce pages to display. For information on P3P, see [Platform for Privacy Preferences \(P3P\) Project](#).



If your browser is set to block third-party cookies, and it does not use the P3P header, and you see an error similar to the one above, perform one of the following actions:

- Configure P3P for your browser
- Change your browser settings to allow third-party cookies
- Add the appropriate server to your browser's cookies exception list

## About Visualforce Enhancements

### Standard List Controllers

Standard list controllers allow you to create Visualforce pages that can display or act on a set of records. Examples of existing Salesforce pages that work with a set of records include list pages, related lists and mass action pages. Standard list controllers can be used with the following objects:

- Account
- Asset
- Campaign
- Case
- Contact
- Contract
- Idea
- Lead
- Opportunity
- Order
- Product2
- Solution
- User

The following topics include additional information about using standard list controllers:

- Associating a Standard List Controller with a Visualforce Page
- Accessing Data with List Controllers
- Using Standard List Controller Actions
- Using List Views with Standard List Controllers
- Overriding Buttons, Links, and Tabs Using Standard List Controller
- Adding Custom List Buttons using Standard List Controllers

You can also create custom controllers for list pages. For information, see "Building a Custom List Controller" in the Salesforce online help

### Accessing Data with List Controllers

Once you have associated a page with a list controller, you can refer to the set of records using expression language syntax. For example, to create a simple table of accounts, create a page with the following markup:

```
<apex:page standardController="Account" recordSetVar="accounts" tabstyle="account"
  sidebar="false">
  <apex:pageBlock >
    <apex:pageBlockTable value="{!accounts}" var="a">
      <apex:column value="{!a.name}"/>
    </apex:pageBlockTable>
  </apex:pageBlock>
</apex:page>
```

```

    </apex:pageBlockTable>
  </apex:pageBlock>
</apex:page>

```

which results in a page that lists all the account names in your organization similar to the following:

Account Name
Burlington Textiles Corp of America
Dickenson plc
Edge Communications
Express Logistics and Transport
GenePoint
Grand Hotels & Resorts Ltd
Pyramid Construction Inc.
sForce
United Oil & Gas Corp.
United Oil & Gas, Singapore
United Oil & Gas, UK
University of Arizona



**Note:** This page does not specify a filter in the request, so the page is displayed with the last used filter. For information on using filters with list controllers, see "Using List Views with Standard List Controllers" in the Salesforce online help

As with queries in the Force.com API, you can use expression language syntax to retrieve data from related records. As with standard controllers, you can traverse up to five levels of child-to-parent relationships and one level of parent-to-child relationships.

When you are using a standard list controller, the returned records sort on the first column of data, as defined by the current view, even if that column is not rendered. When you use an extension or custom list controller, you can control the sort method.



**Note:** No more than 10,000 records can be returned by a list controller.

## Using Standard List Controller Actions

Action methods perform logic or navigation when a page event occurs, such as when a user clicks a button, or hovers over an area of the page. Action methods can be called from page markup by using `{! }` notation in the `action` parameter of one of the following tags:

- `<apex:commandButton>` creates a button that calls an action

- `<apex:commandLink>` creates a link that calls an action
- `<apex:actionPoller>` periodically calls an action
- `<apex:actionSupport>` makes an event (such as "onclick", "onmouseover", and so on) on another, named component, call an action
- `<apex:actionFunction>` defines a new JavaScript function that calls an action
- `<apex:page>` calls an action when the page is loaded.

The following table describes the action methods that are supported by all standard list controllers. You can associate these actions with any Visualforce component that includes an `action` attribute.

Action	Description
save	Inserts new records or updates an existing records that have been changed. After this operation is finished, the <code>save</code> action returns the user to the original page (if known) or the home page.
quicksave	Inserts new records or updates existing records that have been changed. Unlike the <code>save</code> action, this page does not redirect the user to another page.
list	Returns a <code>PageReference</code> object of the standard list page, based on the most recently used list filter for that object when the <code>filterId</code> is not specified by the user.
cancel	Aborts an edit operation. After this operation is finished, the <code>cancel</code> action returns the user to the page where the user originally invoked the edit.
first	The <code>first</code> action displays the first page of records in the set.
last	The <code>last</code> action displays the last page of records in the set.
next	The <code>next</code> action displays the next page of records in the set.
previous	The <code>previous</code> action displays the previous page of records in the set.

In the following example, the user specifies a filter for viewing account records. When the user clicks **Go**, the standard list page is displayed, using the selected filter.

```
<apex:page standardController="Account" recordSetVar="accounts">
  <apex:form >
    <apex:selectList value="{!filterid}" size="1">
      <apex:selectOptions value="{!listviewoptions}" />
    </apex:selectList>
    <apex:commandButton value="Go" action="{!list}" />
  </apex:form>
</apex:page>
```

For details on these methods, see the *Apex Language Reference* at [www.salesforce.com/us/developer/docs/apexcode/index.htm](http://www.salesforce.com/us/developer/docs/apexcode/index.htm).

## Visualforce Email Templates

Available in: **Group**, **Enterprise**, **Unlimited**, and **Developer** Editions

In addition to text, HTML, and Custom HTML email templates, Winter '09 provides developers and administrators the ability to create email templates using Visualforce markup.

The primary feature of a Visualforce email template is the ability to perform advanced operations on data that is sent to a recipient. Previously, an email template could only display fields for a single record. By creating an email template with Visualforce components, the content of the template can contain information from multiple records.

For example, suppose you want to display all the cases associated with a contact. Previously, you could only send an email template to a contact referencing a single case. Now with Visualforce email templates, you can use an `<apex:repeat>` tag to iterate through all the cases related to a contact and incorporate it into the body of your template. In addition, you can:

- Generate Visualforce pages inside the template in order to create content without HTML
- Specify a custom email header
- Create attachments using plain text, HTML, and Visualforce markup. Attachments can be rendered as text or PDF files.

### Implementation Tips

- Visualforce email templates are also retrievable through the Force.com Web Services API and the Force.com Metadata API.
- You cannot send a mass email using a Visualforce email template.
- `emailTemplate` must contain either an `htmlEmailBody` tag or a `plainTextEmailBody` tag. See [Visualforce Components for Email Templates](#) on page 91.
- The `detail` and `form` components are not permitted as child nodes of `emailTemplate`. See [Visualforce Components for Email Templates](#) on page 91.

### Best Practices

- The text enclosed by the header of your Visualforce email template cannot exceed 1,000 characters.
- The subject line cannot exceed 100 characters.

## About Visualforce Email Templates

### Setting Up Visualforce Email Templates

To create a Visualforce email template:

1. Click **Setup ► Email ► My Templates**. If you have permission to edit public templates, click **Setup ► Communication Templates ► Email Templates**.
2. Click **New Template**.
3. Choose **Visualforce** and click **Next**.
4. Choose a folder in which to store the template.
5. Select the **Available For Use** checkbox if you would like this template offered to users when sending an email.
6. Enter an **Email Template Name**.
7. If necessary, change the **Template Unique Name**. This is a unique name used to refer to the component when using the Force.com API. In managed packages, this unique name prevents naming conflicts on package installations. It can contain only alphanumeric characters and must begin with a letter. With the **Template Unique Name** field, a developer can change certain components' names in a managed package and the changes are reflected in a subscriber's organization.
8. Select an **Encoding** setting to determine the character set for the template.
9. Enter a **Description** of the template. Both template name and description are for your internal use only.
10. Enter the subject line for your template in **Email Subject**.
11. In the **Recipient Type** drop-down list, select the type of recipient that will receive the email template.
12. In the **Related To Type** drop-down list, optionally select the object from which the template will retrieve merge field data.
13. Click **Save**.
14. On the **Viewing Email Templates** page, click **Edit Template**.
15. Enter markup text for your Visualforce email template.

16. Click **Save** to save your changes and view the details of the template, or click **Quick Save** to save your changes and continue editing your template. Your Visualforce markup must be valid before you can save your template.



**Note:** The maximum size of a Visualforce email template is 1 MB.

## Visualforce Components for Email Templates

The following components have been added to support Visualforce email templates:

**messaging:attachment component**

Creates an attachment and appends it to the email.

**messaging:emailHeader component**

Defines a custom header for the email.

**messaging:emailTemplate component**

Defines a Visualforce email template. All email template tags must be wrapped inside a single `emailTemplate` component tag, similar to how an `<apex:page>` tag encloses other Visualforce pages.

**messaging:htmlEmailBody component**

The HTML version of the email body. The data rendered by this component will be labeled with a MIME type of "text/html". All non-Action, non-Input generating Visualforce tags can be used within the `htmlEmailBody` tag.

**messaging:plainTextEmailBody component**

The plain text (non-HTML) version of the email body. The data rendered by this component will be labeled with a MIME type of "text/plain". Declarative and execution Visualforce control tags, such as the repeat and variable components, can be children of this tag.

## Apex Enhancements

Available in: <b>Unlimited</b> , <b>Developer</b> , and <b>Enterprise</b> Editions
--

Apex includes the following enhancements in Winter '09. Refer to the [Apex Language Reference](#) for complete information about Apex.

The following enhancements are generally available:

**Dynamic DML, SOQL and SOSL is now generally available**

Previously just in pilot, you can now write dynamic SOQL and SOSL queries, as well as create records dynamically and insert them into the database.

For more information, see [Dynamic Apex](#).

**future annotation is now generally available**

Previously available as a developer preview, you can now mark a static method with the `future` annotation to make it execute asynchronously. This is useful when making an asynchronous Web service callout to an external service.

**abstract, virtual, extends and override now generally available**

Previously only available through your salesforce.com representative, you can now define classes in Apex as either `abstract` or `virtual`. You can also extend these types of classes, not just exception classes.



**Note:** Classes defined with either `virtual` or `abstract` cannot also be defined as `global` in Developer Edition organizations. They can be defined as `global` in sandbox organizations. Only `private` and `public` classes can be defined as either `virtual` or `abstract` in Developer Edition organizations. However, a class defined as `global` can extend `virtual` or `abstract` classes in either Developer Edition organizations or sandboxes.

In addition, you can now define methods using `override`. You can only override methods defined in classes that are `virtual`.

#### Web service methods can be used in triggers

Previously, you could not use the `webservice` keyword in triggers. As of Winter '09, you can make Web service callouts in triggers, as long as they are contained in methods that are defined as asynchronous, that is, defined with the `@future` keyword.

#### `runAs` method

Generally, all Apex scripts run in system mode, and the permissions and record sharing of the current user are not taken into account. The system method `runAs` enables you to write test methods that change user contexts to either an existing user or a new user. All of that user's record sharing is then enforced. You can only use `runAs` in a test method. The original system context is started again after all `runAs` test methods complete.

For more information, see [Testing and Code Coverage](#).

#### `System.debug` methods no longer count as code coverage in unit tests

In order to ensure that all Apex scripts genuinely have at least 75% code coverage, any calls to `System.debug` are no longer counted in unit tests as part of Apex code coverage.

#### New Ideas Class

Use the Ideas class to manipulate ideas posted on a community. This class has the following static methods:

- `ID[] findSimilar(Idea idea)`
- `ID[] getAllRecentReplies(String userID, communityID)`
- `ID[] getReadRecentReplies(String userID, communityID)`
- `ID[] getUnreadRecentReplies(String userID, communityID)`
- `Void markRead(String ideaID)`

For more information, see [Ideas Class](#).

#### `IsCustomerPortal` field is available for Apex triggers

Now, you can include the `IsCustomerPortal` field in Apex triggers. The `IsCustomerPortal` field indicates whether an account has at least one contact enabled to use the organization's Customer Portal (true) or not (false). This field is not available until at least one Customer Portal has been defined.

## Force.com Web Services API Enhancements

Available in: **Enterprise**, **Unlimited**, and **Developer** Editions

The Force.com Web Services API version 14.0 contains new features and bug fixes that improve the capabilities of applications that leverage the Force.com platform. Considerable effort has been made to ensure backwards capability for applications that have been written against previous versions of the API, starting with API 2.5.



**Note:** The older XML-RPC API remain unchanged with this release.

The new API provides a number of powerful enhancements that further improve any integration already in place between Salesforce and your other systems.

After the Winter '09 release, the 13.0 version of the WSDL file is no longer available. Instead, all requests for a WSDL return a 14.0 version. Please remember to save WSDL files with your project, as the enterprise WSDL is custom to your organization. Salesforce maintains backwards compatibility with previous versions of our API in accordance with our stated support policy. We recommend that developers migrate to the latest version of the API as often as is feasible in order to receive the benefit of new enhancements from release to release. Developers with integrations on API versions prior to version 2.5 should plan to migrate to the most recent API in preparation for the eventual end of support for the older API versions.

## Generally Available Enhancements

The Force.com Web Services API has been improved for Winter '09:

### Platform Changes

- SOQL now supports semi-joins and anti-joins, using the SOQL comparison operator `IN` or `NOT IN`. For more information, see "Comparison Operators" in the [Force.com Web Services API Developer's Guide](#).
- A user can have up to 10 query cursors open at one time. The previous limit was five.

### New Objects

The following new objects have been added to API version 14.0:

- **CaseTeamMember**: Represents a case team member, who works with a team of other users to help resolve a case.
- **CaseTeamRole**: Represents a case team role. Every case team member has a role on a case, such as "Customer Contact" or "Case Manager."
- **CaseTeamTemplate**: Represents a predefined case team, which is a group of users that helps resolve a case.
- **CaseTeamTemplateMember**: Represents a member on a predefined case team, which is a group of users that helps resolve cases.
- **CaseTeamTemplateRecord**: The **CaseTeamTemplateRecord** object is a linking object between the **Case** and **CaseTeamTemplate** objects. To assign a predefined case team to a case (customer inquiry), create a **CaseTeamTemplateRecord** object and point the `ParentId` to the case and the `TeamTemplateId` to the predefined case team.
- **New Tagging API**:
  - ◊ **AccountTag**: Associates a word or short phrase with an **Account**.
  - ◊ **AssetTag**: Associates a word or short phrase with an **Asset**.
  - ◊ **CampaignTag**: Associates a word or short phrase with a **Campaign**.
  - ◊ **CaseTag**: Associates a word or short phrase with a **Case**.
  - ◊ **ContactTag**: Associates a word or short phrase with a **Contact**.
  - ◊ **ContractTag**: Associates a word or short phrase with a **Contract**.
  - ◊ **DocumentTag**: Associates a word or short phrase with a **Document**.
  - ◊ **EventTag**: Associates a word or short phrase with an **Event**.
  - ◊ **LeadTag**: Associates a word or short phrase with a **Lead**.
  - ◊ **NoteTag**: Associates a word or short phrase with a **Note**.
  - ◊ **OpportunityTag**: Associates a word or short phrase with an **Opportunity**.
  - ◊ **SolutionTag**: Associates a word or short phrase with a **Solution**.
  - ◊ **TagDefinition**: Defines the attributes of child **Tag** objects.
  - ◊ **TaskTag**: Associates a word or short phrase with a **Task**.



## Changed Objects

The following objects have been changed in API version 14.0:

- ApexComponent and ApexPage each have an additional value available in the `ControllerType` field: `StandardSet`. If `ControllerType` is set to `StandardSet`, the controller is a standard set controller, and the value in `ControllerKey` is the name of the sObject that defines the controller.
- DescribeLayoutResult: Now returns the standard and custom buttons associated with the specified layout.
- EmailTemplate: The following fields have been added:
  - ◊ `ApiVersion` field indicates the version number for the class
  - ◊ `Markup` field indicates the Visualforce markup, HTML, JavaScript, or any other Web-enabled code that defines the content of the template.
  - ◊ `TimesUsed` field indicates the number of times the template has been used.
- Idea: The following fields have been added:
  - ◊ `IsHTML` field indicates whether the `IdeaBody` field may contain HTML or only regular text.
  - ◊ `IsLocked` field indicates whether the idea has been locked because it was merged with a parent idea.
  - ◊ `ParentIdeaID` field identifies the parent idea of this idea.
  - ◊ `Status` field shows the status of an idea from a customizable picklist of values.
  - ◊ `Categories` field is a customizable multi-select picklist used to organize Ideas into logical groups.
- IdeaComment: The following field has been added:
  - ◊ `IsHTML` field indicates whether the `CommentBody` field may contain HTML or only regular text.
- RecordType: The following fields have been added:
  - ◊ `DeveloperName`. The unique name of the object in the API. The name can contain only alphanumeric characters and must begin with a letter. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.
  - ◊ `NamespacePrefix`. The namespace prefix assigned to this object when it was created as part of a managed package. Null if this object is not part of a managed package. Limit is 15 characters. For more information about managed packages and namespace prefixes, see "About Managed Packages" in the Salesforce online help.
- User: The following changes have been made:
  - ◊ The `CommunityNickname` field has been added. This is the name the user can use in the Salesforce Ideas online community. Salesforce creates a default community nickname based on the user's username. If the username is not unique within an organization, Salesforce adds a random four digit number to the end of the username to form the community nickname.
  - ◊ The `UserPreferencesApexPagesDeveloperMode` field has been added. This field is used to indicate whether a user has enabled developer mode for editing Visualforce pages and controllers.
  - ◊ If you do not enter a value for a required encrypted field on a User record when creating or updating a user, Salesforce enters the default value of the encrypted field.
- Vote: The following changes have been made:
  - ◊ The `delete()` call is now supported allowing you to delete a vote from an idea.
  - ◊ The `Type` field can now have a value of `Down` to indicate a user's negative endorsement of an idea. This change impacts all versions of the API.



## API Migration Issues

The following technical notes are available to assist you in migrating from earlier versions:

- Release 4.0: <http://www.salesforce.com/developer/tech-notes.jsp?tn=TN-10>
- Release 5.0: <http://www.salesforce.com/developer/tech-notes.jsp?tn=TN-13>
- Release 6.0: <http://www.salesforce.com/developer/tech-notes.jsp?tn=TN-15>
- Release 7.0: <http://www.salesforce.com/developer/tech-notes.jsp?tn=TN-17>
- Release 8.0: <http://www.salesforce.com/developer/tech-notes.jsp?tn=TN-19>
- Release 9.0:  
[http://wiki.apexdevnet.com/index.php/What%27s\\_New\\_in\\_Apex\\_Web\\_Services\\_API\\_Spring\\_%2707](http://wiki.apexdevnet.com/index.php/What%27s_New_in_Apex_Web_Services_API_Spring_%2707)
- Release 10.0:  
[http://wiki.apexdevnet.com/index.php/What%27s\\_New\\_in\\_Apex\\_Web\\_Services\\_API\\_Summer\\_%2707](http://wiki.apexdevnet.com/index.php/What%27s_New_in_Apex_Web_Services_API_Summer_%2707)
- Release 11.0:  
[http://wiki.apexdevnet.com/index.php/What%27s\\_New\\_in\\_Force.com\\_Web\\_Services\\_API\\_Winter\\_%2708](http://wiki.apexdevnet.com/index.php/What%27s_New_in_Force.com_Web_Services_API_Winter_%2708)
- Release 12.0:  
[http://wiki.apexdevnet.com/index.php?title=What%27s\\_New\\_in\\_Force.com\\_Web\\_Services\\_API\\_Spring\\_%2708](http://wiki.apexdevnet.com/index.php?title=What%27s_New_in_Force.com_Web_Services_API_Spring_%2708)
- Release 13.0:  
[http://wiki.apexdevnet.com/index.php/What%27s\\_New\\_in\\_Force.com\\_Web\\_Services\\_API\\_Summer\\_%2708](http://wiki.apexdevnet.com/index.php/What%27s_New_in_Force.com_Web_Services_API_Summer_%2708)

Documentation for these earlier versions is also available. See

[http://wiki.apexdevnet.com/index.php/Earlier\\_API\\_Doc](http://wiki.apexdevnet.com/index.php/Earlier_API_Doc) on developer.force.com for links to online and PDF versions.

## Force.com Development as a Service

Force.com Development as a Service (DaaS) provides the tools and technologies used by professional developers who build applications for the Force.com platform, as well as those who migrate application changes between development organizations and production. The DaaS feature area includes support for creating, retrieving, and deploying changes to your organization's metadata.

### New Calls

The new `listMetadata()` call retrieves property information about metadata components in your organization. This call is useful when you want to identify individual components in `package.xml` for a `retrieve()` call or if you want a high-level view of particular components in your organization. For example, you could use this call to return a list of names of all the CustomObject or Layout components in your organization, and use this information to make a subsequent `retrieve()` call to return a subset of these components.

### New Components

The following metadata components are new in API version 14.0:

Metadata Component	Description
CustomLabels	Custom labels are custom text values, up to 1,000 characters in length, that can be accessed from Apex classes or Visualforce pages. Custom labels can be localized for use in different languages, countries, and currencies. This component includes a CustomLabel sub-component.
CustomObjectTranslation	Custom object translations allow you to translate custom objects for a variety of languages. This component includes CustomFieldTranslation, LayoutTranslation, LayoutSectionTranslation, ObjectNameCaseValue, PicklistValueTranslation,

Metadata Component	Description
	RecordTypeTranslation, SharingReasonTranslation, ValidationRuleTranslation, and WebLinkTranslation sub-components.
CustomSite	Force.com Sites enables you to create public websites and applications that are directly integrated with your Salesforce organization—without requiring users to log in with a username and password.
Dashboard	Dashboards are visual representations of data that allow you to see key metrics and performance at a glance. This component includes DashboardComponentSection and DashboardComponent sub-components.
Report	Reports allow you to package and move a group of reports, as well as change the filter criteria or the filtered field for a group of reports. This component includes ReportAggregate, ReportGrouping, ReportColorRange, ReportColumn, ReportFilter, ReportFilterItem, ReportParam, ReportChart, and ReportTimeFrameFilter sub-components.
ReportType	Custom report types allow you to build a framework from which users can create and customize reports. This component includes ObjectRelationship, ReportLayoutSection, and ReportTypeColumn sub-components.
Translations	Translations allow you to work with translations for a variety of languages. This component includes CustomApplicationTranslation, CustomLabelTranslation, CustomPageWebLinkTranslation, CustomTabTranslation, ReportTypeTranslation, ReportTypeSectionTranslation, ReportTypeColumnTranslation, and ScontrolTranslation sub-components.

## Updated Components

The following metadata fields have been added or changed in API version 14.0:

Metadata Component	Field	Change	Description
CustomField	trackHistory	New	Indicates whether history tracking is enabled for the field ( <code>true</code> ) or not ( <code>false</code> ).
CustomObject	listViews	New	Represents one or more list views associated with the object.
CustomObject	searchLayouts	New	The Search Layouts related list information for a custom object.
CustomObject	sharingReasons	New	The reasons why the custom object is being shared. Apex managed sharing allows developers to use Apex to programmatically share custom objects. A sharing reason is used to indicate why sharing was implemented for a custom object.
CustomObject	sharingRecalculations	New	A list of custom sharing recalculations associated with the custom object. Apex sharing recalculations represent the Apex classes that developers can write to recalculate the Apex managed sharing for a specific custom object.
CustomPageWebLink	page	New	If the value of the <code>linkType</code> field is <code>page</code> , this field represents the Visualforce page; otherwise, this field should not be specified.

Metadata Component	Field	Change	Description
CustomPageWebLink	protected	New	Indicates whether this component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected components cannot be linked to or referenced by components created in the installing organization.
CustomTab	mobileReady	New	Indicates if the custom tab is available for Mobile Edition ( <code>true</code> ) or not ( <code>false</code> ).
DescribeMetadataObject	childXmlNames	New	A list of child sub-components for this component.
Document	name	New	The document name. The list of characters allowed in the <code>fullName</code> field has been reduced for versions 14.0 and later. The <code>fullName</code> can only contain characters, letters, and the underscore ( <code>_</code> ) character, must start with a letter, and cannot end with an underscore or contain two consecutive underscore characters. This field contains the value contained in the <code>fullName</code> field before version 14.0. This field is only populated if the value of the <code>fullName</code> field contained characters that are no longer accepted in that field.
EmailTemplate	attachedDocuments	New	A list of references to documents in your organization. These documents are included as attachments in the email template. Each document is referenced by its path, for example <code>MyFolder/MyDocument.txt</code> .
EmailTemplate	attachments	New	A list of attachments for the email template.
EmailTemplate	name	New	Email template name. The list of characters allowed in the <code>fullName</code> field has been reduced for versions 14.0 and later. The <code>fullName</code> can only contain characters, letters, and the underscore ( <code>_</code> ) character, must start with a letter, and cannot end with an underscore or contain two consecutive underscore characters. This field contains the value contained in the <code>fullName</code> field before version 14.0. This field is only populated if the value of the <code>fullName</code> field contained characters that are no longer accepted in that field.
FileProperties	fullName	New	The file developer name used as a unique identifier for API access. The value is based on the <code>fileName</code> field but the characters allowed are more restrictive. The <code>fullName</code> can only contain characters, letters, and the underscore ( <code>_</code> ) character, must start with a letter, and cannot end with an underscore or contain two consecutive underscore characters.
FileProperties	type	New	The component type. The type should match a component name, such as <code>CustomObject</code> , <code>CustomField</code> , or <code>Scontrol</code> .
LayoutItem	emptySpace	New	Indicates if this page layout item is an empty space ( <code>true</code> ) or not ( <code>false</code> ).

Metadata Component	Field	Change	Description
Package	apiAccessLevel	New	<p>Package components have access via dynamic Apex and the API to standard and custom objects in the organization where they are installed. Administrators who install packages may wish to restrict this access after installation for improved security. The valid values are:</p> <ul style="list-style-type: none"> <li>Unrestricted—Package components have the same API access to standard objects as the user who is logged in when the component sends a request to the API.</li> <li>Restricted—The administrator can select which standard objects the components can access. Further, the components in restricted packages can only access custom objects in the current package if the user profile provides access to them.</li> </ul>
Package	description	New	A short description of the package.
Package	namespacePrefix	New	The namespace of the developer organization where the package was created.
Package	objectPermissions	New	Indicates which objects are accessible to the package, and the kind of access available (create, read, update, delete).
Package	setupWeblink	New	The weblink used to describe package installation.
Picklist	controllingField	New	The <code>fullName</code> of the controlling field if this is a dependent picklist. A dependent picklist works in conjunction with a controlling picklist or checkbox to filter the available options. The value chosen in the controlling field affects the values available in the dependent field.
PicklistValue	controllingFieldValues	New	<p>A list of values in the controlling field that are linked to this picklist value. The controlling field can be a checkbox or a picklist. The values in the list depend on the field type:</p> <ul style="list-style-type: none"> <li>Checkbox: checked or unchecked.</li> <li>Picklist: The <code>fullName</code> of the picklist value in the controlling field.</li> </ul>
Profile	classAccesses	New	Indicates which top-level Apex classes have methods that users assigned to this profile can execute.
Profile	pageAccesses	New	Indicates which custom Visualforce controllers or controller extensions applied to a Visualforce page have methods that users assigned to this profile can execute.

Metadata Component	Field	Change	Description
ProfileObjectPermissions	allowCreate	Changed	<p>Indicates whether the object referenced by the <code>object</code> field can be created by the users assigned to this profile (<code>true</code>) or not (<code>false</code>).</p> <p>This field is named <code>revokeCreate</code> before version 14.0 and the logic is reversed. The field name change and the update from <code>true</code> to <code>false</code> and vice versa is automatically handled between versions and does not require any manual editing of existing XML component files. The field name change and the update from <code>true</code> to <code>false</code> and vice versa is automatically handled between versions and does not require any manual editing of existing XML component files.</p>
ProfileObjectPermissions	allowDelete	Changed	<p>Indicates whether the object referenced by the <code>object</code> field can be deleted by the users assigned to this profile (<code>true</code>) or not (<code>false</code>).</p> <p>This field is named <code>revokeDelete</code> before version 14.0 and the logic is reversed. The field name change and the update from <code>true</code> to <code>false</code> and vice versa is automatically handled between versions and does not require any manual editing of existing XML component files.</p>
ProfileObjectPermissions	allowEdit	Changed	<p>Indicates whether the object referenced by the <code>object</code> field can be edited by the users assigned to this profile (<code>true</code>) or not (<code>false</code>).</p> <p>This field is named <code>revokeEdit</code> before version 14.0 and the logic is reversed. The field name change and the update from <code>true</code> to <code>false</code> and vice versa is automatically handled between versions and does not require any manual editing of existing XML component files.</p>
ProfileObjectPermissions	allowRead	Changed	<p>Indicates whether the object referenced by the <code>object</code> field can be read by the users assigned to this profile (<code>true</code>) or not (<code>false</code>).</p> <p>This field is named <code>revokeRead</code> before version 14.0 and the logic is reversed. The field name change and the update from <code>true</code> to <code>false</code> and vice versa is automatically handled between versions and does not require any manual editing of existing XML component files.</p>
RecordType	description	New	Record type description.
RecordType	label	New	The record type label. The list of characters allowed in the <code>fullName</code> field has been reduced for versions 14.0 and later. The <code>fullName</code> can only contain characters, letters, and the underscore ( <code>_</code> ) character,

Metadata Component	Field	Change	Description
			must start with a letter, and cannot end with an underscore or contain two consecutive underscore characters. This field contains the value contained in the <code>fullName</code> field before version 14.0. This field is only populated if the value of the <code>fullName</code> field contained characters that are no longer accepted in that field.
Scontrol	<code>fileName</code>	New	The unique name for the s-control. It must contain alphanumeric characters only and begin with a letter.
StaticResource	<code>cacheControl</code>	New	Indicates whether the static resource is marked with a public caching tag so that a third-party delivery client can cache the content.
Weblink	<code>page</code>	New	If the value of the <code>linkType</code> field is <code>page</code> , this field represents the Visualforce page; otherwise, this field should not be specified.
Weblink	<code>protected</code>	New	Indicates whether this sub-component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected sub-components cannot be linked to or referenced by components or sub-components created in the installing organization.
WorkflowAlert	<code>protected</code>	New	Indicates whether this sub-component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected sub-components cannot be linked to or referenced by components or sub-components created in the installing organization.
WorkflowFieldUpdate	<code>protected</code>	New	Indicates whether this sub-component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected sub-components cannot be linked to or referenced by components or sub-components created in the installing organization.
WorkflowOutboundMessage	<code>protected</code>	New	Indicates whether this sub-component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected sub-components cannot be linked to or referenced by components or sub-components created in the installing organization.
WorkflowTask	<code>protected</code>	New	Indicates whether this sub-component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected sub-components cannot be linked to or referenced by components or sub-components created in the installing organization.
WorkflowFieldUpdate	<code>targetObject</code>	Changed	Indicates whether this sub-component is protected ( <code>true</code> ) or not ( <code>false</code> ). Protected sub-components cannot be linked to or referenced by components or sub-components created in the installing organization.

# Force.com Connect Offline: Custom Object Tabs

Available in: **Unlimited**, **Enterprise**, **Professional**, and **Developer** Editions

Winter '09 introduces support for custom objects and their related lists on separate tabs in Connect Offline. The new Administration Console allows administrators to configure Offline configurations of data sets, including custom objects, for various profiles. Offline Briefcase configurations are sets of parameters that determine the data available in a user's Briefcase. Organizations can create multiple offline Briefcase configurations to simultaneously suit the needs of different types of offline users. For example, one configuration might synchronize leads and opportunities to a sales representative's Briefcase, while another configuration synchronizes accounts and related opportunities to an account executive's Briefcase.

## About Custom Object Tabs

### Custom Object Tabs Overview

You can now include custom objects in the data set for a Briefcase configuration in the Administration Console. A Briefcase configuration is associated with a set of profiles. If there is no Briefcase configuration associated with a user's profile, the user can configure their own Briefcase settings. However, it is more advantageous to use the Administration Console. The benefits of using the Administration Console include:

- Centralized configuration for sets of user profiles.
- Better support for custom objects. Briefcase configurations allow synchronization with any custom object, while the user Briefcase settings only support custom objects that are related to accounts, contacts, opportunities, or leads.
- Greater flexibility and filtering capabilities when configuring Briefcase settings using data sets.

### Setting Up the Administration Console

To manage your offline Briefcase configurations, click **Setup ► Offline Administration ► Offline Briefcase Configurations**.

- To define an offline Briefcase configuration, click **New Offline Briefcase Configuration**.
- To define data sets for an offline Briefcase configuration, click the name of the configuration, then click **Edit** in the Data Sets related list.
- To make changes to an offline Briefcase configuration, click **Edit**.
- To delete an offline Briefcase configuration, click **Del**.
- To view details about an offline Briefcase configuration, click its name.
- To clone an offline Briefcase configuration, select the configuration you want to clone and click **Clone**.
- To activate an offline Briefcase configuration, click **Edit** next to the configuration you want to activate, select **Active**, and click **Save**. Deselect **Active** to deactivate the offline Briefcase configuration.

### Implementation Tips

- To show custom objects for particular profiles in Connect Offline, edit the Briefcase configuration data sets for the associated profiles.
- If a custom object containing a custom tab icon is synchronized to a Connect Offline Briefcase, the look and feel of the custom tab defaults to the Star tab style in Connect Offline.
- Connect Offline does not currently support the Force.com app menu. All tabs appear in a single grouping and it is not possible to group sets of tabs into distinct apps.



## Force.com Connect for Outlook: Streamlined Contact Associations

With Winter '09, the process for associating accounts with contacts in Connect for Outlook is streamlined to make new users more successful and improve existing users' productivity. The **Associate** button has also been renamed **Change Associations** to clarify the intended usage for the button.

Winter '09 includes some performance enhancements for Connect for Outlook that result in a more responsive application with reduced time for starting up the clients, adding emails, and associating records to Salesforce. Organizations with large numbers of custom objects will notice the biggest improvement.

## About Streamlined Contact Associations

### Associating Accounts with Contacts in Connect for Outlook

If you mark contacts for sync or change associations for contacts, and the `Company` or `Manager's Name` fields are populated for one of the selected contacts, you must complete the account association process by selecting the associated `Account` and `Reports To` records in Salesforce. If only one contact was selected for sync and the automatic search feature is enabled, the account association is pre-populated by an automatic search. The automatic search feature is enabled by selecting the search checkbox in **Tools > Salesforce Options > Contacts > Advanced > Associations**.

To associate a contact with a Salesforce account and contact to whom the Outlook contact reports:

1. In the `Account` tab, select an account to associate with the contact using one of the options below. The selected account appears in the contact's `Account Name` field in Salesforce, or in the matching Salesforce field defined in **Tools > Salesforce Options > Contacts > Advanced > Field Maps** for the `CompanyName` Outlook field. This step is required if the contact's `Company` field has a value in Outlook.
  - Double-click an account in the search results to choose an existing account.
  - Click **Quick Create** to create a new Salesforce account for the association. The contact will be associated with this new account after the next sync.
2. In the `Reports To` tab, select a contact to whom the contact reports. The selected person appears in the contact's `Reports To` field in Salesforce, or in the matching Salesforce field defined in **Tools > Salesforce Options > Contacts > Advanced > Field Maps** for the `ManagerName` Outlook field. This step is required if the contact's `Manager's Name` field has a value in Outlook.



**Note:** In Outlook 2007, open a contact and click the **Details** button on the Ribbon to see the `Manager's Name`.

3. Click **OK**.

## Force.com Connect for Lotus Notes: Streamlined Contact Associations

With Winter '09, the process for associating accounts with contacts in Connect for Lotus Notes is streamlined to make new users more successful and improve existing users' productivity. The **Associate** button has also been renamed **Change Associations** to clarify the intended usage for the button.

Winter '09 also includes the following enhancements for Connect for Lotus Notes:



### Improved Performance

Winter '09 includes some performance enhancements for Connect for Lotus Notes that result in a more responsive application with reduced time for starting up the clients, adding emails, and associating records to Salesforce. Organizations with large numbers of custom objects will notice the biggest improvement.

### Support for Lotus Notes 8

Connect for Lotus Notes now supports basic mode for Lotus Notes 8.

## About Streamlined Contact Associations

### Associating Accounts with Contacts in Connect for Lotus Notes

If you mark contacts for sync or change associations for contacts, and the `Company` or `Manager's Name` fields are populated for one of the selected contacts, you must complete the account association process by selecting the associated `Account` and `Reports To` records in Salesforce. If only one contact was selected for sync and the automatic search feature is enabled in the advanced contacts options, the account association is pre-populated by an automatic search.

To associate a Lotus contact with a Salesforce account and contact to whom the Lotus contact reports:

1. In the `Account` tab, select an account to associate with the contact using one of the options below. The selected account appears in the contact's `Account Name` field in Salesforce, or in the matching Salesforce field defined in the field map for the `CompanyName` Outlook field. This step is required if the contact's `Company` field has a value in Outlook.
  - Double-click an account in the search results to choose an existing account.
  - Click **Quick Create** to create a new Salesforce account for the association. The contact will be associated with this new account after the next sync.
2. In the `Reports To` tab, select a contact to whom the contact reports. The selected person appears in the contact's `Reports To` field in Salesforce, or in the matching Salesforce field defined in the field map for the `ManagerName` Outlook field. This step is required if the contact's `Manager's Name` field has a value in Outlook.



**Note:** In Outlook 2007, open a contact and click the **Details** button on the Ribbon to see the `Manager's Name`.

3. Click **OK**.

## Additional Force.com Platform Enhancements

### Dashboard Enhancements

Winter '09 provides the following capabilities related to dashboards:


#### Images Supported in Dashboard Emails for Lotus Notes

Now users can specify that Salesforce uses Lotus Notes-supported images when sending dashboard emails. Previously Salesforce sent images in dashboard emails only as `.png` (Portable Network Graphic) files. Lotus Notes does not support `.png` images and when users opened dashboard emails in Lotus Notes the images appeared as boxes with a red X.

To specify that Salesforce uses Lotus Notes-supported images when sending dashboard emails:

1. Click **Setup** ► **Customize** ► **User Interface**.
2. Select `Use Lotus Notes-friendly images in dashboard emails`.

3. Click **Save**.



**Note:** Dashboard emails that contain Lotus Notes-supported images are substantially larger and the image quality may be lower.

**Support for Tagging Dashboards**

Users now have the ability to tag dashboards with personal or public tags.

To enable tags for dashboards:

- 1. Click **Setup** > **Customize** > **Tags** > **Tag Settings**.
- 2. Select `Enable Personal Tags` if you want to allow users to add personal tags to records, and select `Enable Public Tags` if you want to allow users to add public tags to records. Deselect both options if you want to disable tagging.
- 3. Select `Dashboards`.

**Formula Enhancements**

Winter '09 includes the following enhancements for formulas:

**Support for Self Relationships in Cross-Object Formulas**

Previously, you could not build formulas that referenced a merge field from a self relationship. In Winter '09, this restriction has been removed everywhere formulas are available. For example, you can now create a cross-object formula field on the Account object that displays a merge field from the record's parent account as follows:

```
Parent.Phone
```

**Support for New Logical Operators**

When building formulas anywhere in Salesforce, you now have the option of using the following logical operators:

**&& (AND)**

<b>Description:</b>	Evaluates if two values or expressions are both true. Use this operator as an alternative to the logical function AND.
<b>Use:</b>	<code>(logical1) &amp;&amp; (logical2)</code> and replace <code>logical1</code> and <code>logical2</code> with the values or expressions that you want evaluated.
<b>Example:</b>	<code>IF((Price&lt;100 &amp;&amp; Quantity&lt;5), "Small", null)</code>  This formula displays "Small" if the price is less than 100 and quantity is less than five. Otherwise, this field is blank.

**|| (OR)**

<b>Description:</b>	Evaluates if at least one of multiple values or expressions is true. Use this operator as an alternative to the logical function OR.
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<b>Use:</b>	<i>(logical1)    (logical2)</i> and replace any number of logical references with the values or expressions you want evaluated.
<b>Example:</b>	<pre>IF((ISPICKVAL(Priority , "High"))       (ISPICKVAL(Status , "New")),    ROUND(NOW()-CreatedDate, 0), null)</pre> <p>This formula returns the number of days a case has been open if the Status is new or the Priority is high. If the case was opened today, this field displays a zero.</p>
<b>Validation Rule Example:</b>	<pre>(Discount_Rate__c &lt; 0)    (Discount_Rate__c &gt; 0.40)</pre> <p>This validation rule formula displays the following error message when the Discount Rate custom field is not between 0 and 40%: "Discount Rate cannot exceed 40%."</p>

**== (Equal)**

<b>Description:</b>	Evaluates if two values are equivalent. Use this interchangeably with the equals sign (=).
<b>Use:</b>	<i>expression1 == expression2</i> and replace each <i>expression</i> with merge fields, expressions, or other numeric values.
<b>Example:</b>	<pre>IF(Probability == 1,    ROUND(Amount*0.02, 2) , 0)</pre> <p>This formula calculates the 2% commission amount of an opportunity that has a probability of 100%. All other opportunities will have a commission value of 0.</p> <p>Possible results:</p> <ul style="list-style-type: none"> <li>• An opportunity with a Probability of 90% has a commission of 0.</li> <li>• An opportunity with a Probability of 100% and an Amount of \$100,000 has a commission of \$2,000.</li> </ul>

**!= (Not Equal)**

<b>Description:</b>	Evaluates if two values are not equivalent. Use this interchangeably with the original not equals sign used in formulas (<>).
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<b>Use:</b>	<i>expression1</i> <b>!=</b> <i>expression2</i> , and replace each expression with merge fields, expressions, or other numeric values.
<b>Example:</b>	<pre>IF(Maint_Amount__c + Services_Amount__c != Amount, "DISCOUNTED", "FULL PRICE")</pre> <p>This formula displays "DISCOUNTED" on an opportunity if its maintenance amount and services amount do not equal the opportunity amount. Otherwise, displays "FULL PRICE." Note that this example uses two custom currency fields for Maint Amount and Services Amount.</p>

## Language Support

The following languages are now supported by Salesforce:

- Czech\*
- Danish
- Hungarian\*
- Polish\*
- Turkish\*



**Note:** \* This language is not automatically available. You must contact your salesforce.com representative to enable this language. In addition, this language is only available as an end-user language, which means that only the end-user labels are translated.

## Custom Label Support Added

In Winter '09, Salesforce added *custom labels* -- the ability to create custom text values, up to 1,000 characters in length, that can be accessed from Apex classes or Visualforce pages. The values can be translated into any language Salesforce supports. Custom labels enable developers to create multilingual applications by automatically presenting information (for example, help text or error messages) in a user's native language.

## Advanced Managed Package Flexibility

### Improved Component Management

In Winter '09, component management has improved. Certain components, now have a `Unique Name` field. This is a unique identifier used to refer to the component when using the Force.com metadata API. In managed packages, this name prevents naming conflicts on package installations. It can contain only alphanumeric characters and must begin with a letter.



**Note:** The `Unique Name` field cannot be updated after the component is Managed - Released in the developer's organization and once a `Unique Name` is used for a component, it cannot be used again if the component was uploaded as Managed - Released, even if the component is later deleted. The `Unique Name` must be unique across public folders, but not personal folders.

The following components have the field `Unique Name`:

- Documents
- Dashboards

- Email Templates
- Letterhead
- List Views
- Record Types (For Record Types, the `Record Type Name` field functions the same as a `Unique Name` field)
- Reports



**Note:** With the exception of Email Templates, Letterhead, and Record Types, the developer must have the "Customize Application" permission to see the new `Unique Name` field.

In managed packages, components are uniquely named due to the enforcement of the namespace prefix assigned to all developer organizations creating managed packages. The namespace prefix is now displayed on all component detail pages. Managed package components also have a new `Installed by` field that identify the package from which the component was installed.

When installing unmanaged packages in Winter '09, Salesforce gives the installer the option to resolve select naming conflicts automatically. When this is selected, Salesforce changes the name of the component in the package being installed.

#### Custom Objects Managed Package Field Changes

Previously, the `Allow Reports` and `Allow Activities` fields on a custom object were locked after they were released in a managed package. In Winter '09, both of these fields can be changed by the developer in future releases of the managed package.

#### Custom Report Types Managed Packaged Changes

In Winter '09, a developer can edit a custom report type in a managed package after it is released. Subscribers automatically receive these changes when they install a new version of the managed package. However, developers cannot remove objects or fields from the report type once the package is released.

#### Managed Record Types

In Winter '09, record types are now managed. Subscribers can no longer edit or delete record types installed by a managed package. If a subscriber does not want to use a managed record type, they should uncheck the `Active` checkbox. This change allows package developers to reliably refer to record types in Apex code.



**Note:** When upgrading a managed package that includes record types, all the record types are installed as managed even if they were installed previously. Therefore, if a subscriber has relabeled a managed record type, upon upgrade they have two of the same record types.

#### Managed Folders and Letterheads Editable and Deleteable in the Subscriber's Organization

In Winter '09, folders and letterheads are editable and deleteable in Subscriber's organization. For example, if a managed folder is deleted in the subscriber's organization and the developer adds a new report in an upgrade, the folder is created again in the subscriber's organization with only the new report.

#### Removing a Released Component from a Managed Package

In Winter '09, to remove a released component from a managed package, the developer must delete the component in the developer organization, even if it is a non-upgradeable component.

#### Field Management

Previously, after a non-upgradeable field on an upgradeable component was Managed - Released, it was locked on the developer side. In Winter '09, these non-upgradeable fields are no longer locked. The developer can make changes and new subscribers get the changes as their defaults. However, existing subscribers do not receive these changes even after upgrading.

### Protected Components

In Winter '09, developers can mark certain components as *protected*. Protected components cannot be linked to or referenced by components created in the subscriber organization. A developer can easily delete a protected component in a future release without worrying about failing installations. However, once a component is marked as unprotected and is released globally, the developer cannot delete it.

Developers can mark the following components as protected in managed packages:

- Custom Labels
- Custom Links (for Home page only)
- Workflow Alert
- Workflow Field Update
- Workflow Outbound Message
- Workflow Task

### Password Strength Checker

There is a new visual indicator that provides dynamic feedback on the strength of the password that you are typing as you enter a new password in the *New Password* field on the **Setup ► My Personal Information ► Change My Password** page. When the password matches the minimum requirements for your organization's password policy, the visual indicator and associated text indicate that the password is acceptable and can now be saved. A tip is displayed to suggest how to make the password stronger and more difficult to guess.

### Single Sign-On Using SAML

Winter '09 includes enhancements to SAML for all Salesforce Editions:

#### SAML Start and Logout Pages

The landing, login, and logout pages can be customized for single sign-on users using SAML 1.1. The SAML specification defines a `TARGET` field that may be included in the HTTP POST that sends a SAML assertion. By passing a URL in this field, the SAML identity provider can control what page the user sees after successfully logging in with SAML.



**Note:** This URL must be in the salesforce.com domain, either in an absolute, (`https://na1.salesforce.com/005`), or relative, (`/005`), format.

In some cases, it is useful for the identity provider to pass additional information to Salesforce, such as the URLs for the appropriate login and logout pages for a particular user. Salesforce embeds this additional information in the `TARGET` field in a URL format. This URL accepts URL-encoded parameters and propagates the information as necessary. The URL is as follows:

```
https://saml.salesforce.com/?
```

Salesforce supports the following parameters on this URL:

- `ssoStartPage` is the page to which the user should be redirected when trying to log in with SAML. The user is directed to this page when requesting a protected resource in Salesforce, without an active session. The `ssoStartPage` should be the SAML identity provider's login page.
- `startURL` is the URL where you want the user to be directed when sign-on completes successfully. This URL can be absolute, such as `https://na1.salesforce.com/001/o` or it can be relative, such as `/001/o`.
- `logoutURL` is the URL where you want the user to be directed when they click the **Logout** link in Salesforce. The default is `http://www.salesforce.com`.



**Note:** The parameter values are encoded. This allows the URLs, passed as values that include their own parameters, to be handled correctly.

The following sample URL includes properly-encoded parameters. It passes customized start and logout pages embedded as parameter values in the query string.

`https://saml.salesforce.com/?ssoStartPage=%2F001%2Fo&logoutURL=http%3A%2F%2Fwww.salesforcecustomer.com`

### User License Enhancements for Developer Edition Organizations

With Winter '09, developers have access to even more Salesforce features. In addition to the standard two Salesforce licenses, new Developer Edition organizations now have the following user licenses:

License Name	Total Licenses
Salesforce Platform	3
Partner	5
Customer Portal Manager	10

To view the user licenses in your organization, click **Setup ► Company Profile ► Company Information**.

### Workflow and Approval Process Enhancements

#### Support for Activities, Workflow, and Approval Processes on Junction Objects

In Summer '08, Salesforce introduced the ability to create two master-detail relationships on a single junction object, making it easier to represent a many-to-many relationship. However, you could not create activities, workflow rules, and approval processes on junction objects. In Winter '09, this restriction has been removed.



**Note:** When creating workflow rules and approval processes on junction objects, you can associate any type of workflow action except for outbound messages.

#### Recall Actions for Approval Processes

In earlier versions, you could set an option to allow submitters to recall approval requests. In Winter '09, you can create recall actions—actions that are performed when a submitted approval request is recalled. For example, you can create a recall action to change the status of a request from "In Progress" to "Not Submitted."

To create recall actions:

1. Click **Setup ► Create ► Workflow & Approvals ► Approval Processes** to access the approval processes list page.
2. Create a new approval process, or open an existing one by clicking the approval process name.
3. On the Approval Process Detail page, click **Add Existing** or **Add New** within the Recall Actions related list.
4. Create recall actions as you would for initial submission, final approval, or final rejection. Recall actions can include email alerts, field updates, tasks, or outbound messages. By default, an action to unlock the record runs automatically on recall.

When a user clicks **Recall Approval Request** in the Approval History related list on the detail page of a submitted record, the pending approval request for the record is withdrawn and recall actions are run.

### Case Comments Workflow

Now, you can create workflow rules for case comments so that case comments automatically trigger outbound messages or update fields on the cases with which they are associated. For example, you can create a workflow rule so that when a case comment is added to a case, the case's `Status` changes from `Closed` to `New`.

To create such a workflow rule:

1. Click **Setup** ► **Create** ► **Workflow & Approvals** ► **Workflow Rules** to access the workflow rules list page.
2. On the workflow rules list page, click **New Rule**.
3. Select `Case Comment` in the `Select object` drop-down list.
4. Click **Next**.
5. Enter a rule name. Optionally, enter a description for the rule.
6. Select the evaluation criteria.
7. Choose `criteria are met`.
8. Enter the following criteria: `Case Comment: Published equals True AND Case: Status equals Closed`.
9. Click **Save & Next**.
10. Click **Add Workflow Action** and choose **New Field Update**.
11. Enter a name for your workflow field update. Optionally, enter a description for the workflow field update.
12. Select `Case` in the `Field to Update` drop-down list.
13. Choose `Status` in the second `Field to Update` drop-down list.
14. Select `New` in the `A specific value` field to specify the new field value.
15. Click **Save**.
16. Select **Done**.
17. Click **Activate**.

Note the following when creating workflow rules for case comments that automatically update the fields on their associated cases:

- For more information about creating workflow rules, see "Creating Workflow Rules" in the Salesforce online help.
- To insert case merge fields in the formula of a workflow rule, click **Insert Field** on the Rule Criteria section and choose `Case Comment`.
- Note what is and is not triggered on cases when case comments update case fields:

Triggered	Not Triggered
Workflow rules	Assignment rules
Validation rules	Auto-response rules
Roll up summary fields	
Escalation rules	
Apex triggers	

This enhancement is available in Enterprise, Unlimited, and Developer Editions.



### Community Nickname User Field

All Salesforce user records now have a required `Community Nickname` field that contains a unique name for identifying the user in the Salesforce Ideas online community. This field allows up to 40 alphanumeric characters.

A user's community nickname displays at the bottom of an idea's detail page when the user votes for that idea. In addition, users can click their community nickname on the Ideas tab to view their Recent Activity page.

For each existing user, Salesforce creates a default community nickname based on the user's alias. If the alias is not unique within an organization, Salesforce adds a four digit random number to the end of the alias to form the community nickname.

### Default Values for Encrypted Custom Fields on User Records

When creating an encrypted custom field on the User object, you can now configure a default value. Default values can help users understand the format in which to enter the value.

If you created any required encrypted custom fields on the User object prior to Winter '09, Salesforce automatically sets the default value of those fields to a series of nines. You can change the default value on the custom field edit page.

### Salesforce Platform and Salesforce Platform Light Users Can Enable Connect Offline

New organizations can provide Connect Offline licenses to platform users. You can assign a license by selecting the `Offline User` checkbox when creating a new user that has a `Salesforce Platform`, or `Salesforce Platform Light` user license. Note that existing organizations cannot provide Connect Offline licenses to platform users.