



Novell Teaming 2.0

by Phil Karren



Novell Teaming 2.0, code-named Boulder, gives users an easy way bring people together and capture great ideas, flesh them out and then put them to work solving customer problems. New social productivity features and usability enhancements help people to develop and share their work, bring together the right people to take on new challenges, build an active body of useful knowledge, coordinate their activities and automate their work processes.

Developers and integrators can use Teaming 2.0 to develop new business growth by developing solutions around the product. They can also hold more business-focused conversations on the specific user needs they're supporting, and the benefits this brings to the business. Both programmers and non-programmers can customize Teaming to improve work processes, integrate data from enterprise applications, and tie in to services on the Web.

For IT groups, Teaming 2.0 is easy to deploy and manage, provides more flexibility for working with their identity infrastructure and runs much faster. Performance is four times greater than its predecessor.

Product enhancements for this new release fall into the following areas: user experience; customization and integration; and management.

* Engaging Users with a Fresh New Look and Feel

The user experience has to start with a focus on what they want to accomplish ó the jobs they need done. Clayton Christensen, author and Professor of Business Administration at Harvard, says that when people need to accomplish a task, they ask themselves, "What can I buy or what can I hire, to get this job done for me?"¹ He points out that people often look for, and then 'hire' products to do the job. In his book 'Scrolling Forward,' author David Levy describes documents as workers to be hired for a job as well.²

Users can hire Teaming workspaces ó and all of the great contents and capabilities that come with them ó to do important jobs for them in authoring, sharing, coordinating and automating, but it always starts with a clear understanding the job they need done, and the recognition that those documents and tools can do the job required.

To get users started, our development team worked with our education partner Brainstorm, to add 5 'interview' videos to help the prospect see how they can put Teaming to work for them: What is Teaming, Getting Started, Getting Informed, Navigation and Customizations. These videos show up under the masthead, and once viewed, can be hidden.

As the development team talked to our users and IT contacts, it became clear that

they wanted a simpler, more appealing look and feel that would bring users into the system. They wanted Teaming to 'interview' better. Teaming 2.0 does just that, with a cleaner, simpler design. The key elements of this new design include a masthead at the top of the window for search and quick navigation; a sidebar for performing actions on workspaces and items in them; a dashboard in the personal workspace; and a content area. In addition, many of the elements displayed in the content area, like blogs and wikis, also have a cleaner and simpler presentation.

* Using the Masthead, Sidebar and Content Area to Get the Right Work Done

Since hiring workspaces and their contents are the users' most important job, search and quick access figure prominently in the masthead, and users can search for general terms, or look for specific people, places or tags. They can also quickly go to their own personal workspace, go to one of their list of favorite workspaces or folders, or choose from any of the teams they belong to. Workspace owners can also create a custom brand for their workspace, using a combination of images and text. The bottom of the masthead has a tool for navigating workspaces, and under that is a menu of management options for workspaces and their contents.

A question mark at the upper right of the masthead provides a help mode that lets

users click on fields and controls in the Teaming presentation and learn more about them. Clicking anywhere on the translucent area takes the user out of help mode.

The sidebar provides quick options for posting a micro-blog, and collapsible controls for tracking people and workspaces, navigating to recent places, navigating through folders in a workspace, viewing team members, tagging, user preferences, starting a meeting in Conferencing, sending e-mail, and a clipboard for collecting a set of colleagues to work with. Users can hide the sidebar when they want to have the contents of a folder occupy the full width of the display.

* **Getting to the Right Workspaces Easily**

The best way for users to get to the workspaces they need is to use the Favorites and My Teams drop-down controls in the masthead. The search fields in the masthead also provide a quick way to get to relevant content.

As is the case for any Web resource, most users know how to share a URL in an e-mail or an Instant Message. Teaming 2.0 provides a way to assign simple URLs to any workspace, for easier sharing. Simple URLs are also accessible by Web crawlers.

Because workspaces in Teaming are stored in a hierarchical relationship, there is also a navigation control located at the bottom of the masthead to provide one other way for people to click through the tree of workspaces until they get to what they want.

The sidebar also provides some navigation options, for moving to recent locations, or moving to folders within a workspace.

* **Keeping Current with the Dashboard and Micro-Blogs**

As we visited our customers, and watched users at work with traditional file services, we noticed that most file sharing took place accompanied by a yelling over cubicle walls or phone calls — 'the file is there!' The information about the material being shared is essential: people need to know what is new, whether the information they need is ready, and what their co-workers are doing. They need to be informed, and distributed teams with members in several different time zones can't just yell. One of the reasons for e-mail overuse is that people hire e-mail to carry information that wasn't easy to share any other way. Now they have something new and better to hire for the job.

The Teaming Dashboard gives people a new way to stay current and automatically inform their peers of their work, and also takes the load off those overloaded e-mail boxes.

Users can choose from six tabs, depending on what it is they want to know. Overview shows a summary of the documents, posts, tasks and appointments in a user's workspace. What's New is a custom news feed that shows recent posts by teammates, tracked users, and updates to tracked spaces. The user can set a scope of interest: My Teams, Tracked Places; Site Wide. Tasks and Calendars shows due tasks and upcoming appointments, and collects them from all folders in Teaming. Most users belong to many different teams, and this provides a great way to keep track of all the commitments made in those different contexts.

Recent Entries shows what the user has recently posted or visited, and also recent visitors to the the user's personal workspace. Micro-Blogs and Shared Items shows a news feed of updates from other

tracked people, and items recently shared. Profile lets users edit their background information.

Subscriptions provide users with a way of staying current on the latest contents in Teaming from their favorite RSS reader.

On the Web, people have hired Twitter as a quick and simple way to broaden their knowledge, to create a following, and to provide a steady stream of useful information. This simple tool has attracted millions of users.

Teaming 2.0 provides a simple way of letting your colleagues know what you're working on, where you are, and what you're doing with the new micro-blog feature, found at the top of the sidebar. As you post these small updates of just two or three sentences, your co-workers can see a collection of your activities in their own Dashboards. This is a great tool for letting people know what's going on, without filling the e-mail inboxes. Now your colleagues can know that you're on a con call with a customer, working on a new design for a critical account, or packing up to catch a plane.

* **Easy to Post Information in Workspaces**

If enabled by the IT team, every folder in Teaming 2.0 has an e-mail address, making it easy for e-mail users to simply send files with attachments to that address, and the attachments will be placed in that folder. Now, instead of sending attachments to a list of recipients, a user can simply send the attachments to a folder, and let users come to the documents there.

* Working with Folders

The Boulder team made it easier to work with the contents of folders as well, with a cleaner presentation and new elements to show what's unread, what's new and who has access.

* Boulder Languages

Boulder is available in the following languages:

Language	User interface, Online Help and Quickstart	Documentation
Chinese - simplified	Yes	Video scripts
Chinese - traditional	Yes	Video scripts
Danish	Yes	Video scripts
Dutch	Yes	Video scripts
English	Yes	In-product videos Installation guide User guide
French	Yes	Video scripts User guide
German	Yes	Video scripts User guide
Hungarian	Yes	Video scripts
Italian	Yes	Video scripts
Japanese	Yes	Video scripts
Polish	Yes	Video scripts
Portuguese	Yes	Video scripts User guide
Russian	Yes	Video scripts
Spanish	Yes	Video scripts User guide
Swedish	Yes	Video scripts User guide

* Customization

There is a variety of customization opportunities for non-programmers and programmers of different persuasions, to help our mutual customers improve how they get work done.

Programming-Free Customization For Normal Users

Non-programmers can use the following features to make Teaming match their particular needs and tastes:

- Forms
- Workflow

Branding workspaces and folders
Landing pages

Teaming has a built-in Web tool for creating custom forms, which are stored as XML files in Teaming. Filled-out instances of these forms are stored as individual instances inside custom folders.

To get started with custom forms and workflows is at Novell Cool Solutions: <http://www.novell.com/communities/cool-solutions/formandflowfactory>. All of these forms and workflows will be included in a library with Teaming 2.0.

There are currently 19 sample forms and workflows available, with more coming. Samples include incident reports, expense report, bid list, catering request, restaurant inspection form, time off request and more.



Figure 1: Restaurant inspection form

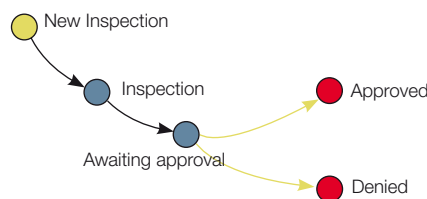


Figure 2: Restaurant inspection workflow

To set a custom brand and tagline for any workspace or folder, go to the manage/modify folder menu option in the masthead, and add an image and some text in the branding field.

Users can also create custom landing pages that bring together elements from different workspaces and Web resources. These pages can be composed of tables, lists, folders, URLs, graphics, utilities, and even custom Widgets built as Java Server Pages.

Customization Options for Programmers

Programmers can also extend and customize Teaming with Widgets based on Java Server Pages Invoking Java classes from workflows Remote applications

Teaming Widgets, implemented as custom Java Server Pages, allow for a broad range of powerful customizations that extend Teaming's functionality. A developer could create their own Teaming widgets that users could add to entry definitions just as we currently do for things like "Date and Time", "Team List", or the TinyMCE Editor.

Developers can also extend Teaming 2.0 by adding functionality to workflows with custom callouts. Every workflow contains two states: "on entry" and "on exit" processing that can occur as an entry enters or leaves a state.

Callouts can be called during workflow processing so that integration logic can be added to import or export data to third party systems. In Teaming 1.0 actions like e-mail or other basic processing took place in state transitions. Now with Boulder we can call external classes during state transitions. These classes don't have to be written in Java although they do need to be in the .class format and capable of running on

the server's Java Virtual Machine. This allows very sophisticated logic to be bundled and distributed as Teaming extensions. One possible extension might take an announcement for a discussion forum and create a tinyurl for it and post the title of the announcement and the tinyurl to Twitter and Facebook when you move to the "publish" state of a workflow.

Teaming 2.0 also has a new remote application capability that opens a broad range of development opportunities. These applications run on some other server, such as PHP, and respond to HTTP Post calls to a URL.

To build such an application, the developer writes a simple PHP server that Teaming can access via a URL. The Teaming site administrator adds the application's URL to the list of available applications.

The administrator can decide what level of access this application can have, such as Visitor or a Participant.

Users can add these apps onto workspace and/or folder pages by issuing the "Modify this workspace" option and selecting the application by its URL.

Whenever anyone visits that workspace, Teaming will call the remote app's URL to get whatever the remote app wants to show. The remote app returns a "snippet" of HTML to be displayed on the workspace page.

When Teaming calls the URL, it posts some info to the URL, like the user's ID. It also posts a security token that the remote app can use when making Web Service calls back to Teaming to get information if it needs anything. The security token makes it possible for the web service call to login as the current Teaming user, with the same rights granted to that user.

There's no limit to what these customizations can do, but integrating to enterprise databases and external Web services are a good place to start. Someone could write an app that lets users post to Twitter from Teaming, and see what anyone is saying on Twitter. A specific customer might want to have a 'degrees of separation' app for users, to see how much collaboration is going on in the company. An app that fetches data from a corporate database would save users the trouble of logging in and using that app if they could get their data right from Teaming. There could also be apps to tie into external workflow systems.

* Management

Teaming 2.0 is much easier to deploy and provides management enhancements as well. We have removed the dependency on Liferay, which leads to four times better performance, more interoperability, and a much simpler deployment as a stand-alone Web application. For current customers that want to keep their Liferay system, we have a 'lite' version they can still use.

Other management improvements include multiple, round-robin indexes, which work much better in a fail-over situations.

Many customers have mixed identity environments, with multiple directory trees, each holding different populations of users. Teaming 2.0 supports multiple LDAP directories, so IT teams can deploy the system and populate it with users and groups from multiple user populations.

Teaming 2.0 supports both eDirectory and Active Directory. We're using the Spring Security framework, an XML-based system designed for Java 2 Execution Environments.

A built-in e-mail system means that if the administrator enables it, every folder can

automatically have an e-mail address.

We have also added support for guest users to have access to the system.

* Conclusion

Novell Teaming 2.0 gives users the opportunity to interact in productive new ways, gives developers and integrators opportunities for customization and integration, and IT teams get a flexible, robust and high-performing system.

To learn more, go to <http://www.novell.com/teaming>

PHIL KARREN currently works as Collaboration Product Manager for Novell.†He has worked for 24 years in IT marketing and development at as an employee at†Novell, IBM, and CacheFlow and for several clients as a consultant, including Linux Networx, The Church of Jesus Christ of Latter-Day Saints Church and Family History Department, Cisco and others.