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Team Commitment

Novell Teaming 2.1 Delivers on Its Customer and Partner Commitments

by Ken Baker

While the recent release of Novell Teaming 2.1 has a number of new capabilities that can make your Novell Teaming experience better than ever before, a key message with this release is delivering on commitments. Since the inception of Novell Teaming, Novell committed to listen to what its customers and partners wanted to see in future releases. As part of their feedback, one of the things customers wanted was shorter release cycles. So after the release of Novell Teaming 2, Novell committed to being more aggressive in the delivery of new features and versions. As a result, just a little over six months later, Novell Teaming 2.1 has arrived with responses to your wish list in the areas of mobility, landing pages and new workspace population.

> Teams on the Move

For on-the-move users, Novell Teaming 2.1 delivers an all-new lightweight, secure and easy-to-use mobile user interface (UI). To achieve its lightweight, simple feel, the mobile UI incorporates about 70 percent of the functionality in the standard Novell Teaming interface. The included functions tailor specifically to the needs of mobile users. But to appreciate its overall ease and functions, you really have to give the Novell Teaming mobile UI a try on your own smart phone.

The mobile UI sports a specialized view of your Novell Teaming workspace, which includes a home page with quick links to the most commonly used aspects of Novell Teaming, such as your workspaces, favorites, micro-blog, teams and what's new. (See Figure 1.) Just as with the standard interface, you can access any workspace or folder to which you have rights. The mobile UI enforces the same security and access controls that the regular UI does. When viewing a workspace, you can see or go to any sub-workspaces or folders within that workspace. You can also return to the mobile starting page at anytime by clicking the Home button on the interface’s top left corner.

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**Figure 1:** The new mobile user interface for Novell Teaming sports a specialized view of your workspaces, including a home page with quick links to the most commonly used aspects of Novell Teaming.
Novell Teaming 2.1 has arrived with responses to your wish list in the areas of mobility, landing pages and new workspace population.

The mobile UI also presents an Action menu that provides a quick list of the options that apply to your current entry, folder or workspace. For example, it will give you the option to see what’s new or unread in the current workspace. It also gives you a tracking option, allowing you to start or stop tracking a person, folder or workspace. Finally, it can take you to your recently visited places.

Some of the other features supported by the mobile UI include searching, viewing file entries and attachments, accessing your calendar and scheduled events, viewing YouTube videos, viewing the workspace tree, calling Novell Teaming users with one click (iPhone only), transitioning entries from one workflow state to another and using folders.

While optimized for iPhones and Blackberry devices, the new interface works with any mobile device with an HTTP/HTML-based interface that supports HTML 4 and JavaScript. To take advantage of the new mobile UI, you simply access your Novell Teaming workspace from your mobile device’s browser. In most cases, Novell Teaming will automatically detect that you’re on a mobile device and launch the mobile UI. (If for some reason it doesn’t, simply append /mobile to the end of your workspace’s main URL. This is typically necessary for phones that don’t inherently declare themselves as mobile devices when browsing.)

For on-the-move users, Novell Teaming 2.1 delivers an all-new lightweight, secure and easy-to-use mobile user interface.

> Landing Pages Made Easy
Whether it’s to enhance an existing intranet or to create a streamlined set of powerful, yet nice looking Web pages, customers have latched on very quickly to the landing page functionality introduced in Novell Teaming 2. Landing pages in Novell Teaming give you the ability to put a custom, personal face on workspaces and folders, while still providing the team-focused, collaborative functionality inherent to Novell Teaming. They also help you manage the information that is most critical to your team or organization—so you can easily see the things most important to you. Landing pages allow you to bring important entries or entire folders to the forefront of workspaces, enabling your users to access their most vital information in a quick, efficient manner.

Even though customers appreciate what Novell Teaming landing pages do for their organizations, they indicated that the previous, menu-driven creation process was too cumbersome. With its commitment to provide a timely response to its Novell Teaming customers, Novell took this feedback to heart, readjusted some of its development priorities, and created a new graphical editor for landing page creation in Novell Teaming 2.1.
The new landing page editor has a working canvas where you drag and drop the various elements you want to add to your landing page.

The new landing page editor has a working canvas where you drag and drop the various elements you want to add to your landing page. Located on a palette to the left of the canvas, these elements include tables, lists, references to existing entries, references to existing folders, graphics, URL links, workspace or folder links, references to custom JSP files your Novell Teaming administrator has created, and utility elements. (See Figure 2.)

In addition to the palette elements you can drag onto the canvas, you can choose to show or hide certain standard layout features on your landing page. For example, you can choose whether or not to hide the Masthead, Sidebar, Main Menu Bar or Footer. Likewise, you can choose if you want to show the Branding Area, links to My Favorites and My Teams, or Navigation Breadcrumbs. You can also edit any of the elements you drag onto the canvas.

To build a landing page, you either need to create a new workspace as a landing page or configure an existing workspace as a landing page. To configure an existing workspace, navigate to the desired workspace, click Manage from the menu bar and select Configure. When the Configure Default Settings page displays, select Landing Page as the default view. Once that workspace is configured as a landing page, you can begin to set it up by clicking Manage from the menu bar, and selecting Modify this Workspace, which will bring up the Novell Teaming landing page editor.

> Teaming Specialists
In another show of commitment, Novell Teaming 2.1 introduces a new workspace export/import feature that addresses a very specific need partners voiced to Novell—the need to quickly populate a workspace. This need often arises for partners that want to create a Novell Teaming space...
customized for a specific vertical market, such as healthcare, manufacturing, education or government. In the past, every time a partner would create one of these specialized Novell Teaming environments for a customer, they would have to start from scratch. Now partners can create a populated workspace model for a vertical market and leverage it for multiple customers using the export/import feature.

**In another show of commitment, Novell Teaming 2.1 introduces a new workspace export/import feature that addresses a very specific need partners voiced to Novell—the need to quickly populate a workspace.**

For example, a partner specializing in the pharmaceutical industry could create a Novell Teaming workspace and use their industry expertise to populate it with knowledgebases, wikis, forums, electronic forms and automated workflows tailored to the unique needs of their customers in the pharmaceutical industry. Once the model is created, the partner can export the workspace to a zip file by doing the following: (See Figure 3.)

1. Log in as the Novell Teaming administrator.
2. Navigate to the workspace to be exported.
3. Click Manage from the menu and then select Export/Import.
4. When the Export/Import page displays, choose the Export This Folder or Workspace option and click OK.

To import a workspace, from the Export / Import page you simply choose the option Import into This Folder or Workspace, browse to the location of the exported zip file and then click OK.

It’s important to note that the export/import process does not preserve all types of data. Export and import do preserve the hierarchical structure of the workspace, all folders in the workspace (unless you specifically exclude certain folders), all content in exported folders, landing pages for workspaces or folders, entry definitions associated with any folder content, workflows associated with any workspace content, custom forms associated with any workspace content and wiki links.
The export/import process does not preserve access control information, accessories, perma-links, activity data (i.e., who visited the place, edit history and workflow history), entry ratings, entry definitions not associated with folder content, workflows not associated with workspace content, e-mail notification settings, default folder columns, global filters and custom JSP files. (Note: Custom JSP files must be exported as part of an extension. Workspaces that leverage custom JSP files still retain the settings that point to the custom JSP files.)

To give you an idea of how you can take advantage of the export/import feature, Novell will be posting short video demos that show how to create a model or baseline workspace for your users or customers. You can find these demos in the Teaming Library. Even though Novell created the export/import feature in direct response to partner feedback, users can also take advantage of its functionality if they want to move workspace content between different workspaces.

> **Committed to the Team**

Novell Teaming 2.1 also delivers enhancement in other areas, such as calendars and tasks and the introduction of Teaming feeds. Teaming feeds provide real-time updates on the activity within your Novell Teaming site. To help you learn more about these and all the other new features provided in Novell Teaming 2.1, Novell has posted a series of articles on the Cool Solutions community. If you’re planning on attending BrainShare, you can get even further insights from Novell Teaming product managers and developers who will be hosting a number of sessions on Novell Teaming. (See Team BrainShare.)

The more you find out about [Novell Teaming 2.1](#), the more you’ll discover how committed the Novell team is to its Novell Teaming customers and partners.

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**Training Sessions** // Novell Connection Magazine

**Team BrainShare**

Running March 21 – March 25, 2010 in Salt Lake City, Utah, BrainShare 2010 will host the following sessions related to Novell Teaming:

- **Novell Teaming Customer Use Cases** *(CL118)*
- **How Partners Are Helping Customers with Novell Teaming** *(CL217)*
- **Novell Teaming: Automating Business Processes with Forms and Workflows** *(CL218)*
- **Integrating Novell Teaming within Your Existing Infrastructure** *(CL219)*
- **Custom Development with Novell Teaming** *(CL220)*

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**Online Resources** // Novell Connection Magazine

- [Learn More about Novell Teaming](#)
Easy Living
Simplified Branch Office Support and Server Deployment with Novell ZENworks 10 Configuration Management SP3

by Jason Blackett

Novell ZENworks Configuration Management is all about making your IT life easier, especially when it comes to managing your endpoints. The release of Novell ZENworks 10 Configuration Management SP3 focuses on three main areas that support the “make IT easier” theme: improved branch office support; authentication enhancements; and easier, faster and more cost-effective deployment of ZENworks Configuration Management through a virtual appliance deployment option.

> Satellite Support Enhanced
The branch office support improvements in this support pack focus on ZENworks satellite servers, which are managed devices you can set up in your branch offices and other locations to perform roles normally performed by primary ZENworks servers. Such roles include authentication, information collection, content distribution and imaging. The improvements provided in Novell ZENworks 10 Configuration Management SP3 deal primarily with giving you greater flexibility, control and WAN bandwidth optimization for replicating content between your satellite and primary servers.

The first of these improvements enables you to make content assignments for your bundles and policies at the folder level, instead of just the individual object level. (See Figure 1.) For example,
if you want to replicate the entire contents of a folder containing a thousand bundles, instead of having to configure each individual bundle for replication, you can simply indicate that you want all of the folder’s content replicated. This is accomplished by doing the following:

1. Go to the bundle folder’s details page in ZENworks Control Center, select the Settings tab and click Content.
2. Choose Primary Server Replication or Satellite Server Replication.
3. Indicate the replication status that you want for that bundle folder by marking either the Include or Exclude check box next to the content server.
4. If you want to ensure that all subfolders—as well as individual bundles and policies—inherit the settings, click Force Inheritance in the Folder Task list in the left navigation pane.

Novell ZENworks 10 Configuration Management SP3 also gives you more flexible and granular control over scheduling content replication. Instead of limiting scheduling to a primary server basis using a basic reoccurring schedule, you can now schedule on a per-satellite basis and content-type basis. Additionally, you can schedule those different satellites and content types to replicate on different days and different times during the day. The new support pack also gives you more flexible control in terms of bandwidth throttling for scheduled content replication.

As an example, the granular scheduling and throttling controls allow you to make sure your critical patches replicate all day long with a large bandwidth throttle to ensure that critical content gets to your satellite servers as quickly as possible. For content that isn’t as time critical (typically the bulk of your content), you could schedule it to replicate on Mondays, Wednesdays and Fridays between 10 p.m. and 2 a.m., or some other time frame that fits your specific needs. If you need some of that content to replicate during working hours, you can reduce the bandwidth throttle so it doesn’t have as big an impact on your WAN traffic.

This support pack update also allows you to deploy new satellite servers in a way that doesn’t consume as much WAN bandwidth during the initial content replication process. When you open a new branch office and bring a new satellite server online, if you have large content repositories that you need delivered to that satellite—and especially if you have a very slow WAN link—you could potentially consume a lot of WAN bandwidth during the initial replication. Novell ZENworks 10 Configuration Management SP3 provides an offline content replication process that allows you to avoid this situation by moving the majority of your content offline rather than over the WAN.

Novell ZENworks 10 Configuration Management SP3 provides greater flexibility, control and WAN bandwidth optimization for replicating content between your satellite and primary servers.
To take advantage of offline content replication, simply do the following:

1. Configure the new satellite device to not replicate any content.
2. To export the content to be replicated to a removable storage device (such as a USB thumb drive), employ the zman command-line command on the primary server: satellite-server-export-content (ssecc) (Path To Device) (Export Directory) [Options]
3. At the branch office, import the content from your removable storage device to your satellite server using the zac command-line command: cdp-import-content (cic) <content path> [-l:<path to log>]
4. Finally, configure the satellite to replicate content. This will ensure that only content changes will be replicated to the satellite over your WAN link.

Authentication Optimized

Novell ZENworks 10 Configuration Management SP3 helps you reduce your WAN bandwidth footprint in the area of authentication as well. As mentioned earlier, one of the roles a satellite device can perform is that of an authentication server. (See Figure 2.) This is a new feature delivered in this support pack. Previously, only a primary server could perform LDAP authentication for your Novell eDirectory user sources. If you already have a local eDirectory replica, using a satellite authentication server can save you WAN bandwidth as well as speed up the authentication process. Instead of having to go over the WAN to authenticate to a primary server, you can keep authentication traffic local and spread the authentication workload among local satellite devices. As an authentication server, a satellite device can also provide local LDAP authentication for Active Directory user sources.

Authentication failover is another new authentication-related feature in Novell ZENworks 10 Configuration Management SP3—one that allows you to define multiple connections per user source. In other words, if your preferred user source replica becomes unavailable, the authentication process will fail over to another defined user source replica, allowing users to continue to

![Satellite server being configured as an authentication server](image-url)

*Figure 2: Satellite devices now have the ability to be configured as authentication servers in Novell ZENworks 10 Configuration Management SP3.*
authenticate and use ZENworks Control Center.

In an environment where you have multiple satellites or primary servers at a single site you can also use the Server Groups feature to randomize which authentication server a device uses. By having a different connection order for each primary and satellite server, you can randomize the load on your user source servers. This means that you will no longer have all of your clients authenticating to a single LDAP replica.

This support pack also brings Kerberos authentication support to Novell ZENworks Configuration Management. This means instead of being limited to user name and password, users can authenticate to Active Directory using a smartcard, fingerprint scanner or any other biometric device that generates a Kerberos ticket—and ZENworks will use that same Kerberos ticket for its authentication as well. Similar support has also been provided for eDirectory users that take advantage of the Novell Modular Authentication Service smart card method.

> Server Deployment Virtualized

In an effort to make it easier, faster and less expensive to deploy Novell ZENworks Configuration Management servers, this support pack also allows you to deploy Novell ZENworks Configuration Management, Novell ZENworks Asset Management and Novell ZENworks Patch Management as a virtual appliance. The Novell ZENworks virtual appliance is essentially a pre-canned VMware virtual machine that includes pre-installed and pre-configured ZENworks Configuration Management, Sybase and ZENworks Reporting Server products, as well as a scaled-down SUSE Linux Enterprise Server 10 SP2 server that includes only those components required by ZENworks.

The basics of deploying the virtual appliance involve the following:

1. Import the Novell ZENworks appliance image into your VMware infrastructure using the VMware VSphere Client application. (Note: The Novell ZENworks appliance image is stored in an open virtualization archive (.ova) format.)
2. Power on the virtual machine containing the imported Novell ZENworks appliance image.
3. When the configuration wizard launches, respond to the prompts to customize your instance of SUSE Linux Enterprise Server, such as specifying the language, time zone, root password, IP address, etc.
4. Likewise, provide the necessary information when the configuration wizard asks you to customize your Novell ZENworks Configuration Management appliance with an IP address and the typical ZENworks zone configuration values.
5. Click Done and it’s ready to use.

Once it’s up and running, the Novell ZENworks virtual appliance can achieve near-native performance running as a virtual machine. This is largely due to the fact that it uses a streamlined
version of SUSE Linux Enterprise Server. Another benefit of being scaled down is that it simplifies management. Essentially, the appliance is self-managed, with patches to the appliance environment all handled through system updates. Also, if you want to add one or more additional primary servers into the appliance’s new ZENworks management zone, you can easily create another instance of the appliance, bring it up and tell it to join the zone.

In addition to being easy to deploy and manage, the Novell ZENworks virtual appliance can reduce your Windows CAL fees—just as regular ZENworks servers running on native Linux machines do.

> **Life Simplified**
As you take advantage of Novell ZENworks 10 Configuration Management SP3, you’ll find a number of other items on its feature list. One of these is user-based license tracking with Novell ZENworks Asset Management. This feature makes it easier for you to track license compliance based on the number of user licenses actually being used rather than on a per-device basis. Another enhancement is the ability for Novell ZENworks Asset Management and Novell ZENworks Desktop Management 7 agents to coexist on the same machine. This gives you the flexibility to migrate to the latest version of Novell ZENworks Asset Management while letting you continue to use ZENworks Desktop Management until you complete your migration to Novell ZENworks 10 Configuration Management.

No matter how you look at it—whether it’s the branch office improvements, authentication enhancements, the drop-and-go ease of the ZENworks virtual appliance or any of its other features—Novell ZENworks 10 Configuration Management SP3 is all about making your IT life easier.

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**Online Resources**

- Learn more about Novell ZENworks Configuration Management
- Endpoint Management
- Move IT
Building a Business View
Build a Highly Customized, Automatically Updated View of Key IT Resources with Novell Business Service Manager
By Tobin Isenberg

> The Value of a View
It’s no mystery that throughout history view properties have always commanded premium prices. A sweeping view—like the one from that top-floor corner office you’ve been dreaming about—does more than just relieve cubicle claustrophobia. It lets you see what’s happening in the environment around you in time to react appropriately. Our primate ancestors were probably happiest scanning the savanna from the topmost branches of an acacia tree. Medieval princes built hilltop towers to watch for invading armies. Seafaring merchants kept lookouts aloft to see dangerous shoals ahead or pirates lurking below the horizon. For exactly the same reasons, today’s manufacturing supervisor enjoys a picture window overlooking the factory floor. We’re all most relaxed—and productive—when we can easily keep an eye on the things that are important to us.

That, in a nutshell, is the appeal of Novell Business Service Manager (BSM). It gives everyone in the organization a corner-office view of the business services and IT infrastructure that are important to them. Novell Business Service Manager consolidates information from existing IT management tools into a single, centralized real-time business view that’s easy to publish, reuse and repurpose. It turns every stakeholder into a deputy system monitor, with his or her finger on the health and performance of the services on which they rely.

We’ve visited BSM several times in recent issues of Novell Connection. In October we talked about using the BSM Dashboard to find and fix problems in a virtualized infrastructure. In November we took a screen-by-screen tour of the BSM Dashboard in action. And in January we went behind the instrument panel to explore the Novell Business Service Management solution architecture. Today we’re going to use the Novell Business Service Manager Java client to organize some newly discovered resources into a customized, self-updating business view.

> Today’s Lesson: Creating Your First View
In this scenario, Novell Business Service Manager has been installed on a server along with an adapter that provides integration to an existing asset management solution and its repository of resource information. This information might reside in a third-party CMDB or even in Novell CMDB360. Whatever the source, when we launch the Novell Business Service Manager client we’re presented with a default view of the discovered resources—in this case a mixed group of physical and virtual servers.

We’ll demonstrate how to arrange those resources in a business view, segregating them in separate containers according to specified attributes. We’ll make some design decisions about the presentation of the view, then save it for future use. The view we create might become part of our network operating center (NOC) display, or we could publish it to the myMO Dashboards of concerned users. But wherever it appears, Novell Business Service Manager will update this view in real time as changes occur in the resources it depicts.

As we start, be sure to save your work periodically, because the Undo feature is not implemented within the recipe subsystem.
Building a Business View // Novell Connection Magazine

> **Step One: Create a Container for Your Physical Servers**
1. Start by highlighting the view, then switch to Layout View. (See Figure 1.)
2. Right-click in the background and choose New Drawing from the pop-up menu.
3. Type “Physical Servers” to the side of the container.
4. Right-click in the background, then select: Customize, Container, Add, Children Container.
5. Left-click to select the container with the children, then right-click: Customize, Child Container, Filtering, Adjust Filtering.
6. Update the script filter as follows: (element.Device_Type.equals("Physical")). For this example, the element we used has a property called “Device_Type” and it has one or two possible values (Physical or Virtual). You can use any attribute, even the condition of the elements. Other filtering options are available such as Expression-based matching. If you are testing this on your system, you will need to use a different script filter criteria.
7. Select the container that has children elements, then right-click: Customize, Container, Wrapping, Hide Wrapping Rectangle.
8. Select all, then right-click on one of the selected items and choose: Customize, Container, Wrap in Container.
9. Select the drawing, then choose: Customize, Container, Layout, Set Layout and choose Flow.

Track any resource under management—It’s important to note that while the resources we’re working with in this example are physical and virtual servers, they could be anything at all—applications, databases, services, network switches. Any resource under management by any tool can be brought into a business view in Novell Business Service Manager.

> **Step Two: Customize the Container Appearance**
1. Select the container, then right-click: Change Group
2. Select the outer box, then right-click: Customize, Add Binding, Condition Gradient, Fill.
3. Set Start to upper left. Set Stop to bottom right.
4. Now right-click on the box again and select: Save Group.

**Figure 1:** A default view of newly-discovered servers—some physical, some virtual—as seen in the Novell Business Service Manager Java client.

**Figure 2:** A business view of the same servers shown in figure 1, with separate containers for physical and virtual machines. Novell Business Service Manager will automatically update this view as these resources change over time.
Step Three: Create a Virtual Server Container

1. Select the container, then right-click Copy. Then paste the copied container.
2. Move one container aside for the moment. Don’t worry about aligning them at this point.
3. On one of the container boxes, right-click Change Group.
4. Left-click to select the container with the children, then right-click: Customize, Child Container, Filtering, Adjust Filtering.
5. Update the script filter as follows: (element.Device_Type.equals("Virtual")).
6. Select the text “Physical Servers” in the Controller. Edit the text to read “Virtual Servers.”
7. Save the group.

Filter by any attribute—While in this example we’re using one set of attributes to filter the contents of these two containers (physical/virtual), we could just as easily use any attribute that’s captured by the front-line management system and exposed to Novell Business Service Manager. We could easily sort them by operating system instead, creating one container for Windows systems and another for Linux.

Object attributes can also be incorporated directly into the view display. A unique identifier such as a serial number or system name can be inserted into the drawing to identify a specific resource. Or a dynamic attribute could be inserted into the view frame to deliver a significant piece of information in a quickly scannable manner. For example, a view featuring a container of transaction processing servers might include the real-time workload on each machine. Anyone with an interest in the transaction processing service could then see, at a glance, the relationship between alarm events and workload distribution, without a single drill-down click.

The key takeaway here is that Novell Business Service Manager allows views of the IT infrastructure and the services it provides to be easily customized, using any of the object attribute information collected and maintained by front-line management tools.

Step Four: Combine the Two Containers in a Single View

1. Select both containers, then right-click: Customize, Container, Wrap in Container.
3. Done! It’s just that simple. (See Figure 2.)

A Simple View, A Powerful Tool

The business view we’ve just created is far more than a static network schematic. Because it’s dynamically linked to the resources it displays, through the very tools used to monitor and manage them, the business view we just created is a real-time window into the services and IT infrastructure that run the business. If new server blades are deployed to increase capacity, they will automatically appear in this view. If new virtual machines are automatically launched to maintain specified workload levels, they too will appear in our view. What’s more, exactly the same changes will be visible to every user with access to this view—a system administrator working in a BSM client, a network administrator sitting in the NOC or a business user checking her myMO Dashboard. State changes in business-critical services and the IT infrastructure are exposed to all concerned stakeholders in the same way, at the same time. So if one simple picture is worth a thousand words, we now might say that with Novell Business Service Manager, one view empowers a thousand decision-makers.
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Learn More about Novell Business Service Managment

- BSM White Paper
- BSM Webcast
- Novell Business Service Management
- Power Trip
- Fix and Find Problems Faster
- Navigating the Cloud with BSM
With just 125 IT professionals to support the organization’s 10,000 users, the California Highway Patrol constantly seeks new ways to operate more efficiently and drive down technology costs. Novell ZENworks Configuration Management has streamlined desktop and system management, while Novell Open Enterprise Server has contributed to the organization’s server consolidation initiative.

> Overview
The California Highway Patrol (CHP) provides highway safety, protects state facilities, conducts criminal investigations and assists local law enforcement agencies. It is the largest state police agency in the United States, with more than 10,000 employees.

> Challenge
The CHP IT staff is responsible for supporting more than 150 sites, geographically dispersed across the state, including 20 emergency dispatch sites that respond to 9-1-1 calls from citizens. To continually deliver the best support resources within its limited budget, the CHP is always looking for new ways to leverage technology to automate processes such as desktop and user management.

“We only have a dozen people to maintain 7,500 desktops and 3,000 laptops across the state,” said Bruce McLeod, system architect of Network Services at the California Highway Patrol. “Our IT support staff can’t be everywhere at once, which makes desktop management and system administration difficult, particularly for these mission-critical sites.”

> Solution
The CHP now uses Novell ZENworks Configuration Management to centrally manage its 7,500 desktops and 3,000 laptops located across the state. The organization is using the software for application delivery, inventory management and system troubleshooting.

“The remote control feature of Novell ZENworks Configuration Management gives us the ability to centrally support our large, dispersed desktop environment with a very small staff,” said McLeod. “It allows us to quickly troubleshoot our users’ desktops and laptops in a consistent manner, which is especially helpful for our dispatch sites that obviously need to be up and running at all times.”

Novell ZENworks Configuration Management has also made a significant impact on application distribution. “We’re able to distribute new applications statewide overnight,” said McLeod. “Without Novell ZENworks Configuration Management, we wouldn’t be able to do that.”

CHP is currently consolidating its data centers. As part of this effort, the organization was looking for ways to leverage virtualization to prevent further server sprawl. To that end, CHP migrated its physical NetWare servers to a virtualized Linux-based environment with Novell Open Enterprise Server and Xen for virtualization.
“The performance of Novell Open Enterprise Server running on Linux has been great and the fact that it ships with Xen for virtualization was a big plus,” said McLeod. “Had we gone with VMware, it would have cost us an additional $800,000,” said McLeod.

CHP uses many of the features within Novell Open Enterprise Server to simplify the delivery of network services and reduce the cost of its storage infrastructure. “Novell iPrint allows us to centrally manage our printer environment, which is a huge timesaver, as users can now install a printer driver themselves from any location in the state,” said McLeod. “Novell Storage Services has been incredibly valuable as well, with the ability to efficiently manage multiple terabytes of data.”

In addition, CHP uses Novell Identity Manager to simplify password management across more than a dozen applications, including CARS, its traffic accident reporting system. “Novell Identity Manager makes it easy to integrate with LDAP-enabled applications right out of the box,” said McLeod. “Our developers can leverage the solution to build applications that use LDAP for authentication, rather than having to build their own security database, which would have been incredibly difficult to support.”

> Results

Novell ZENworks Configuration Management has enabled the CHP to support mission-critical applications across 150+ disparate locations with a very small support staff. With this solution in place, the organization has gained greater efficiency while reducing operating costs. “Using Novell ZENworks Configuration Management, we’ve improved the way we distribute applications, manage IT resources and resolve system issues,” said McLeod.

The use of Novell Open Enterprise Server and Xen for virtualization allows CHP to give users the server resources they need without incurring unnecessary hardware costs. “Since migrating to Novell Open Enterprise Server and leveraging Xen for virtualization, we’ve been able to consolidate one third of the servers in our data center,” said McLeod. “We can now create a new virtual server on the fly, and have it up and running in less than a day.”

Novell Identity Manager has nearly eliminated the time-intensive manual processes related to password management and has reduced the number of passwords users have to remember by 75 percent. “Each time a new user is added, they automatically receive access to the different applications they need, based on pre-defined user groups,” said McLeod. “That’s a huge timesaver for our IT staff and has strengthened security by ensuring the right people have access to the right applications.”

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Online Resources

Learn More about the Offerings Featured in This Success Story

- Novell ZENworks Configuration Management
- Novell Open Enterprise Server
- Novell Identity Manager
Like it or not, passwords aren’t going anywhere. And if your organization is like most, you still heavily depend on traditional user ID/password combinations as your primary authentication method, and most experts don’t see that changing any time soon. Despite a number of obvious and well-known shortcomings, traditional passwords are still the most popular, practical way to protect most corporate assets and information.

But that doesn’t mean passwords can’t create almost as many problems as they solve—especially in large, complex and heterogeneous IT environments. The major issues aren’t new, and virtually every IT professional is familiar with them. Every time you add a new system or application to your environment, you also add a new set of credentials. New credentials mean more passwords for end users to remember. And more passwords translate directly into all kinds of bad habits (like choosing weak passwords or writing passwords down), inefficient processes, more help desk calls and all kinds of compliance complications. Without a smart, comprehensive approach to password management that addresses these persistent problems, runaway passwords can lower productivity, create unnecessary work for your IT staff and compromise the security of your organization.

> **Approaches for Solving Password Management Problems**

These password-related challenges are nearly universal, but the approaches and techniques organizations use to solve them are not. Depending on many different factors—including underlying IT infrastructures, specific compliance pressures and end user requirements—you can choose from a number of different approaches and technologies. All of them have their own unique advantages and drawbacks.

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**Back-end Synchronization.** One common technique involves making password management part of a larger identity lifecycle management and user provisioning solution. This involves assigning users a single password that gets synchronized automatically across all the connected systems in the environment. Back-end synchronization definitely reduces the number of passwords users have to remember. It also provides the distinct advantage of being an integral part of a larger identity management and provisioning solution. However, traditional password synchroniza-
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Password management as part of your identity management framework

Figure 1: To be effective, password management should always be an integral part of a larger identity management framework.
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seamless and unified Web-based experience that brings many types of applications together in one convenient location. However, WAM implementations are limited to Web-based resources. Users still have to remember (or write down) passwords for Internet e-mail accounts, traditional applications and other systems that are not supported by the portal environment.

**Enterprise Single Sign-On (ESSO).** A third approach to password management creates a kind of intermediary between users and all the different systems, applications and resources to which they need access. Like effective password synchronization and Web access management implementations, enterprise single sign-on should work closely with your identity management system to determine appropriate access rights and provide up-to-date credentials. In a typical enterprise single sign-on scenario, users provide one set of credentials to the single sign-on (SSO) system when they log in to the network. Then, that system pulls the appropriate user names and passwords from the directory and automatically presents them to various single sign-on enabled applications on the user’s behalf. This approach eliminates the “lowest common denominator” problem by making it possible to apply a different password policy to every system or application. This allows you to take full advantage of the strongest passwords each individual application can support.

Enterprise single sign-on can also extend single sign-on capabilities to a wider range of external applications and Web resources, make mandatory password changes transparent and automatic for both administrators and end users, and even hide an application’s true password from end users. One criticism of enterprise single sign-on technology revolves around the need to single sign-on enable every application. In the past, this has often involved complicated and time-consuming scripting to make individual applications respond appropriately to requests from the enterprise single sign-on system.

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**Password Management Basics**

Most enterprises use one or more of the following approaches to manage their passwords:

- **Back-end password synchronization**—Works with an identity management system to synchronize a single password across connected systems in a managed environment.
- **Web access management (WAM) and Web single sign-on**—Provides single sign-on access to Web-based applications and resources, usually through a Web portal.
- **Enterprise single sign-on**—Pulls credentials from the directory and presents them to virtually any application or resource on the user’s behalf.

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**Finding the Best Answer**

Given all the various advantages and drawbacks, which of these three password management approaches can offer your organization the best, most complete and most cost effective password management option? The best answer probably involves some combination of all three. For example, you may want to use back-end synchronization to simplify password management across a few core systems, implement a Web access management product to deliver a unified portal environment for users and then extend those password management capabilities using an enterprise single sign-on implementation. As long as these different password management components and technologies can all tap into your identity management framework, they can work together to provide the best possible answer for dealing with password-related challenges. (See Figure 1.)
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Novell SecureLogin Benefits:

- **Seamless integration** with your existing identity management and access management infrastructure
- **Total single sign-on access** to the applications and resources your users access, including Windows, Web, Java and enterprise applications
- **Increased productivity** through reduced password-related help desk calls and less time spent logging in to individual applications
- **The ability to link credentials** for different clients that access the same application (i.e., Windows and Web-based Outlook clients)
- **Audit-ready reporting** that shows exactly what systems and resources users are accessing

> Extending and Enhancing Password Management with Novell SecureLogin

Enterprise single sign-on—working closely with an identity management system like Novell Identity Manager—often provides the fastest and most cost-effective way to enhance and extend your existing password management infrastructure. **Novell SecureLogin** offers a number of unique advantages that make it an especially attractive option. First, it’s designed specifically to integrate easily with existing identity management and access management infrastructures, so it can add value quickly without forcing you to rip and replace your existing synchronization or Web access management systems. Novell SecureLogin also simplifies and automates the process of enabling the complete spectrum of Web, Windows, Java, and terminal-based applications for single sign-on with a surprisingly flexible and intuitive point and click wizard, which eliminates the need for complicated scripting. Unlike traditional synchronization offerings, Novell SecureLogin allows you to link credentials for different clients of the same applications like Web and Windows Outlook clients. And finally, it includes audit-ready reporting capabilities that enhance your compliance efforts by making it easy to track and record all the systems and resources users access through the SSO system. These unique capabilities, and many others, make Novell SecureLogin an excellent addition to any identity-based system. And of course, Novell SecureLogin works especially well with other Novell password and identity lifecycle management products like Novell Identity Manager and Novell Access Manager.

> Take Control of Your Runaway Passwords

Passwords always have been and will probably always be a fact of IT life. But with a smart, nuanced approach to password management that leverages the right combination of identity lifecycle management, password synchronization, Web access management and enterprise single sign-on technology, you can overcome the challenges of managing, controlling and supporting passwords. Novell is ready to make that process as smooth and cost effective as possible with products like Novell Identity Manager, Novell Access Manager and Novell SecureLogin.

Online Resources // Novell Connection Magazine

Dig Deeper

Explore the following resources to learn more about how Novell can help you take control of your passwords:

- Demystifying Password Management Webcast
- Simplifying SSO with Novell SecureLogin Webcast
- Novell SecureLogin Guided Tours

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