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Components of Novell Nterprise Linux Services

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Last month we looked at the Novell press release regarding the announcement of Novell Nterprise Linux Services (NNLS). This month we look at some of the components and how they will be important to your Linux strategy. A number of these products have been available on Linux for some time. NNLS will integrate them into a single package along with a flexible installation, allowing you to install all of the services or just those you need.

Novell Technologies on Linux: eDirectory

Volumes have been written about eDirectory and the benefits of using it in your enterprise. eDirectory has been available for Linux for some time and, along with eGuide and iManager, it provides a rock solid foundation for many of the additional services that make up NNLS. eDirectory brings a proven, robust directory service to Linux that can be used to further secure and customize user access.

Novell eDirectory is a highly scalable, high-performing, secure directory service. It can store and manage millions of objects, such as users, applications, network devices, and data. Novell eDirectory offers a secure identity management solution that runs across multiple platforms and is Internet-scalable and extensible.

eDirectory provides centralized identity management, infrastructure, Net-wide security, and scalability to all types of applications running behind and beyond the firewall. Novell eDirectory 8.7 introduces Web-based and wireless management capabilities, allowing you to access and manage the directory and users, access rights, and network resources from a Web browser, as well as from a variety of handheld devices.

eDirectory natively supports the directory standard Lightweight Directory Access Protocol (LDAP) 3 and provides support for TLS/SSL services based on the OpenSSL source code.

As an addition for developers, there are a number of resources available for integrating eDirectory into your solutions. The LDAP Classes for Java and Libraries for C are based on industry standards and are also available in source code format.

Novell eGuide

Novell eGuide 2.1 is a Web application that provides a simple browser-based solution to search for all of the important people, places, and things that your employees need to know, regardless of what LDAP directories the information resides in. While eGuide may look like an address book, it is independent of platform or a particular application. It can be accessed by any user with rights to your Web server via a standard Web browser.

Since eGuide is directory agnostic, you can use it with any LDAP-compliant directory and even use multiple directories at once. In today's ever changing business environment this can be a significant asset for integrating with partners and new business ventures. In addition eGuide can access data stored in other data sources by using Novell's data synchronization product, DirXML.

eGuide runs on the most widely-used platforms and is compatible with e-mail, instant messaging, and real-time meeting and collaboration tools. When users find the people they are looking for, eGuide allows them to launch whatever type of communication fits their current needs—e-mail, instant messaging, and even video conferencing.

The major features of eGuide include:

- Standards-based display and administration using HTML, XML, and XSL make configuration and use simple, convenient, and highly customizable.
- Advanced Search capabilities allow searches on any attribute.
- Organizational Charts are automatically generated based on eDirectory attributes.
- Anonymous and User Authentication modes are supported, including contextless login, cookies, and support for eDirectory password restrictions.
- Authenticated Searching utilizes access control lists in eDirectory determine if a user can access particular attribute information, such as home phone numbers.
- Works seamlessly with Novell iChain and Novell Portal Services. Novell eGuide is also an excellent add-on to DirXML synchronization projects.
- Compatible with eDirectory or any other LDAP-enabled directory service.

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DirXML

DirXML 1.1a is a data sharing service that runs on Novell eDirectory 8.62 or higher. DirXML allows an application to share selected directory data with eDirectory and to synchronize that data between eDirectory and the application. DirXML can publish information to or accept information from an application, database, or directory for which it has a specific driver. Currently DirXML supports the following drivers on the Linux platform.

- DirXML Driver for eDirectory
- DirXML Driver for SAP
- DirXML Driver for JDBC
- DirXML Driver for LDAP
- DirXML Driver for Delimited Text

The DirXML Driver Kit for Linux allows you to write drivers that take advantage of the DirXML features of Novell eDirectory. These drivers can connect disparate directories (despite different naming conventions and schema definitions) using eDirectory and allow data to be automatically shared and synchronized across directories. You can download the DirXML Driver Kit for Linux at <http://developer.novell.com/ndk/dirxmlin.htm>.

NetMail

NetMail is a standards-based email and calendaring system supporting any POP, IMAP or iCal compatible email/calendaring client. NetMail requires and integrates with eDirectory.

With the ever increasing need for collaboration and communication, NetMail email and calendaring are available to users from anywhere that they have internet access, thus freeing users from a place and allowing them to be more productive wherever they might be. NetMail provides a full range of email and calendaring features, including the ability to:

- Send, receive, store, organize and archive e-mail messages with attachments.
- Use standard e-mail options, such forward, copy, blind copy and reply.
- Automate forwarding, sorting, delegating, rejecting and vacation replies based on user-specified rules.
- Personalize and organize address books.
- Add appointments, schedule meetings and recurring events, and add notes and to-do lists to calendars.
- Participate in discussion groups.

NetMail provides support for many industry standards and can integrate with a number of e-mail clients, such as:

- Post Office Protocol version 3 (POP3) and Internet Message Access Protocol version 4 (IMAP4) to ensure compatibility with all popular e-mail application clients (Novell GroupWise, Microsoft Outlook and Outlook Express, Netscape Communicator, Eudora, Pegasus and other integrated or standalone e-mail clients).
- Simple Mail Transfer Protocol (SMTP) to provide compatibility with e-mail servers on the Internet and most TCP/IP systems.
- HyperText Transport Protocol (HTTP), so users can access their mailboxes and system administrators can manage users and servers from any standard Web browser.
- Internet Calendar (iCal) standard, to ensure interoperability with any client or server that supports the iCal standard.

Developers can download the NetMail (formerly Novell Internet Messaging System or NIMS) SDK including documentation and usable sample code for the Networked Messaging Application Protocol (NMAP), an ASCII RFC-style protocol. NMAP provides full control over the NetMail queuing system and full access to the message store. The SDK also includes ModWeb documentation. ModWeb is a template-based, self-contained Web engine that eliminates the need for JVMs, servlet gateways, and CGI scripts in an HTML environment.

exteNd Director Standard Edition

exteNd Director Standard Edition (formerly known as Novell Portal Services) provides the framework for bringing together all of the enterprise applications and information resources necessary to make those critical business process improvements. exteNd Director Standard Edition, coupled with other security and identity Net Services software from Novell, gives professional service providers the tools they need to bring an integrated and individually relevant view of an organization's information and processes to that organization's workforce, customers and business partners.

Through eDirectory integration, exteNd Director Standard Edition also delivers an unparalleled number of personalization options. For example, you can:

- Use check boxes to easily add services to the portal interface
- Create and add portal pages
- Edit portal page content

- Use a visual drag-and-drop process to lay out personal portal pages
- Visually build and lay out your portal's theme using an intuitive wizard

Access to services and data is provided by modular applications called gadgets and a developer kit for gadget development is available. The exteNd Director Gadget Developer Kit provides tools to develop, test and deploy gadgets, including a preconfigured version of the Tomcat servlet container, the Novell exteNd Director portal libraries, documentation, and sample gadgets. This kit is designed to provide a stand-alone gadget development environment.

Novell iFolder

Novell iFolder lets your files follow you, everywhere. iFolder allows you to access, organize, and manage your files from anywhere, anytime. iFolder also provides worry-free security, ensuring that all your files are always safe, secure and up to date. Never again will you have to search for a file or wish you had brought it with you. With iFolder you can access it from anywhere you have internet access.

Novell iFolder includes many features:

- Scaling to millions of users—multiple Novell iFolder servers can be pooled to create a single-system image, so large organizations and service providers can now manage thousands, even millions of users.
- Pocket PC and Palm OS PDA Web access—any Pocket PC or Palm OS device with Web access lets users get to their files from anywhere at anytime through Novell iFolder.
- Reporting features for billing and management—IT administrators can track which departments or users are using Novell iFolder and can allocate costs to those departments accordingly. This also gives xSPs an easy way to manage billing for Novell iFolder service.
- User ability to choose any existing local file directory as a Novell iFolder directory.
- Ability for IT administrator to recover user pass phrase.

Novell exteNd Application Server for Linux

Novell exteNd Application Server provides the most complete foundation for building and deploying cross-platform, high-performance, standards-based applications. The Novell exteNd Application Server is a comprehensive, J2EE certified platform for building and deploying enterprise-class Web applications. It

supports the full Java 2 Enterprise Edition standard—JavaServer Pages (JSP pages), Enterprise JavaBeans (EJBs), and all the other J2EE 1.3 components and technologies.

The Novell exteNd Application Server also features:

- High performance, scalability, and reliability
- Support for rapid application development
- Application deployment facilities
- Server management facilities

Novell exteNd Application Server provides all of this while providing the ability to integrate with many of the Linux-based standards such as MySQL and the Apache web server. This allows the Novell exteNd Application Server to be deployed into many existing installations with minimal reconfiguration.

iChain

Novell iChain is an integrated security and access-management infrastructure that protects your network and safeguards sensitive eBusiness and identity data. iChain facilitates your eBusiness and remote-access initiatives by providing secure authentication and access to portals, Web-based content, and Web applications.

As an unparalleled foundation for your commercial success, iChain incorporates Novell eDirectory. iChain also offers personalization, simple installation, Web Single Sign-on, and the ability to secure access to data and applications across the Internet.

iChain helps differentiate your users and provide them with access to the right data for them. Some of the task that iChain can help you accomplish are:

- Easily create public, restricted, and secure iChain resources
- Define identity-based security
- Employ multiple factor authentication
- Offer your users the convenience of Single Sign-on
- Dynamically encrypt data
- Simplify your management and administrative duties
- Provide enhanced installation and configuration options
- Securely integrate various eBusiness applications

What It All Means

These are some of the highlight technologies that will be included as part of NNLS. This offering brings to Linux a proven suite of products that will enable Linux

Novell iFolder lets your files follow you, everywhere.

users to have the benefits of these stable, robust products. Together these products can help an enterprise be more secure, more productive and more competitive in today's market.

There are plans for an extensive open beta of NNLS, check the Novell beta site at <http://www.novell.com/betaprogram/novellbeta.jsp> or the Linux at Novell page at <http://www.novell.com/linux> for further details and the most up-to-date news on NNLS.

Forging Ahead

In support of the new Linux and open source initiatives at Novell, Novell Forge (<http://forge.novell.com>) is growing to meet the needs of the increased user base. If you haven't visited Novell Forge, do so! You'll find lots of other users just like yourself sharing their code, tips and advice on open source development.

The Forge team has opened up a number of Communities to better help users find focused discussions around their favorite topics. The current community list includes:

- Web Development
- Directory / Provisioning
- Security
- NetWare OS Development
- Collaboration
- Small Business
- Education
- Finance
- Health Care
- Government
- Novell Developer Kit
- AMP

And by the time you read this, there will also be a community devoted to NNLS. But Forge is also about the projects. Here are some of the top downloaded projects available on Novell Forge:

- LDAPTTool

- PostgreSQL for NetWare
- Rsync for NetWare
- LDAP Libraries for C
- Bash for NetWare
- Netwhere Client for Linux
- Novell Nsure UDDI Server

It's easy to get involved at Novell Forge. Just go to the Novell Forge website (<http://forge.novell.com>) and create yourself a user account (you don't need an account to access the content, but you will if you plan to contribute). Then find or create the project that interests you and contribute.

Novell Acquires Ximian to Expand Linux Solutions and Open Source Commitment

On August 4, 2003 Novell, Inc. announced it had acquired privately held Ximian of Boston, Mass., the leading provider of desktop and server solutions that enable enterprise Linux adoption. The acquisition of Ximian expands Novell's ability to support Linux solutions as the company adds best-of-breed Linux desktop, groupware and management technologies, and welcomes several of the open source community's leading visionaries to the Novell team and a strong core of Linux developers into the Novell fold.

Novell gains, and will carry forward, two key Linux market initiatives through Ximian that reinforce Novell's commitment to the open source community: GNOME, a project to provide a full-featured Linux desktop, and Mono, designed to allow applications developed using Microsoft .NET to run on Linux, UNIX, Windows and other platforms. The combination of Novell's network and infrastructure services with Ximian's Linux solutions provides compelling new value to customers leveraging the power of open source technologies.

This acquisition will be detailed more fully in future Linux Corner columns as we do more to integrate the technologies from Ximian with Novell's technologies and provide the technical information needed for you to more fully utilize these offerings.

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