

# The Novell/SAP Solution

## Flyer Content

### Business Section

Novell and SAP have joined forces to provide customers with the most advanced yet easy to administer user management solution available. The Novell/SAP Solution lets SAP application administrators consolidate the management of user access and privileges to SAP modules and other IT resources into one centrally managed point. User access to multiple SAP modules and other IT resources (complete with profile information and policy enforcement) can be granted or revoked with a single operation. Business rules, levels of access, and verified authentication are maintained and securely implemented so that resource access effectively mirrors the rights and privileges intended for each individual in department, inside or outside an organization.

This solution was developed by Novell and validated by SAP to simplify the management of user access to resources inside and outside a company and initially focuses on ensuring that an individual's status in the Human Resource system is immediately and accurately reflected throughout an organization. A new employee, for example, added to the HR system could immediately and automatically be provisioned to access all applications, computers, peripherals, databases, Web sites, online training, etc. that are appropriate according to the group, roles or responsibilities which they are assigned. In like manner, an employee would automatically and immediately lose access to all resources when their status in the HR system is terminated.

The solution includes the following features:

- Synchronization of the SAP functional users into Novell's eDirectory via the SAP Web Application Server
- Allows employee information in the mySAP Human Resources Module to be used as the basis for organization and personal information
- Provides a simplified platform for developing coordinated user directories based on industry standard eXtensible Markup Language (XML) and Lightweight Directory Access Protocol (LDAP)
- Enables bi-directional synchronization where information can be modified or added to any connected user database and it is automatically reflected in all other user databases
- Provides a single point of management for identity information for mySAP and other IT resources—all user information is available at a single point
- Leverages Novell eDirectory to provide distributed, secure, scalable directory services throughout the enterprise and across geographical distances

The solution provides immediate and quantifiable benefits to any organization that currently has the mySAP Human Resource module. A short list of benefits include:

- **Simplified Administration** - Dramatically reduce the effort required to manage large numbers of users across multiple departments or divisions and geographical areas with various roles and responsibilities. Management by profile or role reduces the number of steps required to provision, modify or revoke access. The number of user directories can be significantly reduced or even resolved to one.
- **Simplified Business Relationships** - Easily accommodate and integrate supply chain partners, B2B relationships and self-service customers using identity management and secure access.
- **Enhanced Security** - The solution maintains the high levels of security that have come to be expected from both vendors. The integration of solutions from SAP and Novell with encryption and authentication actually enhance rather than compromise security.

- **Reduced Cost of Ownership** - Ongoing management costs are cut and IT resource requirements can be reduced with less effort required to manage more users. There are also less quantifiable cost benefits attributable to less downtime, higher user and customer satisfaction, and reduced training. Self-service options reduce efforts for both administrators and users.
- **Efficient IT Architecture** - The solution provides the basis for an IT resource management architecture that accommodates all resources, is scalable to fit the largest corporations, and is based on open industry development standards.

## Technical Section

The solution is an innovative integration of technology from Novell and SAP. At a high level, SAP's Web Application Server (formally BASIS or referred to as the Central User Administrator) is synchronized with Novell's eDirectory so that user access to multiple applications and information can be centrally and simply managed. The solution maintains the highest levels of security while providing user/profile/resource management for a vast collection of disparate IT resources.

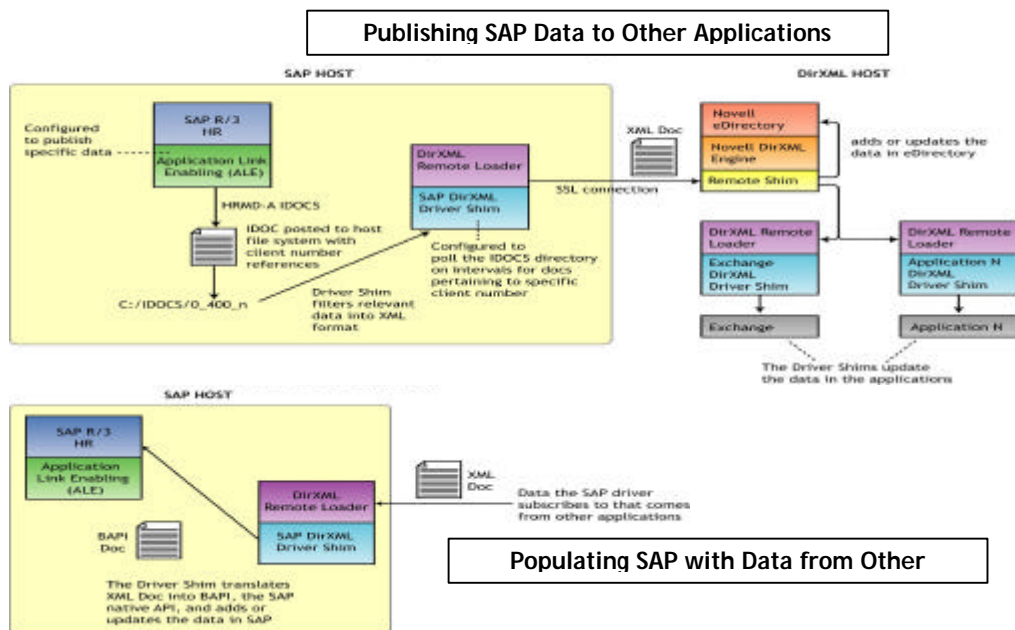
### How it Works

The solution utilizes the SAP's LDAP Synchronization Tool and Novell's DirXML Driver for SAP HR. User management for specific SAP modules, such as HR, is stored in the SAP Central User Administrator (CUA) where attributes such as roles and profiles are stored. Novell eDirectory also stores similar information which can be used by any connected IT resource or application. The LDAP Synchronization Tool is SAP certified to work with Novell eDirectory so that information in the SAP CUA is synchronized with eDirectory. Novell's DirXML Driver or SAP HR ensures that employee information is mapped correctly, synchronized bi-directionally and that it is available as an authentication base for other IT applications and resources. In short, the solution extends the identity information in mySAP modules to be shared with all other IT resources.

This technology combined with SAP Portals and Novell's Portal technology makes it possible for SAP installations to be completely Web-enabled for management, customer/employee/user self-service, and Web-based applications. SAP and other IT applications and resources are available to legitimate users through a standard Internet browser.

### Architecture

The solution is represented in the following architecture diagram. Components required include the mySAP HR module, the SAP LDAP Synch Tool, Novell eDirectory, Novell DirXML, SAP Portals and the Novell Portal framework.



### *Implementation*

Installing and configuring the solution requires some SAP skills with BASIS, ALE, and mySAP HR. Defining business processes that include policies and procedures that pertain to hiring an employee is part of the initial process. In the CUA, for example, it must be determined which individuals, groups or profiles have rights in the HR module to hire a new employee and assign him/her to a position in an organization. This business logic is then mapped to Novell eDirectory through XML stylesheets so that accurate synchronization can take place.

Configuring the SAP system parameters enables ALE-processing of HRMD\_A IDocs. Before you can configure the ALE properties of the SAP Driver, clients and logical systems must be set up. Novell follows SAP's general guidelines for configuring BAPI and ALE technologies which include the following steps: Create a distribution model; Create a port definition; Generate a partner profile; Generate an Idoc; Activate change pointers; Enable change pointers; Define change pointer processing; Schedule a job; and, Create a CPIC user. Pointers are established and links set up so that synchronization can occur automatically. This implementation is non-intrusive to SAP and requires no custom developed APIs.

If desired, Web interfaces can be developed or exposed so that management and user access is available anywhere on the Internet. Using a Novell CSI or the customer's trusted SAP advisor that already has expertise with a company's business policies, the implementation process can be relatively simple. If authenticated access to other company IT applications or resources is required, connecting through LDAP can provide these directory services or they may be included by extending Novell's DirXML.

## Market Strategy

### *The Need*

Practically all enterprise businesses are pressed to enhance and streamline communication for customers, suppliers, partners and employees. The Internet provides a common communications vehicle but the opportunity exists to provide the infrastructure, applications, tools and solutions that make secure, valuable, relevant communication of information between trusted parties possible.

The common and most needed component of an effective enterprise strategy is a directory service that ties together the management of enterprise activities such as Human Resources (HR), Customer Resource Management (CRM), Enterprise Resource Management (ERP), Supply Chain Management, Business to Business, Finance, etc. The solution provides this full directory service.

### *Who Can Implement?*

The solution is available from and can be implemented by a number of expert SAP/Novell integrators. These include the following general integrators consultants and partners:

- **Novell** - Novell Consulting Services (NCS) provides a wide range of development and integration services with extensive experience in customizing DirXML to synchronize with disparate application user directories using Novell eDirectory.
- **Cambridge Technology Partners** - Cambridge Technology Partners deliver technology-enabled solutions to solve complex business problems in the areas of Customer Relationship Management, Supply Chain Management, Enterprise Resource Management, eCommerce, technology implementation and more.
- **Novell Consulting Systems Integration Partners (CSI)** - Novell integration partners provide a wealth of experience and expertise with Novell products, SAP products and business processes. Novell CSI can be found on Novell's Web site.
- **ISV-PSO** - SAP Professional Services, other value-added resellers (VARs) also provide integration and maintenance services around this solution. VARs include enterprise application integration vendors (EAI) Tibco, Mercator, WebMethods, etc.

### *The Return*

Integrators and consultants that implement the solution create significant value. Not only do the companies that they service benefit from simplified management and reduced cost, but also integrators can receive substantial gains. The following advantages are available to partners implementing the solution:

- **Additional Services** - Integrators or SAP trusted advisors are able to provide significant incremental value with the Novell/SAP Solution and leverage their existing installation work through upgraded services. The Novell/SAP Solution enhances and extends the business infrastructure that has already been implemented.
- **Simplified Management** - For external organizations that manage a company's SAP infrastructure or that supply SAP services, the Novell/SAP Solution allows them to manage more installations and provide more services with little or no increase in staff. Administrators can manage more contract services in more locations for more companies without increased effort.
- **Incremental/Increased Revenue** - Additional revenue can be generated through new implementation and development projects and through incremental maintenance and management fees.
- **Expanded Opportunity** - The Novell/SAP Solution allows integrators to tie together disparate business applications and services to a common directory. Providing this aggregation service can lead to additional contract or project work around other applications.

## Contact Information

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