WHITE PAPER

Demonstrating Return on Investment with Enterprise-Class Identity and Access Management Technology

Sponsored by: Novell

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EXECUTIVE SUMMARY

End-to-end, secure identity and access management (IAM) within a distributed systems infrastructure is a key goal of most organizations today. This IDC White Paper demonstrates how enterprise customers can achieve significant ROI within their security and compliance infrastructures by implementing proven IAM technology. To validate and quantify the business benefits of integrated identity management using Novell identity and security management (ISM) products, IDC interviewed IT executives at a sampling of six Novell customer sites in North America and Western Europe. We asked a series of questions about identity management processes associated with IT services and the impact of Novell's ISM solutions on capital expenditures and operating costs, IT staff time requirements, and application user productivity.

Figure 1 shows total benefits on a per-user basis, as explained in more detail in this document.

FIGURE 1

Average Annual Savings from Deploying Novell Identity and Security Management Solutions per 100 Users
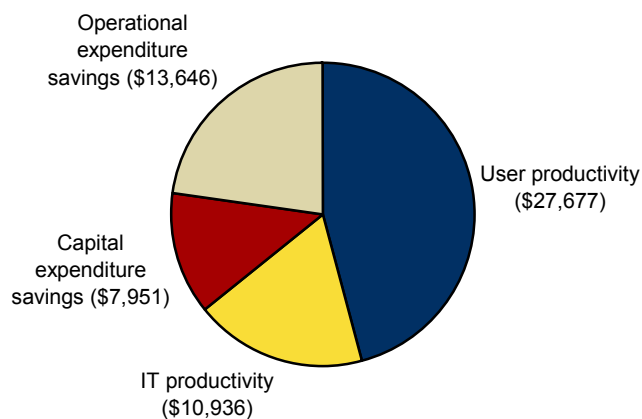
Total = $60,210 per 100 users

Source: IDC, 2007

IDC found that the IT staffs of the companies surveyed were able to reduce the time required to support identity management activities by an average of 54% and help desk activities by 21%, resulting in an annual cost savings over a three-year period of close to $1.0 million. When normalized for company size, the savings amounted to $10,936 per 100 users.

The companies surveyed were growing their user base by an average of 9% annually and were continuing deployment and integration with new business applications. Novell ISM solutions allowed the companies to grow efficiently so they were able to avoid increasing their capital and operational expenses by almost $2 million annually ($21,597 per 100 users).

The largest area of savings came from increased user productivity. By automating and integrating Novell ISM functions, users reduced the productive time lost in activities, such as granting of initial access and changes in access and password management, by 90%. Conversely, more reliable access to applications increased user productivity by an average of 2%. Combined user productivity benefits totaled $2.6 million annually, or $27,677 per 100 users.

For the customers surveyed, the total benefits averaged more than $5.6 million annually, or $60,210 per 100 users. This sampling of companies invested an average of more than $2.8 million over three years in deploying the Novell ISM solutions, resulting in a net present value for the three-year savings of almost $10.2 million, or $111,043 per 100 users.

Based on these numbers, the payback period from deploying the Novell ISM solutions averaged 6.3 months for the companies surveyed, yielding an average return on investment of 358% (see Table 1).

TABLE 1

ROI Analysis for Deploying Novell Identity and Security Management Solutions

Metric	Value
Three-year cost of investment	$2.8 million
Annual benefits	$5.6 million
Net present value of three-year savings	$10.2 million
Payback period	6.3 months
ROI over three years	358%

Source: IDC, 2007

INTRODUCTION

Identity and Access Management Market Definition

Identity and access management is a comprehensive set of solutions used to identify users (such as employees, customers, and contractors) in a system and control their access to resources within that system by associating user rights and restrictions with the established identity. Web single sign-on (SSO), host SSO, user provisioning, advanced authentication, legacy authorization, public key infrastructure (PKI), and directory services are all critical components of identity and access management. Federated identity revenue is also included within the identity and access management market. Federated identity (or federated SSO) is the ability to share a user's log-in and authentication data across different Web sites and applications, both internal and external to the organization, using secure, standards-based protocols. The user is able to sign on to multiple Web sites regardless of the provider or identity domain, and organizations are able to separate employees from external parties to better meet compliance regulations. Many vendors offer specific products to provide this functionality as part of their identity management software suites.

Compliance continues as a major driver in the identity and access management market, accounting for approximately 70% of all IAM revenue. To meet government- and industry-driven regulatory requirements, most companies are employing a variety of IAM technologies that span the submarkets and include provisioning, password management, privileged password management, digital signatures, SSO, audit and reporting, and two-factor and multifactor authentication mechanisms.

With headquarters based in Waltham, Massachusetts, Novell has grown its identity and security management products steadily over the past several years and is constantly working to extend the capabilities of its identity and security product suite. The company has consistently held a leadership position in this market and is especially strong in the manufacturing, financial, healthcare, and government sectors.

The three primary components of the Novell identity and security management suite are identity management, access management, and security information and event management. The company's Identity Manager 3.5 provides provisioning, roles management, and comprehensive identity management capabilities for organizations. Novell's Access Manager 3 provides federation and Web SSO and also includes an integrated VPN. The Sentinel 6.1 product from Novell is designed to collect and aggregate identity and authentication data with information from other IT systems to provide advanced security dashboards and compliance management.

Novell's SecureLogin enterprise single sign-on is designed to offer users easy access to network and Web resources, using a single, secure log-in. It reduces IT administration and cost by drastically reducing help desk calls related to password resets, lowers the risk of data breaches by helping companies enforce consistent password policies, and simplifies compliance with internal and industry regulations. When it is deployed with Novell Identity Manager, Novell Access Manager, and Sentinel from Novell, enterprise customers have access to a complete, integrated identity and security management stack for supporting IT compliance, risk management, and governance requirements.

The metadirectory portion of Novell's Identity Manager product also leverages eDirectory, which provides an LDAP services directory designed to provide multiple layers of security, including a cryptography engine. The eDirectory architecture is designed to allow the common use of roles and policies between Novell's IAM products and runs on a variety of platforms and integrates with Microsoft's Active Directory and other identity repositories.

In addition to providing broadly applicable horizontal IAM solutions, Novell continues to grow the value of its ISM product suite, leveraging core IAM product value through partnerships with companies such as ActivIdentity and Honeywell to provide targeted solutions for healthcare, finance, and government agencies.

QUANTIFYING THE BUSINESS BENEFITS OF DEPLOYING NOVELL ISM SOLUTIONS

Determining the ROI and Payback Period

From the results of the interviews, IDC was able to determine the average ROI and payback period that the surveyed companies realized from deploying Novell ISM solutions based on increases in IT staff productivity and user productivity and cost savings. The following sections contain more detail on the savings shown in Figure 1.

User Productivity

As one may suspect, the greatest beneficiaries of ISM solutions are application users. The greatest impact of Novell's ISM products is felt by the users who are now relieved of long wait times associated with changing passwords, gaining access to new servers/systems, and getting a new account up and running. A three-year analysis showed that the average company would see benefits of $285,534 per 100 users. Novell's ISM solutions enhanced user productivity as follows:

☑ Reduced initial time to get up and running by 72%

☑ Reduced time for monthly moves, adds, and changes by 96%

☑ Reduced help desk calls by 21%

☑ Increased productivity by 2% due to quicker and more reliable access to applications

IT Productivity

The IT staff saves time because Novell's ISM solutions allow for all user accounts to be managed within one system. A three-year benefit analysis shows that the average company would save $44,100 per 100 users. These savings are partly derived from the savings in full-time equivalents (FTEs) including creating/managing user accounts, password management, and user administration, which totaled a benefit of 4.5 FTEs saved.

The help desk enjoyed a benefit of 7.9 FTEs saved. The time saved was due to fewer calls per month (reduced by 6%) per user as well as each call taking less time (average call time was reduced 33%).

Novell's ISM solutions showed a benefit to the IT staff in deployment as well. The time required to deploy new users was reduced 90%, leading to a savings of 4.7 FTEs.

Table 2 shows the time savings by activity for IT staff support. Annual savings totaled $1.0 million. When normalized for company size, the savings amounted to $10,936 per 100 users.

TABLE 2

Time Savings on IT Staff Activities from Deploying Novell Identity and Security Management Solutions

Activity	Time Savings (%)
Creating/managing user accounts	19
Resetting/managing passwords	54
Maintaining user data	40
Managing access to applications	23
User administration	63
Tracking for compliance	75
Reconciling directory entries	50
Help desk	21

Source: IDC, 2007

Cost Savings

Novell provided benefits in both operational costs and capital costs when considering IT. For operating expenditures, Novell provides the ability to access all user accounts from a central point and to automate all access processes. The increase in IT efficiency meant that the companies could grow their user base and develop, launch, and operate new business applications without adding staff. This improved management efficiency yielded an average reduction in IT headcount growth of close to 5% a year. With an average loaded salary of $56,711, and annual increases of 3%, the payroll savings from increased management efficiency averaged $1.3 million a year over the three years, or $13,646 per 100 users.

More efficient account management led to a reduction in application servers and server maintenance savings of $574,951 annually, or $6,234 per 100 users over three years.

Additional savings came from increases in IT efficiency resulting from the deployment of the management software and from the elimination of other management tools of $158,333 annually, or $1,717 per 100 users.

Payback and ROI

Overall, the Novell ISM customers surveyed enjoyed total benefits of more than $5.6 million annually, or $60,210 per 100 users. The companies invested an average of more than $2.8 million over three years in deploying the Novell ISM solutions, including initial equipment and software costs and installation, IT training, annual licenses, and support and outsourced support. Benefits minus the investment resulted in a net present value for the three-year savings of almost $10.2 million, or $111,043 per 100 users.

CHALLENGES/OPPORTUNITIES

Novell's challenge is to provide support for existing customers while continuing to invest in R&D to produce leading-edge IAM software. The company has done exceedingly well in this area in the past, but as regulatory standards continue to proliferate, the ability to quickly and consistently provide reliable solutions to customers will be a key differentiator. Also, providing the integration technology necessary for evolving the IAM customer base to its next logical level of proficiency is essential. Novell must retain the resources required to meet these needs. Customers are looking for IAM to increase security, meet regulatory compliance needs, and ultimately streamline business processes.

To retain its top-tier vendor status in IAM, Novell will need to remain innovative in terms of technology while turning up its marketing efforts a notch or two in the coming months. Also, Novell should continue to nurture its existing partnerships while keeping an eye out for new opportunities that will allow the company to take advantage of emerging technologies in the IAM market. Many vendors are competing in the IAM space, and many are well-funded and ready to take on new challenges and partnerships to achieve greater market share.

FUTURE OUTLOOK

Although compliance was by far the largest IAM market driver in 2006, other elements driving IAM sales reflected the enterprise IT need for:

☑ Enterprise SSO (both host SSO and Web SSO)

☑ More sophisticated password management technologies

☑ Workflow integration with provisioning systems

End-to-end, secure identity and access management within a distributed systems infrastructure is a key goal of most organizations today. Although organizations have to attack this objective with a piecemeal approach, many have made solid in-roads with the adoption of secure SSO, strong provisioning, strong authentication, and the establishment of best practices for meeting overall corporate security goals.

The addition of compliance regulations means that automated auditing and reporting capabilities are becoming a required component of any corporate IAM implementation. Total IAM market revenue reached almost $3 billion in 2006 and is forecast to exceed $4.9 billion by 2011. This total does not include revenue from IAM services. Increasing regulatory compliance mandates (both in the United States and internationally), combined with budgetary and staffing constraints, will continue to drive organizations to look for better ways to cost-effectively manage their security infrastructure. It has become evident in the IT industry that identity and access management products are a key component of compliance platforms.

METHODOLOGY

IDC interviewed six end-user companies from the United States, Western Europe, and Canada that had deployed Novell's identity management software. Half of the customers were using Novell SecureLogin. Interviews with end users focused on the business and technical imperatives for deploying Novell's solutions and also covered cost data that was used as the basis for our business value measurements. In all cases, the applications were critical to the business and offered significant rewards. Respondents selected Novell's identity and security management products to increase user productivity and IT staff efficiency and to reduce long-term hardware and software costs.

Respondent sites included insurance companies as well as healthcare and manufacturing enterprises. The companies ranged in size from 2,700 to 40,000 employees.

The IT managers surveyed are responsible for providing IT services to an average of 8,300 users; the companies surveyed were growing their user base by an average of 9% annually. To support these users, all companies were running Novell identity and security solutions, Novell Identity Manager, Novell Access Manager, Novell SecureLogin, Novell Sentinel, and Novell eDirectory. In addition, most were running Novell Resource Management and Novell Audit.

Managing these devices and servers and the networks that support them requires a significant IT investment. The average IT staff included 259 FTEs responsible for the IT infrastructure. Annual IT expenditures averaged $2,878 per user.

Figure 2 shows the improvement in cash flow and running cash flow over the course of the implementation.

FIGURE 2

Improvement in Cash Flow and Running Cash Flow During Implementation
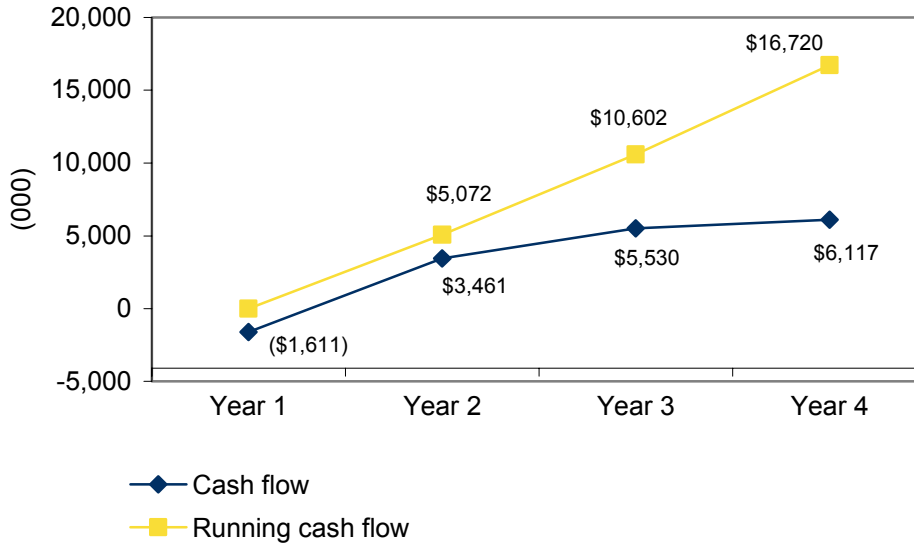
Source: IDC, 2007

IDC's ROI Methodology

To quantify the business benefits of IT management, IDC has developed an ROI methodology that measures the total life-cycle costs and the sum of the benefits achieved. The methodology calculates the ROI in a three-step process:

1. **Ascertain the investment** made in the purchase and implementation of the solution and the associated training and maintenance costs. To get an accurate assessment of the investment in deploying the Novell ISM solutions, IDC asked for the deployment, setup, upgrade, and maintenance costs, as well as the total cost of the software and training. This investment included the loaded costs of the incremental staff required to operate the Novell ISM software.

2. **Measure the benefits** in IT staff and user productivity from deploying the solution, as well as the cost savings from increased IT staff efficiency and lower capital and operating expenses.

   ❑ **Productivity savings.** IT staff productivity indicates how effectively IT managers and their staff use their time. Besides reducing operational costs, gains in IT productivity can free up staff to implement new initiatives more rapidly, helping to create a competitive edge.

- ❑ **User productivity** is increasingly dependent on service uptime as organizations become progressively more network-centric. When users are unable to access network resources, their productivity may be severely impaired. User productivity also suffers when employees have to wait for help desk support or other IT administrative tasks. Since users often are able to move to other business applications when service interruptions or performance degradations occur, only a small fraction of the potential user impact time is counted toward the final ROI result.

- ❑ **Cost savings.** Costs can be cut by improving IT staff efficiency, which is a measure of how well the IT management organization can achieve economies of scale and scope of work with its people, tools, and practices. To remain competitive, companies must be able to grow their systems and networks at a faster rate than the IT staff required to support them. Skilled IT professionals continue to be scarce, so companies are expecting existing staff to take on more work and responsibilities. If IT departments are unable to achieve the required economies of scale and scope, they restrain corporate managers' business decisions and discourage aggressive deployment of technology to gain a competitive advantage.

3. **Calculate the payback period and ROI for the deployed solution.** From the results of the interviews, IDC was able to calculate the average payback period and rate of return from investing in the Novell ISM solutions, as well as the net present value of the savings. IDC bases its calculations on a number of assumptions:

- ❑ Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.

- ❑ Lost productivity benefits are a combination of reducing lost user time from waiting for account setup and changes and increased job performance due to reliable operations.

- ❑ The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost.

Since not every hour of downtime equates to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of the survey, IDC asks each company what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.