

Transforming Service Delivery Through Next-Generation Portals

Novell® Government Solutions: Policy-Based Citizen Portals

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BUSINESS WHITE PAPER

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Executive Summary

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As constituents demand more online services and governments execute their strategic initiatives, citizen portals have been deployed with increasing frequency all over the world. However, the effectiveness and sophistication of these portals varies greatly from place to place and organization to organization. Much like the word “restaurant” can encompass everything from a drab corner cafe to a world-class gourmet establishment, local government portals currently run the gamut from a few static Web pages with primitive graphics to dynamic, sophisticated sources of information and services.

The key objective of virtually any public sector Web initiative is to significantly reduce costs while making government more efficient, secure and effective. And at their best, portals do just that, enabling government workers to be far more productive and allowing citizens to conduct business at their convenience—not just when an office is open. They provide efficient, automated transaction processing for constituents while enabling public agencies to be much more responsive to constituent needs.

Most importantly, citizen portals can dramatically improve the efficiency of services delivery, reducing the cost of—and in many cases the need for—delivering services through face-to-face or paper-based channels. By enabling governments to reallocate funds due to newfound efficiency, a first-rate citizen portal can result in increased funding for vital community programs and services and, as a result, can have a positive impact on public policy.

But a great deal of thought and planning must go into a citizen portal in order for it to live up to expectations that are getting higher all the time. And regardless of what stage a portal implementation is in, it’s always a work in progress. Incremental improvements can always be made. New functionalities and services can always be added. The challenge is therefore tremendous. Priorities and long-term goals must be established up front in order to build a scalable portal infrastructure that can be leveraged time and again to provide additional functionality and serve new audiences.

THE CHALLENGE

When the first government Web sites went online in the 1990s, they were novelties—a way of showing off new albeit early-stage capabilities. Step by step, many of these portals have evolved into essential tools for conducting the work of government—and doing it more efficiently and less expensively than ever before.

But even in government departments that have created the most sophisticated portals, stubborn issues persist. The reality is that many citizen portals have not yet lived up to their promise because they fail to provide several key capabilities:

- They are often primarily informational, and cannot support the transactions that represent a significant part of the citizen- and business-to-government experience.
- They are sometimes linked to a single department or system and cannot bridge technical or organizational silos to leverage existing investments and present citizens and businesses with the comprehensive information they need.
- They are generally unable to personalize the delivery of resources and cannot adequately safeguard transactions and the confidentiality of personal information.
- They do not offer a scalable, extensible platform on which to build services dedicated to other constituencies such as employees, suppliers and business partners.

Moreover, most government transactions—even when a portion of the information or process is available online—still require direct contact between the citizen and a government employee. Given the volume of interactions created by high-transaction classes of citizens (for example, those who have recently moved to a new community and must register a vehicle, enroll children in public schools, register to vote, etc.), it's clear that there is room for tremendous improvement in constituent satisfaction, process efficiency and operating costs. For some citizens, face-to-face meetings, phone conversations and mail exchanges will always be preferred channels, but governments can realize significant gains by providing convenient online options—particularly for “high touch” constituent groups.

In addition to these cost and service drivers, an increasing number of regulations (such as various Freedom of Information acts) mandate timely response to citizen requests for government information. These regulations place additional burdens on today's already budget- and resource-strapped government agencies. Using manual processes, these agencies have a difficult time responding to information requests within the required timeframe while consistently complying with policies that govern access to information.

SOLUTION REQUIREMENTS

In order to provide a rich and flexible menu of online services that effectively increase citizen participation—while making a significant difference in department budgets and effectiveness—

government portals must measure up to several key criteria.

1. Improve Transaction Processing

Requirements: Move beyond static Web pages, incorporate workflow and transaction handling capabilities, support redesign of processes and workflow

Benefits: Process efficiency and consistency, lower staffing requirements, fewer paper forms to process, improved citizen satisfaction, faster service, reduced transaction costs, higher service throughput, fewer errors

2. Consolidate Data from Disparate Sources

Requirements: Leverage a standards-based, service-oriented architecture to consolidate disparate systems and data into a single view

Benefits: Organizational and technical “transparency,” ability to leverage legacy systems and existing investments, opportunity to deploy a common foundation for security and data integration, integrated planning and budget allocation vs. one-off departmental portal projects, better coordination between departments, less duplication of effort, improved citizen satisfaction

3. Leverage a Secure Identity Management Foundation

Requirements: Leverage identity (not just for users, but for everything that feeds into or out of the portal) to control how resources can be accessed and combined, implement organizational policy in the form of technical

rules that automate the delivery of resources, enable citizen control (through federated identity technology) for the way personal information is used and shared

Benefits: Greater adherence to policy, improved data integrity and security, better information-sharing capabilities (both routine and during emergencies), regulatory compliance, increased citizen trust and adoption of eGovernment services, automated service and account provisioning

4. Provide a Scalable Foundation

Requirements: Enterprise-class portal, easy-to-use development tools, ability to integrate additional applications and data sources running on a variety of platforms, ability to leverage a consistent policy- and identity-driven foundation to support portal access by other constituent groups (e.g., employees, suppliers, business partners)

Benefits: Greater ROI, consistent planning and implementation, reduced development time, reuse of existing investments, cross-platform support, flexibility that enables trouble-free modification and growth

Improving Services, Extending Budgets

A citizen portal that satisfies these criteria enables fundamental improvements in government operating efficiency and service quality. By automating routine transactional services and moving them into a secure online environment, a portal simultaneously makes those services more conveniently accessible, lowers costs and reduces manpower requirements.

To cite just two examples of the available savings, in-person vehicle registrations and driver license renewals cost some U.S. states \$3.40 each in personnel and paperwork. The online cost is only \$1.75. And according to Paul Taylor, chief strategy officer at the Center for Digital Government, the State of Washington's health department has put 1,200 forms online, saved \$750,000 as a result and rescued overwhelmed social workers from mountains of paper.¹

Financial and manpower savings like these can be reallocated to fund and staff new programs where face-to-face contact is essential. Thus portals not only improve the quality of existing services, they substantially increase the reach of existing budgets. Portals let agencies and officials respond more attentively to their constituencies, and provide a highly visible example of responsible stewardship of public funds.

THE IMPORTANCE OF IDENTITY MANAGEMENT

A portal is much more than a graphical interface. On the Web, it is the front end of every operational process that relates to sharing information, conducting business and delivering services.

The portal must therefore be backed by digital intelligence of the highest order. It must "know" who is seeking access, what services individuals want, and whether or not they are authorized to receive those services. It must also be able to apply government policy—invoked in the form of technical rules—to the delivery of constituent services. This requires the policies governing resource access to be integral to the portal itself,

where they can be applied to individual users.

In other words, the portal must be able to match people and their motives against well-defined policies in order to determine who can be given authorized access to which resources.

And that, in a nutshell, is the case for a flexible, comprehensive identity management foundation.

In order for a portal to maintain security and other policies—ensuring that end users and employees have access to the right applications and data—the portal must be aware of people's identities.

But the benefits of an identity-driven portal extend beyond the human sphere. In fact, identity profiles can be created for virtually any resource that will be accessed via the portal, including applications, systems and data. These profiles can then be used to control how resources are combined to create a dynamic, personalized set of information for each citizen. A school district, for example, might grant parents the right to access their own children's class records, test scores and teachers' logs through its public portal, while preventing access to unrelated student records.

THE NOVELL POLICY-BASED CITIZEN PORTAL

Whether the goal is to improve an existing government portal or build one from scratch, Novell offers solutions that make the delivery of citizen services more efficient, convenient and secure. By integrating data and providing access via a single, secure and easy-to-use interface, Novell citizen portal solutions encourage citizens and companies to conduct their government business online—saving money and easing the

¹ USA Today, "It's the era of big government," 8/19/2004

burden of overworked public sector employees. And by optimizing the systems and processes required to serve the small percentage of citizens that monopolize the majority of a local government's efforts and offerings, more time and resources can be made available for programs and policies that benefit constituents at large.

Novell policy-based citizen portal solutions deliver these benefits by offering:

- A convenient online environment that minimizes the need for paper forms and face-to-face transactions
- Transparent access to disparate local government resources from a single site and through a single authentication process
- Information, application and device access based on identity and government policies
- Secure, timely processing of citizen requests for information
- Increased citizen control over how personal information is shared among government departments and related organizations
- Secure, automated creation of accounts for various government and private enterprise services

The basis for all Novell policy-based citizen portals is Novell® exteNd™, a comprehensive, award-winning suite for the rapid development and deployment of service-oriented Web applications. This powerful toolset lets developers combine identity, integration and portal services to securely deliver relevant information to the appropriate citizens at the appropriate time. For example, citizens relocating to a new city can complete

several different tasks in a single session via the portal. They can renew vehicle registration and driver's licenses, update voter registration documents, download property tax assessment records on new homes and even purchase parking passes from a third-party provider—completing transactions and updating personal information in several different databases all through a single login and authentication process.

The identity foundation for all Novell policy-based citizen portals is Novell Nsure®, a robust identity and access management foundation that unifies and synchronizes identity information across systems, platforms and locations—based on policy. Novell Nsure identifies citizens based on their relationship with a government organization and mediates their access to authorized resources. With this foundation, Novell policy-based citizen portals address a wide range of security and access management issues, including:

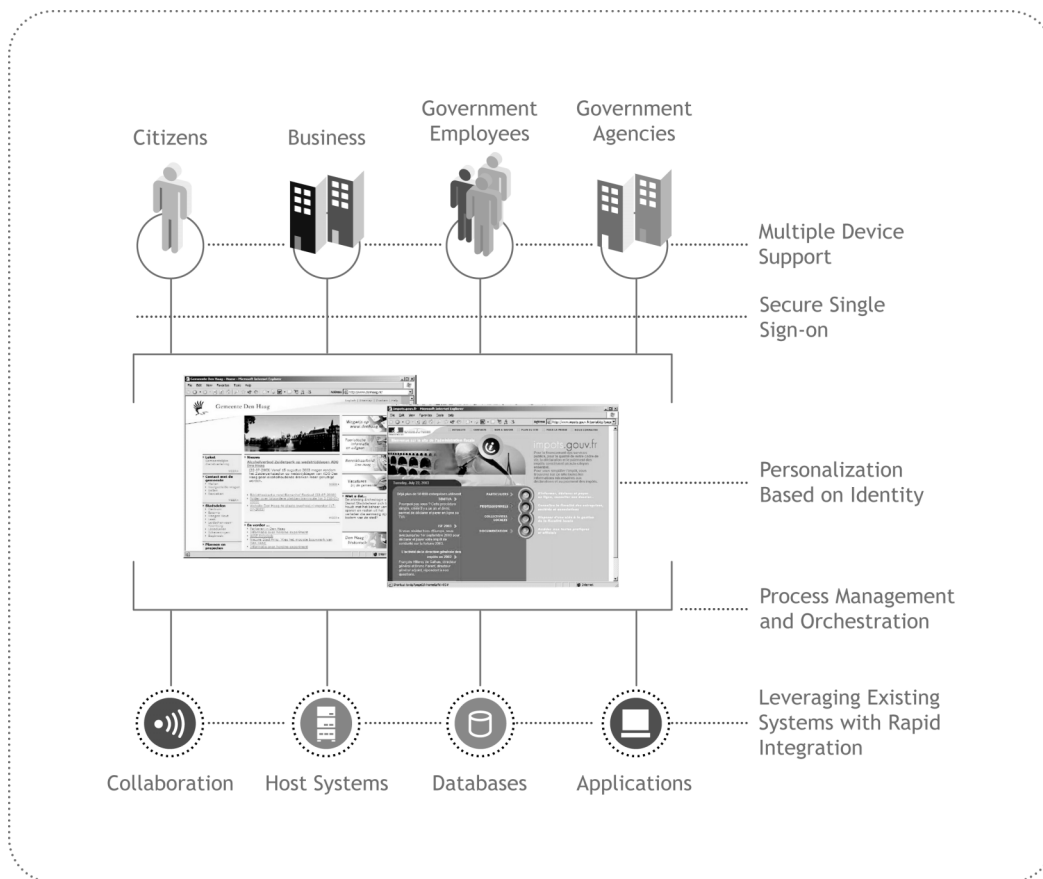
- Identity integration
- Password management and single sign-on
- Personalized data filtering and presentation
- Citizen identity information security
- Regulatory compliance

Novell is also an industry leader in identity management technology and a founding member of the Liberty Alliance, a consortium of 150 companies and organizations that is developing an open standard for federated identity management. By leveraging this capability to allow citizens to securely share personal information with multiple government and private sector organizations, Novell policy-based citizen portals improve

efficiency, minimize manual processes and save money—not only enhancing officials’ ability to deliver better services, but influencing policy-making where it matters most: in areas that improve citizens’ lives.

Novell policy-based citizen portal solutions are part of—and draw upon—a broad range of Novell government solutions, which include other government portals, data and application

integration, secure infrastructure capabilities and core foundation offerings. Novell and its partners have been providing specialized solutions to the public sector for more than 20 years, and this expertise and commitment is reflected in successful deployments across the globe for government organizations at all levels. With Novell as your partner, you can deploy the right government solutions with confidence.



GOVERNMENT PORTALS IN ACTION

An increasing number of government portals the world over are doing what they are intended to do: cost-effectively enhance the relationship between government and the people. And successful implementations have one thing in common: they incorporate all of the solution requirements we’ve discussed. Consider what the following government organizations have accomplished with identity- and policy-driven government portal solutions from Novell.

“The central directory service controls whether a person who wants to log in is really who he says he is. With one password and username, users can gain access to various applications because these applications check whether the details match via the central directory service. In this way, somebody can set a date for a wedding and also read digital council reports. Companies can request a building permit, and people who live elsewhere can even request a parking permit for The Hague digitally.”

—Mari Heesbeen,
External Project Leader
for Implementation of
Central Directory Services,
The Hague Council

The Hague Council Tax Office is responsible for collecting local taxes and implementing the VIG (valuation of immovable goods) law. Unlike taxing authorities in many other countries, The Hague Council Tax Office is almost legendary for its administrative transparency and responsiveness to citizens.

That reputation became even stronger when the office began implementing Novell exteNd as a framework for development of its Web applications and citizen portal. Ever since, the results have been impressive. Internally, The Hague Council Tax Office is benefiting from improved performance for applications, shorter development time and more efficient IT management. Through its Web site, the Council provides taxpayers with complete valuation records disclosing the basis for property tax assessments, as well as an online process for challenging newly assessed values. With the exteNd based portal, transparency isn’t just a government policy—it’s a real-time fact for any citizen or business with a Web browser.

Moreover, transparent access doesn’t end at the desktop. The Hague Council Tax Office also uses the exteNd framework to provide portal access using wireless tablet PCs. This M-government (mobile government) initiative allows tax office appraisers to keep in touch with all the details they need, where and when they need them. For example, an appraiser can use M-government access from within a citizen’s own home to look up information about immovable goods or to compare similar properties from all over the city. M-government gives appraisers the ability to

answer citizen questions on the spot, rather than promising to “get back to you later.”

The Hague Council as a whole is following the Tax Office’s lead, with a goal to become the most customer-friendly city in the Netherlands in 2005. First and foremost, the council will be implementing 100 percent digital access to city services, with single log-in capabilities based on Novell eDirectory™. A central directory service for user authentication—combined with decentralized authorization and provisioning of services—will allow simple, secure access for citizens, while government agencies retain the flexibility they need to provide highly tailored services.

The State of Nebraska hired IBM Global Services to conduct a study with the goal of delivering eGovernment services efficiently, economically and securely to the state’s two million residents. Over the course of the following three years, the study’s recommendations were implemented with significant contributions from Novell consultants and Novell technologies. Key recommendations called for making virtually all of the government’s relevant applications and information available online using the state’s existing Web server architecture—including its “green screen” mainframe applications.

This was a major undertaking, especially in view of the state’s more than 20 agencies, many of which have their own IT departments with a variety of standalone systems. With Novell’s help, the state deployed a user authentication and access solution based on Novell eDirectory, Novell Nsure Identity Manager and Novell iChain. The solution

provides citizens with cross-agency access to applications and information via a single login to an Internet portal. And Nebraska's Information Management Services Division used the intuitive, visual development environment of Novell exteNd to quickly generate Web services for mainframe applications using XML.

The solution gives users personalized, role-based access to information from any location, at any time. Employees will have access to the applications needed to do their jobs, and citizens will have access to services such as voter registration—all based on their individual information. Personalized access protects citizen privacy as well as the confidentiality of sensitive government information.

With Novell eDirectory, Nebraska officials plan to manage more than one million user identities securely and confidentially—including individual citizens and businesses that interact with the state. And the state didn't need to hire additional IT personnel—even as new eGovernment implementations and infrastructure improvements greatly improved functionality, breadth of online services, and the rate of adoption of the portal.

NOW IS THE TIME TO ACT

With government budgets being squeezed like never before—at the same time that more people are turning to the Web for their information and service needs—now is the right time to build effective government portals. The opportunity is now available to simplify, consolidate and save money in the provisioning of many fundamental government services, easily achieving high rates of

adoption thanks to today's Internet-savvy public. What's more, today's technology offers much higher performance at a lower cost than just two or three years ago: one only needs to consider the vastly improved price-performance of business PCs that have come to market during this period. Governments now have the opportunity to deploy or transform their existing portals with a cost-effective, secure and service-rich infrastructure that can be leveraged time and again to integrate additional stakeholders into a secure, policy-based transactional environment.

The key to success is expert planning and ongoing management that enables your organization to effectively:

- Establish dialogue within and outside the organization to determine requirements and goals for the project
- Create ongoing feedback mechanisms to ensure that goals and needs are being met
- Evaluate the role of existing infrastructure in meeting business requirements, as well as the need for new infrastructure to integrate and expand capabilities
- Establish clear priorities, implementing the most cost-effective and far-reaching solutions first
- Build a roadmap to implementation—including training, communication, rollout and post-deployment support
- Document results and lessons learned
- Refine processes and solutions for ongoing improvement and growth

“Choosing Novell exteNd was an easy decision after four Novell consultants completed a proof of concept in just three days.”

—Kevin Keller,
IT Manager, IMServices,
State of Nebraska

Turn to Novell to get the job done quickly and right. Novell and its extensive network of partners and alliances combine the real-world experience and knowledge of expert consultants around the globe to make sure that every Novell solution you implement is based on best practices, customized to meet your needs, and capable of

delivering the highest return on investment. Novell can help you take full advantage of the extraordinary opportunities that identity-driven, policy-based portal solutions have created—to help you transform service delivery, reduce costs and better meet the needs of all citizens in your community.

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1 888 321 4272 US/Canada
1 801 861 4272 Worldwide
1 801 861 8473 Facsimile

Novell, Inc.
404 Wyman Street
Waltham, MA 02451 USA

www.novell.com



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