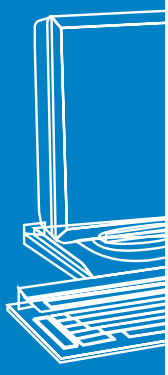
ENABLING THE DIGITAL COMMUNITY

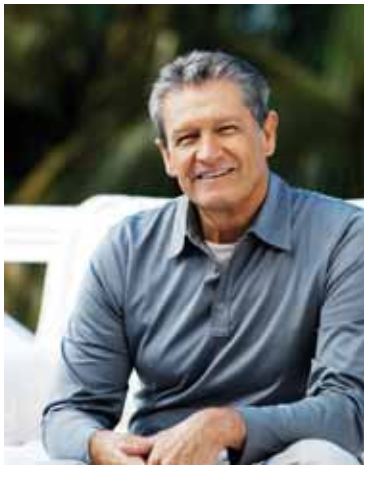
ON DEMAND

Simdesk connects people, business and communities with technology.



REDEFINING ACCESS

Simdesk puts enterprise-class technology within everyone's reach.



Good things happen when technology reaches all members of a community. Children who use technology at an early age are more likely to graduate from high school. Studies show that students with access to technology achieve higher test scores, and they are also more likely to go to college and land rewarding careers.

Residents who gain access to meaningful technology develop capabilities that lead to better jobs and a better quality of life. Without access to technology, these residents are locked out of a growing number of opportunities.

Businesses that make extensive use of information technology become significantly more successful. This is particularly true for small and medium-size companies that generate much of a community's economic growth and vitality.

Although the benefits of publicly available technology are clear, public officials have struggled to launch large-scale community technology initiatives. The cost and complexity of traditional network computing often put these programs out of reach — that is until now.

Simdesk Technologies has changed the way technology is delivered by changing the way software works across the Internet. The company rewrote the rules for IT and is delivering computing services on demand as a utility on a populationwide scale. Through its successful Community Computing initiatives, Simdesk provides entire cities or states with access to affordable technology that supports and sustains education, strengthens work forces and promotes economic development.

Going Beyond Internet Connectivity

For years, localities have worked hard to stock community centers, libraries, churches and other facilities with computers and hardware. Simdesk® takes that offering to a new level by delivering a package of solutions that makes a community's existing computer investments more valuable.

Simdesk combines a world-class set of file, messaging, print and groupware capabilities into one seamlessly integrated, low-cost service. The solution provides communitywide access to e-mail with spam and virus protection, messaging, online file storage and backup, collaboration tools, and remote printing, as well as a free set of productivity applications for those who don't or can't make an investment in additional software. Accessing end-user accounts is easy with any Internet-enabled device, including home or public PCs, laptops, PDAs — even cell phones.

"These are the kinds of capabilities that companies spend thousands of dollars per person to provide to their employees," said Louis Waters, Simdesk's president and CEO. "We're providing tools to every single person in a community, so there are no economic barriers to technology access."

Simdesk's ability to deliver a total package of services to any Internet-enabled device makes it ideal for serving residents and businesses who lack the funds necessary to compete in today's digital economy. These capabilities turn every PC — including public computers in libraries, churches, schools and community centers — into a secure and personal access point where users can create, store, print and share documents and files.

» ***Simdesk literally rewrites the rules for delivering access to technology resources.***

"It doesn't matter if you're using your own PC or a public-access computer that's used by hundreds of people every week," Waters said. "You have your own private area, your own tools and your own services."

A New Approach

It may sound too good to be true, but Community Computing is a reality.

For instance, Simdesk on-demand computing services enable all Indiana residents to securely create, store, print and share electronic information from any Internet device whenever they want. The same is true for residents of Houston, Texas. Chicago deployed Simdesk in community technology centers across the city to level the playing field for low-income residents and is in the process of extending the solution citywide.

"What makes Simdesk such a powerful force is the combination of our technology and our business model," said Simdesk Executive Vice President Wendy Haig. "Today's technology solutions cannot viably address two-thirds of the world's population. Simdesk offers a real and financially sustainable solution that eliminates that barrier and delivers a total solution to entire populations."

Simdesk's Community Computing strategy combines advanced server technology with the simplicity of the Internet to slash the cost of traditional computing services.

The hosted solution relieves government agencies from supporting complex computing infrastructure. Simdesk World Wide Servers™ reside in the company's state-of-the-art data centers, and the Internet provides global connectivity to these resources.

The Simdesk approach eliminates traditional client-server networks — and the layers of servers and software that come with them. Instead, Simdesk's on-demand computing platform was built from the ground up to exploit the power of the Web.

ECONOMIC DEVELOPMENT

Simdesk Delivers Opportunity

Technology is the glue that bonds all facets of a community's economy, according to Public Technology Inc. (PTI), a nonprofit organization that advises local governments. In a recent report, PTI said Simdesk's Community Computing strategy provides long-term, technology-based economic development opportunities that simply weren't feasible before.

Simdesk addresses two fundamental requirements for lasting economic prosperity: deployment of technology to support local businesses and development of a tech-savvy work force.

"With Simdesk's populationwide pricing and availability, digital inclusion for a community's small to medium businesses and residents are achieved simultaneously," the PTI report said. "As a result, communities' quality of life and commercial enterprise environments cost-effectively support each other to create sustainable opportunities for communities to grow, contribute, compete and prosper."

» *"What makes Simdesk such a powerful force is the combination of our technology and our business model."*

— Wendy Haig, executive vice president, Simdesk

UTILITY COMPUTING

Setting the Standard

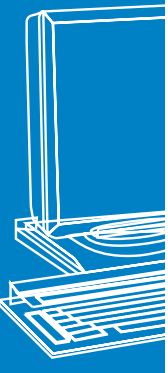
Simdesk's Community Computing model may represent the technology industry's most effective use of utility computing to date.

The ultimate goal of utility computing is to make advanced technology as simple to use as flicking on a light switch. As with other common utilities — water, electricity, telephones — the idea is for users to receive the computing capabilities they need without worrying about the complex maze of servers, software, storage and networks needed to create and deliver those resources.

Unfortunately, most technology users remain burdened with the costly intricacies of building and maintaining IT infrastructure. *BusinessWeek* magazine estimated that companies worldwide would spend $95 billion in 2004 just to maintain their servers — that's 80 percent more than they spent to buy servers over the entire year.

Technology costs restrict the growth of industry, particularly small businesses, which are the economic lifeblood for most communities. These costs also prevent governments from launching digital inclusion programs that improve prosperity and quality of life throughout their communities.

Simdesk uses on-demand utility computing to overcome these barriers. The company's Community Computing programs slash costs and complexity, allowing cities and states to provide advanced IT services to millions of users with revolutionary cost-effectiveness.



"We threw out all the accepted wisdom for how a wide area network has to be constructed," Waters said. "The Internet is the greatest network in the world. Why should you have to create a network over the top of it?"

Community Computing is affordable because Simdesk uses computing resources remarkably efficiently, allowing its computing services platform to support millions of users. The key lies in the company's unique stateless architecture.

Client computers in traditional networks constantly communicate with their servers — regardless of whether an end-user is sending e-mail or staring out of an office window. Maintaining that constant connection needlessly consumes server resources and communication bandwidth.

By contrast, Simdesk uses the Internet to talk to end-user devices only when necessary. For example, the server and client PC exchange log-in credentials and security tokens when a user logs in. Then communication stops between the two devices while the end-user composes a document. Simdesk re-establishes the link when the user saves the document, and compressed packets of XML information are quickly transferred from the client machine to one of Simdesk's World Wide Servers.

A Secure and Flexible Solution

Simdesk's innovative Community Computing approach delivers access to technology that's both secure and reliable. All information transferred between end-user devices and Simdesk is encrypted — so all transactions are protected, even those conducted from wireless computers or cell phones. Indeed, user information remains encrypted when stored on the Simdesk server.

"Everything of yours is encrypted with your own encryption keys," said Waters. "It's like a safety deposit box. We hold it for you, and only you can open it."

Simdesk hosts Community Computing solutions on enterprise-class servers, designed to withstand hardware failure without interruption. The company houses its servers in advanced data centers equipped with an array of safeguards. Served by redundant communication lines, these facilities are built to survive fire, power outages and other threats. Additional precautions include daily data backups and off-site storage of backup tapes. In fact, it's safe to say that user data is more secure on Simdesk than on a user's own desktop.

> **» *"[Simdesk] really is a complete solution. We have not seen anything similar to it. We are very happy with it. "***
>
> *— Chris O'Brien, CIO, Chicago*

Besides the standard hosted deployment, Simdesk offers flexibility to meet specific government requirements. For example, the company can create regional data centers or deploy World Wide Servers at government facilities. Location of hardware becomes a business decision, not a technology limitation.

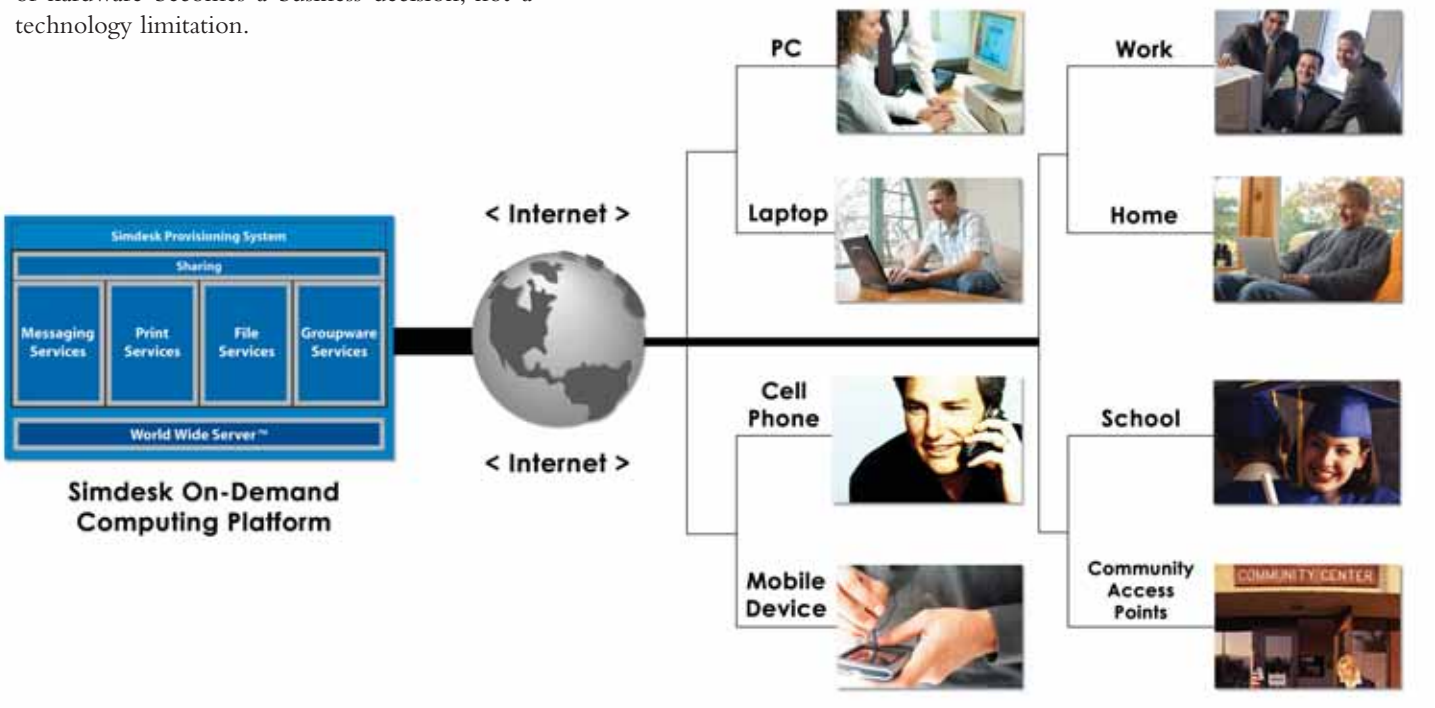
Creating a New Paradigm

Simdesk's Community Computing is being deployed in an expanding number of cities and states, and it's winning support from some of the industry's most respected technology providers.

"Simdesk is leveraging the utility computing model on a massive scale to bridge the digital divide in large cities and states across the globe. With Simdesk, people who normally do not have access to technology are given the tools they need to be successful in school, work and life in general," said Holli Ploog, vice president and managing partner of Unisys global public sector marketing and programs.

"Simdesk represents a new paradigm — ubiquitous, portable, low-cost computing. This is an opportunity to deliver computing on a massive scale," added Martin Fink, vice president and general manager of HP's Open Source & Linux Organization and NonStop Enterprise Division.

The following pages show how Simdesk Community Computing solutions support strategic goals in a growing number of jurisdictions by improving education, strengthening work force development and promoting sustainable economic growth.



A STATE OF INCLUSION

Simdesk: the tools to compete on the world stage.

Several years ago, Houston Mayor Lee Brown became convinced that digital inclusion was key to the long-term health of his community.

"We're in an information society — and people without access to the Internet were being left out," said Brown. "There was a large percentage of city residents who couldn't afford a computer, yet they were competing in the classroom or job market with people who had computers and could use them whenever they wanted."

To remedy that problem, Houston launched the first city-wide deployment of Simdesk's Community Computing concept. SimHouston delivers computing capabilities to any city resident regardless of income level; allows cash-strapped school districts to offer technology to all teachers, staff and students; and provides a free infrastructure to support the needs of small businesses and nonprofit groups.

"This really bridges the digital divide," said Brown. "You don't have to purchase a single piece of hardware or software. Any person or business can connect to the Internet and access a private, on-demand network without any cost."

Brown left office in 2004 due to term limits, but not before Houston received the 2003 City Livability Award from the U.S. Conference of Mayors for its groundbreaking digital inclusion initiative.

Empowered Organizations

SimHouston quickly became a powerful tool for nonprofit groups that deliver technology to underserved city residents. These groups use Simdesk technology to load refurbished PCs with cutting-edge capabilities, develop meaningful technology programs at community centers, and support their own employees and volunteers.

"Every machine we refurbish is loaded with the Simdesk applications, reducing the cost of redeploying PCs and enabling us to put computers in the homes of more families with school-age children," said Danny Perry, executive director of TECH CORPS Texas, a nonprofit group dedicated to enhancing education through technology and improving students' technology skills.

TECH CORPS Texas partners with The Technology Opportunity Institute, another Houston-area nonprofit, to provide refurbished PCs to residents who complete a series of technology training courses. Through a collaborative program called Project IMPACTT, the organizations have distributed more than 200 machines so far.

"Most participants only have access to computers through community centers," said Nicole Robinson, executive director of The Technology Opportunity Institute. "Now they can take the computer home, and the Simdesk software gives them e-mail, personalized storage and productivity applications. It's just a great product."

A Digital Backpack

Simdesk also has proven popular with students in Indiana, who access a complete suite of IT resources through another Community Computing initiative called SimIndiana. The service allows Indiana residents to load Simdesk software on their own PCs at no cost. The Simdesk services also are available on public computers at libraries, schools and state facilities.

» *"[Simdesk] provided a new type of computing that eliminated the barriers to technology."*

— Lee Brown, former mayor, Houston, Texas

Larry Cunningham, director of the Jennings County Public Library in Indiana, said the library's public PCs often are filled with students taking college courses over the Internet. Simdesk's collaboration and online storage features also are a good fit for these users.

"People used to come in the library to do a paper or resumé, and forget their disk. Simdesk solves that problem because you store your work online," Cunningham said. "Another advantage is for group projects, Simdesk allows a whole group of students to access and contribute to a particular document."

Solid Foundation

Chicago residents use technology tools that are fundamental to their future success through a Community Computing platform called SimChicago.

The program, which is available in a growing number of Chicago Community Technology Centers, gives citizens access to powerful computing tools regardless of socio-economic status. And Simdesk is working with the city government, schools and nonprofit organizations to greatly expand SimChicago's reach.

Chicago CIO Chris O'Brien said SimChicago delivers an ideal set of capabilities for city residents who don't own computers. These residents often depend on computers located in public facilities, where saving information to the machine's hard drive isn't an option.

"What Simdesk provided was really a virtual hard drive for residents of the city. That was one of the most exciting aspects of the software," said O'Brien.

Success Story

Ultimately, all of these activities make communities more prosperous places to live — which is just what Mayor Lee Brown had in mind when he launched SimHouston in 2001.

"SimHouston is beneficial to students, to business people, to everyone," he said. "It provided a new type of computing that eliminated the barriers to technology."

EDUCATION

Simdesk Goes to School

Simdesk's cost-effectiveness allows the North Forest Independent School District (ISD) in Houston, Texas, to strengthen internal operations and better prepare students for the future.

The district is distributing SimHouston accounts — which include e-mail, online data storage and a suite of productivity applications — to 1,600 staff members and 10,000 K-12 students.

"We don't have to purchase software and load it onto computers because SimHouston provides everything," said Hung Lieng, technology director for North Forest ISD. "This will reduce our total cost of ownership for technology, which is very important for our district. So we're happy to use the SimHouston software."

SimHouston will let students work on school assignments from any computer — at school, home, a library or community center. The program also allows teachers to collaborate electronically with each other and with parents, Lieng said. In addition, the district may offer SimHouston capabilities through low-cost mobile devices such as cell phones and PDAs that are popular with students.

TAKING CARE OF BUSINESS

Simdesk: an engine for economic growth.

Community Computing doesn't only impact individuals. It also supports the local employers who form the backbone of regional economies.

The expense and complexity of traditional IT means small businesses often can't afford technology to match larger competitors. That leaves these companies at a distinct disadvantage.

The Urban Institute found that companies that used computers extensively to perform administrative and core business activities were 41 percent more productive and 49 percent more profitable than organizations that made little use of technology.

TECHNOLOGY ACCESS

Going Beyond Inclusion

SimChicago's unique set of capabilities offers benefits that will appeal to nearly any Chicago resident — including the city's tech-savviest citizens.

SimChicago gives residents free access to Simdesk's e-mail, file, print and collaboration services. Chicago CIO Chris O'Brien finds Simdesk's secure online file storage particularly useful when he's on the road.

"I use it all the time when I travel," said O'Brien. "I put the documents I need into my Simdesk folder before I leave. Then I just log in to my folder from wherever I am to access the information."

As the program grows, O'Brien expects SimChicago to attract broad interest.

"It really levels the playing field," O'Brien said. "Someone who has a computer at home and at work can derive value from it. It can also provide enormous value for people who do not have any technology in their lives right now."

Simdesk Community Computing initiatives provide fledgling companies with low-cost access to an advanced, highly available, secure technical infrastructure. Therefore, local businesses compete on an equal footing with companies throughout the world, regardless of size and resources.

A Virtual Success

The Central Indiana Region of Business Network International (BNI) serves more than 1,000 member businesses in 50 chapters. Simdesk allows Hazel Walker, the region's executive director, and her three staff members to manage the fast-growing organization from separate home offices.

BNI is the world's largest business and professional networking organization, offering members the opportunity to share ideas, contacts and referrals. The Central Indiana Region more than doubled in size since 1998.

The organization uses Simdesk — provided through the statewide SimIndiana program — to run an efficient virtual office, said Penny Head, a member of Walker's staff. "We instantly saw the value of this tool," she said. "We share files, messages and procedures through SimIndiana."

Simdesk cost-effectively streamlined internal operations for the busy organization. "I've worked in huge offices and small offices, and the biggest problem is always communication and file sharing," Head said. "SimIndiana gives us the tools we need, without the expense of a wide area network, servers and all of those things."

Simdesk also supports internal operations for the Houston Information Technology Empowerment Consortium (HITEC). HITEC uses Simdesk capabilities provided through the SimHouston program to work with some 20 partner organiza-

» ***"We instantly saw the value of this tool. We share files, messages and procedures through SimIndiana."***

— Penny Head, Central Indiana Region, Business Network International

tions that bring technology to underserved areas of the city.

"We are a virtual organization, so members have their own offices in different locations. SimHouston allows us all to access and collaborate on documents remotely, which is a great benefit," said HITEC Director Brian Stevens.

Level Playing Field

Simdesk Community Computing initiatives also enable citizens to develop technology skills that are fundamental to employment in the knowledge economy.

For instance, SimIndiana is being deployed at one-stop career centers that offer comprehensive employment development services to Indiana residents.

"This technology will help unemployed and low-income people communicate through e-mail and allow them to use technology to manage their finances, search for jobs and develop resumés," said Stephanie Powers, CEO of the National Association of Workforce Boards. Her organization represents more than 600 work force boards across the nation which fund community employment development programs.

Powers said technology is a fundamental tool for job seekers because employers have shifted recruiting processes to the Web.

"You just don't walk into a human resources office anymore and say, 'Here's my resumé,'" she said. "You go to a company's Web site and you apply online. If you can't do that, you're at a tremendous disadvantage."

Technology plays an ever-greater role in today's society — in the classroom, in the workplace and in citizens' everyday lives. Simdesk delivers world-class technology to all residents, regardless of income, age or other circumstances — making

the program a powerful solution for digital inclusion, community building and economic development.

Chicago CIO Chris O'Brien expects SimChicago to become a powerful tool for organizing and connecting communities as the program expands. The cost-effective Simdesk technology puts a large-scale rollout within the realm of possibility, O'Brien explained.

"If we were to take $50,000 and dedicate it to SimChicago, we could probably reach several hundred thousand users," he said. "When you compare that to spending the money on computer hardware, where you would reach several hundred users, we think it's a pretty good investment."

Furthermore, deploying the program in schools and Chicago Housing Authority facilities would help Chicago create the tech-savvy work force that employers increasingly demand, O'Brien added.

"As people start to use the software for their own personal use, they will become more skilled in how to use this kind of software in a work setting," he said. "I think that is a great benefit.

"It really is a complete solution. We have not seen anything similar to it. We are very happy with it."

A PLATFORM FOR PROGRESS

Groundbreaking technology powers Simdesk Community Computing.

The Simdesk On-Demand Computing Platform harnesses the original vision of the Internet to powerful advantage. A fundamental technical driver of the Simdesk on-demand platform is its unique stateless protocol. Each and every transaction to the World Wide Server is self-contained and independent, resulting in negligible server-side overhead per client.

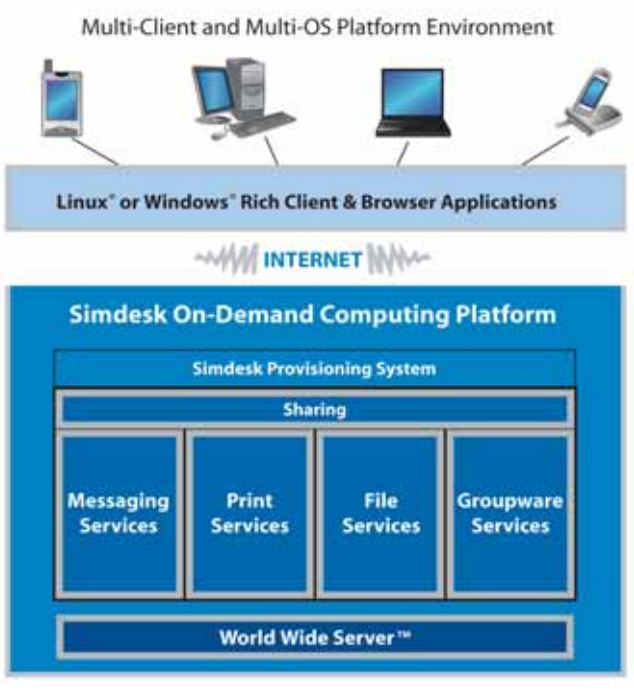
The transaction-based nature of the architecture allows fundamentally higher throughput and enables true horizontal scalability in Simdesk's data center operations. The Internet initially was designed with this kind of architecture in mind — Web servers would serve up static pages and maintain no state per client.

Almost immediately, however, there was a need for applications to be delivered via these servers, with an instant follow-on requirement for security. The security required a constant session with the Web server; the applications required complex back-end application servers. Although necessary, these "advancements" negated much of the scalability advantages of the initial vision for the Web.

Simdesk's World Wide Server brings the scalability and security advantages of the initial Internet vision to the new world of on-demand services. With Simdesk, each transaction is stateless, so incoming client requests can be processed on independent hardware in any variation. Each transaction is encrypted on the client side using a one-time key exchange, achieving individual security without the overhead of a session.

Furthermore, the lack of a constant client session slashes network traffic and server-side resource overhead. Essentially an active client only sends a transaction when a specific action is required of the server, e.g., upload a file, sync a calendar or print a document.

"Simdesk's stateless, transaction-based architecture eliminates bandwidth and resource limitations that have constrained large-scale delivery of enterprise-class IT services across the Internet," said Gary Allison, Simdesk's senior vice president in charge of product development. "This architecture results in a system that can be scaled out to serve almost limitless user populations at an astonishingly low price point."



Fundamental Components of the Simdesk Platform

The server side of the Simdesk platform is divided logically into:

- **World Wide Server —** the server hardware and software that is hosted in a Simdesk or third-party data center. The World Wide Server provides file, print, messaging and groupware capabilities in a stateless, transaction-oriented model.
- **Simdesk Provisioning Services —** the set of interfaces and applications that allow domain and account creation, system monitoring, individual account customization and preferences, billing, and other mass customization features.

Client-Side Services Delivery

Simdesk's philosophy is to provide connection means for all popular user scenarios, including native client access, browser tools, and formats for both PC and mobile device screens.

Furthermore, the Simdesk model accounts for the fact that not all people have immediate or continuous access to the broadband services required for previous on-demand models that deliver services solely through an Internet browser.

The following graphic represents the cross-section of connections available through the Simdesk platform:

Rich Client Windows Linux	Rich Client J2ME BREW
Browser	WAP/Browser
PC/Laptop	Mobile

Private / Public

- **Rich Desktop Platform** provides full functionality on PCs and laptops while on- and offline. This client installation includes applications, device drivers and an underlying SDK that install on a local PC and connect directly to the Simdesk services. These tools allow a user's desktop applications — office suites, graphics editors, photo tools and other day-to-day programs — to directly access Simdesk's online storage, printing and other online tools.
- **Native Mobile Clients** deliver instant responsiveness and offline capability on mobile phones and handheld devices. Similar to the Rich Desktop Platform, these tools provide a rich client experience through a set of applications and drivers that run natively on and are formatted for mobile devices.
- **Desktop Web Browser Services** enable private and secure access on public and third-party desktops. This set of Web application servers and infrastructure makes it possible to access all Simdesk services through standard Internet browsers. These tools allow instant access to user data and resources without plug-in software, eliminating problems caused by the inability to install plug-ins on locked-down computers in Internet cafés, school laboratories and airport facilities.
- **Mobile Web Browser Services** offer quick and easy access on any data-capable mobile phone or PDA. Similar to the desktop browser services, these application servers and infrastructure make it possible to securely access the Simdesk services from Web browsers on mobile devices like mobile phones and PDAs.

» "We completely and totally destroy the idea of device dependency. Whatever you put on our system, you can get to it from any device, anytime, anywhere, from both Windows and Linux platforms."

— Louis Waters, president and CEO, Simdesk

NONSTOP SERVICE

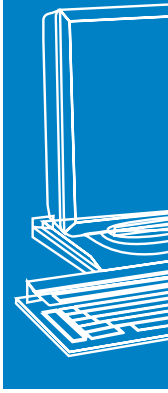
Designed for Flexibility and Reliability

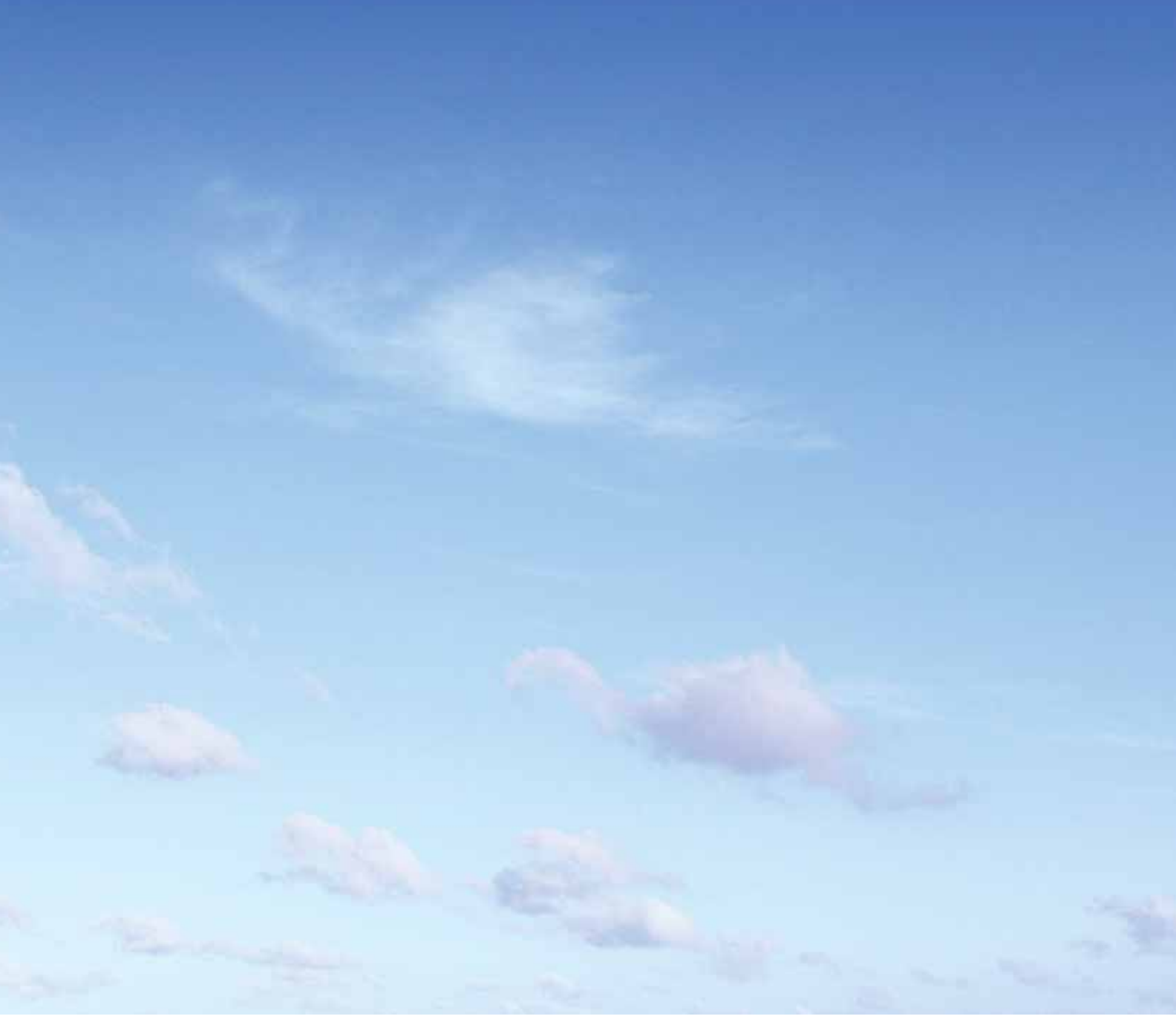
Recently Simdesk and HP unveiled the industry's first open-source solution for Community Computing at LinuxWorld in San Francisco. Although new to the open-source community, the HP-Simdesk platform won finalist for Best Utility/Grid in the show's Product Excellence Awards judging.

The HP-Simdesk open-source solution supports both Windows and Linux, offering unprecedented adaptability to meet the needs of governments, community groups, schools and businesses. For organizations without existing IT infrastructures, the solution offers a Linux-based option that dramatically lowers investment, setup and maintenance hurdles. For organizations that want to migrate from Windows to Linux, the solution provides interoperability at the file system level, allowing them to transform IT operations at their own pace.

A hybrid architecture of HP Integrity NonStop and Linux blade servers power the HP-Simdesk open source Community Computing solution. This is the same fault-tolerant platform for data integrity that powers financial exchanges, ticketing reservations and worldwide logistics networks.

"HP's leadership in Linux and HP NonStop servers allows HP to work with Simdesk to bring customers a solution which changes the landscape for on-demand computing by removing the barriers to entry for population- and community-based organizations," said Martin Fink, vice president and general manager of HP's Open Source & Linux Organization and NonStop Enterprise Division. "This is an opportunity to deliver computing on a massive scale and provide agile solutions for computing organizations' changing needs, part of HP's Adaptive Enterprise strategy."





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