

Choice and Flexibility: Why Software + Services is the Best Solution for Government Cloud Computing

Every government agency has distinct goals, standards and regulations, security concerns, budget pressures, and technical legacies. In today's connected world, no single approach addresses all technology challenges, and solutions can rarely take a one-size-fits-all approach. Instead, deeply integrated products and solutions will be deployed on premises or in "the cloud." The movement toward cloud computing—technologies that enable organizations to access Internet-based information, applications, and services—complements traditional IT models where software and data are hosted on desktop PCs and servers.

This evolution gives government the opportunity to balance the need to deliver cost-effective citizen services with important organizational demands, including mission-critical considerations like data security, authentication, and systems management.

Why cloud computing?

Cloud computing gives systems managers more flexibility to manage scale and cost in ways largely invisible to users but also accounts for risks, peak demand, and long-term planning needs. Government agencies can respond to citizens' needs and work across agencies with more agility, helping ensure that employees have access to critical information using any device from anywhere.

Simplify IT management

Cloud technology can help manage spikes in user demand, decreasing the cost and burden of anticipating and building excess IT infrastructure by enabling on-demand scale, less ongoing maintenance, and shorter deployment time. Systems can be scaled up and down based on actual needs. In today's connected world, government workers need to move seamlessly from the browser to the PC to a mobile device for flexible yet unified experiences.

Reduce carbon footprint

Cloud services help lower operating costs and environmental impact by pooling computing resources across organizational boundaries and assigning and reassigning them dynamically according to demand. Specifically, Microsoft data centers are designed to reduce total energy consumption by 25 to 40 percent compared with traditional facilities.

Lower costs

Cloud computing gives government agencies choices about how to manage costs based on their preferences—either as a capital expenditure or an operational expense. Cloud services developed hand-in-hand with on-premises server counterparts also deliver much-needed choice to government enterprises—enabling flexibility and lower costs to develop, scale, operate, and migrate systems that are distributed between the cloud and the data center.

Microsoft cloud offerings at-a-glance:

- **Infrastructure as a Service (IaaS).** With IaaS, organizations benefit from on-demand computing and storage to host, scale, and manage applications and services. Using Microsoft data centers means scaling with ease and speed to meet the infrastructure needs of an entire state government agency or smaller city agencies and regional municipalities.
- **Platform as a Service (PaaS).** The Windows Azure platform consists of an operating system, a fully relational database, and consumable Web-based services. The Windows Azure platform offers a familiar development experience, on-demand scalability, and reduced time-to-market.
- **Software as a Service (SaaS).** Microsoft Online Services are subscription-based, on-demand applications and hosted services that provide users with a consistent experience across multiple devices. These include: Business Productivity Online Standard Suite, Exchange Hosted Services, Microsoft Dynamics CRM Online, and Office Web Apps (coming soon).

Learn more 



Why Microsoft?

The Microsoft software-plus-services strategy is about the power of choice—a hybrid model of on- and off-premises resources that enable you to move what you want to the cloud—as much or as little as you want. It's not an “all-or-nothing” approach; instead, it enables you to flow workloads across your own, and outside, infrastructures. So, you can complement your existing IT assets with Web-based services. And by having applications available across the Internet, you can help ensure the experience is consistent across PC, phone, and browser—we call this concept “three screens and a cloud.”

Microsoft invests heavily—more than U.S.\$9 billion is targeted for 2010—in research and development to deliver a technology road map that organizations can rely on, with mature development and management tools, and an on-going commitment to security, privacy, federal standards, interoperability, and accessibility.

Lower Cost of Ownership. Software-plus-services offers you greater financial flexibility in how you manage and fund your IT resources to maximize focus on your mission critical needs. Your needs will determine what to keep on premises and what to push to the cloud. On premises, Microsoft has significantly improved its technologies to be more manageable and energy efficient. In the cloud, it's like turning on a light switch: you don't necessarily need to own the generator to get the service you need. And when you reduce the need for on-premises resources, you reduce the maintenance and operational overhead, including hardware and facility expenses. At the same time, you can simplify and accelerate application updates and deployment.

Enterprise-class Security, Reliability and Compliance. Microsoft has invested more than \$2 billion in its data centers, with a holistic view and critical eye on international security and privacy standards, and guaranteeing 99.9 percent uptime to operate during power outages and after natural disasters. The Microsoft Compliance Framework for Online Services allows the company to better meet complex obligations by reducing risk of operational disruptions and increasing confidence in service stability, and by obtaining third-party verifications as proof of continuing adherence to compliance requirements. Microsoft products are developed under the industry best practice Security Development Lifecycle process, and Windows Update—likely the largest software service anywhere—provides security updates and software downloads for consumers and enterprises alike.

Familiar, Agile and Experienced. Microsoft provides an elastic infrastructure that enables you to address needs as they arise, with the confidence that you always have the ability to do so. You will have the flexibility to move services in—and out—of the cloud. That means your workers can stay connected and stay on top of government priorities with a familiar experience they already know how to use, regardless of the device or where they're using it. Your developers can focus on coding, with the confidence their work can get deployed efficiently because the infrastructure is always available and highly interoperable. And your organization as a whole can be more responsive to the growing needs of your citizens.

A Decade in the Cloud

Microsoft Hosted Services

As one of the largest hosted services providers in North America, Microsoft offers a solid track record as an online solution provider:

- Hotmail, one of the most popular messaging services worldwide, services 400 million accounts.
- Microsoft Office Live Meeting hosts 5 billion conference minutes a year.
- Exchange Hosted Services manages 2.4 million e-mail messages each day.
- Windows Live ID processes 1 billion authentications each day.
- Bing serves up to 2 billion search queries a month.

Microsoft Serving Multi-National Corporations

- Some of the largest enterprises in the world use Microsoft Services, helping more than 1 million employees be more productive and cost-efficient. They include **GlaxoSmithKline, Coca-Cola Enterprises, Energizer Holdings, Ingersoll Rand, Autodesk, McDonald's, Pitney Bowes, and Kelly Services.**