

Elevating Applications with Cloud-Based Capabilities

Smoothing Government's Transition to Cloud Computing

The Obama administration continues to emphasize technology and innovation as the keys to making government more transparent, participatory, and collaborative. As a company that has dedicated much effort and investment toward solving difficult challenges (such as clean energy, healthcare, and public safety), Microsoft is also committed to helping government achieve its technology goals.

An essential part of that commitment is smoothing government's transition to cloud-based computing technologies so that agencies and citizens can securely exchange information and access best-in-class capabilities.

Microsoft has already laid the foundation for this transition with continuing investments in state-of-the-art datacenters that support next-generation applications and services. Based on the extensive knowledge Microsoft gained with MS Online, MSN, Live Search, and other services, these centers are among the most powerful, secure, and eco-friendly facilities in the world.

The Azure™ Service Platform allows government agencies to tap the full power of Microsoft's datacenters as a foundation for providing cloud-based capabilities. Azure is hosted by Microsoft, providing agencies with an Internet-scale operating system and developer services.

Using Azure, agencies can streamline the development and deployment of cloud-based capabilities while avoiding big, up-front investments or sunk costs in new infrastructure.

Why the Transition is So Important

Azure gives agencies options. They can use it as a flexible and interoperable platform for building new applications that run entirely from the cloud. Or they can enhance existing apps with cloud-based functionality (such as additional processing power). In either case, Azure enables agencies to offer new capabilities far more quickly and cost-effectively.

With the open architecture of Azure, developers can quickly build applications that equip agencies and citizens alike with the information they need to make governing a mutual process. Deploying those applications within a Software-plus-Services environment will enable agencies to decide what's available via the cloud.

Employing a Software-plus-Services environment will allow the flexibility to decide what goes in a cloud environment, what stays on premise, and what applications use both environments to ensure the utmost security while meeting the challenges of an open and transparent government.

Our Country's New Administration

President Obama's message is clear as it relates to the use of information technology within the new administration as well as providing access to technically disenfranchised citizens. His administration has made several statements regarding plans to use technology to make the government and its processes more "transparent." President Obama has cited the use of technology and increased transparency in government through the use of innovative Web 2.0 technologies such as wikis, social networking tools, publicly searchable databases, and online video streaming of agency deliberations.

Connecting Our Citizens

President Obama has expressed his desire to smartly leverage technology in his quest to create a better, more connected government and increase citizen access to information through new and innovative means by exploiting the full capabilities of technology-based solutions. The investment Microsoft has made in datacenters, infrastructure, and software places rich capabilities and access well within reach of the American public.

Why Cloud Services?

Cloud services are software application and infrastructure services that can be consumed over the Internet. Cloud services will help enable the government to:

- Reduce capital and operations costs
- Simplify application deployment & management
- Better integrate disparate data
- Improve time to market for new solutions
- Focus on core value-add for America's constituents
- Smartly develop opportunities for new scenarios
- Scale solutions seamlessly, economically, reliably

Key Capabilities

Web Developers: Are able to build and publish their own set of services, use a wide range of tools on a standards-based platform, and extend solutions to millions of users.

Government and Partner Developers: Can augment existing agency software solutions and safely and securely connect agency systems more quickly and easily than ever before.

Independent Software Developers: Can take full advantage of the reach and scalability of the Internet without sacrificing investments in existing applications.

Agencies: Reduce capital and operational costs when maintaining existing applications or planning for new initiatives.

Government and Citizen Value

The Azure Services Platform makes available a diverse set of Internet-based tools and services designed to help developers take advantage of the power of the Internet while maintaining as much control over their applications as they need.

The Azure Platform provides these key benefits:

A flexible Internet-scale Microsoft-hosted Services Platform

- Comprehensive and composable features for simple and complex scenarios
- Hosted in secure Microsoft geo-distributed datacenters
- Automated infrastructure and platform designed for high availability and scalability
- Competitively positioned "Pay-as-you-Grow" service model

An Internet standards-based and Interoperable solution

- Multiple protocol support including HTTP, REST, SOAP, and XML
- Broad investment in open, community-based access to services

The ability to leverage and extend existing investments and skills

- Familiar tools, languages, and frameworks with .NET & Visual Studio or tools of choice
- Provides the choice to build on-premises, cloud, or hybrid solutions
- Consistent programming models for client, server, and services

Azure Services Platform Components

Windows Azure is a cloud services operating system that serves as the development, service hosting, and service management environment for the Azure Services Platform. Windows Azure provides developers with on-demand compute and storage services to host, scale, and manage Web applications and services on the Internet through Microsoft datacenters.

Live Services

Live Services are a comprehensive set of Web services that represent the core functionality of Windows Live (including Windows Live Messenger, Live Search, and many more services), and an open and interoperable client runtime technology that can connect the power and scale of Web experiences to consistent and rich client applications across a world of devices.

Microsoft SQL Services

SQL Services is a suite of cloud-based SQL Server capabilities. The first of these capabilities is SQL Data Services, which offers an Internet-facing database and advanced query processing services for customers building new applications or integrating with existing investments into the cloud—delivering flexibility, scale, and developer agility.

.NET Services

Microsoft .NET Services is a suite of Web services for customers with integration and business-to-business collaboration requirements. These services include workflow, access control, and service bus connectivity—enabling developers to extend applications to the cloud through a flexible, scalable, and interoperable platform.

Microsoft® SharePoint® Services & Dynamics® CRM Services

Developers will have access to SharePoint and CRM functionality in the Azure Services Platform. With the flexibility to use familiar developer tools like Visual Studio, developers will be able to rapidly build applications that take advantage of SharePoint and CRM capabilities as developer services. Developers can expect a breadth of SharePoint & CRM capabilities across the spectrum of on-premises, online and the Azure Services Platform.

Microsoft Online Services

Microsoft also offers cloud applications ready for consumption by customers such as Windows Live™ and Microsoft Dynamics™. Additional Microsoft Online Services offered for business are Microsoft Exchange Online, SharePoint® Online and Office Communications Online. The Azure Services Platform, when used in conjunction with MS Online, lets developers provide their own unique customer offerings by offering the foundational components of compute, storage, and building block services to author and compose applications in the cloud.

These online services are designed to provide government users streamlined communication with high availability, comprehensive security, and simplified IT management. The government benefits from always up-to-date technologies that are deployed rapidly, maximizing valuable IT resources and reducing the need for infrastructure investments.