
amazon
web services

AWS Partners with Microsoft for Microsoft License Migration to the Cloud

Summary

Microsoft (NSDQ: MSFT) and Amazon (NSDQ: AMZN) Web Services (AWS) have teamed up to enable Windows-based workloads to run on AWS. The purpose of this document is to give system integrators (SIs), independent software vendors (ISVs), and resellers an overview of the business advantages that this Microsoft and AWS collaboration offers.

Amazon has implemented a Service Provider License Agreement (SPLA) with Microsoft that allows Amazon to offer Windows and Microsoft SQL Server Standard Edition on-demand virtual machine (VM) instances. In addition, businesses with a Microsoft Volume Licensing agreement with Microsoft Software Assurance can now enjoy the benefit of deploying applications running on Windows Server to the Amazon cloud. This change presents SIs and ISVs with a unique opportunity to assist customers with the migration of their existing enterprise or line-of-business applications, websites, services, and infrastructure to AWS using Microsoft licenses in which the customer has already invested.

Amazon–Microsoft Relationship

The relationship between Amazon and Microsoft enables ISVs and SIs to develop new business opportunities for customers interested in deploying Windows-based applications in the Amazon cloud.

AWS is an ideal environment for ISVs to offer products and develop new revenue models. AWS provides ISVs with an on-demand infrastructure that allows them the ability to test and evaluate new software applications quickly and easily. ISVs can move new applications to production without the high acquisition costs and management constraints typical of on-premise hardware purchases, resulting in a decreased sales cycle for ISVs.

SIs and managed services providers (MSPs) can improve on or develop new business opportunities with an AWS practice, allowing them to remain the trusted advisor to their customers. As a trusted advisor, SIs can guide their customers in the migration process and maximize existing IT investments.

MSPs, Sis, and existing Microsoft SPLA customers will also find value in Amazon as an infrastructure partner. The AWS infrastructure, coupled with a service provider's ability to deliver software licenses to customers, can now deliver scalable technology solutions to common business needs, such as email with Microsoft Exchange Server, communication and collaboration with Microsoft SharePoint Server and Lync Server, Desktop as a Service with Windows Server 2008 R2, and Remote Desktop Services. These opportunities can be executed without the direct cost and management of data centers to the solution provider or customer.

License Mobility

With more businesses adopting Infrastructure as a Service, customers moving server workloads and applications to the cloud want to take advantage of their existing licensing investments as part of their IT strategy. The Microsoft License Mobility Through Software Assurance program gives Microsoft Volume Licensing customers the ability to deploy certain server applications with active Software Assurance to the AWS Cloud without having to buy additional licenses. As a result, customers can take advantage of the lower cost infrastructure for changing business priorities. With this new Software Assurance benefit, customers do not need to purchase additional Microsoft server or client access licenses. Also, there are no associated mobility fees.

License Mobility Through Microsoft Software Assurance allows users to run a wide variety of Microsoft server applications in the Amazon cloud, such as:

- Microsoft Dynamics CRN Server;
- Exchange Server;
- Lync Server;
- SharePoint Server;
- SQL Server Standard Edition;
- Microsoft SQL Server Enterprise Edition; and
- Microsoft System Center components and tools.

This program will help SIs and ISVs remove the hardware cost, procurement, and deployment barriers for customers wanting to move their currently licensed applications to the advantages of AWS.

More Resources

License Mobility Overview: http://www.microsoft.com/licensing/about-licensing/product-licensing.aspx - tab=2

Volume Licensing FAQ: http://www.microsoft.com/licensing/resources/faq.mspx

Product Licensing: http://www.microsoftvolumelicensing.com

Product Activation and Key Information: http://www.microsoft.com/licensing/existing-customers/product-activation.aspx

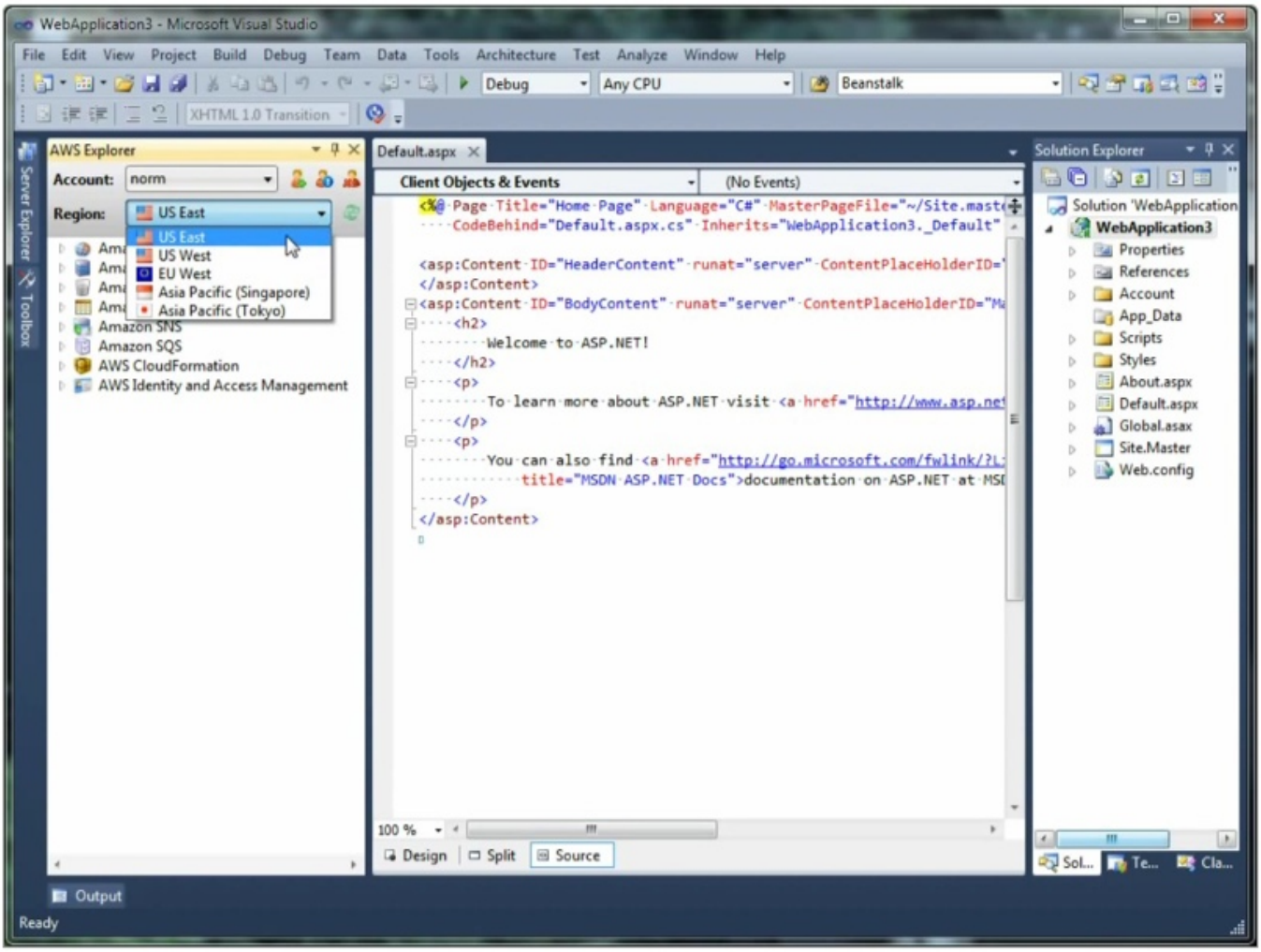
Leverage Existing Skill Sets and Tools

AWS provides a set of familiar development tools. ISVs and SIs looking to develop Microsoft .NET solutions can leverage their existing skill sets, people, and resources to quickly move existing customers to cloud-based solutions.

Amazon Elastic Compute Cloud (Amazon EC2) has an easy learning curve. The basis of Amazon EC2 is the Amazon Machine Image (AMI)—a VM with your chosen operating system and applications bundled together. Integrators can create their own AMIs from scratch, if desired. In addition, Amazon offers hundreds of public AMIs with many operating systems and preinstalled applications.

The AWS Toolkit for Visual Studio is an extension for Microsoft Visual Studio that makes it easier for developers to develop, debug, and deploy Microsoft .NET applications using AWS. With the AWS Toolkit for Visual Studio, developers will be able to get started faster and be more productive when building AWS applications.

Introducing the AWS Toolkit for Visual Studio



Find more screencasts and tutorials at aws.amazon.com/visualstudio

The AWS Toolkit for Visual Studio features:

- AWS SDK for .NET
- AWS Explorer
- Amazon CloudFormation Deployment

AWS SDK for .NET

The AWS Toolkit for Visual Studio conveniently includes the AWS SDK for .NET, so you can get started building Microsoft .NET applications on AWS infrastructure services in Visual Studio, including Amazon Simple Storage Service (Amazon S3), Amazon EC2, and Amazon SimpleDB:

- **Start.** Easily create new Microsoft .NET projects with the AWS .NET library by using one of the included project templates, or add the library to an existing project.
- **Develop.** Use Visual Studio to build and debug your applications.

AWS Explorer

Easily access and administer your AWS infrastructure, including Amazon S3, Amazon SimpleDB, and Amazon EC2, while developing your application. The AWS Explorer provides a graphical interface that makes it easy to create, edit, and delete resources:

- **Configure.** Create, view, and delete Amazon S3 objects, Amazon SimpleDB items and attributes, Amazon Simple Queue Service messages, and more.
- **Edit.** Add, edit, and delete resources to help build and test your application without leaving the integrated development environment.
- **Query.** Write Select queries against your data in Amazon SimpleDB and edit the results.

Amazon CloudFormation Deployment

Use the AWS Toolkit for Visual Studio to develop, debug, and then deploy your Microsoft .NET web applications with AWS:

- **Develop.** Create new Microsoft .NET web applications using a web application template. Use Visual Studio to build and run your application locally before deploying to AWS with Amazon CloudFormation.
- **Deploy.** Easily deploy new application versions to your Amazon CloudFormation stack, then use Amazon EC2 Management in Visual Studio or the AWS Management Console to manage the application.

What Is the AWS Reseller Program?

The AWS Reseller Program enables partners to resell AWS Windows-based services, allowing customers to develop and sell highly scalable, cost-effective, and secure cloud computing solutions. Partners will be able to create innovative business models and licensing mechanisms that differentiate their products from the competition. They will also be able to shorten the sales cycle by quickly and easily deploying demo, pilot, and production environments in a matter of minutes.

For partners that add value to AWS cloud services and meet the requirements of the AWS Reseller Program, Amazon provides the following benefits:

- Resellers are assigned a point of contact (POC) within AWS to develop the partner relationship. This POC will serve to help the partner navigate the organization, increase visibility, and support the partner's needs in terms of building a business on AWS.
- The reseller has the ability maintain and grow customer relationships, including AWS account creation, billing, and support.
- AWS training: Free training offered by AWS at http://www.awslab.com

- Reseller financial incentives:
  - **Margins.** AWS provides resellers with an across-the-board discount on the AWS services authorized for resale.
  - **Aggregation.** Resellers can use the AWS Consolidated Billing tool to aggregate multiple customers' usage to achieve higher usage discounts (see the table below)
  - **Discounted support offering.** Resellers have an opportunity for additional margins by packaging support as part of their solution.

Amazon S3 Monthly Usage: 50 Customers Using 20 TB Each of Storage

Public Pricing			
Amazon S3 Aggregated Usage	**TB/month**	**Price/GB**	**Total**
First 1 TB	50	$0.1250	$6,250
First 50 TB	950	$0.1100	$104,500
Next 450 TB	–	$0.0950	–
500 TB	–	$0.0900	–
Next 4 PB	–	$0.0800	–
>5 PB	–	$0.0550	–
Total	1000	–	$110,750
Each account is created separately, so there is no aggregation benefit.			

Reseller Pricing			
Amazon S3 Aggregated Usage	**TB/month**	**Price/GB**	**Total**
First 1 TB	1	$0.1250	$125
First 50 TB	49	$0.1100	$5,390
Next 450 TB	450	$0.0950	$42,750
500 TB	500	$0.0900	$45,000
Next 4 PB	–	$0.0800	–
>5 PB	–	$0.0550	–
Total with discount	1000	–	$92,879
Effective Discount	**–**	**–**	**16.1%**

Why Customers Are Moving to AWS

Businesses of all sizes are moving to the AWS cloud to simplify infrastructure management, improve time to market, and lower operating costs. AWS offers a reliable and secure infrastructure platform that enables partners to build, customize, and deploy Microsoft applications in the cloud.

Definition of Services

Amazon Elastic Compute Cloud

Amazon EC2 is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier for developers. Amazon EC2's simple web service interface allows users to obtain and configure capacity within minutes and easily test proof-of-concept models.

Amazon EC2 offers the following features and components:

- **Flexible data center configuration.** Traditional hosting services generally provide a preconfigured resource for a fixed amount of time and at a predetermined cost. Amazon EC2 differs fundamentally in the flexibility, control, and cost savings it offers developers, allowing them to treat Amazon EC2 as their own personal data center with the benefit of a robust infrastructure with AWS.
- **Instant response to capacity demands.** When computing requirements unexpectedly change (up or down), Amazon EC2 can instantly respond, meaning that developers have the ability to control how many resources are in use at any point in time. In contrast, traditional hosting services generally provide a fixed number of resources for a fixed amount of time, meaning that users have a limited ability to respond when their usage is rapidly changing, unpredictable, or they are known to experience large peaks at various intervals.
- **Full control over computing resources.** Many hosting services do not provide full control over the compute resources being provided. Using Amazon EC2, developers can choose not only to initiate or shut down instances at any time, but they can completely customize the configuration of their instances to suit their needs—and change it at any time. Most hosting services cater more toward groups of users with similar system requirements and so offer a limited ability to change the environment.
- **Pay only for what you use.** With Amazon EC2, developers enjoy the benefit of paying only for their actual resource consumption at low rates. Most hosting services require users to pay a fixed, up-front fee irrespective of their actual computing power used, so users risk overbuying resources.

Amazon EC2 is the computing part of AWS. Amazon EC2 provides the CPU, memory, operating system, and transient storage; it is the equivalent of a bare-bones PC. Integrators can choose the amount of RAM needed (from a predefined list of configurations), the amount of transient storage needed (also from a list), and the number of CPUs needed (from a series of compute options). Operating systems are available in various flavors of Windows Server and Linux.

Amazon Simple Storage Service

Amazon S3 is a storage system in which data is accessible to Amazon EC2 instances or directly over a network to suitably authenticated callers (all communication is over HTTP).

Amazon CloudFront

Amazon CloudFront offers the following features and components:

- **Security.** Amazon CloudFront authenticates interactions with the administrative application programming interfaces (APIs) using the shared AWS authentication service. In addition, Amazon CloudFront requires encryption using Secure Sockets Layer. Content is fetched directly from the Amazon S3 Service Bucket, with no off-network access.
- **Physical security.** Amazon has many years of experience in designing, constructing, and operating large-scale data centers. The AWS infrastructure is housed in Amazon-controlled data centers throughout the world. Only those within Amazon who have a legitimate business need to have such information know the actual location of these data centers, and the data centers themselves are secured using a variety of physical controls to prevent unauthorized access.
- **Secure services.** Each service within the AWS Cloud is architected to be secure and contains several capabilities that restrict unauthorized access or usage without sacrificing the flexibility that customers demand.

For more information about the security capabilities of each service in the AWS cloud, see the Amazon Web Services: Overview of Security Processes white paper and the AWS Security Center.

Persistent Storage

An Amazon EC2 instance can be launched with an Amazon Elastic Block Store (Amazon EBS) volume as a root device. Amazon EBS volumes provide persistent storage independent of the lifetime of the Amazon EC2 instance and act much like hard drives on a real server. The operating system is free to use the device as needed. Users can set up and manage storage volumes of sizes from 1 GB to 1 TB. The process also supports snapshots, which can be taken from a graphical user interface tool or the API.

Amazon does not charge for the bandwidth for communications between Amazon EC2 instances and Amazon S3 storage *in the same region.* Accessing Amazon S3 data stored in a different region (for example, data stored in Europe from a US east coast Amazon EC2 instance) will be billed at Amazon's normal rates.

Sample Scenario

Amazon Elastic Compute Cloud and SharePoint Server

To reduce infrastructure administration costs and to be able to scale on demand, the combination of Microsoft SharePoint Server 2010 and AWS is the perfect marriage. The main reasons the combination of these two technologies

creates a best-in-class service is that the new SharePoint Server 2010 service application architecture allows users to scale services independently, which makes scaling SharePoint Server 2010 application services and server roles a great fit for deployment to the cloud. Taking SharePoint Server to the cloud allows customers to realize the benefits of reduced hardware overhead, simplified operational support, improved service scalability, and infrastructure cost savings. These benefits in turn open new business opportunities for Microsoft SIs who are interested in helping their customers move SharePoint Server to the cloud.

Other benefits Include:

- Windows Server instances that typically take four to six weeks to procure can be acquired and provisioned in minutes on AWS.
- Amazon EBS could be used to scale SharePoint Server storage capacity within minutes independently of compute resources.
- Amazon Virtual Private Cloud enables keeping the SharePoint Server installation inside the corporate network perimeter.
- Cloud resources offer cost savings when compared to corresponding hardware total cost of ownership.
- Unhealthy SharePoint Server instances can be instantly replaced. The replaced servers can either be discarded or saved for in-depth troubleshooting offline, reducing customer impact.

Visit Resources for Solution Providers to learn more about Microsoft solution providers on AWS.