

Microsoft SQL Server Discovery

Summary Report

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# Executive Overview

As the foundation to the cloud-ready information platform, Microsoft® SQL Server® 2012 helps organizations unlock breakthrough insights across the organization as well quickly build solutions and extend data from server to private or public cloud backed by advanced capabilities for mission critical confidence.

In addition to describing the benefits of migrating to SQL Server 2012, this document explains how you can facilitate the migration process by using the Microsoft Assessment and Planning Toolkit to evaluate existing deployments of SQL Server in your organization in order to identify suitable candidates for migrating to SQL Server 2012 or to SQL Server in Windows Azure Virtual Machines.

The results of the assessment provide you with detailed information about your SQL Server environment and include two outputs: a summary of the results, which is described in this document, and a Microsoft Excel® workbook, Microsoft SQL Server Assessment Report, which provides detailed information about each SQL Server instance on your organization’s network.

## Where Is Your Organization Now?

The following figure and table provide an overview of the SQL Server instances that were discovered for each SQL Server product. Figure 1 shows a chart representing the percentage of instances per SQL Server product and Table 1 shows the instance count per SQL Server product.

Figure 1. Percentage of instances per SQL Server product

Table 1. Instance Count per SQL Server product

| **SQL Server Product Name** | **Instance Count** |
| --- | --- |
| Total | 0 |

## Why Migrate to SQL Server 2012?

The next wave of SQL Server investments will extend organizations beyond the database with a cloud-ready information platform that delivers mission critical confidence, breakthrough insight, and cloud on your terms. SQL Server 2012 meets industry requirements for high availability with the new SQL Server AlwaysOn for mission critical availability while the new xVelocity memory optimized columnstore index helps enable blazing-fast DW query performance.

Additionally, SQL Server 2012 delivers built-in Business Intelligence through self-service analytics balanced with IT management via SharePoint. Customers will quickly unlock breakthrough insights within billions of rows of data with PowerPivot built on Excel and Power View for stunning, interactive data visualizations and broad adoption. Breakthrough insights are backed by a new unified BI semantic model, credible data with Data Quality Services, and scalable data warehousing solutions to support hundreds of TBs including Parallel Data Warehouse and Fast Track.

Meanwhile, customers can enjoy built-in support for complex data types and greater interoperability with PHP and Java. Common tools, like Management Studio and SQL Server Data Tools, enable customers to quickly create and scale innovative Hybrid IT solutions across server, private or public cloud while connection points from SQL Server 2012 make it easy to take advantage of Windows Azure Platform benefits.

## Running SQL Server in Windows Azure Virtual Machines

Windows Azure Virtual Machines will enable you to deploy a custom Windows Server or Linux image to Windows Azure. Virtual Machines give customers full control over their application environment and allow easy migration of existing on-premises applications to the cloud.

Customers can deploy SQL Server within a Windows Azure Virtual Machine (VM) by either moving existing copies of SQL Server from on-premises (with license mobility) or selecting a pre-built Virtual Machine image from the gallery that includes SQL Server (hourly pricing includes license).

**Common Scenarios**

* Easily migrate existing on-premises SQL Server applications to Window Azure Virtual Machines to lower ongoing operating expenses, while still leveraging on-premises infrastructure (identity, management, etc.) for these applications.
* Replicate on-premises SQL Server databases to Windows Azure Virtual Machine.
* Use Windows Azure Virtual Machines as a development/test environment for SQL Server applications and then optionally migrate to on-premises production environment.

For pricing and licensing SQL Server in Windows Azure, see the following reference: <http://go.microsoft.com/fwlink/?LinkId=264783>. If you have existing SQL Server licenses that you would like to use in the Windows Azure see the licensing mobility document at <http://go.microsoft.com/fwlink/?LinkId=264784>.

# Assessment Results Summary

The information in this section summarizes the results of the assessment conducted on your network for your organization. Detailed information about each of the servers inventoried is also contained in the Microsoft SQL Server Assessment Report workbook that accompanies this report. Using the results of this assessment, you can now make informed decisions about the deployment of SQL Server 2012 instances in your organization.

## Windows Azure Virtual Machines Assessment for SQL Server

Here is a summary of the assessment on migrating SQL Server to a Windows Azure virtual machine.

Table 2. Windows Azure VM Assessment Summary

| **Assessment** | **Count** | **Resolution** |
| --- | --- | --- |
| Number of Windows Server machines running SQL Server | 20 |  |
| Number of Windows Server machines running SQL Server that are ready to migrate to a Windows Azure VM | 12 | N/A – The Windows Operating System is supported as a Windows Azure VM and the SQL Server version is supported running in a Windows Azure VM. |
| Number of Windows Server machines running SQL Server where SQL Server needs to be upgraded | 6 | SQL Server needs to be upgraded or migrated to SQL Server 2008 or later. |
| Number of Windows Server machines running SQL Server where the Windows Operating System needs to be migrated | 8 | This Operating System needs to be upgrade to Windows Server 2008 R2 or later. |
| Number of Windows Server machines where SQL Server is clustered. | 4 | Windows Failover clustering is not supported in Windows Azure, consider SQL Server AlwaysOn Availability Group as an alternative. |

See the MAP Toolkit report "Windows Azure VM Readiness" report for detail information on the SQL Server to Windows Azure Virtual Machine assessment.

For more information on migrating to Windows Azure Virtual Machines, see <http://go.microsoft.com/fwlink/?LinkId=264785>.

For information on converting your VMware virtual machines to Hyper-V virtual machines, see the Microsoft Virtual Machine Converter (MVMC) at <http://go.microsoft.com/fwlink/?LinkId=264786>.

For information on converting a Physical Server to a Virtual Machine, see Virtual Machine Manager (VMM) at <http://go.microsoft.com/fwlink/?LinkID=264855>.

## SQL Server Editions

The following figure and tables show the various editions of SQL Server database instances discovered in your organization. For further details, see the accompanying Microsoft SQL Server Assessment Report.

Figure 2 shows the number of computers that have some edition of SQL Server database engine installed.

Figure 2. Computers running SQL Server by edition

Table 3 shows the distribution of various SQL Server database engine editions across computers as well as the number of database engine instances for each edition.

Table 3. SQL Server Editions

| SQL Server Version | SQL Server Edition | Computer Count | Instance Count |
| --- | --- | --- | --- |
| Microsoft SQL Server 2008 R2 | Datacenter | 3 | 2 |
| Microsoft SQL Server 2008 R2 | Enterprise | 8 | 12 |
| Microsoft SQL Server 2008 R2 | Standard | 4 | 5 |
| Total |  |  | 19 |

## Determining your SQL Server 2012 Core Licensing

With MAP Toolkit and the SQL Server Licensing documents, you can determine your SQL Server 2012 Core licensing requirements. The updated document is posted here: <http://go.microsoft.com/fwlink/?LinkID=242488>.

# Licensing References

**SQL Server 2012 Licensing Overview:** <http://go.microsoft.com/fwlink/?LinkId=273728>.

**SQL Server Licensing Guide:** <http://go.microsoft.com/fwlink/?LinkId=230678>.

**MAP does not report number of cores:** <http://go.microsoft.com/fwlink/?LinkId=273729>.

## SQL Server Components

Table 4 provides details about the SQL Server components discovered in your organization. For further details, see the accompanying Microsoft SQL Server Assessment Report.

Table 4. Instance Count of Various SQL Server Components

| **SQL Server Component Name** | **Instance Count** |
| --- | --- |
| Total | 96 |

## Operating Systems Running SQL Server

The following figure and table provide details about the operating systems running SQL Server database instances discovered in your organization. Based on this information, you can identify how many SQL Server database instances are running on server versus client operating systems. For further details, see the accompanying Microsoft SQL Server Assessment Report.

Figure 3 shows the operating systems distribution on which SQL Server database instances were discovered.

Figure 3. Computers running SQL Server database by operating system

Table 5 shows the operating systems distribution on which SQL Server database instances were discovered across computers along with number of database instances.

Table 5. Operating Systems Running SQL Server Instances

| **Operating System** | **Computer Count** | **Instance Count** |
| --- | --- | --- |
| Total | 0 | 0 |

# Next Steps

Using this summary report and the accompanying Excel workbook, you can identify the instances of SQL Server running in your environment. This is an important first step in migrating to SQL Server 2012 or running SQL Server in Windows Azure Virtual Machines. To continue your deployment of SQL Server 2012, you will need to do the following:

1. Identify the instances that you plan to migrate.
2. Review the system requirements for SQL Server 2012 or for running SQL Server in a Windows Azure Virtual Machines.
3. Visit the [Infrastructure Planning and Design Guide](http://go.microsoft.com/fwlink/?LinkId=106686) site to download the free planning guidance for deploying a SQL Server 2012 database infrastructure at <http://go.microsoft.com/fwlink/?LinkId=106686> or visit the [Running SQL Server in Windows Azure Virtual Machine](http://go.microsoft.com/fwlink/?LinkID=248281) site at <http://go.microsoft.com/fwlink/?LinkID=248281>..
4. Decide how to acquire the SQL Server 2012 software licenses, such as through Volume Licensing.
5. Use [Microsoft SQL Server 2012 Upgrade Advisor](http://go.microsoft.com/fwlink/?LinkId=240294) to identify issues to fix either before or after you upgrade. You can find more information about the upgrade advisor at <http://go.microsoft.com/fwlink/?LinkId=240294>.

# Appendix A: SQL Server Assessment Report

In addition to the results summarized in this document, the Microsoft SQL Server Assessment Report provides the following detailed information:

* **Summary worksheet**. Provides a quick summary of SQL Server database instances and other SQL Server components such as Reporting Services and Analysis Services.
* **SQL Server Database Instances worksheet**. Provides a printable report for each database instance along with system hardware details that were found in your environment. This worksheet is provided to help you find which servers might be running older versions of SQL Server (for example, SQL Server 2000).
* **SQL Server Components worksheet**. Provides a quick list of any instances of SQL Server components (Analysis Server, Reporting Server, and so on) other than database instances that were found in your environment.