

## *Reduce capital and operational costs and increase your organization’s responsiveness to change by consolidating on Microsoft® SQL Server® 2008 R2*

http://www.microsoft.com/sqlserver/2008/en/us/server-consolidation.aspx

Top Benefits

* Reduce hardware costs
* Reduce software costs
* Choose from a flexible range of options to meet your application isolation needs
* Gain administrative efficiencies
* Ensure business continuity
* Build a flexible data infrastructure

**REDUCE CAPITAL EXPENSE**

Consolidate with SQL Server 2008 R2 to take advantage of value-added capabilities to meet more of your business needs while reducing server and storage requirements—helping enablesignificant reductions in hardware and software costs.

## Reduce hardware costs

Reduce the number of physical servers in your organization and benefit from the cost savings that come with standardizing your server hardware—in addition to reduced physical space requirements for your data center.

## Choose the isolation option that meets your needs

Choose the server consolidation strategy that best fits your application isolation requirements for manageability, security, high availability, and performance. Use the ability of SQL Server 2008 to host multiple databases in the same instance, and multiple instances on the same server, to reduce the number and diversity of database servers across your organization. Alternatively, use Windows Server® 2008 Hyper-V™ to consolidate physical servers through virtualization.

## Reduce software costs

Take advantage of premium edition licensing for Windows Server and SQL Server that enables you to run multiple virtual database servers with a single license, and gives you the flexibility to move virtual machines to make the best use of available hardware resources.

Windows Server, SQL Server, and Microsoft System Center combine to provide a complete, end-to-end platform for database server infrastructure management that reduces the need to purchase additional virtualization software or management tools. In addition, added-value capabilities like a complete Business Intelligence platform built into SQL Server give you excellent value for your money while ensuring consistent manageability and application interoperability across your organization.

## Reduce storage costs

Use data and backup compression in SQL Server 2008 R2 to significantly reduce storage requirements—enabling further savings on hardware investment.

**REDUCE OPERATIONAL COSTS**

Drive down the cost of managing your data center by reducing the number of servers to be managed, creating consistency across the hardware and software in your data center, and taking advantage of the centralized management capabilities of Windows Server and SQL Server.

## Cut data center costs

By consolidating your database servers, you can realize significant savings through reduced power and cooling requirements—and by standardizing on new, more efficient hardware, you can gain even more efficiencies.

Standardizing and rationalizing the software in use in your data center can also reduce training costs and increase the workload capacity of your existing IT staff.

## Gain administrative efficiencies

Use powerful management tools and capabilities to centralize database server administration and increase the productivity and effectiveness of database administrators.

By using policy-based management, you can enforce server configuration compliance proactively; significantly reducing the time spent troubleshooting and isolating configuration issues. You can also take advantage of the new Utility Control Point capability in SQL Server 2008 R2 to monitor and manage resource utilization across multiple database servers from a single management interface. This makes it easier to identify and resolve potential resource contention issues before they arise and impact business productivity.

## Enable simpler, faster deployment

Use the new SQL Server Sysprep tool in SQL Server 2008 R2 to simplify database server provisioning and reduce the time it takes to bring a new database server into production. You can also use the new Data-Tier Application feature to make it easier to package and deploy database applications along with all the server resources they need.

Organizations that use virtualization to consolidate can simplify server provisioning even more by building a library of virtual machine images that can be quickly deployed as new servers are required.

## Ensure business continuity

Help protect revenue by helping ensure business continuity and minimizing planned and unplanned downtime for your business-critical applications.

Virtualization enables easy-to-implement, high-availability techniques by enabling you to recover quickly from a backup of a virtual hard disk or by using host clustering to protect a server running Hyper-V. In addition, Live Migration enables you to move virtual machines between host servers without incurring downtime for server maintenance or updates. When a virtual machine is moved between servers, open sessions from connected users are maintained, and users do not experience any appreciable delays.

For even greater availability, you can use SQL Server always-on technologies to implement guest clustering in a virtualized database server and database mirroring to help ensure availability in the event of a shared disk failure.

## Reduce revenue loss from security issues

Reduce your database server attack surface by consolidating servers and applying standard server configurations that can be enforced through policy-based management.

Consolidate your enterprise Public Key Infrastructure (PKI) implementation through the support in SQL Server 2008 R2 for extensible key management and hardware security modules.

**INCREASE AGILITY**

Deploy, manage, and optimize usage of database servers with the flexibility required to adapt to fast-changing business requirements—increasing your organizational agility.

## Build a flexible data infrastructure

Use the benefits of virtualization along with deployment enhancements like SQL Server Sysprep and data-tier applications to reduce the time it takes to deploy applications, while giving you the flexibility to quickly move them in response to changes in business requirements or hardware capacity.

## Control resource utilization

Take control of your application resource utilization by choosing the right consolidation strategy to isolate workloads, and proactively enforcing predictable performance through Resource Governor, Windows Server Resource Manager, and Hyper-V virtual machine configuration.

## Improve SLA compliance

Improve server management and benefit from better defined, more predictable service-level agreements (SLAs) by consolidating previously unmanaged servers and replacing them with managed servers in a consistent shared infrastructure.