Microsoft SQL Database Protection

Microsoft SQL database backup and recovery is an inherently challenging process that becomes more difficult as a company's SQL database grows and the demands on its online availability increases, further limiting the time available for backup and recovery operations. Many organizations use manual backups to protect their SQL data. However, these methods do not provide the reliability required by corporate environments or improve the availability of critical systems.

Eliminating backup overhead on production databases is a requirement for many of today's critical online business applications. As SQL data continues to grow in today's enterprise, so does the demand placed on an organization's ability to protect the database in an online state, and overall reduce the IT risk exposure to the database and the applications that rely on it. Without reliable data protection in place, the slightest performance impact or downtime to a SQL environment can result in significant business loss. An efficient backup and recovery solution is required to eliminate downtime and provide complete data protection for critical SQL environments.
Today's SQL database protection challenges include:

- Protecting the database in an online state while minimizing impact during backup windows
- Restoring the database to a point in time that exists between backup sets
- Maintaining rigid service level agreements for both backup and recovery operations

Setting the Standard in Microsoft Database Protection

Symantec Backup Exec 2010 Agent for Microsoft SQL Server protects business-critical online transaction processing (OLTP) and e-business data in case of application or hardware-based corruption or loss. Designed to be flexible and easy to use, this agent gives SQL Server 2000, 2005, and 2008 users' comprehensive and customizable protection down to the individual file group.

Backup Exec 2010 leverages the capabilities and technologies in Microsoft SQL Server to provide complete protection of the SQL database components including:

- Data recovery to named transaction log marks within the transaction log, so administrators can restore data up to the point at which the data was last committed to the database
- Modeling of SQL database backups that can be targeted to fit the individual needs of the business by performing full or differential backups and restores of the file group
- Expanded data protection parameters that include multiple and named SQL Server 2000/2005/2008 database instances running concurrently on the same server
- Improved performance of database consistency checks (DBCC) with the ability to perform a physical-only DBCC on SQL Server 2000/2005/2008 databases, which greatly enhances backup speeds without sacrificing backup accuracy
- Support for SQL Server database mirror data protection
- Support for SQL 2008 Filestream Data (BLOB) including Word documents, spreadsheets, pictures, etc.
- Support for SQL 2008 Database Compression which reduces volume of data that SQL sends to Backup Exec

Key Business Benefits

- Non-disruptive SQL server backup and quick restoration
- Support for both 32 and 64-bit SQL Server installations
- Integrity of vital SQL Server data is maintained during backup and recovery operations
- Increases the chance of data recovery and minimizes data loss without inhibiting daily database activity
- Point in time database recovery allows for quick database restore

Platform Support

- Microsoft Windows Server 2008 Family (including 32-bit, x64 and R2 versions)
- Microsoft Windows Server 2003 Family (including 32-bit, x64, and R2 versions)
- Microsoft SBS 2008
- Microsoft SBS 2003 Family (including R2)
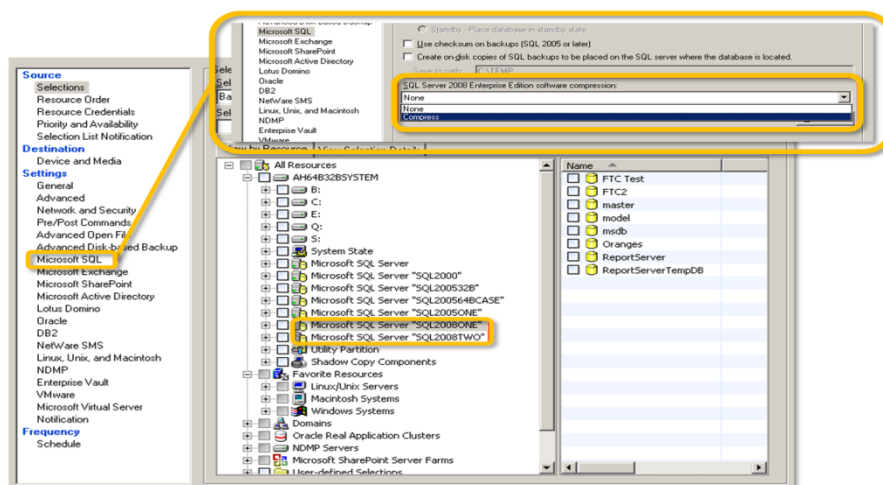- Microsoft Windows 2000 Server Family (SP4)

Figure 1: view of Microsoft SQL Server backup configuration

Features and Benefits

Database Snapshot	A feature in SQL Server 2005/2008 that is fully supported and used to quickly revert SQL server database; grooming and pruning are automatically maintained in the Backup Exec catalog and job history; a fast and reliable snapshot with very little impact to SQL server operations
Copy-only backups	Operated as a full backup but does not disrupt future full or differential backup rotations
Simplified point-in-time restores	Simply select a database and time to recover, and Backup Exec assembles the necessary full, differential, and log sequenced backups and identifies any user selection or redirection conflicts or if the database could be restored to an even later date than specified
Full text catalog support	The text catalog is seamlessly protected and recovered as part of any backup/recovery job
SQL 2008 Filestream Support	Protect SQL 2008 Filestream (BLOB) data that resides outside of the database
SQL 2008 Database Compression	Leverage SQL-side database compression that reduces the volume of data sent to Backup Exec
Continuous data protection for SQL Server	Continuously back up and recover SQL Server databases and file groups to any point in time

Backup Exec Microsoft SQL Server Agent Licensing

Backup Exec 2010 is designed to accommodate the needs of Windows focused environments of all sizes whether it's a single Windows Server or a large, multi-Domain Windows enterprise with some Linux and Unix servers. The Backup Exec 2010 Server product and its Agents are licensed on a per-Server basis regardless of the version of Windows, physical or virtual hardware, or number of processors on the system.

Scenarios	Customer Environment	Licensing
Protecting 1 Microsoft SQL Database Server	(1) Windows Server	Qty: 1 of Backup Exec 2010 license Qty: 1 of Backup Exec 2010 Agent for Microsoft SQL Server

Integrated Data Protection

Each Backup Exec Agent for SQL license supports one SQL server. Backup Exec 2010 is designed to accommodate the needs of Windows-based environments of all sizes– whether it's a single Windows Server or a large, multi-Domain Windows enterprise including multiple remote Linux and UNIX servers. The Backup Exec 2010 portfolio provides a wide array of high powered Agents and Options which are licensed on a per-Server or per-storage device for added scalability, supporting all Windows 2000, 2003 and 2008 environments, physical or virtual servers, and unlimited processors on the system.

• **Deduplication Option**	• **Agent for Active Directory**	• **Agent for Microsoft SharePoint**
• **Exchange Email Archive Option**	• **Agent for Microsoft Exchange Server**	• **Agent for Enterprise Vault**

For More Information

Symantec Enterprise Sales Support: 800-745-6054
Backup Exec on the Symantec Web Site: http://www.backupexec.com