LiveBackup 3.11 Migration Guide

The following document provides best practices for upgrading LiveBackup 2.9x to 3.x. It includes information on

- Upgrade
- Protection
- Data Aging
- Network Disaster Recovery

Upgrade

Before upgrading LiveBackup 2.9x to 3.11, consider the following:

- Language support
- SQL Server 2005 Support
- System Resources

Language Support

LiveBackup 2.95 provides the Client interface and documentation in English, French, Italian, German, and Spanish. The 3.0 version includes only English and French.

For English, French, Italian, German, and Spanish language availability for LiveBackup Client, upgrade to LiveBackup 3.11.

SQL Server 2005

LiveBackup 3.x supports SQL Server 2005 as well as SQL Server 2000. If you choose to upgrade,then first make sure your LiveBackup Server meets Microsoft's system requirements for SQL Server 2005.

Once your server is hardware is prepared, upgrade LiveBackup to version 3.x.

Then finally, taking care to follow the directions in the Upgrade chapter of the *LiveBackup Installation and Setup Guide*, upgrade to SQL Server 2005,

System Resources and Disk I/O

LiveBackup 3.x includes several changes that impact the CPU usage on your server. It is not uncommon for your CPU to reach 80-100% capacity. The following changes impact these system resources:

- **IIS**: Improved IIS performance makes resource utilization more effective.
- **Storage encryption**: Enabling storage encryption increases CPU usage slightly.

- **Automatic checkpoints**: LiveBackup 3.x creates checkpoints every day (by default, at 4:00 am), even when the client computer is not rebooted. This change increases the availability and reliability of client checkpoints, but at the cost of increased data traffic and CPU usage.

- **Protection**: LiveBackup 3.x protects all file types, user document and system files, equally, considering both types for redundancy elimination and shared database storage. This change can save a significant amount of disk space, but adds slightly to the processing time of each file as LiveBackup checks for its existence in the shared database before committing it to an individual client's database. This change has a minimal impact on server performance unless clients are sending thousands of small files per day. For more information on Protection changes, see Protection, below.

To account for these changes, we recommend as always that the computer used for LiveBackup Server is dedicated to LiveBackup alone.

In addition, to improve disk I/O, you can try upgrading your disk subsystem to a SCSI array. For more information on monitoring your system resource requirements, including disk types, see the *LiveBackup Deployment Guide*.

Protection

LiveBackup 3.x improves its protection of all files by eliminating the distinction between system files (those required for running the system such as operating system, application, and program files) and user data (files that you create, such as documents, spreadsheets, photos, and music).

As a result,

- All files are eligible for both redundancy elimination and the shared database, which decreases disk storage requirements.

- All files are eligible for data aging. See Data Aging, below.

- All files are eligible for storage encryption.

- When configured for Full Protection, LiveBackup protects all file types equally; there is no need to configure user document types under Full Protection mode.

Data Aging

In version 3.x, LiveBackup improves the data aging process. Rather than aging all data based on a single version history, 3.x enables you to configure data aging based on protection windows. These settings enable you to define a flexible policy of thinning checkpoints within a protection, which enables you to keep a long history of checkpoints while saving overall disk space.

LiveBackup now defines two protection windows: Continuous and Extended.

- The *Continuous* protection window specifies how long every version of every file and all checkpoints will be available for recovery. By default, it is five days. This means that if you have data aging enabled with the default settings, you will always have a

minimum of five days worth of versions of every protected file and all checkpoints available for immediate recovery.

- The *Extended* protection window extends the number of days for which some versions and checkpoints will be retained and therefore recoverable past the Continuous protection window. This data thinning enables some versions to be recoverable over the extended time frame, but ages unnecessary redundant versions and checkpoints. You can define the Extended protection window by days, weeks, and months.

For example, if you accept the default configuration of Continuous and Extended protection windows, then you will have 65 additional days of available versions *over* the Continuous protection window for 70 days.

Continuous protection = 5 days
+ Extended protection =
1 week = 7 days
+ 4 weeks = 28 days
+ 1 month = 30 days
= 70 days of protected versions

If you have already configured data aging in a previous version of LiveBackup, then that configuration will be converted to the new data aging scheme upon upgrade as follows:

- The **Maintain Version History** value will be converted to the **Continuous Protection Window**, not to exceed 7 days.

- The **Keep at Least One Checkpoint per Day for** value will be converted to the **Maintain only the last *N* checkpoints** parameter of the Extended Protection Window, minus the value of the **Continuous Protection Window**. This value will be forced to at least 7.

As in previous versions of LiveBackup, you have to launch data aging by means of a schedule or the Age Data Now command to actually delete or archive data. The changes affect the configuration only.

Network Disaster Recovery

LiveBackup 3.x enables you to access disaster recovery images from a network drive as well as a local drive or removable media.

If you plan to use this feature, then review the information in TD 469: LiveBackup Disaster Recovery over the Network, which you can find in the Atempo Knowledge Base at http://www.atempo.com/support/kb/article.asp?aid=469