



# **AppAssure**

## Backup anywhere, optimize everywhere, recover always

For many organizations backup can be expensive, complex, and surprisingly unreliable. Built from the ground up for complex virtualized, physical, and cloud environments, AppAssure $^{\text{M}}$  provides you with innovative capabilities and flexibility that go beyond traditional backup offerings. With this next-generation data protection solution from Dell, continuous application-aware image-level backups eliminate the backup window while providing recovery options ranging from an entire server to an individual email. Get back up and running without waiting for a full restore, automatically verify recoverability, and restore anywhere to anywhere and across platforms.

With AppAssure, you'll take advantage of a next-generation approach to protecting data that leverages speed, flexibility and intelligent automation to help you adapt to change and shift IT resources toward innovation.

#### Unified backup and recovery

AppAssure tracks data changes to disk blocks rather than files in order to support a unified disk-imaging approach for all data protection and recovery functionality. Three key technologies capitalize on this approach:

Live Recovery<sup>™</sup>—meet near-zero RTO and quick RPO

Recovery Assure™—automatically test and verify that both backups and application data are recoverable

Universal Recovery™—support granular, cross-platform recovery of files and application items in physical and virtual environments, including bare metal restore

#### Near-zero restores

AppAssure Live Recovery leverages block data to provide near-zero perceived restore time. Restore your entire server from your backup to support recovery time objectives (RTO) of seconds and recovery point objectives (RPO) of minutes with full user access. Server use can resume directly from the backup file without waiting to extract the full backup or waiting for it to completely restore to production storage. If a user tries to access a file or data item still queued on the AppAssure server, the requested data blocks are transferred immediately. As a result, even a large volume file server or Microsoft® Exchange® mailbox database with hundreds of gigabytes of data can be restored instantaneously from an end user's perspective.

#### Verified—automatically

Recoverability is built into AppAssure. Recovery Assure technology automatically tests and verifies your backup file integrity and assures the recoverability of the backup file itself. Proactive health check and corruption detection of application data in the backup archive file help ensure applications are recoverable.

#### Built for virtualization and the cloud

Built from the ground up for virtual and physical environments, AppAssure can place captured images anywhere, onsite or in the cloud—whether that's your server room, secondary location, hosted data center or public cloud. Universal Recovery technology supports full bare metal recovery to dissimilar hardware and VM servers, as well as granular recovery in seconds of individual objects, applications, files or messages regardless of whether they come from a virtual or physical server.

#### Application-aware

Unlike legacy backup products, AppAssure images the entire software stack, protecting the entire application—not just the files. Fine-grained data item recovery is available for applications such as Exchange, Microsoft SharePoint®, and Microsoft SQL Server®. In addition to automating synthetic backups, AppAssure automatically discovers critical applications and presents all of the disks utilized by the application as a logical resource for recovery.

#### Less wasted storage with deduplication

AppAssure is designed to use up to 80% less storage than legacy backup products through integrated deduplication and compression, also optimizing backups for WAN replication. In a changed-block backup, incremental backups only process the changed blocks in a file—there are no unchanged data blocks that need to be deduplicated. By restricting data deduplication to the current backup, AppAssure eliminates the CPU overhead and extended wall clock time associated with data deduplication of a file-based backup. The result? Small backup footprint, lightweight data item recovery, and no manual file rollups. Your data—backed up anywhere, optimized everywhere and always recoverable.

Feature	AppAssure			
Systems Supported				
VMware®	Microsoft Windows® guests running under ESX, ESXi, vSphere 5			
Microsoft Hyper-V®	Microsoft Hyper-V Server 2008 R2			
Microsoft Windows Server®	Windows Server 2008, Windows Server 2008 R2, Windows Server 2003			
Microsoft Small Business Server	Microsoft Small Business Server 2008, Small Business Server 2003			
Microsoft Exchange	Exchange 2003, Exchange 2007, Exchange 2010			
Microsoft SQL	SQL Server 2005, SQL Server 2008			
Microsoft SharePoint	MOSS 2007, WSS 3.0, SharePoint 2010			
Microsoft Windows Desktop	Windows 7, Windows Vista, Windows XP Professional			

### AppAssure is the next generation of data protection

	Legacy software with tape	Legacy replication	AppAssure	AppAssure Advantage
Time to protect your data	Slow	Fast	Fast	Near-zero recovery time and 5-minute RPO
Time to get back in to production	Slow (could be days)	Fast	Fast	Recover and run physical and virtual servers anywhere–onsite or in the cloud–in minutes
Cost	Low	High	Flexible	Reduce storage capacity usage by 80% through deduplication and compression
Application awareness	Good	None	Great	Granular recovery of applications, files, objects or the entire image

