

## Attention Exchange Administrators ... There is a Better Way to back up!

If your company relies on Microsoft® Exchange Server to manage and deliver information, as well as to communicate with your customers and partners, who will you trust to maximize its protection and recovery?

Exchange administrators are looking for a better way to protect and recover the email that their company depends on. Microsoft has heard from our customers and partners and delivered a complete solution with System Center Data Protection Manager (DPM).

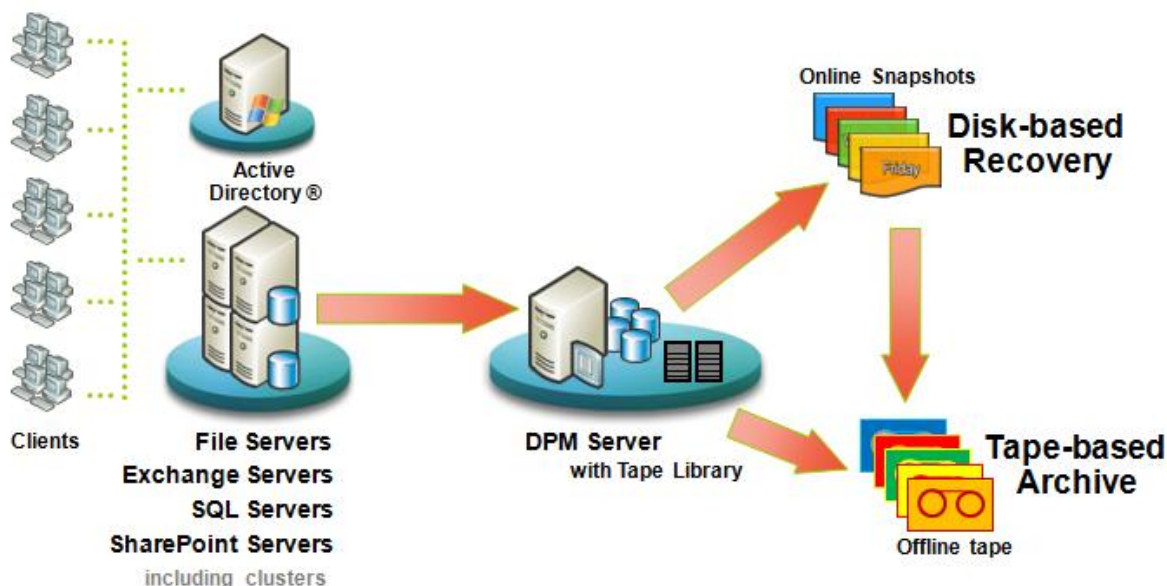
Microsoft®  
**Exchange Server**

**Data Protection Manager (DPM) v2** is a member of the Microsoft System Center family of management products, which are designed to help IT Professionals manage their Windows Server® infrastructure. Announced in September as a publicly available beta, DPM v2 sets a new standard for Windows backup and recovery -- delivering continuous data protection for Microsoft application and file servers to a seamlessly integrated secondary disk and tape solution on the DPM server. DPM enables rapid and reliable recovery through advanced technology for enterprises of all sizes.

### Microsoft protection and recovery for Microsoft applications

**Microsoft designed DPM v2 to provide the best backup and most reliable restore for Microsoft Exchange Server.** Focused on the primary Microsoft server workloads, DPM version 2 was specifically built to protect and recover Exchange Server, Microsoft SQL Server™, SharePoint® Portal Server, as well as Windows file services. In addition, DPM v2 blends the best aspects of continuous data protection (CDP) with traditional tape backup.

DPM v2 provides continuous protection for the core Microsoft server workloads to a DPM server, which then provides disk-based recovery and tape-based, long-term archival for a complete data protection and recovery solution.



## Maximizing Protection of Microsoft Exchange Server with Microsoft Data Protection Manager (DPM)

**DPM v2 is designed for the E-Mail Administrator** or the IT generalist and uses wizards and workflows to help ensure that you can protect your data – without requiring an advanced degree, training, or certification in storage and backup technologies.

DPM presents the data to be protected in the same context as users access it. In DPM 2006, file servers can be protected by selecting file shares within the Data Protection Wizard. In DPM v2, Exchange Server storage groups and SQL Server databases are selected and protected the same way.

### Designed for Exchange Server

Because DPM was designed specifically for Exchange Server, DPM understands the advanced configurations of Exchange Server that often cause other data protection tools to fail:

- When protecting Exchange Server clusters, DPM is not only “Exchange-savvy,” but “cluster-competent.” During deployment, DPM v2 is aware of the physical nodes, the cluster’s identity, and the virtual servers running within it. DPM v2 will help you ensure that the DPM agent is on all clustered nodes to maximize protection of the Exchange data. And when Microsoft Cluster Services changes the Exchange Server to a different clustered-node, DPM v2 will continue to help protect the virtual Exchange server without administrator intervention.
- When deploying Exchange 2007 LCR (Local Continuous Replication) clusters, DPM is LCR aware and protects the active database.
- When deploying Exchange 2007 CCR (Clustered Continuous Replication) clusters, DPM is CCR aware and enables “Preferred Node Backup” – allowing the passive copy to be protected and eliminate any I/O impact from the active Exchange server.

Older backup applications require brick-level backups if you want to do brick-level restore (like a mailbox), which significantly increases the size of the backup disks or tapes. Because DPM v2 was built by Microsoft for Microsoft applications like Exchange, we made sure that isn’t necessary.

**DPM can protect a Storage Group, but restore a storage group, a database, a public folder, or even a single mailbox.**

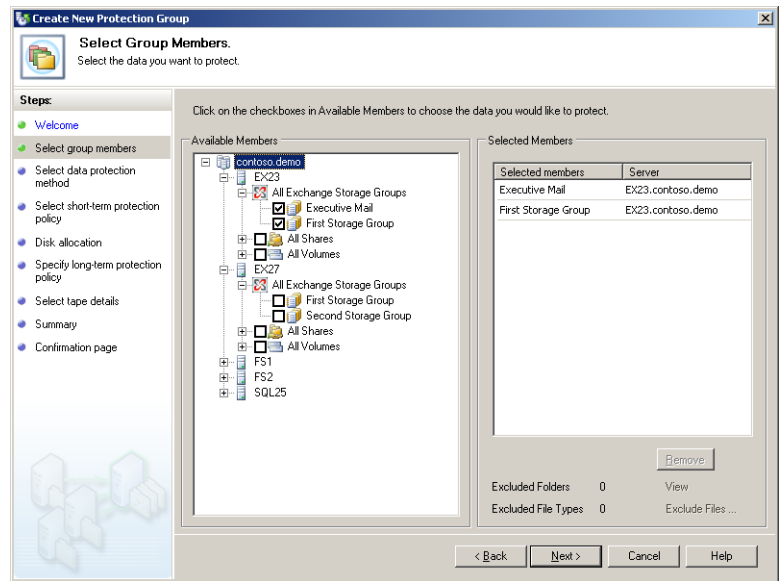
DPM also minimizes backup-related performance impact by offloading the typical ESEUTIL operations that most backup applications force on the production server. Instead, the DPM server handles this on the redundant data, lightening the load on the production Exchange Server so that it can serve more users.

### How does Exchange Server protection with DPM work?

DPM uses a combination of transaction log replication and block-level synchronization in conjunction with the Exchange VSS Writer to help ensure your ability to recover Exchange Server databases. After the initial baseline copy of data, two parallel processes enable continuous data protection with integrity:

- Transaction logs are continuously synchronized to the DPM server, as often as every 15 minutes.
- An “express full” uses the Exchange Server VSS Writer to identify which blocks have changed in the entire production database, and send just the updated blocks or fragments. This provides a complete and consistent image of the data files on the DPM v2 server. DPM v2 maintains up to 512 shadow copies of the full Exchange Server database(s) by storing only the differences between any two images.

Assuming one “express full” per week, stored as one of 512 shadow copy differentials between one week and the next, plus 7 days x 24 hours x 4 (every fifteen minutes), **DPM v2 provides over 344,000 data consistent recovery points for Exchange.**



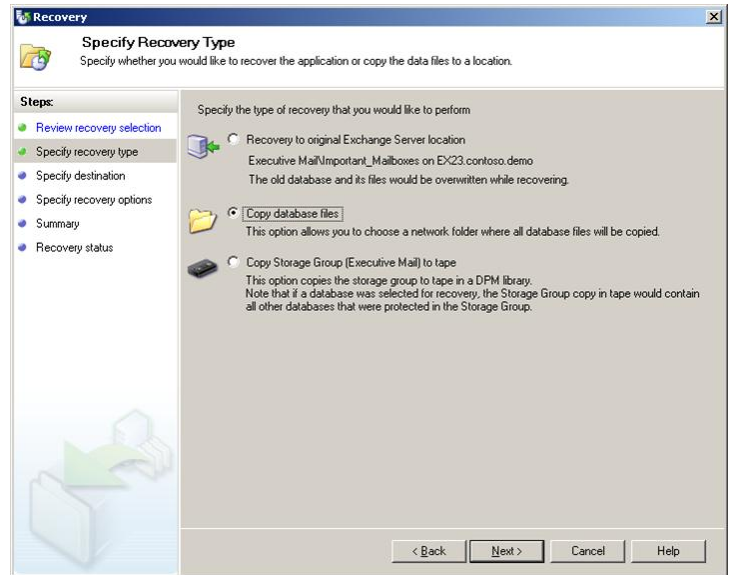
DPM v2 makes protecting Exchange data easy and straightforward

## How to Restore Microsoft Exchange Server with Microsoft Data Protection Manager (DPM)

DPM v2 is focused on “restore” instead of just “backup”, which is why Microsoft has blended CDP and backup, disk and tape, synchronizations and log shipping – all to enable the best possible recovery experience.

With only a few mouse clicks and DPM v2, you can restore an Exchange Storage Group, a Database, a Public Folder, or an individual Mailbox:

- **Restore Exchange data directly back to the original server**  
As a traditional restore, but with no additional work for the Exchange administrator to do afterwards, DPM restores directly back into the active Exchange data set. This improves recovery time and reduces the number of people needed during a crisis recovery.
- **Copy database files to an alternate server,**  
This option enables disaster recovery, compliance auditing, or software testing – without affecting the production environment. The files can be mounted by another Exchange server.
- **Copy the database file to tape,**  
Use this option to create a long-term archive or portable media of the data at any recovery point, even after the fact -- directly to tape – without backing up anything else or impacting the production server that is already serving new data.



DPM v2 provides rapid, reliable and flexible recovery for Exchange Server

**Unique to DPM v2 is “lossless recovery” of Exchange Server data**, meaning that after DPM v2 restores your mail database(s) to the latest 15-minute recovery point, it can automatically reapply the surviving logs from the production server to the very last committed transaction. Thus, the last completed Exchange database transaction (i.e. mail message) is recovered and ready for your users.

### “Designed to Protect and Restore Microsoft Exchange Server”

Common customer questions about their existing Exchange Server solutions include:

#### “Who can help me restore?”

During a crisis, as part of the data recovery, many customers are frustrated when bringing in multiple support organizations to help restore their data. The third-party backup vendor may say that the data restored successfully. But, Microsoft Exchange Server product support may say that the data is un-mountable. And the systems integrator and database administrator can be stuck in the middle.

Having a Microsoft backup product protecting a Microsoft Exchange Server means customers don't have to worry about misunderstandings between vendors when restoring their data.

#### “My backup product does some things well, but protecting my advanced Exchange configuration isn't one of them.”

Because third-party backup products try to back up a wide variety of applications, it is very difficult to protect every application well, particularly with robust and flexible applications like Microsoft Exchange Server 2003 or 2007.

Microsoft is dedicated to making sure that our backup solution is the best for protecting our application workloads. Microsoft protects our own enterprise Exchange 2007 Servers with DPM, beginning with early DPM beta. This helps ensure that no DPM build will go to a customer that Microsoft IT hasn't signed off as tested in our own demanding production environment.

## DPM is built to protect Exchange Server -- in every environment

Microsoft developed DPM to meet customer needs in Exchange Server protection that are not being met by alternative protection technologies, for “enterprises of all sizes”.

**For Exchange Administrators within larger enterprises** - Traditional backup products are often managed by an enterprise’s IT storage team, while the applications are maintained elsewhere. E-mail administrators have asked for the ability to restore data themselves.

To meet this customer need, DPM provides Exchange Administrators and other Microsoft application stakeholders with a reliable protection and recovery platform from the same vendor that produces their application – with the flexibility to protect as often as the application or the business demands it, but be archived to tape by either DPM or the existing third-party tape solution for long-term retention.

**For IT Generalists within medium-sized businesses** – In environments that rely primarily on Microsoft applications (Microsoft Exchange for email, SQL Server as their database, SharePoint for collaboration, as well as Windows file services), DPM provides an opportunity to be assured that all of your core applications are receiving maximum protection by the same company that created them; with the added value of being able to purchase and obtain support for your protection package with all of your other Microsoft licensed products.

Data Protection Manager is part of System Center, the family of management products from Microsoft that have our knowledge built-in. In DPM, this means that workflows and wizards walk the IT Generalist through the straight-forward browsing of your Exchange Server data sets and setting your own recovery goals and retention requirements. DPM locates the data, manages the disk-based images and logs, and rotates the tapes – so you don’t have to.

## Take a look at how DPM can protect your Exchange Server infrastructure

If you depend on Microsoft Exchange Server to manage and deliver information within your company, and to communicate with your customers and partners, take a look at how DPM v2 can help you protect your business critical data.

Check out more about DPM, including the DPM v2 beta, at [www.microsoft.com/DPM](http://www.microsoft.com/DPM)

Watch the new Microsoft TechNet webcast on “Protecting Exchange Server with Microsoft DPM”

<https://msevents.microsoft.com/CUI/WebCastEventDetails.aspx?EventID=1032322917>

And download the beta today.

## Get ready for Data Protection Manager v2

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