

In today's email-centric work environment, it's increasingly important to have a reliable backup of your vital GroupWise data. It's equally important to have a disaster recovery solution in place for your GroupWise system. Reload is a **superior hot backup, push-button disaster recovery, and quick restore** solution for Novell GroupWise®.

Most backup solutions are focused on backing up data. Reload takes a broader approach to GroupWise backups by allowing you to quickly and easily access your backed-up GroupWise data for item recovery or complete disaster recovery.

Simple Deployment

When deploying Reload, you don't need to change any aspect of your GroupWise system servers to enjoy the benefits of Reload. You do not need to install software or make configuration changes. There is no need to convert your GroupWise system to a different platform or hardware solution to leverage the strengths of Reload. Typically, Reload is deployed on a single server running on the Novell SLES or OES Linux platform with access to disk space storage.

GroupWise-Centric

Reload is unique because it is GroupWise-centric. Reload is designed to leverage the strengths in GroupWise, which allows Reload to be highly efficient in the use of disk space. Reload needs only to store 12% of the size of a post office each day to represent a complete duplicate of a GroupWise post office. Reload backs up GroupWise domains as well. The Reload server isn't just a data repository; it can function as a redundant GroupWise system for GroupWise post offices, domains, Internet mail and GroupWise WebAccess connectivity.

Reload has a comprehensive solution for GroupWise backup and recovery. Because GroupWise post offices hold 99+% of the data contained in a GroupWise system, these feature explanations mainly address backing up post offices.

Superior Hot Backup

BACKUP COMPLETENESS: Because Reload tightly integrates with the SmartPurge functionality in GroupWise, no sent or received e-mail or calendar items can be removed from the GroupWise message store until it is backed up.

SMALL BACKUP SIZE: Backup sizes are what make Reload unique from all other backup solutions for GroupWise. Daily (incremental) backups for post offices only back up changes. Daily backups are only 12% of the total size of the post office; however each daily backup is effectively a full backup. Reload accomplishes this feat by immediately linking the newly backed up data to the previously backed up data making it immediately available as if it were a complete copy of the production GroupWise post office.

HIGHEST BACKUP QUALITY: Reload creates highly consistent backups. With this feature of Reload, you are guaranteed that even items received during the time of the backup are fully backed up by Reload. Your users will never encounter a scenario in which they have a new received item in their mailbox on the Reload server, and some portion of the message is not also backed up.

MESSAGE VAULT: Once items are in the Reload backup, users can be allowed to access their mail boxes, but cannot purge items in the Reload backup.

RECENT BACKUPS: Backups can be pulled once a day or several times a day. Having recent backups is an important factor for disaster recovery purposes. The time it takes to create a backup is the greatest factor affecting how often a backup can be pulled. Even if the Reload server has multiple post office profiles, it will still be able to get multiple backups within a day's time. Reload's ability to perform simultaneous backup jobs for up to five post offices at a time is a key technology that allows for customers to have multiple daily backups. Although Reload can pull multiple backups in a day's time, the

disk space efficiency mentioned earlier is still in effect. So all that needs to be stored for each day is 12% of the size of the post office, no matter how many backups were created for a particular post office.

FAST BACKUP SPEED: Reload backups are very time-efficient because Reload only pulls off all the data from a post office the very first time a post office is backed up to the Reload server. A master copy of the data is kept on the Reload server and is fully synchronized with the live post office. Here is a real-world post office backup scenario:

Reload Server Details

Server grade computer

Disk: SAN attached

CPU: Dual SMP, Xeon 3.4 GHz

Memory: 3 Gigabytes

Reload to post office connection speed: Gigabit

Post Office Details

Users: 900 users

Post office size: 53 Gigabytes

GroupWise version: GroupWise 7.0.3

Backup Speed

10 minutes to create a daily backup for this post office

SIGNIFICANTLY SPEED UP TAPE BACKUPS: The GWAVA Reload server can be configured to create a single tape archive (*.tar) file that contains a full week (7 days) backup set. The tape archive file is large (185% of the size of the post office), but because it is just one file, getting it to tape or retrieving it from tape is simple and significantly faster than backing up individual files.

CONSOLIDATE TAPE BACKUP AGENTS: If you want to integrate a tape backup software agent to pull backups only from the Reload server, you need only to point the backup software to the replica of the GroupWise post office or domain that is on the Reload server. This way, tape backup agents can be removed from the servers that host production GroupWise post offices and domains.

DECREASE TAPE BACKUP SYSTEM WEAR: Reload is easily integrated into currently existing tape backup schemes. Reload is not generally meant to replace tape backup systems which are still needed for long-term storage. Reload is a near-term restoration system that lets tape backup systems get less wear and tear, and saves many man-hours when items need to be restored.

BACKUP ARCHIVING: You can configure the Reload server to "archive" off data that should no longer be kept on the Reload server. Once data is archived off, it is no longer managed by Reload. For example, GWAVA Reload could be configured to archive data off of the Reload server after two or three weeks. The archive location might be a NAS device or some other large, inexpensive storage solution.

COMPLETE PLATFORM SUPPORT: Reload backs up GroupWise post offices and domains on every platform that GroupWise runs on:

NetWare, NetWare Clusters, Linux, Linux Clusters, Windows

Reload will backup GroupWise systems in both traditional and virtualized environments. The Reload server can also run on a virtual server.

EFFICIENT SERVER USE: Each Reload server can be configured to back up as many as 20 post offices and 20 domains (Reload profiles). You are generally limited only by disk space and the time it takes to create a backup.

Push-Button Disaster Recovery

PUSH-BUTTON: Disaster recovery for both GroupWise post offices and domains is a push-button action. There are no decisions to make, no backup sets to combine, just one button to push.

DISASTER RECOVERY IS EASY TO TEST: A challenge with many backup and disaster recovery solutions is that they are difficult to test. Reload is different from any

other solution. The fact that it is so easy to restore message items from the Reload system causes it to be “tested” frequently. The method of restoring backed up items and enabling disaster recovery is very similar, and it uses exactly the same GroupWise data. So if Reload is used often for restoring deleted items, disaster recovery is also being tested often.

ONE MINUTE DISASTER RECOVERY: With Reload it will take you only about a minute to turn your Reload server into your live GroupWise post office or domain. All of your services, including the, GroupWise client, BES, GMS and WebAccess, will continue to function with the live GroupWise post office or domain hosted on the Reload server.

GROUPWISE SYSTEM REDUNDANCY: Besides hosting GroupWise post offices and domains, the Reload server can also host Internet mail (the GWIA) and function as the GroupWise WebAccess server. If you choose this configuration, the Reload server can act as a redundant GroupWise system poised to take over whenever necessary. So in the case of a disaster, you only need to make a couple of DNS changes and your entire GroupWise system can be up and functioning on the Reload server.

OFF-SITE DISASTER RECOVERY: Reload supports off-site disaster recovery servers. The off-site Reload server pulls changes from the on-site Reload server. Because Reload supports an off-site Reload server, if the production site were to be completely lost, the off-site Reload server could function as the production GroupWise system.

MIGRATION BACK TO A PRODUCTION SERVER: After you have recovered from a disaster and run successfully on the Reload server, you will need to migrate your domain or post office back to a production server. Using a migration wizard running on the Reload server, you can choose whether you want to migrate back to the same server, a different server, or even a different platform than where the GroupWise system was originally backed up from. Reload can pre-migrate 90% of the post office all while the live post office is still running on the Reload server. That means you can keep downtime for migration to a minimum.

Quick Restore

ACCESS SPEED: A Reload administrator can select, and then access a backup created by GWAVA Reload in about one minute.

EASY RESTORATION OF ITEMS: Users can easily access their own GroupWise backed up mailbox from Reload in either “Restore Mode” or “Access Mode.” In Restore Mode, a user will select the File|Open Backup feature in the GroupWise client. In this mode, the user will only see the items in their backed up mailbox that are not currently in the live mailbox. The user then needs to highlight the item(s) to be restored and select Action|Restore. In Access Mode, users will see all message items in their mailbox that are in the backup. Then, using the Archive feature within GroupWise, they can restore items to their mailbox. In Access Mode, a user can also export address books, or even access backed up documents from GroupWise Document Management libraries.

SELF-SERVICE BACKUP ACCESS: Reload’s Auto-Reload option can make the most recent backup for a post office available for immediate client connections.

SECURITY: The data backed up on a GWAVA Reload server is kept in its native (very secure) GroupWise format. Nothing is ported to a different database type.

About GWAVA Inc.

GWAVA is a worldwide leader in messaging security. With over 15 Million people using our solutions in over 60 different countries, GWAVA’s security and auditing software has been field proven in some of the world’s largest messaging infrastructures. GWAVA has offices in the U.S., Canada, Germany and Australia, and a network of hundreds of Authorized Partner to serve you.

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