

Preferred Data Systems offers two unique solutions for email archiving on Microsoft Exchange Server 2010. These services are tailored to fit any business archetype and are guaranteed to create a dependable resource for email storage.

» **Solution 1:** User mailbox "Personal Archive" or "Archive Database"

» **Solution 2:** External archiving solution

Solution 1: User mailbox "personal Archive" or "Archive Database"

Microsoft Exchange Servers 2010 RTM and SP1 provide the opportunity to create an additional mailbox "Personal Archive" into which emails can be moved either manually or automatically based on policies that are usually custom configured to meet the company or organization's physical and legal needs.

An appropriate configuration of the Exchange Server guarantees that, within the corresponding retention periods, emails cannot be deleted from Exchange Server. Provided that all configuration parameters are set correctly, companies are able to accomplish e-mail archiving that complies with legal requirements.

Applying this solution requires the following IT infrastructure:

- **Storage capacity:** Depending on the retention policies configured, emails typically remain in the archive database for 7 to 10 years. The storage capacity needed can increase dramatically and has to be readily available. Because Exchange 2010 no longer offers single instance storage (SIS), identical emails and file attachments can be and usually are stored multiple times in multiple locations. This can make the storage requirements up to 50 percent higher than that of previous version of Exchange Server. **For Example:** 10 users x 2 GB/year x 10 years = 200GB database

- **Backup:** By using personal archives with their corresponding retention policies, the size of the Exchange Archive database can reach a multiple of its Active Database within a short period time. Therefore, companies should be sure to use a backup strategy which is able to handle this increase in volume. Things to keep in mind are the storage capacities as well as the time window available for backup.

- **File recovery:** Because the amount of data to be restored significantly increases in direct relation to the factors mentioned above, a considerably higher overhead (i.e. expenditure of time) must be allocated to the recovery. The resulting downtimes must be reduced according to company size, data volume and acceptable downtime by implementing a suitable policy for redundant data storage.





- **Redundancy:** Downtimes acceptable to a company during backup and recovery can quickly be exceeded by the increasing amounts of data. Microsoft recommends using Database Availability Groups (DAG), which requires Windows Failover Cluster technology (included in Windows Server 2008 Enterprise Edition).

- **Licenses:** For every Exchange user whose emails are to be archived, an Exchange Enterprise CAL has to be purchased in addition to the Standard CAL.

This solution will offer the best integration into OWA, Outlook and Exchange Server. Companies must also consider the potential for ongoing IT support to monitor policies and procedures as well as the demands on the physical IT infrastructure (i.e. storage requirements).

Solution 2: External archiving solution

Exchange Servers 2010 RTM and SP1 offer a seamless interface for integrating external email archiving solutions. Several solutions are on the market, including hardware appliances, software and SaaS products. The follow solution is based on the assumption that the Barracuda Message Archiver is used for the email archiving of Exchange Server 2010.

A typical configuration of the archiving process guarantees that emails are copied to the external archive immediately upon sending and receiving, ensuring that archiving is complete and tamper proof.

This is accomplished using the journaling feature of Exchange 2010. In addition, already archived emails are deleted from the user mailboxes after a certain amount of time, resulting in a reduced workload of Exchange Server.

Applying this solution requires the following IT infrastructure:

- **Storage Capacity:** The storage capacity assigned to Exchange Server can be held on a permanently low level because old emails are not stored in the Exchange store but in an external archive. Single Instance-Storage (SIS) significantly reduces the effective storage requirements of the archive because identical emails and file attachments are stored only once. Storage capacity can be extended to NAS appliances, external hard drives or SMB shares.

- **Backup:** If size of the Exchange store remains on a permanently low level, no additional requirements apply to the backup of Exchange Server. The Barracuda unit can be backed up to another unit for fault tolerance or to an external hard drive.



Exchange Server 2010

- **Redundancy:** During an outage of Exchange Server, all emails remain available to the users through the archive. This reduces the negative effects of the given downtimes. But new emails will not be received until the Exchange Server is returned to online status.

- **Licenses:** For Exchange Server, no additional licensing is needed to use an external archiving solution. However, Barracuda appliances are modeled based on user size and archived storage requirements and are priced accordingly. Please contact Preferred Data Systems to quote the model suitable for you company or organization's needs.

- **Administration:** Once the Barracuda Message Archiver is setup and configured to the company or organization's needs very little IT administration and/or overhead is required.

Although this way of archiving requires using a 3rd party hardware appliance, the demands on the IT infrastructure are reduced significantly.

