



MessageSolution Implementation Requirements

**For On-Premise Customers, Managed Service Provider Hosting Partners,
and Direct Cloud Customers (Client side plug-ins only)**

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1. Implementation Timeline

Implementation processes and timelines will vary according to each customer's unique environment. The implementation process is performed remotely (unless onsite assistance is requested) and takes from half an hour to a few hours to complete the base install. The base web console install generally takes an hour.

MessageSolution's one time remote implementation assistance fee includes professional engineering assistance to:

1. Configure the MessageSolution Enterprise Email Archive (EEA) system,
2. Successfully test archiving (importing) and indexing processes.
3. Successfully complete the archiving (importing) and indexing of the first 5 PST files.

2. EEA Server Pre-Requisites

2.1 Basic Hardware & System Requirements

- 40GB hard disk (a separate disk array or NAS/SAN for storage)
- Working Web Browser:
 1. IE
 2. Firefox
 3. Safari & Opera (Full Future Support)
- 1 Network Interface card
- Access to the DNS service
 - Properly configured MX record is needed if alert messages are going to be enabled
- Access to the Email Server
- Linux 2.6, Windows 2000, 2003 or 2008, Solaris
- Networking Port Requirements
 - These are the port numbers the EEA uses by default: 25, 8081, 50801, 50802, 50803, 50804, 50805, 50806, 50809, 50811, 50812, 50814
 - Web console access ports are usually 80 or 443, but can be configured to be any port.
 - If there are security conflicts with the aforementioned ports in the environment, MessageSolution can customize specific port numbers.
 - Usually firewalls do not need to be configured for the archive.
- Hardware Requirements
 1. RAM Requirement (Top Priority)
 - 2 - 4 GB
 2. Hard Disk Requirement Guide Lines (Middle Priority)
 - a) Please set aside at least 6 GB for the software install (5 GB for buffer files)
 - b) 50% of current information store size plus considerations for
 - Daily volume
 - Growth Rate
 - Retention Policy
 - c) Please consider using more robust storage media whenever possible

- SAN
 - NAS
3. CPU Requirement Guide Lines (Lowest Priority)
- a) **Best Practice** – Same family/series of processor in email server, but does not require as much as much CPU speed/frequency.
 - b) Depending on Environment – Minimum requirements are Pentium IV 2.0GHz

2.2 Windows OS Platform

- 1) Windows server platform (prefer any edition of Windows server 2003 or 2008)
 - a. The archiving server connects to email server
 - b. Can be on VM
 - c. 32-Bit OS
- 2) .Net Framework 1.1
 - For using CDO to archive, already installed on Win2003 but just in case it was removed
- 3) Outlook 2003 with CDO component (For using CDO to archive)
- 4) Access to the Email Server:
 - a. An EEA administrator service account must be created (covered during WebEx session)
 - b. Access to OWA from browser on EEA server box

2.3 Linux OS Platform

Please allow 2-3 weeks for MessageSolution's engineers to prepare a proper installer for user-specific distributions & versions of Linux. This will ensure that the Linux OS has the necessary packages and dependencies installed.

- 1) Linux 2.6
- 2) Red Hat or SUSE
- 3) Sun Java 1.4.2 or 1.5
- 4)

2.4 Email Servers

2.4.1. Microsoft Exchange Server

Exchange & DC Server Pre-Requisites:

- 1) A lot of transaction logs will be created during the historical information store pull. Please monitor free space on the Exchange server or configure the transaction logs for circular logging.
- 2) EEA administrator service account will need to be created (covered in WebEx).
- 3) Outlook Web Access web form installation (if applicable)

Outlook Plug-in Pre-Requisites (Optional)

- 1) MSI installer 3.1 - <http://www.microsoft.com/downloads/details.aspx?FamilyId=889482FC-5F56-4A38-B838-DE776FD4138C&displaylang=en&displaylang=en>
- 2) When installed on Windows XP, service pack 2 is required

2.4.2. Linux/UNIX-Based Email Server

- Java required for email server to conduct an email injection project

2.4.3. IBM Lotus Domino Server

- 1) Prefer Lotus Domino/Notes versions 6.5 and above, although version 6.0 is also supported
- 2) An EEA Administrator Service Account must be created. This account must have full access to all mailboxes on the Domino Server using the Domino Directory, as well as the right to log onto the local domain using LDAP.
- 3) If Real-Time Archiving is selected, be certain to certify the journal database with the correct cryptographic key

2.4.4. Novell GroupWise Server

- 1) GroupWise 7 or above is needed in order to utilize the SOAP API
- 2) A Trusted Application Key must be created in order to be recognized as a Trusted Application (instructions are included in the installation documentation)
- 3) SmartPurge needs to be selected if you want to archive all inbound, outbound and internal emails (a requirement of many compliance regulations).

3. Preparing for Implementation

Please review the steps below to ensure your system is ready for EEA.

- 1) Install EEA onto a separate system from the email server.
- 2) Create an Administrator Account:
- 3) Stop IIS or relevant services.
- 4) Stop SMTP services.
- 5) Make sure there is enough disk space (at least 40GB or more) on the installation disk.
- 6) For the archive's storage device, estimate your expected data volumes, and then get a storage device with enough storage space for those estimates.

Note

For help estimating your expected storage volumes with EEA, ask your MessageSolution representative for our Storage Space Calculator.

4. Creating Your Project Schedule

Please read these best practices before formulating your project schedule.

For maximized support in the first 6-12 months, Customer/MSP Partners should provide the VPN access to MessageSolution archiving system

When planning your **archiving project schedule**, here are some important items to consider:

- 1) Existing storage size on your email server(s)
- 2) Bandwidth Available
 - a. Bandwidth available to import existing email storage volume into archive (Keep in mind that large storage + less bandwidth = additional days or weeks.)
 - b. Bandwidth available between multiple geographic locations; size of email storage volume on email servers at those locations
- 3) Speed & disk space of archive server
- 4) Potential troubleshooting or system fine-tuning required to complete the data importation process
- 5) Number and size of PST/NSF files to be imported into the archive

When planning **PST/NSF/GroupWise migration** schedules, here are some practices to keep in mind:

- 1) Time frame for completion of PST/NSF migration depends on quantity and quality of PST/NSF files
- 2) PST/NSF files may need to be imported from both local and network locations
- 3) Determine in advance to which employees and to which locations former employees' PST/NSF files will be transferred

5. MessageSolution Product Licensing

Cloud Services Licensing

Full MessageSolution annual licenses are granted to Cloud Customers for the duration of the licensing period and are contingent on payment of all licensing and service fees and continued enrollment in the MessageSolution Technical Support Program.

Active/Idle Users and Repurposed Licenses

MessageSolution supports selective archiving. From the User List on the User Management Menu, the Administrator can choose which individual users to enable active archiving for. Once a user leaves the organization and no longer needs active archiving, his/her license may be reassigned to a new, incoming user. Licenses will be automatically assigned from the top of the user list to the bottom regardless of hierarchy, unless specified.

The MessageSolution Platform does not limit the number of Users on the User List, but rather the number of users licensed for active archiving. If there are more users on the imported user list than there are active licenses, those licenses will be automatically assigned starting from the top of the user list and proceeding alphabetically until all licenses are active. Administrators have the option to manually reassign



individual licenses as needed. For example, if there are 500 users on the User List and only 480 active licenses, the administrator will need to manually disable archiving for one of the top users on the list in order to activate archiving for the CEO who's User Name begins with Z.

MessageSolution Enterprise Information Archive auto-synchronizes from Active Directory, GroupWise eDirectory, Domino Directory, et al in order to auto populate the Users List. Administrators also have the option of manually imputing User Information.

Migration License

For mailboxes that are no longer active yet contain information to be archived (i.e. a couple of users have left the organization but whose mailboxes hold critical data), short-term migration licenses are available to import all remaining data from "dead" mailboxes to the archiving system.

PST File Export Licensing for eDiscovery

PST File Export Migration System Licensing can also be ordered. Ask your MessageSolution Representative for more information.

6. Critical Best Practices

Pre-Installation

Always run e-mail server best practices processes according to e-mail server software vendor maintenance documentation before beginning installation of MessageSolution EEA.

Microsoft Exchange Server Best Practices Analyzer

<http://technet.microsoft.com/en-us/exchange/bb288481.aspx>

Historical Archiving

In general, data size for archiving is not an issue. Although the EEA is capable of archiving tens of thousands of users, it is recommended to follow these best practices.

- 1) For most environments, it is recommended that you archive in batches of 5 – 20 power users or up to 50 median users for every year of historical mail.
- 2) If archiving during nightly window opportunities in an average environment, it is recommended that you archive about 500 GB data per week.

MessageSolution recommends archiving older emails first and then gradually moving to more recent emails because this allows the archiving process, including the impact on the email server, to be closely observed so that if something should go wrong the impact to the email server will be minimized.

The best practice is to start with older emails (3 or 5 years ago) and a small number of mailboxes. If that works fine (depending on how many emails we have archived), we can move the date range closer; for example, 2 years ago, then a year ago, and so on.

Real-Time Archiving

- 1) Do not begin running a Real-Time Archiving schedule until Historical Archiving has been completed.
- 2) Turning on the Journal Box before installing EEA is not recommended.



- 3) Once the Journal Box is turned on, it is recommended that you monitor the size of the Journal Box to avoid jeopardizing your email server storage size.

Stubbing:

In normal archiving environments, an 80/20 rule applies; 80% of space is taken by attachments. For MessageSolution Enterprise Archive SaaS Edition, only stubbing attachments are supported, not email text. The Best Practice for stubbing is to stub only old attachments (1-3 years or older). Stubbing C-Level management teams' attachments within the first 2-3 months of the deployment process is not recommended, in case the system needs more tuning or optimization in the first few months.

Microsoft Exchange server's best performance is delivered when it has less than 20,000 email messages per folder, MessageSolution email archiving system is designed to deliver the best archiving and stubbing performance when the Exchange server condition is maintained below 20,000 messages in each folder. The Outlook performance would be affected when there are more than 20,000 emails in any given folder, which will significantly affect the MessageSolution's data archiving and indexing process from these folders. The Best Practices here is to split the files in these folder when there are over 20,000 and reduce the number of the files in each folder, to ensure a smooth email data replication, archiving, indexing and stubbing processes.

For On-Premise Customers stubbing aged attachments only is recommended. Stubbing C-Level management teams' attachments within the first 2-3 months of the deployment process is not recommended, in case the system needs more tuning or optimization in the first few months.

Continue Using Your Backup Solution:

Backup solutions and archiving solutions are not mutually exclusive processes. In fact, the two solutions complement each other, and both solutions should be implemented within best practices guidelines for a corporate electronic mail/file system.

The main differences between an archiving solution and a backup solution are that an archiving solution:

- Gives an organization the ability to search through archived emails/attachments or files
- Reduces the storage requirements for email/file servers
- Cleans and removes old, dormant emails/attachments or files from the email/file servers after these electronic documents have been archived for years

Backup solutions, however, are intended to back up all data in case any unexpected data loss occurs during the course of the business.

An archiving solution is not intended to replace the backup system; MessageSolution recommends that customers continue to backup the primary mail/file system.

