

Exchange Migration - Limitations of native Exchange tools and how to overcome them.

Overcome the limitations of native Exchange migration tools to perform a risk-free, fast and successful migration

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1. Abstract

Migrating or transitioning to a new version of Exchange Server requires a lot of planning and deliberation by Exchange Administrators. Even after coming up with an elaborate migration plan, one may find oneself staring at an unforeseeable issue that could create serious delay throwing the entire process off-track. After configuring the required settings in the source and destination servers, which can be performed using any standard migration guide, when it comes to actually moving the mailboxes, there could be errors or issues which were not taken into consideration when the initial plan was chalked out. Reason being, one cannot foretell which mailboxes or mailbox items have gone corrupt and how the native utilities would behave while the data is being transferred to the new mailboxes. Compatibility issues and the absence of any resilient native tool that could ensure end-to-end transfer of data without fail complicates the issue further. Not without reason that Exchange Migration is one of the most challenging tasks that Admins have to deal with. Considering the importance of email system as a business application in today's organizations, it is imperative to mitigate all risks associated with Exchange migrations as stakes run quite high and no one can afford to keep the business users off Exchange servers for a time more than the "unavailability window" as specified in the notification email.

With Exchange 2013 just around the corner, the excitement to upgrade to the next level has never been higher. The offerings in this version such as the Social Integration, fresh UI, web-based admin center and Transport Rules have been very enticing. But, simplification of the migration process from a lower version has been left out, which still proves to be a nightmare for the Admins.

This whitepaper points out different native options available to perform Exchange to Exchange migration. While pointing out these options, the whitepaper also underlines their limitations and explains why Exchange Admins are opting for third party tools to can overcome these limitations to ensure a risk-free, swift and easy-to-execute Exchange to Exchange migration process.

2. Introduction

Need to migrate or transit from one Exchange environment to another can be driven by any reason such as harnessing new features of the updated version that could offer more flexibility and reliability in managing email communication. And, in such cases you actually need to move your existing data between servers creating the need of setting up a clean data transfer mechanism.

Exchange server offer some native services to move data while migrating mailboxes, but, these are not without limitations and there are a lot of complexities involved in using such tools. Depending on the version of Exchange server you are migrating to, you may not get the option of satisfactorily dealing with corrupt Exchange mailboxes, migrate mailboxes over 2 GB size or achieve a sufficiently high speed of migration. Each of these factors may pose a significant threat in terms of data loss, service disruption and service unavailability.



3. Exchange Migration using native tools – Options and Limitations

Microsoft has provided a number of options to migrate mailboxes between Exchange servers and depending on the version of Exchange you are using and peculiarity of migration scenarios, different options find preference in different migration plans. Some of the commonly used Exchange migration tools along with their limitations have been given here:

3.1 Move Mailbox Wizard

Move Mailbox Wizard (included till Exchange 2007) gives users quite a handful of choices while migrating from one Exchange server to another. However, the utility has a number of limitations that could create serious risks in ensuring successful Exchange migration. Some of the limitations of the Move Mailbox Wizard are:

- Corrupted mailbox Items cannot be moved to the new location. You can either choose to skip the entire mailbox or the corrupted items only, in later case, corrupted items will be deleted from source mailbox as well.
- Data loss risk in case of corrupt mailbox items requires Admins to take a backup of mailboxes requiring additional storage.
- Works only in intra-organizational Exchange environment.
- Cannot be used to migrate mailboxes from severely corrupt unmounted EDB.
- Cannot export Exchange server mailboxes to PST. (If you were planning to export mailboxes to PST and then import them using other tools)
- Poor filtering option to skip migrating unwanted emails.

3.2 Exchange Migration Wizard (Mailmig.exe)

Exchange Migration Wizard (included till Exchange 2003) is an important utility as it allows migrating mailboxes not only from old Exchange versions but also from non-Exchange environments such as Lotus Notes, Novell GroupWise etc. as well. The utility is widely used by Exchange Administrators to perform



Exchange migration, but then, this service too lacks many of the desirable features, some of which have been pointed out here:

- Works only in inter-organizational Exchange environment.
- Does not migrate Address Book and Distribution List.
- Cannot be used to migrate mailboxes from severely corrupt unmounted EDB.
- Does not offer very fast data transfer speed during migrations.
- Inefficient option to export to PST. (Comparatively, ExMerge is considered as a better option by majority of Exchange Administrators for performing this task)
- Does not offer smart filtering option.

3.3 Mailbox Merge Wizard (ExMerge)

Using ExMerge tool (included till Exchange 2003) is a not so straightforward method of Exchange migration; nonetheless, it proved to be more effective than other native services in certain inter-organization Exchange migration scenarios. ExMerge can export mailboxes to PST from source server which can be then imported in destination server. It offers better message filtering options and can migrate mailboxes between servers where other migration tools might fail. Despite being a useful tool, ExMerge is not a very reliable migration solution owing to a number of drawbacks such as:

- ExMerge fails to migrate mailboxes with size more than 2 GB.
- Skips corrupt messages while exporting mailboxes.
- ExMerge does not support Unicode PST files.
- As you export mailboxes to PST, Single Instance Storage Architecture is lost, thus, combined size of all PST could be way too high than combined size of mailboxes. This could be really troublesome, if you are looking at migrating a large number of mailboxes.
- Cannot be used to migrate mailboxes from severely corrupt unmounted EDB.
- Older versions of ExMerge may not support all mailbox items such as Contacts, Calendars, Journals, Tasks and Notes.



3.4 Export-Mailbox/Import-Mailbox

Export-Mailbox and Import-Mailbox cmdlets (included in Exchange 2007) that replaced ExMerger.exe, also offer option to move data between mailboxes or export mailbox data to PST. You can also filter the mailboxes using *IncludeFolders* and *ExcludeFolders* parameters. But, these tools fall short of acting as a reliable migration solution because of a number of drawbacks such as:

- It doesn't support 64-bit Exchange 2007 server.
- Outlook needs to be installed on the Mailbox server itself.
- The tool is quite error-prone and requires long-winding installation procedure.
- Cannot be used to migrate mailboxes from severely corrupt unmounted EDB.

Recent native tools such as Move Mailbox Request (included in Exchange 2010) offer enhanced options while migrating mailboxes but still have limitations such as inability to support online move for Exchange 2003. Moreover, using these tools is very complex as there is a big list of prerequisites to be performed before migrating mailboxes. Exchange Administrators have always desired a reliable tool that can support diverse migration needs, is compatible with all Exchange versions, and above all, allows a risk-free and fast migration with minimum disturbance to email system users.

4. Lepide Exchange Recovery Manager – meet all your Exchange to Exchange migration needs

Lepide Exchange Recovery Manager (LERM) is a complete Exchange solution that can take care of all your recovery, restoration and migration needs. After analyzing dozens of migrations and interviewing Exchange Admins, we come up with this list of limitations (mentioned in section 3) that Admins usually face while performing Exchange to Exchange migrations. Lepide Exchange Recovery Manager is a single point solution that overcomes all these limitations and provides some additional features that make this tool an indispensable business add-on for Exchange Administrators.



4.1 Advantages over native software

Deploying Lepide Exchange Recovery Manager offers some significant advantages over native software. It ensures a smooth and risk free migration that prevents data loss and offers high availability. Some of the advantages offered by LERM are:

Migrate corrupt mailboxes

Dealing with corrupt mailboxes and corrupt mailbox items is a highly intricate issue as you may permanently lose your important email communication. LERM offers a secure migration set up where you can decide how to deal with damaged and inaccessible items. It recovers corrupt mailboxes and mailbox items by performing a read-only operation on source, thus keeping your source data totally secure.

Compatibility -Get rid of the need of using multiple tools to perform migration

As you update your Exchange environment to new versions, let not the compatibility to be an issue in your migration plan. LERM is compatible with Exchange 2000 to 2010 and can take care of all small and big migrations in any of these Exchange versions.

Perform quick Migration

One GB of Exchange data per hour is the usual data transfer speed that you achieve while working on a 100 MB network using many of the native services. With LERM, you can achieve even faster data transfer speed and complete copying the required mailboxes within minutes where other utilities might take hours.

Bypass 2 GB size limit

Users performing migration using ExMerge have to deal with 2 GB size limit of the mailboxes. Copying large mailboxes with size to the tune of 5 GB or so is unachievable using ExMerge. With LERM, size is not an issue, as no matter what is the size of mailbox to be copied, you can do it within minutes.



Migrate between servers of any Exchange Organization

Move mailbox Wizard and Exchange Migration Wizard suffer from serious limitations, while the former can work only in case of intra-organization servers, the later can be used to perform migration between inter-organization servers. Lepide Exchange Recovery Manager can be used to migrate mailboxes between servers of any Exchange organization.

Migrate without bringing the old server online

Native services such as Mailmig.exe and Move Mailbox Wizard requires you to bring the old server online while performing the migration. Ability of the LERM to migrate mailboxes from unmounted EDB makes it possible to transfer data from offline mailboxes to your new Exchange server doing away with the requirement of bringing the old and new server online together.

Migrate while Users continue to use the mail server

Unavailability window is one of the biggest factors that affect business users during migration. With LERM, you can easily migrate mailboxes between Live Exchange servers, without bringing any of them down. Users continue to use Exchange servers, and you just need to click *Refresh* option in source or destination pane of software to see new mails.

5. How to use Lepide Exchange Recovery Manager for Exchange Migration?

Lepide Exchange Recovery Manager simplifies the migration process and performs it using least time and resources. It does not require setting up any additional hardware and works in your existing infrastructure. It allows to migrate mailboxes between two exchange servers or from offline EDB to different Exchange servers in the network. You can extract mailboxes from Live Exchange server or offline EDB and export it to PST, EML and MSG format which can be imported to Exchange server or Outlook profile. In addition to this, this tool offers extensive filtering option and de-duplicating emails option that help you migrate only required items. Different migration scenarios that can be achieved using this software have been listed here:



5.1 Migrate from Live Exchange server to another Live Exchange server

If you are planning to migrate mailboxes from one Exchange server to another, no matter whether they belong to the same Exchange organization or not, you can perform the migration process just as a simple copy-paste operation. All you need to do is install the LERM on any system on the network and add the source server in source pane and destination server in the destination pane. Simply copy all or selected mailboxes from source to destination server and your migration is complete.

5.2 Migrate from Unmounted EDB to Live Exchange server

This feature of software allows you to work with a single Exchange server while performing migration. Take a backup of all mailboxes and migrate the required ones to the new Exchange environment; or if you have archived mailboxes as EDB and want to migrate selected mailboxes to the existing server, this can be also performed easily. Add the concerned EDB as source and the Exchange server as destination; explore offline EDB without bringing it online and search and transfer required emails to the destination server.

5.3 Export from Live Exchange server to PST

Exporting Exchange server mailboxes to PST is a widely used intermediate step in migration. It makes the mailboxes mobile which can be imported to Outlook client or Exchange server and also acts as a backup. LERM can export Live Exchange mailboxes to a new or existing PST. To export mailboxes from Exchange server to PST, add the Exchange server as source and then add an existing PST to destination pane or create a new PST at desired location. Copy the entire content or search and copy only the required mailbox items to PST.

5.4 Export from Offline EDB to PST

Apart from giving the option to migrate mailboxes directly from offline EDB to Live Exchange server, LERM also allows you to export mailboxes from unmounted EDB to PST, which can be imported to destination Exchange server or Outlook profile. This software allows you to explore and export all or selected mailboxes from offline EDB to PST in just a single click without Exchange server around. You just need to add the offline EDB to source and right-click on it to export required mailboxes to the location of your choice. You can bypass the 2 GB size limit or create multiple PSTs while exporting mailboxes.



6. Benefits of using Lepide Exchange Recovery Manager for migrations

6.1 Save Time and Cost involved in setting up migration hardware

Migrating from old Exchange environment to a new one may require you to setup additional hardware infrastructure. Performing all the required prerequisites of the migration and moving the mailboxes may take a lot time during migration. LERM performs quick migration of mailboxes and does not require any additional investment in setting up hardware for the same. You can install the tool on any machine in the network and then move mailboxes from source to destination. While performing the migration, you can also create single or multiple mailboxes in the destination server and copy folders to them.

6.2 Migrate all/multiple mailboxes together

Lepide Exchange Recovery Manager allows you to migrate all or selected mailboxes from offline EDB to Live Exchange server or export to PST. You can choose to migrate specific folders of all mailboxes or specify folders for individual mailboxes. Apart from this there are other filtering options such as Item types and Include/Exclude mailbox items within a particular date range.

6.3 Search and Migrate

If the data that you want to migrate is spread across multiple EDBs, OSTs, PSTs and Live Exchange server, you can use the search option of software to find specific emails and then migrate them to destination server. Unlike native Exchange utilities, LERM offers option to search messages on the basis of Subject, From and To fields, Keywords, Date range, Flagged Item, Message size and Attachment size. These search parameters can help you pinpoint required messages accurately, and then they can be dragged and dropped to Exchange mailboxes.

6.4 Perform lean migration – control size of migrated mailboxes

It is important that you migrate only the required items and disallow duplicate items to exist in the destination server. This not only ensures fast migration but also help you use the precious server space judiciously. LERM provides you option to filter unwanted messages from source mailboxes and also offers means to find and exclude duplicate items from migrating to destination server. Thus it helps you to save time and storage space by performing lean migration.



7. Conclusion

As Microsoft releases new and enhanced versions of Exchange with advanced features, businesses strive to keep pace with latest releases to exploit new features that are developed keeping in mind contemporary technology and business requirements. While migrating, transitioning or upgrading to the new environment, one of the biggest challenges in front of the Exchange Administrator is to ensure availability of the historical data in the new environment. Lepide Exchange Recovery Manager allows you to perform a smooth migration by securing your data, eliminating risks and reducing the impact of migration on the day-to-day usage of email systems. It is a cost-effective tool that offers versatile migration option and manages your Exchange data in source and destination servers.