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Exchange Migration Guide

The document will guide you through a process of migration from Microsoft Exchange to IceWarp Server.

This utility allows you to migrate data from below versions of Exchange:

- Microsoft Exchange 2007 (SP1)
- Microsoft Exchange 2010
- Microsoft Exchange 2010 (SP1)
- Microsoft Exchange 2010 (SP2)
- Microsoft Exchange 2013

This utility allows you to migrate data to IceWarp Server 10.2 and later.

Migration from MS Exchange to IceWarp Server

This migration is done by an original IceWarp migration tool – IceWarp Exchange Migrator (IEM). This migration tool needs an operation system with 64 bit Windows operating system and .NET Framework 3.5.

Migrated data cover accounts, emails, calendars, contacts, tasks, notes and group names.

Entire migration process is implemented as a short wizard with seven simple steps guiding a user through the process step-by-step.

**NOTE:** IceWarp Exchange migrator will not delete any data in Exchange.

How IceWarp Exchange Migrator Works

Migration process works in rounds, the first round migrates all data from 1/1/1900 to the time of the migration start. Because migration is a long process, the data that come after the migration start would not be migrated. Therefore this utility allows another migration round launching – it covers the data that came meanwhile.

This round is significantly shorted. Nevertheless, other data could come again. It is possible to repeat migration rounds until the final round is short enough to stop MS Exchange server for this time.

Demo Migration Setup

Three machines are used:

- Exchange Microsoft Server 2008 R2 Standard with Microsoft Exchange 2010 and Active Directory
  - This server has 192.168.176.2 IP address.
- CentOS 7 x86_64 (Minimal) with IceWarp 12.0.2
  - This server has 192.168.176.3 IP address.
- Windows 10 for execute IceWarp Exchange Migrator.
Pre-Migration


2. Give Impersonation right to Exchange administrator account. Even it is global administrator, this right must be given.
   You can give this right via OWA or Windows PowerShell.
   a) OWA
      i) Login to OWA with your Microsoft Exchange Administrator Account
ii) Click **Options**.

iii) Select **My Organization** in **Select what to manage** section.
iv) Click **Administrator Roles**.

v) Double click on **Hygiene Management**.
vi) Click Add button.

vii) Select your Microsoft Exchange Administrator Account, click Add button and click OK.
viii) Click **Save**.

ix) You should see your **Microsoft Exchange Administrator Account** as member of **Hygiene Management** role group.
b) Windows PowerShell

i) Open Exchange Management Shell.

ii) Enter below code:

```
New-ManagementRoleAssignment -Role:ApplicationImpersonation -User:Administrator
```

Enter your “Microsoft Exchange Administrator Account” instead of “Administrator” name here.
3. IceWarp mail folder (default /opt/icewarp) must be accessible from computer which migration tool used. Share must be given with full rights.

Example Samba setup:

```bash
yum install samba
mv /etc/samba/smb.conf /etc/samba/smb.conf.bak
vi /etc/samba/smb.conf

[global]
workgroup = WORKGROUP
netbios name = CENTOS
security = USER
map to guest = Bad User

[mail]
comment = mail
path = /opt/icewarp/mail
force user = root
force group = root
guest ok = Yes
read only = No
```

systemctl enable smb
systemctl enable nmb
systemctl restart smb
systemctl restart nmb

4. Check firewall rules or disable firewall.

Example disable firewall:

```bash
systemctl stop firewalld
systemctl disable firewalld
```
Migration

1. Run IceWarp Exchange Migration Tool with Administrator Rights.

2. **Start new migration** should be clicked, if you are starting a new migration.

   **NOTE:** All migration data will be stored in this directory. A MIG file will be created in this directory. And stored all information about migration.

   ![IceWarp Exchange Migration Tool](image)

   Click **Next**.
3. Fill Microsoft Exchange location and administrator account information and click Test button.

Microsoft Exchange Server Location

Only communication over SSL is allowed. All ports required for MS Exchange must be opened in Firewall. MS Exchange server version determines which API will be used for communication. It is a mandatory requirement for MS Exchange 2007 to have Service Pack 1 installed.

Server certificate is validated via standard validation procedure, but it may cause troubles when it is expired or invalid. Because it is assumed that migrated machine environment is obsolete, migration utility allows bypassing this validation by checking Always trust. If checked, standard validation is skipped and certificate validated instantly. It is a recommended setting.

Directory Service

Migration utility requires an administrator account for the Active Directory service where accounts are stored. The URL field must define LDAP protocol (case insensitive).

Full Administrator Account

Migration utility requires an account with full administrator rights on MS Exchange that is capable to administer all accounts and public folders. This account will be used as the master migration account.

Public Folders

Public folders stay behind other account data in MS Exchange. There is no exact one-to-one correspondence between MS Exchange and IceWarp server, thus public folders are created under a group with the Group name specified here. If the Migrate through this account (mandatory) box is not checked, public folders will not be migrated.

Target Machine

The Target machine tab configures IceWarp Server. Server location is defined by its IP address or hostname. It does not matter whether the utility is on the same machine as IceWarp Server or not. You need to specify also Mail Path where emails in IceWarp Server are stored and also port of the Control service.

Migration utility requires a full administrator account on IceWarp Server with all rights in the domain that need not be present on the MS Exchange server. This domain can be deleted after a successful migration.

Migration utility is able to migrate multiple accounts simultaneously, but it is memory consuming. It is recommended to run utility with one or two jobs even on fast machines.

**NOTE:** When the CAS/HT/MBX roles are split between different servers, you need to target the server with the CAS role.
4. Enter Directory Service server and administrator account information and click Test LDAP and you need to see below information.
5. Directory Service

Migration utility requires an administrator account for the Active Directory service where accounts are stored. The URL field must define LDAP protocol (case insensitive).

Click Next.
6. Fill IceWarp server location and administrator account information. Click Test button.

Click Next.
7. Choose items which you want to migrate.

Click Next.
8. Review.

Click **Start**.
9. See Log.

Click **Next**.
10. See Summary.

Click Finish.
11. After migration finish, you can run migration process several times for new messages. Migrator will save all data which is migrated before and get only new data from your Exchange. To do that, use “Continue with previously aborted migration” option. And select your last MIG file.

Click Next.
12. All your migrator entries will come back and you can just click Next and make migration again.

13. After migration screenshots.

IceWarp:

WebClient:
Migration from MS Exchange 2003 to 2007 Prior to Migration to IceWarp Server

NOTE: Below steps should be done prior to Migration to IceWarp Server.

The whole process of migration is summarized in five basic steps, each one includes a couple of sub-steps and notes.

1. Backup of mailboxes
   • We recommend to backup all mailboxes, which will be migrated. You can use the ExMerge utility, which exports mailboxes to separate .PST files.

2. Exchange 2007 installation
   • You have to **Raise functional level of AD infrastructure**
   • You will need certain permissions depending on your current configuration. These involve **Enterprise and Local Administrator privileges** as well as **Schema Administrator permissions**. If you already have an Exchange 2007 server in the domain, you will also need to be a member of the **Exchange Organization Administrator** group.
   • You will need .NET 2.0, Microsoft Management Console (MMC), Microsoft Command Shell (MSH). This software can be installed from the Installation CD of MS Exchange.
   • Before the installation of Ex2k7 itself, the installation program checks all permissions, AD infrastructure and all requirements. Each problem is reported to be fixed, so you can try to start installation just for checking requirements.

   • You must move all mailboxes, which you want to migrate to IceWarp Server, from Ex2k3 to Ex2k7 (this step can be done through AD or MS Exchange management console).
   • Moving of mailboxes takes a long time. It depends on a size of mailboxes and connectivity among MS Exchange servers, but the whole move is a couple times shorter then next migration to IceWarp Server.
   • All mailboxes are still available after a move to Ex2k7. Users can reach them via MS Outlook without any configuration change. So you can leave the infrastructure in this state as long as you want.

4. Migration MS Exchange 2007 → IceWarp Server
   • We recommend to migrate to default configuration of IceWarp Server (immediately after installation). This applies for settings – it is necessary to have an administrator account created. For more information, refer to the **Migration Setup (on page 4)**.
   • Migration utility needs rights to access to AD, where it downloads the lists of users.
   • The person who executes the migration utility needs permission to impersonate all mailboxes which you want to migrate. This permission you can configure by the help of the following guide: [http://msdn.microsoft.com/en-us/library/eeb204095%28v=exchg.80%29.aspx](http://msdn.microsoft.com/en-us/library/eeb204095%28v=exchg.80%29.aspx)
     Just first two commands are required and **user1** (mentioned in the guide) must not be an Exchange administrator.
   • Examples of migration duration:
     Migration 1 – 250 users, 12 GB data (99% mails) – 11 hours.
     Migration 2 – 60 users, 160 GB data, 50k items of GW – 5,5 hours, 450k mails – 25 hours.
     Migration duration is difficult to predict.
   • It is possible to execute migration more times and only new items are migrated during subsequent rounds.

5. Final steps
   a) You must change all default IMAP folders names to the names which are used in MS Outlook (**Sent Items, Drafts, Deleted Items**) immediately after migration.
   **It is necessary to do this before the first user uses WebClient to send/save/delete emails.**
   b) Afterwards, it is the right time to configure IceWarp Server to customer’s demands.
   c) Change your DNS records or Firewall settings to route all traffic to IceWarp Server.
   d) Move all mailboxes from Ex2k7 to Ex2k3 and turn off the Ex2k7.