

# IceWarp to IceWarp Server Migration

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**IceWarp to IceWarp Server Migration.....1**

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# Overview

IceWarp migrator provides migration functionality of all user data and server configuration from an existing IceWarp Server installation to a new server. Cross migration Windows <—> Linux is supported. Also 32bit <—> 64bit is supported.

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## Used Terminology

- **Source server** – the server which is migrated from
- **Target server** – the server which is migrated to
- **Controlling application** – any application using *IWMigrationUnit* – GUI, TUI, config, control, API

## Brief Introduction

The migrator copies all user data and configuration from a source server to a target server. Source server has to be at least of version 11.0, target has to be 11.2 and later.

The migrator exists in three types:

1. Integrated in 11.2 and later ***config – System – Tools – Server migration – IceWarp to IceWarp***
2. Standalone Windows application
3. Standalone Linux application

The migrator operates in several steps (for more details, refer to the **Detailed Description** chapter):

1. Target server pre-configuration
2. Connection – at first, the admin has to provide the target server address and IceWarp administrator credentials. Then the migrator connects to the target server.
3. External dependencies check – the source server is checked for dependencies of another external files etc. – the admin is warned that such files cannot be migrated.
4. First migration phase – the migrator copies user data and the webmail database from the source to target. The source server is operating as usual.
5. Second migration phase – source server is stopped, databases and changed new data that occurred after last copy are migrated.
6. Manual step – admin switches DNS records.
7. The target server is started.

## Detailed Description

### Target Server Pre-configuration

Before migration, administrator has to prepare the migration target server.

- Administrator account in a domain that does not exist on the source server has to be created. For example **admin@localdomain** or such.
- All databases connection strings are to be configured and working. Tables will be created. Existing tables will be dropped!
- DNS settings have to be configured properly.
- VoIP settings (local and remote interface host) are to be configured.

### Target Server Connection

Migrator connects to the target server using RCP – remote control protocol. It is the same protocol that is used for the remote config connection. Thus target server control has to be running and be accessible on the port of 443, 80 or any other. Admin can select whether SSL (and which port) will be used.

When there is directory service synchronization configured, the admin has to enter target AD credentials this step. These credentials will be used in the *Target server restore* step in the second phase.

Only one domain with directory service synchronization is supported. In the case there are more such domains, it is considered to be an error. The admin will have to change settings on the target server after migration.

### External Dependencies Check

The source server is checked for following list of possible problems, that cannot be migrated. Each problem has assigned severity level – error, warning, info. Admin should not continue in the case, any problem with severity level of error appears. Regardless of warning(s), the admin can decide to ignore the error. Admin should go through the list of problems and reconfigure the target server manually after the migration to make it work. The list follows:

#### Content Filters

– scans for content filters copying a message to a folder, responds with message in file, executing application, adding header/footer, extracts attachments, appends content to a file, or operates with database. If this content filter is active, its severity is a warning, otherwise it is just an informational alert.

#### Global Rules and User Rules

– same as content filters.

#### FTP Sites

– any found FTP site raises a warning.

#### Tasks

– any found task raises a warning.

#### External AV Filters

– any found external antivirus filter raises a warning.

## Mailing Lists

- mailing lists with members obtained from database raise a warning.

## Domains

- more than one domain synchronized with directory service raises an error.

## Executables

- any executable account raises a warning.

## First Migration Phase

In this phase, user data and WC cache are synchronized to the target server. Synchronization means that files already being on the target server are not copied again. Modification time and a file size has to be the same on the source and target servers not to copy the file. The source server is not stopped and operates as usual. So new data can appear or something can be deleted on the server during this phase. This phase usually takes a few days.

## Disk Space Check

First, the amount of data being copied is calculated and compared with the target server disk space. However, this check may be false positive when:

- Some data is already on target
- Admin configured for example archive to be on some external drive

Disk space check may be overridden by the admin, but he/she should be careful.

## User Data Migration

Mailboxes of all users in all domains are synchronized to the target server. The copying is based on mailbox paths in user settings. Thus when there is some unused directory in the mail directory, it is not copied.

Archivists – user's data of which mailbox path points to an archive are not copied. They are considered to be archivists and archive will be migrated in the next step separately. In the second phase, mailbox paths of these users on the target server will be set to point to proper folders in archive again.

Externs – user's data which mailbox path points somewhere outside the mail directory will be copied to the default mailbox directory on target. I.e. user *john@domain.com* with mailbox path **E:\johnny\** will be migrated to **C:\Program Files\IceWarp\mail\domain.com\john\**. (Expecting mailbox path points to C:\Program Files\IceWarp\mail\).

Shared users – some user's mailbox path can point to some folder of someone else's user mailbox. Such users will be set on the target server to point to that folder too.

## Archive Migration

Archive folder is synchronized only when auto archive is enabled on the source server. The archive is copied to the target server archive path.

## Logs Migration

Log directory content is synchronized to the target server log directory.

## Webmail Cache Migration

In the current migration version, only SQLite to SQLite or MySQL to MySQL webmail cache migration is supported.

When webmail cache is in SQLite, the files (usually **cache.db** in user's mailbox) are copied during user data migration.



When webmail cache is in MySQL, additional step takes place after files synchronization. In this step, rows of webmail cache database are copied to the target server.

The migrator is not able to convert one database type to another one during migration. If the admin requires this, he/she can either migrate to the target server with the same DB engine first and do the database type conversion there (which is the preferred way) or change DB type on the source and then perform migration.

Also note that no other DB engines (like Oracle, MSSQL, Firebird) are supported by the current migration version. In such a case, the admin has either to convert to MySQL on the source, migrate the database manually, or not migrate it at all – but then he will lose mail flags and POP3 account read status.

## Overall First Phase Process

During the first phase, aforementioned chapters are done two times in following manner:

1. All files are copied – user mailboxes, archive data and logs
2. Directory cache on the target server is populated during files copying; during the second (finalization) phase, directory cache is not migrated – it is just updated when changed files are migrated
3. Whole webmail cache is migrated from the beginning when it is in MySQL
4. All changed files are copied – user mailboxes, archive data and logs are checked again for changes
5. New rows in webmail cache are copied (when it is in MySQL).

Migrator application allows to execute the steps 3 and 4 on demand. This is useful when there was some time after the first phase finished and the admin wants to minimize the time needed for the second phase.

## Second Migration Phase

In this phase, server settings, databases and changed data from the last first phase run are copied to the target server. Nothing can change during this phase on the source server, thus the source server is disabled not to accept any new data. For the admin that means his/her server is offline. The second phase includes these steps:

### Source Server Stop

All services are stopped, i.e. they are disabled. However, modules are still running.

### File System Copy Finalization

Steps 3) and 4) described in the **Overall First Phase Process** chapter are performed. The only difference is, that logs are not migrated to speed up the process.

### Source Server Backup

Configuration of the server, domains and users is backed up. This matches the **System – Tools – System Backup** functionality with only the *Backup user settings* option ticked. The backup is stored in ***IceWarp temp/iw\_migration***.

### Databases Export

Groupware, accounts (if applicable), anti-spam, EAS and spam reports databases are converted to SQLite database files. The files are stored in ***IceWarp temp/iw\_migration***.

### Settings and Databases Transfer

Content of ***IceWarp temp/iw\_migration*** is copied to the same directory on the target server. I.e. the server settings and databases are copied.

## Target Server Restore

First, the target server is stopped. This is done in similar manner as the source server stop. Modules are not stopped, but services are disabled. Because it is necessary to have RCP working, web is disabled using API variable of `c_mail_control_disableweb`, but `c_mail_control_active` remains enabled. Thus, there is a green circle in the config services list showing, that web is running. However only RCP is available – no HTTP service. This can be confusing for an admin that does not finish the migration and ends with disabled server. Web has to be re-enabled via API, in this case.

The source server settings are restored on the target server. However, some settings are preserved not to break the pre-configured target server state. The preserved settings are:

- Archive path
- Various DB connection settings (Accounts, Anti-Spam, Groupware, etc.)
- VoIP local and remote interface hosts, VoIP local network configuration
- DNS server settings
- Administrator account used for connection
- WebMail settings

Directory service synchronization (AD sync) settings are updated to entered details.

When cross migrating between platforms, *webmail.dat* and *immodules.dat* are modified to match the platform.

## Target Server Databases Import

The databases are restored from SQLite files back to specific database types according to the target server settings.

When cross-migrating between platforms, path delimiters (slashes) are converted automatically in databases where it is needed.

## Mailbox Paths Fixes

As mentioned in the section about user data migration, Archivists, Externs and shared users mailbox paths are set on the target server to match configuration on the source server. Archivists point to the archive, externs to the default mailbox path and shared users to the proper mailboxes of another users.

## Modules Restart

Some settings are loaded only when a module is starting. This step restarts all modules including the **Control** module. After restart, migrator reconnects to the target server.

## DNS Switch

Now, all data and configuration are migrated. Administrator should switch DNS records to point to the new machine. This has to be done by this administrator manually, there is no way how migrator could handle it.

## Target Server Start

When everything is prepared, admin selects the *Target server start* action. This re-enables previously disabled services on the target server. The source server remains stopped.

---

## Logs

During migration, migrator logs are generated on the source server into the **IceWarp/logs/migration** directory. There is only one log level.

More information can be obtained by setting **Control** log level to *extended*. On the source server, this will generate more information in Control logs. Enabling of the extended control log level on the target server generates also more information in Control logs. Moreover, there is the ***migYYYYDDMM.log*** file in the **IceWarp/temp** folder. It is in **temp**, because the **logs** directory is synchronized with the source server, which causes deletion of any extraneous files – such as this log.

# Migration Wizard

## Preview

The IceWarp to IceWarp migration wizard is located in the administration console – **System – Tools – Server Migration – IceWarp to IceWarp** node.

**Server Migration**

General Manual Statistics Logs IceWarp to IceWarp

### IceWarp Server Migration

This tool will migrate local IceWarp Server installation to a remote target server.


Before you begin, ensure that the target server meets all these requirements:

- ☒ IceWarp Server version 11.2 or higher is installed
- ☒ Administrator account exists on the target server
- ☒ Connection to target database is configured
- ☒ I understand that IceWarp accounts and all their data on the target server will be deleted before the migration

IceWarp Migrator

Check all boxes and click the *IceWarp Migrator* button to start the **Migration Wizard**.

There is also standalone version of Migrator.



### IceWarp Server Migration

This tool will migrate local IceWarp Server installation to a remote target server.

Before you begin, ensure that the target server meets all these requirements:

- ☐ IceWarp Server version 11.2 or higher is installed
- ☐ Administrator account exists on the target server
- ☐ Connection to target database is configured
- ☐ I understand that IceWarp accounts and all their data on the target server will be deleted before the migration

**Check all boxes to proceed**

Next >

## Connection to Target Server

Enter details of the target server Control service connection and administrator account.

<b>Connection:</b> Host / IP: 192.168.6.52 Port: 80 <input type="checkbox"/> Use SSL User: admin Password: ●●●● <input type="button" value="Connect"/>		<b>Active Directory connection (if applicable)</b> Host / IP: <input type="text"/> User: <input type="text"/> Password: <input type="password"/> <input type="button" value="Test connection"/>
---	--	---

### Connection

<b>Connection:</b> Host / IP: 192.168.6.52 Port: 443 <input checked="" type="checkbox"/> Use SSL User: admin Password: ●●●● <input type="button" value="Connect"/>		<b>Active Directory connection (if applicable)</b> Host / IP: <input type="text"/> User: <input type="text"/> Password: <input type="password"/> <input type="button" value="Test connection"/>
---	--	---

---

```

2015-04-08 14:45:46.592 IceWarp migrator started
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\iw_migration_2015-04-08-1444.log
2015-04-08 14:45:46.593 Source server settings loaded
2015-04-08 14:45:46.592 IceWarp migrator started
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\iw_migration_2015-04-08-1444.log
2015-04-08 14:45:46.593 Source server settings loaded

2015-04-08 14:45:46.598 =====
2015-04-08 14:45:46.599 Local server version: 11.3.0.0 (2015-04-07)
  
```

None

Fill in the *Host/IP* field of the target server, administrator account and password, use SSL if possible.

Click the *Connect* button to connect to the target server.

Enter details of the target server Control service connection and administrator account.

Connected to target server

Host / IP

192.168.6.52

Port

80

☐ Use SSL

User

admin

Password

••••

Disconnect

Active Directory connection (if applicable)

Host / IP

User

Password

Test connection

Target Server Status

Version: 11.2.0.0 (2015-03-31)  
Server version ok, migration can proceed

< Back

Next >

2015-04-08 14:45:46.592 IceWarp migrator started  
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\iw\_migration\_2015-04-08-1444.log  
2015-04-08 14:45:46.593 Source server settings loaded  
2015-04-08 14:45:46.592 IceWarp migrator started  
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\iw\_migration\_2015-04-08-1444.log  
2015-04-08 14:45:46.593 Source server settings loaded  
  
2015-04-08 14:45:46.598 =====  
2015-04-08 14:45:46.599 Local server version: 11.3.0.0 (2015-04-07)  
2015-04-08 14:47:22.783 RCP connecting to host: 192.168.6.52, port: 80, user: admin  
2015-04-08 14:47:23.264 Target server settings loaded  
2015-04-08 14:47:23.287 Local server version: 11.3.0.0 (2015-04-07), target server version: 11.2.0.0 (2015-03-31)

Clear Log

Copy Log to Clipboard

Connected to target server

## Active Directory Connection

If Active Directory (AD) is used on the source server, fill in the *Host/IP* field of your AD server used on the target server and credentials. All AD user settings will be changed on the target server during migration.

AD settings could be checked on the target server using the *Test connection* button.

Click the *Next* button to proceed to the next step (you must be connected).

## Dependencies Check

The following items are not automatically migrated and need to be restored on the target server manually after migration is finished.

#	Importance	Type	Description
1	Warning	System Monitor	Additional disk paths to be monitored (C:\=401)
2	Warning	System Monitor	Additional disk paths to be monitored (D:\=800)
3	Warning	Logging	Send logs to server (syslog protocol) (syslogsyslog)
4	Warning	Logging	Archive deleted logs to file (D:\Program Files\IceWarp\archive\xyzt.zip)
5	Warning	Content Filter	executable rule active
6	Info	VoIP	Text to speech output directory (C:\Program Files\IceWarp\voip\audio\aut

Warnings: 5  
Errors: 0

```

2015-04-08 14:45:46.592 IceWarp migrator started
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\iw_migration_2015-04-08-1444.log
2015-04-08 14:45:46.593 Source server settings loaded
2015-04-08 14:45:46.592 IceWarp migrator started
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\iw_migration_2015-04-08-1444.log
2015-04-08 14:45:46.593 Source server settings loaded

2015-04-08 14:45:46.598 =====
2015-04-08 14:45:46.599 Local server version: 11.3.0.0 (2015-04-07)
2015-04-08 14:47:22.783 RCP connecting to host: 192.168.6.52, port: 80, user: admin
2015-04-08 14:47:23.264 Target server settings loaded
2015-04-08 14:47:23.287 Local server version: 11.3.0.0 (2015-04-07), target server version: 11.2.0.0 (2015-03-31)
2015-04-08 14:47:52.750 External dependencies found: 6, (errors: 0, warnings: 5, infos: 1)
2015-04-08 14:47:52.783 (1.) Importance: Warning, type: System Monitor, desc: Additional disk paths to be monitored (C:\=401), user:
2015-04-08 14:47:52.785 (2.) Importance: Warning, type: System Monitor, desc: Additional disk paths to be monitored (D:\=800), user:
2015-04-08 14:47:52.787 (3.) Importance: Warning, type: Logging, desc: Send logs to server (syslog protocol) (syslogsyslog), user:
2015-04-08 14:47:52.790 (4.) Importance: Warning, type: Logging, desc: Archive deleted logs to file (D:\Program Files\IceWarp\archive\xyzt.zip), user:
2015-04-08 14:47:52.791 (5.) Importance: Warning, type: Content Filter, desc: executable rule active, user:
2015-04-08 14:47:52.793 (6.) Importance: Info, type: VoIP, desc: Text to speech output directory (C:\Program Files\IceWarp\voip\audio\auto\), user:

```

Connected to target server

All settings on the source server are checked and found dependencies are listed. There are three levels of importance – *Info*, *Warning* and *Error*. All dependencies except of *Info* must be solved manually. Click the *Check Again* button to check dependencies again.

If there are any *Errors*, the migrator do not continue. By checking the *Ignore errors and continue* box, this block can be ignored.

The following items are not automatically migrated and need to be restored on the target server manually after migration is finished.

#	Importance	Type	Description	User
1	Error	Logging	Archive deleted logs to file (D:\Program Files\IceWarp\archive\xyzt.zip)	
2	Warning	System Monitor	Additional disk paths to be monitored (C:\=400)	
3	Warning	System Monitor	Additional disk paths to be monitored (D:\=800)	
4	Warning	Logging	Send logs to server (syslog protocol) (syslogsyslog)	
5	Warning	VoIP	Text to speech output directory (C:\Program Files\IceWarp\voip\audio\auto\)	
6	Warning	Content Filter	executable rule active	

Warnings: 5  
Errors: 1  
☒ Ignore errors and continue

Check Again

Copy to clipboard

Save as CSV

< Back

Next >

2015-04-02 11:03:25.330 External dependencies found: 6, (errors: 1, warnings: 5, infos: 0)  
2015-04-02 11:03:25.331 (1.) Importance: Error, type: Logging, desc: Archive deleted logs to file (D:\Program Files\IceWarp\archive\xyzt.zip), user:  
2015-04-02 11:03:25.332 (2.) Importance: Warning, type: System Monitor, desc: Additional disk paths to be monitored (C:\=400), user:  
2015-04-02 11:03:25.333 (3.) Importance: Warning, type: System Monitor, desc: Additional disk paths to be monitored (D:\=800), user:  
2015-04-02 11:03:25.334 (4.) Importance: Warning, type: Logging, desc: Send logs to server (syslog protocol) (syslogsyslog), user:  
2015-04-02 11:03:25.335 (5.) Importance: Warning, type: VoIP, desc: Text to speech output directory (C:\Program Files\IceWarp\voip\audio\auto\), user:  
2015-04-02 11:03:25.336 (6.) Importance: Warning, type: Content Filter, desc: executable rule active, user:

Clear Log

Copy Log to Clipboard

Click the *Next* button to proceed to the next step.



## Data Migration

Ready to start the migration. This may take a long time to finish, depending on the amount of data migrated.

Migration steps		Migration progress		
<b>Copy Data</b>	Copies data (accounts and emails) to the target server. This may take up to a few			
Copy Remaining Data	Copies any data created on the source server while the previous task was			
Finish Migration	Stops local services so that no new data can occur. Migrates GroupWare and			
<input checked="" type="checkbox"/> Stop source server				
Start Target Server	Starts IceWarp services on the target server after all data have been migrated.			
Pause	Cancel	Show Failed Files	Data Transfer Speed [%] 85	Reset Migration
Target server: Version: 11.2.0.0 (2015-03-31), host: 192.168.6.52, port: 80, user: admin Migration status: Not running				

```

2015-04-08 14:45:46.592 IceWarp migrator started
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\jw_migration_2015-04-08-1444.log
2015-04-08 14:45:46.593 Source server settings loaded
2015-04-08 14:45:46.592 IceWarp migrator started
2015-04-08 14:45:46.592 Log file: C:\Program Files\IceWarp\logs\migration\jw_migration_2015-04-08-1444.log
2015-04-08 14:45:46.593 Source server settings loaded

2015-04-08 14:45:46.598 =====
2015-04-08 14:45:46.599 Local server version: 11.3.0.0 (2015-04-07)
2015-04-08 14:47:22.783 RCP connecting to host: 192.168.6.52, port: 80, user: admin
2015-04-08 14:47:23.264 Target server settings loaded
2015-04-08 14:47:23.287 Local server version: 11.3.0.0 (2015-04-07), target server version: 11.2.0.0 (2015-03-31)
2015-04-08 14:47:52.750 External dependencies found: 6, (errors: 0, warnings: 5, infos: 1)
2015-04-08 14:47:52.783 (1.) Importance: Warning, type: System Monitor, desc: Additional disk paths to be monitored (C:\=401), user:
2015-04-08 14:47:52.785 (2.) Importance: Warning, type: System Monitor, desc: Additional disk paths to be monitored (D:\=800), user:
2015-04-08 14:47:52.787 (3.) Importance: Warning, type: Logging, desc: Send logs to server (syslog protocol) (syslogsyslog), user:
2015-04-08 14:47:52.790 (4.) Importance: Warning, type: Logging, desc: Archive deleted logs to file (D:\Program Files\IceWarp\archive\xyzt.zip), user:
2015-04-08 14:47:52.791 (5.) Importance: Warning, type: Content Filter, desc: executable rule active, user:
2015-04-08 14:47:52.793 (6.) Importance: Info, type: VoIP, desc: Text to speech output directory (C:\Program Files\IceWarp\voip\audio\auto\), user:

```

Clear Log

Copy Log to Clipboard

Connected to target server

## Copy Data

Start the first phase of migration.

The source server is running.

Ready to start the migration. This may take a long time to finish, depending on the amount of data migrated.

Migration steps		Migration progress
<b>Copy Data</b>	Copies data (accounts and emails) to the target server. This may take up to a few	ETA: 15:36:09
<b>Copy Remaining Data</b>	Copies any data created on the source server while the previous task was	Item ETA: 14:49:27
<b>Finish Migration</b>	Stops local services so that no new data can occur. Migrates GroupWare and	
<input checked="" type="checkbox"/> Stop source server		
<b>Start Target Server</b>	Starts IceWarp services on the target server after all data have been migrated.	
<b>Pause</b>	<b>Cancel</b>	<b>Show Failed Files</b>
Data Transfer Speed [%] 85		
Target server: Version: 11.2.0.0 (2015-03-31), host: 192.168.6.52, port: 80, user: admin Migration status: Running		<b>Reset Migration</b>

2015-04-08 14:49:23.137 File lists exchanged, 0 items will be processed  
 2015-04-08 14:49:23.141 Synchronizing C:\Program Files\IceWarp\mail\test.com\vit\  
 2015-04-08 14:49:23.147 12 items listed  
 2015-04-08 14:49:23.174 File lists exchanged, 0 items will be processed  
 2015-04-08 14:49:23.178 Synchronizing C:\Program Files\IceWarp\mail\test.com\  
 2015-04-08 14:49:23.183 15 items listed  
 2015-04-08 14:49:23.211 File lists exchanged, 0 items will be processed  
 2015-04-08 14:49:23.215 Synchronizing C:\Program Files\IceWarp\mail\  
 2015-04-08 14:49:23.220 5 items listed  
 2015-04-08 14:49:23.244 File lists exchanged, 0 items will be processed  
 2015-04-08 14:49:23.252 Synchronizing C:\Program Files\IceWarp\logs\adsync\  
 2015-04-08 14:49:23.256 34 items listed  
 2015-04-08 14:49:23.285 File lists exchanged, 1 items will be processed  
 2015-04-08 14:49:23.289 Sending 1 items of size 0 MB  
 2015-04-08 14:49:23.330 Synchronizing C:\Program Files\IceWarp\logs\antispam\  
 2015-04-08 14:49:23.335 40 items listed  
 2015-04-08 14:49:23.365 File lists exchanged, 0 items will be processed  
 2015-04-08 14:49:23.417 Synchronizing C:\Program Files\IceWarp\logs\antivirus\  
 2015-04-08 14:49:23.422 29 items listed  
 2015-04-08 14:49:23.453 File lists exchanged, 9 items will be processed

**Clear Log** **Copy Log to Clipboard**

Filesystem full copy C:\Program Files\IceWarp\logs\antivirus\

Ready to start the migration. This may take a long time to finish, depending on the amount of data migrated.

Migration steps		Migration progress
<b>Copy Data</b>	Copies data (accounts and emails) to the target server. This may take up to a few	<input type="checkbox"/> Source server stopped
<b>Copy Remaining Data</b>	Copies any data created on the source server while the previous task was	<input type="checkbox"/> Finalizing filesystem copy
<b>Finish Migration</b>	Stops local services so that no new data can occur. Migrates GroupWare and	<input type="checkbox"/> Source server backup created
<input checked="" type="checkbox"/> Stop source server		<input type="checkbox"/> Databases exported
<b>Start Target Server</b>	Starts IceWarp services on the target server after all data have been migrated.	<input type="checkbox"/> Files synced
<b>Pause</b>		<input type="checkbox"/> Target server restored
<b>Cancel</b>		<input type="checkbox"/> Databases imported
<b>Show Failed Files</b>		<input type="checkbox"/> Accounts fixed
Data Transfer Speed [%] 85		<input type="checkbox"/> Modules restarted
		<input type="checkbox"/> Target server started
Target server: Version: 11.2.0.0 (2015-03-31), host: 192.168.6.52, port: 80, user: admin Migration status: Not running		<b>Reset Migration</b>

```

2015-04-08 14:49:31.658 File lists exchanged, 0 items will be processed
2015-04-08 14:49:31.660 Synchronizing C:\Program Files\IceWarp\logs\syncpush\
2015-04-08 14:49:31.663 24 items listed
2015-04-08 14:49:31.687 File lists exchanged, 0 items will be processed
2015-04-08 14:49:31.689 Synchronizing C:\Program Files\IceWarp\logs\voip\
2015-04-08 14:49:32.442 91 items listed
2015-04-08 14:49:32.477 File lists exchanged, 0 items will be processed
2015-04-08 14:49:32.479 Synchronizing C:\Program Files\IceWarp\logs\webdav\
2015-04-08 14:49:32.481 2 items listed
2015-04-08 14:49:32.502 File lists exchanged, 0 items will be processed
2015-04-08 14:49:32.504 Synchronizing C:\Program Files\IceWarp\logs\webmail\
2015-04-08 14:49:32.506 4 items listed
2015-04-08 14:49:32.530 File lists exchanged, 0 items will be processed
2015-04-08 14:49:32.532 Synchronizing C:\Program Files\IceWarp\logs\
2015-04-08 14:49:32.544 223 items listed
2015-04-08 14:49:32.614 File lists exchanged, 1 items will be processed
2015-04-08 14:49:32.616 Sending 1 items of size 0 MB
2015-04-08 14:49:32.720 Performing first phase, WC database changes sync
2015-04-08 14:49:32.722 WCMigration - Start, Initial=0
2015-04-08 14:49:32.724 WCMigration - End 8 Stopped=0
  
```

**Clear Log** **Copy Log to Clipboard**

Filesystem done (data copied)

## Copy Remaining Data

Copy new data (created after first phase).

The source server is running.

## Finish Migration

Stop all services on the source server and migrate all new data to the target server.

If needed, the source server can be left running by un-checking the *Stop source server* box.


Ready to start the migration. This may take a long time to finish, depending on the amount of data migrated.

Migration steps		Migration progress
<input type="button" value="Copy Data"/>	Copies data (accounts and emails) to the target server. This may take up to a few	<input checked="" type="checkbox"/> Source server stopped
<input type="button" value="Copy Remaining Data"/>	Copies any data created on the source server while the previous task was	<input checked="" type="checkbox"/> Finalizing filesystem copy
<input type="button" value="Finish Migration"/>	Stops local services so that no new data can occur. Migrates GroupWare and	<input type="checkbox"/> Source server backup created
<input checked="" type="checkbox"/> Stop source server		<input type="checkbox"/> Databases exported
<input type="button" value="Start Target Server"/>	Starts IceWarp services on the target server after all data have been migrated.	<input type="checkbox"/> Files synced
<input type="button" value="Pause"/>		<input type="checkbox"/> Target server restored
<input type="button" value="Cancel"/>		<input type="checkbox"/> Databases imported
<input type="button" value="Show Failed Files"/>		<input type="checkbox"/> Accounts fixed
Data Transfer Speed [%] 85		<input type="checkbox"/> Modules restarted
		<input type="checkbox"/> Target server started
Target server: Version: 11.2.0.0 (2015-03-31), host: 192.168.6.52, port: 80, user: admin Migration status: Running		<input type="button" value="Reset Migration"/>

```

2015-04-08 14:50:39.310 Synchronizing C:\Program Files\IceWarp\mail\test.com\vit\~spam\
2015-04-08 14:50:39.316 5 items listed
2015-04-08 14:50:39.339 File lists exchanged, 0 items will be processed
2015-04-08 14:50:39.353 Synchronizing C:\Program Files\IceWarp\mail\test.com\vit\~webmail\
2015-04-08 14:50:39.356 5 items listed
2015-04-08 14:50:39.378 File lists exchanged, 0 items will be processed
2015-04-08 14:50:39.382 Synchronizing C:\Program Files\IceWarp\mail\test.com\vit\
2015-04-08 14:50:39.387 12 items listed
2015-04-08 14:50:39.412 File lists exchanged, 0 items will be processed
2015-04-08 14:50:39.416 Synchronizing C:\Program Files\IceWarp\mail\test.com\
2015-04-08 14:50:39.420 15 items listed
2015-04-08 14:50:39.448 File lists exchanged, 0 items will be processed
2015-04-08 14:50:39.452 Synchronizing C:\Program Files\IceWarp\mail\
2015-04-08 14:50:39.457 5 items listed
2015-04-08 14:50:39.479 File lists exchanged, 0 items will be processed
2015-04-08 14:50:39.488 WCMigration - Start, Initial=0
2015-04-08 14:50:39.491 WCMigration - End 8 Stopped=0
2015-04-08 14:50:39.513 ==> Status changed to Deleting working directory
2015-04-08 14:50:39.546 ==> Status changed to Source system backup
2015-04-08 14:50:39.553 Source server backup to file C:\Program Files\IceWarp\temp\iw_migration\MigrationSystemBackup_2015-04-08-1445.zip
  
```

Source system backup (GroupWare ERD.emf) 

## Start Target Server

Services, which were running on the source server, will be started on the target server.

Ready to start the migration. This may take a long time to finish, depending on the amount of data migrated.

Migration steps

Copy Data

Copies data (accounts and emails) to the target server. This may take up to a few

Copy Remaining Data

Copies any data created on the source server while the previous task was

Finish Migration

Stops local services so that no new data can occur. Migrates GroupWare and

☒ Stop source server

Start Target Server

Starts IceWarp services on the target server after all data have been migrated.

Pause

Cancel

Show Failed Files

Data Transfer Speed [%] 85

Migration progress

☒ Source server stopped  
☒ Finalizing filesystem copy  
☒ Source server backup created  
☒ Databases exported  
☒ Files synced  
☒ Target server restored  
☒ Databases imported  
☒ Accounts fixed  
☒ Modules restarted  
☐ Target server started

Reset Migration

Target server: Version: 11.2.0.0 (2015-03-31), host: 192.168.6.52, port: 80, user: admin

Migration status: Not running

```

2015-04-08 14:52:29.061 Target server restore from file temp\jw_migration\MigrationSystemBackup_2015-04-08-1445.zip
2015-04-08 14:53:16.956 ==> Status changed to Stopping target server services
2015-04-08 14:53:17.009 ==> Status changed to Target server AD translation
2015-04-08 14:53:17.037 ==> Status changed to Accounts DB import
2015-04-08 14:53:17.044 Importing DB Storage from file temp\jw_migration\accounts.db
2015-04-08 14:53:17.101 ==> Status changed to GroupWare DB import
2015-04-08 14:53:17.110 Importing DB GroupWare from file temp\jw_migration\groupware.db
2015-04-08 14:53:17.155 ==> Status changed to Antispam DB import
2015-04-08 14:53:17.160 Importing DB ChallengeResponse from file temp\jw_migration\antispam.db
2015-04-08 14:53:17.228 ==> Status changed to Directory cache DB import
2015-04-08 14:53:17.233 Importing DB DirectoryCache from file temp\jw_migration\directorycache.db
2015-04-08 14:53:17.377 ==> Status changed to Sync DB import
2015-04-08 14:53:17.383 Importing DB EAS from file temp\jw_migration\sync.db
2015-04-08 14:53:17.495 ==> Status changed to Reports DB import
2015-04-08 14:53:17.500 Importing DB Reports from file temp\jw_migration\reports.db
2015-04-08 14:53:20.518 ==> Status changed to Fixing target system accounts
2015-04-08 14:53:20.525 Number of accounts to fix mail path: archive 0
2015-04-08 14:53:20.529 Number of accounts to fix mail path: external 0
2015-04-08 14:53:20.552 ==> Status changed to Restarting modules on target server
2015-04-08 14:53:38.742 ==> Status changed to Migration completed

```

Clear Log

Copy Log to Clipboard

Migration completed

## Pause/Continue

Data migration process can be paused. Pausing is not immediate – it is performed after finish of some action.

This button changes to *Connect* if the target server is disconnected.

## Cancel

Data migration process can be canceled. Canceling is not immediate – it is performed after finish of some action..

## Show Failed Files

In the case some files could not be copied to the target server, this button is enabled and a list of failed files is shown after clicking it.

## Data Transfer Speed

This option can be used on slow servers to limit CPU/file system/network resource usage. 100 % means full speed without a limit

## **Reset Migration**

This button clears the whole migration progress. So, migration can start from the beginning. No data from the target server is deleted!

# Migration from Linux

## Overview

When migrating from Linux (either to another Linux machine or to Windows), the text user interface application has to be used, because IceWarp migration is not yet supported via the remote console mode. Here is a brief description of the application.

## Installation

Administrator has to take the correct migrator package for his/her Linux distribution and server bitness. He/she has to unpack **icewarpmigrator.tar.gz** into an existing IceWarp installation directory on the source server. Two files will be unpacked – **icewarpmigrator** and **icewarpmigrator.sh**.

## Running

The migrator is started by executing the wrapper shell script – **icewarpmigrator.sh**. The first screen appears:

```

Target server

Please fill in target server address and
administrator credentials.

Target host: mail.server.com
Target port: 443
Target admin: admin
Target password: *****

[X] Use SSL
[ ] Use proxy server

Next Exit
```

On this screen, the admin has to fill in the target server address and administrator account credentials. He/she can specify whether the connection will be encrypted or not. Also a proxy server can be configured (in the next screen).

When *Use proxy server* is ticked, this screen appears after pressing *Next*:

Proxy server

Fill in proxy server credentials.

Proxy host: 10.11.12.13

Proxy port: 8080

Proxy user: proxy

Proxy password: \*\*\*\*\*

Back Next Exit

Here, the admin has to fill the proxy server address and optionally also credentials. If he/she does not want to use proxy, he/she has to press the *Back* button and un-tick *Use proxy server*.

When the admin has some domain synchronized with a directory service (like Active Directory), he/she has to enter credentials to AD that will be used on the target server to connect to this directory service. Often, the directory service server is migrated too, thus the credentials will differ from the source server.

Directory service

If directory service is configured on one of the domains, fill in target server directory service credentials. If not, leave it blank please.

Directory service host:

Directory service user:

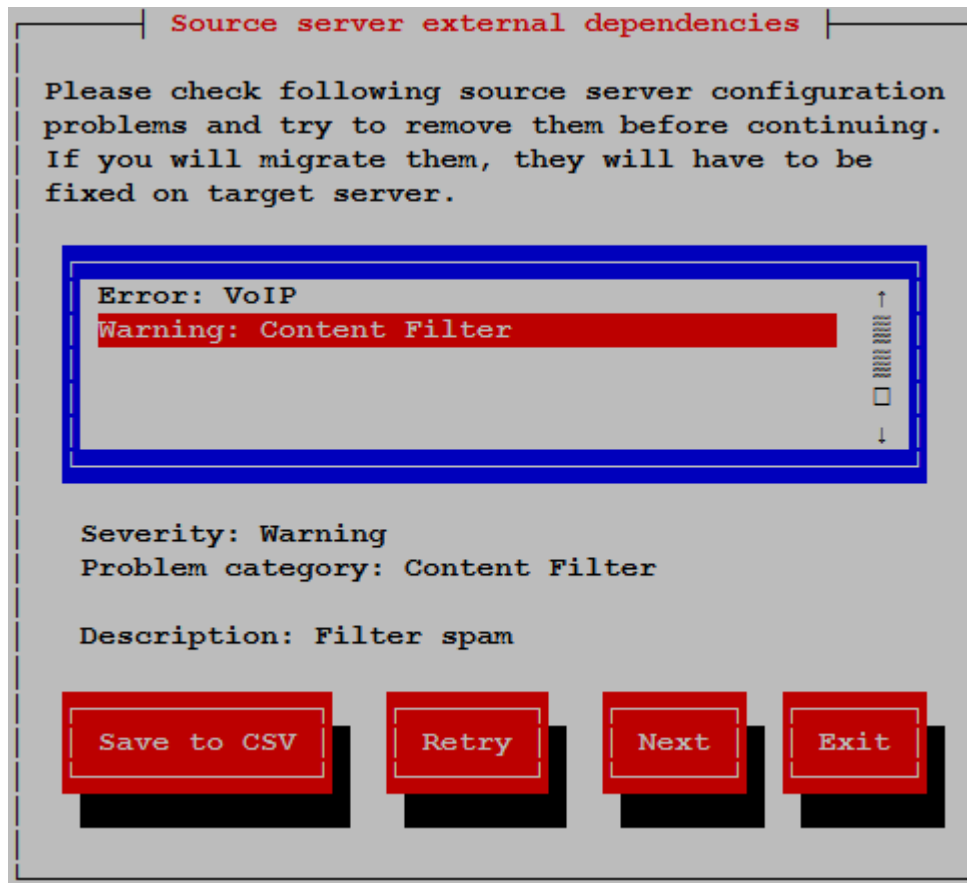
Directory service password:

Back Next Exit

When the admin does not have directory service synchronization set or does not want the migrator to change anything, he/she can leave the fields blank.

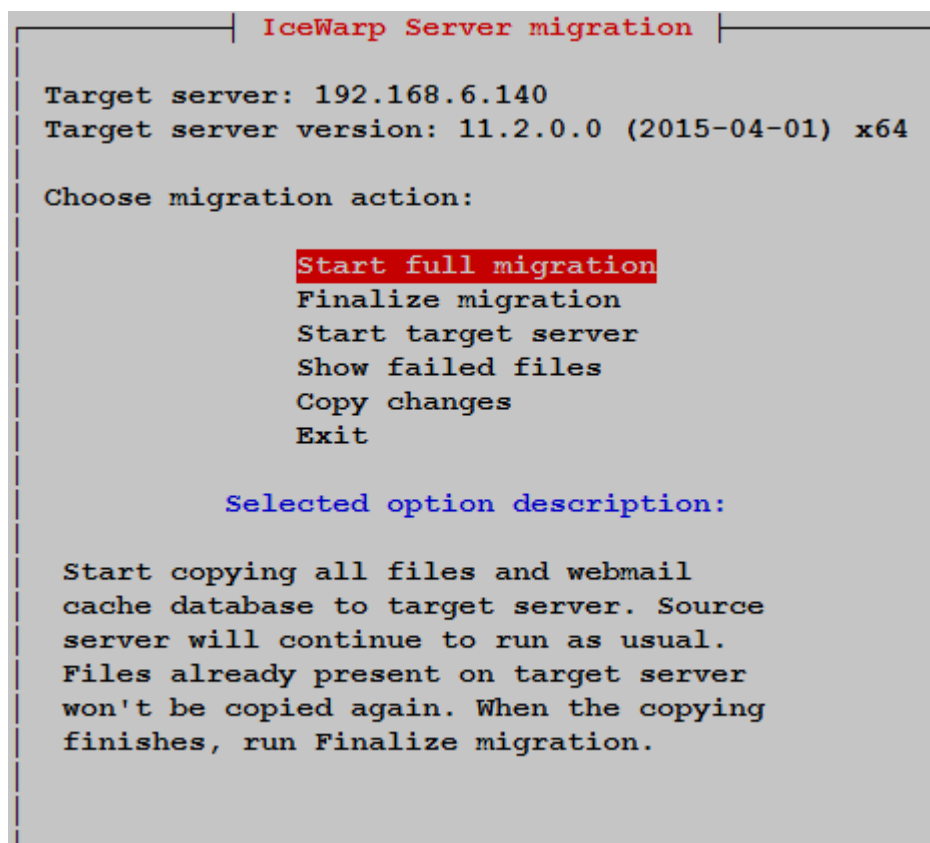
After this step, the migrator tries to connect to the target server using entered credentials. When it is successful, the source server external dependencies are checked. When any dependency is found, it is displayed on a screen like this:





Admin can save the found dependencies to CSV for future reference. This is useful, because the admin has to solve these issues after server migration finishes. Solving it before would mean to modify the source server settings, which could break the functionality. Admin can also request re-scan of external dependencies, exit application or continue migration by pressing *Next*.

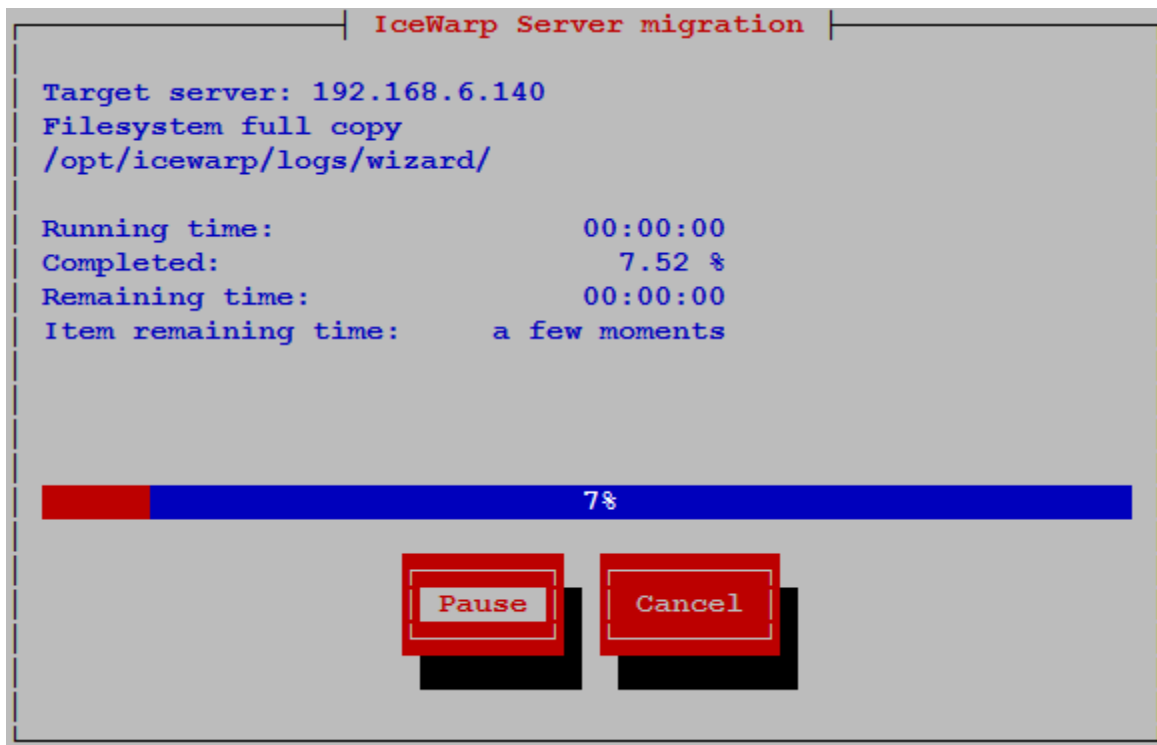
Then the admin is presented with the main migration menu:



Here, the admin can see available actions and a brief description in the lower part of the window. These actions are:

- *Start full migration* – starts the first phase and does all four steps as described in the functionality documentation.
- *Finalize migration* – executes the second phase. Note, that the second phase starts with stopping the source server, so the admin has to be sure he/she really wants to finish the migration.
- *Start target server* – this should be executed after migration is finished and the admin switches DNS records to the target server.
- *Show failed files* – when some files could not be migrated during the finish migration (second phase), they are shown in the list allowing to save it. These files has to be manually examined and copied by the admin.
- *Copy changes* – allows the admin to perform changed files and WC migration copy on demand (steps 3) and 4) in the migration functionality document).
- *Exit* – terminates the application.

During processing of the first or second phase, the admin can check the progress:



Admin can pause the process, then select *Resume* or *Cancel*. He/she can also cancel the process immediately. Note, that canceling takes some time, for example it waits until current chunk of data is copied to the target server.

---

# Additional Dependencies

The configuration items in the following list are not automatically migrated and need to be restored on the target server manually after migration is finished.

- VoIP: interface settings
  - Local network
    - Warning if local network differs from default
    - preserve settings
  - Local interface host
    - preserve settings
  - External interface host
    - preserve settings
- VoIP: log all calls to file
  - dependencies:
    - error: absolute path outside install dir (PATH CHECK)
    - warning: absolute path inside install path
    - ok: relative path
- VoIP: record all calls to
  - PATH check
- VoIP: text to speech - output
  - PATH check
- DNS: connection
  - DNS server
    - preserve settings
- Logging: general tab
  - Archive deleted logs to file
    - PATH check
  - Send logs to server (syslog protocol)
    - Warning if not empty
- System backup:
  - Backup to file
    - PATH check
  - Additional directories to backup
    - Warning if not empty
- System monitor
  - Select additional disk paths to be monitored
    - Warning if not empty
- WebClient
  - SMTP Server
    - preserve settings
  - IMAP server

- preserve settings
- IM Server
  - preserve settings
- URL
  - preserve settings
- DB Settings
  - preserve settings