



## Backing Up and Restoring Data

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Cisco Unity Express backup and restore functions use an FTP server to store and retrieve data. The backup function copies the files from the Cisco Unity Express application to the FTP server and the restore function copies the files from the FTP server to the Cisco Unity Express application. The FTP server can reside anywhere in the network if the backup and restore functions can access it with an IP address.

We recommend that backups be done daily to preserve voice-mail messages and configuration data.

Backup and restore commands are available in configuration mode and in offline mode.

- In configuration mode, commands are available to set the following parameters:
  - Number of backup files to keep (the oldest file is deleted).
  - URL of the FTP server where the files will be stored.
- In offline mode, perform the backup or restore procedure. Decide the following:
  - Type of files to be backed up: all files (configuration and data), only configuration files, or only data files. Data files consist of voice-mail messages. Configuration files consist of all other system and application parameters.
  - Backup filename (used for restore procedure).
  - URL of the FTP server where the files will be stored.



### Caution

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Offline mode terminates all existing voice-mail calls, and no new voice-mail calls are allowed. Calls to auto attendant are allowed. We recommend doing a backup when telephone users are not active on calls.

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In Cisco Unity Express EXEC mode, the startup configuration and running configuration can be saved to various locations, such as the network FTP server, the network TFTP server, and Flash memory.

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# Restrictions

Cisco Unity Express does not support the following backup and restore capabilities:

- Scheduled backup and restore operations. The backup and restore procedures begin when the appropriate command is entered.
- Centralized message storage arrangement. Cisco Unity Express backup files cannot be used or integrated with other message stores.
- Selective backup and restore. Only full backup and restore functions are available. Individual voice-mail messages or other specific data cannot be stored or retrieved.

# Setting Backup Parameters

The backup parameters define the FTP server to use for storing Cisco Unity Express backup files and the number of files that are stored before the system deletes the oldest one.

All Cisco Unity Express backup files are stored on the specified server. You can copy the backup files to other locations or servers, if necessary.

Cisco Unity Express automatically assigns a backup ID to the backup file, and you use the backup ID to restore the file.

## Prerequisites

The following information is required for setting the backup parameters:

- Number of revisions to save before the oldest file is written over
- FTP server URL
- User ID of the FTP server login
- Password of the FTP server login

## SUMMARY STEPS

1. `config t`
2. `backup {revisions number | server url ftp-url username ftp-username password ftp-password}`
3. `exit`
4. `show backup`

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>config t</code> se-10-0-0-0# <code>config t</code>	Enters configuration mode.
Step 2	<code>backup {revisions <i>number</i>   server url <i>ftp-url</i> username <i>ftp-username</i> password <i>ftp-password</i>}</code>  <b>Example:</b> se-10-0-0-0(config)# <code>backup server url ftp://main/backups username "admin" password "wxyz"</code> se-10-0-0-0(config)# <code>backup server url ftp://172.168.10.10/backups username "admin" password "wxyz"</code> se-10-0-0-0(config)# <code>backup revisions 5</code>	Sets the backup parameters. <ul style="list-style-type: none"> <li>• <b>server url</b>—The <i>ftp-url</i> value is the URL to the network FTP server where the backup files will be stored. The <i>ftp-username</i> and <i>ftp-password</i> values are the user ID and password for the network FTP server.</li> </ul> <p><b>Note</b> The backup server must be configured before the backup revisions can be configured.</p> <ul style="list-style-type: none"> <li>• <b>revisions</b>—The number of backup files that will be stored. When this number is reached, the system deletes the oldest stored file.</li> </ul> <p>In the example, <b>main</b> is the hostname of the FTP server and <b>backups</b> is the directory where backup files are stored.</p>

	Command or Action	Purpose
Step 3	<b>exit</b>  <b>Example:</b> se-10-0-0-0(config)# exit	Exits configuration mode.
Step 4	<b>show backup</b>  <b>Example:</b> se-10-0-0-0# show backup	Displays the backup server configuration information, including the FTP server URL and the number of revisions.

## Examples

The following example configures a backup server and displays the **show backup** output:

```

se-10-0-0-0# config t
se-10-0-0-0(config)# backup server url ftp://172.16.0.0/backups username admin password
voice
se-10-0-0-0(config)# backup revisions 10
se-10-0-0-0(config)# exit
se-10-0-0-0#

se-10-0-0-0# show backup
Server URL:                               ftp://172.16.0.0/backups
User Account on Server:                   admin
Number of Backups to Retain:              10
se-10-0-0-0#

```

# Backing Up Files

Backup commands must be entered in EXEC mode while the system is in offline mode. Active calls are terminated, and no new calls are accepted. Consider doing the backup procedure at a time when telephone users are least likely to be on the telephone.

**Note**

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We recommend that you back up your configuration files whenever changes are made to the system or application files. Data files, which contain voice messages, should be backed up daily to minimize data loss, such as from a hardware failure.

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## Numbering Scheme for Backup Files

Three types of backup requests are available: data only, configuration only, or all.

- **Data**—Backs up greetings, voice-mail messages, recorded names, and custom scripts and prompts.
- **Configuration**—Backs up only the running configuration. Use the **show run** command to display the current running configuration.
- **All**—Backs up all data and configuration information.

Cisco Unity Express automatically numbers and dates the backup files and identifies the revision number in a backupid field.

Performing different backup types at various times causes different backup IDs for data backups and configuration backups. For example, the last data backup ID might be 3, and the last configuration backup might be 4. Performing an “all” backup might result in a backup ID of 5 for both data and configuration.

When restoring the files, refer to the backup ID for the backup file that you want to use. Use the **show backup server** command for a list of backup IDs.

**Caution**

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Offline mode terminates all existing voice-mail calls, and no new voice-mail calls are allowed. Calls to auto attendant are allowed. We recommend doing a backup when telephone users are not active on calls.

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### SUMMARY STEPS

1. **offline**
2. **backup category {all | configuration | data}**
3. **continue**
4. **show backup history**
5. **show backup server**

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>offline</b>  <b>Example:</b> se-10-0-0-0# offline	Enters offline mode. All active voice-mail calls are terminated.
Step 2	<b>backup category {all   configuration   data}</b>  <b>Example:</b> se-10-0-0-0(offline)# backup category all se-10-0-0-0(offline)# backup category configuration se-10-0-0-0(offline)# backup category data	Specifies the type of data to be backed up and stored.
Step 3	<b>continue</b>  <b>Example:</b> se-10-0-0-0(offline)# continue	Exits offline mode and returns to EXEC mode.
Step 4	<b>show backup history</b>  <b>Example:</b> se-10-0-0-0# show backup history	Displays the backup and restore procedures and the success or failure of those attempts.
Step 5	<b>show backup server</b>  <b>Example:</b> se-10-0-0-0# show backup server	Displays the backup files available on the backup server, the date of each backup, and that backup file ID.

## Examples

The following example displays the output from the **show backup** commands:

```
se-10-0-0-0# show backup history

#Start Operation
Category:      Configuration
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Backup
Backupid:     2
Restoreid:    -1
Description:   CUE test backup
Date:         Sun Jun 13 12:32:48 PDT 1993
Result:       Success
Reason:
#End Operation

#Start Operation
Category:      Data
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Backup
Backupid:     2
Restoreid:    -1
Description:   CUE test backup
```

```
Date:          Sun Jun 13 12:32:57 PDT 1993
Result:        Success
Reason:
#End Operation

#Start Operation
Category:      Configuration
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Restore
Backupid:     2
Restoreid:    1
Description:
Date:          Sun Jun 13 12:37:52 PDT 1993
Result:        Success
Reason:
#End Operation

#Start Operation
Category:      Data
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Restore
Backupid:     2
Restoreid:    1
Description:
Date:          Sun Jun 13 12:38:00 PDT 1993
Result:        Success
Reason:
#End Operation
```

```
se-10-0-0-0# show backup server
```

```
Category:      Data
Details of last 5 backups
Backupid:     1
Date:         Tue Jul 22 10:55:52 PDT 2003
Description:

Backupid:     2
Date:         Tue Jul 29 18:06:33 PDT 2003
Description:

Backupid:     3
Date:         Tue Jul 29 19:10:32 PDT 2003
Description:

Category:      Configuration
Details of last 5 backups
Backupid:     1
Date:         Tue Jul 22 10:55:48 PDT 2003
Description:

Backupid:     2
Date:         Tue Jul 29 18:06:27 PDT 2003
Description:

Backupid:     3
Date:         Tue Jul 29 19:10:29 PDT 2003
Description:

se-10-0-0-0#
```

# Restoring Files

After the backup files are created, you can restore them when needed. Restoring is done in offline mode, which terminates all voice-mail active calls and does not permit new voice-mail calls (auto attendant calls are permitted). You should consider doing the restore when telephone users are least likely to be on the telephone.

Use the **show backup server** command to locate the backup ID of the file that you want to restore.

## SUMMARY STEPS

1. **show backup server**
2. **offline**
3. **restore id *backupid* category {all | configuration | data}**
4. **reload**
5. **show backup history**

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>show backup server</b>  <b>Example:</b> se-10-0-0-0# show backup server	Lists the data and configuration backup files. Look at the backup ID field for the revision number of the file that you want to restore.
Step 2	<b>offline</b>  <b>Example:</b> se-10-0-0-0# offline	Enters offline mode. All active voice-mail calls are terminated.
Step 3	<b>restore id <i>backupid</i> category {all   configuration   data}</b>  <b>Example:</b> se-10-0-0-0(offline)# restore id 22 category all se-10-0-0-0(offline)# restore id 8 category configuration se-10-0-0-0(offline)# restore id 3 category data	Specifies the backup ID <i>backupid</i> value and the file type to be restored.
Step 4	<b>reload</b>  <b>Example:</b> se-10-0-0-0(offline)# reload	Resets the Cisco Unity Express module so that the restored values take effect.
Step 5	<b>show backup history</b>  <b>Example:</b> se-10-0-0-0# show backup history	Displays the backup and restore procedures and the success or failure of those attempts.



## Example

The following example displays the backup server and backup history:

```

se-10-0-0-0# show backup server

Category:      Data
Details of last 5 backups
Backupid:     1
Date:         Tue Jul 22 10:55:52 PDT 2003
Description:

Backupid:     2
Date:         Tue Jul 29 18:06:33 PDT 2003
Description:

Backupid:     3
Date:         Tue Jul 29 19:10:32 PDT 2003
Description:

Category:      Configuration
Details of last 5 backups
Backupid:     1
Date:         Tue Jul 22 10:55:48 PDT 2003
Description:

Backupid:     2
Date:         Tue Jul 29 18:06:27 PDT 2003
Description:

Backupid:     3
Date:         Tue Jul 29 19:10:29 PDT 2003
Description:

se-10-0-0-0#

se-10-0-0-0# show backup history

Start Operation
Category:      Configuration
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Backup
Backupid:     1
Restoreid:    -1
Description:   test backup 1
Date:         Sun Jun 13 12:23:38 PDT 1993
Result:        Failure
Reason:        Script execution failed: /bin/BR_VMConfig_backup.sh: returnvalue:1
               ; Server Url:ftp://10.100.10.215/CUE_backup: returnvalue:9 Unable to authenticate
#End Operation

#Start Operation
Category:      Data
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Backup
Backupid:     1
Restoreid:    -1
Description:   test backup 1
Date:         Sun Jun 13 12:23:44 PDT 1993
Result:        Failure
Reason:        Script execution failed: /bin/BR_VMData_backup.sh: returnvalue:1
               Voicemail Backup failed; Server Url:ftp://10.100.10.215/CUE_backup: returnvalue:9

```

```

Unable to authenticate
#End Operation

#Start Operation
Category:      Configuration
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Backup
Backupid:      2
Restoreid:     -1
Description:   CUE test backup
Date:         Sun Jun 13 12:32:48 PDT 1993
Result:       Success
Reason:
#End Operation

#Start Operation
Category:      Data
Backup Server: ftp://10.100.10.215/CUE_backup
Operation:     Backup
Backupid:      2
Restoreid:     -1
Description:   CUE test backup
Date:         Sun Jun 13 12:32:57 PDT 1993
Result:       Success
Reason:
#End Operation

```

## Copying Configurations

The following Cisco Unity Express EXEC commands are available to copy the startup configuration and running configuration to and from Flash memory, the network FTP server, and the network TFTP server.

### Copying from Flash Memory to Another Location

Starting in Cisco Unity Express EXEC mode, use the following command to copy the startup configuration in Flash memory to another location:

```
copy startup-config {ftp: user-id:password@ftp-server-address / [directory] |
tftp: tftp-server-address} filename
```

Keyword or Argument	Description
<b>ftp:</b> <i>user-id:password@</i>	User ID and password for the FTP server. Include the colon (:) and the at sign (@) in your entry.
<i>ftp-server-address</i>	IP address of the FTP server.
<i>/directory</i>	(Optional) Directory on the TFTP server where the copied file will reside. If you use it, precede the name with the forward slash (/).
<b>tftp:</b> <i>tftp-server-address</i>	IP address of the TFTP server.
<i>filename</i>	Name of the destination file that will contain the copied startup configuration.

This command is interactive and prompts you for the information. You cannot enter the parameters in one line. The following examples illustrate this process.

In this example, the startup configuration is copied to the FTP server, which requires a user ID and password to transfer files. The IP address of the FTP server is 172.16.231.193. The startup configuration file is saved on the FTP server with the filename `start`.

```
se-10-0-0-0# copy startup-config ftp
Address or name of remote host? admin:voice@172.16.231.193
Source filename? start
```

The following example shows the startup configuration copied to the TFTP server, which does not require a user ID and password. The IP address of the TFTP server is 172.16.231.190. The startup configuration is saved in the TFTP directory `configs` as filename `temp_start`.

```
se-10-0-0-0# copy startup-config tftp
Address or name of remote host? 172.16.231.190/configs
Source filename? temp_start
```

## Copying from the Network FTP Server to Another Location

Starting in Cisco Unity Express EXEC mode, use the following command to copy the network FTP server configuration to another location:

```
copy ftp: { running-config | startup-config } user-id:password@ftp-server-address / directory / filename
```

Keyword or Argument	Description
<b>running-config</b>	Active configuration in Flash memory.
<b>startup-config</b>	Startup configuration in Flash memory.
<i>user-id:password@</i>	User ID and password for the FTP server. Include the colon (:) and the at sign (@) in your entry.
<i>ftp-server-address</i>	IP address of the FTP server.
<i>/directory</i>	(Optional) Directory name for retrieving the file. If you use it, precede the name with the forward slash (/).
<i>filename</i>	Name of the source file to be copied.

This command is interactive and prompts you for the information. You cannot enter the parameters in one line. The following example illustrates this process.

In this example, the FTP server requires a user ID and password. The IP address of the FTP server is 10.3.61.16. The file `start` in the FTP server `configs` directory is copied to the startup configuration.

```
se-10-0-0-0# copy ftp: startup-config
!!!WARNING!!! This operation will overwrite your startup configuration.
Do you wish to continue[y]? y
Address or name or remote host? admin:voice@10.3.61.16/configs
Source filename? start
```

## Copying the Flash Running Configuration to Another Location

Starting in Cisco Unity Express EXEC mode, use the following command to copy the running configuration in Flash memory to another location:

```
copy running-config { ftp: user-id:password@ftp-server-address / directory } | startup-config | tftp:ftp-server-address / filename
```

Keyword or Argument	Description
<b>ftp:</b> <i>user-id:password@</i>	User ID and password for the FTP server. Include the colon (:) and the at sign (@) in your entry.
<i>ftp-server-address</i>	IP address of the FTP server.
<i>ldirectory</i>	(Optional) Directory on the FTP server where the copied file will reside. If you use it, precede the name with the forward slash (/).
<b>startup-config</b>	Startup configuration in Flash memory.
<b>tftp:</b> <i>tftp-server-address</i>	IP address of the TFTP server.
<i>filename</i>	Name of the destination file that will contain the copied running configuration.

When you copy the running configuration to the startup configuration, enter the command on one line.

When you copy to the FTP or TFTP server, this command becomes interactive and prompts you for the information. You cannot enter the parameters in one line. The following example illustrates this process.

In the following example, the running configuration is copied to the FTP server, which requires a user ID and password. The IP address of the FTP server is 172.16.231.193. The running configuration is copied to the configs directory as file saved\_start.

```
se-10-0-0-0# copy running-config ftp:
Address or name of remote host? admin:voice@172.16.231.193/configs
Source filename? saved_start
```

In the following example, the running configuration is copied to the startup configuration as file start. In this instance, enter the command on a single line.

```
se-10-0-0-0# copy running-config startup-config start
```

## Copying the Network TFTP Configuration to Another Location

Starting in Cisco Unity Express EXEC mode, use the following command to copy the network TFTP configuration to another location:

```
copy tftp: { running-config | startup-config } tftp-server-address / [directory] filename
```

Keyword or Argument	Description
<b>running-config</b>	Active configuration in Flash memory.
<b>startup-config</b>	Startup configuration in Flash memory.
<i>tftp-server-address</i>	IP address of the TFTP server.
<i>ldirectory</i>	(Optional) Directory on the TFTP server where the copied file will reside. If you use it, precede the name with the forward slash (/).
<i>filename</i>	Name of the source file to be copied.

This command is interactive and prompts you for the information. You cannot enter the parameters in one line. The following example illustrates this process.

In this example, the TFTP server has IP address 10.3.61.16. The file start in directory configs on the TFTP server is copied to the startup configuration.

```
se-10-0-0-0# copy tftp: startup-config
!!!WARNING!!! This operation will overwrite your startup configuration.
Do you wish to continue[y]? y
Address or name of remote host? 10.3.61.16/configs
Source filename? start
```

## Restoring Factory Default Values

Cisco Unity Express provides a command to restore the factory default values for the entire system. Restoring the system to the factory defaults erases the current configuration. This function is available in offline mode.



### Caution

This feature is not reversible. All data and configuration files are erased. Use this feature with caution. It is recommended that you do a full system backup before proceeding with this feature.

After the administrator enters the command to restore system defaults, the system requests confirmation before starting the procedure. Upon receiving the confirmation, the system does the following:

- Replaces the current database with an empty database.
- Initializes the Lightweight Directory Access Protocol (LDAP) to an empty state.
- Replaces the startup configuration with the template startup configuration that ships with the system.
- Erases all postinstallation configuration data.
- Deletes all user and custom prompts.

When the system is clean, the administrator sees a message that the system will reload, and the system begins to reload. When the reload is complete, the system prompts the administrator to go through the postinstallation process.

When logging in to the graphical user interface (GUI), the administrator has the option to run the initialization wizard.

Perform the following steps to reset the system to Cisco Unity Express factory default values.

**Step 1** se-10-0-0-0# **offline**

This command puts the system into offline mode.

**Step 2** (offline)# **restore factory default**

**This operation will cause all the configuration and data on the system to be erased. This operation is not reversible. Do you wish to continue? (n)**

**Step 3** Do one of the following:

- Enter **n** if want to retain the system configuration and data.  
The operation is cancelled, but the system remains in offline mode. To return to online mode, enter **configure**.
- Enter **y** if you want to erase the system configuration and data.

When the system is clean, a message appears indicating that the system will start to reload. When the reload is complete, a prompt appears to start the postinstallation process.

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