



COPY Commands

This chapter provides COPY (copy) commands for the Cisco ONS 15454, ONS 15327, ONS 15600 and ONS 15310-CL.

8.1 COPY-IOSCFG

Copy Internet Operating System Configuration File

Usage Guidelines

Cisco ONS 15454

This command supports the following types of operations on the Cisco IOS configuration file of ML-Series Ethernet cards:

1. Uploading the startup Cisco IOS configuration file from the network to the node.
FTP is the only protocol allowed for uploading. When doing this operation, the SRC field must be an FTP URL string specifying the user name and password for FTP authentication, and specifying the host and the directory to locate the startup configuration file from the network. The DEST field must be a string of "STARTUP."
2. Downloading the startup Cisco IOS configuration file from the node to the network.
FTP is the only protocol allowed for downloading. When doing this operation, the SRC field must be a string of "STARTUP." The DEST field must be an FTP URL string specifying the user name and password for FTP authentication, and specifying the host and the directory to store the startup configuration file on the network.



Note

- FTP timeout is 30 seconds and is not configurable.
- The Cisco IOS configuration file is unique for each ML-Series card, and is specified by the SLOT number in the AID field of the command.
- In the GNE/ENE environment, if a GNE firewall exists, the download (backup) of the Cisco IOS configuration file through TL1 is not allowed. Any such attempt will receive a "Data Connection Error" from the GNE. If uploading the Cisco IOS configuration file through TL1, the GNE will allow it to go through the firewall only if the file contains the header "! Cisco IOS config <text>". If the configuration file does not contain this header, GNE will block the upload with "Data Connection Error."

- The format of the FTP URL string used in the SRC or DEST field of the command is as follows:

In a nonfirewall environment, the format of the URL should be

“FTP://[FTPUSER[:FTPPASSWORD]]@FTPHOST/PACKAGE_PATH” where:

FTPUSER is the userid to connect to the computer with the package file

<FTPPASSWORD> is the password used to connect to the computer with the package file

<FTPHOST> is the IP address of the computer with the package file. DNS lookup of hostnames is not supported

<PACKAGE_PATH> is the long path name to the package file

- Note that USERID and PASSWORD are optional if the user does not need to log into the host computer. Also note that the password can be optional if the user does not need to log in. All the other portions of the URL are required, including the initial “FTP:\” string.

In a firewall environment, the hostname should be replaced with a list of IP addresses each separated by the “@” character. The first IP address should be for the machine where the package file is stored. Subsequent IP addresses should be for firewall machines moving outwards towards the edge of the network, until the final IP address listed was the machine that outside users first access the network.

For example: if your topology is “FTPHOST <-> GNE3 <-> GNE2 <-> GNE1 <-> ENE”, your FTP URL will be:

FTP://FTPUSER:FTPPASSWORD@FTPHOST@GNE3@GNE2@GNE1/PACKAGE_PATH

Category

File Transfer

Security

Provisioning

Related Commands

APPLY REPT EVT FXFR REPT EVT IOSCFG
COPY-RFILE

Input Format

COPY-IOSCFG:[<TID>]:<AID>:<CTAG>::SRC=<SRC>,DEST=<DEST>;

Input Example

COPY-IOSCFG::SLOT-1:CTAG::SRC=“LONG_FTP_PATH”,DEST=“STARTUP”;

Input Parameters

Table 8-1 COPY-IOSCFG Input Parameters

Parameter and Values	Description
AID	Access identifier. Specifies the slot number of the card where the Cisco IOS configuration file belongs. AID is from the “25.1.13 EQPT” section on page 25-27
SRC	Source AID. Specifies where the Cisco IOS configuration file is copied from. String
DEST	Specifies where the Cisco IOS configuration file is copied to. String

8.2 COPY-RFILE

The Copy File (COPY-RFILE) command downloads a new software package from the location specified by the FTP URL. It is also used to backup and restore the system database.

Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15600, ONS 15310-CL

This command downloads a new software package from the location specified by the FTP URL. It is also used to backup and restore the system database.



Note

Beginning with Release 5.0, PACKAGE_PATH is relative to your home directory, instead of being an absolute path from the root directory of the NE. If you want to specify an absolute path, start the path with the string "%2F".



Note

FTP timeout is 30 seconds and is not configurable.



Note

In the gateway network element/end network element (GNE/ENE) environment, if a GNE firewall exists, the backup of the ENE database through TL1 is not allowed. Any such attempt will receive a 'ERROR -5502 - Command not implemented' from the GNE.

To upload package files or restore databases from a host, the host must be running an FTP server application. If the host is not running an FTP server application, the command fails, indicating that the NE was unable to connect to the remote IP address (host). A host can either be a PC or a workstation running an FTP server application.

- Userid is the user's ID used to connect to the computer hosting the package file or system database.
- Password is the password used to connect to the computer hosting the package file or system database.
- Hostname is the hostname or IP address of the computer hosting the package file or system database.
- PACKAGE_PATH is the long path name to the package file, starting from the home directory of the logged-in user.

All the other portions of the URL are required, including the initial "FTP://" string.

Example:

```
COPY-RFILE:TID:RFILE-PKG:703::TYPE=SWDL, SRC="FTP://USERID:
PASSWORD@HOSTIP:21/DIR1/DIR2/DIR3/PACKAGE.PKG";
```



Note

- The SWDL type is used for software package uploads. The RFBU type is used for system database backups, and the RFR type is used for system database restores. The SRC input is required when the type is SWDL or RFR. The DEST input is needed when the type is RFBU. The SRC and DEST inputs cannot both be used in the same command.
- The extended FTP URL syntax is required by the COPY-RFILE syntax.
- If using FTP URL, port number (21) is optional. Leaving this field blank defaults to 21. However, if using FTTD URL, then port number (21) is mandatory and no default is defined.

- The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command.
- If using FTTD URL, the firewall on GNE must be disabled.

Category

File Transfer

Security

Superuser

Related Commands

APPLY REPT EVT FXFR REPT EVT IOSCFG
COPY-IOSCFG

Input Format

COPY-RFILE:[<TID>]:<SRC>:<CTAG>::TYPE=<XFERTYPE>,[SRC=<SRC1>],
[DEST=<DEST>],[OVWRT=<OVWRT>],[FTTD=<FTTD>];

Input Example

COPY-RFILE:HERNDON:RFILE-PKG:703::TYPE=SWDL,SRC="LONG_FTP_PATH",
DEST="LONG_FTP_PATH",OVWRT=YES,FTTD="FTTD_URL";

Input Parameters

Table 8-2 **COPY-RFILE Input Parameters**

Parameter and Values	Description
SRC	Source AID. The type of file being transferred. Defaults to RFILE-PKG. From the AID “25.1.21 RFILE” section on page 25-33
XFERTYPE	The file transfer protocol Parameter type is TX_TYPE—specifies the type and direction of the file transferred
• RFBU	Remote File Backup. Applicable for Maintenance User (and above)
• RFR	Remote File Restore. Applicable for Superuser
• SWDL	Software Download. Applicable for Maintenance User (and above)

Table 8-2 COPY-RFILE Input Parameters (continued)

Parameter and Values	Description
SRC1	Specifies the source of the file to be transferred. Only the FTP URL is supported. In a non-firewall environment the format of the URL should be: “FTP://FTP_USER[:FTP_PASSWORD]]@FTP_HOST_IP[:21]/PACKAGE_PATH[;TYPE=I]” where: • <FTP_USER> is the userid to connect to the computer hosting the package file • <FTP_PASSWORD> is the password used to connect to the computer hosting the package file • <FTP_HOST_IP> is the IP address of the computer hosting the package file. DNS lookup of hostnames is not supported • <PACKAGE_PATH> is the long path name to the package file starting from the home directory of the logged-in user. Note Userid and password are optional if the user does not need to log into the host computer. The password can be optional if the user does not need to log in. All the other portions of the URL are required, including the initial “FTP://” string. In a firewall environment, the hostname should be replaced with a list of IP addresses each separated by a @ character. The first IP address should be for the machine where the package file is stored. Subsequent IP addresses should then be for firewall machines moving outwards towards the edge of the network, until the final IP address listed is the machine that outside users first access the network. For example, if the topology is “FTP_HOST_IP <-> GNE3 <-> GNE2 <-> GNE1 <-> ENE”, the FTP URL is: FTP://FTP_USER:FTP_PASSWORD@FTP_HOST_IP@GNE3@GNE2@GNE1/PACKAGE_PATH String
DEST	Specifies the destination of the file to be transferred. The comments for the SRC parameter (above) are also valid for DEST. String
OVWRT	If OVWRT is YES, the files should be overwritten. If OVWRT is NO, the file transfers will fail if the file already exists at the destination. Using the NO value will result in an error message. The NO value is not supported for database restore or software download Parameter type is YES_NO—indicates whether the user password is about to expire; the user is logged into the NE or the user is locked out of the NE
• NO	No
• YES	Yes
FTTD	String

