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capwap ap controller ip address

To configure the controller IP address into the CAPWAP access point from the access point's console port, use the **capwap ap controller ip address** command.

capwap ap controller ip address *A.B.C.D*

Syntax Description	<i>A.B.C.D</i>	IP address of the controller.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	This command must be entered from an access point's console port. This command is applicable for IPv4 addresses only.	



Note The access point must be running Cisco IOS Release 12.3(11)JX1 or later releases.

The following example shows how to configure the controller IP address 10.23.90.81 into the CAPWAP access point:

```
ap_console >capwap ap controller ip address 10.23.90.81
```

config ap dhcp release-override

To configure DHCP release override on Cisco APs, use the **config ap dhcp release-override** command.

config ap dhcp release-override {**enable** | **disable**} {*cisco-ap-name* | **all**}

Syntax Description

enable	Enables DHCP release override and sets number of DHCP releases sent by AP to 1. To be used as a workaround for a few DHCP servers that mark the AP's IP address as bad. We recommend that you use this configuration only in highly reliable networks.
disable	Disables DHCP release override and sets number of DHCP releases sent by AP to 3, which is the default value. This ensures that the DHCP server receives the release message even if one of the packets is lost.
<i>cisco-ap-name</i>	Configuration is applied to the Cisco AP that you enter
all	Configuration is applied to all Cisco APs

Command Default

Disabled

Command History

Release	Modification
8.2	This command was introduced.

Usage Guidelines

Use this command when you are using Cisco lightweight APs with Windows Server 2008 R2 or 2012 as the DHCP server.

capwap ap dot1x

To configure the dot1x username and password into the CAPWAP access point from the access point's console port, use the **capwap ap dot1x** command.

capwap ap dot1x username *user_name* **password** *password*

Syntax Description		
	<i>user_name</i>	Dot1x username.
	<i>password</i>	Dot1x password.

Command Default	None
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Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines This command must be entered from an access point's console port.



Note The access point must be running Cisco Access Point IOS Release 12.3(11)JX1 or later releases.

This example shows how to configure the dot1x username ABC and password pass01:

```
ap_console >capwap ap dot1x username ABC password pass01
```

capwap ap hostname

To configure the access point host name from the access point's console port, use the **capwap ap hostname** command.

capwap ap hostname *host_name*

Syntax Description	<i>host_name</i>	Hostname of the access point.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines This command must be entered from an access point's console port.



Note The access point must be running Cisco IOS Release 12.3(11)JX1 or later releases. This command is available only for the Cisco Lightweight AP IOS Software recovery image (rcvk9w8) without any private-config. You can remove the private-config by using the **clear capwap private-config** command.

This example shows how to configure the hostname WLC into the capwap access point:

```
ap_console >capwap ap hostname WLC
```

capwap ap ip address

To configure the IP address into the CAPWAP access point from the access point's console port, use the **capwap ap ip address** command.

capwap ap ip address *A.B.C.D*

Syntax Description	<i>A.B.C.D</i>	IP address.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	This command must be entered from an access point's console port. This command supports only IPv4 address format.	



Note The access point must be running Cisco Access Point IOS Release 12.3(11)JX1 or later releases.

This example shows how to configure the IP address 10.0.0.1 into CAPWAP access point:

```
ap_console >capwap ap ip address 10.0.0.1
```

capwap ap ip default-gateway

To configure the default gateway from the access point's console port, use the **capwap ap ip default-gateway** command.

capwap ap ip default-gateway *A.B.C.D*

Syntax Description	<i>A.B.C.D</i>	Default gateway address of the capwap access point.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines This command must be entered from an access point's console port. This command supports only IPv4 address format.



Note The access point must be running Cisco Access Point IOS Release 12.3(11)JX1 or later releases.

This example shows how to configure the CAPWAP access point with the default gateway address 10.0.0.1:

```
ap_console >capwap ap ip default-gateway 10.0.0.1
```


capwap ap log-server

To configure the system log server to log all the CAPWAP errors, use the **capwap ap log-server** command.

capwap ap log-server *A.B.C.D*

Syntax Description	<i>A.B.C.D</i>	IP address of the syslog server.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines This command must be entered from an access point's console port. This command supports only IPv4 address format.



Note The access point must be running Cisco Access Point IOS Release 12.3(11)JX1 or later releases.

This example shows how to configure the syslog server with the IP address 10.0.0.1:

```
ap_console >capwap ap log-server 10.0.0.1
```

capwap ap primary-base

To configure the primary controller name and IP address into the CAPWAP access point from the access point's console port, use the **capwap ap primary-base** command.



Note This command configures the IPv4 and IPv6 address for Cisco Wave 2 APs.

capwap ap primary-base *WORD A.B.C.D*

Syntax Description		
	<i>WORD</i>	Name of the primary controller.
	<i>A.B.C.D</i>	IP address of the primary controller.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
	8.0	This command supports IPv4 and IPv6 address format.

Usage Guidelines This command must be entered from an access point's console port in enable mode (elevated access).

This example shows how to configure the primary controller name WLC1 and primary controller IP address 209.165.200.225 into the CAPWAP access point:

```
ap_console >capwap ap primary-base WLC1 209.165.200.225
```

capwap ap primed-timer

To configure the primed timer into the CAPWAP access point, use the **capwap ap primed-timer** command.

```
capwap ap primed-timer {enable | disable}
```

Syntax Description	enable	Enables the primed timer settings
	disable	Disables the primed timer settings.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	This command must be entered from an access point's console port.	



Note The access point must be running Cisco Access Point IOS Release 12.3(11)JX1 or later releases.

This example shows how to enable the primed-timer settings:

```
ap_console >capwap ap primed-timer enable
```

capwap ap secondary-base

To configure the name and IP address of the secondary Cisco WLC into the CAPWAP access point from the access point's console port, use the **capwap ap secondary-base** command.

capwap ap secondary-base *controller_name controller_ip_address*

Syntax Description

<i>controller_name</i>	Name of the secondary Cisco WLC.
<i>controller_ip_address</i>	IP address of the secondary Cisco WLC.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.
8.0	This command supports only IPv4 address format.

Usage Guidelines

This command must be entered from an access point's console port. This command supports only IPv4 address format.



Note The access point must be running Cisco Access Point IOS Release 12.3(11)JX1 or later releases.

This example shows how to configure the secondary Cisco WLC name as WLC2 and secondary Cisco WLC IP address 209.165.200.226 into the CAPWAP access point:

```
ap_console >capwap ap secondary-base WLC2 209.165.200.226
```

capwap ap tertiary-base

To configure the name and IP address of the tertiary Cisco WLC into the CAPWAP access point from the access point's console port, use the **capwap ap tertiary-base** command.

capwap ap tertiary-base *WORD**A.B.C.D*

Syntax Description	<i>WORD</i>	Name of the tertiary Cisco WLC.
	<i>A.B.C.D</i>	IP address of the tertiary Cisco WLC.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
	8.0	This command supports only IPv4 address format.
Usage Guidelines	This command must be entered from an access point's console port. This command supports only IPv4 address format.	



Note The access point must be running Cisco IOS Release 12.3(11)JX1 or later releases.

This example shows how to configure the tertiary Cisco WLC with the name WLC3 and secondary Cisco WLC IP address 209.165.200.227 into the CAPWAP access point:

```
ap_console >capwap ap tertiary-base WLC3 209.165.200.227
```

lwapp ap controller ip address

To configure the Cisco WLC IP address into the FlexConnect access point from the access point's console port, use the **lwapp ap controller ip address** command.

lwapp ap controller ip address *A.B.C.D*

Syntax Description	<i>A.B.C.D</i>	IP address of the controller.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
	8.0	This command supports only IPv4 address format.

Usage Guidelines This command must be entered from an access point's console port. This command is applicable for IPv4 addresses only.

Prior to changing the FlexConnect configuration on an access point using the access point's console port, the access point must be in standalone mode (not connected to a controller) and you must remove the current LWAPP private configuration by using the **clear lwapp private-config** command.



Note The access point must be running Cisco IOS Release 12.3(11)JX1 or higher releases.

The following example shows how to configure the controller IP address 10.92.109.1 into the FlexConnect access point:

```
ap_console > lwapp ap controller ip address 10.92.109.1
```

reset system at

To reset the system at a specified time, use the **reset system at** command.

```
reset system at YYYY-MM-DD HH:MM:SS image {no-swap | swap} reset-aps [save-config]
```

Syntax	Description
YYYY-MM-DD	Specifies the date.
HH:MM:SS	Specifies the time in a 24-hour format.
image	Configures the image to be rebooted.
swap	Changes the active boot image; boots the non-active image and sets the default flag on it on the next reboot.
no-swap	Boots from the active image.
reset-aps	Resets all access points during the system reset.
save-config	(Optional) Saves the configuration before the system reset.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to reset the system at 2010-03-29 and 12:01:01 time:

```
(Cisco Controller) > reset system at 2010-03-29 12:01:01 image swap reset-aps save-config
```

reset system in

To specify the amount of time delay before the devices reboot, use the **reset system in** command.

reset system in HH:MM:SS image {swap | no-swap} reset-aps save-config

Syntax Description	HH:MM:SS	Specifies a delay in duration.
	image	Configures the image to be rebooted.
	swap	Changes the active boot image; boots the non-active image and sets the default flag on it on the next reboot.
	no-swap	Boots from the active image.
	reset-aps	Resets all access points during the system reset.
	save-config	Saves the configuration before the system reset.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to reset the system after a delay of 00:01:01:

```
(Cisco Controller) > reset system in 00:01:01 image swap reset-aps save-config
```


reset system cancel

To cancel a scheduled reset, use the **reset system cancel** command.

reset system cancel

Syntax Description This command has no arguments or keywords.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to cancel a scheduled reset:

```
(Cisco Controller) > reset system cancel
```

reset system notify-time

To configure the trap generation prior to scheduled resets, use the **reset system notify-time** command.

reset system notify-time *minutes*

Syntax Description	<i>minutes</i>	Number of minutes before each scheduled reset at which to generate a trap.
Command Default	The default time period to configure the trap generation prior to scheduled resets is 10 minutes.	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to configure the trap generation to 10 minutes before the scheduled resets:

```
(Cisco Controller) > reset system notify-time 55
```

reset peer-system

To reset the peer controller, use the **reset peer-system** command.

reset peer-system

Syntax Description This command has no arguments or keywords.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to reset the peer controller:

```
(Cisco Controller) >> reset peer-system
```

save config

To save the controller configurations, use the **save config** command.

save config

Syntax Description This command has no arguments or keywords.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to save the controller settings:

```
(Cisco Controller) > save config
Are you sure you want to save? (y/n) y
Configuration Saved!
```

transfer download certpasswor

To set the password for the .PEM file so that the operating system can decrypt the web administration SSL key and certificate, use the **transfer download certpassword** command.

transfer download certpassword *private_key_password*

Syntax Description	<i>private_key_password</i>	Certificate's private key password.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to transfer a file to the switch with the certificate's private key password certpassword:

```
(Cisco Controller) > transfer download certpassword
Clearing password
```

transfer download datatype

To set the download file type, use the **transfer download datatype** command.

```
transfer download datatype {code | config | eapdevcert | eapcert | icon | image |
ipseccacert | ipsecdevcert | login-banner | radius-avplist | signature | webadmincert |
webauthbundle | webauthcert}
```

Syntax Description

code	Downloads an executable image to the system.
config	Downloads the configuration file.
eapcert	Downloads an EAP ca certificate to the system.
eapdevcert	Downloads an EAP dev certificate to the system.
icon	Downloads an executable image to the system.
image	Downloads a web page login to the system.
ipseccacert	Downloads an IPSec Certificate Authority (CA) certificate to the system.
ipsecdevcert	Downloads an IPSec dev certificate to the system.
login-banner	Downloads the controller login banner. Only text file is supported with a maximum of 1500 bytes.
radius-avplist	Downloads the RADIUS AVPs in the XML file format from the FTP server.
signature	Downloads a signature file to the system.
webadmincert	Downloads a certificate for web administration to the system.
webauthbundle	Downloads a custom webauth bundle to the system.
webauthcert	Downloads a web certificate for the web portal to the system.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.
8.0	The ipseccacert , ipsecdevcert , and radius-avplist options were introduced.

The following example shows how to download an executable image to the system:

```
(Cisco Controller) > transfer download datatype code
```

transfer download datatype icon

To download icon from TFTP or FTP server onto the controller, use the **transfer download datatype icon** command.

transfer download datatype icon

Syntax Description	None				
Command Default	None				
Command Modes	WLAN configuration				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>Release 8.2</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	Release 8.2	This command was introduced.
Release	Modification				
Release 8.2	This command was introduced.				

Usage Guidelines

Example

This example shows how to download icon from TFTP or FTP server onto the controller:

```
Cisco Controller > transfer download datatype icon
```

transfer download filename

To download a specific file, use the **transfer download filename** command.

transfer download filename *filename*

Syntax Description	<i>filename</i>	Filename that contains up to 512 alphanumeric characters.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	You cannot use special characters such as \ : * ? " <> for the filename.	

The following example shows how to transfer a file named build603:

```
(Cisco Controller) > transfer download filename build603
```


transfer download mode

To set the transfer mode, use the **transfer download mode** command.

transfer upload mode {ftp | tftp | sftp}

Syntax Description	ftp	Sets the transfer mode to FTP.
	tftp	Sets the transfer mode to TFTP.
	sftp	Sets the transfer mode to SFTP.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to transfer a file using the TFTP mode:

```
(Cisco Controller) > transfer download mode tftp
```

transfer download password

To set the password for an FTP transfer, use the **transfer download password** command.

transfer download password *password*

Syntax Description	<i>password</i>	Password.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to set the password for FTP transfer to pass01:

```
(Cisco Controller) > transfer download password pass01
```

transfer download path

To set a specific FTP or TFTP path, use the **transfer download path** command.

transfer download path *path*

Syntax Description	<i>path</i>	Directory path.
		Note Path names on a TFTP or FTP server are relative to the server's default or root directory. For example, in the case of the Solarwinds TFTP server, the path is "/".
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	You cannot use special characters such as \ : * ? " < > for the file path.	

The following example shows how to transfer a file to the path c:\install\version2:

```
(Cisco Controller) > transfer download path c:\install\version2
```

transfer download port

To specify the FTP port, use the **transfer download port** command.

transfer download port *port*

Syntax Description	<i>port</i>	FTP port.
Command Default	The default FTP <i>port</i> is 21.	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to specify FTP port number 23:

```
(Cisco Controller) > transfer download port 23
```

transfer download serverip

To configure the IPv4 or IPv6 address of the TFTP server from which to download information, use the **transfer download serverip** command.

transfer download serverip *IP addr*

Syntax Description	<i>IP addr</i>	TFTP server IPv4 or IPv6 address.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
	8.0	This command supports both IPv4 and IPv6 address formats.

The following example shows how to configure the IPv4 address of the TFTP server:

```
(Cisco Controller) > transfer download serverip 175.34.56.78
```

The following example shows how to configure the IPv6 address of the TFTP server:

```
(Cisco Controller) > transfer download serverip 2001:10:1:1::1
```

transfer download start

To initiate a download, use the **transfer download start** command.

transfer download start

Syntax Description This command has no arguments or keywords.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to initiate a download:

```
(Cisco Controller) > transfer download start
Mode..... TFTP
Data Type..... Site Cert
TFTP Server IP..... 172.16.16.78
TFTP Path..... directory path
TFTP Filename..... webadmincert_name
This may take some time.
Are you sure you want to start? (y/n) Y
TFTP Webadmin cert transfer starting.
Certificate installed.
Please restart the switch (reset system) to use the new certificate.
```

transfer download tftpPktTimeout

To specify the TFTP packet timeout, use the **transfer download tftpPktTimeout** command.

transfer download tftpPktTimeout *timeout*

Syntax Description	<i>timeout</i>	Timeout in seconds between 1 and 254.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to transfer a file with the TFTP packet timeout of 55 seconds:

```
(Cisco Controller) > transfer download tftpPktTimeout 55
```

transfer download tftpMaxRetries

To specify the number of allowed TFTP packet retries, use the **transfer download tftpMaxRetries** command.

transfer download tftpMaxRetries *retries*

Syntax Description	<i>retries</i>	Number of allowed TFTP packet retries between 1 and 254 seconds.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to set the number of allowed TFTP packet retries to 55:

```
(Cisco Controller) > transfer download tftpMaxRetries 55
```


transfer download username

To specify the FTP username, use the **transfer download username** command.

transfer download username *username*

Syntax Description	<i>username</i>	Username.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to set the FTP username to ftp_username:

```
(Cisco Controller) > transfer download username ftp_username
```

transfer encrypt

To configure encryption for configuration file transfers, use the **transfer encrypt** command.

transfer encrypt { **enable** | **disable** | **set-key** *key* }

Syntax Description

enable	Enables the encryption settings.
disable	Disables the encryption settings.
set-key	Specifies the encryption key for configuration file transfers.
<i>key</i>	Encryption key for config file transfers.

Command Default

None

Command History

Release	Modification
7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to enable the encryption settings:

```
(Cisco Controller) > transfer encrypt enable
```

transfer upload datatype

To set the controller to upload specified log and crash files, use the **transfer upload datatype** command.

```
transfer upload datatype { ap-crash-data | config | coredump | crashfile | debug-file |
eapcacert | eapdevcert | errorlog | invalid-config | pac | packet-capture | panic-crash-file
| radio-core-dump | radius-avplist | rrm-log | run-config | signature | systemtrace |
traplog | watchdog-crash-filewebadmincert | webauthbundle | webauthcert }
```

Syntax Description		
ap-crash-data		Uploads the AP crash files.
config		Uploads the system configuration file.
coredump		Uploads the core-dump file.
crashfile		Uploads the system crash file.
debug-file		Uploads the system's debug log file.
eapcacert		Uploads an EAP CA certificate.
eapdevcert		Uploads an EAP Dev certificate.
errorlog		Uploads the system error log file.
invalid-config		Uploads the system invalid-config file.
pac		Uploads a Protected Access Credential (PAC).
packet-capture		Uploads a packet capture file.
panic-crash-file		Uploads the kernel panic information file.
radio-core-dump		Uploads the system error log.
radius-avplist		Uploads the XML file from the controller to the RADIUS server.
rrm-log		Uploads the system's trap log.
run-config		Upload the WLC's running configuration
signature		Uploads the system signature file.
systemtrace		Uploads the system trace file.
traplog		Uploads the system trap log.
watchdog-crash-file		Uploads a console dump file resulting from a software-watchdog-initiated controller reboot following a crash.
webadmincert		Uploads Web Admin certificate.
webauthbundle		Uploads a Web Auth bundle.

webauthcert	Upload a web certificate
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Command Default	None
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Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
	8.0	The ipseccacert , ipsecdevcert , and radius-avplist options were introduced.

The following example shows how to upload the system error log file:

```
(Cisco Controller) > transfer upload datatype errorlog
```

transfer upload filename

To upload a specific file, use the **transfer upload filename** command.

transfer upload filename *filename*

Syntax Description	<i>filename</i>	Filename that contains up to 16 alphanumeric characters.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	You cannot use special characters such as \ : * ? " < > for the filename.	

The following example shows how to upload a file build603:

```
(Cisco Controller) > transfer upload filename build603
```

transfer upload mode

To configure the transfer mode, use the **transfer upload mode** command.

transfer upload mode {ftp | tftp | sftp}

Syntax Description	ftp	Sets the transfer mode to FTP.
	tftp	Sets the transfer mode to TFTP.
	sftp	Sets the transfer mode to SFTP.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to set the transfer mode to TFTP:

```
(Cisco Controller) > transfer upload mode tftp
```

transfer upload pac

To load a Protected Access Credential (PAC) to support the local authentication feature and allow a client to import the PAC, use the **transfer upload pac** command.

transfer upload pac *username validity password*

Syntax Description		
	<i>username</i>	User identity of the PAC.
	<i>validity</i>	Validity period (days) of the PAC.
	<i>password</i>	Password to protect the PAC.

Command Default	None
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Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

Usage Guidelines The client upload process uses a TFTP or FTP server.

The following example shows how to upload a PAC with the username user1, validity period 53, and password pass01:

```
(Cisco Controller) > transfer upload pac user1 53 pass01
```

transfer upload password

To configure the password for FTP transfer, use the **transfer upload password** command.

Syntax Description	<i>password</i>	Password needed to access the FTP server.
transfer upload password <i>password</i>		
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to configure the password for the FTP transfer to pass01:

```
(Cisco Controller) > transfer upload password pass01
```


transfer upload path

To set a specific upload path, use the **transfer upload path** command.

transfer upload path *path*

Syntax Description	<i>path</i>	Server path to file.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
Usage Guidelines	You cannot use special characters such as \ : * ? " < > for the file path.	

The following example shows how to set the upload path to c:\install\version2:

```
(Cisco Controller) > transfer upload path c:\install\version2
```

transfer upload peer-start

To upload a file to the peer WLC, use the **transfer upload peer-start** command.

transfer upload peer-start

Syntax Description This command has no arguments or keywords.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to start uploading a file to the peer controller:

```
(Cisco Controller) >transfer upload peer-start
Mode..... FTP
FTP Server IP..... 209.165.201.1
FTP Server Port..... 21
FTP Path..... /builds/nimm/
FTP Filename..... AS_5500_7_4_1_20.aes
FTP Username..... wnbu
FTP Password..... *****
Data Type..... Error Log

Are you sure you want to start upload from standby? (y/N) n

Transfer Canceled
```

transfer upload port

To specify the FTP port, use the **transfer upload port** command.

transfer upload port *port*

Syntax Description	<i>port</i>	Port number.
Command Default	The default FTP port is 21.	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to specify FTP port 23:

```
(Cisco Controller) > transfer upload port 23
```

transfer upload serverip

To configure the IPv4 or IPv6 address of the TFTP server to upload files to, use the **transfer upload serverip** command.

transfer upload serverip *IP addr*

Syntax Description	<i>IP addr</i>	TFTP Server IPv4 or IPv6 address.
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Command Default	None	
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Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.
8.0	This command supports both IPv4 and IPv6 address formats.	

The following example shows how to set the IPv4 address of the TFTP server to 175.31.56.78:

```
(Cisco Controller) > transfer upload serverip 175.31.56.78
```

The following example shows how to set the IPv6 address of the TFTP server to 175.31.56.78:

```
(Cisco Controller) > transfer upload serverip 2001:10:1:1::1
```

transfer upload start

To initiate an upload, use the **transfer upload start** command.

transfer upload start

Syntax Description This command has no arguments or keywords.

Command Default None

Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to initiate an upload of a file:

```
(Cisco Controller) > transfer upload start
Mode..... TFTP
TFTP Server IP..... 172.16.16.78
TFTP Path..... c:\find\off/
TFTP Filename..... wps_2_0_75_0.aes
Data Type..... Code
Are you sure you want to start? (y/n) n
Transfer Cancelled
```

transfer upload username

To specify the FTP username, use the **transfer upload username** command.

transfer upload username

Syntax Description	<i>username</i>	Username required to access the FTP server. The username can contain up to 31 characters.
Command Default	None	
Command History	Release	Modification
	7.6	This command was introduced in a release earlier than Release 7.6.

The following example shows how to set the FTP username to ftp_username:

```
(Cisco Controller) > transfer upload username ftp_username
```