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Software Configuration Guide, Cisco IOS XE Amsterdam 17.2.x (Catalyst 9600 Switches)

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Americas Headquarters

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Preface

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Document Conventions

This document uses the following conventions:

Convention	Description			
^ or Ctrl	Both the ^ symbol and Ctrl represent the Control (Ctrl) key on a keyboard. For example, the key combination ^D or Ctrl-D means that you hold down the Control key while you press the D key. (Keys are indicated in capital letters but are not case sensitive.)			
bold font	Commands and keywords and user-entered text appear in bold font.			
Italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic</i> font.			
Courier font	Terminal sessions and information the system displays appear in courier font.			
Bold Courier font	Bold Courier font indicates text that the user must enter.			
[X]	Elements in square brackets are optional.			
	An ellipsis (three consecutive nonbolded periods without spaces) after a syntax element indicates that the element can be repeated.			
	A vertical line, called a pipe, indicates a choice within a set of keywords or arguments.			
[x y]	Optional alternative keywords are grouped in brackets and separated by vertical bars.			
$\{x \mid y\}$	Required alternative keywords are grouped in braces and separated by vertical bars.			

Convention	Description
[x {y z}]	Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<>	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!,#	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Reader Alert Conventions

This document may use the following conventions for reader alerts:

Note	Means reader take note. Notes contain helpful suggestions or references to material not covered in the manual.
ρ	
)	Means the following information will help you solve a problem.
7	
	Means <i>reader be careful</i> . In this situation, you might do something that could result in equipment damage or loss of data.
	Means the described action saves time. You can save time by performing the action described in the paragraph.
	IMPORTANT SAFETY INSTRUCTIONS
	This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

Related Documentation

Note

Before installing or upgrading the , refer to the release notes.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.



CHAPTER

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Cisco TrustSec DNA Service for Bonjour High Availability Interface and Hardware Components **IP** Addressing Services **IP Multicast Routing IP** Routing Layer 2 Multiprotocol Label Switching Network Management Programmability Quality of Service Security System Management VLAN

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Configuring the Switch Using the Web User Interface



Any figures included in the document are shown for illustrative purposes only.

- Introduction to Day 0 WebUI Configuration, on page 3
- Cisco DNA Center Cloud Onboarding Day 0 Wizard, on page 4
- Classic Day 0 Wizard, on page 7

Introduction to Day 0 WebUI Configuration

After you complete the hardware installation, you need to setup the switch with configuration required to enable traffic to pass through the network. On your first day with your new device, you can perform a number of tasks to ensure that your device is online, reachable and easily configured.

The Web User Interface (Web UI) is an embedded GUI-based device-management tool that provides the ability to provision the device, to simplify device deployment and manageability, and to enhance the user experience. You can use WebUI to build configurations, monitor, and troubleshoot the device without having CLI expertise.

You have two methods to configure the switch using the WebUI.

- Cisco DNA Center Cloud Onboarding Day 0 Wizard
- Classic Day 0 Wizard

Figure 1: WebUI Day 0 Wizard

	DNAC Cloud Onboarding Day 0 Wizard		Classic Day 0 Wizard						
	This wizard would enable you to on-board this device to dnacentercload.cisco.com. The wizard would give you step by step guidance to configure the management interface and check the cloud reachability. Make sure you have created a Cisco DNA Center Cloud account and added the device before you start the wizard.		This wizard would enable you to configure the Switch with basic and advanced settings like User account, Management Interface IP address/UAN_STP mode selection etc. Once the wizard is successfully completed, user can access the Switch via WEBUI and command line using the Management Interface IP address provided.						
NSTRUCTIC	NS BELOW BEFORE YOU BEGIN								
sure that yc	u have all the required information from your service provide	er to complete the	configuration.						
By default, the	wizard enables some recommended configurations. We rea	commend that yo	u keep these defaults unless you have a reason to change						
m.									
his wizard he	elps you to bring up your WAN/LAN connectivity quickly. You	u can change the	configuration and configure advanced features after the						
ard complete	s successfully.								
As a best prac	tice, when you use WebUI to configure a device, do not del	lete or modify the	 As a best practice, when you use WebUI to configure a device, do not delete or modify the configuration directly by logging into the device. Changing the configuration method could lead to errors. 						

Cisco DNA Center Cloud Onboarding Day 0 Wizard

Use this wizard to configure the management interface and check if it is reachable through the cloud.

Note

You must add the device to your Cisco DNA Center Cloud account before proceeding with this wizard.

Configuring Account Settings

Setting a username and password is the first task you will perform on your device. Typically, as a network administrator, you will want to control access to your device and prevent unauthorized users from seeing your network configuration or manipulating your settings.

- **Step 1** Log on using the default username **webui** and password **cisco**.
- **Step 2** Set a password of up to 25 alphanumeric characters.

The username password combination you set gives you privilege 15 access. The string cannot start with a number, is case sensitive, and allows spaces but ignores leading spaces.

- **Step 3** In the **Device ID Settings** section, type a unique name in the **Device Name** field to identify your device in the network.
- **Step 4** Enter the date and time for your device manually in the **Time & Device Mode** field. To synchronize your device with an external timing mechanism such as a Network Time Protocol (NTP) clock source, enter the IP address in the **NTP Server** field.

Figure 2: Account Settings

	BASIC SETTINGS			SUMMARY
create New Account			DEVICE INFO	HELP AND TIPS
Login Name*	testuser			
Login User Password*			Establish a new Usern Please remember it fo	ame and Password for the Device. r next Login.
Confirm Login User Password*			Establish a new passv level.	vord for the privileged command
evice ID Settings			Device name is an ide physical hardware dev	ntification that is given to the vice.
Device Name*	testdevice		clock synchronization	ol (NTP) is a networking protocol for between computer systems over able-latency data networks. Enter NTP server.
NTP Server	хххх			nen the difference in time will be f configuring the device.
Date & Time Mode	NTP Time	•	adjusted at the time o	comganing the device.
< Welcome Page				Basic Settings >

Configuring Basic Device Settings

On the **Basic Settings** page configure the following information:

Step 1 In the **Device Management Settings** section, assign an IP address to the management interface using either *Static* or *DHCP* address.

- **Step 2** If you chose *Static*, perform the following steps:
 - a) Enter a VLAN ID to associate with the interface in the Associate VLAN Interface drop-down list.
 - b) Ensure that the IP address you assign is part of the subnet mask you enter.
 - c) Optionally, enter an IP address to specify the default gateway.
 - d) Enter the address of the DNS Server.

Figure 3: Basic Settings - Static Configuration

	C BASIC SETTINGS	SUMMARY
evice Management Settings		HELP AND TIPS
P Address	Static DHCP	
/LAN ID*	2	Select this to enable access to the device using Telnet. Configur username and password to authenticate user access to the devic Select this to enable access to the device using Telnet. Configur
P Address*	XXXX	username and password to authenticate user access to the device
Subnet Mask*	X.X.X.X	Select this to enable secure remote access to the device using Secure Shell (SSH). Configure a username and password to authenticate user access to the device.
Default Gateway (optional)	x.x.x.x (optional)	Enable transparent mode if you do not want the switch to particip in VTP, A VTP transparent switch does not advertise its VLAN
Associate VLAN Interface	GigabitEthernet1/0/2 🗸	configuration and does not synchronize its VLAV configuration and does not synchronize its VLAV based on received advertisements, but transparent switches do forward VTP advertisements that they receive out their truck por
DNS Server	X.X.X.X	VTP Version 2.

- **Step 3** If you chose *DHCP*, perform the following steps:
 - a) Enter a value in the VLAN ID field.

VLAN ID must be a value other than 1.

- b) Ensure that the IP address you assign is part of the subnet mask you enter.
- c) Optionally, enter an IP address to specify the default gateway.
- d) Enter the address of the DNS Server.

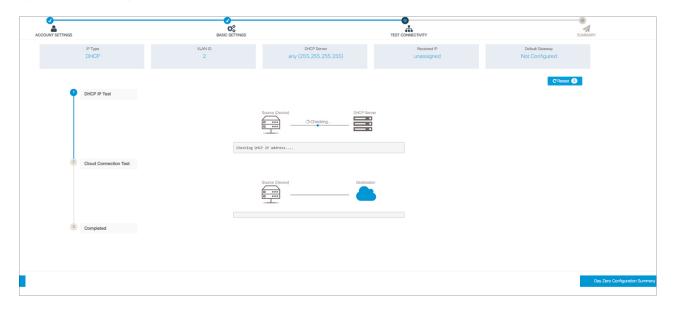
Figure 4: Basic Settings - DHCP Configuration

ACCOUNT SETTINGS	BASIC SETTINGS	TEST CONNECTIVITY	SUMMARY
evice Management Settings			HELP AND TIPS
IP Address	Static DHCP		
VLAN ID*	2		Select this to enable access to the device using Telnet. Configure username and password to authenticate user access to the device
IP Address*	XXXX		Select this to enable access to the device using Telnet. Configure username and password to authenticate user access to the device
Subnet Mask*	XXXX		Select this to enable secure remote access to the device using Secure Shell (SSH). Configure a username and password to authenticate user access to the device.
Default Gateway (optional)	x.x.x.x (optional)		Enable transparent mode if you do not want the switch to particip in VTP, A VTP transparent switch does not advertise its VLAN
DNS Server	ХХХХ		In VIP. A VIP transparent switch todes not advertee to VLAV configuration and does not synchronize its VLAN configuration based on received advertisements, but transparent switches do forward VTP advertisements that they receive out their trunk port VTP Version 2.

L

Configuring Test Connectivity

- **Step 1** Use the **Test Connectivity/Retest** button to ensure that connection is established between the device to the Cisco DNAC Cloud.
- Step 2If connection is not established, click the Retest button.If connection still fails, go to the previous Basic Settings page, make changes to the settings, and test connectivity again.
- Step 3Once connectivity is established, go to the Day Zero Configuration Summary to save the configurations.Figure 5: Test Connectivity



Step 4 Verify that the configurations are applied successfully, and the device is redirected to Cisco DNAC Cloud.

What to do next

If redirection does not succeed, verify if the device is associated with a redirection controller profile on *Cisco PnP Connect (devicehelper)*.

Classic Day 0 Wizard

Use this wizard to configure the device with basic and advanced settings. Once complete, you can access the device through the WebUI using the management interface IP address.

Connecting to the Switch

Before you begin

Set up the DHCP Client Identifier on the client to get the IP address from the switch, and to be able to authenticate with Day 0 login credentials.

Setting up the DHCP Client Identifier on the client for Windows

- 1. Type **regedit** in the Windows search box on the taskbar and press *enter*.
- 2. If prompted by User Account Control, click Yes to open the Registry Editor.
- 3. Navigate to

Computer\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\Interfaces\ and locate the Ethernet Interface Global Unique Identifier (GUID).

4. Add a new REG_BINARY DhcpClientIdentifier with Data 77 65 62 75 69 for webui. You need to manually type in the value.

Figure 6: Setting up DHCP Client Identifier on Windows

📑 Registry Editor				- 🗆 🗙
File Edit View Favorites Help				
Computer\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlS	\Services\Tcpip\Parameters\Interfaces\{46836	ffc-6358-4da1-b9f8-a2a10f1a0c48}		
> stexstor	Name Ty	pe Data		
> stisvc		G_SZ (value not set)		
> 📙 storahci		G_DWORD 0x0000000 (0)		
> 📕 storfit		G_BINARY 77 65 62 75 69		
> 📙 stornvme		0_511VAR1 11 05 02 15 05		
> 📙 storqosfit	Edit Binary Value		×	le 01 00 79 00 00 00 00 00 00 0
> StorSvc	Value name:			
> 📙 storufs	DhcpClientIdentifier			
> storvsc				
> svsvc	Value data:			
> swenum	0000 77 65 62 7	5 69	webui	
> swprv				
- 📙 SynaMetSMI				
- Synth3dVsc				
> SynTP				
SynTPEnhService SysMain				
SystemEventsBroker SzCCID				
> TabletInputService				
> TapiSrv				
			OK Cancel	
Linkage	10 12			
- Parameter	-60.4	<u></u>		
✓ Parameters				
> Adapters				
> DNSRegisteredAdapters				
✓ Interfaces				
2a1d7785-5141-4b33-8f11-4b5cf324636c				
-] {2e6a118d-8ff9-45c8-b861-13bbbf590a22}				
-] {3f99fba7-ae95-43f6-b34c-e2fbdde8cb40}				
-] {46836ffc-6358-4da1-b9f8-a2a10f1a0c48}				
- 4828db99-4092-4a20-903b-e304a283e9f0}				
-1 {7baa2017-910a-4c77-b968-a9beb40c9646}				
- 4922467f8-ace4-4789-93b6-9a3799a7b574				
- [{b20b01ef-9511-4f8d-af8d-c03a948db0e1}				
- [{b5fdd031-2580-445b-8430-074e5248bd14} ·				
< >	<			>

5. Restart the PC for the configuration to take effect.

Setting up the DHCP Client Identifier on the client for MAC

1. Go to System Preferences >Network >Advanced >TCP >DHCP Client ID: and enter webui.

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	Netv	vork	Q Search
🔶 Wi-Fi			
•	TCP/IP DNS WINS	802.1X Proxies	Hardware
WI-FI	TCP/IP DINS WINS	802.1X Proxies	Hardware
Configure IPv4:	Using DHCP		
IPv4 Address:	****		Renew DHCP Lease
Subnet Mask:	2332000235222	DHCP Client ID:	webui
Router:	XXXXXXXXXXX		(If required)
Configure IPv6:	Automatically	\$	
Router:	DEROCKSIS X & MXDEXIQ X 3000X		
IPv6 Address:	2008224202524205228882	CANCER RANX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Prefix Length:	1/2/8K		
?			Cancel OK

Figure 7: Setting up DHCP Client Identifier on MAC

2. Click **OK** to save the changes.

The bootup script runs the configuration wizard, which prompts you for basic configuration input: (Would you like to enter the initial configuration dialog? [yes/no]:). To configure Day 0 settings using the web UI, do not enter a response. Perform the following tasks instead:

- **Step 1** Make sure that no devices are connected to the switch.
- **Step 2** Connect one end of an ethernet cable to one of the downlink (non-management) ports on the active supervisor and the other end of the ethernet cable to the host (PC/MAC).
- **Step 3** Set up your PC/MAC as a DHCP client, to obtain the IP address of the switch automatically. You should get an IP address within the 192.168.1.x/24 range.

Figure 8: Obtaining the IP Address

ems > Network Connectio	ins		~ Ū	Search Network C
his connection Rename	e this connection View s	tatus of this connection	Change settings of this	connection 🖷
Cisco AnyConnect Secu Mobility Client Connec Disabled	tion 🦰 🌄 Uni	ernet dentified network el(R) Ethernet Connectio	Enable	Loopback Adapter d Loopback Adapter
VMware Network Ada VMnet8	Network Connection Details	s	×	
	Property Connection-specific DNS S Description Physical Address DHCP Enabled IPv4 Address IPv4 Subnet Mask Lease Obtained Lease Expires IPv4 Default Gateway IPv4 DHCP Server IPv4 DHCP Server IPv4 DNS Server IPv4 WINS Server NetBIOS over Tcpip Enabl	Intel(R) Ethernet Connection 54-EE-75-DC-9F-06 Yes 192.168.1.3 255.255.255.0 Tuesday, June 11, 2019.8.25 Wednesday, June 12, 2019 192.168.1.1 192.168.1.1	:33 AM	

It may take up to three mins. You must complete the Day 0 setup through the web UI before using the device terminal.

Step 4 Launch a web browser on the PC and enter the device IP address (https://192.168.1.1) in the address bar.

Step 5 Enter the Day 0 username webui and password cisco.

What to do next

Create a user account.

Creating User Accounts

Setting a username and password is the first task you will perform on your device. Typically, as a network administrator, you will want to control access to your device and prevent unauthorized users from seeing your network configuration or manipulating your settings.

- **Step 1** Log on using the default username and password provided with the device.
- **Step 2** Set a password of up to 25 alphanumeric characters. The username password combination you set gives you privilege 15 access. The string cannot start with a number, is case sensitive, and allows spaces but ignores leading spaces.

Figure 9: Create Account

Configuration Se			SUMMARY
reate New Account		Hardware and Software	details of the device.
_ogin Name		Platform Type:	
Password		IOS Installed:	
John massword		Serial Number:	
		Modules:	
		License Installed:	
	Creste New Account		Basic Device Settings >

Choosing Setup Options

Select **Wired Network** to configure your device based on a site profile, and continue to configure switch wide settings. Otherwise, continue to the next step and configure only basic settings for your device.

Configuring Basic Device Settings

On the Basic Device Settings page configure the following information:

Step 1 In the **Device ID and Location Settings** section, type a unique name to identify your device in the network.

Step 2 Choose the date and time settings for your device. To synchronize your device with a valid outside timing mechanism, such as an NTP clock source, choose Automatic, or choose Manual to set it yourself.

Configuration Set	tup Wizard				
CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS	PORT SETTINGS	SUMMARY
Device ID and Location Settings				HELP /	AND TIPS
Device Name		<	① Device name is mandatory		
Date & Time Mode	Automatic	•		device name is an identification that is g	iven to the physical hardware device.
		•		If manual time is set then the difference configuring the device.	in time will be adjusted at the time of
Device Management Settings	Mon Aug 13 2018 14:18:06			The management VRF is a dedicated, so manage the router inband on switched interfaces.	
Management Interface	gigabitethernet0/0			Select this to enable access to the devi password to authenticate user access to	ce using Telnet. Configure a username and o the device.
Management IP	x.x.x.x			Select this to enable secure remote acc Configure a username and password to	ess to the device using Secure Shell (SSH). authenticate user access to the device.
Subnet Mask	X.X.X.X			Enable transparent mode if you do not v transparent switch does not advertise it	vant the switch to participate in VTP. A VTP s VLAN configuration and does not
Default Gateway (optional)	x.x.x.x (optional)			synchronize its VLAN configuration base transparent switches do forward VTP ac	ed on received advertisements, but avertisements that they receive out their trunk
< Setup Options					Site Profile >

Figure 10: Basic Settings - Device ID and Location Settings

- **Step 3** In the **Device Management Settings** section, assign an **IP address** to the management interface. Ensure that the IP address you assign is part of the subnet mask you enter.
- **Step 4** Optionally, enter an **IP** address to specify the default gateway.
- **Step 5** To enable access to the device using telnet, check the **Telnet** check box.
- Step 6 To enable secure remote access to the device using Secure Shell (SSH), check the SSH check box.
- Step 7 Check the VTP transparent mode check box to disable the device from participating in VTP.

If you did not select **Wired Network**, in the earlier step, continue to the next screen to verify your configuration on the **Day 0 Config Summary** screen, and click **Finish**. To automatically configure your device based on a site profile, click **Setup Options**, and select **Wired Network**.

Figure 11: Basic Settings - Device	Management Settings
------------------------------------	---------------------

CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS	PORT SETTINGS	SUMMARY
	Mon Aug 13 2018 14:18:37			HELP A	ND TIPS
ce Management Settings nagement Interface nagement IP ponet Mask fault Gateway (optional) net H P transparent mode	gigabitethemeto/0 x.x.xx x.x.xx x.x.xx x.x.xx (optional)			password to authenticate user access to Select this to enable secure remote acc Configure a userame and password to Enable transparent mode if you do not w transparent switch does not advertise its synchronize its VLAN configuration base	In time will be adjusted at the time of incure VRF instance that allows users to innual interfaces (SVIs) and physical the using Teinet. Configure a username and the device. asso to the device using Secure Shell (SSH authenticate user access to the device. and the switch to participate in VTP. A VTT VLAX configuration and does not
< Setup Options					Site Profile >

Configuring Your Device Based on a Site Profile

To ease your configuration tasks and save time, choose a site profile based on where your device may be installed and managed in your network. Based on the site profile you choose, your device is automatically configured according to Cisco best practices. You can easily modify this default configuration, from the corresponding detailed configuration screens.

Choosing a site profile as part of Quick Setup allows you to configure your device based on the business needs of your enterprise. For example, you could use your device as an access switch, to connect client nodes and endpoints on your network, or as a distribution switch, to route packets between subnets and VLANs.

Setting	Single Distribution Switch (Single Downlink)	Single Distribution Switch (Single Port Channel Downlink)	Redundant Distribution Switch (Port Channel Peer and Downlink)
Hostname	The hostname or device name you provided as part of Quick Setup	The hostname or device name you provided as part of Quick Setup	The hostname or device name you provided as part of Quick Setup
Spanning Tree Mode	RPVST+	RPVST+	RPVST+
VTP	Mode Transparent	Mode Transparent	Mode Transparent
UDLD	Enabled	Enabled	Enabled
Error Disable Recovery	Recovery mode set to Auto	Recovery mode set to Auto	Recovery mode set to Auto
Port Channel Load Balance	Source Destination IP	Source Destination IP	Source Destination IP
SSH	Version 2	Version 2	Version 2
SCP	Enabled	Enabled	Enabled
VTY Access to Switch	Enabled	Enabled	Enabled
Service Timestamp	Enabled	Enabled	Enabled
VLAN	The following VLANs are created:	The following VLANs are created:	The following VLANs are created:
	• Default VLAN	• Default VLAN	• Default VLAN
	• Data VLAN	• Data VLAN	• Data VLAN
	Voice VLAN	• Voice VLAN	• Voice VLAN
	Management VLAN	Management VLAN	• Management VLAN

Table 1: Default Configuration Loaded with Each Site Profile (Distribution Switches)

Setting	Single Distribution Switch (Single Downlink)	Single Distribution Switch (Single Port Channel Downlink)	Redundant Distribution Switch (Port Channel Peer and Downlink)
Management Interface	Layer 3 settings	Layer 3 settings	Layer 3 settings
	configured on the	configured on the	configured on the
	management port, based	management port, based	management port, based
	on Quick Setup	on Quick Setup	on Quick Setup
QoS Policy	QoS Policy for	QoS Policy for	QoS Policy for
	Distribution defined	Distribution defined	Distribution defined
Uplink Interfaces	Selected uplink ports	Selected uplink ports	Selected uplink ports
	connect to other	connect to other	connect to other
	distribution or core	distribution or core	distribution or core
	switches	switches	switches
Downlink Interfaces	Downlink connections to	Downlink connections to	Downlink connections to
	access switches	access switches	access switches
	configured in Trunk mode	configured in Trunk mode	configured in Trunk mode
Port-channel	Port-channel to core created	Port-channel to core or access created	Port-channel to core or distribution created

Figure 12: Site Profile - Distribution Switches



CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE SV	VITCH WIDE SETTINGS		SUMMARY
	Access Distributed			HELP A	ND TIPS
Single Distribution Switch	Enable Routing Single Dourhouton Switch Grigte Port Channel Counting My device doesn't resemble an Item in			Select a sails from the last below the base installed. Or specified the sate process business, features will be configured an This can be customized any time through	and to ensure the device best serves omatically according to Cisco Best Pra
Basic Device Settings					Switch Wide Settings

Figure 13: Site Profile - Distribution Switches (with Routed Access)

Table 2: Default Configuration Loaded with Each Site Profile (Core Switches)

Setting	Standalone Core Switch (with ECMP Peers)	Standalone Collapsed Core Switch (with ECMP Peer and Port Channel Downlink)
Hostname	The hostname or device name you provided as part of Quick Setup	The hostname or device name you provided as part of Quick Setup
UDLD	Enabled	Enabled
Error Disable Recovery	Recovery mode set to Auto	Recovery mode set to Auto
Port Channel Load Balance	Source Destination IP	Source Destination IP
SSH	Version 2	Version 2
SCP	Enabled	Enabled
VTY Access to Switch	Enabled	Enabled
Mitigate Address Spoofing	Unicast RPF (uRPF) in strict mode	Unicast RPF (uRPF) in strict mode
Service Timestamp	Enabled	Enabled
Management Interface	Layer 3 settings configured on the management port, based on Quick Setup	Layer 3 settings configured on the management port, based on Quick Setup
QoS Policy	QoS Policy for Distribution/Core defined	QoS Policy for Distribution/Core defined
Uplink Interfaces	Selected uplink ports connect to MAN/WAN device	Selected uplink ports connect to MAN/WAN device
Downlink Interfaces	Downlink connections to access switches	Downlink connections to distribution switches

Setting	Standalone Core Switch (with ECMP Peers)	Standalone Collapsed Core Switch (with ECMP Peer and Port Channel Downlink)
Cross-connect Interfaces	Selected ports connect to other core switches	Selected ports connect to other core switches

Figure 14: Site Profile - Core Switches

CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS	PORT SETTINGS	SUMMARY
	Access Distributed	Core		O HELP	AND TIPS
Standalone web ECk		Standalone Collap with ECMP Peer and P		 Select a site from the list behavior will be inside the device will be inside the device of the device will be configured a Best Practices. This can be detailed configuration. 	talled. To expedite the setu evice best serves your busi utomatically according to C

Configuring VLAN Settings

- **Step 1** In the **VLAN Configuration** section, you can configure both data and voice VLANs. Type a name for your data VLAN.
- **Step 2** To configure a data VLAN, ensure that the **Data VLAN** check box is checked, type a name for your VLAN, and assign a VLAN ID to it. If you are creating several VLANs, indicate only a VLAN range.
- **Step 3** To configure a voice VLAN, ensure that the **Voice VLAN** check box is checked, type a name for your VLAN, and assign a VLAN ID to it. If you are creating several VLANs, indicate a VLAN range.

Configure STP Settings

- **Step 1** RPVST is the default STP mode configured on your device. You can change it to PVST from the **STP Mode** drop-down list.
- **Step 2** To change a bridge priority number from the default value 32748, change **Bridge Priority** to Yes and choose a priority number from the drop-down list.

Figure 15: VLAN and STP Settings

Ø	⊘		•		
CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS	PORT SETTINGS	SUMMARY
VLAN Configuration				HELP A	ND TIPS
Data VLAN				A data VLAN is a VLAN that	is configured to correction
Voice VLAN				generated traffic.Voice VLAN	allows you to enhance VoIP
Management VL Switch Wide Settings				service by configuring ports phones on a specific VLAN.	to carry IPvoice traffic from IP
STP Configuration				STP is to prevent bridge loops and the b	roadcast radiation that results from them.
				The part of a network address which ide	ntifies it as belonging to a particular domain.
STP Mode Bridge Priority	RPVST	•		Configure Syslog Client within the Cisco through emergencies to generate error n malfunctions.	
Bridge Priority Number	32768	×		Protocol for network management and it network devices, such as switches, and	s collecting information from, and configuring, routers on an IP network.
General Configuration					
< Site Profile					Port Settings >

Configuring DHCP, NTP, DNS and SNMP Settings

- **Step 1** In the **Domain Details** section, enter a domain name that the software uses to complete unqualified hostnames.
- **Step 2** Type an IP address to identify the DNS server. This server is used for name and address resolution on your device.
- **Step 3** In the Server Details section, type the IP address of the DNS server that you want to make available to DHCP clients.
- **Step 4** In the **Syslog Server** field, type the IP address of the server to which you want to send syslog messages.
- **Step 5** To ensure that your device is configured with the right time, date and timezone, enter the IP address of the NTP server with which you want to synchronize the device time.
- **Step 6** In the **Management Details** section, type an IP address to identify the SNMP server. SNMPv1, SNMPv2, and SNMPv3 are supported on your device.
- **Step 7** Specify the **SNMP community** string to permit access to the SNMP protocol.

Figure 16: DHCP, NTP, DNS and SNMP Settings

CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS	PORT SETTINGS	SUMMARY
General Configuration				HELP A	ND TIPS
omain Details Dornain Name DNS Server DNS Server DHCP Server Syslog Server NTP Server				allows you to enhance VolP service by o IP phones on a specific VLAN. STP is to prevent bridge loops and the b The part of a network address which ide Configure Systels Gliet which the Cisco through emergencies to generate error malfunctions.	tiffies it as belonging to a particular domain. Device, use a severity level of warnings nessage about software and hardware ament and its collecting uring, network devices, such
anagement Details					
< Site Profile					Port Settings >

What to do next

Configure port settings.

Configuring Port Settings

- **Step 1** Based on the site profile chosen in the earlier step which is displayed in the left-pane, select the **Port Role** from among the following options:
 - Uplink For connecting to devices towards the core of the network.
 - Downlink For connecting to devices further down in the network topology.
 - Access For connecting guest devices that are VLAN-unaware.
- **Step 2** Choose an option from the **Select Switch** drop-down list.
- **Step 3** Make selections from the **Available** list of interfaces based on how you want to enable them and move them to the **Enabled** list.

Figure 17: Port Settings

CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS	PORT SETTINGS	SUMMARY
	Port Role OUplink	Access			
	Select Switch ALL	•			
• T a	Available (16)	Enabled (0)		
	Uplinks 😒	Interfaces			
\mathbf{X}	GigabitEthernet1/1/1	÷			
- 🕀 -	GigabitEthernet1/1/2	÷			
()	GigabitEthernet1/1/3	÷			
	GigabitEthernet1/1/4	>			
Switch Wide Settings					Day 0 Config Summary

What to do next

- Click Day 0 Config Summary to verify your setup.
- Click Finish.

Figure 18: Day 0 Config Summary

Ø	0	Ø	0	<u> </u>	•	
CREATE ACCOUNT	BASIC SETTINGS	SITE PROFILE	SWITCH WIDE SETTINGS		SUMMARY	
IMARY					CLI Preview	
	This screen provides	the summary of all the steps configured as a pa	art of the day zero configuration. Please click Finish to con	figure the device.		
General Information	✓ User: test, ✓ Network Type: Wire	ed , 🗸 Site Profile: Single Access Switch - Sin	gle Uplink			
Basic Device Configuration	✓ Controller Name: test, ✓ Manage	✓ Controller Name: test, ✓ Management Interface: glgabiltethemet0/0(1.1.1.1),				
Global Switch Settings	✓ Data VLAN: (), ✓ Voice VLAN: (n	ot configured), 🗸 STP Mode: rapid-pvst, 🗸 Br	idge Priority: 32768, 🗸 DNS Server: , 🗸 DHCP Server: ,	✓ NTP Server: , ✓ Syslog Server: , ✓ SNMP Server:		
Port Configuration		Uplink Ports		Downlink Ports		
		No Ports were configured		No Ports were configured		
< Port Settings					Finish	

Configuring VTY Lines

For connecting to the device through Telnet or SSH, the Virtual Terminal Lines or Virtual TeleType (VTY) is used. The number of VTY lines is the maximum number of simultaneous access to the device remotely. If the device is not configured with sufficient number of VTY lines, users might face issues with connecting to the WebUI. The default value for VTY Line is 0-15. The device allows up to 99 simultaneous sessions.

Step 1 From the WebUI, navigate through **Administration > Device** and select the **General** page.

Step 2 In the **VTY Line** field, enter **0-xx**, depending on how many VTY lines you want to configure.

Figure 19: Configuring VTY Line

Q Search Menu Items	Administration • > Device			
📻 Dashboard	General	IP Routing	DISABLED	
Monitoring >	FTP/SFTP/TFTP	Host Name* 🚯	SW-9200	
Configuration	Bluetooth	Banner		
Administration				
C Licensing		Management Interface	GigabitEthernet0/0	
X Troubleshooting		IP Address* 1		
		Subnet Mask*		
		System MTU(Bytes) 1	1500	
		VTY Line 0	0-30	View VTY options
		VTY Transport Mode	Select a value	