Access the CLI via PuTTY on CBS 250 and 350 Switches

Objective

Switches can be accessed and configured through the Command Line Interface (CLI). Accessing the CLI allows commands to be entered in a terminal based window. For a user who has had more experience with terminal commands, this may be an easier alternative to navigating the web configuration utility. Certain tasks such as recovering an administrator password can only be performed through the CLI. In order to access the CLI you must use an SSH client. PuTTY is a standard SSH client and can be found <u>here</u>. This document assumes you are connecting to the switch using PuTTY.

The objective of this document is to show you how to access the Command Line Interface (CLI) of a switch and a Secure Shell (SSH) client.

Applicable Devices | Software Version

- CBS250 (Data Sheet) | 3.0.0
- CBS350 (Data Sheet) | 3.0.0
- CBS350-2X (Data Sheet) | 3.0.0
- CBS350-4X (Data Sheet) | 3.0.0

Accessing the CLI via PuTTY with a Console Connection

Step 1. Connect the switch to the computer using a standard 9-pin serial cable.

The Cisco DB9 to RJ45 Console Cable also supports console connections, but only if the switch has an RJ45 Console port. An RJ45 Console port resembles an Ethernet port and is labeled CONSOLE on the back of the switch.

Newer laptops don't have Serial ports on them, so in this case you have to use a USB to Serial adapter. When plugging that into a computer it assigns a COM port number to it that is not COM1. If this is the case for you, you need to know where to look to find the correct COM port number when setting up the connection with PuTTY. Right-click on the Windows logo/Start menu and click on Device Manager to open it.

In the Device Manager, you would look to see what COM port is given to the USB adapter. In this case you would need to use COM4 for the Serial line to make the connection.

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File Action	View	Help		
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PuTTY Config Category: Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin	guration	Basic of Specify the desti Serial line COM4 O Raw O T Load, save or de Saved Sessions Default Settings Switch	options for your PuTT nation you want to con e: Telnet () Rlogin () lete a stored session s	? × Y session nnect to Speed 9600 SSH Serial Load Save Delete
PuTTY Config Category: Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin SSH Serial	guration	Basic of Specify the desti Serial line COM4 O Raw O T Load, save or de Saved Sessions Default Settings Switch	options for your PuTT nation you want to con e: elnet () Rlogin () lete a stored session s	? × Y session nnect to Speed 9600 SSH
PuTTY Config Category: Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin SSH Serial	guration	Basic of Specify the desti Serial line COM4 O Raw O T Load, save or de Saved Sessions Default Settings Switch	pptions for your PuTT nation you want to con e: Telnet () Rlogin () lete a stored session s s	<pre>? × Y session nnect to Speed 9600 SSH Serial Load Save Delete on clean exit</pre>

Session	Ontions controlling	local serial lines
- Logging - Terminal - Keyboard - Bell	Select a serial line Serial line to connect to	COM4
- Window	Configure the serial line	0000
Appearance	Speed (baud)	9600
- Behaviour Translation	Data bits	8
+ Selection	Stop bits	1
- Colours	Parity	None ~
Data	Flow control	XON/XOFF \vee
-Telnet -Rlogin ★SSH - <mark>Serial</mark>		

Step 2. Open the PuTTY application. The *PuTTY Configuration* window opens:

Category:	
Session	Basic options for your PuTTY session
	Specify the destination you want to connect to
Keyboard Rell	Host Name (or IP address) Port
Features	Connection type: ◯ Raw ◯ Telnet ◯ Rlogin
Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin Byst	Load, save or delete a stored session Saved Sessions Default Settings Load Save Delete
Serial	Close window on exit: Always Never Only on clean exit
About	Open Cancel

Step 3. Under the *Connection Type* field, click the **Serial** radio button.

Category:		
Session	Basic options for your PuTTY session	
Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet	Basic options for your PuTTY session Specify the destination you want to connect to Serial line Speed COM1 9600 Connection type: Raw Telnet Rlogin SSH Serial Load, save or delete a stored session Saved Sessions Default Settings Load Save Delete	
About	Close window on exit: Always Never Only on clean exit Open Cancel	

Step 4. In the *Category* navigation field, choose Serial.

Category:	
E Session	Basic options for your PuTTY session
⊡ Logging ⊡ Terminal Keyboard Bell	Specify the destination you want to connect toSerial lineSpeedCOM19600
Features ⊡ Window	Connection type: Raw
Appearance Behaviour Translation Selection Colours Onnection Data Proxy Telnet Rlogin SSH	Load, save or delete a stored session Saved Sessions Default Settings Load Save Delete
Serial	Close window on exit: Always Never Only on clean exit
About	Open Cancel

The Options controlling local serial lines page opens:

Category:		
	Options controlling local serial lines	
E- Logging Terminal Keyboard Bell Features Window	Select a serial line Serial line to connect to Configure the serial line Speed (baud)	COM1 9600
 Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin SSH Serial 	Data bits Stop bits Parity Flow control	8 1 None • XON/XOFF •
About		Open Cancel

Step 5. In the *Serial line to connect to* field, enter the COM port that your device is connected to. The default COM port is COM1.

Category:		
Session	Options controlling	g local serial lines
Logging	Select a serial line	
Erminal Keyboard	Serial line to connect to	СОМ1
Features	Configure the serial line	
	Speed (baud)	9600
Appearance Behaviour	Data bits	8
Translation	Stop bits	1
Colours	Parity	None -
	Flow control	XON/XOFF -
Data Proxy Telnet Rlogin SSH Serial		
About		Open Cancel

Step 6. In the *Speed (baud)* field, enter the digital transmission speed that is compatible with the switch. For 250 and 350 Series Managed Switches, the speed must be set to **115200**.

Category:		
- Session	Options controlling	g local serial lines
Logging	Select a serial line	COMI
Keyboard Bell	Configure the serial line	COMI
⊡ Features	Speed (baud)	115200
Behaviour	Data bits	8
···· Translation	Stop bits	1
Colours	Parity	None -
Colours Connection Data Proxy Telnet Rlogin €SSH Serial	Flow control	XON/XOFF -
About		Open Cancel

Step 7. In the *Data bits* field, enter the number of data bits used for each character. The recommended value is **8**.

Category:	0	
En Session	Options controlling Select a serial line	g local serial lines
erminal W Keyboard	Serial line to connect to	COM1
Features	Configure the serial line	
	Speed (baud)	115200
Appearance Behaviour	Data bits	8
···· Translation	Stop bits	1
Colours	Parity	None 🔻
Colours ⊡ · Connection ··· Data ··· Proxy ··· Telnet ··· Rlogin ⊡ · SSH ··· SSH ··· Serial	Flow control	None 💌
About	(Open Cancel

Step 8. In the *Stop bits* field, enter the number of bits to be sent at the end of every character. The stop bit informs the machine that it has reached the end of a byte. The recommended value is **1**.

Category:		
	Options controlling	local serial lines
	Select a serial line	
Keyboard	Serial line to connect to	COM1
Bell Features	Configure the serial line	
	Speed (baud)	115200
···· Appearance ···· Behaviour	Data bits	8
···· Translation	Stop bits	1
Selection Colours	Parity	None 👻
Connection	Flow control	None 💌
Proxy		
···· Telnet		
⊞. SSH		
Serial		
About	0	Open Cancel

Step 9. In the *Parity* drop-down menu, select the method of detecting errors in transmission. The recommended method for detecting errors in transmission is **None**.

Category:		
Session	Options controlling	g local serial lines
Logging	Select a serial line	
···· Keyboard ···· Bell	Serial line to connect to	COM1
Features	Configure the serial line	
⊡ · Window	Speed (baud)	115200
Appearance Behaviour	Data bits	8
···· Translation	Stop bits	1
Colours	Parity	None 🔻
Colours ⊂ Connection Data Proxy Telnet Rlogin CSH Serial	Flow control	None 🔻
About	(Open Cancel

Step 10. In the *Flow Control* drop-down menu, select the method of preventing data overflow. The recommended method for preventing data overflow is **None**.

Category:		
E. Session	Options controlling local serial lines	
	Select a serial line	
···· Keyboard	Serial line to connect to	COM1
Bell Features	Configure the serial line	
⊡. Window	Speed (baud)	115200
Appearance Behaviour	Data bits	8
Translation	Stop bits	1
Selection Colours	Parity	None 🔻
	Flow control	None 🔻
Proxy		
Telnet		
Serial		
About		Open Cancel

Step 11. (Optional) In order to save the connection settings for future use, go to the *Category* navigation pane and choose **Session**. If you do not wish to save the connection settings, skip to Step 14.

Real PuTTY Configuration		23
Category:		
Category: Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Colours Connection Data Proxy Telnet Rlogin SSH Serial	Options controllin Select a serial line Serial line to connect to Configure the serial line Speed (baud) Data bits Stop bits Parity Flow control	ng local serial lines COM1 115200 8 1 None • None •
About		Open Cancel

Step 12. Under the Saves Sessions field, enter a name for the settings to be saved as.



Step 13. Click Save.

🕵 PuTTY Configuration		23	
Category:			
Category: Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Colours Connection Data Proxy Telnet Rlogin SSH Serial	Basic options for your PuTTY session Specify the destination you want to connect to Serial line Speed COM1 115200 Connection type: Raw Telnet Rlogin SSH Serial Load, save or delete a stored session Saved Sessions Caseada Compaction		
	Default Settings	Load Save Delete	
	Close window on exit: Always Never Only on clean exit		
About	Open	Cancel	

Step 14. Click Open.

Category:				
Category: Session Cogging Terminal Keyboard Bell Features Window Appearance Behaviour Translation	Options controlling Select a serial line Serial line to connect to Configure the serial line Speed (baud) Data bits Stop bits	local serial lines COM1 115200 8 1		
Selection Colours Connection Data Proxy Telnet Rlogin SSH Serial	Parity Flow control	None		
About		Open Cancel		

The COM1 – PuTTY console window opens.

Step 15. Hit **Enter** on the keyboard to activate the Command Line Interface (CLI). The log in prompt is displayed:

						~
User	Name:					
						$\overline{\nabla}$

Step 16. Enter the User Name. The default username is *cisco*.



Step 14. Enter the Password. The default password is *cisco*.

