Supplementary Installation-Related Information and Procedures

Log In and Out as the Linux CLI Users

The Linux CLI has two shell users: One with administrative access (Linux CLI admin user), and another with root access (Linux CLI root user). The following diagram illustrates the flow for logging in and out as the various CLI users.
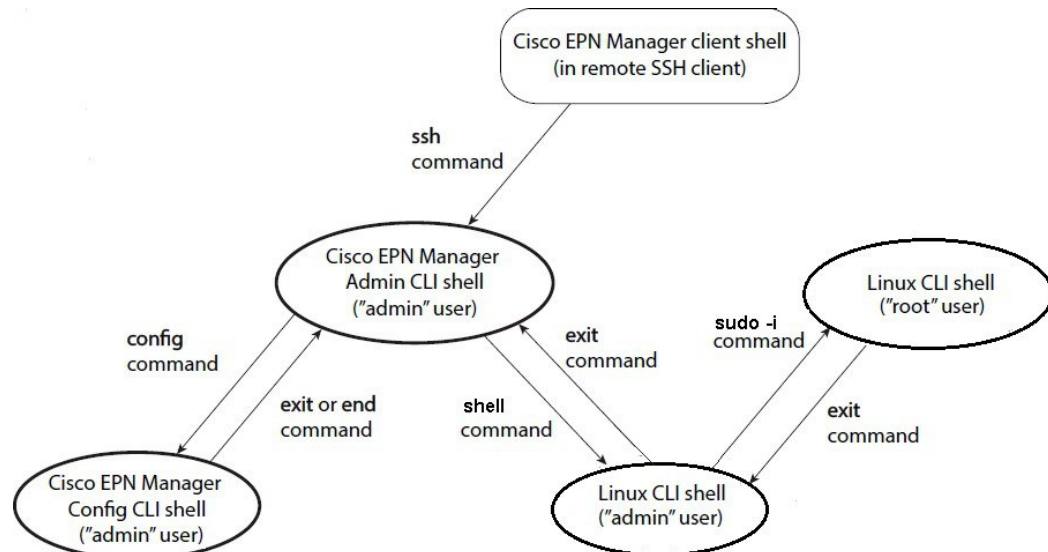
To log in as the Linux CLI root user, you will have to transition from being the Cisco EPN Manager **CLI admin user** to the **Linux CLI admin user** to the **Linux CLI root user**. The following procedure gives you the exact steps you must follow to log in as these users. For more information on these users, refer to the Cisco Evolved Programmable Network Manager User and Administrator Guide.

Before You Begin

If the Linux CLI user is disabled, re-enable it. Refer to the user management procedures in the Cisco Evolved Programmable Network Manager User and Administrator Guide.

Step 1   To log in as the Linux CLI root user:

1. Start an SSH session with the Cisco EPN Manager server and log in as the Cisco EPN Manager CLI admin user.
2. As the Cisco EPN Manager CLI admin user, log in as the Linux CLI admin user:

```
shell
Enter shell access password:
password
```

3. Log in as the Linux CLI root user:

```
sudo -i
```

By default, the Linux CLI shell prompt is the same for the Linux CLI admin and root user. You can use the **whoami** command to check the current user.

Step 2   To exit:

1. Log out as the Linux CLI root user.

```
exit
```

You are now logged in as the Linux CLI admin user.

2. Log out as the Linux CLI admin user:

```
exit
```

You are now logged in as the Cisco EPN Manager CLI admin user.

What to do next

For security purposes, disable the Linux CLI users. Refer to the user management procedures in the Cisco Evolved Programmable Network Manager User and Administrator Guide.

Copy Files From a Client Machine to the Cisco EPN Manager Server

Before You Begin

You can use SCP, FTP, or SFTP protocols to retrieve files from the client machine. Make sure the required protocol is enabled on your client machine and the required ports are open (see Ports Used by Cisco EPN Manager).

This procedure explains how to copy files from your client machine to the Cisco EPN Manager server.

Step 1   Start an SSH session with the Cisco EPN Manager server and log in as the Cisco EPN Manager CLI admin user.

Step 2   Log in as the Linux CLI admin user (see Log In and Out as the Linux CLI Users).

Step 3   From the Cisco EPN Manager server, retrieve the file from the client machine. You can use SCP, FTP, or SFTP. This example uses the **scp** command, which has the following syntax:

```
scpclientUsername@clientIP:/fullpath-to-file-on-client
/server-directory
```

Where:

- *clientUsername* is your username on the client machine
- *clientIP* is the IP address of the client machine
- *fullpath-to-file-on-client* is the full path to the file on the client machine that you want to copy to the server
- *server-directory* is the path to the directory on the server to which you want to copy the file

In the following example, a file named **myfile** located in the /temp directory on the client machine is being copied to the /localdisk/defaultRepo on the Cisco EPN Manager server.

```
scp joesmith@123.456.789.101:/temp/myfile /localdisk/defaultRepo
```

Step 4   Log out as the Linux CLI admin user as described in Log In and Out as the Linux CLI Users.

Synchronize the Hardware and NTP Clock

This procedure synchronizes the hardware clock with the NTP clock using the **hwclock** command.

Step 1   Log in as the Linux CLI root user as described in Log In and Out as the Linux CLI Users.

Step 2   Check the NTP service status and ensure that NTP has obtained a stable time reference using the following commands. The following includes examples of the output you should see.

1. Ensure that ntpd is running.

```
service ntpd status
 ntpd (pid 3290) is running...
```

2. If ntpd (pid 3290) is not running, start it using the following command:

```
service ntpd start
```

(Repeat *Step a* to ensure it is running.)

3. Ensure that NTP is receiving time from an NTP server.

```
ntpstat
 synchronised to NTP server (10.116.133.175) at stratum 3    time correct to within 62 ms
polling server every 1024 s
```

If you do not see output similar to this, then NTP synchronization has not yet occurred. Wait a few minutes and run **ntpstat** again. If synchronization does not happen within 10 minutes, contact your system administrator or Cisco support.

Step 3 Synchronize the hardware clock with NTP using the following command:

```
hwclock --systohc --debug
```

You should see output similar to the following:

```
hwclock from util-linux-ng 2.17.2
Using /dev interface to clock.
Last drift adjustment done at 1470117750 seconds after 1969
Last calibration done at 1470117750 seconds after 1969
Hardware clock is on local time
Assuming hardware clock is kept in local time.
Waiting for clock tick...
...got clock tick
Time read from Hardware Clock: 2016/08/02 16:03:30
Hw clock time : 2016/08/02 16:03:30 = 1470117810 seconds since 1969
1470117810.500000 is close enough to 1470117810.500000 (0.000000 < 0.001000)
Set RTC to 1470117810 (1470117810 + 0; refsystime = 1470117810.000000)
Setting Hardware Clock to 16:03:30 = 1470117810 seconds since 1969
ioctl(RTC_SET_TIME) was successful.
Not adjusting drift factor because it has been less than a day since the last calibration.
root$
```

Step 4 Verify that the hardware clock is synchronized with NTP.

```
 echo "hwclock is: $(hwclock --show)" ; echo "linux clock is: $(date)";
```

Check the output and ensure that the two clocks are synchronized (to at least within a few seconds of each other):

```
Hwclock is: Tue 26 Jul 2016  06:11:40  PM AEST  -0.391028 secondslinux clock is: Tue Jul 26  18:11:40
  AEST 2016
```

Step 5 As the Linux CLI admin user, restart the Cisco EPN Manager services.

• If you are logged in as the Linux CLI root user, switch to the Linux CLI admin user.

```
exit
```

• Switch to the Cisco EPN Manager CLI admin user.

```
exit
```

• Stop and restart the Cisco EPN Manager services.

```
ncs stop
ncs start
```

Log Into the Cisco EPN Manager Web GUI

Follow these steps to log into the Cisco EPN Manager web GUI:

Procedure

Step 1 On a client machine, launch one of the supported browsers (see Web Client Requirements).

Step 2 In the browser's address line, enter `https://serverIP`, where *serverIP* is the IP address of the server on which you installed Cisco EPN Manager. The login window is displayed.

When a client accesses the Cisco EPN Manager web GUI for the first time, the browser may display a warning that the site is untrusted. When this happens, follow the prompts to add a security exception and download the self-signed certificate from the Cisco EPN Manager server. After you complete this procedure, the browser will accept the Cisco EPN Manager server as a trusted site in all future login attempts.

Step 3 Enter the web GUI root username and password, as specified during the installation.

If any licensing problems occur, a message appears in an alert box. If you have an evaluation license, the number of days until the license expires is shown. You are also alerted about any expired licenses. (You have the option to go directly to the **Administration** > **Licenses and Software Updates** > **Licenses** page to address these problems.) For more information about licenses, refer to the Cisco Evolved Programmable Network Manager User and Administrator Guide .

Step 4 Click **Login** to log in to the Cisco EPN Manager web GUI. The home page appears and you can now use the web GUI. For information about the dashboards and dashlets, refer to the Cisco Evolved Programmable Network Manager User and Administrator Guide .

Step 5 For increased security, perform these steps:

1. Change the password for the web GUI root user by choosing **Administration** > **Users** > **Roles & AAA** > **Change Password**.

2. Create at least one Cisco EPN Manager web GUI user that has Admin or Super User privileges, then disable the web GUI root user. For information on disabling this user, refer to the user management topics in the Cisco Evolved Programmable Network Manager User and Administrator Guide .

3. If you have not done so already, disable the Linux CLI users. Refer to the Cisco Evolved Programmable Network Manager User and Administrator Guide .

What to do next

Perform setup tasks for server, user, fault, and web GUI management. For a detailed list of tasks, see the beginning of the administration section of the Cisco Evolved Programmable Network Manager User and Administrator Guide .

For information on Cisco EPN Manager user interfaces and user types, Cisco Evolved Programmable Network Manager User and Administrator Guide .

Time Zones Supported by Cisco Evolved Programmable Network Manager

This table lists the available values for the system time zone.

Africa/Abidjan	America/St_Johns	Etc/GMT+6
Africa/Accra	America/St_Kitts	Etc/GMT+7
Africa/Addis_Ababa	America/St_Lucia	Etc/GMT+8
Africa/Algiers	America/St_Thomas	Etc/GMT+9
Africa/Asmara	America/St_Vincent	Etc/GMT0
Africa/Asmera	America/Swift_Current	Etc/GMT-0
Africa/Bamako	America/Tegucigalpa	Etc/GMT-1
Africa/Bangui	America/Thule	Etc/GMT-10
Africa/Banjul	America/Thunder_Bay	Etc/GMT-11
Africa/Bissau	America/Tijuana	Etc/GMT-12
Africa/Blantyre	America/Toronto	Etc/GMT-13
Africa/Brazzaville	America/Tortola	Etc/GMT-14
Africa/Bujumbura	America/Vancouver	Etc/GMT-2
Africa/Cairo	America/Virgin	Etc/GMT-3
Africa/Casablanca	America/Whitehorse	Etc/GMT-4
Africa/Ceuta	America/Winnipeg	Etc/GMT-5
Africa/Conakry	America/Yakutat	Etc/GMT-6
Africa/Dakar	America/Yellowknife	Etc/GMT-7
Africa/Dar_es_Salaam	Antarctica/Casey	Etc/GMT-8
Africa/Djibouti	Antarctica/Davis	Etc/GMT-9
Africa/Douala	Antarctica/DumontDUrville	Etc/Greenwich
Africa/El_Aaiun	Antarctica/Mawson	Etc/UCT
Africa/Freetown	Antarctica/McMurdo	Etc/Universal
Africa/Gaborone	Antarctica/Palmer	Etc/UTC
Africa/Harare	Antarctica/Rothera	Etc/Zulu

Africa/Johannesburg	Antarctica/South_Pole	Europe/Amsterdam
Africa/Kampala	Antarctica/Syowa	Europe/Andorra
Africa/Khartoum	Antarctica/Vostok	Europe/Athens
Africa/Kigali	Arctic/Longyearbyen	Europe/Belfast
Africa/Kinshasa	Asia/Aden	Europe/Belgrade
Africa/Lagos	Asia/Almaty	Europe/Berlin
Africa/Libreville	Asia/Amman	Europe/Bratislava
Africa/Lome	Asia/Anadyr	Europe/Brussels
Africa/Luanda	Asia/Aqtau	Europe/Bucharest
Africa/Lubumbashi	Asia/Aqtobe	Europe/Budapest
Africa/Lusaka	Asia/Ashgabat	Europe/Chisinau
Africa/Malabo	Asia/Ashkhabad	Europe/Copenhagen
Africa/Maputo	Asia/Baghdad	Europe/Dublin
Africa/Maseru	Asia/Bahrain	Europe/Gibraltar
Africa/Mbabane	Asia/Baku	Europe/Guernsey
Africa/Mogadishu	Asia/Bangkok	Europe/Helsinki
Africa/Monrovia	Asia/Beirut	Europe/Isle_of_Man
Africa/Nairobi	Asia/Bishkek	Europe/Istanbul
Africa/Ndjamena	Asia/Brunei	Europe/Jersey
Africa/Niamey	Asia/Calcutta	Europe/Kaliningrad
Africa/Nouakchott	Asia/Choibalsan	Europe/Kiev
Africa/Ouagadougou	Asia/Chongqing	Europe/Lisbon
Africa/Porto-Novo	Asia/Chungking	Europe/Ljubljana
Africa/Sao_Tome	Asia/Colombo	Europe/London
Africa/Timbuktu	Asia/Dacca	Europe/Luxembourg
Africa/Tripoli	Asia/Damascus	Europe/Madrid
Africa/Tunis	Asia/Dhaka	Europe/Malta
Africa/Windhoek	Asia/Dili	Europe/Mariehamn
America/Adak	Asia/Dubai	Europe/Minsk

America/Anchorage	Asia/Dushanbe	Europe/Monaco
America/Anguilla	Asia/Gaza	Europe/Moscow
America/Antigua	Asia/Harbin	Europe/Nicosia
America/Araguaina	Asia/Ho_Chi_Minh	Europe/Oslo
America/Argentina/	Asia/Hong_Kong	Europe/Paris
America/Argentina/	Asia/Hovd	Europe/Podgorica
America/Argentina/Catamarca	Asia/Irkutsk	Europe/Prague
America/Argentina/Cordoba	Asia/Istanbul	Europe/Riga
America/Argentina/Jujuy	Asia/Jakarta	Europe/Rome
America/Argentina/La_Rioja	Asia/Jayapura	Europe/Samara
America/Argentina/Mendoza	Asia/Jerusalem	Europe/San_Marino
America/Argentina/Rio_Gallegos	Asia/Kabul	Europe/Sarajevo
America/Argentina/Salta	Asia/Kamchatka	Europe/Simferopol
America/Argentina/San_Juan	Asia/Karachi	Europe/Skopje
America/Argentina/San_Luis	Asia/Kashgar	Europe/Sofia
America/Argentina/Tucuman	Asia/Kathmandu	Europe/Stockholm
America/Argentina/Ushuaia	Asia/Katmandu	Europe/Tallinn
America/Aruba	Asia/Kolkata	Europe/Tirane
America/Asuncion	Asia/Krasnoyarsk	Europe/Tiraspol
America/Atikokan	Asia/Kuala_Lumpur	Europe/Uzhgorod
America/Atka	Asia/Kuching	Europe/Vaduz
America/Bahia	Asia/Kuwait	Europe/Vatican
America/Barbados	Asia/Macao	Europe/Vienna
America/Belem	Asia/Macau	Europe/Vilnius
America/Belize	Asia/Magadan	Europe/Volgograd
America/Blanc-Sablon	Asia/Makassar	Europe/Warsaw
America/Boa_Vista	Asia/Manila	Europe/Zagreb
America/Bogota	Asia/Muscat	Europe/Zaporozhye
America/Boise	Asia/Nicosia	Europe/Zurich

America/Buenos_Aires	Asia/Novosibirsk	Factory
America/Cambridge_Bay	Asia/Omsk	GB
America/Campo_Grande	Asia/Oral	GB-Eire
America/Cancun	Asia/Phnom_Penh	GMT
America/Caracas	Asia/Pontianak	GMT+0
America/Catamarca	Asia/Pyongyang	GMT0
America/Cayenne	Asia/Qatar	GMT-0
America/Cayman	Asia/Qyzylorda	Greenwich
America/Chicago	Asia/Rangoon	Hongkong
America/Chihuahua	Asia/Riyadh	HST
America/Coral_Harbour	Asia/Riyadh87	Iceland
America/Cordoba	Asia/Riyadh88	Indian/Antananarivo
America/Costa_Rica	Asia/Riyadh89	Indian/Chagos
America/Cuiaba	Asia/Saigon	Indian/Christmas
America/Curacao	Asia/Sakhalin	Indian/Cocos
America/Danmarkshavn	Asia/Samarkand	Indian/Comoro
America/Dawson	Asia/Seoul	Indian/Kerguelen
America/Dawson_Creek	Asia/Shanghai	Indian/Mahe
America/Denver	Asia/Singapore	Indian/Maldives
America/Detroit	Asia/Taipei	Indian/Mauritius
America/Dominica	Asia/Tashkent	Indian/Mayotte
America/Edmonton	Asia/Tbilisi	Indian/Reunion
America/Eirunepe	Asia/Tehran	Iran
America/El_Salvador	Asia/Tel_Aviv	Israel
America/Ensenada	Asia/Thimbu	Jamaica
America/Fort_Wayne	Asia/Thimphu	Japan
America/Fortaleza	Asia/Tokyo	Kwajalein
America/Glace_Bay	Asia/Ujung_Pandang	Libya
America/Godthab	Asia/Ulaanbaatar	MET

America/Goose_Bay	Asia/Ulan_Bator	Mexico/BajaNorte
America/Grand_Turk	Asia/Urumqi	Mexico/BajaSur
America/Grenada	Asia/Vientiane	Mexico/General
America/Guadeloupe	Asia/Vladivostok	Mideast/Riyadh87
America/Guatemala	Asia/Yakutsk	Mideast/Riyadh88
America/Guayaquil	Asia/Yekaterinburg	Mideast/Riyadh89
America/Guyana	Asia/Yerevan	MST
America/Halifax	Atlantic/Azores	MST7MDT
America/Havana	Atlantic/Bermuda	Navajo
America/Hermosillo	Atlantic/Canary	New_Salem
America/Indiana/Indianapolis	Atlantic/Cape_Verde	NZ
America/Indiana/Knox	Atlantic/Faeroe	NZ-CHAT
America/Indiana/Marengo	Atlantic/Faroe	Pacific/Apia
America/Indiana/Petersburg	Atlantic/Jan_Mayen	Pacific/Auckland
America/Indiana/Tell_City	Atlantic/Madeira	Pacific/Chatham
America/Indiana/Vevay	Atlantic/Reykjavik	Pacific/Easter
America/Indiana/Vincennes	Atlantic/South_Georgia	Pacific/Efate
America/Indiana/Winamac	Atlantic/St_Helena	Pacific/Enderbury
America/Indianapolis	Atlantic/Stanley	Pacific/Fakaofo
America/Inuvik	Australia/ACT	Pacific/Fiji
America/Iqaluit	Australia/Adelaide	Pacific/Funafuti
America/Jamaica	Australia/Brisbane	Pacific/Galapagos
America/Jujuy	Australia/Broken_Hill	Pacific/Gambier
America/Juneau	Australia/Canberra	Pacific/Guadalcanal
America/Kentucky/Louisville	Australia/Currie	Pacific/Guam
America/Kentucky/Monticello	Australia/Darwin	Pacific/Honolulu
America/Knox_IN	Australia/Eucla	Pacific/Johnston
America/La_Paz	Australia/Hobart	Pacific/Kiritimati
America/Lima	Australia/LHI	Pacific/Kosrae

America/Los_Angeles	Australia/Lindeman	Pacific/Kwajalein
America/Louisville	Australia/Lord_Howe	Pacific/Majuro
America/Maceio	Australia/Melbourne	Pacific/Marquesas
America/Managua	Australia/North	Pacific/Midway
America/Manaus	Australia/NSW	Pacific/Nauru
America/Marigot	Australia/Perth	Pacific/Niue
America/Martinique	Australia/Queensland	Pacific/Norfolk
America/Mazatlan	Australia/South	Pacific/Noumea
America/Mendoza	Australia/Sydney	Pacific/Pago_Pago
America/Menominee	Australia/Tasmania	Pacific/Palau
America/Merida	Australia/Victoria	Pacific/Pitcairn
America/Mexico_City	Australia/West	Pacific/Ponape
America/Miquelon	Australia/Yancowinna	Pacific/Port_Moresby
America/Moncton	Brazil/Acre	Pacific/Rarotong
America/Monterrey	Brazil/DeNoronha	Pacific/Saipan
America/Montevideo	Brazil/East	Pacific/Samoa
America/Montreal	Brazil/West	Pacific/Tahiti
America/Montserrat	Buenos_Aires	Pacific/Tarawa
America/Nassau	Canada/Atlantic	Pacific/Tongatapu
America/New_York	Canada/Central	Pacific/Truk
America/Nipigon	Canada/Eastern	Pacific/Wake
America/Nome	Canada/East-Saskatchewan	Pacific/Wallis
America/Noronha	Canada/Mountain	Pacific/Yap
America/North_Dakota/	Canada/Newfoundland	Poland
America/North_Dakota/Center	Canada/Pacific	Portugal
America/Panama	Canada/Saskatchewan	PRC
America/Pangnirtung	Canada/Yukon	PST8PDT
America/Paramaribo	CET	ROC
America/Phoenix	Chile/Continental	ROK

America/Port_of_Spain	Chile/EasterIsland	Singapore
America/Port-au-Prince	ComodRivadavia	Turkey
America/Porto_Acre	CST6CDT	UCT
America/Porto_Velho	Cuba	Universal
America/Puerto_Rico	EET	US/Alaska
America/Rainy_River	Egypt	US/Aleutian
America/Rankin_Inlet	Eire	US/Arizona
America/Recife	EST	US/Central
America/Regina	EST5EDT	US/Eastern
America/Resolute	Etc/GMT	US/East-Indiana
America/Rio_Branco	Etc/GMT+0	US/Hawaii
America/Rosario	Etc/GMT+1	US/Indiana-Starke
America/Santarem	Etc/GMT+10	US/Michigan
America/Santiago	Etc/GMT+11	US/Mountain
America/Santo_Domingo	Etc/GMT+12	US/Pacific
America/Sao_Paulo	Etc/GMT+2	US/Samoa
America/Scoresbysund	Etc/GMT+3	UTC
America/Shiprock	Etc/GMT+4	WET
America/St_Barthelemy	Etc/GMT+5	W-SU
		Zulu