Expedition Installation Guide

Contact Information

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About the Documentation

- For the most recent version of this guide, visit the Expedition Live Community Documentation portal :
  https://live.paloaltonetworks.com/t5/Expedition-Migration-Tool/ct-p/migration_tool
- Have feedback or questions for us? Leave a comment on any page in the portal, or write to us at fwmigrate@paloaltonetworks.com

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Resources Needed

The following resources are needed to install Expedition into your environment.

❑ **Ubuntu 20.04.* LTS Server (64-bits AMD)**

*Please do not download Ubuntu 22.x , it is not supported at this point, expedition installation script won't execute at all.

The Ubuntu server image can be downloaded from the link below:

https://ubuntu.com/download/server

The Ubuntu server will need to be provisioned by the end-user. Options include downloading and installing Ubuntu 20.04.* LTS ISO onto a customer-managed server or to provision an Ubuntu 20.04.* LTS virtual server available from Google Cloud, AWS or Azure.

❑ **Expedition installer File**

The Installer File **expedition1_Installer_latest.tgz** can be downloaded from below link:

https://conversionupdates.paloaltonetworks.com/expedition1_Installer_latest.tgz

System Requirements

The recommended system requirements for the Expedition server are listed in the following table.

Primary usage	Recommended Compute Resources
Migration	4 CPU/Cores 8 GB RAM 40 GB storage 1 nic with 100Mbps/1Gbps
Machine Learning (5 or fewer firewalls)	8 CPU/Cores 16 GB RAM 1 x 6GB (OS related data) 1 x 150 GB SSD (Project Settings and connection.parquet files) 1 x 4 TB (Traffic and other log files) 1 nic with 100Mbps/1Gbps
Machine Learning (6 or more firewalls)	8 CPU/Cores 32 GB RAM 1 x 6GB (OS related data) 1 x 150 GB SSD (Project Settings and connection.parquet files) 1 x 4 TB (Traffic and other log files) 1 nic with 100Mbps/1Gbps

Installation Steps

1) Install Ubuntu Server 20.04.* LTS (64-bits AMD)

> **Note:** Please note that a Hypervisor is required to run a virtual machine (VM).
> The following steps are specific to using VMWare Desktop Fusion for Mac as the Hypervisor.
> However, depending on the Hypervisor used, some of the subsequent steps may vary slightly

1) **Download the Ubuntu iso file:**
   a) Visit https://ubuntu.com/download/server , select**"Option 2: Manual Server Installation**
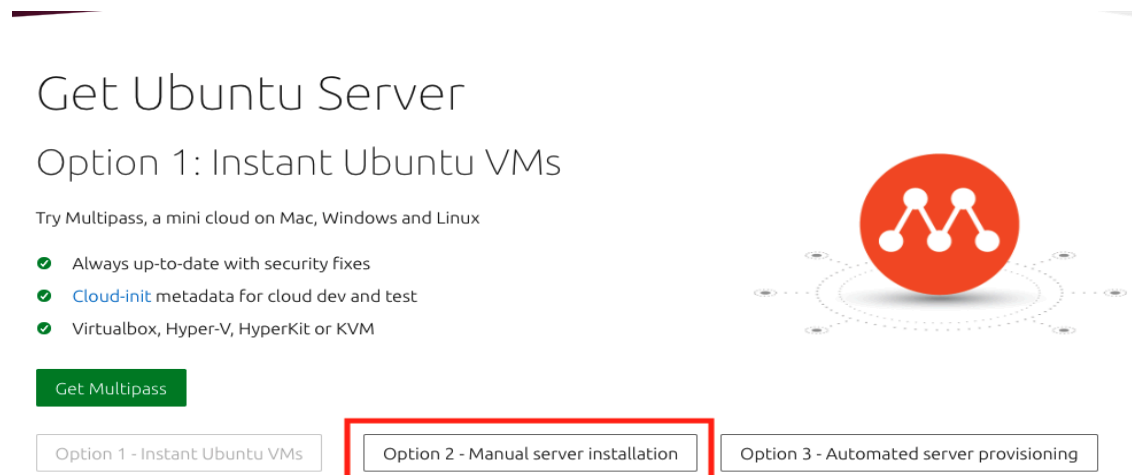
Select **"Alternative Downloads"**

Get Ubuntu Server

Option 2: Manual server installation

USB or DVD image based physical install

- ✔ OS security guaranteed until April 2025
- ✔ Extended security maintenance until April 2030
- ✔ Commercial support for enterprise customers

[Download Ubuntu Server 22.04 LTS]   Alternative downloads ›   Alternative architectures ›

Read the Ubuntu Server 22.04 LTS release notes

Option 1 - Instant Ubuntu VMs	Option 2 - Manual server installation	Option 3 - Automated server provisioning

Click on **"Ubuntu Server 20.04.* LTS"** to download the image. Make sure that the downloaded image is the server amd64 iso.

Alternative downloads

BitTorrents

BitTorrent sometimes enables higher download speeds and more reliable downloads of large files.

[Ubuntu Server 22.04 LTS]

[Ubuntu Server 21.10]

Ubuntu Server 20.04 LTS

The previous long-term support version of Ubuntu Server, including support guaranteed until April 2025.

[Get Ubuntu Server 20.04 LTS]

Other versions

Other versions of Ubuntu Server including torrents, the network installer, a list of local mirrors and past releases.

See alternative downloads ›

b) Launch VMware Fusion and click **"+"** , select **"new"**
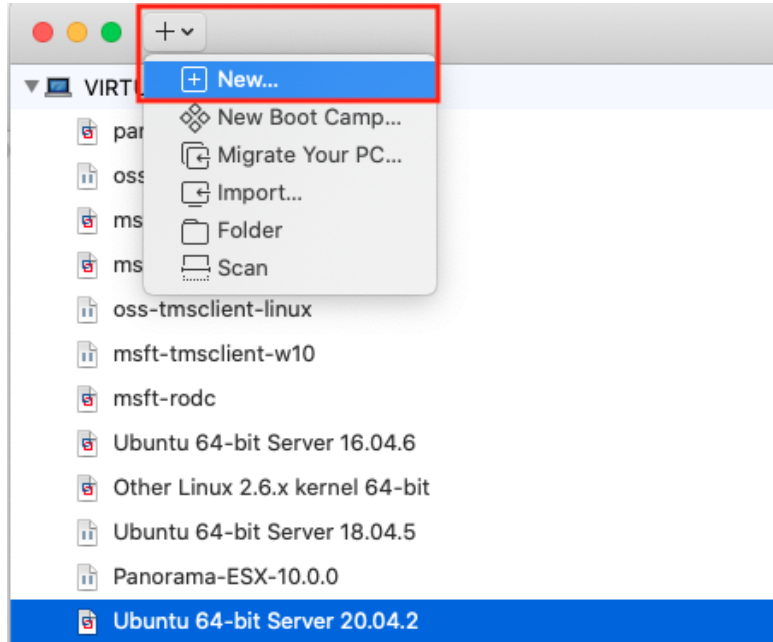
c) Drag the downloaded **ubuntu-20.04.*-live-server-amd64.iso** file to the installation area to start installation

---
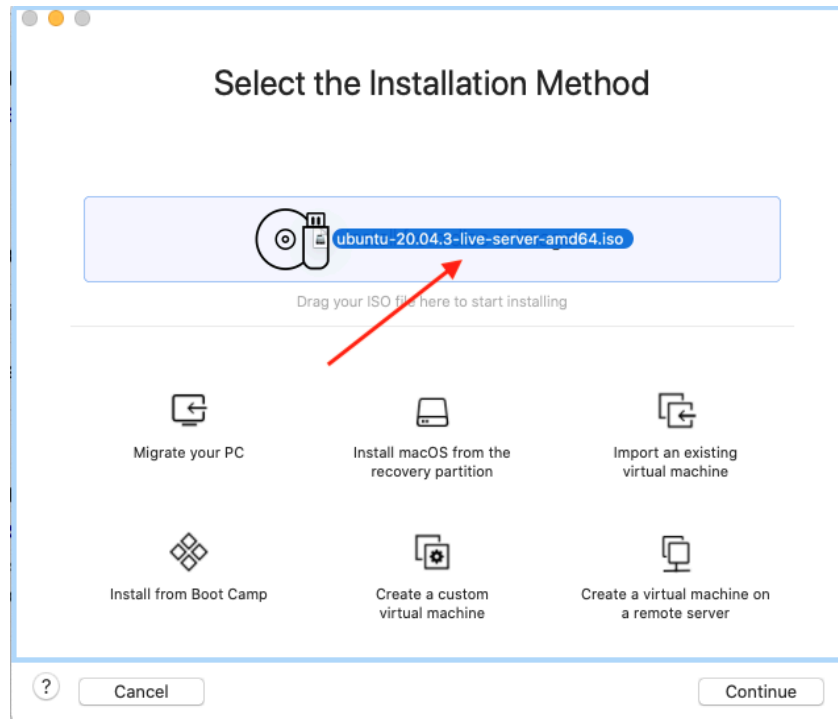
d) Choose the **ubuntu-20.04.*-live server-amd64.iso** image , and click **"Continue"**
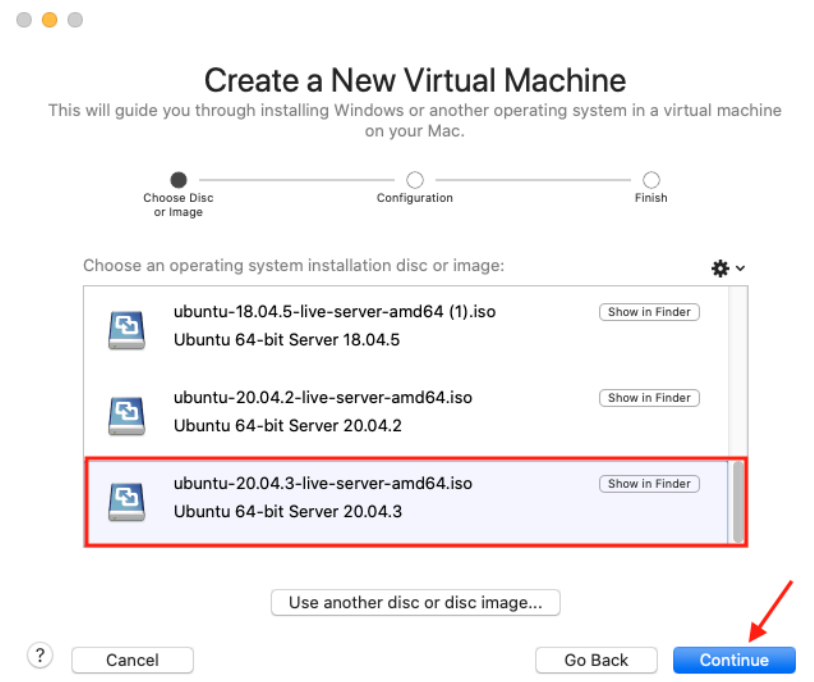
e) Create an **"expedition"** account to install the Ubuntu VM , using the default password **"paloalto"** . Click **"Continue".** **Note:** You can change the login credential after you completely finished Step 2 Install Expedition

---
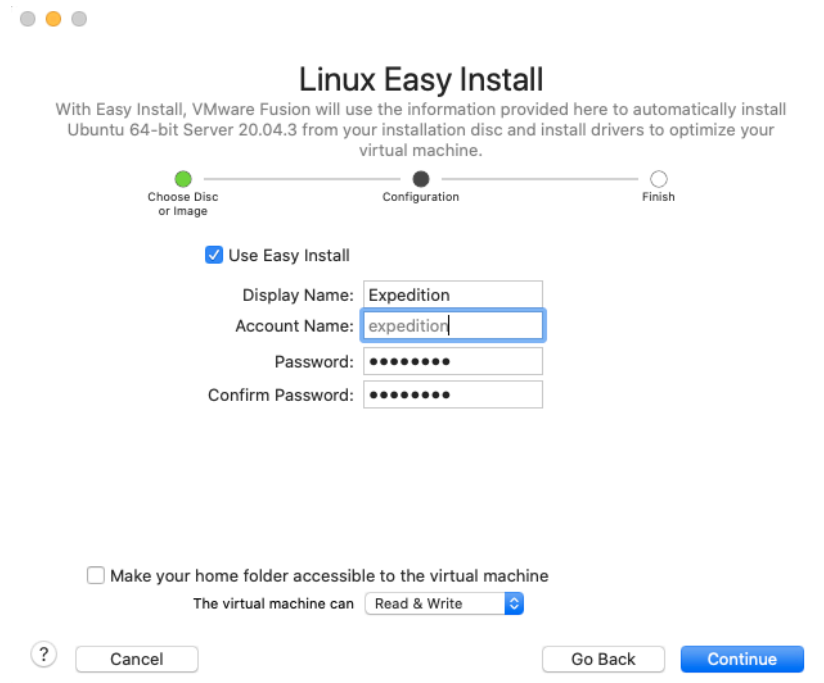
f) Review the setting , and click on **"Finish".** It will auto start ubuntu vm installations.
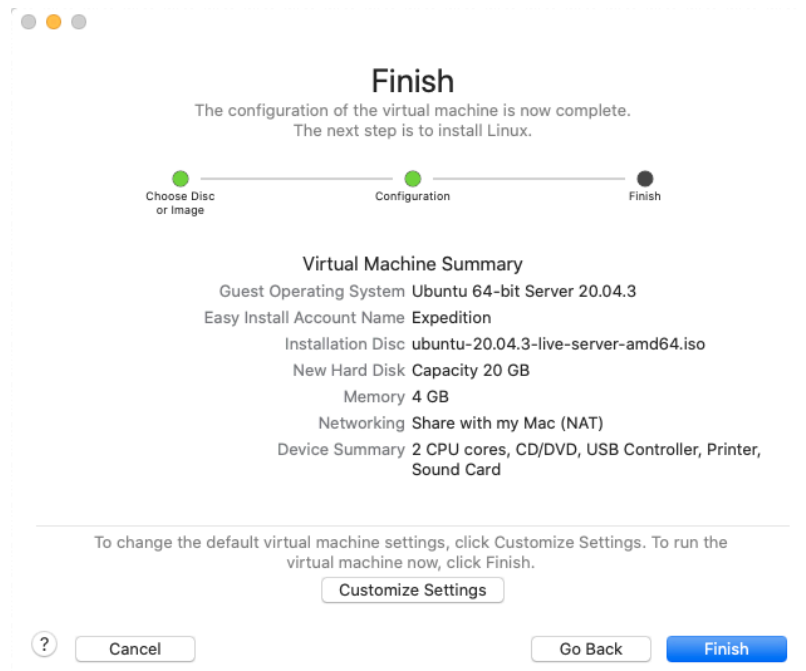
g) When the VM is auto-started , go to the menu bar and select **"Virtual Machine"** -> **"Shutdown"** to temporarily shutdown the VM.
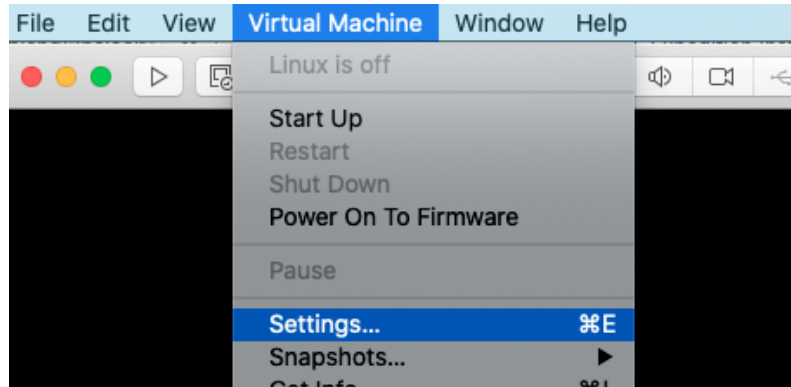
Click **"Settings"** to display setting options of the VM:
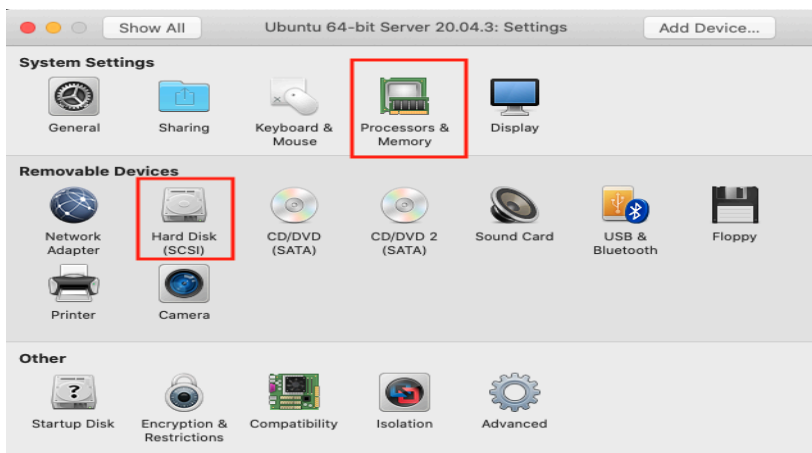
Click **"Processors & Memory"** to increase the CPU and Memory resources , and change the Settings to meet the recommended system requirements per your primary use case.
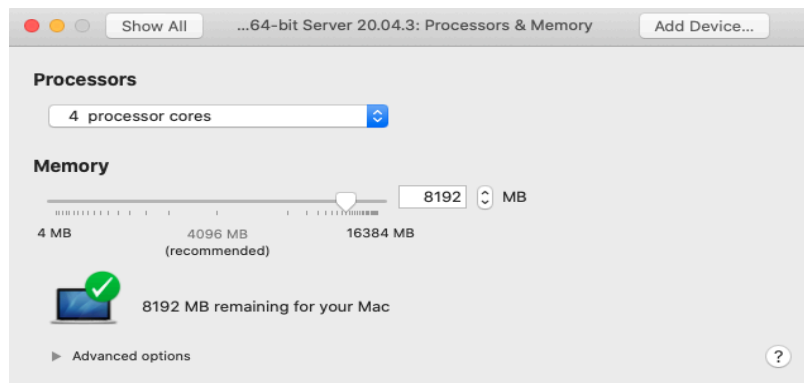
Click **"Show All"** on the top of the menu bar to take you back to the all settings page.

Click **"Hard Disk(SCSI)"** to increase the hard drive space to meet the recommended system requirements per your primary use case.
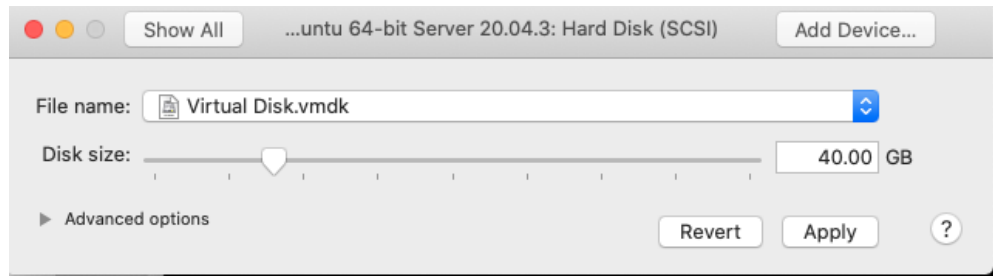
Once you finish changing all the settings , highlight the Ubuntu VM and right click to select **"Start Up"** , the Ubuntu VM installation will continue.

h) Select **"English"** as default language , click **"Done"** to continue.
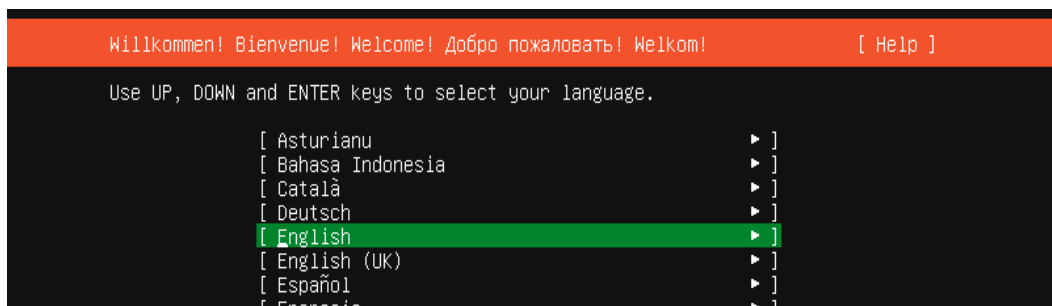
i) By default , the Ubuntu server will auto acquire an IP address from the DHCP pool. click **"Done"** to continue. You could also assign a static IP if it's prefered in your environment.
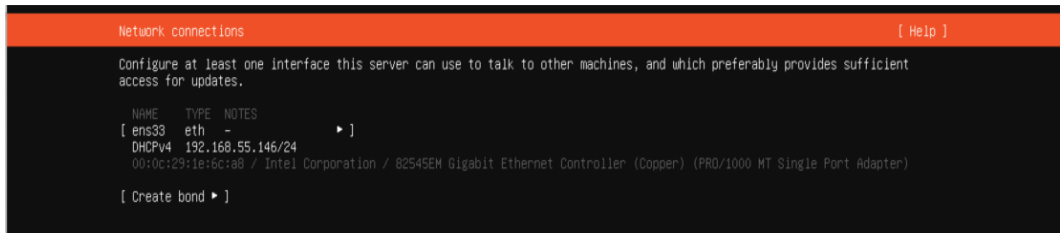
j) Continue to click **"Done"** to go through the default settings. When it reaches the **"Profile Setup"** screen, create an account **"expedition"** and default password **"paloalto"** for login to the system. Click **"Done"**.

Note: You can change the login credential after you completely finished

k) Select to **Install OpenSSH server** . click **"Done"**. Installation requires connections to the Internet , Installation will take less than **5** minutes.

l) Once Installation is completed, the **" Install Complete!"** will be shown on the top , select **"Reboot Now"** to reboot the server.

```
Install complete!                                           [ Help ]

              curtin command apt-config
              curtin command in-target
          running 'curtin curthooks'
              curtin command curthooks
                configuring apt configuring apt
                installing missing packages
                configuring iscsi service
                configuring raid (mdadm) service
                installing kernel
                setting up swap
                apply networking config
                writing etc/fstab
                configuring multipath
                updating packages on target system
                configuring pollinate user-agent on target
                updating initramfs configuration
                configuring target system bootloader
                installing grub to target devices
        finalizing installation
          running 'curtin hook'
              curtin command hook
        executing late commands
final system configuration
  configuring cloud-init
  installing openssh-server
  downloading and installing security updates
  restoring apt configuration
subiquity/Late/run

                        [ View full log ]
                        [ Reboot Now     ]
```

2) Install Expedition Application

1) **Download the installer file:**

There are two ways to download the installer, you can select one of the method below:

1) Download the installer on the ubuntu VM by issue below command:

$cd /tmp

$sudo wget https://conversionupdates.paloaltonetworks.com/expedition1_Installer_latest.tgz

2) Download from any machine and move the installer to expedition VM:
   a) Click on the URL https://conversionupdates.paloaltonetworks.com/expedition1_Installer_latest.tgz to download the latest version
   b) From your local drive scp the installer file to the Ubuntu VM, replace IP in **red** to your expedition IP

   $scp expedition1_Installer_latest.tgz expedition@*192.168.55.147*:/tmp

2) SSH to the Ubuntu VM using account **"expedition"** with the default password **"paloalto"**

3) **Unpack the installer file on UbuntuVM:**
   a) **$cd /tmp**
   b) **$tar -zxvf expedition1_Installer_latest.tgz**

   This will result in two new files. One is the installer, the second is another tgz file that has some initial databases.

   expedition@ubuntu:**~/tmp**$ ls -al

```
[expedition@expedition1:/tmp$ ls -l
total 60
-rw-r--r-- 1 expedition expedition  8806 Sep  7 20:09 databases.tgz
-rw-r--r-- 1 expedition expedition 16589 Sep  7 20:07 initSetup_v2.0.sh
```

4) **Make the initSetup.sh executable**

   a) **$chmod 755 initSetup_*.sh**

5) **Execute the installer script**
   a) Verify that you are able to reach the following external repositories:

   - http://ppa.launchpad.net/adiscon/v8-stable/ubuntu
   - http://ppa.launchpad.net/deadsnakes/ppa/ubuntu
   - https://packages.erlang-solutions.com/ubuntu
   - https://conversionupdates.paloaltonetworks.com/

- http://ppa.launchpad.net/ondrej/apache2/ubuntu
- http://ppa.launchpad.net/ondrej/php/ubuntu
- http://www.rabbitmq.com/debian/
- https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu/
- http://us.archive.ubuntu.com
- http(s)://launchpad.net
- https://files.pythonhosted.org
- https://packagecloud.io/install/repositories/rabbitmq/rabbitmq-server

b) If you are in doubt, we recommend disabling the Global Protect app temporarily before you run the script

The Ubuntu server should have internet access as the installer script will perform an update of the Expedition software by connecting to the Palo Alto Networks update servers for Expedition and additional Ubuntu dependencies, such as MariaDB, Apache Web Server, RabbitMQ, JVM 1.8, etc.

c) **$sudo ./initSetup*.sh**

The script will start running, it requires the user account **"expedition"** to exist before running the script. If you did not create an "expedition" account in the previous step, it will prompt you that the account is needed and stop the script.

```
expedition@expedition1:/tmp$ sudo ./initSetup_v2.0.sh
[sudo] password for expedition:


    ************************************************************************************
    *                                                                                  *
    *              WELCOME TO EXPEDITION ASSISTED INSTALLER v.0.4 (07/27/2021)          *
    *                                                                                  *
    *   This script will download and install required packages to prepare Expedition on *
    *   Ubuntu server 20.04. A NEW image is expected for this installer to take effect.  *
    *   This installer requires Internet Connection                                     *
    *                                                                                  *
    *                                                                                  *
    *   We do not take any responsibility and we are not liable for any damage caused   *
    *   through use of this tool, be it indirect, special, incidental or consequential  *
    *   damages (including but not limited to damages for loss of business, loss of pro- *
    *   fits, interruption or the like). If you have any questions regarding the terms of *
    *   use outlined here, please do not hesitate to contact us at                      *
    *                       fwmigrate@paloaltonetworks.com                              *
    *                                                                                  *
    *   If you continue with this installation you acknowledge having read the above lines *
    *                                                                                  *
    ************************************************************************************




No LSB modules are available.

Correct Ubuntu Server 20.04 version


WARNING: apt does not have a stable CLI interface. Use with caution in scripts.


This machine does not have Expedition installed


Expedition user already exists


**********************************************************
Updating Debian Repositories
**********************************************************

Updating APT
```

The installation will take approximately **20 mins**. You can ignore below cosmetic error messages during the installation:

```
  ERROR: Command errored out with exit status 1:
   command: /usr/bin/python3 -u -c 'import io, os, sys, setuptools, tokenize; sys.argv[0] = '"'"'/tmp/pip-install-fb044qjv/pillow_1e6aaf0c2f9240339873e1df7c8c2186/setup.py'"'"
'; __file__='"'"'/tmp/pip-install-fb044qjv/pillow_1e6aaf0c2f9240339873e1df7c8c2186/setup.py'"'"';f = getattr(tokenize, '"'"'open'"'"', open)(__file__) if os.path.exists(__file
__) else io.StringIO('"'"'from setuptools import setup; setup()'"'"');code = f.read().replace('"'"'\r\n'"'"', '"'"'\n'"'"');f.close();exec(compile(code, __file__, '"'"'exec'"'
"'))' bdist_wheel -d /tmp/pip-wheel-p7o780qw
       cwd: /tmp/pip-install-fb044qjv/pillow_1e6aaf0c2f9240339873e1df7c8c2186/
  Complete output (174 lines):
  running bdist_wheel
```

```
--------------------------------------
ERROR: Failed building wheel for Pillow
  ERROR: Command errored out with exit status 1:
    command: /usr/bin/python3 -u -c 'import io, os, sys, setuptools, tokenize; sys.argv[0] = '"'"'/tmp/pip-install-1xqnh7dj/pillow_f133b1354aae4a63b672b9a3aa491fce/setup.py'"'"'; __file__='"'"'/tmp/pip-install-1xqnh7d
j/pillow_f133b1354aae4a63b672b9a3aa491fce/setup.py'"'"';f = getattr(tokenize, '"'"'open'"'"', open)(__file__) if os.path.exists(__file__) else io.StringIO('"'"'from setuptools import setup; setup()'"'"');code = f.read(
).replace('"'"'\r\n'"'"', '"'"'\n'"'"');f.close();exec(compile(code, __file__, '"'"'exec'"'"'))' install --record /tmp/pip-record-ssai2mht/install-record.txt --single-version-externally-managed --compile --install-head
ers /usr/local/include/python3.8/Pillow
        cwd: /tmp/pip-install-1xqnh7dj/pillow_f133b1354aae4a63b672b9a3aa491fce/
```

```
--------------------------------------
ERROR: Command errored out with exit status 1: /usr/bin/python3 -u -c 'import io, os, sys, setuptools, tokenize; sys.argv[0] = '"'"'/tmp/pip-install-1xqnh7dj/pillow_f133b1354aae4a63b672b9a3aa491fce/setup.py'"'"'; __fil
e__='"'"'/tmp/pip-install-1xqnh7dj/pillow_f133b1354aae4a63b672b9a3aa491fce/setup.py'"'"';f = getattr(tokenize, '"'"'open'"'"', open)(__file__) if os.path.exists(__file__) else io.StringIO('"'"'from setuptools import se
tup; setup()'"'"');code = f.read().replace('"'"'\r\n'"'"', '"'"'\n'"'"');f.close();exec(compile(code, __file__, '"'"'exec'"'"'))' install --record /tmp/pip-record-ssai2mht/install-record.txt --single-version-externally
-managed --compile --install-headers /usr/local/include/python3.8/Pillow Check the logs for full command output.
Warning: ALREADY_ENABLED: 4050-4070:tcp
```

Once the script is completed , you will see the message below as the last message , you can then proceed to the next step to reboot the VM.

```
****************************************************
Starting Task Manager
****************************************************
```

6) **Reboot the Ubuntu VM**

   $sudo reboot

3) Login to Expedition GUI

   a) The first time you login to the Expedition via google chrome, you will receive the "Your connection is not private" warning message, enter **"thisisunsafe"** on the screen to bypass the warning. It is recommended to re-install the self-signed certificate by following instructions listed on live community :

   https://live.paloaltonetworks.com/t5/expedition-articles/access-expedition-gui-using-google-chrome/ta-p/318360

Your connection is not private

Attackers might be trying to steal your information from **192.168.55.147** (for example, passwords, messages, or credit cards). Learn more
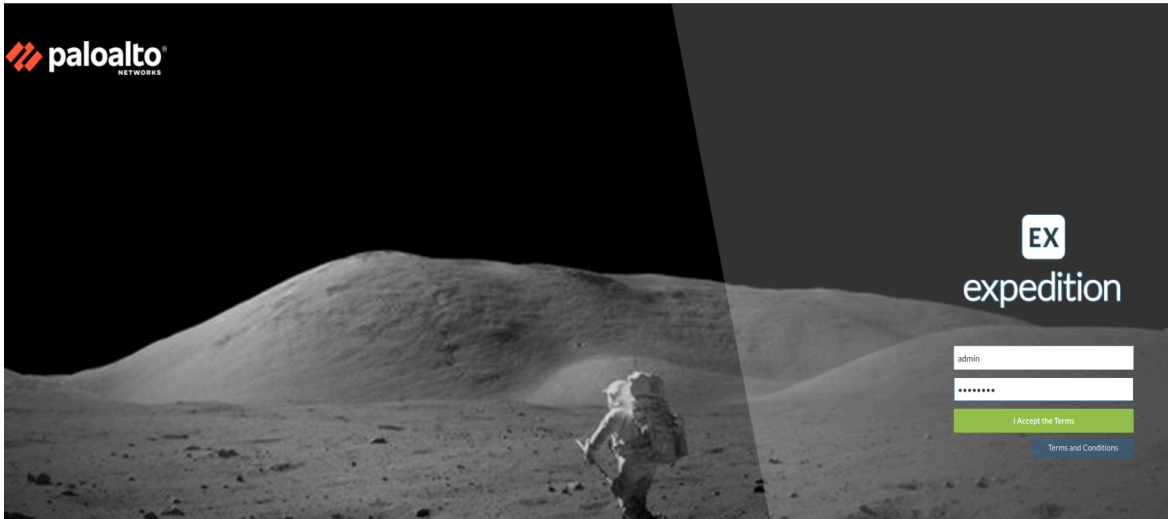
NET::ERR_CERT_INVALID

To get Chrome's highest level of security, turn on enhanced protection
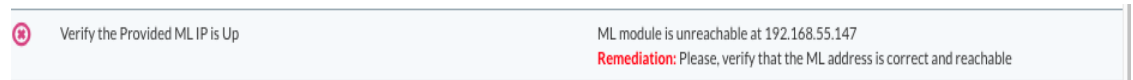
Advanced   Reload

b) Login with default credentials ,username=**"admin"**, password=**"paloalto"**

c) If you see a failed check **"Verify the Provided ML IP is UP"** on the dashboard:

The solution is to verify Expedition ML Address is set correctly, by type **"127.0.0.1"** in the **"Settings"** -> **"M.Learning" -> "Expedition ML Address"** field, and click **"Save"**, this step will reset the database and auto set the IP back to match your expedition IP.
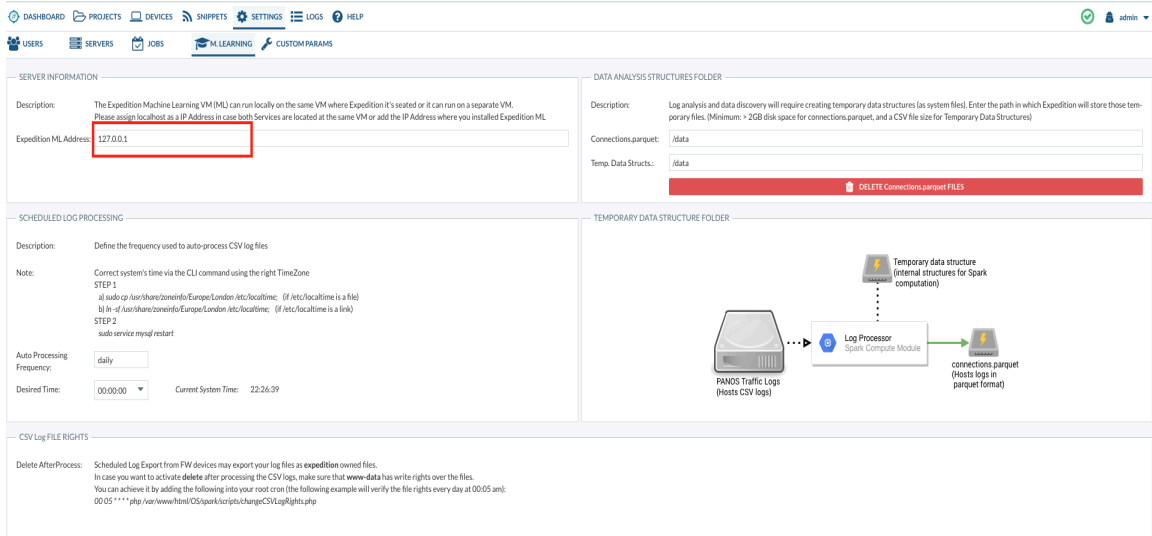
d) Navigate back to the Dashboard, all internal checks listed on the right side should show "green" checkmarks , meaning nothing needs to be remediated. If there are still checks that failed with the "red" mark, please remediate them.

Transfering between Expeditions (Optional)

If transferring user accounts, devices, database, projects, or Firewall traffic logs from the old Expedition server is required, Expedition v1.1.109 and above include a transfer assistant utility called **"migrate.php"** in **/var/www/html/OS/startup/migrate**
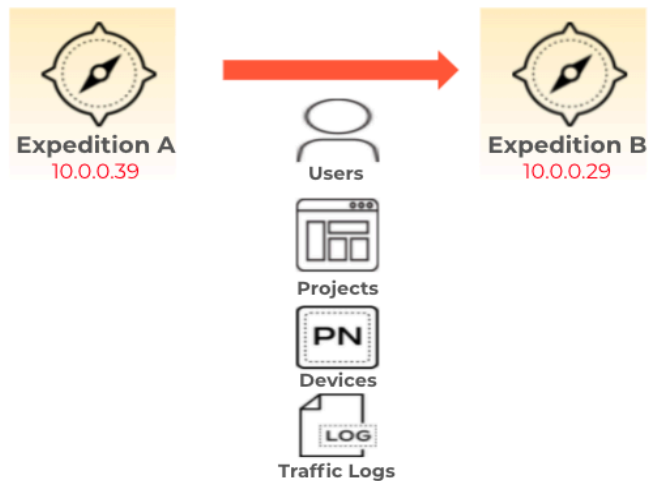
Using the above diagram as an example, we will transfer data from Expedition A- 10.0.0.39 on Ubuntu 16.04.* to Expedition B- 10.0.0.29 on Ubuntu 20.04.* . First step is to make sure you can reach Expedition B from Expedition A. Here are the instructions on how to use the migrate.php.

1) **Destination Expedition Server SSH Settings** (Below instructions can be found in the migrate.php tool selection **2. Enter Destination SSH Settings**)

Three steps to set up Destination Expedition SSH Settings:

a) **Create a private-public SSH key on Expedition A**
    Login to Expediation A 10.0.0.39 as **'root'** user, execute the following command with default options(**leave passphrase empty**):

   #ssh-keygen -o

```
[root@expedition:~# ssh-keygen -o
 Generating public/private rsa key pair.
[Enter file in which to save the key (/root/.ssh/id_rsa):
[Enter passphrase (empty for no passphrase):
[Enter same passphrase again:
 Your identification has been saved in /root/.ssh/id_rsa
 Your public key has been saved in /root/.ssh/id_rsa.pub
 The key fingerprint is:
 SHA256:K+/ec22zvKqCiX8UsQLgE3bgI31P3rcen/uwTFyS3gY root@expedition
 The key's randomart image is:
+---[RSA 3072]----+
|   =o.           |
| = o.    .       |
|. * ...   o      |
| . + +..o    .   |
|     o.S.. E .   |
|       .o + =    |
|     ..+. o =.o  |
|    . oooo.=.*+  |
|     ..++.++B==+ |
+----[SHA256]-----+
```

This will generate a pair of public-private keys for SSH communications.
Show the content of your public key using the command and copy the content :

 # cat ~/.ssh/id_rsa.pub

```
[root@ubuntu:/var/www/html/OS/startup/migrate# cat ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDMdubsY8TUfotSJLZmm2AlPkP2cDky+ISTIOoPSRJwiFLvSTYr/rcYrlAL2hADyVnC4KPS2IBAdMjVK9yZkZ05AowtIdCTTvrKpNSnhtZGS7xJf8qFlhdLOwC/7cDLXu51+ieZOBhjJBC4TPh
E4JphEAoK4whnSNWmOK+BIi9bbLVQ+9Rbwc7M+Qg3IyJnpeY8zPb+pB++sEtDjT5ErxRhogDrPI37RqSRXztFioWQES3JdD1gXenNNj6vqntxL56sqYLSkxwuiatTAot5zoiMBzG4E/TFEIXUnUKFku1DYSrPMH root@ubuntu
```

b) **Add Expedition A as a trusted ssh client in Expedition B**
Login to your destination Expedition B as **root**, edit the authorized keys list with the command:

 # nano ~/.ssh/authorized_keys

Paste the content from Expedition A public key (previous step), **Ctrl+O** to save the file and **Ctrl +X** to exit out of Nano.
Make sure your trusted public key is added in one single line. Some editors may introduce EoL characters that would alter the valid public key.

c) **Test the connection from Expedition A to Expedition B**
Test if your public-private keys are correctly set to SSH between the machines. From Expedition A 10.0.0.39 trying to ssh to Expedition B 10.0.0.29 as root:

 # ssh root@*10.0.0.29*

This will establish an SSH authenticated connection **WITHOUT** your root password.

```
root@ubuntu:~/.ssh# ssh root@10.0.0.29
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-84-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Fri 10 Sep 2021 04:14:50 PM UTC

  System load:   0.11              Processes:             274
  Usage of /:    47.4% of 19.56GB  Users logged in:       2
  Memory usage:  9%                IPv4 address for ens33: 10.0.0.29
  Swap usage:    0%
```

2) **Destination Expedition Server DB Settings**
   a) **Allow remote MySQL connection on Expedition B**

On the destination Expedition B(10.0.0.29), enter mysql using the default credentials (root:paloalto). In case you define a different user and password, modify the SQL statements to make them match.

#**mysql -uroot -ppaloalto mysql**

```
[root@expedition:~# mysql -uroot -ppaloalto mysql
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 798
Server version: 10.3.31-MariaDB-0ubuntu0.20.04.1 Ubuntu 20.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [mysql]>
```

Execute the following three SQL statements (Replace the IP address **10.0.0.39** to the IP of your Source Expedition)

GRANT ALL PRIVILEGES ON *.* TO 'root'@'10.0.0.39' IDENTIFIED BY 'paloalto' WITH GRANT OPTION;

FLUSH PRIVILEGES;

exit;

```
[MariaDB [mysql]> GRANT ALL PRIVILEGES ON *.* TO 'root'@'10.0.0.39' IDENTIFIED BY '
paloalto' WITH GRANT OPTION;
Query OK, 0 rows affected (0.000 sec)

[MariaDB [mysql]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)

[MariaDB [mysql]> exit;
Bye
root@expedition:~#
```

b) **Allow temporary remote MySQL connection on Expedition B**

Open firewall-cmd to allow remote MySQL connections on Expedition B

firewall-cmd --add-port=3306/tcp

```
[root@expedition:~# firewall-cmd --add-port=3306/tcp
success
```

3) **Run the Transfer Assistant Tool on Expedition A**

Access the Transfer Assistant tool on the source Expedition server where you want to transfer data from. In the example here , the source Expedition A is 10.0.0.39, so we will login to 10.0.0.39 to access the tool.

a) **$cd /var/www/html/OS/startup/migrate**

$php migrate.php

The tool main page will be displayed:

```
[expedition@ubuntu:/var/www/html/OS/startup/migrate$ php migrate.php
-----------------------------------------------------------------------------------
|                    WELCOME TO THE EXPEDITION TRANSFER ASSISTANT                  |
|                                  ver. 1.0                                       |
|                                                                                 |
|   This tool will help you transferring your current projects and data between two Expedition instances, |
|   being this one the Source (Machine_A) to a new Expedition (Machine_B).         |
|                                                                                 |
-----------------------------------------------------------------------------------

1. Enter Destination settings               (Required)
2.  See Destination settings
3. Migrate Users, Devices and Projects       (Required)
4. Migrate Device Logs (Traffic Logs)        (Optional)
5. Migrate Pre-Processed Data (Traffic Logs)  (Optional)
6. Review User and Environment Parameters    (Required)
7. Quit

Choose an option: ▌
```

4) Select Option **1. Enter Destination Settings -> 1. Enter Destination IP**

Enter the destination expedition server IP address you want to transfer the data to. In the example here , we are trying to transfer data from a Expedition A (10.0.0.39) to the Expedition B (10.0.0.29) , so the destination Expedition IP is **10.0.0.29**

```
[Choose an option: 1

    1. Enter Destination IP
    2. Enter Destination SSH Settings
    3. Enter Destination DB Settings
    4. Done

[Choose an option: 1

 Enter the destination Expedition IP:
[10.0.0.29  ◄──────────

    1. Enter Destination IP
    2. Enter Destination SSH Settings
    3. Enter Destination DB Settings
    4. Done
```

5) Select Option **3. Enter Destination DB Settings**
   You will see the Instructions containing Step 1 and 2 that should already be completed on Expedition B in the Step 2) **Destination Expedition Server DB Settings** , we will continue Step 3 to fill out the database credentials and port info as shown below. The tool already contains default values for these settings.

   Enter the DB user for remote connection:
   root
   Enter the DB password:
   paloalto
   Enter the DB port:
   3306

```
Choose an option: 3

[ ----------------------------------------------------------------------------------------
  |    INSTRUCTIONS
  |    Step 1: Allow remote MySQL connection
  |       On your destination Expedition Machine_B, enter to mysql using the default credentials (root:paloalto)
  |       In case you defined different user and password, modify the SQL statements to make them match.
  |             mysql -uroot -ppaloalto mysql
  |       And execute the following SQL statements (you may set the IP address of your Machine_A)
[ |             GRANT ALL PRIVILEGES ON *.* TO 'root'@'192.168.%.%' IDENTIFIED BY 'paloalto' WITH GRANT OPTION;
  |             FLUSH PRIVILEGES;
  |             exit;
  |
  |    Step 2: Allow remote MySQL connection
  |       Open firewall-cmd to allow remote MySQL connections. On the remote Expedition:
  |             firewall-cmd --add-port=3306/tcp
  |
  |    Step 3: Allow remote MySQL connection
  |       Complete the form below
  ----------------------------------------------------------------------------------------
Enter the DB User for remote connection [root]:
root
Enter the DB Password [paloalto]:
paloalto
Enter the DB port [3306]:
3306
```

6) Select Option **4 Done** to go back to the main menu.

```
1. Enter Destination IP
2. Enter Destination SSH Settings
3. Enter Destination DB Settings
4. Done

[Choose an option: 4


1. Enter Destination settings                (Required)
2.  See Destination settings
3. Migrate Users, Devices and Projects       (Required)
4. Migrate Device Logs (Traffic Logs)        (Optional)
5. Migrate Pre-Processed Data (Traffic Logs) (Optional)
6. Review User and Environment Parameters    (Required)
7. Quit
```

7) Select Option **2 See Destination Settings** to review the Destination Expedition Server settings. Verify the IP address is set as the IP of the destination Expedition B , ssh and database account are correctly configured. If you are transferring the traffic log , please make sure the connections.paraquet path is set correctly. If they are not correct, you can go back to the main menu and select option **1 "Enter Destination Settings"** , there you can select options to change the settings accordingly.

```
[Choose an option: 2

  Settings
    IP address:    10.0.0.29

  SSH (mandatory)
        user:        root
        password:    private-public keys
        port:        22

  Database
        user:        root
        password:    paloalto
        port:        3306

  ML
        Traffic Logs path:
        connections.parquet path:    /data
```

8) After you have verified the destination settings are correct, you can select option **3 Migrate Users, Devices and Projects** , it will start transferring the data from Expedition A to Expedition B

```
[Choose an option: 3


Warning: session_start(): Cannot send session cookie – headers already sent by (output started at /var/www/html/OS/startup/migrate/migrate.php:48) in /var/www/html/userManager/start_CLI.php on :
  Migrating RBAC settings
    RBAC – Transfer completed  100% [==========================================================================================================================================
  Migrating Projects
    checkpoint – Transfer completed  100% [=====================================================================================================================================
    Panorama – Transfer completed  100% [=======================================================================================================================================
    PanoramaCustomr – Transfer completed  100% [================================================================================================================================
    PanormaRetrieve – Transfer completed  100% [================================================================================================================================
    test – Transfer completed  100% [===========================================================================================================================================
    Projects folders migrated  100% [===========================================================================================================================================
  Migrating Devices
    Devices folders migrated  100% [============================================================================================================================================
```

Once the transfer is completed, You can login to the Expedition B via GUI to check if user account, projects have been transferred.

9) If transfering the traffic logs is required , select **Option 4 and 5** to continue the migration process, otherwise, select **Option 7** to exit out of the tool.

10) Access Expedition B GUI , select **"SETTINGS"** -> **"CUSTOM PARAMS"**, verify the user and environment parameters in your destination Expedition B matches the setting in Expedition A.

	Name	Description	Default	Value	
	Type: Authentication				
	MAXSUPERUSERS	Maximum number of defined Expedition administrators before rising a Warning message	3	3	🗑
	Type: Database				
	DBServer	Server hosting Expedition databases *(Read only)*	localhost	localhost	🗑
	DBUser	User for querying Expedition databases *(Read only)*	root	root	🗑
	DBPass	Password for queryingExpedition databases *(Read only)*	paloalto	********	🗑
	DBName	Default database schema for projects *(Read only)*	project_schema	project_schema	🗑
	DBSQL_LOG_BIN	Enable of Disable SQL logging. This is independent from Expedition logging features	0	0	🗑
	Type: PHP Execution				
	PARSER_max_execution_time	Maximum execution time for a Migration Parser script	10000	40000	🗑
	PARSER_max_execution_memory	Maximum consumed Memory for a Migration Parser script	1G	8G	🗑
	Type: Project Analysis				
	MAX_RULES_TO_ANALYZE	Top number of Security Rules to analyze for Dashboard reports	600	600	🗑

FAQ

Can I upgrade my existing Expedition from Ubuntu 16.04?* to 20.04.* and run the new installation script?

No, Installation of a fresh Ubuntu 20.04.* server is required; there is no direct upgrade from the expedition server running on Ubuntu 16.04 or older versions. In Expedition v1.1.109 and above, the Transfer Assistant Tool is to help you migrate the data from your old expedition server to the new one.

Can I change the password for expedition or root account after installation ?

When running the Expedition Installation , an account name "expedition" with default password is required and the script will auto change the root password. You can change the password after a successful installation.

How can I provide feedback?

Please leave a comment in live community :

https://live.paloaltonetworks.com/t5/expedition/ct-p/migration_tool

 or email us @ fwmigrate@paloaltonetworks.com