LogicMonitor Collector on the Raspberry Pi

Installation instructions

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1 Document control

1.1 Revision control

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1.2 Company information

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2 Instructions

2.1 Introduction

The following instructions apply to the installation of LogicMonitor on Fedora Server 25 and a Raspberry Pi 3. These instructions have also been tested on a Raspberry Pi 2 and the beta release of Fedora Server 25, but it should be noted that the installation was very slow to complete.

Fedora Server for the Pi can be downloaded from:

https://download.fedoraproject.org/pub/fedora/linux/releases/25/Server/armhfp/images/Fedora-Server-armhfp-25-1.3-sda.raw.xz

Documentation for Fedora on the Raspberry Pi can be found at:

https://fedoraproject.org/wiki/Raspberry_Pi

2.2 Limitations

Running a collector on a Raspberry Pi is not supported by LogicMonitor. Panoramic Data Limited can make no guarantees that the following instructions will work in the future as LogicMonitor collectors and the LogicMonitor service are both subject to change.

The following has been tested with Collector version 22.005. Testing with later versions did not succeed.

The Raspberry Pi is limited in it's processing power and so after booting a Raspberry based collector will take at least 5-10 minutes before any new datapoints are visible in the LogicMonitor portal.

2.3 Method

2.3.1 Create SD card

Write the image file to a micro SD card. On a Windows computer this can be done using Win32DiskImager.exe, which can be downloaded from SourceForge:

https://sourceforge.net/projects/win32diskimager/files/latest/download

In Win32DiskImager you will need to select the image file that is going to be written to the micro SD card and the target SD card.

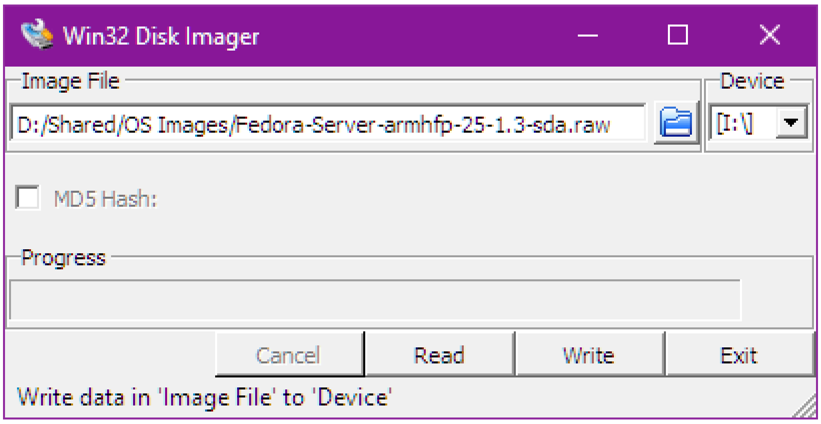


Image File: D:/Shared/OS Images/Fedora-Server-armhfp-25-1.3-sda.raw

Device: [I:\]

☐ MD5 Hash:

Progress

Write data in 'Image File' to 'Device'

Once these are correctly set click on "Write". This will take 5-10 minutes to complete, depending on the size and speed of the micro SD card.

2.3.2 Edit config.txt

After the image as been written to the SD card, the Raspberry Pi's config.txt can be edited to change the speed at which it runs. There should be no issues with running it at a medium speed:

```
arm_freq=900
core_freq=333
sdram_freq=450
over_voltage=2
```

If the Raspberry Pi is installed in an air conditioned environment it may be possible to select a faster configuration option. The screenshots have been captured from a Raspberry Pi in an non-air conditioned room with a temperature of about 27°C.

2.3.3 Install Perl core

3) Once Pidora is set up you will need to install Perl core. This can be down with the command

```
sudo dnf install perl-core
```

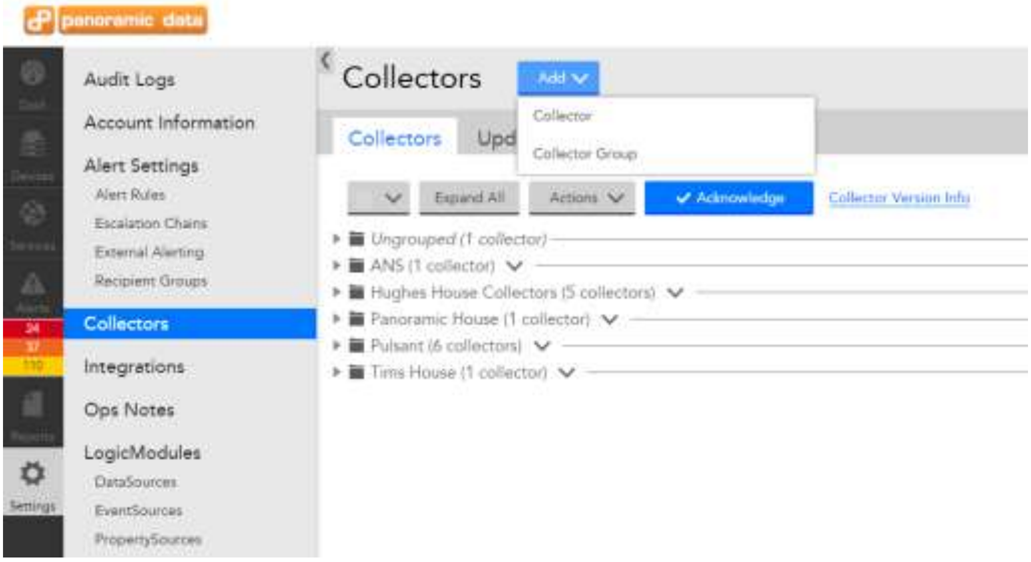
It will display the repositories it is going to retrieve the packages from and it's dependencies, then it will display a list of those packages.

You will be asked to confirm that it is OK to install these packages. Type "y" and return.

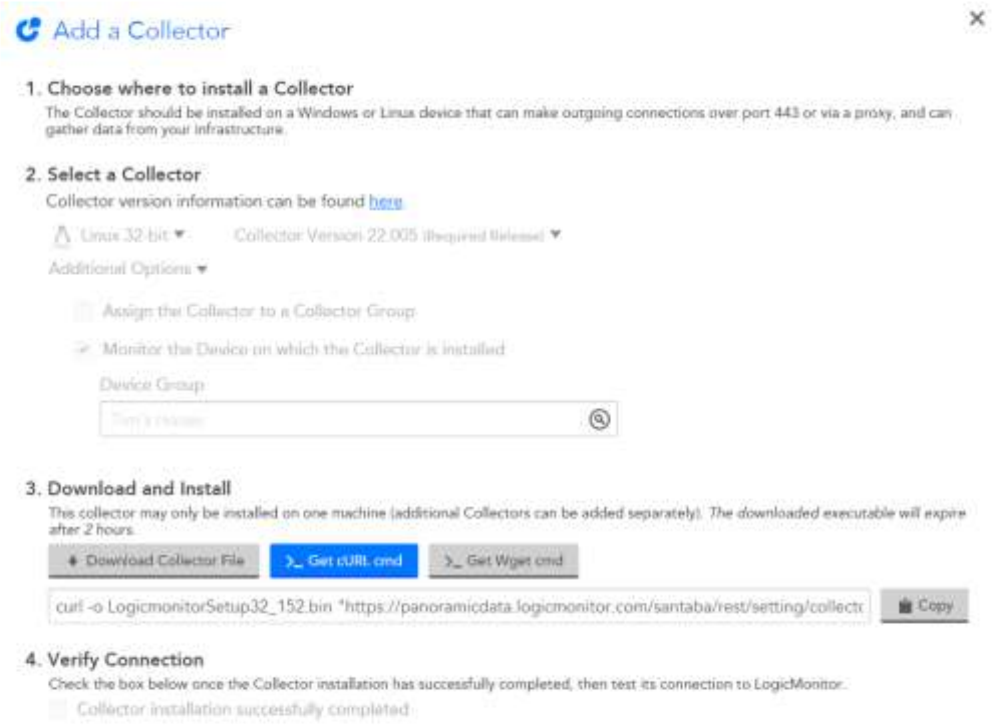
All the packages will first be downloaded, then they will be installed and finally the installation of the packages will be verified.

2.3.4 Create collector in LogicMonitor

Next in LogicMonitor add a new collector.


panoramic data
Audit Logs
Account Information
Alert Settings
Alert Rules
Escalation Chains
External Alerting
Recipient Groups
Collectors
Integrations
Ops Notes
LogicModules
DataSources
EventSources
PropertySources
Settings
Collectors
Add
Collector
Collector Group
Collectors
Upd
Expand All
Actions
Acknowledge
Collector Version Info
Ungrouped (1 collector)
ANS (1 collector)
Hughes House Collectors (5 collectors)
Panoramic House (1 collector)
Pulsant (6 collectors)
Tims House (1 collector)

When filing out the form you **MUST** select the 32 bit Linux version and version 22.005 **MUST** be used.


Add a Collector
×

1. Choose where to install a Collector

The Collector should be installed on a Windows or Linux device that can make outgoing connections over port 443 or via a proxy, and can gather data from your infrastructure.

2. Select a Collector

Collector version information can be found here

Linux 32 bit ▾ Collector Version 22.005 (Required Release) ▾

Additional Options ▾

☐ Assign the Collector to a Collector Group

☑ Monitor the Device on which the Collector is installed

Device Group: Tim's House

3. Download and Install

This collector may only be installed on one machine (additional Collectors can be added separately). *The downloaded executable will expire after 2 hours.*

Download Collector File
>_ Get cURL cmd
>_ Get Wget cmd
Copy

```
curl -o LogicmonitorSetup32_152.bin "https://panoramicdata.logicmonitor.com/santaba/rest/setting/collectc
```

4. Verify Connection

Check the box below once the Collector installation has successfully completed, then test its connection to LogicMonitor.

☐ Collector installation successfully completed

Both Curl and wget are installed as standard in Fedora. For this installation the “cURL cmd” was copied and pasted onto the command line.

NOTE: Each time a collector is added the downloaded file is given a different name, and as is noted in the screenshot above cannot be used more than two hours after section 3 of the form above has been used.

2.3.5 Run the installer

Once downloaded add execution rights with the command

```
sudo chmod +x LogicMonitorSetup32_1.bin
```

Run the installer with the command

```
./LogicMonitorSetup32_1.bin
```

The install will unpack the Java Packages to /usr/local/logicmonitor/agent/jre/bin/java and then attempt to run configure.pl. Upon completion it will fail the 32bit/64bit java test. This is expected on a Raspberry Pi.

2.3.6 Replace Java

Install the Java environment for Fedora with the command

```
su -c "dnf install java-1.?.0-openjdk"
```

This first displays a list of the packages and dependencies it is going to install.

You will be asked to confirm that it is OK to install these packages. Type “y” and return.

All the packages will first be downloaded, then they will be installed and finally the installation will be verified.

More information on Java Environment for Fedora can be found here:

https://fedoraproject.org/wiki/Java/FAQ?rd=JavaFAQ

Rename the LogicMonitor Java Packages. Using the following command:

```
sudo mv /usr/local/logicmonitor/agent/jre/bin/java /usr/local/logicmonitor/agent/jre/bin/java_original
```

Link the Fedora Java Package to the original location for LogicMonitor using the command

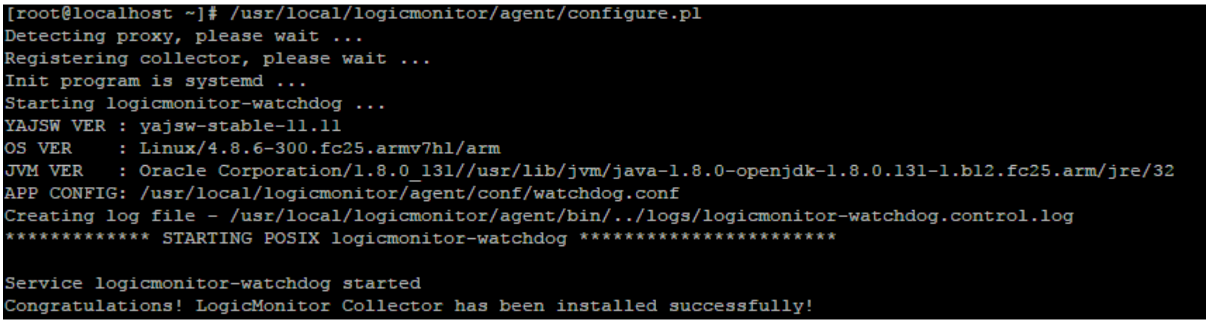
```
sudo ln -s /usr/bin/java /usr/local/logicmonitor/agent/jre/bin/java
```

2.3.7 Re-run configure

10) Re-run the configure.pl script with the command

```
/usr/local/logicmonitor/agent/configure.pl
```

The script should install and configure the collector successfully.



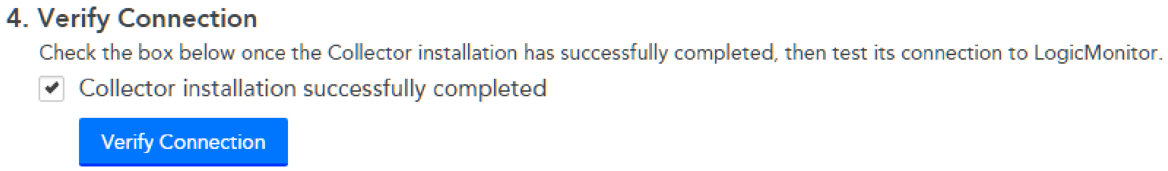
```
[root@localhost ~]# /usr/local/logicmonitor/agent/configure.pl
Detecting proxy, please wait ...
Registering collector, please wait ...
Init program is systemd ...
Starting logicmonitor-watchdog ...
YAJSW VER : yajsw-stable-11.11
OS VER    : Linux/4.8.6-300.fc25.armv7hl/arm
JVM VER   : Oracle Corporation/1.8.0_131//usr/lib/jvm/java-1.8.0-openjdk-1.8.0.131-1.b12.fc25.arm/jre/32
APP CONFIG: /usr/local/logicmonitor/agent/conf/watchdog.conf
Creating log file - /usr/local/logicmonitor/agent/bin/../logs/logicmonitor-watchdog.control.log
************* STARTING POSIX logicmonitor-watchdog ***********************

Service logicmonitor-watchdog started
Congratulations! LogicMonitor Collector has been installed successfully!
```

Once the collector installation has completed, return to the LogicMonitor portal website and select the “Collector installation successfully completed” check box.

2.3.8 Confirm in LogicMonitor UI

A blue button will appear in the LogicMonitor UI. Click the button and the verification will start.



4. Verify Connection

Check the box below once the Collector installation has successfully completed, then test its connection to LogicMonitor.

☑ Collector installation successfully completed

After a little while a dialog box should appear confirming the successful installation of LogicMonitor.

NOTE: The Raspberry Pi is limited in it’s processing power and so after booting a Raspberry based collector will take at least 5-10 minutes before any new datapoints are visible in the LogicMonitor portal.