



OneAgent Installation on Linux

Cavisson Agent

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Purpose

This document provides pre-requisites and SOPs for installing Cavisson Agents (Machine Agent, Log Agent, Application Agents).

Prerequisites

1. Need to run by the root user.
2. Storage requirement – 1 GB.

Installation Steps

1. Download the CavissonAgent Installer using the below command.

```
wget https://nde.cav-test.com/HUB/CavissonAgentInstaller.<version>.bin --no-check-certificate
```

Note: Replace version with the version number of agent installer.

1. Store the file on your machine.
2. Execute the installer file using root user.

Syntax

```
bash CavissonAgentInstaller.<version>.bin --basedir="<base_directory>" --user="<user_name>" --cavisson-server="<CavissonServerHost>:<Port>" --tier="<tiername>" --gateway-server="<proxyHost>:<proxyPort>" --verbose="true" --machine-agent --java-agent --nodejs-agent -php-agent --python-agent --log-agent --gateway
```

Note: To enable both the **Machine Agent** and **Log Agent** with the **Application Agent**, use the following additional parameters:

Machine Agent: `--machine-agent`

Log Agent: `--log-agent`

Example

Only Machine Agent:

```
sudo bash CavissonAgentInstaller.4.14.0.106.bin --basedir="/opt" --user="cavisson" --cavisson-server="cloudpoc4.cav-test.com:443" --tier="NOCJava" --verbose="true" --machine-agent
```

For Java Agent:

```
sudo bash CavissonAgentInstaller.4.14.0.106.bin --basedir="/opt" --user="cavisson" --cavisson-server="cloudpoc4.cav-test.com:443" --tier="NOCJava" --verbose="true" --machine-agent --java-agent
```

For NodeJS Agent:

```
sudo bash CavissonAgentInstaller.4.14.0.106.bin --basedir="/opt" --user="cavisson" --cavisson-server="cloudpoc4.cav-test.com:443" --tier="NOCNode" --verbose="true" --machine-agent --nodejs-agent
```

For PHP Agent:

```
sudo bash CavissonAgentInstaller.4.14.0.106.bin --basedir="/opt" --user="cavisson" --cavisson-server="cloudpoc4.cav-test.com:443" --tier="NOCPHP" --gateway-server="127.0.0.1:1111" --verbose="true" --machine-agent --php-agent --gateway
```

For Python Agent:

```
sudo bash CavissonAgentInstaller.4.14.0.106.bin --basedir="/opt" --user="cavisson" --cavisson-server="cloudpoc4.cav-test.com:443" --tier="NOCPython" --gateway-server="127.0.0.1:1111" --verbose="true" --machine-agent --python-agent --gateway
```

Note

To know more about the installer and various parameters, run the following command:
`./CavissonAgentInstaller.4.14.0.106.bin --help`

```

root@cavisson:/home# ./CavissonAgentInstaller.4.14.0.106.bin --help
2025-06-10 09:26:54 UTC | Cavisson Agent Installer | Distribution: Ubuntu 20.04
PLEASE EXECUTE THIS SHELL FROM "ROOT" USER

1. Use this installer to install/upgrade Cavisson Agent modules like Machine Agent Module, Application Agent Modules.

2. Options
[-b|--basedir] : Installation base dir eg: /home or /opt (default is /opt).
[-t|--tier] : Name to be given to a cluster of application servers running same application services
[-c|--cavisson-server] : Cavisson Server to which agent modules will be posting the captured data. Input format is <hostname:port>
[-s|--saas-url] : Cavisson SaaS URL to send captured data
[-P|--project-key] : Unique project key ID generated for the project
[-B|--php-path] : Full path to the PHP binary used for configuring the PHP agent (e.g., /usr/bin/php). Default is /usr/bin/php.

3. Advanced Options
[-u|--user] : User account to be used to start Cavisson Agent services. If this account doesn't exist, installer will create this account. Default is cavisson.
[-s|--server] : Application server name. Default value will be hostname of the server.
[-p|--cavisson-server-protocol] : Default is WSS (Web Secure Socket). Possible values WSS, WS, TCP.
[-T|--tags] : TAGS name to be given in ndsetting.conf file.
[-A|--attributes] : ATTRIBUTES name to be given in ndsetting.conf file.

4. Log Agent Module Configurations.
[-i|--index-prefix] : Prefix string that will be prepended to all log indices managed by Log server
[-e|--setup-name] : Setup name
[-n|--nf-endpoint-prefix] : NF_ENDPOINT_PREFIX to be given in nf.env (default value is netforest)

5. PHP/Python/Go Agent Module Configuration
[-y|--gateway-server] : Gateway Server <Gateway Server:port>

6. Use below options to install any of the Agent
[-m|--machine-agent] : for Machine Agent
[-a|--java-agent] : for Java application Agent
[-l|--log-agent] : for Log Agent
[-w|--php-agent] : for PHP Application Agent
[-j|--python-agent] : for Python Application Agent
[-z|--nodejs-agent] : for NodeJS Application Agent
[-g|--gateway] : for Gateway
[-r|--go-agent] : for Go Application Agent

7. Python Agent Module Configuration
[-k|--python-version] : Python version (default is python3)

NOTE:
[-v|--verbose] : to print the command line arguments
[uninstall.sh] : Uninstall.sh is created in "BASE_DIR" (given by user). This file can be used to uninstall the deployed Agent Modules.

Syntax for long arguments
Eg: ./CavissonAgentInstaller<x.y.z.build_number>.bin --basedir="/opt" --user="cavisson" --cavisson-server="10.10.30.1000:443" --tier="Cavisson-NS_East" --server="CC-NCMON" --setup-name="NCMON" --cavisson-server-protocol="WSS" --gateway-server="10.10.30.1000:443" --nf-endpoint-prefix="netforest" --verbose="true" --tags="key=inline:value1,key1=env:NDRHOME:value2,key2=nds:proxyMode:value3" --attributes="key=inline:value1"

Syntax for short arguments
Eg: ./CavissonAgentInstaller<x.y.z.build_number>.bin -b"/opt" -u"cavisson" -c"10.10.30.1000:443" -t"Cavisson-NS_East" -s"CC-NCMON" -i"NCMON" -e"NCMON" -p"WSS" -y"10.10.30.1000:443" -n"netforest" -v"true" -T"key=inline:value1,key1=env:NDRHOME:value2,key2=nds:proxyMode:value3" -A"key=inline:value1"

```

Verification of Installation

Once you execute the installer, you can see the messages that show that agents are successfully installed.

2025-06-10 11:35:53 UTC	Cavisson Agent Installer	Cavisson Php application agent will be installed.
2025-06-10 11:35:53 UTC	Cavisson Agent Installer	Cavisson machine agent will be installed.
2025-06-10 11:36:00 UTC	Cavisson Agent Installer	Cavisson Java application agent will be installed
2025-06-10 11:36:00 UTC	Cavisson Agent Installer	Cavisson python agent will be installed
2025-06-10 11:36:00 UTC	Cavisson Agent Installer	Cavisson nodejs agent will be installed.
2025-06-10 11:36:36 UTC	Cavisson Agent Installer	Configuring cavisson machine agent as init service.
2025-06-10 11:37:05 UTC	Cavisson Agent Installer	Cavisson machine agent is installed successfully and started machine agent service
2025-06-10 11:37:59 UTC	Cavisson Agent Installer	CavNdProxy is installed successfully and init service started with user:cavisson
2025-06-10 11:37:59 UTC	Cavisson Agent Installer	Cavisson PHP agent configured successfully
2025-06-10 11:38:00 UTC	Cavisson Agent Installer	Cavisson python agent is installed and configured successfully.
2025-06-10 11:38:00 UTC	Cavisson Agent Installer	Cavisson NodeJS agent is installed and configured successfully.
2025-06-10 11:38:01 UTC	Cavisson Agent Installer	Agents are configured completely. Restart the application to monitor it.

Directory Structure

Following directory structure should be created after Agent Installation.

For Machine Agent: \$Base_DIR/cavisson/monitors
 For Java Agent: \$Base_DIR/cavisson/netdiagnostics/java
 For NodeJs Agent: \$Base_DIR/cavisson/netdiagnostics/nodejs
 For PHP Agent: \$Base_DIR/cavisson/netdiagnostics/php
 For Python Agent: \$Base_DIR/cavisson/netdiagnostics/python
 For Proxy: \$Base_DIR/cavisson/netdiagnostics/proxy

Files to check for Machine Agent

Check for the files present at the below mentioned paths.

Path - \$Base_DIR/cavisson/monitors

```
drwxrwxr-x 2 cavisson cavisson 4.0K May 31 00:08 tmp
drwxr-xr-x 5 cavisson cavisson 4.0K May 31 00:08 custom
drwxrwxr-x 2 cavisson cavisson 4.0K May 31 00:08 mibs
drwxrwxr-x 2 cavisson cavisson 4.0K May 31 00:08 thirdparty
drwxrwxr-x 2 cavisson cavisson 4.0K May 31 00:08 conf
drwxrwxr-x 3 cavisson cavisson 4.0K May 31 00:09 netHavoc
drwxrwxr-x 7 cavisson cavisson 4.0K May 31 00:09 etc
drwxrwxr-x 2 cavisson cavisson 20K May 31 00:09 bin
drwxrwxr-x 3 cavisson cavisson 4.0K May 31 00:13 nf
-rw-r--r-- 1 cavisson cavisson 331M Jun 10 17:17 cmon_nfagent.4.14.0.106.tar.gz
drwxrwxr-x 2 cavisson cavisson 4.0K Jun 10 17:18 lib
drwxrwxr-x 3 cavisson cavisson 4.0K Jun 10 17:18 certs
drwxr-xr-x 3 cavisson cavisson 4.0K Jun 10 17:33 logs
drwxrwxr-x 3 cavisson cavisson 4.0K Jun 10 18:20 svcs
```

Files to check for Java Agent

Check for **lib** directory files present at the below mentioned paths.

Path - \$Base_DIR/cavisson/netdiagnostics/java

```
-rw-rw-r-- 1 cavisson cavisson 6.8M May 30 21:54 ndutil.jar
-rw-rw-r-- 1 cavisson cavisson 56K May 30 21:54 ndproxy.jar
-rw-rw-r-- 1 cavisson cavisson 23K May 30 21:54 ndmain.jar
-rw-rw-r-- 1 cavisson cavisson 4.9M May 30 21:54 ndagent-with-dep.jar
-rw-rw-r-- 1 cavisson cavisson 148K May 30 21:54 ndagentlauncher.jar
-rw-rw-r-- 1 cavisson cavisson 376K May 30 21:54 ndagent.jar
-rwxrwxr-x 1 cavisson cavisson 4.7M May 30 21:54 libjavanativeagent.so
-rw-rw-r-- 1 cavisson cavisson 4.3K May 30 21:54 com_cavisson_ndutils_nativeagent_NDNativeAgentProfiling.h
-rw-rw-r-- 1 cavisson cavisson 5.1K May 30 21:54 cavagent.jar
-rw-rw-r-- 1 cavisson cavisson 8.6K May 30 21:54 awslambdaplugin.jar
```

Files to check for NodeJS Agent

Check for the files present at the below mentioned paths.

Path - \$Base_DIR/cavisson/netdiagnostics/nodejs/src/netjsagent

```
drwxrwxr-x 23 cavisson cavisson 4.0K May 30 21:54 lib
-rw-rw-r-- 1 cavisson cavisson 2.0K May 31 00:08 README.md
-rw-rw-r-- 1 cavisson cavisson 2.3K May 31 00:08 package.json
-rw-rw-r-- 1 cavisson cavisson 4.6K May 31 00:08 netjsagent.js
-rw-rw-r-- 1 cavisson cavisson 167 May 31 00:08 main.js
-rw-rw-r-- 1 cavisson cavisson 586 May 31 00:08 jsCustomInstrumentation.json
-rw-rw-r-- 1 cavisson cavisson 1.8K May 31 00:08 cavisson_lambda_wrapper.js
drwxr-xr-x 141 cavisson cavisson 4.0K Jun 10 17:18 node_modules
```

Files to check for PHP Agent

Check the PHP Agent .so file and Proxy Control file are present at the below mentioned paths.

PHP Agent .so File

Path - \$Base_DIR/cavisson/netdiagnostics/php

File- cavPHP<version>Agent.<release>.<version>.so

File- cavisson.ini

Example:

In Ubuntu: /opt/cavisson/netdiagnostics/php. File-
cavPHP8.2Agent.4.14.0.106_Ubuntu20.so
In CentOS/RHEL: /opt/cavisson/netdiagnostics/php. File-
cavPHP8.0Agent.4.14.0.106_Red.so

Proxy Control File

Path: \$Base_DIR/cavisson/netdiagnostics/proxy/ "CavNDProxy.<release>.<version>"

Example:

In Ubuntu: /opt/cavisson/netdiagnostics/proxy. File- CavNDProxy.4.14.0.106_Ubuntu20

In CentOS/RHEL: /opt/cavisson/netdiagnostics/proxy. File-
CavNDProxy.4.14.0.106_Oracle

Linking of PHP

In Ubuntu20:

/etc/php/<PHP_Version>/<webserver>/conf.d/cavisson.ini ->
/opt/cavisson/netdiagnostics/php/cavisson.ini

Example:

/etc/php/7.4/apache2/conf.d/cavisson.ini -> /opt/cavisson/netdiagnostics/php/cavisson.ini

In RHEL/CentOS

/etc/php.d/cavisson.ini -> /opt/cavisson/netdiagnostics/php/cavisson.ini

Files to check for Python Agent

```
-rw-rw-r-- 1 cavisson cavisson 84K May 31 00:07 pythonagent-0.0.1.tar.gz
drwxrwxr-x 2 cavisson cavisson 4.0K May 31 00:08 scripts
-rwxrwxrwx 1 cavisson cavisson 2.6K May 31 00:08 install.sh
drwxrwxr-x 2 cavisson cavisson 4.0K May 31 00:08 hooksettings
-rwxrwxr-x 1 cavisson cavisson 255 May 31 00:08 cavagent
-rw-rw-r-- 1 cavisson cavisson 1.7M May 31 00:08 alllibs.zip
drwxrwxrwx 2 cavisson cavisson 4.0K Jun 10 17:17 logs
-rw-r--r-- 1 cavisson cavisson 6.7M Jun 10 17:17 pythonagent.4.14.0.106.zip
-rw-r--r-- 1 cavisson cavisson 25 Jun 10 17:17 version
drwxr-xr-x 2 cavisson cavisson 4.0K Jun 10 17:17 config
cavisson@cavisson:/opt/cavisson/netdiagnostics/python$ python3
Python 3.8.10 (default, Nov 22 2023, 10:22:35)
[GCC 9.4.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import pythonagent
>>> pythonagent.__file__
'/usr/local/lib/python3.8/dist-packages/pythonagent/__init__.py'
>>>
```

Check for the files present at the below mentioned paths.

Path - \$Base_DIR/cavisson/netdiagnostics/python

Configuring Application Agents

Java Agent

To enable Java Agent in any Java based server, add below command to the startup shell/Env setup file.

Apache Tomcat Server

```
CATALINA_OPTS="$CATALINA_OPTS -  
javaagent:$ND_HOME/java/lib/ndmain.jar=time,ndAgentJar=$ND_HOME/java/lib/ndagent-  
with-dep.jar,ndHome=$ND_HOME"  
export CATALINA_OPTS
```

JBoss Application Server

```
JAVA_OPTS="$JAVA_OPTS -  
javaagent:$ND_HOME/java/lib/ndmain.jar=time,ndAgentJar=$ND_HOME/java/lib/ndagent-  
with-dep.jar,ndHome=$ND_HOME"  
JAVA_OPTS="$JAVA_OPTS -Djboss.modules.system.pkgs=com.cavisson.ndutils"
```

Path: /opt/jboss/wildfly/bin
File: standalone.conf

Where, ND_HOME=\$Base_DIR/cavisson/netdiagnostics

Note: For other Java Application Servers, Configure **javaagent** in the respective configuration file.

NodeJS Agent

To enable NodeJS Agent, Add the following line in the application's entry point file (i.e., where the application starts).

```
var netjsagent = require('netjsagent').instrument({ logLevel: 'debug', BCILoggingMode:  
'FILE' });
```

OR

To start the application with the NodeJS Agent without changing the application code, use the following command:

```
node --require netjsagent/main.js app.js
```

Note: If application already have a **--require** statement, then add additional **--require** statement with **netjsagent/main.js**

Python Agent

To start the application with the Python agent, use the following command:

```
cavagent run python3 app.py
```

PHP Agent

No configuration required in PHP Agent.

Log Agent

To enable Log Agent, Add the following keywords in the **cmon.env** file.

```
CAV_MON_AGENT_OPTS="-F 1"  
OUTPUT_HOST1=<NF_HOST>  
OUTPUT_PORT1=<PORT>  
CAV_LOG_STORAGE_AUTO_DISCOVERY=false  
CAV_LOG_STORAGE_ENV=env  
CONFIG_PROTOCOL=https  
NF_ENDPOINT_PREFIX=/netforest
```

Path: /opt/cavisson/monitors/sys/
File: cmon.env

Uninstallation Steps

- In \$Base_DIR/cavisson, uninstall.sh file should be present after completion of installation.
- To uninstall, just run **./uninstall.sh**
- It clears all the files and processes, which are initiated and created by the Installer.