Cloud Secure Agent Installation

Cloud Insights

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Table of Contents

C	loud Secure Agent Installation	1
	Before You Begin.	1
	Steps to Install Docker	1
	Docker Installation Reference	2
	Steps to Install Docker on a VM Without Full Access to the Internet.	2
	Java Requirement.	2
	Steps to Install Agent	3
	Files Created During Installation	5
	Network Configuration	5
	Troubleshooting Agent Installation Errors	5

Cloud Secure Agent Installation

Cloud Secure collects user activity data using one or more agents. Agents connect to devices in your environment and collect data that is sent to the Cloud Secure SaaS layer for analysis. See Agent Requirements to configure an agent.

Before You Begin

- The sudo privilege is required for installation, running scripts, and uninstall.
- The Docker CE package must be installed on the VM hosting the agent.

```
To determine if the Docker CE package is installed, use the following command: sudo rpm -qa |grep -i docker-ce

If the package is installed, the command returns the package name, for example: docker-ce-18.03.1.ce-1.el7.centos.x86_64
```

• The Docker-client-xx or Docker-common-xx native RHEL Docker packages are not supported. These packages do not support the docker run cli format that Cloud Secure supports.

Use the following commands to determine if these packages are installed:

```
sudo rpm -qa | grep -i docker-client
sudo rpm -qa | grep -i docker-common
```

Steps to Install Docker

1. Install the required dependencies:

```
sudo yum install yum-utils device-mapper-persistent-data lvm2
```

2. Add docker stable repository to your system:

```
sudo yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo
```

3. To use the latest version of Docker CE, enable repositories that are disabled by default:

```
sudo yum-config-manager --enable docker-ce-edge
```

4. Install the latest version of Docker CE using the following command:

```
sudo yum install docker-ce
(Version must be higher than 17.06)
```

5. Start Docker

```
sudo systemctl start docker
```

6. Use the following command to automatically start Docker on system reboot:

```
sudo systemctl enable docker
```

Docker Installation Reference

For additional installation information, see:

- * https://docs.docker.com/install/linux/docker-ce/centos/
- * https://getstart.blog/2018/03/24/docker-ce-installation-on-red-hat-7/

Steps to Install Docker on a VM Without Full Access to the Internet

Steps

1. Uninstall existing docker installation:

```
sudo rpm -qa | grep docker
sudo rpm -e <rpms>
```

- 2. Install Docker-ce
 - a. Download all required rpms and copy them to the VM on which the agent is to be installed.

```
https://download.docker.com/linux/centos/docker-ce.repo
sudo yum-config-manager --add-repo <repo_file>
https://download.docker.com/linux/centos/7/x86_64/stable/Packages/docker-ce-
18.09.0-3.el7.x86_64.rpm
https://download.docker.com/linux/centos/7/x86_64/stable/Packages/docker-ce-cli-
18.09.0-3.el7.x86_64.rpm
https://download.docker.com/linux/centos/7/x86_64/stable/Packages/containerd.io-
1.2.6-3.3.el7.x86_64.rpm
sudo rpm -i <rpms>
sudo systemctl enable docker
sudo systemctl start docker
```

Java Requirement

OpenIDK Java is required. Use the following command to determine if OpenIDK Java is installed:

```
sudo rpm -qa|grep -i openjdk
```

Install OpenJDK Java using the following command:

```
sudo yum install -y java-1.8.0-openjdk
```

The IBM Java package, found in some RHEL versions, must be uninstalled. Use the following command to verify the Java version:

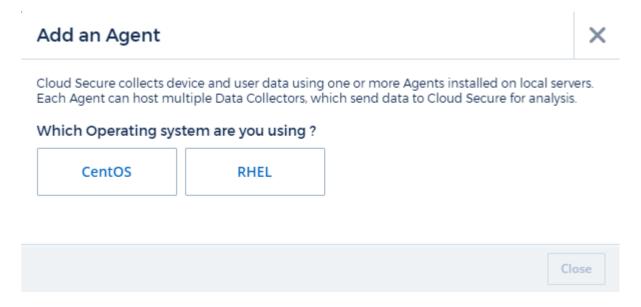
```
sudo java - (or) sudo rpm -qa | grep -I java
```

If the command returns information similar to 'IBM J9 VM (build 2.9.x)' you need to remove the package:

Steps to Install Agent

- 1. Log in as Administrator or Account Owner to your Cloud Secure environment.
- 2. Click Admin > Data Collectors > Agents > +Agent

The system displays the Add an Agent page:



- 3. Select the operating system on which you are installing the agent.
- 4. Verify that the agent server meets the minimum system requirements.
- 5. To verify that the agent server is running a supported version of Linux, click *Versions Supported (i)*.

Add an Agent X Cloud Secure collects device and user data using one or more Agents installed on local servers. Each Agent can host multiple Data Collectors, which send data to Cloud Secure for analysis. Which Operating system are you using? CentOS RHEL Minimum Agent server requirements: 4 CORES 16GB RAM 40GB DISK Versions Supported 1 Installation Instructions Open up a terminal window and run the following command: sudo curl -X GET -H 'Authorization: Bearer eyJ0eXAi0iJKVlQiLCJhbGci0iJIU zM4NCJ9.eyJvbmV0aW1lVG9rZW5JZCI6IjlkNWUwZGE1LWEzYTctNGM3My050DhjLTM0MWNi NzU3ZmIzZSIsImRvY2tlclJlcG9zaXRvcnki0iJodHRwczovL29jaS1yZWdpc3RyeS5vY2ku Y2xvdWQubmFuZS5vcGVuZW5nbGFiLm5ldGFwcC5jb206NTAwMCIsInJvbGVzIjpbImFkbWlu Il0sInNlcnZlclVybCI6Imh0dHBzOi8vMTY0ZDcwYWItZDI00C00YWQ1LWEzNWUtYWY2Mzg3 NGEyNThlLmRldi5jbG91ZHNlY3VyZS5uZXRhcHAuY29tIiwiaXNzIjoib2NpIiwiZXhwIjox NTQ4NzEzMjM2LCJsb2dpbiI6ImFnZW50LjI4OTUzMWFlLTIxZjYtNDM5Ni05ZmQyLTA1M2Fi NDJmM2FkYSIsImlhdCI6MTU0ODcwNjAzNiwidXVpZCI6IjI4OTUzMWFlLTIxZjYtNDM5Ni05 ZmQyLTA1M2FiNDJmM2FkYSIsInRlbmFudCI6IjE2NGQ3MGFiLWQyNDgtNGFkNS1hMzVlLWFm NjM4NzRhMjU4ZSIsImFnZW50TG9naW5Vcmwi0iJodHRwczovL2FnZW50bG9naW4uZGV2LmNs b3Vkc2VjdXJlLm5ldGFwcC5jb20ifQ.0S8645HmX8LGrw0ZDAgAmx6cUdNaKzvisNr05Rx4b CiiN--n5BoxbZlkG593wwww' -o cloudsecure-linux-agent-installer-1.0.zip ht tps://164d70ab-d248-4ad5-a35e-af63874a258e.dev.cloudsecure.netapp.com/re st/v1/agents/installers/linux/1.0 && sudo unzip cloudsecure-linux-agentinstaller-1.0.zip -d . && sudo chmod 755 -Rf . && sudo -- /bin/bash -c 'TOKEN=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzM4NCJ9.eyJvbmV0aW1lVG9rZW5JZCI6Ijl kNWUwZGE1LWEzYTctNGM3My050DhjLTM0MWNiNzU3ZmIzZSIsImRvY2tlclJlcG9zaXRvcnk iOiJodHRwczovL29jaSlyZWdpc3RyeS5vY2kuY2xvdWQubmFuZS5vcGVuZW5nbGFiLm5ldGF wcC5ib206NTAwMCIsInJvbGVzIipbImFkbWluIl0sInNlcnZlclVvbCI6Imh0dHBzOi8vMTY

- 6. Click the Copy to Clipboard icon to copy the installation command.
- 7. Run the installation command in a terminal window.
- 8. The system displays the following message when the installation completes successfully:



After You Finish

- 1. You need to configure a User Directory Collector.
- 2. You need to configure one or more Data Collectors.

Files Created During Installation

• Installation directory:

/opt/netapp/cloudsecure/agent

• Installation logs:

/var/log/netapp/cloudsecure/install /opt/netapp/cloud-secure/logs

- Agent Logs:
- You can use the following command to verify the agent installed correctly: sudo grep -irn register /opt/netapp/cloudsecure/agent/logs/agent.log
- Use the following script to uninstall the agent: sudo cloudsecure-agent-uninstall.sh

Network Configuration

Use the following commands to open ports to be used by Cloud Secure.

Steps

```
    sudo firewall-cmd --permanent --zone=public --add-port=35001-35100/tcp
    sudo firewall-cmd --reload
    sudo iptables-save | grep 35001
    sample output:
```

4. -A IN_public_allow -p tcp -m tcp --dport 35001 -m conntrack -ctstate NEW -j ACCEPT

Troubleshooting Agent Installation Errors

Known problems and their resolutions are described in the following table.

Problem:	Resolution:
Agent installation fails with "File name too long" errror	To correct this error use the sh shell to run the command.

Problem:	Resolution:
Agent installation fails to create the ~/agent/logs folder and the install.log file provides no relevant information.	This error occurs during bootstrapping of the agent. The error is not logged in log files because it occurs before logger is initialized. The error is redirected to standard output, and is visible in the service log using the journalctl -u cloudsecure-agent.service command. This command can be used for troubleshooting the issue further.
Agent installation fails with 'This linux distribution is not supported. Exiting the installation'.	The supported platforms for Cloud Secure 1.0.0 are RHEL 7.x / CentOS 7.x. Ensure that you are not installing the agent on a RHEL 6.x or CentOS 6.x system.

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