



Host Access Analyzer 1.0

Installing HAA Server on Linux

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Introduction

The Host Access Analyzer (HAA) installer for Linux is a `tar.gz` file that contains docker images for all required components as well as installation scripts and certificate components.

Terminology

The following terminology is used in this guide:

Single machine When installing HAA on a single machine, the machine is referred to as *Manager*.

Three machines When installing HAA on three machines, the machines are referred to as:

- *Manager*
- *Node 1*
- *Node 2*

Services are distributed between three different machines, including the one where setup is run.

Prerequisites

Supported operating systems:

- RHEL 7.4 and later, RHEL 8.x
- SUSE SLES 12, SUSE SLES 15

Hardware:

Each machine requires a minimum of:

- 16 GB RAM
- 4 CPUs

Software:

- Docker engine (minimum version 18.09.0) and docker-compose tool (minimum version 1.22.0)

Firewall:

- The following ports must be available:
 - TCP port 2377 for Manager node.
 - TCP and UDP port 7946 for all nodes.
 - UDP port 4789 for all nodes.

Any firewall should be configured correctly. On the Manager machine, the firewall must allow either default SSL port 443, or a custom port you provide during setup, as well as port 6566.

Enhanced security features:

Enhanced security features should be turned off.

Certificates:

If you intend to replace the supplied self-signed certificates in the `cert` directory, you must prepare your own certificates.

Virtual memory for Elasticsearch node

By default, Elasticsearch uses a `mmapfs` directory to store its indexes. The default operating system limits on `mmap` counts is likely to be too low, which may result in out of memory exceptions. On Linux, you can increase the limits by running the following command as root on the node where Elasticsearch is going to be installed:

```
sysctl -w vm.max_map_count=262144
```

To set this value permanently, update the `vm.max_map_count` setting in the `/etc/sysctl.conf` file. To verify after rebooting, run `sysctl vm.max_map_count`.

Memory lock limits for Elasticsearch node

Elasticsearch tries to lock memory to improve performance. We recommend removing memory lock limits to enable this. To remove the limit for docker on the Elasticsearch node:

1. Add the line `LimitMEMLOCK=infinity` to the `[Service]` section of the `/usr/lib/systemd/system/docker.service` file and `containerd.service` (if it exists).
2. Run `systemctl daemon-reload`.
3. Run `systemctl restart docker` and `containerd` (if it exists).
4. Restart HAA by running `./stop.sh` and `./start.sh` if was already running.

Preparing for installation

Run `tar -xf <filename>.tar.gz` to extract the content.

Setup Script

`setup` script contains different parameters you can use. To see the usage guide, run `./setup.sh` without parameters.

--single-machine	Triggers single machine installation.
User1@HostName IP User2@HostName IP	Triggers swarm installation on three defined machines (current machine plus additional supplied machines.)
--temp-dir	Specifies where the files are uploaded on the node machines. Optional. If omitted, the <code>/tmp</code> directory is used by default.
--hostname	Full public host name of the Manager machine. For example, <code>foo.myorg.com</code> . Optional. If omitted, you are prompted during setup.
--port	Desired SSL port. Optional. If omitted, you are prompted during setup. Defaults to 443.
--certfile	<code>/path/to/your/file.crt</code> . Optional. The installer supplies a self-generated certificate file. If omitted, you are prompted during setup.
--keyfile	<code>/path/to/your/file.key</code> . Optional. The installer supplies a self-generated key file. If omitted, you are prompted during setup.
--eula-accepted	Optional. If omitted, you are prompted to accept the End User License Agreement during setup.

Installing HAA Server on three machines

This is the recommended method of installing HAA Server.

Use the supplied `setup.sh` script to install HAA Server on the manager node and two specified nodes.

```
./setup.sh <User>@<NODE 1(HostName/IP)> <User>@<NODE 2(HostName/IP)> [--temp-dir=<dir>>] [--hostname=<full_public_host_name_of_machine>] [--port=<port>] [--certfile=</path/to/your/file.crt>] [--keyfile=</path/to/your/file.key>][--eula-accepted]
```

During the process you might be prompted to accept the End User License Agreement, as well as for `hostname/port` and the `crt/key` file path if not entered in advance.

You might also be prompted for passwords to the other nodes.



Note: Installation starts the service automatically.

Stop service

To stop the services, run the `./stop.sh` script.

Start service

To start previously stopped services, run the `./start.sh` script.

Installing HAA Server on a single machine

Use the supplied `setup.sh` script to install HAA Server on a single machine.

```
./setup.sh --single-machine [--temp-dir=<dir>>] [--  
hostname=<full_public_host_name_of_machine>] [--port=<port>] [--certfile=</  
path/to/your/file.crt>] [--keyfile=</path/to/your/file.key>][--eula-accepted]
```

During the process you might be prompted to accept the End User License Agreement, as well as for `hostname/port` and the `crt/key` file path if not entered in advance.

You might also be prompted for passwords to the other nodes.



Note: Installation starts the service automatically.

Stop service

To stop the services, run the `./stop.sh` script.

Start service

To start previously stopped services, run the `./start.sh` script.

Accessing the server

Configuring the client

Use the Manager node IP address with port 6566.

Accessing the portal

Enter the following into a browser:

```
https://<manager_host_name>[:<Non-Default User Defined SSL Port>]
```

Accessing Identity and Access management

1. To access the **Identity and Access Management** page, enter the following URL in your browser:

```
https://<manager-host-name>[:<user_defined_ssl_port>]/auth
```

2. Enter the following credentials:

```
admin
```

```
and:
```

```
admin
```

Change these after your first login.

Contacting Micro Focus

Our Web site gives up-to-date details of contact numbers and addresses.

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Information we need

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