



Host Access Analyzer 1.0

Installing HAA Server on Windows

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Introduction

The Host Access Analyzer (HAA) installer for Windows is `.msi` file.

The `.msi` file is used to install all HAA components:

- JAVA
- HAA Server
- HAA Portal
- RabbitMQ
- Traefik Proxy
- Elasticsearch
- Kibana
- PostgreSQL
- Identity and Access Management

When you run the file, the installation files for each component are extracted to a location you select.

Installation methods

There are two ways to install HHA Server:

msi installation When asked to run an msi installation, double-click the `.msi` file. This starts the installation wizard.

Batch installation When asked to run a batch install, double-click the batch file with default parameters. You can also use the command prompt to run the same batch file and supply arguments based on this manual.



Note: Each batch file requires a separate instance of a command prompt.

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*

Prerequisites

Each machine requires a minimum of:

- 16 GB RAM
- 4 CPUs

Open firewall ports

If you are not using Windows firewall, you must open the following ports:



Note: For single machine installation, all the ports should be open for the Manager node.

Manager node

Traefik port (default 443)
GRPC Port (default 6566)
RabbitMQ Ports (5672 & 15672)

Node 1

ElasticSearch Port (default 9200)
Kibana Port (default 5601)

Node 2

IAM Port (8081)
Portal port (8080)

Installing HAA Server

Enabling .NET 3.5

 **Note:** For 3-node setup, install on all nodes.

1. Open Server Manager from : `startServer Manager`.
2. Select **2 Add roles and features**.
3. Click **Next >** four times.
4. Check **.NET Framework 3.5 Features**.
5. Click **Next >**.
6. Click **Install**.
7. When installation is complete, close the window.

Installing Java

 **Note:** For 3-node setup, install on all nodes.

In the `JAVA` folder, double-click the `Install_JAVA.bat` file.

The batch file installs JAVA on the machine.

There are no arguments for this file.

Installing Elasticsearch

 **Note:** For 3-node setup, install on Node 1.

In the `Elasticsearch` folder, double-click the `Install_ES.bat` file.

The batch file installs Elasticsearch on the machine.

The following arguments can be configured:

- Folder** Sets the installation directory. Default is `Program Files`.
- Port** Sets the service listening port. Default is `9200`.

To configure these arguments, run the following from a command prompt:

```
Install_ES.bat [-Folder <folder>] [-Port <port>]
```

Installing Kibana

 **Note:** For 3-node setup, install on Node 1.

In the `Kibana` folder, double-click the `Install_Kibana.bat` file.

The batch file installs Kibana on the machine.

The following arguments can be configured:

- Folder** Sets the installation directory. Default is Program Files.
- Port** Sets the service listening port. Default is 5601.
- Elasticsearch** Sets the Elasticsearch endpoint (host:port). Default is `http://localhost:9200`.

To configure these arguments, run the following from a command prompt:

```
Install_Kibana.bat [-Folder <folder>] [-Port <port>] [-Elasticsearch  
<endpoint>]
```

Installing Traefik Proxy



Note: For 3-node setup, install on the Manager node.

In the Traefik folder, locate the `traefik_haa_cluster.yml` file. Use your preferred text editor to edit the file.



Note: The following is a code snippet. The actual file might contain more code than illustrated here.

```
traefik_haa_cluster.yml
http:
  routers:
    kibana-route:
      entryPoints:
        - kibana
      rule: PathPrefix(`/`)
      service: kibana
      tls: {}
    portal-route:
      entryPoints:
        - portal
      rule: PathPrefix(`/`)
      service: portal
      tls: {}
    iam-route:
      entryPoints:
        - iam
      rule: PathPrefix(`/`)
      service: iam
      tls: {}
  services:
    kibana:
      loadBalancer:
        servers:
          - url: http://${KIBANA_HOST_PORT}/
    iam:
      loadBalancer:
        servers:
          - url: http://${IAM_HOST_PORT}/
    portal:
      loadBalancer:
        servers:
          - url: http://${PORTAL_HOST_PORT}
  middlewares:
    ssl-forwards:
      headers:
```

```

    customRequestHeaders:
      X-Forwarded-Proto: "https"
      X-Forwarded-Host: "${DOMAIN}" 4
  tls:
    stores:
      default:
        defaultCertificate: (5)
        certFile: /certs/haa.crt
        keyFile: /certs/haa.key

```

1. Replace `${KIBANA_HOST_PORT}` with `<Manager_Node_DNS_for_single_node_or_node_1_DNS_for_3_node_setup>:<kibana_port>`. Default Kibana port is 5601.
2. Replace `${IAM_HOST_PORT}` with `<Manager_Node_DNS_for_single_node_or_node_2_DNS_for_3_node_setup>:<iam_port>`. Default IAM port is 8081.
3. Replace `${PORTAL_HOST_PORT}` with `<Manager_Node_DNS_for_single_node_or_node_2_DNS_for_3_node_setup>:<portal_port>`. Default HAA Portal port is 8080.
4. Replace `${DOMAIN}` with the public domain host name or IP address of the Manager node.
5. If you want to use your own certificates for SSL, replace `certfile` and `keyfile` with your own certificates, using absolute paths.

If you want to use the supplied certificates, replace the existing content to:

```
certfile: .\certs\haa.crt
```

and:

```
keyfile: .\certs\haa.key
```

6. Save the changes and close the editor.
7. Install Traefik using the `Install.Traefik.bat` file.

Installing RabbitMQ

 **Note:** For 3-node setup, install on the Manager node.

1. In the `RabbitMQ` folder, install the RabbitMQ prerequisite Erlang using the `otp-22.1-win64.exe` installer file. Use all installation defaults.

 **Note:** You might be prompted to install Visual studio 2013 redistributable package. If so, install it by clicking install on the machine.

2. Install RabbitMQ using the supplied `rabbitmq-server-3.7.20.exe` installer file. Use all installation defaults.
3. Double-click `Configure_RabbitMQ.bat`.

This configures RabbitMQ on the machine. No arguments are available for this file.

Installing HAA Server

 **Note:** For 3-node setup, run the installer twice: once on the Manager node and once on Node 2.

1. In the `Server` folder, double-click the `HAA_Server-1.0.0.msi` file.

- Follow the instruction up to the **Settings** page.
2. Enter the ElasticSearch host you installed ElasticSearch on, and the port you used for the installation. Default ElasticSearch port is 9200.
 3. Enter the RabbitMQ host you installed RabbitMQ on. Keep the default port 5672.
 4. *For 3-node setup, perform this step only on the Manager node:*
Check **Producer Mode** and use 6566 as the default **GRPC Port**.
 5. *For 3-node setup, perform this step only on Node 2:*
Check **Consumer Mode**.
 6. Click **Next**, then **Install**.
 7. Click **Finish** to exit the setup wizard.

Installing PostgreSQL



Note: For 3-node setup, install on Node 2.

1. In the `Postgres` folder, either double-click `Install_postgres.bat` or, from a command prompt, enter:

```
Install_postgres.bat
```

No arguments are available for the file
The file installs Postgresql on the machine.
2. When prompted for a password, enter:

```
postgres
```

Installing Identity and Access Management



Note: For 3-node setup, install on Node 2.

1. In the `IAM` folder, run the following file:

```
Install_Iam.bat [-Folder <folder>]
```

where:
`<folder>` specifies the installation folder. Default is `C:\IAM`.

During installation you might be prompted to press any key to continue.
2. After the installation is complete, open a browser window on the node and navigate to:

```
http://localhost:8081
```
3. Click **Continue**.
4. Enter the following credentials:
User: `admin`
Password: `admin`
5. Hover over **Master** and click **Add Realm**.
6. Next to **Import**, click **Select File**.
7. Select the `haaRealm.json` file supplied in the `IAM` folder.
8. Click **Create**.

9. After the realm is created, navigate to the **Themes** tab.
10. Next to **Login Theme**, **Account Theme**, and **Admin Console Theme**, select **haa** from the drop-down list.
11. Click **Save**.

For user configuration, refer to the respective part in the documentation.

Installing the HAA Portal



Note: For 3-node setup, install on Node 2.

1. Install the server using the HAA Portal-1.0.0.msi file.
Follow The instruction up to the **Settings** page.
2. In the **Proxy** frame, type the Manager node IP. Use 443 for the port.
3. Keep the **Port Field** as 8080.
4. Click **Next**, **Next**, then **Install**.
5. Click **Finish** to exit the setup wizard.

Accessing the server

Configuring the client

Use the Manager node IP address with port 6656.

Accessing the portal

Enter the following into a browser:

<Manager_Node_IP>

Contacting Micro Focus

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Host Access Analyzer 1.0

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