



# FIREEYE HEALTH CHECK TOOL

VERSION 3.1



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## OVERVIEW

FireEye Health Check Tool is a standalone agent that allows customers to collect health-related information from their cloud and on-premises FireEye appliances. The agent will run configuration and metric collections against FireEye appliances and provide an automated report detailing the health findings of the appliances based on predefined conditions of Hardware, System, Configuration, Detection and Best Practices health. The intent is to provide the status of the assessed systems and self-help recommendations for any issues identified by the FireEye Health Check Tool.

## SUPPORTED PLATFORMS

The Health Check Agent is supported to be executed from Windows, Mac OSX and Linux CentOS 7 and Ubuntu 16.4.

Supported FireEye platforms to perform Health Check against includes the following:

- Helix – Cloud Threat Analytics
- Endpoint Security – HX, HX DMZ
- Network Security – NX, VX
- Email Security – EX
- Management – CMS
- Content – FX
- Analysis - AX

## EXECUTABLE CHECKSUMS

### MAC OS

**Size:** 12 MB

**Date:** Fri Oct 11 09:16:56 2019

**MD5:** 747241c4b3df16e40a87d1399e40135f

**SHA1:** 4a990d1be89bb7f9c5be35b0b8503238fd781c0c

### Linux

**Size:** 19 MB

**Date:** Fri Oct 11 08:55:40 2019

**MD5:** cbffaab169cec841a2aab6acaa97be9d

**SHA1:** 3acb0bc621a65e0a7cc49c0c37a28e60dff037b

### Windows

**Size:** 16 MB

**Date:** Fri Oct 11 09:01:28 2019

**MD5:** a423727ea5e4e9f6b05ac33b87015a1f

**SHA1:** 096194a4d3eda9558ceb174e7eafcff983a9655c

## NEW IN VERSION 3.1

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### PDF REPORTING

Experimental support for generating PDF reports is now available on Windows 10 64-bit systems with the `-rp/--reportpdf` argument.

PDF reporting depends on several libraries to be available on OSX and Linux systems. To verify if your OSX or Linux system is capable of generating PDF reports, confirm with `fe_hca --help`. If the `-rp/--reportpdf` argument is displayed, then PDF report generation is available.

---

### PROXY SUPPORT

Experimental support for HTTP and SOCKS5 proxies has been added and can be used with the `-P/--proxy` arguments. Proxy authentication credentials will be prompted for by using the `-PA/--proxyauth` argument. After the credential's entry, one can optionally select to encrypt and cache the authentication details for unattended execution. Proxy use can be directed to be used for external only for authentication with Okta (`-PM/--proxymode external`), internal if a proxy is used to access appliances internally (`-PM/--proxymode internal`), or all (`-PM/--proxymode all`) which is the default.

---

### QUIET MODE

For unattended or scheduled executions through a scheduler, output can now be suppressed with the `-q/--quiet` argument.

## CHANGES

---

### TIMEOUTS

Timeouts have been adjusted from a default of 5 seconds to 10 seconds.

## BREAKING CHANGES

None



## USAGE

C:\>fe\_hca.exe -h

```

          /+/////////++
          -s`+''''o-:o
,.....:s-y.....+/s...../
y:--o+-----:-----+o--:y
y` +/      `./+osssso+:`    /+ `y
y` +/      `:syyys+++yYYY+.  /+ `y
y` +/      `oyYYYY#####yYYYY: /+ `y
y` +/      `oyoooo#####ooooyy. /+ `y
y` +/      `yyy#####ooy/    /+ `y
y` +/      `yy#####ooy:     /+ `y
y` +/      `:yYYYY#####yYYYyo` /+ `y
y` +/      `-syyy#####yYYY+`  /+ `y
y` +/      `:oyYYYYYYYys/.    /+ `y
y` +/      `.-:.-.`          /+ `y
s+//so//////////os//+s

```

FireEye Health Check Agent - v3.1

```
usage: fe_hca [-h] [-e] [-c CONFIG] [-cc] [-m {appliance, helix, fso}] [-s]
             [-T TIMEOUT] [-S] [-v] [-q] [-P PROXY] [-PA]
             [-PM {all, internal, external}] [-rp] [-u USERNAME] [-t TARGET]
             [-f FILE] [-ak APIKEY]
```

Automated health check reports for FireEye solutions.

optional arguments:

```
-h, --help          show this help message and exit
-e, --encrypt       Encrypt a password for use in storing in config files.
                   Prompts for password interactively.
-c CONFIG, --config CONFIG
                   Configuration file containing hosts. Used for
                   conducting single runs against multiple hosts that
                   have different passwords or scheduled executions.
-cc, --createconfig
                   Experimental: Create a configuration file based on the
                   current run parameters.
-m {appliance, helix, fso}, --mode {appliance, helix, fso}
                   Operation mode. Supported options are appliance
                   (default), helix & fso. Note: Appliance mode is used
                   for both physical and virtual appliances.
-s, --sslcheckoverride
                   Override the SSL check if an SSL Intercept solution
                   is in use and having SSL certificate verification to
                   fail. Note: Only use this if you are certain on why
                   certificate checks are failing
-T TIMEOUT, --timeout TIMEOUT
                   Connection timeout in seconds. Default is 10.
-S, --statistics    Display execution statistics.
-v, --version       Display full version and exit.
-q, --quiet         Disable execution mode. Used for scheduled runs.
-P PROXY, --proxy PROXY
                   Experimental: Proxy server: http://host:port. Socks5:
                   socks5://host:port.
-PA, --proxyauth    Experimental: Prompt for proxy username and password
                   at runtime. Optionally cache encrypted proxy
                   credentials.
-PM {all, internal, external}, --proxymode {all, internal, external}
                   Experimental: Use proxy settings for all, internal or
                   external connections. Default is all.
-rp, --reportpdf    Experimental: Outputs report in PDF format.
```

-u USERNAME, --username USERNAME  
Username to use for target appliance. Admin level user required. If not provided, you will be prompted.

-t TARGET, --target TARGET  
IP or hostname of target appliance. Multiple hosts can be specified separated by , between targets. If not provided and --file not specified, you will be prompted.

-f FILE, --file FILE File to read target hostnames or IPs from. One hostname/IP specified per line.

-ak APIKEY, --apikey APIKEY  
API key. Only used with --mode helix. If not provided, you will be prompted.

Detailed execution examples can be found in the documentation.

## OPTIONS DESCRIPTIONS

---

### HELP

When FE\_HCA is executed without any arguments, or `-h` or `--help` is specified, the default usage is displayed

---

### TARGET

Target hosts for data collection can be specified directly. A single host can be provided, or optionally, multiple hosts separated by a comma, e.g.; `192.168.1.150,10.1.1.39`

Helix instances are also addressed using target by specifying the instance name, e.g.: `hexabc123`

---

### USERNAME

Username for the appliance. This should be a user with admin credentials on the appliance to facilitate complete configuration collection. Collection from the use of a non-admin account is not supported.

Note: Helix reporting uses an API key instead of usernames.

---

### FILE

A file that contains a list of target hosts to be assessed, each specified on its own line, can be provided. This is useful for large deployments.

---

### ENCRYPT

Encrypt password / API key to be saved in a configuration file. Only encrypted passwords are supported in configuration files. Encrypted passwords can only be used on the same host that the agent is being run from. If the configuration file and moved to another system and used with a configuration file, the passwords / API keys need to be re-encrypted.

---

### CONFIGURATION FILE

An INI style file that contains a list of target hosts with accompanying authentication credentials that can be stored for simple reuse. This can be used to run against Helix, cloud, virtual and on-premise appliances in a single execution. The two primary modes of operation are “appliance” for on-premises and cloud hosted appliances (such as CMS, HX, NX, FX and AX), and “helix” for Cloud Threat Analytics Platform. This option may also assist with conducting a single execution against multiple hosts that have different accounts and passwords. This is useful for large deployments. Example config:

```
[appliance_set_1]
mode:appliance
username:account1
password:<encrypted password generated with '-e'>
target: 10.11.3.8,172.168.2.155,192.168.1.98,axhost.localdomain
```

```
[appliance_set_2]
mode:appliance
username:account2
password:<encrypted password generated with '-e'>
target:10.11.1.5,172.168.1.150,192.168.1.96,hxprimary.otherdomain
```

```
[helix_set_1]
mode:helix
apikey:<encrypted api key generated with '-e'>
target:hexabc123
```

---

## CREATE CONFIGURATION

Using create configuration will automatically create a config file in the `config` folder and is dynamically named based on the mode and date. This file can then be referenced with the `config` argument to execute the agent without having to manually specify any parameters.

Passwords provided at run time are securely encrypted and stored in the config file.

---

## STATISTICS

Provides statistics on the execution of the agent.

---

## TIMEOUT

Enables a custom timeout window in seconds. Typically used to accommodate connections with latency such as cloud appliances or slow links. Default timeout window is 10 seconds.

---

## MODE

Operation mode. Supported options are `appliance` (default), `helix` & `fso`. Note: Appliance mode is used for both physical, virtual and cloud appliances. Only one Mode can be executed at a time. Ex. Helix mode must be run separately from FSO mode, and Appliance mode must be run separately when the agent is being executed without the use of a config file.

---

## API KEY

Provides the parameter to enter in the API key required to query the Helix API when running the Helix mode reporting.

Note: When using the API key argument, the API key will be visible in the command / shell history. The argument can be omitted, and you will be prompted to enter the API key at run time which is recommended.

---

## SSL CHECK OVERRIDE

Override the SSL check if an SSL Intercept solution is in use and having SSL certificate verification to fail. Note: Only use this if you are certain on why certificate checks are failing.

---

## PDF REPORTS

Experimental support for generating PDF reports is now available on Windows 10 64-bit systems with the `-rp/--reportpdf` argument.

PDF reporting depends on several libraries to be available OSX and Linux systems. To verify if your OSX or Linux system is capable of generating PDF reports, confirm with `fe_hca --help`. If the `-rp/--reportpdf` argument is displayed, then PDF report generation is available.

---

## QUIET MODE

For unattended or timed executions through a scheduler, output can now be suppressed with the `-q/--quiet` argument.

## EXECUTION

The following examples demonstrate executing the agent in different scenarios.

Note: Device addresses, credentials and file names need to be substituted with your own.

---

### APPLIANCE EXAMPLE

Execution:

```
fe_hca.exe -username username --target 10.10.11.4
```

---

### CLOUD APPLIANCE EXAMPLE USING A LONGER TIMEOUT

Execution:

```
fe_hca.exe -username username -target hexabc123-hx-ssh-1.hex01.helix.apps.fireeye.com --timeout 20
```

---

### APPLIANCE EXAMPLE SPECIFYING MULTIPLE TARGETS

Execution:

```
fe_hca.exe -username username --target 10.10.11.4,10.10.11.5
```

---

### APPLIANCE EXAMPLE USING HOSTS SPECIFIED IN A FILE

Appliances.txt contents:

```
10.10.11.4  
10.10.11.5
```

Execution:

```
fe_hca.exe --username username --file Appliances.txt
```

---

### HELIX EXAMPLE

Execution:

```
fe_hca.exe --mode helix -target hexabc123
```

---

### CREATE CONFIG EXAMPLE

Execution:

```
fe_hca.exe --mode helix -target hexabc123 --createconfig
```

Contents of config\helix\_290919T164917.cfg file created in config folder:

```
[helix_290919T164917]
mode:helix
target:,hexabc123,
apikey:<encrypted_api_key>
```

---

## USING A CONFIG EXAMPLE

Execution:

```
fe_hca.exe --conig config\helix_290919T164917.cfg
```

---

## USING A PROXY EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --proxy http://10.11.24.10:8080
```

---

## USING A SOCKS5 PROXY EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --proxy socks5://10.11.24.10:8080
```

---

## USING A PROXY WITH AUTHENTICATION EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --proxy http://10.11.24.10:8080 --
proxyauth
```

---

## USING A PROXY FOR EXTERNAL CONNECTIONS ONLY EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --proxy http://10.11.24.10:8080 -
proxymode external
```

---

## USING A PROXY FOR INTERNAL CONNECTIONS ONLY EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --proxy http://10.11.24.10:8080 --  
proxymode internal
```

---

## QUIET EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --quiet
```

---

## PDF REPORTS EXAMPLE

Execution:

```
fe_hca.exe --mode helix --target hexabc123 --reportspdf
```



## BEHAVIORS

---

### PASSWORD ENCRYPTION

Passwords and are encrypted using attributes that are unique to the machine that the they were generated on. If a config file containing passwords is moved to a new machine, decryption will fail and need to be regenerated on the system that the agent will be run on.

---

### USERNAMES, PASSWORDS AND API KEYS

In the event that `-username`, `--password` or `--apikey` is not specified on the command line, the agent will prompt for those at execution time. If there is a concern about having any of these credentials exposed on the shell / command history is a concern, please do not specify these parameters.

---

### TARGETS AND FILES

In the event that neither `--target` nor `--file` is specified, the agent starts in an interactive mode where target hosts can be specified.

---

### REPORTS

Reports are generated automatically and output customized based on the appliance that was detected at run time. Reports can be found in the `reports` folder in the same location where the agent is located.

## EXTERNAL PORTS & PROTOCOLS

<b>Service</b>	<b>Description</b>	<b>Port</b>	<b>Protocol</b>
<b>healthcheck.fireeye.com</b>	Update checks	443	TCP
<b>fireeye.okta.com</b>	Authentication	443	TCP
<b>apps.fireeye.com</b>	Helix API	443	TCP
<b>*.hex01.helix.apps.fireeye.com</b>	Cloud appliances API	443	TCP
<b>*.hex01.helix.apps.fireeye.com</b>	Cloud appliances SSH	22	TCP

## ISSUES AND TROUBLESHOOTING

---

### KNOWN ISSUES

- None at this time

### CRASH REPORTS

Crash reports are generated and stored in the `crash` folder. These files are used for troubleshooting and debugging if an issue is encountered.

### SUPPORT

This agent is not supported by FireEye Technical Support; however, bugs can be reported to FireEye Technical Support. A JIRA will need to be filed to address any bugs that require correction, or feature enhancement.

Phone:

1-877-FIREEYE

Email:

[Support@fireeye.com](mailto:Support@fireeye.com)

Web:

<https://www.fireeye.com/support/contacts.html>