

# FIREEYE HEALTH CHECK TOOL

**VERSION 3.0** 



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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: 3acb0bc621a65e0a7cc49c0c37a28e60dffd037b

#### **Windows**

Size: 16 MB

Date: Fri Oct 11 09:01:28 2019

MD5: a423727ea5e4e9f6b05ac33b87015a1f

SHA1: 096194a4d3eda9558ceb174e7eafcff983a9655c

#### **NEW IN VERSION 3.0**

#### UNIFIED HTML REPORTING

Based feedback from customers, the reporting has been completely overhauled. The Docx reporting has been replaced by HTML reporting and now features a much-improved look and feel. Additionally, execution runs that are made against multiple appliances specified manually or by using config mode are now unified in the single consolidated HTML report.

#### SPEED IMPROVEMENTS

Windows execution averages a ~163% performance gain, and Linux and OSX an average of ~133%. Full execution against any size mixed mode fleet now take under a minute to complete.

#### CREDENTIAL & EULA CASHING

After the initial EULA acceptance and successful Okta authentication the credential state is cached removing the need to reauthenticate during each subsequent run.

#### CREATE CONFIG OPTION

Manually executed runs can now be saved to a config file that saves the username, encrypted password, targets, execution mode and any other parameters stored in the config folder. The config file can then be recalled by passing the path to the config file using the -c/-config parameter to the tool.

The tool will parse the config, run collection and generate reports without any additional user input being required.

Multiple configs can be manually merged into a single config for consolidated reports against an entire fleet of appliances including mixed modes.

### **EXIT CODES**

The now tool returns standard system exit codes after execution:

- 0 Program successfully completed
- 1 Program encountered an issue during execution

# UNATTENDED EXECUTION

The combination of credential and EULA caching, use of config files and exit codes facilitate the execution of the tool in an unattended fashion with your preferred scheduler.

# IMPROVED FEEDBACK DURING EXECUTION

A new feedback cue system provides status information during the initial execution stages of the tool.

# **CRASH REPORTS**

If a non-recoverable issue is encountered during execution, a crash report file is generated in the crash folder. These crash files can be used by the D&I Tech Team to identify and troubleshoot the cause and implement a fix in a future release.

# **BREAKING CHANGES**

# **ENCRYPTED PASSWORDS IN CONFIGURATION FILES**

Version 3.0 uses a complexly new encryption backend. The new implementation is not backwards compatible with previously encrypted passwords used in config files, and will require being regenerated using the -e argument.

#### **USAGE**

C:\>fe hca.exe -h

```
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                                              FireEye Health Check Agent - v3.0
usage: fe hca.exe [-h] [-e] [-c CONFIG] [-cc] [-m MODE] [-s] [-T TIMEOUT] [-S]
                                    [-v] [-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
                                               Create a configuration file based on the current run
                                                paramaters. Experimental.
    -m MODE, --mode MODE 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
                                                isin 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 5.
    -S, --statistics
                                               Display execution statistics.
    -v, --version
                                               Display full version and exit.
    -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.
```

/+/////++. -s`+''''o-:o ,....s-y....++/s......,

#### **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 <code>config</code> folder in the same folder in which the agent is located dynamically named based on the mode and date. This file can then be referenced with the config argument 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. Default timeout window is five 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.

#### **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 -u username -t 10.10.11.4

#### CLOUD APPLIANCE EXAMPLE USING A LONGER TIMEOUT

#### Execution:

fe\_hca.exe -u username -t hexabc123-hx-ssh-1.hex01.helix.apps.fireeye.com -T
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# APPLIANCE EXAMPLE SPECIFYING MULTIPLE TARGETS

#### Execution:

fe hca.exe -u username -t 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 -u username -f Appliances.txt

# **HELIX EXAMPLE**

# Execution:

fe hca.exe --mode helix -t hexabc123

# CREATE CONFIG EXAMPLE

#### Execution:

fe hca.exe --mode helix -t hexabc123 -cc

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 -c config\helix\_290919T164917.cfg

#### **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 <code>-username</code>, <code>--password</code> or <code>-apikey</code> 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 paramaters.

#### 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.

# ISSUES AND TROUBLESHOOTING

# **KNOWN ISSUES**

None at this time

# **CRASH REPORTS**

Crash reports are generated and stored in the crash folder in the same location where the agent is located. 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

Web:

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