

HORUS VIEW & EXPLORE

TECHNICAL DOCUMENTATION

.ini Files Configuration Guide

For Horus Applications

Horus View & Explore
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1 HLL & HSS .ini File

1.1 introduction: HLL & HSS .ini File

The .ini files for both Linking Lab and Security Suite contain various settings for configuring the application.

There are two .ini files, one for Linking Lab and the other for the Security Suite.

The .ini file for Linking Lab is: *horus_app_hll_exe.ini*.

The .ini file for Security Suite is: *horus_app_hss_exe.ini*.

Each file configures their respective application, but the files themselves, should otherwise be identical, containing the same options.

.ini File Location with Windows

For Windows users the .ini file can be found in the following directory:
C:\Users\Username\AppData\Roaming\Horus View and Explore

.ini File Location for Linux

When using Linux the .ini file can be found in the following directory:
~/config/horus

To edit the .ini file open it with any text editor.

```

#v2-server=on
# Enable System v2 Noisy-Neutrino server:
# on: On: Enable.
# off: Off: Disable.

#discoverer-service=on
# Enable discoverer service:
# on: On: Enable.
# off: Off: Disable.

#v1-show-upstream=true
# Display upstream messages.

#v2-ser-net-url=http://112345
# The address for the control-message service [zmq-repl].

#v2-show-upstream=true
# Display upstream messages.

v2-discovery=on
# Enable discoverability:
# on: On: Enable.
# off: Off: Disable.

v2-log-events=Debug
# Minimum severity of log messages to send as events:
# Debug: Debug: Sporadic normal events.
# Info: Information: Interesting events.
# Warning: Warning: Unusual events.
# Error: Error: Error events.
# Fatal: Fatal: Errors from which cannot be recovered.

v2-cmp-search-path="C:\Program Files\Horus View and Explore\Horus LinkingLab\horus_plugins"
# Location of the plugin components.

#v2-pipeline=arg
# A V2 hrp file containing a pipeline to load at start-up.

#v2-start-pipeline=true
# Start pipeline at start-up.

#v2-persistent-pipeline=true
# Allow user to save pipeline on embedded device.

#v2-connection-statistics=true
# Compute connection statistics of a running pipeline.

#v2-lic-key=arg
# The license key of the product, to be activated.

```

Figure 1: Partial List of the .ini File Options

A list similar to figure 1 will appear.

Below, you can read more on the functionality of each option, along with a description on how to edit these options.

1.2 .Ini File Options

The list is comprised out of various configuration options

Each of these options has a short description of its functionality, followed by any possible settings.

```

#this-is-a-setting=true
# The description of the setting is placed on this line
# True: Option A: possible settings are placed here
# False: Option B: possible settings are placed here

```

Figure 2: Option Layout

Editing options

All the options are commented out with an # character by default. If you wish to edit an option, you can do this by removing the #, and then changing the setting. You can modify the option by editing the setting behind the =.

Options that are commented out, revert to a default setting. The default setting is generally what the original setting of the option was, prior to editing it.

This means that if an option is commented out, it can still be active.

You can also edit the .ini files through the System Configuration menu of Linking Lab, as seen in figure 3

When Linking Lab is running without the Security Suite, you can edit the .ini file for Linking Lab.

To edit the .ini file from Security Suite, Start the Security Suite, then open Linking Lab, and connect to the backend created by Security Suite.

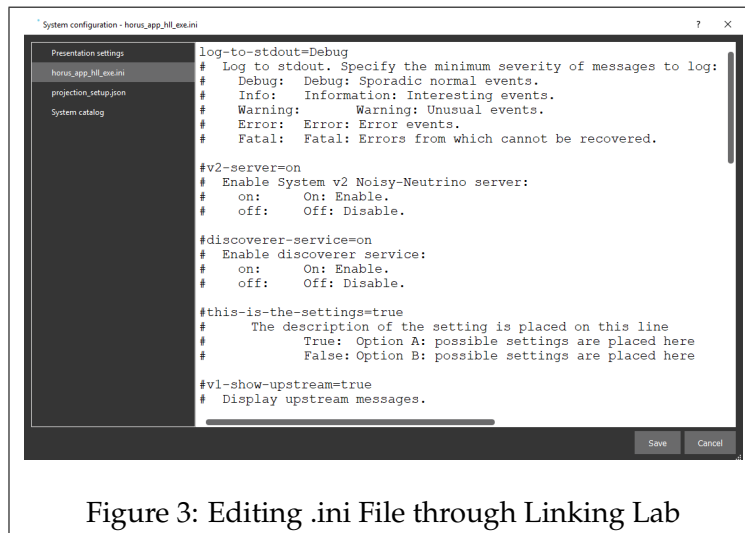


Figure 3: Editing .ini File through Linking Lab

.ini Options in the Terminal

You can also view the options from the .ini file through the terminal.

In the terminal, navigate to the installation folder of either Linking Lab or Security Suite, depending on which application you would like to edit.

Then type the executable of the program, followed by '*-help*'.

This should then print a list containing all the options found in the .ini file.

```
PS C:\Program Files\Horus View and Explore\Horus SecuritySuite> .\horus_app_hss_exe.exe --help
Horus View and Explore - Horus Security Suite:
--help                Display help.
--sdk-version          Display the version of the Horus SDK.
--config arg (=C:/Users/Gebbruiker/AppData/Roaming/Horus View and Explore/horus_app_hss_exe.ini)
                      The configuration file.
--hardware-id         Display the hardware ID of the system.
--keygen              Generate an 2048 bit public & private key.
--min-thread-pool-size arg (=30)
                      Minimum number of threads to use.
--log-to-stdout arg
                      Log to stdout. Specify the minimum severity of messages to log:
                      Debug: Debug; Sporadic normal events.
                      Info: Information; Interesting events.
                      Warning: Warning; Unusual events.
                      Error: Errors; Error events.
                      Fatal: Fatal; Errors from which cannot be recovered.

Services:
--v2-server arg (=on)
                      Enable System v2 Noisy-Neutrino server:
                      on: On; Enable.
                      off: Off; Disable.
--discoverer-service arg (=on)
                      Enable discoverer service:
                      on: On; Enable.
                      off: Off; Disable.
```

Figure 4: Options in the Terminal

Starting the Software through the terminal with a Temporary Option

You can start up the application via the terminal by typing in the executable.

You may also add an option with a desired setting behind the executable. The application should then start up with the specified option.

```
Example: .\horus_app_hll_exe.exe -v2-discovery =off
```

The modified option is only temporary and will not be saved, it will thus only be used during that instance of the software. To make permanent changes, edit the options through Linking Lab or an text editor.

Updating .ini Files

Currently, the .ini file does not automatically update itself. New options could be added with newer builds, the .ini file could thus become outdated as a result. The software will run fine with an outdated .ini file, but you won't be able to configure the missing options.

The '-help' list in the terminal however, will always show the full list with all the .ini options.

To update the .ini file, there are two methods.

When a new option gets added, you could copy over the new one from the terminal to the .ini file.

The alternative method is to delete or move the old .ini file. On startup a new .ini file will be generated with the latest options.

Option Descriptions

Below you will find a list with the options from the .ini file, followed by a description for each option.

v2-server=on

Specify whether or not a System V2 server should be created when starting the application. If disabled, your own local system will not show up in the Connect Screen of Linking Lab. Useful when you only work on remote systems such as embedded systems, for example.

On: Enables the creation of a System V2 server.

Off: Disables the creation of a System V2 server.

discoverer-service=on

Enables or disables the discovery of other System V2 servers.

If turned off the connect screen will only show your own System V2 instance.

On: Enables discovery of other systems running System V2.

Off: Disables the discovery of other systems running System V2.

presentation-settings=

"C:\Users\Gebruiker\AppData\Roaming\Horus View and Explore\horus_app_hss_exe\presentation.json"

Points to the location of the 'presentation.json' file. This file contains configuration settings for the presentation layer.

Add the path between citations. The presentation.json file can be found in the appdata folder for Windows, and the config directory for Linux.

log-to-stdout=debug

On startup a terminal window opens along with the application. This option determines the type of information that gets written to the terminal window.

The specified setting determines the minimum severity of events that are written on the terminal window. From the possible settings, 'Debug' is the least severe, whilst 'Fatal' is the most severe.

Debug: Logs all types of events.

Info: Prints interesting and informative events.

Warning: Only shows warnings and unusual events.

Error: Only show errors.

Fatal: only show fatal errors which require a restart.

onvif-device-credentials=arg

Replace 'arg' with the username, and password to use for ONVIF devices. Separate the username and password with a colon (*username:password*). Used for the Video Proxy component.

video-decoder-priority=CUDA:D3D11:DXVA:FFmpeg

This determines the order of video decoders that are tried. Replace 'arg' with the video decoders to be tried in sequence. separate the video decoders with a colon (*Cuda:D3D11:etc*).

**video-format=loglevel:debug analyzeduration:0 probesize:32
fflags:nobuffer tune:zerolatency,fastdecode**

Additional video format options can be configured with this option. separate the different format options with a colon.

video-buffer-packet-size=-1

The amount of packets that the video buffer may contain. A value of -1 will automatically set the buffer size.

video-framerate-factor=1

The framerate factor acts as a multiplier for the playback speed, and should be at least 1.000000. For example, a factor of 1.25 would play the video 25% faster.

v1-show-upstream=true

Display upstream messages from a System V1 system. Enabling this option will print all control messages going from the server to the client, on the terminal window.
true: Show upstream messages.
false: Do not show upstream messages.

v2-ser-net-url=tcp://*:12345

You can define the address to be used here. When using both Linking Lab and Security Suite, you might want to use different ports for either application.

v2-show-upstream=true

Display upstream messages from a System V2 system. Enabling this option will print all control messages going from the server to the client, on the terminal window.
true: Show upstream messages.
false: Do not show upstream messages.

v2-discovery=on

This setting determines if other System V2 clients can detect your System V2 server.

On: Other System V2 clients are able to discover your System V2 backend.

Off: Other System V2 clients will be unable to detect your System V2 backend.

v2-log-events=debug

Changes the type of messages that get printed to either the notification window in Linking Lab, or the Status window in Security Suite.

The specified setting determines the minimum severity of events that are written to the application. From the possible settings, 'Debug' is the least severe, whilst 'Fatal' is the most severe.

Debug: Logs all types of events.

Info: Prints interesting and informative events.

Warning: Only shows warnings and unusual events.

Error: Only show errors.

Fatal: only show fatal errors which require a restart.

v2-cmp-search-path=arg

Enabling this option will result in the components being automatically loaded on startup.

Replace 'arg' with the path that points to the location of the plugins/component folder, this path should be between citation marks. The plugin folder can be found in the installation directory.

v2-pipeline=arg

Enabling this option will result in a saved pipeline being loaded on startup.

Replace 'arg' with the file path that points to the location of an .hrp file, this path should be between citation marks.

v2-start-pipeline=true

If enabled, the pipeline will start running on startup. Requires a pipeline to be loaded.

Option is set to false when commented out.

true: Starts running a System V2 pipeline on startup.

false: The system will not run the pipeline on startup.

v2-persistent-pipeline=true

This option allows you to save the current pipeline to a remote device; it enables the 'Save to Device' button from the Graph Builder.

Option is set to false when commented out.

true: Enables saving to remote systems.

false: Disables the ability to save to a remote system.

v2-compute-statistics=on

If on, the system V2 backend will compute connection statistics from a running pipeline.

This setting computes the statistics, to display them, use the 'v2-request-statistics' option.

On: System V2 will compute connection statistics.

Off: Connection Statistics will not be computed.

v2-compute-statistics-interval=00:00:05

The time interval between which to compute connection statistics.

Requires the 'v2-compute-statistics' to be enabled.

The interval is set in the following format (*Hours:Minutes:Seconds*).

v2-lic-key=arg

Activate a license key through the terminal.

Replace 'arg' with the license key between citation marks.

Currently, it only works when there is not an active license key already entered.

v2-lic-save-file="C:\Users\Gebruiker\AppData\Roaming\Horus View and Explore\system_v2_license.json"

Specifies the location where the 'license.json' file is saved to.

Place the path pointing to the 'system_v2_license.json' between citations

v2-lic-load-file=arg

The location to load the 'system_v2_license.json' from.

By default it checks the working directory, which is also the default save location.

To set a different location, replace 'arg' with the license key path between citations.

v2-data-content="C:/Users/Gebruiker/AppData/Roaming/Horus View and Explore/system_v2"

The path to the data content directory.

v2-com-service=arg

Provide the comport/serial port for the message service.(/dev/ttyACM0 | COM5)

v2-request-statistics=on

If on, your client will request connection statistics from the connected System V2 backend.

This setting requests the statistics from the server, ensure that the 'v2-compute-statistics' is set to enabled server-side.

On: The client will request connection statistics from the System V2 server.

Off: Connection Statistics will not be requested.

v2-request-statistics-interval=00:00:05

The time interval between which connection statistics are requested.

Requires the 'v2-request-statistics' to be enabled.

The interval is set in the following format (*Hours:Minutes:Seconds*).

extensions-path="D:/T/b/build/extensions/"

The path of the extensions libraries that are to be loaded.

These extensions libraries are required for certain features to function.

The 'extensions' folder can usually be found in the installation directory.

print-extensions=true

Print the loaded extensions and their capabilities to the terminal window.

true: Print extensions.

false: No extensions are printed.

print-extensions-settings=true

Print the settings from the detected 'Settings.json' files of the loaded extension libraries to the terminal window. *true*: Print extensions settings.

false: Do not print the extension settings.

discoverer-url=tcp://*:5556

The address used for the discoverer service.