





# Time Late Plug-in

May 2017

Time Late Plug-in



All Tracks

1 p-3c_orion_nrl	0:03:57	6 p-3c_orion_nrl	0:00:42
2 p-3c_orion_nrl	0:02:37	7 p-3c_orion_nrl	0:01:49
3 p-3c_orion_nrl	0:01:23	8 p-3c_orion_nrl	0:05:14
4 p-3c_orion_nrl	0:03:08	9 p-3c_orion_nrl	0:01:31
5 p-3c_orion_nrl	0:05:02	10 p-3c_orion_nrl	0:00:22

Trackers

6 p-3c_orion_nrl	0:00:42
7 p-3c_orion_nrl	0:01:49

Important

3 p-3c_orion_nrl	0:01:23
6 p-3c_orion_nrl	0:00:42

Critical Assets

5 p-3c_orion_nrl	0:05:02
10 p-3c_orion_nrl	0:00:22

Decoys

2 p-3c_orion_nrl	0:02:37
8 p-3c_orion_nrl	0:05:14

Ignore

9 p-3c_orion_nrl	0:01:31
10 p-3c_orion_nrl	0:00:22

## INTRODUCTION

The Time Late Plug-in was developed at U.S. Naval Research Laboratory for VACAPES. The plug-in can be used in conjunction with SIMDIS to monitor live data tracks and monitor their “time late” value, which is the amount of time since it was last updated. The GUI can be customized via a custom configuration file. The data tracks monitored by the plug-in are also defined in the configuration file.

## INSTALLATION

First, install SIMDIS on your machine using the normal installer. Then, download the Optional Plug-ins Distribution, which includes the Time Late Plug-in. Extract the zip file to a temporary directory, and copy the contents of extracted directory’s SIMDIS folder into your SIMDIS directory. When starting SIMDIS, you will be prompted to load or ignore the plug-in. This prompt will only be shown the first time you start SIMDIS if you set the plug-in to load and click “Save”, and the Time Late Plug-in will be loaded every time you start SIMDIS.

If you use the prompt’s “Ignore” option, the plug-in will not be loaded on start-up. The Plug-in Manager window can be used to change this option and also load and unload plug-ins manually. Please refer to the SIMDIS User Manual for more information.

The plug-in can be accessed by selecting “Time Late...” from the “Plug-ins” menu bar option. Clicking this menu option will open the main graphical user interface (GUI).

## OPERATION

The main GUI can be seen in Figure 1. This is the layout generated by the default configuration file TimeLatePluginConfig.tlml. This file is located in the SIMDIS\_HOME directory. The tracks defined in this file are created by the Simple Server Plug-in.

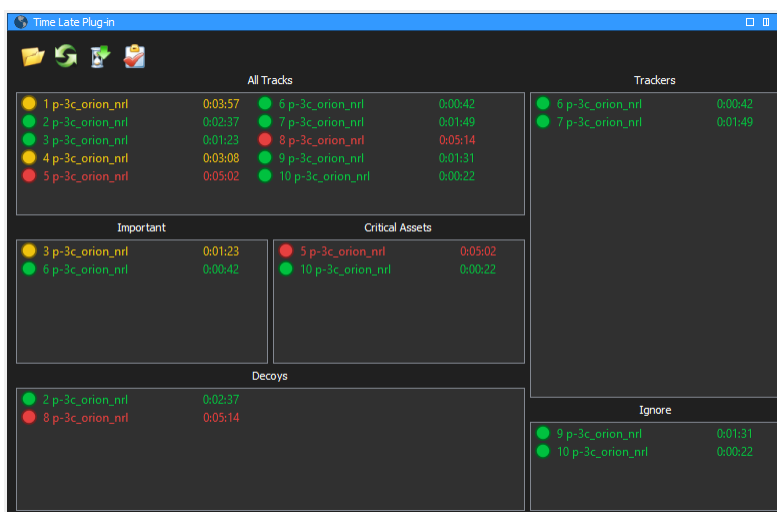


Figure 1: Default Configuration

A custom configuration file can be loaded by using the tool bar's Load button (see Table 1 below) or by specifying the file to be loaded on startup with a command line option. For instance, to instruct the plug-in to load a configuration file called "customConfig.tlml", start SIMDIS on the command line with the parameter

```
-Time_Late_Plugin:configfile customConfig.tlml
```

The tool bar at the top of the GUI contains four buttons useful in operating the plug-in. Each button presented in the GUI's tool bar and its function is described below in Table 1.





Icon	Title	Description
	Load Configuration File	Load a new configuration file. The file dialog opens to the last directory opened. On first use, the file dialog opens to the location of the default configuration file.
	Refresh Configuration File	Refresh the currently loaded configuration file. This button is useful for quickly seeing changes when modifying the configuration file to change the GUI layout or when adding/removing track names.
	Sort By Time Late	Sort the track listings by time late. When this button is checked, the tracks are sorted by time late in ascending order. When this button is unchecked, tracks appear in the list in the order they appear in the configuration file.
	Mark Tracks As Read	Mark all tracks as read. When a track is detected for the first time or when a track receives an update after going inactive, its text is emboldened and its text color is lightened. Clicking this button marks all tracks as "read", which returns them to the default state.

Table 1: Tool Bar Buttons

## CONFIGURATION FILE FORMAT

The Time Late Plug-in uses the XML format for its configuration files. The file extension used is .tlml (Time Late Markup Language). Included with this document is an XML Schema File called TimeLateConfigurationFile.xsd that describes the format for a .tlml file. Table 2 describes each element in depth.

Element Name	Element Description
Column	A vertical stack of Light Boxes and/or Rows.
Row	A horizontal row of Light Boxes. A Row must be defined within a Column.
LightBox	A box containing a list of tracks to monitor. A Light Box may only be defined within a Column or Row, and <i>must</i> contain a single Entity List.
EntityList	A container element holding a Light Box's list of entity names to monitor. An Entity List may only be defined within a Light Box, and there may only be a single Entity List per Light Box.
Entity	The name of a platform in SIMDIS to monitor. A track with this name will be added to the Light Box even if it is not found within SIMDIS when the plug-in starts. The plug-in will begin tracking this platform if it is added to SIMDIS.
Title	The title of a Light Box, displayed centered above the box. This field is optional. If a title is not defined for a Light Box, its title will be set to "No Title".
Stretch	An element's stretch factor determines the proportion of space it takes in its parent container. For instance, if two Light Boxes in a Row have stretch factors of 2 and 8, respectively, the first Light Box will take up 20% of the row, while the second will take the other 80%. Columns, Rows, and Light Boxes can define stretch factors.

WarnTime	The time late (in HH:MM:SS format or a number of seconds) at which a track's color will change to WarnColor. This optional value can be set on a per Light Box basis. The default is 3 minutes.
LateTime	The time late (in HH:MM:SS format or a number of seconds) at which a track's color will change from WarnColor to LateColor. This optional value can be set on a per Light Box basis. The default is 5 minutes.
InactiveTime	The time late (in HH:MM:SS format or a number of seconds) at which a track's color will change from LateColor to InactiveColor. This optional value can be set on a per Light Box basis. The default is 24 hours.
GoodColor	The color used for the track's text and light when the track's status is GOOD. This optional value should be defined at the top level, as it applies to all Light Boxes. The default is green.
WarnColor	The color used for the track's text and light when the track's status is WARN. This optional value should be defined at the top level, as it applies to all Light Boxes. The default is yellow.
LateColor	The color used for the track's text and light when the track's status is LATE. This optional value should be defined at the top level, as it applies to all Light Boxes. The default is red.
InactiveColor	The color used for the track's text and light when the track's status is INACTIVE or NO_DATA. This optional value should be defined at the top level, as it applies to all Light Boxes. The default is white.

Table 2: TLML Element Descriptions

We suggest using an online tool to verify your custom configuration file against the supplied TimeLateConfigurationFile.xsd.