

OPENFLIGHT API 20.0

RELEASE NOTES

CONTENT CREATION

PRESAGIS

Contents

- OpenFlight API 20.0 4**
- Important note regarding Presagis License Tool 5
- What's new 6
 - OpenFlight version 6
 - Visual Studio Compatibility 6
 - For developers 6
 - Location of link libraries 7
 - Location of dynamic link libraries 8
 - Importers and Exporters 8
 - Documentation 9
 - Sample Code 10
 - Plug-in Runtime Directory 11
 - New symbols 11
- Fixes 12
- Issues 13
 - mglNit 13
- Copyright 14**

OpenFlight API Release Notes

Welcome to the Release Notes for OpenFlight API 20.0.

OpenFlight API 20.0

This section describes the fixes made to the software since the previous release, as well as any known issues and limitations of the current version. It includes:

[“Important note regarding Presagis License Tool”](#) on page 5

[“What's new”](#) on page 6

[“Fixes”](#) on page 12

[“Issues”](#) on page 13

Important note regarding Presagis License Tool

Presagis has recently become aware of security vulnerabilities in versions of the Presagis License Tool up to and including version 4.4. The vulnerabilities affect only those customers who are running a Presagis License Server. Customers who are using a node-locked license are not affected.

The vulnerabilities have been fixed in the latest version of the Presagis License Tool, version 4.5.1. If you are using a Presagis License Server running on either the Microsoft Windows or Linux platform to license your Presagis software, ensure that your server is running the latest version.

For more information on how to upgrade, consult the *Presagis License Tool User Guide* for the latest version.

What's new

This section provides an overview of the new features and enhancements introduced in this release. For information on how to use these new features, refer to the *OpenFlight API Developer Guide and OpenFlight API Reference*.

OpenFlight version

This version of the OpenFlight API corresponds to OpenFlight version 16.8.

Visual Studio Compatibility

The OpenFlight API is distributed in several binary formats for the Microsoft Windows platform:

- Visual Studio 2015 (VC14-Win32)
- Visual Studio 2015 (VC14-x64)
- Visual Studio 2013 (VC12-Win32)
- Visual Studio 2013 (VC12-x64)

The table below shows which binary format you should use for the plug-ins, applications, and/or scripts you are developing.

For developers

- VC14-x64 is required for the following Creator plug-ins:
 - Creator 20.0
 - Creator 19.0
 - Creator 18
 - Creator 17
 - Creator 16
- Plug-ins for Creator 15 require VC12-Win32 or VC12-x64, it depends on version of Creator you are using, 32 or 64 bit, respectively.
- For standalone applications — use any format.

- For standalone OpenFlight scripts — use VC14-Win32 or VC14-x64, because the required Python binding files (.pyd) are available only with the VC14 format.

NOTE

If you are developing standalone scripts, you will also need to install Python 2.7.X.

If you are using OpenFlight scripts exclusively within Creator, you do not need to install Python.

The OpenFlight API installer for the Windows platform includes the binary files for all platforms. When you install the OpenFlight API on Windows, you can choose which platform you want or you can choose to install them all.

Location of link libraries

The subfolder containing the link libraries is located in:

PRESAGIS_OPENFLIGHT_API/lib<platform>

where lib<platform> is:

Folder...	Contains library for...
lib	VC14-Win32 or Linux
lib_x64	VC14-x64
lib_vc12	VC12-Win32
lib_vc12_x64	VC12-x64

Location of dynamic link libraries

The subfolder containing the dynamic link libraries is located in:

```
PRESAGIS_OPENFLIGHT_API/bin<platform>
```

where `bin<platform>` is:

Folder...	Contains library for...
<code>bin</code>	VC14-Win32 or Linux
<code>bin_x64</code>	VC14-x64
<code>bin_vc12</code>	VC12-Win32
<code>bin_vc12_x64</code>	VC12-x64

Importers and Exporters

The Windows VC14 platform also includes database importer and exporter plug-ins you can use in your standalone programs. These plug-ins enable you to read/write database formats other than OpenFlight using the OpenFlight API and are included in the following installation folders:

Subfolder	Database importer/exporter plug-ins version
<code>bin_x64/debug/plugins</code>	Debug
<code>bin_x64/release/plugins</code>	Release

Documentation

Documentation that was previously provided in CHM format is now provided in HTML format. It opens in your default Web browser.

The documents included with the OpenFlight API include:

OpenFlight API Installation Guide

OpenFlight API Release Notes

OpenFlight API Developer Guide

- *Volume 1 (Read/Write)*
- *Volume 2 (Extensions/Tools)*

OpenFlight API Reference Set

- *OpenFlight API Reference*
- *OpenFlight Data Dictionary*

Amendment to Software License Agreement

Documentation is installed at:

```
PRESAGIS_OPENFLIGHT_API/docs
```

PDF versions of *OpenFlight API Installation Guide*, *OpenFlight API Release Notes* and *OpenFlight API Developer Guide* are located in this folder.

HTML Help versions of *OpenFlight API Installation Guide*, *OpenFlight API Release Notes* and *OpenFlight API Developer Guide* are accessible from:

```
PRESAGIS_OPENFLIGHT_API/docs/help/index.html
```

OpenFlight API Reference Set is located here:

```
PRESAGIS_OPENFLIGHT_API/docs/reference/  
OpenFlight_API_Reference_Set.htm
```

Sample Code

Sample code is located in:

```
PRESAGIS_OPENFLIGHT_API/samples
```

with subfolders for different kinds of samples:

Subfolder	Description
apps	sample standalone programs
extensions	sample OpenFlight data extensions
plugins	sample plug-ins (not included in the Linux distribution)
scripts	sample OpenFlight and Creator scripts

Plug-in Runtime Directory

Plug-ins are loaded in the standalone program environment when your program or script calls the OpenFlight API function `mgInit`. `mgInit` searches for plug-ins in the following locations (in the order listed). As soon as a folder is found in one of these locations, `mgInit` stops searching for other locations and loads the plug-ins it finds in the first folder found.

- The directory (or directories) your program specifies when calling `mgSetPluginFolder`. If you call this function before `mgInit` to specify one or more directories, the folder(s) you specify will be searched for plug-ins. To specify more than one directory, pass a semi-colon delimited list of paths to `mgSetPluginFolder`.
- The directory (or directories) specified by the environmental variable `PRESAGIS_OPENFLIGHT_PLUGIN_DIR`. This environmental variable may specify any accessible directory on your computer or may specify multiple directories using a semi-colon to delimit each path.
- A directory named `plugins` immediately below the directory that contains the executable being run.

Creator loads plug-ins automatically when it starts. Creator searches for plug-ins in the following locations (in the order listed). As soon as a folder is found in one of these locations, Creator stops searching for other locations and loads the plug-ins it finds in the first folder found.

- The directory (or directories) specified by the environmental variable `PRESAGIS_CREATOR_PLUGIN_DIR`. This environmental variable may specify any accessible directory on your computer or may specify multiple directories using a semi-colon to delimit each path.
- A directory named `plugins` in the Creator configuration folder. This folder is located at:

```
PRESAGIS_CREATOR/config/plugins
```

New symbols

```
fltDetailMapEX
```

```
fltDetailMapExTexture
```

Fixes

This section describes the limitations identified in previous releases that have been fixed.

Case No.	Description
CR-11928	Fixed error in standalone sample on Windows.
CR-11904	Fixed <code>mgSetColorName</code> so that it returns status properly.
CR-11903	Fixed <code>mgSelectTextureIndex</code> to return status properly.
CR-11884	Fixed <code>mgMatrixFormLCS</code> function so it works in Script.

Issues

This section describes any known issues and limitations of the current version, as well as any pending issues from previous versions.

mgInit

`mgInit` / `mgExit` can be called only one time per process.

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