OPENFLIGHT API 15

RELEASE NOTES

CONTENT CREATION

PRESAGIS

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OpenFlight API Release Notes

Welcome to the Release Notes for OpenFlight API 15.

What's new

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

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"New in the OpenFlight Data Dictionary" on page 13

Visual Studio Compatibility

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

- Visual Studio 2013 (VC12-Win32)
- Visual Studio 2013 (VC12-x64)
- Visual Studio 2008 (VC9-Win32)
- Visual Studio 2008 (VC9-x64)
- Visual Studio 2005 (VC8-Win32)
- Visual Studio 2005 (VC8-x64)

Visual Studio 6 (VC6-Win32) is no longer supported.

Following are some guidelines to help you decide which binary format is right for you:

If you are developing plug-ins for Creator 15 you should use VC12-Win32 or VC12x64 depending on which version of Creator you are using (32 or 64 bit, respectively).

If you are developing plug-ins for Creator 14 you should use VC9-Win32.

If you are developing plug-ins for Creator 13 (v5.0) you should use VC9-Win32.

If you are developing plug-ins for Creator v3.4 - v4.2, you should use VC8-Win32.

If you are developing stand-alone applications, you can choose any format.

If you are developing stand-alone OpenFlight Scripts, you should install VC12-Win32 or VC12-x64 as the necessary Python binding files (.pyd) are only available with these VC12 formats. You will also need to install Python 2.7.X if you are developing standalone scripts. You do not need to install Python if you are using OpenFlight script exclusively within Creator.

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.

Both of the VC9 versions of the OpenFlight API DLLs are dependent on VC90 CRT version 9.0.21022.8. The OpenFlight API installer automatically installs the proper Microsoft Visual Studio 2008 (release) redistributable package if your computer does not already have it. The debug version of the CRT should be installed on your computer when you apply the proper patches/service packs to Visual Studio 2008.

Both of the VC8 versions of the OpenFlight API DLLs are dependent on VC80 CRT version 8.0.50727.4053. The OpenFlight API installer automatically installs the proper Microsoft Visual Studio 2005 (release) redistributable package if your computer does not already have it. The debug version of the CRT should be installed on your computer when you apply the proper patches/service packs to Visual Studio 2005.

Common Directory Organization

The OpenFlight API is now installed into the updated Presagis Common Directory Organization. This structure is slightly different than previous installations and affects the developer in the following areas:

"Location of link libraries" on page 7

"Location of dynamic link libraries" on page 8

"Location of documentation" on page 9

"Location of ddbuild parser utility" on page 9

Location of link libraries

The subfolder containing the link libraries has been changed to include a platform designator:

PRESAGIS OPENFLIGHT API/lib<platform>

where lib<platform> is:

Link Library Folder	Contents
lib	Link libraries for VC12-Win32 or Linux
lib_x64	Link libraries for VC12-x64
lib_vc9	Link libraries for VC9-Win32
lib_vc9_x64	Link libraries for VC9-x64
lib_vc8	Link libraries for VC8-Win32
lib_vc8_x64	Link libraries for VC8-x64

NOTE

The relocation of the link libraries may cause you to update your Visual Studio Project files and/or makefiles before the corresponding application(s) or plug-in(s) can be rebuilt with this version of the OpenFlight API. If you are using VC12-Win32 or Linux, your projects will not require any changes. If you are using other configurations on Windows, you will have to change the Linker property Additional Library Directories to reflect the new link library folder names.

Location of dynamic link libraries

The subfolder containing the dynamic link libraries has been changed to include a platform designator:

PRESAGIS OPENFLIGHT API/bin<platform>

where bin<platform> is:

Dynamic Link Library Folder	Contents
bin	Dynamic Link libraries for VC12-Win32 or Linux
bin_x64	Dynamic Link libraries for VC12-x64
bin_vc9	Dynamic Link libraries for VC9-Win32
bin_vc9_x64	Dynamic Link libraries for VC9-x64
bin_vc8	Dynamic Link libraries for VC8-Win32
bin_vc8_x64	Dynamic Link libraries for VC8-x64

NOTE

The relocation of the dynamic link libraries does not require you to update your Visual Studio Project files and/or makefiles. However, since these dynamic link libraries must accompany your application when it is deployed, you should be aware of this change.

Location of documentation

On the Windows platform, the documentation for the OpenFlight API is now included in the Presagis Documentation Library. The Presagis Documentation Library is Compiled HTML Help (CHM) format and includes documentation for all the Presagis products you have installed. The *Presagis Documentation Library* is located at:

```
PRESAGIS ROOT/docs/Presagis MS.chm
```

where **PRESAGIS ROOT** is the root folder where your Presagis products are installed. To view the OpenFlight documentation, as well as all Presagis product documentation, open this file and browse to the OpenFlight API section in the Presagis Documentation *Library* viewer that is displayed. You can also access the Presagis Documentation *Library* via the Windows Start Menu.

On the Linux platform, the documentation is still located in:

```
PRESAGIS OPENFLIGHT API/docs
```

In addition to the CHM versions of these documents, some documents are provided in alternative formats:

The OpenFlight API Installation Guide and OpenFlight API Release Notes (PDF) - both located in:

```
PRESAGIS ROOT/docs/
```

OpenFlight API Developer Guide (PDF) - located in:

PRESAGIS OPENFLIGHT API/docs/developerguide

OpenFlight API Reference Set (HTML) - located in:

PRESAGIS OPENFLIGHT API/docs/reference/ OpenFlight API Reference Set.htm

Location of ddbuild parser utility

The ddbuild parser (used to help you create your OpenFlight extension plug-ins) is now located in:

PRESAGIS OPENFLIGHT API/tools

New Functions

This section lists the functions that are new in this release. See OpenFlight API *Reference* for more information on these functions.

I/O Functions

mgIsInitialized

Tool Activation Functions

mgGetActivationKeyboardFlags

New Symbols

MEFV_1650 for mgExportDb

New Fields

The activateReason field was added to the mgtextactivatecallbackrec structure.

New in the OpenFlight Data Dictionary

The following fields were added to fltIMaterial to provide access to the new Physical Material Map record in the Extended Material:

fltPhysicalMaterialMapEx fltPhysicalMaterialMapExTexture

New in the OpenFlight Data Dictionary

Fixes and issues

This section describes the fixes made to OpenFlight API since the previous release and any known issues and limitations.

"Fixes" on page 16

"Known issues" on page 17

Fixes

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

Case No.	SFDC No.	Description
CR-9299		Fixed mgOpenDb to properly handle Vertex List record on polygon but no Vertex Palette.
CR-9272		Fixed mgWalk (and other variant functions) to propagate exceptions properly when raised in calling script.
CR-9268		Fixed mgExtensionFieldGetString and mgExtensionFieldGetXMLString in OpenFlight Script.
CR-8781		Fixed mgSaveAsDb and mgExportDb to write relative paths correctly when invoked with just a file name (no path).
None		Fixed mgGraphicsViewSettingSetInteger to set MGVI_WINDOWVIEW properly when no graphics view is open.
None		Enhanced mgIsDb to examine the database file more thoroughly to check if it is an OpenFlight file.

Known issues

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

mglnit

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

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