Contents

OpenFlight API 18. ................................................................. 4
  What’s new ........................................................................... 5
    OpenFlight version .......................................................... 5
    Visual Studio Compatibility ............................................. 5
    Location of link libraries ............................................... 6
    Location of dynamic link libraries ................................. 7
    New functions .................................................................. 8
      Geometry Functions ....................................................... 8
  Fixes .................................................................................... 9
  Issues ................................................................................ 10
    mgInit ............................................................................. 10
  Changes ............................................................................ 11
OpenFlight API Release Notes

Welcome to the Release Notes for OpenFlight API 18.
OpenFlight API 18

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:

“What's new” on page 5
“Fixes” on page 9
“Issues” on page 10
“Changes” on page 11
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 16.7.

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

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

<table>
<thead>
<tr>
<th>If you are developing...</th>
<th>Use...</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug-ins for Creator 18</td>
<td>VC14-x64</td>
<td></td>
</tr>
<tr>
<td>Plug-ins for Creator 17</td>
<td>VC14-x64</td>
<td></td>
</tr>
<tr>
<td>Plug-ins for Creator 16</td>
<td>VC12-x64</td>
<td></td>
</tr>
<tr>
<td>Plug-ins for Creator 15</td>
<td>VC12-Win32 or VC12-x64 depending on which version of Creator you are using, 32 or 64 bit respectively.</td>
<td></td>
</tr>
</tbody>
</table>
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:
Location of dynamic link libraries

The subfolder containing the dynamic link libraries is located in:

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

where `bin<platform>` is:

<table>
<thead>
<tr>
<th>Folder...</th>
<th>Contains library for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>lib</td>
<td>VC14-Win32 or Linux</td>
</tr>
<tr>
<td>lib_x64</td>
<td>VC14-x64</td>
</tr>
<tr>
<td>lib_vc12</td>
<td>VC12-Win32</td>
</tr>
<tr>
<td>lib_vc12_x64</td>
<td>VC12-x64</td>
</tr>
<tr>
<td>lib_vc9</td>
<td>VC9-Win32</td>
</tr>
<tr>
<td>lib_vc9_x64</td>
<td>VC9-x64</td>
</tr>
<tr>
<td>lib_vc8</td>
<td>VC8-Win32</td>
</tr>
<tr>
<td>lib_vc8_x64</td>
<td>VC8-x64</td>
</tr>
</tbody>
</table>
New functions

Geometry Functions

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

<table>
<thead>
<tr>
<th>Case No.</th>
<th>Ticket No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR-10267</td>
<td></td>
<td>Fixed Extended Material Reflection Map record to byte swap correctly</td>
</tr>
<tr>
<td>CR-11100</td>
<td></td>
<td>Fixed empty curve node to load properly</td>
</tr>
</tbody>
</table>
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 only be called one time per process.
Changes

- By default, OpenFlight 18 writes OpenFlight Format Revision 16.7. Use `mgExportDb` to save older versions of OpenFlight.

- The **Extended Material Reflection Map** record was introduced in OpenFlight 16.3 as part of the **Extended Material Palette** record set. Since that time (and until OpenFlight 16.6), the **Tint color** field has been stored in the OpenFlight file incorrectly when created by *Presagis Creator* and *OpenFlight API* on the Windows platform. Unlike all other data in the OpenFlight file, the 4-byte floating point values of this field were not byte swapped correctly before being written to disk. As a result, the byte ordering of these floating point values was little endian in the OpenFlight file.

  Beginning in OpenFlight 16.7, the problem has been corrected. As a result, the byte ordering of the values of the **Tint color** field in OpenFlight 16.7 (and later) is big endian format in the OpenFlight file.

  If an OpenFlight file is version 16.3 through 16.6 and was created by a Presagis product running on Windows, the **Tint color** values are expected to be in big endian byte order. If the OpenFlight file is version 16.7 or later, these values will be stored big endian on all platforms.
Copyright

© 2018 Presagis Canada Inc. and/or Presagis USA Inc. All rights reserved.

All trademarks contained herein are the property of their respective owners.

PRESAGIS PROVIDES THIS MATERIAL AS IS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Presagis may make improvements and changes to the product described in this document at any time without notice. Presagis assumes no responsibility for the use of the product or this document except as expressly set forth in the applicable Presagis agreement or agreements and subject to terms and conditions set forth therein and applicable Presagis policies and procedures. This document may contain technical inaccuracies or typographical errors. Periodic changes may be made to the information contained herein. If necessary, these changes will be incorporated in new editions of the document.

Presagis Canada Inc. and/or Presagis USA Inc. and/or its suppliers are the owners of all intellectual property rights in and to this document and any proprietary software that accompanies this documentation, including but not limited to, copyrights in and to this document and any derivative works therefrom. Use of this document is subject to the terms and conditions of the Presagis Software License Agreement included with this product.

No part of this publication may be stored in a data retrieval system, transmitted, distributed or reproduced, in whole or in part, in any way, including, but not limited to, photocopy, photograph, magnetic, or other record, without the prior written permission of Presagis Canada Inc. and/or Presagis USA Inc.

November 19, 2018