

Eagle 14

Release Notes



VERSION 14.9.2 [FlexNET]
BUILD 02

RELEASED 1st June 2016

RELEASE EAGLE 14

This document lists the newly introduced features of this particular major version. Please refer to ancillary documentation and help files delivered with the release for additional information and samples.

NBB - V14 Eagle CDS (Creative Developer Studio) development releases implement the UI Framework (UI2008) interface model and the MFC version is deprecated. This version is very flexible and offers developers dynamic opportunities to maximize UI design. The release directory structure and executable naming is changed as follows:

Eagle\Bin\Std directory contains the standard Eagle executables

STD – Eagle standard release with UI2008 Framework

- *EagleFlexNET.exe (FlexNET licensed Eagle) - Note FlexNET is default licensing*
- *Eagle.exe (when available FlexLM licensed for legacy users*
- *Not delivered with this version EagleMCM*
- (Visual Studio 2013)

Eagle\Bin\Nurbs directory (when available) contains the EagleNurbs executables

Eagle\Bin\Efc directory contains Eagle Foundation Classes for Python

Eagle\Bin\EGI directory contain GUI component integration (OEM release)

Eagle\SDK directory contains Programming Interfaces for Eagle and Services

- *EPI – Eagle Programmer Interface API for Eagle services and functions*
- *LibUFO – C routines library to interact with Eagle SM UFO files*
- *LibEagle – C routines library to interact with Eagle model files*
- *LibOCC – C routines library to interact with EagleNURBS*

Release notes for versions are merged in the same document listings and a hint about which version marked by [NURBS] [UI2008] [PYTHON] etc to indicate a module specific feature.

Eagle will run on Windows Server 2008, Windows Server 2012 (R2), Windows Server 2016, Windows Vista, Windows 7, Windows 8.1, and Windows 10. Eagle may not be fully certified for specific service pack releases, please check with support if in doubt. If the version is fully certified, then Eagle will run automatically without warning. If Eagle is not fully certified for a specific service pack, then Eagle will run normally after warning the user.

In the release notes, the same issues may be documented in several versions; typically this relates to the same new functionality or fixes resolutions being implemented in the FlexNET (default) and FlexLM (legacy deprecated) versions.

Dublin, 1st June 2016

LICENSING

This version is only released for FlexNET licensing systems. This licensing system and differences to previous licensing systems are described in the 'Eagle Licensing Guide'. **The Eagle Licensing Guide is an important document; please give it your attention.**

The key advantages of current FlexNET are as follows;

- Multiple Eagle versions may share same license file (also possible with FlexLM)
- No Serial Number therefore hot-swapping without watermark is possible.
- Support for uncounted standalone licenses
- FlexID host supported across all platforms
- Support for redundant servers
- Supports for BORROWING licenses from servers
- Support for INCREMENTAL licenses
- Support for 32bit (x86) and 64bit (x64) FlexID servers

The default Eagle installation option is for a FlexNET workstation is an uncounted license using only the license file and requiring no server configuration. It is still of course also possible select a server configuration (x86 or x64). Whichever option is selected, to obtain a license the installer will run the GenHostID script which generates a host information file used for licensing. This file should be sent to the OEM supplier or emailed directly to licensing@macrovision.ie or submitted in the secure form at <https://www.macrovision.ie/lics/license.php>

No configuration of the 'uncounted' license is required. An example of an uncounted workstation license file follows:

```
FEATURE fv MVISION 15.100 31-dec-2016 uncounted
VENDOR_STRING=MACROV \
  HOSTID= FLEXID=9-45eee97 SIGN="1E36 C20B 0F11 0AAF A48B 9CD8 \
  DA6F 8E33 DED8 D3EC 2554 5AB7 E878 DFEE 9922 112D DE6F F17A \
  80A8 7BE6 E7C2 0398 CD99 943E 9AFA 995F F5ED 889A 2F3C A3BC"
VENDOR_INFO=557766
FEATURE sm MVISION 15.100 31-dec-2016 uncounted \
  HOSTID=FLEXID=9-45eee97 SIGN="1316 9F47 1475 D084 064B 5D37 \
  7E59 A3A1 0B57 B6D4 E158 A15E 8350 1AED 5633 0453 BA4F 6A6E \
  0EC0 4379 809B 53BE 395E C3EB AEEE 7CC9 70F1 0FAF 9843 5319"
VENDOR_INFO=525214
FEATURE hy MVISION 15.100 31-dec-2016 uncounted \
  HOSTID=FLEXID=9-45eee97 SIGN="15B1 DE40 94E9 B9A8 98B0 977F \
  3D14 E9CE DFEE B2AC 3125 990D E870 9D59 30BE 1CCB 4E17 AF92 \
  43ED B6FB 9738 ED69 451A 264F 2C51 AC16 C7EF 1DCE 5D49 3547"
VENDOR_INFO=544620
```

The FlexNET server license installation and configuration is similar to FlexLM licensing. The only items which can be edited are the hostname and the now optional port number (default 31050) on the SERVER line. In the DAEMON line on the MVISION exe path may be changed (note if the MVISION.EXE is in the

same directory as LMGRD.EXE and the LICENSE file then the path may be omitted entirely). Other changes will invalidate the license.

```
SERVER pythonis FLEXID=9-45eee97a
DAEMON MVISION c:\flexlm\mvision.exe
FEATURE fv MVISION 15.100 31-dec-2016 2 VENDOR_STRING=MACROV \
SIGN="0C30 6107 A87F CC39 8123 EC06 EE29 620F BF98 BB51 634E \
5E98 CC37 FF38 9E20 1191 E2AF 0B46 5F43 6765 4E2F EB69 A872 \
0593 483D 2AB9 796E CE1D D227 24F2" VENDOR_INFO=552132
FEATURE sm MVISION 15.100 31-dec-2016 2 SIGN="01D9 2DB5 ABDB 866C
\
459B 93AA A947 BB59 66C9 7F27 D611 B28D DE7A 7EA9 0A1D 0CB1 \
A87D C4A8 2095 4746 4C2F 0D30 14EC FBCA B85D 680C 8D7B 81B6 \
54C8 0836" VENDOR_INFO=534291
FEATURE hy MVISION 15.100 31-dec-2016 2 SIGN="1797 37E3 6046 718C \
4475 A489 1EE2 F41B 0100 3B9B 5D76 E821 1CDA 504C 8D84 06D8 \
D493 F9E5 7324 4135 OCC8 6C14 606A 1194 F2FC DC72 8746 04CA \
D8EF 3B42" VENDOR_INFO=526779
FEATURE cl MVISION 15.100 31-dec-2016 2 SIGN="174D 7E61 9822 33BC \
D922 59F2 FE78 9B46 488D DE7A 2384 9150 FFA1 2CF2 9779 10F5 \
8FD8 C83B 08E8 24E3 CCDE 5AFF 3D66 2EED 2E8C 805F FFC4 83E3 \
304D 4B50" VENDOR_INFO=528970
FEATURE acad MVISION 15.100 31-dec-2016 2 SIGN="1024 995B DEE5 6861
\
D16A D7E8 E663 919D F425 FE82 0A2F BAD4 0883 CFC2 1BE5 0738 \
5F1F B001 2893 835A 569A 4296 A616 2C3A B3E9 AFD4 B4AB 4B30 \
7674 2A81" VENDOR_INFO=549315
FEATURE deca MVISION 15.100 31-dec-2016 2 SIGN="143C E36C D26A
6A06 \
17A2 9EE5 2B65 7DA9 D041 9DEE 7D84 C1C3 1200 599D D6FF 1C25 \
70CB BA58 BDEC A120 0EC1 2AB4 06AB B1AB DCE6 C2CD 45E9 7826 \
8B99 E733" VENDOR_INFO=547124
```

NBB Warning : The release feature line of the license file must be equal or greater than the version number of the Eagle release in order run that version.

This means that feature lines listed with 14.900 for example will run v14.9.0 and any previous versions but will not future versions without first replacing the license with a higher version:

```
FEATURE fv MVISION 14.900 31-dec-2016 2 VENDOR_STRING=MACROV \
```

GENERAL RELEASE NOTICE

- Eagle v14.9 is now delivered against Visual Studio 2015. Alternate Visual Studio releases may be available on request, please contact support at Macrovision for assistance.
- It is standard practice to place version appropriate DLLs in the same directory as the relevant Eagle executable.
- The manifest file Eagle.exe.manifest must also be present in the same folder where the Eagle executable is placed.
- [PYTHON] This version supports Python 2.6. The Python26.DLL is now required.
- [NURBS] The NURBS version (where available) is aligned to OpenCascade 6.3.1 and the appropriate DLLs are supplied.
- [LIQUIDXML] LiquidXML current aligned version is Liquid v.12. The relevant DLLs are included in the release.
- [INTELLIPORT] DWG is upgraded to DWGDirect V4.0.1 and the relevant DLLs are included in the release.
- [GUI] This version is linked to a new version of the Prof-UIS library, which is V.3.2.0. This version is the first version to provide native support for Windows 10 and Visual Studio 2015 capabilities and also includes a series of minor enhancements with respect to previous the previous V.3.0.0 release stream.
- [GAML] This release is based on the UI2008 interface model. The Eagle GAML the XML based interface model development currently runs in parallel to UI2008 in V14 and 15.0.1 but V15.1.0 the UI is exclusively GAML UI. GamLib_v120.dll is required in this release.
- [LICENSING] This release is aligned to FlexNET Publisher 11.14. A new mvision and Imgrd are required.
- [SDK] Complete new set of the SDK tools, LibEagle, LibUfo and EPI, are required for the Visual Studio 2015 platform details follow below.
- [EPI] Current release EPI is V3.11.10 released March 2016
- [LibEAGLE] Current release LibEagle is V5.4.1 released March 2016
- [LibUFO] Current LibUfo is V1.6.1 released March 2016

[CONFIGURATION] Two major Windows variables are used as the default locations for Eagle files.

Program Files a sub directory of

`%PROGRAMFILES%\Macrovision\EagleCDS`

Data Files a sub directory of

`%ALLUSERSPROFILE%\Macrovision\EagleCDS`

As a guide these locations point to the following Default Values on Microsoft Windows Logo requirements.

Variable	Windows Xp/2003 [Legacy]	Windows 7/2008 Onwards
%ALLUSERSPROFILE%	c:\Documents and Settings\All Users	c:\ProgramData
%PROGRAMFILES%	c:\Program Files	c:\Program Files
	c:\Program Files (x86)	c:\Program Files (x86)
%USERDATA%	c:\Documents and Settings\{user}	c:\Users\{user}

It is recommended your apps and applications should environment variables consistently in the same manner.

- When manually installing the release you need to ensure the setup program includes the appropriate VC runtime libraries or has already been installed on the system.
- [PLOTING] Starting from XPLOT 8.1 and WINPLOT 3.1, XPLOT V7 and WINPLOT V2 are obsolete, V14 and V15 now share the same executables.
- [EOL] Windows Xp is no longer supported.
- [EOL] FlexLM Licensing is no longer supported.

NEW FEATURES AND IMPLEMENTED REQUESTS

RELEASE v.14.9.2 b01-b02 FLEXNET

- [IMPORTANT RELEASE CHANGES] This version V.14.9.2.b02 is the officially supported general release of V14.
- This version is certified for use with Windows 10.
- [VS2015] This version has been released against Visual Studio 2015
- [GUI] This version is linked to a new version of the Prof-UIS library, which is V.3.2.0. This new version is the first version to provide native support for Windows 10 and Visual Studio 2015 capabilities and also includes a series of minor enhancements with respect to previous V.3.0.0.
- [INTELLIPOINT] This version is linked to a new version of the DWG Direct toolkit, which is V.4.1.0. The new DWG Direct version includes a significant amount of minor enhancements when compared with the previous V.3.9.1. This is also the first version DWG Direct to provide support for Visual Studio 2015.
- [LICENSING] This version is now linked to a new version of the FlexNet Publisher library, namely V.11.14. This new version of FlexNET Publisher is the first version to support Visual Studio 2015. A new **lmgrd.exe** and **mvision.exe** are required.
- [EPI] Epi V3.11.10 has been released for the new VS2015 platform.
- [LIBEAGLE] LibEagle V5.4.1 has been released for the new VS2015 platform.
- [LIBUFO] LibUFO V1.6.1 has been released for the new VS2015 platform.
- [XPLOT] Xplot V8.2.5 has been released
- **OPTIONS:** The request to remove the **WS_TABSTOP** style from labels (button type 5) has been implemented

14.9.1 B02

- #5764 **EXPORT:** The request to Export the "@" character intact instead of being exported to as "Ø" (diameter symbol) has been implemented. Note that this is achieved by means of a new environment variable: **"EXPORT_@_CHAR_STRAIGHT"**

When setting the variable **"EXPORT_@_CHAR_STRAIGHT=yes"** the new feature is active. The default is **"EXPORT_@_CHAR_STRAIGHT=no"**, which is the default previous behaviour of the system.

14.9.1 B01

- #5758 The Intelliport exchange system as been updated to include the upgrade to to DWGDirect V4.0.1

- #5757 **EXPORT**: The export PDF files has been implemented with the **EXPORT** command extended to support PDF output.

The output is driven by new Eagle settings:

SET PDFSIZE=<xSize>, <ySize>

Where <xSize> and <ySize> are expressed in mm. No default

SET PDFDPI=<value>

Default is 600.

SET PDFVERSION=<value>,

Supported values are:

15 V.1.5 (default)

16 V.1.6

SET PDFMONOCROME=<value>,

Possible values are:

0 Full colour (default)

1 Monochrome

SET PDFTITLE=<string>

SET PDFAUTHOR=<string>

SET PDFSUBJECT=<string>

SET PDFPRODUCER=<string>

SET PDFAPPLICATION=<string>

Example:

```
SET PDFSIZE = 594,841
SET PDFVERSION = 15
SET PDFDPI = 800
SET PDFMONOCROME = 1
SET PDFTITLE=Example Drawing
SET PDFAUTHOR=name
SET PDFSUBJECT=Test Export PDF from Eagle
SET PDFPRODUCER=MacroVision
SET PDFAPPLICATION=Eagle
EXPORT example-594x841-bw.pdf
SET PDFMONOCROME = 0
EXPORT example-594x841-col.pdf
```

Two new configuration files are required to supporting Monochrome PDF

EXPORT: **monochrome.ctb** and **monochrome.stb**.

They must be placed in the **-EAGLESITE/config** folder.

Typically, this is the **c:/ProgramData/Macrovision/EagleCDS/config**

- [LICENSING] As of this version Eagle is only released for the FlexNET platform. This means that the FlexLM executable is no longer available for new releases.

14.9.0 B01-04

- [IMPORTANT RELEASE CHANGES] This version V.14.9.0.b04 is the officially supported general release V14.

OEM developers may have access to version specific FlexNET and FlexLM licensing versions maintained in parallel but these will no longer be released generally. OEM releases of FlexLM versions in the V14.7. series where available will be aligned to the V14.9 series versions therefore these release notes should be considered for both the 14.9 release and it's 14.7 counterpart. This means that Version 14.7.0 b04 for example is equivalent to Version 14.9.0 b04 in terms of functionality and only the licensing is different.

- **EXPORT:** The request to have three possibilities for exporting polylines has been implemented:
 1. Export to 2D polylines (the old way)
 2. Export to 2D (dashed) and 3D polylines (continuous)
 3. Export to 3D polylines (the current way) has been implemented.

The desired behaviour can be set through a new environment variable EXPORT_POLYLINES where the possible settings are:

```
EXPORT_POLYLINES = 2D_ONLY  
EXPORT_POLYLINES = 3D_IF_CONTINUOUS  
EXPORT_POLYLINES = 3D_ONLY
```

The default is "EXPORT_POLYLINES = 3D_ONLY"

- **PROMPT:** The request to extend the length for input of text, making the widget scrollable in H-size has been implemented.
- Support for Windows 8.1 is certified from this release.
- [GUI] This version is linked to a new version of the Prof-UIS library, which is V.3.0.0. This new version is the first version to provide native support for Windows 8.1 and Visual Studio 2013 capabilities and also provides a series of enhancements since the previous V.2.9.4.
- [DWG] This version is linked to a new version of the DWG Direct toolkit, which is V.3.9.1. Such new version includes a significant amount of minor enhancements with respect to previous V.3.8.2 on top of the fact that is the first version to provide support for Visual Studio 2013.
- [EPI] A new Epi V3.10.20 has been released for VS2013
- [LIBEAGLE] A new Libeagle V5.3.1 has been released for all the platform toolset: VS2013
- [LIBUFO] A new LibUfo V1.5.1 has been released for all the platform toolset: VS2013

- Changes since previous versions (v.14.8.2.b01) refer to [Fixes](#) section

14.8.2 B02

- The new functionality and fixes in the FlexNET version are also replicated in FlexLM version 14.6.6 b01.
- #5674 **EXPORT**: Introduced the possibility to export SAT files
- Changes since previous versions (v.14.8.1.b02) refer to [Fixes](#) section

14.8.2 B01

- Changes since previous versions (v.14.8.1.b01) refer to [Fixes](#) section

14.8.1 B01

- Changes since previous versions (v.14.8.1.b01) refer to [Fixes](#) section

14.8.1 B01

- #5689 **Sorting** in Multi-column lists is implemented
- #4970 **LIST**: a new primer **DUMP** to write the selected lines into the output file specified through the **L= primer** (batch multiple selection) The new primer **DUMP** is implemented for all types of list (ie: **LIST W=1,DUMP='filename.dat'; LIST P=11,B=1,DUMP='filename.dat'**).
- #5672 **RIBBON FREEZE**: the possibility to freeze/unfreeze the ribbon file menu is implemented See #5671
- Changes since previous versions (v.14.8.0.b01) refer to [Fixes](#) section

14.8.0 B01

- The new functionality and fixes in the FlexNET version are also replicated in FlexLM version 14.6.4 b01.
- Support for Windows 8 is certified from this release.
- A new command **RIBBON SAVE** which saves the current ribbon configuration to an XML file is introduced.

RIBBON SAVE

This solves the problem of not saving the QAT when a change to the ribbon is applied.

- [WARNING] This version is linked with a new version (3.8.2) of the DWG Direct toolkit. This implements the request to support ACAD2013 with Teigha V3.8.2.
- The **IMPORT** command is now capable of reading files from AutoCAD 2013.

- The **EXPORT** command is now capable of writing files to AutoCAD 2013.
- A new value "**DXF_EXPORT_FORMAT = vac27**" has been added. The complete set of possible values for the variable is now as follows:

DXF_EXPORT_FORMAT=old ; AutoCAD 2002
DXF_EXPORT_FORMAT=new ; AutoCAD 2007
DXF_EXPORT_FORMAT=vAC09; AutoCAD Release 9
DXF_EXPORT_FORMAT=vAC10; AutoCAD Release 10
DXF_EXPORT_FORMAT=vAC12; AutoCAD Release 11-12
DXF_EXPORT_FORMAT=vAC13; AutoCAD Release 13
DXF_EXPORT_FORMAT=vAC14; AutoCAD Release 14
DXF_EXPORT_FORMAT=vAC15; AutoCAD 2000-2002
DXF_EXPORT_FORMAT=vAC18; AutoCAD 2004-2006
DXF_EXPORT_FORMAT=vAC21; AutoCAD 2007
DXF_EXPORT_FORMAT=vAC24; AutoCAD 2010-2011
DXF_EXPORT_FORMAT=vAC27; AutoCAD 2013

The default value is still **DXF_EXPORT_FORMAT=old** (AutoCAD 2000-2002).

- New release XPLOT 8.1.2 and WINPLOT 3.1.1 are released. Note. Starting from these versions, XPLOT V7 and WINPLOT V2 are now obsolete as from now on, V14 and V15 will share the same executables.
- [PLOT] Transparency is now handled (ref. Set TEXTTRANSP). A new section in the WINPLOT INI file has been defined in order to configure this option:

[FontParams]
TRANSPARENT = ON|OFF

The default is "**TRANSPARENT = ON**", that is the default behaviour in Eagle.

Winplot 3.1.1 should only be used in conjunction with Xplot V.8.1.2 or greater.

Note: starting from this version, WINPLOT V2 is made obsolete and WINPLOT V3 is used for both, V14 and V15.0

- [PLOT] starting from this version, XPLOT V7 is made obsolete and XPLOT V8 is used for both, V14 and V15.0
- [LIBEAGLE] A new LibEagle V5.2.5 is released.
- [LIBUFO] A new LibUFO V1.4.5 is released.
- [NOTE] #3331.1 PATCH3331 must be always active. The default is changed from "false" to "true".

[NOTE] #5630 The default for disable_text_optimization which is "yes" at the moment is changed.

- [FIXES] Changes since previous versions (v.14.7.0.b08a) refer to [Fixes](#) section

14.7.0 B04a FLEXLM

- #5742 **EXPORT**: The request to export a drawing-preview as an option has been implemented. Note: this is now configurable by means of a new environment variable [EXPORT_DRAWING_PREVIEW](#)

The the option for the variable are [EXPORT_DRAWING_PREVIEW=yes](#) | [no](#) (default is 'yes')

14.7.0 B04 FLEXLM

- [IMPORTANT RELEASE CHANGES] This version is equivalent to V.14.9.0.b04 in terms of new features and bug fixing and new features. The two versions only differ with respect to licensing FlexNET or FlexLM. Refer to V14.9 release notes above for development improvements.

Both FlexNET and FlexLM licensing systems will be maintained in parallel for a period but ultimately FlexNET will be the defacto licensing system. Some release information may have been duplicated in these notes to accommodate previous changes to separately maintained FlexNET and FlexLM versions but from V14.7.0 b04 and 14.9.0 b04 onwards the versions will be aligned in everything, only licensing will be different.

This means that Version 14.7.0 b04 is equivalent to Version 14.9.0 b04 in terms of functionality with the Major and Maintenance numbers remaining the same and only the Minor release being different.

- Changes since previous versions refer to [Fixes](#) section

14.7.0 B01 - B03

- Changes since previous version (v.14.6.3.b06) refer to [Fixes](#) section
- [LIBEAGLE] New version 5.2.4 released for #5665
- [LIBUFO] New version 1.4.4 release for LibEagle 5.2.4 compatibility

14.6.6 b01

- #5674 **EXPORT**: The possibility of export SAT files has been introduced.
- Changes since previous version (v.14.6.5.b02) refer to [Fixes](#) section

14.6.5 B01

- Changes since previous version (v.14.6.3.b07) refer to [Fixes](#) section

14.6.4 B01

- Support for Windows 8 is certified from this release.

- A new command **RIBBON SAVE** which saves the current ribbon configuration to an XML file is introduced.

RIBBON SAVE

This solves the problem of not saving the QAT when a change to the ribbon is applied.

- [WARNING] This version is linked with a new version (3.8.2) of the DWG Direct toolkit. This implements the request to support ACAD2013 with Teigha V3.8.2.
- The **IMPORT** command is now capable of reading files from AutoCAD 2013.
- The **EXPORT** command is now capable of writing files to AutoCAD 2013.
- A new value "**DXF_EXPORT_FORMAT = vac27**" has been added. The complete set of possible values for the variable is now as follows:

```
DXF_EXPORT_FORMAT=old ; AutoCAD 2002
DXF_EXPORT_FORMAT=new ; AutoCAD 2007
DXF_EXPORT_FORMAT=vAC09; AutoCAD Release 9
DXF_EXPORT_FORMAT=vAC10; AutoCAD Release 10
DXF_EXPORT_FORMAT=vAC12; AutoCAD Release 11-12
DXF_EXPORT_FORMAT=vAC13; AutoCAD Release 13
DXF_EXPORT_FORMAT=vAC14; AutoCAD Release 14
DXF_EXPORT_FORMAT=vAC15; AutoCAD 2000-2002
DXF_EXPORT_FORMAT=vAC18; AutoCAD 2004-2006
DXF_EXPORT_FORMAT=vAC21; AutoCAD 2007
DXF_EXPORT_FORMAT=vAC24; AutoCAD 2010-2011
DXF_EXPORT_FORMAT=vAC27; AutoCAD 2013
```

The default value is still **DXF_EXPORT_FORMAT=old** (AutoCAD 2000-2002).

- New release XPLOT 8.1.2 and WINPLOT 3.1.1 are released. Note. Starting from these versions, XPLOT V7 and WINPLOT V2 are now obsolete as from now on, V14 and V15 will share the same executables.
- [PLOT] Transparency is now handled (ref. Set TEXTTRANSP). A new section in the WINPLOT INI file has been defined in order to configure this option:

```
[FontParams]
TRANSPARENT = ON | OFF
```

The default is "**TRANSPARENT = ON**", that is the default behaviour in Eagle.

Winplot 3.1.1 should only be used in conjunction with Xplot V.8.1.2 or greater.

Note: starting from this version, WINPLOT V2 is made obsolete and WINPLOT V3 is used for both, V14 and V15.0

- [PLOT] starting from this version, XPLOT V7 is made obsolete and XPLOT V8 is used for both, V14 and V15.0
 - [LIBEAGLE] A new LibEagle V5.2.5 is released.
 - [LIBUFO] A new LibUFO V1.4.5 is released.
 - [NOTE] #3331.1 PATCH3331 must be always active. The default is changed from "false" to "true".
- [NOTE] #5630 The default for disable_text_optimization which is "yes" at the moment is changed.
- [FIXES] Changes since previous versions (v.14.7.0.b01 v.14.8.0.b01) refer to [Fixes](#) section

14.6.3 B07

- Changes since previous version (v.14.6.3.b06) refer to [Fixes](#) section

14.6.3 B06

- Including changes incorporating version (v.14.6.3.b03-06)
- The [HATCH_DRAWING_SCALE](#) variable is defined as the new variable that is used both by the Import/Export and by the visualization process to reflect the drawing scale as a multiplier of the current pattern-scale defined in Symbolic Hatches or in the TABHATCH configuration file.

Default value is [HATCH_DRAWING_SCALE = 1](#)

Any previously used name such as [DRAWING_SCALE](#) environment variable is no longer valid and is definitively changed to [HATCH_DRAWING_SCALE](#), since its value only affects [HATCHES](#).

- #5646 TRACE_MACROS. The request to flush the rows onto the output file each individual line is implemented. Note: This feature will help in getting updated information from the trace facility when Eagle cannot catch the exception.

Set [TRACE_MACROS_BUFFERED=no](#) to flush on each executed line.

14.6.3 B02

- Changes since previous version (v.14.6.3.b01) refer to [Fixes](#) section

14.6.3 B01

- The use of the Symbolic Hatch has been changed as described in the new "Symbolic Hatch.pdf" and Eagle Help documentation file provided with the release notes.

- #5625 A new environment variable `DWG_DRAWING_SCALE` that is used by the `EXPORT` process to reflect the drawing scale as a multiplier of the current pattern-scale defined in the TABHATCH configuration file.

Default value is 1.

This setting is also applied to the export of the scale of Symbolic Hatches.
[See above Release 14.6.3b05]

- #5443.1 Spin controls: button types 11,111,211,311 should return RN=-1 if button down and =1 if button up. Still sometimes it could happen that the returned value is wrong.

The RN value can be now also "zero" when the lower or upper bound are reached and there is no difference from the previous value.

- TREEVIEW the fix #5605 applied to treeview data file has the consequent the data lines in the file may now be up to 256 characters.
- A new LibUfo 1.4.3.is released

14.6.2 B02

- Changes since previous version (v.14.6.2.b01) refer to [Fixes](#) section

14.6.2 B01

- #4601 Symbolic hatch patterns implemented which allows Eagle Hatch definitions to be interoperable with AutoCAD Hatch definitions. In particular this indicates the fact that the Hatch patterns will be derived from standard definition in AutoCAD and they will be rendered in the same way also inside the Eagle environment. Hatches can be modified in AutoCAD or in Eagle and maintain their identity.

Symbolic hatch using submodel pattern does not require improvements in the plotting systems.

The use of the Symbolic Hatch is described in the "Symbolic Hatch.pdf" and Eagle Help documentation file provided with the release. Refer to this documentation for details.

There are two new settings for the INI file:

`DWG_HATCH_FILE = <filename>` patterns configuration
`DWG_HATCH_ATTRIBUTE=<i>`

14.6.1 B01

- #5468.1 The PATCH5468 when enabled resolves the interactive use of POPUP -> OPTIONS ON -> POPUP -> OPTIONS ON sequences

`PATCH5468=yes`

Default PATCH5468=no

14.6.0 B11

- Changes since previous version (v.14.6.0.b09) refer to [Fixes](#) section

14.6.0 B09

- Changes since previous version (v.14.6.0.b08):
- [#5330]. A new **TILE** type has been added to allow this fitting of an image to a face item, permitting zooming in and out the image tracking the zooming of the face.

The new type is defined as FIT. The following is an example of use:

```
tile 1=image.bmp,m=1,b=3,fit
```

The displayed image is keyed to the top left corner of the associated polygon.

If the ratio of the image is different from the ratio of the face to which it is associated then the ratio of the image has precedence and consequently the face can result be either “over-covered” or “under-covered” by the image.

- [GUI] Warning! A new **GAML DLL** and **GAML XSD** are released with this version.
- The CheckBox Button has now has the default attribute which was was previously missing.

The relevant GAML syntax is:

```
<RibbonButton Id="8" Command="tell mn,bn" Type="8" Mnemonic="?">
<CheckBoxButton Type="normal" Text="Male" default="true"/>
</RibbonButton>
```

The default value for the **default** attribute is “false”.

- [GUI][#5533.2]A new syntax for the **RIBBON** command for setting the state of a CheckBox button is available:

```
RIBBON CLICK, POS=2, B=1, STATE=1 (true) or STATE=0 (false)
```

14.6.0 B08

- Changes since previous version (v.14.6.0.b03).
- [GUI] Warning! This release is linked against ProfUIS 2.92 since 2.93 had problems with RibbonBar and classic themes. Please use ProfUIS292m.dll included with this release.
- To implement fix #5565 a new TABHATCH.DAT file is required.

The new format is defined as follows:

<name> <a> <c> <d> <e> <f>, where:

name	name of the hatch pattern
a	Eagle colour, for filled hatch
b	Eagle hatch index
c	scale of the pattern, for pre-defined hatch
d	spacing of the pattern, for user-defined hatch
e	angle of the pattern, for any hatch
f	boolean value to indicate if export using BLOCK_DEFINITION

For example:

```
ANSI31 -1 1 10 10 0 0
LINE -1 2 10 10 30 0
ANSI32 -1 3 20 20 0 1
```

Note that to obtain an exact match between Eagle and AutoCAD line spacing, the values for “scale” and “spacing” should be set depending on the Eagle hatch definition and ACAD.PAT (for Imperial drawings) or ACADISO.PAT (for Metric drawings).

For example, if Eagle HATCH 2 is defined as:

HATCH 2=M5,30(10)

And the LINE hatch pattern in AutoCAD is defined as:

```
*LINE,Parallel horizontal lines

0, 0, 0, 0, 3.175
```

Then the proper entry for TABHATCH.DAT for exporting such hatch pattern is:

```
LINE -1 2 3.1496 3.1496 30 0
```

In fact, (3.1496*3.175) is equal to (10), which is the scale value specified in the Eagle hatch.

Also, note that the value of “angle” must be referred to the default angle setting of the specified AutoCAD pattern. For example, considering that ANSI31 is defined with a default angle of 45, adding an angle value of 10 in the corresponding column of TABHATCH will cause a total angle of 55 degrees to be produced in the rendering.

- Fixes details are located in the FIXES AND OTHER ISSUES section.
- [EIF] A new release LibEagle 5.2.3 is available.
- [EIF] This version works for applications compiled with Visual Studio 2008 (VC90)
- [EIF] This version has been linked without optimization link option (/GL)

14.6.0 B03

- Changes since previous version (v.14.6.0.b02). Fixes are located in the FIXES AND OTHER ISSUES section.
- Please consider particularly in conjunction with most recently published features notes for the latest features.
- [GUI] A new GAMLLib_vc90.DLL and XSD schema are required for use with this release. (Updated with this specific release)
- [GUI] **RIBBON** #5558: The hide/remove or freeze the Options button in the FileMenu is provided. A new GAMLLib_vc90.DLL and XSD schema are required. Ref
- [GUI] #5560 **RIBBON**: The possibility to enable/disable text label on buttons has been introduced using the prototype :

RIBBON LABEL=on|off

Example

RIBBON LABEL off

- [GUI] #5533 **RIBBON**: The CheckBox control is implemented for RibbonBar. A new GAMLLib_vc90.DLL and XSD schema are required. The relevant GAML syntax is:

```
<RibbonButton Id="8" Command="tell mn,bn" Type="8" Mnemonic="?">
<CheckBoxButton Type="normal" Text="Male" />
</RibbonButton>
```

Where Type can be "normal" or "tristate"

14.6.0 B02

- Changes since previous version (v.14.6.0.b01). Fixes are located in the FIXES AND OTHER ISSUES section.
- Please consider particularly in conjunction with most recently published features notes for the latest features.
- [GUI] ProfUIs is upgraded to v2.93. A new version of the profuis dll is required and distributed with this release.
- **RIBBON**: The relevant returns on the **RibbonBar FileMenu** "Exit" button are as follows

WT	12	The is the RibbonBar code
MN	-1	no menu
BN	-1	the Exit button

14.6.0 B01

- Please read these release notes in conjunction with the published features notes of the 14.5.2 b03x and 14.5.2 b04x detailed below.
- [LICENSING] Note the version in the license file changed has from 600 to 610. A new license file required for all license files with a version less than 14.610 (As in X release)
- A new GAMLLib_vc90.DLL is required for use with this release. (As delivered in v.14.5.2.b04X release)
- A new GAML.XSD schema file also is shipped with this version. (As delivered in v.14.5.2.b04X release)
- [GUI] #5536 **RIBBON** now has the added possibility to FREEZE an entire tab page or a single button. The new syntax is defined as follows:

New syntax to freeze or unfreeze a RIBBON page:

RIBBON freeze | unfreeze, pos=<i>

Examples

RIBBON FREEZE,POS=2
RIBBON UNFREEZE, POS=2

New syntax to freeze or unfreeze a specific RIBBON button:

RIBBON freeze | unfreeze, pos=<i>, b=<k>

Examples

RIBBON FREEZE,POS=2,B=1
RIBBON UNFREEZE, POS=2,B=1

- [EPI] A new release EPI 3.10.18 is available.
- [EIF] A new release LibEagle 5.2.2 is available.
- [EIF] #5390 The LibEagle documentation was missing the VAR file functions.
- [EIF] The Include files have changed from previous releases.

14.5.2 B04X

- This version is a pre-release version for development and testing purposes only. Changes since previous version (v.14.5.2.b03X):
- [LICENSING] The version in the license file changed has from 600 to 610. A new license file required for all license files with a version less than 14.610

- #5449.1 This release is certified for use with Windows 7 SP1
- A new GAMLLib_vc90.DLL is required for use with this release.
- A new GAML.XSD schema file also is shipped with this version.
- [GUI] #5532 **RIBBON** - the RibGroup "launch button" is now available. A new version GAMLLib_vc90.DLL is required.
- [GUI] #5535 **RIBBON**: add the possibility to define a dynamic part of Ribbon FileMenu (user menu)
- [GUI] The RibbonGroup element has been extended to support a "launcher button" through the following syntax:

```
<RibbonLauncher Id="999" Command="do panel">
  <KeyTip Title="Launcher button" Image="clock.ico" ... >
    This is a launcher button for the Ribbon Group.
  </KeyTip>
</RibbonLauncher>
```

- [GUI] #5535.1 **RIBBON**: it is possible to have more placeholders at any depth of the Ribbon FileMenu. There is a new command to insert a **DropDownMenu** GAML file into an Option of the application FileMenu in a RibbonBar.

The syntax is:

```
RIBBON MENU,OPTION=<i>,FILE=<file.xml>
```

Where the <file.xml> is something like:

```
<Gaml>
  <DropDownMenu Id="9">
    <Option Id="1" Label="User 1" Image="" Command="tell 'User 1'" />
    <Option Id="2" Label="User 2" Image="se55.ico" Command="tell 'User 2'" />
    <Option Id="3" Label="User 3" Image="se10.ico" Command="tell 'User 3'" />
  </DropDownMenu>
</Gaml>
```

14.5.2 B03X

- This version is a pre-release version for development and testing purposes only. Changes since previous version (v.14.5.2.b02):
- From this version on the ProfUIS library upgraded to v.292. Upgrade to ProfUIS v.2.92 A new DLL is required. (#5457)

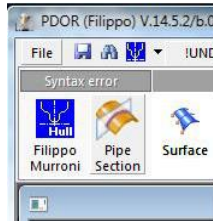
14.5.2 B02

- [GUI] #5511 **RIBBON**: The possibility to define a "multi-line" text for a button label has been implemented.

This is achieved by using the following syntax in the XML file:

```
<ImageButton Label="Filippo;Murrone" />
...
<ImageButton Label="Pipe;Section" />
```

Where the semi-colon represents indicated a “new line” is required for the button text.



14.5.2.b01

- #5449 Support for Vista SP2 is implemented. This also means there is no longer a user warning at start-up on this service pack release.
- In this version we introduce Eagle GAML, the new XML-based user interface. At the moment the only GUI object supported is the RibbonBar as it already was in previous V.14 versions, but with a slightly different syntax (see below). This version requires the new GamLib_VC90.dll and the RibbonLib_VC90.dll is not used anymore.

GAML uses a new **GAML.XSD** schema which replaces the current **RIBBON.XSD**

- [GUI] In GAML the file root node is no longer the **<RibbonBar>** element but is instead braced by the **<Gaml>** element, which then has the **<RibbonBar>** element as a child element.
- [GUI] #5422 The possibility to select a “tab page” of a **RibbonBar** has been added using the syntax:

```
RIBBON SELECT,POS=3
```

Where POS= is referenced “tab page”.

- [GUI] It is now possible to use Eagle string variables in the **GAML** definition of the **RibbonBar**. The syntax is:

```
<RibbonPage Label="^\tablabel" Id="1" Mnemonic="H">
```

where tablabel is a string variable. If the variable is not defined the string !UNDEF is shown.

This feature couples with the message function m(set,line) that is used to show text defined in the message file:

```
<RibbonGroup Label="m(3,10)" Caption="Bottom">
```

- [GUI] #4930 Introduce behaviour in a PBUTTON-like way for adding and removing tabs, groups, buttons.

Consequently, the possibility to add and remove a “page” from the RibbonBar has been added. The new syntax is:

```
RIBBON INSERT,POS=pos,F=newpage.xml
```

The new page must be defined in a XML file containing the specification of the new page:

```
<RibbonBar xmlns:xs="http://www.w3.org/2001/XMLSchema-instance">
  <RibbonPage Label="Inserted page" Id="2" Mnemonic="V">
    ...
  </RibbonPage>
</RibbonBar>
```

If the XML file contains more pages, they are inserted as well.

The new syntax to remove an existing page is:

```
RIBBON REMOVE,POS=pos
```

Please note that the “original” XML file used to install the RibbonBar is changed and its content is updated with the inserted or removed pages. This reflects the persistency characteristic of the new XML-based Eagle graphic user interface.

The above example in GAML becomes:

```
<Gaml xmlns:xs="http://www.w3.org/2001/XMLSchema-instance">
  <RibbonBar>
    <RibbonPage Label="Inserted page" Id="2" Mnemonic="V">
      ...
    </RibbonPage>
  </RibbonBar>
</Gaml>
```

The First line can include the schema for run-time validation purposes:

```
<Gaml xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="C:\tmp\gaml.xsd">
```

- #5452 In the RIBBON.XML file the use of QuickAccessToolbar and the ApplicationButton are optional.

- #5434 A new setting called `GUIDE_TEXT_HEIGHT` is introduced to define a fixed pixel height for `GUIDE` text
- [GUI] #5459 If the root (main) window background color is changed, using the `THEME` command, the change is applied.
- Example:

```
env ROOT_BACKGROUND_COLOR=#004466
theme 9
```

- [GUI] The `CAMEO` command now shows the created cameo in the upper-left corner of the graphic window instead of the lower-left corner.
- A new version XPlot v.7.2.3 is released. Refer to individual release notes for details. Use in conjunction with Winplot v2.1.10
- A new version Winplot v.2.1.10 is released. Refer to individual release notes for details. Use in conjunction with Xplot v7.2.3
- [GUI] #5492 The possibility to set the creation of multi-column lists with the ability to sort or not to sort columns has been introduced using the environment variable `MULTI_COLUMN_LIST_SORT`

`MULTI_COLUMN_LIST_SORT=YES | NO`

Default setting is `MULTI_COLUMN_LIST_SORT=YES`

- [GUI] A new environment variable `HISTORY_TITLE` is introduced to set the command history window title.

`HISTORY_TITLE="<Text>"`

Default setting is `HISTORY_TITLE="History"`.

- [GUI] #5484 The `CLICK` command now also works on the Color Picker button (type=500 with the following syntax:

`CLICK P=p,B=COLOR=<pen_number>`

Example:

`CLICK p=10,b=40,col=4`

- The environment setting `DIRECTORY_CELL_COLUMNS` is now dynamic.

14.5.1.b03

- [GUI] #4921 Extended usage of ICO files has been implemented allowing Vista Icons (compressed multi format) in toolbars, ribbon, etc. for a more complete full realization of UI transparency management.

- [LICENSING] #5446 A new setting `LM_MVISION_VERSION_LOG` is made available in the INI file which when set writes the MVISION version in use into the FLEXLM log file
- [GUI] #5447 The `RIBBON` command has been extended to enable minimize (hide) or maximize (show) of the ribbon bar. The new additional syntax options are ;

`RIBBON MINimize | MAXimize`

- #5327 The `RIBBON` command : messages implemented in ribbon XML file to support multilingual interfaces:

`<ImageButton ... Label="M(2,4)" ...>`

Refer to the document "RibbonBar_dictionary_support.docx" or the new release of the GUI Book 2.02.1 or later.

- [EPI] A new `EPI_getMessage` to retrieve the value of a message from the message file has been introduced. A new EPI v3.10.16 is released containing this EPI

`void EPI_getMessage(HMODULE hEagle, int set, int num, char *value);`

14.5.1.b02

- The `IMPORT` command is now capable of reading files coming from AutoCAD 2010 and 2011. New DLLs required refer to General Release Notes above for details.
- A new configuration value for "`DXF_EXPORT_FORMAT = vac24`" has been added. The complete set of values for this variable is now as follows;

```
DXF_EXPORT_FORMAT=old ; AutoCAD 2002
DXF_EXPORT_FORMAT=new ; AutoCAD 2007
DXF_EXPORT_FORMAT=vAC09 ; Autocad Release 9
DXF_EXPORT_FORMAT=vAC10 ; Autocad Release 10
DXF_EXPORT_FORMAT=vAC12 ; Autocad Release 11-12
DXF_EXPORT_FORMAT=vAC13 ; Autocad Release 13
DXF_EXPORT_FORMAT=vAC14 ; Autocad Release 14
DXF_EXPORT_FORMAT=vAC15 ; Autocad 2000-2002
DXF_EXPORT_FORMAT=vAC18 ; Autocad 2004-2006
DXF_EXPORT_FORMAT=vAC21 ; Autocad 2007
DXF_EXPORT_FORMAT=vAC24 ; Autocad 2010-2011
```

The default value is `DXF_EXPORT_FORMAT=old` (Autocad 2000-2002)

14.5.1.b01

- The new EDUX version is now available for V14. This version differs from the EDU version in terms of watermark size and position. This version is available on a subscription basis for learning.

- Eagle now writes the version of the MVISION daemon to the licensing lmgrd log file.
- [GUI] The maximum number of options permissible for combo-box type 127,37,47,57,67,77, has been increased from 64 to 256
- [GUI] #5432 implemented in this release allows the creation of 8 bit bitmap using the **CAMEO** command, instead of 4 bit images which was the previous case. In any case old style bitmap files still remain usable.
- Starting from this version, the digitiser/tablet device is no longer supported. This “end of life” notice for this functionality applies to all future standard releases. If this option is needed then it must be requested as a “special custom development”.

14.5.0.b01

- [GUI] When Focus-in and focus-out in edit controls is used, **POLLING** must exit or not on the basis of the setting of **PATCH4084**. The **POLLING** command must not exit if **PATCH4084=no**, which is also the default behaviour. If the development requires that **POLLING** should exit when executing a focus in/out action, then **PATCH4084** must be set to YES. This reflect the same behaviour as available in v.11.9 and v.12.
- x A new option is implemented for the command **PBUTTON** when the button is added to a panel that has the “layout” definition for dynamicity.

Example:

```
pbutton p=1,b=1,del
```

```
pbutton p=1,b=1,  
add='1,0,0,400,200,0,0,506,"listsort1.dat";',layout=0,0,100,100
```

where the four integer values specified with the new option **LAYOUT=** are the four corners as specified in the layout file in the **OPTION** command.

14.4.5b03

- [GUI] A new type of **GWINDOW** is available when in “MDI” or “TMDI” mode which can float outside the main Eagle frame container window. This option to float windows outside the Main Frame is only available.

In order to enable the new floating window feature, the “gwindow” command has been extended as follows:

```
GWINDOW <i>, FIXED | FLOAT
```

Example

```
GWINDOW 1, FLOAT  
GWINDOW 1, FIXED
```

Tiling does not work on these type of windows when floating. *Refer to the GUI Guide book rel 1.11.3en or Help rev 14.020 documentation for further details of the implementation.*

- [GUI] The possibility to include a **RIBBON** help or search button has been enabled on the right hand side of the menu bar. The function is enabled by setting **RIBBON_HELP_ENTRY** Example:

```
RIBBON_HELP_ICON = C:\escape\ncg\opengl\ribbon-help.ico  
RIBBON_HELP_TEXT = Help on ribbon ...  
RIBBON_HELP_ACTION = C:\escape\ncg\opengl\help.cmd
```

Refer to the GUI Guide book rel 1.11.3en or Help rev 14.020 or later documentation for further details of the implementation.

- [GUI] A “**BUTTON_IMAGE_BORDER**” can be defined for use with “icon only” buttons which contains a bitmap image which does not have a transparent background meaning that the normal button click event is not visible.

The “**BUTTON_IMAGE_BORDER**” configuration variable is used set a border size in pixel units to solve the problem.

Example

```
BUTTON_IMAGE_BORDER = 3
```

The button image border default value is 0.

- [GUI] It is now also possible to use the icon format (*.ico) as the image for the buttons. The file extension (*.bmp or *.ico) should be now set in the in the tab file to define the correct format selection. If no extension is specified the bitmap (.bmp) is the default format.

Eagle will automatically select the appropriate icon ICO format to use depending on the appropriate button size for the interface (i.e 16x16, 32x32, etc.)

- Firmware annotations and dimensions are visualized using Windows Screen fonts. The **FONT** command has been extended to allow the definition of Windows fonts as an alternative to Eagle software FNT files.

The definition of the font is made using the following prototype:

```
FONT <n>=<font name>
```

if used without the “.fnt” extension then a Windows font is assumed. The font name may or may not include blank characters.

Examples:

```
FONT 2=Verdana  
FONT 3=Berlin Sans FB  
FONT 4=-eaglepath/bft/stdfont.fnt
```

Windows fonts will be used when the command **FIRMWARE T** is set. Using **SOFTWARE T** selects Eagle fonts. When Eagle starts the **SOFTWARE T** enabled.

Refer to the “Windows Fonts” document included with this release or the Eagle Help rev 14.020 or later documentation Appendix section for details of the implementation.

- When issuing either the **FIRMWARE T** or **SOFTWARE T** commands a redraw is now automatically invoked to accommodate the correct display of the appropriate font set.
- A new **SET** function has been introduced to implement transparency for Windows fonts:

SET TEXTTRANSP = ON | OFF

At the program startup the value is ON.

When this value is set to OFF then the firmware annotations are OPAQUE. This functionality can be used together with the **DISORDER** command to “hide” geometries placed below annotations.

- [LICENSING] Licensing extended to support VMWARE VMs and vSphere. New MVISION.exe and SNGEN.exe utilities are required for these platforms dated 3rd November 2010 or later.
- [UTILS] New executables for Xplot 7.2.1 and WinPlot 2.1.7 are required to support Windows fonts when plotting.

Output files produced by version 7.2.1 of Xplot should only be used in conjunction with Winplot V.2.1.7 or greater.

Winplot interprets output files coming from Xplot V.7.2.1 or greater so that Windows fonts are used when specified.

A new section has been defined in the WINPLOT .INI file in order to facilitate configuration of Windows fonts that are to be used. An example of this section follows:

```
[DefaultFonts]
FONT 1 = Courier New
FONT 2 = Verdana
FONT 3 = Harlow Solid Italic
FONT 4 = Berlin Sans FB
....
```

- [EIF LibEagle] Updated LibEagle documentation with instructions for using LibEagle to read and write VAR files.
- [LibEagle EIF] A new **EIF_reset_model(void)** has been made available, replacing previous **EIF_reset_model2(void)**.
- [EPI] A new EPI v.3.10.15 is released

- [EPI] A new `EPI_getMenubarHandle` has been added to get the Cmenu handle of the menubar
- [EPI] The prototype of the `EPI_inqInfPoints` function has been changed:

```
BOOL EPI_inqInfPoints( HMODULE hEagle, int index, double *pt )
```

The buffer "pt" must be allocated to the needed size from the calling harness. This can be done using the appropriate `EPI_inqInfNum()` with `index=3`, that will provide the correct number of points.

- [DOCUMENTATION] The `DOCUMENT` and `UNLOAD` commands previously scheduled for obsolescence are retained. These commands are fully documented again.
- The `LOAD` command is used to both `LOAD` and `unLOAD` custom DLL and the plan to reclassify the `UNLOAD` command for this purpose has been dropped in the interest of retaining backward compatibility.

14.4.5b03

- A new type of button, the `LIST` button has been introduced. The `LIST` button is represented by two types, 505 for single column and 506 for multiple column list. This is similar to creating a list attached to a panel with the difference that the new button type(s) are handled as buttons. For a multi-column list specify in the TAB file:

```
2,0,100,200,200,0,0,506,'listsort1.dat';
```

To remove a "list button" use:

```
LIST P=1,B=2,OFF
```

To remove a line from a "list button"'s list use:

```
LIST P=1,B=2,POS=3,DEL
```

To position/select a line of a "list button"'s list use:

```
LIST P=1,B=2,POS=3
```

To add a new line into a "list button"'s list use:

```
LIST P=1,B=2,POS=3,ADD='new line'
```

To replace the whole content of a "list button"'s list use:

```
LIST P=1,B=2,F='newfile'
```

To set the output file for multiple selections use:

```
LIST P=1,B=2,L='file.out'
```

Note : [#5042] List together with POS=0,DEL removes the entire content of the list.

As this LIST in all effects a button, therefore if the **LAYOUT** option is used when creating the panel to define resizable layout, then the list will also follow these settings and consequently it is possible to automatically resize a list when resizing a panel (or dialog, docked or floating). *Refer to the GUI Guide book rel 1.10.2 for further details of implementation.*

- A new DLL called Eprinters.dll has been released which includes the Windows dependent code for **LISTDEVICE**, **SETUPDEVICE** and **GETDEVICEINFO**.
- This DLL includes the following commands:
- **EPRLIST**, **EPRGETINFO** and **EPRSETUP** that implement **LISTDEVICE**, **GETDEVICEINFO** and **SETUPDEVICE** respectively.
- Example:

```
EPRLIST <numPrinters>,<names_array>,<shares_array>
EPRGETINFO <numValues>,<printerName>,<size_array>
EPRSETUP <printerName>,<size>,<orientation>,<scale>,<SETUP>
```

- An example macro (Eprinters.cmd) has also been provided.
- [OEM] The new EPI function EPI_setControlResizeBehavior has been added to define the resize behaviour of controls inside a resizable panel. EPI v3.10.14 is released including this EPI.

```
int EPI_setControlResizeBehavior( HMODULE hEagle, int panel,
                                HWND hControl,
                                int xStart, int yStart, int xEnd,
                                int yEnd )
```

- See also changes since the previous version 14.4.5 b02 refer to the Bug Fixes section

14.4.5b02

- Changes since the previous version 14.4.5 b01 refer to the Fixes section

14.4.5b01

- x [UI2008] A new, OS option has been added to the FILE command to use the native Windows dialog. That has been implemented as an alternative to the custom fashioned UI dialog which is slow when browsing on a remote disk.

```
FILE filename,CWD='//R/files',OS
```

- [UI2008] A new, DELETE=<pos>, option has been introduced to the RIBBON GALLERY command, which enables the removal of an entry from the gallery.

RIBBON GALLERY,DEL=3

- A new EPI_getMenubarHandle function has been added to get the handle of the CMenu of the menu bar. A new EPI version 3.10.12 is released.
- [SDK] #5223 LibUfo C++ compiled VS2008 (VC90) the release is v.1.4.2 also compiled for VC90. Aligned to latest in v.12
- [PYTHON] Ribbon gallery implemented in EBC

14.4.4 b07

- Starting from this version the manifest file is no longer included in the Eagle executables. The relevant released manifest files must instead be copied into the folder which contains the relevant executables.

<i>Eagle.exe.manifest</i>	<i>for Eagle.exe</i>	<i>(Flex licensed)</i>
<i>EagleMCM.exe.manifest</i>	<i>for EagleMCM</i>	<i>(Hasp licensed)</i>
<i>Eagle-OCC.exe.manifest</i>	<i>for Eagle-OCC.exe</i>	<i>(Flex licensed)</i>

14.4.4 b05

- #5230 EXPORT function now includes the possibility of exporting the set
- UNITS. A new environment variable has been introduced which controls this functionality and it is enabled when the environment configuration includes `EXPORT_UNITS=yes`

The ACAD-MEASUREMENT variable is set according to the following correspondence:

<i>Unit = in,ft,yd,mi</i>	<i>MEASUREMENT=0 (English)</i>
<i>Unit = <other></i>	<i>MEASUREMENT=1 (Metrics)</i>

The default is

`EXPORT_UNITS=no` that keeps the ACAD default

14.4.4 b04

- [UI2008] A new Eagle GUI Guide is release rev 1.9.2en
- [NURBS] A new Eagle NURBS Guide is released 1.7.2en
- [UI2008] The `RIBBON` command has been extended to handle the Gallery in the Application Button. The XML file representing the ribbon interface has also been extended and a new Ribbon.xsd schema file is required.

```
...
<ApplicationButton Image="EagleRibbon.bmp" ... >
...
<FileMenu Exit= ...>
```

```
...
</FileMenu>
<Gallery Title="Gallery Items" Size="12">
<GalleryItem Id="3" Text="File 1" Action="do ..."/>
<GalleryItem Id="2" Text="File 2" Action="do ..."/>
<GalleryItem Id="1" Text="File 3" Action="..."/>
</Gallery>
...
</ApplicationButton>
```

The new RIBBON command options are:

RIBBON GALLERY,SIZE=<value> -Change the maximum number of options

Example :
ribbon gallery, size = 10

RIBBON GALLERY,TITLE='<string>' -Change the title

Example :
ribbon gallery, title = 'Recent models'

RIBBON GALLERY,ADD='<string>,ACTION='<string>' -Add a new option with an associated action on top of the Gallery.

Example :
ribbon gallery, add = 'myfile.mod', action='get myfile.mod'

The changes applied to the ribbon gallery by the RIBBON GALLERY options are persist in the XML file used for creating the ribbon.

- A New version of MVISION (v.2.05) is released.

14.4.4 b03

- [UI2008] A new primer FILE=<rtf filename> has been implemented for the INSERT command which enables appending a RTF file into a rich edit control.

INSERT P=1,B=3,RTF=myfile.rtf,APPEND

- [UI2008] #5278 LIST: The ability possibility to have stand-alone lists in the same manner as v.12 without a panel as container has been implemented. Refer to the GUI Book for details of the implementation.
- [UI2008] #5200 Documentation clarification in relation to the ROOT_CAPTION_ICON which should contain two images 16x16 and 32x32.

The smaller image is used for the Eagle caption and the second is used for the ALT-TAB menu Refer to the GUI Book for details.

- [EPI] #5238 A new EPI function is introduced to allow the direct editing of an item.
- New SDK versions have been also released:
 - *LibEagle v.5.2.1*
 - *LibOCC v.1.1.4*
 - *EPI v.3.10.10*

14.4.4 b01

- Eagle v14 is for delivered as two releases:
 - *VC60 (compiled with Visual Studio 6.0 as previously)*
 - *VC90 (compiled with Visual Studio 2008)*

There are two delivery folders, called VC60 and VC90, where the corresponding executables and DLLs are placed. Refer to General Notes above about 14.4.4 for details about changes for Visual Studio 2008 delivery.

- [UI2008] A new type of panel called Page Container is now available. The creation and handling of this new panel is very similar to the existing Tab Container. To simplify the syntax of the **PANEL** command there is a change to the previously implemented syntax.

Tab Container:

PANEL ..., container=tab Page Container: **PANEL ...**, container=page

Example:

```
PANEL P=10,ON,,,,,,,,CONTAINER=PAGE
PANEL P=41,ON,,,,,,,,PAGED,PAGEOF=10
```

The **CLICK** command operates on the new type of panel in the same way as the Tab Container.

- [UI2008] A new GridView control is implemented, see the GUI Book or ask Macrovision for documentation and samples.
- [UI2008] Two new Rich Edit Control button types are available see the GUI Book or ask Macrovision for documentation and samples.

15 *Single-line Rich Edit Control*
16 *Rich Edit Ctrl to view RTF files*

- [UI2008] The **INSERT** command has been extended to enable filling of a richedit control (type 16) with a RTF file. The syntax is:

```
INSERT P=1,B=5,RTF=myfile.rtf
```

- [UI2008] A new setting called `DEFAULT_GWINDOW` is implemented in the configuration INI file which allows starting of Eagle without having the default graphic window.

`DEFAULT_GWINDOW=yes`

The default setting is `DEFAULT_WINDOW=yes` meaning that window 1 is created automatically.

- [UI2008] A new variable setting in the configuration INI file can be used to define the transparent color for BMP images. The color is specified using a hash “#” followed with three hexadecimal values (one for red, one for green and one for blue), so the range of possible values is : #000000 to #FFFFFF

`BITMAP_TRANSPARENCY_COLOR=#FF33DD`

14.4.3 b02

- The `PANEL` command has been extended to allow the creation of “always on top” menus. This can be achieved using the new `TOPMOST` primer.

Example :

`PANEL P=1,ON,...,TOPMOST`

- `PANEL` The default behavior of using `PIN=1` or `PIN=-23` for a panel, if no title is defined, has been reassigned to behave as a “fixed” unmovable panel, which was also the v.12 behaviour of panel with `PIN=1`.

14.4.3 b01

- This version is aligned to v.12.7.2.b01 and v.11.9.11.b01

14.4.2 b03

- [UI2008] #5155 Eagle sends a window message when panels are closed `PANEL OFF`, panels are cleaned `OPTIONS OFF` or a button is deleted `PBUTTON_DEL`.

Closing a panel	<code>WM_PANEL_OFF="EAGLE_PANEL_OFF"</code>
Clearing a panel	<code>WM_PANEL_OFF="EAGLE_OPTIONS_OFF"</code>
Deleting panel button	<code>WM_PBUTTON_DEL="EAGLE_PBUTTON_DEL"</code>

14.4.2 b02

- [PYTHON] Align EFC to NURBS 2.2 extensions.

NURBS 2.2 extensions include:

- *EXPORT of Eagle entities other than OCC-entities, this includes Eagle LINES, ARCS, etc.*
- *UPOS and UVPOS functions.*

- *Extrusion, Revolution and Sweep of a Profile functions to create a SHAPE or a BODY object.*

This version is aligned to v.12.7.1.b01 (See V12 Release Notes for additional details)

14.4.2 b01

- #5161 The **INFOPANEL** now returns two additional values in the last two positions, these are the width and height of the panel in pixels.
- #5156 A new string function **PARAM** has been introduced that returns command line parameters and its value. There are three cases:

- Parameter specified as `-parameter=value`:

```
eagle -ini=eagle.ini -mode=virtual

s1=PARAM(mode)
Value is "virtual"
iferr tell 'Error: parameter not specified'
```

- Parameter specified as `-parameter`

```
eagle -ini=eagle.ini -fast

s1=PARAM(mode)
Value is ""
iferr tell 'Error: parameter not specified'
```

- Parameter not specified

```
eagle -ini=eagle.ini

s1=PARAM(mode)
Value is ""
iferr tell 'Error: parameter not specified'
Error: parameter not specified
```

- **PO_FACTOR** and **PO_UNITS** are now dynamic and re-evaluated when the **GLMODE** changes.
- #5132 Angled t-junctions are rendered incorrectly when **HIDE_MODE=advanced** and meshed incorrectly in **OpenGL**. This is resolved by assigning a new value to the **HIDE_MODE** environment variable. When setting "**HIDE_MODE=evr**" the resolving fix is active.
- This solution can also be driven by a further new environment variable **HIDE_MINIMUM_APP** which indicates the minimum approximation to be used for all pipe entities.
- An environment variable is used when **HIDE_MODE=evr**:

HIDE_MODE_THRESHOLD

This variable can be set to indicate the percentage of the size of the object against the full screen above which no optimization is made whilst faceting the object. The default value is "0.2", indicating that if the object size is bigger than 20% of the full screen then the approximation is the specified value (e.g. APPROX 32).

- A new environment variable is used when `HIDE_MODE=evr`:

`HIDE_MODE_NON_ORTHOGONAL`

This can be set to "yes" to indicate that pipes that are not orthogonal to the current view (i.e. that are not visible as circles in the current view) are not subject to approximation optimization when faceting (i.e. they are faceted using the current approximation). The default value is "no", which indicates that all pipes are considered for optimizing their approximation when faceting.

- #5132 A new environment variable is used to dynamically draw silhouette edges for pipes and Ufos in the OpenGL window:

`OPENGL_SILH=yes`

The default value is "no", which indicates that pipes and Ufo silhouettes are drawn statically.

- PATCH 4114 environment variable is no longer required.
- Alignment of V14 with V12 Nov-09 to Jan-10
- A new EPI v3.10.7 included with this release (items not previously are listed below).
- A new `EPI_createCustomEntity` has not been introduced to reflect the above functionality:

```
BOOL WINAPI EPI_createCustomEntity( HMODULE hEagle,
EPI_CUSTOM custom, EPI_Item *handle )
```

The data structure to support this type of new entity is the following:

```
typedef struct
{
    EPI_ITEM_HEADER header; /* item header */
    double pos[3]; /* the position of the Custom */
    double strfac[3]; /* stretching factors of the Custom */
    double rot[3][3]; /* the post-mult rotation matrix */
    double max[3]; /* maximum coordinates of the Custom */
    double min[3]; /* minimum coordinates of the Custom */
    int rottra; /* rotated/not(1/0) + 2*trans for the Custom entity */
    int pen; /* Simbology info (pen,dash & thick) */
    int colour; /* Colour fill */
    int hatch; /* Hatch */
    int ctype; /* Ctype of the Custom entity */
    int dummy; /* For future use */
}
```

```
int size;          /* Size of the payload, in bytes */
void *payload;     /* Custom data */
```

```
} EPI_CUSTOM, *LP_EPI_CUSTOM;
```

- [EPI] #5016 EPI_changeAnnot has been changed to allow removal of one line of text, previously it simply changed the specific line to an empty line.

The functionality has now changed but in implementing this change the prototype for EPI_changeAnnot has not been changed:

```
BOOL APIENTRY EPI_changeAnnot( HMODULE hEagle, EPI_Item handle,
                               EPI_ANNOTATION annot, int line, char *new_text)
```

- In order to remove the generic “line” of text it is sufficient to set to "" (NULL) the value of the new_text parameter, i.e.:

```
EPI_changeAnnot( he, id, annot, 2, "" );
```

- LibOCC v.1.1.2 included with this release includes some functions which may not have been fully documented in all documentation sources but were present in some form in either the EagleHTML, online help, Nurbs Guide or Release Notes.

- This version of LibOCC includes the following new functions:

- a. A new OCC_convert is implemented to convert one single entity from/to Eagle items to/from OCC-curves, according to the behaviour of the Convert command.

```
Item OCC_convert( itemPointer )
Item itemPointer; /* <i> Pointer to the existing item to be
                  converted */
```

- b. A new OCC_extrusion is implemented to allow creating a Surface entity representing the linear sweep of a curve entity.

```
Item OCC_extrusion( itemPointer, p1, p2 )
Item itemPointer; /* <i> Pointer to the Curve item */
double *p1; /* <i> First point defining the extrusion vector */
double *p2; /* <i> Second point defining the extrusion vector */
```

- c. A new OCC_extrudeProfile is implemented to create a shell or a body by extruding a profile between 2 points.

```
Item OCC_extrudeProfile( itemPointer, p1, p2, solid )
Item itemPointer; /* <i> Pointer to the profile item */
double *p1; /* <i> First point defining the extrusion vector */
double *p2; /* <i> Second point defining the extrusion vector */
int solid; /* <i> Flag to indicate if a solid or shell is to be created */
```

- d. A new OCC_revolution is implemented to allow creating a Surface by revolving a Curve around an axis by a given angle.

```
Item OCC_revolution( itemPointer, p1, p2, angle )
Item itemPointer; /* <i> Pointer to the Curve item */
double *p1; /* <i> First point defining the axis */
double *p2; /* <i> Second point defining the axis */
double angle; /* <i> Angle of revolution, in degrees */
```

- e. A new OCC_revolveProfile is implemented to create a shell or a body by revolving a profile around an axis by a given angle.

```
Item OCC_revolveProfile( itemPointer, p1, p2, angle, solid )
Item itemPointer; /* <i> Pointer to the Curve item */
double *p1; /* <i> First point defining the axis */
double *p2; /* <i> Second point defining the axis */
double angle; /* <i> Angle of revolution, in degrees */
int solid; /* <i> Flag to indicate if a solid or shell is to be created */
```

- f. A new OCC_sweep is implemented to allow creating a surface by sweeping a Curve along a Spine.

```
Item OCC_sweep( curvePointer, spinePointer )
Item curvePointer; /* <i> Pointer to the Curve item */
Item spinePointer; /* <i> Pointer to the Spine item */
```

- g. A new OCC_sweepProfile is implemented to create a shell or a body by sweeping a Profile along a Spine.

```
Item OCC_sweepProfile( curvePointer, spinePointer, solid )
Item curvePointer; /* <i> Pointer to the Curve item */
Item spinePointer; /* <i> Pointer to the Spine item */
int solid; /* <i> Flag indicates if a solid or a shell is created */
```

- EVR UTILITY** - A new primer MATCHATT has been implemented for the EVR utility. This enables the ability to avoid merging vectors or arcs with different layers or attributes. When this primer is specified, items are merged only if layer and user-defined attributes are coincident. Example:

```
EVR Origin.plo Result.plo MATCHATT
EVR Origin.plo Result.plo + + MATCHATT
```

14.4.1 b01

- [UI2008] 5112 There is a new primer for the **HOOK** command, **HOOK <command>, CMD=<string>** that is passed as a parameter to the function. A new version of the PLNGHOOK.DLL included in this release, is also required.
- [UI2008] #4951 The new treeview control can be used more than once in the same panel or in different panels. In previous versions only one treeview was allowed. ui2008. *Reference GUI Framework Guide – Controls - Treeview*
- [UI2008] The **THEME** command has been extended to incorporate themes 15,16,17,18 for Office2010. The references are as follows:

Office 2010 R1	15
Office 2010 Blue Release 2	16
Office 2010 Silver Release 2	17
Office 2010 Black Release 2	18

- Reference GUI Framework Guide – Make up of Eagle - Theme
- [UI2008] #5139 A new **NODE** primer has been introduced for the **FREEZE** and **UNFREEZE** commands to enable the freezing/unfreezing of a treeview control node. Examples as follows where p=panel, b=button and NODE=node id.

```
FREEZE p=88, b=1, NODE=8
UNFREEZE p=88,b=1,NODE=8
```

- [UI2008] **INSERT** command extended with three new primers **ADDTREE**, **ADDNODE** and **DELNODE** which allow adding and deleting of a subtree or a new node from a treeview. Examples follow where p=panel, b=button and DELNODE=<node_id> or ADDNODE=node item or ADDTREE = dat file.

```
INSERT P=1,B=4, DELNODE=15
INSERT
P=1,B=4, ADDNODE='2,1,Conveyors,do
checkpoll,cap1.cmd,-icon/green_leaf.bmp,-,U4002'

INSERT p=1,b=1, ADDTREE=file.dat
```

Where the format of the **ADDNODE** string is the same as that used in the initial loading of the treeview and the format of "file.dat" is the same as the file used to create the treeview.

To delete a subtree just use the **DELNODE** primer specifying the node that is root of the subtree.

- [UI2008] TreeView: **CLICK** with **SELECT** is able to search by node ID using the syntax **SELECT='\$17'** where 17 is the referenced node id as defined in the first field of the tree definition and returned by polling in the LN variable. *Reference GUI Framework Guide – Controls - Click Command*
- Treeview look can be customized using the **TREEVIEW_STYLE** characteristics. There are several new settings for the treeview in the INI file. These are:

```
TREEVIEW_LINE=no | solid | dots(default)
TREEVIEW_BOX=round | square(default) | bitmap
```

- and when **TREEVIEW_BOX=bitmap** then use:

```
TREEVIEW_BOX_IMAGE_COLLAPSED=<image path name>
TREEVIEW_BOX_IMAGE_COLLAPSED_HOVER=<image path name>
TREEVIEW_BOX_IMAGE_EXPANDED=<image path name>
TREEVIEW_BOX_IMAGE_EXPANDED_HOVER=<image path name>
```

Reference GUI Framework Guide – Controls - Treeview

- A new `EPI_getErrorFlag` has been made available:

```
void APIENTRY EPI_getErrorFlag( HMODULE hEagle, int *flag )
```

returns the current IFERR flag in FLAG.

- The following definitions correspond to values returned by

```
EPI_getLastErrorCode():

#define EPI_NO_ERROR                0
#define EPI_INVALID_ROUTINE        1
#define EPI_INVALID_ITEM_TYPE      2
#define EPI_EMPTY_PARTITION        3
#define EPI_INVALID_INDEX          4
#define EPI_INVALID_ATTRIBUTE_CODE 5
#define EPI_INVALID_PARAMETER_VALUE 6
#define EPI_ERROR_CREATING_ITEM    7
#define EPI_INVALID_HANDLE         8
#define EPI_NO_MORE_ITEMS          9
#define EPI_INVALID_GEOMETRY       10
```

Alignment of v.14.4 to v.12.7 development in the period 8-sep-09 up to v.12.7.0.b03 dated 20-nov-2009 (*Refer to V12 release notes in for other details*)

14.4.0 b01

- [UI2008] A new FOLDER command has been introduced which opens a folder selection dialogue panel permitting browsing of the file system for required path. The syntax of which is as follows;

```
FOLDER <string>, T='<title>', DESC='<description>
```

- The selected folder is stored the string. The description can be multi-line (only two lines at the moment) with a LF character is used to break the lines:

```
DESC='First line description\nSecond line description'
```

A series of Configuration variables may be used configure the standard layout of the folder dialog. These are :-

`FOLDER_DIALOG_OK_BUTTON` which is used to change the text of the standard OK button

INI Sample :

```
FOLDER_DIALOG_OK_BUTTON ='Alternative text'
```

and `FOLDER_DIALOG_CANCEL_BUTTON` which is used to change the text of the standard CANCEL button

INI Sample :

```
FOLDER_DIALOG_CANCEL_BUTTON ='Alternative text'
```

If the `FOLDER_DIALOG_NEW_BUTTON` and `FOLDER_DIALOG_EDIT_LABEL` variables are set then an additional button for creation of a new folder is added to the dialog together with an edit control.

INI Sample :

```
FOLDER_DIALOG_NEW_BUTTON =yes
FOLDER_DIALOG_EDIT_TEXT ='Edit label text'
```

The context menu can be accessed pointing to a folder and then clicking the mouse right button.

- [UI2008] #4956 The `CLICK COL` option can now be used to change the foreground color in EDIT, LABEL and HYPERLINK fields (button type 5, type 6 and type 501 respectively).

Example : `CLICK P=11,B=4,COL=2`

- [UI2008] The `CLICK` command has a new primer called `BACK` which is used to set the background color for EDIT, LABEL and HYPERLINK button types 5, type 6 and type 501 respectively.

Example :

`CLICK P=1,B=1,COL=2,BACK=4`

- [UI2008] New `FILE` command alternative dialog to the operating system default. This new dialog is customizable and has a broader range of customization possibilities to the standard dialog. The appearance of the Eagle FILE dialog is influenced by the `THEME` command whereas the operating system default is not. The new prototype for the command is

```
FILE <svar>, title='title', cwd='<directory>', flt='<wildspec>', full=yes|no ,
{multi,save,saves},tree ,collapsed
```

- Eagle's `FILE` dialog has a variety of customization possibilities which are accessed directly using the file function for specific dialog features or by settings in the INI configuration file

`"FILE_DIALOG_OPEN_BUTTON"` used to define the text of the "Open" button when type selected is "open single file" or "open multiple files". If no text is defined, the default will be applied.

`"FILE_DIALOG_SAVE_BUTTON"` entry in the configuration file to define the text of the "Save" button. If no text is defined, the default will be applied.

- `"FILE_DIALOG_CANCEL_BUTTON"` entry defines the "Cancel" text for each type of file dialog. If no text is defined, the default will be applied.

- “[FILE_DIALOG_FILENAME_LABEL](#)” entry in the INI file we can set the label before the edit field that contains the file name. If no text is defined, the default will be applied.

“[FILE_DIALOG_FILETYPE_LABEL](#)” entry in the IN file enables setting of the label before the combo box field that contains the permitted file extensions. If no text is defined, the default will be applied.

- The file dialog permits selection of more than one item, the string returned to the variable will contain all the selected files separated by a predefined character. It is possible to define a custom separator by using the “[FILE_DIALOG_SEPARATOR](#)” entry in the configuration file. If no text is defined, the default comma (,) separator will be applied.

‘[FILE_DIALOG_FILTER](#)’ entry in the configuration file is used to set the file extensions to be displayed in the combo box filter. The relevant syntax to define the filter string is :

[Type_1|Type_2| |Type_N||](#)

where each “Type” must be defined in the following way: Description (*.ex1,*.ext2, ... ,*.exN)|*.ex1;*.ext2; ... ;*.ex When no filter is defined, the default “ All Files (*.*)|*.* ” will be applied.

[FILE_DIALOG_FILTER](#) = Portable Network Graphics

[\(*.png;*.mng\)|*.png; *.mng|GIF Files \(*.gif\)|*.gif|All Files \(*.*\)|*.*||](#)

Complete details of the new dialog are located in the GUI Book rev1.6.pdf

- [UI2008] New LIST command options. Lists are a collection of items, usually strings, which can have one or more columns. In the previous Eagle versions was possible to create a list as an independent control (that is, in a floating dialog) or as a child of a panel; now, with the user interface framework, the first approach has been depreciated. Note that if the panel is deleted, then any lists owned by the panel will also be deleted. The relevant syntax prototype is defined as follows:

[list {on|off}, w=<i>, vc=<i>, vr=<i> {,f=<file>} {,pos=<i>}, {add='<text>'}|del} {,pan=<i>, bx=<i>, by=<i>} {,typ=<i>}](#)

or

[list w=<i>, l=<file>](#)

Complete details of the new [LIST](#) options are located in the GUI Book and the Help command. The new list types are influenced by the [THEME](#) command like other UI2008 controls.

- [UI2008] The [PANEL](#) command has been extended to allow the attachment
- (association) of a panel (toolbar and dialogbar) with the exception of the status bar, PIN=-6, to a GWINDOW. This is achieved by using the primer

[W{INDOW}=<gwindow_id>.](#)

Example:

```
PANEL p=9,on,u=1,...,pin=-7,win=8,...
```

The effect of this instruction will be to attach a docked dialog (PANEL p=9...pin-7) to the left side of GWINDOW 8 (win=8).

The default behaviour is association with the main Eagle window

- [UI2008] The **LET INFOGUI** function now accepts values other than “zero”(default). If the value is greater than zero then this means that the returned values will refer to the **PANELs** attached to the **GWINDOW** with the id defined rather than the default.
- [UI2008] The **OPTIONS** command has been extended with a new **LAYOUT** primer which points to a file used to define the dynamic layout of the contents of a panel when it is resized. The primer syntax is **LAYOUT=<filename>** where the filename contains the layout of the panel.

The format of this file is:

```
button-id,val1,val2,val3,val4.
```

- [UI2008] The syntax for defining “short-key” in pulldown and popup menus has changed. It is now possible to define a short-key inside the title string by using:

```
3,'Remove Item^Ctrl+X': do remove
```

The previous method of using a string variable containing a “tab” is no longer valid syntax and does not produce the desired effect anymore in UI2008.

- [UI2008] **RIBBON**: Mnemonic keys support added to the ribbon bar and are available for Tab page, Controls inside pages, Quick access toolbar buttons, Application node and Buttons inside the application menu.
- Mnemonics can be set to have one or more keys and these are set using the appropriate tips in the xml configuration file.
- The **Export** command now allows exporting of IGES (International Graphics Exchange Specification) files to include not only NURBS entities but also standard Eagle items, but excluding **DIMENSIONS**, **GDIMENSION**, **ANNOTATION**, **GUIDE** and **GNODE**.
- #5030 **DIMMENSION** command **INTERN** is extended to act on types 1,4,5,6,9,16,17,22 in addition to the existing 10,11,12,27,28 and 29 already present. **INTERN** makes it possible to specify a parameter which automatically adjusts the dimension line when the length, the height or the position of the text is modified and it can also automatically places the text beyond the start point or beyond the end point.

Intern=0, standard, i.e. no automatic placing of the text. (Default)
Intern=1, text automatically placed beyond start point
Intern=2, text automatically placed beyond end point

- #5063 The implicit calculation of the middle point for text placement must be calculated as the midpoint of the dimension line and also consider arrows. This implementation overrides the implemented behaviour of the environment variable that was used for the feature #4645: `DIMENSION_MID_POINT`.

If the "`DIMENSION_MID_POINT=new`" the new behaviour is active and it has the effect to changing the geometrical text placement in the Eagle

database when creating new dimensions.

The default environment setting is `DIMENSION_MID_POINT=old`, that means that the midpoint is calculated as before, i.e. considering the arrows.

- [PYTHON] Eagle Foundation Classes for Python are now generally available. It is recommended that developers interested in these technologies liaise with our developers to ensure success for any envisaged project.
- #5097 [PYTHON] [UI2008] Alignment of Python interface to latest Ui2008 extensions and enhancements.
- A new version of EPI has been released this is v.3.10.4. which has new functions to handle NURBS entities:

```
EPI_addShape()
EPI_getShape()
EPI_interpolate()
EPI_addNurbsCurve()
EPI_addBezierCurve()
```

- A new version of LibOCC has been released this is v.1.1.2. which includes functions for the new shell/body creation functions:

```
OCC_extrudeProfile()
OCC_revolveProfile()
OCC_sweepProfile()
```

For a detailed description of each of the above functions refer to the "NURBS Software Implementation Document.doc"

- A new version of LibEagle has been released this is v.5.1.0.

14.3.2 b04

- #5007 An ActiveX installed in a gwindow or in a dialog/panel can use the Eagle EPI; the OCX must be linked to epi.lib. A new EPI Rel 3.10.3 has been released which includes:

EPI_createDIIControl
EPI_destroyDIIControl

- #4901 **POINTINSHAPE**. The behaviour for Curves has been changed. The returned values are:

1 if the point is in the same direction of the normal
0 if the point is on the curve boundary
-1 if the point is in the opposite direction of the normal

- #4917 **DUMP** and **ETCH** commands now work with an extended PLO format (PLX) that includes attributes.

Facilitating this is new feature a new SET PLOT option has been made available:

SET PLOT=ETCH

- This option enables creation of temporary **PLO** files that can only be used by the **ETCH** command. These PLO files also include attribute definition for items. The functionality can be disabled using:

SET PLOT=STD

Note that the old fashioned (and, in any case, previously undocumented **SET PLOT=A** and **SET PLOT=C** have been removed).

- A new SET option set has been made available:

SET MSELECT=ON|OFF

This option enables **SELECT** with multiple outcomes (multi-select). The selection process does not stop at the first “selectable” item but gathers all the “selectable” items and places them under partition.

- #4819 A new primer has been added to the **PARTITION** command:

PARTITION UID=<value>

This means that selection of items with a given unique ID (ref. INF(28)) is now possible.

- [UI2008] A new type of “checkbox” button, type 18, has been introduced; it represents the tri-state checkbox which can have three possible values:

- *checked*
- *unchecked*
- *unknown*

The value reported by the **POLLING** command is, respectively:

- *1*
- *-1*
- *0*

The tri-state checkbox changes its status from unchecked to checked to unknown in a cyclic way.

- The **CLICK** command has also been extended to manage this type of checkbox. The **CLICK** command follows the same cyclic way as the interactive selection.
- [UI2008] A new option 999 has been introduced for MEN files to install a pulldown menu to show the active and available gwindows.
- [UI2008] #4954 The button types 11,111,211,311 are now again available and represent the “step button” respectively as:
 - *vertical arrows without the text field*
 - *horizontal arrows without the text field*
 - *vertical arrows with the text field, on which the **FETCH** and **INSERT** commands can be used to get the current value*
 - *horizontal arrows with the text field, on which the **FETCH** and **INSERT** commands can be used to get the current value*

In the text field of the TAB file line representing this type of button, the user can specify:

- *nothing (e.g.: “)*
 - *the current value (e.g.. ‘50’)*
 - *the current value and the minimum and maximum values (e.g: ‘50#0#100’)*
- [UI2008] #4883 The ribbon bar can now be removed by issuing the command **RIBBON OFF**.
 - A new primer **LAYOUT=<filename>** has been added to the **OPTIONS** command to define dynamic layout of the content of a panel. This means that when the panel is resized the panel layout is managed taking its reference from this “layout file”.

The format of the layout file is:

button-id,val1,val2,val3,val4

where the four values are percentages and define the “resizable and positioning behaviour” of each button in the panel.

- The **TRACE_MACROS INI** setting has been extended to retrieve information from encrypted macros when the “encrypt” feature is licensed in the license file.

When macros are encrypted but there is no “encrypt” feature is licensed then only the last 100 lines will be available in the generated file. When no “encrypt” feature is available, this functionality can only be consistently used when either all macros are readable (unencrypted) or all macros are encrypted, not in a mixed environment.

- #4817 A new primer has been added to the **GUIDE** command for setting the color of optional text associated to infinite lines:

GUIDE <old-params>, colortext=<n>

This information is persistent to the MOD file and does not change the model format.

- [NURBS] #4878 **FLIP** implemented for NURBS entities.
- #4889 Definitive Vista certification for v14 release.
- A new EVR V12.1 is released which enables handling of the new PLX format that includes attribute definition for items (ref. #4917). The new PLX format is obtained from the DUMP command using the new:

SET PLOT=ETCH

This allows the creation of temporary plot files that can only be used by the **ETCH** command and this new EVR version.

The functionality can be disabled using:

SET PLOT=STD

14.3.2 b02

NBB Warning! Please note that the message file has changed. Use the eagle.msg provided with this version in the bft folder or include the noted differences from the previous version in the source file eagle.dat:

\$SET 3

...

64 Warning Duplicate Window Id

65 Warning cannot destroy Eagle or Main windows

66 Theme

67 not supported

68 Element with type

- [PYTHON]A new command **PYTHON** <filename> to execute a python script from an Eagle macro has been introduced:

MYMACRO.CMD

```
{
    vane on
    python script.py
    vane off
}
```

- If the python parser has been already activated with **EATHON ON** and paused, then the **PYTHON** command works from within that already

existing instance, otherwise a new instance is created. When the PYTHON command is finished the Python parser is paused without closing it.

- A new environment variable called `TRACE_MACROS` is introduced that allows monitoring of resources usage throughout the entire Eagle session and in the event of an Eagle crash, stores a log file information about the monitored resources and the history of the macros and commands used during the whole session.

This tracing is only available when `TRACE_MACROS=yes` at the Eagle start.

The log file is stored in the current working directory and is named "trace.txt".

The format of the created file is:

`<V1> <V2> <V3> <V4> #<standard echo information>`

Where:

*V1 is the Memory usage, in K
V2 is the CPU usage, in milliseconds
V3 is the number of used GDI objects
V4 is the number of used GUI USER objects*

i.e.:

`11432 343 87 69 #<.../test.cmd...4> get $model`

Note that when `ECHO` is active the information generated is also displayed in the message area.

- [UI2008] Several new types of combobox button have been introduced:
 - 37 *MultiColumnComboBox : multi-column text*
 - 47 *GridComboBox with: check, image, text*
 - 57 *GridComboBox with: image, text*
 - 67 *GridComboBox with: check, text*
 - 77 *GridComboBox with: check, image*
- Selection from the combobox pulldown works in exactly the same way as for the standard combobox, with the exception of the check box selection which has a change of state. When a check box is checked the action is executed and the LN variable is set to zero, while ST is -1 (unchecked) or 1 (checked).
- When a row is selected, LN is set to -1 or 1 to reflect the status of the check box for the selected line, RN is set to the row number and ST contains the text of the selected row.
- [UI2008] The `PANEL` command VR and VC parameters can now be used to specify a NxM matrix layout for floating toolbars. Refer to the GUI guide for details

- [UI2008]The **FILE** command introduces two new INI configuration settings which may be used to control the layout of the combo box

FILEDIALOG_FILETYPES defines the file types to display set in to be set to pairs <label>,<extension>;<other_extension> for example

```
FILEDIALOG_FILETYPES =All,*.*,Text,*.txt;*.dat, Script,*.py;
*.pyc,Model, *.mod,lges,*.iges;*.igs,BREP,*.brep
```

And **FILEDIALOG_FILETYPES_DEFAULT** specifies the default type from the index when the dialog is opened.

FILEDIALOG_FILETYPES_DEFAULT=3

- [UI2008] The **NOTIFY** command now has two new primers:
 - **TITLE=<title_string>**, to define a title for the dialogbox
 - **DEFAULT=<digit>**, to define which is the default button; values can be 1,2 or 3 to address the first, the second or the third button, if the latter is present.
- Furthermore, the previously available notify type EXT has been substituted by XQUE (extended question) with Yes, No and Cancel buttons. A new type XWAR has also been introduced which has a warning icon together with the Yes, No and Cancel buttons. *Refer to the GUI guide for details*
- [NURBS] A new primer "**B=ON|OFF**" has been introduced for the Sweep, Revolution and Extrusion commands.
- The "**B=ON**" option allows the creation of a Body entity from a profile. The default is b=off, that will drive the command to the creation of a Shell entity.
- [NURBS] A new function has been made available: **UVPOS**. It determines a point that is at distance L in the U-direction and N in the V direction from the origin of the selected surface.
- [NURBS] A new function has been made available: **UPOS**. It determines a point that is at distance L in the U-direction from the start of the selected curve.
- [NURBS] #4873 **CONVERT**: converts a curve into a polyline and viceversa
- The following new and extended **SYS** are available:

NUMERIC:

SYS(47)	Is Python parser Active 0 (no) 1 (yes)
SYS(48)	Is Ribbon bar Active (0) no 1(yes)
SYS(49)	Size of full Desktop
SYS(50)	RootWindow position with respect to top-left of desktop
SYS(51)	Is gwindow an OCX (0) no 1(yes)
SYS(52)	Winfont parameters: Size, Bold, Italic, Underline

STRING:

SYS(40) Winfont parameter: name

- [NURBS] The numeric [SYS\(38\)](#) has been extended to handle Surface entities.

In such case fourteen values are returned:

*1 = U Periodic (values: 0 or 1)
2 = V Periodic (values: 0 or 1)
3 = U Rational (values: 0 or 1)
4 = V Rational (values: 0 or 1)
5 = U Degree
6 = V Degree
7 = Number of control points in U
8 = Number of control points in V
9 = Number of Knots in U
10 = Number of Knots in V
11 = Start parameter in U
12 = End parameter in U
13 = Start parameter in V
14 = End parameter in V*

- #4939 ActiveX are now available also in the UI20008 version
- [UI2008] #4932 A new mode TMDI is introduced which represents tabbed MDI and is started using the primer –TMDI Refer to the GUI guide for details
- [UI2008] #4968 A new INI setting is introduced called [BAR_EXPANDABLE](#) which is used to enable/disable the expandability of the pulldown Refer to the GUI guide for details
- [UI2008] #4969 A new INI setting called [BAR_DOCKING_ENABLED](#) is introduced to enable/disable the docking/undocking of the menubar Refer to the GUI guide for details
- [UI2008] #4971 The request to center align text for buttons type 5 (label) and 220 (static) has been implemented Refer to the GUI guide for details
- [UI2008] #4972 Command history introduced a new INI setting called [HISTORY_DUPLICATES](#) which defines whether to have redundant lines or not Refer to the GUI guide for details
- [UI2008] #4975 A new INI setting [EDIT_BORDER_ENABLED](#) is introduced to enable adding of a border to button type 6 (edit field) Refer to the GUI guide for details
- [UI2008] #4974 Font setting for all the controls, theme overriding and default font is enabled using the [WINFONT](#). Refer to the GUI guide for details
- [UI2008] #4960 The background and foreground colors from the TAB file are now used also for button type 6 (edit field)

- [UI2008] #4988 Several new INI setting which can be used to control the font appearance in splash screen have been introduced.

SPLASH_WINDOW_TEXT_COLOR
SPLASH_WINDOW_FONT_NAME
SPLASH_WINDOW_FONT_SIZE
SPLASH_WINDOW_FONT_BOLD
SPLASH_WINDOW_FONT_ITALIC
SPLASH_WINDOW_FONT_UNDERLINED
Refer to the GUI guide for details

- [UI2008] #new Font control in toolbars for button types 4, 500 has been implemented
Refer to the GUI guide for details
- #new Alignment of Eagle V.14 to latest v.12 changes

14.3.0 b04

- [UI2008] UI2008 - phase 2.0 - Please refer to the current help documentation for details of the UI implementation. Detailed papers about UI development is available in the document UI2008_specs_detailed.pdf from support@macrovision.ie
- New SYS(46) string variable returns the current window operation mode of Eagle whether it is SDI, MDI or TDI namely Single, Multi or Tabbed Document Mode
- [UI2008] Extended type 6 Control to include password mask character and cue banner. Refer to the Control type 6 and UI Framework UI2008 documentation for details.
- [UI2008] New **SPLASH** command to display and alter a startup window application splash bitmap and messages. There is also a configuration setting for controlling the splash called **SPLASH_WINDOW_ENABLE**. Refer to the **SPLASH** command and UI Framework UI2008 documentation for details.
- [NURBS] Further extension to Nurbs OCC implementation including revisions to **REVOLUTION**, **EXTRUSION**, **SWEEP** commands with extended entries in the Model Function Information topic. Refer to these topics and also to the NURBS - Software Implementation Document and relevant NURBS sections and training within the Help documentation for further details.
- [NURBS] New **CONVERT** command to converts Eagle items to OCC entities and vice-versa.
- [NURBS] New **ELIPSE** command to add an elliptical Curve entity to the model.

- **DEFAULT_COLOR_DIALOG_TYPE.** The Polling command returns in the ST string variable the RGB values (separated by the currently defined **DECODE_SEPARATOR**) and the index of the nearest color in the Eagle colormap.
- [UI2008] Hyperlink button (type=501) has been added. The implementation of this new button type is the as button type=1
- [UI2008] Color Picker button (type=500) has been added. The option activates the colorDialog defined in the configuration file variable setting
- [UI2008] Horizontal Radio box control (type=39) has been implemented. Data is handled in the same way as for type=29 through an array of strings.
- [UI2008] The slider control (type=10 |110) has been implemented and extended to include new types 210,310,410,510,610,710 where 10 (existing) 210, 410 and 610 are horizontal types, and, 110 (existing) and 310, 510 and 710 are vertical types.
- [UI2008] New primer for toolbars called **DOCK** where **DOCK=0** for horizontal or **DOCK=1** for vertical if the toolbar/dialogbar should be only be docked horizontally or vertically respectively.
- LibEagle v.5.0.1 released
 - *Extended for multi-stack to allow multi-channel reading and writing. Note that is at this point where LibEagle v.14 will start to differ from the one for v.12 and developers should be aware of this when considering development and rollout issues.*
 - *EPI_setActiveStack() implemented*
- LibOCC v.1.0.3 released

14.3.0 b01

- [UI2008] MAJOR NEW FEATURE Introduction of UI Framework aka UI2008 which incorporates a new and flexible UI programming methodology which includes Interface Themes, Microsoft Office Ribbon bar and several new or extended controls. The UI2008 specifications document is available with full details of UI2008 developments
- [UI2008] The following DLLs are required for the parsing of UI2008 XML
 - RibbonLib_vc60.dll
 - LtXmlLib6_vc60.dll
- [UI2008] **RIBBON** command introduced with the syntax

RIBBON F=ribbon.xml

where F-<filename> primer points to an XML schema which describes the structure of the ribbon construction.

- A significant amount of additional control over the appearance and event driven operation of Eagle container window and the [GWINDOWs](#), [MESSAGE](#), and [COMMAND](#) windows within it.
- The relevant environment variables which are introduced, extended or consolidated are as follows;

COMMAND_TITLE
COMMAND_WINDOW_FONT_NAME
COMMAND_WINDOW_FONT_SIZE
COMMAND_BACKGROUND_COLOR
COMMAND_TEXT_COLOR

MESSAGE_READONLY
MESSAGES_TITLE
MESSAGE_WINDOW_TITLE
MESSAGE_WINDOW_FIXED
MESSAGE_WINDOW_FONT_NAME
MESSAGE_WINDOW_FONT_SIZE
MESSAGE_TEXT_INTERLINE=
MESSAGE_BACKGROUND_COLOR
MESSAGE_TEXT_COLOR
MESSAGE_WINDOW_TITLE
MESSAGE_TITLE

GWIND_TITLE = yes
GWINDOW_POLLING_EXIT_ON_ACTIVATION
GWINDOW_CLOSE_MACRO
GWINDOW_ICONIZED_MACRO
GWINDOW_RESTORED_MACRO
GWINDOW_MAXIMIZED_MACRO
GWINDOW_LOOSE_FOCUS
GWINDOW_GET_FOCUS
GWINDOW_INITIAL_MAXIMIZED

- Details of setting of Eagle variables are located in the How to Configure Eagle section of the Help. The variables listed here are detailed in the subsection "Principle Windows Configuration"
- [UI2008] It is possible to have more than one [PANEL](#) enabled to contain [TABBED](#) containers.
- The Default button in dialogs ([PANELs](#)) is the first one defined in the tab settings.
- Tabbing on dialogs ([PANELs](#)) is no longer restricted, that is tabbing is now implemented for all button types.
- #new TABbing on dialog/panel buttons is now working on all button types
- Need to define the roof-value for the stack size e.g. [DEF W=max](#) is now removed.

- **LOAD** command in the event of an error now returns more information about the error.
- **LibEagle v.5.0.1** - This is the first LibEagle aligned with Eagle v.14. This version library is for use with LibOCC for handling of the new [NURBS] curve and surface entities.

14.1.2 b01

- [NURBS] MAJOR NEW FEATURE A version supporting NURBs compliant to Phase 1.2 of the EagleNurbs Software Implementation is introduced. The Nurbs extension requires an additional 'EX' feature in the license file.
- [NURBS] The following DLLs from OCC are required for the deployment of this version:

TKBRep.dll
TKIGES.dll
TKShHealing.dll
TKXSBase.dll
PTKernel.dll
TKBool.dll
TKernel.dll
TKG2d.dll
TKG3d.dll
TKGeomAlgo.dll
TKGeomBase.dll
TKMath.dll
TKPrim.dll
TKPShape.dll
TKService.dll
TKTopAlgo.dll
TKMesh.dll
TKV2d.dll
TKV3d.dll
TKBO.dll

- [NURBS] A new **CURVE** command is available. Refer to NURBS Software Implementation Document.pdf and to the related **CURVE** Help topic.
- [NURBS] A new **POINTINSHAPE** command is available. Refer to NURBS Software Implementation Document.pdf and to the related **POINTINSHAPE** Help topic.
- [NURBS] A new **Profile** command has been implemented. Refer to the "NURBS - Software Implementation Document.pdf" document. Note that the order in which Lines, Arcs, Curves and Profiles are placed under the Partition is not relevant, since items are ordered by the command itself.
- The old Solid Modeling module's **CURVE** command has been renamed to **XCURVE**.

- [NURBS] The Import command has been extended to support BREP and IGES files, according to specification listed in the current the "NURBS - Software Implementation Document.doc" document.
- [NURBS] A new primer has been made available in the **IMPORT** command. The primer {A} for "append" to append a result of an import to the stack.
- [NURBS] **IMPORT** settings for IGES files:
 Name : IGES_COLOUR
 Description : Drive the automatic import of colour attributes from IGES files.
 Options : **IGES_COLOUR=no** [Default] | **IGES_COLOUR=yes**

 Name : IGES_LEVELS
 Description : Map Layer information from IGES files using the TABLAYER configuration file for layer mapping.
 Options : **IGES_LEVELS=no** [Default] | **IGES_LEVELS=yes**
- [NURBS] The following new environment variable have been added to Nurbs operations
 Name : SELECT_RAYTRACE
 Description : Allows selection of NURBS entity being computed also internally to surface boundary.
 Options : **SELECT_RAYTRACE=no** [Default] | **SELECT_RAYTRACE=yes** (This method can be much slower)

 Name : NURBS_FACETED=no
 Description : Indicates if NURBS should be faceted for rendering in OpenGL or if they are to be translated as NURBS. The variable is read at each rendering.
 Options : **NURBS_FACETED=yes** | **NURBS_FACETED=no** [Default]

 Name : NURBS_TRIMMED
 Description : This includes Trimming Curves for NURBS for rendering in OpenGL.
 Options : **NURBS_TRIMMED=no** [Default] | **yes** (The variable is read at each rendering)

 Name : NURBS_BLEND_NORMALS
 Description : When faceted, normals on triangles for NURBS can then be blended
 Options : **NURBS_BLEND_NORMALS=yes** [Default] | **NURBS_BLEND_NORMALS=no**

 Name : NURBS_PRECISION; Description : Used as tolerance on geometric comparisons at the NURBS level.
 Options : **NURBS_PRECISION=0.001** [Default]

 Name : NURBS_UV_RECALCULATE
 Description : This is used to compute UV parameters on the basis of shape curves.
 Options : **NURBS_UV_RECALCULATE=no** [Default] | **NURBS_UV_RECALCULATE=yes** (Note dramatically effects performance)

See also [PATCH4704](#)

- [NURBS] [AREA](#), [LENGTH](#), [MASS](#) and [VOLUME](#) functions work on NURBS entities when the NURBS version is used.
- [NURBS] Latching and snapping on NURBS entities is applied to their trimming curves and it is driven by the standard latch settings: 'e' and 'x' when the NURBS version is used.
- [NURBS] The [Meet](#) command has been extended when the NURBS version is used to allow the selection of Curve entities through its standard syntax. In particular this means that the [MEET L=](#) or [MEET C=](#) also search the workspace looking for the closest intersection vs. Curve entities.
- [NURBS] The following environment variables for the [OpenGL](#) are now read from `OGL_initializeDisplay` (i.e. at each rendering):

- `DEBUG_GL`
- `NORMALIZE`
- `NURBS_APPROX`
- `CULLING`
- `NURBS_FACETED`
- `NURBS_PRECISION`
- `NURBS_BLEND_NORMALS`
- `NURBS_UV_RECALCULATE`
- `NURBS_TRIMMED`

- #4577 has been implemented using a new environment setting: `"DWG_NEW_SCANLAYER=yes"`.
Using this setting for the `IMPORT` command means `SCANLAYER` will also return information on the Layer-status: i.e. Frozen, Visible. When activated the format of the `SCANLAYER` file is changed according to the following information format:

When it is set then the format of the `SCANLAYER` file is changed according to the following information:

`INDEX NAME ON/OFF FROZEN/THAWED VPFROZEN/VPTHAWED
LOCKED/UNLOCKED`

The default is `"DWG_NEW_SCANLAYER=no"`, that means that the `SCANLAYER` file will only include:

`INDEX NAME`

- [EXPORT](#) - [PATCH4644](#) : If an arc with a very large radius is not displayed in ACAD then export it as a line. A workaround to fix this problem has been implemented.
Options : [PATCH4644=YES](#) [Patch active] | [PATCH4644=NO](#) [Default]
- [IMPORT](#) - [PATCH4148](#) : Cases when [IMPORT](#) of [DIMENSION](#) has the wrong arrows or missing dimension. A workaround to fix this problem has been implemented.
Options : [PATCH4148=YES](#) [Patch active] | [PATCH4148=NO](#) [Default]

- **IMPORT - PATCH3596** : When **IMPORT**ing specific DWG (Microstation) files where UNNAMED blocks are present, the geometry of the imported model is sometimes different from the one visible in ACAD.
Options : No longer required since #4147 implemented
- **HIDE X = - PATCH4712** : There are cases when the HIDE X= cause the program to hang. A workaround to fix this problem has been implemented.
Options : **PATCH4712=YES** [Patch active] | **PATCH4712=NO** [Default]
- **ONCHANGE - PATCH4618**: **ONCHANGE** did not convert a UNIX pathname and did not resolve environment variables for the action if it included a pathname. A workaround to fix this problem has been implemented.
Options : **PATCH4618=YES** [Patch active] | **PATCH4618=NO** [Default]
- **[NURBS] SELECT - PATCH4704** : In perspective message is displayed "unable to compute beyond the horizon" A fix for this problem has been implemented.
Options : **PATCH4704=YES** [Default] | **PATCH4704=NO**
- The options available for the DXF_EXPORT_FORMAT variable has been extended to target specific AutoCAD releases. The full list of available values is as follows:

old	Autocad 2000-2002
new	Autocad 2007
vAC09	Autocad Release 9
vAC10	Autocad Release 10
vAC12	Autocad Release 11-12
vAC13	Autocad Release 13
vAC14	Autocad Release 14
vAC15	Autocad 2000-2002
vAC18	Autocad 2004-2006
vAC21	Autocad 2007

- **[NURBS]** Amended **INTERSECTION** command: refer to the related **INTERSECTION** Help Topic.
- Amended **POINTINBODY** command: refer to the related **POINTINBODY** Help Topic.
- **[NURBS]** The following new SET command options are available:

SET PURGETRIANG=ON|OFF

Introduced to allow the Save command to purge triangulation before storing the relevant information for each shape in the BREP file. This maintains a smaller data file.

The default is ON, that means that the triangulation information is purged.

SET CPAR=ON|OFF

Enables displaying isoparametric lines. The default value is OFF.

SET LINU=<n>
SET LINV=<m>

Indicate the number of lines of constant parameter in U and V. The default value is 2 for both parameters.

SET CTOL=<n>

Set the tolerance to be used when drawing a curve that belongs to a NURBS entity. The default value is 0.5. The minimum value is 0.001.

SET DTOL=ON|OFF

Indicates whether the curves of a NURBS entity should be drawn according to a tolerance (see Ctol). The default value is OFF.

- [NURBS] A new LIBOCC (Eagle-NURBS) library V1.0.1 has been released. It includes the following functions:
- - OCC_init()
 - OCC_libvers()
 - OCC_open_model()
 - OCC_importBREP()
 - OCC_importIGES()
 - OCC_addShape()

For a detailed description of each of the above functions refer to the "NURBS Software Implementation Document.pdf"

- [NURBS] A new message file Eagle.msg is required
- [NURBS] The following new Selection primers are available:
 - a. *Select XB, for Body entities*
 - b. *Select XBF, for face/surface in a Body*
 - c. *Select XBE, for edge/curve in a Body*
 - d. *Select XS, for Shell entities*
 - e. *Select XSF, for face/surface in a Shell*
 - f. *Select XSE, for edge/curve in a Shell*
 - g. *Select XF, for Surface entities*
 - h. *Select XFE, for edge/curve in a Surface*
 - i. *Select XC, for Curve entities*
- Note that the use of the "special cases options", i.e. SELECT XBF, XBE, XSF, XSE and XFE, extract the relevant Surfaces or Curve from the selected object and place them under the Partition marker.
- [NURBS] New specific SYS functions are implemented in order to retrieve the current settings related to the NURBS entities. In particular:
 - Sys(35).** *The display silhouettes flag. The value returned will be 0 (OFF) or 1 (ON).*
 - Sys(38).** *The display lines of constant parameter flag (ref. Set CPAR). The value returned will be 0 (OFF) or 1 (ON).*

Sys(39). The number of lines of constant parameter to be displayed (ref. Set LINU, LINV). Two values will be returned, and they are the number of lines in the U parameter range and in the V parameter range.

Sys(40). The display curves according to a tolerance flag (ref. Set DTOL). The value returned will be 0 (OFF) or 1 (ON).

Sys(41). The tolerance to be used when triangulating a generic shape (ref. Set CTOL).

- [NURBS] New INF functions have been implemented in order to retrieve the item information related to the NURBS entities. In particular:

Arithmetic Function:

Inf(30). The number of edges in a profile, only applicable to item type 20 (Profile).

Inf(31). The closure of the item, only applicable to item type 20 (Profile). The value returned is 0 for OPEN and 1 for CLOSED

Inf(32). The planarity of the item. It is applicable to item type 1 (Face), 2 (Solid), 13 (Irregular Solid) and 20 (Profile). The value returned is 0 for NON-PLANAR and 1 for PLANAR

String Function:

Inf(8). A new function for item types 25 (Surface) and 26 (Curve). The returned value describes the geometrical type of the item (i.e. *Geom_BsplineCurve*, *Geom_Line*, *Geom_Circle*, *Geom_BsplineSurface*, *Geom_SurfaceOfRevolution*, etc.)

- Existing INF functions have been enhanced in order to return the relevant information on the NURBS entities. In particular:

- **Arithmetic Function:**

Inf(3). The number of poles (control-points) available via inf(1) functions for 3-D point information. Extended to Surface and Curve. In the case of a Curve only one value is returned. In the case of a Surface two values are returned, that are the number of poles in the U and in the V directions.

3-D Point Information

Inf(1). Item definition points:

- 23 Body. Base point, maximum XYZ extents and minimum XYZ extents (untranslated).
- 24 Shell. Base point, maximum XYZ extents and minimum XYZ extents (untranslated).
- 25 Surface. Control points (poles) in the U and in the V direction. Base point.
- 26 Curve. Control points (poles). Base point.

- A new button type, 320, OCX_b has been added to allow the use of ActiveX Controls (OCX) from a panel.
- A panel-based OCX works exactly like as a gwindow-base ActiveX, with the exception that the **INVOKE** command, as a first parameter, requires a

number that is the combination of the panel and button(*), instead of the gwindow ID.

(*) number = panel * 2**8 + button, which is the panel number in the second byte and the button number in the first byte.
See OPTION OCX in the Eagle Help

- The **CLICK** command has a new primer, **SILENT**, which can be used when the associated node action must not be processed, for instance during a “loosefocus” action.

14.1.1 bx7

- This version is aligned to features of V12.5.3 b03 Certified Release and V12.5.2 b09 Official Release.
- Additional note about **GWINDOW_POLLING_EXIT_ON_ACTIVATION**. This variable can be set to “no” when the developer does not want that POLLING will exit when there is a change of focus between different gwindows. The default setting is “yes” which means that **POLLING** also exits when a non-active gwindow is clicked.

14.1.1 bx5

- The The syntax of the **CLICK** command has been changed with regards to the **IMAGE** parameter, which does not require the quotes anymore:
Examples:
`CLICK P=j,B=k,SELECT='%4567',IMAGE=lb2\books.bmp`

14.1.1 bx3

- TreeView file format has been extended where it is now possible to add to each line of the DAT file (representing a node) an additional field, called UID (Unique Identifier), which can be used by the **CLICK** command to “select” the node. The UID code, is a string of maximum length of 16 characters.

Enabling this additional functionality is triggered setting in environment variable :

`TREEVIEW_UID=yes`

The default setting for this variable is “no”, that is, no requirement for the extra field in the input file.

- There is new environment variable setting **TREEVIEW_ST_AS_UID**, which is used if the **POLLING** command needs to return the node’s UID in the ST system string variable instead of the node label. In these cases the actual label can be extracted from the full node path stored in the OS string. The default setting for triggering this functionality is `TREEVIEW_ST_AS_UID=no` and therefore compliant with actual current behaviour.

Example:

`TREEVIEW_ST_AS_UID=yes`

- #4413 TreeView – Has been extended to facilitate the dynamic allocation of unlimited number of nodes
- #4660 Treeview - specify a SEPARATOR (2 chars) for wrapping hidden information as a prefix/suffix for the node label (e.g.: label [status] where [] are the separators.)
- The **CLICK** command has been extended to allow the selection of a treeview node by specifying its UID (see treeview notes above and the Treeview option in the GUI section of the Eagle Help):
- `CLICK P=j,B=k,SELECT='%<uid string>'`

The “%” character is used to branch from the path-based select. The <uid string> has a maximum length of 16 characters. The CLICK command has also been extended to support UPDATE of a treeview node using the syntax:

`CLICK P=j,B=k,SELECT='%4567',<update_option>`

Where <update_option> is one or more options from amongst the following:

`LABEL='<node_label>'`
`IMAGE='<icon_filename>'`
`MENU='<context_menu_filename>'`
`ACTION='<action_filename>'`
`DND='<dragn-drop_filename>'`

Examples:

`CLICK P=j,B=k,SELECT='%4567',LABEL='Inter Milan'`
`CLICK P=j,B=k,SELECT='%4567',LABEL='Inter Milan',IMAGE=Scudetto`
`CLICK P=j,B=k,SELECT='%4567',ACTION='do @fitOnPage'`

Since V.14.1.0 bx4

- A new command **SYSENV** has been introduced to write system environment variables, and also a new function **SYSENV** has been introduced to read system environment variables.
- The **ENV** function and command will not read or write system environment variable anymore. Starting from this version, the variables read from and written to the INI file are now "cached" in memory. Note also that changes made to the INI file outside the Eagle environment (for instance hand-made changes of it or changes done by external programs) are no longer synchronized with the values that are valid in the Eagle cache.
- Four new EPI have been implemented: **EPI_getenv**, **EPI_putenv**, **EPI_getsysenv** and **EPI_putsysenv** to access the INI variables and the system environment variables through the same mechanism used by Eagle.
- The **PULL L** is no longer valid as a syntax. The PULL latching is available with **PULL T,L**

- **OPENGL**: the default usage is to prefer Quality and polygon are offsetted when overlapping lines are drawn (FAKE/HIDE and SHADE/EDGES), but there is a INI file setting that can be used to prefer Speed, disabling offsetting:

`POLYGON_OFFSET_DISABLED=yes`

Two new primers have been added:

`SET GLMODE=HIDE` (same behaviour than FAKE)

`SET GLMODE=EDGES` (same behaviour than SHADE)

The two modes: FAKE and SHADE, are now deprecated

- A primer **PEN** allows a pen being to be associated to an index:

`INDEX <name>, PEN=<pen>`

If an index has a pen associated then all the items belonging to that index will be drawn with the index color. System indices (PARTITION, BACKGROUND and FOREGROUND) have priority over user-defined indices. This means that if an item belongs to a user defined indices that has a pen associated, but it also belongs to the PARTITION index that has a pen associated, then the item is drawn using the pen associated to the **PARTITION** index. If **COLOR_SELECTION** environment variable is defined, the pen associated to the **PARTITION** overrides it.

A new **NUMERIC** function have been added to retrieve such information:

`V1=index('indexname')`

14.1.1 bx2

- A new LATCH criteria has been made available: `SET LATCH=Q`. It is similar to the "N" criteria, but it's not related to CC. It is defined as: Normal to model entity edge (arc or line), relative to selection point
- The default maximum number of different images in a treeview is 16. That can be extended setting the variable **TREEVIEW_MAXLEN_IMAGELIST** in the configuration INI or Registry file:

`TREEVIEW_MAXLEN_IMAGELIST=32`

The default for a TreeView is with icons. If the user does not want icons then the variable **TREEVIEW_WITHOUT_ICONS** must be set to "yes".

- Two new primers are available in the `SET LATCH`:
Q - model entity edge (arc or line) perpendicular (normal) to current control but only within selection tolerance with respect to selection point
M - mid point (for lines and arcs)
- A new primers has been made available in the **NEAREST** command:
- `NEAREST ...,TOL`

- This makes the **NEAREST** command to get only items within the selection tolerance.
Selections on annotations are now performed using as a reference a straight line across the middle of the text, for each line of the annotation.
- Two new primers has been made available in the PULL command to allow directional PULL and latching during PULL:
- **PULL** D,P1\2
PULL L
Note that the L (latch) option can be used in combination with all the other primers, except the R option.

Previous v14

- The FlexLM licensing manager is updated to version 9.5. There are several changes implemented as a result of this update. The license file changes and Eagle requires the features to be licensed as version 14.0. There are new LMGRD.EXE, LMTOOLS.EXE and MVISION.EXE vendor daemon supplied with this version. It is no longer necessary to install FlexLM DLLs because Eagle v.14 is statically linked.
- #3777. The request has been implemented to handle polylines inserted by spline fitting and curve fitting. Comment: NCG-REF: C232
- #3830. The request has been implemented to handle files coming from ACAD2004.
- #4422. The request has been implemented to export DWX and DWG files including the view setting to be used when a drawing is opened in AutoCAD.
- #4432. The request has been implemented to export thumbnail bitmap associated to the generated drawings.
- #4433. The request has been implemented to Import Ordinate Dimensions.
- #4436. The request has been implemented to Import attribute definitions.
- A new format for the **TABHATCH** configuration file is available, that includes the pattern scale information for imported hatch. The new **TABHATCH** line will be:

<name> <x> <y> <z>, where:
name: name of the hatch pattern
x: Eagle colour, for filled hatch
y: Eagle hatch index, for non-filled hatch
z: scale of the pattern, for non-filled hatch

For example:

ANSI31 -1 1 25

- MAJOR NEW FEATURE - Implementation of management of multiple stacks (models) including new [STACK](#) command. See document Multi-graphic window Eye tutorial.pdf and Eagle Help for examples of implementation details.
- MAJOR NEW FEATURE - Implementation of management of multiple windowing environment including new [GWINDOW](#) command. Documented in Eagle Help. Previously Eagle worked in a SDI (Single Document Mode) much the same as applications like Microsoft Word® whereas the Eagle version 14 adds the opportunity to develop applications with Multiple Document Interface (MDI), like Access® or TDI (Tabbed Document Interface) like Excel®. When stating Eagle there is a new option to define in which mode the windowing system should operate.
- eagle -SDI -INI=myinfile.ini →(single document mode)
eagle -MDI -INI=myinfile.ini →(multiple document mode)
eagle -TDI -INI=myinfile.ini →(tabbed document mode)
- See document Multi-graphic window Eye tutorial.pdf and Eagle Help for examples of implementation details.
- Extend the [GWINDOWS](#) features by implement the possibility to close [GWINDOW 1](#)

Introduction of SYS(45) is a numerical function that returns the number of the active [STACK](#)

Introduction of SYS(43) a numerical function that returns the number of the active [GWINDOW](#)

Introduction of several definable INI/Registry settings to handle application management of graphic window activity

[GWINDOW_CLOSE_MACRO](#): specifies the macro to execute when the gwindow is closed by pressing the “close” button.

[GWINDOW_ICONIZED_MACRO](#): specifies the macro to execute when the gwindow is iconized.

[GWINDOW_RESTORED_MACRO](#): specifies the macro to execute when the gwindow is restored from the iconized or from the maximized position

[GWINDOW_MAXIMIZED_MACRO](#): specifies the macro to execute when the gwindow is maximized.

[GWINDOW_LOOSE_FOCUS](#): specifies the macro to execute when the gwindow loses its focus because another window is selected. The macro is executed before the new window becomes active, so with the environment for the window that is being deactivated still active.

[GWINDOW_GET_FOCUS](#): specifies the macro to execute when the gwindow is activated and receives the focus. The macro is executed in the newly triggered environment.

Additionally there is another setting to assist in organizing the “polling loop”. If there is a single polling loop, where the POLLING command exits when the focus is moved from one window to another. If, instead, the application needs to exit from the POLLING command when there is a change of focus then the INI/Registry settings [GWINDOW_POLLING_EXIT_ON_ACTIVATION](#) has to be set to “yes”. In this way the

code can check if the polling exit event has had a change of focus by examining the WT value which should be 9.

- MAJOR NEW FEATURE - DWG import export engine updated. See associated documentation delivered with this release.
- A new meaning for the DXF_EXPORT_FORMAT variable, that defines the AutoCAD version to which the program is required to output. The possible values are:
 - "" ACAD2000-2002
 - old ACAD2000-2002
 - new ACAD2007

MAJOR NEW FEATURE - Implementation of the possibility for a GWINDOW to act as an ActiveX container. There is also the ability to automatically generate Macro-Stubs which means that an Eagle application can execute functions defined in the OCX. Documented in Eagle Help

- Before installing Eagle, please install the distributable C++ runtime from the VS2005_redist folder. [*Necessity to do this has been removed*]

Additional Notes

NOTE : Things you can do if OpenGL sometimes produce strange on screen results.

- You should always ensure that your graphics card is equipped with the correct drivers optimized for OpenGL

- Ensure that the OpenGL setting are present and correct in the INI file settings.

- Disable "triple-buffering", cards such as NVIDIA have the triple buffering option which is usually set to Off by default. Triple buffering is typically of benefit to gaming software where it can help cure low frame rate. Enabling triple buffering also means it requires 50% more frame buffer spaces. Triple buffering has no effect with Direct3D.

NOTE : HybridCAD commands such as OVERLAY can cause problems with JPG and TIFF color images unless the correct settings are made in the configuration settings file. We recommend that users upgrading should use a recent INI file and you're your modifications to this rather than trying to add settings to an older INI file.

FIXES AND OTHER ISSUES

14.9.2.b02

- **POLLING:** Tabbing on radio buttons changed their status but didn't notify such change to the application, since POLLING didn't exit. The requested behaviour is not changing the status when tabbing and consequently polling must not exit.
- There were cases when tooltips were shown even if not defined in the **TAB** file for the corresponding button. Note: this happened when the same button had a tooltip in an earlier panel
- When "**list_close_action**" was set and a list was closed by selecting the delete-button, returned values for **WT** was incorrectly set to "5" instead of "6" and also **RN** now set to "-1"
- **POLLING:** The use of space-bar toggles the state of check-boxes and also exits polling.
- **LIST:** Extra unwanted printout were shown
- **Polling** didn't stop when using the function key **F6**
- **Polling:** the **R=angle** option didn't work
- **XPLOT:** There were cases when **PEN** higher than 16 were handled incorrectly in the generated output file. NBB: A new Xplot V8.2.5 has been released

14.9.1 b02

- Changes since previous version (V.14.9.1.B01):
- #5655 **EXPORT:** When exporting dimensions with multiple annotation lines the dimension text was opaque vs. the dimension line, making it only partially visible in ACAD.

This fix #5655 is driven by an environment variable in the configuration file. When setting the variable "**PATCH5655=yes**" the fix is active. The default is "**PATCH5655=no**".

- #5723 **EXPORT:** There were case when custom-dimensions were exported with incorrect arrows position
- #5737 **IMPORT:** There were cases when annotations from imported files contained extra unwanted characters in the text. Note that this was happening when importing DXF files from AVEVA.

This fix #5737 is driven by an environment variable. When setting the variable "**PATCH5737=yes**" the fix is active. The default is "**PATCH5737=no**".

- #5766 **EXPORT**: There were cases when invalid faces caused this command to crash the program

14.9.1 b01

- #5759 There were cases when the **IMPORT** command crashed loading 2D polylines

14.9.0 b04

- #5718 **ONCHANGE** action caused the message window to disappear
- #5719 There are cases when the **IMPORT** command caused the program to crash. This happened with long-names in anonymous blocks
- #5720 Default value didn't work for combo components in Gridview. Also, no data was shown at start in the combo and when selecting for the first time any element from the list the program produced an error.
- 5721 There were cases when the **READ** command caused the program to crash. This happened when try reading lines longer than 256 characters

14.9.0 b03

- #5712 **HIDE** command gave an error message and showed empty results on specific Ufos
- #5713 **POLLING-ZOOM**: there were cases when dynamic zoom/spin caused the system to hang. This happened on specific Ufos
- #5699.1 When "**EXPORT_DIMENSION_TEXT_OVERRIDE=no**" then Fix #5699 caused automatic-text dimensions to be exported incorrectly
- #5701.1 There were cases when the **DO <command>,label** did not work
- #5701.2 There were cases when the resolution of Environment Variables caused the program to crash.
- #5715 There were cases when creating the Quick-Access toolbar for the Ribbon caused the program to crash
- #5693 Preview for generated DXF/DWG file was no longer available, i.e. thumbnail image was not generated
- #5716 There were cases when **POLLING Highlight** caused the program to crash when used with annotations from data-file
- #5717 There were cases when the **ONCHANGE** action caused syntax errors

14.9.0 b02

- #5711 The **OPTION** command caused a crash when datafile contained lines longer than 132 characters

14.9.0 b01

- There were cases when **OPENGL ON** caused the program to crash. Note: this happened when solids with non-planar control faces are present (they come from Libeagle)
- **EXPORT**: there were cases when exporting IGES files caused the program to crash. Note: this happened when NULL vectors were present in the workspace
- When Menubar was active and GWindow was maximized then the system menu disappeared. Note that a similar problem happened when Ribbon was active
- There were cases when **SELECT UF** caused the program to hang
- There were cases when **CONFLICT** on volume failed finding the requested items. Note: this was depending on CW/CCW of the control polygon
- **ENCODE**: There were cases when the **ENCODE** command caused the program to crash. Comment: this was happening when the value to be encoded was bigger than 132 characters. Note: VS2012 showed the problem
- **RIBBON**: after **RIBBON OFF**, if the gwindow was maximized its buttons went on the Eagle caption or were invisible.

14.8.2 b02

- #5668.1 Licensing issues occurring after failed execution and subsequent run issues resolved.
- #5668.2 Licensing issues occurring after failed execution, not answering to the prompt Yes/No and subsequent run issues resolved
- #5685 **GET**: there are conditions when this command produces the message "Indices are out of step"

14.8.2 b01

- #5694 **EXPORT**: there were cases when exporting SAT files caused the program to crash. Note: this happened on specific cases of tee-junctions
- #5695 There were cases when adding annotations from file cause error messages "System restrictions. Cannot open logical unit ..."
- #5699 **EXPORT**: Aspect ration for Dimension text was not exported correctly. Note: this is due to the fact that in ACAD width-factor is not directly applicable to dimension-text

- #5700 **EXPORT**: there were cases when exported submodels generated incorrect output
- #5668.2 Licensing issues resolved relating to failed run and subsequent run of system

14.8.1 b02

- POLLING didn't stop when clicking on a list header in a list. In V12 POLLING stops and the os (outstring) contained columnid en RN=0. This problem was linked to #5652 below.
- Polling exits only if **MULTI_COLUMN_LIST_SORT=no**
- #5652 **LIST** multi-column: if **MULTI_COLUMN_LIST_SORT=no** when click on headers then **POLLING** exits with **LN=k, RN=0, WT=6, VB=1** for LIST and **LN=RN=0 WT=5, MN=n, BN=m** for a list button. The OS string contains the column index.
- #5685 **GET**: there were conditions when this command produced the message "Indices are out of step"
The Fix #5685 is driven by a new environment variable. When setting the variable "PATCH5685=yes" the fix is active.

The default is "PATCH5685=no"
- #5671 The **FREEZE/UNFREEZE ALL** command did not freeze/unfreeze the ribbon bar as expected.
See #5672 - Use **RIBBON FREEZE/UNFREEZE**
- #5648.2 Select all lines in a multi-column list with **LIST W=1,POS=-1** and deselect all lines with **POS=-2** was not working and did not save into the **L-file** These problems are now obsolete since the introduction of the new primer **DUMP=filename** has been added to the LIST command.
- #5648.1 **LIST POS=-2** did not select all rows as documented for single-column lists
- #5474 **TABing** on a checkbox and using the "space bar" to change state, then Polling does not exit
- #5639 **RIBBON**: When a null action is defined on combobox and checkbutton, the polling command doesn't exit on the selection action
- #5668.1 Licensing issues occurring after failed execution and subsequent run issues resolved involving dongle usage.
- #5690 **LIBUFO**: There are cases when Ufos were created incorrectly, showing edges that should be silhouette edges but were always visible instead A new Libufo V.1.4.6 has been released

14.8.1 b01

- #4766.2 **POLLING H** sometimes did not work nicely. Specifically when in GL mode the result was corrupted only when also **GLMODE=EDGES**
- #5554 **OPENGL**: Resolved **WHERE P<i>** after a **SHOW** did not show the model. **SWITCH ON** and **SHOW** was ok.
- #5159 There were cases when the **CONFLICT** command was very slow. Note: **CLUMP** on the same area is rather fast
- #5466 After adding a (string) variable to an existing var file, the string arrays which have been stored before lost their values.
- #5596 **PROFILE**: allocated array too small.

14.8.0 b01

- [LIBEAGLE] after EIF_reset_model() is used then any EIF_add fails. A new Libeagle V5.2.5 and Libufo 1.4.5 have been released.
- #5660 When annotations with layer > 0 were exported and imported back, their position was slightly shifted
- #5524 **EXPORT** There were cases when exporting horizontally placed dimensions produced a slight vertical shift in the dimension position. Note: this happened for DXF files, not DWG. Comment: NCG-REF: C380
- #5641 Plotting process didn't handle annotation transparency (ref. **SET TEXTTRANSP**) A new release XPLOT 8.1.2 and WINPLOT 3.1.1 is made available.
- #5659 Winplot: There were cases when annotation angle was incorrect. Note: this happened when using windows fonts and angle was negative.
- #5643 **FIRM T**. Annotations were positioned incorrectly when FIRM T and justification was defined as RIGHT.

14.7.0 b08-8a

- #5755 The **POLLING OS** variable was not filled in with the selected line from the list
- #5753 There were cases when selection/click on empty list caused an "Incorrect Parameter" error message
- #5754 A multi column data file that had only one line to define the header gave a list with one list item

14.7.0 b07

- #5752 **EXPORT**: there were cases when exporting dimension caused the program to crash. Note: this happened when multi-line text with more than 256 characters were present

- #5733 **EXPORT**: There were cases when exporting annotations with multiple lines produced misplaced text in ACAD. Note: this was due to annotations with angle of -180 deg.

This #5733 fix is driven by an environment variable. When setting the variable "**PATCH5733=yes**" the fix is active. The default is "**PATCH5733=no**"

- #5735 **EXPORT**: There were cases when exporting solid items caused invisible faces to be visible in ACAD.

14.7.0.b06-6a

- #5751 **OPTIONS**: when an empty file was used for combo options the combo was presented with a huge number of lines
- #5744 **SAVE <cr>** (that is used when **UPDATE**) caused the program to crash.
- #5747 There were cases when the **OPTIONS** command caused the program to crash. Note: this was related to button **TYPE 7** with data files terminating with multiple empty lines
- #5750 There were cases when focus-in/focus-out actions caused the program to crash. Note: this happened when **PATCH4084** is active and a **PANEL OFF** is issued after exiting the polling

14.7.0.b05

- #5603 **IMPORT**: There were cases when **IMPORT** crashed. Comment: this happened when long names for **LAYERS** were defined in the DWG file. NCG-REF: C390
- #5740 **EXPORT**: There were cases when dimension arrows were not exported. Note: this happened when the environment variable **EXPORT_POLYLINES** was set to **2D_ONLY**
- #5731 **EXPORT**: Actual linestyles were not exported correctly
- #5739 **GET**: There were cases when models get corrupted under unknown circumstances. In such a case it may happen that part of the model is still usable (the part of the model until the corruption point) while the remaining part was lost forever.
- #5741 **EXPORT**: There were cases when exported dimension missed "small vertical lines" defined by means of AR1 or AR2 primers

14.7.0 b04 – 4a

- #5729 There were cases when the **DECODE** command caused the program to crash. Note: this happened when empty substring were analyzed, i.e. "**decode 'a , , b, c': s2,s3**"

- #5730 There were cases when the **EXPORT** command caused the program to crash. Note: this happened when annotations with more than 256 character were exported
- #5724.1 Export: when exporting 2D Polylines the "Linetype generation" flag must be enabled, as it was in V12. The current result was that some dashed polylines were exported partially as dashed
- **ONCHANGE** action caused the message window to disappear
- There are cases when the **IMPORT** command caused the program to crash. This happened with long-names in anonymous blocks
- Default value didn't work for combo components in Gridview. Also, no data was shown at start in the combo and when selecting for the first time any element from the list the program produced an error.
- There were cases when the **READ** command caused the program to crash. This happened when try reading lines longer than 256 characters

14.7.0 b03

- #5712 **HIDE** command gave an error message and showed empty results on specific Ufos
- #5713 **POLLING-ZOOM**: there were cases when dynamic zoom/spin caused the system to hang. This happens only on specific Ufos
- #5699.1 When "**EXPORT_DIMENSION_TEXT_OVERRIDE=no**" then Fix #5699 causes automatic-text dimensions to be exported incorrectly
- #5701.1 There are cases when the **DO <command>,label** did not work.

14.7.0 b02

- #5711 The **OPTION** command caused a crash when datafile contains lines longer than 132 characters.

14.7.0 b01

- [LIBEAGLE] #5665 After the `EIF_reset_model()` was used than any `EIF_add` failed. Comment: this happened after a model was first loaded by means of the `EIF_open_model()`
- The version is exactly equivalent to the previous version 14.6.4 b07 apart from the licensing is changed to FlexNET.

14.6.6 b01

- #5694 **EXPORT**: there were cases when exporting SAT files caused the program to crash. Note: this happened on specific cases of tee-junctions
- #5695 There were cases when adding annotations from file cause error messages "System restrictions. Cannot open logical unit ..."

- #5699 **EXPORT**: Aspect ration for Dimension text is not exported correctly. Note: this is due to the fact that in ACAD width-factor is not directly applicable to dimension-text
- #5700 **EXPORT**: there are cases when exported submodels generate an incorrect output
- #5668.2 If the execution fails and another instance is run, the latter works even if not licensed when removing the dongle and not answering to the prompt Yes/No

14.6.4 b01

- [LIBEAGLE] after EIF_reset_model() is used then any EIF_add fails. A new Libeagle V5.2.5 and Libufo 1.4.5 have been released.
- #5660 When annotations with layer > 0 were exported and imported back, their position was slightly shifted
- #5524 **EXPORT** There were cases when exporting horizontally placed dimensions produced a slight vertical shift in the dimension position. Note: this happened for DXF files, not DWG. Comment: NCG-REF: C380
- #5641 Plotting process didn't handle annotation transparency (ref. **SET TEXTTRANSP**) A new release XPLOT 8.1.2 and WINPLOT 3.1.1 is made available.
- #5659 Winplot: There were cases when annotation angle was incorrect. Note: this happened when using windows fonts and angle was negative.
- #5643 **FIRM T**. Annotations were positioned incorrectly when FIRM T and justification was defined as RIGHT.

14.6.3 b07

- #5656 Imported annotations were always loaded with **FONT=1**

14.6.3 b06

- **DRAWING_SCALE** is changed definitively to **HATCH_DRAWING_SCALE** since its operation only effects **HATCHES**
- #5653 When not using symbolic hatched then solid hatches were not imported correctly

14.6.3 b03-05

- The **DRAWING_SCALE** variable replaces the **DWG_DRAWING_SCALE** variable. **DWG_DRAWING_SCALE** is consequently no longer used.
- #5648 **LIST POS=-2** did not select all rows as documented

- #5252.3 **RIBBON**: if the RIBBON was active and the **THEME** command was used to set one of the extended themes (≥ 8) then the system buttons did not work and on Windows7 and Windows Vista with Eagle becoming stuck.
- #5651 When one of the System,Menu option was executed, the **POLLING** exited having the same WT, MN, VB and BN values as the previous time polling, while it should have returned WT=MN=BN=0 and VB=1.
- #5647.1 Spin control didn't return the proper -1 and +1 values when left-right spin was used. Spin-edit still behaved as it did before fix #5647
- #5652 **LIST** multi-column: if **MULTI_COLUMN_LIST_SORT=no** when clicking on headers then **POLLING** exits with LN=k, RN=0, WT=6, VB=1 for LIST and LN=RN=0 WT=5, MN=n, BN=m for a list button. The OS string contains the column index.
- #5252.4 **RIBBON**: There was occasions when a drop-down menu was on that a click in the ribbon client area caused Eagle a random crash when Aero was off.

14.6.3 b02

- #5586.2 **TreeView**: **INSERT ADDTREE** does not redraw the node "+" icon
- #5443.2 **Spin controls**: the first value of RN is -1 which is wrong
- #5636 **RIBBON**: when an option is selected from the **GALLERY** and its action includes a **RIBBON OFF** followed by the definition of a new **RIBBON** then Eagle crashes
- #5637 **RIBBON**: The "default" option on combobox do not work
- #5629 **RIBBON**: options in a combobox do not accept the form m(1,10) (message file)
- #5627 When **FIRMWARE** fonts are used, underline is incorrect when $R < 1$.
- #5625.1 The **DWG_DRAWING_SCALE** variable is not handled correctly when it is defined in the Windows env more than the Eagle INI file
- #5640 The **CLICK P=<n>,B=<n>** doesn't work for activating pages on **TABBED** panels
- #5616.1 **Treeview**: after **CLICK** the context menu exits prematurely.
- #5647 Spin control should return -1 and +1 respectively also when selections go outside the range

14.6.3 b01

- #5473.1 **CAMEO**: extended fix #5473

- #5600 **TreeView**: a **CLICK** on a hidden and "already expanded" node did not scroll the treeview to view the selected node.
- #5600.1 **TreeView**: when the treeview loses focus the selection colour was hardly visible
- #5606 **TreeView**: when the label didn't fit the tooltip is not shown
- #5605 **TreeView**: if the input data file lines are longer than 130 char then Eagle crashed. A new max length has been implemented at 264 chars.
- #5604 There were cases when the UIF_MakeFace hang A new LibUfo 1.4.3 is released
- Alignment with v.12.8 and V15.
- #5611 **Treeview**: Click on Treeview with UID length bigger than 16 caused the program to crash
- #5443.1 Spin controls: button types 11,111,211,311 should return RN=-1 if button down and =1 if button up. It sometimes happened that the returned value was wrong. The RN value can be now also be "zero" when the lower or upper bound are reached and there is no difference from the previous value.
- #5616 **Treeview**: Should exit from polling loop whenever the selection changes.
- #5621 **RIBBON**: when a gallery item was selected its action was executed before the application menu was removed. As a result Eagle crashed.
- #5620 **RIBBON**: removing a page containing a check box button, the operation terminates correctly but an error message (RibbonPage 1 not found) is printed in the message dialog.
- #5468.3 **BAR ON** flashed when **PATCH5468=yes**
- #5468.4 The context popup menu of the treeview was incorrect, but only when **PATCH5468=yes**
- #5617 Box border was slightly incorrect compared to the one of V12
- #5610 Annotation box was incorrect when using **FIRM T**, depending on the Windows font being used.
- #5615 Annotation justification was sometimes incorrect when using **FIRM T**
- **#4601.1** Symbolic hatch implementation via System Attributes At the moment "Symbolic Hatch" worked on PLAN view only.
- **#4601.2** Symbolic hatch definition should optionally reflect rotation on face item

- #new The EDU/EDUX versions sent an incorrect probe
- #5623 **RIBBON**: when selecting from the gallery the output values of a POLLING were wrong
- #5623.1 **RIBBON**: when selecting from the gallery the ST value returned by POLLING was wrong
- #5624 When **DDE ON** and a DDE client is started (eg Acrobat) avoid notification messages in the dialog window. DDE notification messages now consider the SUP M directive
- #5579 **EXPORT**. Dashed lines in hatches which are exported as blocks (column 7 =1) are exported as continuous lines. NCG-REF: C385
- #5619 **RIBBON**: the launcher button was not handled in the RIBBON INSERT command

14.6.1 b02

- #5468.2 Re-refix of the **POPUP** #5468 issue.
- #5601 When a **POPUP** was activated the cursor position must be on the TL corner of the popup
- #5602 **BLOWUP**: the starting position of the mouse was wrong when the CC was not in view

14.6.2 b01

- #5597 **RIBBON**: executing a LABEL=off when the ribbon was not active returned a list of errors while it should check the presence first
- #5468.2 Refix #5468 **PATCH5468=yes** remains the option to use to enable the fix.
- #5595 When a **POPUP** is active and an button type 4 is selected from a toolbar he program does not respond if executing a command like BLOWUP
- #5576 **POPUP**: there are cases when popup followed by **PANEL/OPTIONS** cause a crash

14.6.1 b01

- #5440.1 Refix problems with OpenGL and multi-windows
- #5563 **FILE**: the output string was not blanked if CANCELED
- #5590 **OPENGL**: if **GLMODE** was not STD switching from one **GWIND** to another the image restore always showed the STD style
- #5468.1 The sequential use of POPUP -> OPTIONS ON -> POPUP -> OPTIONS ON crashed Eagle To enable fix this fix #5468 a patch variable is set as PATCH5468=yes

- #5593 In **OPENGL** when **HIGHLIGHT** was used the **VANE** was also highlighted when **GLMODE=STD** or **WIRE**
- #5592 In **OPENGL** and **SWITCH ON** when switching between gwindows the Pi labels disappeared in the GL window

14.6.0 b11

- Changes since the previous build 09
- #5587 Nested **EPI_parseCommand()** caused code after **POLLING** to be executed prematurely. To enable this fix set **PATCH5587=yes**
- #5580.1 **IMPORT**. Predefined hatch patterns were not imported correctly when angle or scale were set.

14.6.0 b09

- Changes since the previous build 08
- #5567 The **DATE** and **TIME** functions crashed when the required file didn't exist
- #5533.2 **CLICK** command did not work on Ribbon's CheckBox
- #5533.3 **RIBBON**: when editing the ribbonbar then checkbox buttons did not maintain their status
- #5577 **EXPORT** Solid filled hatches (i.e. **FM<i>**) are exported with color byblock. NCG-REF: C383
- #5578 **EXPORT** Solid filled hatches, color filled faces and hatches exported as blocks are exported to layer 0. NCG-REF: C384
- #5580 **IMPORT** Predefined hatch patterns were not imported. NCG-REF: C386
- #5581 **IMPORT** Import layers sometimes was incorrect. Mostly items were imported on F=0. NCG-REF: C387
- #5582 **IMPORT** Dashed lines were imported as continuous lines. NCG-REF: C388
- #5583 **IMPORT** Underlined or boxed multiline text was not imported correctly. NCG-REF: C389
- #5584 **IMPORT**: Annotations and Dimensions were always imported upper-case
- #5586 **TreeView**: editing did not work (**INSERT** command with **DELNODE**, **ADDNODE**, **ADDTREE** as well as **INSERT RTF**)

- #5508.1 **RIBB INSERT** if the new page is inserted before the current page, the latter is not selected at the end of the operation
- #5586 TreeView: **CLICK IMAGE** to change the icon does not resolve implicit filenames
- #5586.1 TreeView: **CLICK IMAGE** does not redraw the changed icon

14.6.0 b08

- Changes since the previous build 03
- It has been necessary to downgrade to PROFUIS 2.92 because 2.93 includes changes in the RibbonBar that cause the problem #5574 when classic themes are used. Please ensure that the correct ProfUIS DLL is used in OEM releases.
- #5554 **OPENGL: WHERE P<i>** after a **SHOW** did not show the model. Note : SWITCH ON and SHOW was ok.
- #5566 **OPENGL**: switching from software text to firmware text and vice versa left in the display list both, software and firmware annotations
- #5564 **EXPORT**: Names from TABLAYER and other config files were always exported as lower-case
- #5565 **EXPORT**: When exporting hatch definition, some parameters were incorrect: pen, layer, line style, and angle. Note: some of them must be derived from new TABHATCH definition and some of them from the Eagle HATCH definition – see notes above with the release.
- #5568 **PANEL OFF** crashed if done in a macro soon after a **LIST** selection
- #5569 **RIBBON REMOVE** did not present the current active page
- #5568.1 **PANEL OFF** crashed if done in a macro soon after a **LIST** selection
- #5570 **RIBBON MENU** crashed if the attribute Mnemonic is missing from the Option element
- #5514 **RIBBON**: on XP only when a new page was inserted before selecting the current page, page 1 was selected and flashed
- #5527 **RIBBON**: when a "combobox" button was present then it could reappear after a **RIBBON OFF** was issued
- #5572 **LIST**: single-column list were not emptied by **LIST W=1,f='empty.dat'**
- #5573 **LIST OFF** crashed if done in a macro soon after a **LIST** selection

- #5574.0 Downgrade from ProfUIS 2.93 to 2.92 see notes above with release
- #5573 Re-fix **LIST OFF** crashes if done in a macro soon after a **LIST** selection

14.6.0 b03

- #5559 **DYNAINPUT**: the polling outstring was usually corrupted when dynainput was used on Windows7
- #5561 **RIBBON**: when an option was added to the QAT using the right mouse button then it was added with 16x16 image. After **RIBBON INSERT** the image was resized to 32x32.

14.6.0 b02

- #5555 **RIBBON**: Using **RIBBON INSERT/REMOVE** commands reset the Quick Access Toolbar
- #5468 When **POPUP** menus were called in a loop after the first section they froze the application. Note: a <CR> on the command line restarted the application.
- #5478 When **POPUP** menus had more than 2 levels of cascading the options were shown incorrectly.
- #5557 **RIBBON**: Using the **RIBBON INSERT/REMOVE** commands reset the enabled/disabled state of the ribbon buttons.
- #5556 **RIBBON**: The Exit button on the ribbon did not set the WT and BN

The **Ribbonbar FileMenu** "Exit" button returns

WT	12	The is the RibbonBar code
MN	-1	no menu
BN	-1	the Exit button

- #5482.3 & #5543.1 If PATCH4084=no then focus-in/out still returned the wrong BN and actions execution order.

14.6.0 b01

- Changes since previous version (v.14.5.2.b04x)
- Includes LibEagle v5.2.2
- #5549 **LIST** button: the **LIST P=, B=, F=** returned run-time exception when the list button belongs to a tab panel page.
- #5507.1 **LIST** button: the **LIST P=, B=, L=** did not accept environment variable

- #5537 The initial width of a column was not driven by the characters of the header (incl. blanks) as was the behaviour in V12
- #5177 `GLMODE=HIDE` was slower than `EDGES` when `OPENGL_SILH=yes`
- #5490 OPENGL: `GET $` of a model containing a UFO returned an error message in displaying of the ufo
- #5184.1 `WRITE`: There were cases when the write command with lines longer than 132 characters produced incorrect output lines. Comment: Occurs in particular when the line was filled with NULL characters. Refix.
- #5281 `EXPORT`: Special characters for degrees, etc.
- #5544 When an empty `annotation` was present then `POLLING L` crashed.
- #5482.2 `BN` was wrong in the output focus action.
- #5392 `EIF_get_Numeric` etc. from the VAR did not work
- #5518 `FREEZE`: freezing a pulldown option does not work
- #4766.2 `POLLING H` did not work nicely in GL mode, and corrupted the result when `GLMODE=EDGES`
- #5545.1 [EPI] `EPI_getDimension` and `EPI_addDimension` did not set all values correctly New version 3.10.18 for EPI has been shipped.
- [GUI] #5547 Lists attached to a `PANEL` are automatically removed when `OPTION OFF` is issued, exactly the same as when a `PANEL OFF` is executed.
- #5552 `FREEZE` did not grey the text of a radio button
- #5553 `PANEL`: if the title length was > 63 chars the panel jumped in a wrong position
- #5548 OPENGL: if `FIRM T` was active then when in OpenGL text was not displayed.

14.5.2 b04x

- Changes since previous version (v.14.5.2.b03x):
- #5529 The `PROMPT` command crashed
- #5512 `Export`: Layer were not exported correctly. NCG-REF: C374
- #5521 `Export`: There were cases when exporting dimensions with arrowheads on one side only caused the arrowheads to be exported the other way around. NCG-REF: C376
- #5522 `Export`: When boxed annotations with actual character height were exported, the box was very small. Comment: NCG-REF: C377

- #5531 **RIBBON ON** should make a **RIBBON OFF** first automatically to avoid leaks
- #5528 **RIBBON**: if the XML file didn't exist then Eagle crashes
- #5530 ACAD2010 didn't show exported dimensions because RecomputeDimBlock.Tx DLL file must be present in the deployment folder
- #5541 **LIST BUTTON**: when initialising the content of the list, the first line in the input file was printed at the last position in the list and when updating, the last line in the input file was printed twice in the list.
- #5542 Single-column list: the last line is duplicated when reloading the content and the first is sometimes misplaced when creating the list
- #5543 **FOCUS**: focus-out action should be executed before the button action and not the other way around. Use **DO <macro>** in the button action as well as in the focus-in/out actions.
- #5523 **Export**: There were cases when linetypes of exported polylines do not match with those of the Eagle model. Comment: NCG-REF: C379
- #5538 The handling of TAB in e-controls in V14 were not in the same TAB-sequence of the Eagle controls
- #5482.1 The input focus on the panel was lost by latching/highlighting. The input focus was not restored when the mouse was on the panel. We believe that the focus should not be set back automatically because that would make unstable panels where focusin/out actions are set; besides other software does not do that.
- #5545 **EPI**: **EPI_getDimension** did not return all the values New version 3.10.17 for EPI has been shipped.
- #4445.2 Lines with multiple vectors were exported as a single vector only when same z-coordinates
- #5406 In **OPENGL** and **GLMODE=HIDE** if the color was not set (**COL=0**) then solid and nurbs were transparent

14.5.2 b03X

- This version is a pre-release version for development and testing purposes only. Changes since previous version (v.14.5.2.b02):
- #5503 **RIBBON**: the primer **POS=** starts from 0 instead of 1
- #5505 **RIBBON**: memory leak if **RIBBON ON** and **OFF** or **INSERT** and **REMOVE** are used
- #5513 **RIBBON**: After doing an **INSERT** and **REMOVE** then the selection of a button didn't not work anymore

- #5526 **PANEL OFF** does not work after a text field with focus-in only is selected.

14.5.2 b02

- #5499 When Eagle started on an uncertified platform the notify box is type Information instead of Warning (OEM release)
- #5498.1 The list button in a panel (type 505 and 506) had a duplicated line at the end.
- #5498 Single column **LIST**: the horizontal scroll bar was not shown when needed as it does in v12
- #5504 **RIBBON**: the new **INSERT** option when ICOs were used instead of BMPs made the system unstable after using several times
- #5476.1 **LIST** created with the **LIST** command attached to a panel were not shown on top as was the case in V12
- #5491.1 **LIST** multi-column: double clicking on the header. On XP machine the list was not correctly refreshed when you double clicked on the header. Fix comes from fix #5498
- #5506 **INSERT** did not work on the toolbar anymore
- #5382.1 When **FOC=** option was used in **POLLING** and the ref. button has a focus-in event the focus-in must not generate an action.
- #5382.2 Focus-out action didn't exit polling even if **patch4084** was set to yes
- #5507 **LIST** button: the **LIST P=, B=, F=** did not accept environment variable
- #5508 **RIBBON**: when **INSERT**ing a new page the active page must remain active
- #5509 **RIBBON**: DropDownMenu options were sometimes missing
- #5510 **FILE**: using the **FULL=yes** option and selecting "Cancel" the resulting string was set to //
- [DOCUMENTATION] Errata to 14.4.5 official release notes. #5042 was correctly described in the following sources, the pre-release notes "**List** together with **POS=0,DEL** removes the entire content of the list", the Help 14.017 and GUI Book but incorrectly described in this document.

14.5.2 b01

- #5433 The sequence **OP ON;OP OFF;KILL B** caused a crash
- #5467 There were still cases when Diameter and Degree sign were not translated correctly when Importing DXF or DWG files

- #5472 The new **RIBBON INSERT** could not handle file paths which were defined as (f=-gui/subrib1.xml)
- #5407 TreeView: an environment variable was not evaluated when used for the context menu pathname
- #5450 Button type 505,506 did not handle environmental variables in pathnames.
- #5155.1 The custom message **EAGLE_OPTIONS_OFF** was not sent when **OPTION OFF** was executed
- #5476 LIST created with the LIST command attached to a panel was not shown on top as it was in V12
- #5442 When firmware fonts were used and text ratio was different from 1, the **DUMP/PLOT** process didn't use firmware fonts correctly
- #5480 Since version V7.2.1 Xplot always tried using firmware fonts even if "SET FONT -1" was specified to specifically use software fonts. New Xplot released.
- #5405 In **OpenGL** annotations were not displayed correctly in plan view and additionally if the view was switched between plan and perspective and then plan again annotations were lost from the view entirely.
- #5420 **FOLDER** command: the option **CWD=** was not yet implemented
- #5096 **POLLING FOC=0,1** did not work correctly with dynainput because of the dynainput tolerance
- #5482 BN was wrong when a button type 1 was pressed while the input focus is in an input field that has a focusin-out action.
- #5491 Double clicking on the list column separator should resize based on the content of the column (like it does in V12), instead of the by the length of the header text. (data win against header in V12, vice versa in V14)
- #5440 **OPENGL**: when a gradient background was used and the focus was moved to a panel or to another gwindow and then a repaint of the OpenGL view was done, the background was painted in black.
- #5489 The flag **DWG_UNITE_3DFACE** was not handled correctly
- #5442.1 When firmware fonts were used the box of the output file was slightly different from the real box. NOTE: Output files produced by 7.2.3 version of Xplot should only be used in conjunction with Winplot V.2.1.10 or greater
- #5384 **POLLING T=value** required user input if there was no gwindow present.

- #5496 The default color for a color picker button in a dialog was wrong while it was correct in a toolbar
- #5485 Color Picker button: use the foreground color to set the default (starting) color. Note same as #5496
- #5497 Color Picker button in the Status Bar does not work correctly. Note: the color picker is not allowed in the Status Bar
- #5100 In **SDI** mode the opengl window was not working

14.5.1 b03

- #5247.2 Multiple-windows: when one gwindow was in OpenGL mode and another window was selected, the image on the first become inconsistent
- #5276.1 Multi-windowing and OpenGL: when switching between two gwindows something was corrupted (cc was shown in the wrong place)

14.5.1 b02

- #5436 Files coming from ACAD 2010 and 2011 were not readable in native format but had first to be exported to ACAD 2000 format before **IMPORTING**
- #5439 There were cases when exported dimensions were re-imported with the witness lines swapped.
- #5430 When **exporting** annotation from file and the referred file didn't exist, the program crashed
- #4761 **IMPORT**: There were cases when 3D angular dimensions were missing or incorrect. Comment. Ref. 30026900.dxf, ST8284-52.dxf
- #5438.1 Re-fix of the instance for '**#^fname**' where fname =local\etc
- #5437 The **FETCH/INSERT** commands were not working with ComboBox type 127
- #5443 Spin controls: button types 11,111,211,311 must return RN=-1 if button down and =1 if button up.

14.5.1 b01

- #5394.2 The values of MN,BN,WT were unset inside the macro executed for a focus in/out event relating to an edit control
- #5429 ComboBox type 7 did not work correctly
- #5413 **GridView**: The image pathname did not accept environment variables.
- #5432 **CAMEO** only created 4 bit images which should be extended to 8 bit

- #5438 The RichEdit control did not accept file names like '@cmdhelp/info.rtf' and then entered into an unknown state meaning it was necessary to kill Eagle.
- #5397 If a **PANEL** had dynamic layout set (**LAYOUT=**) and a button was added using a **PBUTTON** instruction the relevant behavior was missing
- #5394.1 When Focus-in and focus-out in edit controls is used, the **POLLING** should exit or not on the basis of the setting of **PATCH4084** (if set to NO then it does not exit (default), YES then it exits)
- #5398 The option **CHANGE** in the **FOLDER** command was not implemented
- #5399 **Firmware** annotation with an angle different from 0 sometimes were drawn incorrectly
- #5400 There were times when the command "**FOLDER s1**" crashed
- #5408 **GridView**: The column headers were not shown properly
- #5403 Enable the grid-view control to be auto-resizable even if it is not a button using height=width=-1
- #5411 The fourth value in the specification of a Slider button is not used; it should represent the step of the increment (in the documentation says "the number of decimal places", which is wrong)
- #5412 The WT value returned when the Close button of a panel is 0 instead of 5
- #5414 **GridView**: the primer "readonly" was not implemented properly
- #5417 **PROMPT**: if **CANCEL** was set the rest of the command file was skipped
- #5415 **NOTIFY**: T=ERR showed Yes/No button instead of the OK button as was the behavior in V12
- #5410 **StatusBar**: the Slider button did not work properly on Windows XP
- #5426 **FILE DIALOG**: the default working directory (if CWD was not specified) was not the current directory
- #5418 If **TAB_ENABLE_DRAGGING=yes** then dragging tabbed dialog tabs caused a crash
- #5424 A **panel** with PIN=1 (fixed) was correctly displayed if the main window was on screen 1 but it was not displayed if it was on screen 2
- #5425 **INFOPANEL** returned slightly different values from those used in creation

- #5423 The **THEME** command changes the active gwindow

14.4.6 b01

- #5356 The default VB and WT when a return was sent were wrong (VB=1,WT=12 instead of VB=0,WT=7)
- #5369 If the **MESSAGE_WINDOW_TYPE** variable was not defined in the INI file then Eagle crashed
- #5370 When the message window had a caption, double-clicking on it crashed Eagle
- #5358 There were cases when INF(1) on NURBS surfaces causes the program to crash.
- #5374 Sometimes in **OPENGL** a glError message was shown (non valid operation caught while rendering)
- #5373 **INF(1)** on more than 200 points polylines/faces/solids did not return the points
- #5375 **EPI_inqInfPoints** changes when more than 200 pts
- #4893 **LIST**: keyboard arrow keys did not scroll the list (focus problem) and <Return> to exit polling
- #5377 **PROMPT** always set the IFNO
- #5380 TABing in a panel did not skip frozen fields
- #5383 The **LIST BUTTON** did not respond to TAB navigation
- #5381 The radio options were not always evenly distributed
- #5376 **EXPORT**: when the font name in TABFONT the had spaces then Eagle crashed
- #5251 When in **TMDI** mode right-clicking on a window tab should execute a macro defined in the INI file as **TMDI_CONTEXT_COMMAND** and pass the window ID.
- #5394 Focus-in and focus-out in edit controls is missing
- #5252.1 **RIBBON**: a help button or a search edit box on the right side of the menu bar.
- #new **RIBBON OFF** leaves a bar mounted on top of the root window (this problem can be related to #5252)
- #5382 The (new) "floating" gwindow did not show opengl view when activated

- #5312.1 Implement resizable dockable (also tabbed) panels filled with resizable (fitted) tree-view and grid-view
- #5247.1 Multiple-windows: when one gwindow is in OpenGL mode and another window was selected the image on the first became inconsistent
- #5395 The option `FOC=<panel>,<button>` of the `POLLING` command was not working correctly

14.4.5 b03

- #5347 When Python was active, the filename returned by the `DialogBox.fileOpen()` was strictly in Windows format
- #5345 When using dynainput and the cursor hit a toolbar the cursor and the dynainput were not removed causing the toolbar to leave a trace on the graphics.
- #5339 [OEM] E-controls in a toolbar were not always centrally aligned when the toolbar is docked.
- #5348 `EPI_getenv`: when the required environment variable didn't exist this EPI caused the program to crash
- #5350 Check license file existence before calling FlexLM to avoid that FlexLM hangs Eagle
- #5312 Resizable dockable (tabbed also) panels filled with resizable (fitted) list Use the new "list button" (505,506) and the `LAYOUT=` option of the `PANEL` command
- #5354 FlexLM 9.5 check socket consistency when calling flex api
- #5351 There were cases when the `LISTDEVICE` command didn't report all the network printers. Comment: this happens on Windows 7
- #5211 Message window - user definable commands in the context menu through the INI setting `MESSAGE_CONTEXT_MENU` Warning: when using a .MEN context menu after the execution of the selected option's action the polling exits with WT=3.
- #5189 `CLICK` on a treeview using the primer `SELECT` pointing to the root node does not work
- #4622.1 In v14 Message window speed we much slower than v12's message window

14.4.5 b02

- #5344 `GWINDOW`: Changing only one size corrupted the other which got smaller

- #5345 When using **DYNAINPUT** and the cursor hit a toolbar the cursor and the dynainput were not removed causing the toolbar to leave a trace in the graphics.
- #5346 Tabbed panel crashed when **PANEL OFF** issued. Severe bug fix

14.4.5 b01

- #5308 The EPI_printf was incorrectly controlled by **SUPPRESS M**. No new EPI required.
- #new TreeView: When the variable **TREEVIEW_RIGHTCLICK=no** or the rightclick action was not defined, Eagle crashed
- #5315 TreeView: The node right-click menu is displayed in the wrong position
- #5311 LIST: The default font set with **WINFONT** is not used as it is in v12
- #4146 Undo of an old fix related to **PATCH2586** These old fixes, if **PATCH2586** was unset, caused CHECK to visualize wrong attributes even if the data was correct.
- #2586 Undo of an old fix related to **PATCH2586**
- #5310 **RIBBON**: The KeyTip of the quick access toolbar is incorrect. The last button keytip was always shown
- #5320 ComboBox: Type 7,17,27 are required to be non-editable while a new type 127 has been added equal to 27 but with the editable edit field.
- #5323 File Dialog: When the dialog starts on a remote disk it is very slow. The return after selection is also very slow. This is a ProfUIs problem therefore we added a new option OS to use the native file dialog, which is as fast as in v.12. (See New features with this release)
- #5322 When executing macros with both V12 and V14 active, after some macros were executed Eagle gave a "License Server down" error and exited. Note: This happened on Windows 7 and Vista. It operated ok on XP in order to interoperate with v.12, at least v.12.7.5.b01 is required.
- #5262.1 Toolbars: Sequencing the issuing of a **PANEL CLOS** and **PANEL**
- **OPEN** immediately after it in a macro resulted in the panel not opening.
- #5332 When **PATCH2586** is not set then **CHECK** combined with
- **DISORDER** produced a crappy result (Windows 7 only)
- #5205.1 **RIBBON**: The use of environments in path for HelpImage in the KeyTip nodewas not enabled.
- #5334 **EPI_getWindowHandle** returned 0 if button=0 while it should have return the MFC tab-control handle

- #5335 **OPENGL**: Traces of panels in OpenGL or graphical screen behind panel was not updated when the panel was shifter after zooming or panning.
- #5333 Eagle V14 crash problem when att=<panelid> was used
- #5223 LibUfo C++ compiled VS2008 (VC90). It is v.1.4.2 also compiled for VC90. Aligned to latest in v.12
- #5341 **RIBBON** Gallery: Adding lines with the same text generates duplicates
- #5202.1 **PANEL**: When PIN=0 or 1 now it is possible to use J=pixel_values
- #5338 **POLLING**: It must exit when a tab from a tab-container is selected as was the behavior in v12. The polling must also return the same values as returned in v12. Returned values: MN=panel_id of the selected tab-page; BN=0, WT=10
- #5342 **CLICK**: Button type 4 with BMP image: when a button was **CLICKed**, it remained in the clicked down status.

14.4.4 b07

- #5308 The **EPI_printf** was incorrectly controlled by SUPPRESS M (Does not require a new EPI version)
- #5309 [UI2008] **ROOT_CAPTION_ICON=-eaglesite/myfile.ico** did not work because of env.variable
- #5313 [UI2008] **Ribbon**: the Application button FileMenu was only three levels deep
- #5314 **EPI_getListHandle** did not work correctly in UI2008 (Does not require a new EPI version)
- EBC: Entity.insert() pos= i= o= added
- Embedded manifest file could generate installation errors when "winsxs" directory does not include all the entries specified in the manifest itself. Embedding is disabled and the correct manifest file is required to be present in the executable folder.

14.4.4 b06

- #5304 [UI2008] If the text of a NOTIFY was empty then a huge empty notify was shown
- #5303 [UI2008] FILE command: Once the primer "collapsed" was used then all the following dialogs are shown collapsed
- #5302 FILE command: the parameter CWD is not handled

- #5290.1 When the background color was not (0,0,0) and the backg and foreg color of any text-based control in the TAB file are 0,0 then the Windows theme defaults must be used – additional issues.
- #5305 [PYTHON] The PYTHON command required the .py extension to be specified by default
- #5306 [UI2008] The CLICK command did not work correctly on button types 37,47,57,67,77
- #5307 [UI2008] Multiple-windows: when more than 3 gwindows were created in a macro it could happen that if a GWINDOW DEL was executed Eagle crashed

14.4.4 b05

- #5290 When the background color was not (0,0,0) and the backg and foreg color of an Edit control in the TAB file are 0,0 then the Windows theme defaults must be used
- #new Alignment with v.12.7.5.b02
- #5295 [UI2008] The background and foreground colors of an edit control in a panel were sometimes incorrect
- #5297 EPI_printf did not work anymore. A new v.3.10.11 is released.
- #5293 HIGHLIGHT when SUPV did not highlight anymore
- #5291 [UI2008] When the theme used was one of the base themes (1-7) then the END command caused a crash.
- #5292 [UI2008] With themes above 8 when maximizing the root window the POLLING did not respond until a restore was made.
- #5296 [UI2008] The combo box 37 47 57 67 did not execute the action specified in the TAB file.
- #5214 [UI2008] LIST: trying to create a list outside a panel caused Eagle to crash.

14.4.4 b03

- #5270 [UI2008] FILE dialog: the primer FLT was not handled and also the INI entry `FILEDIALOG_FILETYPES_DEFAULT` was not handled
- #5268 A Syntax Error caused the last item in the stack to be deleted (severe)
- [UI2008] LIST: `LIST W=1,F=file` inserted the file instead of replacing the content with the file
- [UI2008] Message window: the scrolling was much slower than in the MFC versions

- #5271 [UI2008] LIST: single selection did not write into the file specified with L=
- #5273 [UI2008] TreeView: more than one root was no longer accepted
- #5216 [UI2008] LIST: multiple selection using the <shift> key did not work like in the MFC version and v.12
- #5277 Custom DLL load did not work in the VC60 version and legacy DLLs
- #5279 PERP function (LET) with the (O) option returned a syntax error
- #5280 [UI2008] The INI variable HISTORY_BUTTON_ICON did not accept environment variable (eg: -eaglesite...)
- #5195 [UI2008] DIALOG ON after DIALOG OFF has been executed twice at times
- #new [UI2008] Ribbon bar was misplaced if the graphical window was not maximized. This happens when the Windows base scheme is Classic
- #new [UI2008] When the variable DEFAULT_GWINDOW=no and also
- GWINDOW_INITIAL_MAXIMIZED=yes an empty menubar was mounted
- #5276 [UI2008] Multiple-windows: when MAXIMIZED the cc was sometimes shown in the wrong position. This depended also on the theme used.

14.4.4 b02

- #5144.1 [NURBS] In OpenGL with GLMODE=EDGES the nurbs edges were displayed in the object color instead of black
- #5245 [NURBS] Eagle-OCC VC90 version crashes when importing some BREP or IGES files
- #5246 [UI2008] BARMENU: after several BAR ON with many options the bar menu disappeared
- #5257 [UI2008] TreeView: the initial load of the control was much slower than MFC V14 and V12
- #5259 [UI2008] The creation of a tabbed panel or page container caused the CLICK command to fail on the previously created panel.
- #5260 [UI2008] PANEL: the options CLOS and OPEN crash if the panel was tabbed
- #5261 [UI2008] PANEL: the options CLOS and OPEN crash if the panel was created with the AUTOHIDE option

- #5248 [UI2008] TreeView: when the root expanded on a double-click, the scroll moved the selected node out of view
- #5249 [UI2008] TreeView: the expansion/collapse (+ or -) of a node when a child was selected caused the POLLING to exit, which was wrong (this sometimes happened)
- #5256 [UI2008] Treeview: The right click `TREEVIEW_ST_AS_UID=yes` should return the UID in the ST variable
- #5262 [UI2008] PANEL: if in a macro `PANEL CLOS` was immediately followed by `PANEL OPEN`, the panel is not opened
- #5263 [UI2008] Button type 120 did not display the title
- #5264 [UI2008] PANEL - the scroll bars were always shown
- #5245.1 [NURBS] Eagle-OCC VC90 version crashes when importing some BREP or IGES files
- #5243 ZERO ALL on a string array does not reset the last cell of the array

14.4.4 b01

- #new This version is aligned with v.12.7.2.b01
- #bug [ui2008] LOCK on toolbars crashed if this was implemented at startup when the realization of the interface is deferred.
- #new [licensing] A problem with the encrypted serial number has been fixed.
- #5229 SYS(5) must return 0,0 if root window is maximized
- #5204 [UI2008] When a dialog was associated with a gwindow that was not visible (iconized or behind another window) the dialog if floating should have been not visible
- #5235 OPENGL: Triangle facets in UFOs were not shown
- #5199 [UI2008] The default of the static text control on panels (button type 5) should be the default text color for the scheme. When 0,0 is used it means that it is the default (usually white backg and black foreg); Colors from 0 up, will instead be taken from the Eagle colormap.
- #5186.1 [licensing] On 64bit servers the Serial Number could have problems.
- #5198 [UI2008] Setting `EAGLE_DOCUMENT_ICON` did not work with environment variables (-appsite\)
- #5203 CAMEO command changed the viewport and did not restore it at the end if a pathname was used for the bitmap file(!)

- #5206 [UI2008] Ribbon: Add validation when loading the XML file and if errors are present do not load the ribbon, report the errors and return IFERR set.
- #5192 [UI2008] The combination of a check box and a short cut text in menu bar did not work as they did in v12

'text^Ctrl+H#on' : do -gui/highlight;

- #5239 [UI2008] FREEZE ALL caused a crash
- #5240 [UI2008] Arrow keys did not work correctly in command window
- #5008.1 On VISTA OPENGL ON flashed in the graphics and a SHOW was needed to display corectly.
- #5192.1 [Ui2008] The combination of a check box and a short cut text in menu bar crashed Eagle

'text^Ctrl+H#on' : do -gui/highlight;

14.4.3 b02

- #5175.1 [UI2008] PANEL size was incorrect when includes scroll bar
- #5193 [UI2008] The popup position should be the (top left corner) but the cursor was in the middle of the menu while in v.12 the cursor points to the top-left corner
- #5196 [UI2008] The INI setting MESSAGE_LINES did not work correctly
- #5197 [UI2008] Close button on panels/toolbars should set BN to -1 just like in V12
- #5201 [UI2008] When the main frame was maximized at start the splash image was not centered correctly
- #5207 [UI2008] When setting the ribbon off using the 'RIBBON OFF' command then use the ALT+TAB keys the ribbon was displayed again.
- #5219 [UI2008] RIBBON f=-gui/my.xml did not work because it did not resolve the environment variable '-gui' correctly
- #5226 [UI2008] When Eagle started maximized the icon in the caption bar was wrong
- #5205 [UI2008] RIBBON: 4. Using the bitmap path '-ico3d/32/blank.bmp' in the XML file did not work.
- #5202 [UI2008] PANEL: If PIN=1 and the TITLE was missing the caption bar should not have been visible
- #5194 [UI2008] The default background and foreground colors of the MESSAGE and COMMAND WINDOW should have been those set by the

- current theme

14.4.3 b01

- #5174 [UI2008] Frame button (type 120) overlaps other buttons
- #5175 [UI2008] PANEL size is incorrect when it included a scroll bar
- #5186 When a valid license using flexid is moved to another machine the Warning Message is displayed correctly and Eagle works but must terminate after 3 weeks if a new license is not generated for the new server.
- This version is aligned to v.12.7.2.b01 and v.11.9.11.b0114.4.2 b03

14.4.2 b03

- #5038.5 There were still cases when latching on pipe ends does not always work
- #5018.1 Interactive selection on faces sometimes failed. A patch variable has been introduced to implement Fix #5018. Setting `PATCH5018=yes` the fix is active. In these cases selections on faces and solids consider only edges and not the bounding box. The default is `PATCH5018=no`, that is the default is the existing select behaviour.
- #5170 The phrase "QL" for solids or lines didn't work
- #5171 Export of reducer to IGES or BREP format produced an incorrect pipe-end at the second definition point. Alongside that, eccentric reducers were exported without pipe-ends
- #5016 EPI. EPI_changeAnnot did not allow removing one line of text

14.4.2 b02

- #5162.1 GETDEVICEINFO: There were additional cases when this command cause a crash.
- #5163 FLOOD: There were cases when this command failed. Note: this happened when more than 1 dangling edge departed from the same point.
- [UI2008] #4247 The right click on a toolbar executed the macro defined in `TOOLBAR_CONTEXT_ACTION` but returned the wrong MN, BN and VB
- Align this version is to v.12.7.1.b01 (See V12 release notes)

14.4.2 b01

- #5160 [UI2008] In cases where panels or dialogbars had "many" lines, when they were docked the background was positioned incorrectly.
- #5164 [UI2008] Resizing the Eagle main window, the command-line / command-history causes GDI-object leaks.
- Align v14 with v12 since 20-nov-09 to 27-jan-10 (See V12 release notes)

14.4.1 b01

- #5080 POPUP and Pulldown menus with "shortcut" had layout problems with ^Ctrl+Shift+O of long title
- #new Align v.14.4 to v.12.7 since 8-sep-09 up to v.12.7.0.b03 dated 20-nov-2009
- #5076 [UI2008] Slider controls were not removed from a panel when OPTION OFF was executed and if OPTION ON was done again the slider controls were not created
-

14.4.0 b01

- #4850 [UI2008] Smooth appearing of floating toolbars implemented.
- #5033 There are cases when annotations were exported with an incorrect positioning
- #4791 EXPORT: If an exported dimension was edited, copied or moved in AutoCAD the color of the dimension text changed.
- #4793 EXPORT: If a dimension contained two text lines, one supposed to be underneath and one supposed to be above the line, both lines were then relocated above the dimension line if the dimension was edited, copied or moved in AutoCAD
- #5038 Latching on pipe ends sometimes failed. This happened in orthogonal view when the view showed the pipe just as a circle. A new environment variable has been implemented for fix #5038. This new patch variable is called [PATCH5038](#). The default is setting is [PATCH5038=no](#). When the setting [PATCH5038=yes](#), the fix is active.
- #5068 IMPORT: There were cases when importing DWG files caused the program to crash. Comment: this is due to specific block-names
- #5069 There were cases when the DO <filename> caused the program to crash. Comment: this was due to "special characters" in TELL or POLLING action
- #5070 There were cases when DUMP in HIDE didn't store attributes correctly in the PLO file.

- #5072 There were cases when MODIFY W was applied incorrectly
- #5058 [UI2008] When resizing a docked tabbed dialog on the right hand side the OPENGL graphics was lost
- #5058 OpenGL crashed when a Tab Panel which contained more than one page was resized.
- #5075 [UI2008] The PullDown Menu did not correctly show separators, short-keys or frozen options
- #5079 An OpenGL window was not refreshed properly after loosing and then regaining focus, this was probably due to fix #5058
- #new Alignment of Eagle V.14 to v.12.6.2.b02. Please refer to the V12 release notes for full details of implemented options.
- #new [UI2008] Doing OPTION OFF on docked tabbed panel and then recreating it Eagle crashes
- #5058.1 [UI2008] When a docked tabbed dialog was resized on the right hand side OPENGL graphics were lost
- #5081 [UI2008] Pulldown menus showed "CTRL-A" even if not defined
- #5082 [UI2008] BARMENU: pulldown menus did not show "shortcutkey" when using the new syntax
- #5094 [UI2008] When closing an auto-hide docked panel a trace of the control was left on the sidebar
- #5095 [UI2008] Check control in status bar did not execute the associated action when returning correct values and exiting polling.
- #5036 [UI2008] PREVIEW command was not implemented in UI2008 version
- #new [UI2008] The Color picker (button type 500) did not show the content of the popup panel anymore.
- #5117 EXPORT DWG/DXF exported only polylines for single vectors while v.12 differentiated these. The fix #5117 is driven by a new environment variable called `DXF_EXPORT_LINE_AS_POLYLINE`. If this variable is not set or if its value is 'NO' then individual vectors will be exported as Line entities to ACAD.

If `DXF_EXPORT_LINE_AS_POLYLINE=YES` then individual vectors will be exported. The default setting for this variable is `DXF_EXPORT_LINE_AS_POLYLINE=no` to retain compliancy with v.12.

14. 3.2 b04

- #4098.1 [UI2008] Compound accelerators (e.g.: ctrl-c) did not work in the UI2008 version
- #4875 [NURBS] PROFILE Reverse curve in did not work correctly
- Nurbs #4898 PROFILE on an arc creates a profile with a circle
- Nurbs #4901 POINTinSHAPE for curves should return 0(on), -1(outside), 1(inside)
- #4853 Reducer from 0 to 100 was not rendered correctly in OpenGL
- #4860 There were cases when layer visibility on submodels did not reflect correctly in the OpenGL window
- #4867 There were cases when layer visibility on submodels doesn't reflect correctly in the OpenGL window
- #4835 ADVANCE - if N items are under partition and an ADVANCE is executed with a number M much bigger than N, the returned message gets scrambled.
- #5020 [UI2008]The quality of icon fitting in menus was worse than that of the MFC version.
- #5004 [PYTHON] From python the Gwindow.setTitle() did not resize the tab of the window; it is fine when exiting from Python
- #5022 [UI2008] PANEL: if the title was not specified two dialogs were created
- #5023 [UI2008]PBUTTON command crashed when deleting a button from a toolbar the second time round
- #4917.1 DUMP HIDE did not correctly preserve attributes
- #4917.2 When generating more than one polyline or arc DUMP did not preserve attributes
- #5014 The sequence "ECHO ON; ECHO" leaves the echo facility active.
- #4819.2 PART UID=<n> does not select joined items where the item with UID=<n> is the master of the join
- #4822 SELECT with multiple outcomes (multi-select). The actual select process should not stop at the first "selectable" item but gather all the "selectable" items and present them under partition. The following action would be to visualize a popup list where the user can scan the item (with highlight) and choose one
- ui2008 #5019 PBUTTON DEL repeated inside a loop generated a "iconizing" effect that was too slow

- #5018 Improvement in SELECTing solids and faces in 3D views
- #4933 [UI2008] RIBBON: mouse wheel did not scroll ribbon pages when polling active
- #new [UI2008] PANEL with PIN=0 (old-style): when VR<R and/or VC<C the scrollbars were not shown
- #new [UI2008] If the font type was not specified for the new types of comboboxes then the pulldown was empty
- #5024 [UI2008] **OPTION OFF** either crashed or didn't work properly
- #4989 [NURBS] When the Nurbs-rule was not respected the curve is still created but ...
- #5031 **EXPORT**: rotation and scaling on submodels was not exported correctly
- #5017 The **TRACE_MACROS** facility did not display information from encrypted macros
- #5015 When **PULL** was used in combination with MTHREAD, there were conditions when the system gave a syntax error
- #4878 [NURBS] **FLIP** on NURBS entities is missing
- #5032 Export: There were cases when exporting dash information produce an error message and creates an empty file
- #5008 On VISTA **OPENGL ON** flashed the graphics and a SHOW was needed.

14. 3.2 b02

- #new Alignment of Eagle V.14 to latest v.12 changes
- #4940 Batch creation of more than one gwindow leave a trace on the root window
- #4965 Warning message depending on the language
- #4758 DEF W no longer required re-fixed
- #4908 **POPUP** does not return to polling loop correctly when left button is used for exiting
- #4959 Tooltips: check if it works for each type of button
- #4963 Scroll/Scale/Slider buttons must execute the event also when the thumb is moved
- #new Toolbars: when floating repaint after a pbutton = a) add button and b) repaint caption

- #4971 Center align. Of text for buttons type 5 (label) and 220 (static)
- #4977 **CLICK** sometimes crash when applied to the statusbar
- #4965 Warning message depending on the language
- #5000 **POLLING** returns WT=3 for left-button
- #4910 **POLLING** in UI2008: input from the command line does not echo the text
- #new SYS(46) must return 3 for -TMDI mode
- #4913 Python: make the print synchronous
- #new The "midpoint" cursor is not shown during latch
- #4935 Python: if the function end() is called from a gui object then Eagle crash
- #4999 **EXPORT**. There are cases when exporting items produce an error message line "DWGDirect incorrect input"
- #5002 The UPP string function does not work
- #4890 Latch N on edge, Q perpendicular and M mid point: check for Nurbs objects
- #5003 When the **PYTHON** command is used the menubar is shown in reverse order
- #5005 In TMDI mode tiling is not precise.
- #4960 The background and foreground colors from the TAB file are now used also for button type 6 (edit field)

14. 3.0 b04

- #4869 A function in base class Gwindow to activate a gwindow object was missing
- #4856 PULL T,L latches also on moving items, which is incorrect.
- #4859 The sequence DUP;MOD COL=j;SHI <vect> does not display the new object in the correct position
- #4828 **UNDO** did not work correctly when multiple instances of Eagle instances were running on the same computer
- #4838 SURX – did not work correctly.
- #4861 **HIDE**: There were cases when tee-junction are not rendered correctly.

- #new Alignment of Eagle V.14 to latest v.12 changes
- #new NOTIFY on Vista: buttons disappear
- Notes In Python there are some known problems, such as:
 - print is buffered and flushed at the exit of a python script
 - it is not possible to start a python session and execute a python script from a CMD file.
- FUNKEY and KEYS with F= option were not working properly.

14. 3.0 b01

- #4814 FUNKEY and KEYS with F= option were not working properly.
- #4816 There were times when pulldown in a menubar was missing
- #new UI2008 version crashed when old syntax for tabbed panels was used
- #new Aligned to V12.6.0b11

14. 2.0 b01

- Alignment of Eagle V.14 to latest v.12 changes refer to V12.6.0 b02
- #4766.1 SELECT problems in GL mode
- #4792 Viewporting (WINDOW command) was enabled only in SDI mode
- #4787 STACKS - the item ID was not initialized correctly
- #4784 Visibility flag (item_ptr->bits) was not reflected the GWINDOW status
- #new New implementations meant that DYNAINPUT did not TAB anymore
- #new If window 1 was in GL mode and in then in window 2 we did a NIB (for instance) then when refreshing window 1 the modified items were lost in the GL display-lists
- #4794 Problem when resizing has the old size equal to the new size which forced a resize for viewport update
- #4788 With GLMODE=EDGES the 2D items should be skipped (i.e. drawn with their assigned color and not in black)
- #4806 GDIM returns an error message if during the loading of the model a non-existing sub-model generates an error
- #4808 There were cases when the HIDE command cause the program to hang. Comment: this occurred when the HIDE_MODE=advanced setting was used

14.1.2 b01

- #4677 Check if it is possible to have icons on all barmenu options i.e. on submenu option.
- #new The <ENTER> in a edit button does not work
- #new In TDI mode the scroll arrows on the left of the tabs did not activate the get and loose focus action if any
- #new DisableProcessWindowGhosting not available on Windows 2000
- #4685 Inf(32). The planarity of the item is checked and returns 0 if no-coplanar and 1 if planar
- #new NOTIFY - possibility to overlap another app window (no-TOPMOST) driven by an INI setting
- #4544 Export. FACE H=<hatch> (with all the edges invisible) is translated into an Acad hatch object (without any block or face3d).
- #4445.1 EXPORT - 3D polylines
- #4702 Test on VISTA
- #4720 EPI aligned to v.12's EPI
- #4717 If the CLICK command fails in finding a node of the treeview the IFERR is not set
- #4472 Polling with dynainput leaves traces
- #4729 When changing focus from a gwindow to another the rubber effect of a Polling started from a wrong position
- #4725 DIMENSION command produces a message "Warning - point is not in view"
- #4727 DIMENSION command draws twice the annotation-text, in two different positions.
- #4730 When polling exits on a focus change the WT value is set to 13 and not to 9
- #4737 Legacy panels automatically converted into dialog pin=-21in the UI2008 version
- #4736 BORDER must not be always visible if BORDER OFF is specified.
- #new INSERT on button type 220 does not work in UI2008.

14.1.1 b07x

- #4201 Tooltips on toolbars have a latency effect, that is often display the message of the previous button in a wrong sized box
- #new If **OPENGL OFF** is executed before any **OPENGL ON** then the opengl view is lost
- #new Close button to delete gwindow 2 with gwindow maximized causes the display of a smaller view of the gwindow before the end of the operation.
- #new Moving the caret with keyboard arrows in a text field the movement goes two chars by two
- #new When using dialogbar with PIN=-17 (18,19) the polling loop could exit at a wrong level of macro nesting
- #4681.1 Use the **PATCH4681** mechanism.
- #new When using the **CLICK** command on a treeview in a get or loose focus action pressing <ctrl-tab> could exit at a wrong level of macro nesting

14.1.1 b05x & 14.1.1 b06x

- Alignment of Eagle V.14 to v.12.5.3.b03
- #4668 (only) If the view is orthogonal (**PLAN**) then resizing the window progressively reduced the view.
- #4682 When a **BAR ON** command is executed together with a gwindow deletion, then the get-focus event is not fired.
- **GWINDOW** - <Ctrl-Tab> sometimes messed up the viewport
- #4680.1 The loose and get focus action caused the **POLLING** to exit and wipes the setting of **GWINDOW_POLLING_EXIT_ON_ACTIVATION**
- #4680 Selecting a window with **POLLING** when the active window has been selected clicking on the caption, exits from **POLLING** also if the setting is set to yes
- #4681 **ONCHANGE** did not convert a UNIX pathname and did not resolve environment variables for the action if it includes a pathname
-

14.1.1 b04x

- NOTE : There can be some “differences” between Eagle V14 and Eagle v.12, notably since V.12.5.0/Build.07, dated 9 November 2007. This Eagle V14 build does not have not all the fixes/changes made between v.12.5.0.b07

and the latest v.12.5.2.b05. Please refer to Version 12 release notes for bug fixes relating to the relevant version mentioned.

- TreeView - the drag-n-drop action filename is not resolved correctly when environment variables or , etc. are used
- #4690 **CLICK** with **IMAGE=** sometimes does not change the bitmap
- #n4691 A **PANEL OFF** and a select on the treeview cause a crash
- #4692 The **CLICK** command executed on an already selected node of a treeview does not fire the action and does not return the correct LN,RN values

14.1.1 b03x

- #4658 **SEARCH** command on #10 causes a memory problem that interfered with fragments and display process.
- In TDI mode issue of a **BAR ON** to an existing barmenu caused an up & down of the UI and graphics.
- Changing focus with **GWIN <n>** between two gwindows there is a loss of the viewport
- With a dialog docked in the lower part of the screen and removing all the gwindows then any command crashes.
- Eagle crashes if there are no gwindows and a pulldown toolbar is dragged
- Eagle crashes if there are no gwindows and the cursor overlap a toolbar (with probably a tooltip)
- If the Barmenu is present together with some toolbars, when loading two files into two different gwindows/stacks, Eagle flashes
- **UNDO** - with one stack and more gwindows on the same stack the UNDO works only on the window where the undo has been defined
- #4637 **INDEX KILL** and **COUNT X=** - there are case when index pen is used that have problems
- Treeview - when executing the context menu, the ST and other settings are not set properly
- #4663 Treeview - node selection returns also LN equal to the node id and RN = 0 if the node has no children or 1 if it has.
- #4665 Import: There are cases when this command crashes the program. Comment. This happen when **SCAN_MODE** is set to "yes" and **SCANLAYER** is undefined

- TreeView - the drag-n-drop action filename is not resolved correctly when environment variables or , etc. are used

14.1.1 b01x

- Alignment with V12.5.2 b06 (See V12 Release notes)
- #4621 Import: SCANMODE is not handled at all
- #4633 There are cases when the error "DWGdirect - Error: Null object Id" is returned and part of the drawing is not imported. Also, sometimes the BOX of the imported drawing is incorrect. Comment: saving the file in ACAD resolves the problem.
- #4620 **IMPORT**: There are cases when importing polylines with UCS, the resulting Eagle drawing is incorrect
- #4622 The (E) and (W) messages are not colored in the message window
- #4623 Focus notification are executed in the wrong order when focus is changed through **GWIN** for selecting a window
- #4624 When creating a new **gwindow** focus notification are executed in the wrong order and both for the new **gwindow**
- #4625 Focus notification are not executed when focus is changed with the **POLLING**
- #4626 Focus notification are not executed when focus is changed with the Windows cursor
- #4627 Deleting a **gwindow** does not fire the loose and get focus events (neither CLOSE nor GWIN DEL)
- #4628 Tiling cause a change in the current active gwindow, which is wrong and focus notifications are executed in the wrong order
- #4629 Minimizing a gwindow correctly changes the focus but does not fire the loose and get focus events
- #4630 **CLOSE** on a gwindow execute the associated action but close the window anyway; different from panel close.
- #4631 When restoring an iconized gwindow this correctly becomes active but the current active window keeps the active caption bar
- Minimizing a gwindow with **GWIN 1,MINIMIZE** the focus is not changed
-

Previous v14

- #4599 When **COLOR_SELECTION** is defined, annotations and dimension items are drawn independently from their occurrence
- #3487. There were memory leaks when using the **EXPORT** command. Comment: NCG-REF: C218.
- #3823. There were cases when imported hatch entities cause incorrect faces to be created in the Eagle workspace. Comment: this was related to hatches whose geometric definition included holes.
- #4389. When the full-name length was bigger than 96 characters the **GET** command crashed.
- #4405. The pen specification for imported dimension was always PEN1.
- #4406. Text specification for imported Diametric Dimension was incorrect. Comment: it contained control characters.
- #4414. The size of the arrows of the imported dimensions was always set as the height of the text of the dimension.
- #4415. The position of the imported text was sometimes shifted in the up-side direction.
- #4417. There were cases when the exported dimension lost their information of arrowheads. Also, the subsequent **IMPORT** made further errors on them.
- #4418. Holes in hatches were not imported, i.e. the imported face contained only the external loop of the hatch.
- #4434. Dimension inside Blocks were not handled by the Import command.
- #4435. Dimension inside submodels were not exported.
- TDI mode: make w1, make w2 and then delete w2 cause a problem
- When switching to gwindow 1 the Eagle root caption is lost
- Fix the problem related to the compilation of the library **VISUAL.KIT**
- Polling through a std **GWINDOW** and an OpenGL **GWINDOW** sometimes the cursor is drawn in the wrong window