

CPO Statement of Geometric LTD.

Following the prerequisites of ProSTEP iViP's Code of PLM Openness (CPO) IT vendors shall determine and provide a list of their relevant products and the degree of fulfillment as a "CPO Statement" (cf. CPO Chapter 2.8).

This CPO Statement refers to:

Product Name	Glovius for Windows
Product Version	Version 4, Release 4.0.5, Build 4.0.0.254
Contact	Sameer Kondejkar sameer.kondejkar@geometricglobal.com

This CPO Statement was created and published by Geometric LTD. in form of a self-assessment with regard to the CPO.

Publication Date of this CPO Statement: 18 May 2015

Content

1 Executive Summary	2
2 Details of Self-Assessment	3
2.1 CPO Chapter 2.1: Interoperability	3
2.2 CPO Chapter 2.2: Infrastructure	3
2.3 CPO Chapter 2.5: Standards	3
2.4 CPO Chapter 2.6: Architecture	3
2.5 CPO Chapter 2.7: Partnership	3
2.5.1 Data Generated by Users	3
2.5.2 Partnership Models	3
2.5.3 Support of User and Innovation Groups	4
2.6 Additional Information	4

1 Executive Summary

Geometric Ltd. is committed to Codex of PLM Openness (CPO) and ready to fulfill the requirements of this initiative in its product development.

The CPO concept defines reuse of data across the enterprise, by use of open, standard based interoperable tools and processes. By signing this CPO for Glovius, Geometric becomes a part of this movement. As a member of the Codex effort, we commit to PLM openness and will contribute towards its perpetuation and adoption by the industry.

*We whole-heartedly welcome & support the **Codex for PLM Openness** initiative and will actively participate in its further development.*

Manu Parpia
 CEO, Geometric Ltd.

*By defining the basic requirement of “Open” in PLM context, the **Codex for PLM Openness** will benefit the customers, vendors and service providers alike. As one of the first vendors to commit, we are delighted to play a part in development & adoption of this initiative. Open standards make information available from heterogeneous systems and help customers save time & cost.*

Sreekanth Jayanti
 Principal Consultant, Geometric Ltd.

Company Name:	Geometric Ltd.	Contact Person:	Sameer Kondejkar
Product Name:	Glovius for Windows		
CPO Term	Fulfilled (100%)	Comments because of deviations	
2.1 Interoperability	<input checked="" type="checkbox"/>		
2.2 Infrastructure	<input checked="" type="checkbox"/>		
2.3 Extensibility	<input checked="" type="checkbox"/>		
2.4 Interfaces	<input checked="" type="checkbox"/>		
2.5 Standards	<input checked="" type="checkbox"/>		
2.6 Architecture	<input checked="" type="checkbox"/>		
2.7 Partnership	<input checked="" type="checkbox"/>		
List of inherent supported neutral standards	API: <input checked="" type="checkbox"/> C/C++ / <input type="checkbox"/> Java / <input type="checkbox"/> .NET / <input type="checkbox"/> Web Services / Others: Please provide, if desired 3D: <input type="checkbox"/> IGES / <input checked="" type="checkbox"/> JT / <input checked="" type="checkbox"/> STL / <input type="checkbox"/> STEP / <input type="checkbox"/> VRML / Others: Please provide, if desired DX: <input type="checkbox"/> eCl@ss / <input type="checkbox"/> FMI / <input type="checkbox"/> IDX / <input type="checkbox"/> PDF / <input type="checkbox"/> ReqIF / <input type="checkbox"/> STEP / <input type="checkbox"/> VEC Others: Complete product information, including downloads, release notes, FAQs and an Image Gallery are maintained on the product website at https://www.glovius.com		

2 Details of Self-Assessment

The following chapters summarize the results of the CPO-related self-assessment of Geometric LTD. with regard to Glovius for Windows.

2.1 CPO Chapter 2.1: Interoperability

APIs have the following standard language bindings:

C/C++ based APIs

Compilers – Visual C++ 2012 Update 3, Visual C++ 2013

Platforms – win32 and win64 applications, on Windows 7 SP1 and Windows 8.

Full documentation and getting started guide are available for our SDK customers.

2.2 CPO Chapter 2.2: Infrastructure

Supported platforms (hardware and OS) are:

Hardware - 1280 X 1024 or higher resolution with support for 32-bit color
4GB RAM or more, 1 GHz CPU or higher, 1 GB or more disk space

OS - Windows 7, 8 and 8.1 (32-bit and 64-bit, all service packs are supported)

2.3 CPO Chapter 2.5: Standards

Supported data exchange formats:

JT (upto version 10.0 format through JTOpen Toolkit), STL

Glovius supports industry standard data formats, use cases and user interfaces to help aid integration with the larger systems and ease end user training and learning requirements. Glovius uses the JT format, which is a standard in lightweight visualization of product design data. All data that needs to persist on the file system is stored in relevant sections of the JT file format.

In addition, standard use cases have also emerged from various industry organizations promoting pre-defined end-user functionality & goals. Glovius for Windows is based on these standard use cases.

2.4 CPO Chapter 2.6: Architecture

The IT system's architecture is conforming CPO 2.6 Yes / No

Glovius for Windows has a documented and defined architecture, available with the SDK toolkit guide.

IT customers and other vendors can access individual components like the renderer, scene-graph, user interface elements and file operations. The various layers interact with each other through well-defined interfaces and can be replaced by other layers for maximum customization and interoperability.

As a Windows desktop application, Glovius for Windows has simple application architecture, with reusable components provided by the operating system and other vendors. The application does not have tiers.

2.5 CPO Chapter 2.7: Partnership

2.5.1 Data Generated by Users

Data generated by IT users with an IT system is and remains the intellectual property of these IT users, according CPO 2.7.4 Yes / No

2.5.2 Partnership Models

Partnership models are offered according CPO 2.7.7 Yes / No

<http://geometricglobal.com/about-us/alliances-and-partnerships/>

2.5.3 Support of User and Innovation Groups

Glovius users and customers can also reach out to the product team at support@glovius.com email address. This email address is monitored regularly and a case history is maintained for all interactions.

In addition, Glovius for Windows has a dedicated blog, available at the following URL

<https://www.glovius.com/blog/>

2.6 Additional Information

EXTENSIBILITY

Geometric provides all of the tools details, libraries and necessary documentation for implementing changes to the Glovius data models, the business logic and rules as well as customization of the user interface and installation mechanism.

Geometric provides all of the tool details, and installation procedure required to create a runtime executable that can be implemented on top of the standard installed code.

Interfaces are documented in PDF format. The SDK (Software Development Kit) contains full API documentation, along with usage examples for easy implementation of custom code.

Customers can commission third parties to realize extensions, based on customer license agreements.

Geometric supports a customer feedback system wherein end users can request for certain features and extensions for consideration in future release plans.

INTERFACES

Interfaces are documented in PDF format. The SDK (Software Development Kit) contains full API documentation, along with usage examples for easy implementation of custom code.

Interfaces that are soon to be deprecated are marked as such in the documentation.

Release & version compatibility with regard to new releases of and changes to IT interfaces is always strived upon and intended. For exceptionally rare scenarios, where this is technologically not feasible, alternatives are provided in advance.

Some interfaces are used internally by Glovius for Windows, as are provided to IT customers, or third parties commissioned by the customers. Glovius for Windows API Interfaces adhere to best practices for interface definition, use and extension. These interfaces are also used within Glovius, for development of out-of-the-box add-ons and thus ensure compatibility and version support.

Except user interaction based functionality, there is no difference in functionality and performance of IT interfaces with regard to batch processing and direct user interaction.

The interfaces are completely transparent towards end use.

A deprecation period is followed before cancellation of an interface, typically lasting more than a year. Alternatives are also suggested for giving IT customers an opportunity to maintain the applications.

Whenever a need arises to retire an interface for compatibility or performance reasons, adequate workarounds are provided to reduce the impact such a change may have on the end users.