

CPO Statement of ECS GmbH

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	Connect
Product Version	2.x
Product Name	Compose
Product Version	6.x
Contact	Peter Teckentrup teckentrup@ecs-gmbh.de

This CPO Statement was created and published by ECS Engineering Consulting & Solutions GmbH in form of a self-assessment with regard to the CPO.

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1 Executive Summary - Connect

- Connect is a high efficient integration solution and provides ready-to-use pre-implemented integration tasks to setup batch processes between connected business applications.
- Connect is based eCenter connectivity, provides integration connectivity to certain marked leading PLM systems and brings existing business logic of the backend systems into system overlapping processes.
- Connect utilizes standard BPM environment (open source and commercial) to design, deploy, run and monitor background business processes.
- Connect allows customization based on industry proven standards.

Company Name:	ECS GmbH	Contact Person:	Peter Teckentrup
Product Name:	Connect		
CPO Term	Fulfilled (100%)	Comments because of deviations	
2.1 Interoperability	X		
2.2 Infrastructure	X		
2.3 Extensibility	X		
2.4 Interfaces	X		
2.5 Standards	X		
2.6 Architecture	X		
2.7 Partnership	X		
List of inherent supported neutral standards	API: <input type="checkbox"/> C/C++ / <input checked="" type="checkbox"/> Java / <input type="checkbox"/> .NET / <input checked="" type="checkbox"/> Web Services / Others: Please provide, if desired 3D: <input type="checkbox"/> IGES / <input type="checkbox"/> JT / <input type="checkbox"/> STL / <input type="checkbox"/> STEP / <input type="checkbox"/> VRML / Others: Please provide, if desired DX: <input type="checkbox"/> eCI@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: Please provide more or URL to product flyers, if desired Remarks: Please provide information, if e.g. certain standards are not supported throughout the whole software suite for which you want to provide this statement.		

2 Details of Self-Assessment

The following chapters summarize the results of the CPO-related self-assessment of ECS Engineering Consulting & Solutions GmbH with regard to Connect.

2.1 CPO Chapter 2.1: Interoperability

APIs have the following standard language bindings: Java, SOAP, PLM specific API's

<http://www.ecs-gmbh.de/en/products/connect/connect-general.html>

2.2 CPO Chapter 2.2: Infrastructure

Supported platforms (hardware and OS) are:

Operation Systems:

- Windows
- Linux
- Solaris

Hardware: Processor: X86 32-64, ARM

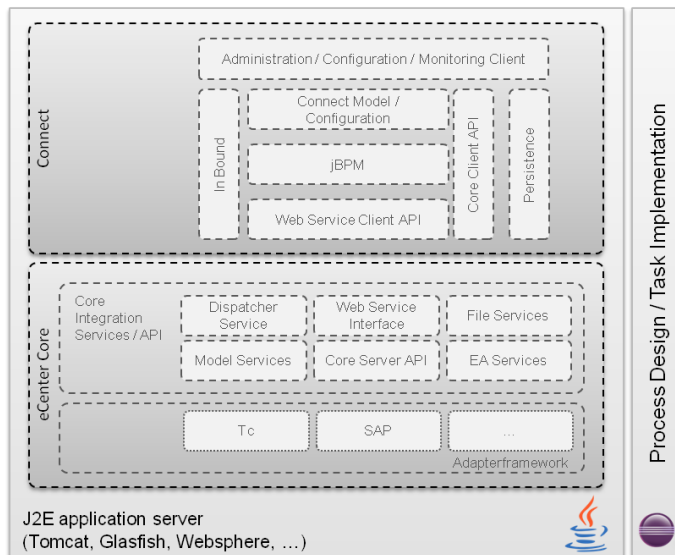
2.3 CPO Chapter 2.5: Standards

Supported data exchange formats: n/a

2.4 CPO Chapter 2.6: Architecture

The IT system's architecture is conforming CPO 2.6

Yes / No



- **Connect is based on J2E Standards**
 - J2E application server for server components runtime and client distribution
 - JRE for administration client with Java Webstart
- **Modeling and execution of business processes across applications**
 - Embedded jBPM Workflow Engine
 - Graphical process design
 - Synchronous or asynchronous execution
 - Process initiation by URL /SOAP call or time schedule
- **Administration and monitoring client**
 - Queues, connections, requests, processes, recovery points
- **Customization methodology**
 - eCenter module concept for separation of standard and customization
 - Command plugin concept for clear modification of standard functionalities
- **Available PDM system adapters**
 - Teamcenter based on Tc SOA API
 - Teamcenter Enterprise based on Enterprise Service API
 - SAP based on JCo/BAPI
 - Windchill based on Java RMI API

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 X / No

2.5.2 Partnership Models

Partnership models are offered according CPO 2.7.7 Yes X / No

<http://www.ecs-gmbh.de/en/products/connect/connect-general.html>

2.5.3 Support of User and Innovation Groups

Supported groups are:

Please provide names and, if available, related URLs to the homepages of the groups

2.6 Additional Information

Statements concerning CPO Chapter 2.3 “Extensibility” and Chapter 2.4 “Interfaces” can be noted here. For example, statements concerning “Development Environments”, “Third-party Integration”, “Version and Release Compatibility”, possibilities for “Batch Processing” and “Cancellation”.

You can note related URLs where related information can be found.

3 Executive Summary - Compose

- Compose is a neutral, easy-to-use, easy-to-learn and easy-to-deploy user interface environment and enables the simultaneous management of business data from different sources, such as product data and documents from PLM.
- Compose combines modern standard software technology and IT infrastructure efficiently into one application.
- Compose is based on a system concept, which places the user in the middle of a heterogeneous system landscape.
- Compose presents the user a homogeneous UI, connected to different applications by process steps.
- Compose GUI is a configurable Web desktop, which unites Internet technology and Desktop functionality.

Company Name:	ECS GmbH	Contact Person:	Peter Teckentrup
Product Name:	Compose		
CPO Term	Fulfilled (100%)	Comments because of deviations	
2.1 Interoperability	X		
2.2 Infrastructure	X		
2.3 Extensibility	X		
2.4 Interfaces	X		
2.5 Standards	X		
2.6 Architecture	X		
2.7 Partnership	X		
List of inherent supported neutral standards	API: <input type="checkbox"/> C/C++ / <input checked="" type="checkbox"/> Java / <input type="checkbox"/> .NET / <input checked="" type="checkbox"/> Web Services / Others: Please provide, if desired 3D: <input type="checkbox"/> IGES / <input type="checkbox"/> JT / <input type="checkbox"/> STL / <input type="checkbox"/> STEP / <input type="checkbox"/> VRML / Others: Please provide, if desired DX: <input type="checkbox"/> eCI@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: Please provide more or URL to product flyers, if desired Remarks: Please provide information, if e.g. certain standards are not supported throughout the whole software suite for which you want to provide this statement.		

4 Details of Self-Assessment

The following chapters summarize the results of the CPO-related self-assessment of ECS Engineering Consulting & Solutions GmbH with regard to Compose.

4.1 CPO Chapter 2.1: Interoperability

APIs have the following standard language bindings: Java, SOAP, PLM specific API's

<http://ecs-gmbh.de/en/products/compose/compose-general.html>

Remark: If detailed information with regard to bindings are not given (e.g. C++, instead of C++11 (ISO/IEC 14882:2011), maybe additional clarification efforts arise.

4.2 CPO Chapter 2.2: Infrastructure

Supported platforms (hardware and OS) are:

Operation Systems:

- iOS
- MAC OS
- Windows
- Linux
- Solaris

Hardware: Processor: X86 32-64, ARM

4.3 CPO Chapter 2.5: Standards

Supported data exchange formats: n/a

Please provide relevant information or URL to product flyers providing relevant information

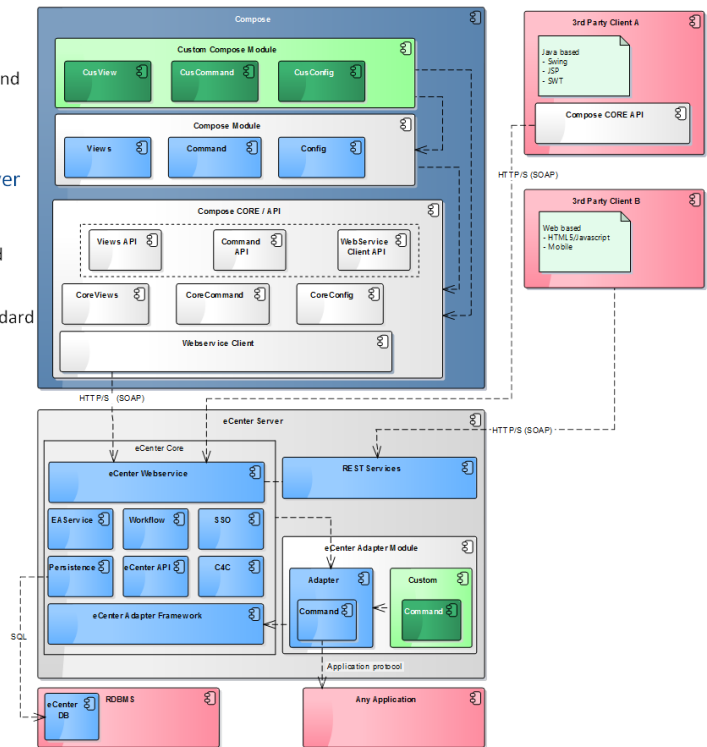
Remark: If detailed information with regard to name and version (e.g. STEP AP 214 (ISO 10303-214:2010)), considered Implementation Guidelines (e.g. CAX-IF Recommended Practices) and potential participation in related Implementor Forums (e.g. CAX-IF) are not given, maybe additional clarification efforts arise.

4.4 CPO Chapter 2.6: Architecture

The IT system's architecture is conforming CPO 2.6

Yes X / No

- **Compose is based on J2E Standards**
 - J2E application server for server components runtime and client distribution
 - JRE for client with Java Webstart
- **Web service communication between client and server**
- **Customization methodology**
 - eCenter module concept for separation of standard and customization
 - Command plugin concept for clear modification of standard functionalities
- **Single sign on support**
 - Kerberos based authentication is OOTB
 - PKI implementation in production with customers
- **Available PDM system adapters**
 - Teamcenter based on Tc SOA API
 - Teamcenter Enterprise based on Enterprise Service API
 - SAP based on JCo/BAPI
 - Windchill based on Java RMI API



4.5 CPO Chapter 2.7: Partnership

4.5.1 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 X / No

4.5.2 Partnership Models

Partnership models are offered according CPO 2.7.7 Yes X / No

<http://ecs-gmbh.de/en/products/compose/compose-general.html>

4.5.3 Support of User and Innovation Groups

Supported groups are:

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4.6 Additional Information

Statements concerning CPO Chapter 2.3 “Extensibility” and Chapter 2.4 “Interfaces” can be noted here. For example, statements concerning “Development Environments”, “Third-party Integration”, “Version and Release Compatibility”, possibilities for “Batch Processing” and “Cancellation”.

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