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WSDL OF V2 SERVICES COLLECTION

- *PLCS PLM Web Services specifications*

by

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Abstract:

This document is the technical specification of the web services being developed within ST 3.6.2.7

At this phase of the Vivace project, only PLCS PLM Web Services specifications are ready.

Dissemination:

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1. EXECUTIVE SUMMARY

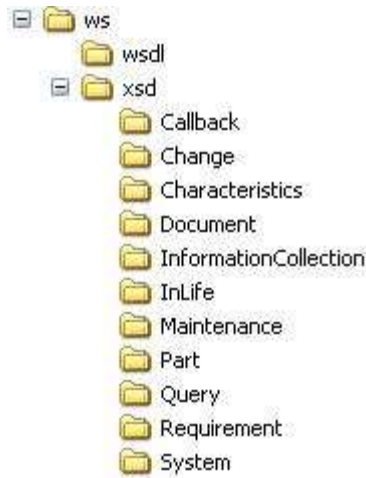
This document is the technical specification of the web services being developed within T 3.6.2. In this phase of the Vivace project, only the PLCS PLM Web Services are specified.

The specification files are of two types – Web Services Description Language (WSDL) files and XML Schema (XSD) files. The WSDL files specify the services and the XSD files the types and messages that are being sent.

The document describes the way the different defining files are structured and presents the WSDL files together with the services they specify. Both the WSDL- and XSD files are listed as hyperlinks to their physical representation.

2. WEB SERVICES

The files specifying the PLCS PLM Services are of two types. WSDL files (Web Services Description Language) describing the web services and XSD files (XML Schema) specifying the structure of the information sent in SOAP messages when the web services are executed.



In the folder wsdl all WSDL files are contained. In the xsd folder all XML Schema files are contained. General XSD files are in the root folder xsd and then one folder for each different business object or area of usage containing the XSD files defining the messages concerning this type of business object or area of usage.

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2.1. WSDL FILES

The PLCS PLM services defined in T 3.6.2 are divided into different groups. Each group is more or less tightly connected to a specific business object in the ISO 10303-239 information model. This grouping is still under development and should not be regarded as final. To each group corresponds a wsdl file describing the web services used for that group. These wsdl files are provided below together with the services they define.

Business object characteristics are defined only in the xsd file Characteristics.xsd. Some of the common ones are:

- [Identification assignment](#)
- [Assigned property](#)
- [Document assignment](#)
- [DateTime assignment](#)
- [Organization or person in organization assignment](#)
- [Classification assignment](#)
- [Effectivity assignment](#)

2.1.1. WSDL files with defined and specified Web Services

SystemManagement.wsdl

- GetProjects
- Authenticate
- OverrideSession
- Logout

QueryManagement.wsdl

- Search
- LoadPLM_object
 - GetAllClassifications
 - GetAllOrganizations
 - GetAllPersons
 - GetAllProperties
 - GetAllUnits
 - GetAllViewDefinitionContexts

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- CreatePart
- UpdatePart
- CreatePart_version
- UpdatePart_version
- GetAssemblyStructure
- WhereUsed
- CreateNext_assembly_usage
- UpdateNext_assembly_usage
- RemoveNext_assembly_usage

DocumentManagement.wsdl

- DownloadFile
- CreateDocument
- CreateDocument_version
- UpdateDocument
- UpdateDocument_version
- CheckInDocument_version <not yet described – only specified here>
- CheckOutDocument_version <not yet described – only specified here>
- GetCheckedOutDocument_versions <not yet described – only specified here>
- GetCheckedInDocument_versions <not yet described – only specified here>
- CreateDigital_file

InLifeManagement.wsdl

- GetTopParent
- WhereUsed
- GetAssemblyStructure
- CreateProduct_as_realized
- CreateProduct_as_individual
- UpdateProduct_as_realized
- CreateResource_as_realized_resource_item <not yet described – only specified here>
- UpdateResource_as_realized_resource_item <not yet described – only specified here>

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- CreateRequired_resource_by_specification <not yet described – only specified here>
- UpdateRequired_resource_by_specification <not yet described – only specified here>
- CreateRequired_resource_by_resource_item <not yet described – only specified here>
- UpdateRequired_resource_by_resource_item <not yet described – only specified here>

InformationCollectionManagement.wsdl

- CreateInformation_collection_version
- CreateInformation_collection
- UpdateInformation_collection
- UpdateInformation_collection_version
- CheckInInformation_collection_version <not yet described – only specified here>
- CheckOutInformation_collection_version <not yet described – only specified here>
- GetCheckedOutInformation_collection_versions <not yet described – only specified here>
- GetCheckedInInformation_collection_versions <not yet described – only specified here>

ChangeManagement.wsdl

- CreatePlannedEngineeringChange <not yet described – only specified here>
- CreateEngineeringChangeOrder <not yet described – only specified here>
- PromotePlannedEngineeringChange
- CreateWork_request
- UpdateWork_request <not yet described – only specified here>
- CreateWork_order
- UpdateWork_order <not yet described – only specified here>
- CreateActivity
- UpdateActivity <not yet described – only specified here>
- CreateActivity_actual
- UpdateActivity_actual <not yet described – only specified here>
- CreateDirected_activity

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- UpdateDirected_activity <not yet described – only specified here>

MaintenanceManagement.wsdl

- UpdateScheme_version <not yet described – only specified here>
- UpdateScheme <not yet described – only specified here>
- UpdateTask_method_version <not yet described – only specified here>
- UpdateTask_method <not yet described – only specified here>
- UpdateState_observed <not yet described – only specified here>
- UpdateState_definition <not yet described – only specified here>
- UpdateScheme_entry <not yet described – only specified here>
- CreateState_observed
- CreateState_definition
- CreateTask_method
- CreateTask_method_version
- CreateScheme
- CreateScheme_version
- CreateScheme_entry

2.1.2. WSDL files with no definitions, only with specifications

The following Web Services are only specified here. The definitions will come later.

RequirementManagement.wsdl

- CreateRequirement
- UpdateRequirement

ChangeEvents.wsdl

- OnCreateWorkOrder
- OnCreateWorkRequest
- OnCreateActivity
- OnCreateSubActivity
- OnAssignActivityElementToEngineeringChange
- OnActivityResolveWorkRequest
- OnPromoteECPtoECO
- OnAssignActivityActualToDirectedActivity

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- OnAssignActivityElementToDirectedActivity
- OnAssignActivityElementToActivityActual
- OnAddScopeItemToWorkRequest
- OnPartialSignOffWorkOrder
- OnCompleteSignOffWorkOrder
- OnActivityAssignedInResponseToWorkOrder
- OnWorkRequestAssignedInResponseToWorkOrder

[DocumentEvents.wsdl](#)

- DocumentEventsSoap
- OnCreateDocumentVersion

[PartEvents.wsdl](#)

- OnCreatePart
- OnCreatePartVersion

[ProductCharacteristicsEvents.wsdl](#)

- OnNewIdentificationAssignment
- OnNewPropertyAssignment
- OnRemovePropertyAssignment
- OnChangeEffectivityOfPropertyAssignment
- OnRemoveIdentificationAssignment
- OnChangeIdentificationAssignment
- OnChangeOwnerAssignment

[RequirementEvents.wsdl](#)

- OnCreateRequirement
- OnCreateRequirementVersion
- OnCreateTracingRelationship

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2.2. XML SCHEMA FILES

In the specification of the PLCS PLM services the description of the web services have been separated from the actual messages being sent. The messages are being specified in XML schema files, which are provided below starting with the more general XSD files followed by the more usage and business object specific grouped files.

[RepresentingBusinessObjects.xsd](#)

[SubscriberProfile.xsd](#)

[System.xsd](#)

[types.xsd](#)

[Exceptions.xsd](#)

[Headers.xsd](#)

2.2.1. Callback

[DocumentEvents.xsd](#)

[PartEvents.xsd](#)

[ProductCharacteristicsEvents.xsd](#)

[ProductEvents.xsd](#)

[RequirementEvents.xsd](#)

[Callback.xsd](#)

[ChangeEvents.xsd](#)

2.2.2. Change

[ChangeMsg.xsd](#)

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2.2.3. Characteristics

[CharacteristicsMsg.xsd](#)

2.2.4. Document

[DocumentMsg.xsd](#)

2.2.5. InformationCollection

[InformationCollectionMsg.xsd](#)

2.2.6. InLife

[InLifeMsg.xsd](#)

2.2.7. Maintenance

[MaintenanceMsg.xsd](#)

2.2.8. Part

[PartMsg.xsd](#)

2.2.9. Query

[QueryMsg.xsd](#)

2.2.10. Requirement

[RequirementMsg.xsd](#)

2.2.11. System

[SystemMsg.xsd](#)