

## SAP NetWeaver Development Infrastructure – Change Management Service

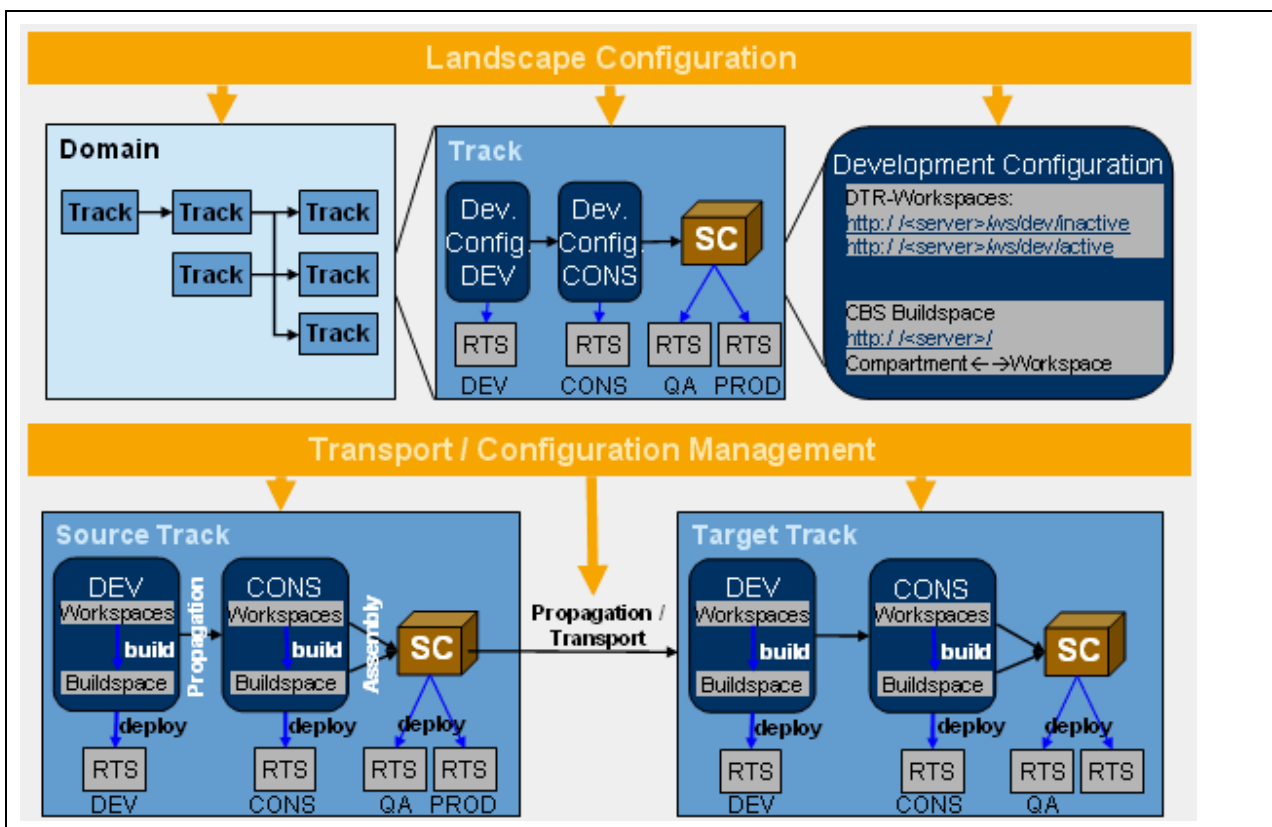
### Adding SAP's Proven Software Logistics Concepts to the Java World

#### Project Summary

The Change Management Service (CMS) represents the part of Software Life-Cycle Management in the SAP NetWeaver Java Development Infrastructure. In conjunction with the Design Time Repository (DTR) and the Component Build Service (CBS) it enables the delivery and maintenance of Java software. It is made up of the Landscape Configurator and the Transport Studio and covers all software logistics related steps in the development process with the SAP NetWeaver Java Development Infrastructure (NWDI).

#### Change Management Service – Overview

The Change Management Service is the central administration UI for development landscape definition and transport management. The following figure gives an overview of objects and landscapes in the CMS:



The picture starts with the Landscape Configurator. Here in the very first step the CMS domain is defined, which

contains all tracks. Each CMS has one domain, which you can think of as a namespace for this CMS separating different software vendors from each other.

- Inside each track we see the two development configurations dev and cons. The result of development is a software component archive (SCA), which can be deployed to a J2EE Engine.
- Each development configurations contains a pair of workspaces in the DTR and an associated buildspace in the CBS.
- In the second half you see the tasks performed in the Transport Studio: Sources are propagated (after a successful test in the runtime system) from the development phase into the consolidation phase. After the consolidation phase the SCA is produced in the assembly step; the result is tested again, the approved and delivered.

The result of each track can be imported into a target track and be used as the basis for further development.

### *Setting up development landscapes in the CMS Landscape Configurator and the flow of objects in the CMS Transport Studio*

Administration of development landscapes has two phases in the NWDI:

1. Before development starts administration has to provide the (logical) development systems. These are made up of workspaces in the Design Time Repository (DTR) and buildspaces in the Component Build Service (CBS). In the DTR workspaces all source files (and folders) are handled in the CBS buildspace all archives needed for the software project. Development has two main phases, development and consolidation. For this pair of phases a logical system is defined in the **Landscape Configurator** - we call this pair of systems a *track*; each logical system is described by a **development configuration**.
2. When the definition of the systems is done, software transports start: All archives that are already available are imported into the logical development systems. For details on used components see component model. For newly created objects all steps from bringing them into the consolidation phase, assemble, and approve the new software can be done in the **Transport Studio**.

### Feature List

The CMS is the administrative UI for all steps of development based on the SAP NetWeaver Java Development Infrastructure:

- Definition of development landscapes based on product and component information in the SLD
- Automated creation of DTR workspaces and CBS buildspaces
- Development configurations are imported into the SAP NetWeaver Developer Studio and define the access of all developers to the central systems
- Controlling the build processes
- Automated deployment process for each project phase
- Propagation of Java software changes
- Assembly and delivery of software component versions
- Optional integration with the Change and Transport System of SAP NetWeaver AS ABAP

### Related Content

- SAP NetWeaver Development Infrastructure
- Design Time Repository
- Component Model & Component Build Service

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