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Change Control Management
The whole is more than the sum of its parts
Motivation to develop Quality Gate Management

- Each project has to be approved before development starts
- 100% transparency of changes
- Risk avoidance and risk reduction
- Each change is documented
- Changes are bundled in projects and releases, based on SAP’s best practices
Standard Application and Quality Management
One end-to-end integrated and consistent quality process

- 100% transparency of changes
- A central transport mechanism and change control system to manage changes across technology stacks and application components
- A central test plan for core business processes
- A central quality manager validating test execution and test completeness
- Integration of every development workbench into the central transport and change control system

Provides an integrated and consistent Quality Process for all operational units across all organizations
### Quality Gate Management

#### Roles and Responsibilities

- **Development Lead**
  - ... creates and releases changes and transports for the developers.

- **IT Operator**
  - ... performs imports into the test and production systems.

- **Quality Manager**
  - ... performs quality checks at certain project milestones.

- **Quality Advisory Board**
  - ... supervises the risks of an implementation project.
Quality Management Process

Build

- BOE 4.0 Dev system
- BW 7.0 Dev system
- HANA 1.0 Dev system

Synchronization

Test

- BOE 4.0 QAS system
- BW 7.0 QAS system
- HANA 1.0 QAS system

QG

Deploy

- BOE 4.0 PRD system
- BW 7.0 PRD system
- HANA 1.0 PRD system
Quality Management Process

Build

- BOE 4.0 Dev system
- BW 7.0 Dev system
- HANA 1.0 Dev system

Test

- BOE 4.0 QAS system
- BW 7.0 QAS system
- HANA 1.0 QAS system

Deploy

- BOE 4.0 PRD system
- BW 7.0 PRD system
- HANA 1.0 PRD system

Synchronization

FIX
Integrated and consistent quality process

Details

**Scope**
- Q Gate II
  - Scope from business Departments
  - Functional and technical blueprint
  - Functional and technical feasibility

**Build**
- Q Gate III
  - Extend Solution
    - SAP Updates
    - Custom Dev.
    - Partner solutions
  - Unit Tests
  - Prepare Solution Operations
    - Solution Docu
    - Enablement of Standards for Solution Operations
  - Prepare Tests
    - Test Scope Identification
    - Test Requirements
    - Test System Setup
    - Test Planning

**Test**
- Q Gate IV
  - Functional Tests
  - Integration Tests
  - Data Consistency Checks
  - Performance Tests
  - User Acceptance Tests

**Deploy**
- Q Gate IV
  - Transports in Cycles
  - Handover to Production
  - Final Transport

**Collaboration and Project Controlling**
Thinking in different levels to enable one consistent quality process

Organize Change Control

Organize Transports centrally

Organize Transports for one application

SAP Solution Manager

Process Best Practice
- Set up integrated and consistent quality process
- Manage projects and quality gates for solutions
- Reduce risks for maintenance, enhancements or releases

Central Transport Management
- Set up system landscapes and dependencies
- Manage synchronized transports
- Enable central logging and monitoring

Transport Tools
- Set up transport system for one application
- Record, export and import changes
- Use same tool for different applications / technologies

Managed Systems
Quality Gate Process

- Build
  - Quality Gate Open
  - Developer

- Test
  - Quality Gate Passed
  - Tester
  - Operator

Quality Gate Document

- Quality Gate III
  - Quality Manager
    - Document the results
    - Upload documentation
    - Q-Gate rating
  - Quality Steering Board
    - Confirm / reject Quality Manager recommendation

SAP Solution Manager Project using Quality Gate Management
Work Center Change Management: Overview
Quality Gate Management to ensure via standardized gates the quality of a new solution or of major changes

- Project and Quality Gate Calendar
- Project Schedules
- Quality Gate Maintenance with SoD (Segregation of Duties)
Quality Gate Management supports Implementation and Maintenance projects

- Upgrade / Implementation Project
- Maintenance Project
Quality Gate

![SAP Solution Manager with Quality Gate interface](image)

- **Project Name**: MCCLAMMON
- **Project Type**: Implementation Project
- **Description**: Quality Gate Management
- **Planned Date for Q-Gate**: 12.10.2008

**Set the Status for the Quality Gate**
- Status set by Quality Manager | TSTWCCLM_08 | Initial
- Status set by Quality Advisory Board | TSTWCCLM_07 | Passed
- Overall Quality Gate Status: In Process

**Documents**

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Central Change Control
of Transports in Solution Landscapes

SAP Solution Manager
Change Control

SAP Solution Manager Project

SAP Enterprise Portal

CTS Project

SAP ECC

Change 1
Transport Request 1
Transport Request 2

Change 2
Transport Request 3
Transport Request 4

Change 3
Transport Request 5
Transport Request 6
Transport Management
to reach 100% transparency of changes

- Central transport mechanism and change control
- Manage changes across the technology framework and application
- Every development workbench is integrated
Efficient Transport Best Practice

Cyclic Testing

- Repository objects are locked as long as possible in DEV
- Number of transports in production is reduced
- Transports of copies are periodically imported into QAS but do not follow the transport routes into following systems
- Only the original transports can reach production

Cross-System Object Lock (CSOL)

- Identify changes on the same objects in different projects
- Minimize risk of downgrades through different go-live dates of changes from different projects
**One source of truth** to avoid and manage risks of application changes in a project

- Identify the relationships and dependencies between different changes and associating changes with business requirements.
- Replace any spreadsheets used to track the application of changes to individual SAP systems within a central location.
- Risk avoidance and Risk reduction
- Tracking location of changes and the changes for your project which are affected by these errors.
- The quality manager can react to critical situations appropriately, and assess the project risk.
Risks for a Chosen Project

- Risk overview via Risks tab
Risks for a Chosen Project

- Risk visualized in the System Landscape Graphic
Project creation
Integration with Change Request Management

- Use Change Request Management in combination with Quality Gate Management
  - Define quality gates with QGM
  - Approve & control your changes with Change Request Management
Enhanced Change and Transport System to transport all kind of objects
Change Control of Transports in Solution Landscapes

Development Landscape
- Development Environment
- SE80
  - DS & DI
- SE80
  - DS & DI
- Portal Content Administrator
  - DS & DI
- SE80
  - Integration Builder

System
- mySAP ERP
- mySAP CRM
- Enterprise Portal
- Process Integration (PI)

Transport Landscape
- ERP
- CRM
- PI

QA Landscape
- System
- mySAP ERP
- mySAP CRM
- Enterprise Portal
- Process Integration (PI)

Production Landscape
- System
- mySAP ERP
- mySAP CRM
- Enterprise Portal
- Process Integration (PI)

Change Control
- SAP Solution Manager
SAP Quality Gate Management

SAP Quality Gate Management provides for all operational units across the various organizations of a company an integrated and consistent quality process. The SAP Quality Gate Management therefore ensures the full control of all software change processes.

- SAP Solution Manager provides a fast entry point to get a project and status overview for the different projects
- Central administration interface for all types of transports and system landscapes
- Integrates the various development workbenches into a central transport and change control system
- Synchronizes the software distribution in the different software stacks
- Synchronized changes to business processes which run in ABAP and Non-ABAP
- Control the quality of software changes by quality gates
Further Information

SAP Public Web:

SAP Quality Gate Management:
Central Note: 1509091
Thank You!