Customer Center of Expertise
Advanced Certification Guidelines
Structure of Material
Customer

January 2014
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1. Introduction

This Customer COE guideline describes the requirements and the content of the material to be provided for the Advanced Certification of your Customer COE. Additionally, this document provides best practice recommendations based on the input of successfully certified Advanced Customer COEs.


The certification process is started by ordering the Advanced Customer COE service. With the assignment of the Advanced Customer COE certification team, the responsible contacts are defined to answer questions on the requirements and content described in this document. During this phase of the certification, Customer COE and SAP team will stay in regular contact.

2. Scope of the certification

The Advanced Certification of your Customer COE provides the SAP confirmation of your successful implementation or transformation towards SAP’s Best Practices. The audit also documents the high maturity level of your Customer COE especially:

- Transparent and complete documentation of solutions, projects, operations handbooks and engagements within a single source of truth
- Integration of partner tools and roles with the end-to-end operations processes
- Continuous improvement of IT operations and projects driven by scorecards and using the KPI framework for definition and improvement documentation
- Central, top-issue resolution and reporting
- Central activity planning regarding tasks, services, issues, KPIs, and risks
- Establishment of all quality management roles by customer and partners, with skill levels of quality managers proven with individual certification
- Successful setup and operation of an Operation Control Center (OCC)

3. Documentation Guideline

To ensure a smooth process of preparation, SAP would like to define the required deliverables for each focus topics. These deliverables consist mainly from documentation, presentations, screenshots, and information material. The underlying idea is to optimize the review of the customer’s organization and processes as well as reduce the effort on customer side for preparation.

On customer demand SAP will provide a dedicated upload link in a secure area for customers to store their documentations. The uploaded material should be named and categorized in synchronization with the leading excel data sheet to link the material to the relevant section and simplify the review.

3.1 Documentation / Language Requirements

The required documentation to achieve the Advanced Certification of your Customer COE is based on material already used at the customer and describing the day-to-day operations. Therefore we do not recommend re-documenting or translating all material. There is a mandatory part of the material that needs to be in English language for the auditors to understand the big picture. Additionally some sections of the Advanced Customer COE topics are
based on collaboration with SAP and to be effective here, this documentation is needed in English anyway.
The sections required in English are marked specifically in the certification excel guideline.

3.2 Structure of Customer COE Certification Material

To have an efficient approach, SAP kindly asks to structure the material in the following way:
Step 1: Review the document and structure your material with the supporting excel data sheet.
Step 2: for each section, please note or comment, what specific areas of material are of relevance, e.g. customer overview is provided in customer_overview.pptx or customer_overview.pdf page 2 to 6.
Step 3: Upload your material to the provided storage location and document the corresponding filenames and linked chapters, sections and pages within the excel sheet. In case of questions, please get in touch with the SAP team.

4. Advanced Certification of your Customer COE

The structure of the Advanced Certification of your Customer COE is set up with five focus topics:

- Customer Overview
- Established IT Processes
- Customer COE
- Partner Integration
- Roles and Skills

4.1 Customer Overview

Organization and Teams:
Please provide an overview of the organizational setup of your company.
Please explain in detail the setup of your IT organization.

**Deliverables:**
Information provided shall contain information on departments, responsibilities, partners involved, also an overview on tasks of each IT department. This information is supported with org-charts, screenshots from portal information, etc.

Solution Landscape:
Please describe the solution landscape.

**Deliverables:**
Information provided shall contain information on system landscape and infrastructure, core business processes and tools and interfaces. SAP would highly recommend having this information stored in the SAP Solution Manager. This information is supported screenshots from SAP Solution Manager, portal information, etc.

Business' Vision and Strategy:
Please give a brief overview on the strategy of the business.
How is IT included into the business strategy?
How is the alignment between business and IT?
4.2 Established IT Processes
In general this focus topic underlines the CCOE setup and operational E2E Operation Standard adaption in all relevant areas.

Adaptation of Best Practices:
Please describe the implemented process for the following topics, following the best practices from SAP:

Incident Management & Exception Handling / Root Cause Analysis

Deliverables:
Information provided shall answer and describe in detail:
- Description of process
- Summary / Lessons Learned from last serious incident (explain situation, describe RCA activities, show example of the action plan, results)
- Technical KPIs
- Screenshots from message handling
- Examples for incident reporting

Tool Requirements for Incident Management & Exception Handling
Solution Manager and other tools are possible to pass the audit. Interfaces to SAP Solution Manager must exist. Routing to SAP is only possible with SAP Solution Manager / SAP Service Marketplace. Integration into other processes e.g. CHaRM and SST (SAP Solution Manager) is mandatory.

Tool Requirements for Root-Cause-Analysis
No alternatives to SAP Solution Manager Diagnostics / Wily are possible.
Monitoring (System Monitoring / End-user-Experience Monitoring / Business Process Monitoring)

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Alert Inbox Screenshot
- Screenshots EEM Overview
- Screenshots Business Process Monitoring for one solution
- Description of EWA analysis → procedure of usage

**Tool Requirements**
The use of the Monitoring and Alerting Infrastructure (MAI) is a mandatory requirement.

**System Monitoring**
Especially when partners are involved other tools cannot be excluded.
SAP Solution Manager is highly recommended to reduce efforts of integration, transparency and reporting. Integration into other processes and SST (SAP Solution Manager) is mandatory.

**End-user-Experience Monitoring**
No alternatives to SAP Solution Manager

**Business Process Monitoring**
No alternatives to SAP Solution Manager

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
A very good example in the End-user Experience Monitoring area was a SAP Solution Manager 7.1 based solution with mobile device connections for the key solutions given to business owners for instant performance review of their key revenue generator.

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Change Request Management (CHaRM)

**Deliverables**: Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Quality Gates Screenshot
- Change Reporting for Single Source of Truth – Example
- Examples of Change Advisory Board (CAB) decisions (Go/ NoGo)

**Tool Requirements**
SAP Solution Manager is highly recommended (to reduce efforts of integration, transparency and reporting) but other tools are possible to pass the audit.
Change impact analyzer usage in SAP Solution Manager is mandatory.
Integration into other processes and SST (SAP Solution Manager) is mandatory and difficult to obtain.

**Best Practices Experiences shared from already certified Advanced Customer COEs**: A very good example showed an End-to-End Change Request Management process with defined Quality Gates documented and agreed from the Quality-Gate-Board Meeting to ensure smooth project progress from phase to phase.

Change Management (Transport Management – CTS+)

**Deliverables**: Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Examples for handling of failed transports
- Example for Master release plan
- Protocol of release plan alignment
- Communication per release to all stakeholders / business impact

**Tool Requirements**
SAP Solution Manager is highly recommended (to reduce efforts of integration, transparency and reporting).
CTS+ is mandatory in case of JAVA.
Other tools are possible to pass the audit in pure ABAP landscapes.
Integration into other processes and SST (SAP Solution Manager) is difficult to implement but mandatory, e.g. integration to CHaRM and ITSM.
Data Consistency Management / Interface Management

**Tool Requirements**
No alternatives to SAP Solution Manager.
The use of the Monitoring and Alerting Infrastructure (MAI) is a mandatory requirement.

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
A very good example showed an End-to-End Change Request Management process with defined Quality Gates documented and agreed from the Quality-Gate-Board Meeting to ensure smooth project progress from phase to phase.

**Data Volume Management**

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Screenshots Data Consistency Work Center SAP Solution Manager
- Examples of interface monitoring / Alert Inbox

**Tool Requirements**
SAP Solution Manager is highly recommended (to reduce efforts of integration, transparency and reporting) but other tools are possible to pass the audit.
Integration into SST (SAP Solution Manager) is mandatory and difficult to obtain.

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
Customer reported a significant reduction of monitoring effort with the move from SAP Solution Manager 7.0 manual alerting to the Alert Inbox in SAP Solution Manager 7.1
Solution Documentation

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Screenshots of Business Process description in SAP Solution Manager
- System repository
- Custom Code documentation
- Change documentation examples
- Documentation standards

**Tool Requirements**
SAP Solution Manager is mandatory.
ARIS can be connected, but business processes and interfaces have to be documented in SAP Solution Manager e.g. as basis of Business Process Monitoring, Test Management, etc.
Project documentation with Quality Gates is mandatory as well.

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
Solution documentation to be created for at least one solution with all included business processes.

Supportability

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Screenshots of systems

**Tool Requirements**
No alternatives to SAP Solution Manager available.

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
Show the full process, from planning, organization, alignment with business and continuous execution of deletion and archiving activities to successfully avoid over spilling data volumes. Be efficient in minimizing the necessary resources for hardware, backup and storage.
**Job Scheduling Management**

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Examples for request
- Storyboard in ppt. / screenshots of request – schedule – monitor flow
- Example for escalation of job management

**Tool Requirements**
SAP Solution Manager is highly recommended (to reduce efforts of integration, transparency and reporting) but other tools are possible to pass the audit. Integration into other processes and SST (SAP Solution Manager) is mandatory and difficult to obtain, e.g. job monitoring (and alerting) must be in SAP Solution Manager.

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
The key success factor is process description and also a description of emergency process and examples this is working fine.
Custom Code Management

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Development standards
- Examples for custom code documentation
- Screenshots for Change Impact Analysis
- Examples for evaluation of modification necessity vs. standard code
- Examples for regular code reviews

**Tool Requirements**
SAP Solution Manager is mandatory.

*Best Practices Experiences shared from already certified Advanced Customer COEs:*
Show the usage of the custom-code services from SAP AGS. SAP Solution Manager offers SAP Code Inspector, SAP Clone Finder and SAP Custom Development Management Cockpit (CDMC).

Security

**Deliverables:**
Information provided shall answer and describe in detail:
- Authorization concept
- Examples for authorization request

**Tool Requirements**
Other tools are possible to pass the audit.
Integration into other processes and SST (SAP Solution Manager) is essential, e.g. Authorization documentation

*Best Practices Experiences shared from already certified Advanced Customer COEs:*
SAP authorization reports have been incorporated into a strategic approach of security being a companywide concept with definition of critical authorizations in SAP Systems and using GRC for a company authorization process.
System Administration

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Screenshots of system administration workbench

**Tool Requirements**
SAP Solution Manager is highly recommended. Especially when partners are involved other tools cannot be excluded. Integration into other processes and SST (SAP Solution Manager) is mandatory.

Test Management

**Deliverables:**
Information provided shall answer and describe in detail:
- Description of process
- Technical KPIs
- Examples of test concept, test plans, test reporting
- Examples of Test Q-Gates adherence

**Tool Requirements**
SAP Solution Manager is highly recommended (to reduce efforts of integration, transparency and reporting) but other tools are possible to pass the audit. Business Process Change Analyzer usage is mandatory. Integration into other processes and SST (SAP Solution Manager) is mandatory and difficult to obtain, e.g. test case integration into business process documentation and change impact analysis.
Operations Handbook:
Do you have an Operations Handbook for each of the above processes?

Deliverables:
The Operations Handbook (the collection of operational descriptions) shall contain:
- High-Level Process description
- Architecture (landscape and tools)
- Roles and organizations (teams, names, responsible)
- Authorizations
- Standards (e.g. naming conventions, documentation)
- Detailed Operations Process (all flavors)
  - Activities
  - Workflows
  - Exception resolution
  - Exception escalation process (path, roles)
  - Operations adjustment
- Operations Change Process
- Process Escalation
- Reporting
- Process KPIs
- QM Tasks and Activities

The information should be structured and following the standards explained above to ensure a complete overview on the E2E Operation Standards and to help the audit team to not lose valuable information provided by the Customer COE team.

Tool Requirements
No tool requirements.
4.3 Customer COE

All Quality Management Roles:

Deliverables:
- present their work areas in real situations, responsibilities
- show case studies, where the QM tasks are explained (and activities are shown)
- provide screenshots that prove the abilities for
  - Continuous improvement of IT operations and projects driven by balanced scorecards and using a KPI framework for definition and improvement documentation and adjustment of control center structures if needed.
  - Centralized ownership, resolution, and reporting of top issues, with quality managers acting as de-escalation architects to coordinate the required expertise from all involved parties.
  - Centralized activity planning for tasks, services, issues, and so on related to each KPI (also to optimize collaboration with the embedded SAP support team).
  - Usage of roadmaps for the implementation of operational standards.

Please note that with beginning of Q2/2014 all customers that apply for the Advanced Customer COE certification need to have SAP certified quality managers e.g. by attending the E2E060 training.

Quality Manager for Business Continuity

Deliverables:
- Provide guidelines, explanations and examples, how controlling KPIs are used to improve the overall setup.
- Describe how the established quality managers perform the following tasks:
  - Drive the implementation and continuous improvement of an Operations Control Center
  - Establish and optimize end-to-end operation standards for business process operations and application operations
  - Proactive prevention of poor business process performance
  - Continuous improvement of the business processes, automation and control
  - Performance and capacity management
  - Ensure efficient technical operation of complex landscapes
  - Efficient provision and use of the infrastructure
  - Drive IT infrastructure planning and integration of new infrastructure topics into the existing, end-to-end operations processes
Quality Manager for Protection of Investment

**Deliverables:**
- Provide guidelines, explanations and examples, how controlling KPIs are used to improve the overall setup.
- Describe how the established quality managers perform the following tasks:
  - Control proper maintenance of existing solutions
  - Ensure that business requirements resulting in a new project are efficiently deployed into the solution
  - Manage decisions about creating custom code versus using existing code
  - Ensure minimal downtime without disruption of existing business and IT processes for project Go-Lives.
  - Periodical review of the customer’s security concepts.
  - Ensure that the corresponding, end-to-end IT processes are established and improved continuously
  - Drive the implementation and continuous improvement of an implementation control center
  - Support the portfolio planning and master release planning
  - Drive continuous business requirements clarification

Quality Manager for Integration Validation

**Deliverables:**
- Provide guidelines, explanations and examples, how controlling KPIs are used to improve the overall setup.
- Describe how the established quality managers perform the following tasks:
  - Periodically perform technical risk assessments and risk mitigation
  - Ensure that SAP-defined solution, product, and operation standards are implemented and enforced
  - Support the deployment of new solutions by ensuring that all required experts are available in the control centers
  - Review, validate and optimize the end-to-end process standards for integration validation

Quality Manager for Business Process Improvement

**Deliverables:**
- Provide guidelines, explanations and examples, how controlling KPIs are used to improve the overall setup.
- Describe how the established quality managers perform the following tasks:
  - Close collaboration with business units to improve existing business processes and drive accelerated innovations
  - Identify on a continuous basis critical issues and requirements through the SAP Solution Management Assessment methodology
  - Implement continuous improvement projects based on the results of the risk assessments.
  - Verify the improvements of your risk mitigation projects periodically
  - Drive projects for fast value realization of business requirements by using the SAP Rapid Prototyping service or the value prototyping methodology

Operations Control Center Readiness

**Deliverables:**
Please show existing operations guidelines, day-to-day examples, definitions for operations, operations handbook, information on internal help portals, support portal area and explain
- How your Operations Control Center is established,
- How processes are executed, reported and monitored.
- Exception handling and crisis mode procedures.
- The collaboration with SAP Support and other partners.
- How you ensure a proper understanding of the current operational challenges
- How the technical KPIs for business processes and IT infrastructure get defined
- How central monitoring is used for alerting, monitoring, reporting and dashboards establishment
- Automation of monitoring and alert infrastructure
- How the continuous improvement process for the OCC processes is defined

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
Create an OCC according to SAP Support best practices and have dry-run a critical incident or an escalation situation to ensure the concept is crisis proven.
Single Source of Truth (Reporting and Documentation)

**Deliverables:**
- Reports for monitoring
- Issue reporting
- SLA / KPI fulfillment
- Q-Gates
- Documentation in SAP Solution Manager
- Partner Reports on SLAs, capacity and deliverables
- EWA reporting
- Please answer the following questions:
  - Are the core business processes documented?
  - Are the solution landscapes and production systems documented?
  - How is your top issue reporting defined?
  - Is quality gates management established?
  - Is project documentation performed?
  - Which KPIs & Scorecards are used?
  - How is SLA reporting executed and controlled?
  - How are change requests documented and tracked?
  - How is transparency on transports ensured?
  - Do you use an issue resolution database?
4.4 Partner Integration
The focus topic “Partner Integration” is only applicable if your Customer COE collaborates with partners (e.g. in a sourcing scenario). If your Customer COE is a completely customer owned organization without partner participation, this chapter is not relevant for the certification.

Deliverables:
- Examples how partners work in SAP Solution Manager of customer
- Tools with screenshots how partner tools are integrated into E2E processes
- Examples of usage of partner tools
- Definition of processes on partner side
- Real life examples, how collaboration is lived up.
- Describe how partners are integrated into the control centers
  - Tasks and responsibilities
  - Operations handbook integration
  - Partner skills and certificates

Best Practices Experiences shared from already certified Advanced Customer COEs:
Give guidance how your partners are involved in the IT operations. The main focus is to show seamless operations between the different operation units from partner and customer and how the collaboration is set up defined and jointly improved. Key element is to show that partners are actively involved and not just taken to execute repeatable work without any related alignment to the customer business and IT vision.
4.5 Roles and Skills
In the focus topic Roles and Skills the proper setup and training of the quality managers and the subject matter experts is verified.

**Deliverables for each Quality Manager role:**
- Description of the skills and training history of the quality managers
- Quality Manager certificates
- Explain percentage of QM activities to overall workload
- Show overview of persons, organizational assignment, tasks & responsibilities
- Describe how the roll-in of information on new technologies and products into the business and IT organization is performed

**Best Practices Experiences shared from already certified Advanced Customer COEs:**
The E2E060 Training is mandatory for each Quality Manager to pass the Advanced Customer COE certification.
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