



## Implementation Methodology

# System Administration Setup Operations

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## Table of Contents

|     |  |   |
|-----|--|---|
| 1   | Management Summary   | 3 |
| 1.1 | Overview of Current Methodology                                    | 3 |
| 1.2 | Run SAP Implementation Methodologies                               | 3 |
| 2   | Setup Operations   | 4 |
| 2.1 | Goal of the Setup Operations Phase                                 | 4 |
| 2.2 | Requirements and General Conditions for the Setup Operations Phase | 4 |
| 2.3 | Essential Resources for the Setup Operations Phase                 | 4 |
| 2.4 | Key Deliverables of the Setup Operations Phase                     | 4 |
| 2.5 | Steps to Implement Process   | 4 |
| 2.6 | Testing the Operational Process                                    | 5 |
| 2.7 | Preparation of the Support Organization                            | 5 |
| 2.8 | KPI Monitoring Setup   | 6 |
| 3   | Further Information  | 7 |
| 3.1 | Standard System Installation                                       | 7 |
| 3.2 | Recommended or Standard Processes of System Administration         | 7 |
| 3.3 | Standard System Configuration                                      | 8 |
| 3.4 | System Maintenance   | 8 |

## 1 Management Summary

### 1.1 Overview of Current Methodology

Managing complexity, risk, costs as well as skills and resources is the heart of implementing mission-critical support for SAP-centric solutions. To help customers manage their SAP-centric solutions, SAP provides a comprehensive set of *Standards for Solution Operations*.

The purpose of this phase is to implement *End-to-End Solution Operations* based on the plan created during the *Design* phase.

This implementation methodology should be regarded in conjunction with the implementation methodology for the *Design* and *Operations & Optimization* phases. Furthermore, all daily business administration tasks are described in the *Template* document. This can be used for defining administration processes and tasks.

### 1.2 Run SAP Implementation Methodologies

As IT landscapes grow and solutions become increasingly mission-critical, the cost of successfully operating an IT landscape becomes a key business issue. To optimize operations and to reduce cost SAP has harnessed its experience with thousands of customers and created:

- *SAP Standards for End-to-End Solution Operations* that span customers' mission-critical operations landscapes and aim at reducing the risk of failure and increasing the skill base
- *Run SAP*, a robust operational methodology that underpins these standards and complements SAP's implementation methodology AcceleratedSAP (ASAP)
- *SAP Enterprise Support*, a support offering that enables *SAP Standards for End-to-End Solution Operations* at lower total cost and across mission-critical support systems

## 2 Setup Operations

### 2.1 Goal of the Setup Operations Phase

The overall process goals are described in section 2.5.1 of the *Design Operations* document.

Based on the results of the *Design Operations* phase you now have to perform the roll-out of the new processes. Install the required technical infrastructure, e.g. *SAP Solution Manager*. Set up all defined and created scenarios, for instance, register new thresholds. Test the existing and the new operational processes: Do they work as designed? Are there errors? Have new interdependencies been uncovered?

Finally prepare the organization to deploy the new processes and tools.

### 2.2 Requirements and General Conditions for the Setup Operations Phase

The overall process requirements and conditions are described in sections 2.5.3 and 2.5.4 of the *Design Operations* document.

Before you start with the *Setup Operations* phase, make sure all deliverables of the *Design Operations* phase are available:

- Analysis of the existing processes, tools and possible interdependencies between new processes
- Blueprint document for the new processes and an efficient usage of the tools
- Test plan for the new operational processes

### 2.3 Essential Resources for the Setup Operations Phase

The overall process organization and roles are described in section 2.5.5 of the *Design Operations* document.

Before you start the *Setup Operations* phase, make sure you have all resources with the required skills in place. You will need in-depth technical knowledge of *SAP Solution Manager* and other tools that will be used by the operations processes.

Furthermore, you will need a test coordinator and testers to perform the testing activities, and resources with skills in organizational change management in order to prepare the organization to deploy the new processes and tools.

### 2.4 Key Deliverables of the Setup Operations Phase

The overall process output is described in section 2.5.8 of the *Design Operations* document.

After successful completion of the *Setup Operations* phase you should have finished and tested the installation of the required technical infrastructure including the setup of all defined scenarios.

The support organization is now ready to manage the solution.

### 2.5 Steps to Implement Process

The implementation or setup of central *System Administration* consists of:

- The initial setup
- The continuous optimization of initial settings

Requirements for a successful setup are:

- *SAP Solution Manager* is implemented and available for central administration and monitoring.
- The system landscape is entered in an SAP System Landscape Directory (SLD). From there, the landscape data will be transferred into the repository of *SAP Solution Manager* (SMSY).

In the initial setup phase, the following activities must be addressed:

1. Configure central system monitoring: The CCMS monitoring infrastructure provides an overview screen of the systems that are available and maintainable.
2. Configure central system administration.
3. Configure the DBACOCKPIT in *SAP Solution Manager*.
4. Configure *Printing Assistant for Landscape* (PAL) in *SAP Solution Manager*.

## 2.6 Testing the Operational Process

The *Final Testing* contains two different test categories, the infrastructural tests and the tests of the operations processes. These tests ensure the coverage of the service level agreements (SLAs) and the requirements of IT operations. All tests must be run successfully and documented in a protocol.

The operations requirements of the solution must be known to IT operations. These requirements are defined and described in the *Operations Handbook*. Access to the productive systems must be ensured.

The goal of *Final Testing* is to create a protocol that documents the successful operation.

The following tests should be performed:

1. Backup and recovery test
2. Failover test
3. Infrastructure test (network and hardware)
4. Monitoring and alerting test
5. Application stability test
6. High availability check
7. Operational processes (*Incident Management, Change Management*)
8. Downtime management (planned and unplanned downtimes)

As a result of *Final Testing*, all tests must have been performed successfully in the opinion of IT operations. The corresponding *Test Protocols* document the results. The solution can be set live when the tests have been successfully completed.

## 2.7 Preparation of the Support Organization

To ensure that the support organization is able to manage the SAP solution and that all the processes and tools required are in place and have been tested, further preparation steps are needed.

This is a *phase gate*, to ensure that the operations of the solution have been implemented and tested. In this phase, you have to prove and check the requirements to run the application, for example, SLAs, performance of the business processes and systems, integration, and so on.

Once the solution is implemented, you have to hand over the support and operations of the application from the project team to the support organization.

Depending on your situation, the handover can take place at different stages of a project. There are two basic scenarios:

### **Operations are handed over *at go-live***

The project team leaves when the implementation goes live. This means that you have to start the handover procedure when there is still sufficient time before the project team leaves, to ensure that it is completed at go-live.

### **Operations are handed over *after go-live***

The project team remains and provides support for a defined time after the go-live. This means that the handover can start at or after go-live and finishes when the project team leaves.

You need to verify that all relevant support operation procedures and all relevant documentation are successfully handed over to the solution support organization. This takes place in the run-up to the intended handover, in general, several weeks before.

Once the handover is finished, you need to verify the sign-off of the handover of systems, applications, interfaces and customer developments. Thus you ensure that all steps of the handover plan were successfully executed and that the solution support organization has taken over the responsibility.

## **2.8 KPI Monitoring Setup**

The quality of the *System Administration* platform concerning the fulfillment of IT and business solution requirements can be checked and monitored by implementing KPIs.

Implement the KPI monitoring defined in the *Design Operations* phase with all defined thresholds, alerting and notification functions (e-mail, incident), and escalation procedures, too. The implementation of the KPI monitoring requires that *SAP Solution Manager* is available and that a CCMS agent is implemented on all objects to be monitored. After implementing KPI monitoring, the KPI reporting can be set up.

For detailed information regarding the setup of KPI monitoring and reporting, see the *Setup System Monitoring* document.

## 3 Further Information

### 3.1 Standard System Installation

| Link  | Description  |
|---|--|
| <a href="#">Product Availability Matrix</a>       | The <i>Product Availability Matrix</i> (PAM) bundles technical and release planning information on SAP product versions for quick reference. You will find information on the availability of SAP product versions, maintenance end dates and upgrade paths, as well as technical release information (DB platforms, JSE platforms, operating systems, etc.) |
| <a href="#">Installation Guide: SAP NetWeaver</a> | The installation guide contains all information needed for the preparation and the execution of the <i>SAP NetWeaver</i> installation and can be accessed under the tab page <i>Installation &amp; upgrade guide</i> .   |

### 3.2 Recommended or Standard Processes of System Administration

| Link   | Description   |
|--|---|
| General <a href="#">Administration</a> tasks                               | This section contains general administration tasks as an overview, needed for administrating all SAP systems.   |
| <a href="#">Administration of SAP NetWeaver Systems</a>                    | This section contains the usage type-specific administration tasks for <i>SAP NetWeaver</i> systems.  |
| <a href="#">Administration of Standalone Engines</a>                       | This section contains the administration tasks for additional installable entities that function "standalone", and which are not really <i>SAP NetWeaver</i> systems (e.g. <i>TREX</i> , <i>SAP Web Dispatcher</i> ).   |
| <a href="#">Administration of SAP NetWeaver IT Scenarios</a>               | This section contains administration information that is specific to the individual IT scenarios.   |
| <a href="#">Work Center system administration</a>                          | Here, the usage and functions of the <i>Work Center</i> as central point for access and viewing the monitoring of the systems is described.   |
| <a href="#">Help-Portal: Technical Operations Manual for SAP NetWeaver</a> | The link provides a starting point for administrators in procedures for the optimal operation and use of <i>SAP NetWeaver</i> . It contains specific information for various administration tasks, and lists the tools that you can use to perform them. It also refers to documentation required for these tasks. You can use this guide only in connection with other guides such as the <i>Master Guide</i> , and the <i>SAP Library</i> . |

## 3.3 Standard System Configuration

| Link  | Description   |
|---|---|
| <a href="#">Solution Manager</a>              | With this link, you can access all documentation (release notes, installation & configuration guides) about <i>SAP Solution Manager</i> . |
| <a href="#">Technology Consultant's Guide</a> | This chapter guides you in configuring an <i>SAP NetWeaver</i> installation so that it works most effectively with your IT scenario.      |

## 3.4 System Maintenance

| Link  | Description   |
|---|---|
| <a href="#">Support Package Stack Information</a> | Here, the latest Support Package Stack Information can be found, necessary to evaluate and plan a support package update.   |
| <a href="#">SAP System Landscape Optimization</a> | If you plan to optimize the TCO of your SAP landscape or want to make a major organizational change, which mostly results in running an IT landscape consolidation or process optimization, the SAP SLO group can deliver a number of services starting from analysis, preparation and execution (conversion and migration services) to a complete successful system consolidation. Information about the SAP SLO service offerings are described here. |