

Instructor Notes:

Add instructor notes
here.

SAP Basis Part- III

SAP Solution Manager- Operations

Instructor Notes:

Solution Manager

Lesson 00:

IGATE is now a part of Capgemini

People matter, results count.



©2016 Capgemini. All rights reserved.
The information contained in this document is proprietary and confidential. For Capgemini only.

Instructor Notes:

Add instructor notes here.

Course Goals

This course will prepare you to:

- Understand SAP Solution Manager Service Offerings
- Understand SAP Solution Manager Landscape
- Understand basic concepts of SAP Solution Manager Sizing, Installation and Upgrade
- Understand SLD, LMDB, LV
- Understand SAP Solution Manager Administration Work Center



Instructor Notes:

Add instructor notes here.

Course Objectives

After completing this course, you will be able to:

- Understand SAP Solution Manager Service Offerings
- Understand SAP Solution Manager Landscape
- Understand basic concepts of SAP Solution Manager Sizing, Installation and Upgrade
- Understand SLD, LMDB, LV
- Understand SAP Solution Manager Administration Work Center

Instructor Notes:

Intended Audience

- Consultants new to SAP Technology



Instructor Notes:

Day Wise Schedule

- Day 1: The SAP Solution Manager Environment
SAP Solution Manager System Landscape
- Day 2: SAP Solution Manager Sizing, Installation, and Upgrade
- Day 3: Management of System Data in the SAP Solution Manager System Landscape (SLD, LMDB and LV)
- Day 4: The SAP Solution Manager Administration Work Center

Instructor Notes:

Lesson 1: The SAP Solution Manager Environment

■ Lesson Objectives:

After completing this lesson, you will be able to:

- Choose the SAP Support level you need for your business

Instructor Notes:

Add instructor notes here.

Making Use of SAP Support Offerings

- **SAP Standard Support** is reactive, and ensures a customers business continuity
 - The focus is on technical risk mitigation, comprising:
 - 24x7 incident support, including SAP Notes and Support Packages
 - Standard system health checks (SAP GoingLive Check, SAP EarlyWatch Check, SAP GoingLive Functional Upgrade Check, and SAP OS/DB Migration Check)
 - Service and Support Report as self-service
 - Knowledge database via SAP Service Marketplace



Copyright © Capgemini 2016. All Rights Reserved 8

Add the notes here.

Instructor Notes:

Add instructor notes here.

Making Use of SAP Support Offerings (2)

- **SAP Enterprise Support** goes beyond the standard support, adding the proactive view with:
 - Improvement of business user productivity: Business Process
 - Analysis/Monitoring and continuous quality checks (CQCs).
 - Improvement of business processes: End-to-end operations standards, custom code reduction, Custom Code Management Cockpit, and Business Process Change Analyzer.
 - Improvement of IT operational efficiencies: Run SAP/infrastructure operations standards, end-to-end solution application lifecycle management enablement, and Quality Gate Management.
 - Use of integrated SAP IT EGI sessions and operational scenarios



Copyright © Capgemini 2016. All Rights Reserved 9

Add the notes here.

Instructor Notes:

Add instructor notes here.

Making Use of SAP Support Offerings (3)

■ SAP MaxAttention

- Offers technical account management for the entire life cycle of your solution
- Ensures increased uptime, enhanced performance, greater data consistency, and improved maintainability to lower your company's TCO
- SAP MaxAttention mitigates the technical risk of implementation, upgrade, and operations



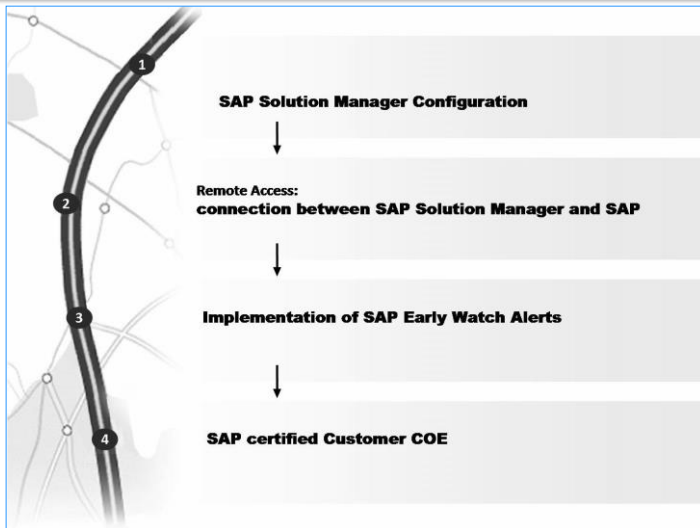
Copyright © Capgemini 2016. All Rights Reserved 10

Add the notes here.

Instructor Notes:

Add instructor notes here.

Roadmap for Enterprise Support Readiness



Add the notes here.

Instructor Notes:

Steps to Follow:

- Install, configure, and use SAP Solution Manager, enterprise edition
- Provide and maintain remote access
- Activate SAP EarlyWatchAlert for the production systems
- Establish and maintain an SAP certified Customer COE
- Maintain adequate and current records of all modifications

Instructor Notes:

Lesson Summary:

- You should now be able to:
 - Choose the SAP Support level you need for your business

Instructor Notes:

Lesson 2: Application Lifecycle Management with SAP Solution Manager

■ Lesson Objectives:

After completing this lesson, you will be able to:

- Plan Application Lifecycle Management with the help of SAP Solution Manager

Instructor Notes:

Add instructor notes here.

Application Lifecycle Management with SAP Solution Manager

The diagram illustrates the Application Lifecycle Management (ALM) process using SAP Solution Manager. It is divided into two main sections: 'Run SAP like a Factory' on the left and 'Application Lifecycle Management' on the right. The 'Run SAP like a Factory' section includes 'Incident, Problem & Request Management', 'Business Process Operations', 'Application Operations', and 'Maintenance Optimization & Security'. The 'Application Lifecycle Management' section includes 'Portfolio & Project Management', 'Solution Documentation & Implementation', and 'Change, Test & Release Management'. A central circular flow represents the 'Single Source of Truth' with stages: Requirements, Design, Build & Test, Deploy, Operate, and Optimize. Arrows indicate the flow between these stages and between the two main sections. A large arrow at the bottom points from 'Maintenance Optimization & Security' to 'Integration Validation'.

Run SAP like a Factory

Application Lifecycle Management

Incident, Problem & Request Management

Portfolio & Project Management

Business Process Operations

Solution Documentation & Implementation

Application Operations

Change, Test & Release Management

Maintenance Optimization & Security

Integration Validation

Single Source of Truth

Requirements

Design

Build & Test

Deploy

Operate

Optimize

Capgemini

CONSULTING TECHNOLOGY OUTSOURCING

Copyright © Capgemini 2016. All Rights Reserved 15

Add the notes here.

Instructor Notes:

Add instructor notes here.

Application Lifecycle Management with SAP Solution Manager (2)

- **The application management lifecycle has six phases:**

- **Requirements:** Collect requirements for new applications or to adapt existing applications
- **Design:** Convert requirements into detailed specifications
- **Build and Test:** Configure the application and create an operating model according to specifications
- **Deploy:** Transfer changes and the operating model to the existing live IT landscape
- **Operate:** Provide IT services for ongoing operations.
- **Optimize:** Analyze service-level fulfillment and perform any activities required to improve results



Copyright © Capgemini 2016. All Rights Reserved 16

Add the notes here.

Instructor Notes:

Dealing with Projects and Solutions

- Document the solution, including customer code
- Innovation management
- Solution configuration
- Test management
- Deployment of solution updates
- Technical operations
- Business process operations
- Incident and Problem Management
- IT reporting
- SAP solution maintenance
- Improvements of solutions
- Upgrade process

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Plan Application Lifecycle Management with the help of SAP Solution Manager

Instructor Notes:

Lesson 3: SAP Solution Manager Authorization Concept

▪ Lesson Objectives:

After completing this lesson, you will be able to:

- Discuss the authorizations and roles for SAP Solution Manager

Instructor Notes:

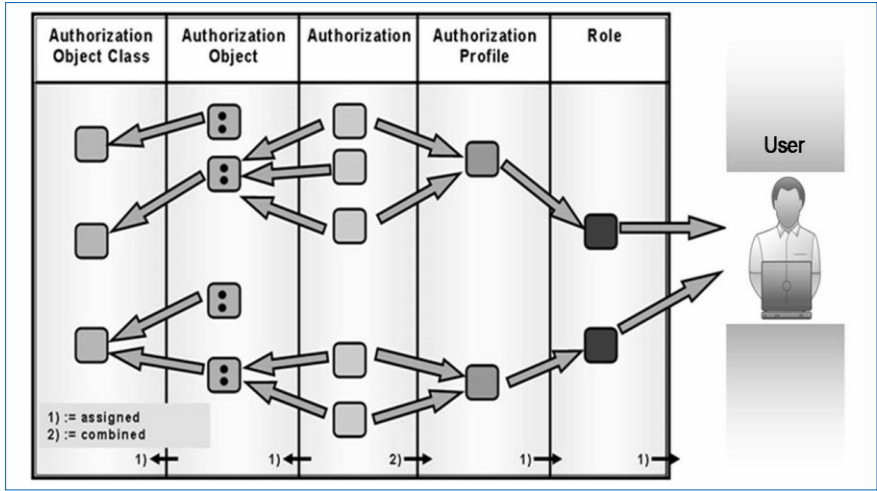
Matrix of authorizations and roles for SAP Solution Manager

- Identify which functions of SAP Solution Manager scenarios you use
- Create a menu matrix according to these functions
- Identify your roles
- Populate your menu matrix
- Create your roles from SAP template roles. Use a unique naming convention
- Maintain your roles
- Test your roles

Instructor Notes:

Add instructor notes here.

SAP Solution Manager Authorization Concept



Add the notes here.

Instructor Notes:

Authorization Concept


- SAP Solution Manager uses the authorizations provided by SAP NetWeaver
- SAP NetWeaver authorization concept is based on assigning authorizations to users based on roles
- RFC connections between SAP Solution Manager and the satellite systems are needed for monitoring and incident analysis

Instructor Notes:

Add instructor notes here.

Single Roles, Scenarios and Composite Roles

		Scenario (Composite Role *COMP)		
		Job Management	Maintenance Optimizer	...
Single Role (Function Group)	Business Roles			
	Technical Roles			
	CRM Roles			
	Reporting Roles (BW)			



Capgemini
CONSULTING TECHNOLOGY GETTING BETTER

Copyright © Capgemini 2016. All Rights Reserved

23

Add the notes here.

Instructor Notes:

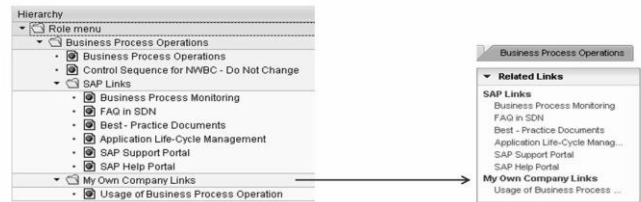
Add instructor notes here.

Navigation Roles and Transaction SOLMAN_WORKCENTER

- 1 The sequence of the Navigation Roles (SAP_SMWORK_[work_center]) in the Roles tab of the User Maintenance (SU01) defines the sequence shown in transaction SM_WOKRCENTER.



- 2 The Role menu in the Navigation Roles (SAP_SMWORK_[work_center]) maintained in transaction Role Maintenance (PFCG) defines the links shown in the Work Center Related Links section.



Add the notes here.

Instructor Notes:

Add instructor notes here.

Default User within SAP Solution Manager System

User Name	Usage
SOLMAN_ADMIN	Configuration of the basic settings of SAP Solution Manager. Update of the configuration of the basic settings of SAP Solution Manager Administration of SAP Solution Manager.
SMD_ADM	Connect the Diagnostics Agent to your SAP Solution Manager Java Stack during system preparation.
SOLMAN_BTC	During system preparation, you create this technical user to run all batch jobs in the SAP Solution Manager system. See also SAP Note 1314587.
SAPSUPPORT	Read user for Root Cause Analysis. The system automatically creates this user in the SAP Solution Manager system, the managed systems, and the BW client/system.
SAP_WEBSERV	This technical user is used for the BMC Appsign License Check Service in the Internet Communication Framework (ICF).
CONTENTSERV	This technical user is used for services in the ICF.
SM_EXTERN_WS	To ease support (user tracing) and a potential user locking, this technical user is used.
SM_INTERN_WS	Used for internal Web services communication between the ABAP and Java stack of SAP Solution Manager
SMD_RFC	For communication between Root Cause Analysis/Java and SAP Solution Manager /ABAP. This user is also used to run the Job Extractor Resource Manager Framework.
SMB_[SID managedsystem]	The technical user is used for the BACK-RFC connection from the managed system to the SAP Solution Manager system. It is created during managed system setup.

Add the notes here.

Instructor Notes:

Lab 1: Add Administrator Roles

- Exercise Duration: 15 Minutes
- Exercise Objectives:
After completing this exercise, you will be able to:
 - Add composite roles to your system user for using the SAP Solution Manager work center
- Business Example:
 - You want to have authorization to configure and use SAP Solution Manager work centers

Instructor Notes:

Task

1. Log on to the SAP Solution Manager System and call the user management
2. Assign the composite roles for the work centers we need during the course:

SAP Engagement and Service Delivery, SAP Solution Manager Administration, Technical Monitoring, Technical Administration, Job Management, Change Management, Change Request Management, End-User Experience Monitoring, Data Volume Management, and Configuration Validation

Instructor Notes:

Solution 1: Add Administrator Roles (1)

- Log on to the SAP Solution Manager system with your system user. Your instructor will provide the system data and the credentials
- 1. Log on to the SAP Solution Manager System and call the user management
 - a) Log on to the SAP Solution Manager system with your system user <CourseID>--<GroupNumber>.
 - b) Call transaction SU01 and open your user, <CourseID>--<GroupNumber>, in change mode
- 2. Assign the composite roles for the work centers we need during the course: SAP Engagement and Service Delivery, SAP Solution Manager Administration, Technical Monitoring, Technical Administration, Job Management, Change Management, Change Request Management, End-User Experience Monitoring, Data Volume Management, and Configuration Validation.

Instructor Notes:

Add Administrator Roles (2)

- Switch to transaction SU01 and open your user, <CourseID>-<GroupNumber>, in change mode.
- Click into an empty field and open the field help (F4). Switch to the Composite Role tab, enter SAP*COMP in the input field, and use the value help to open the list with the available work center roles. Sort the result by name to find it easier. Select the following composite roles:

Instructor Notes:

Add Administrator Roles (3)

- SAP_BP_OPERATIONS_ADMIN_COMP
 - SAP_CM_ADMINISTRATOR_COMP
 - SAP_CV_ADMIN_COMP
 - SAP_DVM_ADMIN_COMP
 - SAP_EEM_L2_COMP
 - SAP_ISSUE_MANAGEMENT_ALL_COMP
 - SAP_ITMO_L2_COMP
 - SAP_JOBMAN_ALL_COMP
 - SAP_MAINT_ADMIN_COMP
 - SAP_PIM_L2_COMP
 - SAP_QGM_ADMIN_COMP
 - SAP_RCA_EXE_COMP
 - SAP_SERV_DELIVERY_COMP
 - SAP_SM_BI_ITSM_ADMIN_COMP
 - SAP_SM_CONF_COMP
 - SAP_SMWORK_ADMINISTRATOR_COMP
 - SAP_SMWORK_BASICCONF_COMP
 - SAP_SODOCA_ALL_COMP
 - SAP_SOL_PM_COMP
 - SAP_SOLMAN_ADMIN_COMP
-
- Assign the composite roles to your user and save



Instructor Notes:

Lesson Summary:

- You should now be able to:
 - Discuss the authorizations and roles for SAP Solution Manager

Instructor Notes:

Lesson 4: The SAP Solution Manager System Landscape

- **Lesson Objectives:**

- After completing this lesson, you will be able to:

- Design your system landscape with SAP Solution Manager, managed systems, and additional infrastructure components

Instructor Notes:

The SAP Solution Manager System Landscape

- To gain the benefit of tight functional integration, it is recommend to run all scenarios on the same SAP Solution Manager system
 - It is best to have all solution information (systems, business processes) as well as messages (incidents, issues, change requests) accessible to the entire support organization for efficient management of the production solutions
-
- Single-System Landscape
 - Two-system landscape
 - Three-system landscape



Instructor Notes:

Number of Solution Manager Systems

How many SAP Solution Manager systems are needed?

- **Depending on the SAP Solution Manager systems landscape**
 - Single-system landscape
 - Two-system landscape
 - Three-system landscape (*recommendation*)
- **Depending on the running scenarios in SAP Solution Manager system**
 - Running all scenarios in the same SAP Solution Manager (*recommendation*)
 - **Exception: Multiple productive SAP Solution Manager systems are used for full segregation of business units**

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Design your system landscape with SAP Solution Manager, managed systems, and additional infrastructure components

Instructor Notes:

Lesson 5: The Agent Infrastructure of the SAP Solution Manager System Landscape

▪ **Lesson Objectives**

- After completing this lesson, you will be able to:
 - Plan the agent infrastructure for the SAP Solution Manager system landscape
 - Knowing update procedures for the different components and agents

Instructor Notes:

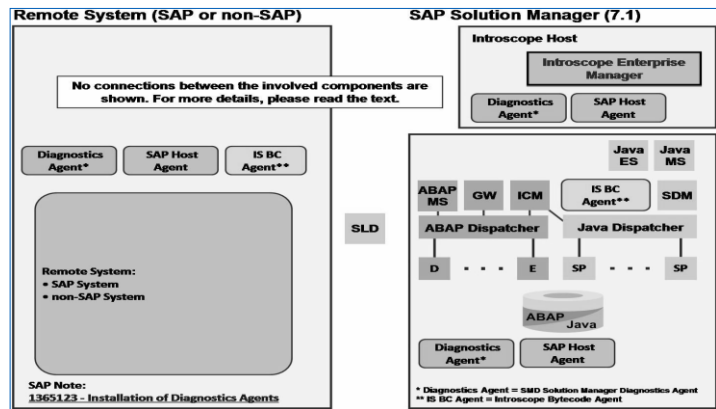
Types of Agents

- In general different types of agents are installed on the managed systems:
 - SAP Host Agents running at managed host
 - Diagnostics agents running at the host level of the managed systems
 - Introscope Bytecode agents running at the SAP J2EE instances of the managed systems

Instructor Notes:

Add instructor notes here.

SAP Solution Manager Architecture and Landscape



Add the notes here.

Instructor Notes:

The Agent Infrastructure of the SAP Solution Manager System Landscape

Managed System Components (Agents)

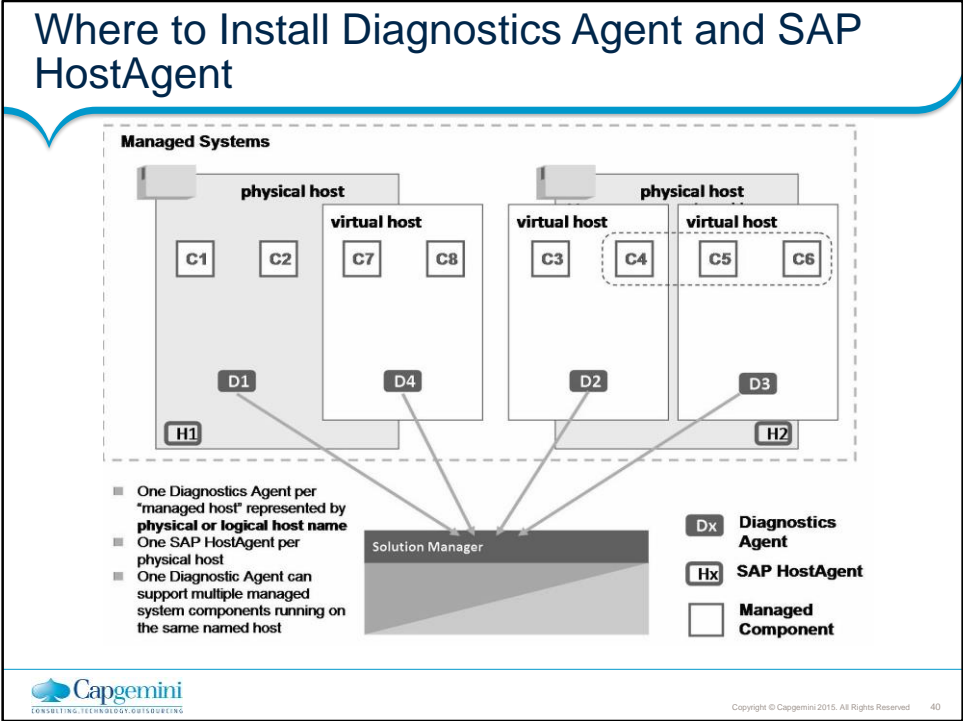
SAP Diagnostics Agents

- Installed on a logical host name level
- Belongs logically to the Solution Manager and is patched centrally from SolMan
- Used to collect data in the context of managed components
- Contains Introscope Host Adapter for sending data to Introscope Enterprise Manager

SAP Host Agent

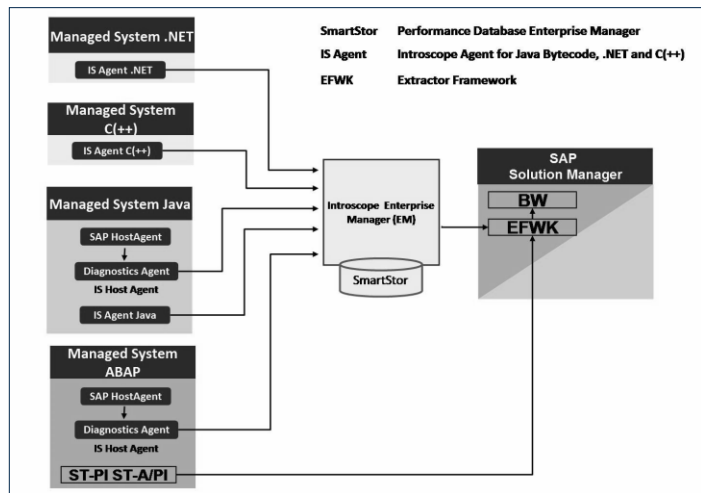
- Installed on a host level (physical or virtual – where the operating system is running)
- Replacement of SAPOSCOL
- Used to collect host and operating system data
- Used for outside discovery

Instructor Notes:



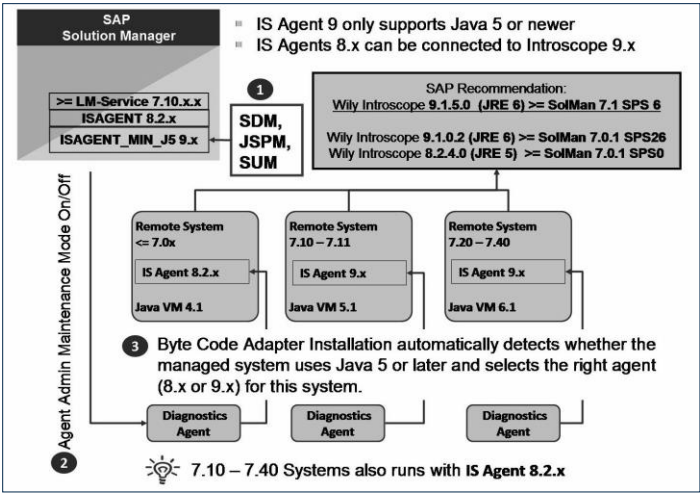
Instructor Notes:

Monitoring Data Flow



Instructor Notes:

Wily Introscope Version and Introscope Bytecode Adapter (IS Agent) usage



Instructor Notes:

Lesson 6: SAP Solution Manager Sizing, Installation, and Upgrade

▪ **Lesson Objectives**

- After completing this lesson, you will be able to:
- Understand the main factors that influence sizing

Instructor Notes:

Sizing Considerations for SAP Solution Manager

- Main factors that influence sizing:
 - a. Scenarios implemented in SAP Solution Manager
 - b. Number and role of concurrent users connecting to Solution Manager
 - c. Solution landscape (managed systems)
 - Number of systems
 - Size of systems/system category (in t-shirt size)
 - Product used on the system

Instructor Notes:

User Categories and Scenarios

User Activity	Description
Low User	user processes, on average, 10 interaction steps an hour, or one every six minutes.
Medium User	processes, on average, 120 interaction steps an hour, or one every 30 seconds. Most users will have a comparable profile.
High User	processes an average of 360 interaction steps an hour, or one every 10 seconds. This is typical for power users working in call centers or doing data entry.

Scenario	Kind of Information
Service Desk	Number of Low, Medium and High Users. Working Days
ChaRM	Number of Low, Medium and High Users. Working Days
Implementation	Number of Low, Medium and High Users. Working Days
Solution Documentation	Number of Business Processes
Business Process Monitoring	Number of Business Processes
End-User Experience Monitoring	Number of Robots

Instructor Notes:

Landscape: Load per System

Product	Number of Systems
ECC, CRM, MDM, TREX etc.	Number of Systems used in the landscape

Load per System	Description
M	Development system, NON-Production System.
L	Production System with medium volume of users, transactions.
XL	Production System with large volume of users, transactions.
XXL	Production System with extra large volume of users, transactions.

Instructor Notes:

Impact on Managed Systems

Impact on Managed Systems	
Disk (MB)	Diagnostics Agent 7.1X: 500 MB per Host (or Virtual Host) where an Diagnostics Agent is installed. Diagnostics Agent 7.3x: 200 MB per Host (or Virtual Host) where an Diagnostics Agent is installed.
Memory (MB)	256 MB in AIX environment or 128 MB for other environments per Host (or Virtual Host) where an Diagnostics Agent is installed.
Network	3% usage for a 100Mbit/s Network bandwidth.
CPU	5% CPU average increase per Host (or Virtual Host) belonging to the Managed Systems.

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Understand the main factors that influence sizing

Instructor Notes:

Lesson 7 : Installation of a SAP Solution Manager System

■ Lesson Objectives

- After completing this lesson, you will be able to:
 - Understand the components that make up an SAP Solution Manager system

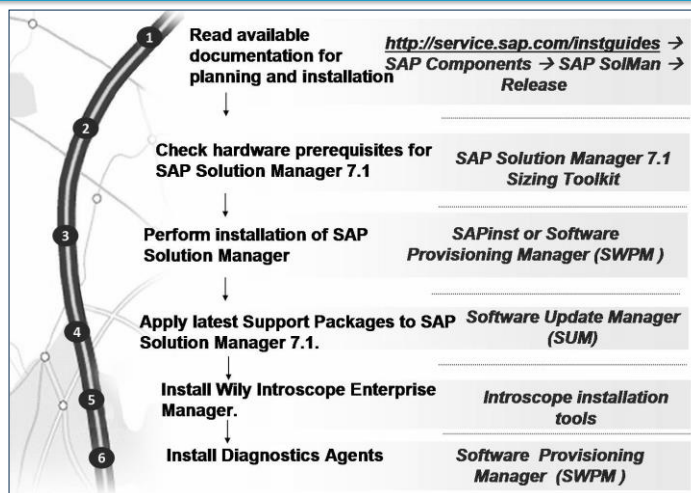
Instructor Notes:

Installation of a SAP Solution Manager System

- You can find the following documents, which should be read before and during an installation, on the SAP Service Marketplace:
 - Master Guide for SAP Solution Manager
 - Media List SAP Solution Manager
 - Installation SAP Solution Manager OS - DB
 - Wily Installation Guide
 - Setup Guide Landscape Management Database

Instructor Notes:

Installation of a SAP Solution Manager System



SAP Solution Manager Installation Sequence

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Understand the components that make up an SAP Solution Manager system

Instructor Notes:

Lesson 8: Upgrade of a SAP Solution Manager System

■ Lesson Objectives

- After completing this lesson, you will be able to:
 - Describe the procedure to upgrade an SAP Solution Manager system

Instructor Notes:

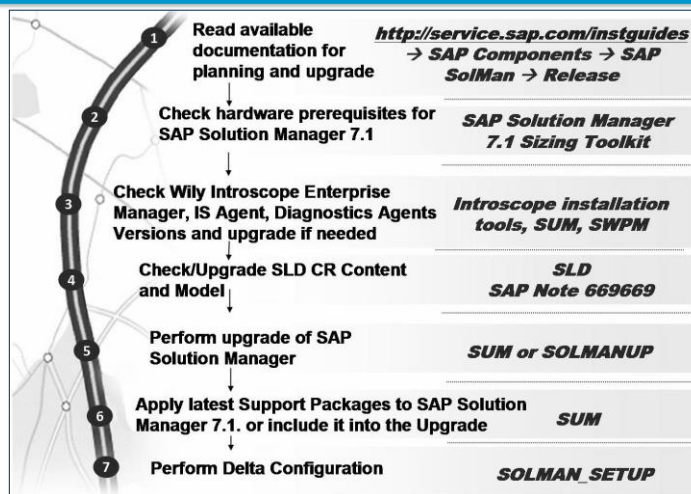
Upgrade of a SAP Solution Manager System

In general, an upgrade happens in two big steps:

1. The technical upgrade, which is simply switching the release without touching any application-configuration
2. The post-processing/delta configuration, where the new functionality is enabled In the case of SAP Solution Manager, some scenarios have enhancements (for example, ITSM/Service Desk, Change Request Management) which can, depending on the current configuration, make the post-processing quite complex. It is therefore crucial to plan the configuration ahead of time and reserve enough time and manpower to handle the tasks involved

Instructor Notes:

Upgrade of a SAP Solution Manager System

**SAP Solution Manager Upgrade Sequence (Main Steps)**

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Describe the procedure to upgrade an SAP Solution Manager system

Instructor Notes:

Lesson 9: Functions and Consumers of the System Landscape Directory (SLD)

■ Lesson Objectives

- After completing this lesson, you will be able to:
 - Explain the concept and possible data consumers of the System Landscape Directory (SLD)
 - Explain the component information model and connecting systems
 - Understand SLD topology and help decide where to run the SLD

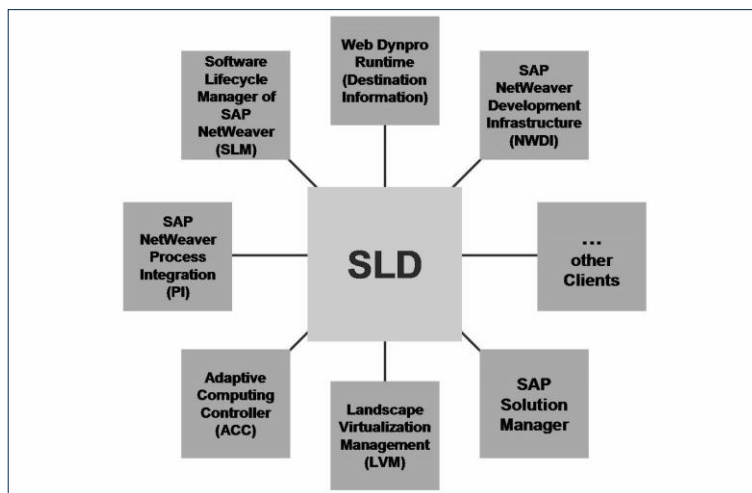
Instructor Notes:

System Landscape Directory (SLD)

- The aim of SLD is to have one central information instance that contains:
 - The description of your system landscape (that is, the software components that are currently installed)
 - The repository of software components that can theoretically be installed in your landscape (such as the software components available from SAP, as well as customer-defined components)
 - A name reservation service (also known as name server) to enable a conflict free way to create names for software objects

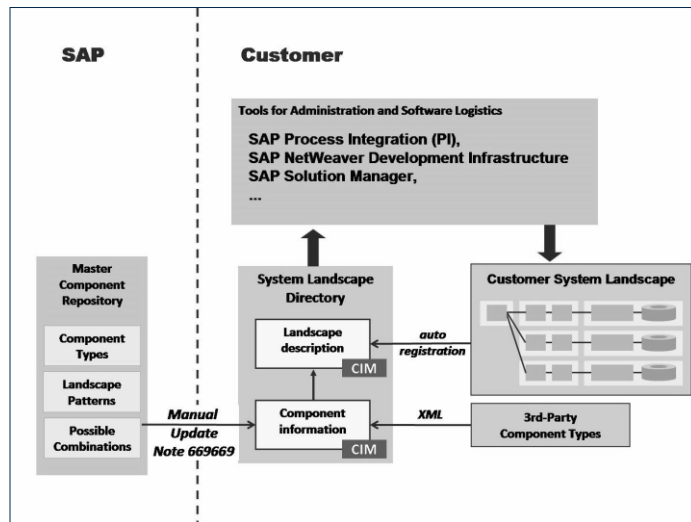
Instructor Notes:

SLD: Data Consumers



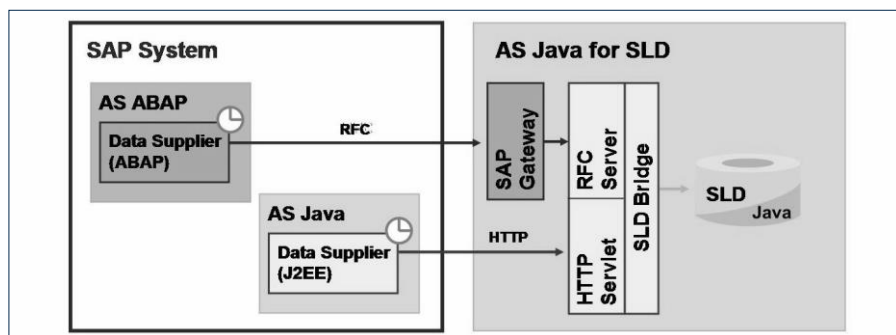
Instructor Notes:

SLD Landscape Handling CIM



Instructor Notes:

SLD Data Suppliers



Instructor Notes:

Exercise 2: Functions and Consumers of the System Landscape Directory (SLD)

■ **Exercise Objectives**

■ After completing this exercise, you will be able to:

- Handle administration tasks within the System Landscape Directory (SLD)

■ **Business Example**

- In this exercise you check the configuration of the System Landscape Directory (SLD)

Instructor Notes:**Task:**

- Handle administration tasks within the System Landscape Directory (SLD). You check the CR Content version implemented to the SLD and the gateway information which has been stored.

To make sure the information stored in the SLD could also be make available for the LMDB.

- Log on to the System Landscape Directory on the SAP Solution Manager
- Which CR Content version is available in SLD?
- Which gateway information is stored in the SLD?

Instructor Notes:**Solution 2:****(1)**

1. Log on to the System Landscape Directory on the SAP Solution Manager

a) Open a browser and enter the URL:

`http://<servername>.wdf.sap.corp:5<InstanceNumber>00/sld`

b) Enter your user <CourseName>-<GroupNumber> and enter your production password

2. Which CR Content version is available in SLD?

a) In the top navigation choose Administration

b) In the content area choose "Details"

c) Switch to the tab "Data"

d) Write down the "Model Version (sld/active)": _____

e) Write down the "SAP CR Content Version (sld/active)": _____

Instructor Notes:**Solution 2:****(2)**

3. Which gateway information is stored in the SLD?

- a) In the top navigation choose Administration
- b) Choose Profile
- c) Change the section field to datasupplier
- d) Enter the field value of the field GatewayHost: _____
- e) Enter the field value of the field GatewayService:

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Explain the concept and possible data consumers of the System Landscape Directory (SLD)
 - Explain the component information model and connecting systems
 - Understand SLD topology and help decide where to run the SLD

Instructor Notes:

lesson 10: Synchronize Data to the Landscape Management Database (LMDB)

▪ Lesson Objectives

- After completing this lesson, you will be able to:
- Describe the definition, installation, and customizing of the Landscape Management Database (LMDB)
- Understand the available LMDB scenarios and how to integrate them
- Explain different synchronization methods between System Landscape Directory (SLD) and LMDB

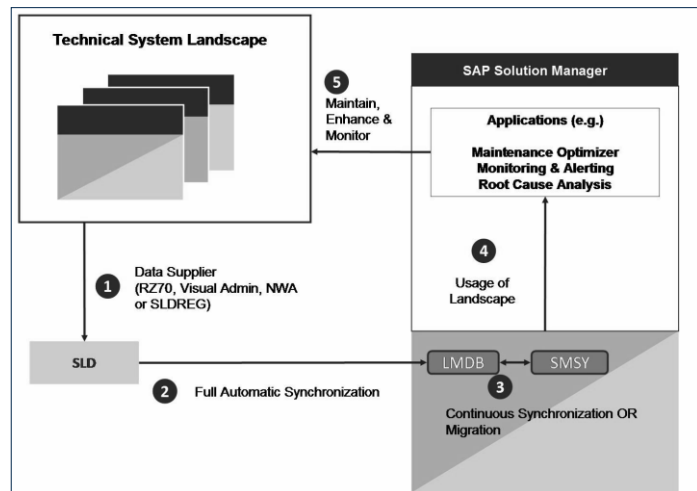
Instructor Notes:

Landscape Management Database (LMDB)

- LMDB was introduced in SAP Solution Manager 7.1, and is required since then
- The Landscape Management Database (LMDB) is a directory of elements of a system landscape
- The main task of LMDB is to provide information about the system landscape
- LMDB aims for a more flexible extendibility of the landscape model and the unification of SLD and SMSY in SAP Solution Manager

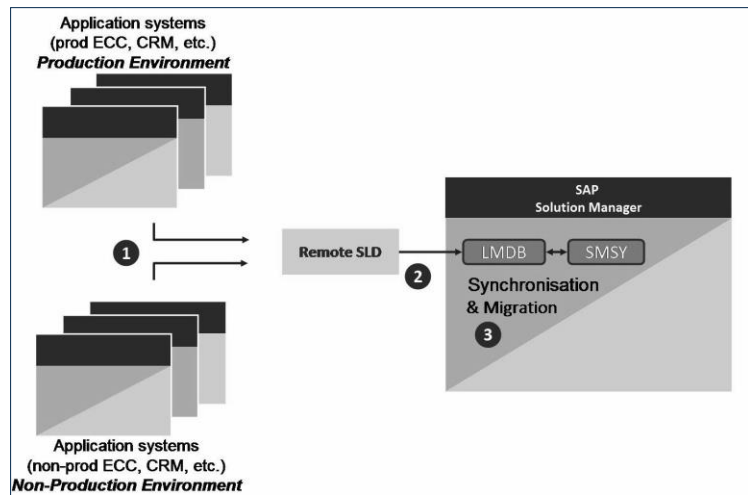
Instructor Notes:

LMDB The Big Picture



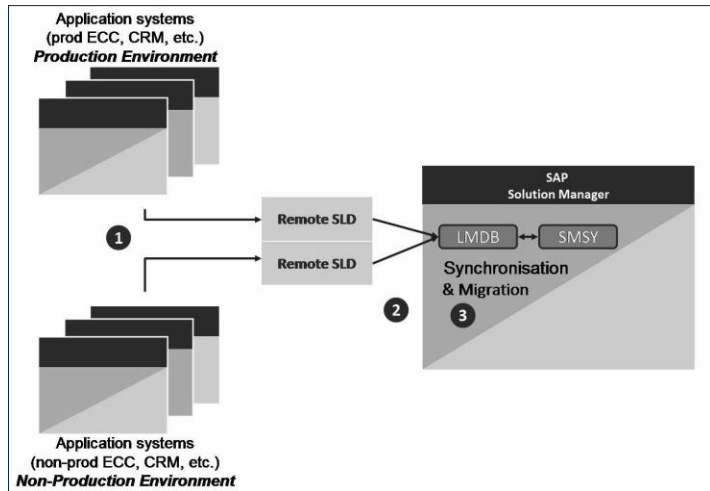
Instructor Notes:

SLD, LMDB and SMSY Configuration 1 (Recommended)



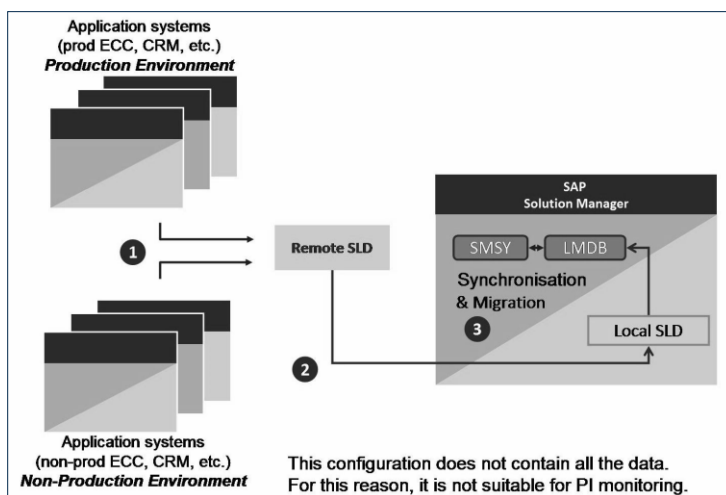
Instructor Notes:

SLD, LMDB and SMSY Configuration 2



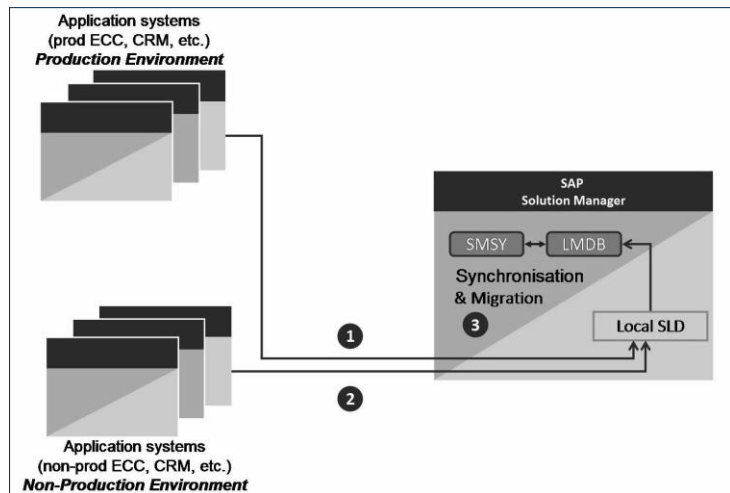
Instructor Notes:

SLD, LMDB and SMSY Configuration 3 (Not suitable for PI monitoring)



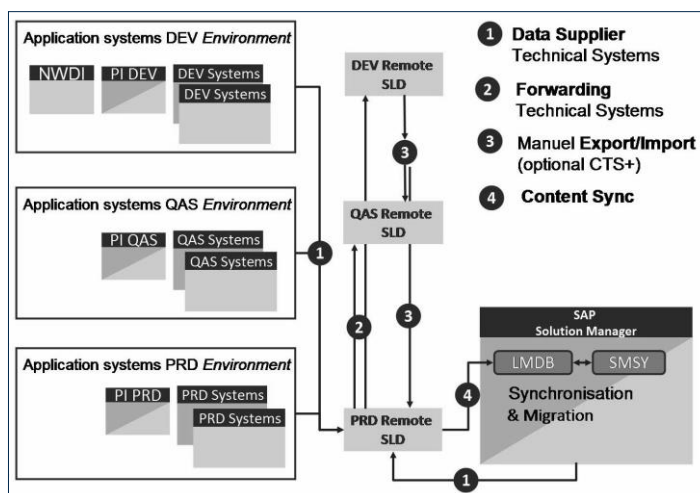
Instructor Notes:

SLD, LMDB and SMSY Configuration 4 (if no central SLD is available)



Instructor Notes:

SLD, LMDB and SMSY Complex Scenarios



Instructor Notes:

Data sources for LMDB entities

Entity	Data Source	Editor	Notes
ABAP application server, Business object cluster, Database system, Diagnostics Agent, Java application server, Master Data Management Server, TREX system, SAP Web Dispatcher, Unspecific application system	SLD data supplier	LMDB → Technical systems	
Apache Tomcat server, IBM WebSphere Cell	SLD data supplier	LMDB → Technical systems	No installed product information
LiveCache	AS ABAP data supplier	LMDB → Technical systems	
Microsoft internet Information service	Outside discovery	LMDB → Technical systems	No installed product information
.NET System	Outside discovery	LMDB → Technical systems	
Introscope Enterprise Manager Server, Introscope Manager of Manager	Manual	SOLMAN_SETUP	Configuration from SOLMAN_SETUP
Technical scenario	Manual	SOLMAN_SETUP	Dual stacks recognized Automatically
Product system	Manual	LMDB → Product Systems	
Logical component	Manual	LMDB → Logical Components	Since SolMan SPS9

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Describe the definition, installation, and customizing of the Landscape Management Database (LMDB)
 - Understand the available LMDB scenarios and how to integrate them
 - Explain different synchronization methods between System Landscape Directory (SLD) and LMDB

Instructor Notes:

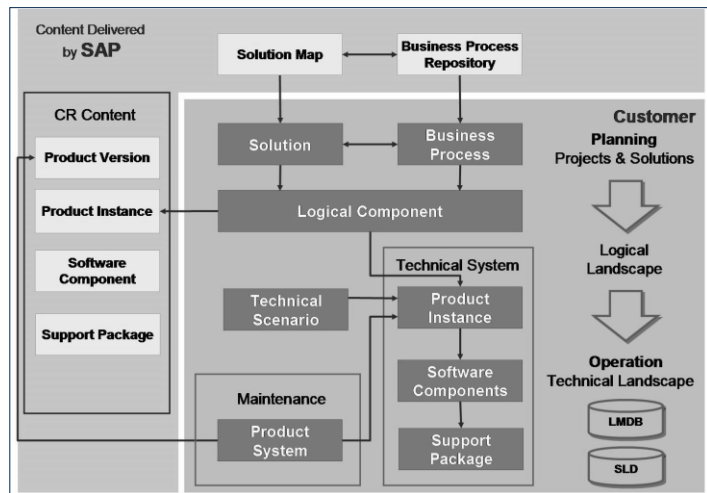
Lesson 11: Landscape Model, LMDB and Landscape Verification (LV)

▪ **Lesson Objectives**

- After completing this lesson, you will be able to:
 - Understand the SAP Landscape Model
 - Understand how Landscape Verification works
 - Work with the Landscape Management Database (LMDB)

Instructor Notes:

SAP Landscape Model

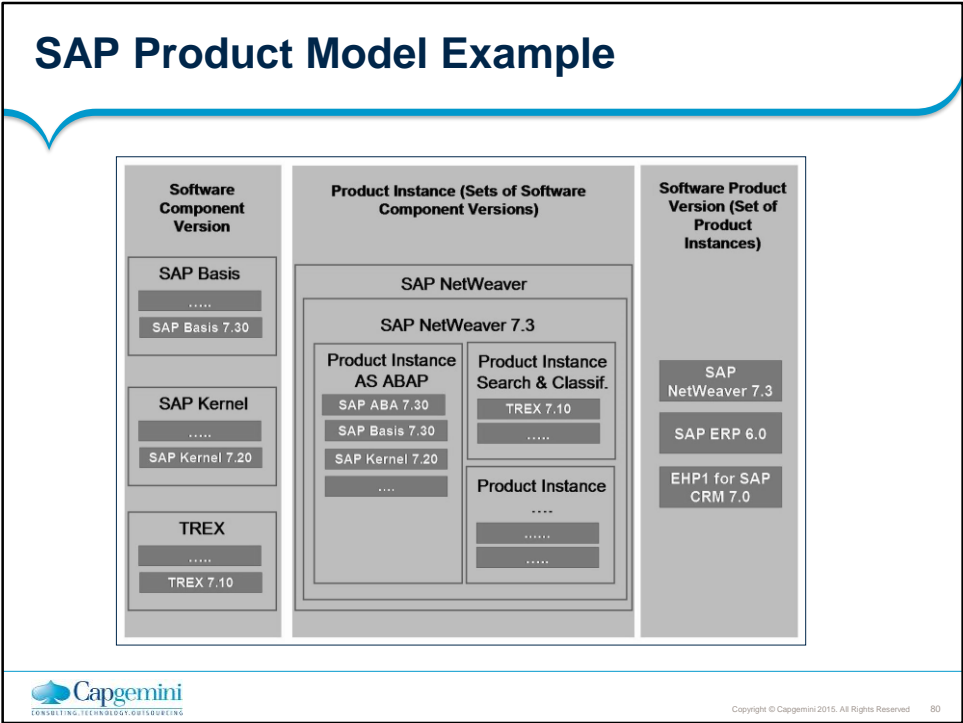


Instructor Notes:

SAP Product Model – Entities

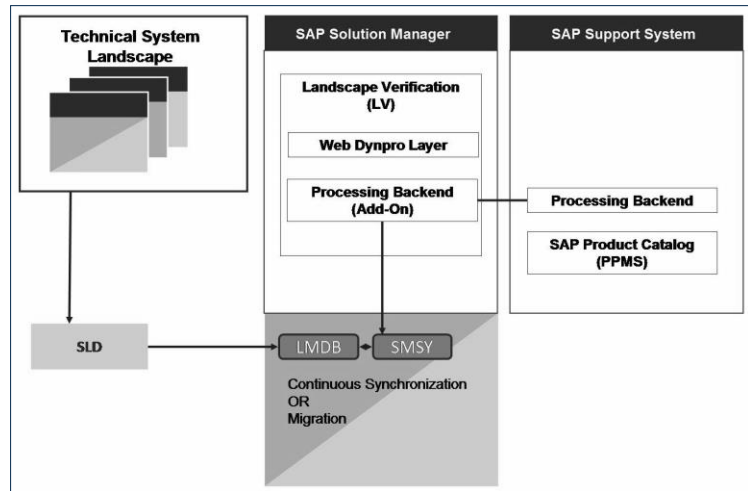
- A **Solution Map** helps customers to identify and compose their business process scenarios
- The **Business Process Repository** describes SAP process models of SAP solutions with reference to products and their versions
- A **logical component** is an abstraction for a software feature, for example the functionality of a CRM ABAP application server

Instructor Notes:



Instructor Notes:

Landscape Verification (LV) – Architecture and Dataflow



Instructor Notes:

Lesson 12: Monitoring and Alerting Infrastructure (MAI)

■ Lesson Objectives

- After completing this unit, you will be able to:
 - Understand central changes that came in the area of SAP System Monitoring
 - with SAP Solution Manager

Instructor Notes:

News on Monitoring and Alerting

New Infrastructure for Technical Monitoring and Alerting

- Introduced with SAP Solution Manager 7.1
- Based on E2E Diagnostics architecture
- SAP's new standard for central Monitoring and Alerting
- "Old" System Monitoring work center based on central CCMS still available
- New work center "**Technical Monitoring**" has been introduced which contains the new applications



Instructor Notes:

Advantages of the new Monitoring and Alert Infrastructure (MAI)

MAI in SAP Solution Manager 7.1 offers:

- Landscape awareness
- Easy integration of new technologies
- Different alert consumers can be configured
- Central configuration which is automatically distributed
- Central administration and self-monitoring of infrastructure
- Mass configuration by using templates
- Integrated reporting capabilities
- Collaboration features
- Graphical overview of landscape status
- Grouping of metrics and alerts prevents alert flooding



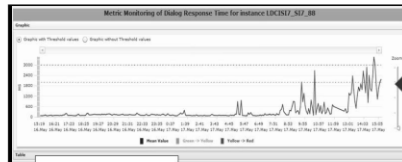
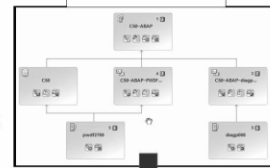
System Monitoring – What should it look like?

Instructor Notes:

System Monitoring using SAP Solution Manager 7.1:

- Provides status overview regarding technical system including databases and hosts
- Allows to access landscape information and problem context for technical system
- Allows drill down from status information to single metrics and events provided by End-to-End Monitoring and Alerting
- Visualizes metrics and events including thresholds and current rating / value
- Offers Jump-in capability in metric viewer

Status Overview



Metric Viewer

Metric/Event	Rating	Report	Value
⊗ RCA-MBAP			
⊗ RCA			
⊗ RCA-MBAP-Isolated_RCA_M			
⊗ RCA-MBAP-Unisolated_RCA_E			
⊗ Impact Performance	📉		
⊗ Degr Response Time	📈		
Degr Response Time	📈		118.50
Degr Standardized Resur	📈		>= 3.00
Degr Queue Time	📈		>= 3.00
Degr Forward Network T1	📈		>= 3.00
Degr Latency + Generation T	📈		>= 17.50
Degr DB Request Time	📈		>= 17.50
Number of Degr Alarms per	📈		31
Degr Critical Response	📈		>= 3.00

Details Tree



Instructor Notes:

Comparison of CCMS-based Monitoring and the new MAI

Operation	Central CCMS (RZ20)	Technical Monitoring and Alerting (MAI)
Configuration	Configuration has to be performed on central and managed systems.	Configuration has to be performed only on the central (SAP Solution Manager) system. It gets automatically distributed to managed systems.
Agent infrastructure	CCMS agents have to be updated and configured manually.	Diagnostic agents are automatically updated and configured
Landscape awareness	Landscape setup and changes have to be adjusted manually.	Landscape setup and changes are automatically detected and updated
Mass maintenance	Configuration has to be done per managed system	Configuration can be done on multiple managed systems at the same time using template concept.
Central administration	Not applicable	Operation tasks can be performed from the Solution Manager Administration Work Center, centrally.
Self-monitoring	Not applicable	Self-monitoring is available for SAP Solution Manager landscape and infrastructure components
Alert flooding	Not applicable	Prevents alert flooding by grouping metrics and alerts
Graphical overview	Not applicable	Provides graphical overview of landscape status

Instructor Notes:

Lesson Summary

- You should now be able to:
 - Understand central changes that came in the area of SAP System Monitoring
 - with SAP Solution Manager