

SAP Solution Manager Landscape Assessment: Critical Considerations for Configuring and Deploying SAP Solution Manager the Right Way

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### In This Session

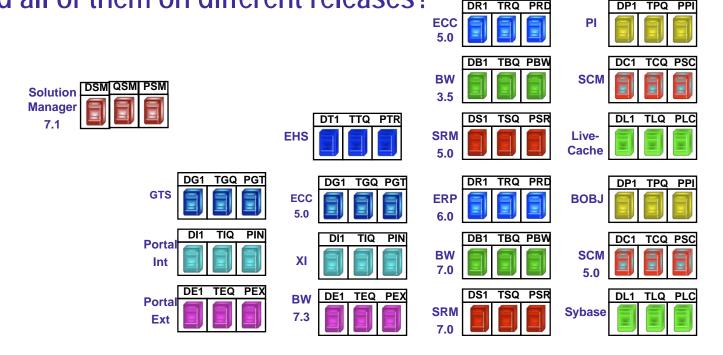
- We will review various scenarios of how SAP Solution Manager may already be deployed in your company
- We will explore ways to assess your current SAP Solution
   Manager landscape and how the managed systems are connected
- We will look into ways to fix and optimize your SAP Solution Manager implementation and help you to choose the right type of landscape
- We will discuss best practices for setting up SAP Solution
   Manager and keeping the connection to your managed systems current
- We will review what it means that SAP Solution Manager 7.0 maintenance ended at the end of 2013

### What We'll Cover

- SAP Solution Manager Landscape Overview
- How to best assess your current landscape
- Best practices to efficiently and correctly set up your SAP Solution Manager landscape considering the multiple connected managed systems
- Moving to Release 7.1 as SAP ends Maintenance for 7.0
- Wrap-up

### Landscape: Size Matters!

- Do you have just a single DEV/QAS/PRD SAP ERP 6.0 system landscape?
- Or... do you have 3x23 SAP ERP boxes (DEV, QAS, PRD), 4x3 SAP BW, 2x3 SAP CRM, 2x3 SAP SCM, some SAP NetWeaver BusinessObjects, SAP NetWeaver PI, and others... let's say 93 boxes, and all of them on different releases?

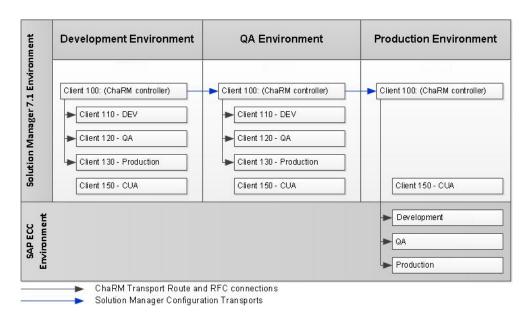




- When reviewing your own Solution Manager landscape, many topics need to be considered
  - Solution Manager's very own landscape
  - Expected data volume on Solution Manager
  - Type and number of managed systems
  - Roadmap for Solution Manager scenarios that you want to deploy over time
  - Technical system components and important repositories
  - Ongoing SAP initiatives in your company

### Landscape Strategy

- Each customer's SAP Solution Manager strategy will vary, which determines the landscape strategy and capacity
- We recommend, at minimum, a two-tier SAP Solution Manager landscape to facilitate implementation and testing activities
- Example for a Solution Manager landscape with ITSM scenario deployed:



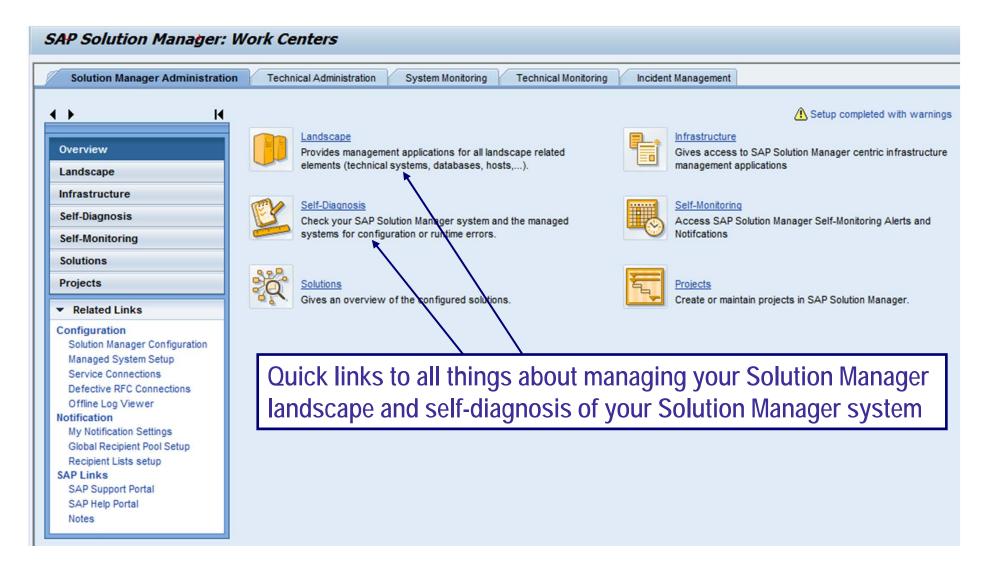
### **Key Questions to Success**

- How many Solution Manager Systems do you have?
- How should they be sized?
- How do you archive and delete possibly obsolete data?
- How many managed systems do you have connected and to which Solution Manager systems?
- How do you keep information current within Solution Manager about all your systems?
- What individual components are required on both the Solution Manager system as well as the managed systems?
- Managed Systems Information management: How do you transition from SMSY to SLD to IBase to LMDB?
- What Solution Manager scenarios do you have deployed?

## One Key Element: Know the Administration Work Center

- With Release 7.1, this new work center, called "Solution Manager Administration," allows you to:
  - Manage the landscape with the ability to:
    - Maintain RFC connections
    - Manage the extractor and agent framework
    - Verify how the system landscape is defined in Solution Manager
  - Run self-diagnosis for:
    - Solution Manager itself
    - Managed Systems
  - Maintain Solutions and Projects

## You Need to Know the "Administration" Work Center



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### Step 1: How Many Solution Manager Systems?

- You have one Solution Manager system
  - Still the situation with many SAP customers
  - Mostly used to generate the license key and to do "some" monitoring and EarlyWatch Alerts
  - "We only use it as a document repository"
  - Largely not utilized



- You have two Solution Manager systems
  - Customers utilizing one or more of the "more involved" scenarios
  - Examples: Project Management, Test Management, Change Request Management, Incident Management, Custom Code Management, etc.
  - This is SAP's minimum recommendation



- You have three Solution Manager systems
  - Fully deployed, three-tier Solution Manager landscape
  - You are following SAP's standard recommendation
  - Typically, many scenarios configured and deployed

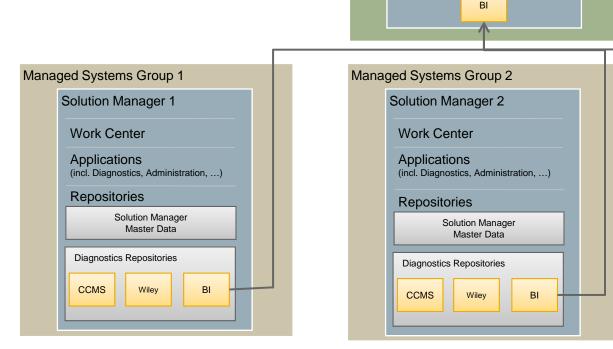


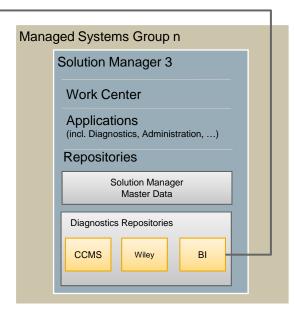
- Review your own SAP Solution Manager landscape
  - You have more than three Solution Manager systems

Central Reporting Instance

BI

- ▶ Large, regional SAP landscapes by world area
- Multi-divisional organization with divisional IT organizations





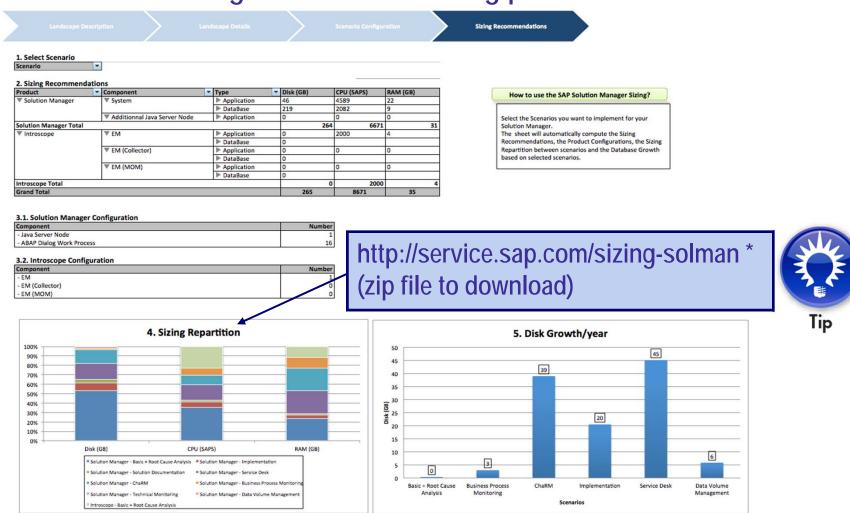
### Step 2: Sizing of Solution Manager?

- The sizing tool kit will require a lot of input, and without a roadmap of which scenarios you plan to deploy, it's not going to be a big help
- Be aware that there are still old versions of the sizing tool around: If a file called "SSM\_Sizing\_ToolKit\_V2\_3.zip" ends up in your download folder – you downloaded the old version



## Step 2: Sizing of Solution Manager? (cont.)

Use the SAP Sizing Toolkit as a starting point



<sup>15</sup> 

# Step 3: Cleaning House – Archiving in Solution Manager

- Archiving is still limited with 7.1; these objects <u>cannot be archived</u> at this point:
  - Projects
  - Solution landscapes
  - Incidents, change requests, change documents, issues
  - Test packages, test cases
- Documents in projects can be archived with SOLMAN\_DOCU\_VERSION\_ARCHIVE

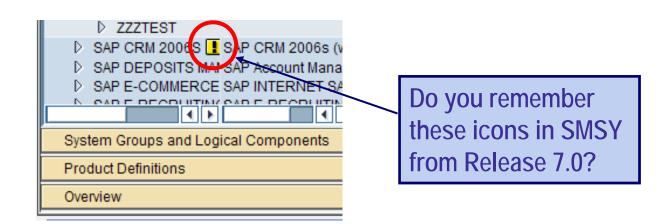
- **3**
- Attributes of these documents will stay in Solution Manger
- SAP Notes 546685 and 1092503 have details about archiving in Solution Manager

## Step 3: Cleaning House – Deleting in Solution Manager

- You can clean up old or unwanted/obsolete data in SAP Solution manager. Examples are:
  - Projects (if you want to keep a copy, put it in a transport) with transaction SOLAR\_PROJECT\_ADMIN
  - Solutions (if dependent objects, such as issues or tickets exist, you might not be able to delete them) with the report RDSMOPDELETESOLUTION
  - Test plans and packages with transaction STBW\_2
  - Business Partners with transaction BUPA\_DEL

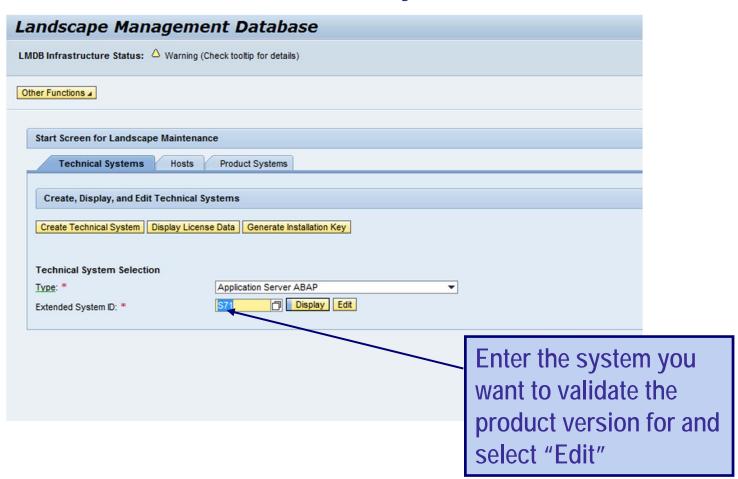
### Step 4: Check Product Version

- If you have upgraded a managed system since you installed and configured Solution Manager, you need to validate or update the settings of that managed system in Solution Manager using the following steps:
  - Start the Landscape Management database with transaction LMDB (in 7.0 and 7.1 up to SP4, you had to go to SMSY)
  - Validate the logical component and create a new logical component for your upgraded managed system

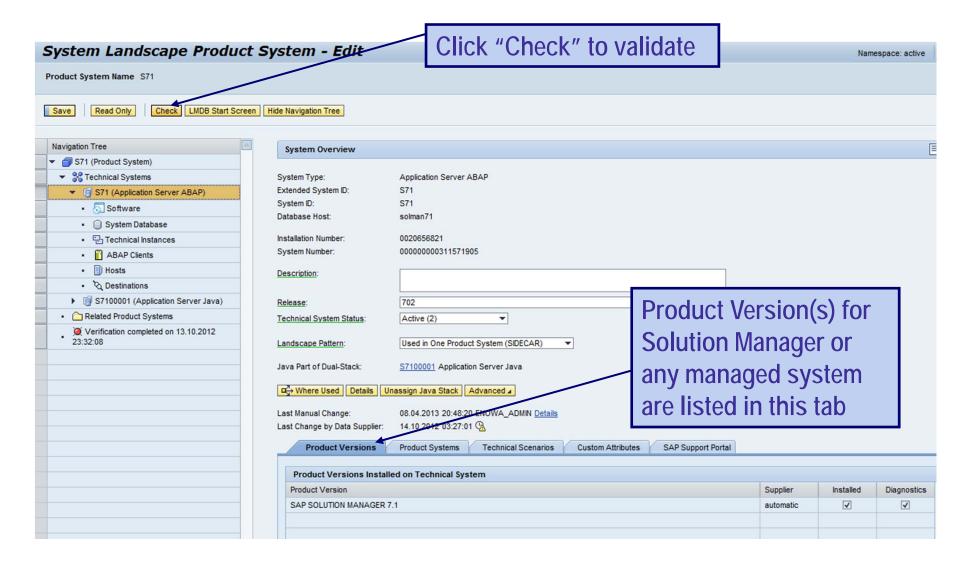


### Step 4: Check Product Version (cont.)

 Start transaction LMDB and select/enter the system you want to validate on the tab "Technical Systems"



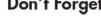
### Step 4: Check Product Version (cont.)



### Step 4: Check Product Version (cont.)

- Validate the logical components and create a new logical component for your upgraded managed system
- Then, replace your obsolete logical component in your solutions. Before you do that, de-activate the solution and any business process monitoring sessions that you may have active (using the Solution Manager Administration Work Center or transaction SOLMAN\_DIRECTORY).
- Don't forget to activate your solution and business process monitoring sessions again
- For implementation projects, you can choose to leave or update the logical component
  - It is recommended to leave any outdated logical components in your project if it's closed
  - For any active projects, update the logical component







# Step 5: Check Your Connections to Managed Systems

- Which managed system should be connected to which Solution Manager System?
  - The <u>entire landscape</u> of all managed systems, i.e., all development, quality assurance, production systems of all SAP products (examples: ERP, SRM, BW, SCM, CRM, etc.), should be connected as managed systems to your <u>production</u> Solution Manager system
  - Your production Solution Manager system is the one central system for the management and setup of the connected systems
  - Having all systems connected allows you to utilize scenarios such as Change Analysis, ChaRM, Quality Gate Management, etc.



- Which managed system should be connected to which Solution Manager System? (cont.)
  - Your development and/or quality Solution Manager system should also be connected to some managed systems, primarily for testing purposes
  - We often recommend considering connecting sandboxes from the landscapes to the DEV/QAS Solution Manager system
  - For some scenarios (primarily ITSM), we recommend applying a special client strategy on your test Solution Manager system

### Step 6: Landscape Verification Tool

- Tool to verify your landscape information
  - First introduced by SAP in June 2010 (LV 1.0) as an add-on to Solution Manager 7.0, EHP1, SP23

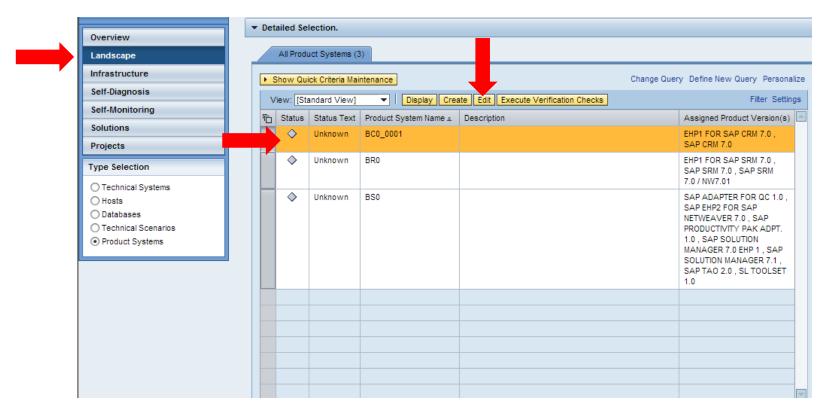
 Tremendously increased functionality and stability and has now been made a part of the Product System Editor of the LMDB (as

of 7.1, SP05)

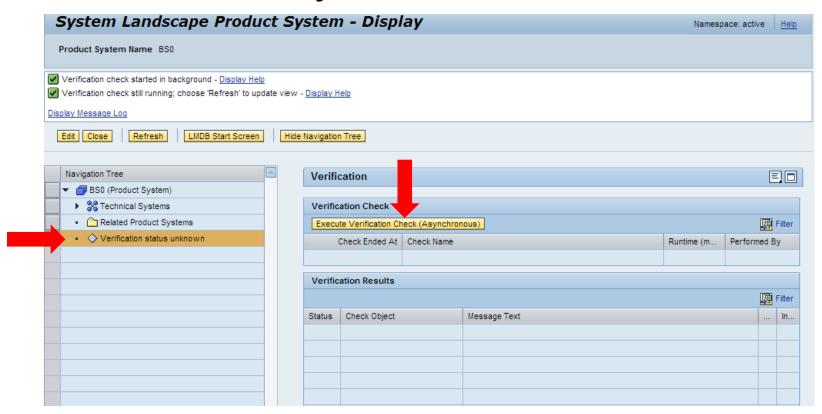
 Valuable tool for administrators of complex landscapes (pre SP05: use transaction LVSM)



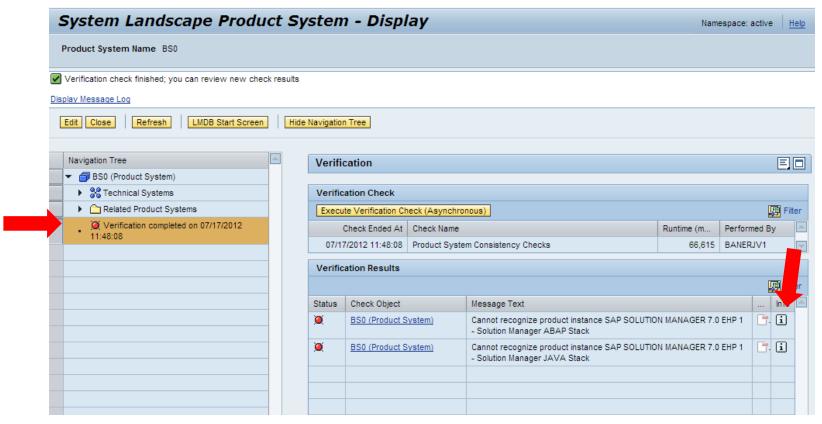
- Step 6: Landscape Verification Tool (cont.)
  - Executing the verification for a system in your landscape
    - Go to the Solution Manager Administration work center, select the landscape view, choose the system you want to verify, and click "Edit"



- Step 6: Landscape Verification Tool (cont.)
  - Executing the verification for a system in your landscape (cont.)
    - Start the verification by selecting the "Verification status unknown" entry for your system and clicking on the "Execute Verification Check (Asynchronous)"



- Step 6: Landscape Verification Tool (cont.)
  - Executing the verification for a system in your landscape (cont.)
    - Review the verification check results
    - If the results show errors, they can be corrected using the button in the info column



#### What We'll Cover

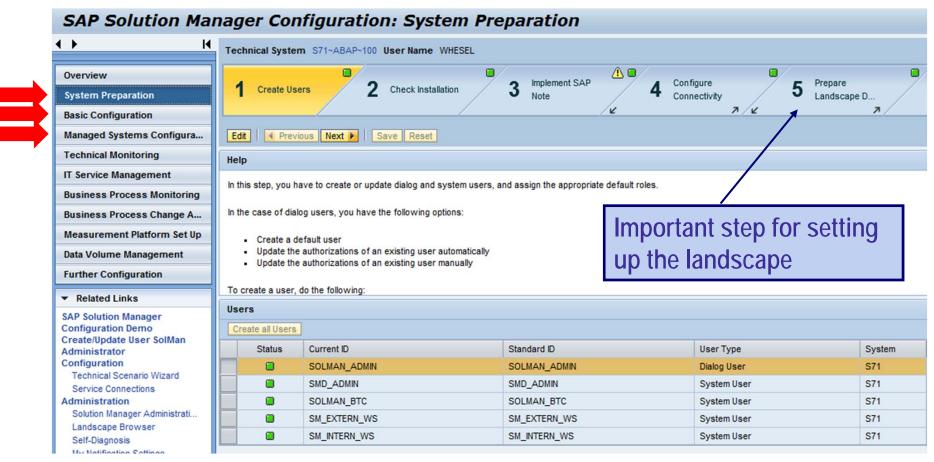
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### Best Practices: Basic Understanding

- Solution Manager needs to be Unicode
  - If you are on a prior release and not yet on Unicode with your Solution Manager system, a migration is highly recommended
- Solution Manager needs to be dual stack (ABAP & JAVA)
- For new customers running only on HANA environments, SAP Solution Manager 7.12, powered by SAP HANA (SP1) is available
  - SAP Note 1831407: Solution Manager 7.12 Basic Functions
  - SAP Note 1847305: Profile parameters for Solman 7.12 on HANA
- Comprehensive planning is required (sizing, landscape design, etc.) – We recommend a planning workshop before you start
- Installation guides can be found as usual:
  - http://service.sap.com/instguides \*

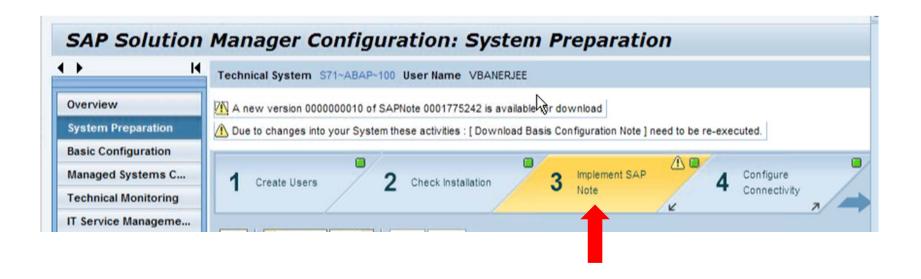
### Best Practice: SOLMAN\_SETUP

- No matter what you do, SOLMAN\_SETUP has to be done
- First three sections are part of the key set-up procedure

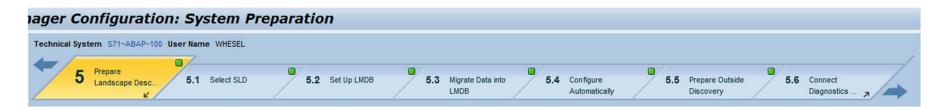


- Best Practice: SOLMAN\_SETUP (cont.)
  - Section "System Preparation"
    - For a new install:
      - Perform all steps all steps are mandatory except the migration of system data into LMDB from SMSY
      - "Outside Discovery Step" must be performed to collect all system information
    - For upgrade/patch:
      - Perform selected steps
      - ▶ If you are not yet using the LMDB, migrate all systems from the current SMSY/SLD into the LMDB

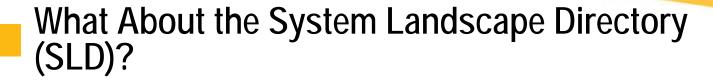
- Best Practice: SOLMAN\_SETUP (cont.)
  - Central Correction Note (CCN) is another key step
  - Make sure to implement it and keep it current at all times
  - The Note is updated several times during the year by SAP



- Best Practice: SOLMAN\_SETUP (cont.)
  - Prepare Landscape Description (Step 5 in System Preparation)



- Includes all the key steps to properly prepare all landscaperelated settings
  - Select SLD
  - Set up LMDB
  - Migrate Data into LMDB
  - Prepare Outside Discovery
  - Connect Diagnostics



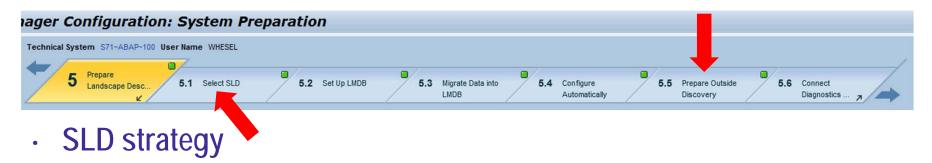
- Over the years, there were different recommendations
  - Put it on Solution Manager
  - Put it on SAP NetWeaver PI/XI
- Then came the "central" or "master" SLD concept, and the recommendation has been stable over the past 4-5 years:
  - "Run one central SLD on an existing Java stack in your landscape"
  - If Solution Manager is the only Java stack you have, you can consider installing and configuring it there, but typically it is the SAP NetWeaver PI system

- What About the System Landscape Directory (SLD)? (cont.)
  - If you want to use the SLD together with the Landscape Management Database (LMDB), be aware of minimum requirements in support packs
    - Lower than EHP2, SP6, Patch 5 for SAP NetWeaver 7.0: Not supported



- SAP NetWeaver 7.1: Need to be on SP9
- EHP1 for SAP NetWeaver 7.1 and above: All service packs

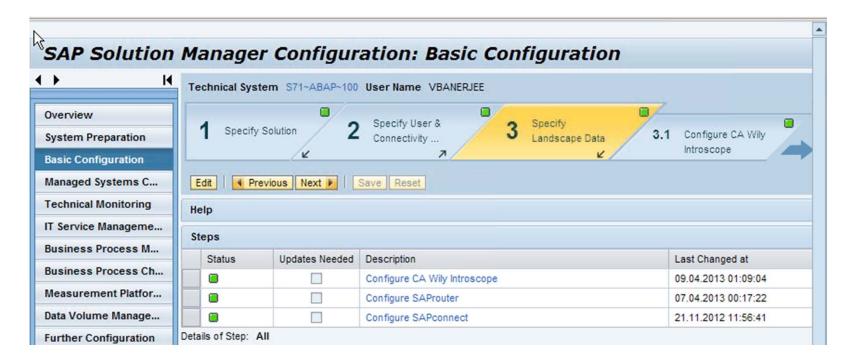
#### Best Practice: SOLMAN\_SETUP



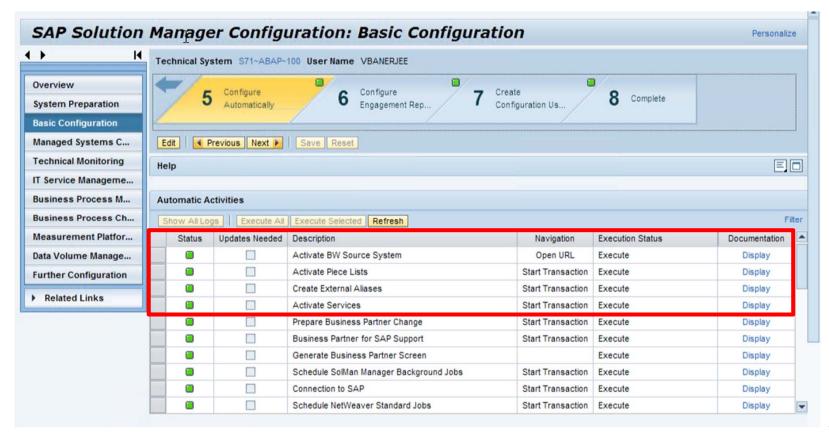
- If you have a PI/XI instance in your landscape, the SLD on PI will act as the central/master SLD
- The PI SLD is pushing data to the Solution Manager SLD
- The Solution Manager SLD then provides data for the LMDB
- Outside discovery
  - Generally recommended, but critical step if you have any form of virtualization in the landscape

**Best Practice** 

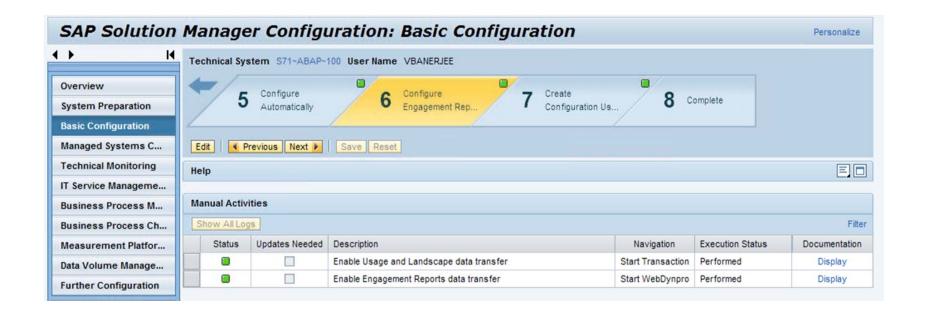
- Best Practice: SOLMAN\_SETUP (cont.)
  - Basic configuration section
    - It is very important not to skip the configuration of the CA Wily Introscope at this time (size the CA Wiley host)
    - Revisiting this particular area of setup later is usually a lot of effort and an expensive proposition



- Best Practice: SOLMAN\_SETUP (cont.)
- Basic configuration section (cont.)
  - Configure Automatically (Step 5) is important to ensure that specifically these steps are performed without any errors:



- Best Practice: SOLMAN\_SETUP (cont.)
  - Basic configuration section (cont.)
    - Configure Engagement Reports (Step 6) is critical for ensuring data is transferred to SAP (when service reports are run)



- Best Practice: SOLMAN\_SETUP (cont.)
  - Basic configuration section (cont.)
    - Critical step for security administrators (Step 7) this ensures the quick setup for users using the different scenarios
    - Authorizations management in Solution Manger is typically a very underestimated effort!



Caution

## Best Practice: Simulation Clients for ITSM Scenarios

 Create four clients on your DEV/QAS Solution Manager System to allow simulation/testing of the ChaRM functionality within one SAP Solution Manager system

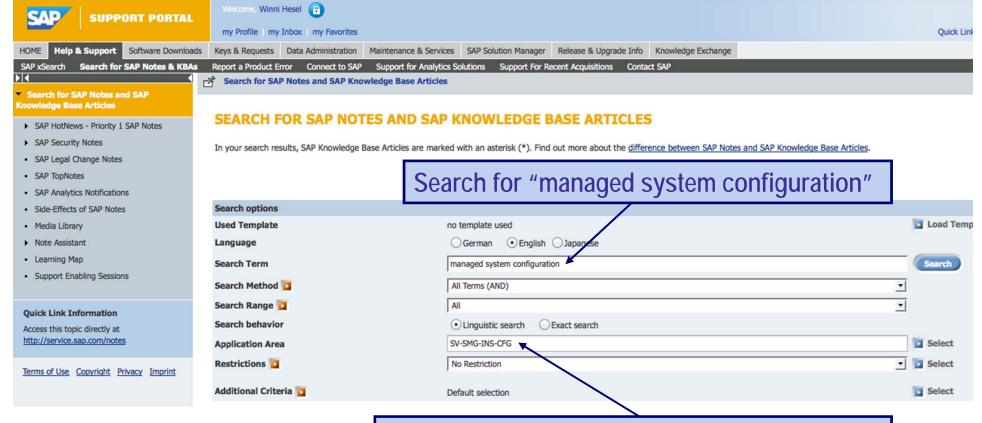
□ User System **Best Practice** ▼ 4 📙 | C G Q | 🚨 M K | 20 C L 21 | 🛒 🗾 | @ 📭 SAP Each client simulates a New password role: 100 Information Client Solution Manager 7.1 (S71) 100: ChaRM Control User whesel Password Clients: 200: Simulated DFV Standard Solman Client Simulation: CHARM DEV client Language Simulation: CHARM OAS client 201: Simulated OAS Simulation: CHARM PRD client 202: Simulated PRD



## Best Practice: Be Smart on SAP Service Marketplace Search

 In September 2013, this search returned 60+ SAP Notes, which were over 50% relevant





Application Area/Component: SV-SMG-INS-CFG

## Best Practice: Be Smart on SAP Service Marketplace Search (cont.)

- These "basic" searches will provide you with key SAP Notes required after any maintenance step on your Solution Manager system
- Then, "scenario-specific" searches will deliver key tips, tricks, bug fixes, and documentation on individual Solution Manager functionality (all 7.1 Release)
  - Change Request Management (SAP Note 1574224)
  - Quality Gate Management (SAP Note 1509091)
  - Central System Administration (SAP Note 1686849)
  - Custom Development Management Cockpit (SAP Note 1244713)

# What About SAP NetWeaver BW on Solution Manager?

- BW has become a very important part of SAP Solution Manager's reporting capabilities
- Two approaches to install it into the Solution Manager landscape:
  - As part of the productive Solution Manager client
    - Simpler configuration, separates the BW activities for Solution Manager from the business reporting on the BW instance
    - SAP's recommendation
  - As a separated client on Solution Manager
    - More complex configuration, separate user management
    - ▶ Increased security (if needed), but no technical benefit

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### Upgrade Considerations

- If you have data to protect (i.e., ChaRM and Service Desk live, many projects and solutions, etc.), it is strongly recommended that you upgrade
- Fresh installations should be considered if SAP Solution Manager is used for very basic purposes
- You should be at least planning your upgrade now, as support for Solution Manager 7.0 ended at the end of 2013
- SAP is not offering extended maintenance
- 7.1 has been out for a while, is stable, and is on SP10
- When planning to use new 7.1 features, check your maintenance agreement, as you will not have access to many features if you are not on Enterprise Support → http://tinyurl.com/l78h4cj

### Upgrade Considerations (cont.)

- Scenario A: No additional hardware investment needed
  - No plans to build upon current architecture
    - Configuration of data, scenario deployment/expansion, large volume of new users
  - Adding a small number of additional managed systems and users
- Scenario B: Hardware review recommended
  - Significant scope increase across environment
    - Scenarios (Technical Monitoring, SAP ITSM, Documents, etc.)
    - ▶ Users (e.g., 5,000+ users to support full ITSM rollout)
    - Managed systems (e.g., to support monitoring, ITSM, etc.)

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#### Where to Find More Information

- Vivek Banerjee, "Explore the New Features of LMDB with Support Package 05" (SAP Professional Journal, March 2013).
  - http://sapexperts.wispubs.com/Solution-Manager/Articles
- Podcast on SAPinsider Web site with Winni Hesel
  - http://sapinsider.wispubs.com/Assets/Blogs/2013/September/Winni-Hesel-on-the-Benefits-of-Upgrading-to-SAP-Solution-Manager-7-dot-1-Podcast
- http://service.sap.com/instguides \*
  - Select SAP Components → SAP Solution Manager → Release 7.1
- SAP Wiki on Solution Manager setup
  - http://wiki.scn.sap.com/wiki/display/SMSETUP/Maintenance+of+ Product+in+the+System+Landscape

<sup>\*</sup> Requires logon credentials to the SAP Service Marketplace

### 7 Key Points to Take Home

- Landscape design and management for Solution Manager itself, as well as how to connect managed systems, needs to be planned well
- Know your terms: Understand what to use when and how they interact – SMSY, SLD, LMDB
- Landscape Verification Tool from SAP is now (as of 7.1, SP05) integrated into LMDB
- Plan for at least a two-tier Solution Manager landscape
- SOLMAN\_SETUP is mandatory, whether you install new, upgrade, or just apply the latest service pack
- "Smart" SAP Service Marketplace search avoids headaches during the implementation
- You can simulate an entire ChaRM scenario on one Solution Manager system

Your Turn!



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Please remember to complete your session evaluation

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