

System Monitoring Using Solution Manager



Applies to:

All SAP systems with the ABAP, Java Stack.

For more information, visit the [Operations homepage](#).

Summary

In large SAP landscape it is difficult to monitor all the system individually. Hence we need some way to monitor systems centrally. Using Solution Manager we can monitor SAP systems centrally. This paper contains the procedure to integrate SAP system with solution manager in order to monitor centrally.

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Created on: 24 November 2008

Author Bio

Kaustubh Dhekane has been working as an SAP NetWeaver Basis administrator for past 3+ years. He has performed installations and configurations of almost all SAP NetWeaver Components with all usage type.

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1. Prerequisite

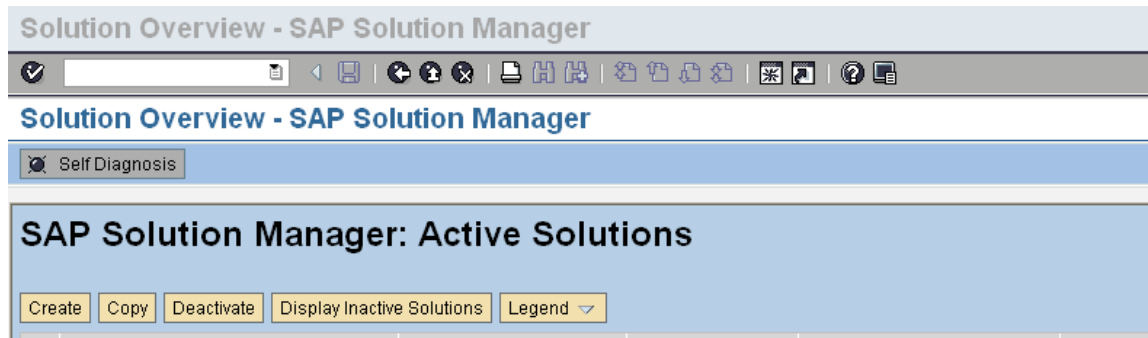
- Both Solution Manager and Satellite System must have installed ST-PI Add-on
- User in Satellite System should have authorization for the following functions
 - Generate RFC Connections (authorization object S_RFC)
 - Generate RFC connection of the Trusted Type (authorization object S_RFCACL)

Note: Above authorization objects are not part of SAP_ALL so we have to create Role manually which includes above authorization object.

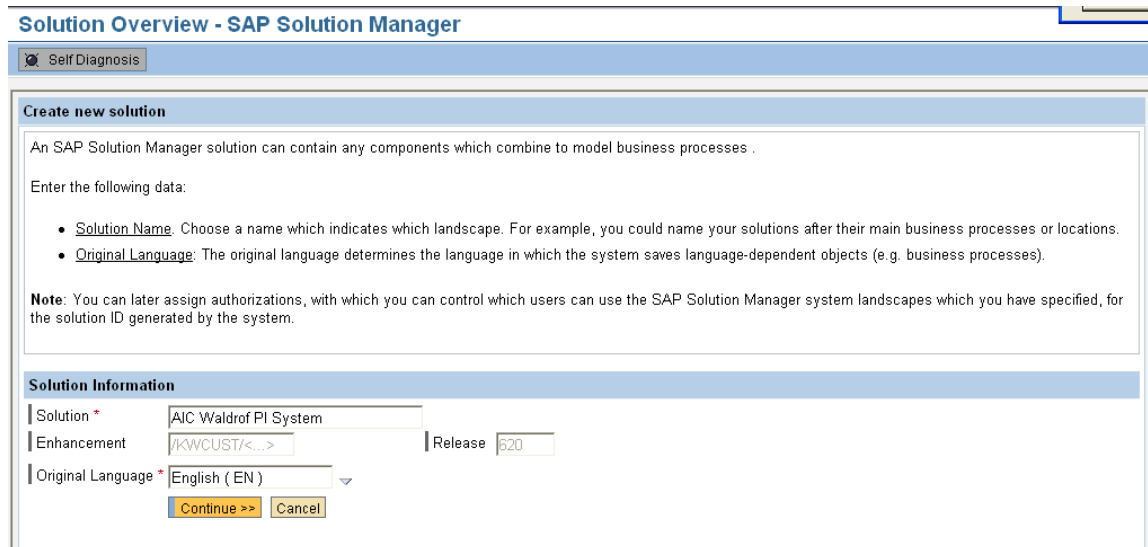
2. Procedure to Add Satellite System

2.1 Creating Solution Landscape

This step shows how to create Solution Landscape. Go to Transaction DSWP



Click on Create



Enter name of Solution and Click Continue.

Now the new Solution landscape called AIC Waldrof PI System is created.

Solution: AIC Waldrof PI System - SAP Solution Manager

Refresh Self Diagnosis

Solution Overview

Solution Landscape

Operations Setup

Operations

System Landscape Maintenance
You define and manage, for example, systems, servers, databases and RFC connections which are relevant for your solution.

Project Scoping
You receive an overview of projects that are assigned to your solution, create new projects, or manage projects that have already been assigned.

Solution Landscape Maintenance
You specify the business processes, interfaces and systems in your solution. You can make settings for the graphical display of the systems and servers.

Solution Settings
Edit your solution settings.

Service Connections
Create service connections for the systems in your solution. Open a temporary service connection, so that a member of SAP Support can logon to your system.

Note for the new solution
The ID of this solution is: 000000360010000
You can assign authorizations for the solution ID, with which you can determine which users can use the system landscapes which you specified in the SAP Solution Manager.

Contacts Maintenance (SELF_CON) Session 1000000003489 for 08.10.2008 created (S40) S40 (1) 100 frces4152 INS

2.2 Create Server, Database, System, Logical System, Logical Component

In order to start System monitoring using solution manager, Satellite system need to be created in Solution Manager.

a. Create Server

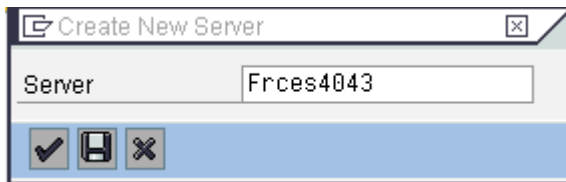
Go to Transaction SMSY

System Landscape - SAP Solution Manager

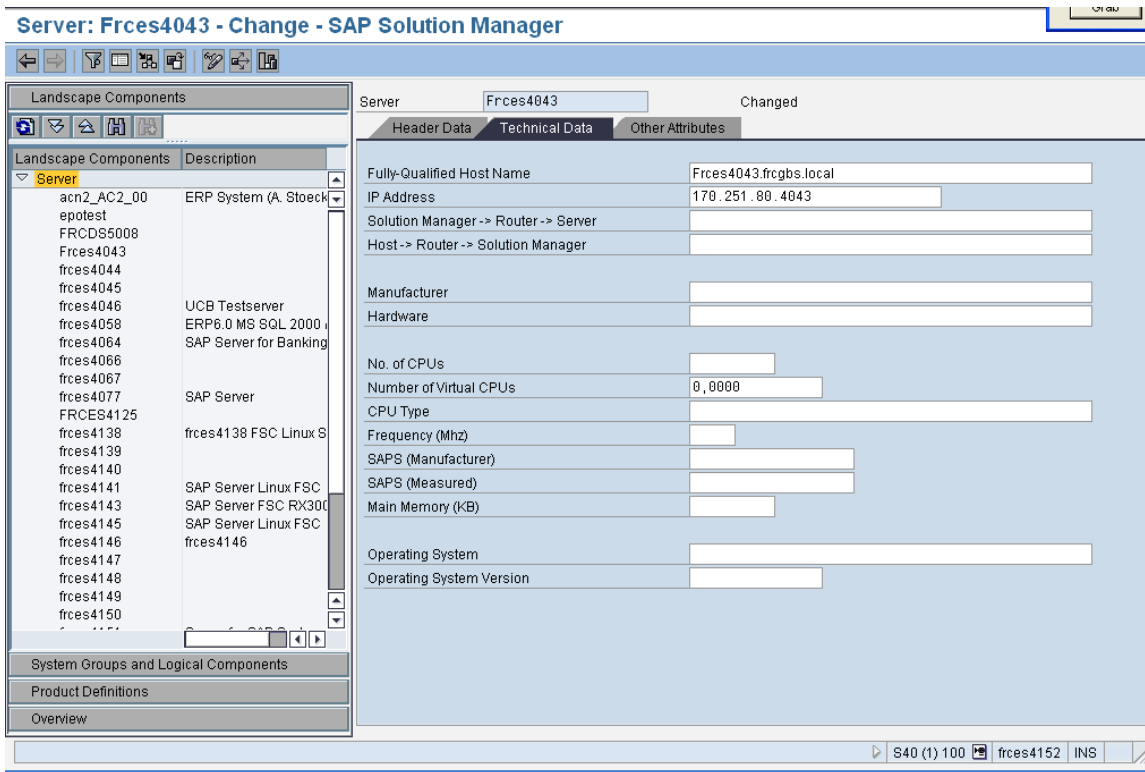
Landscape Components

Landscape Components	Description
Server	
Databases	
Systems	
System Components	

Click on Server → Right Click → Create New Server



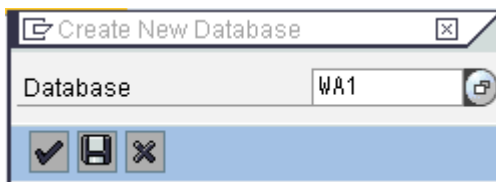
Enter host name of the server and save



Save the changes.

b. Create Database

Click on Database → Right Click → Create New Database



Enter name of the Database and save.

Enter details of the Database server like Manufacturer, release etc.

Database: WA1 - Change - SAP Solution Manager

The screenshot displays the 'Database: WA1 - Change' window in SAP Solution Manager. The left sidebar shows a tree view of 'Landscape Components' with a list of components and their descriptions. The main area is divided into three tabs: 'Header Data', 'Technical Data', and 'Other Attributes'. The 'Technical Data' tab is active, showing the following configuration details:

Field	Value
Manufacturer	SQL SERVER
Release	2000
SP Level	
Server	Frces4043

At the bottom right of the window, the status bar indicates 'S40 (1) 100'.

Save

c. Create System

Click on System → SAP NETWEAVER → Right Click → Create New System

The screenshot shows the 'Create New System' dialog box. The fields are filled with the following information:

System	WA1
Product	SAP NETWEAVER
Product Version	SAP NETWEAVER 7.0 (2004S)
Installation Number	0020173278

At the bottom of the dialog, there is a 'Create Product' button with a checkmark icon.

System: WA1. Main Instance: Process Integration (PI/XI) - Display - SA

Assignment to Logical Components

Landscape Components

- ▶ JE1
- ▶ MDC
- ▶ NB7
- ▶ NW1
- ▶ NW2
- ▶ NW3
- ▶ NW4 ! WebAS+BI+EP
- ▼ P71
- Application Server ABAP
- ▼ PX1-NEW PX1-NEW
- Process Integration (PI/XI)
- Application Server Java
- ▶ TRN
- ▶ VS4
- ▼ WA1
- Process Integration (PI/XI)
- Application Server Java
- ▶ SAP NETWEAVER MOBILE SAP NetWe
- ▶ SAP PROCESS SCHEDULING ADAPTEF SAP Solu
- ▶ SAP R/3 ENTERPRISE ! SAP R/3 Ent
- ▶ SAP SCM SAP SCM
- ▶ SAP SNC SAP Supply
- ▶ SAP SOLUTION MANAGER SAP SOLUT
- ▶ SAP SOP SAP Sales a
- ▶ SAP SPEND ANALYTICS SAP Spend

System Groups and Logical Components

Product Definitions

Overview

System: Read System Data Remote

Product Version:

Main Instance:

Header Data | Clients | Instances | Software Components | Other Attributes

System Header Data

Description:

Installation Number: ConP call-off/ME

Production

Data Source:

Last Changed On/By:

Message Server:

System Number:

Database:

Database Schema:

Transport Domain:

Temporarily Inactive Syst Virtual System (TMS)

S40 (1) 100 frces4152 INS

Click on Clients Tab

System: WA1. Main Instance: Application Server ABAP -Change - SAP Solu

Grab

Assignment to Logical Components

Landscape Components

- ▶ SAP E-COMMERCE SAP E-Commerce for S
- ▶ SAP E-RECRUITING SAP E-RECRUITING
- ▶ SAP ECC SAP ERP Central Com
- ▶ SAP ERP SAP ERP
- ▶ SAP EXCHANGE IN SAP EXCHANGE INFR
- ▶ SAP EXTENDED W SAP EXTENDED WARE
- ▼ SAP NETWEAVER ! SAP NETWEAVER
- ▶ BW7
- ▶ CHN
- ▶ ECP
- ▶ EP7 ENTERPRISE PORTAL
- ▶ EPT
- ▶ JE1
- ▶ MDC
- ▶ NB7
- ▶ NW1
- ▶ NW2
- ▶ NW3
- ▶ NW4 ! WebAS+BI+EP
- ▶ P71
- ▶ PX1-NEW PX1-NEW
- ▶ TRN
- ▶ VS4
- ▼ WA1
- Application S

System Groups and Logical Components

Product Definitions

Overview

System: Saved Read System Data Remote

Product Version:

Main Instance:

Header Data | Clients | Instances | Software Components | Other Attributes

RFC RFC RFC RFC

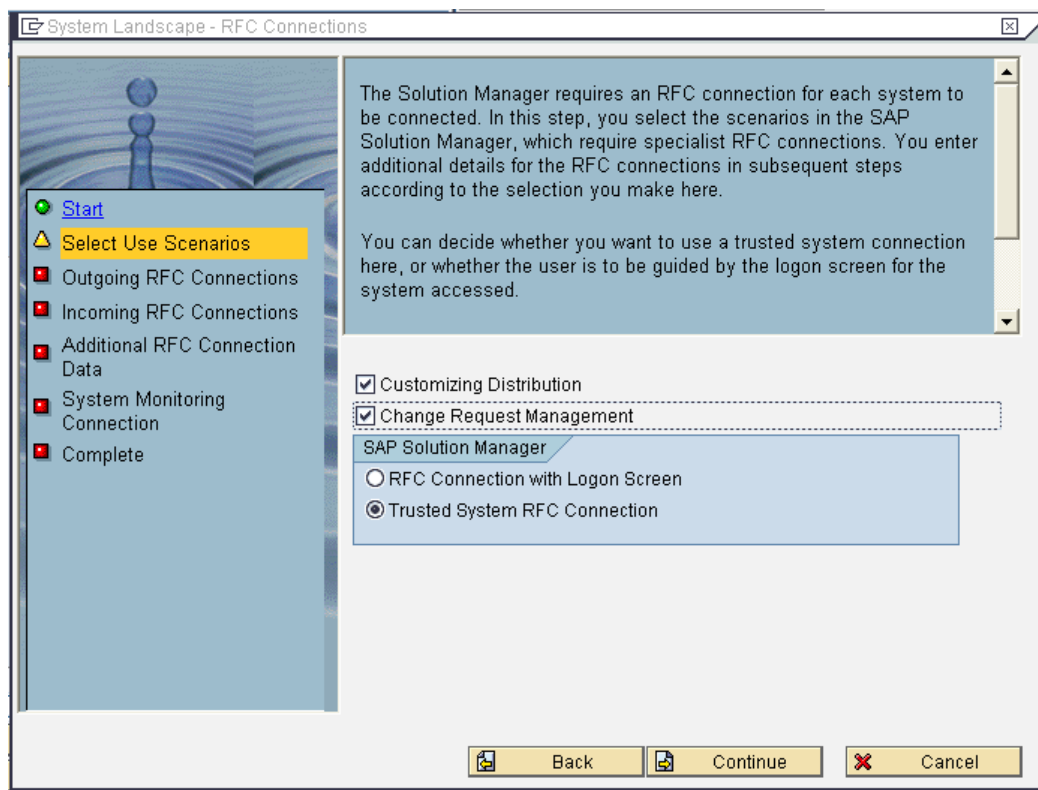
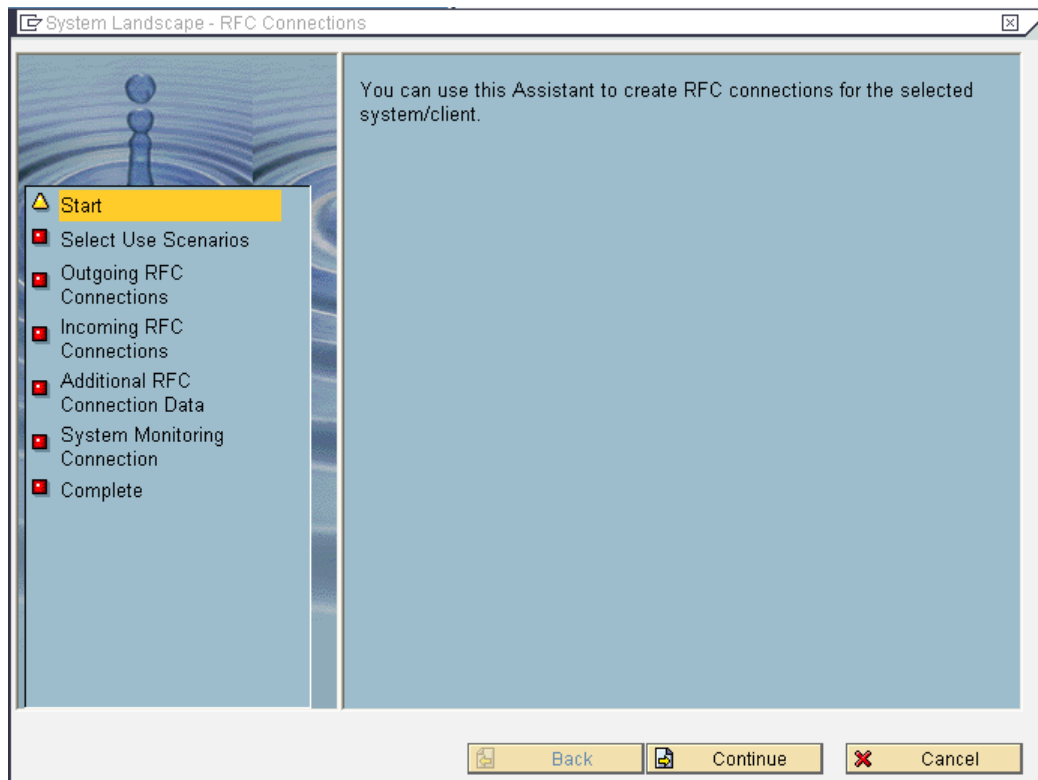
Clients

Cli	Name	Role	Logical sys.	RFC Read Access	RFC for Change Ma	Trusted System RFC	RFC
000	SAP AG Konzern	SAP refer					
001	AuslieferungsmarCustomizi						
006	Test EarlyWatch	SAP refer					
100	XI Development	Customizi	WA1CLNT100				
200	WA1 Client 200	Customizi	WA1CLNT200				

S40 (1) 100 frces4152 INS

Generate RFC

Now click on Generate RFC with Assistant



System Landscape - RFC Connections

Here you enter the details on RFC connections that go out of the Solution Manager system.

You always need an RFC connection for read-access.

You only need an RFC connection for Change Request Management if you also want to use this scenario. If you have not selected this scenario in the previous step, the corresponding fields are not editable here.

Start
 Select Use Scenarios
 Outgoing RFC Connections
 Incoming RFC Connections
 Additional RFC Connection Data
 System Monitoring Connection
 Complete

RFC Connection for Read Access

Option:

User:

Password:

RFC Connection for Change Request Management

Option:

User:

Password:

System Landscape - RFC Connections

In this step you define the details for the RFC connection that is created in the integrated system and which points to the Solution Manager system from there.

A check is made to see if this RFC connection has already been generated. If this is the case, it does not have to be generated again. You are advised not to generate this RFC connection. However, if you want to do so, flag the corresponding checkbox.

Start
 Select Use Scenarios
 Outgoing RFC Connections
 Incoming RFC Connections
 Additional RFC Connection Data
 System Monitoring Connection
 Complete

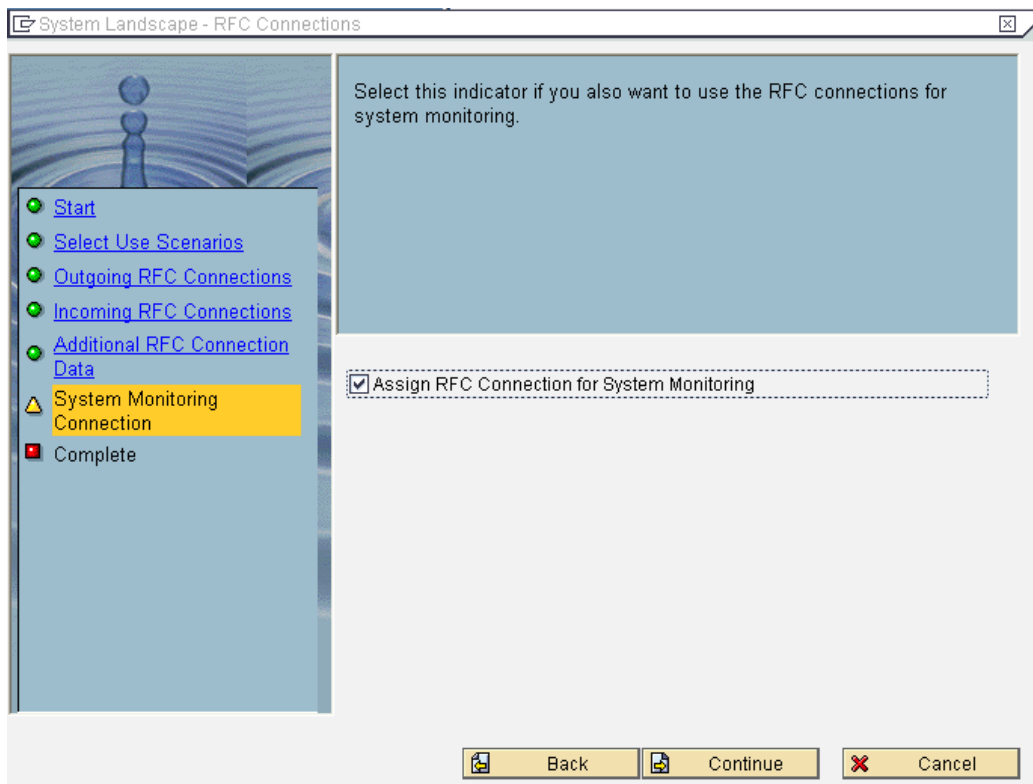
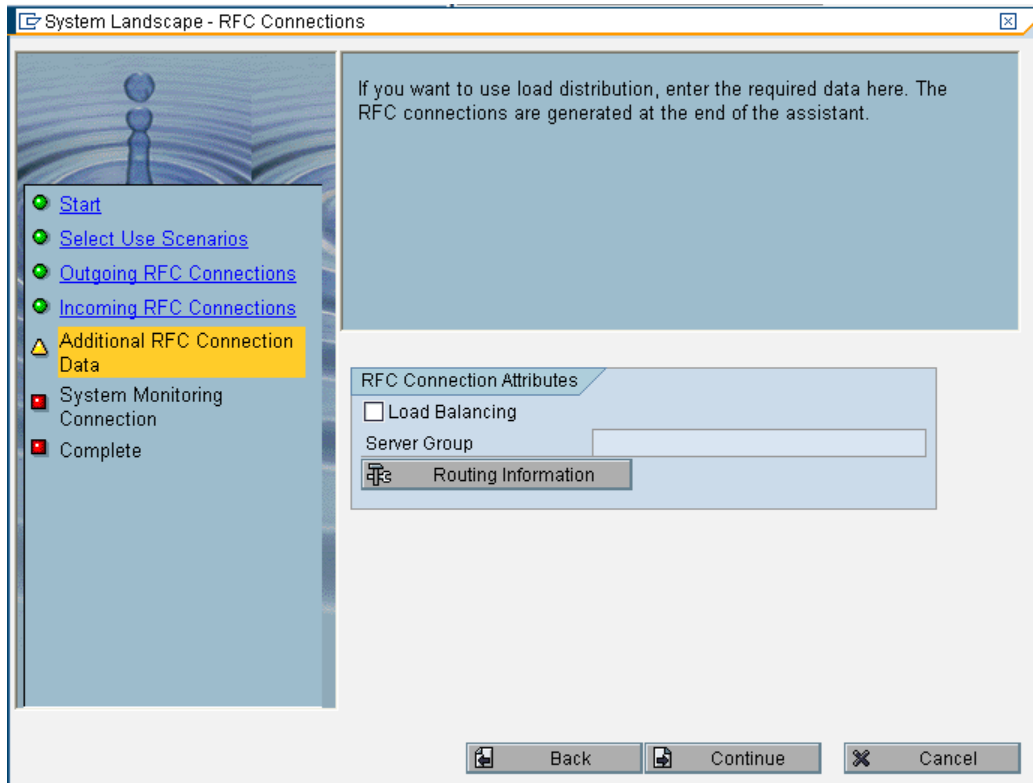
Generate Incoming RFC Connection

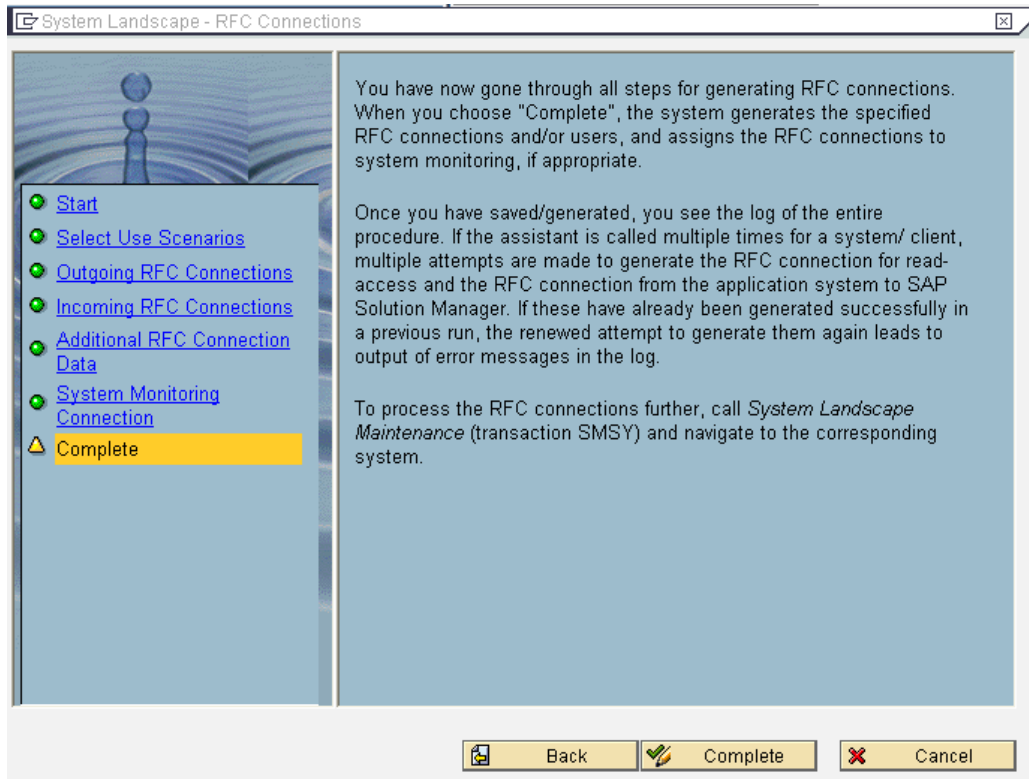
Incoming RFC Connection

Option:

User:

Password:





Display logs

Date/Time/User	Numb	External ID	Object bd	Sub-object text	Tran	Program
10.10.2008 08:56:16 AICMONITC	9	RFC Destinati...	System Landsc...	Logs for RFC G...	SMSY	SAPLSMS
Problem class Other		9				

Message Text:

- RFC destination SM_WA1CLNT100_READ check beginning
- RFC destination SM_WA1CLNT100_READ function checked
- RFC destination SM_WA1CLNT100_READ check ended
- RFC destination SM_WA1CLNT100_TMW check beginning
- RFC destination SM_WA1CLNT100_TMW function checked
- RFC destination SM_WA1CLNT100_TMW check ended
- RFC destination SM_WA1CLNT100_TRUSTED check beginning
- RFC destination SM_WA1CLNT100_TRUSTED function checked
- RFC destination SM_WA1CLNT100_TRUSTED check ended

d. Create System Component

In order to add Java Component in PI system add System Component



Right Click on Java → Create New System Component

System Component: WA1 (Java) - Display - SAP Solution Manager

The screenshot displays the 'System Component: WA1 (Java) - Display' interface in SAP Solution Manager. The left-hand pane shows a tree view of Landscape Components, with 'WA1' selected under 'System Components'. The main pane shows the 'Header Data' tab, which contains the following information:

- System Component:** WA1
- Type:** Java
- Description:** (empty field)
- Data Source:** Manual (Automatic Refresh)
- Last Changed On/By:** 15.10.2008 15:33:36 AICADMIN
- Planned/Production:** (checkboxes for Planned and Production)
- Message Server:** Frces4043
- Installation Number:** 0020173278 (with 'ConP call-off/ME' label)
- Dispatcher:** (empty field)
- Port Number:** 0
- Database:** WA1
- Database Schema:** (empty field)
- ABAP Transport System/Client:** (empty fields for ABAP Transport System and ABAP Transport Client)

The status bar at the bottom indicates 'S40 (1) 100' and 'frces4152 INS'.

System Component: WA1 (Java) - Display - SAP Solution Manager

Landscape Components

- ▼ Landscape Components
- ▼ WA1
 - Process Integration (PIXI)
 - Application Server Java
 - ▼ SAP NETWEAVER MOBILE SAP NetWea
 - ▼ SAP PROCESS SCHEDULING ADAPTEF SAP Solution
 - ▼ SAP R/3 ENTERPRISE SAP R/3 Ente
 - ▼ SAP SCM SAP SCM
 - ▼ SAP SNC SAP Supply
 - ▼ SAP SOLUTION MANAGER SAP SOLUTI
 - ▼ SAP SOP SAP Sales a
 - ▼ SAP SPEND ANALYTICS SAP Spend /
 - ▼ SAP SRM (WITH SAP EBP) SAP SRM E-
 - ▼ SAP SUPPORT ENABLEMENT PACKAGI SAP Solution
 - ▼ SAP TRANSPORTATION MANAGEMENT SAP Transp
 - ▼ SAP WEB AS SAP WEB AS
 - ▼ SAP XI EP SAP xApp Int
 - ▼ SAP XPD SAP xApp Pr
 - ▼ SAP XRPM SAP xApp Re
 - ▼ System Components
 - ▼ Java
 - EP7
 - JE1
 - PX1
 - WA1**
 - TREX

System Component: **WA1**
Type: **Java**

Header Data | Instances | **Software Components** | Other Attributes

from Main Instance | SM Diagnostics

Installed Software Components

Software Component	Release	SP Level	Component Version
ADSSAP	7.00		ADOBE DOCUMENT SERVICES 7.00
BASCTABLES	7.00		J2EE ENGINE BASE TABLES 7.00
BC-FES-166	7.00		SAP 166 7.00
BC-SEC-VIR	7.00		SAP VIRUS SCAN INTERFACE 7.00
BI_MMR	7.00		BI META MODEL REPOSITORY 7.00
BI_UDI	7.00		BI UDI 7.00
CAF	7.00		SAP CAF 7.00
CAF-UM	7.00		SAP CAF-UM 7.00
CONVERSION_AGENT	7.0		CONVERSION AGENT 7.0
CORE-TOOLS	7.00		J2EE ENGINE CORE TOOLS 7.00
JLAUNCH	7.00		SAP STARTUP FRAMEWORK 7.00
JLOGVIEW	7.00		JAVA LOG VIEWER 7.00
JSPM	7.00		JAVA SP MANAGER 7.00
KM-KW_JIKS	7.00		SAP_IKS_7_00
KRNL32NUC	7.00		SAP KERNEL 7.00 32-BIT

Go to System → SAP NetWeaver → WA1

System: WA1 - Change - SAP Solution Manager

Landscape Components

- ▼ Landscape Components
- ▼ SAP EXTENDED WAREHOUSE SAP EXTEND
- ▼ SAP NETWEAVER SAP NETWEA
 - ▼ BW7
 - ▼ CHN
 - ▼ ECP
 - ▼ EP7 ENTERPRISE
 - ▼ EPT
 - ▼ JE1
 - ▼ MDC
 - ▼ NB7
 - ▼ NW1
 - ▼ NW2
 - ▼ NW3
 - ▼ NW4 WebAS+BI+E
 - ▼ P71
 - ▼ PX1-NEW PX1-NEW
 - ▼ TRN
 - ▼ VS4
 - ▼ **WA1**
 - Process Integration (F)
 - Application Server Java
 - ▼ SAP NETWEAVER MOBILE SAP NetWea
 - ▼ SAP PROCESS SCHEDULIN SAP Solution
 - ▼ SAP R/3 ENTERPRISE SAP R/3 Ente

System: **WA1** Saved
Product Version: **SAP NETWEAVER 7.0 (2004S)**

Header Data | **Selection of Main Instances** | System Data in SAP Support Portal | Other Attributes

Create System Component

Relevant Main Instances for this System Installation

Main Instance	ABAP Inst.	Relevant	Also Instal.	System C.	System	Type	Extended Assignment of
Application Server ABAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Business Intelligence	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Business System 6.20 PI/	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Mobile Infrastructure (MI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Process Integration (PIXI)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Count: 1
Adobe Document Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Application Server Java	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
BI Java	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
BI Partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Business Explorer (BI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Content PI/	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Content Server	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Developer Studio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Developer Workplace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Development Infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
EP Content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
EP Core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Click on Extended Assignment of System Component

Change Assigned System Components

System: WA1
 Product Version: SAP NETWEAVER 7.0 (2004S)
 Main Instance: Process Integration (PI/XI)

Assigned System Components

System Component	Type
WA1	Java

Click

System: WA1 - Change - SAP Solution Manager

System: WA1 | Saved
 Product Version: SAP NETWEAVER 7.0 (2004S)

Header Data | Selection of Main Instances | System Data in SAP Support Portal | Other Attributes

Relevant Main Instances for this System Installation

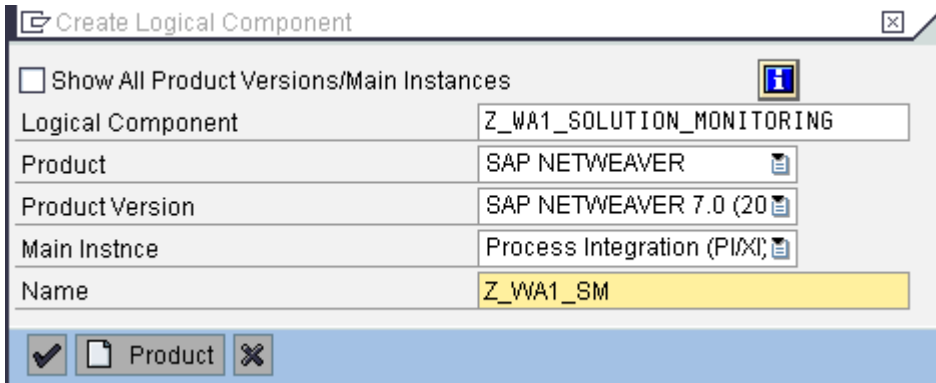
Main Instance	ABAP Inst.	Relevant	Also Instal.	System C.	System	Type	Extended Assignment of
Application Server ABAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Business Intelligence	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Business System 6.20 PI(X)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Mobile Infrastructure (MI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Process Integration (PI/XI)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Count: 1
Adobe Document Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Application Server Java	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
BI Java	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
BI Partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Business Explorer (BI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Content PI(XI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Content Server	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Developer Studio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Developer Workplace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Development Infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
EP Content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
EP Core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Click Save.

e. Create Logical Component

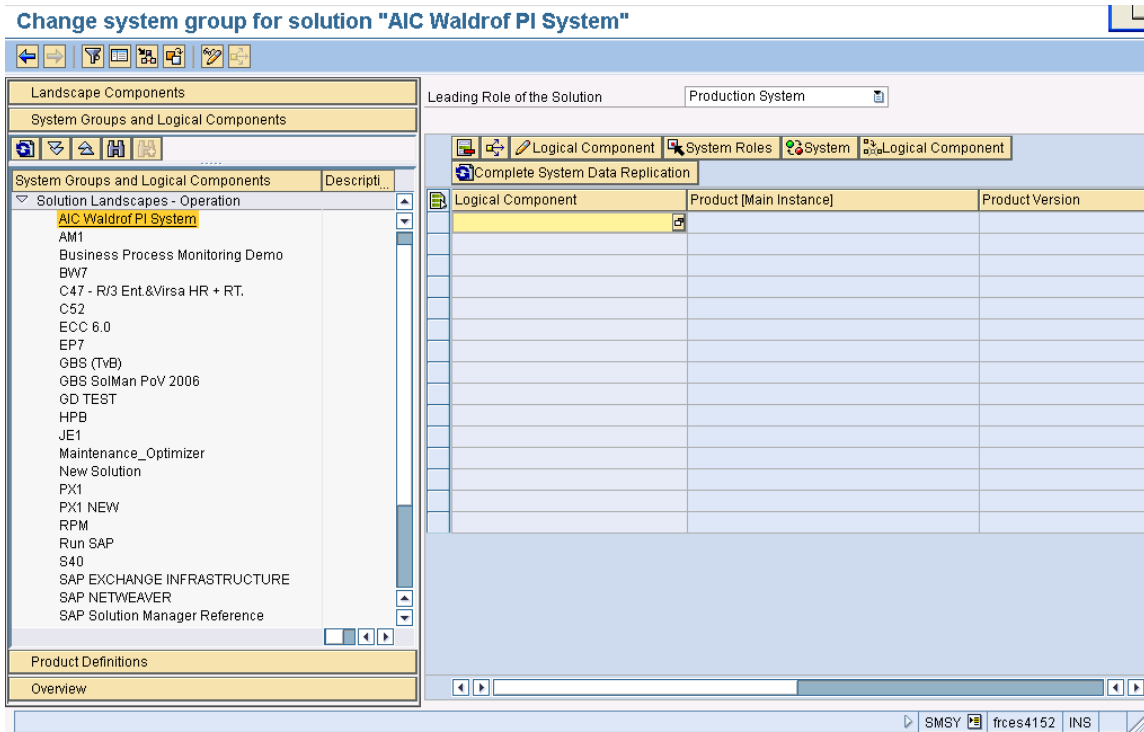
Click on **System Groups and Logical Components**

Right Click on **Process Integration (PI/XI)**



Click

f. Assigning System to Logical Component



Click on Logical Component and select corresponding System

Select Logical Component for System Landscape

Logical Components per Product	Product Version	Production Sy...	Development ...	Demo System	Training Syst...
<ul style="list-style-type: none"> ▷ SAP MFG EXECUTION BY VISIFF ▷ SAP MOBILE SALES WITH R/3 ▼ SAP NETWEAVER <ul style="list-style-type: none"> ▷ Application Server ABAP ▷ Application Server Java ▷ BI Java ▷ BI UDI ▷ Business Intelligence ▷ Content Server ▷ Developer Studio ▷ Development Infrastructure ▷ EP Core ▷ Enterprise Portal ▷ J2EE Adapter Engine (PI/XI) ▷ J2SE Adapter Engine (PI/XI) ▷ Job Scheduler ▷ KMC Cache Server ▷ Mobile Infrastructure (MI) ▷ PDK for MS.NET ▷ Partner Connect. Kit (PI/XI) ▼ Process Integration (PI/XI) <ul style="list-style-type: none"> <input type="checkbox"/> SAP NETWEAVER XI SAP NETWEAVER 7... PX1-NEW:100 <input checked="" type="checkbox"/> Z_WA1 SOLUTION SAP NETWEAVER 7... WA1:100 ▷ RTC Application Sharing Ser ▷ SAP LiveCache ▷ Search and Classif. (TREX) ▷ Visual Composer ▷ SAP NETWEAVER AS ABAP ▷ SAP NETWEAVER CE 					

Change system group for solution "AIC Waldrof PI System"

Change system group for solution "AIC Waldrof PI System"

Leading Role of the Solution: Production System

Product [Main Instance]	Product Version	Production System	Devel...	Demo System	Training System	SAP R...
SAP NETWEAVER [Proce	SAP NETWEAVER				WA1:100	

Right Click on Training System and click on Put in Solution

The screenshot shows the SAP Solution Manager interface. On the left, the 'Landscape Components' tree is expanded to 'Solution Landscapes - Operation' and 'AIC Waldrof PI System'. The main table displays system data with columns: Product [Main Instance], Product Version, Production System, Devel..., Demo System, Training System, and SAP Re... A context menu is open over the 'Training System' column, showing options 'Put in Solution' and 'Remove from Solution'.

Save the Changes

The screenshot shows the 'Change system group for solution "AIC Waldrof PI System"' dialog box. The main table now includes a new row: Logical Component | Product [Main Instance] | Product Version | Production System | D... | De... | Training System | SAP Re... The row for 'Z_WA1_SOLUTION_SAP NETWEAVER [Proc SAP NETWEAVER]' is highlighted in green, indicating it is the selected system group.

Note: The added system should be in Green state as shown above.

3. Setting up System Monitoring

Go to transaction DSWP

The screenshot shows the SAP Solution Manager interface. The title bar indicates the URL is 170.251.80.43. The main heading is 'Solution Overview - SAP Solution Manager'. Below this, there is a section titled 'SAP Solution Manager: Active Solutions'. On the right side of this section, there is a control panel for 'Automatic Refresh of Alerts' with a 'Refresh all' field set to 0 minutes and buttons for 'Switch On All' and 'Switch Off All'. Below the heading, there are several buttons: 'Create', 'Copy', 'Deactivate', 'Display Inactive Solutions', and 'Legend'. A table lists active solutions, with the first entry being 'AIC Waldrof PI System'.

Solution	EarlyWatch Alert Reports	System Monitoring	Business Process Monitoring	Open Tasks	Last Alert Refresh
<input type="checkbox"/> AIC Waldrof PI System					08.10.2008 - 14:11:20

Click on Solution Landscape which was created.

The screenshot shows the SAP Solution Manager interface for the 'Solution: AIC Waldrof PI System'. The title bar indicates the URL is 170.251.80.43. The main heading is 'Solution: AIC Waldrof PI System - SAP Solution Manager'. Below this, there are buttons for 'Refresh' and 'Self Diagnosis'. A navigation pane on the left shows 'Solution Overview', 'Solution Landscape', 'Operations Setup', 'Operations', and 'Setup System Monitoring'. The main content area is titled 'System Overview ---- Current Status' and displays a hierarchical view of the system components: 'SAP NETWEAVER - WA1' (Application Server Java) and 'Process Integration (PIXI)'. The status bar at the bottom shows 'DSWP frces4152 INS'.

Choose *Solution Monitoring* → *System Monitoring*, in the *Operations Set-Up* area.

Solution: AIC Waldrof PI System - SAP Solution Manager

Refresh Self Diagnosis

Solution Overview ▾ **Solution Monitoring** ▾ Best Practices ▾

EarlyWatch Alert | Service Level Reporting | **System Monitoring** | System Administration | Business Process Monitoring

Solution Landscape

Operations Setup

Operations

Monitoring Graphic

Service ▲	Date
Setup System Monitoring	16.10.2008

Best Practice Documents

Best Practice ▲

- mySAP SCM Monitoring with SAP Solution Manager and CCMS
- SAP SRM 4.0/5.0 System Landscape Monitoring

DSWP frces4152 INS

Choose *Set-Up System Monitoring*

"Setup System Monitoring - AIC Waldrof PI System" Change

HTML document Word document Attachments Action List

Setup System Monitoring

- Activate Monitoring for Systems
- Check CCMS Connectivity
- Copy Customizing
- J2EE WA1-J2EE SERVER
- Activate Monitoring for Other Se

Purpose
In this step, you choose the SAP systems for which monitoring is to be set up.

Procedure
All systems with an SAP Basis component are listed in the table below. To set up monitoring for a system, select the appropriate checkbox.

Background
Since the CCMS architecture cannot handle two systems with identical SIDs, you cannot activate these systems at the same time.

To Do Done

next open check

List of SAP Systems

SID	Installation No.	Active?
WA1	0020173278	<input type="checkbox"/>

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Perform the following checks in change mode

3.1 Select Active System

"Setup System Monitoring - AIC Waldrof PI System" Change

HTML document Word document Attachments Action List

Setup System Monitoring

- Activate Monitoring for Systems with ABAP-stack
- Check CCMS Connectivity
- Copy Customizing
- SAP System WA1 0020173278
 - Setup Monitoring for SAP System
 - User Defined Alerts WA1 00
 - SAP Application Server frces
 - Server Frces4043
 - Database WA1-DATABASE
 - J2EE WA1
 - Activate Monitoring for Other Servers

Activate Monitoring for Systems with ABAP-stack

Purpose
In this step, you choose the SAP systems for which monitoring is to be set up.

Procedure
All systems with an SAP Basis component are listed in the table below. To set up monitoring for a system, select the appropriate checkbox.

To Do (Done) Done

next open check

List of SAP Systems

SID	Installation No.	Active?
WA1	0020173278	<input checked="" type="checkbox"/>

And SAVE

3.2. Check CCMS Connectivity

"Setup System Monitoring - AIC Waldrof PI System" Change

HTML document Word document Attachments Action List

Setup System Monitoring

- Activate Monitoring for Systems with ABAP-stack
- Check CCMS Connectivity
- Copy Customizing
- SAP System WA1 0020173278
 - Setup Monitoring for SAP System
 - User Defined Alerts WA1 00
 - SAP Application Server frces
 - Server Frces4043
 - Database WA1-DATABASE
 - J2EE WA1
 - Activate Monitoring for Other Servers

Check CCMS Connectivity

Purpose
To check the connectivity to the CCMS of the monitored systems.
If you have not already configured working RFC connections to the systems to be monitored, a red rating will appear.

Procedure
In case of a green rating you can proceed with the next steps.
In case of a red rating proceed as follows:

Automatic rating (Green) Green Yellow Red Refresh

next open check Options

Connected Systems

System ID	Central Monitoring System	CEN Destination	Status	CCMS Read Destination	Status	CCMS Login Destination	Status
WA1	S40	NONE	✓	SM_WA1CLNT100_READ	✓	SM_WA1CLNT100_TRUSTED	✓

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3.3 Setup User Defined Alerts for Satellite System

Select User Defined Alerts under SAP System

"Setup System Monitoring - AIC Waldrof PI System" Change

HTML document Word document Attachments Action List

Setup System Monitoring

- Activate Monitoring for Systems
- Check CCMS Connectivity
- Copy Customizing
- SAP System WA1 0020173278
 - Setup Monitoring for SAP System
 - User Defined Alerts WA1 00
 - SAP Application Server frcs404
 - Errors / Administrating of frcs
 - Instance Availability of frcs4
 - Performance Alerts of frcs4
 - Dialog Alerts of frcs404
 - Spool Alerts of frcs4043
 - Enq., Gtw., Upd. and Bgr
 - Memory Mngt and Bu
 - User Defined Alerts for frcs-
 - Server Frcs4043
 - Database WA1-DATABASE
 - J2EE WA1
 - Activate Monitoring for Other Servers

User Defined Alerts WA1 0020173278

Purpose
To assign arbitrary CCMS alerts to this software component.

Procedure
If you have specified the CCMS context in the parent node, the F4 input help, which provides you with all available alerts in this context, is defaulted automatically. If this is not the case, proceed as follows:
Call up transaction RZ20 and open a monitor that contains the alerts you are interested in.


Automatic rating (Green) Green Yellow Red Legend Properties

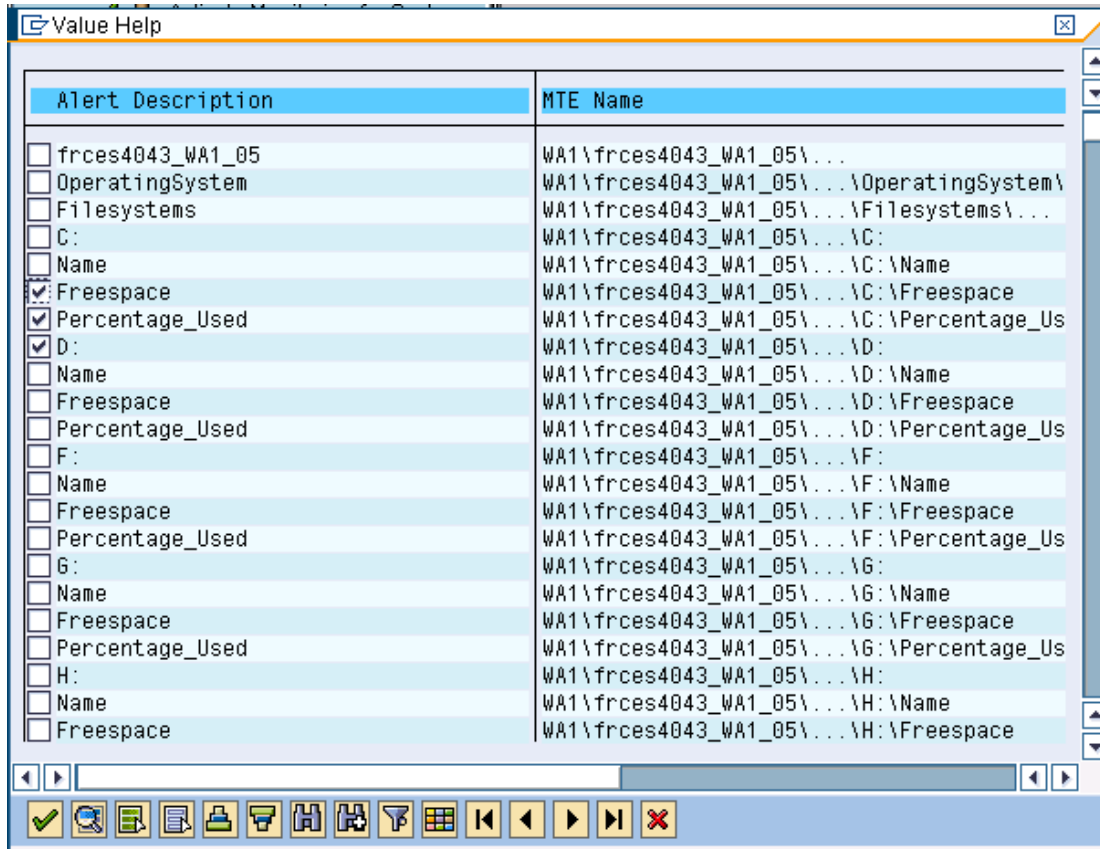
next open check Options

User alerts table

Status	Alert	Alert Long Name	Alert Long Name (the rest)	Active?	Ty	Green t
✓	Percentage_Used	WA1frcs4043_WA1_05L...IC:Percentage_Used		<input checked="" type="checkbox"/>	50	
✓	Percentage_Used	WA1frcs4043_WA1_05L...ID:Percentage_Used		<input checked="" type="checkbox"/>	50	
✓	Freespace	WA1frcs4043_WA1_05L...IG:Freespace		<input checked="" type="checkbox"/>	8192	
✓	Percentage_Used	WA1frcs4043_WA1_05L...IH:Percentage_Used		<input checked="" type="checkbox"/>	50	
✓	CPU_Utilization	WA1frcs4043_WA1_05L...ICPU:CPU_Utilization		<input checked="" type="checkbox"/>	90	
✓	Page_In	WA1frcs4043_WA1_05L...IPaging:Page_In		<input checked="" type="checkbox"/>	70	
✓	Page_Out	WA1frcs4043_WA1_05L...IPaging:Page_Out		<input checked="" type="checkbox"/>	100	

We can select as many user defined alerts and set Threshold for the same.

Click on  button and select Alert Description



Now once Alert Description is added we can set Threshold for the same alerts.

Double Click on

<input checked="" type="checkbox"/>	Percentage_Used	WA1\frces4043_WA1_05\...\C:\Percentage_Used	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50
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Here we can define Threshold for the Alert Category Percentage_Used

Monitoring: Properties and Methods

Properties of: WA1\rces4043_WA1_05\OperatingSystem\Filesystems\C:\Percentage_Used
 MTE class: FilesystemPercentageUsed

General PerformanceAttribute Methods Addnl info

Performance properties assigned from group: CG_FileystemPercentageUsed

Comparison Value

Last reported value Smoothing over last 1 min.
 Average in the last hour Smoothing over last 5 min.
 Average in the last quarter of an hour Smoothing over last 15 mins

Threshold values

Change from GREEN to YELLOW	50	%
Change from YELLOW to RED	70	%
Reset from RED to YELLOW	70	%
Reset from YELLOW to GREEN	50	%

Alert is triggered if the comparative value

falls below threshold value exceeds the threshold value

Alert text

Message class: RT
 Message number: 029
 Text: File system for &1 &3 full (threshold value: &2 &3)

8000

Go to Change mode and set Threshold values and save.

Once the system reaches Threshold values Alert is automatically generated.

4. Alert Overview

Once the satellite system is configured with Solution Manager and System Monitoring is also configured we can check the Alerts

Go to Transaction DSWP → Click on Solution Overview

Click on Solution Landscape which was created earlier

Solution Overview - SAP Solution Manager

Self Diagnosis

SAP Solution Manager: Active Solutions

Automatic Refresh of Alerts
 Refresh all 0 Minutes Save
 Switch On All Switch Off All

<input type="checkbox"/>	AIC Waldrof PI System		(1)		29.10.2008 - 00:02:29	
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Solution: AIC Waldrof PI System - SAP Solution Manager

Refresh Self Diagnosis

Solution Monitoring | Service Desk | Change Management | Solution Reporting | Service Plan | Issue Management
 EarlyWatch Alert | Service Level Reporting | System Monitoring / Administration | Business Process Monitoring

06:30 Open Alerts Status: SW: HW: BP: Alert Overview Print Export 100%

System Overview ---- Current Status

SAP NETWEAVER - WA1

- Application Server Java
- Process Integration (PI/XI)

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Click on **Alert Overview**

SAP Solution Manager : Alert Overview

Refresh Interval (Minutes)

Open Alerts Postpone

AIC Waldrof PI System -- Current Status at 06:30:56

Alert	Alert Description	Value	Monitored Object	Previous Object	Last-but-one Object	Doc.	Status
<input type="checkbox"/>	CPU 5minLoadAverage	0 QL	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	CPU Used by SQL	0 %	WA1	Process Integration (PI(X))	SAP NETWEAVER - WA1		Production
<input type="checkbox"/>	CPU Utilization	2 %	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	CPU Utilization	2 %	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	CPU Utilization	2 %	Process Integration (PI(X))	SAP NETWEAVER - WA1			Production
<input type="checkbox"/>	Data Hit Ratio	100 %	WA1	Process Integration (PI(X))	SAP NETWEAVER - WA1		Production
<input type="checkbox"/>	Errors		WA1	Process Integration (PI(X))	SAP NETWEAVER - WA1		Production
<input type="checkbox"/>	Filesystems		WA1 System (PI 7.0)				Production
<input type="checkbox"/>	FreeSpace	7.994 MB	Process Integration (PI(X))	SAP NETWEAVER - WA1			Production
<input type="checkbox"/>	Gateway work process	0 %	fcres4043_WA1_05	WA1 System (PI 7.0)			Production
<input type="checkbox"/>	HeapPeak	0 %	fcres4043_WA1_05	WA1 System (PI 7.0)			Production
<input type="checkbox"/>	HeapTotal	1.907 MB	fcres4043_WA1_05	WA1 System (PI 7.0)			Production
<input type="checkbox"/>	Host spool list used	0 %	fcres4043_WA1_05	WA1 System (PI 7.0)			Production
<input type="checkbox"/>	Instance Availability	100 %	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	Lan		WA1 System (PI 7.0)				Production
<input type="checkbox"/>	Operation mode status		fcres4043_WA1_05	WA1 System (PI 7.0)			Production
<input type="checkbox"/>	OS_Collector	The OS collector (saposcc)	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	OS_Collector	The OS collector (saposcc)	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	Page_In	0 Pg/S	Process Integration (PI(X))	SAP NETWEAVER - WA1			Production
<input type="checkbox"/>	Page_Out	0 Pg/S	Process Integration (PI(X))	SAP NETWEAVER - WA1			Production
<input type="checkbox"/>	Paging_out	0 Pg/S	WA1 System (PI 7.0)				Production
<input type="checkbox"/>	Paging_out	0 Pg/S	WA1 System (PI 7.0)				Production

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Related Content

<https://service.sap.com/sap/support/notes/769623>

<https://service.sap.com/sap/support/notes/662441>

<https://service.sap.com/sap/support/notes/69455>

http://help.sap.com/saphelp_sm40/helpdata/en/5b/0c9ccfd262427685c245d7ea85cd7a/content.htm

For more information, visit the [Operations homepage](#).

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