

**Technical Support Appliance**

**Service Station Appliance**

**Inventory Collection Appliance**

***Review Report***

***Service Station Appliance***

***documentation***

***and***

***education material***

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## Table of Contents

1 Service Station Appliance.....	3
1.1 The Product.....	3
1.2 Review.....	4
1.2.1 Service Station Extra Education.ppt.....	4
1.2.2 Service Station Preinstall Checklist 02212312.odt.....	5
1.2.3 ssdoc-pdf.pdf.....	6
1.2.4 xw5261_course.jpg.....	7
1.2.5 Inventory Collection Appliance Connectivity Paper R1.odt.....	7
1.2.6 Service Station data collection vs credentials vs mapping for rel1 20120215v3.xls.....	7
1.2.7 SSH Key Based Authentication.v01 2012_02_29.odt.....	7
1.2.8 USB_TCPIP_Config.doc.....	8

# 1 Service Station Appliance

There do exist three different names:

- Technical Support Appliance (future)
- Service Station Appliance (current)
- Inventory Collection Appliance (old)

## 1.1 The Product

When I went over the documents, spreadsheets, and presentations I gathered the following information to get a clear picture about what the Service Station Appliance is about and what the difference or addition to Tivoli Application Dependency Discovery Manager is.

In addition I have got access to a Service Station Appliance installation in Mainz.

The Appliance components are:

- IBM x86 server running Vmware ESXi
- Linux running in a virtual machine
- IBM TADDM (7.2.1.1) (Discovery)
- IBM Service and Support Software (Transmission )

Following is a list of Appliance characteristics:

- individual elements are not accessible
- appliance GUI simple and easy to use
- TADDM GUIs are not accessible by the customer
- custom sensors are added for storage and firmware discovery
  - AiXPowerFirmwareSensor 1.0.0
  - IbmlFirmwareSensor 1.0.0
  - MidRangeStorageSensor 1.0.0
  - NSeriesStorageSensor 1.0.0
  - StoragePortSensor 1.0.0
  - XIVStorageSensor 1.0.0
- discovered data and the TADDM logs will be sent to IBM
- Windows Gateways are currently not used
  - ssh daemon is needed on each windows target
- Anchor Servers are not used
  - firewalls need to be opened for more than just port 22 between TADDM and Anchor
- ip addresses are preferred rather than subnets and ranges
- TADDM out of the box Level 3 discovery profile is used
- no additional discovery profiles added
- the custom sensors do appear in the Level 1,2, and 3 discovery profiles they are enabled in Level 2 and 3 discovery profiles
- Appliance in linked mode is using a customers TADDM server and not the embedded one

- Discovery Schedule is outside TADDM  
it is part of the appliance GUI and Schedules do not appear in the TADDM Schedule
- Credentials can not be limited to Scope Sets but in TADDM they can

The Appliance embedded TADDM is a Domain server deployment with a local database.

According to the TADDM documentation this is not recommended for production environments.

So with the current Appliance version the three TADDM recommended deployment ways for production environments can not be used. Depending on the size of the environment the three deployment ways are:

- Domain server deployment
- Synchronization server deployment
- Streaming server deployment

See the following link for the TADDM architectural overview.

→ [http://publib.boulder.ibm.com/infocenter/tivihelp/v46r1/topic/com.ibm.taddm.doc\\_721fp1/InstallGuide/c\\_cmdb\\_arch\\_overview.html](http://publib.boulder.ibm.com/infocenter/tivihelp/v46r1/topic/com.ibm.taddm.doc_721fp1/InstallGuide/c_cmdb_arch_overview.html)

## **1.2 Review**

### **1.2.1 Service Station Extra Education.ppt**

The presentation is well structured and gives lots of valuable information. It points to all other documents, spreadsheets and links around the Appliance.

When I went through the slides and notes I took these comments:

- slide 4:  
telnet is used within some sensors only like Cisco IOS,  
the session sensor is using SSH or WMI
- slide 5:  
One reason for multiple components for the same system is that the reconciliation could not decide that this is the same system based on the CDM naming rules .  
This might happen when first discovery is with SNMP and second discovery is with credentials, or when first discovery is with StackScan and second with credentials .
- slide 6:  
TADDM windows user needs to be member of the local administrator group
- slide 6:  
Windows Gateway is basic TADDM architecture but not used with the Appliance
- slide 6:  
VMware discovery: VMware ESX is discovered by the VirtualCenterSensor and / or the VMwareComputerSystemSensor, ESXi by the VirtualCenterSensor only
- slide 10:  
The limit for a TADDM Domain Server is 10.000 Server Equivalents (SE) or

2.000.000 CIs, a SE is a server with 200 CIs, so in the end the number of CIs is the limit, another limit could be the time frame in which all CIs need to be discovered.

- slide 10:  
the url points to a sales/marketing page not to a technical
- slide 18:  
Level 1 discovery is credential less, Level 2 discovery is with credentials on server level, Level 3 discovery is with credentials on application level. These are pre-defined discovery profiles, new discovery profiles can be created in TADDM to select/de-select or configure sensors.

Most of these comments already have been incorporated into the presentation for the 14. of March. Three slides about discovery and sensors were contributed and added to the presentation.

## 1.2.2 Service Station Preinstall Checklist 02212312.odt

This document is very important when going to prepare the discovery targets and configuring the Appliance for discovery. Following you will find the comments and questions I took when reading the document.

What is link mode? <i>Using customers TADDM installation.</i>	Page 4, 1.3
How to access the Appliance web GUI when DHCP ip address is used?	Page 5, 2.4
Deployed software components can be discovered if they are running at discovery time only!	Page 7, 5
Configuring the target prerequisites is the most time consuming part in a discovery project and it needs to be done by the customer	Page 7, 5
Which cygwin modules need to be installed? <ul style="list-style-type: none"> <li>• <i>From the admin category: cygrunsrv (version 1.17-1 or later)</i></li> <li>• <i>From the net category: opensshd (version 4.6p 1-1 or later)</i></li> </ul>	Page 10/11, 5.3.1.2
Why a Windows Gateway Server when sshd needs to be on each windows target?	Page 11, 5.3.1.2
What is it about guestinfo.ip in VMware discovery? <i>This is described in the Redbook "ITADDM Capabilities and Best Practices" which is based on TADDM version 5.1. In the TADDM 7.2.1 Sensor Reference Guide this is not listed as prerequisite.</i>	Page 11, 5.3.1.3
Which sensor(s) do discover IBM Storage? <i>Four custom sensors developed for the appliance.</i>	Page 12/13, 5.3.2
Windows gateway?	Page 14, 5.3.3.2
Apache binary? <i>It is the httpd executable.</i>	Page 13, 5.3.3.1
iPlanet executables are ns-httpd or webserd.	Page 14, 5.3.3.3
Anchor server?	Page 15,

	5.3.4.1/5.3.4.2
OAS administrator ID?	Page 15, 5.3.4.1
WeBLogicSensor and WebLogicSSHSensor should not run in the same discovery!	Page 16, 5.3.4.3
JBoss jars need to be copied!	Page 16, 5.3.4.4
Domino Web application server requirements? <i>The TADDM Sensor Reference Guide lists some more requirements</i>	Page 16/17, 5.3.4.5
SAP_SLD_GUEST role and SAP_J2EE_ADMIN role are listed in Sensor Reference for SLD sensor.	Page 19, 5.3.6.1
Assuming that the SAP Java Connector (JCo) libraries are pre-installed for CCMS sensor?	Page 19, 5.3.6.1
CCMS user needs to have which privileges? <i>See TADDM Sensor Reference Guide.</i>	Page 19, 5.3.6.1
How to go with firewalls? <i>To open ports 22/23/161 might be sufficient for system discovery but may be not for application discovery.</i>	Page 19; 5.4
The supported target versions (OS, Apps) are not listed for each Sensor. <i>See TADDM Sensor Reference Guide for the out of the box sensors. What is about custom sensors?</i>	general

It is important to keep this document up to date to the TADDM version used in the Appliance.

For the TADDM out of the box sensors the reference is the respective TADDM Sensor Reference Guide.

For TADDM 7.2.1 you will find it here:

→ [http://publib.boulder.ibm.com/infocenter/tivihelp/v46r1/topic/com.ibm.taddmsensors.doc\\_721fp1/welcome\\_page/welcome.html](http://publib.boulder.ibm.com/infocenter/tivihelp/v46r1/topic/com.ibm.taddmsensors.doc_721fp1/welcome_page/welcome.html)

### 1.2.3 ssdoc-pdf.pdf

The Setup Guide Version 1 Release 1 gives a detailed guidance for setting up and using the Appliance.

Following are my findings when reading the document and playing around with the Appliance user interface of the Mainz installation.

The Appliance has its own web-based user interface and does not use the TADDM graphical user interfaces.

For the discovery part of the Appliance an embedded TADDM installation is used. The transmission part of the Appliance is an add on which does not exist in TADDM.

The Appliance discovery schedule is outside the TADDM Schedule shown in the Discovery Management Console.

The Appliance does not give the possibility to create and configure Discovery Profiles.

When creating Discovery Credentials they cannot be limited to Scope Sets as they can in TADDM.

There is no graphical view in the Appliance compared to the TADDM Discovery Management Console Discovery Overview.

When changing the Trace Level from Warning to Debug I did not see the change in the Sensor Logs afterwards. So I am not sure if changing the Appliance Trace Level has effect to the TADDM Sensors log level.

The particular sensor logs can be found in the downloaded logs `download.zip` archive in directory `/logs/taddm/sensors/<timestamp>/*.*`.

### **1.2.4      xw5261\_course.jpg**

To the second XW5261 course I could not enroll.

I enrolled to the first XW5261 course and could download both, the PDF and the ZIP file here.

After extracting the ZIP file and starting the training (Start.htm) on my IBM Open Client for Debian Community (OCDC, Ubuntu) I could follow the course in Firefox but without audio. There was nor error message, so I do not know exactly what is needed for audio in Firefox on OCDC for this course.

### **1.2.5      Inventory Collection Appliance Connectivity Paper R1.odt**

This document gives a brief overview about the Appliance assembly and function.

I doubt that information provided in chapter 5 will be sufficient to convince German customers to send their data centre hardware and software configuration data to IBM.

### **1.2.6      Service Station data collection vs credentials vs mapping for rel1 20120215v3.xls**

This spreadsheet gives a brief overview of the data which is collected with the TADDM out of the box sensors, with the for the Appliance developed custom sensors and which is not collected but is ascertained by reports and analytics afterwards.

### **1.2.7      SSH Key Based Authentication.v01 2012\_02\_29.odt**

This document describes the SSH key based authentication and the usage of the Appliance built in SSH Server Key Management utility which is a helpful utility but not available in TADDM.

### **1.2.8 USB\_TCPIP\_Config.doc**

This document describes how to configure an Appliance with a configuration file stored on an USB stick during boot time. This is not a TADDM feature.