

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring RingMaster/Optimiser from Soft-ex with Avaya Communication Server 1000E R7.6 to collect Call Detail Recording - Issue 1.0

Abstract

These Application Notes describe the configuration steps necessary for provisioning Soft-ex's product RingMaster/Optimiser to successfully interoperate with Avaya Communication Server 1000E R7.6.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

RingMaster/Optimiser from Soft-ex is a telephone call accounting system that processes Call Detail Recording (CDR) information from the Avaya Communication Server 1000E R7.6 (CS1000E) PBX and produces management reports. RingMaster was the original product supplied by Soft-ex to process CDR records and Optimiser is an additional product/service built onto RingMaster which is an alerting system for calls that meet specific requirements, for instance that may indicate telephone fraud.

2. General Test Approach and Test Results

The compatibility testing is concerned with verifying that the addition of Soft-ex's RingMaster/Optimiser does not interfere with the operation of the CS1000E. CDR information is transferred on a serial port (V24 or RS232), so RingMaster/Optimiser is interfacing to the serial port on the switch allocated to CDR output. RingMaster/Optimiser also operates in multisite environments, where CDR data from more than one site is collected and forwarded to a central site. In these cases the data is collected by buffering devices supplied by Soft-ex and transferred by a variety of methods such as via FTP or email. Essentially however for each PBX the interface has the same characteristics: one way data flow from the PBX.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

Note: In some Soft-ex literature the RingMaster/Optimiser product is referred to as Call Management Software or just Optimiser to avoid confusion the product name in this document will be referred to as RingMaster/Optimiser.

2.1. Interoperability Compliance Testing

The principle objective of Interoperability Compliance testing is to provide assurance to the potential customers that the tested products operate as specified and can interoperate in an environment similar to the one that will be encountered at a customer's premises. Performance and load testing is outside the scope of the compliance testing. The interoperability compliance testing includes the following connection types.

- Real-Time connection to the serial port of the CS1000E
- A scheduled connection to an IP Buffer which was connected to the serial port of the CS1000E
- A scheduled connection to the Avaya Data Buffering and Access CDR Collector Toolkit (DBA CDR Collector) which has an FTP connection to the CS1000E

2.2. Test Results

All tests outlined in the test plan document passed successfully. No errors or performance issues were observed on the CS1000E.

2.3. Support

For more information on Soft-ex and product support visit http://www.soft-ex.net.

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3. Reference Configuration

Figure 1 shows the network topology during compliance testing. The CS1000E has a serial connection to both the IP Buffer and the RingMaster/Optimiser server. The RingMaster/Optimiser has two connection types, Real-time direct connection in which case it is connected to the serial port of the CS1000E or a scheduled connection to the IP Buffer in which case an FTP session is opened to the IP Buffer on a scheduled basis. Mapping of a network drive to the DBA CDR Collector to copy the information collected by the DBA CDR Collector to the RingMaster/Optimiser server for processing and reporting. In all cases the CDR information coming from the CS1000E will be the same.

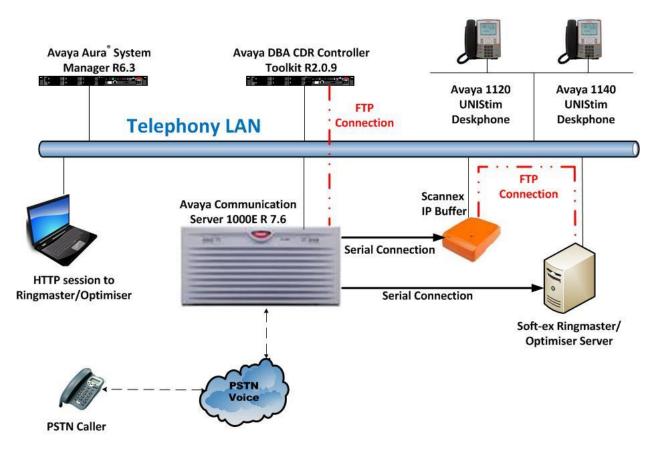


Figure 1: Connection of Soft-ex RingMaster/Optimiser and IP Buffer to the Avaya Communication Server 1000E R7.6 and Avaya DBA CDR Collector Toolkit.

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya Communication Server 1000E on CPPM	R7.6 SP2 (See Appendix for a list of patches)
Avaya Aura® System Manager	System Manager 6.3.0 - FP2 Build No 6.3.0.8.5682-6.3.8.1814 Software Update Revision No: 6.3.3.5.1719
Avaya 1140 UNIStim Deskphone	UNIStim V0625C8D
Avaya 1140 SIP Deskphone	SIP 04.03.12
Avaya 3904 Digital Deskphone	Core V2.4 Flash V9.4
Avaya PC running DBA CDR Collector Toolkit	V2.0.9
Scannex IP Buffer	V2.82
PC Windows 7 running Soft-ex RingMaster/Optimiser	V5.5

5. Configuration of Avaya Communication Server 1000E

The configuration operations illustrated in this section were performed using terminal access to the CS1000E using PuTTY. It is assumed a fully working CS1000E is in place with the necessary licensing. For all other provisioning information, such Administering Avaya CS1000E, refer to product documentation in **Section 11** of these Application Notes.

Note: The configuration of PSTN trunks and routes are outside the scope of these Application Notes.

Note: Not all prompts need an answer. The prompts outlined below are mandatory for a basic configuration. Accept the default responses for all other prompts by pressing the Return key.

Note: Changes made in the CDR_DATA and the RDB below again determine the format of the output of the CDR record and may not apply to all cases on connection to RingMaster/Optimiser. The example below shows the setup used for this compliance testing but may be changed on a per site basis. Refer to the CDR fundamentals document outlined in **Section 11** of this document.

Log in to the CS1000E using PuTTY, enter the proper credentials and once logged in to the Linux application enter the command **cslogin** to gain access to the call server.

```
Avaya Inc. Linux Base 7.65

The software and data stored on this system are the property of, or licensed to, Avaya Inc. and are lawfully available only to authorized users for approved purposes. Unauthorized access to any software or data on this system is strictly prohibited and punishable under appropriate laws. If you are not an authorized user then do not try to login. This system may be monitored for operational purposes at any time.

paul@10.10.40.101's password:
Last login: Thu May 1 14:47:42 2014 from 192.168.10.222

[paul@cs1kpg1 ~]$ cslogin
```

5.1. Configure CDR on Avaya Communication Server 1000E

Enter Overlay 15 to make changes on the **CDR_DATA** in order to setup CDR records on the CS1000E. Type **LD 15** at the > prompt to enter the overlay as shown below. Note the port number that is referenced here is that port configured in **Section 5.2**.

Prompt	Response	Description
>	LD 15	Enter Overlay 15
REQ	CHG	Change
TYPE	CDR_DATA	Change Call Detail Recording Data
CUST	0	Customer Number
CDR	YES	Allow changes on CDR_DATA
IMPH	YES	CDR for Incoming Packet data call
OMPH	YES	CDR for Outgoing Packet data call
AXID	YES	Aux Identification output in CDR Record used in MARP
TRCR	YES	Carriage Return sent after each CDR Record
CDPR	YES	Insert Access code for Route ahead of a Distance Steering
		Code or Trunk Steering Code
ECDR	YES	Print End-to-End Signalling digits in CDR Record
BDI	YES	Buffer Data Interface for CDR Record
OTCR	YES	CDR provided based on originally Dialled Trunk Route
PORT	0-15	Ports that CDR record will be outputted on (Section 5.2)
CNI	DGTS	Calling Number Identification is recorded in the digits
		field
BCAP	NO	Bearer Capability in CDR

Enter Overlay 16 to make changes on the Route Data Block (**RDB**) in order to allow CDR records on the incoming and outgoing route. Type **LD 16** at the > prompt to enter the overlay as shown below.

Prompt	Response	Description
>	LD 16	Enter Overlay 16
REQ	CHG	Change
TYPE	RDB	Route Data Block
CUST	0	Customer Number
ROUT	X	x = Route Number to Change
CDR	YES	Allow changes to CDR for Route x
INC	YES	Allow CDR for Incoming Calls
TTA	YES	Time to Answer output in CDR
ABAN	YES	Abandoned calls record for this route
CDRB	YES	Abandoned calls on busy tone records allowed
QREC	YES	CDR ACD Q initial records can be generated
OAL	YES	CDR records allowed for outgoing calls
AIA	YES	Answered call Identification Allowed on CDR record
OAN	YES	CDR timing starts on Answer supervision of outgoing calls

Changes to the format of the CDR output is changed in the parameters section of overlay 17. Type **LD 17** to enter the overlay as shown below. **FCDR** is set to **NEW** or OLD depending on the output that is required. For this compliance testing the setting is set to NEW. With the new Format CDR (**FCDR** = **NEW**), CDR records are two lines if the Time to Answer (TTA) feature is not activated, or three lines, if the TTA feature is activated.

Prompt	Response	Description
>	LD 17	Enter Overlay 17
REQ	CHG	Change
TYPE	PARM	Parameters
FCDR	NEW	Information fields locations are fixed

5.2. Configure the CDR port on Avaya Communication Server 1000E

Setup the serial ports on the CS1000E in order to configure them as CDR output ports. These port numbers will correspond to the port numbers outlined in the CDR_DATA changed previously. Type **LD 17** to enter the overlay as shown below.

Prompt	Response	Description
>	LD 17	Enter Overlay 17
REQ	CHG	Change
TYPE	ADAN	Parameters
ADAN	NEW TTY x	New TTY port x
CTYP	MGC	Card type is Media Gateway Controller
IPMG	4 0	Loop and shelf where the MGC is located
PORT	X	Port number on the MGC for this connection
DES	cdrport	Description
BPS	9600	Baud Rate for the Port
BITL	8	Data Bit Length
STOP	1	Number of Stop Bits
PARY	NONE	Parity Type
FLOW	NO	Flow Control
USER	CTY	Output Message Type

In order to collect CDR records into a buffer on the CS1000E for collection by the Avaya DBA CDR Collector Toolkit the buffer must be enabled in overlay 117. Type **LD 117** to enter the overlay as shown below.

Prompt	Response	Description
>	LD 117	Enter Overlay 117
=>	ENL BUF CDR	Enable CDR Buffer

Changes are made on the Class of Service of each telephone set in order to allow or deny various CDR outputs on a per set basis. Type **LD 11** to enter overlay 11 to make the changes.

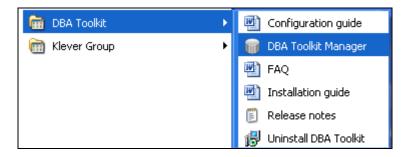
Prompt	Response	Description
>	LD 11	Enter Overlay 11
REQ	CHG	Change
TYPE	1140	Phoneset type to be changed
TN	L-S-C-U	Loop Shelf Card unit location of the Set to be changed
CLS	ABDA	Abandonded call record and Time to Answer Allowed
CLS	ICDA	Internal Call Detail Recording Allowed

6. Configure the Avaya Data Buffer and Access Call Detail Recording Collector Toolkit

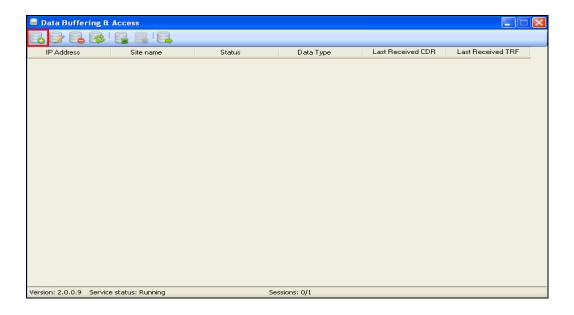
For CS1000E Release 7.0 and later, the DBA SFTP user account must be explicitly enabled by the administrator. The following CLI commands are used to manage the SFTP Account **NT_S_TM_DBA**, which is a system-provided account for DBA SFTP tasks.

- Log in to the CS1000E Linux Base where the Call Server application is installed using PuTTY or an application that uses SSH.
- Execute the command **harden dba** on to enable the NT_S_TM_DBA user and to configure a new password.
- Use NT_S_TM_DBA user and the corresponding password to configure the Avaya Data Buffer and Access Call Detail Recording Collector Toolkit.

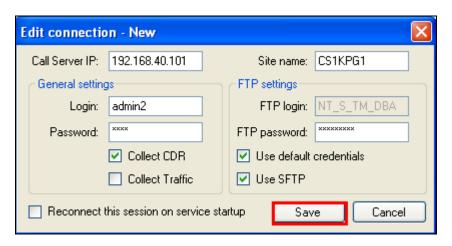
The DBA CDR Collector Toolkit collects the CDR information from the CS1000E via an FTP/SFTP connection to the CS1000E. Once the application is installed the configuration information for the PBX is entered as follows. The DBA Toolkit can be opened by starting the **DBA Toolkit Manager** as shown below.



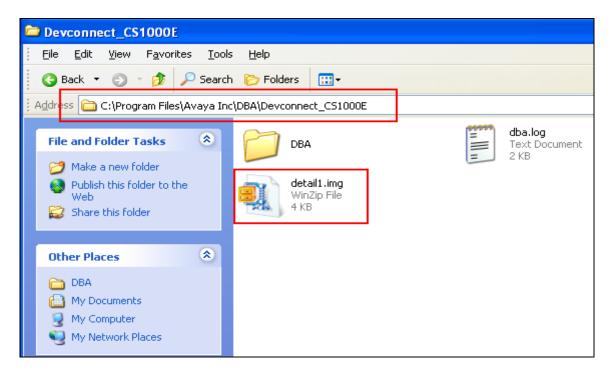
Select **New Session** as shown below.



Enter the **IP Address** of the CS1000E Call Server; note this is the ELAN address of the Call Server Enter a suitable **Login** and **Password** for the CS1000E under **General settings**. Enter the **FTP login** and **FTP password** note that this is the username/password created above to gain FTP/SFTP access. Tick the options on the information that is to be collected in the example below **CDR** only is ticked. If **SFTP** is to be used instead of FTP ensure this box is also ticked. Click on **Save** once the information is entered correctly.



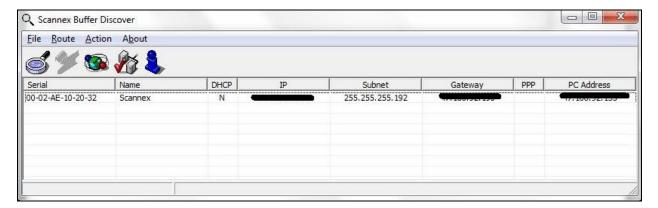
The CDR information from the PBX is collected into a folder in the same location where the DBA was installed. A unique folder is created for each new site created. In the example below the site name is **Devconnect_CS1000E** and thus a folder with this same name is created in C:/ProgramFiles/Avayainc/DBA. Withinthis folder the filename labelled detail.img is stored and can be collected by the RingMaster/Optimiser using a mapped drive from the RingMaster/Optimiser server.



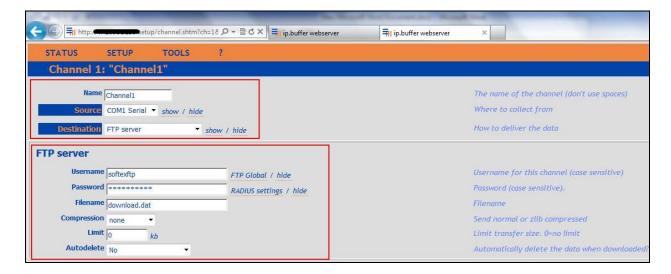
7. Configuration of Scannex IP Buffer for collection by Softex RingMaster/Optimiser

The IP Buffer is a product from Scannex and is supplied by Soft-ex as an option to use a CDR buffer to collect the CDR data from the CS1000E. Information on the install and configuration of this can be found at http://www.scannex.co.uk/. Scannex Buffer Discover is used to configure the IP Buffer and this can be downloaded from the Scannex website. Once installed, it detects the device and a new IP address can be given to the IP Buffer to place this on the network.

Using **Scannex Buffer Discover** the current IP Address, subnet mask and gateway can be found and thus changed to suit any IP network. An example of this is shown below.

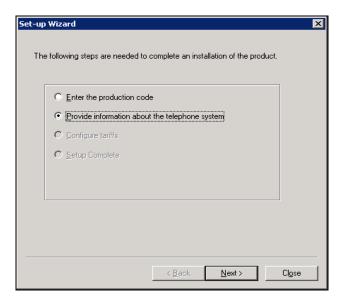


Upon changing the IP information a HTTP session can opened to the IP address of the Buffer and the FTP information is filled out as shown below.



8. Configuration of Soft-ex RingMaster/Optimiser

This section outlines the steps to configure the RingMaster/Optimiser from Soft-ex in order to correctly collect CDR data and process this connecting to the CS1000E. RingMaster/Optimiser is installed on a server or PC from a program on CD/DVD. Installation instructions are outside the scope of this document but information on installation of RingMaster/Optimiser can be found in **Section 11** of this document. Once the software is correctly installed it automatically prompts for some configuration details to complete the installation. This includes information on the PBX that it is connecting to.



Select the PBX that is being connected to from the **PBX Group** as shown below. For a connection to an Avaya CS1000E choose Nortel from the list for PBX's (not shown below, scroll down to Nortel).



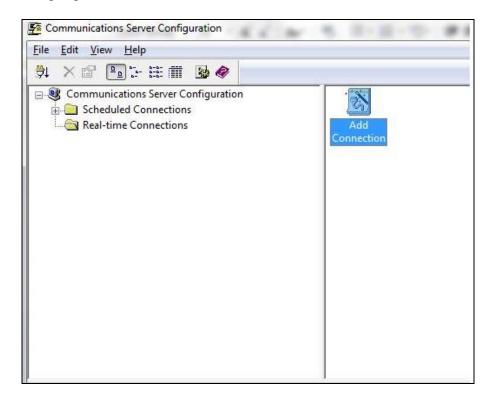
8.1. Configuration of Soft-ex for Direct Connection to CS1K (TTY Port)

Once the application is successfully installed a connection must be setup to collect CDR data. This section shows the setup of a Real-time connection to the CS1000E. This is a serial type connection from the TTY port on the CS1000E to the Communication port on the RingMaster/Optimiser PC.

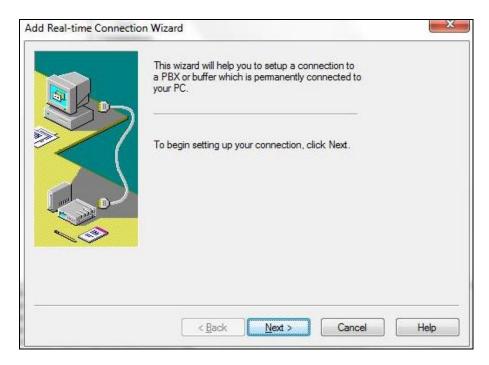
Open the Communication Server configuration in order to configure the new Real-time connection by clicking on **Communications Server** as shown below.



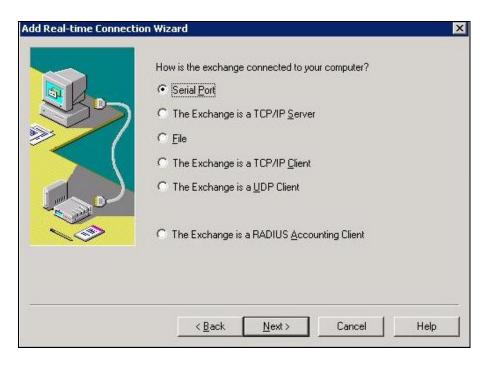
Select the **Real-time Connections** folder in the left hand pane and double click on **Add Connection** as highlighted below.



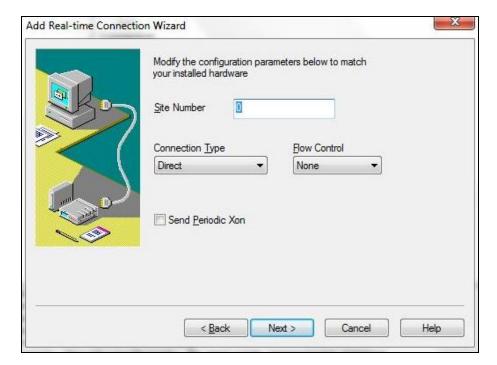
This opens the configuration wizard. Click Next to continue.



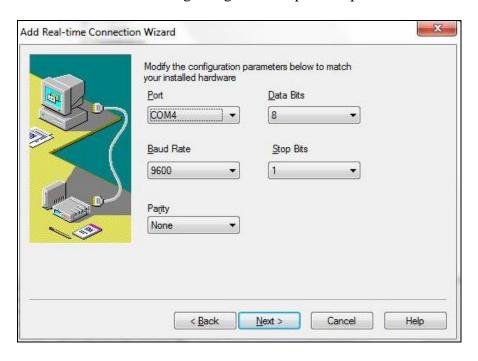
Select the relevant PBX connection for Real-time connection to the CS1000E **Serial Port** is chosen.



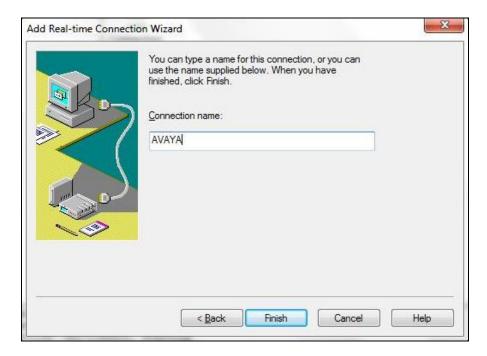
Select the **Site Number**. When there is only one site the site number will always be **0**. The **Connection Type** is **Direct** for a Real-time connection and **Flow Control** is **None**.



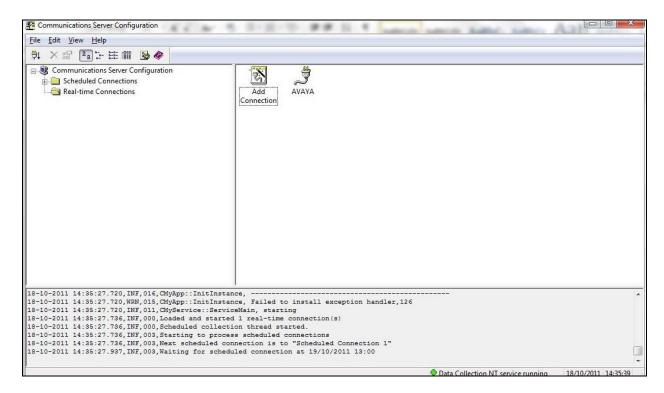
The **Baud Rate** and **Port** number are chosen, note that the information filled in here correspond to the information added in **Section 5** regarding the TTY port setup on the CS1000E.



Choose a **Connection name** for the new connection.

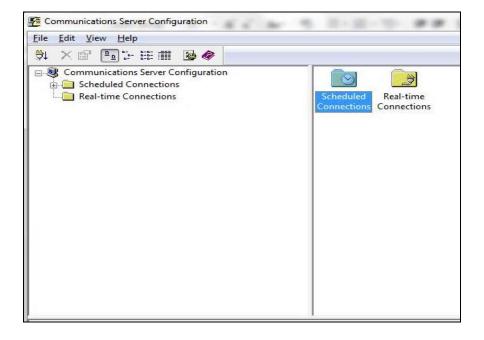


This new connection is shown under **Real-time Connections**.

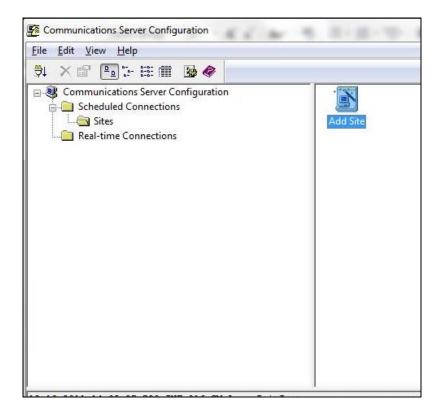


8.2. Configuration of the Soft-ex RingMaster/Optimiser for a scheduled connection to IP Buffer

Open the Communications Server Configuration as in **Section 8.1**. Select **Scheduled Connections** as shown below.



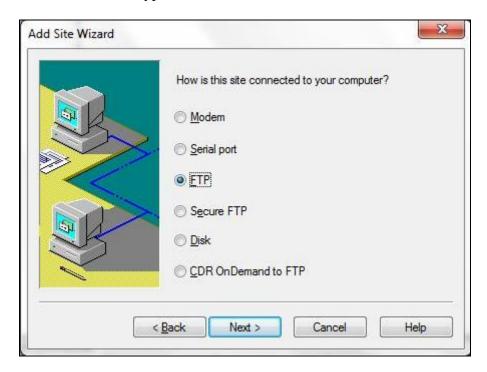
Under Sites double click on Add Site in order to create a new site for the connection.



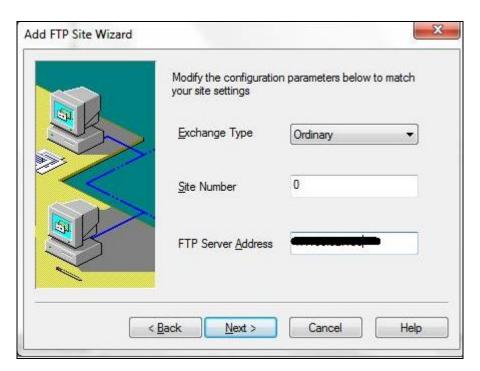
This opens the Add Site Wizard. Click Next to continue.



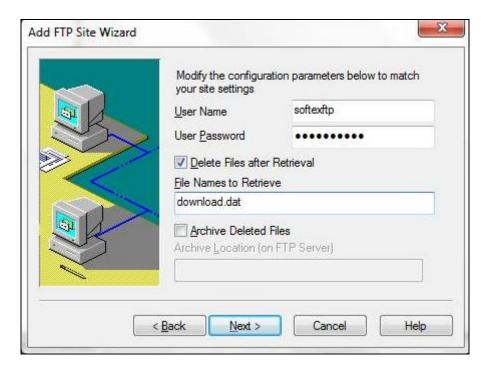
Choose **FTP** for the connection type to connect to the IP Buffer and click **Next** to continue.



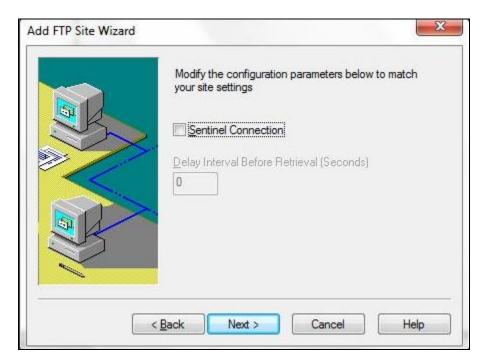
Enter the **FTP Server Address** this is the IP Address of the IP Buffer as in **Section 7.**



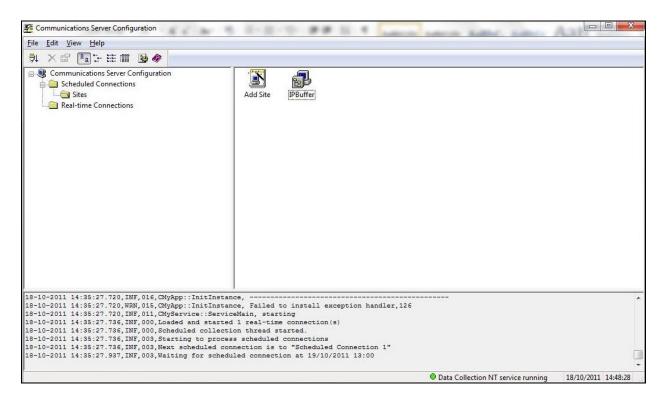
Enter the username and password and the filename that needs to be retrieved. Note that this is the information that was entered in **Section 7**.



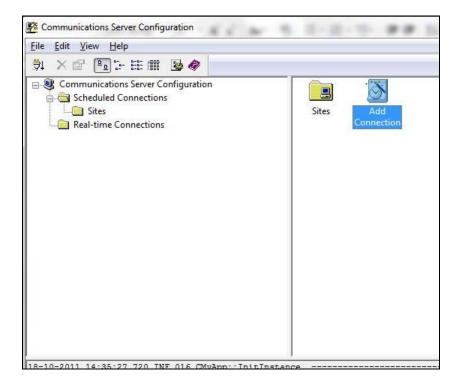
Click Next and then finish to complete the configuration.



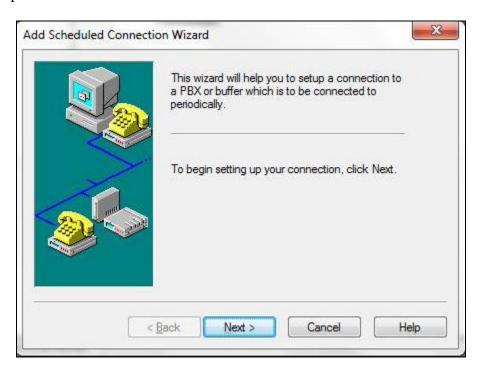
The new site is now shown under the **Scheduled Connections – Sites** folder.



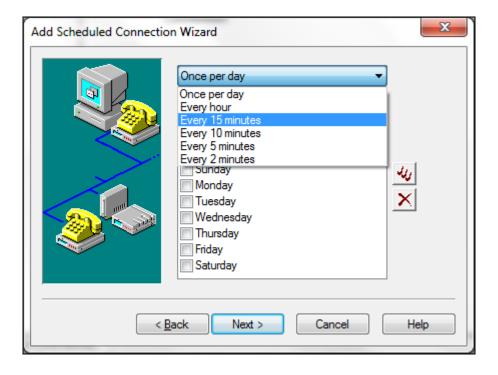
Once the site has been added click on **Scheduled Connections** and double click **Add Connection** as shown below in order to setup the scheduled connection to retrieve the data.



This opens up the Add Schedule Connection Wizard. Click on Next to continue.



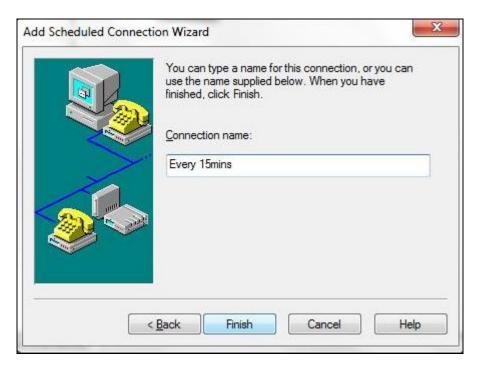
Select the frequency that the RingMaster/Optimiser will FTP to the IP Buffer in order to parse the CDR Data.



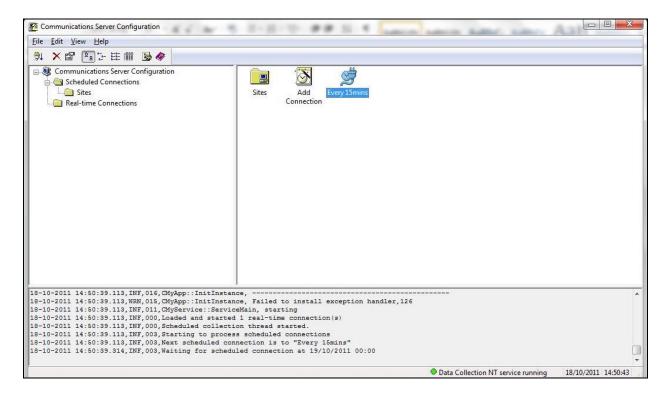
Select the site to be included in the scheduled connection in this case the IPBuffer site that was setup previuosly.



Select a suitable Connection Name and click Finish to complete.

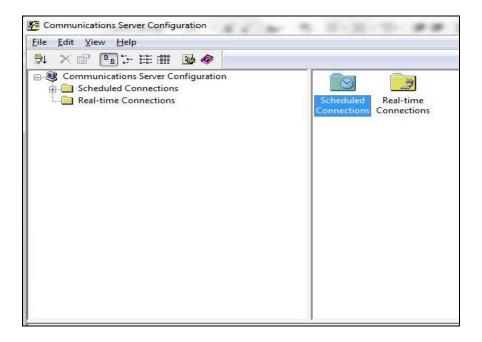


The new connection is now visible under **Scheduled Connections**.

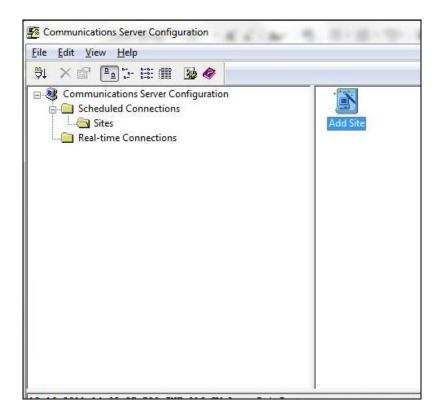


8.3. Configuration of Soft-ex RingMaster/Optimiser for a scheduled connection to the Avaya DBA client

Open the Communications Server Configuration as in **Section 8.1**. Select **Scheduled Connections** as shown below.



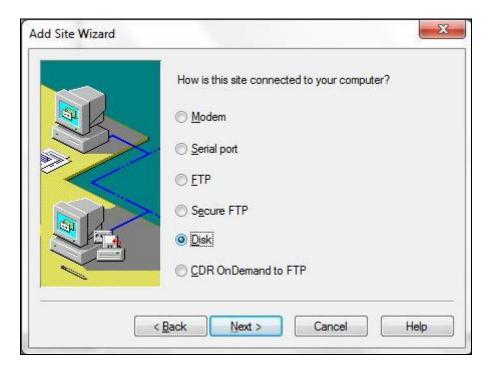
Double-click on Sites and Add Site.



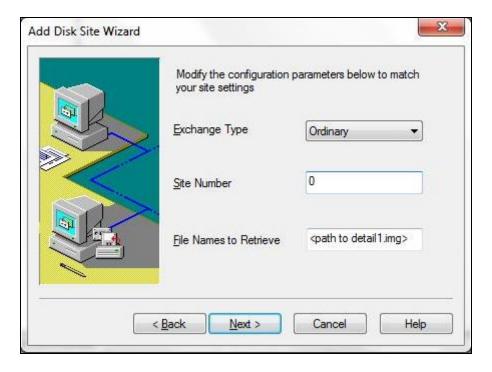
This opens the Add Site Wizard. Click Next to continue.



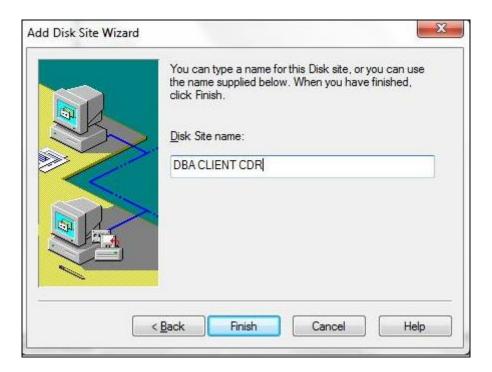
Choose **Disk** for the connection type to connect to the IP Buffer and click **Next** to continue.



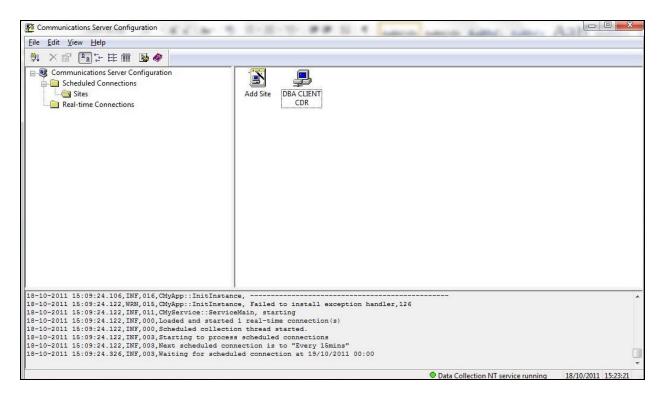
Enter the file name containing the CDR information in the **File Names to Retrieve** box.



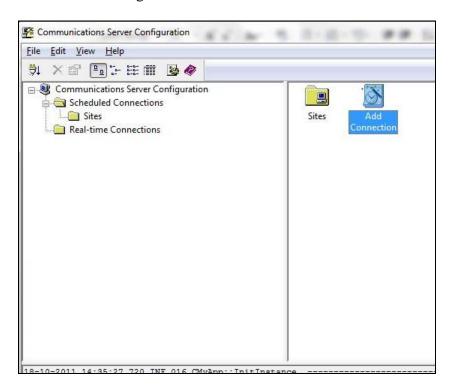
Enter a suitable name for the new site and click Finish.



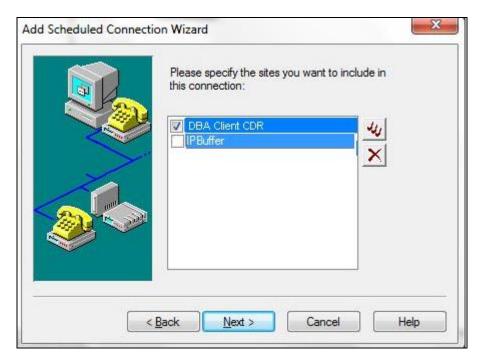
The new Site is now shown under **Sites** in **Scheduled Connections**.



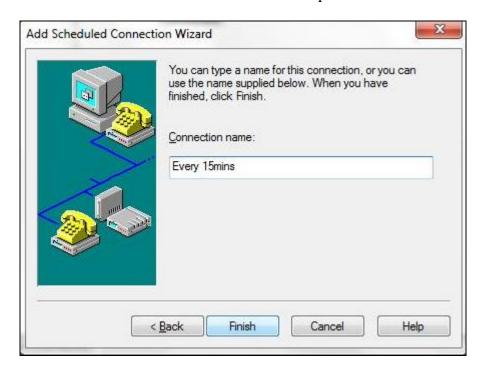
Once the site has been added click on **Scheduled Connections** and double click **Add Connection** as shown below in order to setup the scheduled connection to retrieve the data. This is done as per **Section 8.2** in adding a Scheduled Connection.



Select the newly added site **DBA Client CDR** as shown below.



Select a suitable Connection Name and click Finish to complete.



9. Verification Steps

Verification that CDR data is being produced and sent to the RingMaster/Optimiser is done by first checking that CDR information is being sent from the PBX and second that this CDR information is being received by the RingMaster/Optimiser.

9.1. CDR information is being sent from the CS1000E

Connect a PC/Laptop to the TTY port that is outputting the CDR information this will be the port that was configured in **Section 5.** Using HyperTerminal setup a serial connection with **Port Settings** as shown below.

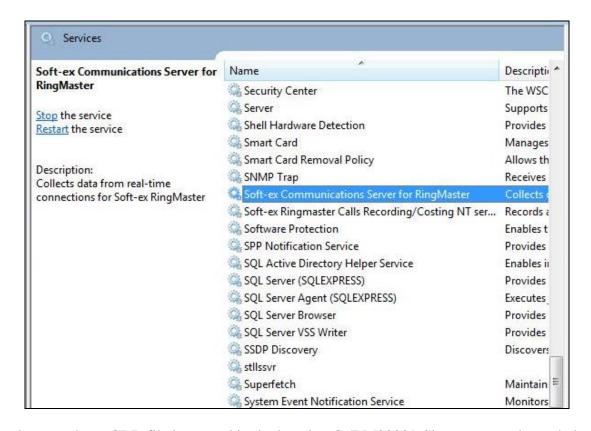


Once connected make an incoming and outgoing call and on completion of the calls, CDR records should be visible on the HyperTerminal. An example is shown below.

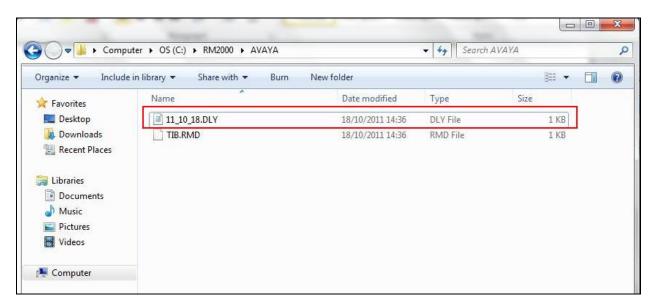
N 107 00 5180	A042020 10/20 11:37:31 00:00:18.0 A423016	
&		000 000
&	000	
N 108 00 A042017	5013 10/20 11:37:45 00:00:14.0	
&		000 000
&00:02	000	

9.2. CDR information is being received by the RingMaster/Optimiser

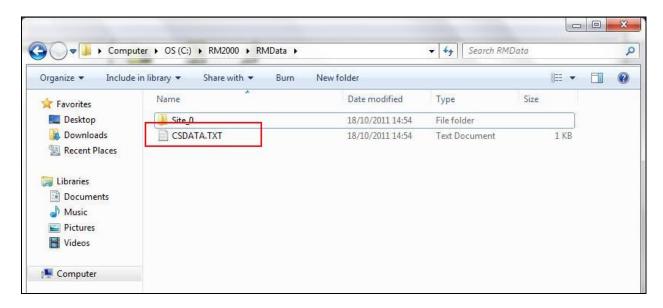
Check that the Soft-ex Communications Server for RingMaster service is running as shown below.



Check to see that a CDR file is created in the location C:/RM2000/<Sitename> as shown below.



Check the processed CDR Data in the location \\RM2000\RMDATA\CSDATA.TXT.



This should show the CDR information as was sent from the CS1000E.

```
<u>File Edit Format View Help</u>
 050 00 5181
                  5180
                           10/18 14:40:32 00:00:10.0
000 000
 051 00 5181 5180
                         10/18 14:40:53 00:00:00.0
                                                                                    000 000
Int. Extn:5180 Extn:5181 (Recorded)
5181, , 14:40, 00:00:00, Internal, 00:01, , , €0.0000, 5180, , , Standard, 18/10/2011, Tuesday
5 052 00 A042023 5181
                         10/18 14:40:47 00:00:06.0
                                                                                    000 000
&00:02
Trnk:T042023 Extn:5181 Buffered.
E 053 00 A042023 5180 10/18 14:40:59 00:00:06.0
                                                                                    000 000
&00:01
a000:01
Inc. Trnk:T042023 Extn:5181 Extn:5180
Portion 1 Recorded
5181, 14:40, 00:00:06, Incoming, 00:02, , , €0.0000, T042023, , FREE, Standard, 18/10/2011, Tuesday
Portion 2 Recorded
5180, , 14:40, 00:00:06, Incoming, 00:01, , , €0.0000, T042023, , FREE, Standard, 18/10/2011, Tuesday
                A042024 10/18 14:40:30 00:00:30.0 A423016
                                                                                    000 000
outg. Trnk:T042024 Extn:5013 (Recorded)
5013, , 14:40, 00:00:30, Outgoing, 00:00, Local, ER42+11142+3016, €0.0920, T042024, , L, Standard, 18/10/2011, Tuesday
```

10. Conclusion

The addition of the RingMaster/Optimiser from Soft-ex and the IP Buffer from Scannex did not impact on the performance of the Avaya Communication Manager 1000E R7.6 and there were no issued reported as per **Section 2.2**.

11. Additional References

Additional Avaya product documentation is available at http://support.avaya.com.

- [1] Call Detail Recording Fundamentals Avaya Communication Server 1000 R7.6 NN43001-550, 05.03
- [2] Software Input Output Reference Administration Avaya Communication Sever R7.6 NN43001-611
- [3] Unified Communications Management Common Services Fundamentals Avaya Communication Server 1000 R7.6 NN43001-116

Information on the installation and configuration of RingMaster/Optimiser can be found at http://www.soft-ex.net website. Information on the install and configuration of the IP Buffer from Scannex can be found at http://www.scannex.co.uk.

Appendix

Avaya Communication Server 1000E R7.6 - Linux Patches

Product	Product Release: 7.65.16.00							
In syst	In system patches: 0							
_	In System service updates: 26							
- "	ATCH# IN SERVICE SPECINS REMOVABLE NAME							
2	Yes	NO	YES	cs1000-dmWeb-7.65.16.21-01.i386.000				
3	Yes	NO	yes	cs1000-snmp-7.65.16.00-01.i686.000				
4	Yes	NO	YES	cs1000-nrsm-7.65.16.00-03.i386.000				
5	Yes	NO	YES	cs1000-oam-logging-7.65.16.01-01.i386.000				
6	Yes	NO	yes	cs1000-cs1000WebService_6-0-7.65.16.21-00.i386.000				
7	Yes	NO	YES	cs1000-sps-7.65.16.21-01.i386.000				
8	Yes	NO	YES	cs1000-pd-7.65.16.21-00.i386.000				
9	Yes	NO	YES	cs1000-shared-carrdtct-7.65.16.21-01.i386.000				
10	Yes	NO	YES	cs1000-shared-tpselect-7.65.16.21-01.i386.000				
11	Yes	NO	YES	cs1000-emWebLocal_6-0-7.65.16.21-01.i386.000				
12	Yes	NO	yes	cs1000-dbcom-7.65.16.21-00.i386.000				
13	Yes	NO	YES	cs1000-csmWeb-7.65.16.21-05.i386.000				
14	Yes	NO	YES	cs1000-shared-xmsg-7.65.16.21-00.i386.000				
15	Yes	NO	YES	cs1000-vtrk-7.65.16.21-29.i386.000				
16	Yes	NO	YES	cs1000-tps-7.65.16.21-05.i386.000				
17	Yes	NO	YES	cs1000-mscAnnc-7.65.16.21-02.i386.001				
18	Yes	NO	YES	cs1000-mscAttn-7.65.16.21-04.i386.001				
19	Yes	NO	YES	cs1000-mscConf-7.65.16.21-02.i386.001				
20	Yes	NO	YES	cs1000-mscMusc-7.65.16.21-02.i386.001				
21	Yes	NO	YES	cs1000-mscTone-7.65.16.21-03.i386.001				
22	Yes	NO	YES	cs1000-bcc-7.65.16.21-21.i386.000				
23	Yes	NO	YES	cs1000-Jboss-Quantum-7.65.16.21-3.i386.000				
24	Yes	NO	YES	cs1000-emWeb 6-0-7.65.16.21-06.i386.000				
25	Yes	NO	yes	cs1000-cs-7.65.P.100-01.i386.001				
26	Yes	YES	yes	cs1000-linuxbase-7.65.16.21-08.i386.000				
27	Yes	NO	YES	cs1000-patchWeb-7.65.16.21-06.i386.000				

Avaya Communication Server 1000E R7.6 - Call Server Patches

VERS	ION 4121					
	ASE 7					
ISSU	E 65 P +					
DepL	ist 1: core	<pre>Issue: 01 (created:</pre>	2013-12-17	04:32:53 (e	est))	
	ERVICE PEPS					
	CR #	PATCH REF #	NAME	DATE	FILENAME	SPECINS
000	wi01052968	ISS1:10F1	p32540_1		p32540_1.cpl	NO
001	wi01045058	ISS1:10F1		19/03/2014	p32214_1.cpl	NO
002 003	wi01085855	ISS1:10F1	_		p32658_1.cpl	NO
003	wi01053314 wi01060382	ISS1:10F1 iss1:1of1		19/03/2014 19/03/2014	p32555_1.cpl p32623 1.cpl	NO
004	wi01070580	ISS1:10F1		19/03/2014	p32380 1.cpl	YES NO
005	wi01070380	ISS1:10F1		20/03/2014	p32858 1.cpl	NO
007	wi01101870	ISS1:10F1			p32382 1.cpl	NO
008	wi01124074	ISS1:10F1		20/03/2014	p32989 1.cpl	NO
009	wi01099300	iss1:10f1			p32704 1.cpl	NO
010	wi01035300	ISS1:10F1		19/03/2014	p32173 1.cpl	NO
011	wi01065922	ISS1:10F1	_	19/03/2014	p32516 1.cpl	NO
012	wi01055480	ISS1:10F1			p32712 1.cpl	NO
013	wi01041453	ISS1:10F1		19/03/2014	p32587 1.cpl	NO
014	wi01096842	ISS1:10F1	p32731 1	20/03/2014	p32731 1.cpl	NO
015	WI0110261	ISS1:10F1	p32758 1	19/03/2014	p32758 1.cpl	NO
016	wi01064599	iss1:1of1	p32580 <u></u> 1	19/03/2014	p32580_1.cpl	NO
017	wi01098783	ISS1:10F1		20/03/2014	p32748_1.cpl	NO
018	wi01072027	ISS1:10F1		19/03/2014	p32689_1.cpl	NO
019	wi01059388	iss1:1of1			p32628_1.cpl	NO
020	wi01104410	ISS1:10F1			p32801_1.cpl	NO
021	wi00933195	ISS1:10F1		19/03/2014	p32491_1.cpl	NO
022	wi00996734	ISS1:10F1			p32550_1.cpl	NO
023	wi01065118	ISS1:10F1		19/03/2014	p32397_1.cpl	NO
024	wi01063864	ISS1:10F1		19/03/2014	p32410_1.cpl	YES
025	wi01096712	ISS1:10F1		20/03/2014	p32708_1.cpl	NO
026 027	wi01075359 wi01080753	ISS1:10F1 ISS1:10F1	_	19/03/2014 19/03/2014	p32671_1.cpl p32518 1.cpl	NO NO
027	wi01030733	ISS1:10F1		19/03/2014	p32413 1.cpl	NO
029	wi01075475	ISS1:10F1		19/03/2014	p32594 1.cpl	NO
030	wi01073333	ISS1:10F1		19/03/2014	p32522 1.cpl	NO
031	wi01070756	ISS1:10F1		19/03/2014	p32444 1.cpl	NO
032	wi01075353	ISS1:10F1		19/03/2014	p32613 1.cpl	NO
033	wi01062607	ISS1:10F1		19/03/2014	p32503 1.cpl	NO
034	wi01068851	ISS1:10F1	_	19/03/2014	p32439 1.cpl	NO
035	wi01075352	ISS1:10F1	p32603 1	19/03/2014	p32603 1.cpl	NO
036	wi01092300	ISS1:10F1	p32692 1	19/03/2014	p32692_1.cpl	NO
037	wi01063263	ISS1:10F1	p32573_1	19/03/2014	p32573_1.cpl	NO
038	wi01087528	ISS1:10F1	p32700 <u></u> 1	19/03/2014	p32700_1.cpl	NO
039	wi01111400	ISS1:10F1	p32854_1	20/03/2014	p32854_1.cpl	NO
040	wi01039280	ISS1:10F1	p32423_1	19/03/2014	p32423_1.cpl	NO
041	wi01068669	ISS1:10F1	p32333 <u></u> 1	19/03/2014	p32333_1.cpl	NO
042	wi01069441	ISS1:10F1	p32097_1	19/03/2014	p32097_1.cpl	NO
043	wi01058621	ISS1:10F1	p32339_1	19/03/2014	p32339_1.cpl	NO
044	wi01032756	ISS1:10F1	p32673_1	19/03/2014	p32673_1.cpl	NO
045	wi01070465	iss1:1of1	p32562_1	19/03/2014	p32562_1.cpl	NO
046	wi01053920	ISS1:10F1	p32303_1	19/03/2014	p32303_1.cpl	NO
047 048	wi00897254 wi01057403	ISS1:10F1	p31127_1 p32591 1	19/03/2014 19/03/2014	p31127_1.cpl p32591 1.cpl	NO
048	wi0105/403	ISS1:10F1 ISS1:10F1	p32591_1 p32449 1	19/03/2014	p32449 1.cpl	NO NO
050	wi01066991	ISS1:10F1 ISS1:10F1	p32449_1 p32640 1	19/03/2014	p32640 1.cpl	NO
051	wi01094303	ISS1:10F1 ISS1:10F1	p32840_1 p32809 1	20/03/2014	p32809 1.cpl	NO
031	MIDIOODII	1301:101	b22003_1	20/03/2014	basana_r.cbr	140

052	wi01123033	ISS1:10F1	p33006 1	20/03/2014	p33006 1.cpl	NO
053	wi01060241	ISS1:10F1	p32381 1	19/03/2014	p32381 1.cpl	NO
054	wi01034307	ISS1:10F1	p32615 1	19/03/2014	p32615 1.cpl	NO
055	wi01051307			19/03/2014		
		ISS1:10F1	p32606_1		p32606_1.cpl	NO
056	wi00884716	ISS1:10F1	p32517_1	19/03/2014	p32517_1.cpl	NO
057	wi01070468	iss1:1of1	p32418_1	19/03/2014	p32418_1.cpl	NO
058	wi01091447	ISS1:10F1	p32675 1	19/03/2014	p32675 1.cpl	NO
059	wi01130189	ISS1:10F1	p33004 1	20/03/2014	p33004 1.cpl	YES
060	wi01132599	ISS1:10F1	p33025 1	20/03/2014	p33025 1.cpl	NO
061	wi01132333	ISS1:10F1	p32416 1	19/03/2014	p32416 1.cpl	NO
062	wi01056633	ISS1:10F1	p32322_1	19/03/2014	p32322_1.cpl	NO
063	wi01078721	ISS1:10F1	p32553_1	20/03/2014	p32553_1.cpl	NO
064	wi01053597	ISS1:10F1	p32304 1	19/03/2014	p32304 1.cpl	NO
065	wi01132883	ISS1:10F1	p33030 1	20/03/2014	p33030 1.cpl	NO
066	wi01025156	ISS1:10F1	p32136 1	19/03/2014	p32136 1.cpl	NO
067	wi01023133	ISS1:10F1	p32659 1	19/03/2014	p32659 1.cpl	NO
068	wi01114038	ISS1:10F1	p32869_1	20/03/2014	p32869_1.cpl	NO
069	wi01075360	iss1:1of1	p32602_1	19/03/2014	p32602_1.cpl	NO
070	wi01053195	ISS1:10F1	p32297_1	19/03/2014	p32297_1.cpl	NO
071	wi01043367	ISS1:10F1	p32232 1	19/03/2014	p32232 1.cpl	NO
072	wi01082456	ISS1:10F1	p32596 1	19/03/2014	p32596 1.cpl	NO
073	wi01089519	ISS1:10F1	p32665 1	19/03/2014	p32665 1.cpl	NO
073	wi01009319	ISS1:10F1	p32794 1	20/03/2014	p32794 1.cpl	NO
075	wi01088585	ISS1:10F1	p32656_1	19/03/2014	p32656_1.cpl	NO
076	wi01035980	ISS1:10F1	p32558_1	19/03/2014	p32558_1.cpl	NO
077	wi01087543	ISS1:10F1	p32662_1	19/03/2014	p32662_1.cpl	NO
078	wi01060826	ISS1:10F1	p32379_1	19/03/2014	p32379_1.cpl	NO
079	wi01114177	ISS1:10F1	p32871 1	20/03/2014	p32871 1.cpl	NO
080	wi01034961	ISS1:10F1	p32144 1	19/03/2014	p32144 1.cpl	NO
081	wi01111041	ISS1:10F1	p32840 1	20/03/2014	p32840 1.cpl	NO
082	WI01077073	ISS1:10F1	p32534 1	19/03/2014	p32534 1.cpl	NO
083	wi01133985	ISS1:10F1	p33049_1	20/03/2014	p33049_1.cpl	NO
084	wi01060341	ISS1:10F1	p32578_1	19/03/2014	p32578_1.cpl	NO
085	wi01130836	ISS1:10F1	p33008_1	20/03/2014	p33008_1.cpl	YES
086	wi01118928	ISS1:10F1	p32922 1	20/03/2014	p32922 1.cpl	NO
087	wi01070585	ISS1:10F1	p32383 1	20/03/2014	p32383 1.cpl	NO
088	wi01071296	ISS1:10F1	p32836 1	20/03/2014	p32836 1.cpl	NO
089	wi01089355	ISS1:10F1	p32674 1	20/03/2014	p32674 1.cpl	YES
090	wi01119312	ISS1:10F1	p32919 1	20/03/2014	p32919 1.cpl	NO
091	wi01134952	ISS1:10F1	p33039_1	20/03/2014	p33039_1.cpl	NO
092	wi01124477	ISS1:10F1	p32963_1	20/03/2014	p32963_1.cpl	NO
093	wi01117636	ISS1:10F1	p32941_1	20/03/2014	p32941_1.cpl	YES
094	wi01115894	ISS1:10F1	p32910 <u></u> 1	20/03/2014	p32910_1.cpl	NO
095	wi01101385	ISS1:10F1	p32773 1	20/03/2014	p32773 1.cpl	YES
096	wi01115450	ISS1:10F1	p32888 1	20/03/2014	p32888 1.cpl	NO
097	wi01075538	ISS1:10F1	p32469 1	20/03/2014	p32469 1.cpl	NO
098	wi01073336	ISS1:10F1	p32192 1	20/03/2014	p32192 1.cpl	YES
099	wi01126552	ISS1:10F1	p32975_1	20/03/2014	p32975_1.cpl	NO
100	wi01130405	ISS1:10F1	p33015_1	20/03/2014	p33015_1.cpl	NO
101	wi01129028	ISS1:10F1	p33016_1	20/03/2014	p33016_1.cpl	NO
102	wi01099724	ISS1:10F1	p32742_1	20/03/2014	p32742_1.cpl	YES
103	wi01129098	ISS1:10F1	p32951 1	20/03/2014	p32951 1.cpl	NO
104	wi01101781	ISS1:10F1	p32890 1	20/03/2014	p32890 1.cpl	NO
105	WI01108562	ISS1:10F1	p32832 1	20/03/2014	p32832 1.cpl	NO
106	wi01094727	ISS1:10F1	p32848 1	20/03/2014	p32848 1.cpl	NO
107	wi01094727	ISS1:10F1	p32735 1	20/03/2014	p32735 1.cpl	
						NO
108	wi01022598	ISS1:10F1	p32066_1	20/03/2014	p32066_1.cpl	NO
109	wi01126454	ISS1:10F1	p32973_1	20/03/2014	p32973_1.cpl	NO
110	wi01051200	ISS1:10F1	p32290_1	20/03/2014	p32290_1.cpl	NO
111	wi01127640	ISS1:10F1	p32992 <u></u> 1	20/03/2014	p32992_1.cpl	NO
112	wi01128512	ISS1:10F1	p32997 1	20/03/2014	p32997 1.cpl	NO
113	wi01122174	ISS1:10F1	p32936 1	20/03/2014	p32936 1.cpl	NO
	-	/	1		1	

114	wi01097598	ISS1:10F1	p32797_1	20/03/2014	p32797_1.cpl	NO
115	wi01095462	ISS1:10F1	p32723 1	20/03/2014	p32723 1.cpl	NO
116	wi01108828	ISS1:10F1	p32831 1	20/03/2014	p32831 1.cpl	NO
117	wi01104473	ISS1:10F1	p32818 1	20/03/2014	p32818 1.cpl	NO
118	wi01079444	ISS1:10F1	p32564 1	20/03/2014	p32564 1.cpl	NO
	wi01079444 wi01109251					
119		ISS1:10F1	p32827_1	20/03/2014	p32827_1.cpl	NO
120	wi01092443	ISS1:10F1	p32676_1	20/03/2014	p32676_1.cpl	NO
121	wi01099292	ISS1:10F1	p32886_1	20/03/2014	p32886_1.cpl	NO
122	wi01104867	ISS1:10F1	p32828 1	20/03/2014	p32828 1.cpl	NO
123	wi01080963	ISS1:10F1	p32626 1	20/03/2014	p32626 1.cpl	YES
124	wi01065115	ISS1:10F1	p32523 1	20/03/2014	p32523 1.cpl	NO
125	wi01081510	ISS1:10F1	p32582 1	20/03/2014	p32582 1.cpl	NO
126	wi01110593	ISS1:10F1	p32849 1	20/03/2014	p32849 1.cpl	NO
127	wi010199606	iss1:1of1	p32713 1	20/03/2011	p32713 1.cpl	NO
128	wi01123389	ISS1:10F1	p33045_1	20/03/2014	p33045_1.cpl	NO
129	wi01072062	ISS1:10F1	p32776_1	20/03/2014	p32776_1.cpl	NO
130	wi01076654	ISS1:10F1	p32529_1	20/03/2014	p32529_1.cpl	NO
131	WI01092793	ISS1:10F1	p32699 1	20/03/2014	p32699 1.cpl	NO
132	wi01128596	ISS1:10F1	p33000 1	20/03/2014	p33000 1.cpl	NO
133	wi01090535	ISS1:10F1	p32519 1	20/03/2014	p32519 1.cpl	NO
134	wi01127447	ISS1:10F1	p32990 1	20/03/2014	p32990 1.cpl	NO
135	wi01127447	ISS1:10F1	p33041 1	20/03/2014	p33041 1.cpl	NO
136	wi01126704	ISS1:10F1	p32980_1	20/03/2014	p32980_1.cpl	NO
137	wi01093118	ISS1:10F1	p32496_1	20/03/2014	p32496_1.cpl	NO
138	wi01108262	ISS1:10F1	p32865_1	20/03/2014	p32865_1.cpl	YES
139	wi01098433	ISS1:10F1	p32736_1	20/03/2014	p32736_1.cpl	NO
140	wi01115807	ISS1:10F1	p32895 1	20/03/2014	p32895 1.cpl	YES
141	wi01072366	ISS1:10F1	p32488 ⁻ 1	20/03/2014	p32488 1.cpl	NO
142	wi01136698	ISS1:10F1	p33057 1	20/03/2014	p33057 1.cpl	NO
143	wi01119086	ISS1:10F1	p32917 1	20/03/2014	p32917 1.cpl	NO
144	wi01132204	ISS1:10F1	p32501 1	20/03/2014	p32501 1.cpl	NO
145	wi01058378	ISS1:10F1	p32344 1	20/03/2014	p32344 1.cpl	NO
146	wi01088797	ISS1:10F1	p32844_1	20/03/2014	p32844_1.cpl	NO
147	wi00937672	ISS1:10F1	p31276_1	20/03/2014	p31276_1.cpl	NO
148	wi01098905	ISS1:10F1	p32556_1	20/03/2014	p32556_1.cpl	NO
149	wi01120705	ISS1:10F1	p32930_1	20/03/2014	p32930_1.cpl	NO
150	wi01120406	ISS1:10F1	p32956 1	20/03/2014	p32956 1.cpl	NO
151	wi01083896	ISS1:10F1	p32937 1	20/03/2014	p32937 1.cpl	NO
152	wi01130815	ISS1:10F1	p33017 1	20/03/2014	p33017 1.cpl	NO
153	wi01113374	ISS1:10F1	p32874 1	20/03/2014	p32874 1.cpl	NO
154	wi01113374	ISS1:10F1	p32738 1	20/03/2014		NO
					p32738_1.cpl	
155	wi01104627	ISS1:10F1	p32819_1	20/03/2014	p32819_1.cpl	NO
156	wi01137003	ISS1:10F1	p33053_1	20/03/2014	p33053_1.cpl	NO
157	wi01093071	ISS1:10F1	p32701_1	20/03/2014	p32701_1.cpl	NO
158	wi01068751	ISS1:10F1	p32445_1	20/03/2014	p32445_1.cpl	NO
159	wi01134602	ISS1:10F1	p32398_1	20/03/2014	p32398_1.cpl	NO
160	wi01102093	ISS1:10F1	p32760 1	20/03/2014	p32760 1.cpl	NO
161	wi01101969	ISS1:10F1	p32726 1	20/03/2014	p32726 1.cpl	NO
162	wi01133106	ISS1:10F1	p33032 1	20/03/2014	p33032 1.cpl	NO
163	wi01070279	ISS1:10F1	p32262 1	20/03/2014	p32262 1.cpl	NO
164	wi01070279	ISS1:10F1	p32202_1 p32970 1	20/03/2014	p32970 1.cpl	NO
				20/03/2014		
165	wi01088915	ISS1:10F1	p32638_1		p32638_1.cpl	NO
166	wi01130348	ISS1:10F1	p33014_1	20/03/2014	p33014_1.cpl	NO
167	wi01077639	ISS1:10F1	p32883_1	20/03/2014	p32883_1.cpl	NO
168	wi01125238	ISS1:10F1	p32971_1	20/03/2014	p32971_1.cpl	NO
169	wi01000087	ISS1:10F1	p32014_1	20/03/2014	p32014_1.cpl	NO
170	wi01119100	ISS1:10F1	p32925 1	20/03/2014	p32925 1.cpl	NO
171	wi01132902	ISS1:10F1	p33028 1	20/03/2014	p33028 1.cpl	NO
172	wi01053950	ISS1:10F1	p32654 1	20/03/2014	p32654 1.cpl	YES
173	wi01033330	ISS1:10F1	p32467 1	20/03/2011	p32467 1.cpl	NO
174	wi01002024	ISS1:10F1	p32830 1	20/03/2014	p32830 1.cpl	NO
175						
1/3	wi01073725	ISS1:10F1	p32552_1	20/03/2014	p32552_1.cpl	NO

176	wi01103142	ISS1:10F1	p32778_1	20/03/2014	p32778_1.cpl	NO
177	wi01099810	ISS1:10F1	p32796 <u></u> 1	20/03/2014	p32796_1.cpl	NO
178	wi01134354	ISS1:10F1	p33031_1	20/03/2014	p33031_1.cpl	NO
179	wi01127527	ISS1:10F1	p32988_1	20/03/2014	p32988_1.cpl	YES
180	wi01095255	ISS1:10F1	p33027_1	20/03/2014	p33027_1.cpl	NO
181	wi01121374	ISS1:10F1	p31107_1	20/03/2014	p31107_1.cpl	NO
182	wi01102475	ISS1:10F1	p32782 <u></u> 1	20/03/2014	p32782_1.cpl	YES
183	wi01120458	ISS1:10F1	p32929 <u></u> 1	20/03/2014	p32929_1.cpl	NO
184	wi01118320	ISS1:10F1	p32753_1	20/03/2014	p32753_1.cpl	NO
185	wi01133960	ISS1:10F1	p33034_1	20/03/2014	p33034_1.cpl	NO
186	wi01075540	ISS1:10F1	p32492_1	20/03/2014	p32492_1.cpl	NO
187	wi01112655	ISS1:10F1	p32870 <u></u> 1	20/03/2014	p32870_1.cpl	NO
188	wi01106658	ISS1:10F1	p32812_1	20/03/2014	p32812_1.cpl	NO
189	wi01021522	ISS1:10F1	p32863_1	20/03/2014	p32863_1.cpl	NO
190	wi01089807	ISS1:10F1	p32957_1	20/03/2014	p32957_1.cpl	NO
191	wi01083036	ISS1:10F1	p32571_1	20/03/2014	p32571_1.cpl	NO
192	wi01102091	ISS1:10F1	p32744 <u></u> 1	20/03/2014	p32744_1.cpl	YES
193	wi01104486	ISS1:10F1	p32866_1	20/03/2014	p32866_1.cpl	NO
194	wi01119863	ISS1:10F1	p32923_1	20/03/2014	p32923_1.cpl	NO
195	wi01071996	ISS1:10F1	p32461_1	20/03/2014	p32461_1.cpl	NO
196	wi01094832	iss1:1of1	p32718_1	20/03/2014	p32718_1.cpl	NO
197	wi01115369	ISS1:10F1	p32889 <u></u> 1	20/03/2014	p32889_1.cpl	NO
198	wi01137737	ISS1:10F1	p33055_1	20/03/2014	p33055_1.cpl	NO
199	wi01081692	ISS1:10F1	p32569_1	20/03/2014	p32569_1.cpl	NO
200	wi01065248	ISS1:10F1	p32412_1	20/03/2014	p32412_1.cpl	NO
201	wi01132222	ISS1:10F1	p33023_1	20/03/2014	p33023_1.cpl	NO
202	wi01127874	ISS1:10F1	p25747_1	20/03/2014	p25747_1.cpl	NO
203	wi01118819	ISS1:10F1	p32954_1	20/03/2014	p32954_1.cpl	NO
204	wi01096907	ISS1:10F1	p32733_1	20/03/2014	p32733_1.cpl	NO
205	wi01111194	ISS1:10F1	p32821_1	20/03/2014	p32821_1.cpl	NO
206	wi01113712	ISS1:10F1	p32877_1	20/03/2014	p32877_1.cpl	NO
207	wi01100508	ISS1:10F1	p32761_1	20/03/2014	p32761_1.cpl	NO
208	wi01096910	ISS1:10F1	p32734_1	20/03/2014	p32734_1.cpl	NO
209	wi01071659	ISS1:10F1	p32589_1	20/03/2014	p32589_1.cpl	NO
210	wi01075149	ISS1:10F1	p32475_1	20/03/2014	p32475_1.cpl	NO
211	wi01097166	ISS1:10F1	p32878_1	20/03/2014	p32878_1.cpl	NO
212	wi01068922	ISS1:10F1	p32454_1	20/03/2014	p32454_1.cpl	NO
213	wi01127738	ISS1:10F1	p32993 <u></u> 1	20/03/2014	p32993_1.cpl	NO
214	wi01102296	ISS1:10F1	p32780_1	20/03/2014	p32780_1.cpl	NO
215	wi01076948	ISS1:10F1	p32526_1	20/03/2014	p32526_1.cpl	YES
216	wi01088055	ISS1:10F1	p32607_1	20/03/2014	p32607_1.cpl	NO
217	wi01114695	ISS1:10F1	p32885_1	20/03/2014	p32885_1.cpl	NO
MDP>LAST SUCCESSFUL MDP REFRESH :2014-03-20 09:14:46(Local Time)						

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