



## **Avaya Solution & Interoperability Test Lab**

---

# **Application Notes for aurenz GmbH AlwinPro UC-Edition with Avaya IP Office to collect Call Detail Records (CDR) – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps necessary for provisioning aurenz GmbH's product AlwinPro UC-Edition v13.0 to successfully interoperate with Avaya IP Office R11.1 to collect CDR/SMDR.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

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

These Application Notes describe the configuration steps necessary for provisioning aurenz GmbH's product AlwinPro UC-Edition v13.0 to successfully interoperate with Avaya IP Office R11.1 to collect CDR/SMDR. Avaya IP Office consists of an IP Office Server Edition running on a virtual platform as the primary server with an IP Office IP500 V2 running as the secondary expansion system. Both systems are linked by IP Office Line IP trunks that can enable voice networking across these trunks to form a multi-site network. AlwinPro UC-Edition collects CDR from both the primary Server Edition and the secondary IP500 V2 expansion and presents them together as one system.

**Note:** *Call Detail Records on IP Office is referred to as Station Message Detail Recorder (SMDR).*

AlwinPro UC-Edition from aurenz GmbH is a telephone call accounting system that uses Call Detail Records (CDR) information from Avaya IP Office and produces management reports. SMDR generated by IP Office is captured by AlwinPro UC-Edition using its Data Collector. Costs for manpower, equipment (devices) and services are collected and allocated properly. AlwinPro UC-Edition is used by customer for calculating internal costs or third-party billing. All data is generated and processed with regard for data protection requirements. For further information please go to <https://www.aurenz.de>

**Note:** AlwinPro uses a module called Data Collector to process CDR from IP Office, this module and its interaction with IP Office is the primary focus of these Application Notes. The reports produced by AlwinPro are used to verify that the data collected by the Data Collector is processed correctly.

## 2. General Test Approach and Test Results

Compliance testing focused on verifying that calls that were made and received by various endpoints on IP Office were reported on correctly and that the addition of AlwinPro UC-Edition did not interfere with the overall operation of IP Office. CDR information is transferred via TCP/IP stream, so AlwinPro UC-Edition is listening on a port awaiting CDR output. Various calls were made to and from IP Office endpoints/extensions and the CDR produced examined to ensure all calls were reported on appropriately.

*CDR on IP Office is referred to as Station Message Detail Recorder (SMDR). IP Office Server Edition and IP500 V2 produce separate SMDR outputs which are collected into the aurenz GmbH Data Collector installed on the AlwinPro UC-Edition server.*

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.

Avaya recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Avaya systems and AlwinPro UC-Edition did not include use of any specific encryption features as requested by aurenz GmbH.

## 2.1. Interoperability Compliance Testing

The 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. The interoperability compliance testing focused on a Real-Time TCP/IP connection listening on a port awaiting CDR data from IP Office.

The testing focused on the following types of calls:

- **Internal calls** – Calls made internally between H.323, SIP and Digital endpoints.
- **Inbound calls** – Test CDR records for inbound calls to the IP Office from PSTN callers.
- **Outbound calls** – Test CDR records for outbound calls from the IP Office to PSTN callers.
- **Hold/Transferred/ calls** – Test CDR records for calls transferred to PSTN callers.
- **Conference calls** - Test CDR records for calls in conference between the IP Office and PSTN callers.
- **Forwarded calls** – Test CDR records for calls made to desk phones that are forwarded to the PSTN.
- **Account Code and Authorization Codes** – Outbound calls were made using Account Codes and Authorization Codes to see how they are reported on.
- **Mobile Twinning and Hunt Groups** – Calls were made using Mobile Twinning and calls were made to Hunt Groups to see how they are reported on.
- **Serviceability** - The behaviour of AlwinPro UC-Edition under different simulated LAN failures was also observed.

**Note:** Two PSTN lines were used, ISDN on the IP500 V2 expansion and SIP trunk to Session Manager on the Server Edition.

Each CDR/SMDR record was inspected for the accuracy of specific information shown below:

- Call termination time
- Call duration
- Condition code
- Dialed number
- Calling number
- Access code used (outbound)

## 2.2. Test Results

Tests were performed to ensure full interoperability of IP Office with aurenz GmbH AlwinPro UC-Edition. Performance and load testing is outside the scope of the compliance testing. All the test cases passed successfully. With the following observation noted.

1. When an internal call was made to an IP Office user with Mobile Twinning, IP Office did not generate an extra SMDR record with U MT as cause. Avaya is investigating.

## 2.3. Support

Information on aurenz GmbH and product support can be obtained through the following:

Phone: +49 (0) 7021 73888-0

Fax: +49 (0) 7021 73888-30

E-Mail: info@aurenz.de

### Support-Hotline

Mo.-Fr. 08:00-17:00

Phone: +49 (0) 7021 73888-33

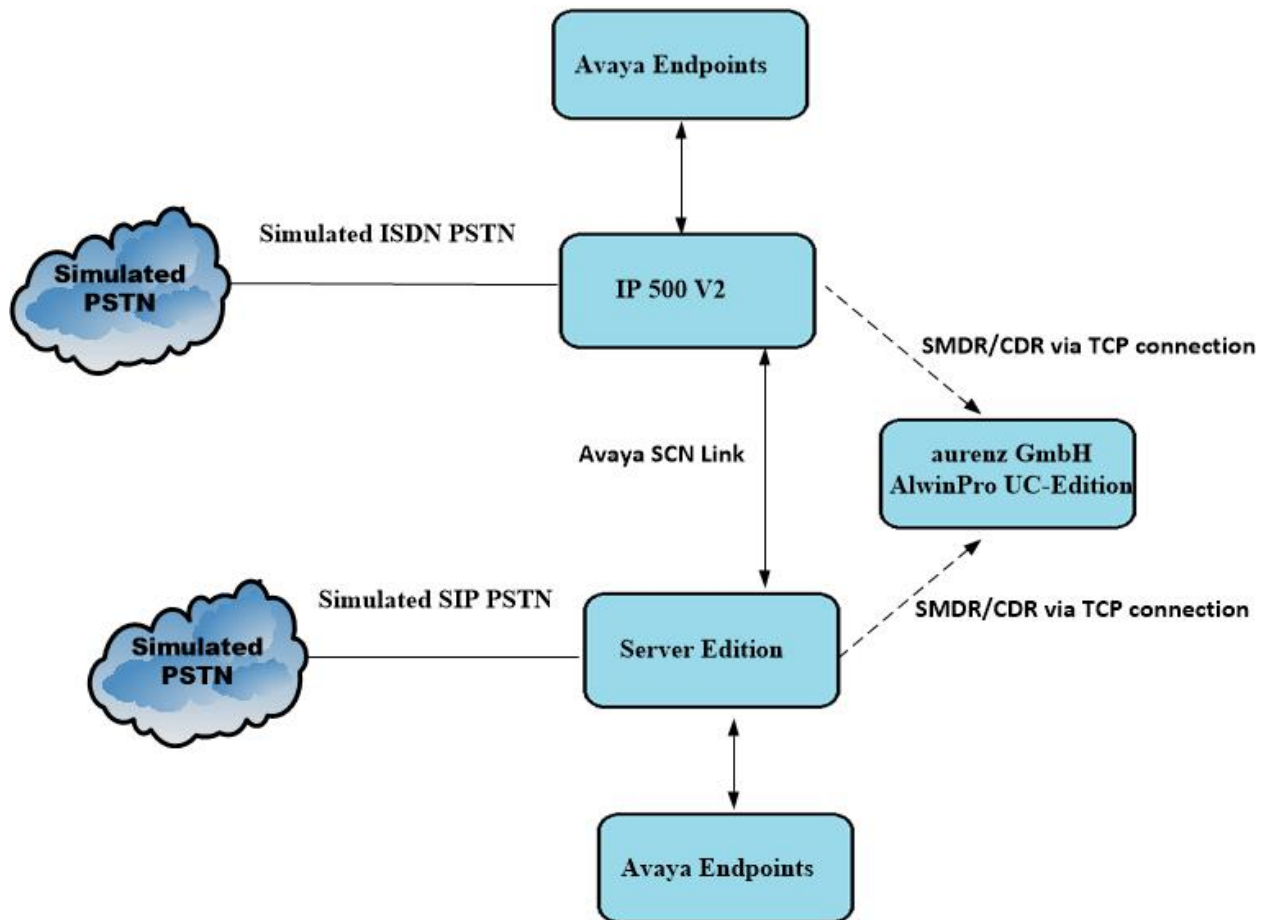
Fax: +49 (0) 7021 73888-30

E-Mail: support@aurenz.de

### 3. Reference Configuration

**Figure 1** illustrates the network topology used during compliance testing. The Avaya solution consists of an IP Office Server Edition running on a virtual platform as the primary server with an IP Office IP500 V2 running as the secondary expansion system. Both systems are linked by IP Office Line IP trunks that can enable voice networking across these trunks to form a multi-site network. AlwinPro collects CDR from both the primary Server Edition and the secondary IP500 V2 expansion and presents them together as one system. A variety of Avaya deskphones were used to generate intra-switch calls (calls between phones on the same system), and outbound/inbound calls to/from the PSTN.

**Note:** Two simulated PSTN lines were used, ISDN and SIP trunk to Session Manager.



**Figure 1:** Avaya IP Office and aurenz GmbH reference configuration

## 4. Equipment and Software Validated

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

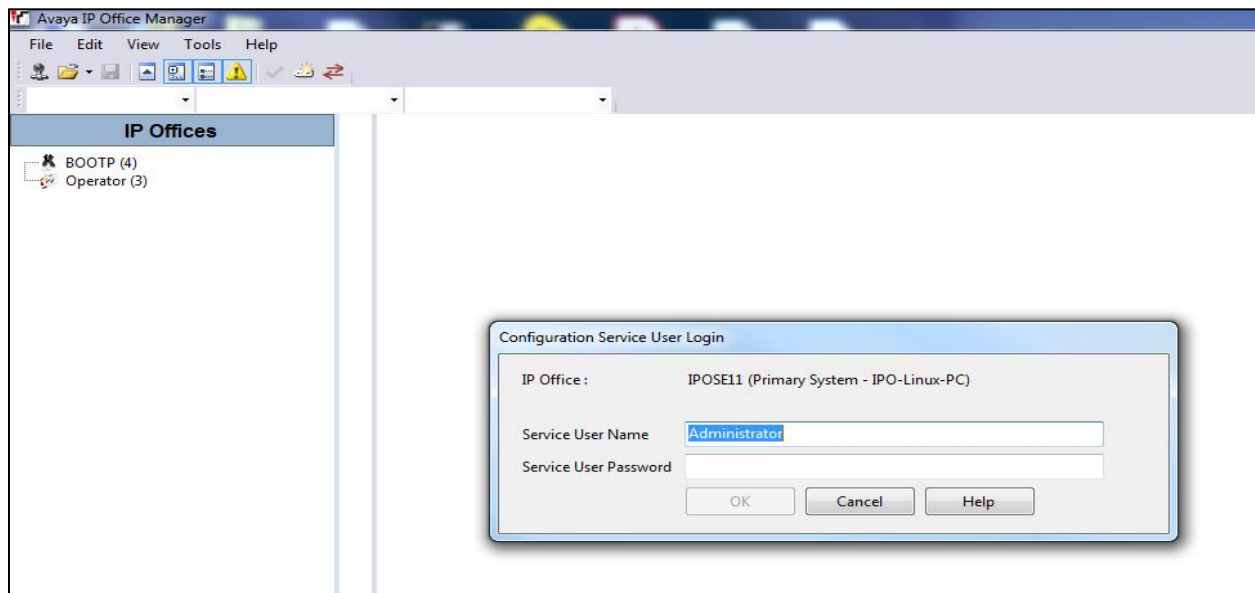
Equipment/Software	Release/Version
Avaya IP Office Server Edition running on a Virtual Platform	11.1.1.0.0 Build 209
Avaya IP Office 500 V2	11.1.1.0.0 Build 209
Avaya IP Office Manager running on a Windows 7 PC	11.1.1.0.0 Build 209
Avaya J179 IP Phone (H.323)	6.8304
Avaya 96x1 H323 Deskphone	6.8304
Avaya J189 IP Phone (SIP)	4.0.6.1.1b4
Avaya 9508 Digital Deskphone	V0.6
aurenz GmbH AlwinPro UC-Edition running on Windows 10 PC	13.0.1.02

**Note:** Compliance Testing is applicable when the tested solution is deployed with a standalone IP Office 500 V2 and also when deployed with IP Office Server Edition in all configurations.

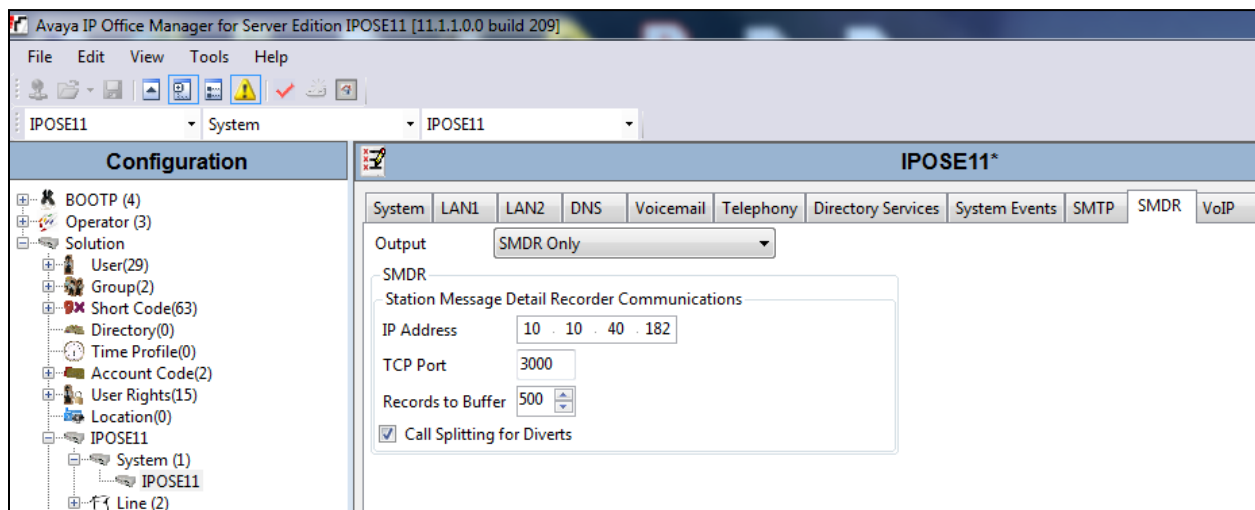
## 5. Configure Avaya IP Office

IP Office needs to be configured to send SMDR to AlwinPro. Open IP Office Manager (not shown) and the following screen appears where the appropriate credentials are entered, and the system is accessed.

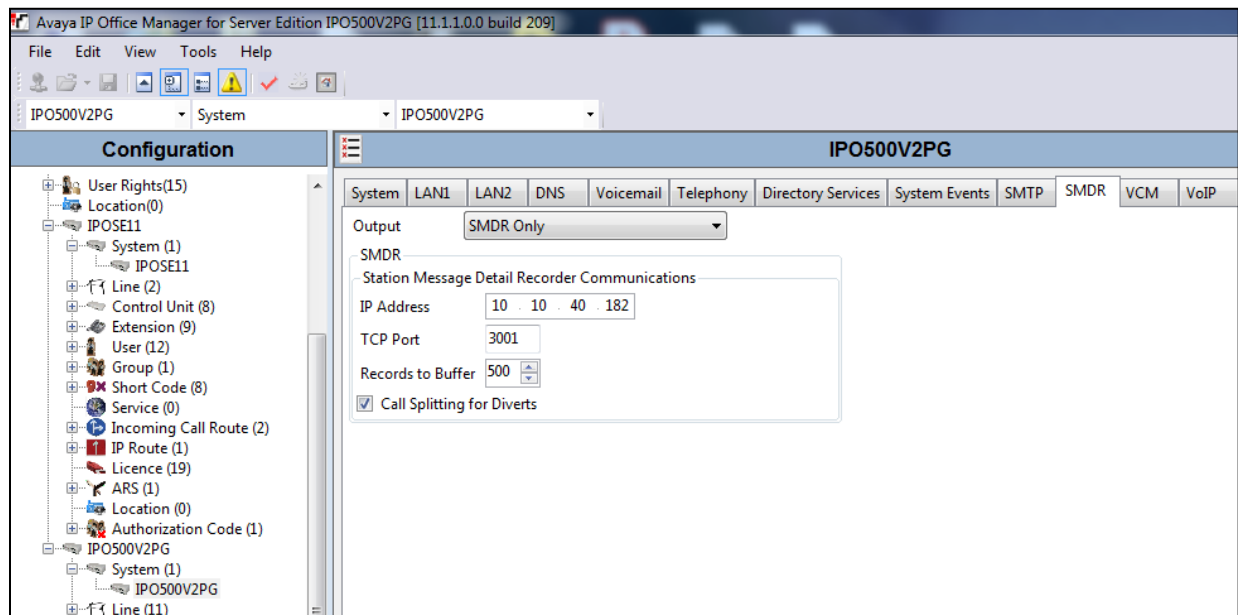
**Note:** Both the Server Edition and the IP500 V2 will need to be configured to send separate SMDR feeds out to the same AlwinPro IP address on different ports.



Navigate to the Server Edition system in the left window and click on the SMDR tab in the main window. Enter the **IP Address** of the AlwinPro server and the **TCP Port** number to send out the SMDR on. **Call Splitting for Diverts** must be ticked and the number of **Records to Buffer** can be set appropriately for that site.

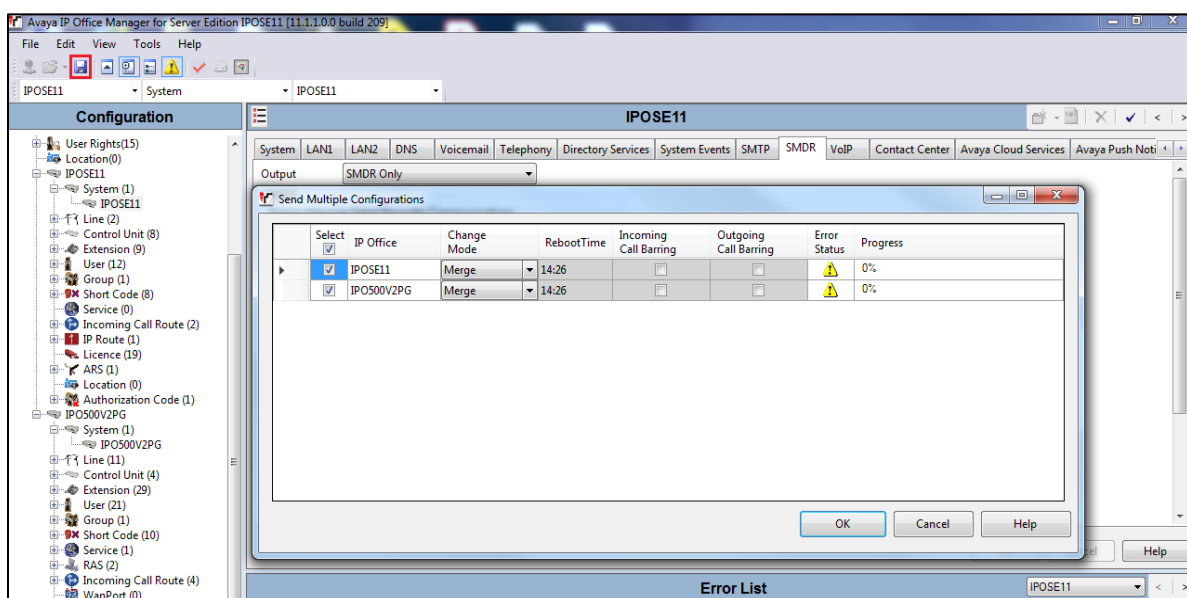


The screen below shows a similar configuration for the IP500 V2. Again, navigate to the IP500 V2 system in the left window and click on the **SMDR** tab in the main window. Enter the **IP Address** of the AlwinPro server and the **TCP Port** number (note that this port number is different than the number on the previous page for Server Edition). **Call Splitting for Diverts** must be ticked and the number of **Records to Buffer** can be set appropriately for that site.



**Note:** The IP address of the Server Edition and the IP500V2 can be found by clicking on the **LAN1** tab on each if the screens above.

To save the configuration, click on the **Save** icon highlighted and click on **OK** in the main popup window.

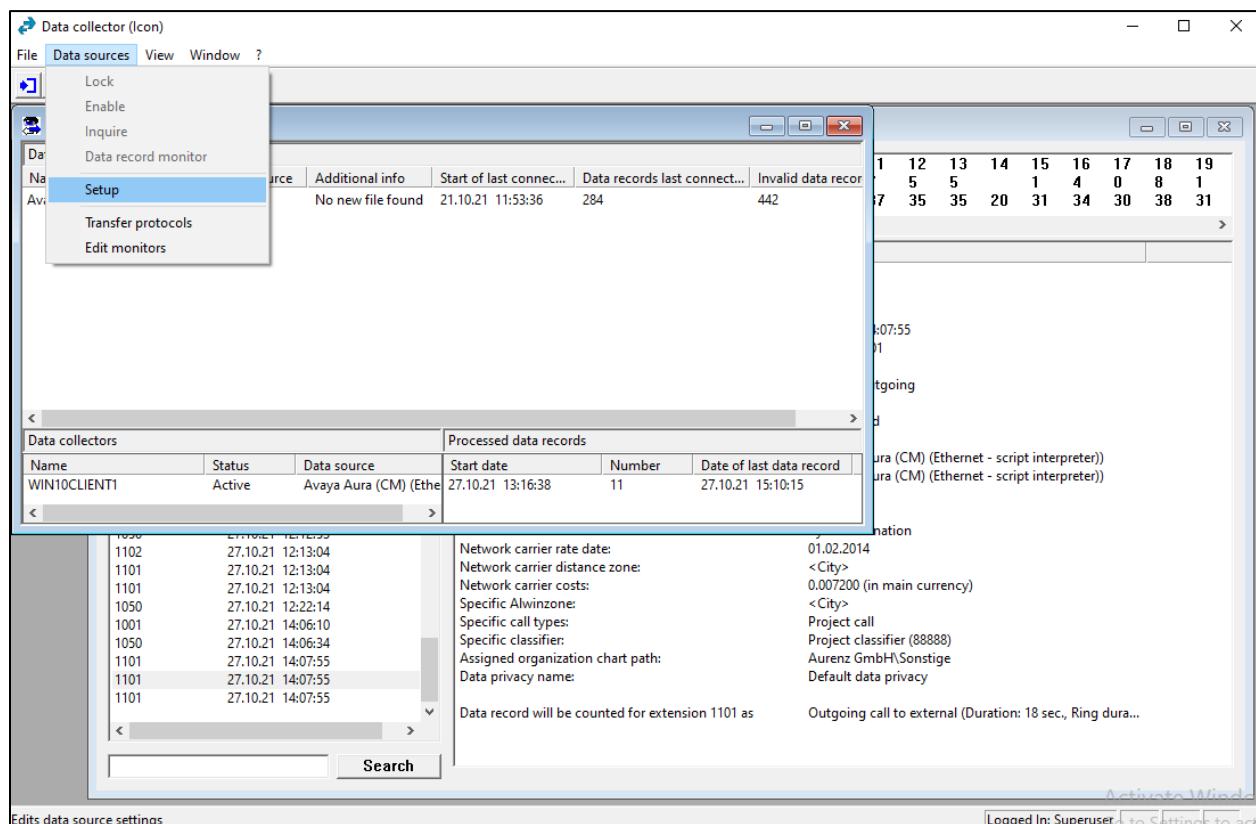


## 6. Configuration of aurenz GmbH AlwinPro UC-Edition

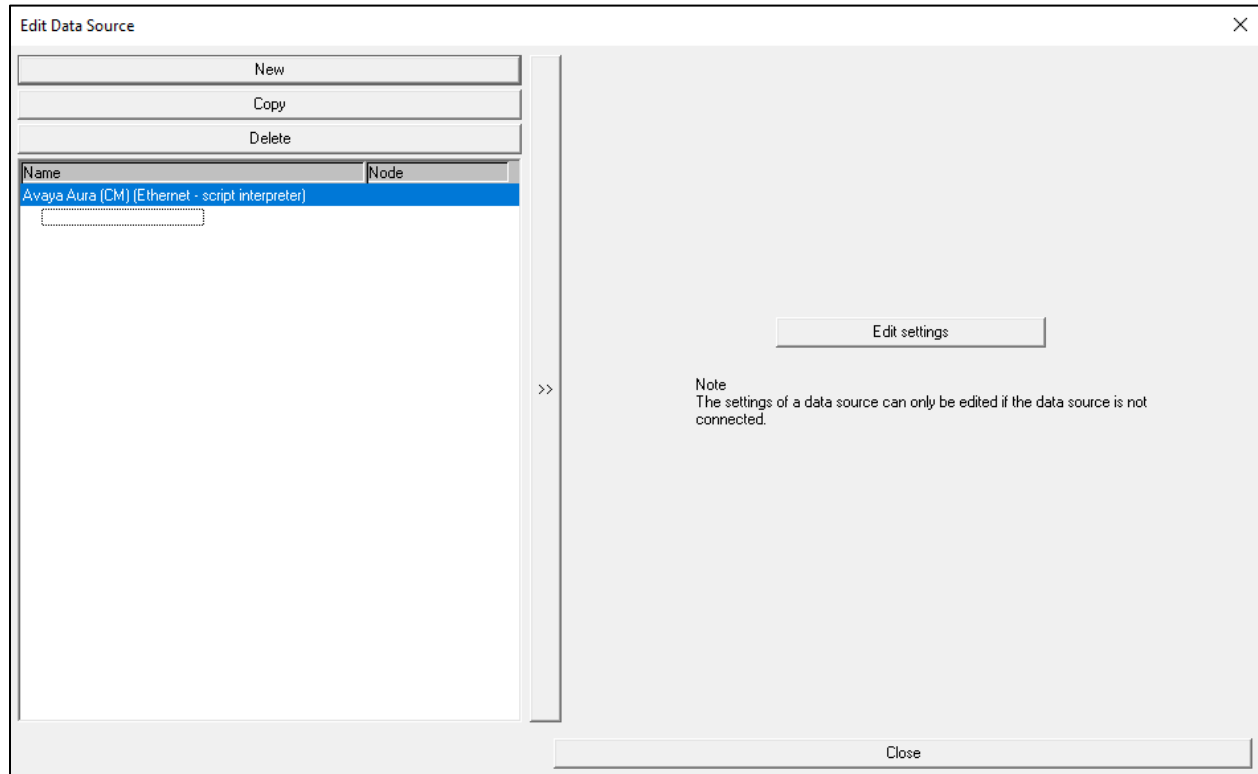
This section outlines the steps to configure the AlwinPro UC-Edition to collect CDR data. AlwinPro UC-Edition can be installed on a server or desktop PC. Installation is carried out using software provide by aurenz GmbH. Installation instructions are outside the scope of this document but information on installation of AlwinPro UC-Edition can be found in **Section 9** of this document.

Once the software is installed the connection to IP Office can be created by accessing the Data Collector wizard. The Data Collector is running in the system tray at the bottom of the screen, once opened the following screen is displayed where a new Data Source can be created by navigating to **Data Sources → Setup**.

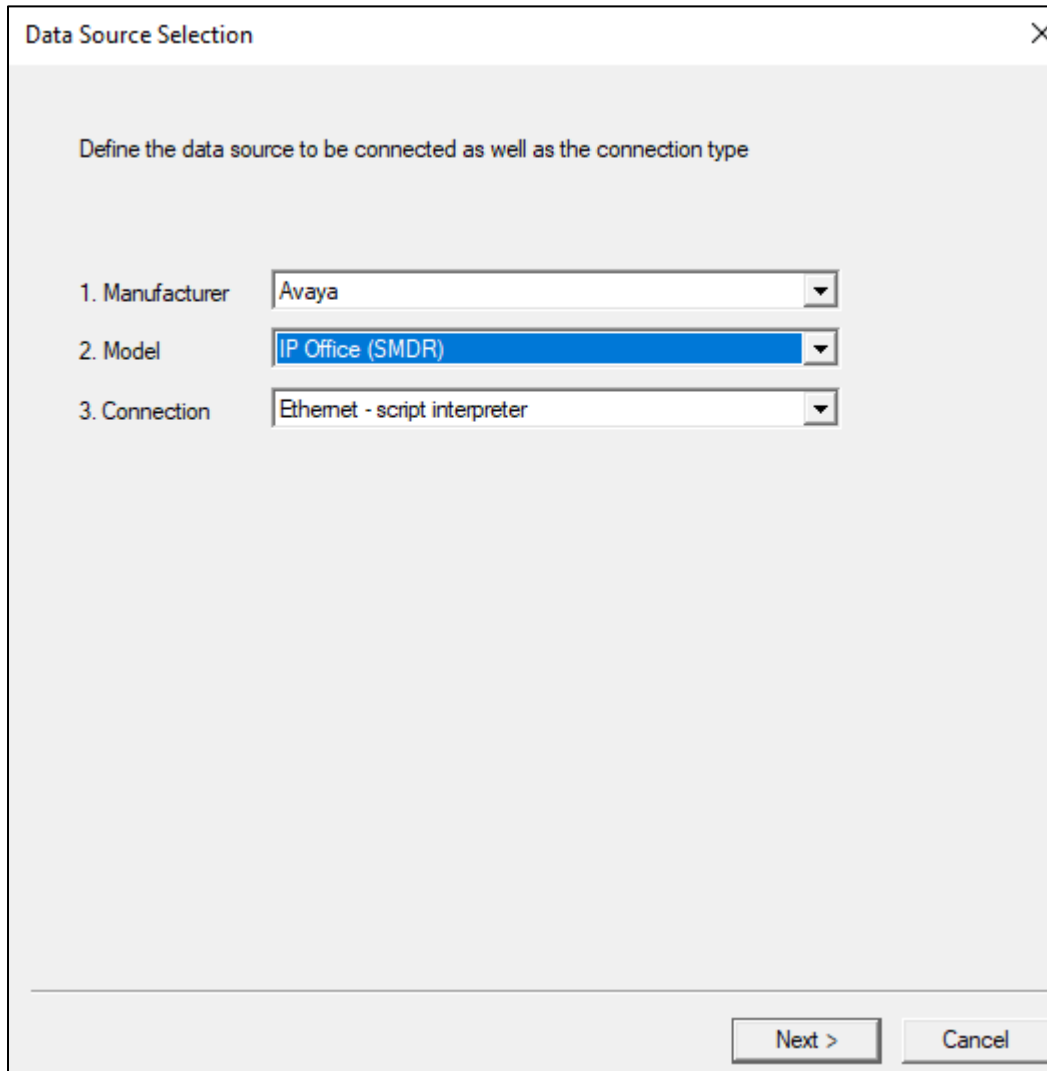
**Note:** A separate Data Source will to be setup for both the Server Edition and the IP500V2.



Click on **New** from the screen shown below.



Select **Avaya** as the **Manufacturer** and the **Model** should be set to **IP Office (SMDR)** as shown below, the **Connection** is set to **Ethernet – script interpreter**. Click on **Next** to continue.

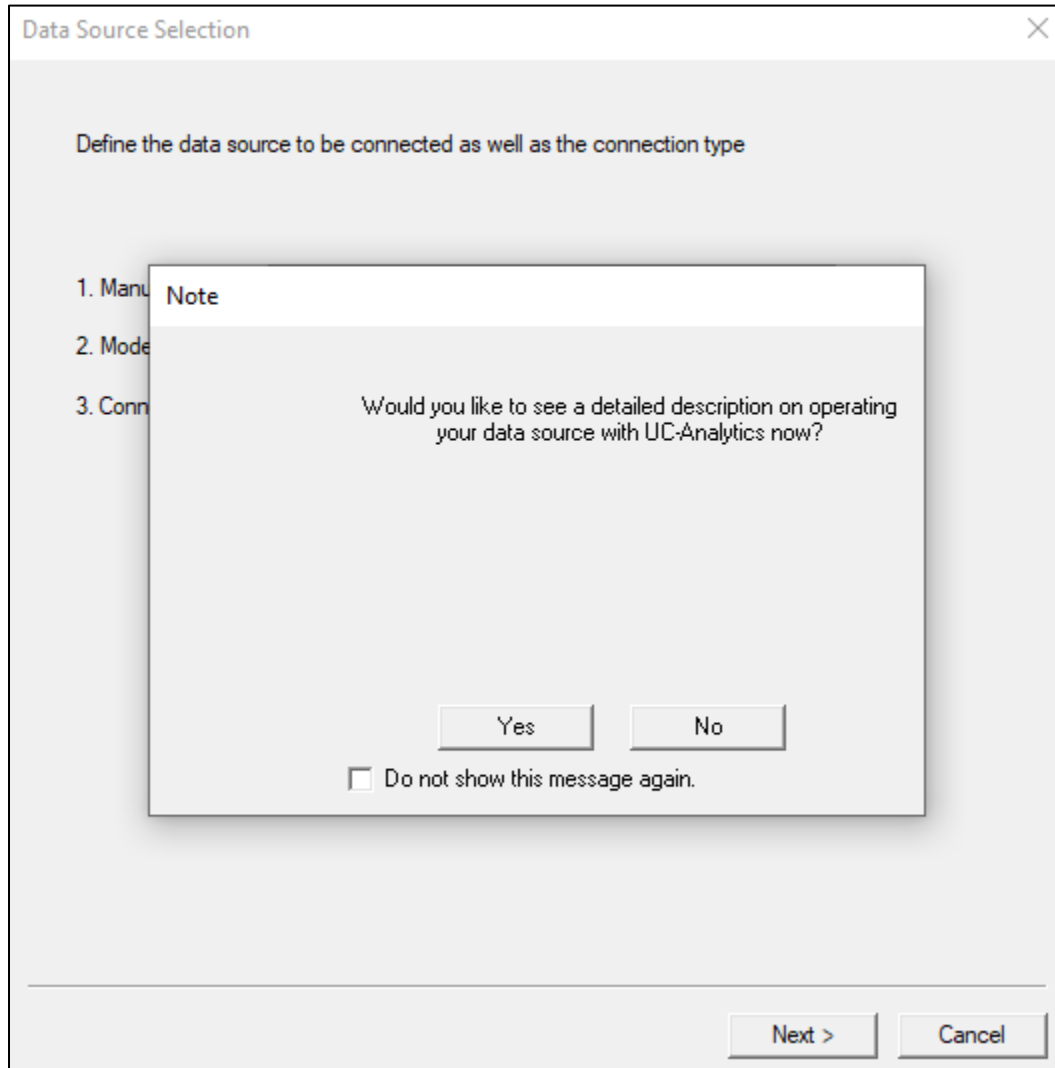


The image shows a 'Data Source Selection' dialog box with a close button (X) in the top right corner. Below the title bar, there is a label 'Define the data source to be connected as well as the connection type'. The dialog contains three numbered items, each with a dropdown menu:

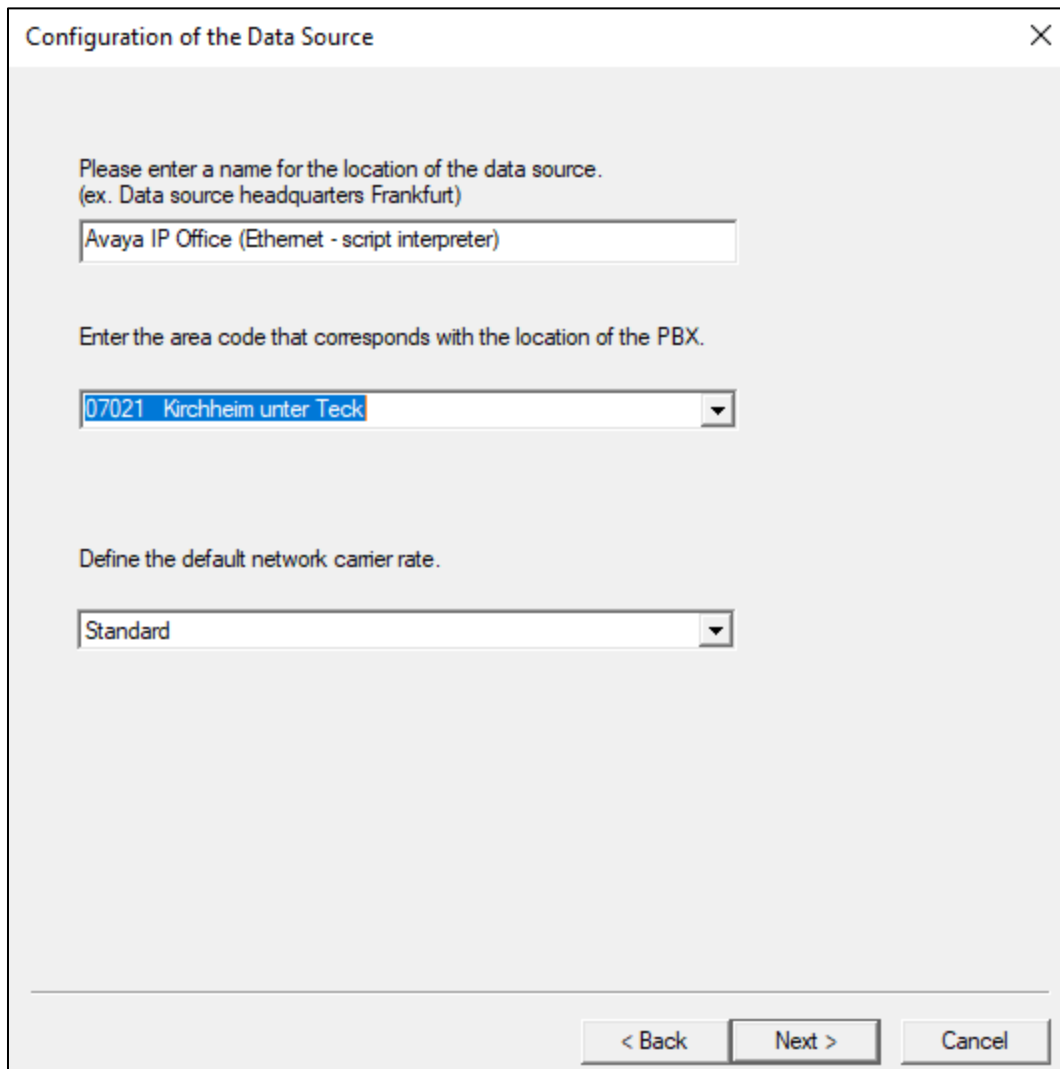
- 1. Manufacturer: The dropdown menu is open, showing 'Avaya' as the selected option.
- 2. Model: The dropdown menu is open, showing 'IP Office (SMDR)' as the selected option.
- 3. Connection: The dropdown menu is open, showing 'Ethernet - script interpreter' as the selected option.

At the bottom right of the dialog, there are two buttons: 'Next >' and 'Cancel'.

Click on **No** for the following, or if a description of the connection is required, then click on yes.



From the drop-down menu, select the local postcode and the **Default network carrier rate** was set to **Standard**. Click on **Next** to continue.



The image shows a dialog box titled "Configuration of the Data Source" with a close button (X) in the top right corner. The dialog contains three input fields and three buttons at the bottom.

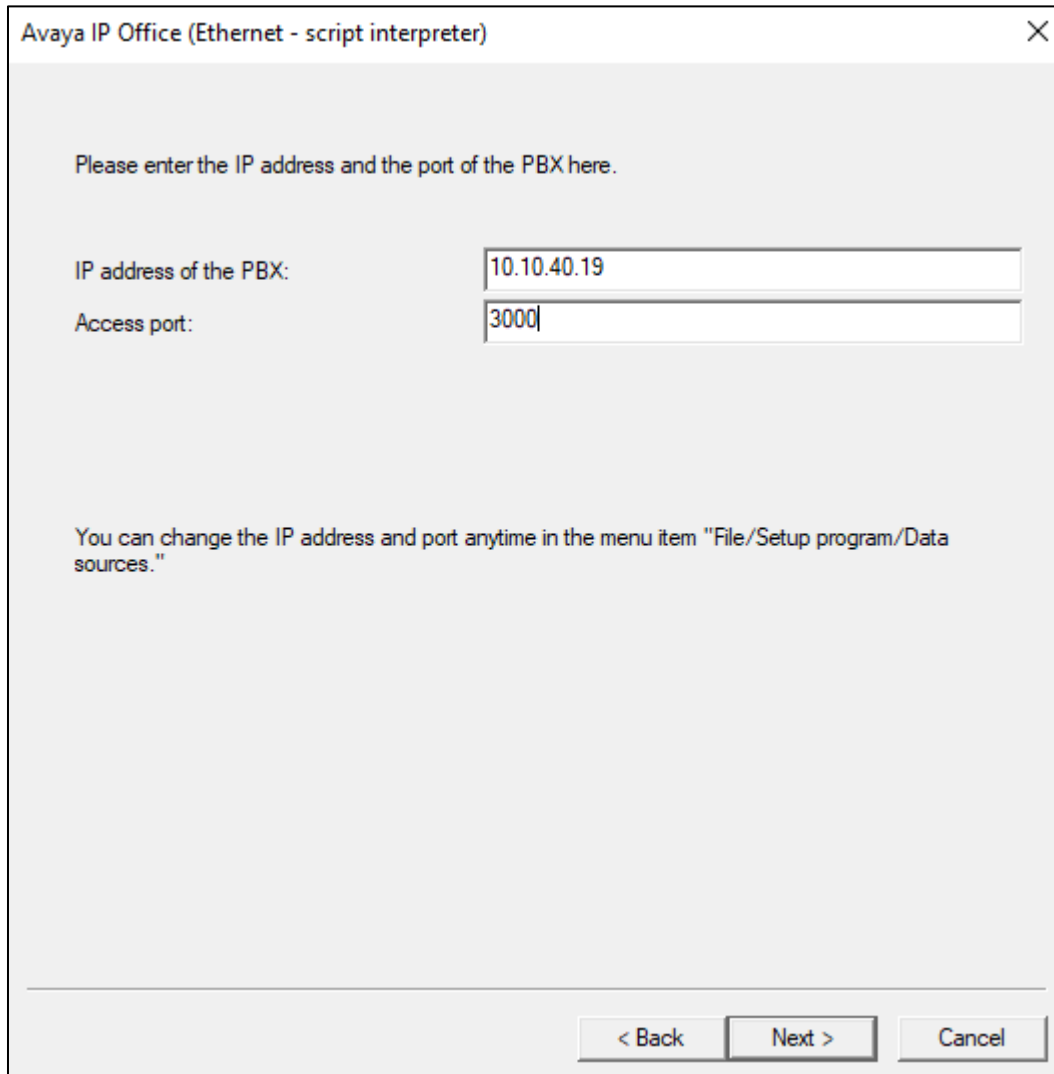
1. The first input field is a text box with the label "Please enter a name for the location of the data source. (ex. Data source headquarters Frankfurt)". The text "Avaya IP Office (Ethernet - script interpreter)" is entered in the box.

2. The second input field is a dropdown menu with the label "Enter the area code that corresponds with the location of the PBX.". The selected option is "07021 Kirchheim unter Teck".

3. The third input field is a dropdown menu with the label "Define the default network carrier rate.". The selected option is "Standard".

At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

Enter the **IP address** of IP Office and the **Access port** as defined in **Section 5**. Shown below is the IP address Access port that was setup for the Server Edition.



A screenshot of a Windows-style dialog box titled "Avaya IP Office (Ethernet - script interpreter)". The dialog has a close button (X) in the top right corner. Inside, there is a message: "Please enter the IP address and the port of the PBX here." Below this, there are two input fields. The first is labeled "IP address of the PBX:" and contains the text "10.10.40.19". The second is labeled "Access port:" and contains the text "3000". Below the input fields, there is a note: "You can change the IP address and port anytime in the menu item 'File/Setup program/Data sources.'" At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

Avaya IP Office (Ethernet - script interpreter)

Please enter the IP address and the port of the PBX here.

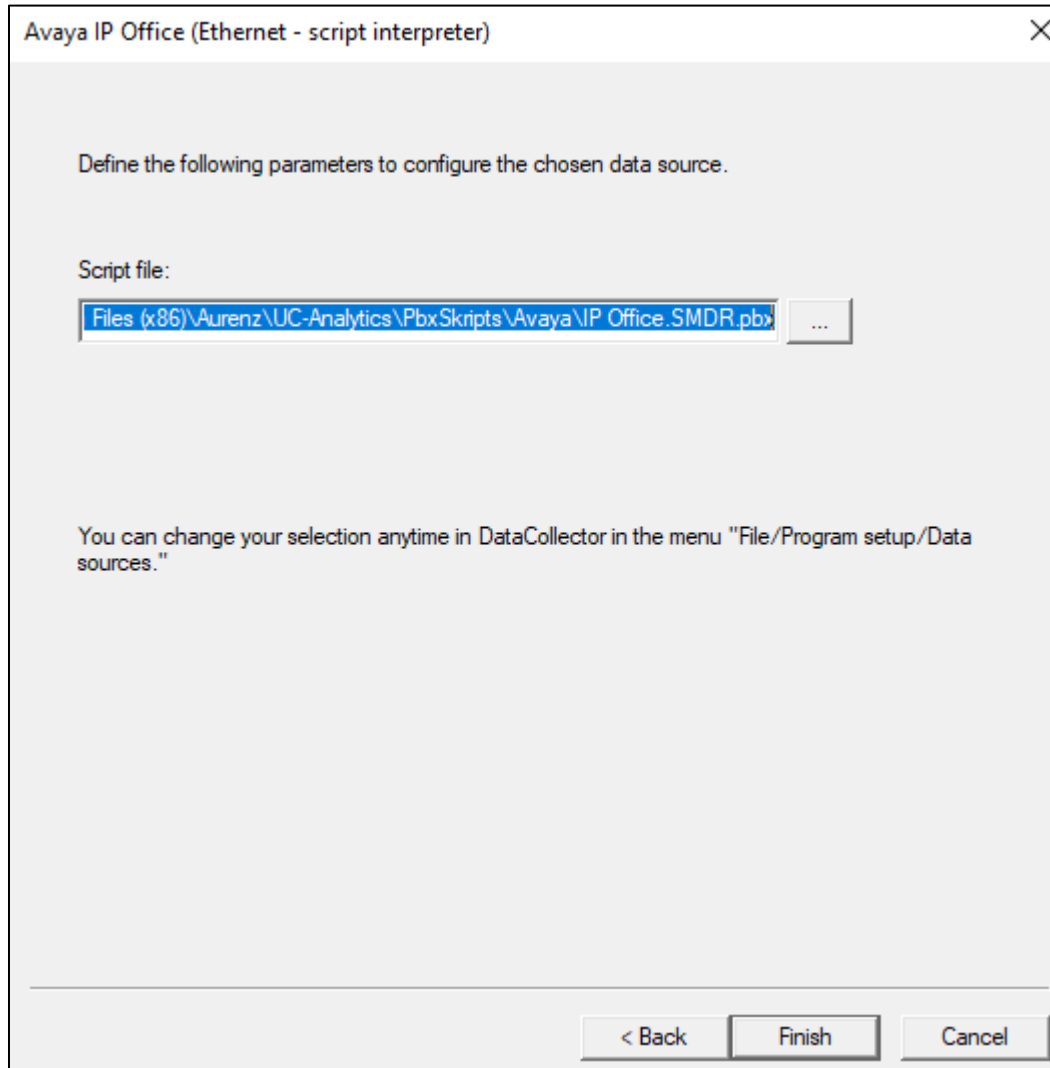
IP address of the PBX: 10.10.40.19

Access port: 3000

You can change the IP address and port anytime in the menu item "File/Setup program/Data sources."

< Back Next > Cancel

The **Script file** was automatically populated and was not changed, click on **Finish** to complete.



Once the new Data Source is added, it is visible in the left window as shown below. Clicking on the **Data Source** in question will allow the settings to be changed, should this be required. Clicking on the **Avaya IP Office** tab allows the extension length to be specified, for compliance testing **4** was the extension length.

**Edit Data Source**

New  
Copy  
Delete

Name	Node
Avaya Aura (CM) (Ethernet - script interpreter)	
Avaya IP Office (Ethernet - script interpreter)	

General | PBX | Time Period | Trunk seizure | Extensions | Fax extensions  
 Avaya IP Office | Avaya Vernetzung | Script | Scan Directory | TCP/IP Settings | Help

Länge der Nebenstelle(n)

Zu entfernender Prefix für die Nebenstelle

Zu entfernender Prefix für externe Rufnummern bei abgehenden Gesprächen

Zu entfernender Prefix für externe Rufnummern bei eingehenden Gesprächen

Prefix für die Private Amtsanlassung

Gespräche zu Funktionscodes verwerfen (Kennungen der Funktionscodes)

Multiple entries in one input field can be separated with a semicolon.

Close

Avaya IP Office is configured to send the data to the AlwinPro UC-Edition. Therefore, the data source must be configured to listen for an incoming connection. On the tab **TCP/IP Settings** the **Type of connection** must be set to **Passive** and the **Access port** must be the same as configured in the Avaya IP Office.

**Edit Data Source**

New  
Copy  
Delete

Name	Node
Expansion - Avaya IP Office	
Master - Avaya IP Office	

<<

General | PBX | Time Period | Trunk seizure | Extensions | Fax extensions  
Avaya IP Office | Avaya Vernetzung | Script | Scan Directory | **TCP/IP Settings** | Help

Type of connection: ☐ Active ☒ **Passive**

IP address of the PBX: 0.0.0.0

Access port: 7000

IP address for access: All IP addresses (dropdown)  
0.0.0.0 (\*)

Access port: 3000

\*) An ip address for the data collector must be entered here [NOT the ip address of the PBX]!  
You can also select the "All ip addresses" option, then all ip addresses on the entered port are waited for a connection.

Close

Clicking on the **Time Period** tab allows the period of operation to be set.

The screenshot shows the 'Edit Data Source' window with the 'Time Period' tab selected. On the left, a list of data sources includes 'Avaya IP Office (Ethernet - script interpreter)' which is highlighted. The main area displays a table for configuring time periods for each day of the week. All days are checked, and the time range is set from 00:00 to 23:59 with an interval of 1. A button at the bottom allows copying settings from Monday to other days.

	from	to	from	to	Interval
<input checked="" type="checkbox"/> Monday	00:00	00:00	21:00	23:59	1
<input checked="" type="checkbox"/> Tuesday	00:00	00:00	21:00	23:59	1
<input checked="" type="checkbox"/> Wednesday	00:00	00:00	21:00	23:59	1
<input checked="" type="checkbox"/> Thursday	00:00	00:00	21:00	23:59	1
<input checked="" type="checkbox"/> Friday	00:00	00:00	21:00	23:59	1
<input checked="" type="checkbox"/> Saturday	00:00	00:00	21:00	23:59	1
<input checked="" type="checkbox"/> Sunday	00:00	00:00	21:00	23:59	1

Copy settings from monday to other days.

The IP address of the IP Office in question needs to be set under the **Avaya Vernetzung** tab. As shown below, a **Data Source** must be added for both the Server Edition (**Master**) and the IP500V2 (**Expansion**). This setup shows the configuration for the Server Edition only.

The screenshot shows the 'Edit Data Source' window with the 'Avaya Vernetzung' tab selected. On the left, a list of data sources includes 'Expansion - Avaya IP Office' and 'Master - Avaya IP Office', both of which are highlighted. The main area displays the 'Server IP-Adresse(n) [Nur bei Vernetzung erforderlich]' field, which contains the IP address '10.10.40.19'. A note at the bottom indicates that multiple entries can be separated by a semicolon.

Server IP-Adresse(n) [Nur bei Vernetzung erforderlich]

10.10.40.19

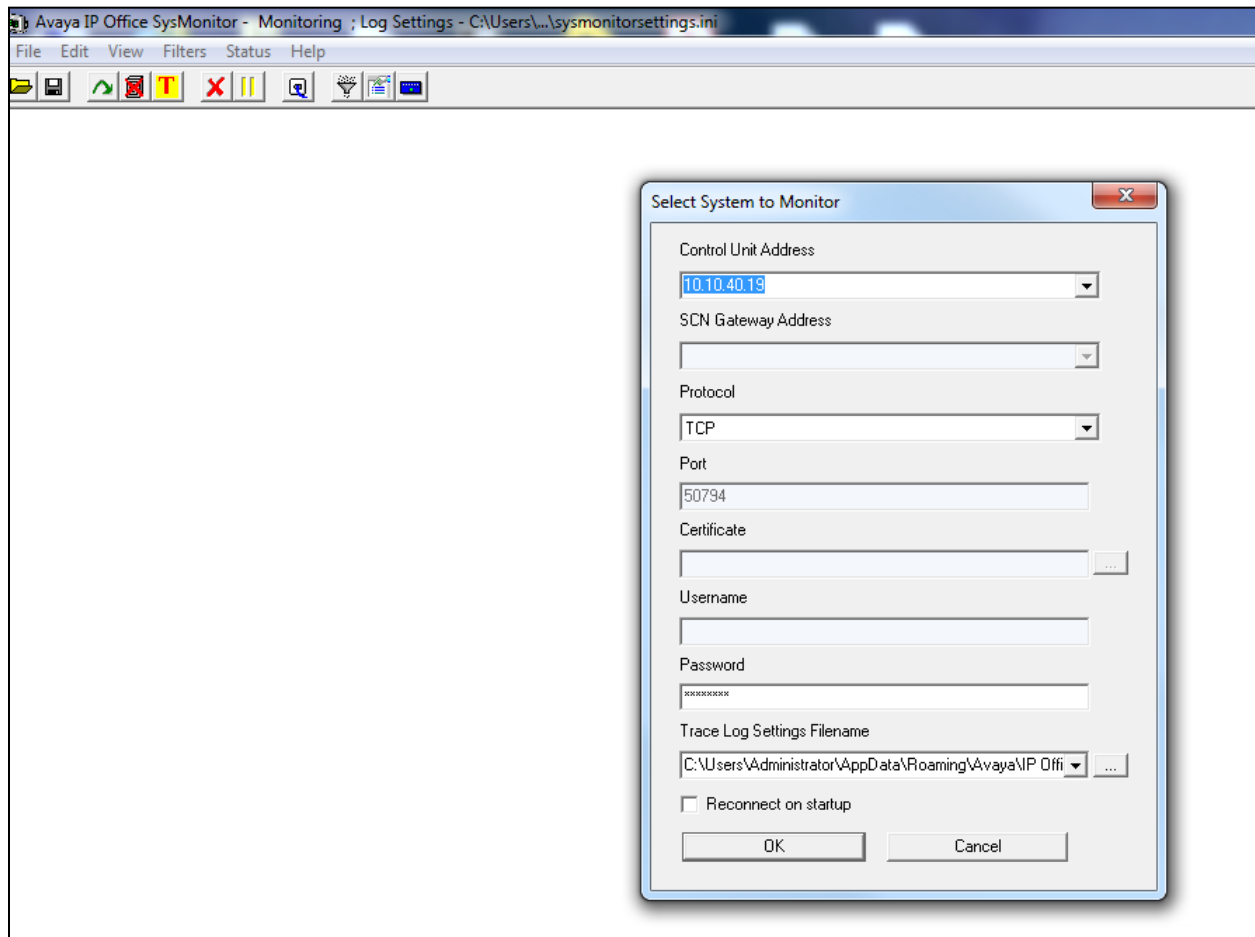
Multiple entries in one input field can be separated with a semicolon.

## 7. Verification Steps

This section provides tests that can be performed to verify correct configuration of the Avaya and aurenz GmbH solution.

### 7.1. Verify Avaya IP Office SMDR

**IP Office SysMonitor** can be used to verify that SMDR is being sent. The IP Address and Password of the IP Office in question should be entered.



The Trace Options are set to allow **Call Detail Records** and **CDR Extra diagnostics** to be shown.

**All Settings**

ISDN	Key/Lamp	Directory	Media	PPP	R2	Routing	Services	SIP	System
T1	VPN	WAN	CTI	SCN	Jade				
ATM	Call	DTE	EConf	Frame Relay	GOD	H.323	Interface		

<b>Events</b> <input type="checkbox"/> Call <input type="checkbox"/> Call Delta <input type="checkbox"/> Call Delta2 <input type="checkbox"/> Call Logging <input type="checkbox"/> Extension <input type="checkbox"/> Line <input type="checkbox"/> MonCM <input type="checkbox"/> MonIVR <input type="checkbox"/> <b>Targeting</b> <input type="checkbox"/> <b>ARS</b> <input type="checkbox"/> <b>LRQ</b> <input type="checkbox"/> ACD <input type="checkbox"/> <b>IP Dect</b> <input checked="" type="checkbox"/> Call Detail Records <input checked="" type="checkbox"/> CDR Extra diagnostics	<b>Packets</b> <input type="checkbox"/> Call <input type="checkbox"/> Extension Send <input type="checkbox"/> Extension Receive <input type="checkbox"/> Extension TxC <input type="checkbox"/> Extension RxC <input type="checkbox"/> Extension TxP <input type="checkbox"/> Extension RxP <input type="checkbox"/> Line Send <input type="checkbox"/> Line Receive <input type="checkbox"/> Short Code Msgs <input type="checkbox"/> Supplementary services <input type="checkbox"/> <b>IP Dect Msgs</b> <input type="checkbox"/> Sort IEs	<b>Embedded Voicemail</b> <input type="checkbox"/> Voicemail Client <input type="checkbox"/> Audio Response <input type="checkbox"/> Message Recorder <input type="checkbox"/> Housekeeping <input type="checkbox"/> Flash Storage <input type="checkbox"/> Silence <input type="checkbox"/> Email  <b>PC Voicemail</b> <input type="checkbox"/> Voicemail Events <input type="checkbox"/> Voicemail Messaging <input type="checkbox"/> Voicemail Raw Tx <input type="checkbox"/> Voicemail Raw Rx
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Trace Colour █

The screenshot displays the Avaya IP Office SysMonitor application window. The title bar reads "Avaya IP Office SysMonitor - Monitoring 192.168.40.20 (IP0500V2PG (Server Edition(E))) : Log Settings - C:\Users\...". The menu bar includes File, Edit, View, Filters, Status, and Help. Below the menu is a toolbar with icons for file operations and monitoring. The main window is divided into two panes. The left pane shows a list of network events, including TCP sessions and data transmissions, with timestamps ranging from 618110mS to 620688mS. The right pane displays system information, including the SysMonitor version (v11.1.1.0.0), build number (209), and connection details to the IP0500V2PG (Server Edition(E)) server. It also shows a list of network events, including TCP sessions and data transmissions, with timestamps ranging from 618110mS to 620688mS. The bottom status bar shows the current date and time as 11/03/2021 16:25:06.

Avaya IP Office SysMonitor - Monitoring 192.168.40.20 (IP0500V2PG (Server Edition(E))) : Log Settings - C:\Users\...sysmonetorsettings.ini

File Edit View Filters Status Help

618110mS CDR: TCP Session is operational

618110mS CDR: Established TCP communications - framecount=25

618110mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

618125mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

618256mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

618332mS CDR: Using TCP to send data len 174 to 10.10.40.182 on port 3001

618411mS CDR: Using TCP to send data len 173 to 10.10.40.182 on port 3001

618489mS CDR: Using TCP to send data len 172 to 10.10.40.182 on port 3001

618566mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

618644mS CDR: Using TCP to send data len 168 to 10.10.40.182 on port 3001

618724mS CDR: Using TCP to send data len 177 to 10.10.40.182 on port 3001

618801mS CDR: Using TCP to send data len 168 to 10.10.40.182 on port 3001

618879mS CDR: Using TCP to send data len 177 to 10.10.40.182 on port 3001

618935mS CDR: Using TCP to send data len 169 to 10.10.40.182 on port 3001

619034mS CDR: Using TCP to send data len 200 to 10.10.40.182 on port 3001

619114mS CDR: Using TCP to send data len 173 to 10.10.40.182 on port 3001

619192mS CDR: Using TCP to send data len 173 to 10.10.40.182 on port 3001

619271mS CDR: Using TCP to send data len 173 to 10.10.40.182 on port 3001

619350mS CDR: Using TCP to send data len 173 to 10.10.40.182 on port 3001

619427mS CDR: Using TCP to send data len 173 to 10.10.40.182 on port 3001

619507mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

619583mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

619662mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

619741mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

619818mS CDR: Using TCP to send data len 200 to 10.10.40.182 on port 3001

619898mS CDR: Using TCP to send data len 200 to 10.10.40.182 on port 3001

619973mS CDR: Using TCP to send data len 200 to 10.10.40.182 on port 3001

620688mS CDR: SMDR OUTPUT '2021/11/03 16:23:28,00:00:28,5,091731101@devconnect.local,I,5250,5250,,0,1000000,0,E5250,5250,T9002,Line 2.1,0,0,0,n/a,,,,,,,,,10.10.40.19,3491,1

620688mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

\*\*\*\*\* SysMonitor v11.1.1.0.0 build 209 [connected to 192.168.40.20 (IP0500V2PG (Server Edition(E)))] \*\*\*\*\*

648089mS CDR: SMDR OUTPUT '2021/11/03 16:24:19,00:00:09,2,5201,0,1001,91001,,0,10000002,0,E5201,5201,T9009,Line 9.1,0,0,0,n/a,5201,0000.00,,0000.00,0,0,618,1.00,U,5201,,192.168

648089mS CDR: Using TCP to send data len 200 to 10.10.40.182 on port 3001

649555mS CDR: SMDR OUTPUT '2021/11/03 16:24:24,00:00:05,2,091731101@devconnect.local,I,5250,5250,,0,1000003,0,E5250,5250,T9002,Line 2.1,0,0,0,n/a,,,,,,,,,10.10.40.19,3494,1

649555mS CDR: Using TCP to send data len 188 to 10.10.40.182 on port 3001

649555mS CDR: SMDR OUTPUT '2021/11/03 16:24:30,00:00:04,2,5250,0,1101,91101,,0,1000004,0,E5250,5250,T9009,Line 9.1,0,0,0,n/a,5250,0000.00,,0000.00,0,0,618,1.00,U,5250,,192.168

649555mS CDR: Using TCP to send data len 200 to 10.10.40.182 on port 3001

657676mS CDR: SMDR OUTPUT '2021/11/03 16:25:00,00:00:05,3,091731050,I,5250,5250,,0,1000005,0,E5250,5250,T9009,Line 9.2,0,0,0,n/a,,,,,,,,,192.168.4.20,1017,192.168.4.20,1018

657676mS CDR: Using TCP to send data len 172 to 10.10.40.182 on port 3001

686098mS CDR: SMDRInfo Trigger bck to file, c\_time=16:25:06, nrt\_save\_time=00:00:00, nrt\_save\_point=0, last\_saved\_point=-1, last\_bck\_day=3

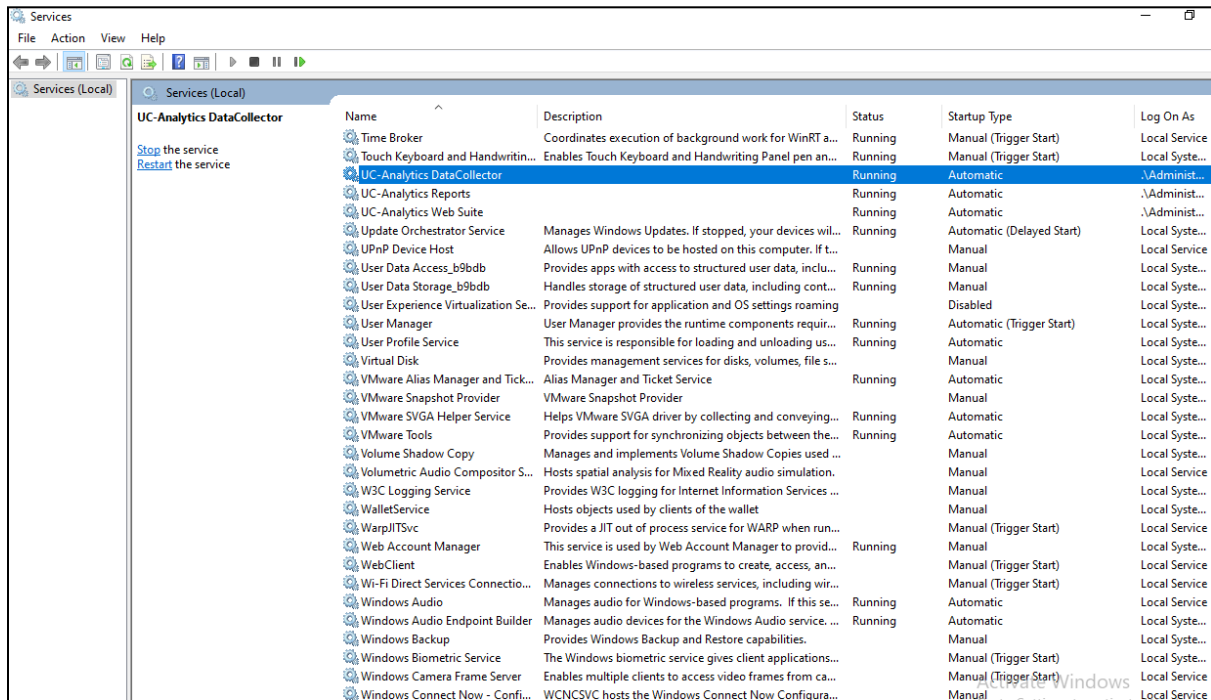
686120mS CDR: SMDRInfo Successfully SMDR backed up to NAND (size=2, smdr\_saved\_count=0)

686264mS CDR: SMDRInfo Saved to file, c\_time=16:25:06, nrt\_save\_time=12:00:00, nrt\_save\_point=1, last\_saved\_point=0, last\_bck\_day=3

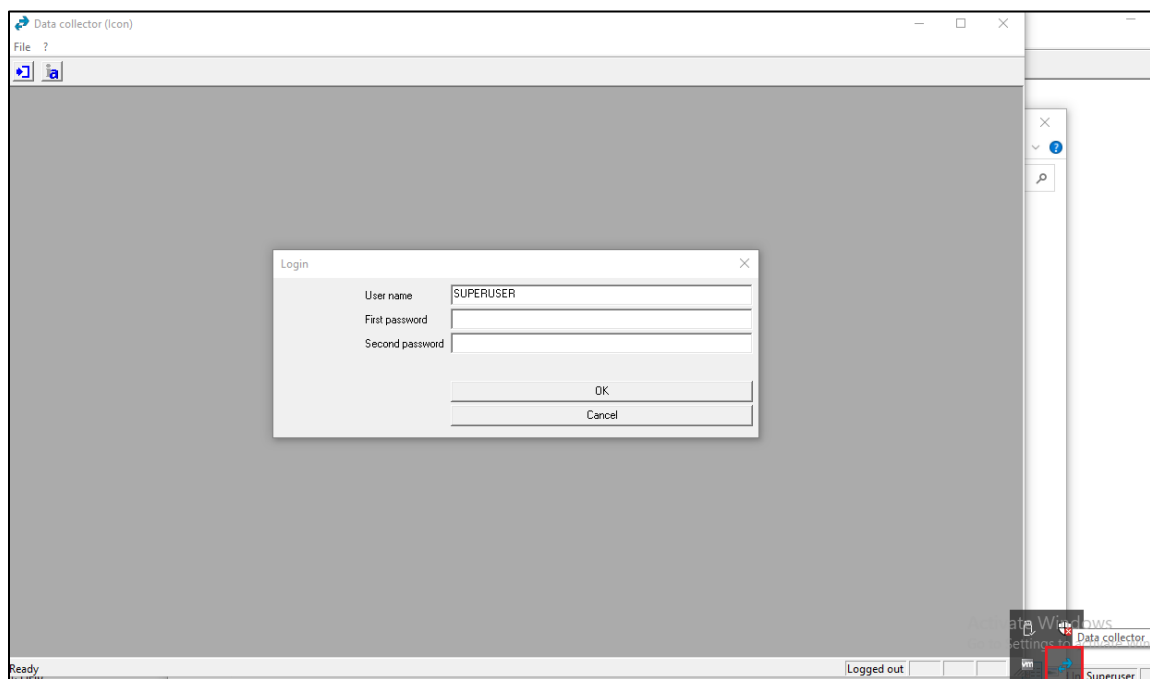
686264mS CDR: SMDRInfo Successfully SMDR backed up to file (size=3, smdr\_saved\_count=0) in 144ms

## 7.2. Verify CDR data is being received by the AlwinPro UC-Edition

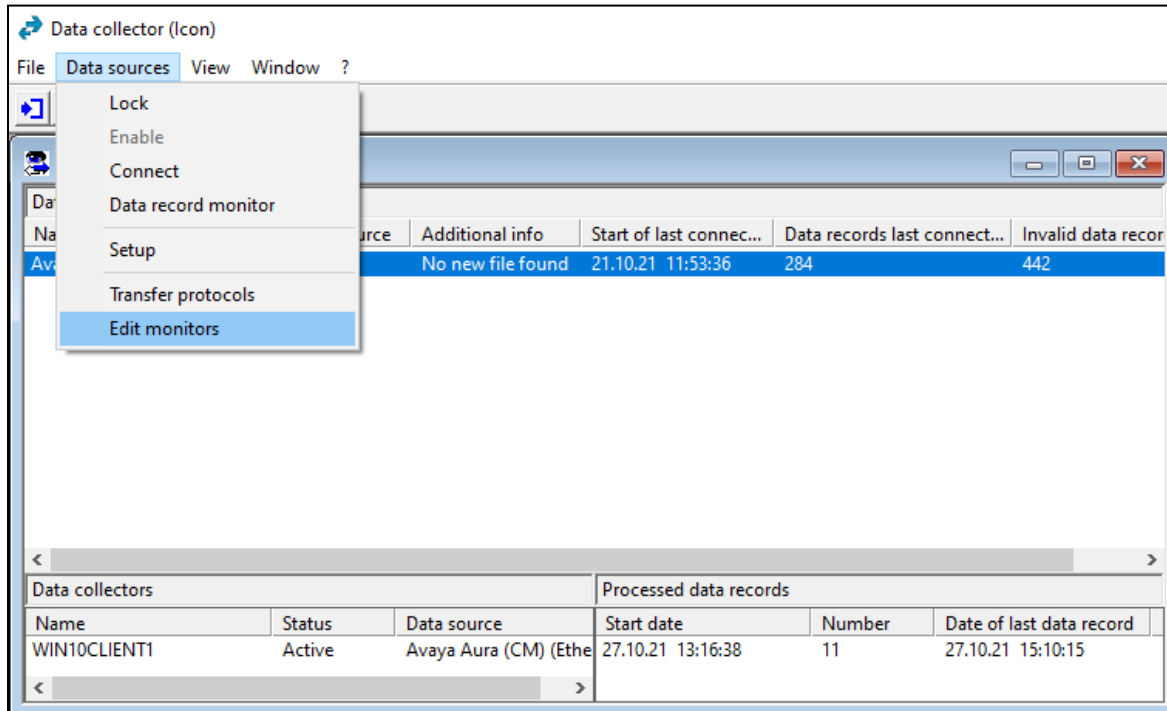
Before the application is run the services can be checked to ensure that they are in the **Running** state as shown below for the **UC-Analytics** services.



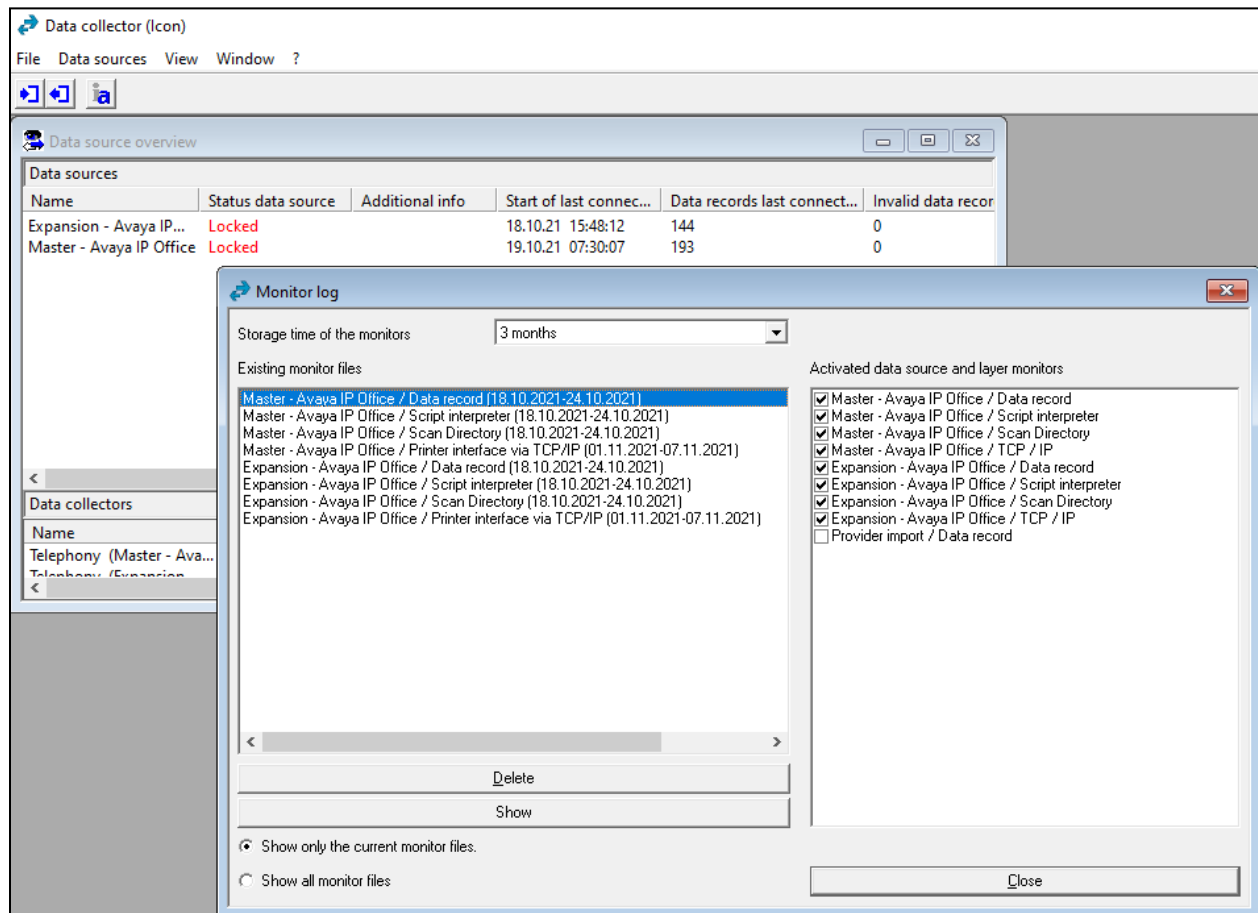
From the task bar at the bottom right of the screen, click on the icon highlighted, this will open the window shown. Enter the appropriate credentials and click on **OK**.



From the menu, navigate to **Data sources** → **Edit monitors**.



Click on the **Data record** line as shown below with the various monitors ticked as shown and click on **Show** at the bottom of the screen.



The list of calls made appear in the left window and clicking on them reveal information about that call such as shown below for a call to **091731001**.

The screenshot shows the 'Data collector (Icon)' window with the title bar '[Data record monitor: Master - Avaya IP Office / Data record (18.10.2021-24.10.2021)]'. The window has a menu bar with 'File', 'Data sources', 'Data record monitor', 'View', 'Window', and '?'. Below the menu bar is a toolbar with icons for navigation and search.

The left pane displays a list of calls with columns 'Extension' and 'Date'. The right pane displays detailed call information for the selected call.

Extension	Date
5350	21.10.21 10:31:27
5350	21.10.21 10:31:38
5350	21.10.21 10:31:38
5350	21.10.21 10:31:48
5350	21.10.21 10:31:55
5350	21.10.21 10:31:56
5350	21.10.21 10:32:17
5350	21.10.21 10:32:23
5350	21.10.21 10:32:23
5350	21.10.21 10:32:38
5350	21.10.21 10:32:44
5350	21.10.21 10:32:44
5350	21.10.21 10:35:41
5350	21.10.21 10:35:54
5350	21.10.21 10:35:55
5350	21.10.21 10:36:10
5350	21.10.21 10:36:18
5350	21.10.21 10:36:19
5350	21.10.21 10:36:29
5350	21.10.21 10:36:37
5350	21.10.21 10:36:37
5350	21.10.21 10:36:47
5350	21.10.21 10:36:55
5350	21.10.21 10:36:56
5350	21.10.21 10:48:17
5350	21.10.21 10:48:37
5350	21.10.21 10:48:37
5221	21.10.21 10:52:39
5350	21.10.21 10:52:52
5350	21.10.21 10:56:28
5350	21.10.21 11:01:21

The right pane displays the following call information:

**Data record telephony**

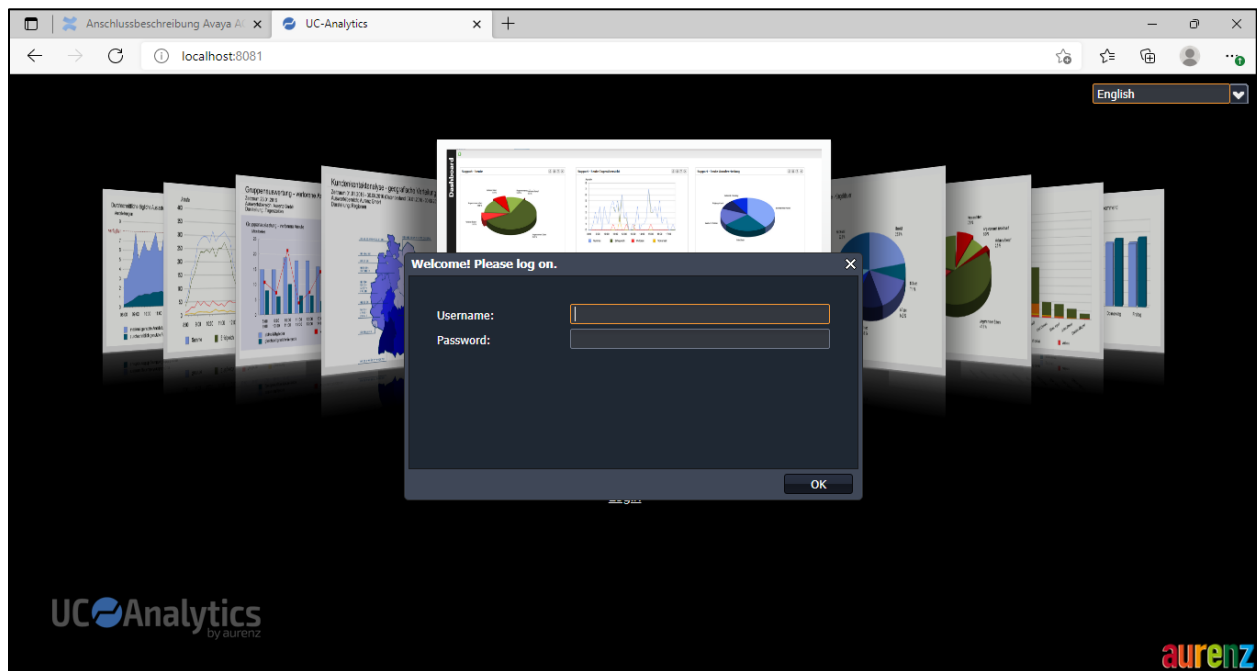
Charged Subscriber: 5350  
 Call Time: 21.10.21 11:01:21  
 Dialed No.: 091731001  
 Duration: 00:00:30  
 Charged TrunkNo.: 9002  
 Charged Username: 5350  
 Used TrunkNo.: 9002  
 Call Direction: External incoming  
 Ring Duration: 2  
 Call Service: Not defined  
 Unique Call ID: 1000276

More redirection subscribers: 5350  
 Assigned to PBX: 2 (Avaya IP Office (Ethernet - script interpreter))  
 Assigned to PBX (trunk): 1 (Avaya IP Office (Ethernet - script interpreter))  
 Specific Alwinzone: <R200>  
 Specific call types: Business call  
 Specific classifier: Extension classifier (5350)  
 Assigned organization chart path: Aurenz GmbH\Extension <5350>  
 Data privacy name: Default data privacy

Data record will be counted for extension 5350 as Accepted call from external (Duration: 30 sec., Ring d...

### 7.3. Verify AlwinPro UC-Edition Reports

Open a web browser to the IP address of the AlwinPro UC-Edition server as shown below and enter the appropriate credentials.



From the main data from the **Call Data Explorer** can be displayed for example, **Today's data**.

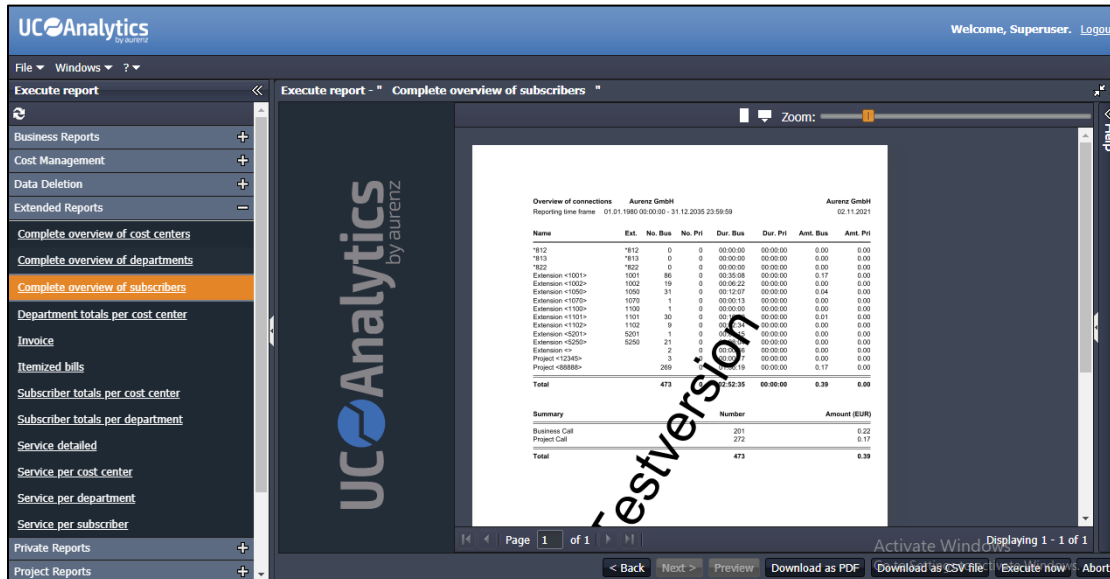


The report should give back call data, an example of this call data is shown below.

Call ID	Date of connection	Clock time	Direction	Subscri...	Project number	Destination number	Call durat...	Call costs	Alwinzone	Call types	Settlement
0	27.10.2021 14:07:55	13:07:55	Outgoing local	1101	88888	*822	00:00:18	0.00		Project Call	27.10.2
0	27.10.2021 14:07:55	13:07:55	Incoming local	1102	88888	1101	00:00:35	0.00		Project Call	27.10.2
0	27.10.2021 14:07:55	13:07:55	Incoming local	*822	88888	1101	00:00:18	0.00		Project Call	27.10.2
0	27.10.2021 14:07:55	13:07:55	Outgoing	1101	88888	35391847001	00:00:18	0.01	<City>	Project Call	27.10.2
0	27.10.2021 14:07:55	13:07:55	Outgoing local	1101	88888	1102	00:00:35	0.00		Project Call	27.10.2
0	27.10.2021 14:06:34	13:06:34	Incoming	1050		35391847001	00:00:06	0.00	<City>	Business Call	27.10.2
0	27.10.2021 14:06:10	13:06:10	Outgoing	1001		35391847001	00:00:30	0.01	<City>	Business Call	27.10.2
0	27.10.2021 12:22:14	11:22:14	Outgoing local	1050		1001	00:00:10	0.00		Business Call	27.10.2
0	27.10.2021 12:22:14	11:22:14	Incoming local	1001		1050	00:00:10	0.00		Business Call	27.10.2
0	27.10.2021 12:13:04	11:13:04	Incoming local	1102	88888	1101	00:00:55	0.00		Project Call	27.10.2

Other reports can also be run from the **Extended Reports** menu on the left window.

These reports can be viewed and downloaded.



This is an example of such a report downloaded to PDF.

Overview of connections		Aurenz GmbH				Aurenz GmbH	
Reporting time frame		01.01.1980 00:00:00 - 31.12.2035 23:59:59				02.11.2021	
Name	Ext.	No. Bus	No. Pri	Dur. Bus	Dur. Pri	Amt. Bus	Amt. Pri
*812	*812	0	0	00:00:00	00:00:00	0.00	0.00
*813	*813	0	0	00:00:00	00:00:00	0.00	0.00
*822	*822	0	0	00:00:00	00:00:00	0.00	0.00
Extension <1001>	1001	86	0	00:35:08	00:00:00	0.17	0.00
Extension <1002>	1002	19	0	00:06:22	00:00:00	0.00	0.00
Extension <1050>	1050	31	0	00:12:07	00:00:00	0.04	0.00
Extension <1070>	1070	1	0	00:00:13	00:00:00	0.00	0.00
Extension <1100>	1100	1	0	00:00:00	00:00:00	0.00	0.00
Extension <1101>	1101	30	0	00:10:00	00:00:00	0.01	0.00
Extension <1102>	1102	9	0	00:12:34	00:00:00	0.00	0.00
Extension <5201>	5201	1	0	00:00:15	00:00:00	0.00	0.00
Extension <5250>	5250	21	0	00:08:04	00:00:00	0.00	0.00
Extension <>		2	0	00:00:16	00:00:00	0.00	0.00
Project <12345>		3	0	00:00:17	00:00:00	0.00	0.00
Project <88888>		269	0	01:55:19	00:00:00	0.17	0.00
Total		473	0	02:52:35	00:00:00	0.39	0.00
Summary				Number		Amount (EUR)	
Business Call				201		0.22	
Project Call				272		0.17	
Total				473		0.39	

## 8. Conclusion

A full and comprehensive set of feature functional test cases were performed during compliance testing. aurenz GmbH AlwinPro UC-Edition v13.0 is considered compliant with Avaya IP Office R11.1. All test cases have passed with all observations noted in **Section 2.2**.

## 9. Additional References

These documents form part of the Avaya official technical reference documentation suite. Further information may be had from <http://support.avaya.com> or from your Avaya representative.

[1] *Administering Avaya IP Office™ Platform with Manager*. Release 11.0, February 2019

Information on the installation and configuration of AlwinPro UC-Edition can be found at <https://www.aurenz.de>.

---

**©2021 Avaya Inc. All Rights Reserved.**

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at [devconnect@avaya.com](mailto:devconnect@avaya.com).