

OpenScape Business

Troubleshooting Guide

A31003-P3000-S100-03-7620

Provide feedback to further optimize this document to edoku@atos.net

As reseller please address further presales related questions to the responsible presales organization at Unify or at your distributor. For specific technical inquiries you may use the support knowledgebase, raise - if a software support contract is in place - a ticket via our partner portal or contact your distributor.

Our Quality and Environmental Management Systems are implemented according to the requirements of the ISO9001 and ISO14001 standards and are certified by an external certification company.

Copyright © Unify Software and Solutions GmbH & Co. KG 26/08/2020

All rights reserved.

Reference No.: A31003-P3000-S100-03-7620

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

Availability and technical specifications are subject to change without notice.

Unify, OpenScape, OpenStage and HiPath are registered trademarks of Unify Software and Solutions GmbH & Co. KG. All other company, brand, product and service names are trademarks or registered trademarks of their respective holders.



Contents

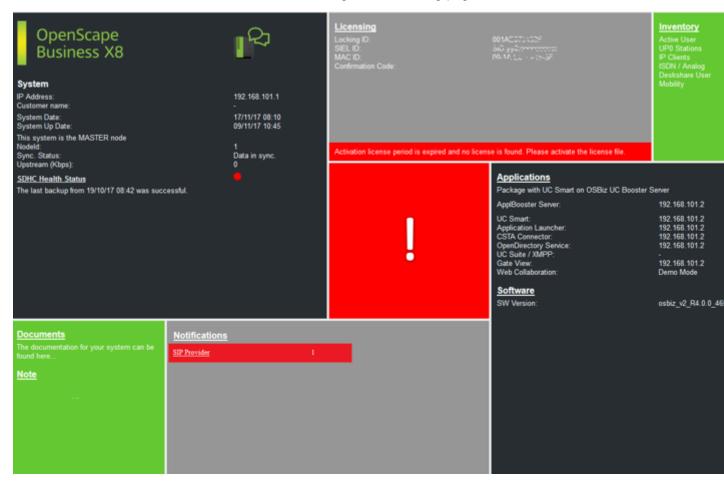
1 What can I do in case of an issue?	5
2 Which information and data is needed for an efficient clearing within Unify	6
3 Trace settings / recommendations	7
4 Additional trace data depending on the use-case scenario	8
4.1 General telephony issues	
4.2 TDM/Analog/ISDN phone issues	8
4.3 HFA phone issues	8
5 Add-on trace profiles depending on problem scenario	10
6 Additional trace data depending on the use-case scenario	
6.1 Poor voice quality/dropped calls	
6.2 Device Tones issues, Tones within the call, MoH issues	
6.3 Display Handling issues:	
6.4 CDR issues per individual Output Format:	
6.5 ITSP (SIP provider) issues	
6.6 General payload issues or interworking scenarios:	
6.7 FAX issues with analog or ISDN fax devices	
6.8 FAX issues with UC Suite Fax	
6.9 CMI Cordless	
6.10 Checklists for CMI in OSBIZ	
6.10.1 OSBiz-Systems (X8/X5/X3/X1) Cordless Diagnostics requirements	14
6.10.3 Collecting the SLC-Trace	
6.10.3.1 Collecting traces from the SLC boards in OSBiz Systems	
6.10.3.2 Collecting SLC traces in a nutshell	
6.11 License issues	
6.12 System startup issues after software activation / software update	
6.13 UC Smart issues	
6.14 MyPortal/MyPortal for Outlook/MyAgent/MyAttendant	
6.15 UC Suite Clients Crash or Freeze – Process Dump	
6.16 Troubleshooting VSL issues	
6.16.1 myPortal@Work (UC Smart, UC Suite) client issues	
6.16.2 myPortal to Go issues	
6.16.2.1 APNS validations for MyPortal To Go	
6.17 Application Launcher issues	
6.18 Skype for Business	25
6.19 Connected CSTA Applications	26
6.20 TAPI Service Provider	26
6.21 Accounting Manager issues	
6.22 Issue involving OpenScape Contact Center	27
6.23 ODS/ODBC issues	
6.24 DLI issues	
6.25 Gate View	
7 Diagnosis on OpenScape Business Attendant/BLF	
8 Diagnosis on VoiceMail issues	
9 CallBridge Diagnosis	31

Contents

10 Remote Access RSP.servicelink......32

1 What can I do in case of an issue?

Check hints and warnings on the landing-page first.



2 Which information and data is needed for an efficient clearing within Unify

- Detailed description of the customer's problem scenario
 - Is the issue reproducible?
 - Describe exactly what happens, including details
 - Call handling via Handset/Headset/Application?
 - Which user (subscriber no.) was involved? When (exact time stamp)? Other users involved as well?
 - Try again with another device or PC. Is the issue reproducible here as well?
 - Check call flow and try to simplify the scenario
- · List of all involved components including corresponding software versions
 - including Client PC details for OS 32/64bit and MS Office versions/service packs
- Provide at least "default" traces of system and applications
 - UC-Suite/MyPortal/MyAttendant/MyAgent/MyPortalSmart
- · Make use of additional trace profiles / trace info
 - Depending on the problem scenario, additional trace profiles can be used
 - For sporadic issues that are solved with a system restart and come up again after some time, corresponding traces should be activated AND customer should provide traces from the system restart until the problem happens again
 - Specific to undesirable System Restarts, it is vital to collect also Core Logs from the faulty environment.
- Always download complete trace data package
 - Diagnostic backup / KDS / trace data

3 Trace settings / recommendations

Basic Trace- / Ticket data which is required

- · If possible please activateRSP.servicelink
 - Please enable remote access for Unify and provide credentials
- · Manager E user credentials and password
- · WBM user credentials and password
- If applicable: Linux user credentials and root access password
- Customer KDS
- · Diagnostic backup
- **Plus**: additional trace data, depending on problem scenario. More details on subsequent pages.

Remark: For scenarios where OSBiz environment contains multiple nodes interworking in a Network configuration, it is required that diagnostics are collected from all involves nodes that take part in a specific scenario.

- To reduce the amount of data to be transferred to Unify, trace slices for certain time frames can be downloaded from the system. Check that you've captured the correct time frame on when the issue has occurred.
- After downloading all trace data it's mandatory to switch trace profiles back to default!!
 - Only Trace Profile Basic and Voice_Fax_connection are allowed to stay active

Certified Environments:

Prior to escalating a customer ticket, please consult the Overview Certification portal for compliance:

https://sp2013.myatos.net/sites/ucc/organization/product-house/technology_partner/Pages/overview-certification.aspx

Compliant VolP Providers by Countries:

https://wiki.unify.com/wiki/Collaboration_with_VoIP_Providers#Tested VoIP Providers by Countries

4 Additional trace data depending on the use-case scenario

4.1 General telephony issues

Trace Profiles

- Basic
- Voice_Fax_connection

Add-on trace profiles depending on problem scenario

Feature_Service_activation

issues with feature activation from phone or application side and issues with call processing in general such as CDL, CFU, Path Replacement, etc.

· Network Call Routing LCR

issues with call routing

· Actors Sensors Door-Opener

issues with actors/sensors/door opener

· CDR_Charging_data

issues with CDR

4.2 TDM/Analog/ISDN phone issues

Trace Profiles

- Basic
- Voice Fax connection
- For TDM related issues activate: Calls_with_System_Device_Upn
- For analog trunk telephony or analog trunk card related issues activate:

 Calls with Analog Subscriber Trunks
- For ISDN trunk telephony or ISDN trunk card related issues activate: Calls_with_ISDN_Subscriber_Trunks

Add-on trace profiles depending on problem scenario

· Display problems

issues with phone display notifications

Device trace (see trace guide TDM phone Wiki.unify.com)

http://wiki.unify.com/images/0/0f/Service_Info_How_to_trace_OST_TD-M_3.pdf

4.3 HFA phone issues

Trace Profiles

- Basic
- Voice Fax connection
- Calls with System Device HFA

Add-on trace profiles depending on problem scenario

- · Display_problems
 - issues with phone display notifications
- Gateway_stream_overview issues with payload
- · Wireshark traces
- · Full Network Topology
- · Device trace (see trace guide HFA phone, wiki.unify.com

 $http://wiki.unify.com/images/c/c7/Service_Info_How_to_trace_HFA-Update_V3R0.pdf$

https://wiki.unify.com/wiki/File:Service_Info_How_to_trace_CP-HFA_V1.2.pdf

5 Add-on trace profiles depending on problem scenario

SIP phone issues

- Basic
 - Voice Fax connection
 - SIP_Interconnection_Subscriber_ITSP
 - SIP_Registration

Add-on trace profiles depending on problem scenario

- Network plan overview
- · List of network components involved
- · Wireshark traces
- Firewall configuration
- Device trace (see trace guide SIP phone Wiki.unify.com)

http://wiki.unify.com/images/a/a7/Service_Info_How_to_trace_SIP_2.pdf

6 Additional trace data depending on the use-case scenario

6.1 Poor voice quality/dropped calls

Trace Profiles

- Basic
- · Voice Fax connection
- · Trace Profile Gateway Stream detailed
- · Resources_MOH_Conferencing

(only in case of MOH or announcement issues)

TCP dump/Wireshark

After consultation with support team

- Network plan overview
- · List of network components involved
- · Firewall configuration

6.2 Device Tones issues, Tones within the call, MoH issues

Check Always use DSP flag: must be deactivated for network trunks, applies only for ITSP with enabled encryption:

Expert mode > Trunks/Routing > Rout > Networking > Change routing parameters > Always use DSP

 Check Tones from CO flag: generally must be deactivated – it assumes that tones will always be generated within payload from the CO:

Expert mode > Basic Settings > System Flags

Internal Music On Hold flag under:

Expert Mode > Auxiliary Equipment > Music on Hold (MoH)

6.3 Display Handling issues:

The 'Display_problems' trace profile is needed to get meaningful information logged for such use cases.

6.4 CDR issues per individual Output Format:

Indicate the CDR system output format under:

Expert Mode > Telephony Server > Basic Settings > Call Charges > Call Charges - Output Format

- When the Output Format is set as HTTPS, the system acts as a server. (gez.txt also required)
- If option LAN-TCP-Client is chosen then the PBX acts as a client .

Additional trace data depending on the use-case scenario

ITSP (SIP provider) issues

Per individual setup, troubleshooting requires that the problematic scenario is captured with the following additional components/levels:

- · While PBX acts as a server:
 - Default logs plus:
 - CDR_Charging_data Trace Profile in Level 9
 - FP CHARGE-DATA in Level 9
 - FP CP-NET in Level 9
 - FP CP-SUB in Level 9
- · While PBX acts as a client:
 - All the above plus:
 - FP_API-IWU in Level 9
 - FP_API-SPU in Level 9

6.5 ITSP (SIP provider) issues

Trace Profiles

- Basic
- Voice_Fax_connection
- SIP_Interconnection_Subscriber_ITSP
- SIP_Registration

In case of poor voice quality/dropped calls please set SPP trace component level to 9 temporarily

Expert Mode > Maintenance > Traces > Trace Components > SPP > 9

After consultation with support team

- TCP dump/Wireshark
- · Network plan overview
- · List of network components involved
- Firewall configuration

6.6 General payload issues or interworking scenarios:

Including SIP/SIPQ connections, scenarios where OSBiz interacts with ITSPs, network systems, OSV system, Circuit, Skype4Business, and so on.

Trace Profiles

- Basic
- Voice_Fax_connection
- SIP_Interconnection_Subscriber_ITSP
- SIP_Registration
- · Feature_Service_activation

Extra info

- TCP dump/Wireshark
- · Network plan overview
- · List of network components involved

Firewall configuration

6.7 FAX issues with analog or ISDN fax devices

Trace Profiles

- Basic
- · Voice Fax connection
- SIP_Interconnection_Subscriber_ITSP

(only in case of ITSP trunks)

TCP dump

(only in case of ITSP trunks)

Additional Data

- · fax file transmitted
- · fax file received
- involved components (fax device type/fax server type, ISDN or ITSP trunk)

6.8 FAX issues with UC Suite Fax

Trace Profile(s)

- Basic
- Voice_Fax_connection
- TCP dump/Wireshark
- SIP_Interconnection_Subscriber_ITSP
- CSTA_application

Additional data

- · Fax file transmitted
- · Fax file received

Please ensure that during trace download the following flags are set

- UC Suite Protocols
- Application Protocols

(add also CSTA_application traces)

Since OpenScape Business V2 R2, UC Suite Logging is enhanced. With this change most of the errors can be analysed with default traces.

The enhanced UC Traces should be only activated if GVS / development requests it. Please deactivate them directly after finishing the trace scenario.

6.9 CMI Cordless

Trace Profile

- Basic
- Voice_Fax_connection
- CMI

Additional data

Expert mode > Maintenance > Cordless > BS Diagnostic data, download file.

Provide:

- Software version and handset id/name from CMI mobile device (Menu *#06#)
- · Site plan with overview of the stations
- In case there are trace data needed from the SLCN/SLMUC/SLC16N board as well please follow the the guidelines on the next pages (Checklists for CMI in OSBIZ) and add those to the system trace package

Descriptive data needed

- The history of the problem: in which Software version did the problem appear
- Provide software version and handset id/name from CMI mobile device (Menu *#06#)_
- Are there any HW, SW or configuration changes took place in the meantime?

E.g. a change in the network of the customer should not be related to DECT, even a SW update if there is no new version of the DECT code. In general this is very critical information as the the CMI team insists to have this as it helps to speed up their investigation.

• Site network plan with overview of the stations.

Hint for GO

Identify with customer similar scenarios with other phone devices: i.e. if a problem is reproducible with a UP0, then it does not look like to be a DECT specific problem so it needs to be escalated in OSBiz GVS instead of CMI GVS.

6.10 Checklists for CMI in OSBIZ

Requests for OSBiz Tracedata Version: 2.01, Issue Date: the 13th of November 2018, Mircea Mucha.

NOTICE: "SLC" term implies either SLC16N for X5 or SLCN or SLMUC for X8.

6.10.1 OSBiz-Systems (X8/X5/X3/X1) Cordless Diagnostics requirements

General requirements

In case of Cordless problems please turn on the following tracer settings:

- System: X8/X5/X3/X1: CMI-Trace profile (this enables at least DH-CMI and ILW-DECT with Level 9)
- System: X and BS are connected to SLC line cards (collect SLC-Trace directly after problem occurred;see description below)

Call related problems

The following info is required for call and handset related problems:

- The detailed, actual problem description including the following info:
 - Who has called whom including:
 - Extension numbers
 - Display Names
 - Problem time
 - Terminal-types (phone type S4, SL4 and so on)
 - Software Version of System (e.g.osbizv2 R0.4.0 xxx)
 - If possible software version of the terminals
 - Info if it is an external or internal call (DECT/DECT DECT/internal DECT/ external)
 - Description about the call progress (who has initiated the call, a call back, etc.)
- If a call was disconnected unexpected then:
 - Info seen on display of the DECT handset/partner phone
 - tones heard on both sides e. g. "busy tone, ringing tone ..."
- If the connection has a bad quality, please describe the malfunction
 - Like clicking noise, voice dropouts, echo, voice delay, low noise [you can hear your partner, but with noise in background] or strong noise [you can hear only a loud noise and not your partner])
 - Noise duration (instant noise e.g. ~1 second or during the whole call). If possible provide a recording of the noise.
- · Additional info
- Is the problem reproducible?
- Is possible to take a photo from the display content or a video from the total problem sequence
- Info about the position of the DECT user at the site plan (BS location)
- Info if the DECT user has moved during the call
- For internal users' info about configured call distribution features like Teams, MULAP, Call Pickup, and so on.
- Did problem occur after a new BS was reached?

The statistical distribution of the problem:

- · How often does the problem occur on a day?
- · What is the relationship between good and bad DECT calls?
- Is there a relationship between DECT problems and a dedicated location,
 e.g. a staircase?
- Is there a relationship between DECT problems and a determinate base station?

The current site plan (position plan) of the base stations including information about special environment conditions, e.g. reinforced concrete ceiling, wire-reinforced glass wall, closeness of strong electric consumers, closeness of other radio technology like WLAN, other DECT systems or medical equipment like X-Ray, CT, etc. Please check the radio coverage at the location where the problem occurs (FRAQ and RSSI values concerningOSBizV2 service documentation).

Minimum needed data from system:

- Trace from problem time (see min. Tracer settings)
 - System trace
 - SLC-trace in case of BS connected to SLC-card
- BS-Statistic data (please specify time; like last data collection at 2015-11-10 15:20)
- Answered questionnaire (see above)
- KDS of actual system at problem time (collected when the problem occurred)
- · Remote connection details e.g. RSP should they exist
- Network plan (location of BSS) mandatory in case of voice quality problems, call disconnections, coverage issues.

6.10.2 Example of call related problems

This is a sample of call related problems. It is given only as an example.

- the DECT user "Meyer with the internal phone number 123 with an SL4 with SW Version V1 R2.1.0 has called the external partner "Lehmann" with the number 00987654321
- user 123 calls 00987654321
- · user 123 got a ringing tone
- user 00987654321 accepts the call and is successfully connected with 123
- the user talks five minutes without problems
- after five minutes hears the user 123 a strong noise and user 00987654321 was disconnected
- the problem occurs at 2015-11-19 at 17:50
- · the problem is not reproducible
- the user with the handset 123 sits during telephone call in the room number
- the user 123 is in a MULAP with the OpenStage Phone 100
- the problem occurs two times per day.
- there is an average of 500Dectcalls per day.
- · the problem occurs mostly at the seventh floor.
- the problem occurs mostly at the proximity of base station two.

Floor plan: /Network plan:

Attachments: trace.20151119-174500.log.gz

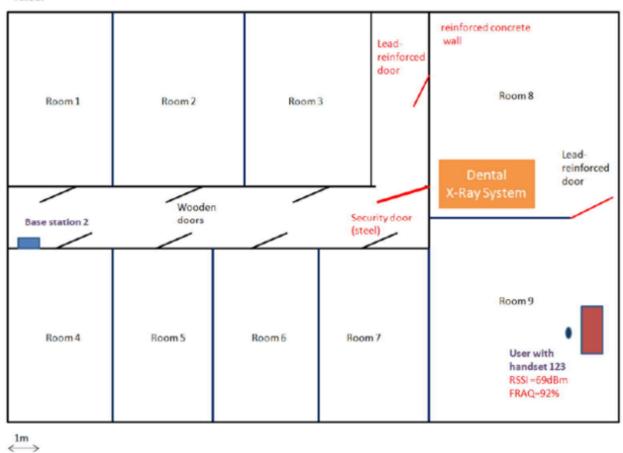
Or complete data set: 172.30.242.200-gw-2015-11-19-diagfiles.tgz

photo_location_bs2.jpg BS-Static data: bssdata.zip

KDS of customer

Floor plan:

7.floor



6.10.3 Collecting the SLC-Trace

Please note the following important information:

- 1) The SLC trace transfer is needed when we have SLC16N (X5) or SLCN (X8) or SLMUC (X8). When we have integrated DECT, e.g. SLU8, SLU8N or SLUC8, the traces are written directly to system log, there is no need for trace transfer, so no need for SLC16N component activation.
- 2) Remember that FP_LW-SLC16N trace component is different from other components: the SLC traces are recorded in the card always and they stop recording when the FP_LW-SLC16N component is enabled (this prevents the existing trace information to be overwritten) and transfer from the card to the system takes place. In other words, when you check the below parameter you stop the traces on the cards and start the transfer from the cards to the central system log. When this transfer is finished, the FP_LW-SLC16N trace component must be disabled (uncheck). This action stops the transfer from the SLC cards to the central system and starts the tracing on the SLC cards for future usage.
- 3) Please note that the memory on the SLC cards is limited to 4MB. For this reason, please enable theFP_LW-SLC16N component as soon as possible after the problem occurred. Depending on the traffic(the load) which is on the switch, the transfer must be started from a few minutes to a few hours, otherwise the traces are overwritten.

It is imperative to download the SLCN traces immediately after error occurrence. The reason is the SLCN trace buffer is very small and on systems with substantial traffic only about 15 minutes of history can be captured.

If you want to make several scenarios, it is preferable to collect the SLCN traces after each, to avoid traces to be overwritten.

6.10.3.1 Collecting traces from the SLC boards in OSBiz Systems

Prerequisites

Login: Expert Mode

Trace in SLC is always running in SLC, but to get the trace information (which is in the boards) into system trace (central system) the trace must be uploaded from SLC to system trace. This will be done in the following way

Step by Step

- 1) Start upload from SLC to System trace buffer
 - a) Under Expert Mode > Maintenance > Traces > Trace Components > FP_LW_SLC16N enter the following:

Trace level: 1

Trace on: Check mark

b) Press the **Apply** button.

After this, a small window might appear, depending on the browser. Now the trace is being uploaded from SLC to system trace buffer. This might take some time (approx. 20 min or more, depending on the amount of SLC-boards in the system).

When all data has been uploaded then an entry in the "Eventlog" under "messages" file will be made.

c) Go to Expert Mode > Maintenance > Events > Event Log and click on

With this action, the event log file will be downloaded.

- d) Go inside the archive and look on the file messages located under the folder log.
- e) In this file, search for the text finished.

You should see a text like ${\tt SLC}$ trace transfer finished. This means that the ${\tt SLC}$ transfer was successful.

2) To start again the SLC traces, for future usage, go back to Expert Mode > Maintenance > Traces > Trace Components > FP_LW_SLC16N and enter the following:

Option	Description
Trace Level	0
Trace on	Uncheck mark

Press the **Apply** button.

3) Get the Diagnosis-Files.

Specify a given time interval or get all data to cover the period since the problem occurred until the time when the SLC trace transfer finished.

- a) To get the Diagnosis file, go to Service Center > Diagnostics > Trace and click on Diagnostics Logs.
- b) Choose a period which will include the time when the problem occurred and the time when the SLC transfer finished.

Be careful of the next possible mistake. Let's suppose that the error occurred at 10:02. The SLC transfer started at 10:57, the transfer finished at 11:16. We must collect at least the period from 10:00 till 11:15. Please note that the interval is from 15 to 15 minutes. 11:15 means that the interval beginning with 11:15 (till 11:29:59) is included. Mistake: if it is collected only the interval from 10:00 till 10:15 (which indeed includes the time when the problem occurred) is not enough because the events from the SLC boards from 10:00 till 10:15 have been transferred to the central syslog after the transfer started (at: 10:57) and finished (at 11:16). Even so, it is not sure that the SLC traces are OK, are not overwritten. The collection of these traces was stopped at 10:57.

6.10.3.2 Collecting SLC traces in a nutshell

Step by Step

- 1) Disable FP_LW-SLC16N trace component to allow tracing in the SLC cards.
- 2) Enable CMI trace profile.
- **3)** Do the tests and finish them (in case of a sporadic problem, wait until the problem occurs).
- **4)** Enable FP_LW-SLC16N trace component that starts trace transfer (and stops SLC tracing).
- 5) Wait until the message SLC trace transfer finished appears

 That means that going in Expert Mode > Maintenance > Events > Event

 Log > Load a file like: <ip-address>-gw-year-month-dayevent.tgz will be downloaded. Inside there are 2 folders: evtlog and log. Open
 the file messages from the folder log and check if the text SLC trace
 transfer finished exists. If it is found it means that the SLC traces from
 the boards have been transferred. If this message is not found or it is an old
 message like this, then wait and check again after 5 minutes.
- 6) Deliver the traces
 - a) Go to Service Center > Diagnostics > Trace and click on Diagnostics Logs.
 - The downloaded file oso diagnostic.tgz contains traces and events.
 - b) Another possibility is to go to Expert Mode > Maintenance > Traces > Trace Log and select a period to include the time when the problem occurred and time when the transfer finished and then click on Load.

The downloaded file is a file with the name: $oso_diagnostic.tgz$. Deliver also the last events log file you downloaded. (a file like <ip-ad-dress>-gw-2017-month-day-event.tgz). The first method (using Service Center) collects more data than the second and is preferable.

License issues

Disable FP_LW-SLC16N trace component to allow tracing in the cards for future use.

When the problem is 100% reproducible under certain conditions, ideally, to have only the traces from the desired scenarios and not unnecessary data from the past, if it is possible, do the following:

- a) Disable FP_LW-SLC16N trace component to allow tracing in the SLC cards
- b) Enable CMI trace profile
- c) Enable FP_LW-SLC16N trace component that starts trace transfer and get previous unnecessary data.
- d) Wait for "SLC trace transfer finished" message and clear all the data captured (trace-logs and events).
- e) Disable FP_LW-SLC16N trace component.
- f) Do the tests and finish them (or wait until the problem occurred)
- g) Enable FP LW-SLC16N trace component that starts trace transfer.
- h) Wait for "SLC trace transfer finished" message
- i) Collect and deliver the traces.
- j) Disable FP_LW-SLC16N trace component to allow tracing in the cards for future use.

Traces following at least the 1st method are necessary; the 2nd method would be perfect.

6.11 License issues

Trace Profile

- Basic
- Voice_Fax_connection
- License_problem
- · Validate that under WBM:

Expert Mode > Maintenance > Traces > License Component > CLA, the Trace Level is set to ALL.

INFO: Licensing logs have a relatively brief history and information could be rotated when tracing intensively. It is advised to collect logs as close as possible to the time stamp of a reported issue so as not to loose vital license diagnostics.

Additional data

- · original .lic file
- Screen shots of License Manager and Home screen where applicable.

6.12 System startup issues after software activation / software update

Trace Profile

- Basic
- Voice_Fax_connection

Core Logs (if generated)

NOTICE: Please contact your support team

6.13 UC Smart issues

Trace Profile

- Basic
- Voice_Fax_connection
- UC_Smart
- · Smart VM
- · CSTA application

Additional data

- List of all involved components with software versions including client PC details for OS 32/64bit and MS Office versions/service packs
- Get client PC and OS details from local PC: Start > execute > dxdiag
- · UC Smart Client Logs from local PC
- · Screen shot from UC Smart application including date and time

Please ensure that during trace download the following flag is set, **Application Protocols** (add also **CSTA_application** traces).

6.14 MyPortal/MyPortal for Outlook/MyAgent/MyAttendant

Trace Profile

- Basic
- Voice_Fax_connection
- CSTA_application (only for CC and myAgent scenarios)

Additional data

List of all involved components with software versions including client PC details for OS 32/64bit and MS Office versions/service packs.

UC Suite Client Logs from local PC

Screen shot from UC Suite application including date and time. The time of occurrence is vital.

NOTICE: When capturing a client's screen shot e.g. from myAgent, please provide the whole screen (customers often crop it). The time at the bottom right of the screen shot is important for analysis.

Windows Eventlog complete saved as (*.evtx)

Please ensure that during trace download the following flags are set: **UC Suite-Protocols**, **Application Protocols**.

Reference also sections on Process Dump and VSL troubleshooting

Since OpenScape Business V2 R2 UC Suite Logging is enhanced. With this change most of the errors can be analysed with default traces.

The enhanced UC Traces should be only activated if GVS / development requests it. Please deactivate them directly after finishing the trace scenario.

6.15 UC Suite Clients Crash or Freeze - Process Dump

Procdump (https://docs.microsoft.com/en-us/sysinternals/downloads/procdump) gives us a snapshot of what an application is doing at any time. Procdump should be used for OLI/myAgent/FaxPrinterDriver when the application either crashes or freezes/becomes unresponsive.

Step by Step

- 1) Extract the contents of procdump.rar to any folder on your PC.
- 2) Using CMD, navigate to that folder.
- **3)** Depending on the type of error being investigated, type one of the following commands:
 - a) When the application is frozen:
 - For Outlook: procdump.exe -ma outlook.exe
 - For myAgent: procdump.exe -ma myagent.exe
 - b) When the application crashes:

Type the following before the application crashes (or before you start the application)

- For Outlook: procdump.exe -ma -w -e outlook.exe
- For myAgent: procdump.exe -ma -w -e myagent.exe
- **4)** Provide the DMP file in the folder where you extracted it, along with the client log files and Windows machine's EventLogs
- 5) Install DebugDiag from the following link: https://www.microsoft.com/en-us/download/details.aspx?id=49924
- **6)** Once installed, right click on the DMP file and select **DebugDiag Analysis**. Please store this data and attache it to the ticket.

6.16 Troubleshooting VSL issues

- When VSL Crashes are experienced (system/vsl/csp, etc.):
 - Set the flag **Core Logs** prior to collecting/downloading system traces.
- For problems with UC Suite Fax printer Driver:

Collect and provide Fax Printer Driver logs over client machine's path: C:\ProgramData/CommunicationsClients/CC-Logs/OSBizUser[e.g.406]\FaxPrinterDriver

· For UC Clients Auto Update issues:

Collect contents of the following paths from the client machine:

- C:\ProgramData/CommunicationsClients/AutoUpdate

Contains traces for the migration process from V2R6 to V2R7 clients

 C:\ProgramData/CommunicationsClients/CC-Logs/AutoUpdate

Contains traces from auto update background service

- C:\Users\<USER>\CC-Logs/AutoUpdate

Contains traces from the auto update graphical user interface

In case of AutoUpdate related issues, please include all three path contents.

6.16.1 myPortal@Work (UC Smart, UC Suite) client issues

You need to provide the following traces

Step by Step

- 1) System traces with Trace Profiles
 - Basic
 - VoiceFaxConnection
 - SIP-Interconnection-Subscriber-ITSP

and Trace Components

- Default
- ERH_H323_REG Ivl 3
- FP CP *
- · HFAM level 6
- MSTU level 9
- MSTU RTPPROXY level 9
- NSA Ivl 6
- TC IvI 3
- SPP Ivl 6
- MSH Ivl 6
- LLC CALL IVI 3
- IPNC IvI 6
- MPH IvI 6
- 2) RTPProxy traces.
- 3) Application Traces
 - HFA proxy
 - LAS
- **4)** TCPDump (system side), depending on the nature of the issue, also wireshark from client side.
- 5) From the client machine where myPortal@work is installed and under **Settings** > **Debug settings**, collect the client's logs after problematic scenario has been reproduced.
- **6)** Where applicable and necessary to demonstrate a defect, capture screen shots of the UI or a video.

- 7) From the System side, make sure that Application Protocols and UC Suite Protocols are selected when system diagnostics are collected since LAS logs are vital for investigation.
- **8)** State Timestamps of the actions/scenario and users' parameters involved to identify inside logs.

6.16.2 myPortal to Go issues

- State the Mode used, that is, Deskphone, VoIP, Device @home, GSM calls (only in Dual mode mobility)
- LAS/CSTA modules involved so important to have Application Protocols logs. If Booster server exists, system diagnostics are needed from BS side since MPTG connects with that server.
- · myPortal to Go client app logs.

Additional Checklist at customer site:

- OSBiz is connected to the Internet
- · DNS properly configured
- Validate that Notifications are allowed from device and from underlined network
- Indicate WSI Application Server status
- Wireshark diagnostics

6.16.2.1 APNS validations for MyPortal To Go

Prerequisites

To get the APNS mechanism working, the following administration steps are required:

Step by Step

- 1) The latest myPortal to go (iOS) version from App Store needs to be installed.
- Please make sure that the app has all required permissions (iOS settings > apps section > myPortal to go).
- 3) In OpenScape Business, we recommend to use the latest release software.
- 4) OpenScape Business (and Booster Card/Server if present) require internet access, as they need to be able to send notifications to Apple's public AP-NS service. This requires also a proper DNS server configuration, which allows OSBiz to resolve public internet domain names like "gateway.push.apple.com".
- **5)** If the company firewall restricts outbound internet access, then please make sure that the firewall is open for APNS related ports.
- 6) The iOS device needs an active internet connection to receive and handle APNS notifications.

Next steps

Regarding WiFi availability when the iPhone is locked:

 Please check if specific power saving settings are in use. For example, the iOS option Low Power Mode may have an impact if enabled, especially when the device's battery status is low. • It is also strongly advised that the iPhone device is restarted.

NOTICE: All hints above are related to iOS only.

As an additional troubleshooting method, there is also a Mac OSX app which a customer can install for testing APNS connectivity from their network. Example: Push Diagnostics by Twocanoes Software, Inc. which can be found in the MAC App Store.

6.17 Application Launcher issues

Traces for Client App. Launcher:

Local Disk > Users > <User> > AppData > Roaming > Tray_Tool > trace.atr

Traces for Server App. Launcher:

From the System side, make sure that **Application Protocols** is selected when system diagnostics are collected.

Remarks

App Launcher trace file can get easily corrupted as it is "dynamically" copied. The result will be to get empty decoded view of the trace by using the special Development tool for examining App Launcher logs.

Corruptions can happen usually when an engineer copies the traces but the Application Launcher application is still running in the background or if it is terminated not gracefully e.g. via Windows Task Manager.

After a critical error or after a specific time period, Application Launcher updates the trace file, but if during the update it is terminated or someone copies this file then the trace file could get corrupted or the copied file might be incomplete.

In order to avoid this, which makes the investigation harder and lengthens processing time, you are advised trying to gracefully terminate the app by rightclicking its icon at the task bar to allow for proper update of its contents.

If corruption has already taken place and in order to avoid maintaining it, please completely delete the log file while the app is not running and then start up App Launcher to have it properly regenerated.

6.18 Skype for Business

Trace Profile

- Basic
- Voice_Fax_connection
- SIP_Interconnection_Subscriber_ITSP
- TCP dump/Wireshark

Trace components

FP_CP-Port-User: level 9

FP DH-SIP: level 9 (only for OpenScape Business X variant)

In case of registration issue with ITSP/lines please activate following profile in addition:

· SIP Registration

6.19 Connected CSTA Applications

Trace Profile

- Basic
- CSTA application

Please ensure that during trace download the following flag is set: **Application Protocols**.

6.20 TAPI Service Provider

 Please activate the following flags first on the TAPI PC and restart the Telephony-Service before reproducing the issue

Control Panel > Phone and Modem > Advanced > OpenScape Business TAPI > Configure > Advanced

Debug-trace options: on with verbose level

Write trace to file when Debug-trace is turned on

- Depending on the TAPI operation mode choose the following traces on the OSBiz system
 - OSBiz TAPI CSTA

UC Suite-Protocols

Application Protocols (add also CSTA_application traces)

- OSBiz TAPI UC Smart

Application Protocols (add also CSTA_application traces)

· Over the client machine end, please include Windows Event Viewer Logs.

6.21 Accounting Manager issues

To activate, set Registry key:

HKEY_CURRENT_USER\Software\Siemens\Accounting Tool\Accounting Tool TraceToFile, REG DWORD, value 1

The generated trace file can be found under:

 $LOCALAPPDATA\$ \VirtualStore \Program Files (x86) \Accounting Manager \Trace.log

- Depending on the CDR output format, consult also the relevant CDR troubleshooting section for the respective CDR diagnosis data over system side.
- Include screen shots of the Accounting Manager configuration and particularly any active Filters.
- Indicate that OSBiz Central Call Charge Recording flag Activate Call
 Charge Recording is set and also indicate the configuration under Expert
 Mode > Telephony Server > Basic Settings > Call Charges

NOTICE: In particular situations it could be required that prior to fetching CDRs from within Accounting Manager, GVS will have to first remotely connect and collect from the PBX via ssh the generated gez.txt file to analyze CDR record formation. This file gets deleted when Accounting Manager retrieves the CDRs.

6.22 Issue involving OpenScape Contact Center

For OSBiz scenarios where OSCC is involved and in order to avoid multiple requests, along with OSBiz Diagnostics with "Application Protocols" set, please collect the following OSCC diagnostics:

- · OSCC design db
- OSCC telephony server trace (full level)
- OSCC call director server trace (full_level)
- OSCC routing server trace (INFO level)
- CMS trace (full level)
- OSCC error log
- Windows Event Logs (OSCC)
- /var/log/messages+warn (CMS)

6.23 ODS/ODBC issues

- Name, exact version, 32bit/64bit variant of the 3rd Party Datasource used by a customer.
- An indication from within the 3rd Party datasource, of the column Data Types used.
- Size/records of the datasource and its location (i.e. integrated to the ODBC Bridge server or remotely located on a separate server).
- Firewall/ports allowed over ODBC Bridge and Datasource servers.
- A validation of UniqueIDs not containing null or duplicate values.
- · A rough estimate of end user size pulling LDAP searches.
- An indication of any special characters used in both column headers and data contents. This should consider also "regular" characters but on data deviating typical syntax, e.g. tel.# +30{210}xxxxxx instead of +30(210)xxxxxx
- If ODBC Bridge remote access is not possible, along with ODBC Bridge configuration and logs, please provide also System DSN configuration of the associated ODBC driver configuration.
- Where found valuable, a wireshark of the communication in between ODS and ODBC Bridge Server and ODBC to Datasource Server.
- Validate if the following ODBC functions are indeed supported by the Database Management System (DBMS) and the corresponding ODBC driver used: SQLAllocHandle, SQLBindCol, SQLConnect, SQLDisconnect, SQLDriverConnect, SQLExecDirect, SQLFetch, SQLFreeHandle, SQLFreeStmt, SQLGetDiagRec, SQLGetInfo, SQLSetConnectAttr, SQLSetEnvAttr, SQLGetEnvAttr, SQLGetFunctions, SQLGetStm-

¹ Enable **CSTA_application** prior to executing the scenario.

tAttr, SQLNumResultCols, SQLGetTypeInfo, SQLColAttribute, SQLGetData, SQLTables.

6.24 DLI issues

- If a DLI issue is reproducible, please set the trace component
 DLI_WORKPOINT to level 3 and perform the use case anew. Once the scenario completes, collect the logs and reduce trace component back to default level.
- For the matching timestamps, Phone diagnostics of a sample failing device is also required for the investigation of DLI issues.

6.25 Gate View

- Gate View Log files
- Type of camera / related door opener
- Chosen camera profile / URL in case of generic camera profile usage

Some actions that can be performed:

- Turn off any screen saver and power saver modes on the phone.
- Perform a factory reset on the phone and update it to latest phone software.
- Reset the phone in Gateview from scratch.

Guidelines for relevant checkpoints and troubleshooting (Steps below should be executed in the order represented herein):

- Reload (Factory reset) HFA device and configure it
- 2) Check that both the analog DoorOpener and the HFA device have the appropriate licenses. (TDM-user & UC-user for DoorOpener and IP-user & UC-user for the HFA)
- Re-configure DoorOpener's UC password in OpenScape Business UC Suite (under Expert mode > Applications)
- Set WBM's DoorOpener feature via Expert Mode > Auxiliary EquipmentDoor Opener
- 5) Configure the camera through the GateView administration panel
- 6) Configure the HFA phone through the GateView administration panel
- 7) Re-configure HFA's buttons, save them and then Transfer them to phone
- 8) Re-configure DoorOpener through the GateView administration panel
- 9) Close GateView administration panel, Deactivate GateView and then Activate it again (Important!)
- **10)** Re-test the DoorOpener automatic video feature while recording network traffic between OCAB and the HFA device with Wireshark.

7 Diagnosis on OpenScape Business Attendant/BLF

How to collect the Attendant Trace

- 1) In the folder Attendant/Debug start debugview.exe.
- 2) Set the Filter in Debugview to **Uno*** (predefined in Debugview)
- Enable Capture/Capture Win32, Options/Clock Time, Options/Show Milliseconds.
- 4) Open Attendant and go to the menu Help/About.
- 5) Click on the picture. In the Status line you will see a T.

Now the trace is active and you will see any information in the debugview window. Click on **File** and choose **Save as** to save the captured data into a file.

DebugView is a Freeware Tool from Microsoft Sysinternals.

IMPORTANT: OSBiz Attendant start-up sequence is quite important when troubleshooting e.g. connectivity issues. It is strongly advised that Debugview is started prior to running OSBiz Attendant in order to capture the start-up messages of the application.

Additional data

- Description of the failure scenario with timestamps of the actions, users involved etc.
- · If required screen shots or a video of the UI
- · System Diagnostics at the matching time stamp of the issue
- Device Diagnostics: as defined in the 'Trace Guide' and per individual device family type, see https://wiki.unify.com/wiki/Devices

Suggested device Trace parameters:

- WSI service on DEBUG
- · Communications on DEBUG

8 Diagnosis on VoiceMail issues

Identify initially what type of VM is used (SmartVM, IVM, VSL VM)

- 1) OSBiz X
 - a) Application mode is UC Smart > Voicemail capabilities are provided by SmartVM feature (ISDN ports).
 - **b)** Application mode is UC Suite > Voicemail capabilities are provided by VSL.
- 2) OSBiz S
 - a) Application mode is UC Smart > Voicemail capabilities are provided by SmartVM feature (MEB trunks).
 - **b)** Application mode is UC Suite > Voicemail capabilities are provided by VSL.

If problems appear while recording a message in VM, make sure scenario is included in traces.

If problems appear while playing back a message from VM, then make sure that both recorded and playback scenarios are included in traces.

- · Wireshark when ITSP and/or HFA subscribers are involved.
- UC Suite protocols when UC Suite VM is used.

9 CallBridge Diagnosis

To enable the CallBridge traces, the following registry keys need to be changed:

Set:

HKLM > SOFTWARE > Siemens > CallBridge Unified CorNet > Trace > DBGTrace to value 1.

also parameter:

HKLM > SOFTWARE > Siemens > CallBridge Unified CorNet > Trace > DBGTraceEnh to value 1.

Execute the DebugView tool (can be found in Microsoft's Windows Sysinternals site), navigate to the **Capture** menu and make sure that both **Capture Win32** and **Capture Global Win32** options are checked.

Restart the Windows telephony service and perform the problematic use case stating timestamps and scenario parameters.

Collect/save the DebugView trace and provide TAPI diagnostics along with the OSBiz traces.

10 Remote Access RSP.servicelink

Why RSP.servicelink

RSP.servicelink is the preferred connectivity method for all products of the actual Unify portfolio offering easy to install, easy to use secure broadband remote access.

Customers benefits with RSP.servicelink

- · Highest security
- · Secure outgoing connection set up
- Broadband connection
- · One connectivity for all actual products
- SSL-VPN
- · Easy setup
- · Cost efficiency
- · Suited for monitoring
- · Future proof platform