Release Notes

Product Name: *OpenScape Business*

Product Version: *V2*

Software Release is identified by Version: *V2 R5.1.0_019*

Major Release ☐   **Minor Release** ☐   **Fix Release** ☒   **Hotfix Release** ☐

Production Version:

System:	**OpenScape Business System X3/X5/X8/UC BC**	
File type	Product Item Number / File name	Size
Filename Update image small: Product Item # **MD5 checksum:**	**image_osbiz_v2_R5.1.0_019_occ.img.tar** P30152-P1603-P1-73 b4615b2ad0b98c52be6a7baa5733a190	1.142.091.264 Bytes
Filename Update image big: Product Item # **MD5 checksum:**	**image_osbiz_v2_R5.1.0_019_ocab.img.tar** P30152-P1603-P2-73 0c9a5a8160e5d0d882be5e934550ada1	2.684.356.096 Bytes
System:	**OpenScape Business Server S/UC BS**	
File type	Product Item Number / File name	Size
Filename Update Image Server Product Item # **MD5 checksum:**	**image_osbiz_v2_R5.1.0_019_pcx.img.tar** P30152-P1603-P12-73 41b82da2f541675ed2cace262e21f16e	2.264.453.632 Bytes
Filename Installation Image Server Product Item # **MD5 checksum:**	**dvd_osbiz_v2_R5.1.0_019.iso** P30152-P1603-P10-73 61dee72da4cd12c40c78f844b81557ac	2.805.915.648 Bytes
System:	**OpenScape Business Open Source Code**	
File type	Product Item Number / File name	Size
Filename Open Source Code Product Item # **MD5 checksum:**	n.a.	n.a.
Filename Open Virtual Application (OVA) Product Item # **MD5 checksum:**	n.a.	n.a.

Released for: OSBiz X1/X3/X5/X8: ☒ **OSBiz UC BC:** ☒   **OSBiz S:** ☒   **OSBiz UC BS:** ☒

Export Control Classification Data   **AL: N** 5D002C1A   **ECCN:** 5D002ENCR

Field Trial: ☐   **eeQS:** ☐   **Limited Availability:** ☐   **General Availability:** ☒

DECLARATION DATE: Date   : 2018-08-02

DELIVERABLES: **Full Release:** ☒   **Delta Release:** ☐

Abstract:
This document provides general information about the release, generics, and other relevant notes for the corresponding product and its correction versions. This document also lists and describes the known issues, restrictions, and workarounds.

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1 History of change

1.1 Product version history

Software version	Production version	Date	Remarks
V2 R0.1.0_068	M-IM/OM G2.00.068	2015-03-31	OpenScape Business V2 R0.1.0.068 Field Trial Release
V2 R0.1.1_072	M-IM/OM G2.01.072	2015-05-18	OpenScape Business V2 2nd Field Trial Release
V2 R0.1.2_077	M-IM/OM G2.01.077	2015-06-19	OpenScape Business V2 3rd Field Trial Release
V2 R0.1.2_077	M-IM/OM G2.01.077	2015-07-03	OpenScape Business V2 EEQS Release
V2 R0.1.2_079	M-IM/OM G2.01.079	2015-07-08	OpenScape Business V2 FT / EEQS Release
V2 R0.2.0_081	M-IM/OM G2.01.081	2015-07-17	OpenScape Business V2 GA Release
V2 R0.2.1085	M-IM/OM G2.01.085	2015-08-03	OpenScape Business V2 R0.2.1085 Hotfix Release
V2 R0.2.1086	M-IM/OM G2.01.086	2015-08-13	OpenScape Business V2 R0.2.1086 Hotfix Release
V2 R0.2.1089	M-IM/OM G2.01.089	2015-08-28	OpenScape Business V2 R0.2.1089 Hotfix Release
V2 R0.3.115	M-IM/OM G2.03.115	2015-09-25	OpenScape Business V2 R0.3.115 FT / EEQS Release
V2 R0.3.119	M-IM/OM G2.03.119	2015-10-16	OpenScape Business V2 R0.3.119 GA Release
V2 R0.3.1120	M-IM/OM G2.03.120	2015-10-23	OpenScape Business V2 R0.3.1120 Hotfix Release
V2 R0.3.1121	M-IM/OM G2.03.121	2015-10-27	OpenScape Business V2 R0.3.1121 Hotfix Release
V2 R0.3.1122	M-IM/OM G2.03.122	2015-11-03	OpenScape Business V2 R0.3.1122 Hotfix Release
V2 R0.3.1123	M-IM/OM G2.03.123	2015-11-12	OpenScape Business V2 R0.3.1123 Hotfix Release
V2 R0.3.1124	M-IM/OM G2.03.124	2015-11-20	OpenScape Business V2 R0.3.1124 Hotfix Release
V2 R0.3.1126	M-IM/OM G2.03.126	2015-12-02	OpenScape Business V2 R0.3.1126 Hotfix Release
V2 R0.3.1127	M-IM/OM G2.03.127	2015-12-11	OpenScape Business V2 R0.3.1127 Hotfix Release
V2 R0.3.1129	M-IM/OM G2.03.129	2015-12-17	OpenScape Business V2 R0.3.1129 Hotfix Release
V2 R1.0_156	M-IM/OM G2.10.156	2015-12-18	OpenScape Business V2 R1.0.156 1st FT Release
V2 R1.0_162	M-IM/OM G2.10.162	2016-01-18	OpenScape Business V2 R1.0.162 2nd FT Release
V2 R0.3.1130	M-IM/OM G2.03.130	2016-01-28	OpenScape Business V2 R0.3.1130 Hotfix Release
V2 R1.0_168	M-IM/OM G2.10.168	2016-02-25	OpenScape Business V2 R1.0.168 FT / EEQS Release
V2 R1.0_172	M-IM/OM G2.10.172	2016-03-10	OpenScape Business V2 R1.0.172 FT / EEQS Release
V2 R1.0_176	M-IM/OM G2.10.176	2016-03-29	OpenScape Business V2 R1.0.176 GA Release
V2 R1.0.1177	M-IM/OM G2.10.177	2016-04-07	OpenScape Business V2 R1.0.1177 Hotfix Release
V2 R1.0.1178	M-IM/OM G2.10.178	2016-04-20	OpenScape Business V2 R1.0.1178 Hotfix Release
V2 R1.0.1179	M-IM/OM G2.10.179	2016-04-26	OpenScape Business V2 R1.0.1179 Hotfix Release
V2 R1.0.1180	M-IM/OM G2.10.180	2016-05-10	OpenScape Business V2 R1.0.1180 Hotfix Release
V2 R1.0.1181	M-IM/OM G2.10.181	2016-05-16	OpenScape Business V2 R1.0.1181 Hotfix Release
V2 R1.1.0_185	M-IM/OM G2.10.185	2016-06-02	OpenScape Business V2 R1.1.0_185 GA Release
V2 R1.1.0_185a	M-IM/OM G2.10.185a	2016-06-14	OpenScape Business V2 R1.1.0_185a GA Release Update
V2 R1.1.1_187	M-IM/OM G2.10.187	2016-06-17	OpenScape Business V2 R1.1.1_187 Hotfix Release
V2 R1.1.1_192	M-IM/OM G2.10.192	2016-07-04	OpenScape Business V2 R1.1.1_192 Hotfix Release
V2 R1.1.1_193	M-IM/OM G2.10.193	2016-07-19	OpenScape Business V2 R1.1.1_193 Hotfix Release
V2 R2.0.0_228	M-IM/OM G2.20.228	2016-07-20	OpenScape Business V2 R2.0.0_228 1st FT Release
V2 R1.1.1_194	M-IM/OM G2.10.194	2016-07-26	OpenScape Business V2 R1.1.1_194 Hotfix Release
V2 R2.0.0_233	M-IM/OM G2.20.233	2016-08-12	OpenScape Business V2 R2.0.0_233 2nd FT Release
V2 R1.1.1_195	M-IM/OM G2.10.195	2016-08-23	OpenScape Business V2 R1.1.1_195 Hotfix Release
V2 R2.0.0_236	M-IM/OM G2.20.236	2016-08-31	OpenScape Business V2 R2.0.0_236 EEQS Release
V2 R2.0.0_237	M-IM/OM G2.20.237	2016-09-09	OpenScape Business V2 R2.0.0_237 EEQS Release
V2 R2.0.0_243	M-IM/OM G2.20.243	2016-10-04	OpenScape Business V2 R2.0.0_243 GA Release
V2 R2.0.1_251	M-IM/OM G2.20.251	2016-10-20	OpenScape Business V2 R2.0.1_251 Hotfix Release
V2 R2.1.0_260	M-IM/OM G2.20.260	2016-12-06	OpenScape Business V2 R2.1.0_260 EEQS Release
V2 R2.1.0_261	M-IM/OM G2.20.261	2016-12-09	OpenScape Business V2 R2.1.0_261 EEQS Release

Software version	Production version	Date	Remarks
V2 R2.1.0_261	M-IM/OM G2.20.261	2016-12-15	OpenScape Business V2 R2.1.0_261 GA Release
V2 R2.1.0_262	M-IM/OM G2.20.262	2016-12-23	OpenScape Business V2 R2.1.0_262 HotFix Release
V2 R2.1.0_264	M-IM/OM G2.20.264	2017-01-20	OpenScape Business V2 R2.1.0_264 HotFix Release
V2 R2.1.0_269	M-IM/OM G2.20.269	2017-02-13	OpenScape Business V2 R2.1.0_269 HotFix Release
V2 R2.1.0_271	M-IM/OM G2.20.271	2017-02-23	OpenScape Business V2 R2.1.0_271 HotFix Release
V2 R2.1.0_272	M-IM/OM G2.20.272	2017-03-07	OpenScape Business V2 R2.1.0_272 HotFix Release
V2 R2.1.0_269	M-IM/OM G2.20.269	2017-03-08	OpenScape Business V2 R2.1.0_269 GA Release
V2 R2.1.1_278	M-IM/OM G2.20.278	2017-03-29	OpenScape Business V2 R2.1.1_278 HotFix Release
V2 R2.2.0_279	M-IM/OM G2.20.279	2017-04-10	OpenScape Business V2 R2.2.0_279 HotFix Release
V2 R2.2.1_280	M-IM/OM G2.20.280	2017-04-27	OpenScape Business V2 R2.2.1_280 HotFix Release
V2 R2.2.1_282	M-IM/OM G2.20.282	2017-05-15	OpenScape Business V2 R2.2.1_282 HotFix Release
V2 R2.2.0_279	M-IM/OM G2.20.279	2017-05-16	OpenScape Business V2 R2.2.0_279 GA Release
V2 R3.0.0_358	M-IM/OM G2.00.358	2017-05-22	OpenScape Business V2 R3.0.0_358 1st FT Release
V2 R3.0.0_361	M-IM/OM G2.00.361	2017-05-30	OpenScape Business V2 R3.0.0_361 2nd FT Release
V2 R2.2.1_284	M-IM/OM G2.20.284	2017-06-02	OpenScape Business V2 R2.2.1_284 HotFix Release
V2 R2.2.1_285	M-IM/OM G2.20.285	2017-06-12	OpenScape Business V2 R2.2.1_285 HotFix Release
V2 R3.0.0_367	M-IM/OM G2.00.367	2017-06-13	OpenScape Business V2 R3.0.0_367 3rd FT Release
V2 R2.2.1_287	M-IM/OM G2.20.287	2017-06-20	OpenScape Business V2 R2.2.1_287 HotFix Release
V2 R3.0.0_371	M-IM/OM G2.00.371	2017-06-21	OpenScape Business V2 R3.0.0_371 4th FT Release
V2 R3.0.0_371	M-IM/OM G2.00.371	2017-06-23	OpenScape Business V2 R3.0.0_371 EEQS Release
V2 R3.0.0_002	M-IM/OM G2.30.002	2017-07-07	OpenScape Business V2 R3.0.0_002 EEQS Release
V2 R3.0.1_005	M-IM/OM G2.30.005	2017-07-12	OpenScape Business V2 R3.0.1_005 EEQS Release
V2 R3.0.1_008	M-IM/OM G2.30.008	2017-07-21	OpenScape Business V2 R3.0.1_008 EEQS Release
V2 R3.0.1_008	M-IM/OM G2.30.008	2017-07-26	OpenScape Business V2 R3.0.1_008 GA Release
V2 R3.0.1_021	M-IM/OM G2.30.021	2017-08-09	OpenScape Business V2 R3.0.1_021 HotFix Release
V2 R3.0.1_008	M-IM/OM G2.30.008	2017-08-30	OpenScape Business V2 R3.0.1_008 GA Release with OVA file
V2 R3.0.1_024	M-IM/OM G2.30.024	2017-08-30	OpenScape Business V2 R3.0.1_024 HotFix Release
V2 R3.0.1_025	M-IM/OM G2.30.025	2017-09-07	OpenScape Business V2 R3.0.1_025 HotFix Release
V2 R3.0.1_008	M-IM/OM G2.30.008	2017-09-25	OpenScape Business V2 R3.0.1_008 GA Release with OVA file-Update
V2 R3.1.0_031	M-IM/OM G2.30.031	2017-09-26	OpenScape Business V2 R3.1.0_031 GA Release
V2 R4.0.0_453	M-IM/OM G2.00.453	2017-10-18	OpenScape Business V2 R4.0.0_453 1st FT Release
V2 R3.1.1_035	M-IM/OM G2.30.035	2017-10-20	OpenScape Business V2 R3.1.1_035 HotFix Release
V2 R4.0.0_454	M-IM/OM G2.00.454	2017-10-20	OpenScape Business V2 R4.0.0_454 2nd FT Release
V2 R4.0.0_456	M-IM/OM G2.00.456	2017-10-26	OpenScape Business V2 R4.0.0_456 3rd FT Release
V2 R3.1.1_036	M-IM/OM G2.30.036	2017-10-31	OpenScape Business V2 R3.1.1_036 HotFix Release
V2 R4.0.0_460	M-IM/OM G2.00.460	2017-11-03	OpenScape Business V2 R4.0.0_460 4th FT Release
V2 R4.0.0_465	M-IM/OM G2.00.465	2017-11-10	OpenScape Business V2 R4.0.0_465 5th FT Release
V2 R4.0.0_465	M-IM/OM G2.00.465	2017-11-15	OpenScape Business V2 R4.0.0_465 1st EEQS Release
V2 R4.0.1_004	M-IM/OM G2.40.004	2017-12-04	OpenScape Business V2 R4.0.1_004 2nd EEQS Release
V2 R4.0.1_007	M-IM/OM G2.40.007	2017-12-11	OpenScape Business V2 R4.0.1_007 3rd EEQS Release
V2 R4.0.1_007	M-IM/OM G2.40.007	2017-12-15	OpenScape Business V2 R4.0.1_007 GA Release
V2 R4.0.1_011	M-IM/OM G2.40.011	2018-01-03	OpenScape Business V2 R4.0.1_011 HotFix Release
V2 R4.0.1_015	M-IM/OM G2.40.015	2018-01-17	OpenScape Business V2 R4.0.1_015 HotFix Release
V2 R4.0.1_017	M-IM/OM G2.40.017	2018-01-29	OpenScape Business V2 R4.0.1_017 HotFix Release
V2 R4.0.1_019	M-IM/OM G2.40.019	2018-02-07	OpenScape Business V2 R4.0.1_019 HotFix Release
V2 R4.0.1_007	M-IM/OM G2.40.007	2018-03-01	OpenScape Business V2 R4.0.1_007 GA Release with OVA file
V2 R4.1.0_028	M-IM/OM G2.40.028	2018-03-01	OpenScape Business V2 R4.1.0_028 GA Release
V2 R4.1.1_030	M-IM/OM G2.40.030	2018-03-09	OpenScape Business V2 R4.1.1_030 HotFix Release
V2 R5.0.0_559	M-IM/OM G2.50.559	2018-03-23	OpenScape Business V2 R5.0.0_559 1st FT Release

Software version	Production version	Date	Remarks
V2 R4.1.1_034	M-IM/OM G2.40.034	2018-03-27	OpenScape Business V2 R4.1.1_034 HotFix Release
V2 R5.0.0_564	M-IM/OM G2.50.564	2018-04-04	OpenScape Business V2 R5.0.0_564 2nd FT Release
V2 R4.1.1_035	M-IM/OM G2.40.035	2018-04-05	OpenScape Business V2 R4.1.1_035 HotFix Release
V2 R5.0.0_568	M-IM/OM G2.50.568	2018-04-16	OpenScape Business V2 R5.0.0_568 3rd FT Release
V2 R5.0.0_576	M-IM/OM G2.50.576	2018-04-24	OpenScape Business V2 R5.0.0_576 1st EEQS Release
V2 R5.0.0_580	M-IM/OM G2.50.580	2018-05-02	OpenScape Business V2 R5.0.0_580 2nd EEQS Release
V2 R4.1.0_028	M-IM/OM G2.40.028	2018-05-04	OpenScape Business V2 R4.1.0_028 GA Release with OVA file
V2 R5.0.0_586	M-IM/OM G2.50.586	2018-05-11	OpenScape Business V2 R5.0.0_586 3rd EEQS Release
V2 R5.0.0_591	M-IM/OM G2.50.591	2018-05-18	OpenScape Business V2 R5.0.0_591 GA Release
V2 R5.0.1_001	M-IM/OM G2.50.001	2018-05-31	OpenScape Business V2 R5.0.1_001 HF Release
V2 R5.0.1_002	M-IM/OM G2.50.002	2018-06-06	OpenScape Business V2 R5.0.1_002 HF Release
V2 R5.0.1_003	M-IM/OM G2.50.003	2018-06-13	OpenScape Business V2 R5.0.1_003 HF Release
V2 R5.0.1_004	M-IM/OM G2.50.004	2018-06-19	OpenScape Business V2 R5.0.1_004 HF Release
V2 R5.0.1_006	M-IM/OM G2.50.006	2018-06-26	OpenScape Business V2 R5.0.1_006 HF Release
V2 R5.0.1_007	M-IM/OM G2.50.007	2018-07-03	OpenScape Business V2 R5.0.1_007 HF Release
V2 R5.1.0_013	M-IM/OM G2.50.013	2018-07-13	OpenScape Business V2 R5.1.0_013 1st EEQS Release
V2 R5.1.0_019	M-IM/OM G2.50.019	2018-07-30	OpenScape Business V2 R5.1.0_019 2nd EEQS Release
V2 R5.1.0_019	M-IM/OM G2.50.019	2018-08-02	OpenScape Business V2 R5.1.0_019 GA Release

2 Important Information

Please Note:
Additional improvements regarding the system security have been implemented in OpenScape Business SW Version V2R5.1. These improvements are necessary to secure the systems against unauthorized access and to harden the systems against toll fraud.
See also Security Advisory Report - OBSO-1807-01 for further information.
> https://networks.unify.com/security/advisories/OBSO-1807-01.pdf
> https://networks.unify.com/security/advisories/html/OBSO-1807-01.html

It´s strongly recommended to update / upgrade all OpenScape Business systems to SW version V2R5.1 using the SW support.
It is strongly recommend to read carefully the chapter 6 before you update to OS Biz V2R5 FixReleas 1.

Within the following only relevant information for the product and SW Version mentioned above are given.
Note: The term:
- "SW-Update" is used for the installation of a Fix Release. E.g. from V2R1.0.0 to V2R1.1.
- "SW-Upgrade" is used for the installation of a Minor or a Major release. E.g. from V2R1 to V2R3.
- "Migration" is used for a complete system / platform change.
  E.g. from HiPath 3000 to OpenScape Business or from OpenScape Office HX to OpenScape Business UC Booster Server.

2.1 Preconditions

2.1.1 Administration / Configuration Tools

For initial system administration a LAN connection to a PC with installed Internet Explorer ≥ 10 or Firefox ≥V18 is required.
In addition following tools are optionally required for specific installation tasks.
- Manager E, (see also chapter 5.1 for further information)
- OpenScape Business Card Manager and supported SDHC-Card programming HW

The tools mentioned above can be downloaded from the Software Supply Server within the Unify Partner Portal.

2.2 First Installation

2.2.1 OpenScape Business X - Charging Buffer Battery

An OpenScape Business X system must be connected to the power supply for at least 48 hours after setting the system date and time, as a partially charged buffer battery might not be able to store the time settings correctly. An unintended time difference can disable the remaining ALF period.

2.2.2 OpenScape Business S - Dynamic Hardware Requirements

OpenScape Business S / UC Booster Server are operated under SUSE Linux Enterprise Server (SLES). This can be done either directly using a specific Server HW, which is certified for SLES by Novell or using a virtual machine on a HW, which is certified by the manufacturer of the virtual machine.
On the Linux server PC, either the regular SLES version or a SLES version optimized by the manufacturer of the server PC can be installed.
The requirements and conditions listed in chapter 5.2 (Hardware revision) must be met in order to operate OpenScape Business on the SLES Linux server PC in general.

2.2.2.1 RAM space

The RAM requirement depends on the OpenScape Business System expansion and used services and functions. For the following functions a minimum of 4 GB of RAM is required:
- convert Fax to PDF format
- OpenScape Contact Center Multimedia Business
- More than 100 users and up to 500 users

- Gate View
- XMPP

OpenScape Business S with more than 500 users requires a minimum of 8GB RAM.

2.2.2.2 HDD / SDD memory space

The HDD /SDD memory requirement or the OpenScape Business S / Booster Server depend on the number of users.

	Up to 50 User (IP,-TDM,- Mobility,- Deskshare User)	Up to 100 User (IP,-TDM,- Mobility,- Deskshare User)	>100 up to 500 User (IP,-TDM,- Mobility,- Deskshare User)	> 500 User (IP,-TDM,- Mobility,- Deskshare User)
Harddrive	min. 60 GB *	min. 100 GB *	min. 200 GB	min. 500 GB

* Systems with Multimedia Contact Center always require at least 200 GB HDD/SDD memory space for the home partition.

OpenScape Business OVA (Open Virtual Appliance) uses at least 40 GB home partition in the default installation. This can be adjusted according to configured features within the virtual environment.

2.2.3 First Installation in countries with time zone difference ≥ UTC +5

The following applies in case of SW upgrade to V1R3.0.0 or higher within time zones with a difference of ≥ +5 hours to UTC.
One of the following steps has to be executed before SW upgrade in order to get a valid Activation Period.
1. Before initial installation a new SDHC card must be prepared with OpenScape Business card manager with OpenScape Business software version V1 R3.0.0 or later.
2. The factory shipped SDHC card, deployed with a new system can be used to startup the system, but before the Basic Installation Wizard is operated the first time, the system must be updated to OpenScape Business software version V1 R3.0.0 or later.

Afterwards the first installation steps including time zone change can be performed. If the Activation Period has been lost before the fix was applied, only the Regular License File (RLF) is able to reactivate the system.

2.3   Migration

A technical migration path to the current OpenScape Business HW/ SW version (V2R1.x.x) is supported for the following Systems and SW versions.

System	Source Version	Remark
HiPath 3000	V9 R2.7.0	Manager E V10 R2.15.0 or higher required
HiPath 3000	V8	Manager E V10 R2.15.0 or higher required
HiPath 3000	V7	Manager E V10 R2.15.0 or higher required
OpenScape Office HX	V3 R3	Interim stage to OSBiz V1R2.2.0 required
OpenScape Business X3/X5/X8	V1 R3.0.0	single node only
OpenScape Business X3/X5/X8	V1 R3.3.0	multinode
OpenScape Business S	V1 R3.3.0	

2.3.1 Migration from HiPath 3000 V7, V8 or V9 to OpenScape Business X

HiPath 3000 V7, V8 and V9 System can be migrated directly to OpenScape Business V2. A direct migration requires:
- An active HiPath 3000 CDB.
- Manager E V10 R2.12.0 or higher
- Upgrade license V9 (L30250-U622-B684. This is independent from the HiPath 3000 version!)
- Connection from administration PC to Central License Server (CLS)

After the successful technical migration the central license server provides for HiPath 3000 V7 systems 70% for HiPath 3000 V8 systems 80% of active TDM subscribers as OpenScape Business TDM user licenses. If HiPath 3000 V9 systems are migrated, 100% of the active TDM subscribers are provided as OpenScape Business TDM user licenses.
The already existing **indirect** migration from HiPath 3000 V7 / V8 to OpenScape Business V2 is still available.

In case of indirect migration, CDB of HiPath 3000 V7,V8 systems must be converted to HiPath 3000 V9, then uploaded into a HiPath 3000 system that has been upgraded to V9 software including 'Hardware and Overwrite" afterwards it can be finally migrated to OpenScape Business.

The converted CDB is uploaded to the new OpenScape Business system with active flags for "Overwrite & Hardware". Afterwards the license dialog has to be executed within OpenScape Business administration and an appropriate license file for the new OpenScape Business System has to be generated on the Central License Server and has to be imported into OpenScape Business. Details are described within chapter 25 of the administration manual.

The following restrictions have to be considered for successful licensing:

- Registration information must be equal to either Company-ID or the full Company information like - Company Name, address, etc. Otherwise license migration will fail.
- The generated user_info.xml can only be created once during a migration process. If file content is faulty (not equal as described above) the migration must be repeated with a new (or newly created) SDHC card.

2.3.2 Migration from OpenScape Office HX V3 to OpenScape Business UC Booster Server V2

The migration of an OpenScape Office V3 HX to OpenScape Business Booster Server V2 requires an interim stage to OpenScape Business Booster Server V1R2.2.0 as a direct migration to OpenScape Business Booster Server V2 is not supported.

With OpenScape Business V1 R2.2.0 a conversion script was provided allowing migration of an OpenScape Office HX backup to OpenScape Business UC Booster Server. After migration to V1.R2.2 an upgrade to OpenScape Business V2 can be performed. A detailed step by step guideline is available within chapter 25 of the administration documentation.

Note:
The following UC configuration data and user data are not transferred and must be reconfigured in the UC Booster Server:

- Web services (e.g., XMPP, Web Collaboration, Mobility)
- Open Directory Service
- OpenStage Gate View

2.4 SW Upgrade / Update

It is strongly recommended to backup system SW before and after SW upgrade.

Depending on the different processor architecture different upgrade files are created and provided via the distribution channels. In case the wrong upgrade file is accidentally uploaded to a system it will automatically detect the wrong file type and prevent the upgrade request. Due to large file sizes please make sure the appropriate file is downloaded to save time.

File name	Destination OSBiz Type
image_osbiz_xxx_**occ**.img.tar	OpenScape Business X1/X3/X5/X8 without UC Booster Card
image_osbiz_xxx_**ocab**.img.tar	OpenScape Business X3/X5/X8 with UC Booster Card
image_osbiz_xxx_**pcx**.img.tar	OpenScape Business S/UC Booster Server update
dvd_osbiz_**xxx**.iso	OpenScape Business S/UC Booster Server First Installation
OpenScape_Business_**xxx**.ova	OpenScape Business Server Open Virtual Application

2.4.1 Upgrade from OpenScape Business X V1 to V2

The following steps have to be performed in case of an upgrade from OpenScape Business X V1 to V2.

a) **Update the OpenScape Business V1 software**

Using the WBM, update the OpenScape Business V1 software to the latest V1 SW version (V1R3.3)

b) **Load the OpenScape Business V2 license file**

Load the OpenScape Business V2 license file into the OpenScape Business V1 system (Master in case of a network license file) and activate the licenses

c) **Load the current OpenScape Business V2 software**

Using the WBM, load the current OpenScape Business V2 software into the communication system. In case of network first upgrade the Master system and continue with the Slave nodes immediately.

For further details about migration of OpenScape Business X V1 consult OpenScape Business Administration Documentation chapter 25 "Migration"

2.4.2 Upgrade from OpenScape Business S / Booster Server V1 to V2

The following steps have to be performed in case of an upgrade from OpenScape Business X V1 to V2.
- Update OpenScape Business system to latest V1 SW version (V1R3.3)
- Load the license file which has been generated for OpenScape Business V2 into the OpenScape Business V1 system.
- Perform SW upgrade to OpenScape Business V2 (automatic data upgrade)

For further details about migration of OpenScape Business S V1 consult OpenScape Business Administration Documentation cchapter 25 "Migration"

2.4.3 Upgrade of OpenScape Business Attendant to ≥ V2 R0.0.0

If OpenScape Business Attendant is in use on upgrading to OpenScape Business V2 R0.2.0, an upgrade of OpenScape Business Attendant to V2 R0.0.0 and all its related components have to be performed as well, due product version compatibility requirements.

2.4.4 SW Upgrade of OpenStage Phones / Octophone Phones

Device SW of HFA phones has to be upgraded to latest version for operation with OpenScape Business V2. If the devices are not upgraded telephony is not possible. For release devices the SW upgrade can be done automatically by using the DLI. SW update of OpenScape Personal Edition and WL2 phones has to be done manually.
Note: This applies only for HFA phones but not for TDM and SIP phones.
In order to re-flash **CP 200 HFA** devices, you need first to upgrade the CP SIP version to >= V1R1.7.0 and then apply re-flash to HFA version.

2.5   Fall back

It is recommended to back up the V1 system before SW upgrade and to back up the V2 system immediately after SW upgrade.
A fallback to version can only be performed with support from Unify service side. In this case the V1 backup set and the OpenScape Business V1 license file are required.

2.6   Special Settings and Instructions

2.6.1 General Instructions

2.6.1.1 DNS

If Dynamic DNS Update option is enabled then it is mandatory to configure Domain Name in IP Address Pool respective "Domain name" field.

2.6.1.2 SDHC Card

It is not allowed to remove and to insert the SDHC card while the system is in operation.

2.6.1.3 Networking – Restart of an OpenScape Business S Slave node

The master node within an OpenScape Business network must be in operation, when an OpenScape Business S slave node performs a system restart. Otherwise OpenScape Business S services are not initialized properly. OpenScape Business S restarts, e.g. due to SW maintenance etc., should be scheduled appropriately. An additional restart via INIT 6, when master node is available, resolves the problems, if OpenScape Business S services are affected after an uncoordinated restart,
Note: This restriction does not apply to OpenScape Business X slave nodes.

2.6.2 Migration

2.6.2.1 Groups /Hunt groups - Configuration

Please note that the first three groups are reserved:
- The first group is reserved as the hunt group for Xpressions Compact.
- The second group is reserved as the hunt group for Smart VM.
- The third group is reserved for the Company AutoAttendant

This is important for migration of HiPath 3000 systems.

2.6.3 Virtualization

2.6.3.1 VMware Virtual LAN driver

The latest NIC driver has to be used for vShpere 5.1.0 or above. NIC driver *versions <= 1.1.28.0 may cause problems* with receiving faxes. The installed NIC driver version can be checked with the command:
`ethtool –i ethx`
The recommended NIC driver is part of the VMware tools (V9.0.5.21789 build-1065307 or above). VMware tools should be updated firstly. The following command has to be executed within the guest system environment afterwards in order to update the driver:
`vmware-install.pl --clobber-kernel-modules=vmxnet3`
Note:
The driver E1000 can be used for virtual LAN interface alternatively.

2.6.3.2 VMware Tools

VMware tools should always be updated to latest version.

2.6.3.3 VMware - Snapshot Handling

Snapshots of virtualized OpenScape Business S systems must not be made during business hours. During the Snapshot time devices, clients and applications lose connection to the OpenScape Business S or UC Booster Server instance. It is strongly recommended to restart OpenScape Business S / UC Booster Server after the Snapshot.
Note:
Snapshots are also used by vSphere backup tools such as VDP or VDR! It must be strictly ensured that:
- backup operations are scheduled off work time.
- snapshots generated by these tools are deleted at the end the backup operation.

For further information regarding Snapshots see VMware Knowledge Base article 1025279.

2.6.3.4 Terminal Server

2.6.3.4.1 Citrix XenApp 5/6/7:

Only "Desktop mode" is supported.

2.6.3.4.2 Citrix XenDesktop 7

2.6.4 Administration

2.6.4.1 Admin LAN Interfaces

The Admin LAN interface must not be deactivated or set to IP address 0.0.0.0. Otherwise it is not possible to assign user and/or trunk licenses.

2.6.4.2 Wizards

2.6.4.2.1 User Telephony - Group Call /Hunt Group

The wizard "User Telephony \ Group call /Hunt Group" currently does not provide the option to change the Route on changing the Call. No. Expert mode must be used if the route is supposed to be modified.

2.6.4.2.2 Basic Installation – Automatic Smart VM

The mailbox of the AutoAttendant is not adapted to new call number after modification of the call number. This concerns the Company AutoAttendant hunt group (default: 352) via the automatic SmartVM configuration Wizard in section "Basic Installation". It is recommended to use Manager E to configure Company AutoAttendant.

2.6.4.2.3 Internet Telephony - ITSP configuration

- The configuration of "Clip via ITSP" should be done via Internet-Telephony Wizard exclusively. The previously communicated 'Work-around' with a mixed use of wizard and expert mode should not be used any longer. If this configuration is used for special purposes (e.g. if multi-site is used with different registrations) it has to be kept in mind that route data needs to be re-entered if the wizard is used again.
- LCR reset is mandatory in case an ITSP profile is either added or edited or deleted. You can also follow wizard instructions.

2.6.4.3 Expert mode

2.6.4.3.1 Call Number Import Function

Abort of ITSP call number import via XML file:
Import of ITSP call numbers via XML file is aborted in case that a number within the XML file is already configured as ITSP call number within the system. In this case the "double numbers" have to be deleted manually within the XML before file import.

2.6.4.3.2 HFA Phone Codec configuration

After codec settings of a HFA phone are modified by Administration Portal (WBM) the device performs a reset.
Note:
Administration Portal (WBM) offers an option to provide device settings centrally for all devices at once. This could also lead to a phone re-initialization. Active calls are disconnected during re-initialization. Therefore it is recommended to change phone settings preferably off work time.

2.6.5 Extension Boards and Hardware

2.6.5.1 RSP.servicelink - SDHC card reuse

RSP.servicelink remains tied to the previous MAC address, if the OCCx main board is changed and the SDHC card of the previous main board is reused. In this case the RSP.servicelink plug-in have to be reset to the default settings.

2.6.6 Features

2.6.6.1 Direct Media Control

DMC (interworking OpenScape 4000 – OpenScape Business) is currently not supported with HFA Software for IP registered devices connected to OpenScape Business listed in compatibility matrix. (See chapter Hardware and software compatibility).

2.6.6.2 ITSP Media Security

- ITSP - Media Security (SDES) at SIP Trunk, (OSBiz S)---- Maximum limit is 100 concurrent established calls.

2.6.6.3 Remote Access

GateView application and UC Suite cannot be configured via Remote Access WAN (port forwarding).

2.6.6.4 AutoAttendant

It is generally recommended to configure Single Step Transfer as preferred transfer protocol instead of Consultation Transfer (Supervised Transfer). Single Step Transfer is more reliable especially for calls to groups and external devices.

2.6.6.5 Dialing Number Format

A manually entered external call number within a UC client requires the access codes in front in the number in the same way as it is done by manually dialing via telephone.
In general the dialing information should always be entered in full canonical format. In this case no trunk access code is required.
Note: Canonical format has to be used also for phone number entries within directories and contacts.

2.6.7 UC Smart

- UC Smart must not be used on TOP MULAPs.
- Default password of SmartVM box is '123456'. Smart VM requests the modification of the password at first login.
- Login of WebBased myPortal clients: It is mandatory to use the user's phone number as the Login name for all web based clients. (myPortal to go, myPortal for OpenStage etc.)

2.6.7.1 myPortal Smart

- Login to myPortal Smart is not possible if cookies are disabled in browser settings.
- myPortal Smart Outlook Import via myPortal Smart web page is not possible with 64bit JAVA . It works with Java 32 bit.
- Due to security issues with the existing certificate, contacts Import from Outlook in myPortal Smart via Smart Assistant is no longer supported. Please use myContacts for Outlook for this purpose.

2.6.7.2 myPortal smart for MAC OS

myPortal Smart for MAC: It may happen that an installation / update attempt for "myPortal Smart" fails. In this case, please empty the trash and retry the installation.
Latest Adobe AIR is required before installing myPortal Smart.

2.6.7.3 myPortal to go

With OpenScape Business V2R2.1 and myPortal to go (iOS) version 22.11.18 onwards a new notification mechanism for incoming VoIP calls has been implemented. The new mechanism is compatible also to iOS 10, which does not support anymore the local VoIP call notifications used before. If the app does not run in foreground mode, then incoming call notifications are sent to the iOS device via internet using the Apple Push Notification Service (APNS).
Requirements:
- OpenScape Business software version V2R2.1.0_261 or later is required.
- myPortal to go V2R2.11.18 or later has to be used.

Both OpenScape Business and myPortal to go require access to the Apple APNS service via internet. Local notifications are not available anymore. See https://support.apple.com/en-us/HT203609 for details regarding the network ports that are used.

2.6.7.4 myPortal @work

General Restrictions:
- The proposed configuration for name resolution in conversations for personal/global contacts is to have dialable contact formats (Exactly as you would dial the call number on the system telephone in your office, always with the trunk access code). Note that also canonical format may work efficiently.

2.6.8 UC Suite

2.6.8.1 Java Runtime Environment

Java Runtime Environment 32 bit should be used on 64 bit systems for operation of myPortal, myAttendant and myReports instead of the 64 bit version, in order to save memory resources
Note:
The 64bit version of Java Runtime is required in case that the myPortal/myAttendant function "Import Outlook Contacts on Startup" is used for import contact from Outlook 2013/2016 64 Bit version.
On windows platform, having JRE is OK for myPortal, but on MAC OS, JDK version 1.8 installation is also needed for supporting TLS 1.2.

2.6.8.2 Microsoft .NET Framework

MyPortal for Outlook and FaxPrinter require at least .NET 3.5 framework or above. The runtime environment must be installed and enabled. MyPortal for Outlook on Outlook 2010/2013/2016 and myAgent require .NET 4.0 framework.
Startup of .net based OpenScape Business clients (myAgent and myPortal for Outlook) fails if:
- .NET 4.0 environment is installed and
- Computer has no internet access

In this case please execute the „Local Group Policy Editor" (execute via MS Windows start menu: 'gpedit.msc') and enable: *Computer Configuration\Administrative Templates\System\Internet Communication Management\Internet Communication settings "Turn off Automatic Root Certificates Update"*

2.6.8.3 Microsoft Exchange connection

2.6.8.3.1 Exchange Calendar Integration:

Exchange Web Services uses the Primary SMTP Address of the mailbox users to read the calendar appointments. Therefore it is necessary to enter this address in Personal Details of myPortal and myPortal for Outlook.

2.6.8.3.2 Microsoft Small Business Server 2011 - Exchange Calendar Integration

Make sure that form-based authentication (FBA) is deactivated. FBA is usually activated by default, but with activated FBA the exchange calendar integration is currently not supported. Error message: "Unable to find calendars" (Error 440 or Error 3).

2.6.8.4 Fax Printer

The Fax printer driver can only handle documents with True Type fonts, due to a problem with a Microsoft font driver. This is a known issue, but actually no solution is provided by Microsoft.

2.6.8.5 MyPortal for Desktop/ for Outlook and myAttendant

2.6.8.5.1 Java Version for myPortal for Desktop

Java 1.7.45 and above is required. Java 8 is recommended since TLS1.2 is set by default. In case you use Java 1.7.45 please set TLS1.2 (under Java Control Panel -> Advanced -> Advanced Security Settings check "Use TLS 1.2").

2.6.8.5.2 Click to Call

Click to Call via Desktop dialing mode is based on the Microsoft Graphics Device
Interface (GDI). Over time Microsoft has introduced other versions (e.g. Direct 2D), which have replaced the GDI. This leads to the situation that Desktop Dialing will not work with Microsoft's latest Operating Systems. If the Desktop Dialing is not, or after an update, is no longer supported by the operating system, the applications Clipboard Dialing method should be used instead.

2.6.8.6 MyPortal for Outlook

If your PC has a pre installation of Microsoft Office (trial version) please make sure that you have de-installed this package completely (incl. all language packs) before you make a new installation of the commercial MS Office package.
Avoid Outlook crash:
If in the UC-Suite, Server the flag „Slow External Provider" is activated it can happen that a crash of Microsoft Outlook occurs while the user selects with right mouse click the myPortal function to call another destination. In such cases, please deactivate the flag.

2.6.8.6.1   Manual Dialing

Manual dialing out of myPortal for Outlook has to be performed by entering digits and clicking the dial button afterwards, if MS Outlook 2010/2013/2016 is used. Call initiation by pressing the Enter key is not supported within these Outlook versions.

2.6.8.6.2   Call Number Search

Successful call number search out of MS Outlook within the OpenScape Business directories depends on the MS Outlook / MS Exchange versions and operation modes.
Terminal Server dependencies:
- Outlook 2010 supports also Exchange Cached Mode on Terminal Server. Additional requirements for Cached Mode on Terminal Server must be considered.

2.6.8.7 MyPortal for Desktop for MAC OS

2.6.8.7.1   Installation on Mac OS X

Due to a recent Apple MAC OS X operating system update the new default setting to install new software on the MAC OS X is now set to:
Allow applications downloaded from: 'Mac App Store and identified developers'
After the update from < V2R5 to OS Biz V2R5.1 or higher it is required manual reinstallation of the myPortal for Desktop clients on a MAC environment.
Execution of myPortal setup program is prevented by latest versions of MAC OS X, due to modified security policies. The following actions have to be performed to overcome the problem.
1. Click myPortal installer icon while hold 'CTRL' key.
2. Select "Open" in the pop-up menu.
3. Click "Open" in the dialog to start the myPortal installer.
Afterwards myPortal installer can be used as usual.

2.6.8.7.2   Click to Call via Desktop Dialing mode (right mouse click):

Desktop Dialing mode for UC Suite systems is not supported by Apple MAC OS based systems. The Clipboard Dialing method has to be used instead.

2.6.8.7.3   Clipboard Dialing out of iContacts / iCal after upgrade to Mac OS X 10.9

The following steps have to be performed to use clipboard dialing in combination with iCal / iContact entries on MAC OS X 10.9.
- Confirm the two hints in case of an (auto) update during update process.
- Confirm Calendar and Contact access, when application starts first time after update.
  (These settings can be also edited later within "System preferences -> Security & Privacy: set/remove flag for "Contacts", "Calendars", "Accessibility")
Note: myPortal for Desktop should be uninstalled and installed again if it does not start after OS upgrade.

2.6.8.8 OpenScape Business Contact Center Option

OpenScape Business Contact Center operation is only allowed via ISDN C/O or ITSP C/O. In case of a hybrid connection of analogue and ISDN/ITSP trunks, it has to be ensured that incoming contact center calls are routed via the ISDN/ITSP trunks only.

2.6.8.8.1   Simultaneous usage of OpenScape Business UC Suite Clients

Be aware of interactions when using OpenScape Business Clients Applications simultaneously with myAgent using the same OSBiz account in order to keep full functionality.

2.6.8.9 myPortal @work

General Restrictions:

- The proposed configuration for dialing numbers is the canonical format for personal/external contacts. Note that name resolution may fail (same behavior like TOGO client).
- Conversations are not updated automatically. Manual refresh is required by selecting conversation again
- CallMe feature is not supported currently.
- In some cases conversation details are not shown in myPortal@work from external ITSP incoming call.
- In favorites the synchronization of presence is not working properly.

2.6.9 OpenScape Xpressions

OpenScape Xpressions V7R1 can be connected to OpenScape Business systems via S0/S2M, CornetNQ. CTI via CSTA can be used on standalone or networked systems.

2.6.10   MS Exchange connection

The following installation guidelines have been modified due to technical changes in respective operating systems and are now available for download on WIKI.

- Connect OpenScape Business systems to Microsoft Exchange 2010
- Connect OpenScape Business systems to Microsoft Exchange 2013
- Connect OpenScape Business systems to Microsoft Office 365 (Microsoft Exchange Online)
- Connect OpenScape Business systems to Microsoft Exchange 2016

3 Reported Problems / Symptoms under Analysis

3.1 General problems under analysis

3.2 General Remarks

3.3 Restrictions on this release

3.4 Restrictions from previous GA releases

- With OSCCV9 V9 R1.2.127 blind Transfer to networking UCD may fail.
- For systems with activated the feature "Branch on Data" in CCV schedules of a Queue, Payload delays on CCV played messages may occur. In that situation, deactivation of "Branch on Data" should be considered.

4 Changes

4.1 New in this release

4.1.1 Implemented change requests

CR Number	JIRA	Summary
		OpenScape Business myPortal @Work UC Smart features.
		OpenScape Business myPortal @Work – myPortal to go feature set on UC Suite mode.
		Support of Cloning and Changing SDHC card.
		New handling of Tomcat port.
		ITSP profile update.

4.2 Resolved Reported Problems / Symptom

4.2.1 Resolved Problems in V2R5 FR1 - 2nd EEQS / GA (V2 R5.1.0_019)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15943248	NA15947036		Telekom Test center QC-1422.
NA15855347	NA15864459		First name of UC Suite user changes undesirably back to name of FP.
NA15793624	NA15797598		Incorrect journal call info (Picked up by hunt group).
FT_V2R5	FT_V2R5		UC Suite issue with Profiles.
NA16009849	NA16011577		Wrong number format on display of phones when dialed number is too short
NA15953678	NA15986188		Inconsistencies between system CDR output and myPortal Journal
NA16005630	NA16006799		No payload after call is transferred from CCV to group of phones
NA15728515 NA15502449	NA15744646 NA15505517		myAgent out of service - UC Suite crash
FT_BETA	FT_BETA		Decline is shown instead of End-call in the pop-up during a call
FT_BETA	FT_BETA		Nothing is shown when call popup is minimized
FT_BETA	FT_BETA		Cannot change the default password for a new user
FT_BETA	FT_BETA		Scroll bar in conversation list not working correctly

4.2.2 Resolved Problems in V2R5 FR1 - 1st EEQS (V2 R5.1.0_013)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15943291	NA15971954		System receives a high load of getButtonInformation.
NA15991014	NA16006743		Group name is not displayed on UP0 phones.
NA15977363	NA15995525		"External dest." of CDL is not called when caller is analog.
NA15977003	NA15977620		No payload when call is transferred from EVM to group.
NA15954635 NA15954624	NA15967144 NA15967015		Indication voicemail isn"t displayed in Mulap members.
NA15967573 NA16000562	NA15932246 NA16009365		Wrong CLI in tray pop detailed description.

NA15820522	NA15842832		Sporadically UC Suite Fax is not complete.
NA15830388 NA15953157 NA15930256	NA15922762 NA15969129 NA15930353		Telekom Testcenter QC-1396: Problem with Voicemail and RTP supervision
NA15964590	NA15964677		No telephony possible
NA15852500	NA15888435		Calls fail when routed through native SIP trunk
FT_BETA	FT_BETA		MULAP and Group calls are not signaled in myPortal @Work client
FT_BETA	FT_BETA		myPortal@work-Play icon for VM messages is not usable
FT_BETA	FT_BETA		Wrong timestamps in conversation feature
FT_BETA	FT_BETA		myPortal@work - Wrong dates in conversations
FT_BETA	FT_BETA		Image url in some cases is distorted in conversations
FT_BETA	FT_BETA		In myPortal@Work client the answered group calls are seen in some cases as missed rather than answered

4.2.3 Resolved Problems in V2R5 HF6 (V2 R5.0.1_007)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15929032	NA15981756		Clicking "Spooled Jobs" opens "Sent Items"
NA15983309	NA15984078		Due to extra Codec in SDP call is rejected by OSBiz
NA15854497	NA15963027		Caller's name won't be displayed on OS40T devices - works fine on OS30T
NA15919761	NA15926937		Disconnections and one-sided calls via SIP lines
NA15978610	NA15991963		Conferences are shown twice
NA15806573	NA15822548		Fax forwarding fails sometimes
NA15998796	NA16005684		Received emails for missed calls notification, have empty subject and body.

4.2.4 Resolved Problems in V2R5 HF5 (V2 R5.0.1_006)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15784586	NA15796993		CoS/Special Days Calendar is not following configured time zone
NA15899960	NA15916397		Phone display issues with specific conference call scenarios.
NA15869262	NA15883328		myPortal for Outlook crashes on clicking the "Forward" icon
NA15980507	NA15981786		No Option to add Deskshare User in Multisite
NA15862449	NA15865894		SpeedDial list import issue with symbol '&' while editing via MSExcel
NA15718635	NA15993243		ODBC Bridge service stopped unintentionally affecting ODS functionality
NA15884784	NA15887278		Sporadic disconnections to ODBC Bridge
NA15955643	NA15972402		UC Smart: MeetMe conference dial-in failed
NA15965554	NA15971939		Headset key LED flashing on CP600 HFA with no call
NA15718635	NA15739095		ODS connected to 'Advantage StreamlineSQL' ODBC database fails after some time
NA15974630	NA15986312		KM600 shows "CallMe" status since upgrading to MR5 HF1

4.2.5 Resolved Problems in V2R5 HF4 (V2 R5.0.1_004)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15982273	NA15983626		Special characters in description are not allowed
NA15958286	NA15962303		OsBizS System restart
NA15965078	NA15971105		System restart OsBizS
NA15842451	NA15899464		Contact search delivers non readable results
NA15965768	NA15972410		myPortal for Outlook call information change retrospectively

4.2.6 Resolved Problems in V2R5 HF3 (V2 R5.0.1_003)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15972696	NA15973592		System restart OsBiz_S
NA15879823	NA15895632		No ringing tone for external calls via ITSP
NA15716698	NA15913236		DTMF is not working for Circuit users on external calls
NA15672042	NA15716128		Search in myPortal for Outlook is very slow
NA15951048	NA15959571		ESTOS ProCall 5 - No CSTA data forwarded by OSBiz
NA15866363 NA15925788 NA15943329	NA15917638 NA15934184 NA15959459		Fax Integration UC-Suite - pdf damaged
NA15958932	NA15959107		SfB: Trunk inactive
NA15848124 NA15877699 NA15954591	NA15862139 NA15891538 NA15971090		UC suite restarts

4.2.7 Resolved Problems in V2R5 HF2 (V2 R5.0.1_002)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15879383	NA15892939		CC Fax Printer allows sending fax without a recipient
NA15938284	NA15944231		Loudspeaker gets turned on instead of headset with mulap conference
NA15926263	NA15934734		Device keeps on ringing after the call was answered
NA15817592	NA15839114		UCSmart - Help page for UD Edit Contacts wrongly points to Ch 10.12.4
NA15867934	NA15880823		Outlook contacts are not imported in myPortal
NA15934726	NA15937862		System restart
NA15844811	NA15868015		myPortal requires 36% processor load on TS per user
NA15822614	NA15884411		myPortal Smart pop-up while presence in status "out of office"
NA15946830	NA15954518		After upgrade (V1->V2) 'System startup not yet finished'
NA15736633	NA15775364		LDAP test fails for ODS to an SQL Anywhere 16 data source
NA15943248	NA15947036		Telekom Testcenter QC-1422
NA15806479	NA15817253		Strange search results in Comm Clients Fax Printer

4.2.8 Resolved Problems in V2R5 HF1 (V2 R5.0.1_001)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15826548	NA15878763		"call me" services shows complete number in CP600 favorites display.
NA15789153	NA15793287		Conference is not possible on ISDN device.

NA15946174	NA15948483		2x10 entries under OLI->Telephony->Dia/Search .
NA15857175	NA15883671		Wrong number format on voicemail group messages.
NA15932880	NA15951823		"Automatically record this conference" flag stays active.
NA15928905	NA15940418		MyPortal: Wrong entry in call list.
FT_V2R5	FT_V2R5		MyReports - xls format is missing.
NA15918097	NA15919176		SfB - bulk messages at customer Prince's Trust.
NA15912969	NA15919893		No ringback tone when calling DISA.
NA15876095	NA15895967		No external calls possible.
NA15626506	NA15632717		SME_iFT: License is not available in slave node after sw upgrade.
NA15849965 NA15849965	NA15932484 NA15852354		SIP Trunk from RoutIT is losing registration.
NA15914346	NA15927712		External number missing on SIP device when a call is transferred via AutoAttendant.
NA15822987	NA15914313		myAgent-supervisor cannot see logged in agents.
NA15951438	NA15951518		System restart.
NA15852258	NA15876391		TMANI trunks lock. Card restart is needed.
NA15402535	NA15465989		Gate View: no Picture if call comes from the door station.

4.2.9 Resolved Problems in V2R5 GA (591)

Incident Ticket	Problem Ticket	JIRA	Summary
NA15855275	NA15860639		OSBiz S 'trace_log' reached 75% of hard disk capacity
NA15704469	NA15716273		Faxes: When T.38 is disabled then the fax partially fails
NA15869406	NA15870813		UC Suite / Fax on Booster Card does not send correct fax tones
NA15930093	NA15930710		Voicemail groups were deleted by upgrading to MR5 EEQS
NA15890810	NA15909550		User shown with grey status icon in internal directory
NA15876063	NA15879462		75% of hard disk capacity reached for 'trace_log'
NA15930390	NA15930752		'NOPERM' WSI application issues since upgrading to MR5 EEQS
NA15913810	NA15921049		OSBiz_S Unexpected outage of UC Suite

4.2.10   Resolved Problems in V2R5 3rd EEQS (586)

Incident Ticket	Problem Ticket	JIRA	Summary
FT_V2R5	FT_V2R5		WSI restarting issue
NA15879358	NA15888026		User with no system and no UC license appears in UC directory
NA15893585	NA15919946		Deleted queue showing in the CC reports
NA15864582	NA15893015		Cordless system crashes on registration
NA15572637	NA15584722		No name resolution in ad-hoc conference window
NA15819258	NA15848919		X8-Daily failures of all BSS

Incident Ticket	Problem Ticket	JIRA	Summary
NA15810719	NA15810959		No name resolution in OLI pop up
NA15883679	NA15908797		Not possible to answer a call with myAttendant when announcement player is used

4.2.11 Resolved Problems in V2R5 2nd EEQS (580)

Incident Ticket	Problem Ticket	JIRA	Summary
FT_V2R5	FT_V2R5		Configured LDAP/Exchange providers won't be saved in UCSuite.
FT_V2R5	FT_V2R5		Quick search (F8) Function does not show the complete number.
NA15879383	NA15892939		CC Fax Printer allows sending fax without a recipient.
NA15817478	NA15877028		600s automatic postprocessing time.
NA15826040	NA15893832		Crosstalk issues in SLMU after upgrade to HF2 (.034)
NA15867934	NA15880823		Outlook contacts are not imported in myPortal.
NA15856851	NA15866837		Calls redirected to OSCC fail sporadically.
NA15828780	NA15885229		Missed call notification via e-mail for answered calls.

4.2.12 Resolved Problems in V2R5 1st EEQS (576)

Incident Ticket	Problem Ticket	JIRA	Summary
FT_V2R5	FT_V2R5		myPortal cannot login after upgrade to R5.0.0_568
FT_V2R5	FT_V2R5		OLI:Set up does not open when logged in with MULAP
NA15605080	NA15621788		Sporadically MyPortal to go (VOIP) loses connection to UC Server
NA15786720	NA15793341		The time format on fax transmission report has changed from German to English since upgrade to V2R4 HF2
NA15792776 NA15823159 NA15817484	NA15794868 NA15827989 NA15823051		Contact Centre received silence
NA15843205	NA15851121		UC Suite SMS notification for voicemail messages is not working
NA15850510	NA15856550		Not possible to transfer a call via myAttendant BLF when a second call is waiting
NA15866061	NA15866509		Total outage of telephony services
NA15860713	NA15875212		OSBiz circuit dynamic registration fails.
NA15851441	NA15911128		myAttendant freezing/crashing
FT_V2R5	FT_V2R5		ODS inactive status with ldap error
FT_V2R5	FT_V2R5		OLI Journal: interchanged Open and All buttons (from drop down list)
FT_V2R5	FT_V2R5		Wrong order of column data in csv exporting for External Directory
FT_V2R5	FT_V2R5		Issue with yellow squares in myPortal when mouse over a name
FT_V2R5	FT_V2R5		Mulaps not visible at drop down list of add group member of wizards
FT_V2R5	FT_V2R5		Fallback telephony - WBM issue
FT_V2R5	FT_V2R5		Wrong color for AFK in myPortal for Desktop
NA15665436	NA15665708		Total system outage after upgrade to HF1
NA15687139	NA15690104		MeetMe conference is not working
NA15741749	NA15743223		Google chrome: key programing CP600 WBM not working

NA15758798	NA15758876		Contact Card status mapping
NA15816511	NA15820558		Incoming fax issue
NA15828078	NA15829913		Cyclical group rings sporadically at all CMI members simultaneously.
NA15836340	NA15839000		No transfer calls to available agent from myAgent group
NA15813798	NA15839397		Speakerphone activated while handset still lifted when taking back a transferred call due to busy recipient
NA15825034	NA15848147		WBM: wrong limit of 6 digits under Remote ISDN call No
NA15599056	NA15857501		User not visible in UC Suite directory
NA15845373	NA15862513		IP phones not working
NA15861838	NA15864469		'Branch on variable' not usable in French UI
NA15690109	NA15865086		Voicemail icon is missing from Call info in OLI
NA15862470	NA15867788		Desktop Integration/Dialing won't work for numbers in myPortal Smart chat area
NA15879716 NA15907787	NA15880633 NA15909357		Calls to OSCC won't be queued or disconnected while in queue
NA15911056	NA15911177		SfB: Trunk not available after incoming call from unlicensed SFB Client
FT_V2R5	FT_V2R5		Groups cannot be edited if there is a team as a member
NA15813263	NA15813713		OLI Sort by user defined is not working anymore
NA15763519	NA15769266		Clipboard Dialing not working
NA15752270	NA15758044		UC Fax groups lost their members
NA15806447	NA15813347		Sporadically double entry for a missed call in journal
NA15817592	NA15838942		error in search functionality of UC Smart - Unified Directory

5 Hardware and software compatibility

5.1 Compliant products (compatibility matrix)

Hardware and software products that have been tested together with the OpenScape Business, including third-party products, are listed in the following table. In addition to this please also read the corresponding release note from the other products. There are further products and software issues which can be connected. For such products please refer to their own release and change notes respectively.

Product Family	Product	Preferred Software Versions[1]			
		Version	Status[3]	G-DMS Note	In Image
Operating System	Novell SLES 11 SP4 64 Bit	P30152-P1532-P11-4	GA		
Administration	ManagerE	≥ P30152-P1532-P3-23 (V10 R2.17.0)	GA		
	KC-Manager[2]	≥ P30152-P1532-P3-23 (V10 R2.17.0)			
	OSBiz Card Manager	≥ P30152-P1532-P6-4 (V1R1.0.022)	GA		
	MCU Recovery Tool	≥ P30152-P1532-P19-1	GA		
Voicemail	Xpressions Compact V3[5]	≥P50038-P103-A1-35 (V3 R2.4.0)	GA		
	OpenScape Xpressions	≥P30152-P1526-A1-14 (V7 R1.5.0) build 18409	GA		
Attendant	OpenScape Business Attendant	≥P30152-P1603-P13-07	GA		
	Busy Lamp Field	≥V2 R1.1.0			
	OpenScape Desk Phone IP 35G ECO SIP	P30152-P1633-A180-8 (V3 R5.8.2)	GA		X
	OpenStage 15/20(E)/40/60 SIP/ DeskPhone IP 35/ 55G SIP	P30152-P1633-(A75/A200/A300/A175/A275)-8 (V3 R5.8.2)	GA		X
	CP 20x/400/600 SIP	P30152-P1605-A100/200/300-15 (V1 R3.8.0) [8]	GA		X
	OpenScape Desk Phone IP 35/55G HFA	P30152-P1587-A175/A275-15 (V3 R0.40.3)	GA		X
	OpenStage XX HFA	P30152-P1587- A75/A100/A200/A300-15 (V3 R0.40.3)	GA		X
	OpenScape Desk Phone IP 35G ECO HFA	P30152-P1587-A180-15 (V3 R0.40.3)	GA		X
	CP 20x HFA	P30152-P1632-A100-8 (V1 R2.4.0)	GA		X
	CP 400/600 HFA	P30152-P1632-A200-8 (V1 R2.4.0) P30152-P1632-A300-9 (V1 R2.4.0)	GA		X
	openStage 10 TDM	N.A	GA		
	openStage 15 TDM	P30152-P1595-A75-2 (V2 R1.2.1)	GA		X
	openStage 20 TDM	P30152-P1595-A100-1 (V2 R1.2.0)	GA		X
	openStage 30 TDM	P30152-P1459-A150-2 (V2 R1.2.1)	GA		X
	openStage 40 TDM	P30152-P1595-A200-1 (V2 R1.2.0)	GA		X
	openStage 60 TDM	P30152-P1595-A300-11 (V2 R1.15.0)	GA		X
	openStage 80 TDM	P30152-P1595-A400-10 (V2 R1.14.0)	GA		X
	OpenScape Personal Edition V7 HFA/SIP	P30152-P1510-C1-78 (V7 R1.47.45)	GA		
	optiPoint 500 (all types)	N.A	GA		
	optiPoint 4xx	P30152-P1285-A100/A200/A300/A400/A500-70 (V5 R7.1.0)	GA		
	T-Octophon Fxx[2]	P30152-P1285-T110/T210/T310/T410/T510-70 (V5 R7.1.0)	GA		
	OptiPoint WL2 SIP	P30152-P1305-A100-71 (V1 R0.81.0)	GA		X
	OpenStage WL3	WL3 V1R0.1.0	GA		
	openStage Up0 Adapter	P30152-P1416-B100-9 (V1 R0.11.0)	GA		X
	openStage 5 SIP	V3 R1.41.0	GA		
Partner Products	Mediatrix 4102 V2.0	≥P30152-P1361-P25-24 (V2.0 R34.627.0)	GA		
CSTA	OpenScape Business TAPI	≥P30152-P1532-P14-11 (V1.R1.10.0)	GA		
Contact Center	OpenScape Contact Center	V8 R2.16.214[7] V9 R1.2.127 V9 R2.0.200	GA		
	CDSS	V9 R1.1.0_11709	GA		
	CMS	V9 R2.0.1(200)	GA		
Telephony Services	OpenScape Alarm Response Economy	P30152-P1504-A1-5 (V1 R1.1.1)	GA		
	OpenScape Alarm Response Professional	P30152-P1503-A1-4 (V3 R2.60.4)	GA		

Product Family	Product	Preferred Software Versions[1]			
		Version	Status[3]	G-DMS Note	In Image
Accounting	OpenScape Accounting	V2R0 V3R0	GA		
Networking/ Interoperability	OpenScape 4000	P30152-P1624-S1-9 (V8 R1.19.1)	GA		
	OpenScape Voice	V9 R3	GA		
	OpenScape Fault Management	V9 R1.10.06 V10 R0.04.05	GA		
	DLS Deployment Service	≥ P30152-P1559-A8-59 [V7 R3.48.0 (HI-DLS7R3.487.00)]	GA		

Notes:[1] We recommend customers use the "Preferred Software Version" for the given products. The preferred software versions offer higher levels of functionality. However, the OpenScape Business might also operate with older software version with the caveat that recently added interoperability or advanced features may not be possible when using these versions. In cases, if a defect is found when using a backward compatible version, it may be necessary to update to the preferred version.
[2] Supported product/Corresponding pendants for Octopus F X (Deutsche Telekom)
[3] FT = Field Trial, N.A = Not available, GA= General Availability, eeQS= extended external quality assurance TBV = To Be Verified
4 optiPoint 4xx and T-Octophon Fxx with this SW or higher, can be operated BUT in case of problems there will be no support as the product is phased out.
5 Product compatible with OpenScape Business V2 but no support will be delivered for SW corrections.
6 Some Features (call waiting, conference hold) are not fully supported with SIP Devices
7 Multinode scenarios are not supported.
8 Please be aware that CP SIP SW versions higher than the one mentioned in the table are not supported.

5.2 Hardware revisions

Board	Product "long" name		Product Number
OCCM	UC Main board (F)X3W/(F)X5W (Wall)		S30810-K2959-X S30810-Q2959-X
OCCMR	UC Main board (F)X3R/(F)X5R (Rack)		S30810-K2959-Z S30810-Q2959-Z
OCCL	UC Main board (F)X8		S30810-K2962-X S30810-Q2962-X
OCCB1	Voice Channel Booster Card		S30807-Q6949-X100 (1 DSP)
OCCB3			S30807-Q6949-X (3 DSP)
OCAB	UC Booster Card		S30807-K6950-X
Power Supply Unit	UPSC-D / OCPSM	(F)X3 / (F)X5	≥ S30122-K5660-A300/-M300/-M321
	UPSC-DR / OCPSM	(F)X3 / (F)X5	≥ S30122-K7373-A900/-M900/-M921
	LUNA2	(F)X8	≥ S30122-K7686-A1/-M1

Note: F X3/ F X5/ F X8 are corresponding pendants for Deutsche Telekom
Older revisions that are installed on customer systems are also supported.

OpenScape Business S Requirements up to 500 users

Hardware	Requirements
Server PC	64 bit support, certified for SLES 11 (SP4), designed for 24h service
CPU	Dual Core CPU, ≥ 2 GHz per core req.
RAM	2 GB RAM (recmnd.: 4 GB, s. chap. 2.1)
HDD	≥ 200GB Home partition (required)
DVD ROM	Required
Operating System	SUSE Linux Enterprise Server (SLES) 11 SP4 64bit
Virtualization	VMware vSphere V5.5* / V6 Hyper-V
Misc Information	Applications other than OpenScape Business + certified Virus scan Software must not be installed

* For details regarding virtualized environment requirements please consult Administrator documentation

OpenScape Business S Requirements for more than 500 users

Hardware	Requirements
Server PC	64 bit support, certified for SLES 11 (SP4), designed for 24h service
CPU	Dual Core CPU, ≥ 2 GHz per core req.
RAM	recmnd.: 8 GB, s. chap. 2.1
HDD	≥ 300GB Home partition (required)
DVD ROM	Required
Operating System	SUSE Linux Enterprise Server (SLES) 11 SP4 64bit
Virtualization	VMware vSphere V5.5* / V6 Hyper-V
Misc Information	Applications other than OpenScape Business + certified Virus scan Software must not be installed

* For details regarding virtualized environment requirements please consult Administrator documentation.

5.3   Applications shipped

Product	SW Version
myPortal/myAttendant	6.2.50.017
myPortal for Outlook	6.2.5.016
myAgent	6.2.5.016
FAX Printer	6.2.5.16
Cover Page Editor	6.2.5.16
myReports	6.3.23
SmartUC	V2R5.04.19
Application Launcher	V2R5.0.36
Gate View	2.00.050
Accounting Manager	2.0.0.36
myContacts for Outlook	V1.0.21.0
myPortal @work	1.0.2

5.4   Operating systems and applications

Operating Systems for OSBiz Applications

Operating system:	Req. Service Pack:	Version:	OSBiz Clients	MyReports	SmartUC Client	myPortal@Work Client
Microsoft Windows 10	latest	64 bit	X	X	X	X
Microsoft Windows 8 / 8.1	latest	32 + 64 bit	X	X	X	X
Microsoft Windows 7	SP1	32 + 64 bit	X	X	X	X
Microsoft Windows 2012 / 2012 R2 Server as Microsoft Terminal Server	latest	64 bit	X	X		
Microsoft Windows 2016 Server as Microsoft Terminal Server	latest	64 bit	X	X		
Microsoft Windows 2012 / 2012 R2 Server with Citrix XenApp 7.6 Server	latest	64 bit	X	X		
Microsoft Windows Server 2008 R2 with Citrix XenApp 6.0/6.5 Server	SP1	64 bit	X	X		
Microsoft Windows Server 2008 R2 with Citrix XenApp 5.0 Server*	SP1	64 bit	X	X		
Microsoft Windows Server 2008 R2 as Microsoft Terminal Server	SP1	64 bit	X	X		
Microsoft Windows 2012 / 2012 R2 Server with Citrix XenDesktop 7.6 Server	latest	64 bit	X	X		
Microsoft Windows 2016 Server	latest	64 bit	X	X		

with Citrix XenApp 7.17 / XenDesktop 7.17 Server							
Apple MAC OS X	latest	≥Yosemite 10.10.x [1] ≥El Capitan10.11.x[1,2] ≥Sierra 10.12.4 [2] ≥High Sierra 10.13 [2]	myPortal myAttendant		latest	

1 Supported, but not part of the system test anymore. In case of error no SW correction will be delivered.
2 Apple Java ≥ 1.6.x is mandatory to be installed before using OpenScape Business Clients.

Applications

Manufacturer	Application	SW Version
Unify	Callbridge Collection	V2 R3.12.0
	HiPath Cordless IP Base Station	≥ V1R6.0.0
	HiPath Cordless IP Server	
	OpenScape Cordless IP V2	≥ V2R0.16.0
	Web Collaboration	≥ V7 R0
	UC Mainboard Driver	5.2.2600.3
	myPortal to go (Android/iOS)	Latest on AppStores
Microsoft	Exchange Server 2010, 64bit	≥ SP2
	Exchange Server 2013, 64bit	SP1
	Exchange Server 2016, 64bit	
	Microsoft Exchange Server "Online" with Office 365	Cloud controlled
	Small Business Server 2011 Standard	
	EDGE	
	Internet Explorer	IE 11
	Outlook 2016 32bit and 64bit and Office 365	
	Outlook 2013 32bit and 64bit and Office 365	SP1
	Outlook 2010 32bit and 64bit	SP2
Mozilla	Firefox	≥ V18
Oracle	Java Runtime Environment **(preferred 32bit, see 2.4.3)**	latest Java 8
Google	Chrome	≥53
Trend Micro	Trend Micro OfficeScan Client	≥ V10.x
NCP	NCP Secure Client	≥ 9.02 build 69
ShrewSoft	ShrewSoft VPN Client	≥ 2.1.7
MSI	Teledata Office 4.0	≥ 6.20
Adobe	Adobe Reader	≥ 9.3.x

* Supported, but not part of the system test anymore.
**You may use it, but it is not supported anymore.
General Note: The products and software issues for additional components mentioned in the tables above have to be seen as a list of finally tested products. There are further products and software issues which can be connected. For such products please refer to their own release and change notes respectively.

6 Security

Within SW version V2R5.1, the following security relevant issues are addressed:

Disclosure of passwords for OpenScape Business root and database access
The changes in V2R5.1 affect OpenScape Business X, S and UC Booster systems and prevent unauthorized access to the systems. Operation and serviceability of the system is not affected by this change.
Note: The following applies for OpenScape Business systems in a network only: The "Default SQL password" has to be activated in every system in the network before the SW update to V2R5.1 is applied. After SW update of all systems a new SQL password has to be generated in each system to secure the network. (Administration Portal (WBM) Expert mode à Telephony Server à SQL Security).
Blocked database access
Access to the OpenScape Business database is blocked for any clients in the LAN. Connections via the Remote Service Link Platform (RSP) to database are still possible e.g. for specific problem diagnosis.
Disabled SSH access
The port 22 used for SSH is disabled in OpenScape Business systems by factory default but it could be opened manually by the system administrator. An open port 22 of OpenScape Business X will be closed permanently by upgrading to SW version V2R5.1 and cannot be enabled again afterwards. Remote Service Link Platform (RSP) sessions and terminal connection to the system via USB for diagnostic purpose are still possible.
Note: Port 22 has to be closed manually in OpenScape Business S using the Administration Portal (WBM) before upgrade to V2R5.1 or SLES YAST after upgrade.
Reduced developer functions in the Administration Portal (WBM)
The developer tools within the section platform and application diagnostic of the administration portal (WBM) have been reduced to the required tools for normal operation.
All service related maintenance functions, such as log- and trace functions are still available in the Administration Portal (WBM).
Secured UC Suite client connections
Access of All UC Suite clients to the system is hardened. This improvement is available from V2R5.1 on. Older UC clients will not work any longer with V2R5.1 for security reasons. All UC Suite clients have to be updated. The update is done automatically by the OpenScape Business Update Service after system SW version has been updated to V2R5.1.
Note: The message "No connection to UC Suite Server" is displayed until the UC Suite client SW has been updated.
Important Notes
Use always VPN to connect UC Suite clients via the Internet to OpenScape Business.
Do not open the ports 22 and 5432 within the Internet Router / firewall for access to OpenScape Business X, S and UC Booster from the Internet.
Apply OpenScape Business Security checklist to harden OpenScape Business systems in general.
Update Linux from SP3 to SP4
Due to security reasons with OpenScape Business V2R5 for OpenScape Business S/Booster Server Operating System with SLES 11 SP3 is no longer supported. Please install SLES 11 SP4 and then upgrade on V2R5.
Disclaimer
Please note that Unify may not take responsibility for resulting losses in case these advisories have been disregarded or improperly or untimely implemented.

7 Documentation reference

	Hyperlinks	Remarks
SLMUC configuration migration guide	http://apps.g-dms.com:8081/techdoc/en/P31003P3020T100017618/P31003P3020T100017618.pdf (English,chapter 9) http://apps.g-dms.com:8081/techdoc/de/P31003P3020T100010018/P31003P3020T100010018.pdf (German, chapter 4)	
Service Information: OpenScape Business		≥ V2 R0.2.0
Service Information: Novell SLES 11 SP4 64 Bit		
Service Information: OpenScape Smart Office Card Manager		
OpenScape Business Connector how to in Circuit	https://www.circuit.com/unifyportalfaqdetail?category=55896&categoryName=&articleId=117733&structureId=11185	
Administration Documentation	Online Help in OpenScape Business Assistant	
Migration H3k to OSBiz	Administration Documentation Chapter 25	
Migration from OpenScape Business V1 to V2	Administration Documentation Chapter 25.3	
Migration OSO HX to OSBiz UC Booster Server	Administration Documentation Chapter 25.1.3	Requires V1 R2.2.0
OSBiz Applications	Available for download via OpenScape Business Service-Center	
Details regarding supported peripheral devices and or other 3rd party products	Sales Information	
Diagnostic hints	Administration Documentation	
Experts Wiki	http://wiki.unify.com/wiki/OpenScape_Business	
Exchange Configuration Guides	http://wiki.unify.com/wiki/OpenScape_Business#Microsoft_Exchange_Server	
Client system & memory requirements in Terminal Server environments	http://wiki.unify.com/wiki/OpenScape_Business#Integration_into_IT_environment	
SIP devices configuration guide	http://wiki.unify.com/wiki/Features_and_Configuration_of_SIP_Devices#SIP_Endpoint_Configuration_within_OpenScape_Business	
Migration of Openstage WL2 HFA to SIP	http://wiki.unify.com/wiki/How_To_replace_HFA_protocol_of_optiPoint_WL2_by_SIP	Ref. chap. 2.3
Important HFA upgrade information	https://enterprise-businessarea.unify.com/productinfo/document/qy1ln3stT2U_/OpenScape%20Business%20V1%20Service%20Documentation%20Phone%20Software%20Update%20Information.pdf	Ref. chap. 2.3
Best Practices for virtual machine snapshots in the VMware environment	http://kb.vmware.com/kb/1025279	Ref. chap. 2.6.1
"How to collection" for H4k and OSV networking	http://wiki.unify.com/wiki/How_to_collection_and_tutorials_for_OpenScape_Business#Specific_topics	
SIP / ITSP Wiki	http://wiki.unify.com/wiki/OpenScape_Business#SIP_.2F_ITSP_Connectivity	