A MITEL
PRODUCT
GUIDE

OpenScape Xpressions

Release Notice

Service Documentation
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History of Changes

Date	Changes	Reason
2011-12-16	First draft	
2012-01-27	More information about anti-virus software (see Section 2.6.2.1, "Server", on page 57)	CQ00193820
2012-01-27	A voice conference scheduled with n participants requires n+2 licenses (see Section 2.4.6, "Extension Restrictions on Conferences and OpenScape WebClient", on page 53).	
2012-01-27	The telephone user interfaces (TUI) ERGO, PhoneMail and VMS are supported (see Section 5.5.1, "ERGO, PhoneMail and VMS", on page 101).	
2012-01-27	Connecting OpenScape UC Application V6 R0 is supported (see Section 2.2, "New Features", on page 23).	
2012-01-27	Upgrading MRS 8.xx to XPR 7 R0 is supported (see Section 2.2, "New Features", on page 23 and Section 5.2, "Upgrading", on page 96).	RQ00033308
2012-02-10	The following features are not supported anymore: - MMCC (Multimedia Contact Center) - x-Kit - TNG (The Next Generation) - SAPbyDesign See Section 2.2, "New Features", on page 23 and point 38 on page 75.	
2012-02-10	Configuration parameters of a virtual computer for the XPR server updated (see footer ^{2} of Table 13 on page 51 and footer ^{2} of Table 14 on page 52)	
2012-02-10	The Internet Explorer 6.5 is not longer supported (see Section 2.6.2.2, "Clients", on page 66). SSL2 and SSL3 have been replaced with TLS (see point 40 on page 76).	CQ00197505
2012-02-13	Connecting the XPR server to the following software is supported (see Section 6.1.8, "Connection to Exchange Server 2010", on page 110): - Exchange Server 2010 DAG - Exchange Server 2010 DAG and CAS - Exchange Server 2010 CAS Array - Exchange Server 2010 DAG and CAS Array	
2012-03-09	TTS and ASR have been released only for specific operating systems and only on real hardware or on VMware ESX 4.0 (see footer ^{4} in Table 17 on page 57 and point 41 on page 76).	CQ00192557
2012-03-09	CTI is not supported for HiCom 300E US, HiPath DX V7.0 and ROLM 9752 (see footer ^{1} on page 18).	CQ00199296
2012-03-09	Column **Voice conference** added to Table 1 on page 21.	CQ00199296
2012-03-09	Hardware specifications updated (see Section 2.4.1, "Server", on page 35): - RAM size - LAN box	CQ00199296
2012-03-09	More information about the hard disk priority of a virtual computer (see point 2d on page 63)	CQ00199296
2012-03-09	No mailbox replication for Exchange Server 2010 (see point 1 on page 82)	CQ00199296
2012-03-09	Sections "Generating a License File" and "General Information on Administration" removed.	CQ00199296

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Date	Changes	Reason
2012-03-09	Information about a Microsoft Exchange server 2003 as gateway between the XPR and an Exchange server 2007 or 2010 removed. It is no longer required (see Section 3.4, "Exchange Integration Restrictions", on page 82).	
2012-07-09	If conferences are supported, an upgrade can only be directly performed to XPR 7 R0 from XPR 6 R2 or MRS 8.03 (see footer [5] in Section 5.2, "Upgrading", on page 96).	
2012-07-09	The antivirus program AV4UC (Trend Micro) has been released (see Antivirus programs on page 64).	
2012-07-09	OpenScape Voice V7 R0 has been released (see for example Table 1 on page 21).	
2012-07-09	VMware ESXi V5 has been released (see for example in Section 2.4.2, "OpenScape Xpressions optiClient Extensions", on page 40, footer [4] in Table 17 on page 57, VMWare on page 59 and point 41 on page 76)	FRN5078
2012-07-09	Microsoft Office 2010 can be used for the application conversion in the 64-bit version also (see Section 2.6.2.2, "Clients", on page 66).	
2012-07-18	A PrintAPL supports a maximum of 150 printers (see point 42 on page 76).	
2012-08-17	Information about operating systems for Exchange 2003 Connector added (see point 6 on page 82)	
2012-09-18	Maximum number of channels for CorNet IP (G.711) on VMware ESXi added (see Table 13 on page 51 and Table 14 on page 52)	
2012-09-18	Internet Explorer 9 and Firefox 3.6 released (see Section 2.6.2.2, "Clients", on page 66)	FRN4913
2012-09-18	The WebAssistant can be configured to prevent playing voicemails on the PC (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN5516
2012-09-18	The configuration of the Trusted Transfer Mode has been revised (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN4930
2012-09-18	New parameter **tenant** for the Vogue protocol. This protocol can thus also be used in a multi-tenant environment (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN5258
2012-09-18	Using the FI APL configuration script `XprConfig.e` the location and tenant settings can be imported in the XPR server via a configuration file (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN5259
2012-09-18	The WebClient journal also displays entries of unavailable phones, for example of a softphone on a shut-down computer (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN4907
2012-09-18	The name dialing control of the Application Builder has been extended by a filter (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN5515
2012-09-18	The Fax G3 protocol parameters UseFaxIdAsOAD, InsertMidHl and CheckPageNumbers are supported by the IP APL also (see Section 2.2.6, "New Features with V7 R1", on page 28).	FRN4914
2012-09-18	Information about operating systems for Exchange 2003 Connector updated (see point 6 on page 82)	
2012-09-18	IPv6 is not supported by XPR (see point 43 on page 76).	CQ00215681
2012-09-18	Upgrade table updated (see Section 5.2, "Upgrading", on page 96)	FRN5334, CQ00219597
2012-10-31	VMware ESXi V5.1 is supported with restrictions (see Section 2.6.2.1, "Server", on page 57).	
2012-10-31	The PBX HiPath 3000 V9 has been released (see Section 2.1, "PBX Connection Options", on page 17 and Table 1 on page 21).	FRN5711

Date	Changes	Reason
2012-10-31	The following browsers are supported for the WebAssistant: Internet Explorer 7.0, 8.0 and 9, Firefox 16.0.1, Safari 5.1.7 and Chrome 22.0 (see Section 2.2.6, "New Features with V7 R1", on page 28 and Section 2.6.2.2, "Clients", on page 66)	FRN5512
2012-10-31	Lotus Domino 8.5.3 and Lotus Notes 8.5.3 are supported (see Section 2.2.6, "New Features with V7 R1", on page 28 and Section 2.6.2.2, "Clients", on page 66)	
2012-11-06	Connecting the XPR server to an Alcatel OmniPCX Enterprise (OXE) R10 and R10.1 has been released (see Section 2.1, "PBX Connection Options", on page 17, Table 1 on page 21 and Section 2.2.7, "New Features with V7 R0", on page 29).	
2012-11-14	The G.711 fax support for OpenScape Voice V5, V6 and V7 has been set to "Not released yet" (see Table 1 on page 21).	
2012-11-16	Section 2.5, "Languages", on page 55 added.	
2012-11-16	VMware vMotion has been released with restrictions (see Section 2.2.6, "New Features with V7 R1", on page 28 and Section 2.6.2.1, "Server", on page 57).	FRN4910
2012-12-10	French removed for the Application Builder (see Table 15 on page 55)	
2012-12-10	Conference languages added (see Table 16 on page 55)	CQ00225490
2012-12-10	You cannot perform a phone number normalization depending on the invoking user for MSPTSP applications (see point 45 on page 77).	
2012-12-10	The Cisco Unified Communications Manager 9 is supported (see e. g. Table 1 on page 21).	FRN5711
2012-12-11	Data backup and restore on virtual computers with Windows Server 2008 R2 is supported for three different tools (see Section 2.2.6, "New Features with V7 R1", on page 28 and point 7 on page 63).	FRN4908
2013-01-08	Multi-tenants are only supported for SIP connections, PhoneMail and Vogue but not for H.323 connections (see Section 2.2.6, "New Features with V7 R1", on page 28 and point 46 on page 77).	CQ00240176
2013-01-08	VMware ESXi V5.1 is supported without special restrictions (see Section 2.2.6, "New Features with V7 R1", on page 28, Section 2.6.2.1, "Server", on page 57 and point 41 on page 76).	FRN6611
2013-01-08	VMware High Availability is supported (see point 1 on page 61).	
2013-01-21	The multi-tenant features that apply for SIP connections only are the new features (Vogue support and support of the location and tenant settings of the XPR server with help of the FI APL and a configuration file) (see Section 2.2.6, "New Features with V7 R1", on page 28 and point 46 on page 77).	
2013-01-24	In all passages of this documentation, Lotus Domino 8.5.3 and Lotus Notes 8.5.3 have been released.	
2013-02-18	Table 13 on page 51, "Maximum number of channels for the single-node scenario", and Table 14 on page 52, "Maximum number of channels for the kernel-satellite scenario", updated.	
2013-02-18	If you use real computers for the XPR server, a maximum of 20000 users is supported, on virtual computers a maximum of 15000 (see Chapter 1, "General Considerations", Section 2.4.1, "Server", on page 35, Section 2.4.2, "OpenScape Xpressions optiClient Extensions", on page 40, and step 4 on page 63).	

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Date	Changes	Reason
2013-05-23	Operating systems for the XPR server: UEFI Unified Extensible Firmware Interface) is not supported for the XPR server (see footer [1] in Table 17 on page 57). Windows Server 2012 Standard Edition has been added. Operating system support has been divided in real and virtual computers (see Table 17 on page 57, "Released operating systems for the XPR server on real and virtual computers"). Operating systems for the clients: UEFI is not supported for the clients (see Section 2.6.2.2, "Clients", on page 66). Windows 8 Pro Edition has been added (see Section 2.6.2.2, "Clients", on page 66).	FRN5992, FRN4909
2013-05-23	Internet Explorer 10 is supported by the XPR Web Assistant (see Section 2.2.5, "New Features with V7 R1 FR1", on page 26 and Section 2.6.2.2, "Clients", on page 66).	FRN6525
2013-05-23	Sub-section "VMWare" on page 59 updated and Table 18 on page 60, "Virtual Machine configuration parameters" added.	FRN4909
2013-05-23	While VMware vMotion is being used, no CPU core must be permanently assigned to a virtual computer (see point 2 on page 61).	
2013-05-23	Catalan is supported for specific features (see Section 2.2.5, "New Features with V7 R1 FR1", on page 26 and Section 2.5, "Languages", on page 55).	FRN7057
2013-05-23	Smaller fix release packages are possible (see Section 2.2.5, "New Features with V7 R1 FR1", on page 26).	FRN5399
2013-05-23	VMware Data Recovery on VMware ESXi V4.x is supported (see Section 2.2.6, "New Features with V7 R1", on page 28 and point 3 on page 61).	
2013-05-23	The fax printer driver has been removed from the list of unsupported client programs for 64-bit operating systems (see Section 2.6.2.2, "Clients", on page 66).	
2013-05-23	"Support of the Outlook Extensions for Microsoft Outlook 2010 64-bit in the 32-bit mode" has been replaced with "Support of the Outlook Extensions for the 32-bit version of Outlook 2010 on 64-bit operating systems" (see Section 2.2.7, "New Features with V7 R0", on page 29).	
2013-05-23	CSV import with the Web Client is not supported for Outlook 2010 (see point 23 on page 73).	CQ00251063
2013-06-12	The silent upgrade is supported for certain versions under certain circumstances (see Section 2.2.5, "New Features with V7 R1 FR1", on page 26 and point 47 on page 77).	FRN6055
2013-06-26	Up to 60 T.38 fax channels are supported per STMI for HiPath 4000 V6 R2.14.1 (HF003111) and higher independent of the STMI version (see Section 2.4.4.4, "HiPath 4000 with HG35xx", on page 47).	
2013-07-31	Changes in Table 17 on page 57, "Released operating systems for the XPR server on real and virtual computers": The support of Windows Server 2008 R2 has been changed to Windows Server 2008 R2 SP1. This applies to Windows clusters as well. Windows Server 2008 R2 SP1 Datacenter Edition is supported. This applies to Windows clusters as well. However, Windows Server 2008 Datacenter Edition is not supported.	
2013-10-07	Internet Explorer 10 is supported by XPR WebClient (see Section 2.2.4, "New Features with V7 R1 FR2", on page 26 and Section 2.6.2.2, "Clients", on page 66).	FRN7049
2013-10-07	Restriction for Internet Explorer 10 added (see Section 2.6.2.2, "Clients", on page 66)	CQ00270474
2013-10-07	The configuration for a sample configuration has been changed (see footnote [1] in Table 11 on page 48, footnote [1] in Table 12 on page 49, footnote [1] in Table 13 on page 51 and footnote [1] in Table 14 on page 52). Use the load and dimensioning tool for more detailed values.	

Date	Changes	Reason
2013-10-07	If you want to upgrade an XPR or MRS that is installed on a Windows cluster to XPR 7 R1, you need a project-specific release under certain conditions (see point 7 on page 80 and footnote [2] in Section 5.2, "Upgrading", on page 96).	
2013-10-07	Voice conferences are not supported anymore for HiPath 3000 V5, V6 and V7 and HiPath 4000 V3 and V4 (see footnote [1] in Table 1 on page 21, Section 2.4.6, "Extension Restrictions on Conferences and OpenScape WebClient", on page 53 and Section 5.2, "Upgrading", on page 96).	
2013-10-30	The name "Unify" has been introduced.	
2013-10-30	Forwarding incoming calls to another phone number if your office phone is engaged or if the specified ring time of the device is exceeded is not supported for a connection to a HiPath 4000/OpenScape 4000 via SIP or for a connection to a HiPath 3000 (see point 48 on page 78).	
2013-10-30	XPR on Windows Server 2012 requires .NET Framework 3.5 (see footnote [6] in Table 17 on page 57).	
2013-11-05	The .NET Framework version in footnote [6] in Table 17 on page 57 has been updated.	
2013-12-17	"SEN ESY HA AR TS" removed	
2014-02-10	R2 of Windows Server 2012 is supported by the XPR server (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Table 17 on page 57).	FRN7927
2014-02-10	Windows 8.1 Pro Edition is supported for clients (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Section 2.6.2.2, "Clients", on page 66).	FRN7854
2014-02-10	Microsoft Office 2013 is supported (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Section 2.6.2.2, "Clients", on page 66).	FRN6617
2014-02-10	VMware ESXi V5.5 is supported (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25, footer [4] in Table 17 on page 57, subsection VMWare in Section 2.6.2.1, "Server", on page 57 and item 41 on page 76).	FRN7740
2014-02-10	IBM Notes 9 and IBM Domino 9 are supported (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25, Section 2.4.2.1, "Software Requirements", on page 41, Section 2.6.2.1, "Server", on page 57, Section 2.6.2.2, "Clients", on page 66 und Section 3.6, "Restrictions on the Lotus Notes Integration", on page 84).	FRN6618, FRN7467
2014-02-19	The support of IBM Notes 9 and IBM Domino 9 has been changed to the support of IBM Notes 9.0 Social Edition (Basic Configuration) and IBM Domino 9 Social Edition (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25, Section 2.4.2.1, "Software Requirements", on page 41, Section 2.6.2.1, "Server", on page 57, Section 2.6.2.2, "Clients", on page 66 und Section 3.6, "Restrictions on the Lotus Notes Integration", on page 84).	
2014-03-10	If you connect XPR to IBM Notes 9.0 Social Edition (Basic Configuration) and IBM Domino 9.0 Social Edition, use the mail templates for Lotus Notes 8 (see Section 2.4.2.1, "Software Requirements", on page 41, Section 2.6.2.1, "Server", on page 57, Section 2.6.2.2, "Clients", on page 66 and point 7 on page 85).	
2014-03-10	OpenScape 4000 V7 is supported (see for example Section 2.1, "PBX Connection Options", on page 17, Table 1 on page 21, Section 2.2.3, "New Features with V7 R1 FR3", on page 25).	
2014-03-20	A Windows cluster based on Windows Server 2012 R2 Datacenter Edition is supported by the XPR server (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Table 17 on page 57).	

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Date	Changes	Reason
2014-04-07	The Outlook extensions for the 64-bit version of Outlook 2010 on 64-bit operating systems are supported (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Section 2.6.2.2, "Clients", on page 66).	FRN5333
2014-05-15	XPR on VMware ESXi V5.5 is supported only for up to 10000 users. A project-specific release is needed for more than 10000 users. (see VMWare on page 59, footnote [1] in Table 18 on page 60 and point 50 on page 78).	FRN7740
2014-05-15	Additionally released operating operating systems for the XPR Server (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Section 2.6.2.1, "Server", on page 57): Without a Windows cluster: • Windows Server 2012 R2 Datacenter Edition • Windows Server 2012 R2 Standard for Embedded Systems - Telecommunications • Windows Server 2008 R2 SP1 for Embedded Systems - Telecommunications • Windows Server 2003 R2 SP2 Datacenter Edition With a Windows cluster: • Windows Server 2012 R2 Standard for Embedded Systems - Telecommunications • Windows Server 2008 R2 SP1 for Embedded Systems - Telecommunications • Windows Server 2003 R2 SP2 Datacenter Edition	
2014-05-15	Windows Server 2008 without R2 is not supported anymore for the XPR Server (see Section 2.6.2.1, "Server", on page 57).	
2014-05-15	Upgrade from versions lower than XPR V5 removed (see Section 5.2, "Upgrading", on page 96)	
2014-05-15	The Outlook extensions for the 64-bit version of Outlook 2013 on 64-bit operating systems are supported (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25 and Section 2.6.2.2, "Clients", on page 66).	FRN8228
2014-05-26	OpenScape Voice V8 is supported (see for example in Table 1 on page 21 and Section 2.2.3, "New Features with V7 R1 FR3", on page 25).	
2014-06-03	Alcatel OmniPCX Enterprise (OXE) R11.0 is supported (see for example in Table 1 on page 21 and Section 2.2.3, "New Features with V7 R1 FR3", on page 25).	FRN8318
2014-06-16	Table 18 on page 60, "Virtual Machine configuration parameters", has been updated and partly moved to the installation guide *OpenScape Xpressions Serve Installation*.	CQ00301593
2014-08-21	"Freely available" removed for VMware ESXi Server (see Section 2.6.2.1, "Server", on page 57).	
2014-08-21	"Dialogic Diva BRI-2 PCI" has been removed (see Section 2.4.1, "Server", on page 35).	
2014-08-21	OpenScape Business V1 is supported (see Section 2.1, "PBX Connection Options", on page 17 and Section 2.2.3, "New Features with V7 R1 FR3", on page 25).	
2014-10-10	A connection to a Microsoft Exchange Server 2013 via a Microsoft Exchange 2007 gateway is supported. A project-specific release is required for a connection to a Microsoft Exchange Server 2013 via a Microsoft Exchange 2010 gateway. (see Section 2.2.3, "New Features with V7 R1 FR3", on page 25, Section 6.1.2, "Supported Exchange Versions", on page 103, Section 6.1.4, "Multi-Connector Operation", on page 104 und Section 6.1.9, "Connecting to Exchange Server 2013 via an Exchange 2007/2010 Domain", on page 111)	FRN7973
2014-11-17	The sentence "MSPTSP is not supported on 64-bit operating systems." has been removed.	CQ00313979
2014-11-17	MAPI fax printer drivers are supported for terminal server environments with Citrix (see step 17 on page 72).	

Date	Changes	Reason
2014-11-17	The 64-bit version of Outlook is not supported by optiClient 130 (see Section 2.6.2.2, "Clients", on page 66 and point 22 on page 73).	
2014-11-17	VMware configuration parameters (see Table 18 on page 60): XPR on VMware ESXi for 15000 users needs a project-specific release. This is possible for VMware ESXi V5.5 as well (see footnote [1]). A kernel with at least 3 virtual CPUs is needed for 15000 users. The unit of information for the hard disk throughput has been changed from kb/s to kB/s.	
2014-11-17	The hint that VMware Data Protection is not supported for VMware ESXi V5.5 has been removed (see Section 2.6.2.1, "Server", on page 57).	
2014-11-17	A direct connection to a Microsoft Exchange Server 2013 is supported (see Section 2.2.2, "New Features with V7 R1 FR4", on page 24, Section 6.1.2, "Supported Exchange Versions", on page 103, and Section 6.1.10, "Connection to Exchange Server 2013", on page 113).	FRN8302
2015-02-04	ADDED: Note on Internet Explorer 11 being supported by Xpressions WebClient only when running in Compatibility View Mode to Section Clients,Paragraph For the WebClient	FRN9789
2015-02-04	ADDED: Paragraph on Internet Explorer 11 being supported by Xpressions WebClient only when running in Compatibility View Mode to Section New Features with V7 R1 FR4,Paragraph Newly supported browsers	FRN9789
2015-02-04	ADDED: Paragraph on Internet Explorer 11 being supported by Xpressions WebClient only when running in Compatibility View Mode and paragraph on pearl icon to Section Information for Users	FRN9789
2015-02-04	ADDED: point 50 On Internet Explorer 11 being supported by Xpressions WebClient only when running in Compatibility View Mode, point 51 on DI-Tool not being supported by IE11 and point 52 on Windows 8 Metro not being supported.	FRN9789
2015-03-20	REMOVED:Dynamic resource management from Section 2.6.2, "Not included in the Scope of Delivery" and Section 3.1, "General Restrictions"	CQ00326929
2015-04-16	UPDATED:Step 49 XPR on Virtual Machine is supported only for up to 10000 users. A project-specific release is needed for more than 10000 users.in Section 3.1	CQ00330115
2015-04-16	UPDATED:History of change entry "2014-05-15", on page 10 for FRN7740	CQ00330115
2015-12-21	ADDED: "The communications client does not support tenant features. The WebAssistant is recommended to be used to work with tenant users." To restrictions.	UCBE-2077
2016-4-4	UPDATED: Table 17 "Released operating systems for the XPR server on real and virtual computers" for UCBE-5523	UCBE-5523
2017-02-07	Updated: Section 2.2 New Features - Add Subchapter for New Features with V7 R1 FR5	UCBE-9747
2017-02-07	Updated: Section 2.1 PBX Connection Options - remove HiPath 4000 V3, V4, V5 - remove OpenScape Voice V3.1, V4, V5, V6 - add OpenScape Voice V9 Adapt Table 1 also accordingly	review
2017-04-05	Updated Section 2.2.1 New Features with V7 R1 FR5	UCBE-10850
2018-01-08	Updated Section 2.1 PBX Connection Options - add OpenScape 4000 V8	UCBE-14726
2018-01-15	Updated Section 3.1 General Restrictions	UCBE-14791
2018-01-26	Updated Section 2.1 PBX Connection Options - add OpenScape Business V2	UCBE-14959

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Date	Changes	Reason
2018-03-29	Updated: - Section 3.1 General Restrictions - Section 1 General Considerations	UCBE-15530
2018-05-18	Updated: - Section 2.2.1New Features released on V7 R1 FR5 - Section 2.6.2.1 Server - Section 2.6.2.2 Clients	UCBE-15941
2018-05-24	Updated: - Section 2.2.1New Features released on V7 R1 FR5 - Section 2.6.2.1 Server - Section 2.6.2.2 Clients	UCBE-15941 (has been reopened)
2018-06-06	Rename: - rename Section 2.2.1 to "New Features available on V7 R1 FR5 HF18"	UCBE-15941 (has been reopended)
2018-07-13	Updated: - Section 2.2.1 New Features released on V7 R1 FR5 - Section 2.6.2.2 Clients - Section 6.1.2 Supported Exchange Versions - Section 6.1.11 Connection to Exchange Server 2016/Exchange Online(O365) - Section 6.1.11.1 Overview	
2018-07-25	- Section 6.1.11.1 Overview	UCBE-16558
2018-07-30	- new Section 5.6 Installation on Windows Server 2016	UCBE-16665
2018-09-17	- Section 3.1 General Restrictions	UCBE-17176
2018-11-23	- Secction 3.1 eneral Restrictions	UCBE-17882
2019-03-12	Added: - Section 5.3 Running Xpressions Setup with OpenSSL files on Hotfix folder - Section 5.3.1 Installing the SNMP feature	UCBE-18989
2019-03-15	Updated: - Section 2.6.2.1 Server - Table 18	UCBE-19012
2019-04-08	Updated: - Section 2.2.1 New Features released on V7 R1 FR5 - All references to "Dialogic" and replaced them with "Sangoma" throughout the document	UCBE-19224 UCBE-19214
2019-09-17	Updated: - Section 2.6.2.1 Server - Section 2.2.1 New Features released on V7 R1 FR5	UCBE-21060
2019-11-26	Updated: - Section 2.6.2.2 Clients	UCBE-21820
2020-04-16	Updated: - Section 3.1 General Restrictions	UCBE-23069
2021-04-27	Updated: - Section 3.1 General Restrictions	UCBE-26445
2021-12-08	Updated: - Section 3.1 General Restrictions	UCBE-28858

Date	Changes	Reason
2025-03-06	Updated sections: - 2.4.2 Web Conference Server (chapter removed) - 2.4.5.5 Connecting a HiPath 4000 V6 and OpenScape 4000 V7 via SIP - 2.4.5.5 Connecting a HiPath 4000 V6 and OpenScape 4000 V7 via SIP - 2.4.6 Maximum Number of Cards and Channels	DOCLOC-9434
2025-10-24	Updated sections: - 2.2 New Features - 2.2.1 New Features released on V7 R1 FR5 - 2.6.2.1 Server - 2.6.2.2 Clients	UCBE-38540

History of Changes

A31003-S2370-S100-64-7620, 10/2025

1 General Considerations

OpenScape Xpressions V7 is an Intel-PC-based server solution that can be operated on the Microsoft operating systems listed in Table 17 on page 57.

OpenScape Xpressions enables the user to manage his/her voice and fax messages as well as e-mails in one mailbox, which can be accessed via telephone as well as PC.

To control his/her calls and view call journals he/she can use the convenient OpenScape Web Client as well as the optiClient Extensions as rich client.

Connected to one or several PBXs, the Multimedia Contact Center offers conventional contact center features such as automatic call and message distribution as well as Unified Messaging applications, for example voicemail, e-mail, fax and SMS.

A user's presence profile and status can be controlled and represented. He/she can exchange Instant Messages with other users. The client to be used for this the optiClient 130.

OpenScape Xpressions can be deployed to conveniently extend meeting requests by conferences in the user's preferred groupware. These conferences can be staged as voice conferences, as web conferences or as combined voice/web conferences.

OpenScape Xpressions is connected to the PBX via one (or several) S_0 or S_2 tie trunk(s) or via an IP/SIP link.

Message access by computer in OpenScape Xpressions occurs via IMAP4 clients by default or also via the clients of the e-mail systems that already exist at the customer's - such as Microsoft Exchange Server 2003, Microsoft Exchange Server 2007, Microsoft Exchange 2010, Lotus Domino (R6, R7 and R8) or SAP/R3.

Alternatively, the OpenScape Xpressions Web Assistant is available as browser-based client as well.

On the basis of OpenScape Xpressions several product versions exist which all provide a different feature range.

In addition, OpenScape Xpressions offers:

- Connection to communications systems of the Unify GmbH & Co. KG via CorNet-N, CorNet-NQ or CorNet-IP

- Networking with hardware-based PhoneMail networks

- Connection to HiPath User Management

- Connection to HiPath Fault Management

- A voice interface which corresponds to the one used in Hicom VMS.

- A voice interface which corresponds to the one for Hicom PhoneMail.

- The voice interface ERGO

- Display support at the telephone user interface via CorNet-N/NQ/IP at HiPath 4000

OpenScape Xpressions is a category A product.

IMPORTANT: Each feature not explicitly released in this release notice is not released or requires a project-specific release (PSR). In the PSR process, project-specific release may be granted or rejected for a feature. The process may also result in a release notice modification to explicitly release a feature or to explicitly deny the release.

Features that are released only project-specifically are not necessarily mentioned in this release notice. Please read the respective setup and administration guides or other instructions to see whether a feature has been released project-specifically. Example: the documentation for connecting the XPR to a Microsoft Exchange server informs you about project-specific releases that exist to connect the XPR to a Microsoft Exchange server. In Section 2.7, "Documentation", on page 69 you find a documentation list.

NOTE: If you use the XPR server on real computers, a maximum of 20000 users are supported, on virtual computers a maximum of 15000 users. If you want to support more users, a project-specific release (PSR) is needed.
The load and dimensioning tool is a supplement to this release notice. It enables calculating the load based on the available number of kernels, workstation memory, harddisk memory, satellite computers, users, channels, the assumed frequency of voicemail, fax documents, calls, the medium size of voicemails, fax documents etc.

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2 Scope of Release

OpenScape Xpressions V7 with the build number mentioned in the release notes on the setup medium is released with the restrictions according to Chapter 3, "Restrictions" and the last modifications to the scope of releases, which are also mentioned in the release notes on the setup medium.

2.1 PBX Connection Options

NOTE: The OpenScape Voice PBX used to be called HiPath 8000 before product version 3.1 R2.

Connection options for established customers

Using the PBXs listed in the following enables the same scope of services as with HiPath Xpressions V4.0 SA10, but new features of OpenScape Xpressions V7 will not be supported. These systems support the connection via ISDN only.

- Hicom 300E V1.0, Hicom 300 V3.5

- Hicom 300E V2.0, Hicom 300 V3.6

- Hicom 300E V3.0 and V3.1

- Hicom 300 H V1.0

- Hicom Office Pro as of V2.2

- Hicom Office Com as of V2.2 (as of HE420K.10.428)

- Hicom 150 H V1.0

- HiPath 3000 of a version smaller than V5.0

- HiPath 4000 V1.0

Using the PBXs listed in the following enables the same scope of services as with HiPath Xpressions V5 R4, but new features of OpenScape Xpressions V7 will not be supported.

- Hicom 300E US[1]

- HiPath 3000 V5.0

- HiPath 4000 V2.0

- HiPath 8000 V3.0

- HiPath DX[1]

- ROLM 9751[1]

The following systems support the new features of the OpenScape Xpressions V7 release. Please obtain details about connection versions of the single PBXs from .

- HiPath 3000 V6

- HiPath 3000 V7

- HiPath 3000 V8

- HiPath 3000 V9

- OpenScape Business V1[2]

- OpenScape Business V2

- HiPath 4000 V6

- OpenScape 4000 V7[3]

- OpenScape 4000 V8

- HiPath 5000 (project-specific)

- OpenScape Voice V7

- OpenScape Voice V8

- OpenScape Voice V9

- Cisco Unified Communications Manager 6[1]

- Cisco Unified Communications Manager 7[1]

- Cisco Unified Communications Manager 8[1] and 8.6

- Cisco Unified Communications Manager 9

---

1. Without CTI support, i. e. Contact Center and Web Client may no longer be used, for example.
2. OpenScape Business is the successor of HiPath 3000.
3. As of version 7, "HiPath 4000" is named "OpenScape 4000".

- Alcatel OmniPCX Enterprise (OXE) R7

- Alcatel OmniPCX Enterprise (OXE) R8

- Alcatel OmniPCX Enterprise (OXE) R9 and R9.1

- Alcatel OmniPCX Enterprise (OXE) R10 and R10.1

- Alcatel OmniPCX Enterprise (OXE) R11.0

- other PBX (project-specific only)

Connection options for new customers

The following systems support the new features of the OpenScape Xpressions V7. Please obtain details about connection versions of the single PBXs from Table on page 21.

- HiPath 3000 V6

- HiPath 3000 V7

- HiPath 3000 V8

- HiPath 3000 V9

- OpenScape Business V1[1]

- HiPath 4000 V6

- OpenScape 4000 V7[2]

- OpenScape 4000 V8

- R8300 (project-specific only)

  This is a HiPath 4000 with a reduced scope of service.

- HiPath 5000 (project-specific only)

- OpenScape Voice V7

- OpenScape Voice V8

- OpenScape Voice V9

- Cisco Unified Communications Manager 6[3]

- Cisco Unified Communications Manager 7[3]

- Cisco Unified Communications Manager 8[3] and 8.6

- Cisco Unified Communications Manager 9

- Alcatel OmniPCX Enterprise (OXE) R7

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1. OpenScape Business is the successor of HiPath 3000.
2. As of version 7, "HiPath 4000" is named "OpenScape 4000".
3. Without CTI support, i. e. Contact Center and Web Client may no longer be used, for example.

- Alcatel OmniPCX Enterprise (OXE) R8

- Alcatel OmniPCX Enterprise (OXE) R9 and R9.1

- Alcatel OmniPCX Enterprise (OXE) R10 and R10.1

- Alcatel OmniPCX Enterprise (OXE) R11.0

- other PBX (project-specific only)

Overview PBXs / connection version

PBX	ISDN	VoIP	T.38 Fax	G.711 Fax	Voice conference
HiCom 300E (US-Version)	✔	Unavailable	Unavailable	Unavailable	Unavailable
HiPath 3000 V5 (VoIP via gateway HG1500/CorNet-IP)	✔	Not yet	Not released	Not yet	Unavailable[1]
HiPath 3000 V6 (VoIP via gateway HG1500/CorNet-IP)	✔	Not yet	Not released	Not yet	Unavailable[1]
HiPath 3000 V7 (VoIP via gateway HG1500/CorNet-IP)	✔	✔	✔	Not released yet	Unavailable[1]
HiPath 3000 V8 (VoIP via gateway HG1500/CorNet-IP)	✔	✔	✔	Not released yet	✔
HiPath 3000 V9 (VoIP via gateway HG1500/CorNet-IP)	✔	✔	✔	Not released yet	✔
OpenScape Business V1 (VoIP via gateway HG1500/CorNet-IP)	✔	Not released yet	Not released yet	Not released yet	✖
OpenScape Business V2 (VoIP via gateway HG1500/CorNet-IP)	✔	Not released yet	Not released yet	Not released yet	✖
HiPath 4000 V6 with PCI slot hardware[2] (VoIP via gateway HG35xx/**CorNet-IP** or **SIP**[3])	✔	✔	✔	Not released yet	✔[4][3]
HiPath 4000 V6 without PCI slot hardware[2] (VoIP via gateway vHG35xx/**SIP**[3])	Unavailable	✔	✔	Not released yet	✔[4][3]
OpenScape 4000 V7[5] with PCI slot hardware[2] (VoIP via gateway HG35xx/**CorNet-IP** or **SIP**[3])	✔	✔	✔	Not released yet	✔[4][3]
OpenScape 4000 V7[5] without PCI slot hardware[2] (VoIP via gateway vHG35xx/**SIP**[3])	Unavailable	✔	✔	Not released yet	✔[4][3]
OpenScape 4000 V8 with PCI slot hardware[2] (VoIP via gateway HG35xx/**CorNet-IP** or **SIP**[3])	✔	✔	✔	Not released yet	✔
OpenScape 4000 V8 without PCI slot hardware[2] (VoIP via gateway vHG35xx/**SIP**[3])	Unavailable	✔	✔	Not released yet	✔
OpenScape Voice V7	Unavailable	✔	✔	Not released yet	✔
OpenScape Voice V8	Unavailable	✔	✔	Not released yet	✔
OpenScape Voice V9	Unavailable	✔	✔	Not released yet	✔

Table 1   Overview PBXs / connection version

PBX	ISDN	VoIP	T.38 Fax	G.711 Fax	Voice conference
HiPath DX V7.0	✓	Unavailable	Unavailable	Unavailable	Unavailable
ROLM 9751	✓	Unavailable	Unavailable	Unavailable	Unavailable
Cisco Unified Communications Manager 6	Unavailable	✓ for H.323 via XCAPI/ISDN APL[6] + SIP for audio conferencing	✓ Restricted[7] for H.323 via XCAPI/ISDN APL[6]	Not released yet	✓
Cisco Unified Communications Manager 7	Unavailable	✓	✓	Not released yet	✓
Cisco Unified Communications Manager 8	Unavailable	✓	✓	Not released yet	✓
Cisco Unified Communications Manager 8.6	Unavailable	✓	✓	Not released yet	✓
Cisco Unified Communications Manager 9	Unavailable	✓	✓	Not released yet	✓
Alcatel OmniPCX Enterprise (OXE) R7	✓	Not yet	Not yet	Not yet	✓
Alcatel OmniPCX Enterprise (OXE) R8	✓	✓	✓	Not yet	✓
Alcatel OmniPCX Enterprise (OXE) R9 and R9.1	✓	✓	✓	Not supported	✓
Alcatel OmniPCX Enterprise (OXE) R10 and R10.1	✓	✓	✓	Not supported	✓
Alcatel OmniPCX Enterprise (OXE) R11.0[8]	✓	✓	✓	Not supported	✓

Table 1   Overview PBXs / connection version

1   Voice conferences are not supported because SIPcontrol is not suported anymore by Sangoma.
2   PCI slots with ISDN boards of the Unify GmbH & Co. KG have been sold for new installations of a HiPath 4000 up to version V5. A HiPath 4000 with this hardware can be upgraded to hardware for HiPath 4000 V6 or OpenScape 4000 V7 by adding a DSCXL-V2 board. A connection from the XPR server to hardware upgraded in this way supports CorNet-IP and SIP, but no SIP-Q.
   If your hardware for HiPath 4000 V6 or OpenScape 4000 V7 is completely new, a purely server-based solution is on hand (VoIP switch). This hardware does not include any ISDN boards. It has been sold as of HiPath 4000 V6 R0. **This hardware supports SIP but no CorNet-IP and SIP-Q.**
3   We **do not** recommend to connect a HiPath 4000 V6 **R0** via **SIP**. If you wish to use SIP we recommend an upgrade of the HiPath 4000 to V6 **R1**, OpenScape 4000 V7 or later.
4   Audio conferences have not been released for HiPath 4000 V6 R0 yet.
5   As of version 7, "HiPath 4000" is named "OpenScape 4000".
6   XCAPI has been released project-specifically only.
7   Released for the gateways C2600 and C2800 only
8   In case of problems with outcalls from XPR via SIP - especially after an upgrade from Alcatel OmniPCX Enterprise R9 or lower to R11.0 - check whether the parameter values for SIP Ext Gateway have been set as follows:
```
SDP in 18x = false
Support Re-invite without SDP = false
```

2.2 New Features

Compared to the previous version, the following features have been added or revised with OpenScape Xpressions V7:

2.2.1 New Features released on V7 R1 FR5

Reference	Summary	Released on
	Microsoft Office 2024 and 365 Apps support for documents conversion: • Word • Excel • PowerPoint	XPR V7R1 FR5 HF43
	Windows Server 2022 support for Xpressions Server	XPR V7R1 FR5 HF42
	Microsoft Office 2021 support for documents conversion: •Word • Excel • PowerPoint	XPR V7R1 FR5 HF42
	Exchange 2019 Integrated Messaging support	XPR V7R1 FR5 HF33
NA16527118	Windows Server 2019 support for Xpressions Server	XPR V7R1 FR5 HF31
RQ00041467	Exchange 2016 PublicFolders support for OutlookForms	XPR V7R1 FR5 HF25
	Microsoft Office 2016 support for documents conversion: • Word • Excel • PowerPoint	XPR V7R1 FR5 HF18
	Updated WebAssistant web browsers supported versions: • Internet Explorer 11 • Mozilla Firefox 59.0 • Safari 5.1.7 (only for Windows) • Google Chrome 66.0	XPR V7R1 FR5 HF18
NA15525275	OutlookForms Fax Cover support	XPR V7R1 FR5 HF13
	Windows Server 2016 support for Xpressions Server	XPR V7R1 FR5 HF13
	Exchange 2016 Integrated Messaging support	XPR V7R1 FR5 HF7
	Microsoft Office 2016 support for: • OutlookForms • VMPlayer	XPR V7R1 FR5 HF5

Reference	Summary	Released on
	Microsoft Windows 10 support for: • Application Builder • WebAssistant • OultookForms • VMPlayer • Server Monitor Application • Notes Forms	XPR V7R1 FR5 HF5
	Microsoft Edge Browser support for WebAssistant	XPR V7R1 FR5 HF5
NA14523582	OutlookForms "From" field support	XPR V7R1 FR5 HF4
	Exchange Online (O365) Integrated Messaging support	XPR V7R1 FR5 HF3
	Windows Server 2025 support for Xpressions Server	XPR V7R1 FR5 HF43

2.2.2 New Features with V7 R1 FR4

VMware ESXi

VMware Data Protection is supported for VMware ESXi V5.5 as well (see Section 2.6.2.1, "Server", on page 57).

XPR on VMware ESXi for 15000 users needs a project-specific release. This is possible for VMware ESXi V5.5 as well.

Microsoft Exchange Server 2013

A direct connection from the XPR server to a Microsoft Exchange Server 2013 is supported.

MSPTSP

The sentence "MSPTSP is not supported on 64-bit operating systems." has been removed.

MAPI fax printer driver

MAPI fax printer drivers are supported for terminal server environments with Citrix.

Client Applications

Support of the Outlook Extensions for the 64-bit version of Outlook 2010 and Outlook 2013 on 64-bit operating systems

Newly supported browsers

Internet Explorer 11 is supported by Xpressions WebClient when running in Compatibility View Mode.

2.2.3 New Features with V7 R1 FR3

Newly supported PBXs

OpenScape Business V1, OpenScape Voice V8, OpenScape 4000 V7 and Alcatel OmniPCX Enterprise (OXE) R11.0 are supported.

NOTE: As of version 7, "HiPath 4000" is named "OpenScape 4000".

Newly supported operating systems

- The following operating systems are supported by the XPR server as well:

  - Without Windows cluster

    - Windows Server 2012 R2 Datacenter Edition

    - Windows Server 2012 R2 Standard Edition

    - Windows Server 2012 R2 Standard for Embedded Systems - Telecommunications

    - Windows Server 2008 R2 SP1 for Embedded Systems - Telecommunications

    - Windows Server 2003 R2 SP2 Datacenter Edition

  - With a Windows cluster

    - Windows Server 2012 R2 Datacenter Edition

    - Windows Server 2012 R2 Standard for Embedded Systems - Telecommunications

    - Windows Server 2008 R2 SP1 for Embedded Systems - Telecommunications

    - Windows Server 2003 R2 SP2 Datacenter Edition

- Microsoft Windows 8.1 Pro Edition is supported for clients.

IBM Notes/IBM Domino

IBM Notes 9.0 Social Edition (Basic Configuration) and IBM Domino 9.0 Social Edition are supported.

NOTE: The names of former versions of IBM Notes and IBM Domino are Lotus Notes and Lotus Domino.

Microsoft Exchange Server 2013

A connection from the XPR server to a Microsoft Exchange Server 2013 via a Microsoft Exchange 2007 gateway is supported.

A project-specific release is required for a connection from the XPR server to a Microsoft Exchange Server 2013 via a Microsoft Exchange 2010 gateway.

Microsoft Office

Microsoft Office 2013 is supported.

VMware ESXi V5.5

VMware ESXi V5.5 is supported (see Section 2.6.2.1, "Server", on page 57).

2.2.4 New Features with V7 R1 FR2

Newly supported browsers

Internet Explorer 10 is supported by the WebClient as well.

2.2.5 New Features with V7 R1 FR1

Newly supported operating systems

Windows Server 2008 R2 Datacenter Edition and Windows Server 2012 are supported by the XPR server and Windows 8 is supported by the clients (see Table 17 on page 57, "Released operating systems for the XPR server on real and virtual computers" and Section 2.6.2.2, "Clients", on page 66).

VMware configuration parameters

VMware configuration parameters for virtual computers have been specified (see Table 18 on page 60, "Virtual Machine configuration parameters").

Catalan

Catalan is supported for specific features (see Section 2.5, "Languages", on page 55).

Smaller fix release package

You can create a setup medium for an upgrade to a fix release with help of an old setup medium and additional EXE files. This applies only for an upgrade to a fix release on a non-cluster system and for kernel computers (not for satellite computers). You perform the actual upgrade as usual.

Silent upgrade

XPR V6 R2 64-bit, XPR V7 R0 64-bit and XPR V7 R1 64-bit can be upgraded silently to XPR V7 R1 FR1, i e. no user interaction is needed during the upgrade. Restrictions are described in point 47 on page 77.

Multi tenant

New configuration field for configuring a tenant-specific welcome greeting.

Exchange connection

- New option in the Exchange Fail-Safe Tool for skipping the transport directory test.

- New option in the Exchange Fail-Safe Tool for an advanced system property check with the following tests after setting up the connectors:

  - Checking which Exchange Server version is active in the system.

  - Checking whether a connection can be set up to this Exchange server.

  - Checking whether the core services such as System Attendant, Mail submission, RPC Client operate on the Exchange server.

  - Checking whether the registry entries are consistent after the ExUMApl installation.

  - Checking whether the registry entries are consistent after the E2k7Apl installation.

  - Checking the CAS Array and DAG AD configuration.

  - Checking whether the service account has a valid mailbox in case of a connection to Exchange Server 2010.

  - Result dialog displaying tips and hints concerning the XPR integration in an Exchange environment.

- E2k7Apl start/stop configurable independently from the current watchdog settings via registry value.

- Selecting the transport directories already during the E2k7Apl setup.

- Browse button for selecting the service account in the Exchange Fail-Safe Tool added.

- ExUmApl improvements with regard to detecting missing installation requirements to avoid login problems after the installation.

Newly supported browsers

Internet Explorer 10 is supported by the WebAssistant but not by the WebClient.

2.2.6 New Features with V7 R1

PBXs

The HiPath 3000 V9 is supported also.

Lotus Domino/Notes

Lotus Domino 8.5.3 and Lotus Note 8.5.3 are supported.

Newly supported browsers

*   WebClient

    –   Internet Explorer 9

    –   Firefox up to 3.6

*   Web Assistant

    –   Internet Explorer 9

    –   Firefox 16.0.1

    –   Safari 5.1.7

    –   Chrome 22.0

Web Assistant

The WebAssistant can be configured to prevent playing voicemails on the PC.

WebClient

The journal also displays entries of unavailable phones, for example of a softphone on a shut-down computer.

PhoneMail/Ergo

The configuration of the Trusted Transfer Mode has been revised.

IP APL

The Fax G3 protocol parameters **UseFaxIdAsOAD**, **InsertMidHI** and **CheckPageNumbers** are supported by the IP APL also.

Multi tenants

*   Voice guide (Vogue) support

    If a user deploys the voice guide on an XPR server with several tenants, only users of the same tenant are returned if a corresponding configuration has been performed. Such settings are valid for an SIP connection only.

- The location and tenant settings of the XPR server can be configured with help of the FI APL and a configuration file. To enable this, the `XprConfig.e` configuration script, being able to process appropriate configuration files, is shipped for the FI APL. Such settings are valid for an SIP connection only.

Application Builder

The name dialing control of the Application Builder can use a filter ($AAFILTER), so that e. g. the Automated Attendant searches for names in a subsidiary and not in the entire company.

Web APL

The HTTP protocol is disabled by default. This affects the IP-Phone wizard and the SNMP agent. Both of them require this protocol. If you need these applications, you must reactivate the protocol.

Wall APL and ACD Supervisor

The following features are not supported anymore:

- Wall APL

- ACD Supervisor

VMware vMotion

VMware vMotion is supported with restrictions (see Section 2.6.2.1, "Server", on page 57).

Data backup and restore on virtual computers

Data backup and restore is supported on virtual computers with Windows Server 2008 R2 by the following means:

- Microsoft Windows Server Backup Features

- Veeam Backup & Replication 6.1

- VMware 5.1 VDP (VMware Data Protection) on VMware ESXi V5.x

- VMware VDR (VMware Data Recovery) on VMware ESXi V4.x

See point 7 on page 63 for details.

VMware ESXi V5.1

VMware ESXi V5.1 is supported without special restrictions (see Section 2.6.2.1, "Server", on page 57).

2.2.7 New Features with V7 R0

Supported operating systems

Only 64-bit operating systems are supported for the XPR server (see Table 17

). Windows 7 Professional is supported for the XPR server with restrictions.

Upgrading MRS 8.xx to XPR 7

When upgrading MRS 8.xx to XPR 7, the following components are installed:

- ABC APL

- LPR APL

- VM APL

- ERGO

The ERGO configuration was added to the Web Assistant. You can use the clients as MRS clients until the next upgrade during which the branding is changed to OpenScape Xpressions.

Installation

No DVDs but a USB stick is used as setup medium.

Connecting PBXs

The following connections are supported:

- HiPath 4000 V6 R1/R2 via CorNet-IP or SIP

  PCI slots with Sangoma ISDN boards have been sold for new installations of a HiPath 4000 up to version V5. You can upgrade this hardware to hardware for HiPath V6 by adding a DSCXL-V2 board.
  If you have entirely new hardware for HiPath 4000 V6, a purely server-based solution is on hand (VoIP switch). This V6 hardware does not include any ISDN boards. It has been sold as of HiPath 4000 V6 R0. **This hardware supports only SIP but no CorNet-IP and no SIP-Q.**

- OpenScape Voice V6

- OpenScape Voice V7

- Cisco Unified Communications Manager 8.6

- Alcatel OmniPCX Enterprise (OXE) R9.1

- Alcatel OmniPCX Enterprise (OXE) R10 and R10.1

TTS and ASR

TTS is executed by Nuance Vocalizer for Networks 5 and ASR by Nuance Recognizer 9.

VM2TXT APL

This new APL enables converting a voicemail into written text and further processing it. This APL can be installed on a Windows cluster (see point). Please consider the restrictions outlined in point .

Connecting OpenScape UC Application V6 R0

Connecting OpenScape UC Application V6 R0 is supported

Microsoft SQL Server

Microsoft SQL Server 2008 and SQL Server 2008 R2 are supported in the following editions:

- Datacenter Edition

- Enterprise Edition

- Standard Edition

- Workgroup Edition

- Web Edition

- Developer Edition

- Express Edition

Microsoft Exchange Server

- Support of multi-connector operation for Exchange Server 2003, 2007 and 2010

- Client Access Server Array support for setting up the connectors for Exchange Server 2010

- Database Availability Group support for setting up the connectors for Exchange Server 2010

VMware ESXi V5.1

VMware ESXi V5.1 is supported with restrictions, see .

ERGO

You can connect ERGO of the XPR server to the voiceportal of the OpenScape UC Application using the Trusted Transfer Mode. This expands ERGO by the corresponding OpenScape UC Application features (see also point).

Multi tenant

- Caller guide support

  If a user deploys the caller guide on an XPR server with several tenants, only users of the same tenant are returned.

- Tenant management

  User group **Tenant Supervisor Group** has been introduced. Users of this group may administer users within a tenant and have the following privileges:

- Acces to menu **Server settings** > **User Administration** except for creating a new user group

- Creating a user

- Assigning a user to a tenant

- Assigning a user to a tenant supervisor group

New user group Help Desk Group

User group **Help Desk Group** has been introduced with the following privileges:

- Creating a user

- Assigning a user to the Helpdesk group

- No access to the XPR server configuration

- Restricted access to menu **Server settings** > **User Administration**:

  - Unlocking the user

  - Deleting the MWI status

  - Updating the MWI status

  - Resetting the PIN

  - Resetting the password

  - Resetting notification settings

  - Resetting voicemail settings

  - Acting on behalf of

Client Applications

Support of the Outlook Extensions for the 32-bit version of Outlook 2010 on 64-bit operating systems

Java runtime environment (JRE)

The SUN-JRE has been replaced with the IBM-JRE.

Web Assistant

- Requesting a new PIN can be configured.

- All available user licenses and those already used are displayed.

- True Single Sign On (SSO)

  A user of the same domain as the XPR server is authenticated after the login to the domain and he/she does not need to retype his/her password.

This is valid for using the browsers Internet Explorer 6 or later or Firefox 4 or later on the client side and for using Microsoft Windows Server 2003 or 2008 as domain controllers. If other domain controllers are used, a special configuration might be necessary to activate the Kerberos authentication protocol.

SNMP traps for errors and warnings

XPR uses SNMP (Simple Network Management Protocol) traps not only for sending system information but also for sending error messages and warnings to the management center.

Over capacity license warning

When a license violation was detected, a warning used to be written to the XPR log. Now, an error is written. In addition, an entry is made in the Microsoft event log. If SNMP is used, an SNMP trap is sent as well.

Installing LocalFormsSmtp without Outlook profile

Setting up LocalFormsSmtp (OpenScape Xpressions optiClient Extensions) does not require the Outlook profile of the installing user anymore. This is not valid for publishing LocalFormsSmtp.

Support of the OpenScape Voice Trace Manager

XPR sends logging information to the OpenScape Voice Trace Manager (OSVTM), which collects this information centrally.

Conferences

- Web conferences can be accessed from the Outlook or Lotus Notes plug-in within a specific period (entrance grace period) prior to the scheduled web conference start.

- If participants are still in a web conference at a specific time (termination grace period) before the web conference ends, the web conference is prolonged by 30 minutes if the required resources can be reserved. If no participants are in the web conference at this time, it ends as scheduled.

- Statistics raw data of conferences can be used for reporting as in the OpenScape UC Application V6 R0. Such statistics raw data comprise among other things a conference's creation and start date and the times at which participants joined or left a voice or web conference.

Resetting a PIN

You can reset a PIN by mail from Lotus Notes, Microsoft Exchange or by SMTP. The user clicks on **PIN forgotten** and receives a message that he/she needs to confirm. He/she then receives a second message with the new, arbitrary PIN. The user enters this PIN to log in and changes it.

Crystal Report Runtime Engine

This runtime engine is available on the setup medium (USB stick) and installed in the scope of a ReportScheduleAPL setup.

XPR version in the program list

The list of programs installed on the Windows computer displays the XPR version.

Security checklist

The new documentation called OpenScape Xpressions *Security Checklist* serves as basis for defining the security settings when you expand systems, put them into operation or update their software. The checklist supports the service in the direct and indirect channel when making arrangements with the customer and for documenting decisions taken.

MMCC, x-Kit, TNG and SAPbyDesign

The following features are **not** supported anymore:

- MMCC (Multimedia Contact Center)

- x-Kit

- TNG (The Next Generation)

- SAPbyDesign

For details see point .

Application conversion

Microsoft Office 2010 can be used for the application conversion in the 64-bit version also.

2.3 New Hardware

No new hardware. See the following section for supported hardware.

2.4 Hardware Requirements

2.4.1 Server

Sangoma ISDN boards:

IMPORTANT: At times, Sangoma uses different version numbers for the same board. For example, the hardware description features a specific version number for a board, but in the Sangoma Diva Configuration Manager you find another version number for the same board. The version numbers used for Sangoma ISDN boards in this XPR V7 release notice are always the version numbers specified in the Sangoma Diva Configuration Manager!

IMPORTANT: Connecting OpenScape Xpressions via the QSIG protocol instead of CorNet is supported. Such a QSIG connection is enabled by using any Sangoma Euro ISDN board that supports QSIG. All Sangoma CorNet-N and Sangoma CorNet-NQ boards are Euro ISDN boards, so they support QSIG.

IMPORTANT: You cannot use a Sangoma-PRI board for two different protocols, e. g. QSIG and CorNet-NQ, at the same time. Instead, use two Sangoma-PRI boards: one for the first and one for the second protocol.
If, for example, you use QSIG for SIP control and CorNet-NQ for features specific to Phonemail, you need two Sangoma-PRI boards: one for QSIG and one for CorNet-NQ.

The following Sangoma ISDN boards are supported by the drivers (version 8.5.10) on the XPR V7 setup medium:

*   Diva BRI boards (version 2.0)

    *   Diva BRI-2 PCIe

    *   Diva 4BRI-8 PCI

    *   Diva 4BRI-8 PCIe

- Diva PRI/E1/T1 boards (version 3.0)

  - Diva PRI/E1/T1-8 PCI

  - Diva PRI/E1-30 PCI

  - Diva PRI/E1-30 PCIe

  - Diva PRI/T1-24 PCI

  - Diva PRI/T1-24 PCIe

- Diva PRI/E1/T1 boards (version 4.0)

  - Diva V-PRI/E1-30 PCI

  - Diva V-PRI/E1-30 PCIe

  - Diva V-PRI/T1-24 PCI

  - Diva V-PRI/T1-24 PCIe

  - Diva V-2PRI/E1-60 PCI

  - Diva V-2PRI/T1-48 PCI

  - Diva V-4PRI/E1-120 PCI

  - Diva V-4PRI/T1-96 PCI

  - Diva V-1PRI/T1-24 PCIe HS

  - Diva V-1PRI/E1-30 PCIe HS

  - Diva V-2PRI/T1-48 PCIe HS

  - Diva V-2PRI/E1-60 PCIe HS

  - Diva V-4PRI/T1-96 PCIe HS

  - Diva V-4PRI/E1-120 PCIe HS

  - Diva V-1PRI/E1/T1-30 CorNet for Unify GmbH & Co. KG

  - Diva V-1PRI/E1/T1-30 Fax enabled CorNet for Unify GmbH & Co. KG

    HS: Half size

IMPORTANT: Sangoma ISDN PRI boards of version 2.0 are not supported.

Mixed operation between different BRI or PRI cards as well as mixed operation of BRI and PRI cards on a server computer is not released.

The boards released for parallel operation of XPR and HiPath ProCenter V7.0 GP4 are listed in .

An SMS send station and maybe also an interface extension board are required for the SMS by direct GSM transmission.

On the Hicom side, DIUS2/DIUN2/DIUN4 ports are required for a connection via S_2 (Hicom 300 or HiPath 4000 only) or STMD/STMD2/STLS ports are required for a connection via S_0 (Hicom 300, Hicom Office Pro/COM, HiPath 3000).

A detailed description of all the hardware components which can be installed can be found in the OpenScape Xpressions Akabam (section 2).

Standard PC (in case of new installations):

NOTE: If you use real computers for the XPR server, a maximum of 20000 users is supported, on virtual computers a maximum of 15000. If more users are to be supported, a project-specific release (PSR) must be applied for.
The load and dimensioning tool is a supplement to this release notice. It enables calculating the load based on the available number of kernels, workstation memory, harddisk memory, satellite computers, users, channels, the assumed frequency of voicemail, fax documents, calls, the medium size of voicemails, fax documents etc.

NOTE: Please obtain the hardware requirements for an upgrade from the OpenScape Xpressions *Upgrade* installation guide.

Processor

- At least Intel Pentium 4 (or compatible) (Xeon processor or dual core system), at least 2 GHz

- Using T.38 Fax on more than two parallel lines requires a server with at least 2 GHz, at least 2 GB RAM and at least one dual core CPU.

- For conferencing usage one additional core per 50 voice channels

- Using the OpenScape Web Client requires a powerful processor depending on the number of users and sessions. The performance requirements per OpenScape Web Client user are approximately twice as high as for an optiClient 130 user.

RAM requirements:

- 2 GB (recommendation: 4 GB)

- in case of TTS usage

    - additional 100 MB per installed TTS voice of Nuance Vocalizer for Networks and

    - additional 2MB per channel

    at least, however, 1 GB in addition

- in case of ASR usage 512 MB in addition

- in case of conferencing usage 2 GB in addition

- in case of OpenScape Web Client usage at least 1 GB in addition

Hard disks

- 2 hard disks with at least 100 GB (IDE or SCSI) each.

- Be sure that the partition on which the XPR server software is installed has a minimum size of 10 GB. Additionally, the target path must not contain any blanks (e. g. c:\OpenScape Xpressions\xpr)!

- Second hard disk for data backup recommended

LAN

- When the XPR and web conference server are operated in parallel on the same computer, the following requirements must be complied with:

  - Port 80 (TCP) and port 5000 (TCP) must be accessible.

Additionally required hardware:

- Diva ISDN board(s) by Sangoma, if no connection is to be set up via IP.

- Optionally SMS via LAN box (SMS feature)

  A LAN box is a box that has an Ethernet interface and a serial interface. The Ethernet interface is connected to the Ethernet interface of the XPR server via the Ethernet. The serial interface of the LAN box thus represents a dislocated serial interface of the XPR server. Deploying a LAN box is useful if the radio coverage for sending and receiving short messages is insufficient in the XPR server's location but is sufficient in the place where the LAN box is situated.

- The adapter cable between DIU connection and PC card with RJ48 sockets must be prepared by the regional office. The connection configuration can be found in the appendix to the installation guide.

- The S_0 cable with RJ45 connection must be provided by the regional office.

2.4.2 OpenScape Xpressions optiClient Extensions

The OpenScape Xpressions optiClient Extensions consist of the

*   CTI client optiClient 130 and the

*   Outlook Extensions (icon and message forms)

The OpenScape Xpressions optiClient Extensions are exclusively intended for operation on a client computer.

optiClient 130 is compatible to Microsoft Dynamics CRM 3.0 and 4.0 and offers an improved support for Citrix terminal server and Microsoft terminal server, because it is no longer limited to 10 users per terminal.

IMPORTANT: If optiClient 130 is to communicate as SIP softphone via a VPN connection, the QoS packet planner must not be installed under the Windows operating system.

NOTE: The support of optiClient 130 in Microsoft terminal server- respectively Citrix-MetaFrame environments is restricted to the use of CTI features. The client can then not be used as SIP telephone.

NOTE: Expansion limits for CTI
The load limitation for CTI usage strongly depends on the individual telephony behavior of the user. If standard conditions apply (average of 10 monitored contacts per CTI client and 20 calls per user and day, no bulk calls at a specific time of day), there can be up to 1000 simultaneous CTI users. An increase of this number requires specific analysis and a project-specific release.

NOTE: If you use real computers for the XPR server, a maximum of 20000 users is supported, on virtual computers a maximum of 15000. If more users are to be supported, a project-specific release (PSR) must be applied for.
The load and dimensioning tool is a supplement to this release notice. It enables calculating the load based on the available number of kernels, workstation memory, harddisk memory, satellite computers, users, channels, the assumed frequency of voicemail, fax documents, calls, the medium size of voicemails, fax documents etc.

2.4.2.1 Software Requirements

For usage with Microsoft Outlook

- Microsoft Outlook XP SP2 or SP3

- Microsoft Outlook 2003

- Microsoft Outlook 2007

- Microsoft Outlook 2010

For usage with Lotus Notes

- Lotus Notes Client 6.0.x

- Lotus Notes Client 6.5.x

- Lotus Notes Client 7.0.x

- Lotus Notes Client 8.0.x

- Lotus Notes Client 8.5.0 up to 8.5.3

- IBM Notes Client 9.0 Social Edition (Basic Configuration)

> *NOTE:* If you use IBM Notes 9.0 Social Edition (Basic Configuration), use the mail templates for Lotus Notes 8.

2.4.2.2 Hardware Requirements

Windows XP Professional SP2 and SP3

The recommended hardware configuration allows operating the software and several other applications simultaneously without significant loss of performance.

- At least Pentium 4 with 1,3 GHz or compatible processor of the same performance

- At least 512 MB RAM

Windows 7, Vista, Server 2003 and Server 2008

Please adhere to the hardware recommendations by Microsoft for the respective operating system.

2.4.3 Application Builder Computer

The Application Builder computer has to comply with the following minimum requirements:

- CPU with 512 MB RAM and more than 1 GHz

  We recommend a computer being just as powerful as an Intel Core T7200 with 2 GHz and 2 GB RAM.

- Every Windows operating system the following software can run on is supported:

  - Java runtime environment 6 or later

  - Eclipse Rich Client Platform (RCP; see http://wiki.eclipse.org/index.php/Rich_Client_Platform)

  - Standard Widget Toolkit (SWT, see http://wiki.eclipse.org/SWT)

  - Graphical Editing Framework (GEF, see http://www.eclipse.org/gef/)

  - Draw2D

NOTE: This software need not be set up before the Application Builder installation. It is shipped with the XPR setup medium and set up automatically in the course of the Application Builder installation.

NOTE: For example, the current versions of the operating systems Windows Server 2008, Windows XP and Windows Vista comply with such requirements.

2.4.4 Upgrading Limits with Connection via IP

Depending on the HiPath -3xxx model, between two and eight HG1500 may be implemented.

An IP APL can be operated in parallel to an ISDN APL on one computer.

One IP APL cannot support two protocols of the infrastructure layer (e. g. H.323, CorNet-IP or SIP) in parallel. However, the following example scenarios are well possible, provided the connected PBX supports the mentioned protocols:

• Parallel operation of Voice via H.323 and T.38 Fax via H.323

• Parallel operation of Voice via SIP and T.38 Fax via SIP.

You find details on this in the OpenScape Xpressions *Server Administration* administrator documentation.

Multiple installation of the IP APL on one computer has been released.

2.4.4.1 Cornet-IP

An IP APL may be addressed by an arbitrary number of HGs, but can transmit outgoing calls only via a specific HG. 30 channels for the IP APL on a kernel computer and 60 channels for an IP APL on a satellite computer are supported for the G.711 codec.

Satellite system specialities

Max. number of channels in the entire system: 300

Max. number of channels in the kernel: 30

Max. number of channels per satellite: 60

2.4.4.2 HiPath 37xx with HG1500

The channels are provided by Digital Signaling Processors (DSP). A DSP of an HG1500 can process a maximum of 8 voice channels. An HG1500 can be furnished with up to four DSPs and supports up to 32 voice channels. On the basic expansion level the HG1500 has already 2 DSPs .

	Number of simultaneous channels on the basic expansion level of the HG1500 (2 DSPs)	Number of simultaneous channels on the highest expansion level of the HG1500 (4 DSPs)
Voice-only	16	32

Table 2   Number of simultaneous Channels

In case of mixed Voice/T.38 Fax operation the maximum number of T.38 Fax channels is limited by the HG1500. For one HXGM3 as well as STMI2, three T.38 Fax channels are possible and for one HXGS3 as well as HXGR3, two T.38 Fax channels are possible. The number of channels available for Voice is reduced by the number of channels used for T.38 Fax. Please note the increased minimum hardware-requirements for using T.38 Fax on more than two parallel lines (see Section 2.4.1, "Server", on page 35).

Connection scenarios from the OpenScape Xpressions V7 view

The following table shows the maximum number of channels for voice (all values in the table refer to the highest expansion stage of the HG1500). We differentiate between the number of channels for incoming and outgoing calls.

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernels	Satellites		In total	Kernels	Satellites
1	0	1	30	30	0
1	1	3	90	30	60
1	2	4	150	30	120
1	3	5	210	30	180

Table 3   Number of Channels for incoming Calls

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernels	Satellites		In total	Kernels	Satellites
1	0	1	30	30	0
1	1	2	64	30	34
1	2	3	96	30	66
1	3	4	128	30	98

Table 4   Number of Channels for outgoing Calls

2.4.4.3 HiPath 38xx with HG1500SAPP

The channels are provided by Digital Signaling Processors (DSP). A DSP of an HG1500SAPP can process a maximum of 16 voice channels. An HG1500SAPP can be furnished with up to four DSPs and supports up to 64 Voice channels. On the basic expansion level the HG1500SAPP has already 2 DSPs.

	Number of simultaneous channels on the basic expansion level of the HG1500SAPP (2 DSPs)	Number of simultaneous channels on the highest expansion level of the HG1500SAPP (4 DSPs)
Voice-only	32	64

Table 5   *Number of simultaneous Channels*

In case of mixed Voice/T.38 Fax operation the maximum number of T.38 Fax channels is limited by the HG1500. For one HXGM3 as well as STMI2, three T.38 Fax channels are possible and for one HXGS3 as well as HXGR3, two T.38 Fax channels are possible. The number of channels available for Voice is reduced by the number of channels used for T.38 Fax. Please note the increased minimum hardware-requirements for using T.38 Fax on more than two parallel lines (see Section 2.4.1, "Server", on page 35).

Connection scenarios from the OpenScape Xpressions V7 view

The following table shows the maximum number of channels for voice (all values refer to the highest expansion stage of the HG1500SAPP). We differentiate between the number of channels for incoming and outgoing calls.

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernels	Satellites		In total	Kernels	Satellites
1	0	1	30	30	0
1	1	2	90	30	60
1	2	2	128	30	98
1	3	3	192	30	162

Table 6   *Number of Channels for incoming Calls*

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernels	Satellites		In total	Kernels	Satellites
1	0	1	30	30	0
1	1	2	90	30	60

Table 7   *Number of Channels for outgoing Calls*

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernel s	Satellites		In total	Kernel s	Satellites
1	2	3	150	30	120
1	3	4	210	30	180

Table 7   *Number of Channels for outgoing Calls*

2.4.4.4 HiPath 4000 with HG35xx

The HiPath 4000 V3 loadware must at least be of version V3.0 R7.4.0. It contains the loadware for the HG35xx

The channels are provided by Digital Signaling Processors (DSP). A DSP of an HG35xx is able to process a maximum of 30 voice channels. An HG35xx is always furnished with four DSPs and consequently supports up to 120 voice channels.

	Number of simultaneous HG35xx channels
Voice-only	120

Table 8   *Number of simultaneous Channels*

In case of mixed Voice/T.38 fax operation, a maximum of 16 T.38 fax channels per HG35xx can be used for the HiPath 4000 V3.0 and for the HiPath 4000 V4.0. Up to 60 T.38 fax channels are supported per STMI for HiPath 4000 V6 R2.14.1 (HF003111) and higher independent of the STMI version. This applies as well for OpenScape 4000 V7. The number of channels available for Voice is reduced by the number of channels used for T.38 Fax. Please note the increased minimum hardware-requirements for using T.38 Fax on more than two parallel lines (see Section 2.4.1, "Server", on page 35).

Connection scenarios from the XPR V7 view

The following table shows the maximum possible number of channels:

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernels	Satellites		In total	Kernels	Satellites
1	0	1	30	30	0
1	1	1	90	30	60
1	2	2	150	30	120
1	3	2	210	30	180
1	3	3	210	30	180
1	4	3 or more	270	30	240
1	5	3 or more	300	30	270

Table 9   *Number of Channels for incoming Calls*

Number of XPR PCs		Number of HGs	Channels voice-only		
Kernels	Satellites		In total	Kernels	Satellites
1	0	1	30	30	0
1	1	1	90	30	60
1	2	2	150	30	120
1	3	2	210	30	180
1	3	3	210	30	180
1	4	3 or more	270	30	240
1	5	3 or more	300	30	270

Table 10   Number of Channels for outgoing Calls

2.4.4.5 Connecting a HiPath 4000 V6 and OpenScape 4000 V7 via SIP

In case of connecting the HiPath 4000 V6 oder OpenScape 4000 V7 via SIP the following number of voice channels is available:

Codec	Maximum number of channels	
	Standard server[1] [2]	Virtual Machine[1] V4 or V5
G.711	150	80
G.729	100	-

1   For example one computer with two processors with four cores for each processor with 2,53 GHz, 12 GB RAM and 64 bit

2   The following values apply for older systems such as a Xeon computer with 3.6 GHz and 4 GB RAM: ISDN: G.711: 100 channels and G.729: 80 channels

Table 11   Maximum number of channels to a satellite computer

An even higher number of channels may be provided after a project-specific release. The entire maximum is 300 channels.

IMPORTANT: The table gives values for sample configurations. Use the load and dimensioning tool for more detailed values.

2.4.4.6 Connection to a HiPath 8000/OpenScape Voice via SIP

In case of connecting the HiPath 8000/OpenScape Voice via SIP the following number of voice channels is available:

Codec	Maximum number of channels	
	Standard server[1] [2]	Virtual Machine[1] V4 or V5
G.711	150	80
G.729	100	-

1   For example one computer with two processors with four cores for each processor with 2,53 GHz, 12 GB RAM and 64 bit
2   The following values apply for older systems such as a Xeon computer with 3.6 GHz and 4 GB RAM: ISDN: G.711: 100 channels and G.729: 80 channels

Table 12   *Maximum number of channels to a satellite computer*

An even higher number of channels may be provided after a project-specific release. The entire maximum is 300 channels.

IMPORTANT: The table gives values for sample configurations. Use the load and dimensioning tool for more detailed values.

Restrictions on connecting HiPath 8000 up to and including V3.0

An XPR server can only be connected to a HiPath 8000 up to and including version 3.0 as preregistered terminal device with several channels (BGL, Business Group Line), since connecting from voice mail may not be supported by HiPath 8000 in case of a connection via a trunk (EP, End Point).

This results in restrictions especially if satellites servers are used, since the HiPath 8000 V3.0 does not provide some features for preregistered terminal devices, such as call distribution, failover, Transport Layer Security (TLS) and arbitrary originator phone numbers.

Therefore, the satellites may not have the same access phone numbers. Each satellite requires an individual access phone number. Without further measures, only a computer with connection to the HiPath 8000 is possible.

Workaround

This problem can be evaded by assigning different Phonemail access phone numbers to different user groups. For example, you can assign access phone number 101, which represents the first satellite, to user group 1 and phone access number 102, which represents the second satellite to user group 2 etc. This means that a user of user group 1 must dial 101 as access phone number for Phonemail, whereas a user of user group 2 must dial the phone number 102 as access phone number for Phonemail. If 40 users of group 1 had access to Phonemail at the same time by dialing phone number 101, all channels of the first satellite would be occupied. A 41st user of user group 1 would then not be able

to access Phonemail by dialing phone number 101, even if all channels of the second satellite were available. When the first satellite is not operable, no user can access Phonemail by dialing 101. With this solution, up to 300 SIP channels with G.711 or G.729 are supported.

Connection to an OpenScape Voice V3.1 and later via SIP

The OpenScape Voice V3.1 and later via SIP provides call forwarding via a trunk (EP). Satellites are connected as trunks. All satellites have the same access phone numbers. OpenScape Voice distributes incoming calls among different satellites automatically. All users may use the same access phone number. A user may access Phonemail as long as at least one channel is vacant on one of the satellites.

The OpenScape Voice V3.1 and later recognizes a satellite as being not operable. In this case it routes incoming calls to other satellites.

SRTP is available for communication with optiPoint and OpenStage telephones as well as with RG gateways.

OpenScape Xpressions can set the phone number of an outgoing call to the phone number of the user who has initiated the call. This enables correct call charging for any terminal device.

2.4.5 Maximum Number of Cards and Channels

Single-node scenario

If OpenScape Xpressions is installed on a single computer (single-node scenario), a maximum of 2 S_{2M} interfaces can be installed.

If S_0 boards are used, a maximum of 5 cards can be installed. If the largest BRI cards (4BRI-8M) are used, 40 channels are available. In the event that more than 40 channels are to be available, PRI cards must be used. A maximum of 60 channels are supported.

Connection type	Maximum number of channels		
	Standard server[1]	Virtual Machine[2]	
		V4	V5
ISDN	120	✖	
Cornet IP (G.711)	60	20	60
SIP (G.711)	120	20	120
SIP (G.729)	100	-[3]	100

1 For example one computer with two processors with four cores for each processor with 2,53 GHz, 12 GB RAM and 64 bit
The following values apply for older systems such as a Xeon computer with 3.6 GHz and 4 GB RAM: ISDN: 60 channels, Cornet-IP (G.711): 30 channels, SIP (G.711): 60 channels and SIP (G.729): 60 channels
2 The virtual computer must have at least two cores and 4 GB RAM.
3 Because of its poor quality, G.729 is not released for VMware ESXi V4.

Table 13   Maximum number of channels for the single-node scenario

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IMPORTANT: The table gives values for sample configurations. Use the load and dimensioning tool for more detailed values.

Kernel-satellite scenario

NOTE: The maximum number of channels with a connection via ISDN can be achieved via different configurations. For example, 120 channels can be realized by using a 4PRI card with 120 channels or via 4 PRI cards with 30 channels each.

If you use the largest BRI boards (4BRI-8M) on the kernel computer, 40 channels are available. In the event that more than 40 channels are to be available, PRI cards must be used. A maximum of 60 channels are supported.

If you use the largest BRI cards (4BRI-8M) on a satellite computer, 40 channels are available. In the event that more than 40 channels are to be available, PRI cards must be used. A maximum of 120 channels are supported.

Connection type	Maximum number of channels								
	Standard server[1] as kernel			VMware ESXi[2] as kernel					
				V4			V5		
	In total	Kernels	Per satellite	In total	Kernels	Per satellite	In total	Kernels	Per satellite
ISDN	300	120	120	❌					
Cornet IP (G.711)	300	60	60	300[3]	0	60	300[3]	60	60
SIP (G.711)	300	100	150	300[3]	0	80	300[3]	100	150
SIP (G.729)	300	100	100	-[4]	-[4]	-[4]	300[3]	100	100

1 For example one computer with two processors with four cores for each processor with 2,53 GHz, 12 GB RAM and 64 bit
   The following values apply for an older kernel computer such as a Xeon computer with 3.6 GHz and 4 GB RAM:
   - In total: ISDN: 300 channels, CorNet-IP (G.711): 300 channels, SIP (G.711): 300 channels, SIP (G.729): 300 channels
   - Kernel: ISDN: 60 channels, Cornet-IP (G.711): 30 channels, SIP (G.711): 60 channels, SIP (G.729): 60 channels
   - Per satellite: ISDN: 120 channels, Cornet-IP (G.711): 60 channels, SIP (G.711): 100 channels, SIP (G.729): 80 channels
2 The virtual computer must have at least two cores and 4 GB RAM.
3 If required, distribute the load among several VMware-ESXi-entities.
4 Because of its poor quality, G.729 is not released for VMware ESXi V4.

Table 14   *Maximum number of channels for the kernel-satellite scenario*

IMPORTANT: The table gives values for sample configurations. Use the load and dimensioning tool for more detailed values.

2.4.6 Extension Restrictions on Conferences and OpenScape WebClient

The following extension restrictions apply:

- Voice conferences

  - Maximum 200 channels

    Each single conference may entertain a maximum of 100 subscribers.

    The voice channels for voice conferences are to be considered independently from voice channels for Unified Messaging. In particular, they are not counted among the systemwide restriction of 300 voice channels for Unified Messaging.

    IMPORTANT: A voice conference scheduled with n participants requires n+2 licenses because there are always two additional stand-by channels for unexpected participants.

- Connection to the PBX

  - S_0 or S_2 connection: HiPath 3000 V5, V6 and V7 and HiPath 4000 V3 and V4 cannot be connected via the program SIPControl by Sangoma Diva because SIPControl is not supported anymore by Sangoma Diva.

  - IP/SIP connection: All other PBXs listed in the subsection Connection options for new customers in Section 2.1, "PBX Connection Options", on page 17 are connected via an SIP trunk. Among such PBXs you find e. g. HiPath 3000 V8 and V9, HiPath 4000 V5, HiPath 4000 V6, OpenScape 4000 V7, R8300 (project-specific), HiPath 5000 (project-specific) and OpenScape Voice. R8300 is a HiPath 4000 with a reduced scope of service.

  - Please consider the increased hardware requirements (see Section 2.4.1, "Server", on page 35).

- Web conferences

  - Maximum 200 channels, i. e. any number of conferences with a maximum total of 200 conference participants

  - Each single conference may entertain a maximum of 100 subscribers.

  - Please consider the increased hardware requirements (see Section 2.4.1, "Server", on page 35).

- OpenScape Web Client

  - Maximum 2500 users

In case of a higher number of users a project-specific release must be requested

2.5 Languages

The following languages are supported:

Language	Communications optiClient 130 Web Client Notes Extensions	Outlook Extensions Web Assistant	IPPAssistant	XPR Application Builder
German	✓	✓	✓	✓
English	✓	✓	✓	✓
French	✓	✓	✓	
Spanish	✓	✓	✓	
Italian	✓	✓	✓	
Dutch	✓	✓	✓	
Portuguese	✓	✓	✓	
Brazilian	✓	✓	✓	
Turkish	✓	✓		
Russian	✓	✓		
Catalan		✓		

Table 15   Supported languages with GUI applications

Language	PhoneMail	Conferences	VMS	Evo Caller Guide	Text-to-speech
German	✓	✓	✓	✓	✓
English (US)	✓	✓	✓	✓	✓
English (UK)	✓	✓	✓	✓	✓
French (France)	✓	✓	✓	✓	✓
French (Canada)	✓	✓	✓		✓
Spanish	✓	✓	✓		✓
Spanish (US)	✓	✓	✓		✓
Italian	✓	✓	✓		✓
Dutch	✓	✓	✓		✓
Portuguese	✓	✓	✓	✓	✓
Brazilian	✓	✓	✓		✓
Turkish	✓	✓	✓		
Russian	✓	✓	✓		✓
Slovenian			✓		
Catalan	✓				

Table 16   Supported languages with TUI and SUI applications

Please note that, except for Catalan, the languages supported for PhoneMail are identical with the languages supported for conferences.

2.6 Released Software

NOTE: The version numbers specified here can be increased within the scope of bug fixing (hotfixes). Updated OpenScape Xpressions software components are available in the G-DMS respectively PRISMA.

2.6.1 Included in the Scope of Delivery

- OpenScape Xpressions V7

  Please obtain the build number from the release notes on the OpenScape Xpressions setup medium.

- Sangoma drivers of version 8.5.10 with support for CorNet-N/NQ/T

  IMPORTANT: Sangoma ISDN PRI boards with the hardware version 1.0 and 2.0 are no longer supported by the Sangoma drivers of version 8.5.10 used with XPR.

- Voice prompts on the OpenScape Xpressions setup medium (in the respective language packets)

- HiPath license management

- Nuance Vocalizer for Networks 5

- Nuance Recognizer 9

- Adobe Acrobat Reader 9

- Microsoft SQL Server 2005 Express

- PostgreSQL database

- CAP Inside

- Crystal Report Runtime Engine

2.6.2 Not included in the Scope of Delivery

2.6.2.1 Server

Operating systems for XPR Server

Language	Operating system	Release	Service pack	Bit-width	Edition	Released Real	Virtual
English[1]	Windows Server 2025 [2][3][4][5][6]	R0	-	64	Standard	✓	✓
English[1]	Windows Server 2022 [2][3][4][5][6]	R0	-	64	Datacenter	✓	✓
German[1]/ English[1]	WIndows Server 2019 [2][3][4][5][6]	R0	-	64	Standard	✓	✓
					Datacenter	✓	✓
	WIndows Server 2016 [2][3][4][5][6]	R0	-	64	Standard	✓	✓
					Datacenter	✓	✓
	Windows Server 2012[2][3][4][5][6]	R0 and R2	-	64	Datacenter	✓	✓
					Standard	✓	✓
					Standard for Embedded Systems - Telecommu-nications	✓	✓
	Windows Server 2008[7]	R2[4]	SP1	64	Datacenter	✓	✓
					Enterprise	✓	✓
					Standard	✓	✓
					for Embedded Systems - Telecommu-nications	✓	✓
	Windows Cluster based on Windows Server 2012[2][3][5][6]	R2	-	64	Datacenter	✓	✓
					Standard for Embedded Systems - Telecommu-nications	✓	✓
	Windows Cluster based on Windows Server 2008[7]	R2	SP1	64	Datacenter	✓	✓
					Enterprise	✓	✓
					for Embedded Systems - Telecommu-nications	✓	✓

Table 17   *Released operating systems for the XPR server on real and virtual computers*

Language	Operating system	Release	Service pack	Bit-width	Edition	Released	
						Real	**Virtual**
German[1]/ English[1]	Windows 7	-	-	64	Professional	✔ with restrictions[8]	✖
				32		✖	✖

Table 17   Released operating systems for the XPR server on real and virtual computers

1 UEFI (Unified Extensible Firmware Interface) is not supported for any operating system. Use a BIOS instead. If you use hardware that supports UEFI, check that the Legacy Only Flag is in top position of the boot sequence.
2 Only the Desktop Mode is supported. The Modern UI Mode (Metro Mode) is not supported.
3 Only NTFS is supported as file system. ReFS (Resilient File System) is not supported.
4 **IMPORTANT**: TTS and ASR are only released on this operating system and for the case that one of the following conditions has been fulfilled:
   - Use of real hardware or
   - Use of VMware ESX V4.0 or
   - Use of VMware ESXi V5.0, V5.1 or V5.5
5 **IMPORTANT:** You need to select an installation version while setting up Windows Server 2012, Windows Server 2016 or Windows Server 2019, Windows Server 2022, Windows Server 2025. Only the **Server with a GUI** setup version is supported. The installation version **Server Core Installation** (no .NET framework, reduced GUI etc.) is **not** supported
6 If you use Windows Server 2012, Windows Server 2016 or Windows Server 2019, Windows Server 2022, Windows Server 2025. NET Framework 4 has been installed per default. Download .NET Framework 3.5 from the internet and install it additionally.
7 **IMPORTANT:** You need to select an installation version while setting up Windows Server 2008. Only the installation version **Full Installation** is supported. The installation version **Server Core Installation** (no .NET framework, reduced GUI etc.) is **not** supported.
8 **IMPORTANT:** The following releases apply for operating OpenScape Xpressions on Windows 7 Professional :
   - Up to 8 channels
   - Up to 200 users
   - SMTP and IMAP4
   - Web Assistant (WebApl)
   - ISDN hardware via ISDN APL (CAPI)
   - Unified Messaging for Voice, Fax and Mail
   - PhoneMail Telephone User Interface (TUI)
   - VMS TUI
   - ERGO Telephone User Interface (TUI)
   - Connection to Microsoft Exchange
   - No satellite systems or clusters
   - No connection to groupware such IBM Notes/Lotus Notes or SAP
   - No conference server.

VMWare

Using OpenScape Xpressions V7 in a virtual environment based on VMware is released for the following versions:

- VMWare

- VMware ESX V4.0

- VMware ESX V4.1

- VMware ESXi V4.0

- VMware ESXi V4.1

- VMware ESXi V5.0

- VMware ESXi V5.1

- VMware ESXi V5.5

- VMWare ESXi V6.0

- VMWare ESXi V6.5

- VMWare ESXi V6.7

- VMWare ESXi V7.0

- VMWare ESXi V8.0

VMware ESXi is also called VMware vSphere Hypervisor.

- Proxmox KVM VE 8.3.1

- Microsoft Hyper-V

IMPORTANT: Not all versions have been released for TTS and ASR (see footer [4] in Table 17 on page 57).

The following configuration parameters apply:

Property	Minimum hardware	Number of XPR users					
		300	1000	3000	5000	10000	15000[1]
Server	XPR (Voice Only System)						
Scenario	Single-node scenario					Kernel-satellite scenario	
Number of kernel computers	1						
Number of satellite computers (minimum)	0					2	3
Number of supported channels	See Table 13 on page 51, "Maximum number of channels for the single-node scenario"					See Table 14 on page 52, "Maximum number of channels for the kernel-satellite scenario"	
Configuration parameters of the virtual computer							
Size of the virtual disk in GB[2]	80	80	85	220	360	Kernel: 690, each satellite: 80	Kernel: 1030, each satellite: 80
Number of virtual CPUs (minimum)[3][4]	1	1[5]	1[5]	2[5]	3[5]	Kernel: 2[5], per satellite: 2[5]	Kernel: 3[5], per satellite: 2[5]
Memory size in GB (minimum)[6]	3	3	3	3	3	Kernel: 3, per satellite: 2	Kernel: 4, per satellite: 2
Further parameters.							
Additionally required disk space [7] in GB	0						
Hard disk throughput in kB/s	Unavailable	260	800	1250	2200	3900	5100
Network bandwidth in kbit/s	Unavailable	1300	3000	6400	12000	86000	160000

Table 18   Virtual Machine configuration parameters

1 XPR on Virtual Machine for 15000 users needs a project-specific release.
2 Parameter **Capacity**
3 Changing the number of virtual CPUs after the operating system is installed is not supported.
4 With VMware ESXi 4.1 the parameter is called **Number of virtual processors** and with VMware ESXi V5.1 it is called **Total number of cores**.
5 Xeon X7560 with 2.27 GHz
6 The number of possible guest operating systems in which an XPR server may be installed and operated depends to a great extent on the performance of the host system. Please note that the real load generated in real operation is hard to estimate in advance and depends on many factors. Therefore, we recommend copious load tests before a host system starts real operation and to increase the RAM if needed.
7 Disk space on the computer or SAN for e. g. images, patch sets, restore CDs etc.

You find additional configuration parameters in the section "XPR in a virtual Environment" in the installation guide *OpenScape Xpressions Server Installation*.

Support of VMware features or products

The following VMware features or products are supported:

1. VMware High Availability

> *IMPORTANT:* In case of damaged hardware there is only little risk of the system not being restorable because of a damaged file system. This risk is unspecific for the OpenScape UC Application. It concerns every virtual computer protected by VMware High Availability.

2. VMware vMotion

   VMware vMotion is a tool for migrating a running virtual computer from one host computer to another host computer. This tool has been released with the following restrictions:

   a) Time of the migration

   > *IMPORTANT:* Use VMware vMotion only at times of low system load. **Do not** use VMware vMotion during business hours!

   b) No CPU core must be permanently assigned to a virtual computer during the migration. If you use permanently assigned CPU cores, cancel this assignment before the migration and reassign the cores after the migration. You can do this while the virtual computer operates.

   c) Each fax being transmitted at the time of a migration will be damaged or abandoned. This effect is stronger for G.711 than for T.38.

   d) Callers hear during the migration a short cracking noise at the most or are shortly interrupted. The phone call will not be terminated.

   e) Now and then and for a short moment (1 s - 2 s) you will not receive a response when operating the clients (CSTA and MSP) but things will be all right again after the migration.

   f) If the kernel computer or a satellite computer is migrated in a distributed system, the connection may become shortly interrupted. If the satellite computer receives a message to be transported to the message store of the kernel computer in this moment, the message gets lost and an error message is generated.

3. VMware vSphere Data Protection 5.1 (VDP) and VMware Data Recovery (VDR)

> *NOTE:* See point for further data backup and restore options.

VDP operates on VMware ESXi V5.x. VDR operates on VMware ESXi V4.x.

When backing up a virtual machine with VMware vSphere Data Protection 5.1 on Windows 2008 R2, the `disk.EnableUUID` parameter must be previously set to `false` in the settings of the virtual computer.See also VMware-Knowledge-Base-Artikel 2035736:

```
http://kb.vmware.com/selfservice/microsites/
search.do?language=en_US&cmd=displayKC&externalId=2035736
```

The following VMware features or products are **NOT** supported:

1. VMware Distributed Resource Scheduler (DRS)

2. VMware Fault Tolerance

The following applies:

1. XPR on Virtual Machine is released in local company networks only.

2. Verify that the host systems, storage systems and networks used provide the required resources and response times.

   Please note the following:

   a) Be sure to exclusively use the features supported by Virtual Machine solution provider.

   b) Heed the warnings in the Virtual Machine documentation.

      For example, changing the number of CPU cores after the XPR installation is **not** permitted.

   c) Follow the instructions in the Virtual Machine documentation for enabling a solution that comes close to a real-time system as far as possible.

   d) Configure the virtual computer according to Table 18 on page 60, "Virtual Machine configuration parameters". Reserve in particular the CPU and memory resources according to this table.

3. The following scenario is supported also: The XPR server (kernel) is installed on a virtual computer with the Virtual Machine software released above. One or several satellite computer(s) is/are connected to this XPR server. Such satellite computers can be virtual computers with the Virtual Machine software released above or real computers. If they are real computers, you can use Sangoma ISDN boards in them (see Section 2.4.1, "Server", on page 35).

4. If you use real computers for the XPR server, a maximum of 15000 users is supported. If more users are to be supported, a project-specific release (PSR) must be applied for.

   When using the load and dimensioning tool (see Chapter 1, "General Considerations") you need to set in the tool that the values for a virtual environment shall be calculated.

5. In such a scenario, the hardware requirements of the host system and of all guest systems must be added. This applies in particular for RAM and hard disk capacity.

6. Furthermore, such a scenario merely allows an IP-based connection. Please heed for your dimensioning the hard and software requirements mentioned in the OpenScape Xpressions *Server Installation* instructions for operating OpenScape Xpressions V7. Please also note the hard and software requirements of the virtualization software. There will be no support if problems occur that origin from scenario-specific conditions and that cannot be uniquely assigned to the OpenScape Xpressions V7 product.

7. Data backup and restore

Data backup and restore is supported on virtual computers with Windows Server 2008 R2 by the following means:

a) Microsoft Windows Server Backup Features

   Open **Start** > **All Programs** > **Administrative Tools** > **Server Manager** > **Features** > **Add features** > **Windows Server Backup Features** to initiate the installation of the server backup features. You can then start them under **Start** > **All Programs** > **Administrative Tools** > **Windows Server Backup**.

b) Veeam Backup & Replication 6.1

c) VMware vSphere Data Protection 5.1 (VDP)

d) VMware Data Recovery (VDR)

   See point for details.

Miscellaneous

- Microsoft Exchange Server 2003 with SP2, 2007 and 2010

- PCAnywhere version 12 + SP (software for remote maintenance)

- Connector components for IBM Domino integration / Lotus Domino integration

  – Lotus Notes/Domino R 6.0 German/English

  – Lotus Notes/Domino R 6.5.1, 6.5.3 or 6.5.4 German/English

  – Lotus Notes/Domino R7 versions 7.0.0, 7.0.1, 7.0.2 German/English

  – Lotus Notes/Domino R8 versions 8.0.x and 8.5.0 to 8.5.3 German/English

    The Lotus Notes Basic Configuration client is supported as connector component of the Lotus Domino integration but not the Lotus Notes Standard Configuration client.

  – IBM Notes 9.0 Social Edition (Basic Configuration) and IBM Domino 9.0 Social Edition German/English

    NOTE: The names of versions lower than IBM Notes 9 and IBM Domino 9 are Lotus Notes and Lotus Domino.

    NOTE: If you use IBM Notes 9.0 Social Edition (Basic Configuration) and IBM Domino 9.0 Social Edition, use the mail templates for Lotus Notes 8.

- Antivirus programs

  – TrendMicro Office Scan V8.0

This virus detector is released for operation parallel to the XPR server only.

XPR was tested with TrendMicro Office Scan successfully. If problems occur with other anti-virus software it may have to be disabled or uninstalled.

NOTE: When you perform a real-time scan, you need to exclude the directories `<install>\Backup`, `<install>\Folders` and `<install>\Infostor` from the scan to avoid access errors. `<install>` is typically `C:\OpenScape\xpr`.

– AV4UC (Trend Micro)

The following products of the AV4UC (Trend Micro) product family have been released:

- Server Protect for Windows (SPNT) V5.58

- Control Manager Advanced (CMA) V5.5

2.6.2.2 Clients

NOTE: All client programs except for optiClient 130 with HFA (HiPath Feature Access) can also be executed on 64-bit operating systems. However, they are not compiled in the 64-bit mode.

The following programs have been released for the clients:

UEFI (Unified Extensible Firmware Interface) is not supported for any operating system. Use a BIOS instead. If you use hardware that supports UEFI, check that the Legacy Only Flag is in top position of the boot sequence.

*   Microsoft Windows 7 Professional Edition

*   Microsoft Windows 7 Ultimate Edition

*   Microsoft Windows 7 Enterprise Edition

*   Microsoft Windows 8.1 Pro Edition

*   Microsoft Windows 10 Pro

    Restrictions:

    *   Only the Desktop Mode is supported. The Modern UI Mode (Metro Mode) is not supported.

    *   UEFI (Unified Extensible Firmware Interface) is not supported. Use a BIOS instead.

*   Client programs for application conversions

    The MTA can convert specific application formats into a fax format by invoking an associated application. With the following programs application converters are available for the formats:

    –   Microsoft Office 2016/2019/2021//2024/365 Apps

        *   Microsoft Word: doc, rtf, htm

        *   Microsoft Excel: xls

        *   Microsoft PowerPoint: ppt, pps

        Microsoft Office 2010/2013/2016/2019 can be used for the application conversion in the 64-bit version also.

    –   Foxit Reader:pdf

    Other application conversions are not approved, but you can use them project-specifically without producer support.

- Exchange clients

  - Microsoft Outlook 2007

  - Microsoft Outlook 2010

  - Microsoft Outlook 2013

  - Microsoft Outlook 2016

  - Microsoft Outlook 2019

  - Microsoft Outlook 2021

  - Microsoft Outlook 2024 Classic

  - Microsoft Outlook 365 Classic

- IBM Notes / Lotus Notes

  NOTE: The names of versions lower than IBM Notes 9 are Lotus Notes.

- Lotus Notes 6.5.1, 6.5.3 or 6.5.4

- Lotus Notes 7.0.0 and 7.0.1, 7.0.2

- Lotus Notes 8.0.x and 8.5.0 up to 8.5.3

- IBM Notes 9.0 Social Edition (Basic Configuration)

  NOTE: If you use IBM Notes 9.0 Social Edition (Basic Configuration), use the mail templates for Lotus Notes 8.

- SAP R/3 from version 4.5b

- IMAP clients

  - Microsoft Outlook 2007

  - Microsoft Outlook 2010

  NOTE: All these Outlook versions are released as OpenScape Xpressions IMAP client only on client PCs on which Outlook is not already operated as Exchange client.

- Internet browser

  – For the WebClient

    - Internet Explorer 7. 0, 8.0, 9, 10 and 11

    NOTE: If you use Internet Explorer 10, make sure that the compatibility view is not used for the intranet, executing the following steps:
    In the menu bar open **Tools** > **Compatibility View settings...** and clear the **Display intranet sites in Compatibility View** check box.

    NOTE: If you use Internet Explorer 11, make sure that the compatibility view is used for the intranet executing the following steps:
    In the menu bar open **Tools** > **Compatibility View settings...** and check the **Display intranet sites in Compatibility View** check box.

    - Firefox 2.0 up to 3.6

    NOTE: The web browsers versions support for the XPR WebClient will not be updated anymore.

  – For the WebAssistant

    - Internet Explorer 7. 0, 8.0, 9, 10 and 11

    NOTE: If you use Internet Explorer 10 or newer, make sure that the compatibility view is not used for the intranet executing the following steps:
    In the menu bar open **Tools** > **Compatibility View settings...** and clear the **Display intranet sites in Compatibility View** check box.

    - Firefox 59.0

    - Safari 5.1.7

    - Chrome 66.0

    NOTE: If the Firefox setting enables saving passwords, a dialog to confirm the password opens each time a user with administrator privileges accesses the configuration page of a user.

2.7 Documentation

Part number	Documentation type	Title
A31003-S2370-S100-*-20	Service documentation	Release Notice
A31003-S2370-S101-*-20	Service documentation	Security checklist
A31003-S2370-Y100-*-7618	Description	System Description
A31003-S2370-J100-*-31	Installation guide	Server Installation
A31003-S2370-J101-*-31	Installation guide	Cluster Installation
A31003-S2370-J102-*-31	Installation guide	Upgrade Instructions
A31003-S2370-J103-*-31	Installation guide	Client Installations
A31003-S2370-J105-*-31	Installation guide	Cisco UC Manager
A31003-S2370-J106-*-31	Installation guide	optiClient 130 & MS Dynamics CRM
A31003-S2370-M100-*A9	Administrator documentation	Server Administration
A31003-S2370-M101-*A9	Installation and administrator documentation	Microsoft Exchange Gateway
A31003-S2370-M102-*A9	Installation and administrator documentation	IBM Notes Gateway
A31003-S2370-M103-*A9	Installation and administrator documentation	SAP R/3 Gateway
A31003-S2370-M104-*A9	Administrator documentation	Multi Tenancy
A31003-S2370-M105-*A9	Installation and administrator documentation	Multimedia Contact Center
A31003-S2370-M106-*A9	Administrator documentation	optiClient 130 Administration
A31003-S2360-U100-*-7619	User guide	Client Applications
A31003-S2370-U101-*-19	User guide	Web Assistant
A31003-S2370-U122-*-19	Short user guide	Web Assistant
A31003-S2370-U102-*-19	User guide	Microsoft Outlook Extensions
A31003-S2370-U123-*-19	Short user guide	Outlook Extensions
A31003-S2370-U103-*-19	User guide	IBM Notes Extensions
A31003-S2370-U104-*-19	User guide	optiClient 130
A31003-S2370-U124-*-19	Short user guide	optiClient 130
A31003-S2370-U125-*-19	Short user guide	optiClient 130 - ACD Agent
A31003-S2370-U105-*-19	User guide	OpenScape Web Client
A31003-S2370-U106-*-19	User guide	PhoneMail
A31003-S2370-U107-*-19	Short user guide	PhoneMail User Card
A31003-S2370-U108-*-19	Short user guide	PhoneMail Function Tree
A31003-S2370-U109-*-19	Short user guide	PhoneMail Function Tree Simplified mode
A31003-S2370-U126-*-7619	Short user guide	PhoneMail Function Tree Octel-like-Menu (in English only)
A31003-S2370-U110-*-19	User guide	VMS
A31003-S2370-U111-*-19	Short user guide	VMS User Card
A31003-S2370-U112-*-19	Short user guide	VMS Function Tree

A31003-S2370-U113-*-19	User guide	EVO
A31003-S2370-U114-*-19	User guide	ERGO
A31003-S2370-U115-*-19	Short user guide	ERGO
A31003-S2370-U116-*-19	Short user guide	ERGO Function Tree
A31003-S2370-U117-*-19	Short user guide	Conferencing
A31003-S2370-U118-*-19	User guide	Communications
A31003-S2370-U119-*-19	User guide	Application Builder
A31003-S2370-U120-*-19	User guide	IP-Phone Assistant

2.8 General Information

Further XPR V7 platform features listed neither in the sales information nor under the project-specific releases are generally not available with OpenScape Xpressions V7.

2.9 Product Validation and Quality Approval Procedure

The OpenScape Xpressions test results are recorded in a specific test report.

3 Restrictions

3.1 General Restrictions

1. The XPR server must not be installed on the domain controller.

2. Connecting a HiPath 3000 via the CorNet-NQ protocol to OpenScape Xpressions V7 is not released.

3. Fax-on-demand is only permitted by the server in fax-polling mode. FOD services executed via the voice menu are not released.

4. Fax-On-Demand is only supported with connection via ISDN APL.

5. Access via OpenScape Xpressions Communications to TUM mailboxes is not possible for foreign message stores.

6. Access numbers starting with "0" are not possible.

7. As of XPR V7 R0, only Nuance Vocalizer for Networks is used for text-to-speech.

8. If more than three Sangoma-4BRI boards are used in combination with CorNet-T, the connection can be bad in case of call forwardings. As workaround a new key of type REG_MULTI_SZ must be defined under the name `Private` and set to value `TransferViaDeflect=1` in the registry under

   `HKLM\SOFTWARE\PP-COM\MRS\IsdnApl\Devices\`*XX*
   (with *XX* representing the devices)

   for each device (one 4BRI module provides 4 devices).

9. OpenScape Xpressions supports up to 60 APLs plus kernel services (MTA, InfoStor, XMRSvc, NameLoc, CfgSvc, mrs).

10. The maximum number of users is restricted to 5000 per ExUmAPL.

11. The following Application Protocol Layers (APLs) are not supported any more:

    • WE2XT

    • XA2HT

    • HLBFAX

    • LDAPs

    • HXCSvc

12. When using a HiPath 8000 or OpenScape Voice, display texts for the TUI are not supported.

13. The HiPath Xpressions Extensions (HXE) are released neither for a new installation nor for an update.

14. Using the OfficeScanNT personal firewall is not supported on a OpenScape Xpressions server, since otherwise the connection between the CLC and the CLA would be disturbed and the OpenScape Xpressions server functionality could not be guaranteed.

15. The Microsoft SQL Server Desktop Engine (MSDE) has been replaced with SQL Server 2005 Express, because Microsoft does not support MSDE any more.

16. optiClient 130 can be operated in a combined connection, i.e. it can be connected to an XPR server as well as to an SIP communication system as SIP telephone in parallel In this combined connection it can solely use the following XPR services:

    • ACD features

    • Call journal

    • Presence feature

    • Server directory

    In the combined connection, optiClient 130 can especially not be used as CTI client to monitor and control a desk telephone.

17. The following components are approved for operation on terminal servers:

Client Component	Microsoft 2003/2008 Terminal Server	Citrix MetaFrame XP
optiClient 130	Yes[*]	Yes[*]
Outlook message forms	Yes	Yes
MAPI fax printer drivers	No	Yes

[*] The support of optiClient 130 in Microsoft terminal server environments respectively Citrix MetaFrame environments is restricted to the use of CTI features. Usage as IP client (SIP softphone) is not possible here.

    The OpenScape Xpressions Communications Client and the Notes Client are not released for terminal server operation.

18. optiClient 130 cannot be used as SIP telephone on Windows Vista.

19. If optiClient 130 is to communicate as SIP softphone via a VPN connection, the QoS packet planner must not be installed under the Windows operating system.

20. An optiClient 130 of product type Xpressions must not be installed on a computer on which an optiClient 130 different from the Xpressions product type has been set up. The same applies vice versa also.

21. The Microsoft Outlook integration of optiClient 130 must not be used in combination with the Microsoft-Outlook-Add-In CryptoEx Outlook Version 3.0.

22. The 64-bit version of Outlook is not supported by optiClient 130. This applies not only for the CTI client optiClient 130 but also for the optiClient 130 plug-in in Outlook ("Dial" button).

    This button and other buttons in Outlook caused by the Outlook Extensions (icon and message forms) are independent of each other.

23. CSV import with the Web Client is not supported for Outlook 2010.

24. The Caller Guide is only released for using names that do not contain any digits.

25. Crystal Reports 2008 must not be installed on the computer that also hosts Crystal Reports Developer Edition XI.

26. Direct Delivery of Incoming Messages via SMTP

    If SMTP is entered in the PREFERRED field as the service so that incoming messages are forwarded to another SMTP mail server directly via SMTP, the OpenScape Xpressions data can no longer be accessed using IMAP4/POP3 clients or the telephone user interface. For this reason, this configuration is not recommended.

27. The IP APL with CorNet-IP **does not** support the following features:

    • Digit-by-digit dialing information transmission

      If case of a digit-by-digit dialing information transmission the first call sign received is already evaluated. If the dialing information is transmitted block-by-block, a received phone number is not further processed until the entire phone number is received. The PBX must be set to either block-by-block or digit-by-digit dialing information transmission. In contrast, no settings need to be made in the IP APL.

    • Callback if busy (CCBS; Completion of Calls to Busy Subscriber)

      A caller who receives a busy sign from his/her callee can request this feature via his/her telephone's keypad before putting the phone down. When the previously busy callee puts his/her phone down, the caller's telephone is informed about this by a special ringtone. If the caller answers this return call by picking up the receiver, the callee is called again.

    • Callback if no reply (CCNR; Completion of Calls on No Reply)

      A caller whose call is not accepted can request this feature via his/her telephone's keypad before putting the phone down. When the callee puts the phone down the next time, the caller's telephone is informed about this by a special ringtone. If the caller answers this return call by picking up the receiver, he/she is reconnected to the desired callee.

- Hicom PIN

  If you call the XPR server access number you need to enter a PIN for logging on. The HiCom-PIN feature means that you only need to perform this logon process once a day. In case of a second call you are logged on without being prompted to enter a PIN.

- Remote activation of a call diversion

  Remote activation of a call diversion means that you, for example, call the access number of the XPR server TUI from your private phone to activate a call diversion to your own business phone by TUI.

28. OpenScape Web Client requires a Java runtime environment of version 1.4 or later on the client computer to function correctly. Version 1.4.2.06 of the Java runtime environment is not supported.

29. OpenScape Web Client must not be installed if the XPR is integrated with a HiPath ComAssistant. In this case you may consider replacing the HiPath ComAssistant with the OpenScape Web Client integrated in Xpressions.

   The OpenScape Web Client was developed based on the HiPath ComAssistant. Instead of directly accessing the PBX or via HiPath CAP, every access made goes via the combination of CSTA APL and CTI APL. Therefore, some specialities that the HiPath ComAssistant mastered with specific PBXs are not possible here. In particular, only the settings listed in the administrator documentation *OpenScape Xpressions Server Administration* have been tested and released. You can test continuative configuration options via a project-specific release.

30. You must not set up an XPR on a computer on which a HiPath ComAssistant is installed. In this context it is irrelevant whether or not the XPR is to be integrated in the HiPath ComAssistant.

31. **No** client program supports Citrix Application Isolation.

32. The name of the computer on which the XPR is installed must not exceed 15 characters.

33. No NAT may exist between the OpenStage telephones and the XPR server, since this would prevent voicemail playback.

34. Setting up an XPR Connection APL on a satellite has not been released.

NOTE: It can be released project-specifically only if this satellite is connected to an XPR kernel on a Windows cluster (see point 6 on page 80 for further details and please also refer to point 4g on page 91).

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35. The Application Builder comprises ASR (Automatic Speech Recognition) and ACD (Automatic Call Distribution) also. ASR is a component of the default XPR product and can be licensed. However, ACD is not a component of the default XPR product and requires a special license.

36. A T.38 fax is transmitted with a maximum of 35 kbit/s per channel. More important than the transmission speed is the latency period, which must not exceed 100 milliseconds.

37. The following requirements must be complied with for using the ERGO Trusted Transfer Mode (TTM):

    a) The XPR server and the OpenScape UC Application must be connected to the same PBX.

    b) The XPR server and the OpenScape Voice must be connected to each other via SIP.

    c) The Trusted Transfer Mode supports only a 1:1 relationship between an ERGO entity and a voiceportal access number.

    d) The start character in phone number format of the Trusted Transfer Mode must not be removed from a PBX or a gateway between the XPR server and the OpenScape UC Application.

38. The computer on which the VM2TXT APL runs must have a TCP connection to the internet. If the VM2TXT APL is installed on a Windows cluster, both of these cluster nodes must provide this internet connection. Please consider that the customer may regard this as a security risk. If the computer on which the XPR core components run are not connected to the internet but the VM2TXT APL is required just the same, this APL must be installed on a satellite computer.

    The VM2TXT APL sends the voicemail contents to a computer by Nuance for conversion into text. This too might be considered a security risk.

39. The following features are not supported anymore:

    • MMCC (Multimedia Contact Center)

    • x-Kit

    • TNG (The Next Generation)

    • SAPbyDesign

    These features must not be upgraded in the course of an upgrade to XPR V7. They must be uninstalled.

    All information about these features in other XPR V7 documentation is obsolete.

40. SSL 2 and SSL 3 are no longer supported by the WebAPL. They were replaced with TLS. Only the following ciphers are supported:

```
TLS_RSA_WITH_AES_128_CBC_SHA          AES128-SHA
TLS_RSA_WITH_AES_256_CBC_SHA          AES256-SHA
TLS_RSA_WITH_3DES_EDE_CBC_SHA          DES-CBC3-SHA
SSL_RSA_WITH_3DES_EDE_CBC_SHA          DES-CBC3-SHA
TLS_DHE_RSA_WITH_AES_128_CBC_SHA    DHE-RSA-AES128-SHA
TLS_DHE_RSA_WITH_AES_256_CBC_SHA    DHE-RSA-AES256-SHA
TLS_DHE_RSA_WITH_3DES_EDE_CBC_SHA EDH-RSA-DES-CBC3-SHA
SSL_DHE_RSA_WITH_3DES_EDE_CBC_SHA EDH-RSA-DES-CBC3-SHA
```

NOTE: TLS V1.0 is identical with SSL V3.1.

IMPORTANT: Now TLS V1.2 is used by default.

---

41. TTS and ASR are released only on a specific operating system and for the case that one of the following conditions has been fulfilled:
    - Use of a real hardware or
    - Use of VMware ESX V4.0 or
    - Use of VMware ESXi V5.0, V5.1 or V5.5
    (see footer [4] in Table 17 on page 57)

42. A PrintAPL supports a maximum of 150 printers.

43. IPv6 is not supported by XPR.

44. The following features are not supported anymore:

    • Wall APL

    • ACD Supervisor

All information about these features in other XPR V7 documentation is obsolete.

45. You cannot perform a phone number normalization depending on the invoking user for MSPTSP applications.

   MSPTSP is short for MSP TAPI Service Provider.

   The MSPTSP is a TAPI Service Provider that translates TAPI commands in CTI transactions of the XPR server. Communication occurs via the MSP as is usual for the XPR server. However, there's the speciality that the MSPTSP operates as TAPI service provider in the system context of the operating system, thus being unable to deploy the MSP user profiles possibly configured, because it is not privileged to access such data. In this respect, an individual user profile valid for the computer on which the MSPTSP operates must be configured for the MSPTSP. For this reason, logging on via the Windows user account is not possible either.

   See the operation guide *OpenScape Xpressions Client Applications* for MSPTSP details.

46. Multi tenants

   a) Voice guide (Vogue) support

      If a user deploys the voice guide on an XPR server with several tenants, only users of the same tenant are returned if a corresponding configuration has been performed. Such settings are valid for an SIP connection only.

   b) The location and tenant settings of the XPR server can be configured with help of the FI APL and a configuration file. To enable this, the XprConfig.e configuration script, being able to process appropriate configuration files, is shipped for the FI APL. Such settings are valid for an SIP connection only.

47. A silent upgrade does not need any user interaction. The following restrictions apply to it.

   a) Only XPR V6 R2 64-bit, XPR V7 R0 64-bit and XPR V7 R1 64-bit can be upgraded silently to XPR V7 R1 FR1.

   b) The silent upgrade does not change any feature, i. e. it corresponds to a normal upgrade that has been initiated by the **Repair** radio button.

   c) The silent upgrade of UCC components such as Web Collaboration server, ConAPL, media server and conferencing module is not supported on satellite computers.

   d) XPR clients such as Communications or XPR Monitor must have been terminated before the silent upgrade has been started.

48. You can configure in the OpenScape Web Client that incoming calls are forwarded to another phone number if your office phone is engaged (**on busy to** radio button) or if the specified ring time of the device is exceeded (**after time to** radio button). These two features are not supported for a connection to a HiPath 4000/OpenScape 4000 via SIP or for a connection to a HiPath 3000.

49. XPR on Virtual Machine is supported only for up to 10000 users. A project-specific release is needed for more than 10000 users.

50. Internet Explorer 11 is supported by Xpressions WebClient only when running in Compatibility View Mode.

> *NOTE:* If you use Internet Explorer 11, make sure that the compatibility view is used for the intranet executing the following steps:
> In the menu bar open **Tools** > **Compatibility View settings...** and check the **Display intranet sites in Compatibility View** check box.

51. DI-Tool is not supported with Internet Explorer 11.

52. Windows 8 Metro Interface is not supported.

53. The communications client does not support tenant features. The WebAssistant is recommended to be used to work with tenant users.

54. Due to the Office 2007 End Of Life declared by Microsoft on October 10th, 2017, Xpressions Development team will no longer provide support for this Microsoft Office version. (https://support.office.com/en-us/article/office-2007-end-of-life-roadmap-416c54d8-823c-4def-bb7a-6a9b14ef2745).

    Therefore, Outlook 2007 forms (SBF/SBFCC/LocalForms) and Office 2007 server conversion will not be supported anymore.

55. OpenScape Xpressions client 'Communications' must be used only for Administrative purposes and must not be used as a mail client. WebAssistant should be used in its place.

56. TLS V1.2 is used by default.

    If for some reason TLS V1.1 or TLS V1.0 needs to be used for webapl, ipapl or smtpapl, then the related DWORD registration keys can be enabled. (SSL_TLSv1_Enable or SSL_TLSv1_1_Enable)

57. Xpressions UCC components out of support

NOTE: Apache Tomcat server may have unfixed vulnerabilities that are impacting OpenScape Xpressions. Apache Tomcat server is no longer maintained by OpenScape Xpressions since it was part of UCC Components that is out of support and OpenScape UC integration must be used on its place.
For this reason, we strongly recommend to uninstall any UCC components installed on OpenScape Xpressions server and if it is not possible, at least block the access to ports 7789 and 8443 on OpenScape Xpressions server.

On July 2019 the Xpressions UCC components have reached the M5 status and therefore they are out of support.

Affected components:

- Xpressions WebClient

- Conferencing

- Web Conference

- Cti Functionality

58. Xpressions components out of support

The following Xpressions components are out of support:

- Outlook/Notes Conference

- OptiClient

- Communications (as mail client)

- CtiApl

- CstaApl

- MspTsp

- SapR3Apl

- SapRouteApl

- SapPhoneApl

- ABCApl

- LPRApl

- V24APL

- Vm2TxtApl

3.2 Project-Specific Release

> *IMPORTANT:* Each feature not explicitly released in this release notice is not released or requires a project-specific release (PSR). In the PSR process, project-specific release may be granted or rejected for a feature. The process may also result in a release notice modification to explicitly release a feature or to explicitly deny the release.
>
> Features that are released only project-specifically are not necessarily mentioned in this release notice. Please read the respective setup and administration guides or other instructions to see whether a feature has been released project-specifically. Example: the documentation for connecting the XPR to a Microsoft Exchange server informs you about project-specific releases that exist to connect the XPR to a Microsoft Exchange server. In Section 2.7, "Documentation", on page 69 you find a documentation list.

The following features have exclusively been released for project-specific usage:

1. From Section 3.11, "Restrictions on a Cluster Installation", on page 88 you can obtain which APLs may be installed on a Windows cluster without project-specific release with general or limited availability.

2. SAP/R3 integration for SAP R/3 3.1, 4.6 and CRM 3.1

3. Message import from foreign POP3 servers

4. DSS1 connection

5. Numerous distributed systems with a single access number

6. Setup of an XPR Connection APL on a satellite only under the condition that this satellite is connected to an XPR kernel on a Windows cluster (see Section 3.11, "Restrictions on a Cluster Installation", on page 88). No further XPR Connection APL may be installed on any other satellite. If UC components (web conference server etc.) are to be installed, they may only be set up on the satellite on which the XPR Connection APL is installed also. See also point 34 on page 74 and point 4g on page 91.

7. The PostgreSQL database, a component of the Connection APL is needed for the restore step in the feature Smart Backup and Restore. If an XPR server is installed on a Windows cluster, the Connection APL can be installed according to point 6 on page 80 only on a satelllite and only with a project-specific release. That means that if an XPR server or MRS-Server on a Windows cluster is upgraded to XPR V7 R1 by means of the Smart Backup and Restore feature, a project-specific release is needed for XPR V7 R1.

3.3 Restrictions on the IMAP4 Client

(see also Chapter 7, "Information for Users")

1. IMAP directories cannot be administrated on the server.

2. The "Deleted Items" folder is not supported by the OpenScape Xpressions server.

3. Outlook 2002/2003/2007/2010 as IMAP client of OpenScape Xpressions is only released on client PCs on which Outlook is not already used as the Exchange client.

4. Netscape: version 7.1 is released as IMAP client for OpenScape Xpressions.

5. Outlook Express version 5.5 and version 6 is released as the IMAP Client for OpenScape Xpressions.

6. All other POP3/IMAP4 Clients and versions must be tested on a project-specific basis.

7. The local forms for SMTP cannot be installed in a terminal server environment.

3.4 Exchange Integration Restrictions

(see also Chapter 6, "Information on Exchange Integration")

1. Mailbox replication (replication of all incoming Exchange messages of a user to a corresponding mailbox in OpenScape Xpressions) is to be limited to a maximum of 5000 Exchange users. This number has been successfully tested in the lab, but no general release may be deducted from this. The actually possible number of Exchange users depends on many different factors of a scenario and may have to be determined in the course of project supervision.

NOTE: Mailbox replication is not supported in case of connection to Exchange Server 2007 and 2010.
Integrated Messaging users who are Exchange Server 2003 users cannot be upgraded to Integrated Messaging users who are Exchange Server 2007 or Exchange Server 2010 users. They must be converted into TUM users.

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2. If mailbox replication is used by 200 Exchange users or more, it does not immediately take effect after a message has come in, but after an interval of 5 minutes or more. We generally recommend to set an interval for activating the mailbox replication.

3. To avoid problems owing to increased restrictions on MAPI sessions, configurations are required on all connected Exchange mailbox servers.

IMPORTANT: You can obtain more information from the installation and administration documentation OpenScape Xpressions *Microsoft Exchange Gateway*.

---

4. For an integration in a *Hosted Exchange 2007* see Section 6.1.7.6, "Integration in Hosted Exchange 2007", on page 109.

5. In a Microsoft Exchange environment, the use of public folders in combination with optiClient 130 and Pubany is restricted to five public contact folders per user. This restriction must be established by appropriate read permissions in the Exchange configuration. In addition, each of these public contact folder must not contain more than 1.000 entries.

6. If you wish to run the Exchange 2003 Connector on one of the following operating systems, you cannot use the Exchange System Manager, because it has not been released for 64-bit operating systems. Use Exchange MAPICdo (see http://www.microsoft.com/en-us/download/details.aspx?id=1004) instead.

   • Windows Server 2008 R2 Standard Edition (always 64-bit)

- Windows Server 2008 R2 Enterprise Edition (always 64-bit)

If, however, you wish to use the Connector Snap-in for configuring the connector, these operating systems are not supported, because this snap-in requires the Exchange System Manager.

NOTE: Do not confuse the Connector Snap-in with the User Extension Snap-in. The Connector Snap-in is loaded from the Exchange System Manager, whereas the User Extension Snap-in is loaded from the Active Directory User and Computer (ADUC) MMC. See the installation and admin-istration guide *OpenScape Xpressions Microsoft Exchange Gateway* for details.

NOTE: Note the information in Section 6.1.2, "Supported Exchange Versions", on page 103 on using the Exchange 2003 Connector.

3.5 ExchAPL (Exchange 2003) Restrictions

1. Connection to the Exchange Front-End server is not supported.

2. The physical installation of the ExchAPL on an Exchange cluster system is not permitted.

3. More than one ExchAPL connection to the same Exchange server is not supported.

4. It is impossible to install several ExchAPLs on one server.

5. Connections to virtual Exchange servers not having the Exchange MTA service are not allowed.

3.6 Restrictions on the Lotus Notes Integration

NOTE: The names of versions lower than IBM Notes 9 and IBM Domino 9 are Lotus Notes and Lotus Domino.

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1. Using Lotus Notes 6.5.2 to connect Lotus Domino is not released. Please use Lotus Notes 6.5.1, 6.5.3, 6.5.4, 7, 8.0.x, 8.5.0 to 8.5.3 or IBM Notes 9.0 Social Edition (Basic Configuration).

2. Operating the IBM/Lotus Notes Gateway in an xSP Domino environment is **not** possible.

3. Operating the IBM/Lotus Domino server and an XPR server on the same computer has **not** been released.

4. Please verify that no automatic upgrade of the IBM/Lotus Notes Connector client is performed. This is the IBM/Lotus Notes client found between the XPR and the IBM/Lotus Domino server. Before upgrading to a new IBM/Lotus Notes version, you must consult the technician in charge. Other IBM/Lotus Notes clients not found between the XPR and the IBM/Lotus Domino server, for example user clients on workstations, may be upgraded.

5. optiClient 130 integration in IBM/Lotus Notes

IMPORTANT: For integrating optiClient 130 in IBM/Lotus Notes only the scenarios 'Single user without roaming' and 'Terminal server' of the below scenarios are released.

NOTE: Please obtain information about scenarios not released for the optiClient 130 integration in Lotus Notes from the optiClient 130 release notes.

IBM/Lotus Notes offers the following setup scenarios:

• Single user with roaming

  Roaming is available from Lotus Notes 6.0.1.

• Single user without roaming

• Multiple user with roaming

  Roaming and the multiple-user installation are available from Lotus Notes 6.0.1.

• Multiple user without roaming

  The multiple user installation is available from Lotus Notes 6.0.1.

- Shared client

  The shared-installation feature is a Lotus Notes 5.x element. A shared client old installation can be used in connection with Lotus Notes 6 and higher.

- Terminal server

  IBM restricts the terminal server installation of IBM/Lotus Notes to a single user without roaming.

6. The IBM/Lotus Notes preview does not show any fax messages and voicemails in an individual ActiveXControl.

7. If you connect XPR to IBM Notes 9.0 Social Edition (Basic Configuration) and IBM Domino 9.0 Social Edition, use the mail templates for Lotus Notes 8.

3.7 Restrictions on using the "One Mailbox for Numerous Call Numbers" Feature

It is usually not possible to use this feature with GSM devices because the destination station number to be configured in the mobile phone for call forwarding normally exceeds the maximum length permitted by the provider for call forwarding.

3.8 Restrictions on connecting HiPath 8000 up to and including V3.0

NOTE: The OpenScape Voice PBX used to be called HiPath 8000 before product version 3.1 R2.

An XPR server can only be connected to a HiPath 8000 up to and including version 3.0 as terminal device with several channels (BGL, Business Group Line), since the HiPath 8000 V3.0 does not support connecting from a voice mail when connected via a trunk (EP, End Point). This results in restrictions, since the HiPath 8000 V3.0 does not provide some features for preregistered terminal devices.

- TLS (Transport Layer Security) is not supported.

- SRTP (Secure Real Transport Protocol) is not supported.

- Arbitrary originator phone numbers are not supported.

The absence of arbitrary originator phone numbers means that all calls made by the XPR server appear at the HiPath 8000 with the caller number under which the XPR server is registered with the HiPath 8000. XPR cannot set the phone number

of an outgoing call to the phone number of the subscriber who has initiated the call. This enables call charging only for the XPR server as a whole, but does not allow an assignment to the calling subscriber.

Possible satellites may not have the same access phone numbers. Each satellite requires an individual access phone number.

3.9 Restrictions on connecting to Hicom Office Pro/COM

Hicom Office Pro/Com does not permit direct call forwarding on no answer / ring no answer from trunk calls to external lines. Instead, a destination call list with a dummy subscriber (without a physical port) must be configured for the OpenScape Xpressions user. User-specific call forwarding to OpenScape Xpressions must be assigned to the dummy subscriber.

3.10 Restrictions on Co-residency with HiPath ProCenter V7.0 GP4

PBXs

If OpenScape Xpressions V7 and HiPath ProCenter V7.0 GP4 are installed on the same computer, you can connect the following PBXs:

*   HiPath 3000 V6.0 3800 SMR 8

*   HiPath 3000 V5.0 3750 SMR 13

*   HiPath 4000 V3.0 SMR 5 Patch 05

Sangoma Diva Server boards

The following Sangoma Diva Server boards are released:

*   Sangoma Diva Server 4BRI-8M

*   Sangoma Diva Server PRI/E1-30

Further restrictions

*   A distributed setup, where the XPR hardware is installed on one or several satellite computers and the core is installed on a main computer, is not supported.

*   For the connection to all PBX types applies the restriction of a maximum of 1600 call attempts to the XPR per hour.

*   XPR supports a maximum of 8 channels.

*   IP connection to HiPath 3000/5000 respectively HiPath 4000 with Cornet-IP is not supported.

- The WebAssistant is not supported since the Internet Information server by ProCenter is required.

3.11 Restrictions on a Cluster Installation

1. On the two cluster nodes the following programs may be locally installed on the nodes but not on the cluster. Please note that if licenses are required, one license must be purchased for each node.

   a) Client License Management (CLM)

   b) Business Intelligence and Reporting Tool (BIRT)

   c) Text-To-Speech (TTS)

   d) Automatic Speech Recognition (ASR)

   e) Application Builder

2. Only the following APLs may be installed on a Windows cluster without project-specific release and have general availability:

   a) XPR License Service

   b) XPR Name Locator

   c) XPR Configuration Service (cfgsvc)

   d) XPR Status Dispatcher (xmrsvc)

   e) XPR Information Store (infostor)

   f) XPR Message Router (mta)

   g) XPR Administrator (mrs)

   h) XPR TCP/IP Transport Layer(TcpApl)

   i) XPR stunnel

   j) XPR Directory Service (dirsvc)

   k) XPR Internet Mail APL (SMTPAPL)

   l) XPR Web APL(WebApl)

   m) XPR Mail APL(MailApl)

   n) XPR Lear APL(Lear)

   o) XPR Notification APL(NotApl)

   p) XPR Lpr APL(LprApl)

   q) XPR CSTA APL (CSTAAPL)

r) XPR Cti APL(CtiApl)

NOTE: General availability is only valid for a CSTA connection. For a TAPI connection, only limited availability applies (see point).

---

s) XPR ip APL(ipApl)

NOTE: This APL can be installed on a Windows cluster only without TTS and ASR.

---

t) XPR Ldap APL(LdapApl)

u) XPR Presence APL(PresenceApl)

v) XPR XmlAPL(XmlApl)

w) XPR VM APL(VmApl)

x) XPR Printer APL(PrintApl)

3. The following APLs may be installed on a Windows cluster without project-specific release, but they have limited availability only:

IMPORTANT: Limited availability means that this XPR service depends on third-party software or contains this software and the producer of this third-party software has not released it for Windows clusters. However, the corresponding XPR component has been successfully tested as being operable on a Windows cluster. If a modification or a bug in the third-party software makes the XPR incompatible in a Windows cluster, Unify GmbH & Co KG will attempt to provide a workaround. If such a workaround is not economically justifiable, this problem may be finally solved by performing the XPR cluster installation once more and in a way that this component is moved to a (not clustered) satellite.

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a) XPR Cti APL(CtiApl)

NOTE: Limited availability is only valid for a TAPI connection. For a CSTA connection, only general availability applies (see point).

---

b) XPR Isdn APL(IsdnApl)

NOTE: This APL can be installed on a Windows cluster only without TTS and ASR.

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c) XPR SMS Large Account APL(SmsIPApl)

d) XPR Serial APL(V24Apl)

e) XPR FileInterface APL(FiApl)

f) XPR Exchange Connector for i386(<XPR server name>:<Exchange 2003 server name>)

g) XPR Exchange Connector for i386(<XPR server name>:<Exchange 2007 server name>)

h) XPR Exchange UM APL

i) XPR Lotus Notes APL (LNAPL)

j) XPR Lotus Notes UM APL(LnUmApl)

k) XPR SAP R/3 APL (SapR3Apl)

IMPORTANT: Setting up this APL on a Windows cluster has been released only project-specifically.

---

l) XPR SAPphone APL(SAPphoneApl)

IMPORTANT: Setting up this APL on a Windows cluster has been released only project-specifically.

---

m) XPR Reporting APL(RepApl)

IMPORTANT: In case of setting up the Reporting APL on a cluster, the XPR must be connected to a Microsoft SQL server that is on a computer outside the cluster.

---

n) XPR Schedule APL(RepScheduleApl)

IMPORTANT: In case of setting up the Schedule APL on a cluster, the XPR must be connected to a Microsoft SQL server that is on a computer outside the cluster.

---

o) XPR VM2TXT APL(Vm2TxtApl)

IMPORTANT: Please consider the restrictions outlined in point 38 on page 75.

---

4. The following APLs are not admitted on a Windows cluster:

a) XPR Isdn APL(IsdnApl) with TTS and/or ASR

b) XPR ip APL(ipApl) with TTS and/or ASR

c) XPR Db APL(DbApl)

d) XPR SAP Business Routing APL (SAPROUTEAPL)

e) XPR HiPath Management APL(HpmApl)

f) XPR ABC APL(AbcApl)

g) The XPR Connection APL (UCC, Web Conference Server, PostgreSQL and OpenScape Web Client) must neither be installed on the Windows cluster nor locally on a cluster node.

NOTE: The XPR Connection APL may be installed with a project-specific release on a satellite that is connected to an XPR kernel on a Windows cluster. For further details see 6 on page 80. See also point 34 on page 74.

---

5. If you do not perform the application conversion with Ghostscript but with Microsoft Office, you need to install Microsoft Office on both nodes. Please remember that you need two licenses for this purpose.

6. You need to select an installation version during the setup process of Windows Server 2008 SP2 Enterprise Edition. Only the installation version **Full Installation** is supported. The installation version **Server Core Installation** (no .NET framework, reduced GUI etc.) is **not** supported, even if it is capable of clustering (see Section 2.6.2.1, "Server", on page 57).

4 Error Correction Procedures

Error reports from customers are entered in the SIS by the responsible CSC and are handled in accordance with the regulated escalation procedures.

5 Notes for Service Personnel

5.1 General Information

Besides the user guide and administrator documentation please also note the `XpressionsInstall\ReleaseNotes.rtf` file on the setup medium. In there you are provided with current product notes that may not have been considered for the documentation.

Before starting an installation, check in G-DMS (Global Document Management System) if updated versions of the Release Notice and the Release Notes are available.

The following tables reflect the product structure in the G-DMS / SWS (Software Supply Server) and the diagnostics structure in the ICTS (International Case Tracking System):

Main Category	Applications
Product family	OpenScape Xpressions
Product	OpenScape Xpressions
Product version	OpenScape Xpressions V7
Product Code	P30152-P1526-A1-1

Table 19   *Product Structure in the G-DMS / SWS*

Product family	Applications
Product group	OpenScape Xpressions
Product type	OpenScape Xpressions
Product version	V7
SW version	V7 1.0.0

Table 20   *Diagnostics Structure in the ICTS*

5.2 Upgrading

You can upgrade to version OpenScape Xpressions 7 R1 only from versions MRS 8.xx, OpenScape Xpressions 5.0 R4 FR13, 6 R0, 6 R1, 6 R2 and 7 R0.

Please obtain possible previous versions, intermediate versions that may be required and restrictions on an upgrade from the following table. You find information about upgrading to an intermediate version in the upgrade instructions of the intermediate version.

Voice conferences are not supported for installations or upgrades of an XPR that is connected to a HiPath 3000 V5, V6 and V7 and HiPath 4000 V3 and V4 because the program SIPControl is not supported anymore by Sangoma Diva.

From version	Bit-width	via the intermediate version(s)	to version
XPR 7 R0	64	-	XPR 7 R1
XPR 6 R2	64	-	XPR 7 R1
	32	-[1 2 3]	XPR 7 R1
XPR 6 R1	32	-[4 1 2 3] or XPR 6 R2[2 5]	XPR 7 R1
XPR 6 R0	32	-[4 1 2 3] or XPR 6 R2[2 5]	XPR 7 R1
MRS 8.xx	64	-[1 2 6] or MRS 8.03[2 5]	XPR 7 R1
	32	-[1 2 6] or MRS 8.03[2 5]	XPR 7 R1
XPR 5.0 R4	32	XPR 5.0 R4 FR13[1 2 7] or XPR 6 R2[2]	XPR 7 R1
XPR 5.0 R3	32	XPR 5.0 R4 FR13[1 2 7] or XPR 6 R2[2]	XPR 7 R1
XPR 5.0 R2	32	XPR 5.0 R4 FR13[1 2 7] or XPR 6 R2[2]	XPR 7 R1
XPR 5.0 R1	32	XPR 5.0 R4 FR13[1 2 7] or XPR 6 R2[2]	XPR 7 R1
XPR 5.0 R0	32	XPR 5.0 R4 FR13[1 2 7] or XPR 6 R2[2]	XPR 7 R1

1 You upgrade the XPR 6 R2 32 bit, XPR 6 R1, XPR 6 R0, XPR 5.0 R4 FR13 or MRS 8.xx to XPR 7 **DIRECTLY** by executing the following major steps:
- Make the **TOV7** (to version 7) check box in the WebAssistant visible
- Back up the MRS/XPR data
- Uninstall the MRS/XPR
- Install the XPR 7 freshly
- Restore data
If the **TOV7** check box is unavailable on your MRS/XPR server, check that the corresponding hotfixes have been installed instead. You can obtain details of this topic from section 2.2 in the current Release Notes.
If you wish to perform a "normal" upgrade without data backup and restore, you do not need TOV7.
2 **IMPORTANT**: Be that you have one of the following source versions:
- XPR or MRS on a Windows cluster on a 32-bit operating system
- MRS 8.xx on a Windows cluster
Let us assume as well that you do not have a project-specific release for a Connection APL on a satellite computer.
If you want to upgrade to XPR 7 R1 on a Windows cluster (always on a 64-bit operating system), a project-specific release is needed for XPR 7 R1 because for this upgrade certain parts of the Connection APL on a satellite computer are needed. See also point 34 on page 74, point 7 on page 80 and point 4g on page 91.
The same applies if you want to upgrade XPR V5 R4 FR13 on a Windows cluster directly to XPR 7 R1.
3 The XPR WebClient data is not backed up prior to this upgrade. In other words, it must be manually configured after the upgrade in the XPR 7 WebClient.
4 Upgrades from XPR 6 R0 or 6 R1 to XPR 7 are only released for the case that no conferences have been released on your XPR.
5 This intermediate step is required only if conferences have been released on your MRS or XPR.

6   This upgrade is possible only if MRS 8.03 is available or no conferences have been released on your MRS.
    MRS 8.xx cyPhoneWeb data is not backed up prior to the upgrade. In other words, it must be manually configured after the upgrade in the XPR -7 WebClient.

7   Please heed respectively comply with the following:
    Make sure that the **TOV7** check box is available in the WebAssistant.
    The SMSIP APL exists on XPR 7 instead of the XPR 5.0 SMS APL. As a result, the SMS APL configuration gets lost during the upgrade.
    The password of user Network Administrator and the local profile are retained during the upgrade only if the computer name (host name) and the IP address of the XPR 5 server computer are used for the XPR 7 server computer also.

5.3 Running Xpressions Setup with OpenSSL files on Hotfix folder

Some Xpressions services, in order to run, require you to have updated OpenSSL files. When running Xpressions Setup those OpenSSL files are replaced with old versions making some services not able to run again or some features not able to be installed.

In order to prevent such problems, when running the Xpressions setup, the OpenSSL files must be copied to the Xpressions setup **HOTFIX** folder.Those files are now available on the latest OpenSSL hotfix.The OpenSSL hotfix contains a folder named **Files** and its content must be copied to the HOTFIX folder on the Xpressions setup installation path.

5.3.1 Installing the SNMP feature

If you select the **SNMP for license and SystemVersionInfo** feature when running the Xpressions setup with the OpenSSL file on the **HOTFIX** folder, you may be prompted with a message informing you that the files are in use when the setup tries to install the feature.

That is because the MS Windows **SNMP Service** is running.You will need to manually stop this service and click 'try again' in order to make the setup continue.

The SNMP service will be running after the setup finishes.

5.4 Configuration Data Required for Start Up

Before switching the system on, the most important data for configuration should be recorded so that the startup is not delayed by a numerous prompts.
Here is a list of the data required:

5.4.1 Necessary Data for Telecommunications (Call Number Plan)

*   PABX trunk connection

*   External prefix

*   Tie trunk ID for OpenScape Xpressions

*   Call numbers provided for DID in OpenScape Xpressions (range information)

*   Type of the HiPath fax configuration (e.g. combi-fax numbers)

5.4.2 Necessary Data for the LAN

*   Computer name of the Windows computer

*   IP address

*   Domain into which the computer should be introduced

*   DHCP server

*   DNS server

*   WINS server

5.5 Telephone User Interfaces

5.5.1 ERGO, PhoneMail and VMS

The telephone user interfaces (TUI) ERGO, PhoneMail and VMS are supported. Such TUIs support the German, English, French, Dutch, Italian, Spanish, Portuguese and Brazilian language.

5.5.2 Parallel Use of PhoneMail and VMS

The two telephone user interfaces PhoneMail and VMS can both be configured on the same server in parallel and used specific to the subscriber. It is important that the scripts and the subscribers are configured correctly. See the adminstrator documentation OpenScape Xpressions *Server Administration* on this.

5.6 Exchange and IBM/Lotus Notes Integration without True Unified Messaging

If an integration with Exchange or IBM/Lotus Notes is to be performed without mailbox replication and True Unified Messaging, the following settings must be made:
In registry the following key must be set to value `1`:

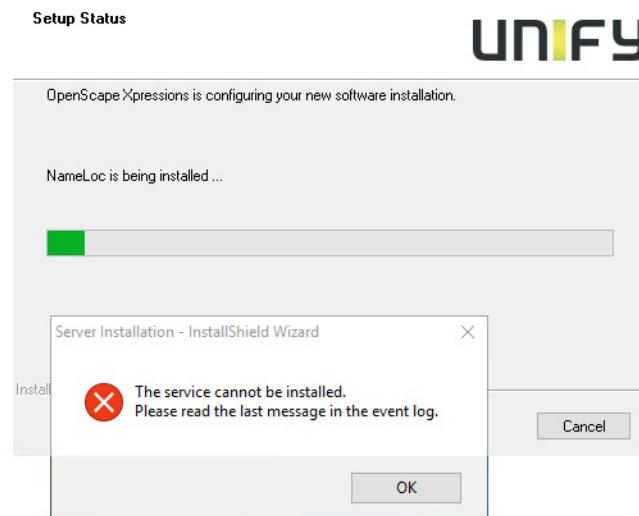HKLM\Software\PP-COM\MRS\MailApl\TumBackend

The following rule must be inserted before the first rule (replace 'server name')
NVS:<server name>/*[TYPE=TRANS]=NVS:MAILBOX/*[ABORT=1].

The preferred rule must be changed as follows:

NVS:*.*/*[ABORT=0]=<PREFFERED>.

5.7 Installation on Windows Server 2016

It has been experienced in some Openscape Xpressions installations on Windows Server 2016 where Xpressions installation fail and it is not possible to install '**nameloc**' service.

This seems to be a random issue after Windows Server 2016 is updated to latest patch level and cannot be localized to a specific Microsoft Hotfix.

In order resolve this problem the installation must be canceled and it must be verified the existance of the following Registry Key:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\LanmanServer \Parameters\

NullSessionPipes [REG_MULTI_SZ]

In case it doesn't exist, you must create it manually.

6 Information on Exchange Integration

6.1 Integration with Exchange

6.1.1 Supported Scenario

XPR supports the following scenario:

- Only one Exchange organization

- Only one administrative group and one routing group

- The system manager with the latest SP is installed on the XPR server (SAT too, if needed).

- No Outlook is installed on the ExchAPL server.

- Exchange Cluster is operated in a two-node configuration (active/passive). ExchAPL is connected with the virtual Exchange server.

- The LDAP APL is always installed on the XPR server.

- Address book replication is activated for every domain that has XPR users.

NOTE: See for information about the integration in Hosted Exchange 2007 and 2010.

6.1.2 Supported Exchange Versions

Connection is possible to the following Exchange versions:

- Microsoft Exchange Server 2003 SP2

- Microsoft Exchange Server 2007

   The following connection versions are possible:

   – Direct connection to Exchange Server 2007 via the Exchange Connector for Exchange Server 2007 (Foreign Connector).

   NOTE: Integrated Messaging is not available with *Exchange Server 2007*. Already existing IM users must be reset to TUM users.

– **NOTE:** This version is only supported for upgrading older XPR versions to XPR V7.

The Microsoft Exchange Server 2007 is connected via the Exchange 2003 Connector. This Exchange 2003 Connector, an SDK connector, is a Microsoft Exchange Server 2003 SP2. It is used as gateway to the Exchange server 2007.

IMPORTANT: Please heed the restrictions on the operating systems used for this connection version under point 6 on page 82.

- Microsoft Exchange Server 2010

  The XPR Connector for Exchange Server 2010 is based on the Exchange 2007 Foreign Connector.

- Microsoft Exchange Server 2013 via a Microsoft Exchange Server 2007 gateway

- Microsoft Exchange Server 2013 via a Microsoft Exchange Server 2010 gateway only with a project-specifice releaseMicrosoft Exchange 2013

- Microsoft Exchange 2016

- Microsoft Exchange Online (O365)

6.1.3 Exchange Connector on a distributed System

If during reinstallation the Exchange Connector is installed on a satellite instead of on the OpenScape Xpressions server, then this is a distributed system. In this case follow the setup instructions for a distributed system in the OpenScape Xpressions *Server Installation* instructions.

6.1.4 Multi-Connector Operation

Multi-connector operation (several Exchange servers at one XPR) is supported for Exchange Server 2003, 2007, 2010 and 2013 (2013 only via a 2007/2010 gateway).

6.1.5 Exchange Connector

The Exchange Connector needs to be restarted for global activation of mailbox replication. It must also be restarted in the case of all other Exchange Connector global configuration changes.

6.1.6 Connection to Exchange Server 2003 SP2

6.1.6.1 XPR Server with several Exchange Servers

Note: An XPR server can be connected to several Exchange servers only in networks with the same Exchange Server software release (2003). Consequently, the same hotfixes and the same service packs must have been installed on the Exchange servers.

6.1.7 Connection to Exchange Server 2007

6.1.7.1 Changes introduced with Exchange Server 2007

With *Exchange Server 2007*, Microsoft has introduced some essential modifications and further developments compared to the previous version *Exchange Server 2003*. The most important differences are:

- Upgrade of a 32-bit system to a 64-bit system. This means that Microsoft allows life-operation of *Exchange Server 2007* on a 64-bit system only.

- The combination of Exchange features to modules, the so-called Roles, which enables a distributed setup of the *Exchange Server 2007* on different servers. This results in an improved scalability of the Exchange components. The individual roles are called: Mailbox Server Role, Hub Transport Server Role, UM Server Role, Client Access Server Role and Edge Transport Server Role.

- Replacement of the SDK-connector concept with the foreign-connector concept. This required an XPR connector redevelopment.

6.1.7.2 Administration Modifications

- **Exchange management console**

  Exchange Server 2007 provides the new *Exchange management console* for administering the *Exchange Server 2007*. Different from the *Exchange system manager*, the sites and administrative groups known so far and also the routing groups inclusive the routing group connectors have ceased to exist in the *Exchange management console*, for example. The information for that is in case of *Exchange Server 2007* administered via the Active Directory (sites and services).

- **Exchange management shell**

  The basic connector configurations are on the Exchange side performed via the *Exchange management shell*.

6.1.7.3 The new XPR Connector

The new XPR connector is a so-called *Exchange 2007 foreign connector*. Its executable file is the `E2k7Apl.exe`. You find this file in the `\bin` directory of the XPR server. The name of the connector in the XPR monitor still reads **ExchApl**.

The Foreign Connector is required for "store-and-forward" operation. It delivers the messages received via the XPR server to the Exchange users and transmits the Exchange server messages to be sent via the XPR server.

To this, a logical connection is established between the XPR server and the Exchange modules "Mailbox Server Role" and "Hub Transport Server Role" via the Foreign Connector.

The connection to the Exchange Mailbox Server Role is required for opening a MAPI connection to resolve addresses.
The connection to the Exchange Hub Transport Server Role serves for transporting messages from/to the XPR server.

NOTE: In case of a monolithic *Exchange Server 2007* environment structure no differentiation needs to be made between Mailbox Server Role and Hub Transport Server Role. In this case the Foreign Connector is connected to the computer that hosts the Exchange server 2007.

Messages are exclusively retrieved via direct access to the Exchange mailboxes by means of the **ExUMApl**. The new connector does not support inbox replication. **Integrated Messaging (IM)** as XPR server operation mode is thus not possible anymore.

The XPR TUM-Connector must establish a connection from the XPR server to the Mailbox Server Role.

NOTE: In case of a monolithic *Exchange Server 2007* environment structure no differentiation needs to be made between Mailbox Server Role and Hub Transport Server Role. In this case the XPR TUM-Connector is connected to the computer that hosts the Exchange server 2007.

Message transport

The messages to be sent from the XPR server to users on the Exchange server are stored in the *<**Replay Directory**>*. Messages to be sent by Exchange users via the XPR server are stored in the ***Drop Directory**>*. In both cases such messages are SMTP messages with the file extension `.eml`, and they are buffered in the above directories until their final delivery.

The playback directories are found on the server that has the Mailbox Server Role.

NOTE: In case of an Exchange Server 2007 environment with monolithic structure the `<Drop Directory>` should be manually created in path `%Program Files%\Microsoft\Exchange Server`.
The `<Replay Directory>` is created in path `%Program Files%\Microsoft\Exchange Server\TransportRoles\Replay` with the installation of Exchange Server 2007.

6.1.7.4 XPR Foreign Connector Administration Innovations

Owing to the changed *Exchange Server 2007* administration, the administrative access options differ from those you know from *Exchange Server 2003*.

- The XPR foreign connector is now exclusively configured via the **ExchApl** settings dialog in the XPR monitor.

- Users are still administered via the MMC Snap-In extension for Active Directory Users and Computers, which was already used for *Exchange Server 2003*. To this, the MMC Snap-In must be installed on the system from which the user configuration is performed.

6.1.7.5 XPR Features Modifications

In the Exchange connection context, the following XPR server features are modified as a result from the new XPR foreign connector:

- Integrated Messaging (inbox replication) is not supported with the XPR foreign connector anymore.

- The connector is exclusively configured via the **ExchApl** settings dialog in the XPR monitor.

6.1.7.6 Integration in Hosted Exchange 2007

IMPORTANT: We strongly recommend to discuss these requirements with your provider during XPR installation planning, and to make sure the provider is able and willing to support the requirements.

To integrate an XPR in Hosted Exchange 2007, the following requirements must be complied with:

1. The XPR is installed at the customer's and not at the provider site. In other words, it does not share the same location with Exchange.

2. An XPR satellite must be installed, on which the connectors operate at the provider's **within the Exchange domain**.

   NOTE: This does not require a physical server. A virtual server is sufficient.

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3. This satellite must be connected to the XPR kernel computer in the customer domain.

   a) This requires a VPN connection or a similar network connection between the satellite and the XPR kernel computer.

   b) This connection must allow data traffic to the target ports 137, 138, 139, 445 and 13010 in both directions.

4. Services on the satellite and the XPR kernel computer must be able to access the respectively other computer. In other words, the domains either trust each other or working group authentication must be applied.

   If you use working group authentication, execute the following sub-steps:

   a) Create a local user on the XPR kernel computer with the same user name and password as for the domain user account used for the services of the Exchange satellite.

   b) Add this user account to the local administrator group.

   c) Execute substeps a and b for the reverse direction, i.e. create a local user on the satellite with the same user name and password as for the domain user account of the services on the XPR kernel computer and add this user account to the local administrator group.

   d) Open **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Local Security Policy** > **Security Settings** > **Local Policies** > **Security Options** and verify that the **Network access: Sharing and security model for local accounts** entry has value **Classic - local users authenticate as themselves**.

6.1.8 Connection to Exchange Server 2010

Connecting the XPR to an Exchange server 2010 or to Exchange Server 2010 CAS (Client Access Server) is supported. The following connections are **supported also**:

- Exchange Server 2010 DAG (Data Availability Group)

- Exchange Server 2010 DAG and CAS

- Exchange Server 2010 CAS Array

- Exchange Server 2010 DAG and CAS Array

See the installation and administration manual OpenScape Xpressions *Microsoft Exchange Gateway* for installation details.

NOTE: The process of setting up the Exchange Message Forms is identical for Exchange Server 2007 and Exchange Server 2010.

6.1.8.1 Changes introduced with Exchange Server 2010

Exchange Server 2010 is based on version Exchange Server 2007, being an improvement and extension of the latter.

Please note the following system property innovations to the previous version:

- Exchange Server 2010 is shipped exclusively as 64-bit version. The 32-bit evaluation version is not longer available.

- Exchange Server 2010 runs exclusively on the operating system Windows Server 2008 or Windows Server 2008 R2: Standard as well as Enterprise can be used as version. However, the domain structure in which Exchange Server 2010 shall be integrated need not be based on Windows Server 2008.

- A new privilege assignment model in Microsoft Exchange Server 2010. This privilege assignment model is called Role Based Access Control (RBAC). A new method of assigning privileges to users of an organization in this model is to combine such users in so-called Management Role Groups.

6.1.8.2 Integration in Hosted Exchange 2010

The statements in are valid for Hosted Exchange 2010 also.

6.1.9 Connecting to Exchange Server 2013 via an Exchange 2007/2010 Domain

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IMPORTANT: A project-specific release is needed for a connection via an Exchange 2010 domain.

If an XPR server connection to an Exchange Server 2007/2010 environment has already been configured, this connection can be used to access the mailboxes of an Exchange Server 2013 to be newly integrated in this domain.

This requires the service account existing for the ExUM Apl in the Exchange 2007/2010 environment to be replaced with a new service account on Exchange Server 2013. This new account must use the same logon data to allow access to both the Exchange Server 2013 mailboxes and those of the older Exchange environment.

The Exch Apl is still used as described in the manual. The service account need not be adjusted for this Apl.

6.1.9.1 Overview

With Exchange Server 2013 appearing, some architectural changes have become effective. For compatibility reasons, the components Collaboration Data Objects (CDO) and Messaging API (MAPI) must therefore be updated to allow supporting Exchange Server 2013.

To update these components, the configuration must be additionally adjusted for the MAPI, so that the ExUM Apl can set up the connection to the Exchange server.

You find detailed information about the installation (`MAPI Download configuration guidance.docx`) under:

`http://www.microsoft.com/en-us/download/details.aspx?id=39045`

6.1.9.2 General System Requirements

For Exchange Server 2013:

- Microsoft Exchange 2013 Server with Service Pack 1

  Provision under:

`http://www.microsoft.com/en-us/download/details.aspx?id=41994`

For Xpressions V7 R1 FR3 or later

- Exchange MAPICDO download version 08.03.0.8353

  Provision under:

  `http://www.microsoft.com/en-us/download/details.aspx?id=42040`

- ExUmApl hotfix version 811-17591-i

NOTE: Please check that the previous **ExchangeMAPICDO** version is no longer present on the system before you start setting up the new or a more recent **ExchangeMAPICDO 6.5.8353** version.

6.1.10 Connection to Exchange Server 2013

Following the workaround that enables accessing an Exchange Server 2013 via connecting an Exchange 2007/2010 domain you can now also directly connect an Exchange Server 2013 domain by modifying the Exchange connectors.

6.1.10.1 Overview

With Exchange Server 2013 appearing, some architectural changes have become effective. For compatibility reasons, the components Collaboration Data Objects (CDO) and Messaging API (MAPI) must therefore be updated to allow supporting Exchange Server 2013.

Updating these components requires the configuration to be additionally adjusted for the MAPI, so that the ExUM Apl can set up the connection to the Exchange server.

You find detailed information about the installation (`MAPI Download configuration guidance.docx`) under:

`http://www.microsoft.com/en-us/download/details.aspx?id=39045`

6.1.10.2 General System Requirements

For Exchange Server 2013:

- Microsoft Exchange 2013 Server with Service Pack 1

  Provision under:

`http://www.microsoft.com/en-us/download/details.aspx?id=41994`

For Xpressions V7 R1 FR3 or later

- Exchange MAPICDO download version 08.03.0.8353

  Provision under:

`http://www.microsoft.com/en-us/download/details.aspx?id=42040`

- The following hotfixes must have been installed on the Xpressions server:

  – E2k7Apl V7 R1 FR4 or later

  – ExUmApl V7 R1 FR4 or later

  – LdapApl V7 R1 FR4 or later

– MMCExchSnapIns V7 R1 FR4 or later

NOTE: Please check that the previous **ExchangeMAPICDO** version is no longer present on the system before you start setting up the new or a more recent **ExchangeMAPICDO 6.5.8353** version.

6.1.11 Connection to Exchange Server 2016/ Exchange Online(O365)

Xpressions now provides a solution for Exchange 2016 integration using the Exchange Web Services interface.

6.1.11.1 Overview

As the MAPI support has been discontinued by Microsoft, a new XPR module provides the integration by using the Exchange Web Services (EWSApl). This module is responsible for the synchronization of the messages status between the Exchange and Xpressions' mailboxes.

The SmtpApl also plays a role on the integration by sending the Voice and Fax messages to the user's Exchange Mailbox.

For more details, please, consult:

OpenScape Xpressions V7, Microsoft Exchange Gateway, Administrator Documentation

7 Information for Users

7.1 IMAP4 Clients

- Directories may not be set up on the IMAP4 server. For this reason, the option **Move Message to Recycle Bin when Deleted** in the Netscape Client must *not* be activated since this means that the **Trash** folder is saved on the server. Only local directories should be used to save messages in the inbox.

- The **Send and Receive** function in Outlook Express Client does not work correctly. To update the inbox, you should briefly switch directories. The inbox is then completely updated. The **Connect** button should not be used for updating.

- If messages in the IMAP4 client are deleted, they are only marked as deleted. To finally remove the message, you need to execute the menu item **Edit > Permanently remove deleted messages** in Outlook clients. Netscape, to delete messages permanently, you must select the command **File > Compress this Folder**.

7.2 Xpressions WebClient

- Internet Explorer 11 is supported by Xpressions WebClient only when running in Compatibility View Mode. If you use Internet Explorer 11, make sure that the compatibility view is used for the intranet, executing the following steps: In the menu bar open **Tools** > **Compatibility View settings...** and check the **Display intranet sites in Compatibility View** check box.

- The pearl icon in the upper left corner of the Xpressions WebClient is static. It will not spin in order to alert the user that there are missed calls or new voice-mail. To see notifications, hover the mouse over or click on the pearl icon.

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