

1 Introduction

This document provides information about interoperability and best practices for interworking between voice and video over IP endpoints, room systems and PBXs and the Orion VX1000/VX2000 (version 2.2.3).

The tables in this document provide information about the best known connectivity setup for Orion VX1000/VX2000. While other configurations are possible, the recommended setups outlined in this document have all been tested and are therefore considered “best practices”.

The Interoperability test setup is shown in the figure at right. All devices are registered in the Orion VX1000/VX2000 unless mentioned otherwise.

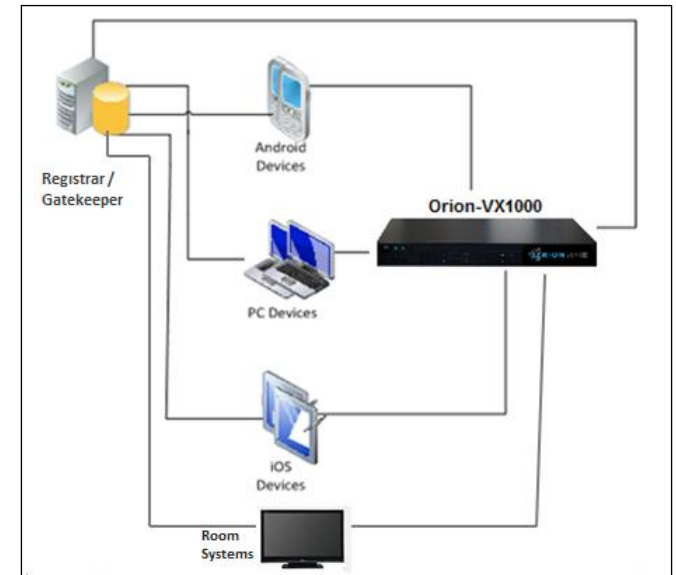


Figure 1: Orion VX1000/VX2000 Architecture

2 SIP Interoperability

Clients / Systems Type	Name	Version	OS / Device	Audio Codec	Video Codec	SIP Client Rx Max Resolution	SIP Client Tx Max Resolution	DTMF	Direct Calling	Registrar	Comments	Orion model
PC-based	Linphone	3.5.2	Windows	G.711U/A,G.722	H.264,H.263	VGA	VGA	RFC2833,INBAND	V	V	profile-level-id=42801e, SIP over UDP and TCP	VX, 1286
	Lifesize	8.1.12, Build 56354	Windows	G.711U/A, G.722.1	H.264,H.263	720P	720P	RFC2833,INBAND	V	V	Also supports H.263-1998 SIP over UDP and TCP	VX, 1286
	Lifesize	7.0.57, Build 33285	Windows	G.711U/A	H.264	720P	720P	RFC2833,INBAND	V	V		VX, 1286
	Bria	3.4.2 67300	Windows	G.711U/A, G.722.1	H.264.H.263	720P	VGA	RFC2833,INBAND,INFO	V	V		VX, 1286
	X-Lite	4.1 63214	Windows	G.711U/A	H.263	CIF	CIF	RFC2833, INBAND	V	V		VX, 1286
	X-Lite	4.5.5	Windows	G.711U/A, G.722.1	H.263	CIF	CIF	RFC2833, INBAND	V	V	SIP over UDP and TCP	VX, 1286
	Polycom	8.0.2 0225	Windows	G.711U/A, G.722.1	H.264	VGA	QVGA	INFO	X	V		1286
	Polycom	RealPresence Desktop 3.0.0.38914	Windows	G.722.1,G.722	H.264	HD	HD	RFC2833,INBAND	V	V	Decoder and IVVR problems on both 1286 and VX: video pixelation, no IVVR video on VX Audio problem on SIP outgoing call from MCU : Tx=G.722.1, Rx=G.722	1286,VX
	Polycom	8.0.16	Windows	G.722	H.264	VGA	VGA	INBAND	X	V	Doesn't work with VX	1286
	Orion O	1.5.3.3	Windows	G.711U/A	H.264	VGA	VGA	RFC2833,	X	V		VX, 1286
Orion O	1.5.6.4	Windows	G.711U/A, G.722	H.264	720P	VGA	RFC2833,	V	V	SIP over UDP and TCP	VX, 1286	
Phontage	Phontage (Delux) 5.3.Ai	Windows	G.711U/A	H.263	CIF	CIF	RFC2833	X	X	Work via iPECS PBX	VX	
Apple iOS 7.0.2	Orion O	2.0.14 (iphone5)	Apple	G.711U/A	H.264	VGA	QVGA	INFO	V	V		VX, 1286
	Orion O	2.0.14 (iPOD)	Apple	G.711U/A	H.264	VGA	QVGA	INFO	V	V		Not tested for current version
	Bria	3.0.0	Apple	G.711U/A	H.264 H.263	VGA	QVGA	INFO	V	V	SIP over UDP and TCP	VX, 1286
	Polycom	3.0.1 (iPAD)	Apple	G.711U/A	H.264	480X352	CIF	RFC2833	V	V	SIP over UDP and TCP	VX, 1286

Clients / Systems Type	Name	Version	OS / Device	Audio Codec	Video Codec	SIP Client Rx Max Resolution	SIP Client Tx Max Resolution	DTMF	Direct Calling	Registrar	Comments	Orion model
Android	Polycom	1.1.3-18948_4303	Android	G.711U/A	H.264	VGA	QVGA	RFC2833	X	V	Samsung Tablet	VX, 1286
	Polycom	1.1.3	Android	G.711U/A	H.264	VGA	QVGA	RFC2833	X	V	SIP over UDP and TCP	VX, 1286
	Orion O	2.2.1.6	Android	G.722	H.264	720P	QVGA	INFO	V	V		VX, 1286
Desk phones	Grandstream	SW:1.0.3.22	GXV3175	G.711U/A, G.722	H.264,H.263	VGA	VGA	RFC2833,INFO, INBAND	X	V	H.263 1998 - SIP over UDP and TCP	VX, 1286
	Yealink	SW: 22.21.0.60	VP530	G.711U/A	H.264	VGA	CIF	RFC2833,INBAND,	X	V		VX, 1286
	Yealink	SW: 22.21.0.60	VP2009	G.711U/A	H.264	VGA	CIF	RFC2833,INBAND,	X	V		VX, 1286
	Yealink	SW: 23.70.0.10	VP530P	G.711U/A, G.722	H.264,H.263	VGA	CIF	RFC2833,INBAND,	X	V	H.263 1998 - SIP over UDP and TCP - MP4V CIF	VX 1286
	Snom	7.3.30 6057	Snom300-SIP	G.711U/A	N/A	N/A	N/A	RFC2833,INFO, INBAND	X	V	Voice Only	
	Fanvil	1.0.900.112.88	D800	G.711U/A	H.264	720P	4CIF	RFC2833,INFO	V	V		VX, 1286
	Fanvil	1.0.900.112.88	SE780	G.711U/A	H.264	VGA	VGA	RFC2833,INFO	V	V		VX, 1286
	Fanvil	1.0.926.150.88	SE780	G.711U/A, , G.722	H.264, ,H.263	VGA	VGA	RFC2833,INFO	V	V	H.263 1998 - SIP over UDP and TCP	VX, 1286
	LG Ericsson IPECS	1.0Dk	LIP-8050	G.711U/A	H.263	QCIF	QCIF	RFC2833,INBAND	X	X	Work via iPECS PBX only	VX, 1286
	LG Ericsson IPECS	1.2.6i_m	LIP-9070	G.711U/A	H.263,H.264	CIF	CIF	RFC2833,INBAND	X	X	Work via iPECS PBX only QCIF resolution must be changed to CIF in cfg file	VX, 1286
LG Ericsson IPECS	1.2.6s	LIP-9070-sip	G.711U/A	H.263,H.264	CIF	CIF	RFC2833, INBAND	X	V		VX, 1286	

Clients / Systems Type	Name	Version	OS / Device	Audio Codec	Video Codec	SIP Client Rx Max Resolution	SIP Client Tx Max Resolution	DTMF	Direct Calling	Registrar	Comments	Orion model
Room Systems	AVer	S1.01.03.10.T042	HVC130/310/130/EVC100	G.711U/A, G.722, G.722.1	H.264	720P	720P	RFC2833,INFO	V	V		VX, 1286
	AVer	<u>00.01.02.16/F00D/0</u>	EVC 100	G.711U/A, G.722.1	H.264, H.263	720P	720P	RFC2833,INFO	V	V	H.263 1998 SIP over UDP and TCP	VX, 1286
	Panasonic	2.40 Rev 1	KX-VC300	G.711U/A, G.722.1	H.264	720P	720P	RFC2833	V	V	Get freeze VX	VX, 1286
	Polycom	3.0.0.2-13047	HDX 6000	G.722.1	H.264	720P	720P	RFC2833	V	V		VX
	Sony	2.37.00	PCS-XG80	G.711, G.722	H.264, H.263	720P	720P	RFC2833	V	V	H.263 1998	VX, 1286
	Huawei TE30	TEXO V100R001C01B013SP04 Release 1.1.13.4 May 4 2013 17:52:31		G.711/G.722	H.264	720P	720P	RFC2833	x	V		VX, 1286
PBXs	Xorcom IPBX	CPBX 4.00.0	CentOS 6.5	G.711U/A, G.722	H.264	720P	720P	RFC2833,INBAND,INFO	X	V	Screen sharing from Orion-O doesn't work (PBX issue)	VX, 1286
	Tadiran Aeonix UC&C	1.7.07	CentOS 5.5	G.711U/A	H.264	720P	VGA	RFC2833,INBAND	X	V	Screen sharing from Orion-O doesn't work (PBX issue)	VX, 1286
	LG	IPECS 50a MFIM/VD92M-E.5Gp MAR/12	N/A	G.711U/A	H.264	CIF	CIF	RFC2833,INBAND,INFO	X	V	Screen sharing from Orion-O doesn't work (PBX issue) Orion-O doesn't send video G.722 not supported by PBX	VX, 1286
	Elastix	2.4.0	CentOS 5.10	G.711U/A	H.264	720P	720P	RFC2833,INBAND,INFO	X	V	Screen sharing from Orion-O doesn't work (PBX issue)	VX, 1286
	OpenSIPs	1.7.1	CentOS 6.2	G.711U/A, G.722	H.264	720P	720P	RFC2833,INBAND,INFO	V	V		VX, 1286

3 H323 Interoperability

Clients / Systems Type	Name	Version	OS / Device	Audio Codec	Video Codec	Client Rx Max Resolution	Client Tx Max Resolution	DTMF	H.239	Calling IP:Port other than the default 1720	Comments	MCU type
PC based	Polycom	3.0.0.2-13047	HDX 6000	G.722.1	H.264	720P	720P	INBAND	V	V		VX, 1286
	Lifesize	8.1.12, Build 56354	Windows	G.711, G.722.1	H.264, H.263	720P	4CIF	Signaling	V	V	H.263 1998	VX, 1286
	Polycom	8.0.2 0225	Windows	G.722.1	H.264	VGA	QVGA	Signaling	V	X		1286
	Polycom	RealPresence Desktop 3.0.0.38914	Windows	G.722.1,G.722	H.264	HD	640x360	INBAND	V	V	No video IVVR Non-standard video resolution	VX
iOS	Polycom	2.2-31634 - 3.0.1	iOS 7.0.2	G.711	H.264	CIF	480x272	INBAND		V	Non-standard video resolution	VX, 1286
Android	Polycom	1.1.3-18948_4303	Android 3.2	G.711	H.264	720P	VGA	INBAND		X	The first IVVR playing has no video	VX 1286
Room Systems	AVer	S042	HVC130/310	G.711	H.264	720P	4SIF	Signaling	V	X		VX, 1286
	Panasonic	2.40 Rev 1	KX-VC300	G.722.1	H.264	720P	4SIF	Signaling		V		VX, 1286
	Sony	2.31.00	PCS-XG80	G.711	H.264	720P	W432P	INBAND	V	X		VX 1286
	Huawei TE30	TEX0 V100R001C01B013SP04 Release 1.1.13.4 May 4 2013 17:52:31	N/A	G.722.1/ G.722		720P	720P	INBAND	x	V	No voice	VX, 1286
Gatekeeper	GNUGK	3.3.0	Windows server2003	G.711U/A,G.722	H.264	720P	720P	INBAND /Signaling	V	NA		VX, 1286

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