

7. VIKTAS-Tag 26. März 2009

Videokonferenztechnik heute

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Videokonferenz Gruppe
Rechenzentrum Garching
Max-Planck-Gesellschaft (MPG)
& Max-Planck-Institut für Plasmaphysik (IPP)
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Übersicht

- VIKTAS-Tag Standorte
- Videokonferenzdienst im Wissenschaftsnetz DFNVC / VCC
- Telepresence
- Lösungen
- Software Systeme
- HD Hardware, Markt
- Unified Communication
- Infrastrukturen

Standorte

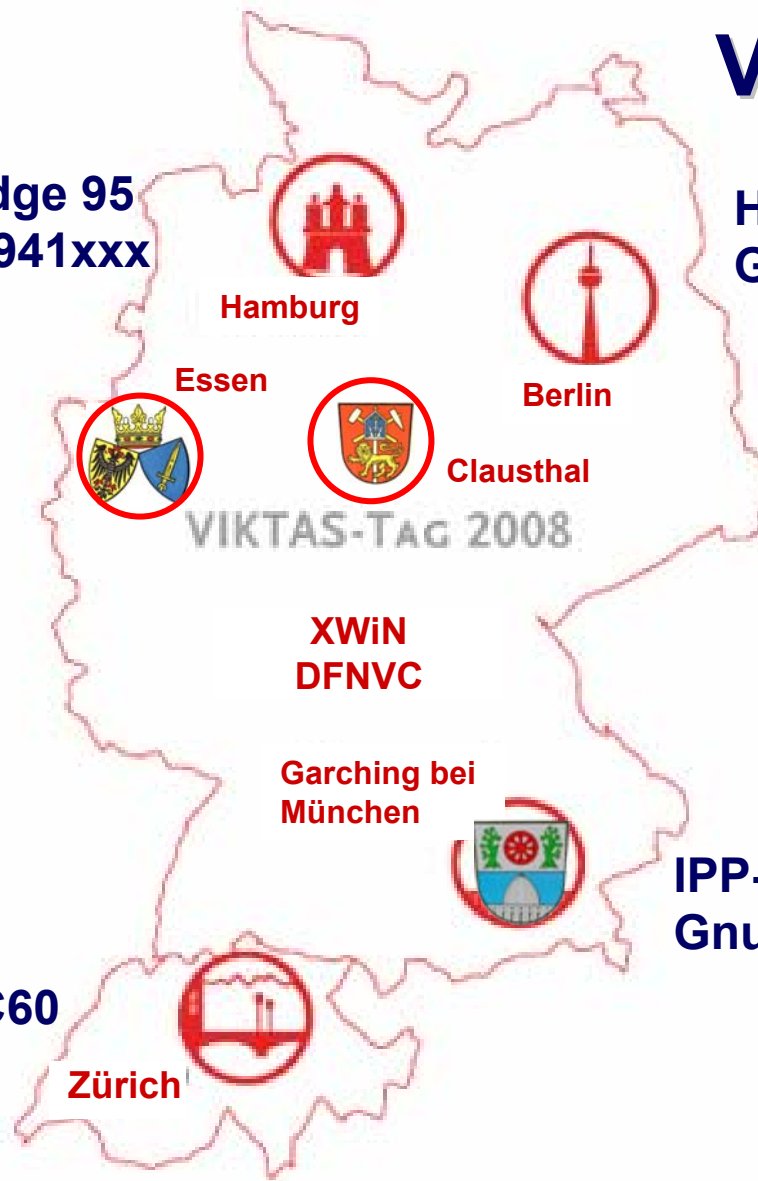
VIKTAS-Tag 2009

DESY Tandberg Edge 95
Gnu GK E164: 004941xxx

HU-Berlin LifeSize Room
Gnu GK E164: 004930xxx

Universität
Duisburg-Essen
Campus Essen

Technische Universität
Clausthal Polycom HDX 9004



Uni Zürich
Tandberg C60

IPP-RZG LifeSize Room
Gnu GK E164: 00498932996101

VCC – 2008, Gisela Maiss

DFNVC

DFNVC: Dienstkomponenten



- **MCUs:**
 - **Codian: 3 Codian MCU 4520, Version 2.2**
→ **120 Ports Video und 120 Ports Audio**
 - [Radvision: 3 Radvision MCU 60, Version 4.0
mit TCM 30 Audio Transcoder Board
und MVP 30 Video Boards] → Abschaltung Ende Sep. 08!!
- **Recorder**
 - **Codian IPVCR 2220, Version 2.2**
→ **5 parallele Aufzeichnungen**
- **Gatekeeper, Gateways und DCS**
 - Gatekeeper Radvision ECS 3.5, Gatekeeper GNU-GK 2.0.7
 - **Codian Gateway GW 3210**
 - Radvision Gateway gw-P20 → Austausch gegen Codian GW Juli 08
 - [Radvision Data Collaboration System 3.5] → Abschaltung Ende Sep. 08!!

Seite 3

- **ADOBE Connect Webconferencing**

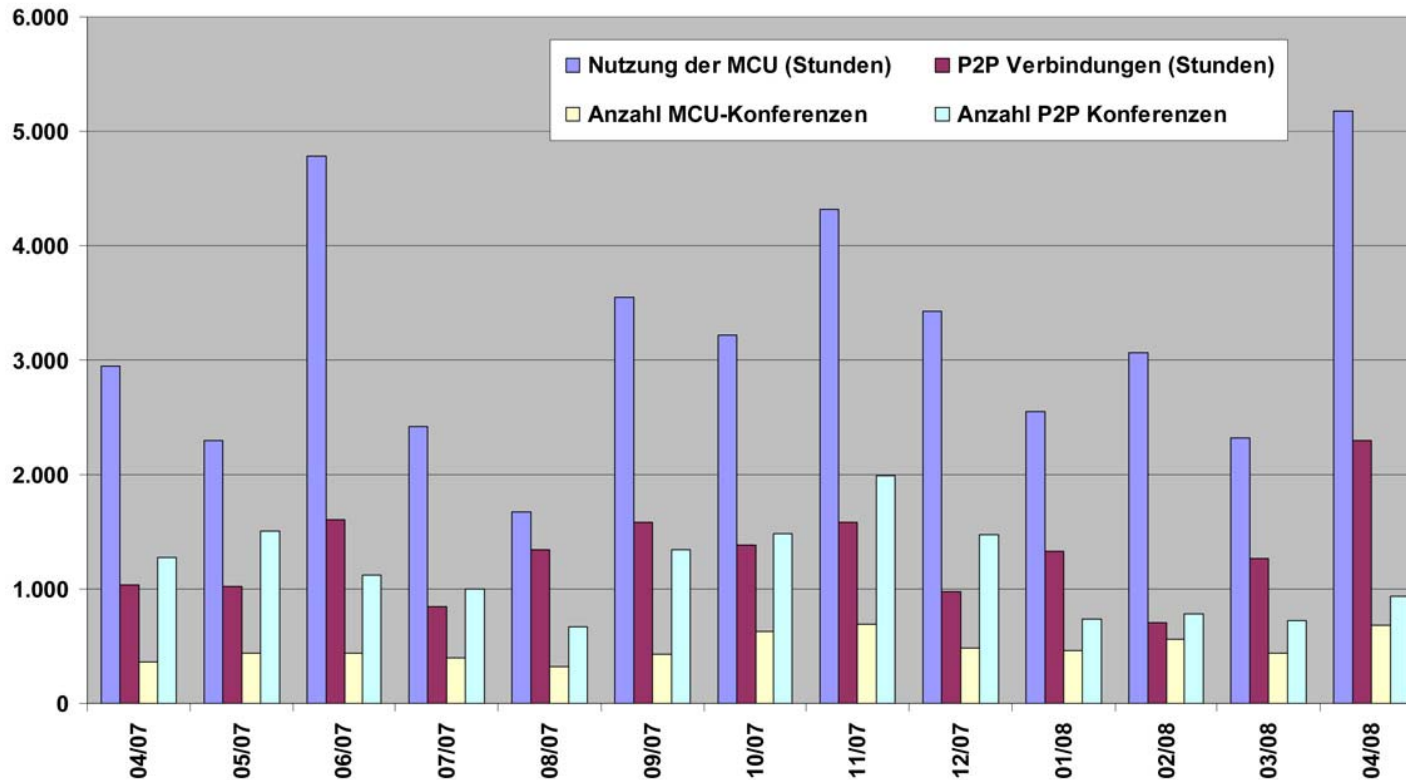
VCC – 2008, Gisela Maiss

DFNVC








DFNVC: Nutzungszahlen



155 teilnehmende Einrichtungen (Stand 12.06.08)






Kompatibilitätsmatrix


Qualität:
  ... gut, stabil;
  ... ausreichend, stabil;
  ... schlecht, stabil;
  ... gut, instabil;
  ... ausreichend, instabil;
  ... schlecht, instabil;
  ... keine Funktion

[Tests ab 2008](#) | [HD-Systeme](#) | [Tests ab 2006](#) |

In der ersten Spalte der [Tabelle](#) sind alle getesteten Videokonferenzsysteme aufgelistet. Der Link führt zu allen Testbeschreibungen mit diesem System.

Die Symbole ( ... ) in der Tabelle führen über einen Link zu dem Testergebnis zwischen den beiden Systemen.

Die Symbole sind unter der Tabelle erläutert. Das Gesicht zeigt in drei Stufen die technische Qualität der Konferenz an, die gelbe Farbe weist auf Instabilitäten hin. Bei den mit rot ()

gekennzeichneten Kombinationen konnte keine Verbindung erreicht werden. Der Trenner zwischen den Tests zu einem System () führt zur Tabelle zurück.

Vielen Dank an [alle](#), die Zeit und Technik für diese Tests zur Verfügung gestellt haben.

VCC
Dresden
DFNVC

VC-System	LifeSize Express 3.5	LifeSize Room 3.5	Mirial Softphone	Polycom HDX 8002 XL	Polycom PVX 8.0.2	Polycom PVX 8.0.4	Polycom VSX 3000	Sony PCS-G70 (Version 2.24)	Sony PCS-G70 (Version 2.61)	Sony PCS-XG80	Tandberg 6000	Tandberg 6000 MXP (F6.3 PAL)	Tandberg 6000 MXP (F7.0 PAL)	Tandberg 990 (F 6.3 PAL)	Tandberg 990 (F 7.0 PAL)	VCON HD 4000 (7.1.97)	VCON HD7000Pro	VCON vPointHD 8.0	VCON xPoint	Codian MCU 4520
LifeSize Express 3.5																				
LifeSize Room 3.5																				
Mirial Softphone																				
Polycom HDX 8002 XL																				
Polycom PVX 8.0.2																				
Polycom PVX 8.0.4																				
Polycom VSX 3000																				
Sony PCS-G70 (Version 2.24)																				
Sony PCS-G70 (Version 2.61)																				
Sony PCS-XG80																				
Tandberg 6000																				
Tandberg 6000 MXP (F6.3 PAL)																				
Tandberg 6000 MXP (F7.0 PAL)																				
Tandberg 990 (F 6.3 PAL)																				
Tandberg 990 (F 7.0 PAL)																				
VCON HD 4000 (7.1.97)																				
VCON HD7000Pro																				
VCON vPointHD 8.0																				
VCON xPoint																				
Codian MCU 4520																				

Anzahl der Tests: 59

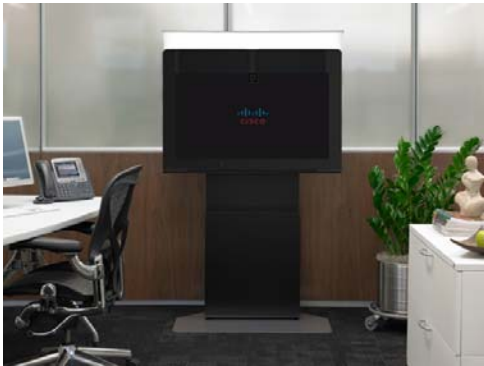
Telepresence

Cisco-Expo 2008 Berlin Collaboration und IT-Vernetzung contra CO2-Emissionen



Telepresence

CISCO TP 1000



Personalizing TelePresence



CISCO TP 500



CISCO TP 3000



CISCO TP 3200

Telepresence

Telepresence—Like Being There

Polycom telepresence solutions enable people to collaborate face-to-face as if they were in the same room. The extraordinary Polycom personal to immersive telepresence solutions improve productivity, accelerate decision-making and offer many other advantages—all while helping the environment by reducing travel. Imagine how your business will change with a barrier.



INTRODUCTION

VIDEOS

PODCASTS



Polycom offers a complete portfolio of high definition telepresence solutions over IP network and traditional telepresence solutions.



Immersive Telepresence

Polycom immersive telepresence solutions provide a natural, life-like experience. Participants are shown in true-to-life dimensions. You'll speak with and interact as if you were in the same room.



Room Telepresence

Polycom's powerful high definition solutions for room environments provide more informed decisions.



Personal Telepresence

Polycom Personal Telepresence solutions seamlessly extend branch sites, and beyond.

Polycom



Telepresence

TOTAL PRODUCT

We know that one size does not fit all. So, we've built Telepresence T3, Telepresence T1 and the 1700 MXP to bring your team together in different types of meeting environments.

Behind the scenes, powerful infrastructure ensures your systems are interoperable and meetings are scalable.



▶ Telepresence T3



▶ Telepresence T1



▶ Personal Telepresence



Tandberg



▶ Telepresence Engine



▶ Telepresence Server



Bedarf und Lösungen am IPP



IPP-Garching 12.11.2008

Lösungen IPP

IPP-Garching



Seminarraum RZG 12.11.2008

Desktop Lösungen IPP



Tandberg (7)



Polycom PVX
(inkl. EFDA 250)



Lifesize Express (2)



IPP-Garching



Seminarraum RZG 14.11.2008

„Akzeptanz“



System Off

Hallo Herr Schwenn,

bitte entschuldigen Sie, dass es am Freitag so lange gedauert hat.
 Ich habe den Beamer mit "power off" am Laptop heruntergefahren.
 Leider habe ich danach den Laptop einmal zugeklappt, worauf dieser sich
 unerwartet ausschaltete. Nachdem ich ihn wieder eingeschaltet hatte,
 war er gesperrt und ich konnte das System nicht mehr ordnungsgemäß mit dem
 entsprechenden Menüpunkt herunterfahren. Ich habe daraufhin zumindest den
 Fernseher mit der Fernbedienung ausgeschaltet, und den Rest des Systems übers
 Wochenende laufen lassen.

Ein schönes Wochenende

Mediensteuerung

(Ein Physiker 😊 14.11.2008)

Akzeptanz – Nutzung

MPG 2008

MPI mit VK, bei DFNVC	VK-Syst.	geplant	Konf/M	Desk-top	Sem.-raum mobil	SR fest	Hör-saal	GK	PLCM	TB	LS	sonst	Web Conf	720P
1	2		2	1		1		2	1	1			1	
2	6	1	30	3		3				5	1			1
3	1		1			1				1				
4	1		2			1		1		1			1	
5	2		5											
6	1		1	1										
7	1		1		1					1				
8	5		15	2	1	1	1	5	1	4			1	
9	2		5	1		1	2	2		2			1	
10	1		1	1						1				
11	2		5	1		1		2		1		1	1	1
12	3		3	1		2		3	3				1	
13	1		1			1	1	1		1				
14	5		15	3	2		2	5	3	2			1	
15	2		2			2		2		2				
16	4		10	2	1	1		1	4				1	
17	2		1	2					1				1	
18	2		2		1	1				2			1	
19	1					1						1	1	
20	1		10						1					
21	4	2		2		2		4	4				1	
22	1	2	5	1						1			1	1
23	14			11		3			8			6		
24	5		10	3	2			5					1	
25	2		1			1							1	
26	1		2					1	1		1			1
27	1		4					1			1		1	1
28	2		1	1	1			2		2				
29	2	2		1		1				2			1	
30	1		1	1						1			1	
31	2		5	1		1			1	1			1	
32-46	keine Angaben													
MPG	80	7	141	39	9	25	6	37	28	31	3	8	19	5
RZG/ IPP	110	10	400	75	2	15	3	110	90	13	7			7

31 →

MPI für Geistiges Eigentum & Patentrecht

Lösungen



Technische Universität Clausthal

Lösungen



Life-Demo aus Clausthal

Lösungen



Desktop 1 - PVX

Nachfolger von ViaVideo

Reine Windows Lösung

Standard für IPP und EFDA
Ca. 250 Systeme in IPP&EFDA

Ca. 270€ Gesamtkosten
(Lizenz, Kamera, Communicator)

Kann bis 4CIF und H.239

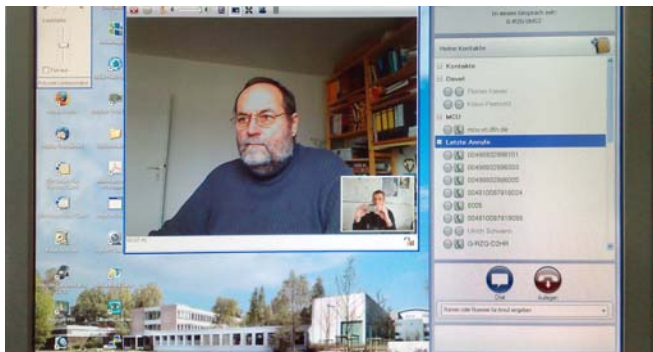
Unterstützung noch aktiv (8.0.4)

720p HD ??

Mit VMWare Mac & Linux ???



Verbindung via DSL 784 full duplex VGA und 4CIF



PVX Nachfolger?

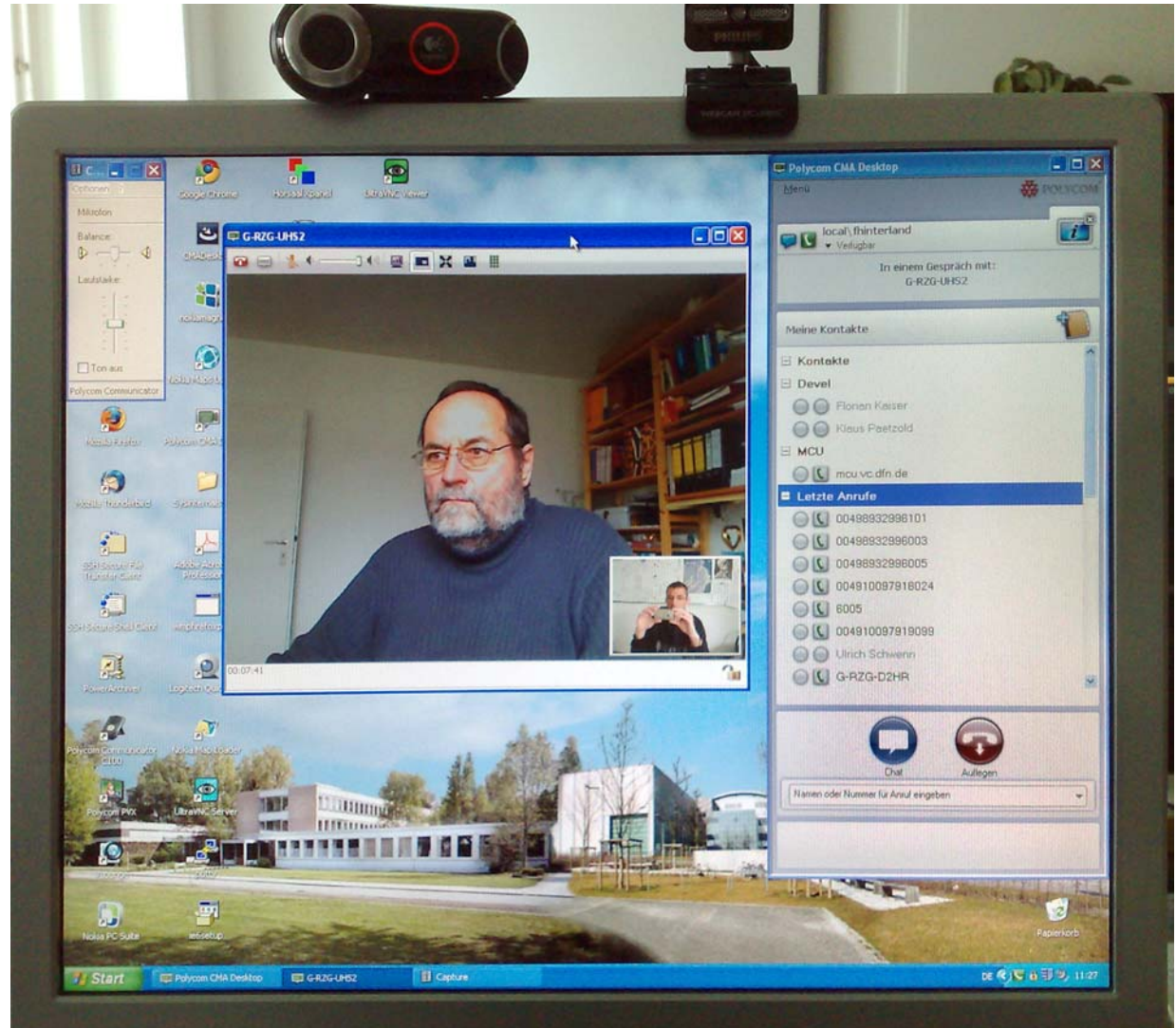
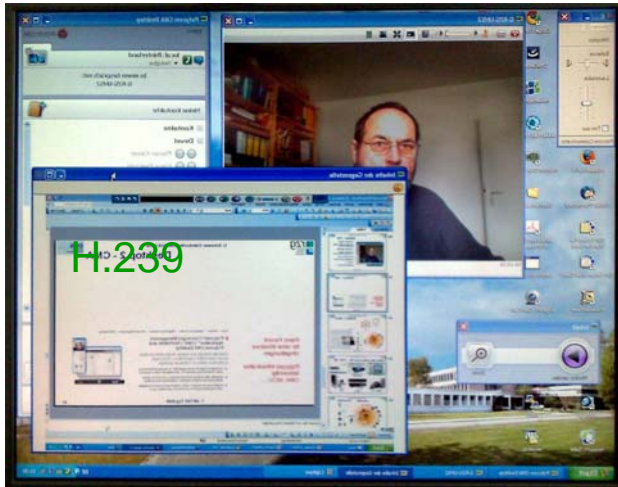
Desktop 2 - CMA

Home > Products > Telepresence & Video > Telepresence Solutions > Personal Telepresence > CMA Desktop

► **Polycom® Converged Management Application™ (CMA™) 5000/4000 and Polycom CMA Desktop**

Centrally manage and deploy visual communication across your entire organization—from large conference rooms to individual desktops

- Leverage a single powerful application to manage telepresence, video conferencing, desktop PC, and multipoint video resources
- Integrate with existing corporate directory services to speed deployment and enable seamless contact/resource locating
- Enable users to instantly verify contact and resource availability with integrated presence-awareness and status icons



Klarer Favorit
 für reine Windows
 Umgebungen?
 Bis 720P Empfang, H.239
 Polycom Infrastruktur
 notwendig:
 CMA, MCU, ...

Desktop 3 – Movi2

Windows basiert (wie CMA)

 proprietäre Tandberg Infrastruktur

WR-Bulletin 10/2009:

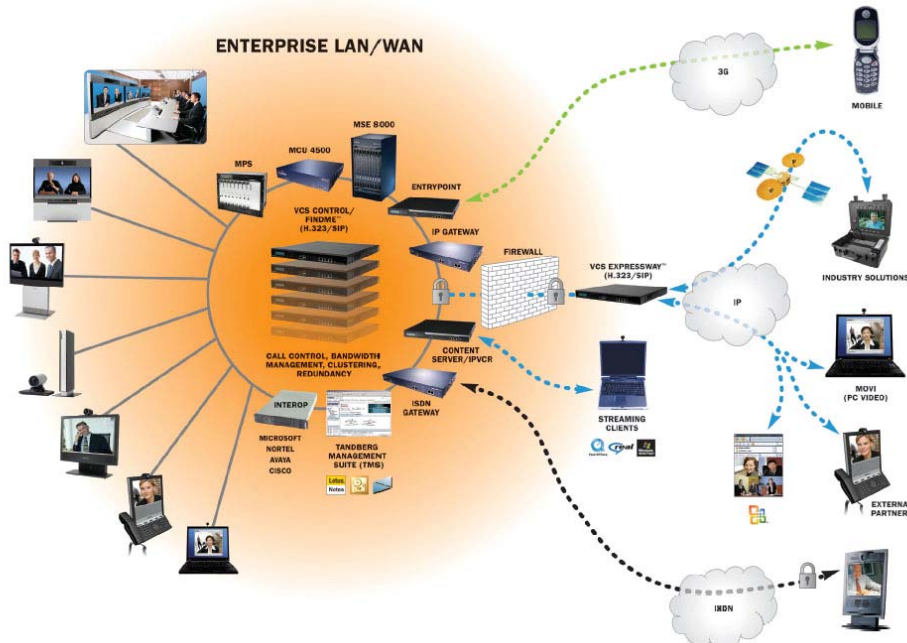
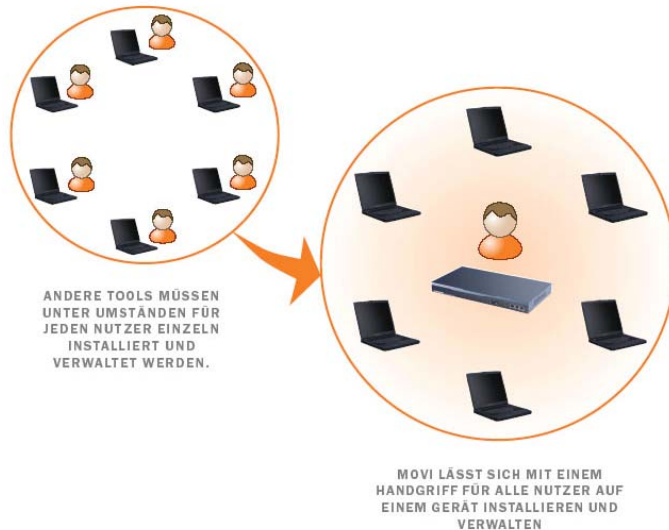
News in Tandberg

Tandberg has re-launched Movi (dubbed Movi 2 by insiders), the company's business-quality mobile video solution for the PC. Movi brings quality, scalability and interoperability (and echo cancellation with wideband audio) to PC video by enabling high-definition (up to 720p) communication from a PC to any other standards-based telepresence and video solution. In its literature, Tandberg is showing Movi with the company's still-unreleased-as-far-as-we-know PrecisionHD USB camera (see photo). Movi is of course compatible with all of Tandberg's infrastructure products and its other endpoints. We recently witnessed a stunning video call from a Movi user while we were in one of the company's T3 telepresence suites, demonstrating the value of high quality video and seamless interoperability with a non-telepresence system, in this case an ordinary laptop.



The new Movi is different from the old Movi in several ways. In fact, they are totally different products; this is NOT a software revision or update. OldMovi was hosted in a browser and was based on Active X. NewMovi uses a client-server architecture, and like its predecessor is SIP-based and has a self-contained presence engine. The client is an MSI file, a windows install file you install once. There is however no Movi server. NewMovi is hosted on Tandberg's Video Communications Server (VCS), a device that can provide gatekeeper functionality, SIP-to-H.323 connectivity, and SIP registrar, and then provisioned by TMS.

As far as licensing goes, a Movi license is used when a user has opened the application, logged in and authenticated, and is ready to receive or place a call. Customers may provision a greater number of Movi users (software, username, password) but are limited to the number of users logged in and ready for calls by the number of Movi user licenses purchased. The incremental list price (cost) for NewMovi if you ALREADY have a registered TMS license and VCS is \$4,430 for 25 licenses (\$177 each); for 2000 licenses the price is \$186,900 (\$93 each). And yes, you still need to buy a camera. Nobody's figured out yet how to build an all-software camera.



LifeSize, Codian, Tandberg, Polycom 720P → 1080P HD

HD System #1: LifeSize in 2005



Codian best MCU since 2006

Creative Video Conferencing



Codian ist TANDBERG
Derzeit nur 720p

LifeSize® Room 200™



Verfügbar 11/08



C90 / C60

01/09



HDX 8006

01/09

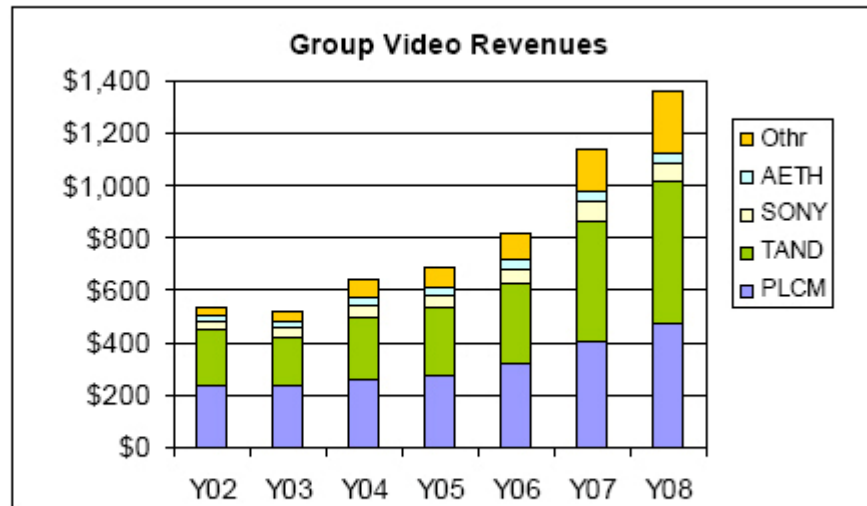
Q4-2008 Videoconferencing Industry Statistics

While the period of hypergrowth appears to be behind us, the videoconferencing industry as a whole turned in a remarkable fourth quarter in 2008 in the midst of what appears to be a near world-wide economic meltdown. Buoyed by the fact the conferencing and collaboration systems actually can help companies be more efficient and save money at the same time, the industry remains in a positive growth mode. Our figures indicate that a 5% annual growth rate in units created a 13% rise in revenues, reflecting the shift to high definition as well as the inclusion of a small number of high cost "telepresence systems."

Quarterly	Q4-07	Q3-08	Q4-08	Q/Q	Y/Y
Video System Revenues (\$M)	\$331	\$347	\$375	7.9%	13.3%
Video System Units	60,000	58,540	62,875	7.4%	4.8%
Infrastructure Revenues (\$M)	\$90	\$84	\$107	27.0%	18.5%

Comparing all of 2008 to all of 2007 we find growth rates as follows:

Annual	Y/Y
Video System Revenues (\$M)	18%
Video System Units	9%
Infrastructure Revenues (\$M)	11%

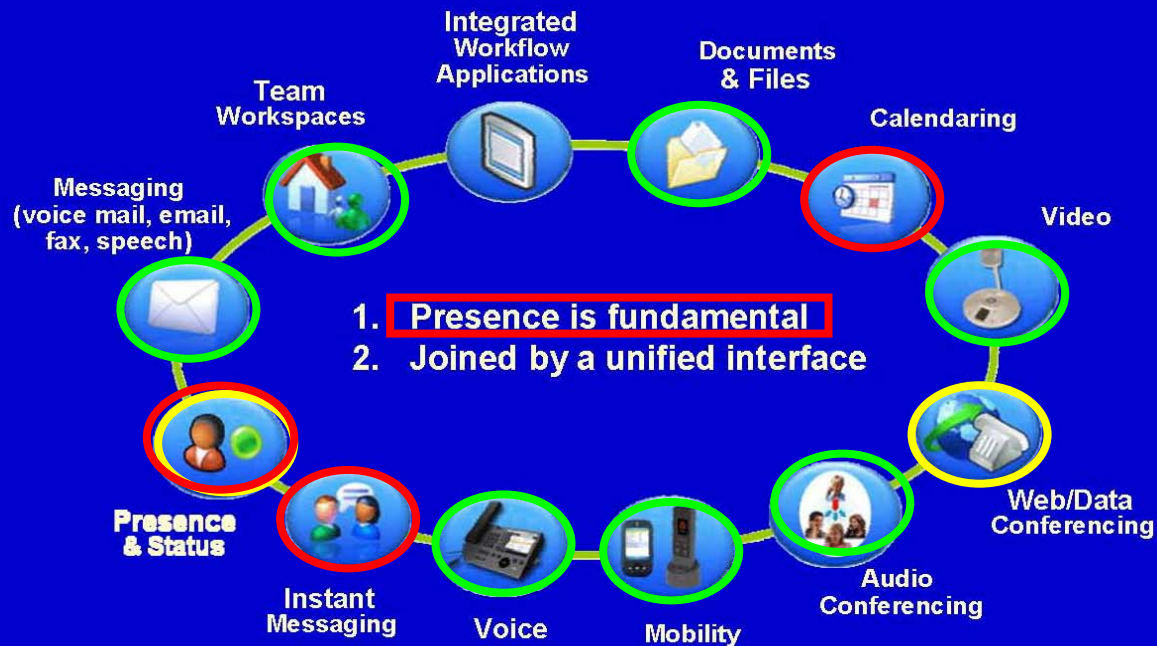


Wainhouse
 Research
 Bulletin
 Vol. 10 #05
 March 11, 2009

Markt

UC - Unified Communication (1)

Defining Unified Communications



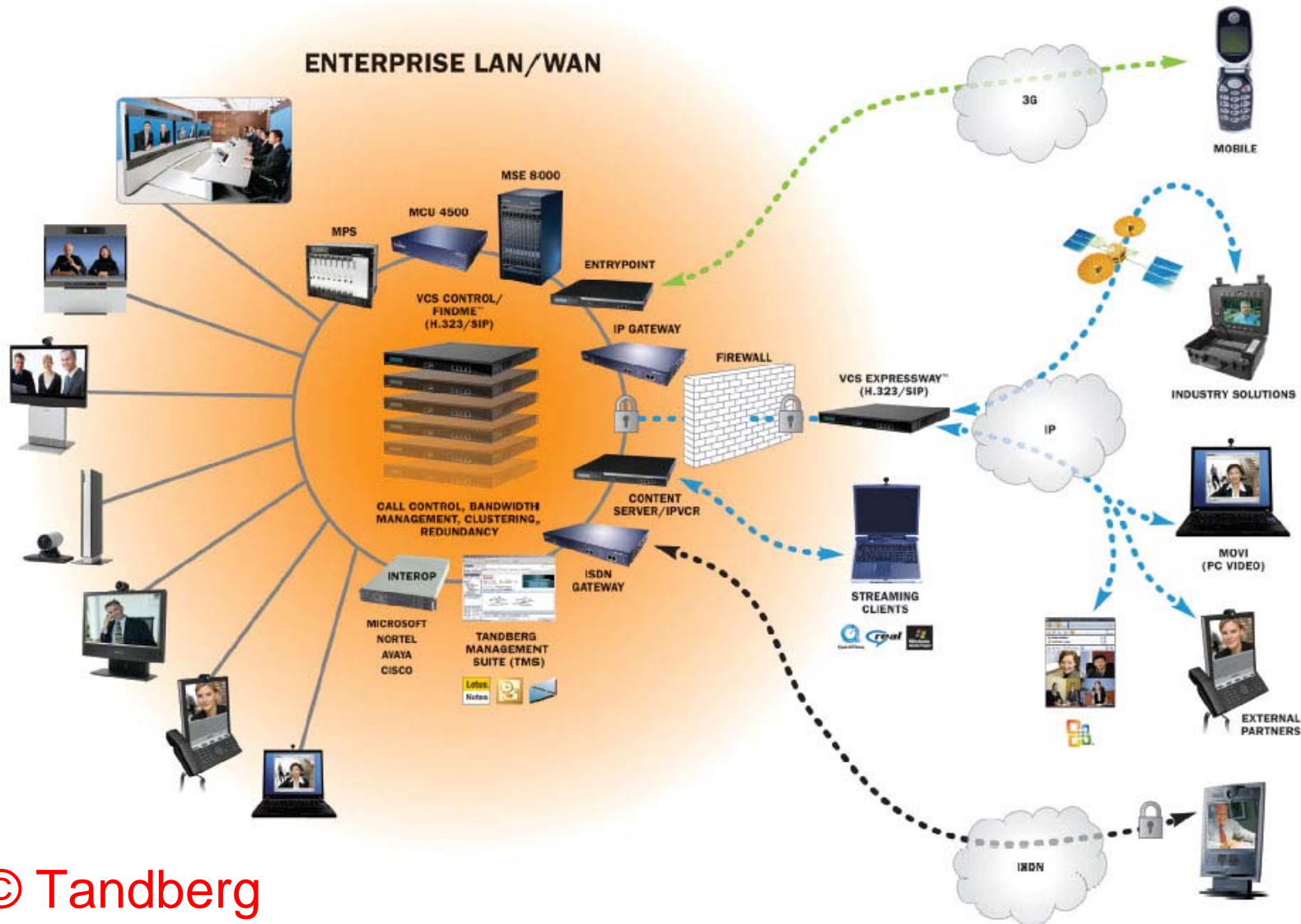
Unified communications enables real-time, ad-hoc knowledge and information flows by combining collaboration and conferencing capabilities such as presence, instant messaging, telephony, audio conferencing, web collaboration, unified messaging, mobility, and videoconferencing, through a simple and easy to use interface

Presence will be the dial tone for the 21st century!

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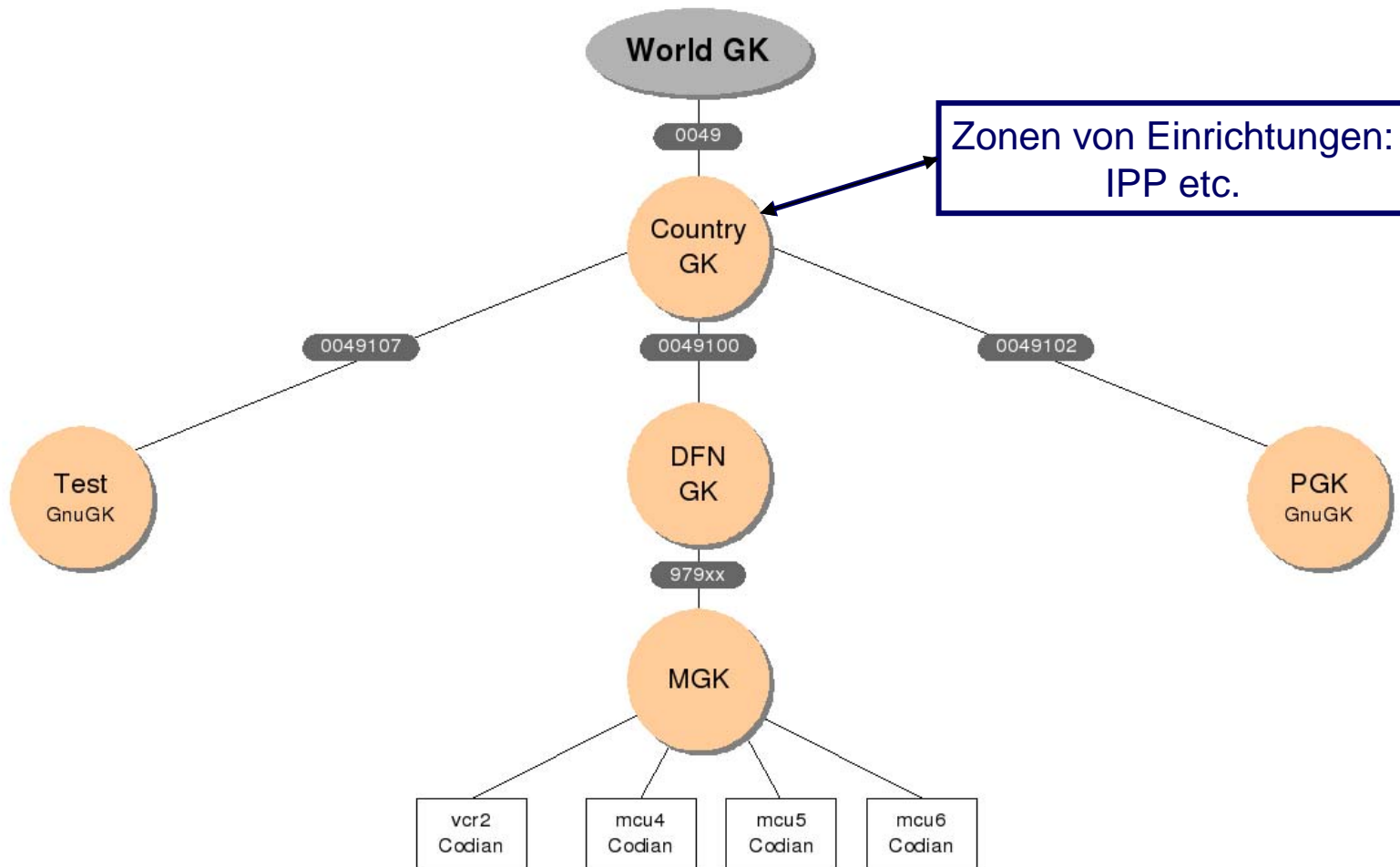
Kommerzielle Infrastruktur



© Tandberg

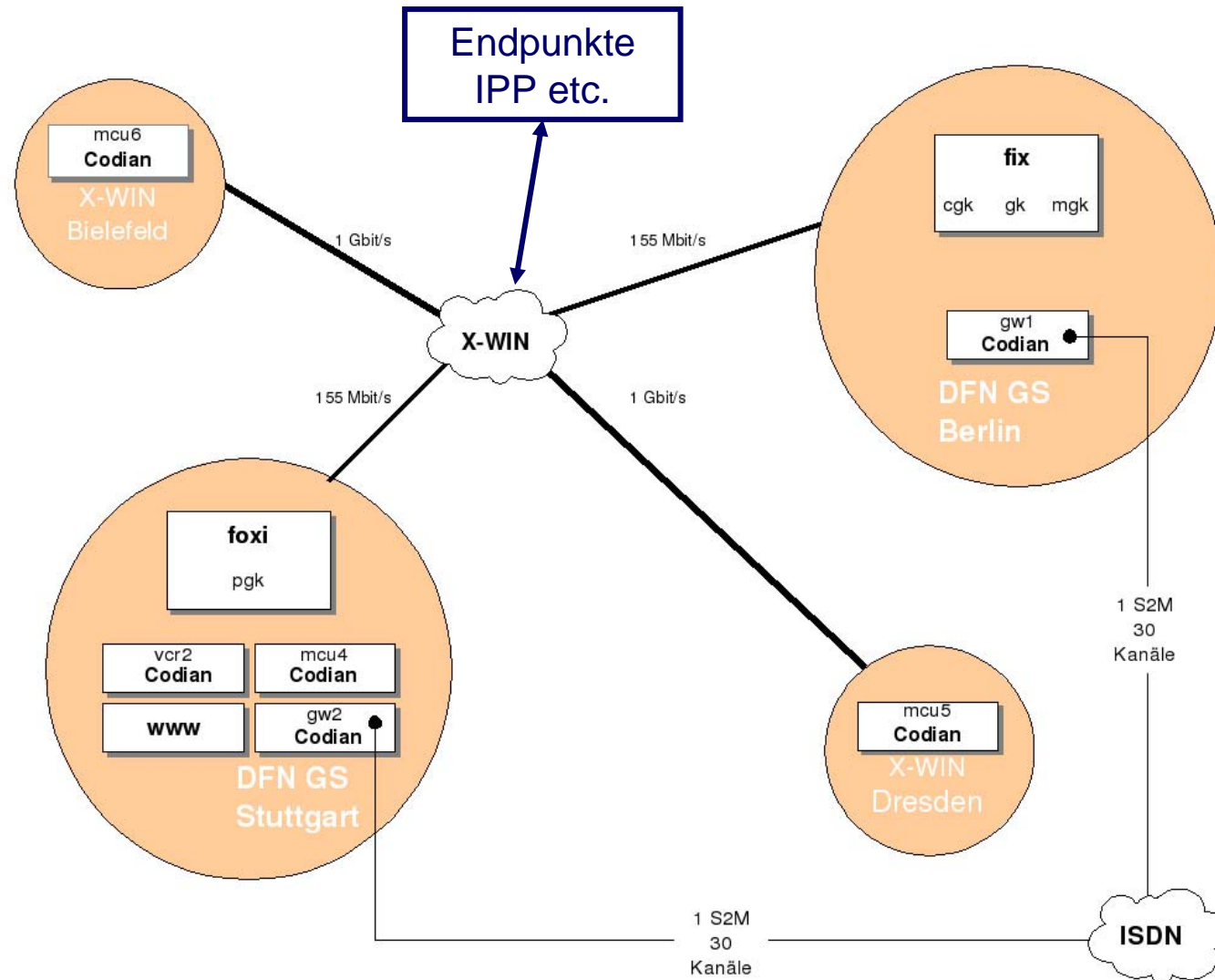
„Unsere“ DFNVC

Infrastruktur



„Unsere“ DFNVNC

Infrastruktur



„Unsere“ DFNVC

Infrastruktur



Zusammenfassung

Thesen

- TP Qualität möglich mit Standard Komponenten
- Probleme Lösbar (IP, QoS, Firewall, Global Admin)
- Hilfe von
DFNVC, VCC, VIKTAS, VC-Gruppe RZG - Profi-Planer nutzen!
- Desktop Systeme Windows basiert, Opensource zu schlecht
- Klassisches VC oder Telepresence – Keine Bedeutung für uns?
Beide Welten konvergieren - ABER “Cisco” könnte trotzdem gewinnen
- Wichtig: **Akzeptanz ~ € x T x M x O**

Benefits (Gute Akzeptanz vorausgesetzt)

Reise & CO2 Reduktion, Manpower Effizienz

Videoconferencing erhöht Lebensqualität

Reisen, CO2, Lebensqualität

Umwelt

* <http://www.atmosfair.de/>



© vodafone

Danke für Ihre Aufmerksamkeit