



# SWITCH

The Swiss Education & Research Network

## **E-Conferencing**

**Martin Sutter, Beatrice Huber**  
**NetServices**

- **Videoconferencing**

- Universelles Wählsystem
- SWITCH betreibt Multipoint Control Unit (MCU)
- Webbasiertes Reservations-System
- SWITCHvconf Helpdesk

- **Streaming**

- **Collaboration Tools**

- Breeze
- Marratech

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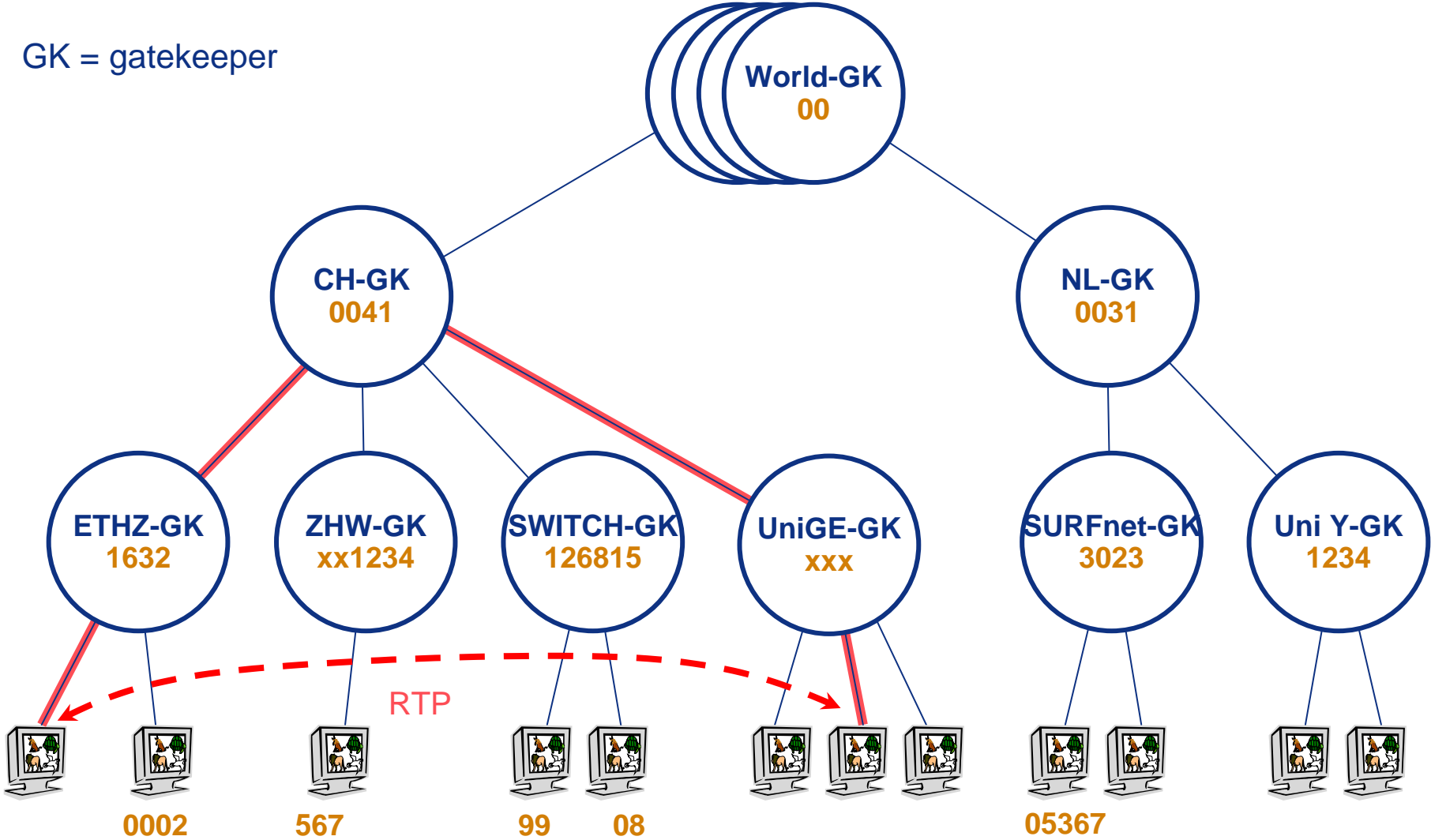
- **Streaming**

- **Collaboration Tools**

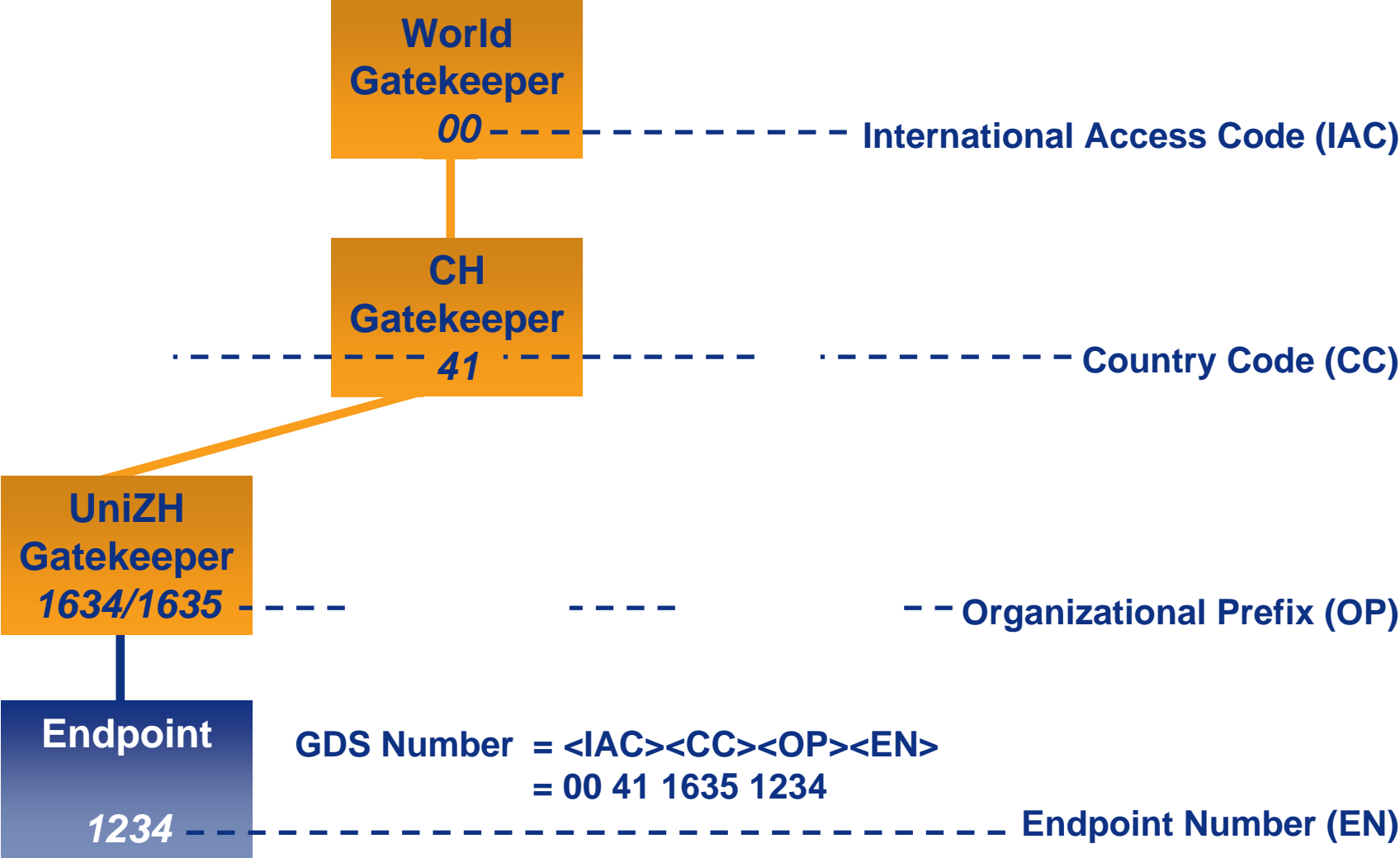
- **Breeze**
- **Marratech**

# Global Dialing Scheme (GDS)

GK = gatekeeper



# Global Dialing Scheme (GDS)





IP Adresse: 195.176.255.32



IP Adresse: 130.59.98.10

## Gatekeeper

Registrierung



Registrierung

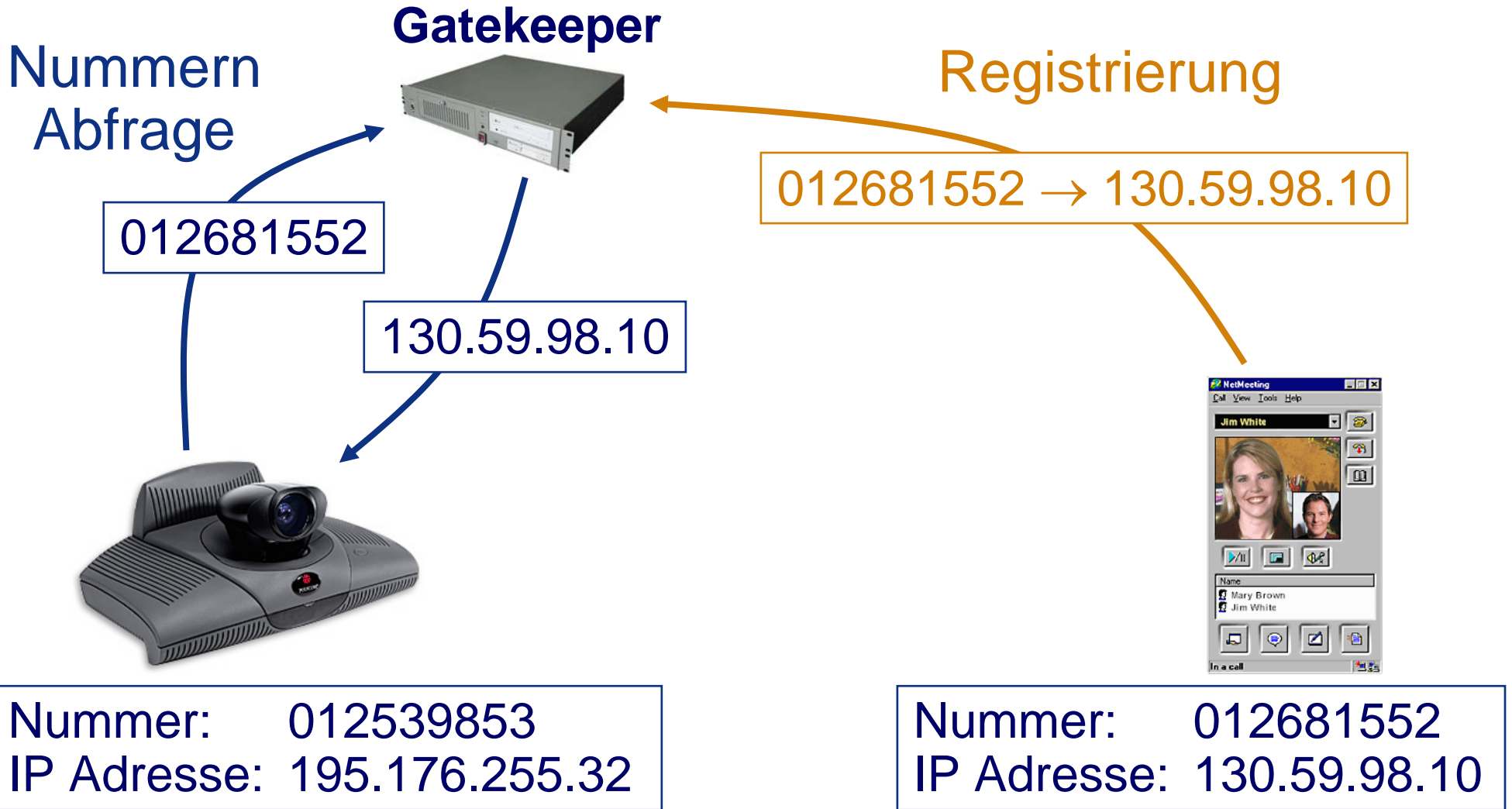
012539853 → 195.176.255.32

012681552 → 130.59.98.10

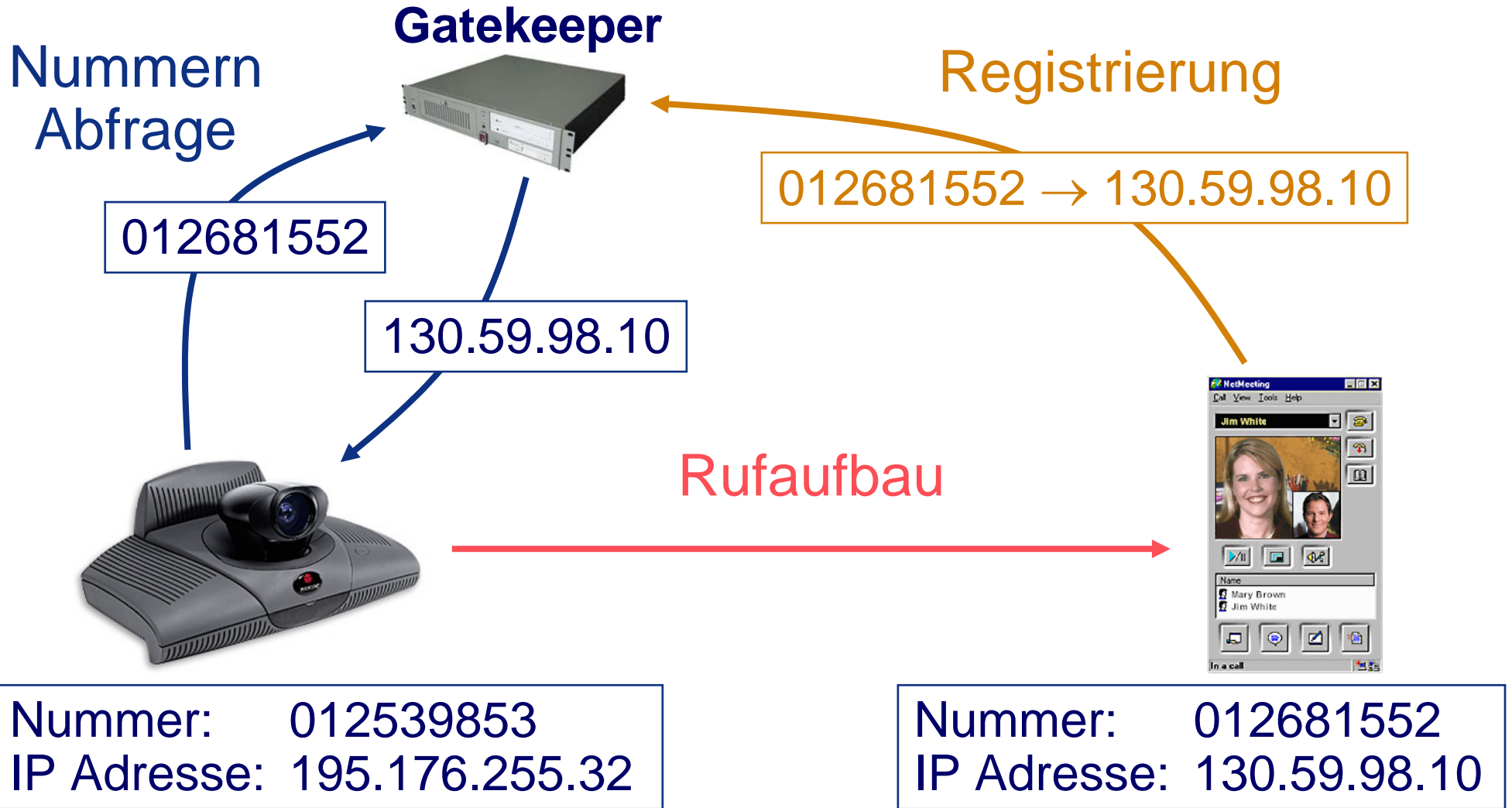


Nummer: 012539853  
IP Adresse: 195.176.255.32

Nummer: 012681552  
IP Adresse: 130.59.98.10







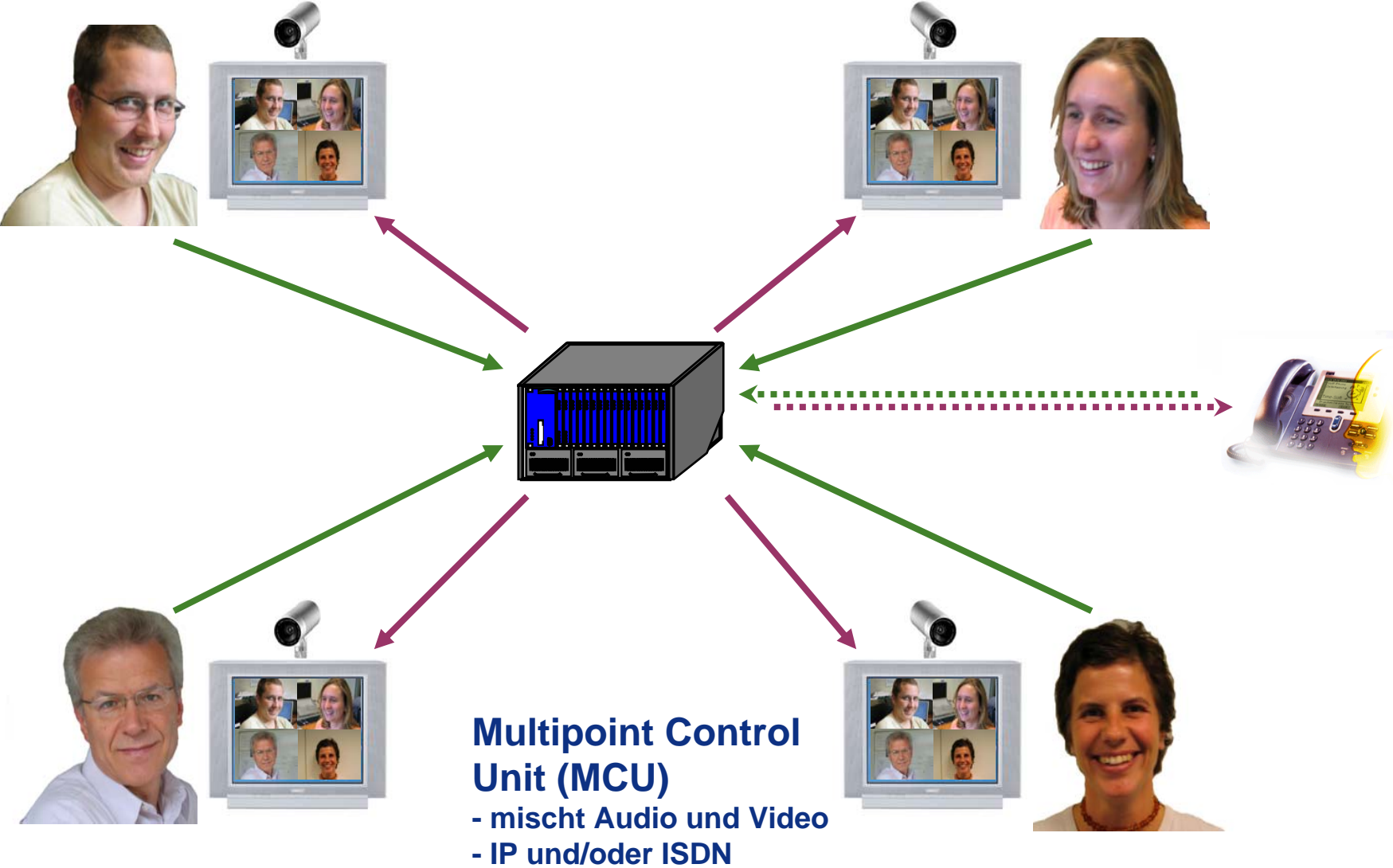
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## SWITCHvconf Conference Reservation

### Date and Duration of the Conference

Date: <not yet defined>  
Duration: <not yet defined>

Define

### Number of Participants and Coordinator

Coordinator: <not yet defined>  
Nr of parties: <not yet defined>

Define

### Advanced Settings

Define

Make Reservation



a service of SWITCH

## SWITCHvconf Conference Reservation

### Date and Duration

It is advisable to reserve **enough time** before and after the actual conference. Good practice is to reserve one hour before and half an hour after the conference for testing and other purposes.

It is also possible to test your equipment with our [test conferences](#). For further questions please contact the [SWITCHvconf Helpdesk](#).

Date	5	April	2005
Starttime	14 h	10 min	
Start now	<input type="checkbox"/>	(Date and Starttime above will be ignored)	
Duration	0 h	10 min	
<input type="button" value="Submit"/>			

Please **reserve in Swiss local time** (which is Central Europe Time, CET = UTC+1 + daylight saving).

Swiss local time	14:08 (UTC + 2)
UTC	12:08



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## SWITCHvconf Conference Reservation

### Define Coordinator and Number of Participants

The **coordinator** will receive an email in order to authenticate this reservation request. He also will receive an email with all conference details like dialin numbers etc.

The coordinator does not have to be a participant of the requested conference. Only users registered in the [SWITCHvconf Directory](#) are allowed to act as a coordinator. There is no such limitation for conference participants.

The conference resources will be limited to the specified number of participants. If multiple participants use the same video conference device, they are counted as one single participant.

**Coordinator**

Please select ▼

**Number of participants**

3 ▼

Submit



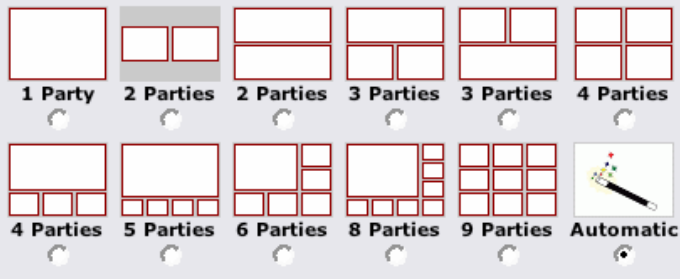
a service of SWITCH

## SWITCHvconf Conference Reservation

### Advanced Settings

The default settings are suitable in most cases. However, you can define other settings such as the video layout here.

#### Video Split



The **Automatic** setting will select an appropriate video split depending on the number of participants and the chosen **Participant's View** setting. We recommend using this setting.

You can change the video split later when the conference is running.

#### Participant's View

- Default Layout
- Same Layout

- When **Default Layout** is activated, the participants will not see themselves but they will see all of the other participants. Choose this layout if you are disturbed seeing yourself on the screen.
- When **Same Layout** is activated, all participants will receive the same video image. That means that you will see yourself, too.

#### Conference Type

- Audio/Video Conference
- Audio Only Conference

**Note:** When choosing **Audio Only Conference**, the above settings in relation to the **Video Split** and **Participant's View** have no effect.



### Video layout

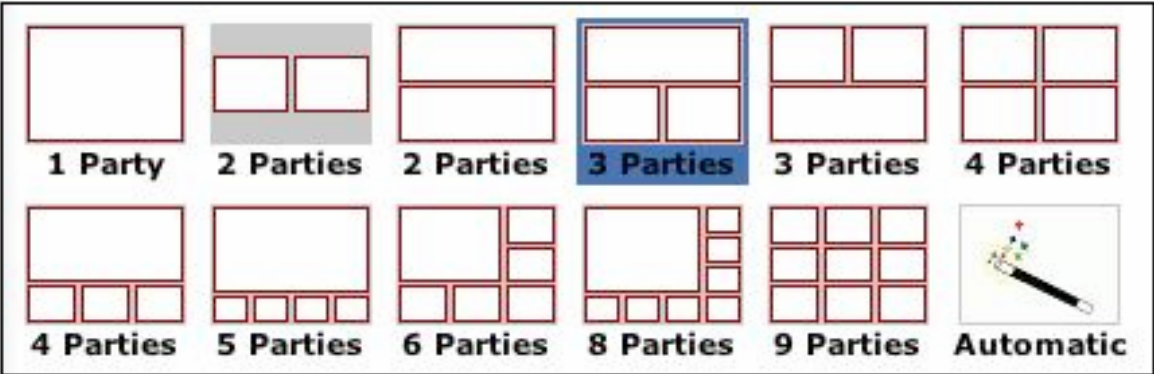


Figure 3: Choice of the video layout

### Participant list

	Alias Name	Interface	Status	Volume	Audio	Video	Disconnect / Delete
1	schlatter	h323	connected	5 <sup>+</sup> / <sub>-</sub>			
2	John Smith	h323	disconnected	5 <sup>+</sup> / <sub>-</sub>	N/A	N/A	
3	vconf-helpdesk@switch.ch	h323	connected	5 <sup>+</sup> / <sub>-</sub>			

[Show extended view](#)

Figure 4: List of participants that have joined the conference

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- Unterstützung beim Betrieb von Videokonferenzen
- Beratung für ...
  - Anschaffung von vconf Ausrüstung
  - Einrichten von vconf Räumen
  - (Inter-) Nationale vconf Projekte
- Anlaufstelle bei technischen Problemen

**vconf-helpdesk@switch.ch**

 **+41 1 268 1501**

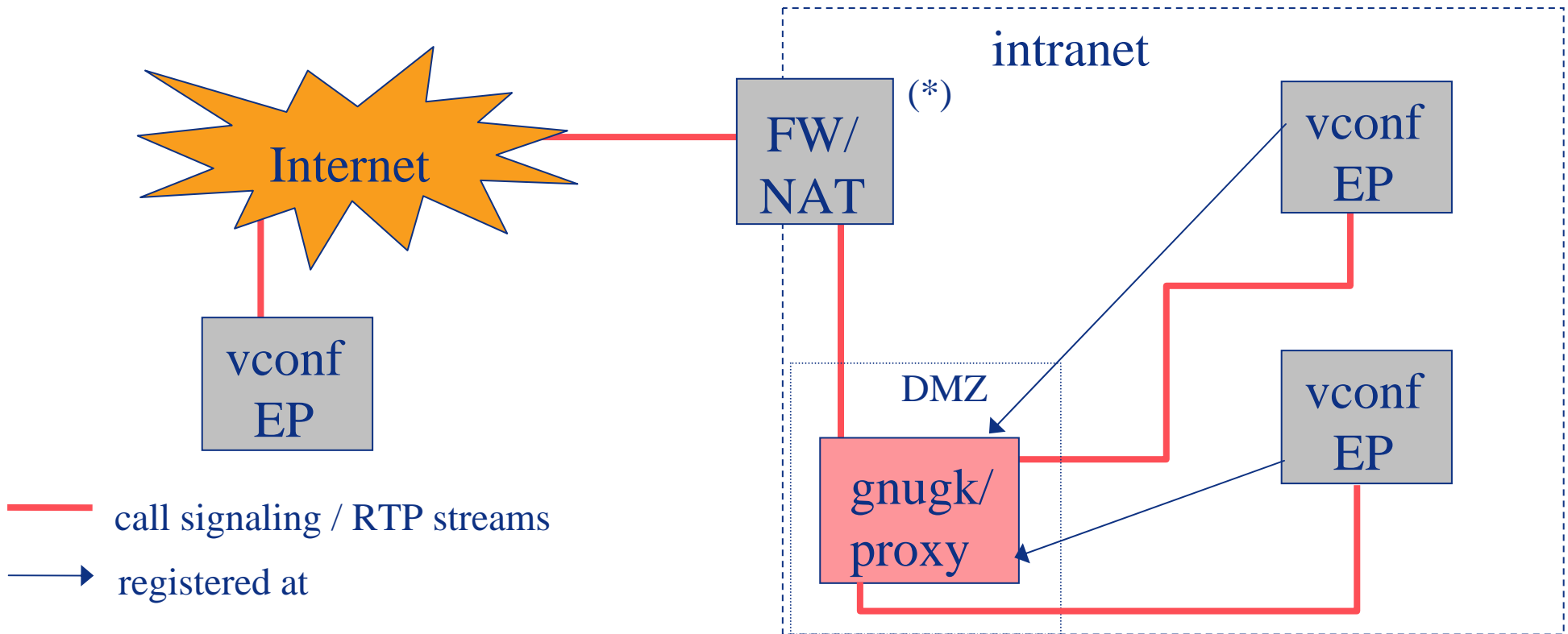
 **004112681501**

**<http://www.switch.ch/vconf/>**

mailing list **vconf-users@switch.ch**

registration **[www.switch.ch/vconf-users/](http://www.switch.ch/vconf-users/)**

- vconf benutzt peer-to-peer UDP Ströme  
→ Firewalls mögen das nicht



— call signaling / RTP streams

→ registered at

(\*) FW: high ports open for proxy  
NAT: port forwarding for proxy

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- **Streaming & Recording von Videokonferenzen**
  - Server = H.323 client
  - inklusive Slides
  - Eingebettet ins vconf-portal → AAI-enabled
- **In Planung: Streaming & Recording von “events”**
  - Server = standard video encoder
  - inklusive Slides
- **Ausstehende Probleme**
  - Speicherung, Metadaten, Zugriff (AAI?)
  - Streamingkonzept für viele Benutzer (10'000 +)
- **Kommerzielle Kooperation wünschenswert**

## Stream und Folien vom SIPInfoday (Jan 05)

→ <https://vconf.switch.ch/infoday/>

(Username: sip, Passwort: sipinfo)

- **Servers**

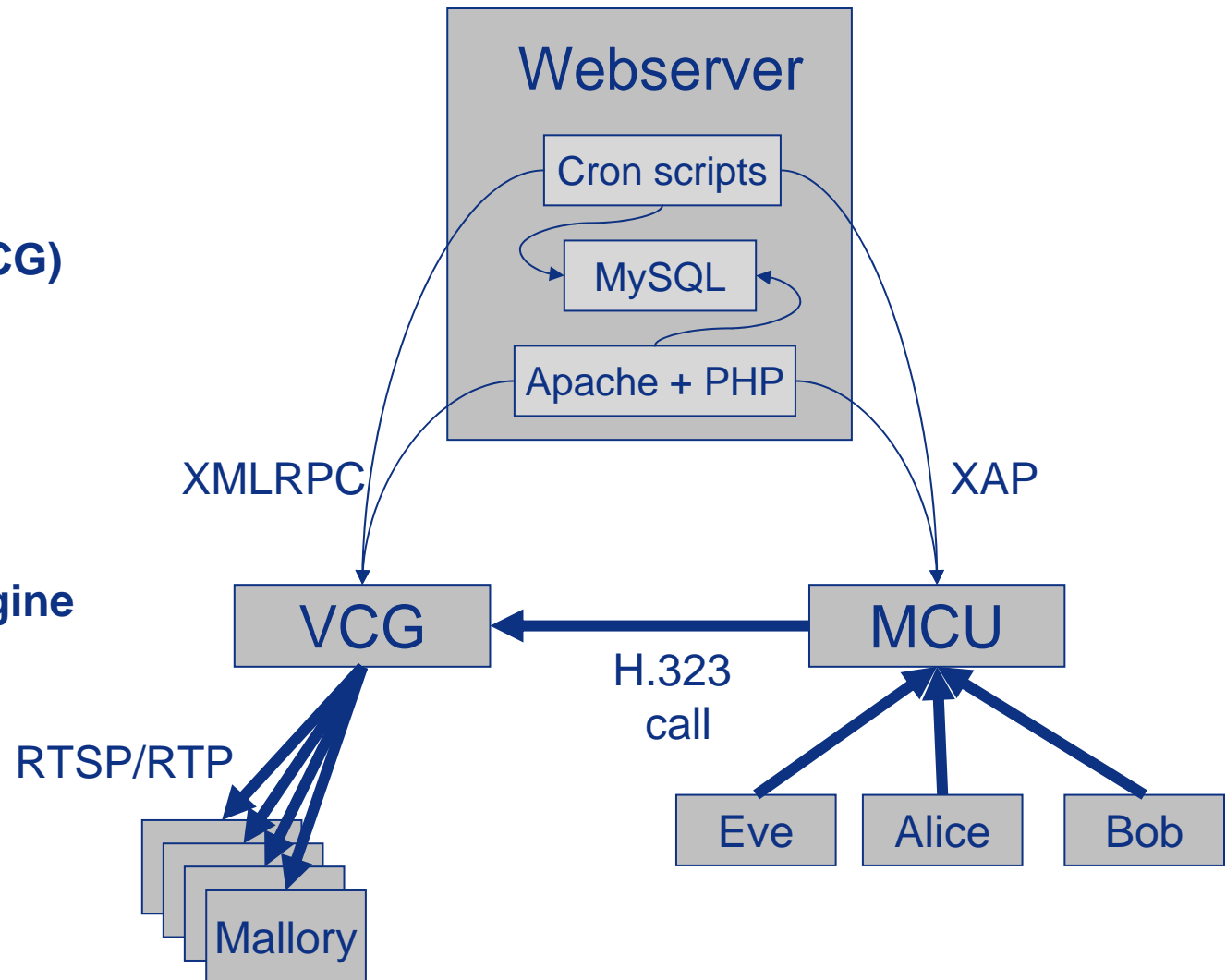
- Webserver (LAMP)
- MCU
- Streaming Server (VCG)

- **Libraries**

- XAP
- XML RPC
- SWITCHweb Library
- Smarty Template Engine

- **Languages**

- PHP
- JavaScript





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- nur audio und video genügen nicht
- Dokumente werden übertragen (Documentstore)
- Einführung Desktopsharing Tool (PictureTalk)
























- Desktop Client für Einzelpersonen
- Online Anpassungen am Dokument vornehmen
- Video, Audio und Daten vereint in einem Tool

The screenshot shows a video conference interface. On the left, a Microsoft Excel spreadsheet is displayed with a menu open over the 'Column' option. A yellow arrow points to a cell in the spreadsheet with the text 'Significant increase!!'. Below the spreadsheet is a bar chart showing data for quarters O1, O2, O3, O4, O1, and O2. On the right, a grid of video thumbnails shows several participants. At the bottom, a chat window displays messages from Tom and Jill.

	Q4	Q1	Q2
East	925	1000	1200
West	600	675	700
Central	650	650	700
<b>Budget</b>	<b>2 175</b>	<b>2 325</b>	<b>2 600</b>
East	890	930	1 115
West	612	650	690
Central	480	510	480
<b>Actual</b>	<b>1 982</b>	<b>2 090</b>	<b>2 285</b>
<b>% achieved</b>	<b>115%</b>	<b>116%</b>	<b>113%</b>

< previous 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 next >

NAME	DESCRIPTION	TYPE	MANUFACTURER	
<a href="#">FirstClass</a>	FirstClass is a cost-effective, highly scalable, feature-rich messaging and communications...		Open Text Corporation	
<a href="#">Flash Communication Server MX 1.5</a>	A server based platform for creating and deploying compelling, interactive web-based audio...		Macromedia	
<a href="#">Future Office Dynamics</a>	human-centered technologies for work- and interaction environments		Fraunhofer IPSI-AMBIENTE	
<a href="#">G2-R-2U</a>	NCast Telepresenter™ G2 is an interactive presentation system that allows you to deliver i...		NCast Corporation	
<a href="#">Genesys Meeting Center</a>			Genesys Conferencing	
<a href="#">Glance</a>	Glance is a unique Web conferencing tool which specializes in providing effective and reli...		Glance Networks, Inc.	
<a href="#">Gnome Meeting (Version 0.98)</a>	A H.323 compatible videoconferencing and VOIP/IP-Telephony software-only; open source appl...		Gnome Meeting	
<a href="#">Groove</a>	Groove is virtual office software that allows teams of people to work together securely ov...		Groove Networks	
<a href="#">GroupMind Express</a>	GroupMind Express connects people across geography and functions to solve business problem...		GroupMind Express	
<a href="#">GroupSystems OnLine</a>	GroupSystems OnLine uses the Internet to allow every member of your group to work effectiv...		GroupSystems.com	

- **Usability (learning curve, intuitive usage)**
- **Audioqualität für synchrone Kollaboration / delay**
- **Support für Windows, Mac und Linux/Unix**
- **Preis**
  - Server
  - Clients (wenn vorhanden)
- **Integration in existierende Systeme (AAI)**
- **eigenen Server hosten**
- **Performance**
- **NAT/firewall**

## Breeze User

### Ease of Use

Kein Client erforderlich

Deutsch

Port 80, 443 (1935)

Audioqualität mangelhaft

Proprietär

Daten bleiben auf Server

Präsentationen publizieren

Mac kann Desktop nicht sharen

250 concurrent users

## Marratech User

Weniger intuitiv

Download 32 MB

Englisch

Firewall settings (52000 to 52999 udp)

Hervorragende Audioqualität

SIP Integration

Daten nicht zentral gespeichert

Kein Publishing vorgesehen

VNC für application sharing

10 concurrent users

- Demo mit Paola Wieting (remote)

- Bei Interesse bitte Email an:

[breeze@switch.ch](mailto:breeze@switch.ch)

[marratech@switch.ch](mailto:marratech@switch.ch)

[vconf-helpdesk@switch.ch](mailto:vconf-helpdesk@switch.ch)