



Communication Solutions

# Ready for tomorrows world of communication.

## Remote Call Control for Microsoft Lync Server

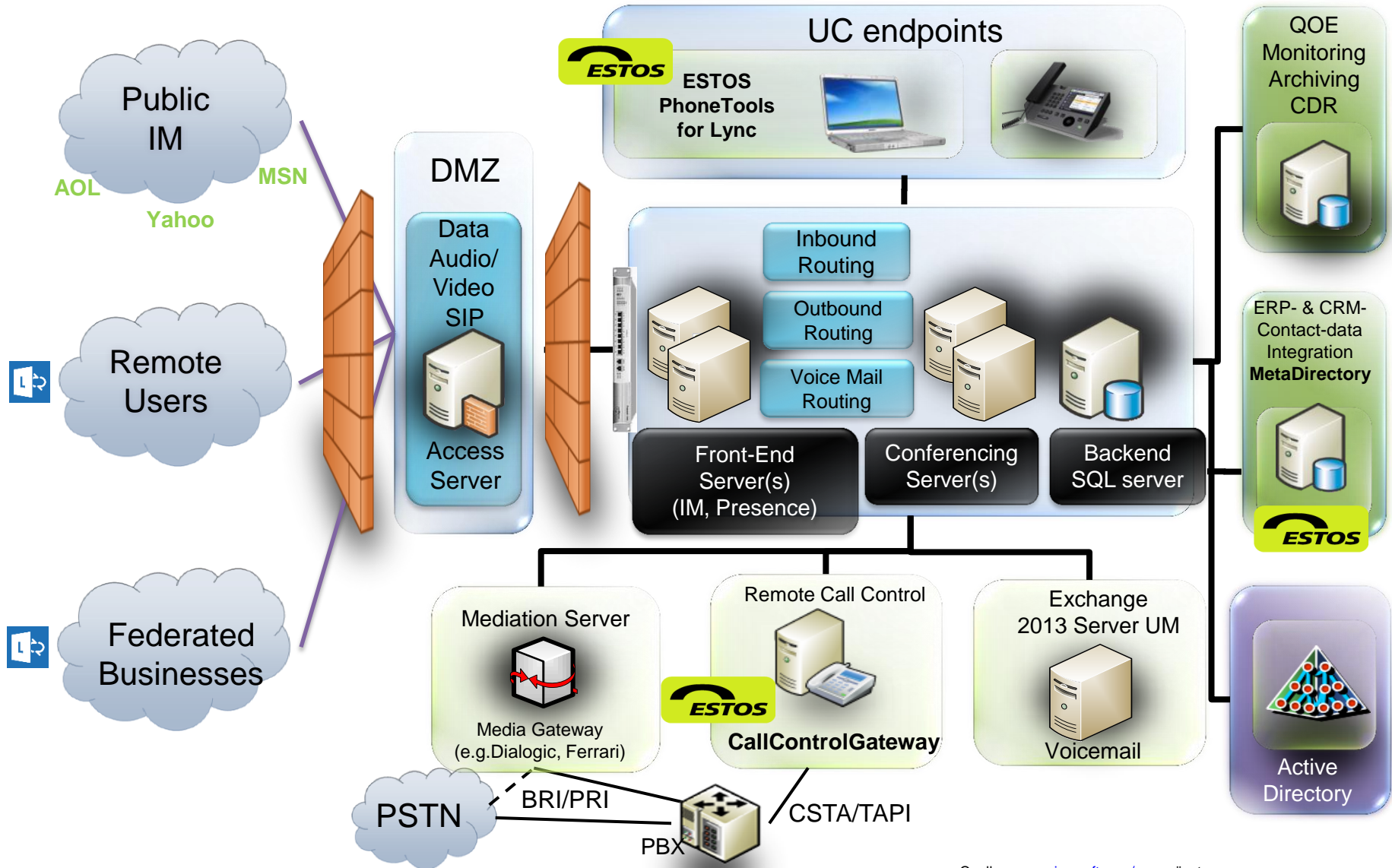
A photograph of the Golden Gate Bridge in San Francisco, overlaid with a green tint. On the right side, there is a white circuit-like graphic with nodes and lines. Text is overlaid on this graphic: "64 Bit" in large white font on a dark red background, with "ESTOS Technology" in smaller white font below it. Further down, "MultiSite and MultiVendor" is written in black, with "compliant technology" in smaller black font below it. In the bottom left corner of the image area, there is a small icon of a white speaker with red sound waves and a red and white flag. At the bottom right, the text "CallControl Gateway" is written in a bold, black, sans-serif font.

**64 Bit**  
ESTOS Technology

**MultiSite and  
MultiVendor**  
compliant technology

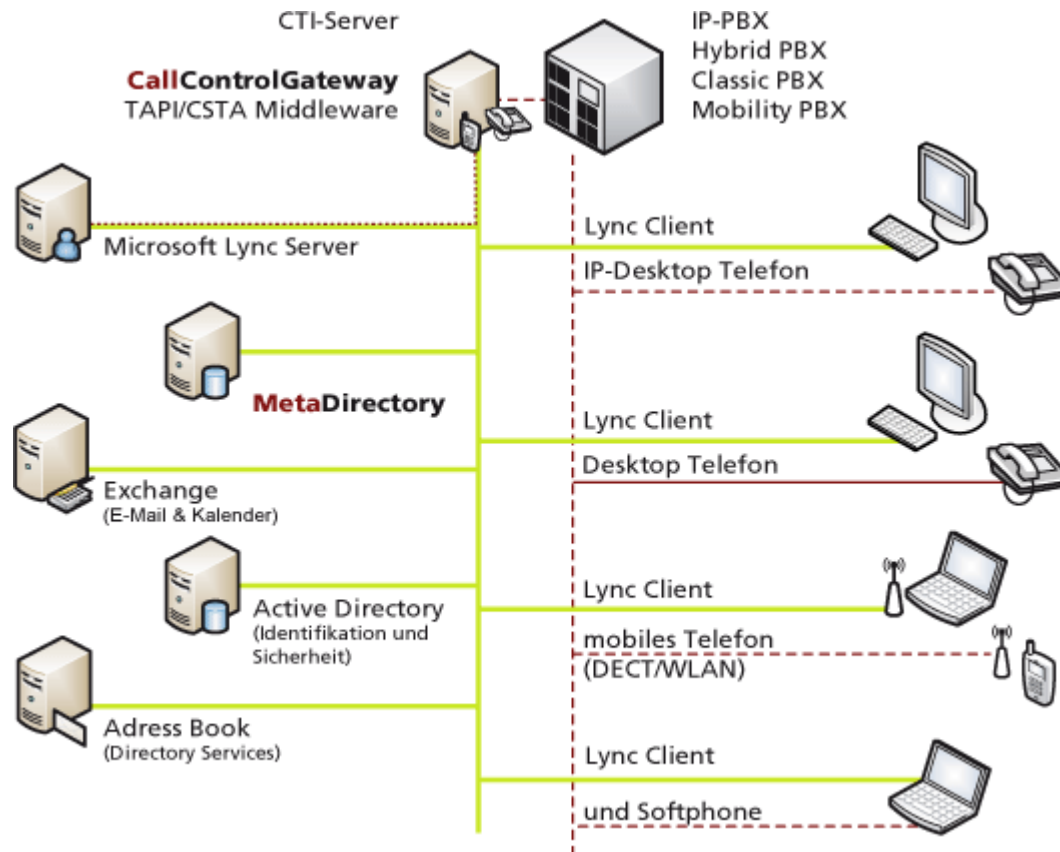
**CallControl Gateway**

# Migration with ESTOS solutions



Quelle: [www.microsoft.com/uc](http://www.microsoft.com/uc) ergänzt

# CallControlGateway Topology



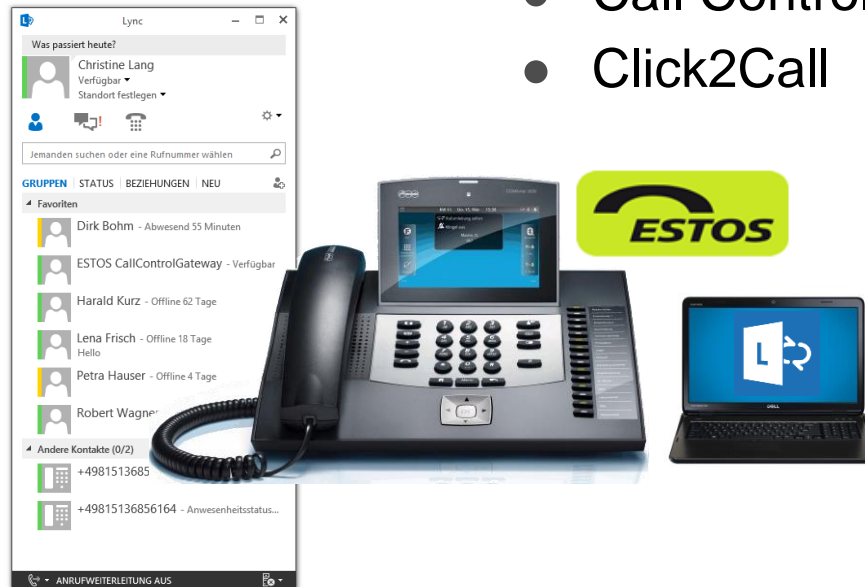
# Value Add Remote Call Control?

## Microsoft Lync

- Presence-Management
- Instant Messaging
- VoIP-Softphone
- Office Integration
- A/V Conferencing

## Remote Call Control

- Ad hoc Integration of existing PBX
  - System phones
- Telephony presence
  - „busy in a call“
- Call Control
- Click2Call



# Differentiation: Media Gateway/Remote Call Control

## Media Gateway

(z.B. Dialogic, Ferrari, innovaphone)

- Lync as Softphone
- Certified Hardware
- Software

## Remote Call Control Gateway

- Lync as application to control existing phones
- Software



## Combination of Media - and Remote Call Control Gateway

- For OCS „Enterprise Voice“-Scenarios with RCC (with/without Forking)
  - User can decide on which telephone he wants to communicate
- For Lync „Remote Call Control“ or „Remote Call Control Only“
  - Decision per workstation

# Remote Call Control for Lync Server

Microsoft Lync Server 2010 Administrator | Abmelden 4.0.7577.0

Benutzersuche

Bearbeiten: Lync Server-Benutzer - User 1

**Commit ausführen** **Abbrechen**

**Anzeigename:**  
User 1

**Aktiviert für Lync Server**

**SIP-Adresse:**\*  
sip:user1 @ dev-estos.de

**Registrierungsstellenpool:**  
LyncServer.dev-estos.de

**Telefonie:**  
Remoteanrufsteuerung

**Anschluss-URI:**  
tel:+49815136856146

**Leitungsserver-URI:**  
sip:rcc@app.dev-estos.de

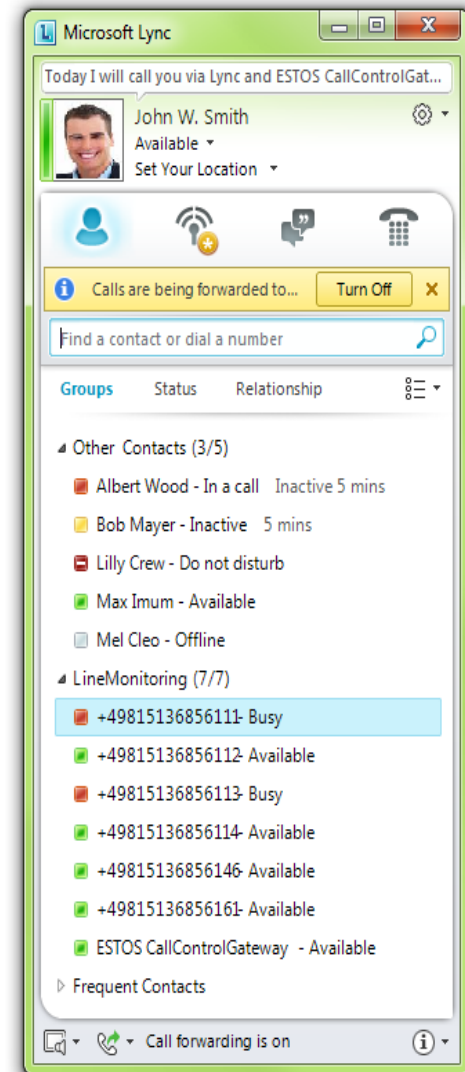
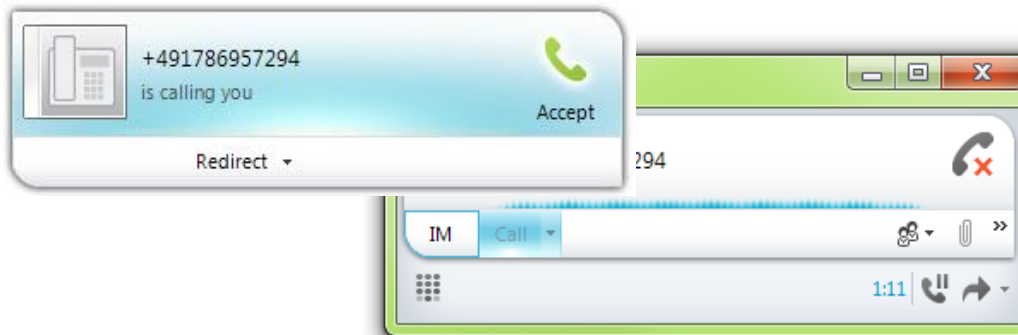
**Konferenzrichtlinie:**  
<Automatisch> **Anzeigen...**

**Telefonie:**

- Audio/Video deaktiviert
- Nur PC-zu-PC
- Enterprise-VoIP
- Remoteanrufsteuerung**
- Nur Remoteanrufsteuerung

# Lync Client 2010 mit RCC

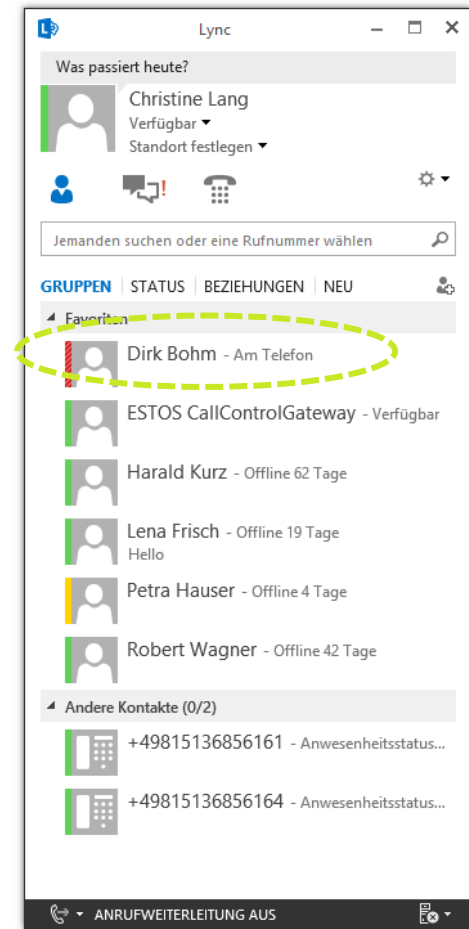
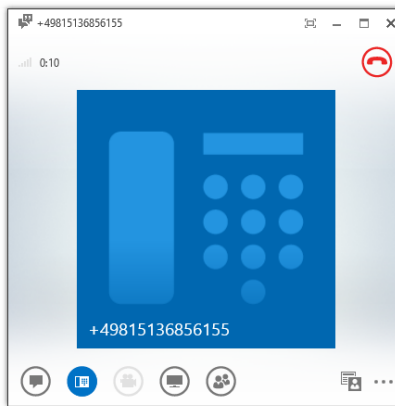
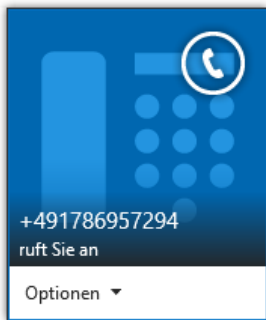
- Präsenz-Zustand
  - Busy „In a Call“
- Eingehende Gespräche
  - Pop-up (Toast)
  - Dyn. Anrufumleitung
  - E-Mail bei Anrufen in Abwesenheit (lokal)
- Kein Enterprise Voice + PBX Integration
  - Kein Dual Forking





# Lync Client 2013 mit RCC

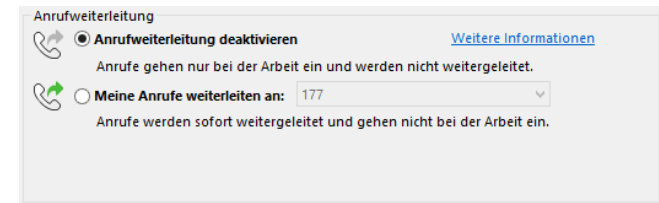
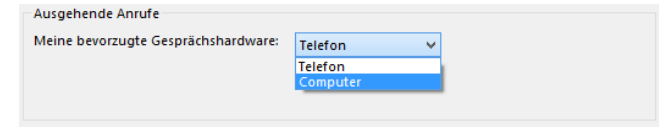
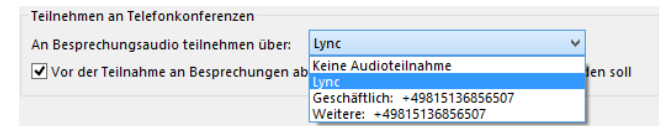
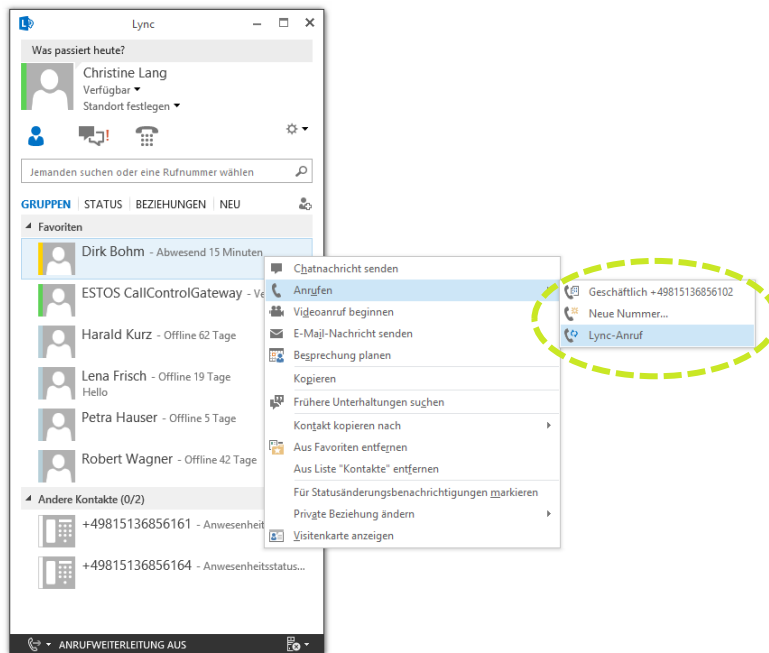
- Presence State
  - Busy „in a call “
- Eingehende Gespräche
  - Pop-up (Toast)
  - Dyn. Call Redirection
  - E-Mail on missed calls (local)
- No Enterprise Voice + PBX Integration
  - No Dual Forking





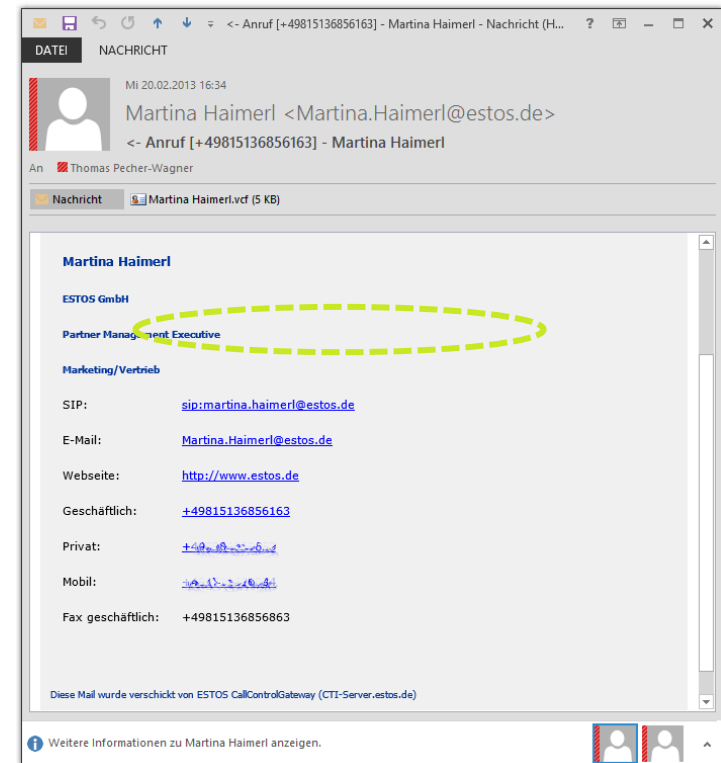
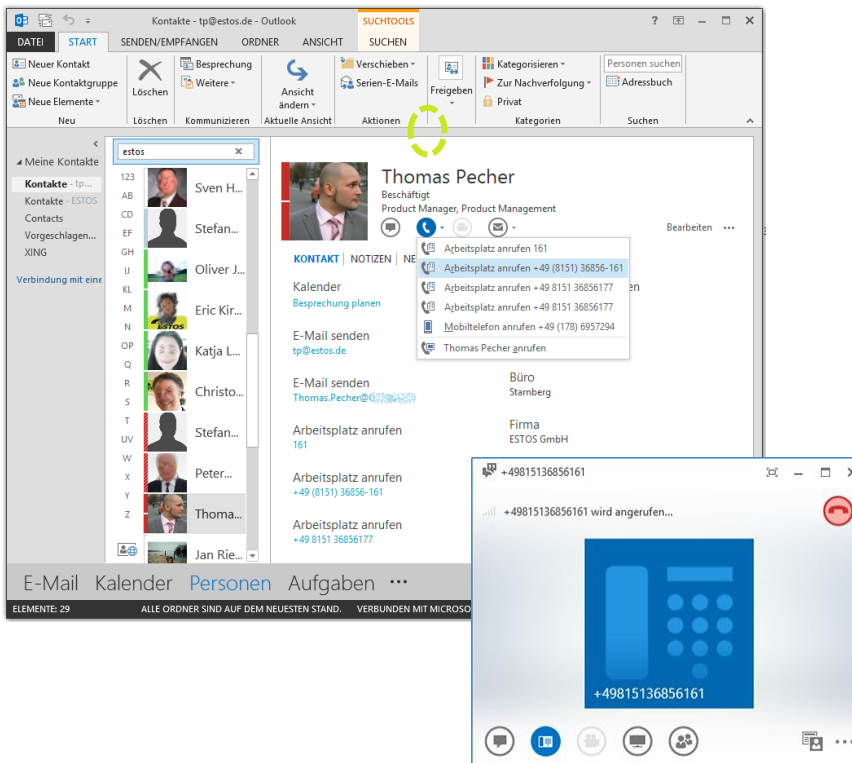
# Lync Client with RCC

- Preferred Call Device
  - Users decides how to establish a call - via Lync or via the PBX
  - Call redirection can be configured within Lync settings
  - Device for Audio-Conferences can be chosen freely

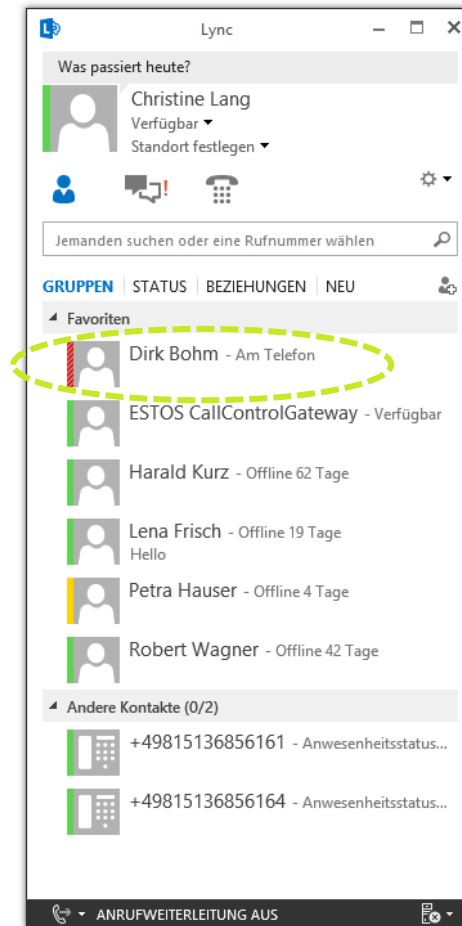


# Lync Client with RCC – Office Integration

- Outbound Calls
  - Click2Call
  - Hotkey-Dialing (optional)
  - Office Integration
- Missed calls Emails
  - Also if workstation / Lync is offline
  - Optimized for smartphones to be informed about calls on the go



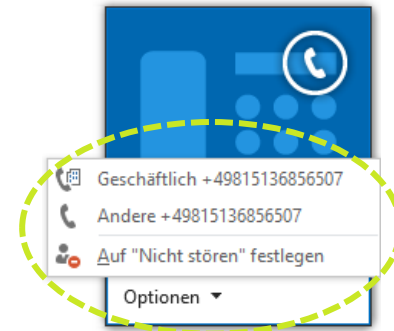
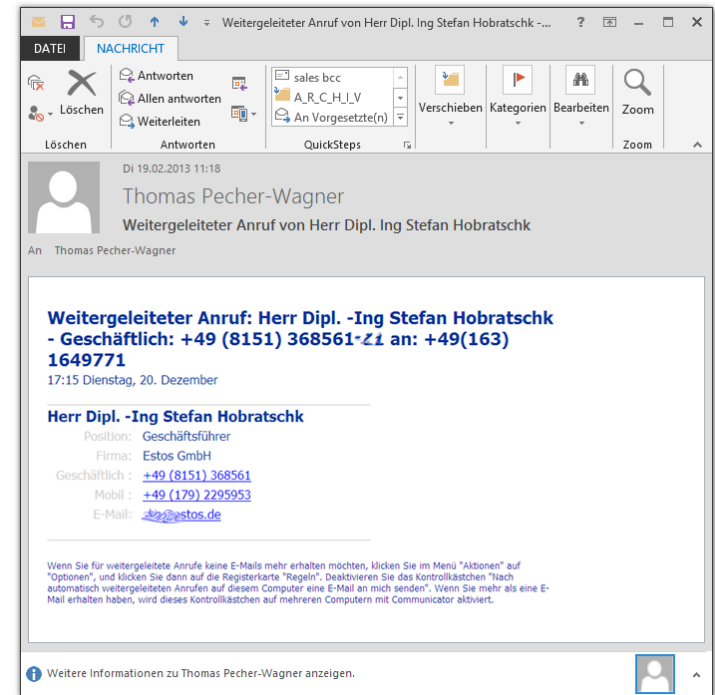
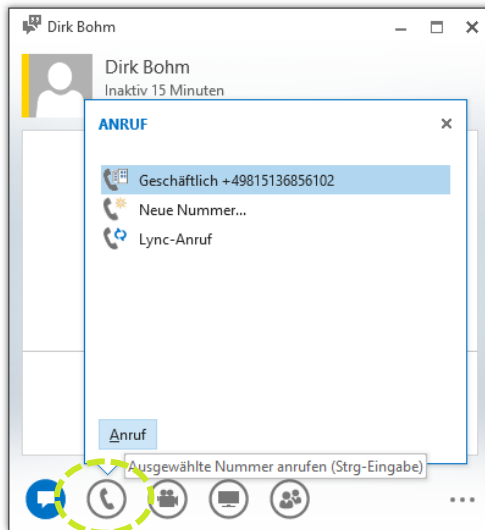
# Telephony Functions Lync (1/3)



- Presence state „Busy – in a call “

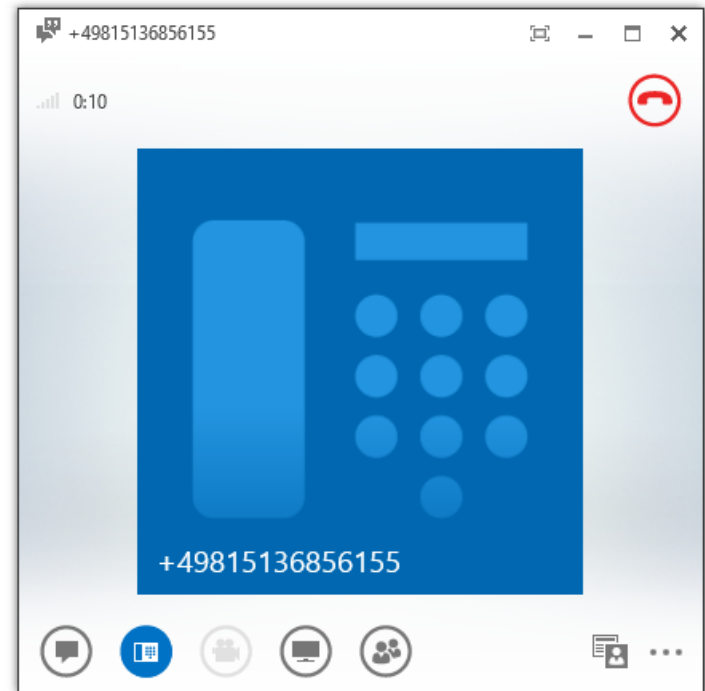
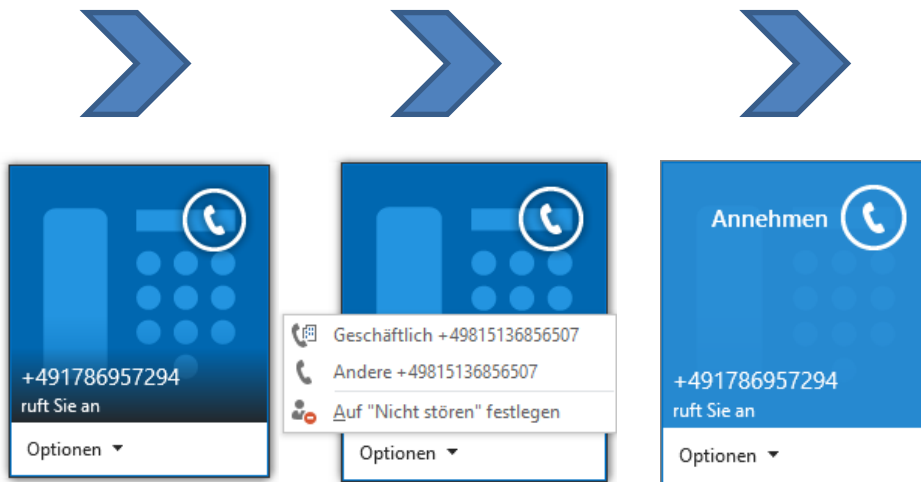
# Telephony Functions Lync (2/3)

- Inbound Calls
  - Pop-up (Toast)
  - Dyn. Call Redirection
  - Email on missed calls
- Outbound Calls
  - Click2Call
  - Office Integration



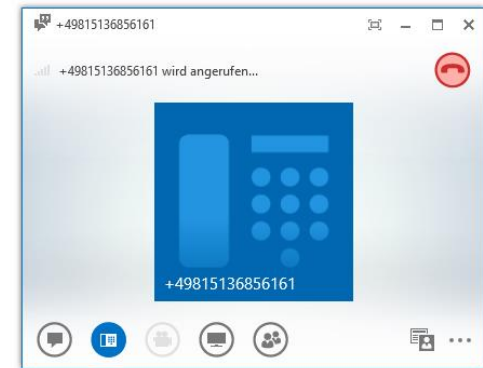
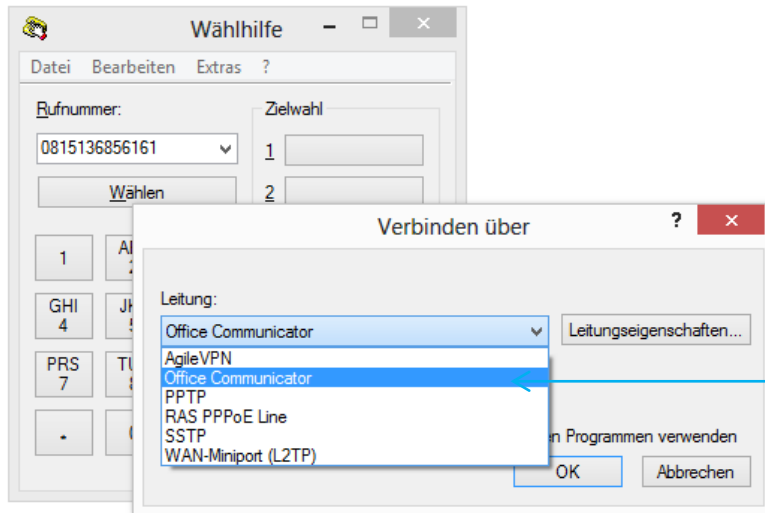
# Telephony Functions Lync (3/3)

- Before and after call
  - Automatic status change (in a call)
  - Hold, Rückfrage, Makeln, etc.
  - Automatic redirection



# PhoneTools – Addon TAPI TSP

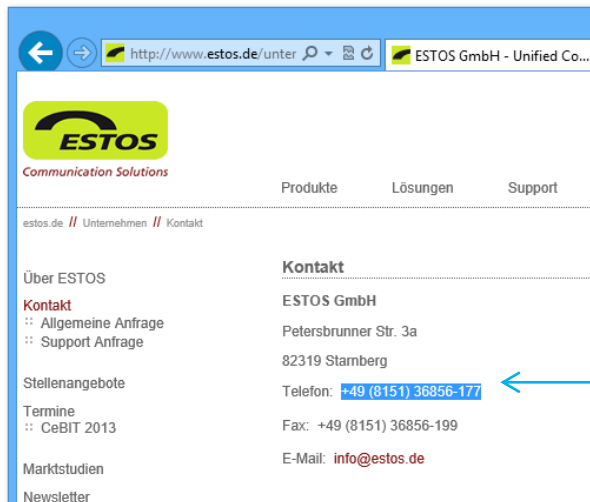
- Wahlaufbau via Proxy TSP
  - Aus allen 3rd Party Anwendungen mit nativer TAPI Schnittstelle
  - TerminalServer fähig



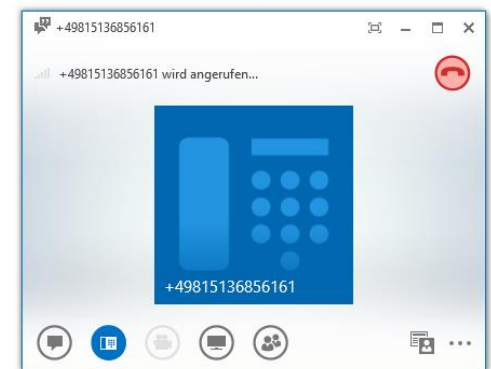
Proxy TSP einstellen  
und Anruf aufbauen

# PhoneTools – Hotkey-Dialing

- Select phone number, press Hotkey, e.g. F8 – dial
  - Phone number is handled by Lync and call will be started
- Works with all Windows-compatible applications:
  - E.g. Internet Explorer, Excel, Word
- Freely configurable hotkey
  - Avoiding conflicts



Select number  
+ F8 = dial





# Welche Legacy PBX-Systems are RCC ready?

## Via ESTOS ECSTA

- Siemens Hicom 150 / 300H
- Siemens HiPath 2000/3000/4000/5000
- Siemens HiPath OpenScapeVoice
- Alcatel OmniPCX Office / Enterprise
- Alcatel 4400
- Aastra/Ericsson BusinessPhone
- Aastra/Ericsson MD110
- Aastra/Ericsson MX One
- Aastra Matracom NeXspan
- Aastra OpenCom X
- SipPhones via uaCSTA
- Avaya ACM
- IPCentrex Plattformen

## Via TAPI TSP of vendor

- Cisco Call Manager
- Nortel M1, Succession, CS 1000
- Avaya i33,i55 und Nachfolger
- Ascotel
- Auerswald
- AGFEO
- innovaphone
- Panasonic
- NEC
- Samsung
- ....
- fast alle Enterprise-Systeme



# System requirements UCServer

- **Server Betriebssysteme**
  - Windows Server 2003
  - Windows Server 2003 R2 (x86/x64)
  - Windows Server 2008 (x86/x64)
  - Windows Server 2008 R2
  - Windows Server 2012
- **Client Betriebssysteme**
  - Microsoft Windows XP (x86/x64)
  - Microsoft Windows Vista (x86/x64)
  - Microsoft Windows 7 (x86/x64)
  - Microsoft Windows 8 (x86/x64)
- **Microsoft**
  - Live Communications Server 2005
  - Office Communications Server 2007
  - Office Communications Server 2007 R2
  - Lync Server 2010
  - Lync Server 2013
- **Optionale Umgebung**
  - Microsoft Hyper-V
  - Microsoft Exchange ab 2003
  - VMWare ab Version 4.5
  - Microsoft Active Directory

