



Cisco Expo
2008

Austrian Airlines flies with Cisco Unified Communications



Johannes Hauer, Telekom Austria TA AG
Manfred Schmiedl, Austrian Airlines AG

Who is Telekom Austria TA AG



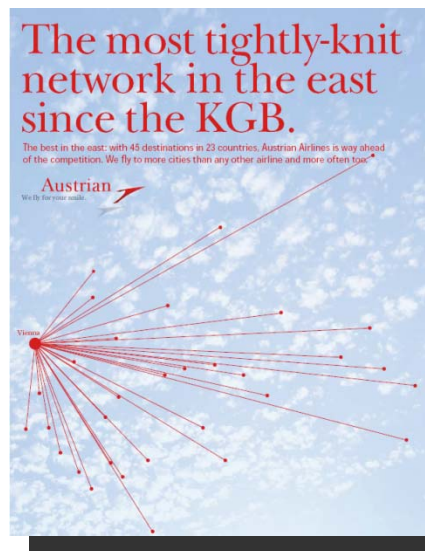
- Well-known as Carrier
- ... but also a strong Partner for custom-made business solutions
- Business Solutions department
 - Solution oriented sales with
 - Presales support & solution designer
 - Customer & solution oriented Project Management
- Best of breed system-integrator
- Experiences (e.g.)
 - LAN / WAN, IPT, outsourcing, server housing & hosting,
 - Contact Centre, RFID, ASP, etc.

Who is Austrian Airlines Group



Austrian Airlines in few numbers ...

- 10.8 Mio passengers
- 105 aircrafts
- 118 scheduled destinations
- operated out of Vienna
- Focus East Strategy
- > 140 branch office (Chicago – Tokyo)



IT Services for 3 “companies”

... look behind the curtain



- in its current state Austrian is the result from a “merger” of 3 different companies
- although IT Services are already toughly integrated this has not been true for networking and communications
- **4 different PABX** (Siemens, NORTEL, Aspect, TENOVIS) solutions and **2 separated networks** with loosely interconnection
- plus **3 different Call Center Solutions** on 3 different locations

Unique chance – New Building OP2

... near Greenfield deployment!

- during September 2007 Austrian relocated headquarter from Vienna City to Vienna Airport Office Park
- complete new building and **ALL NEW** infrastructure
- decision for RFP has been made late December 2006
- RFP answers received January 2007
- RFP negotiations during February and March
- final decision for Cisco and Telekom end of March 2007
- order placed mid of April 2007
- **... everything new within 4 months timeframe?**
- **... total renewal in less than 1 year !**

Design Rules

Which principles gave us the power to trust ...

Network

- ready for VoIP
- POE “enabled”
- Gigabit to the Desktop
- fully redundant in backbone, core and EDP center, → highest availability possible
- no single point of failure
- security 802.1x @ each userport

Voice

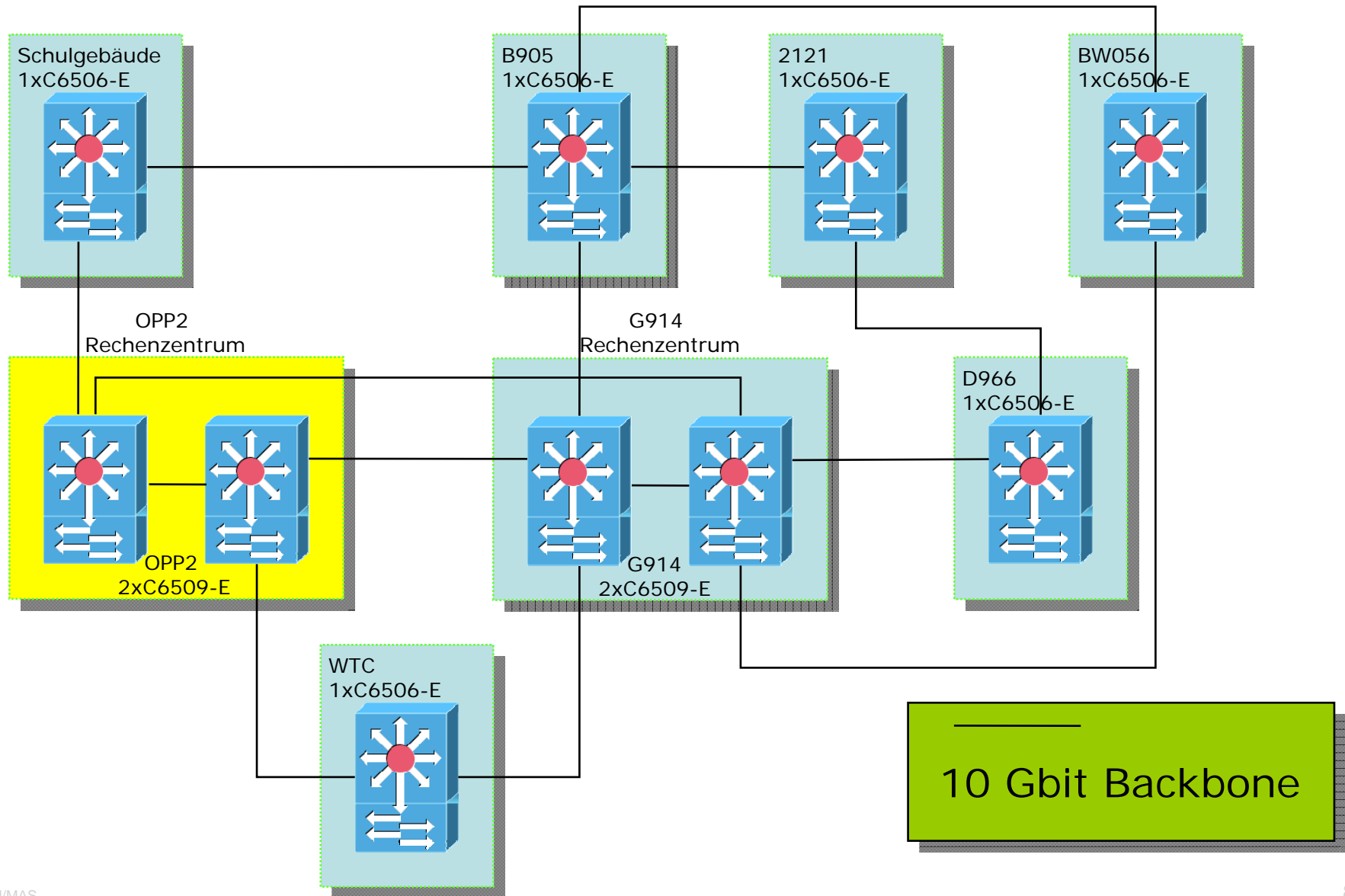
- “just another” application on the network
- graphical phone display ready for future use
- integration with Office Communicator available
- unique numbering scheme for the group
- possibility of breakouts in branch offices
- high sophisticated call center services

Result

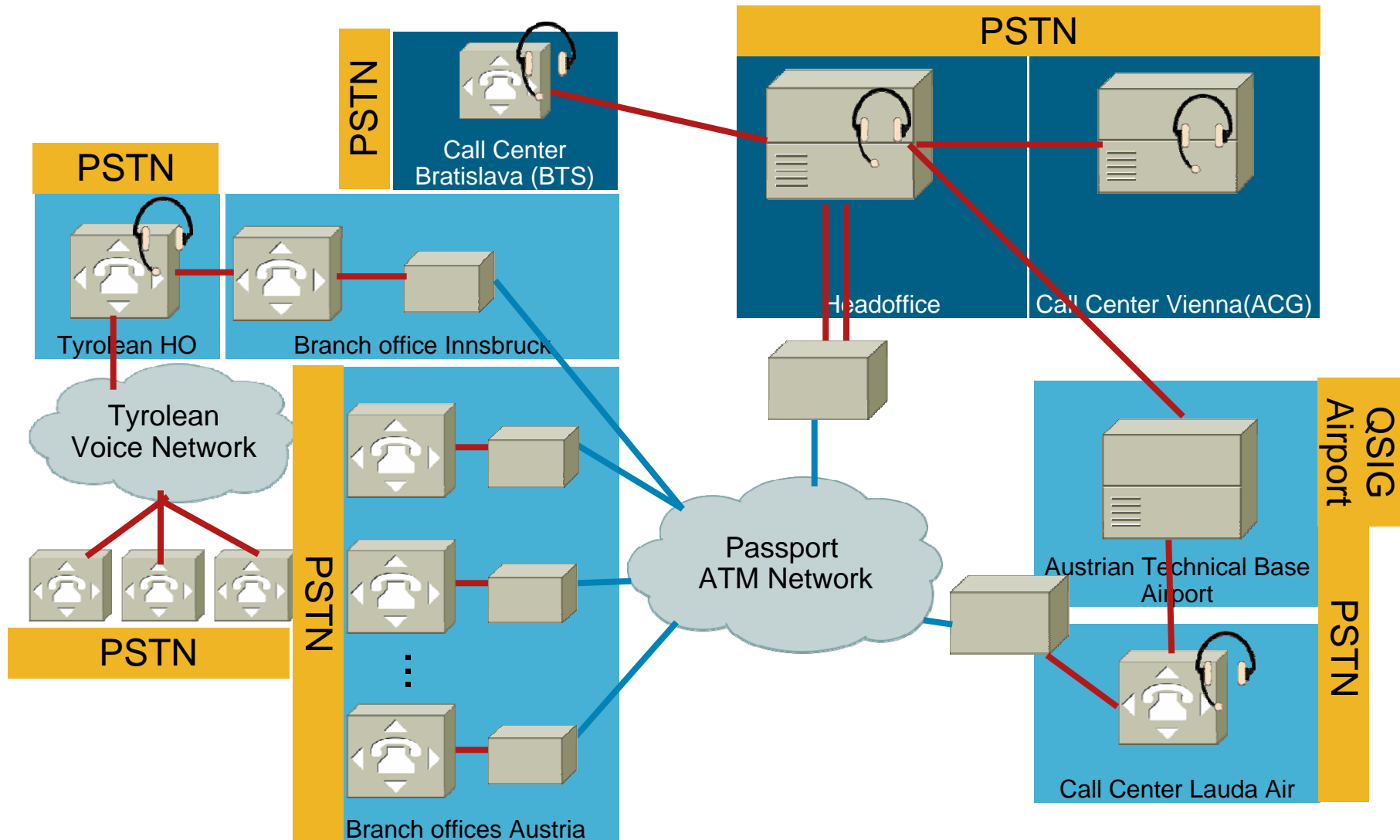
main reasons why we have chosen Cisco and Telekom

Financial	Technology	Call Center	Provider	soft facts
<ul style="list-style-type: none">• best cost benefit ratio• maintenance cost significant below competition• pricing fixed for 60 months period	<ul style="list-style-type: none">• open platform• voice tightly integrated with network• broadest service offer• clear comittment to our design goals• integration roadmap (e.g. Office) fits to our targets	<ul style="list-style-type: none">• best demonstration during RFP• only solution that clearly lined out how to handle distributed call centers• finally: „if we have to change we want Cisco“	<ul style="list-style-type: none">• Telekom Austria as former monopolist still „strong“ partner	<ul style="list-style-type: none">• presented team and ideas fully matched expectations• ... “we trust them”

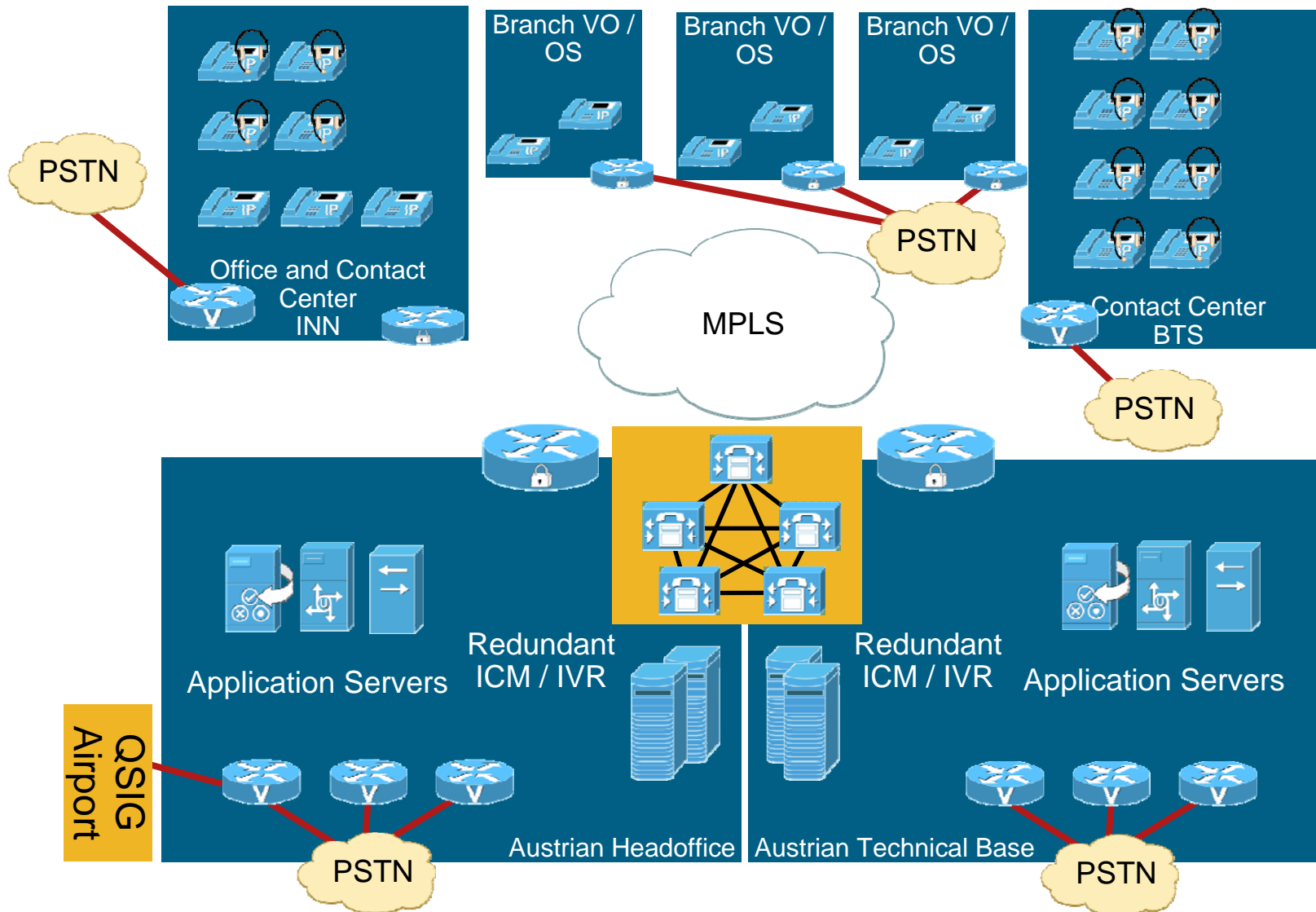
Network Design LAN



Infrastructure as of 01.08.2007



Voice Design High Level

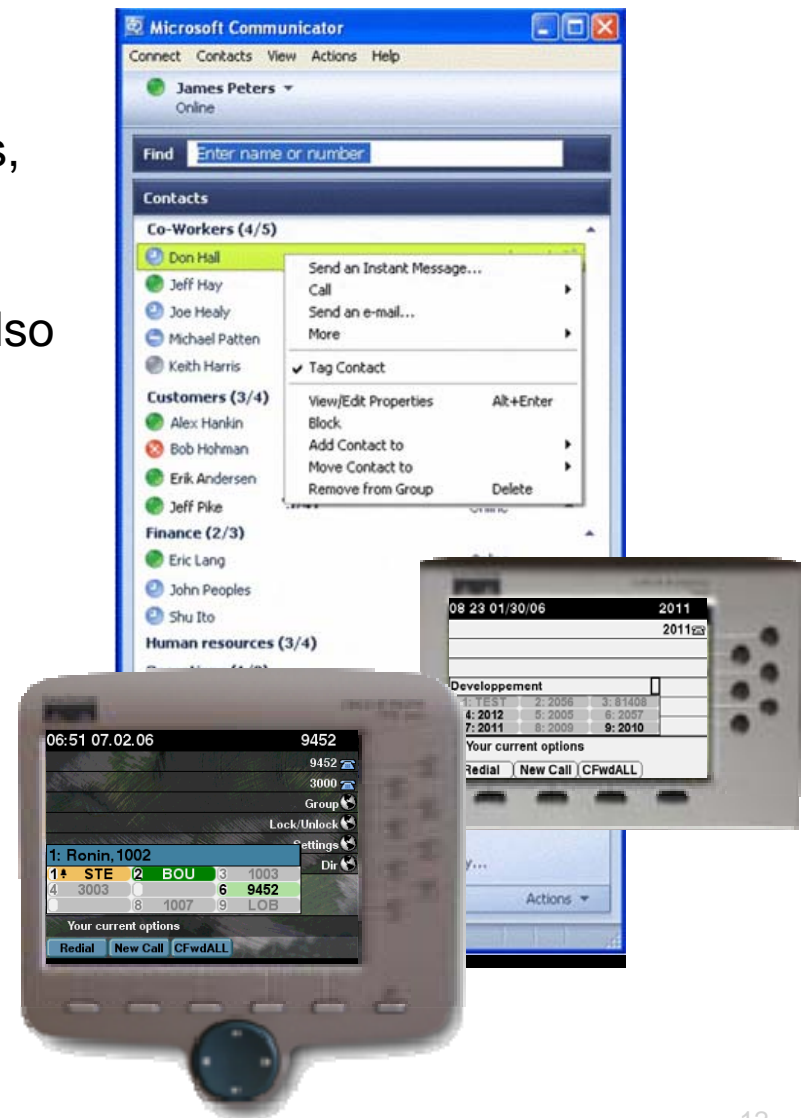


Voice Design Details

- single cluster
- all Services for “everyone”
 - CCM 5.1(3)
 - ICM 7.1 / IP IVR 4.5
 - CUPS 6
 - Mobility Manager 1.2(5)
- 3rd party applications
 - ARC
 - ANDphone
- Security
 - End to end encryption for exposed areas
- challenge: distribute load
 - solution: devicepools based on unique Device ID
- challenge: 051766
 - solution: routing in 3 Steps
 - IN (Intelligent Network)
 - GW Routers
 - and if necessary PBX
- challenge: time to change routing on legacy PBX
 - solution: GW routers in front of PBX during migration
 - use longest match routing

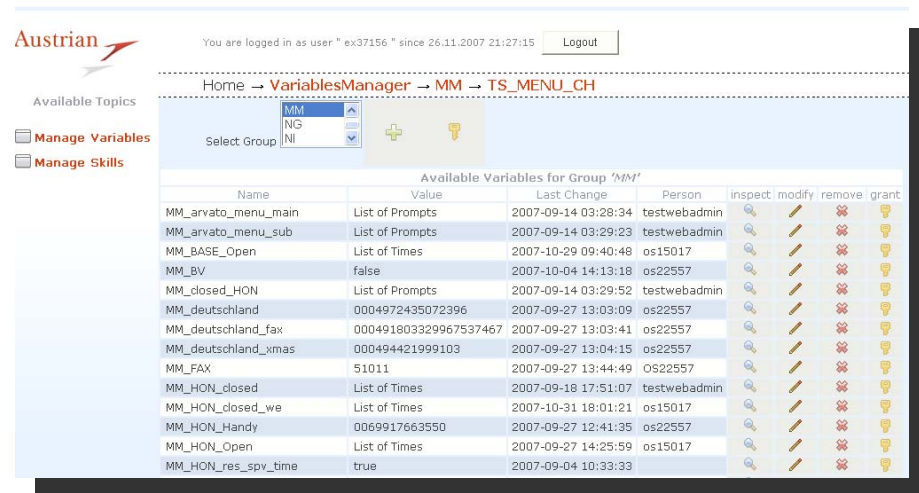
IPC / CTI Integration / XML

- Microsoft Office Communicator
 - already deployed @ Austrian Airlines, mobile users
 - challenge: adapt existing design (all clients connect to access proxy) to also work with voice
 - plus dialing from Outlook via “TAPI spoofing”
- group services on the phone
 - provide BLF on 7941
 - improve intra - group communications
- IP Communicator for travelling employees



Contact Centre

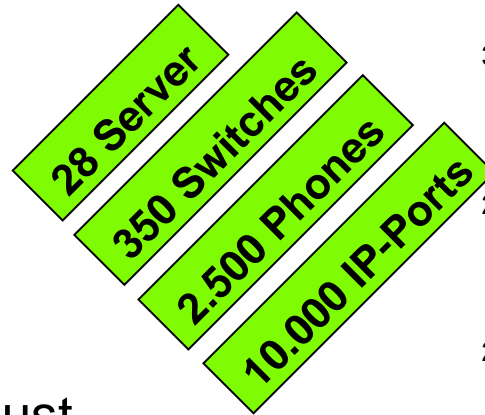
- existing contact centres in Lauda Air, Austrian Arrows and Austrian Airlines
 - multiple Nortel Systems
 - Aspect
 - Tenovis
- provide redundancy on multiple levels
- consolidate all services, move to a consistent numbering scheme
- provide flexibility through custom web application
- custom wallboard done by call center staff



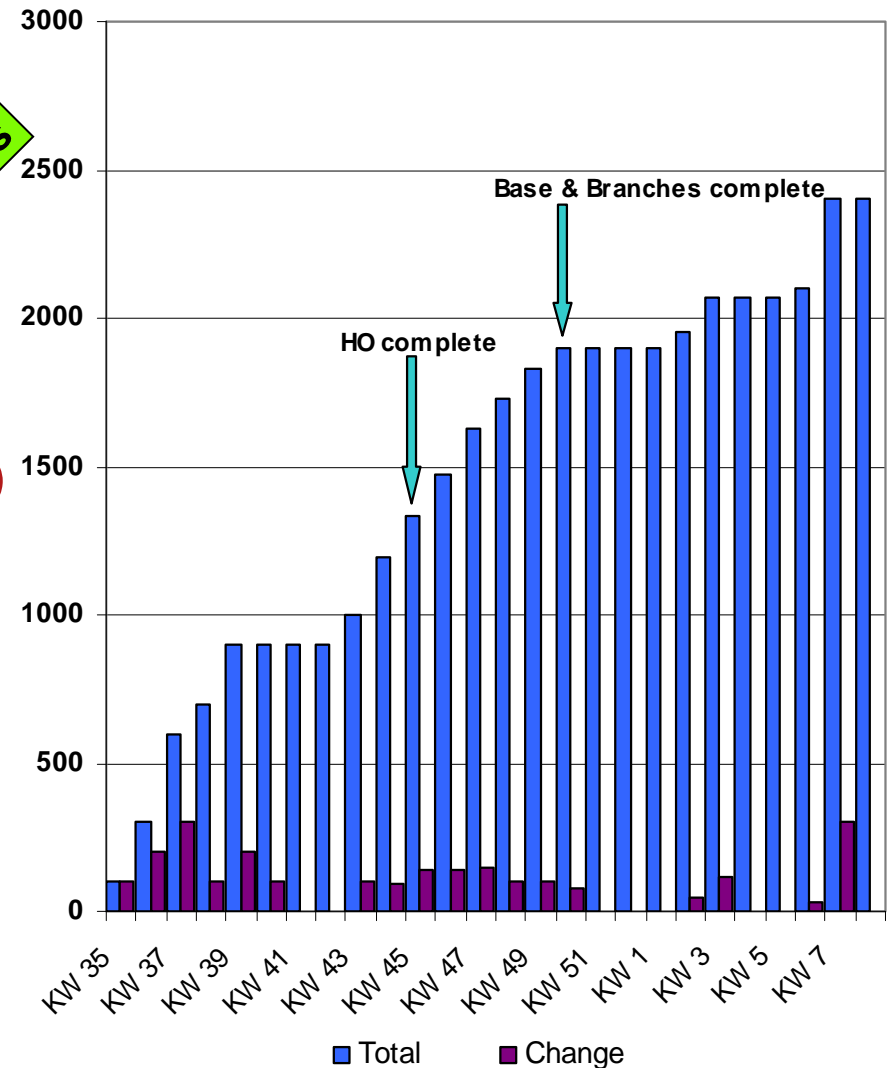
The screenshot shows the Austrian VariablesManager web application interface. The user is logged in as 'ex37156' since 26.11.2007 21:27:15. The breadcrumb navigation is Home → VariablesManager → MM → TS_MENU_CH. The interface includes a 'Select Group' dropdown menu with options MM, NG, and NI. Below the dropdown is a table titled 'Available Variables for Group 'MM'' with columns for Name, Value, Last Change, Person, and actions (inspect, modify, remove, grant).

Name	Value	Last Change	Person	inspect	modify	remove	grant
MM_arvato_menu_main	List of Prompts	2007-09-14 03:28:34	testwebadmin				
MM_arvato_menu_sub	List of Prompts	2007-09-14 03:29:23	testwebadmin				
MM_BASE_Open	List of Times	2007-10-29 09:40:48	os15017				
MM_BV	false	2007-10-04 14:13:18	os22557				
MM_closed_HON	List of Prompts	2007-09-14 03:29:52	testwebadmin				
MM_deutschland	0004972435072396	2007-09-27 13:03:09	os22557				
MM_deutschland_fax	000491803329967537467	2007-09-27 13:03:41	os22557				
MM_deutschland_xmas	000494421999103	2007-09-27 13:04:15	os22557				
MM_FAX	51011	2007-09-27 13:44:49	os22557				
MM_HON_closed	List of Times	2007-09-18 17:51:07	testwebadmin				
MM_HON_closed_we	List of Times	2007-10-31 18:01:21	os15017				
MM_HON_Handy	0069917663550	2007-09-27 12:41:35	os22557				
MM_HON_Open	List of Times	2007-09-27 14:25:59	os15017				
MM_HON_res_spv_time	true	2007-09-04 10:33:33					

Migration



- decision: April
- start: May
- installation: August
- **deadline via new Headoffice (HO)**
 - first employee in new HO: 25.08.2007
 - complete: 05.10.2007
- technical base: quite complex, smaller steps
- branches: one at a time (both network + telephony)



Impressions



Fun Moments

- DSP bug in gateway routers
 - looked like a QoS issue (on a microwave link...)
 - fixed in newer IOS
- needed to remodel LCS deployment
 - limitation on LCS Side
 - last Minute Change
- bug in TAPI TSP used for attendant console
 - only visible >800 phones & extension mobility

(technical?) Lessons Learned

- do not underestimate existing voice routing
 - “So what does this E1 do?”
- routers “in front of” existing PABX during migration
 - make “Surprise” employees externally reachable without changing PABX config
- different deployment strategies for different units
 - “Bulk” vs. “On Demand”
 - prepared file vs. scripted
- strong Cooperation between voice, network and Microsoft teams
 - MOC, LCS, Exchange, AD
 - switching and WAN

Finally – Opened Perspectives ...

- platform for future VoIP based services in place
- API “ready” network infrastructure
- powerful XML capabilities on desktop phones
- network ready to fulfil future multi media requirements
- readiness for improved security implemented

- last but not least: NO TOKENRING anymore

Next Steps – plan for 2008

- VoIP deployment never finished ...
- Immediate plans – 15 additional international branches:
 - Beijing
 - Frankfurt
 - Moscow
 - London
 - New York (dislocated Call Center)
- Implementation includes local Call Manager Express installations and centralized Call Manager connected branches
- Cisco Provisioning Manager in focus for ease of deployment and delegation of management to different company entities (e.g. Tyrolean)
- Call Center in Lemberg (→ Focus East)
- Mid of 2008: Upgrade to Call Manager 6.x (tighter Office integration)
- 2nd quarter 2008: deployment of Austrian Airlines phones within 3rd party managed networks



Dankeschön.

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Please complete the online evaluation under

www.cisco.at/expo2008/feedback

The first 100 to complete the survey will receive a copy of Don Tapscott's book "Wikinomics".

We very much appreciate and value your feedback, many thanks!

