What's new in Voice OCS 2007 R2

Virgilio Ribeiro
UC Solutions Sales Specialist
Microsoft

Scenario Enabled

Agenda

- ***Response Group***
- Delegation
- Office Communicator Attendant
- Team-call Group
- Audio Conferencing
- Media Enhancements

Response Group

- Enable PBX replacement
  - Offer all the hunt group and queuing functionality found in a traditional PBX
- Provide compelling value
  - Support some advanced features which require an ACD deployment in some solutions
- Low TCO solution
  - Simple deployment and administration
  - Empower end-user to take on some tasks

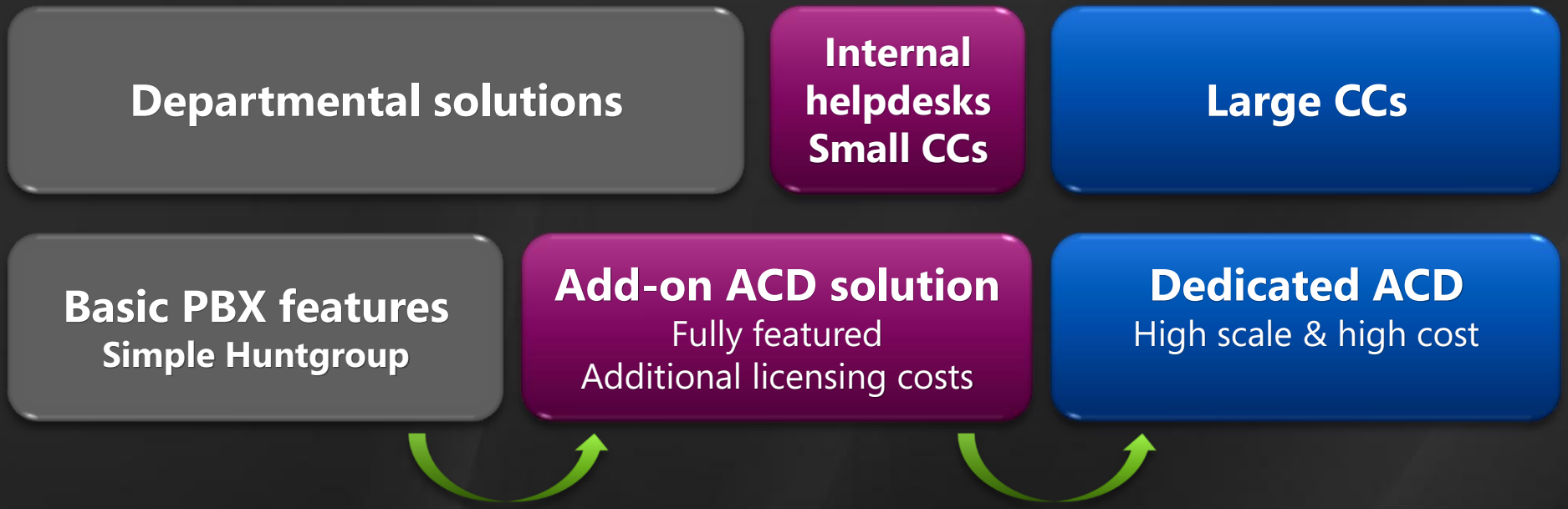
Response Group Positioning

Departmental solutions

Internal helpdesks Small CCs

Large CCs

Response Group Positioning



- Call Treatment
- Music on Hold
- Business Hours
- CDRs

- Critical business need
- Customer facing
- High call volumes

Response Group Positioning

Departmental solutions

Internal helpdesks Small CCs

Large CCs

Basic PBX features
Simple Huntgroup

Add-on ACD solution
Fully featured
Additional licensing costs

Dedicated ACD
High scale & high cost

- Basic huntgroups
- Agent sign-in/out
- Various hunt methods

- MoH
- Business hours
- Basic CDR

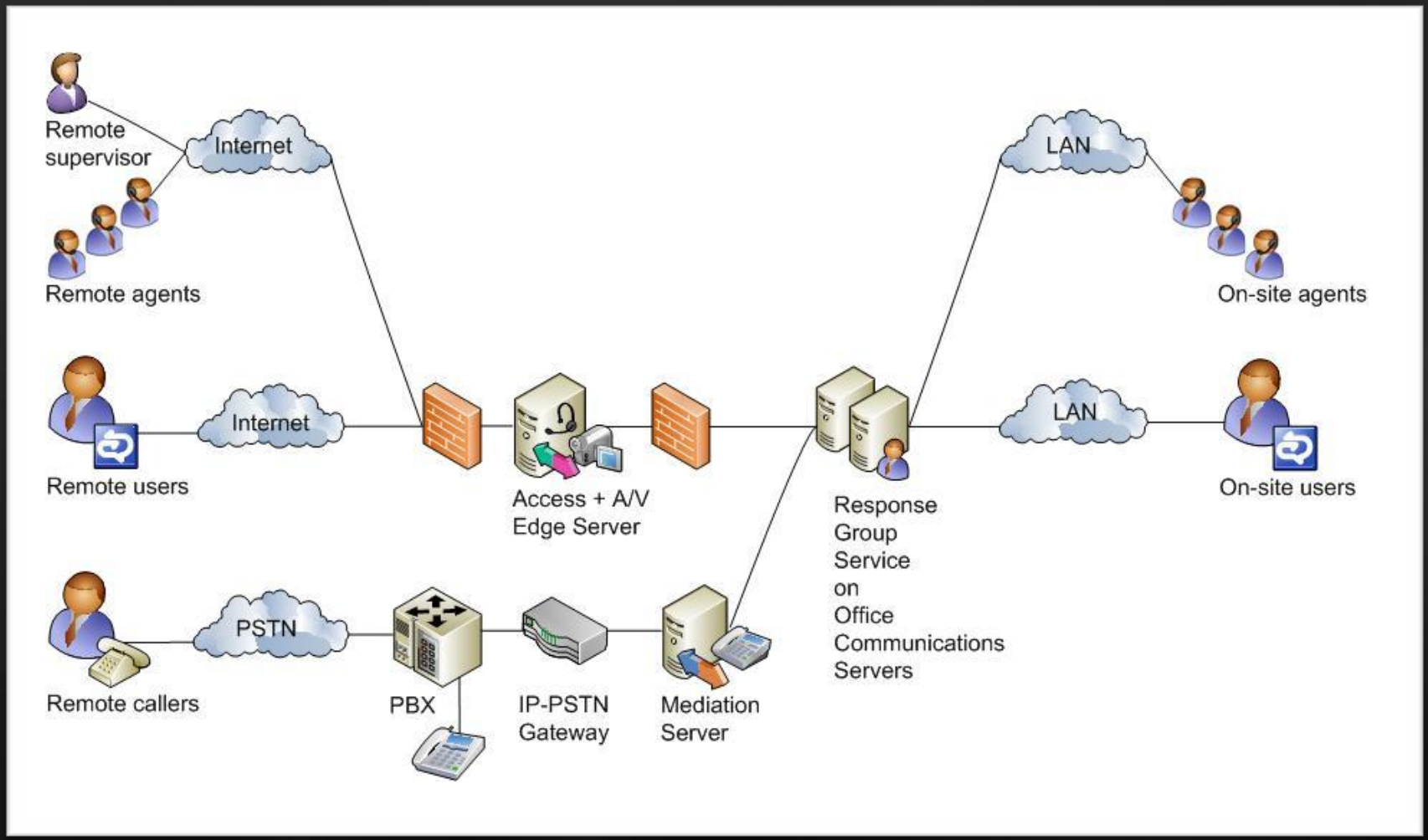
- Supervisor
- Live views
- Advanced CDRs

- High Scale & Availability
- Multi-Skill Routing
- Interop w/ LoB apps

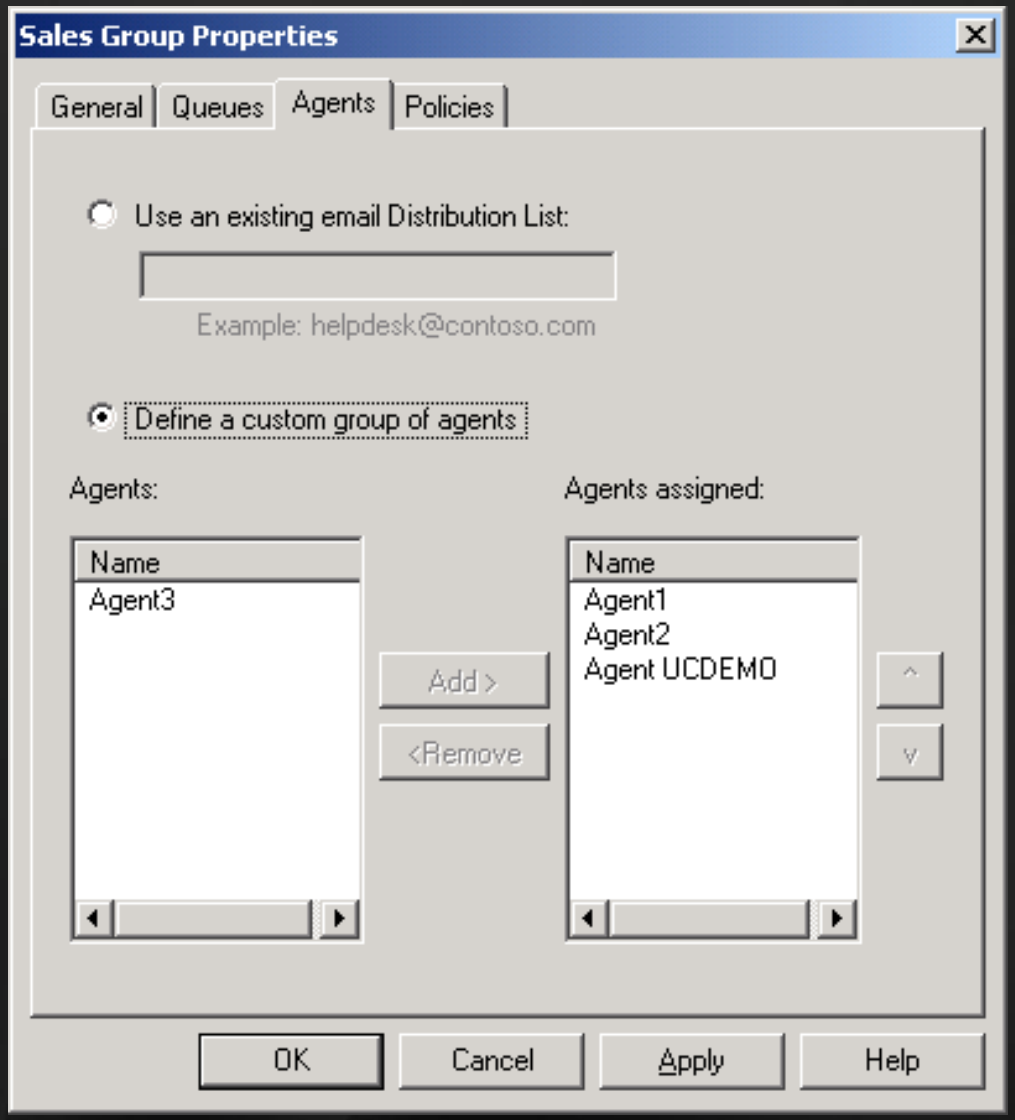
OCS 2007 R2 Response Group

OCS 2007 R2 & Partner solutions

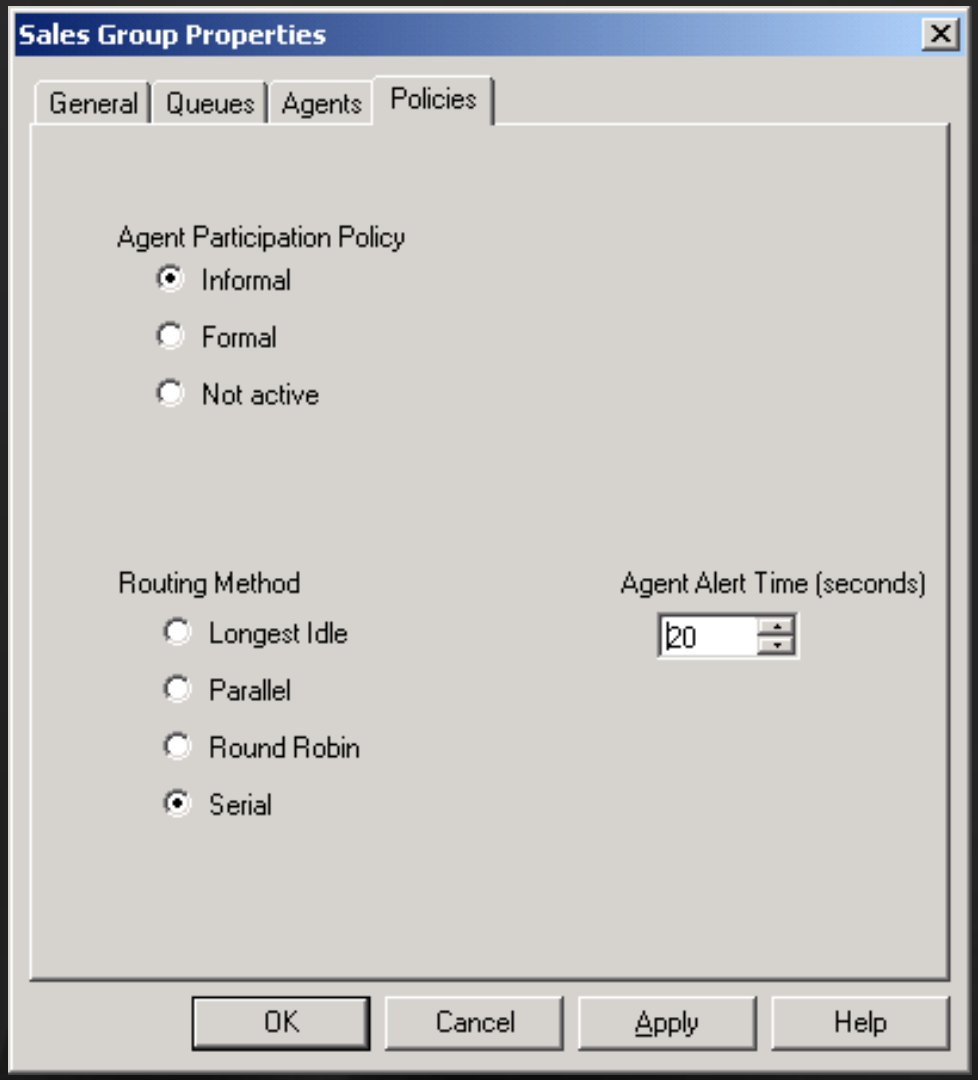
Response Group Topology



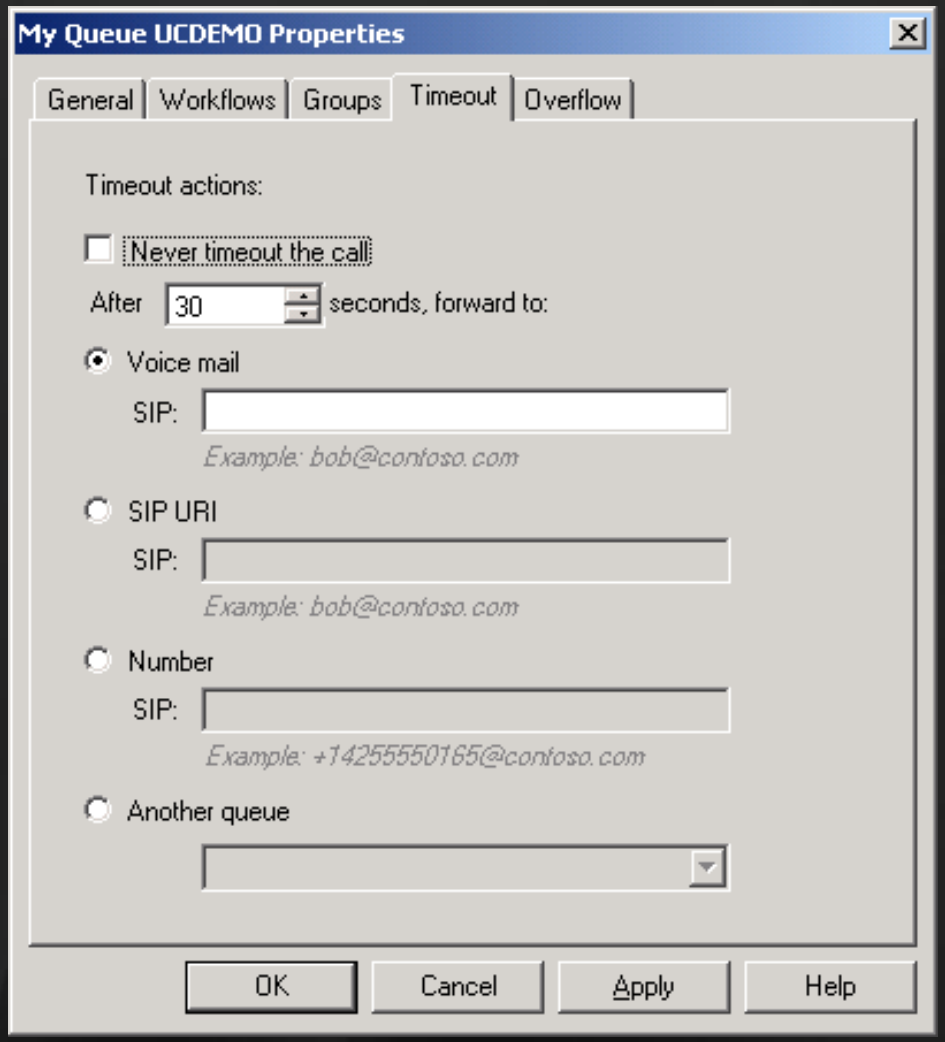
Agent Configuration



Group Configuration



Queue Configuration



Response Group Overview

- **Agents: taken from all UC Enabled users**
  - Screen Pop: Call context & treatment delivered with incoming call
  - Aggregated presence on Hunt Groups
  - Basic Call Detail Records & Reporting
- **Groups:**
  - Agent groups: Distribution Group or custom admin defined
  - Routing: Serial, Parallel, Longest Idle, Round Robin
  - End user managed settings on hunt groups
- **Queues:**
  - Music on hold
  - Queue timeout / queue overflow action on first & last call
- **Workflows: Template based Call Treatment**

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Response Group

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- Response Group
- ***Delegation***
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Delegation

- Delegate able to make and receive calls on behalf of delegator
- Delegator establishes and authorizes delegate relationship
- Visual and Email notifications of calls “made on behalf of…”
- Multiple-delegate support and ability for delegates to configure delegator’s settings
- Delegate client: Attendant
- Delegator client: Communicator

Agenda

- Response Group
- Delegation
- ***Office Communicator Attendant***
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Office Communicator Attendant

- Stand-alone call management client
  - An alternative client to Communicator
  - Optimized for call management, not collaboration: no video, Live Meeting, etc.
- Accurate & rapid call handling and routing for front-line business professionals
- Typically used by
  - Front Desk / Reception
  - Administrative staff
  - Delegates

Attendant Features

- Single-screen UI for multi-call handling
- Rich presence in contact list and groups
- Integrated conversation history & rapid-reply
- Confirmed blind transfer & call recovery
- Conversation & contact categories, subject line
- Templates for rapid conversation creation
- Client-side Music on Hold
- Repeat caller notification

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Delegation
Office Communicator Attendant

Agenda

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Team-call Group

- User configurable team routing to enable group pickup-like functionality
- Simultaneous or delayed alerting
- Unanswered calls routed to team leader’s voicemail
- Visual and Email notifications
- Supports up to 25 team members

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Team Call Group

Agenda

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- ***Audio Conferencing***
- Media Enhancements

Audio Conferencing Scenarios

PBX Functionality

Office Communications Server 2007

- N-way conferencing
  - "Conference" button on the desktop phone

- Bridge functionality
  - Similar to that provided by ACPs

New R2 feature

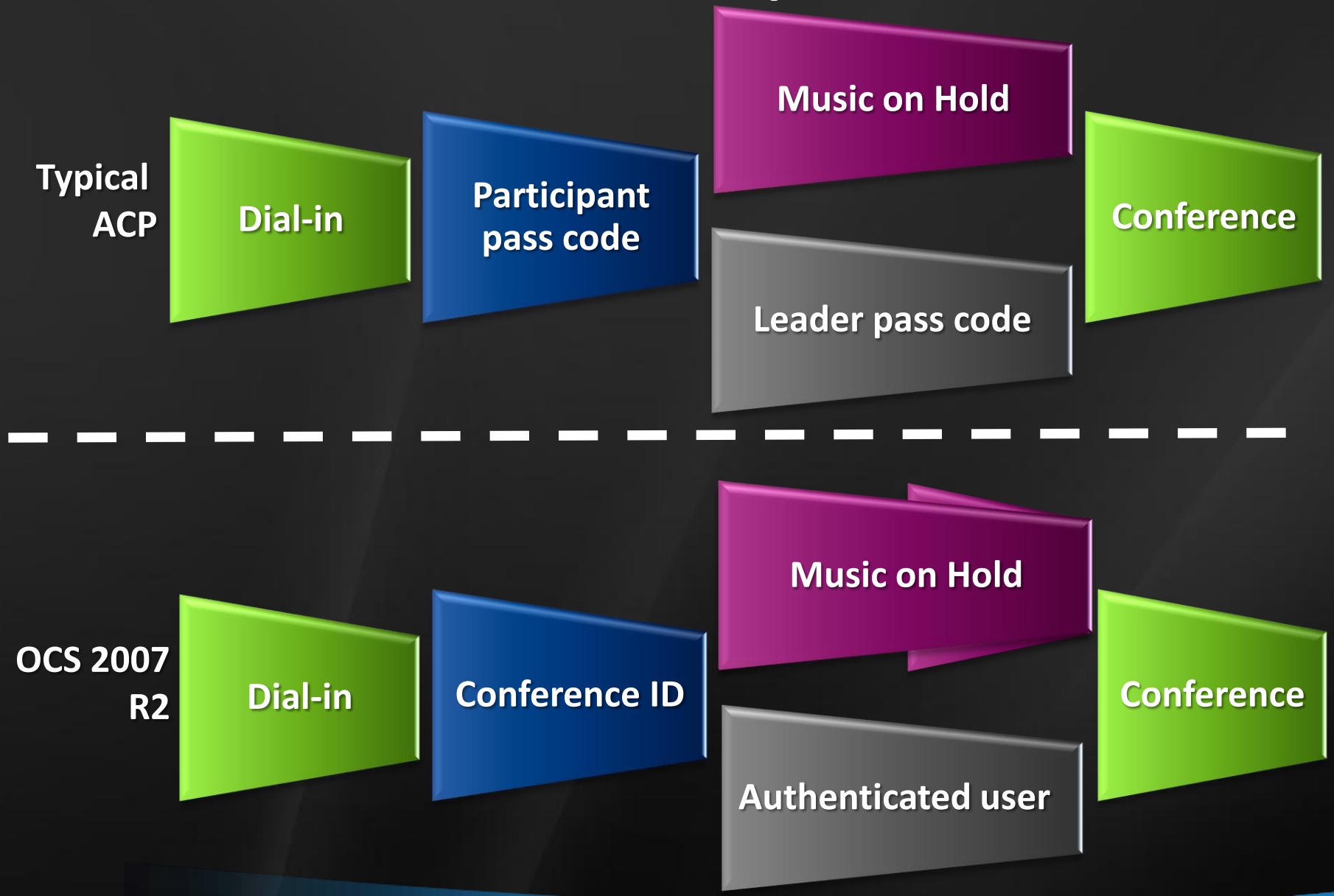
Audio Conferencing Provider (ACP) Functionality

- Reservation-less bridges
  - Dial-in number provided along with participant passcode

- Operator assisted calls
  - High profile assisted conferencing events

- Scheduled unattended
  - Ports are reserved for the conference

Reservationless Comparison

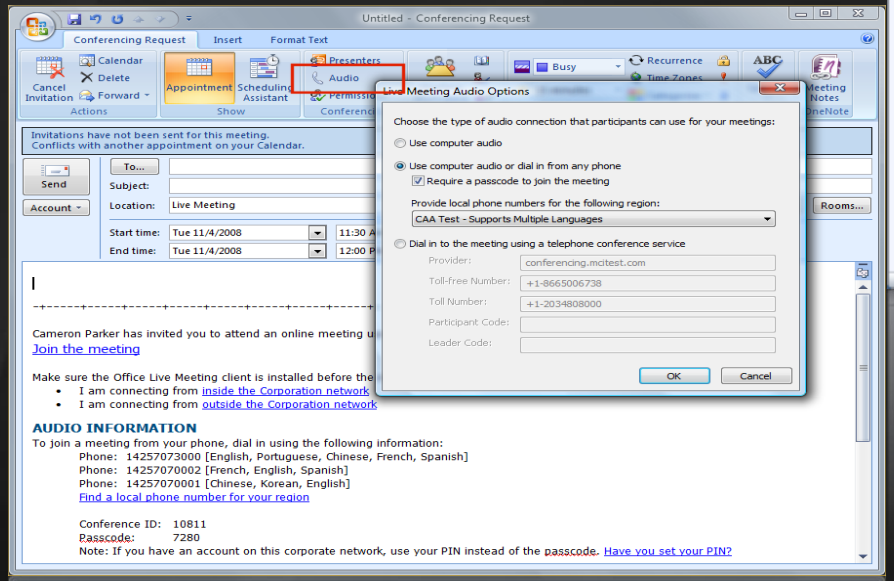


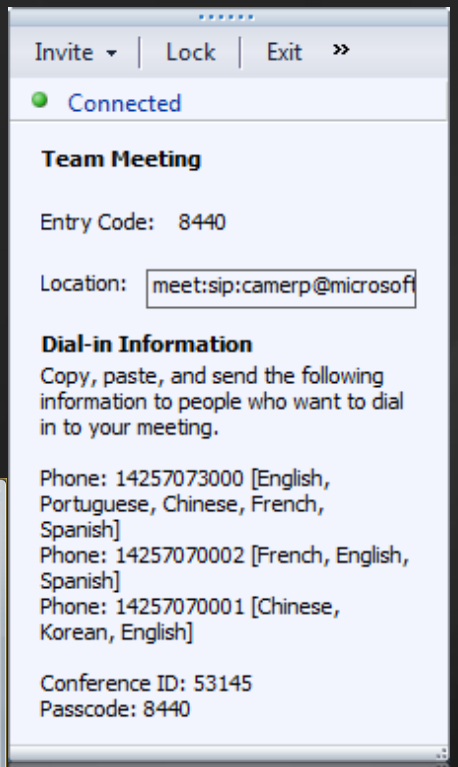
Differentiate with UC

- Ease of use
  - Outlook based scheduling experience
  - non-UC participants can still join with CWA or phone
  - Simple roster control: drag and drop participants
- Secure
  - AD authentication
  - Additional security options
- Multi-modality
  - Seamless escalation to video and desktop sharing
  - Automatic handoff between PC and phone
  - CWA dial out experience …more coming

Live Meeting Integration

- Meeting Dial-in Information
  - Copy/paste support
  - Multiple, configurable languages available
- Also included in email invites from Live Meeting client

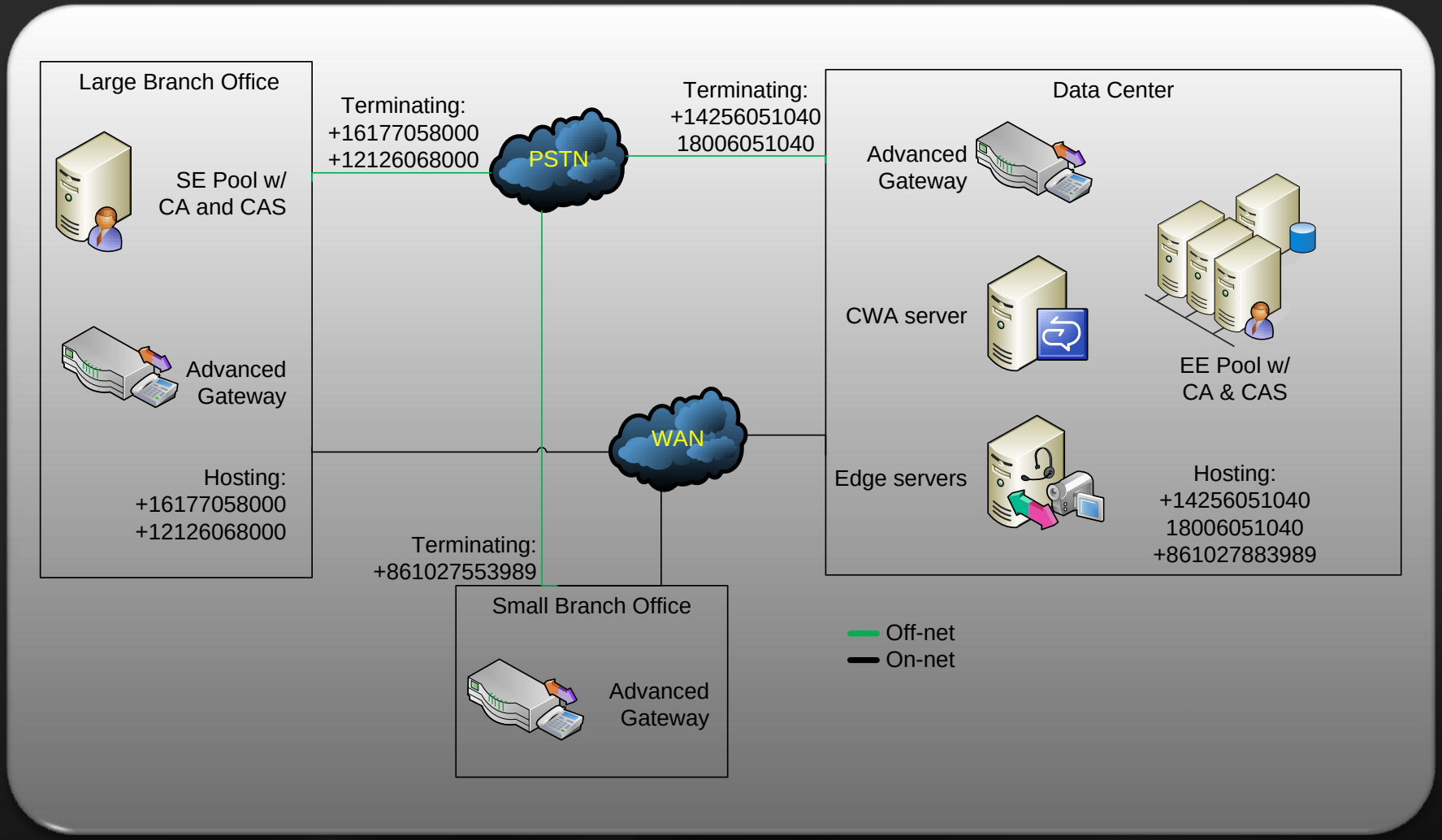




What Does It Take?

- OCS deployment
- Infrastructure to support audio conferencing functionality
  - Conferencing Attendant (CA) and Deploy Conference Announcement Service (CAS) automatically deployed on the Front End
  - CWA server
- Access to PSTN
  - Mediation server
  - Basic gateway
  - Access numbers

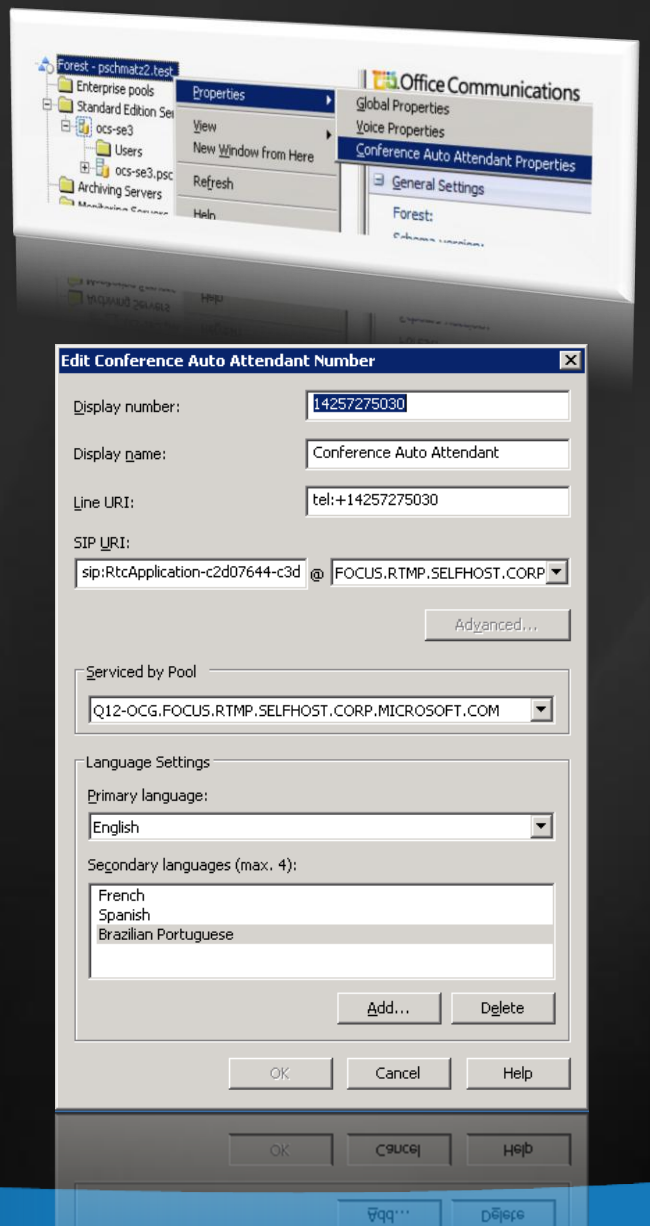
Deployment



- Assuming no number portability
- CA scale requirements: 8-core 2.33 GHz, 4 GB RAM, 500 calls

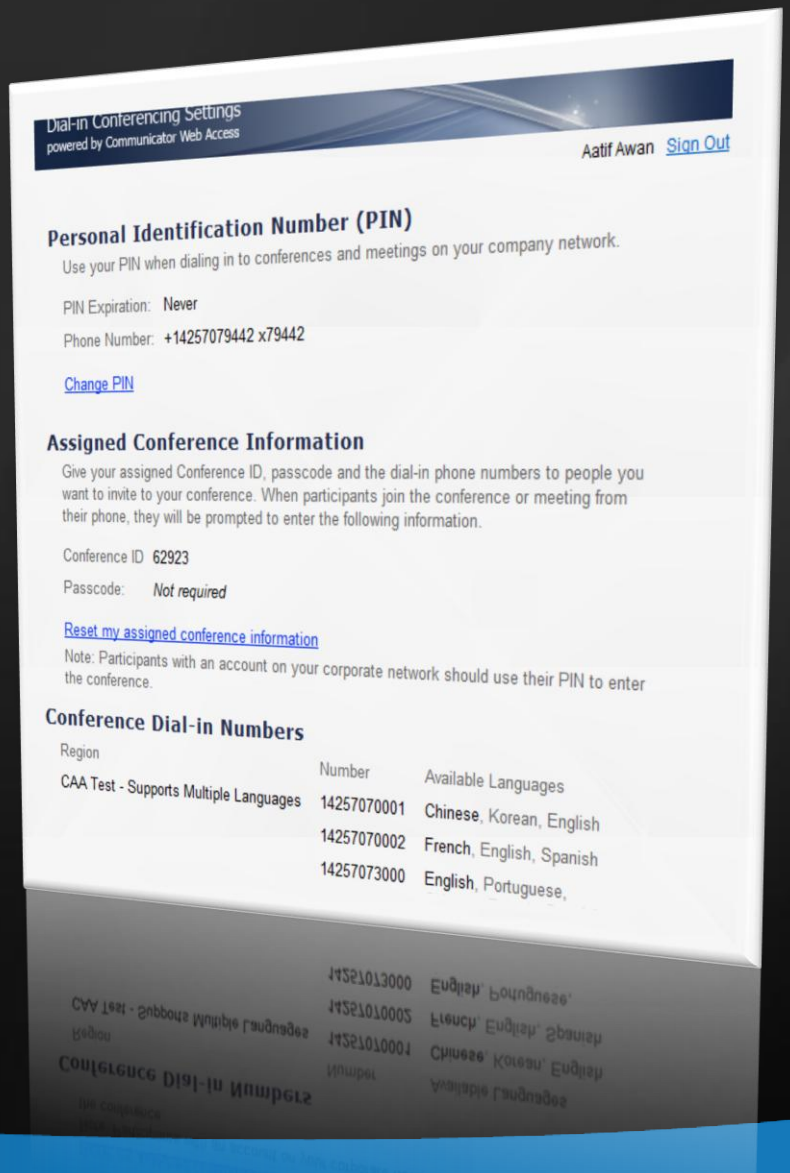
Dial-in Conferencing Configuration

- Globally manage access numbers
  - Add a number
  - Specify supported languages
  - Assign to pool
- Define multiple region (location) profiles
- Manage access pin policy per pool



Dial-in Conferencing Information Page

- A web page that provides
  - Call-in phone numbers
  - PIN management
  - Reservation-less meeting entry information
- Hosted on CWA server
  - Uses Integrated Windows Authentication (IWA) and forms-based authentication
- Linked to from
  - Office Communicator
  - Conferencing Add-In and meeting invitations



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Dial-in Conferencing

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Additional Voice Enhancements

- Resiliency
  - SIP: OC transparently reconnects when FE fails
  - RTP: Media maintained on pool disconnection
- Normalization rules
  - Optimizing IP phone dialing experience
- Per-user location profiles
  - Additional granularity
  - Eliminates Exchange UM integration pain point

The Microsoft Media Platform

- Robust audio/video processing
  - Forward error correction and error concealment
  - Time-warping jitter buffer control
  - Dynamic Adaptation to real-time network conditions
- Optimizes the audio that gets into the packet
  - Noise suppression
  - Automatic gain control
  - Acoustic echo cancellation
- Advanced Network Layer
  - NAT/Firewall traversal
  - Secure RTP
- Measurements and reporting of user experience

Media Enhancements in R2

- Audio improvements
  - AGC: Improvements to Voice Activity Detector, increased robustness to typing noise
  - Echo: improved AEC (improved power to eliminate echoes, improved robustness against bad devices)
- Greater interoperability
  - Implementation of Comfort Noise Generation according to RFC 3389
  - Implementation of latest STUN/TURN protocols, ICE V19
- Latency improvements
  - Support for early media

Summary

- Response Group Service
  - Presence integration, flexible routing
  - Easy to administer
- Delegation
- Attendant
  - Great user experience
  - Improved productivity
- Audio Conferencing
- Enhanced media experience

… continued

- Video improvements
  - Supports VGA (640x480) and HD (1280x720) @ up to 25 frames/sec in P2P calls
  - Video settings under control of UC Admin
- Quality & Diagnostics
  - Device-level enhancements to HW & SW.
  - QoE Server includes Video, GW leg of the Mediation Server
  - Ability to stitch different call legs into a single report
  - In-call diagnostics to report on network impairments, network bandwidth limitations and bad devices
  - Enhancements to reports to the QoE Monitoring Server
- Tools
  - OCS Media Traffic Analyzer Tool
  - PC4UC Health Check Tool

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