Back to the Basics:

Device Pools

Toby Sauer
Instructor/Consultant
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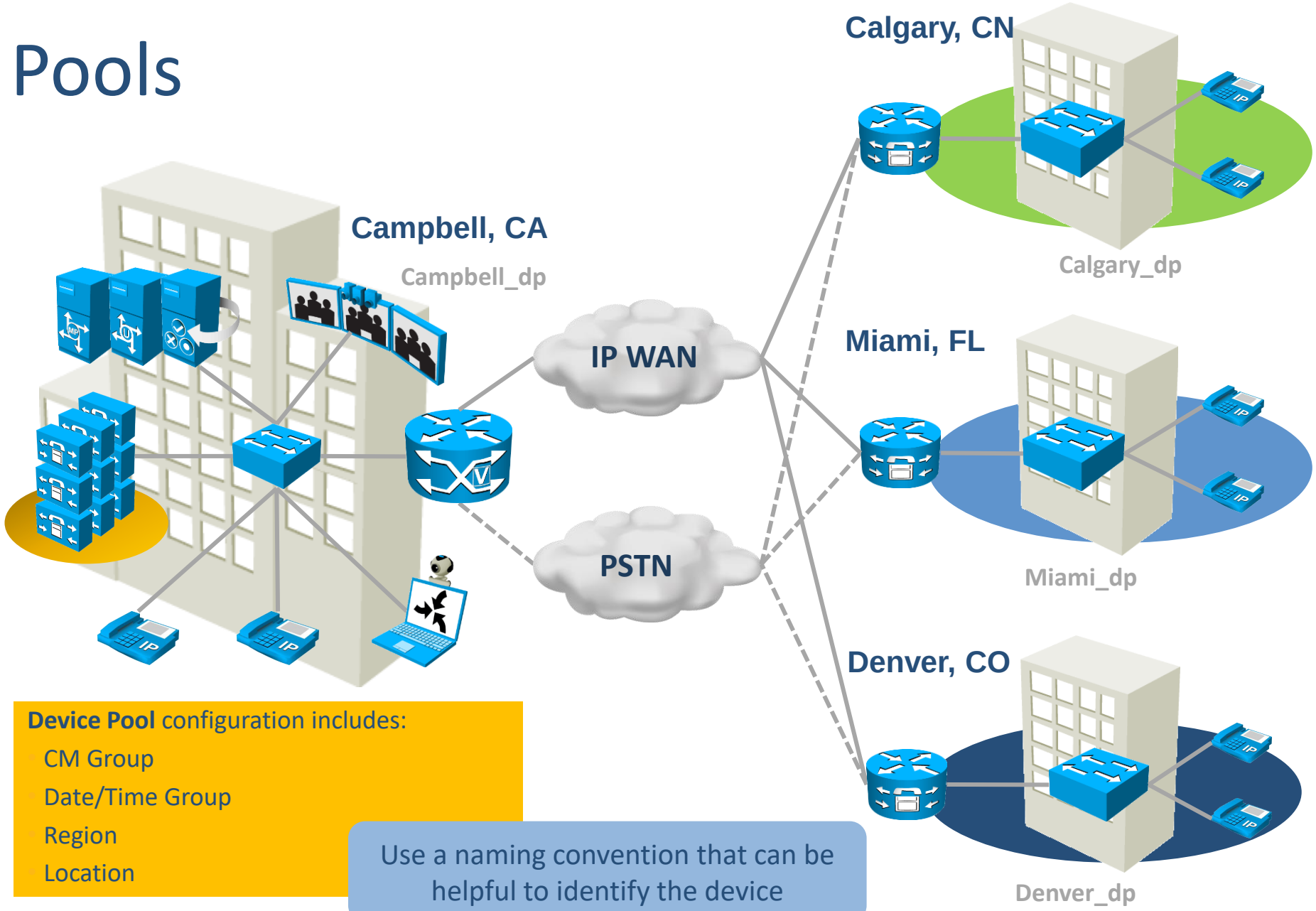
Our Agenda

- Device Pools: The Purpose
- Device Pool Contents
- Device Mobility
- Other Settings
- Closing & Wrap Up
  Your Questions and Feedback

Device Pools: The Purpose

Device Pools



Device Pool configuration includes:

- CM Group
- Date/Time Group
- Region
- Location

Use a naming convention that can be helpful to identify the device

Commonly Used Device Pool Elements

Always active

- CM Group – Where should device register

Roaming

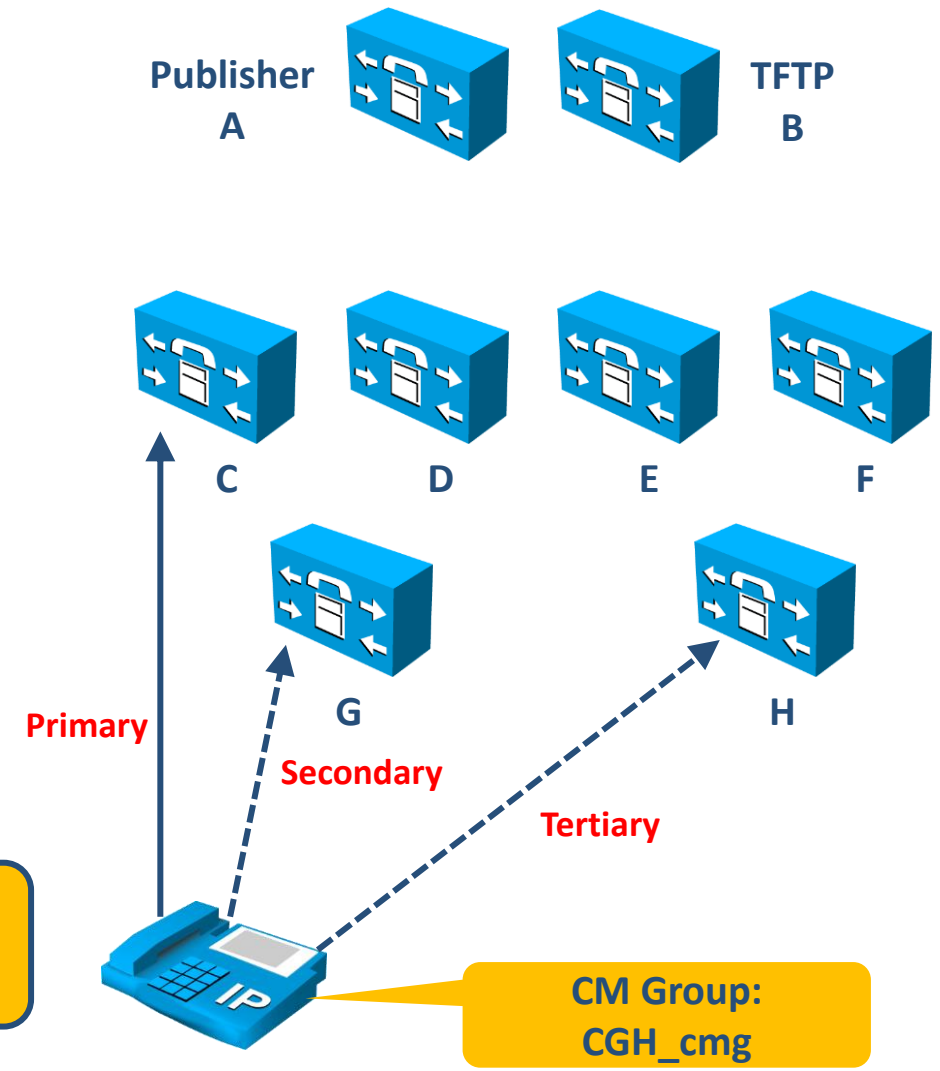
- Date/ Time Group – Time on Phone/ CDRs
- Region – Codec Selection
- Media Resource Group List – Conf Bridge, MoH, etc.
- Location – Bandwidth Call Admission Control
- SRST Reference – Where to register during WAN Failure
- Local Route Group – Which gateway should I use for calls

Commonly Used Parameters

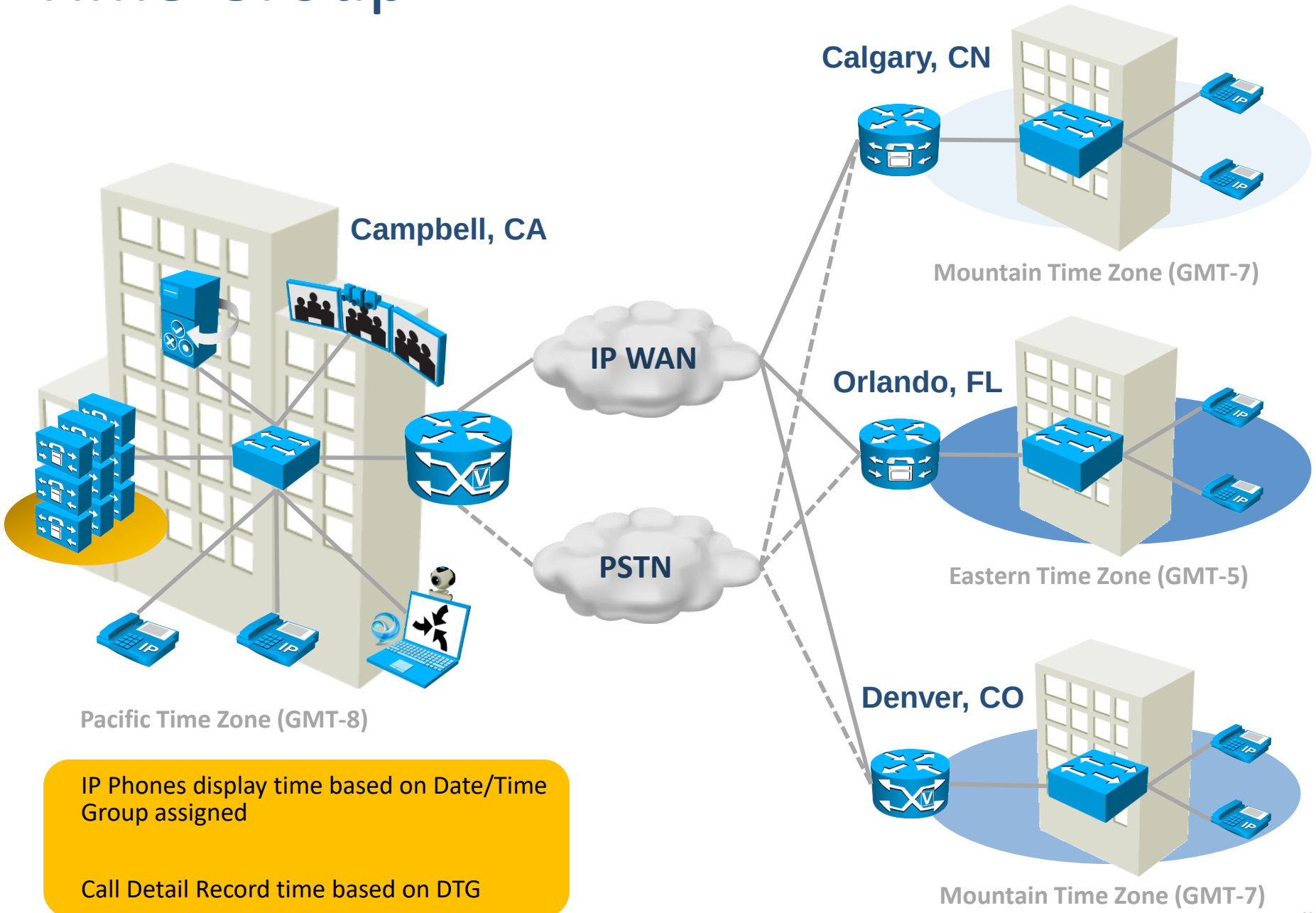
Cisco Unified Communications Manager Group

- Configuring CM Groups provides redundancy and load-balancing by defining where the phone registers:
  - In the example, there are four primary call-processing servers (CDEF) and two failover servers (GH)
  - Create CM Groups by defining a Primary, Secondary and (optional) Tertiary server:
    - CGH_cmg
    - DGH_cmg
    - EHG_cmg
    - FHG_cmg

Note: Phone must register to a server running the CallManager service



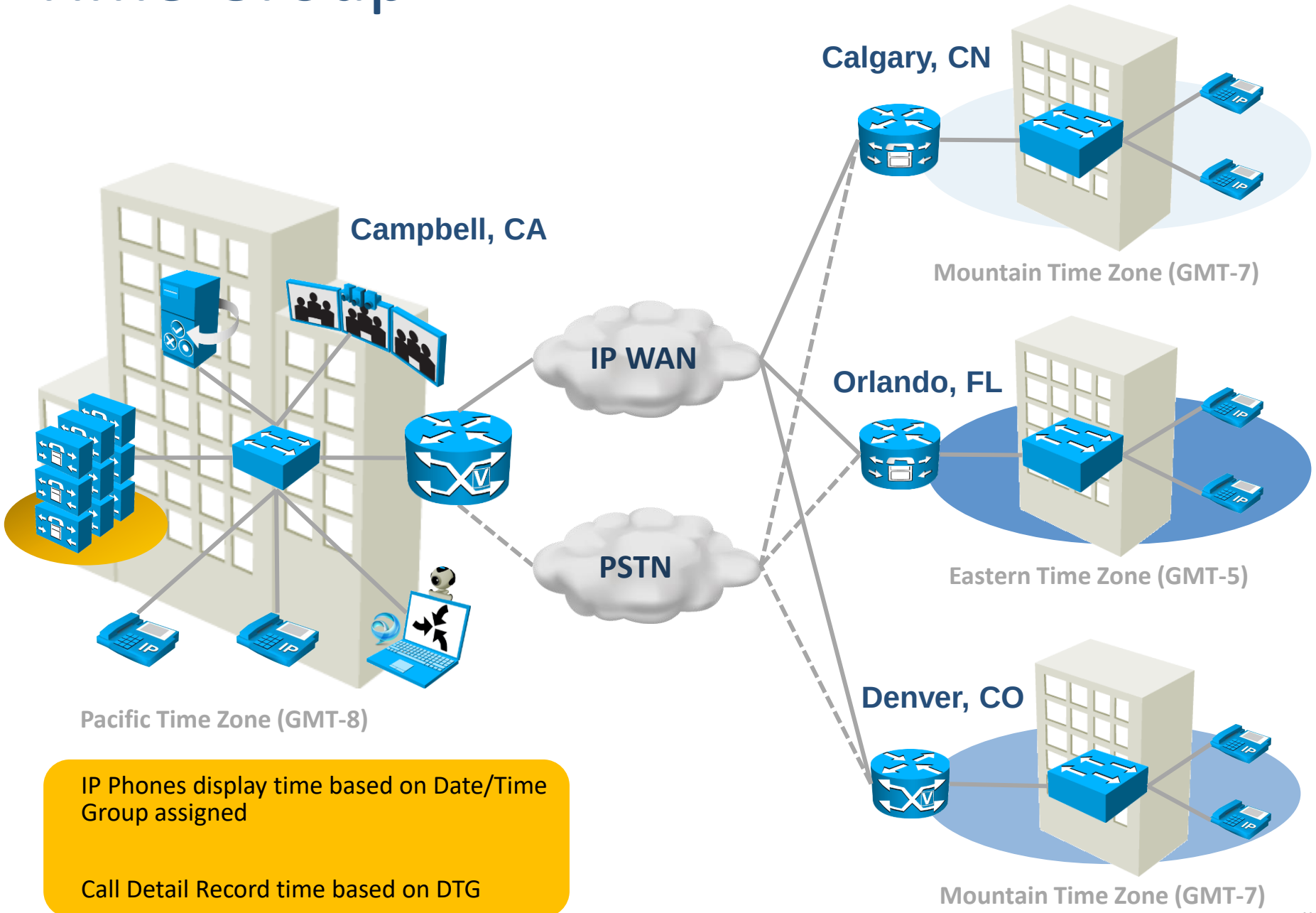
Date/ Time Group



IP Phones display time based on Date/Time Group assigned

Call Detail Record time based on DTG

Date/ Time Group



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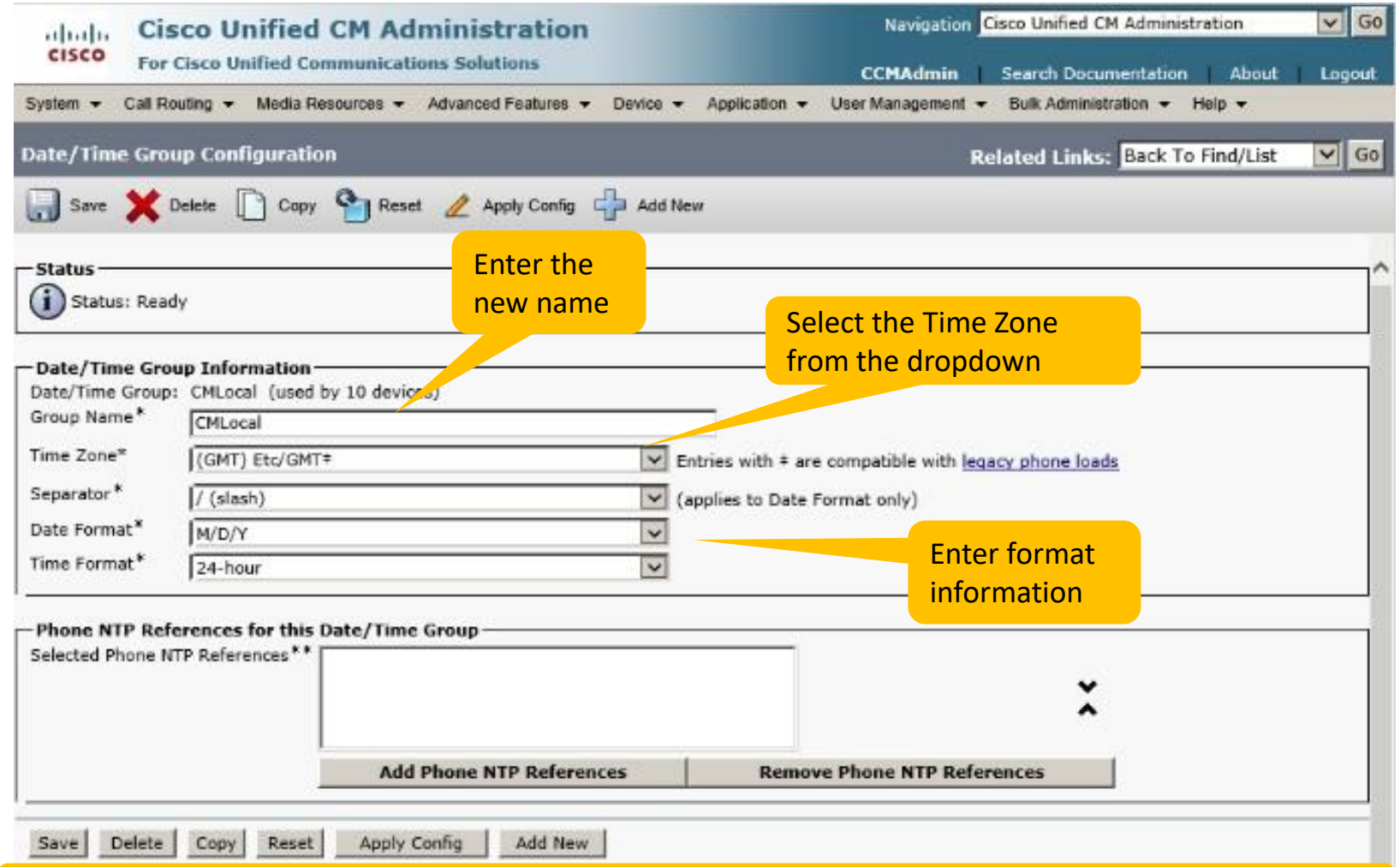
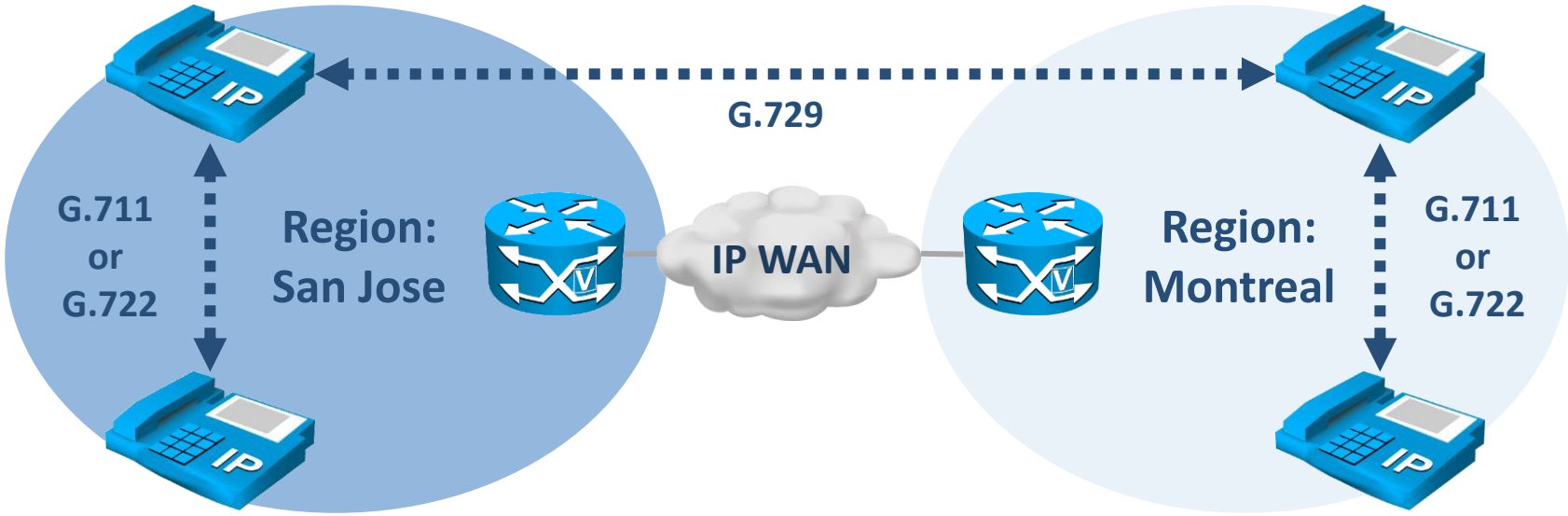


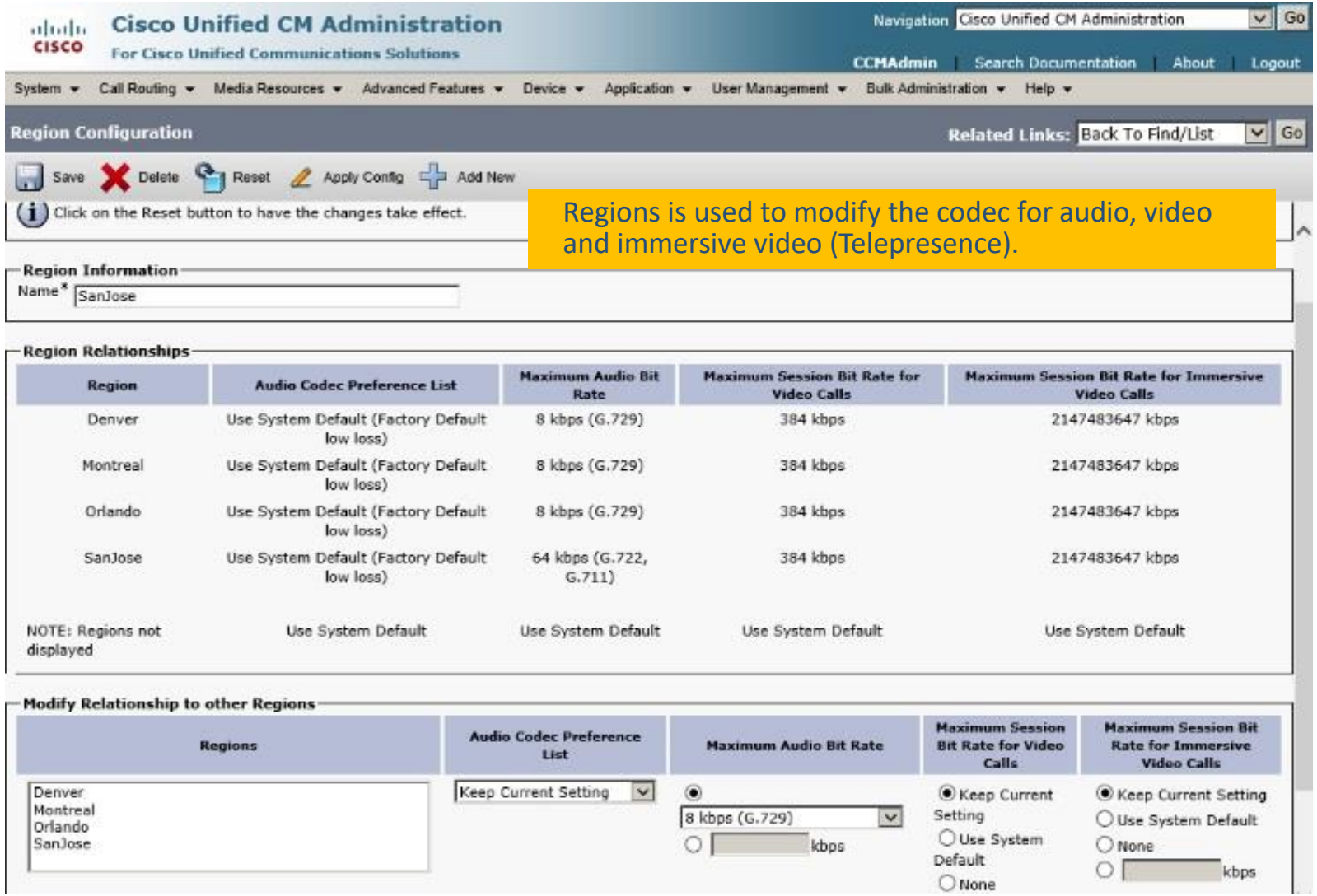
The specific Time Zone accounts for variations in Daylight Savings Time dates.

Codecs Selection

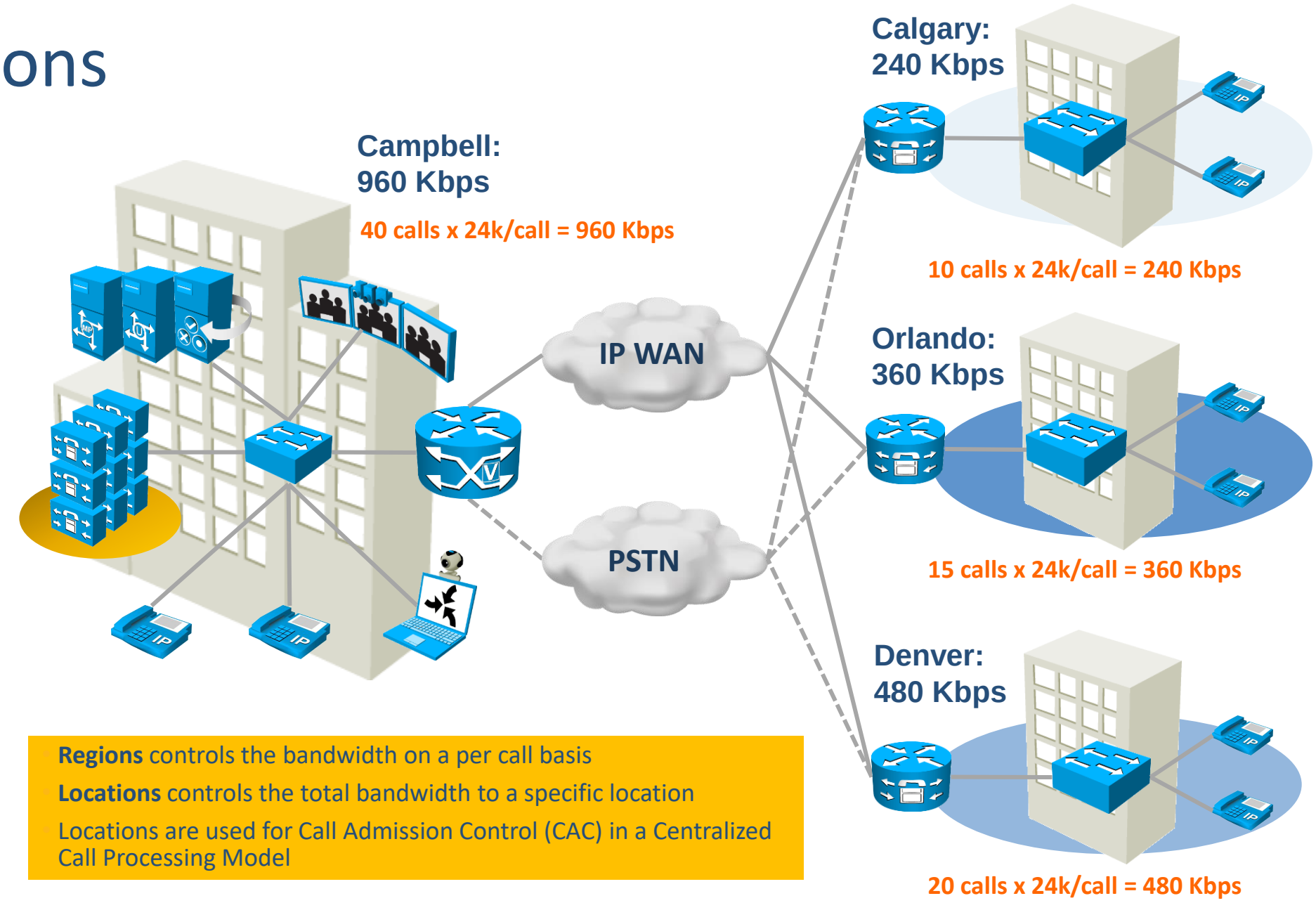
- G.711 / G.722 codecs uses the most bandwidth (64kbps per call) and is typically used within the LAN.
- G.729 is compressed and uses less bandwidth (8kbps per call) and is typically used across the WAN.
- Codec selection is controlled by the Region settings configured in CM Administration.



Region Configuration



Locations



Regions controls the bandwidth on a per call basis

Locations controls the total bandwidth to a specific location

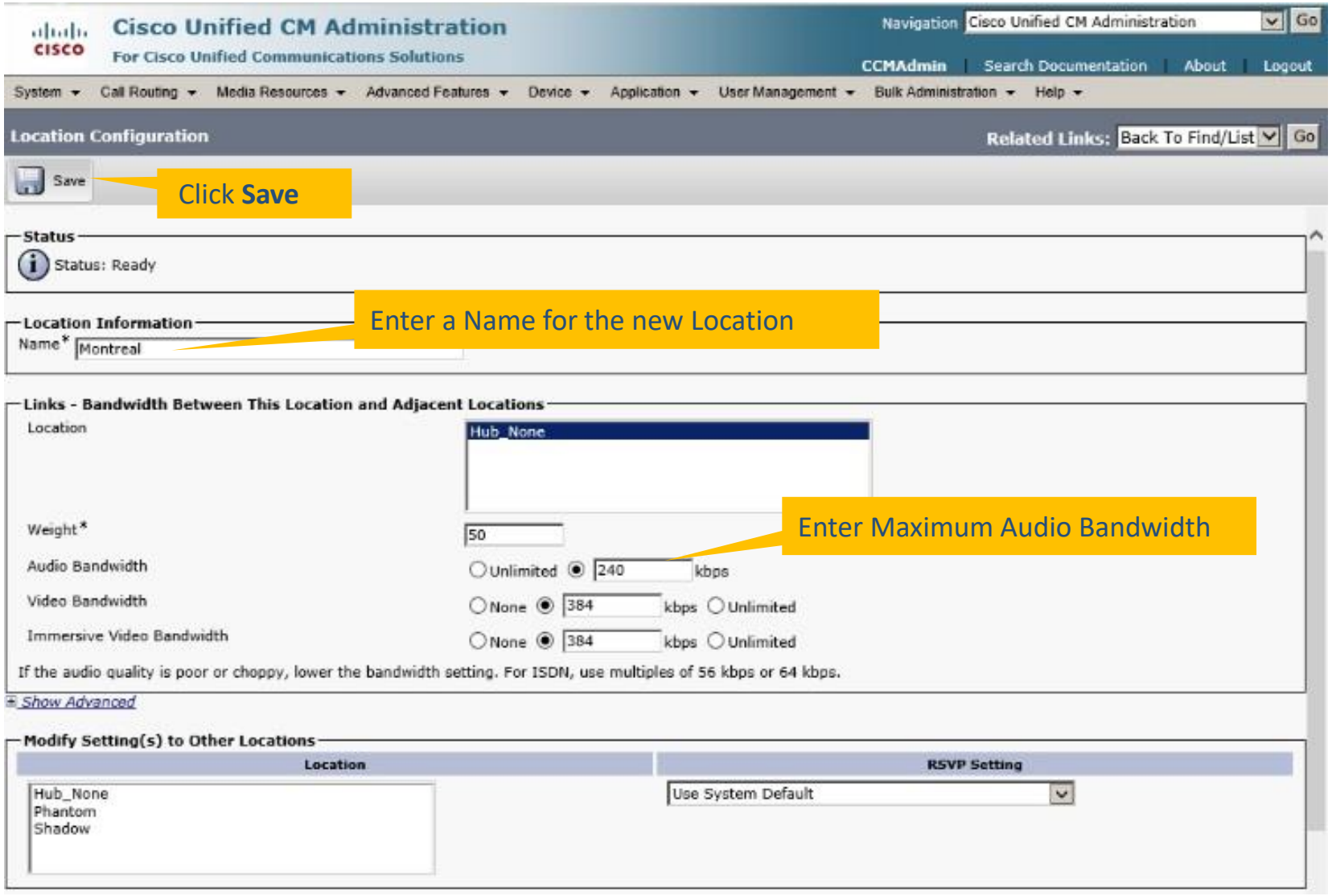
Locations are used for Call Admission Control (CAC) in a Centralized Call Processing Model

Locations

- Codec bandwidth utilization is calculated by adding the codec payload bitrate to the header overhead:
  - Payload + Overhead (16 kbps) = Total Bandwidth

Codec	Payload	+Overhead
G.711	64 Kbps	80 Kbps
G.729	8 Kbps	24 Kbps

Location Configuration



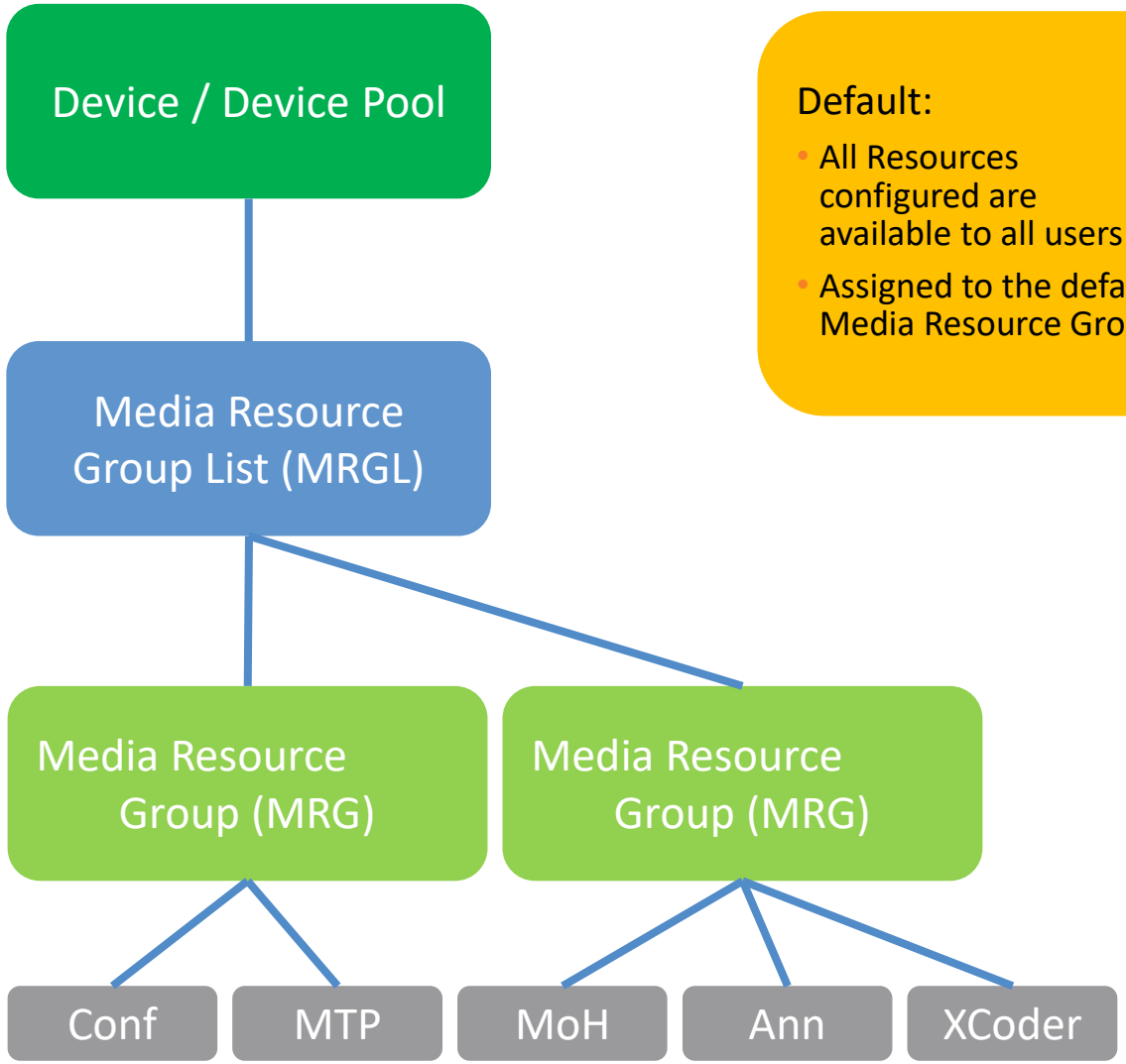
Media Resource Group List

Media Resource Group Lists are assigned to devices in order allow device access to specific resources

Media Resource Groups are then assigned to Media Resource Group Lists

Resources are assigned to Media Resource Groups

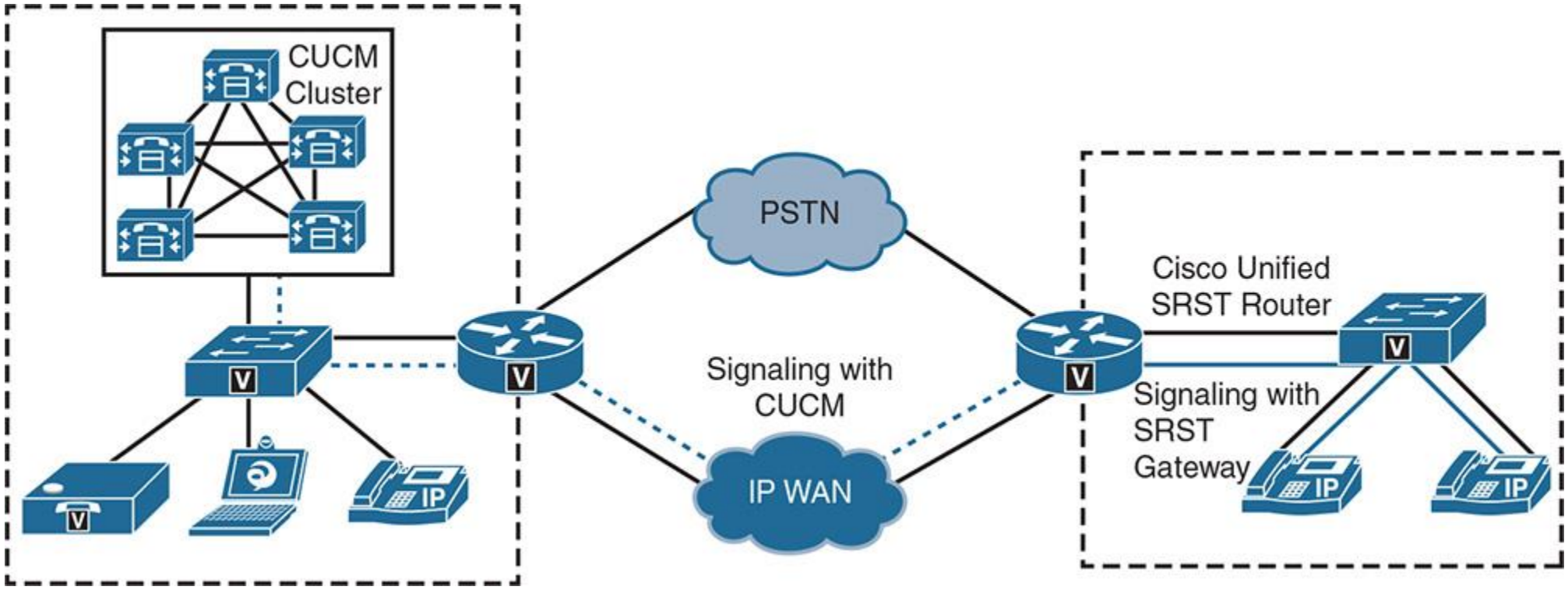
- Once assigned to an MRG, they no longer are available to all users, and are no longer part of the default MRG



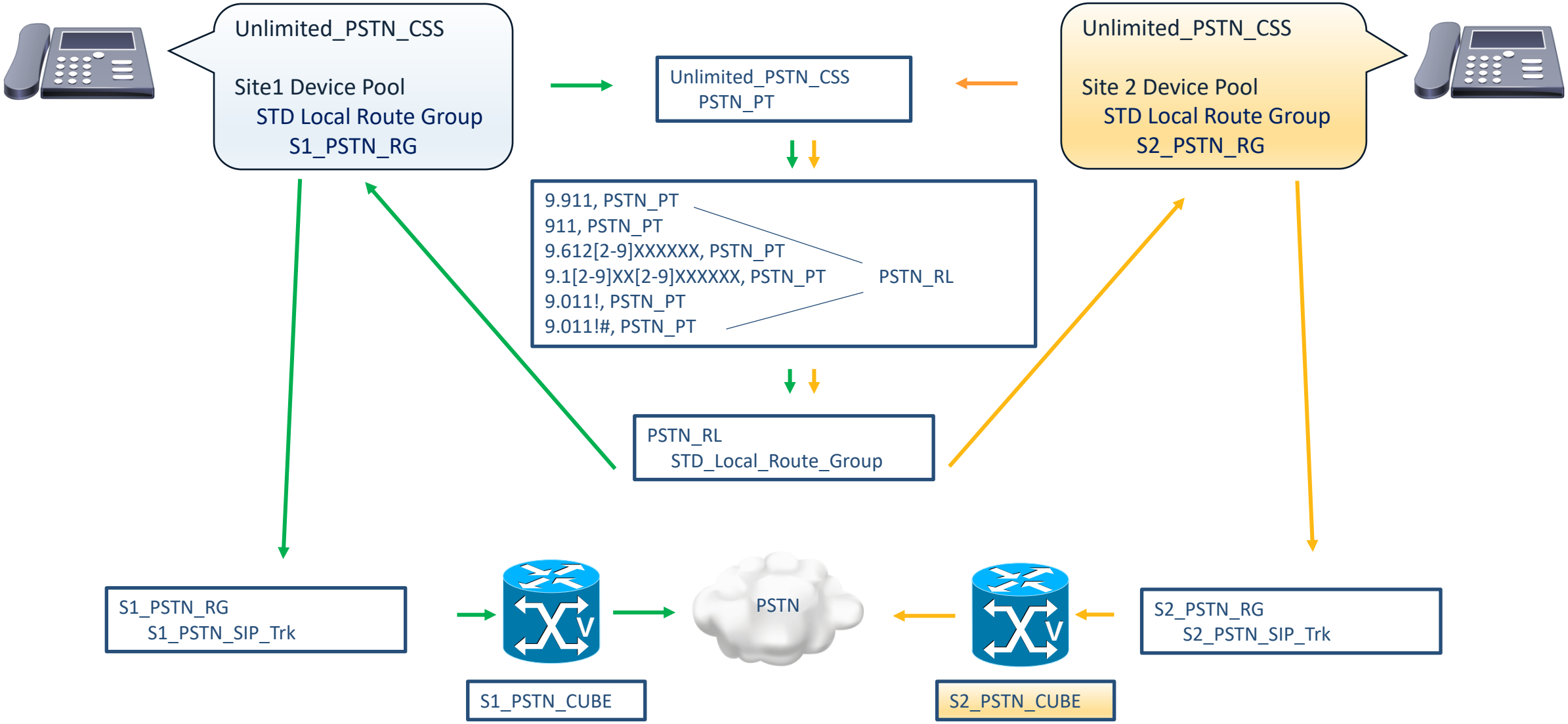
Default:

- All Resources configured are available to all users
- Assigned to the default Media Resource Group

SRST Reference

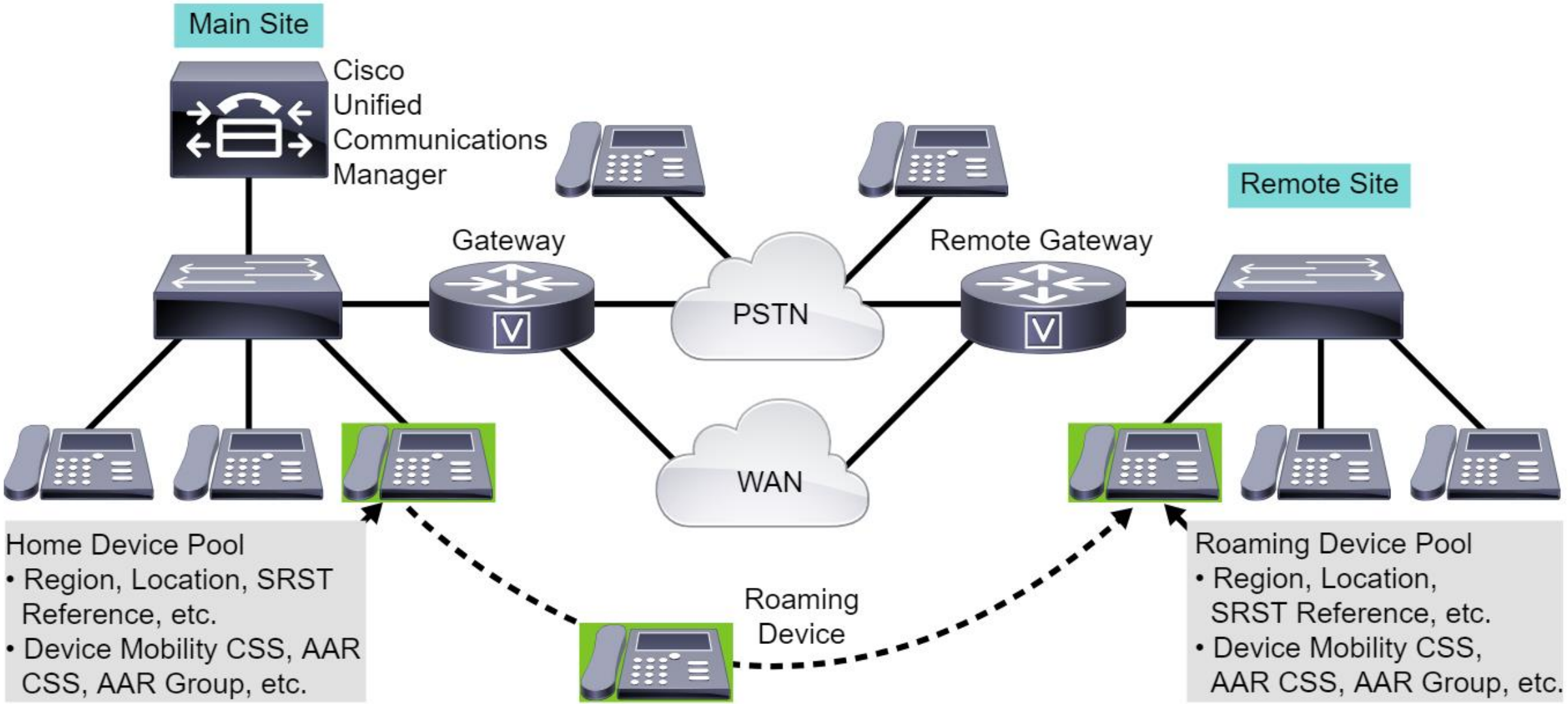


Local Route Groups

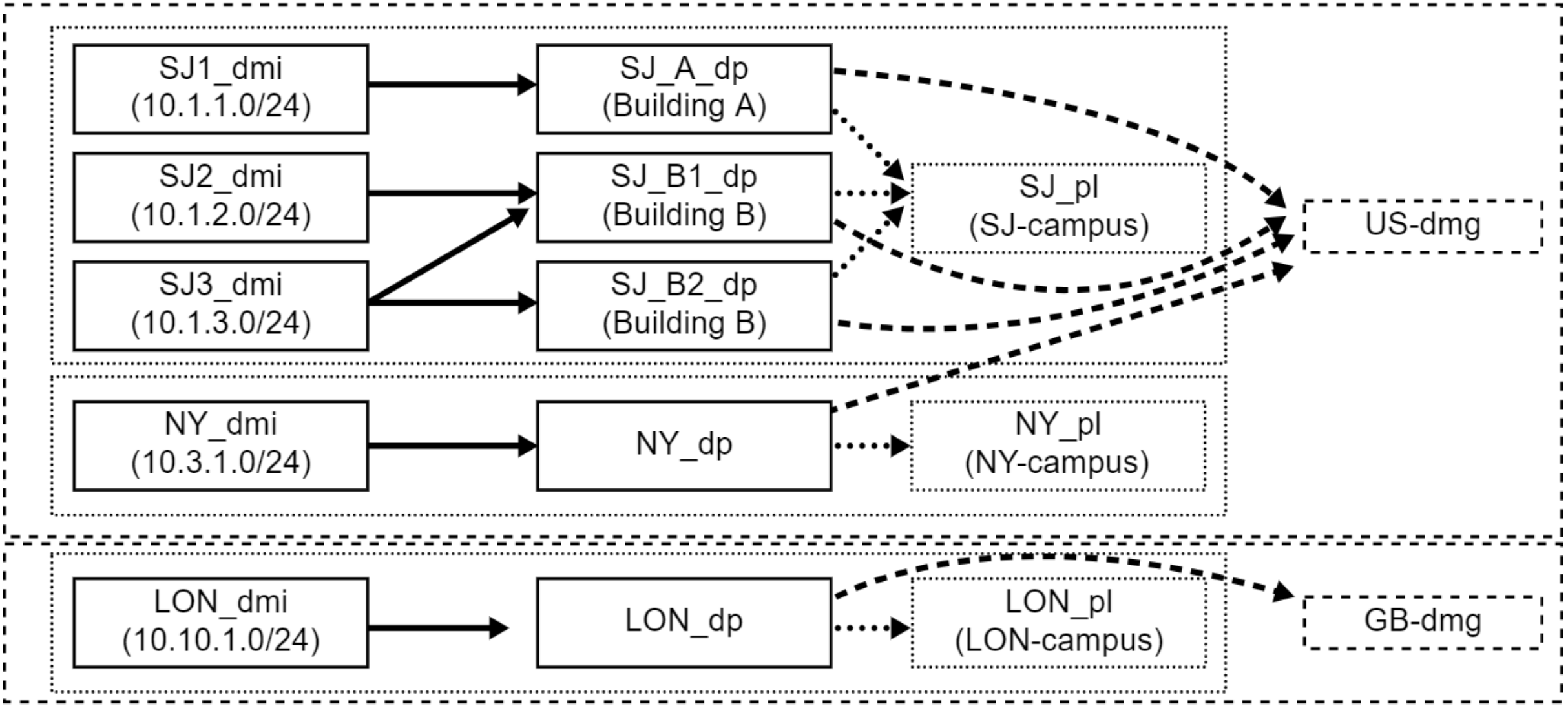


Device Mobility

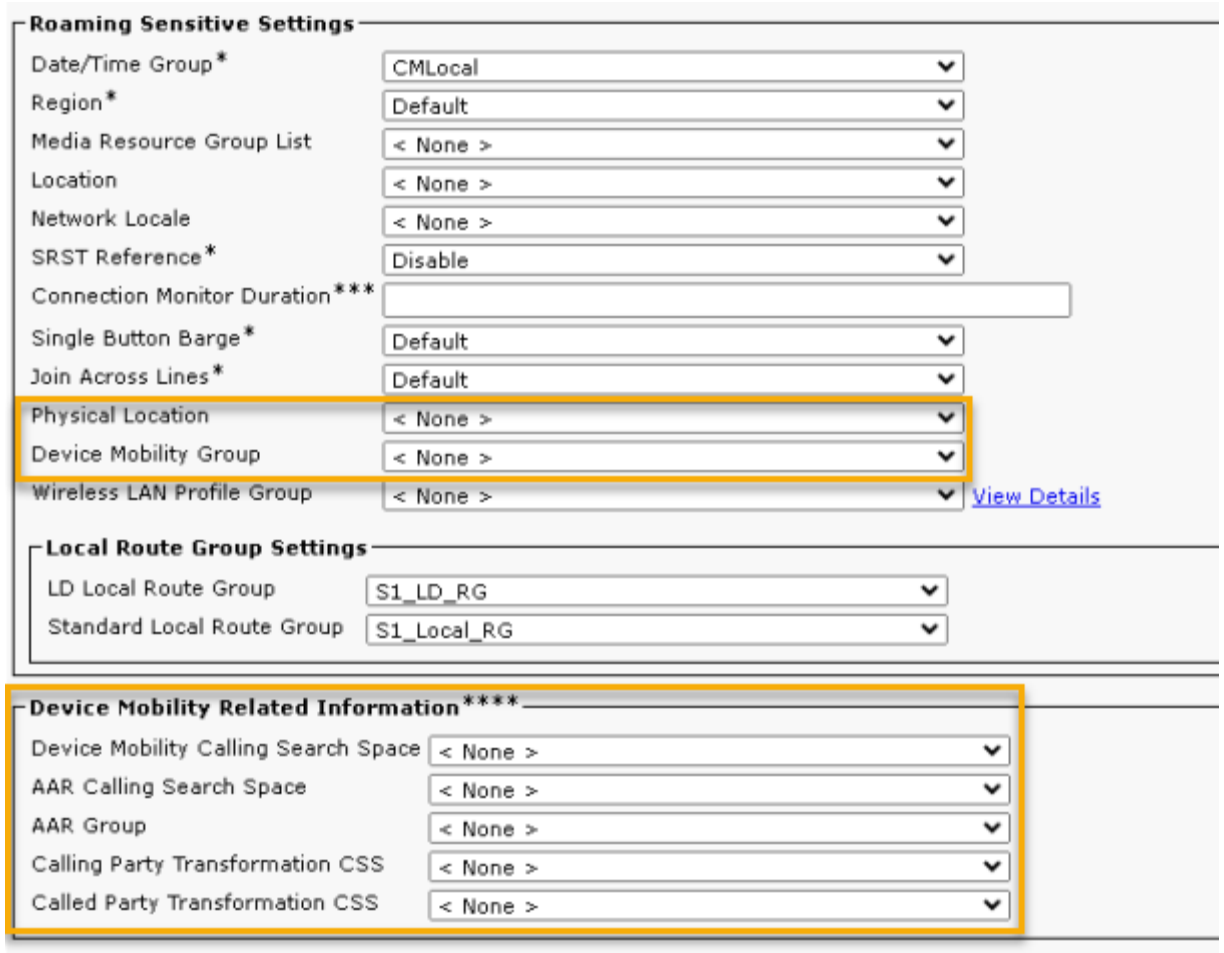
Device Mobility



Device Mobility Selection



Device Pool Device Mobility Settings

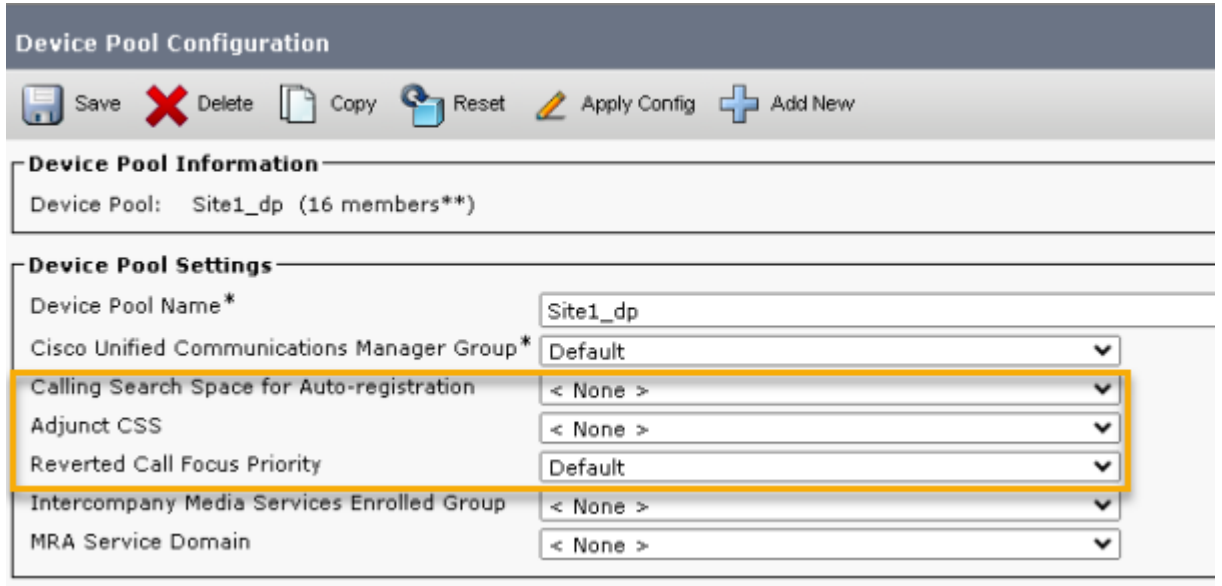


Other Settings

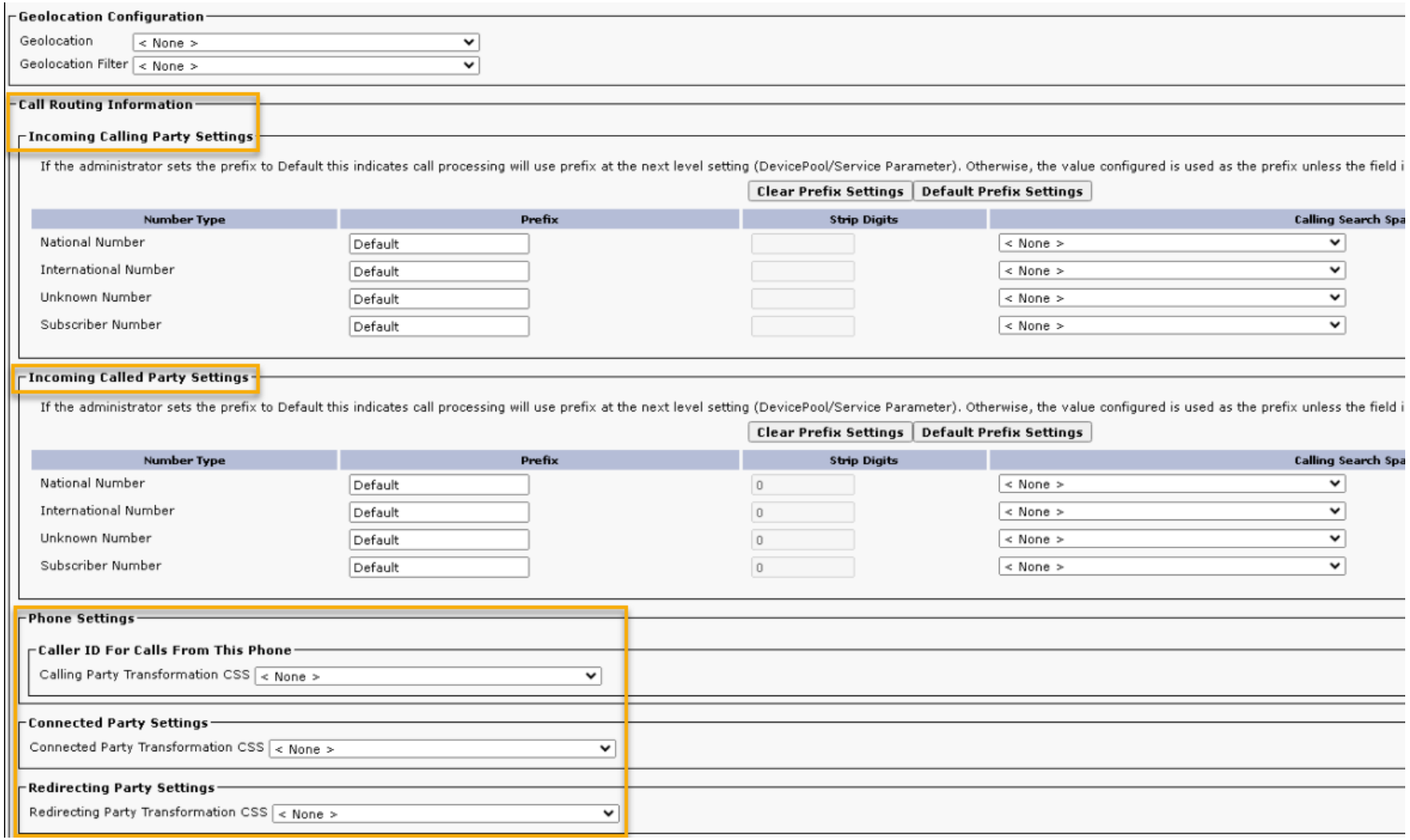
Additional Options

Calling Search Space for Auto-registration – Used to assign Calling Search Space to phones that auto register into this device pool. Can be over-ridden with templates.

Adjunct CSS – Used to assign Calling Privileges to remote cluster phones when using Cross Cluster Extension Mobility.



Globalized Dial Plan Device Pool Manipulations



Summary

- Device Pool Overview
- Device Pool Contents
- Device Mobility
- Additional Settings

Questions

Thank you for attending.

If you have any additional questions, or would like to learn more about our Athena program, please email…

pka@skyline-ats.com

Skyline
Advanced Technology Services

www.skyline-ats.com