



## Third-Party Applications and Integrations

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### Third-Party Applications and Integrations

The Cisco Hosted Collaboration Solution (HCS) uses the same UC applications that are used to deploy on-premises deployments. Cisco and its partners certify many applications through the Interoperability Verification Testing (IVT) program for integration into Cisco UC products and these are cataloged in the Cisco Developer Network (CDN) at <http://developer.cisco.com>.

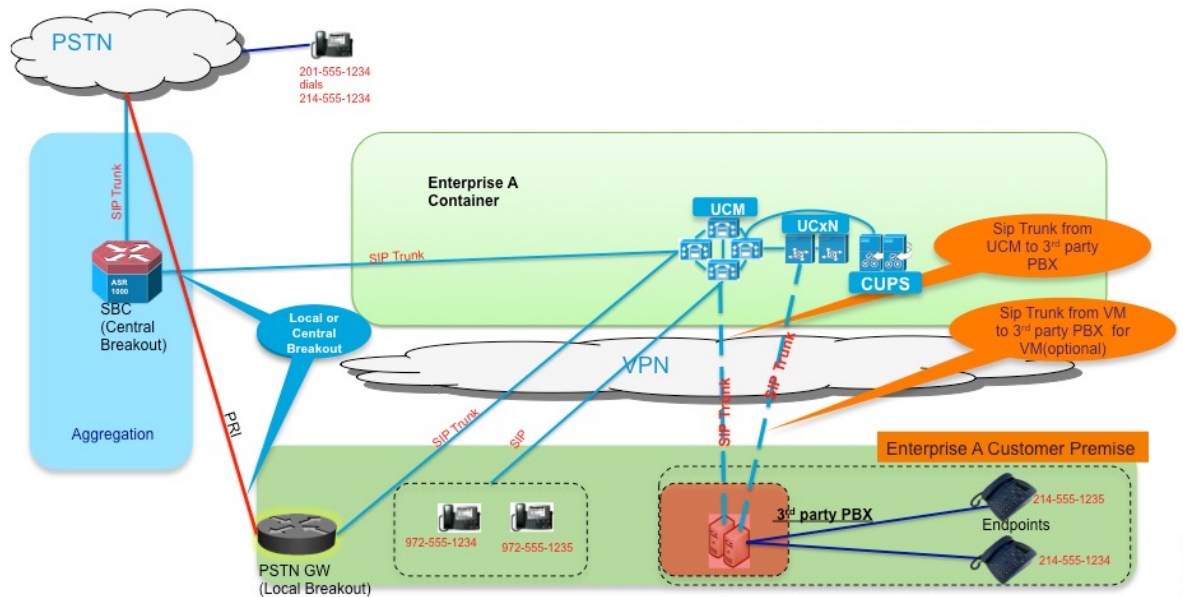
Because Cisco HCS uses Cisco Hosted Collaboration Mediation Fulfillment (HCM-F) with Unified Communications Domain Manager as domain manager, be aware that automated provisioning may not be available through Unified Communications Domain Manager, and manual provisioning may be necessary. HCS Service Assurance may not apply to these integrations.

### Third-party PBX Integration in Cisco HCS

To accommodate third-party PBXs that are already deployed at customer locations, and to enable seamless dialing and future migration, Cisco HCS supports the integration of third-party PBXs.

Third-party PBXs are integrated in Cisco HCS by allowing the configuration of SIP and H323 trunks toward these IPPBXs and the corresponding provisioning from Cisco Unified Communications Domain Manager. The third-party PBXs are integrated at the leaf UC cluster dedicated for customers as shown in the following figure. The integration is limited to basic DN-to-DN dialing across the Cisco HCS and the third-party IPPBX. Feature transparency and special signaling like DPNSS is outside the scope of the supported configuration in Cisco HCS. However, special cases of third-party PBX integration may be supported on a case-by-case basis, based on the requirements and support available within Cisco HCS.

Figure 1: Third-Party PBX Integration



As shown in the preceding figure, the leaf cluster Cisco Unified Communications Manager deployed on a per-customer basis within Cisco HCS can be deployed and configured with either the central breakout option or the local breakout option.

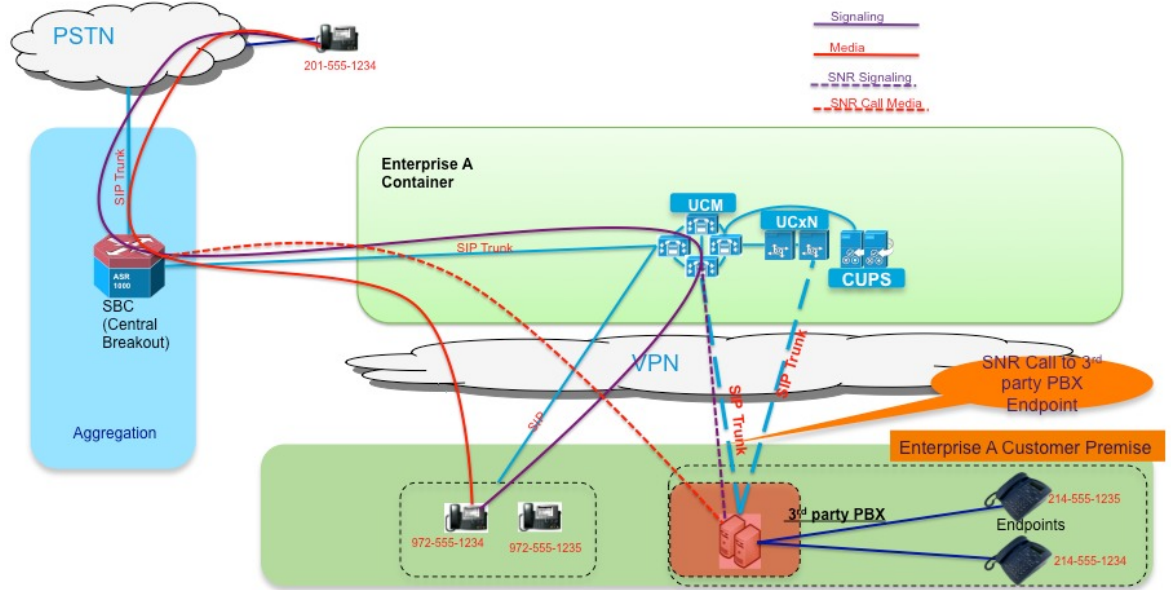
Key architectural assumptions for the preceding deployment are as follows:

- Centralized handling of PSTN connectivity and routing policies at the Cisco HCS Unified Communications Manager.
- Unified Communications Manager provides a legacy PBX integration.
- DNs and E.164 patterns belonging to third-party PBX endpoints are independently routed to the PBX over a SIP or H323 trunk.
- DNs of Cisco HCS endpoints are served directly by Unified Communications Manager. Unified Communications Manager can provide Single Number Reach (SNR) services to Cisco HCS users and can include DNs of Lync clients.
- No feature transparency or interworking occurs across Cisco HCS and third-party PBX clients.
- Emergency call handling integration is done independently on the IPPBX.
- Cisco HCS UC deployment can be configured to provide voicemail to the third-party PBX endpoints using an independent SIP trunk to the Cisco Unity Connection.

The diagrams that follow describe the various call flows that are supported as part of third-party PBX integration.

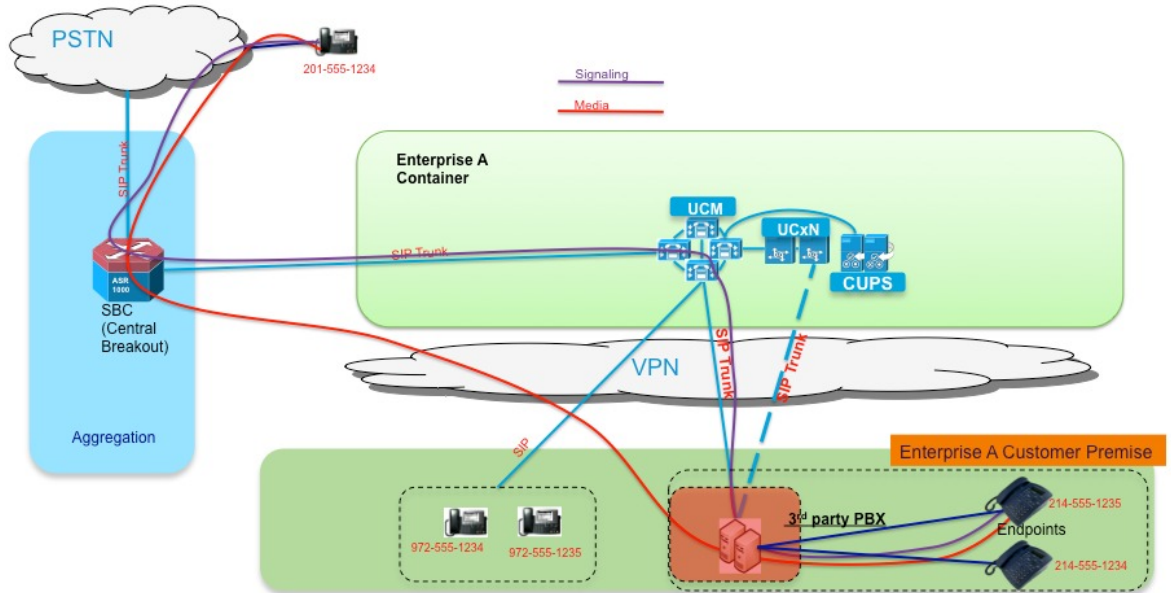
As shown in the following figure, the SNR feature can be configured for Cisco HCS endpoints and users, so that calls arriving at the Cisco HCS endpoints can be sent to the third-party PBX endpoints.

Figure 2: Call Flow for PSTN to Cisco HCS Endpoint with SNR to Third-Party Endpoint



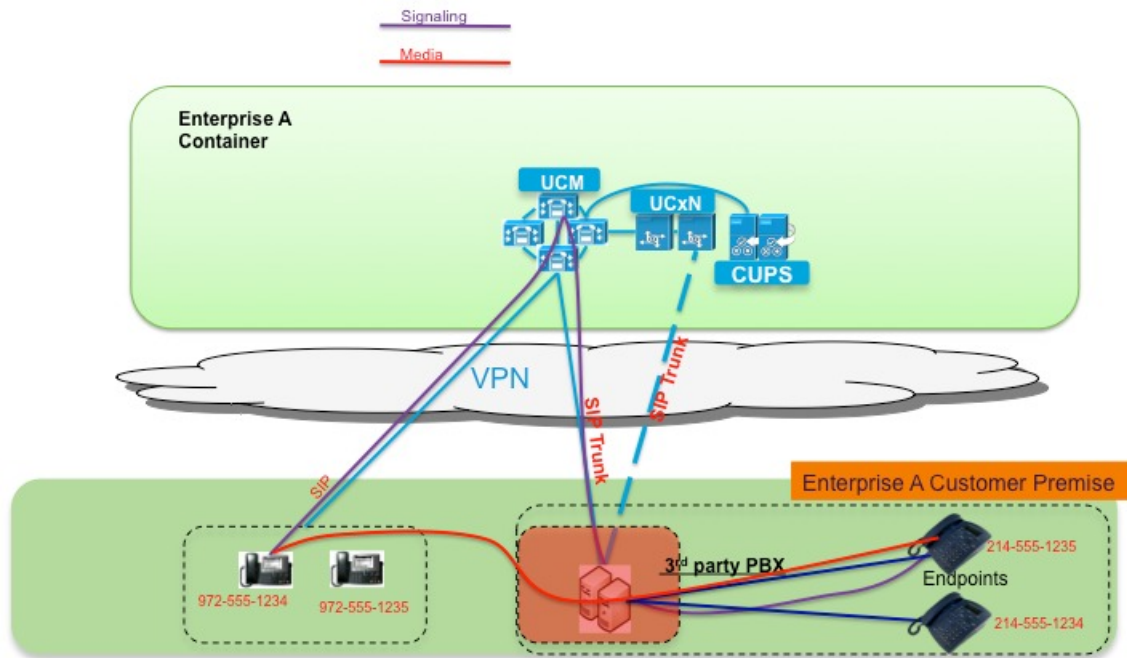
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Figure 3: Call Flow for PSTN to Third-Party Endpoint



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Figure 4: Call Flow for Cisco HCS Endpoint to Third-Party Endpoint



For more information on third-party PBX integration in Cisco HCS, see *Third-party PBX SIP Integration for Cisco Hosted Collaboration Solution* and *CUCILync Integration Guide for Cisco Hosted Collaboration Solution*, available at [http://www.cisco.com/en/US/partner/products/ps11363/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/partner/products/ps11363/prod_maintenance_guides_list.html).