

The Webex Cloud Platform

Infrastructure, Data Residency and Connectivity

Stefano Giorcelli
Principal Engineer

CISCO Live !

Cisco Webex App

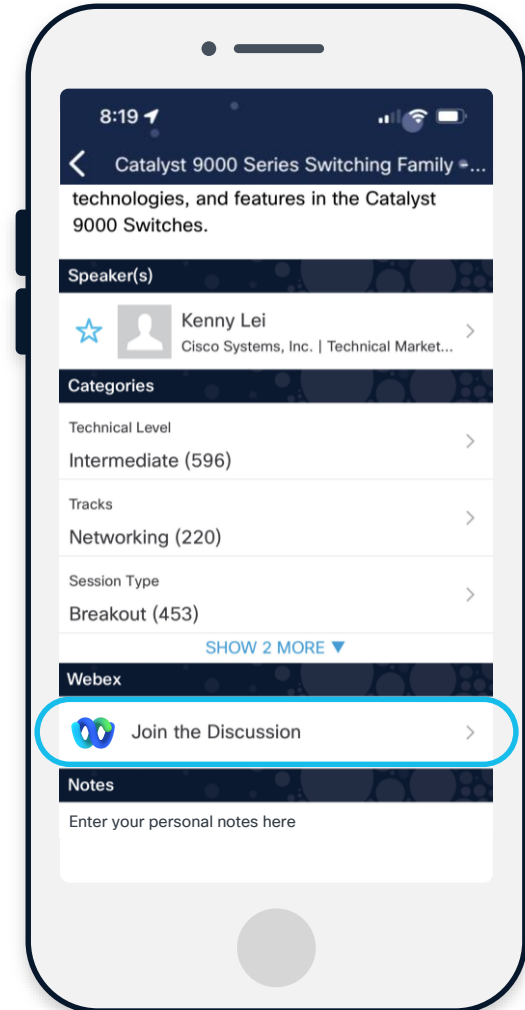
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How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
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- 4 Enter messages/questions in the Webex space

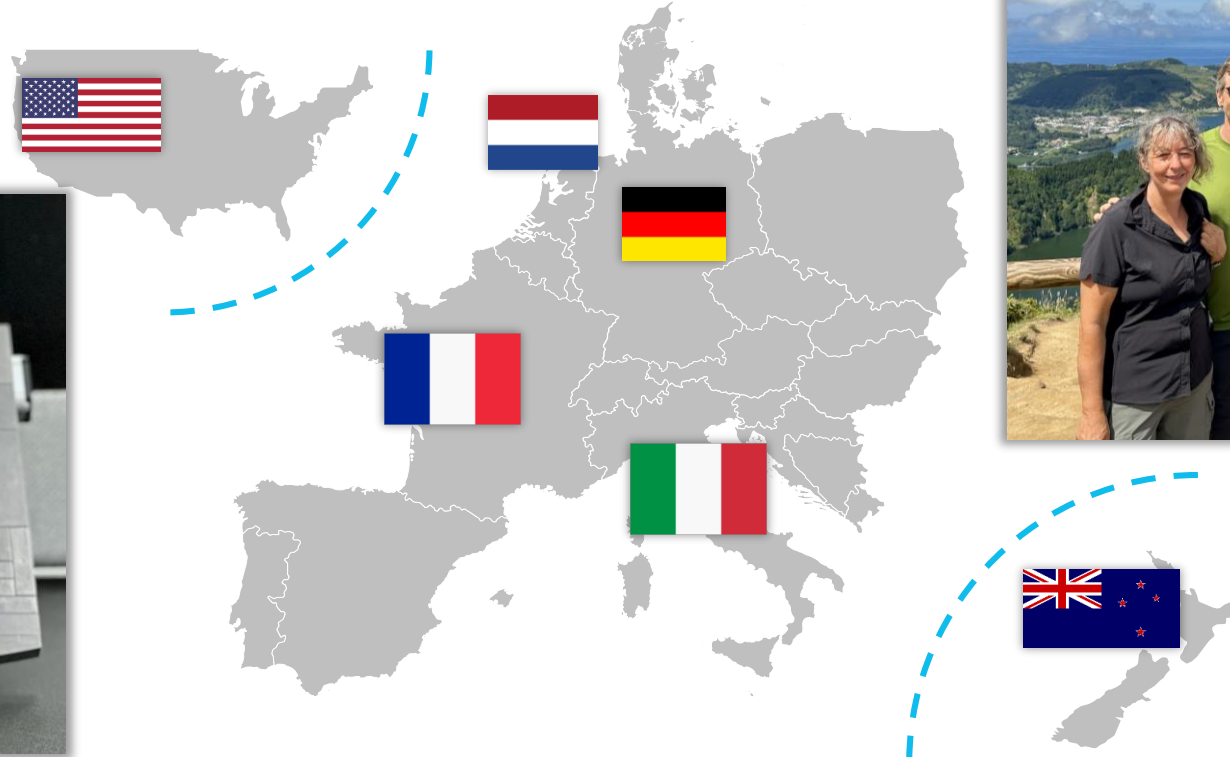
Webex spaces will be moderated by the speaker until June 13, 2025.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCOL-2990>

About Your Speaker

Stefano Giorcelli

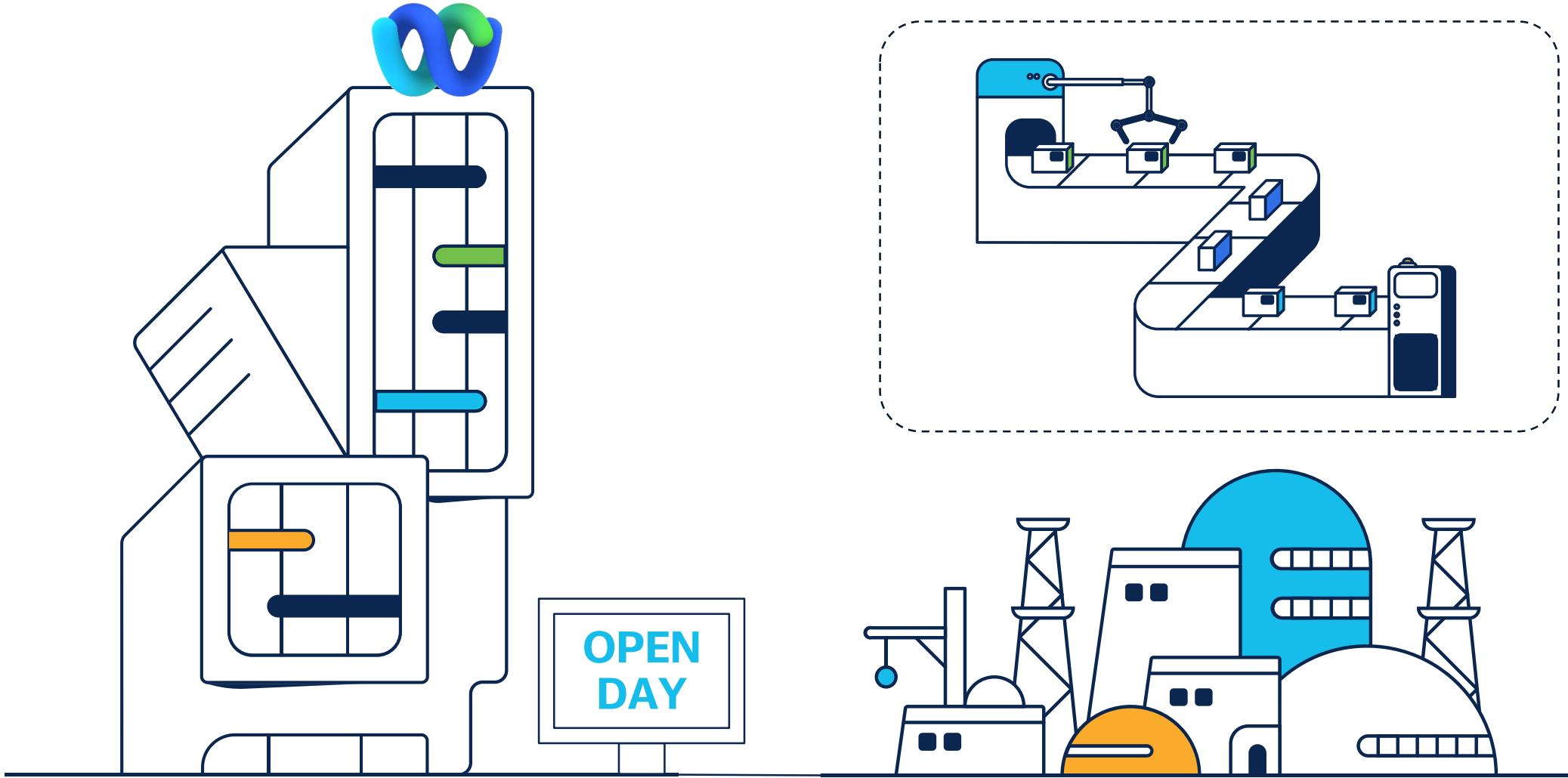


Safe Harbour Statement

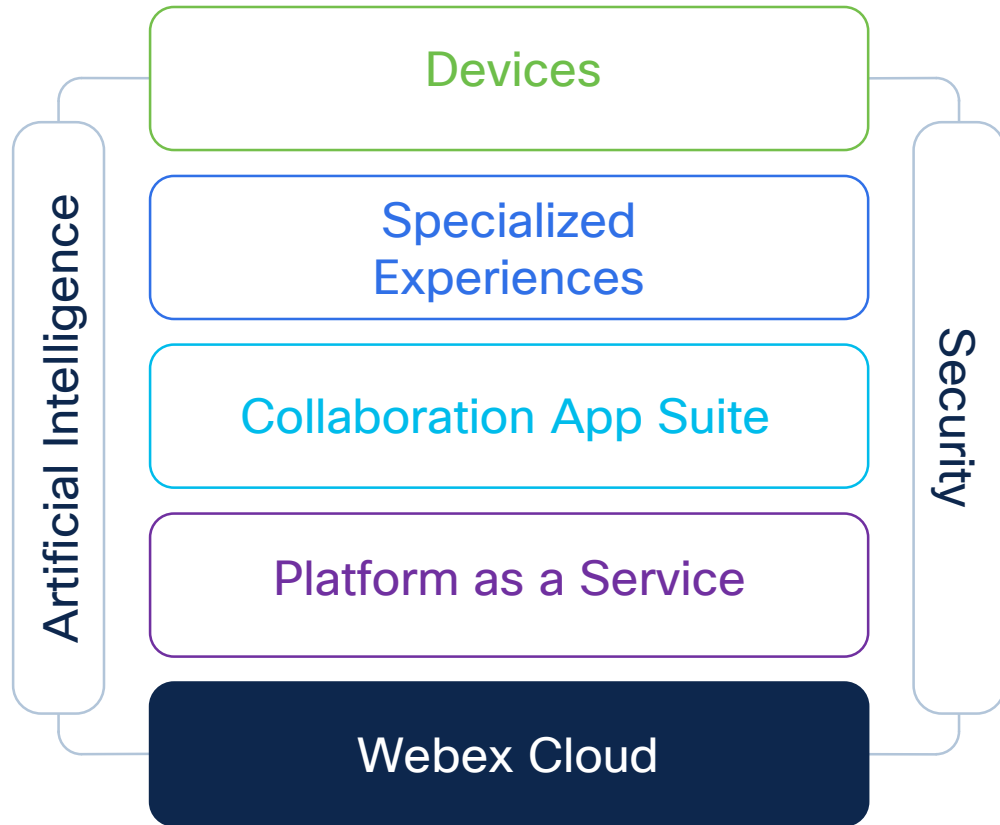
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About This Session



Webex Cloud Mission



Provide a robust, reliable, scalable, extensible, and secure **platform foundation** for everything we do in Webex, today and tomorrow

Combine Webex Data Centers and Cloud Service Providers into a seamless **hybrid cloud** with prescriptive operational and delivery models

Our Challenge

We went from this...



Independent services with separate platforms, infrastructure and deployment processes

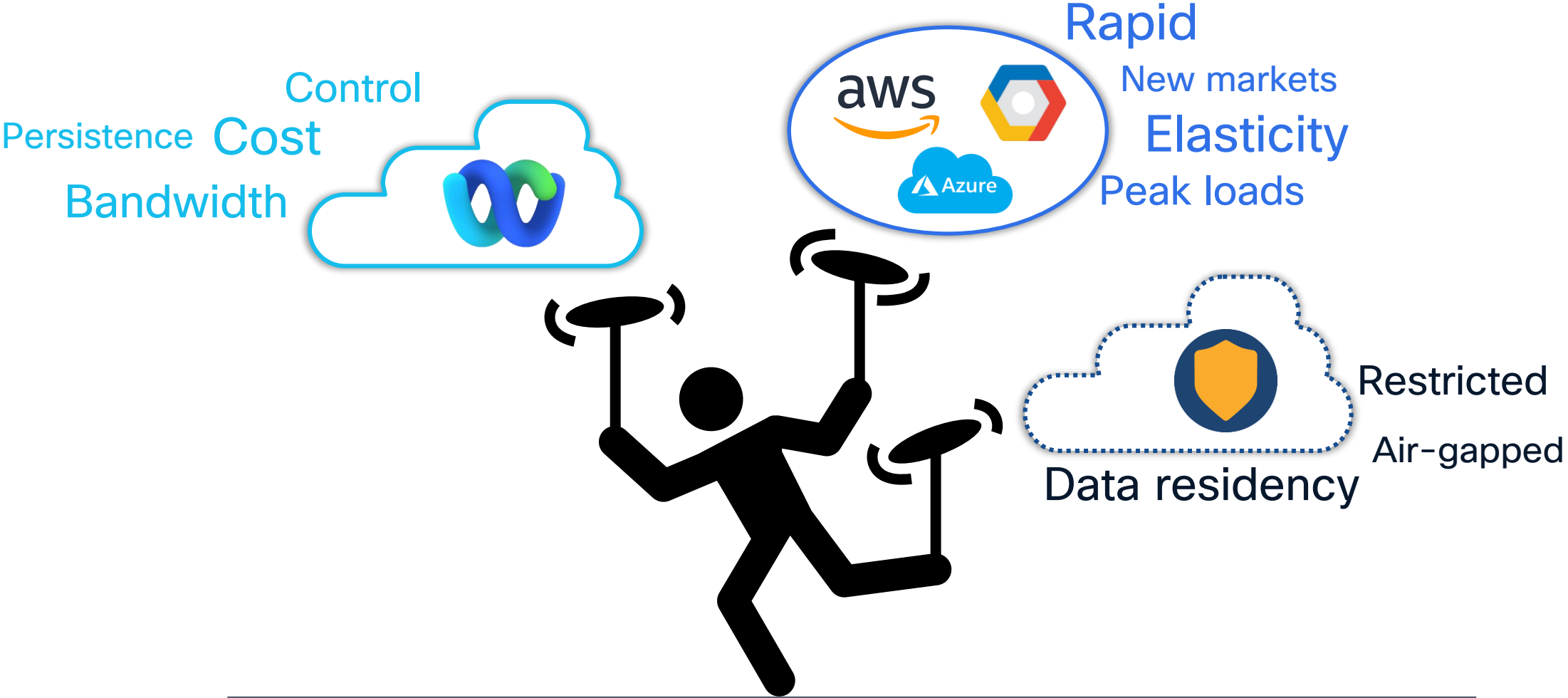
Our Challenge

... to this



Common platform, infrastructure and deployment processes
+ Shared services and components

A Balancing Act

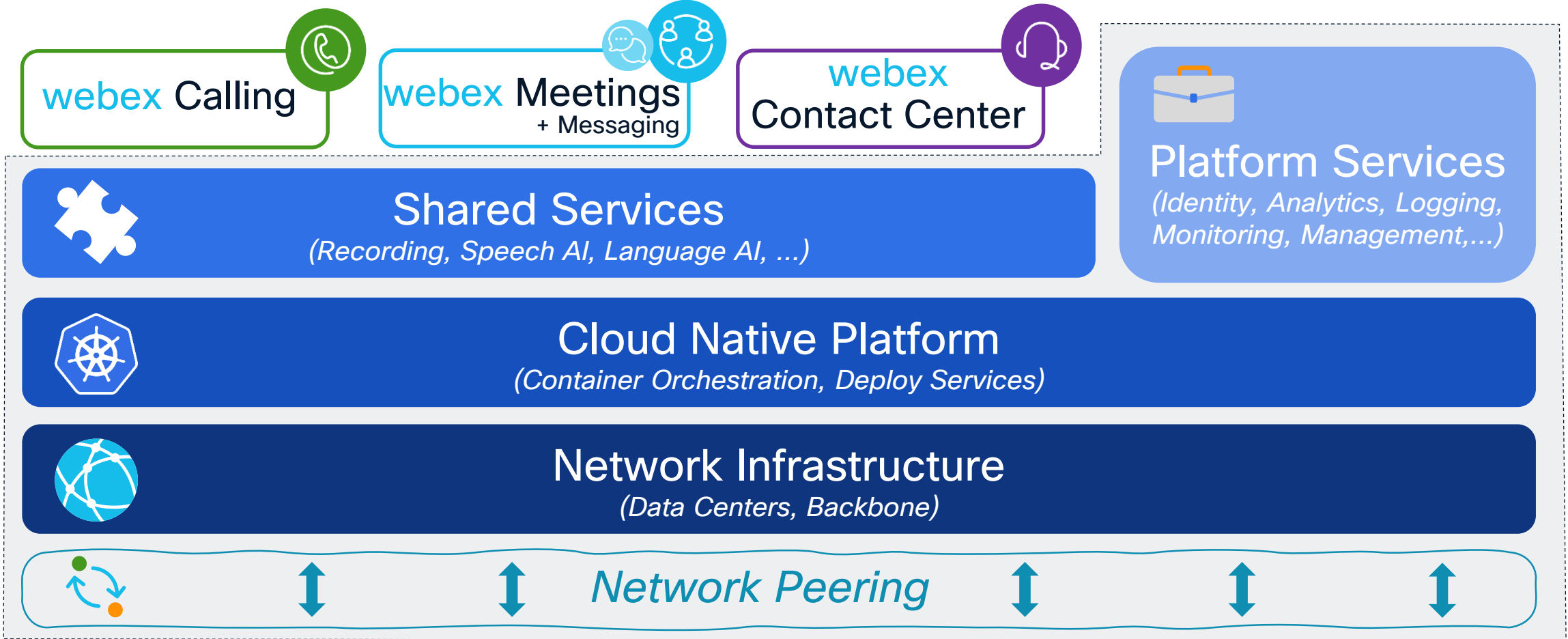


Right mix between private cloud, public clouds and data residency requirements

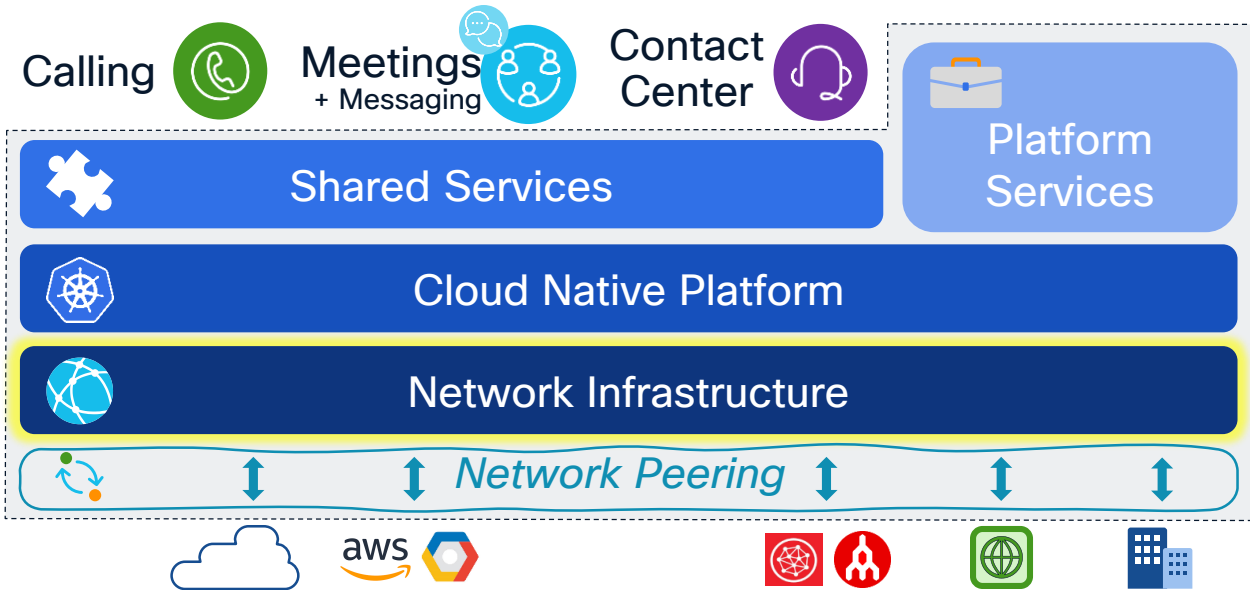
Webex Cloud Architecture

A Platform-centric View

the webex platform



Agenda

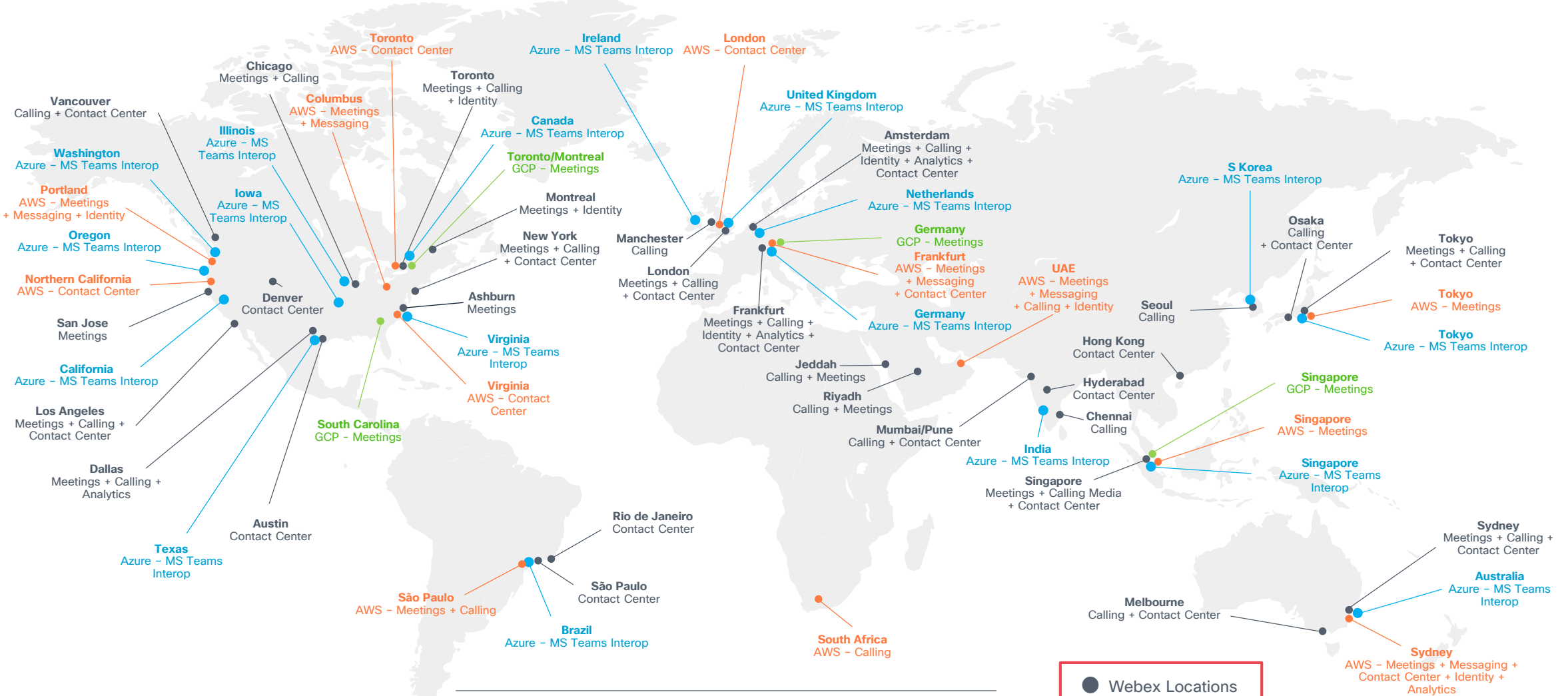


- 01 Introduction
- 02 Network Infrastructure
- 03 Cloud Native Platform
- 04 Platform & Shared Services
- 05 Data Residency
- 06 Edge Connectivity and Network Peering
- 07 Summary

Network Infrastructure



Webex Cloud Landscape

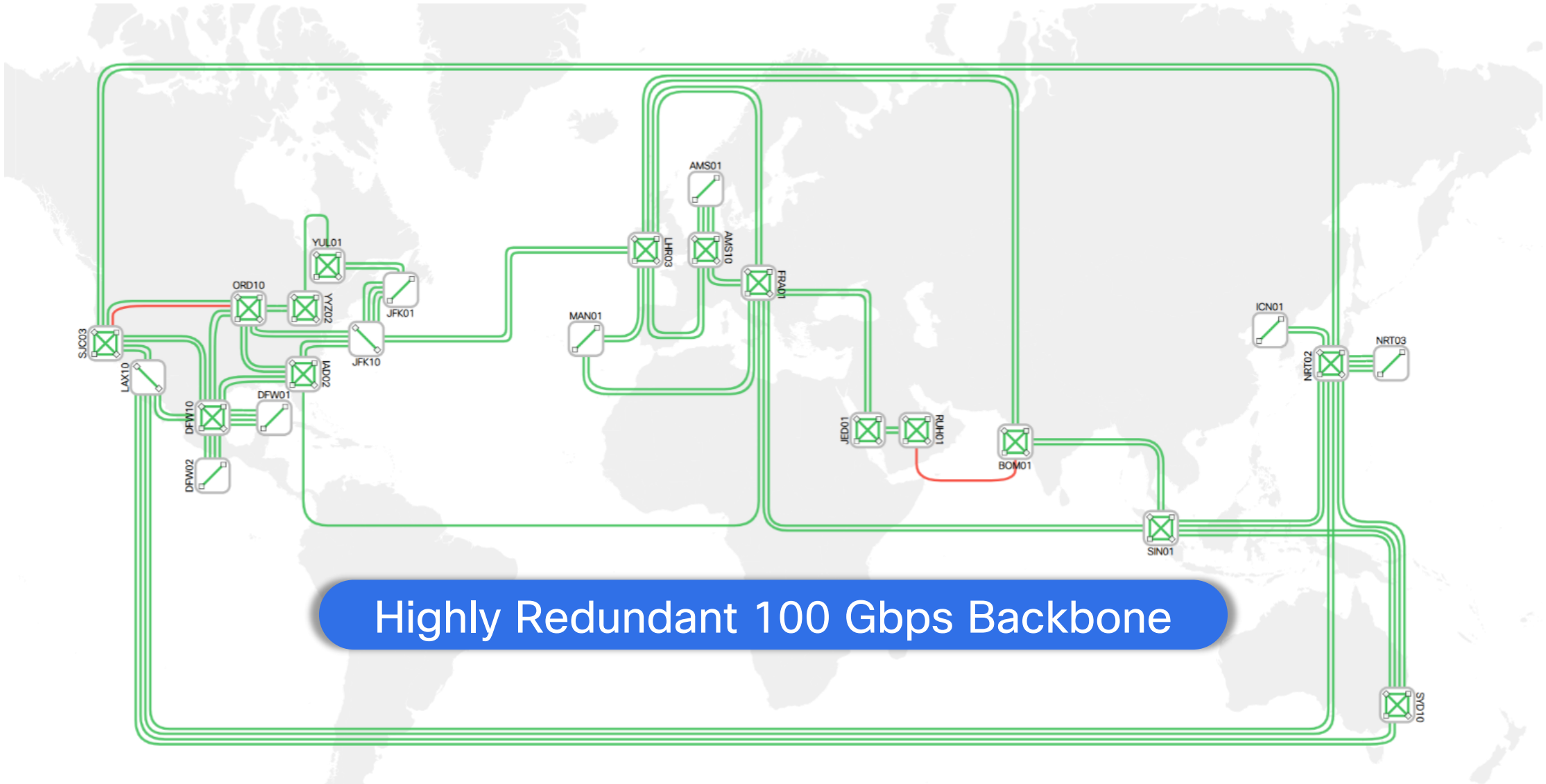


Webex + Public Cloud: +24 Regions

Webex + Public Cloud: ~110 Locations

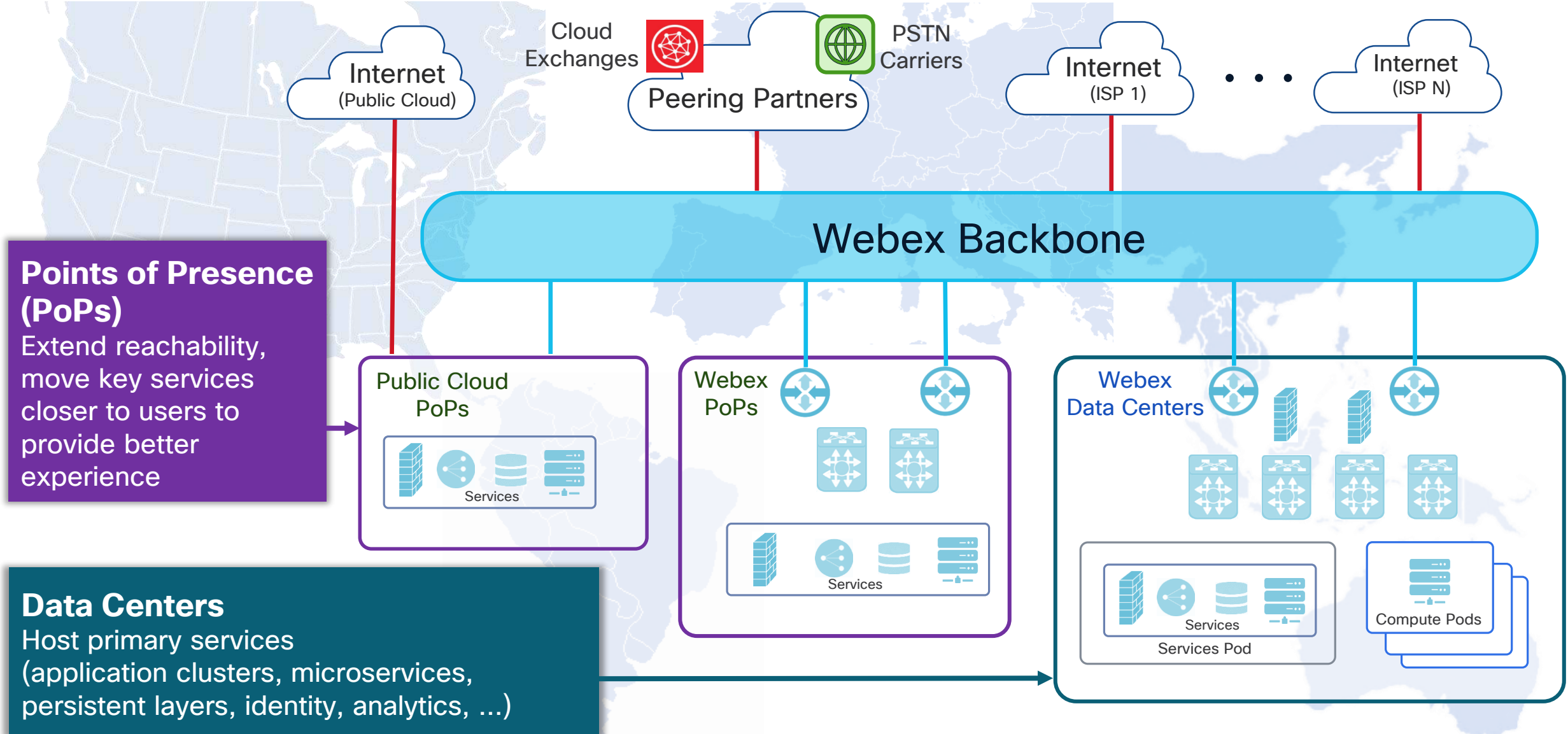
- Webex Locations
- AWS Locations
- GCP Locations
- Azure Locations

Webex Backbone



Highly Redundant 100 Gbps Backbone

Webex Data Centers and Points of Presence (PoP)



Points of Presence (PoPs)

Extend reachability, move key services closer to users to provide better experience

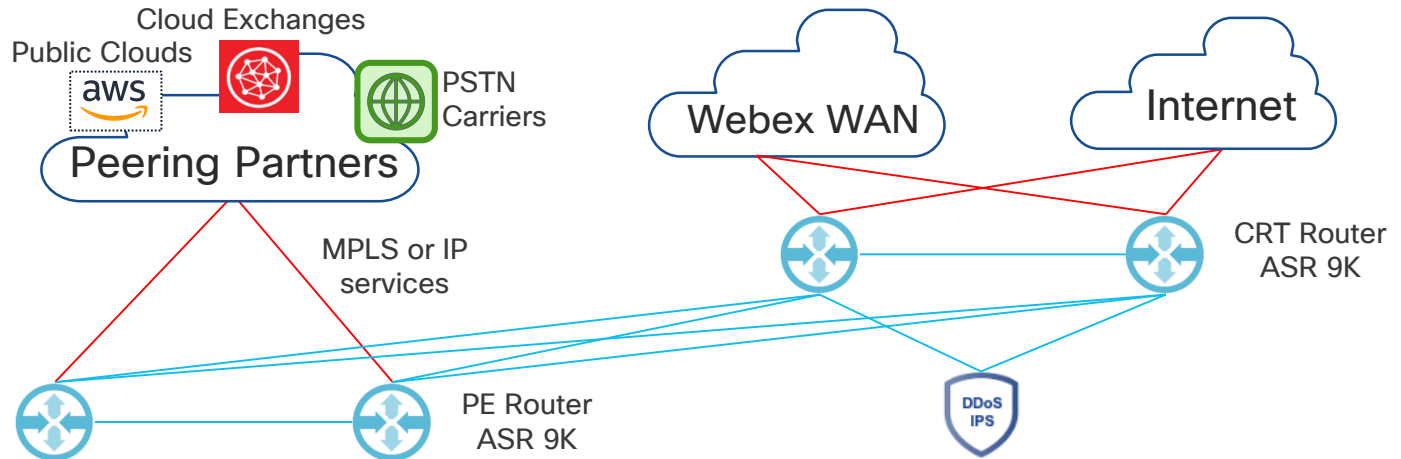
Data Centers

Host primary services (application clusters, microservices, persistent layers, identity, analytics, ...)

Webex Data Center Network Design

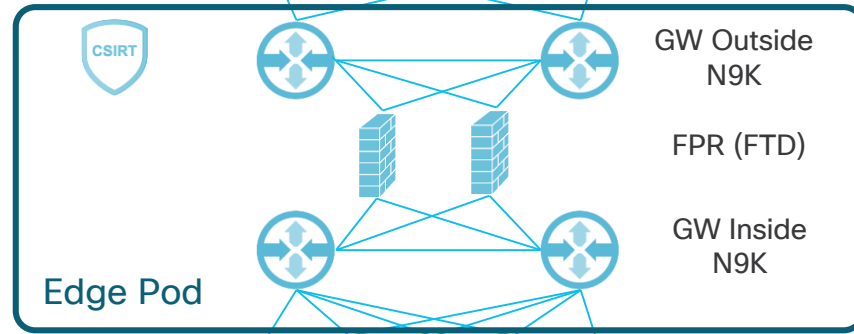
Backbone Layer

- ECMP routing
- High capacity 100G
- DDoS / IPS at the edge (security and fraud)



Data Center Layer

- Deployment model based on ACI data center design

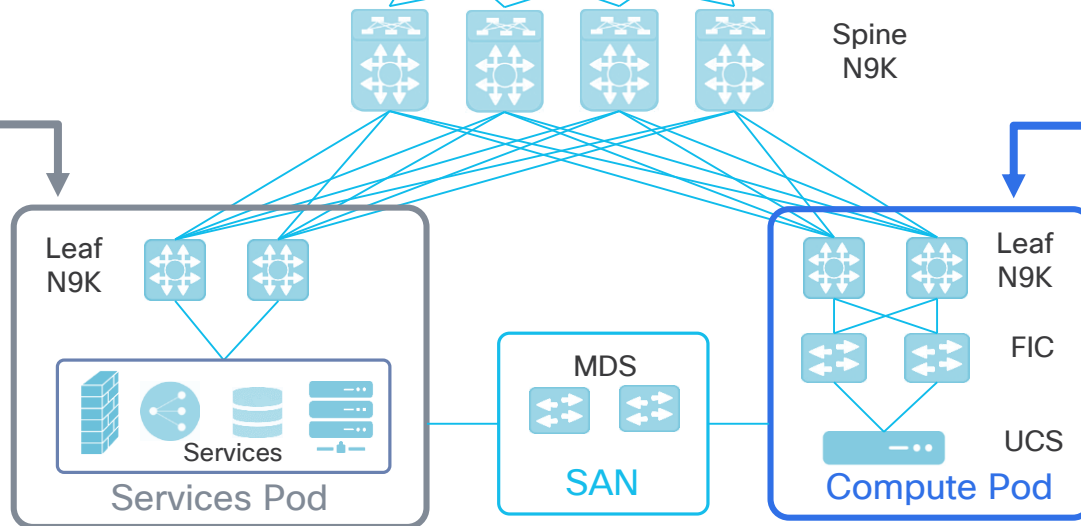


Edge Pod

- Provides network connectivity in and out of the DC
- Hosts DC edge Firewall cluster

Services Pod

- Storage
- Load balancers
- Database
- Services (East/West) firewalls
- DNS
- Monitoring + tools

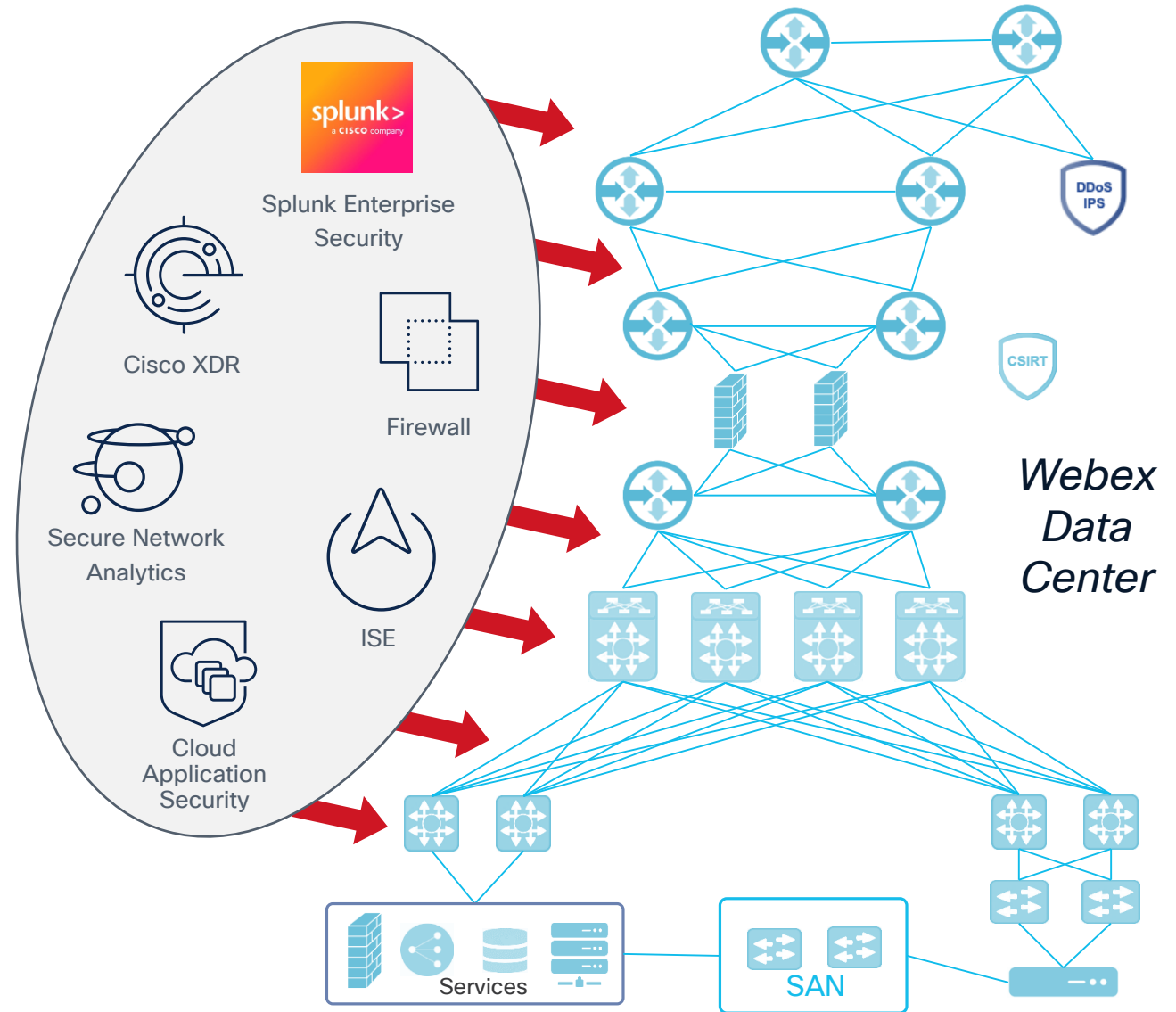


Compute Pod (Standard base design)

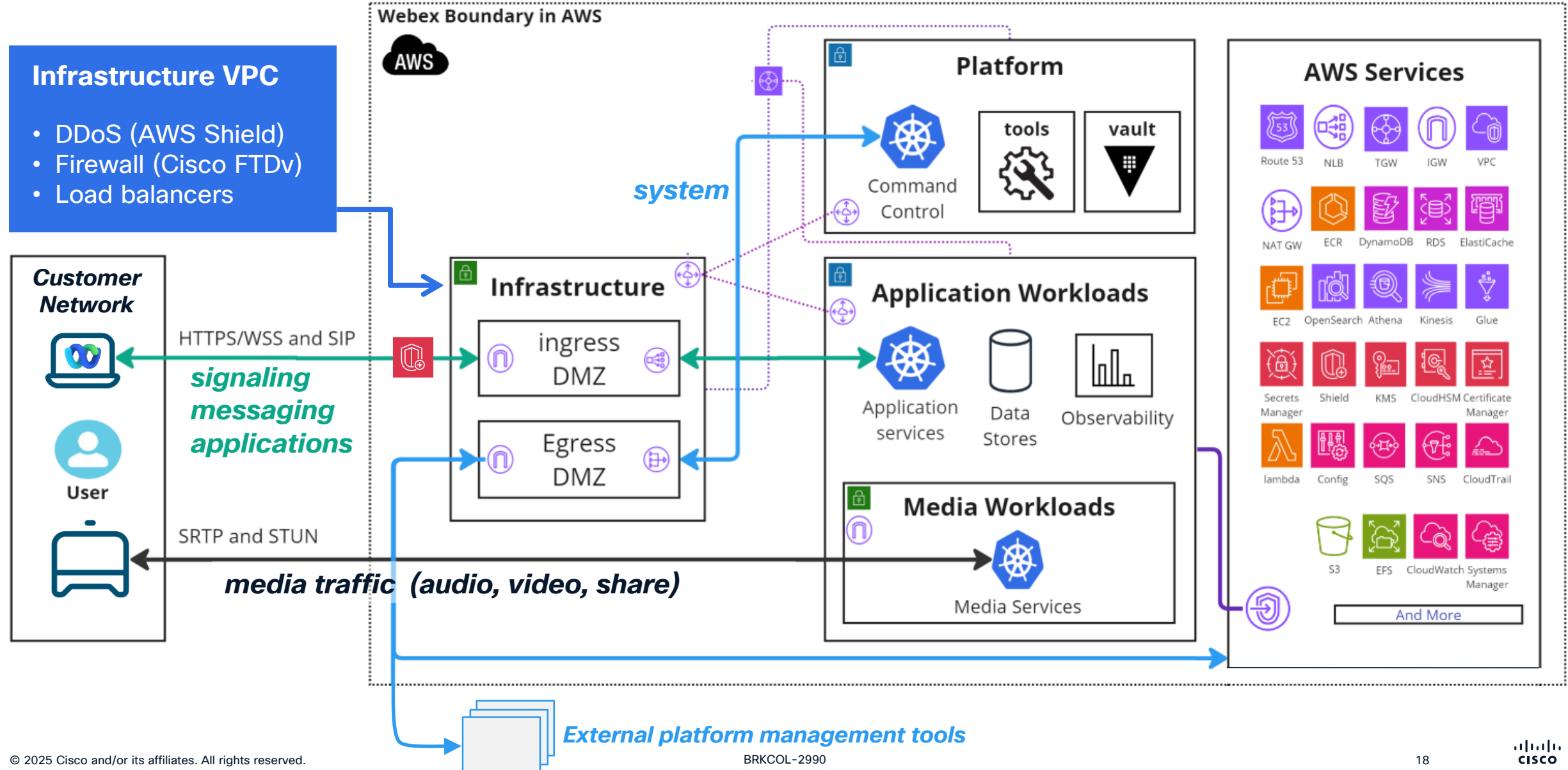
- 8 Compute racks
- Up to 320 UCS servers (40 per rack)
- Hosts Kubernetes, OpenStack and ESXi servers/services
- Horizontally expandable – multiple Compute Pods can be connected to the spine switches

Webex Data Center Security

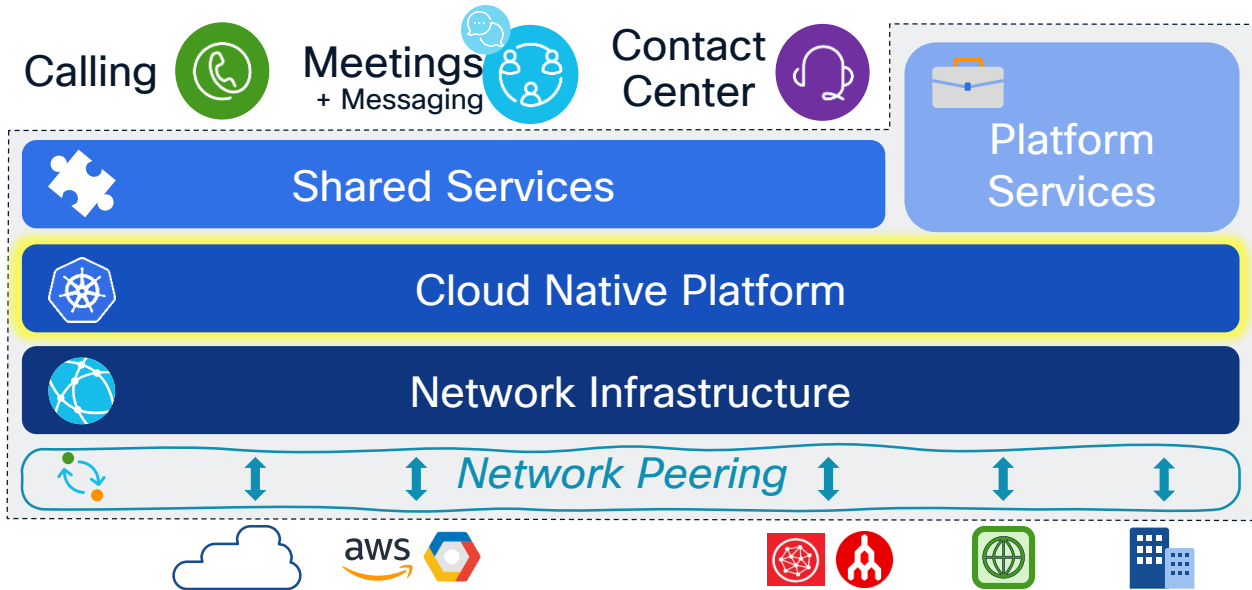
- Independently-audited controls and procedures include:
 - Access management
 - Asset management
 - Change management
 - Config management
 - Incident monitoring and response
 - Vulnerability management
- Webex SecOps teams work together with Cisco's Security & Trust Organization



Webex Public Cloud Network Design



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- 01 Introduction
- 02 Network Infrastructure
- 03 **Cloud Native Platform**
- 04 Platform & Shared Services
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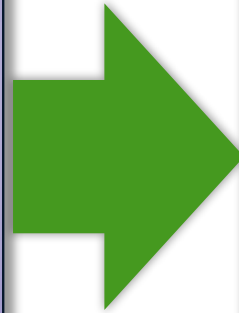
Cloud Native Platform



Cattle vs. Pets



Monolithic applications
Custom-built, hand-fed servers
HA = active/active, active/standby



Microservice architecture
Build automation, transient instances
Disaggregated compute/persistence
HA = multi-master, auto-recovery

Cloud Native Pillars and Benefits

Speed of innovation

Scalability

Portability

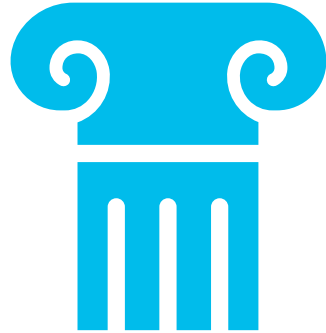
Lower cost

Following market needs

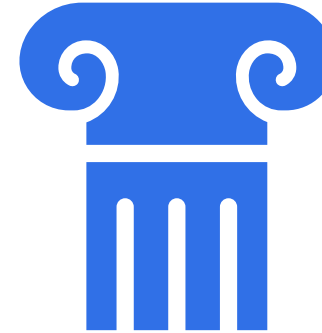
Availability



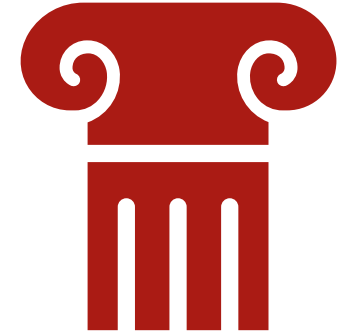
Microservices
and API's



Containers and
Orchestration



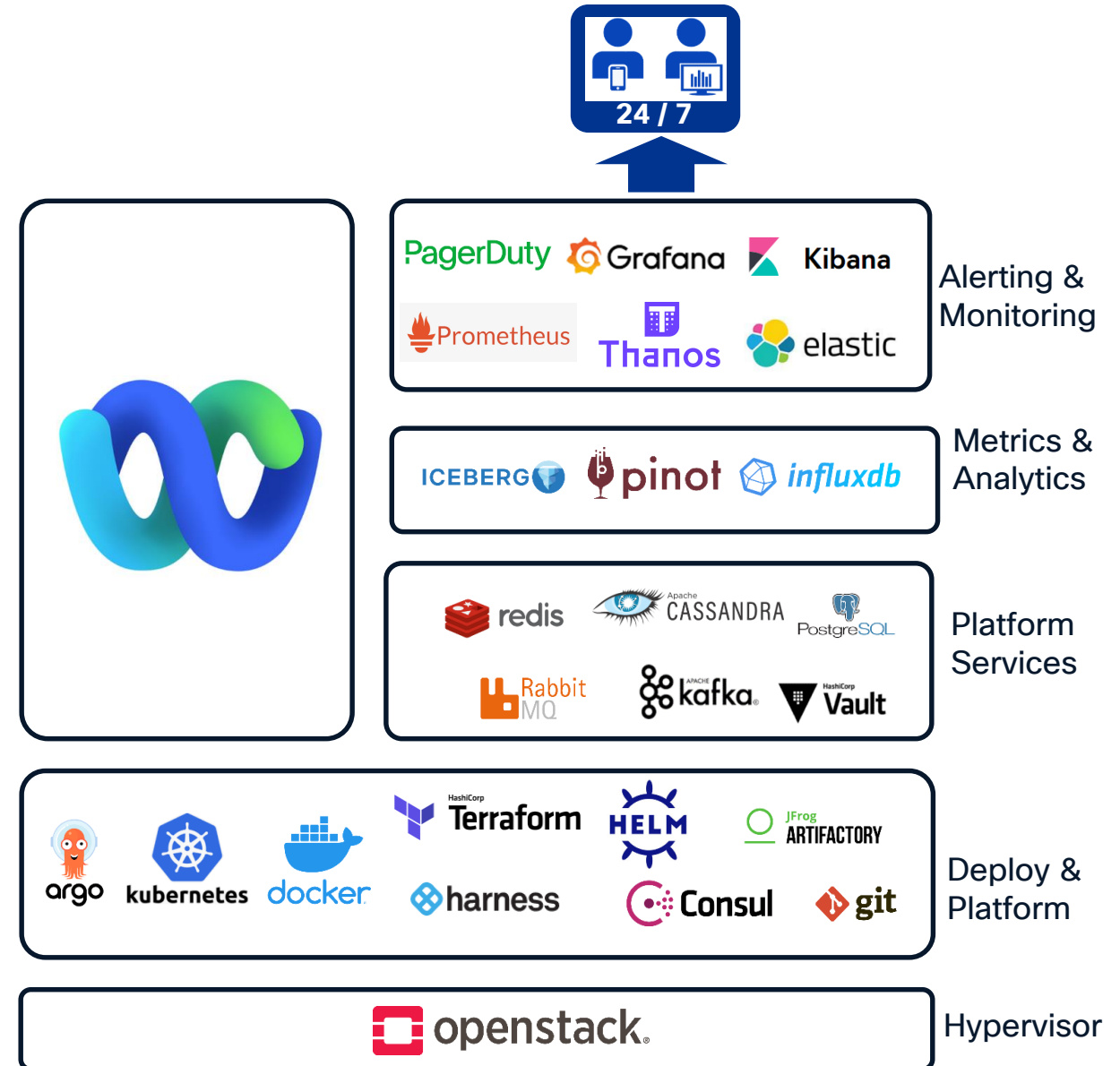
DevOps



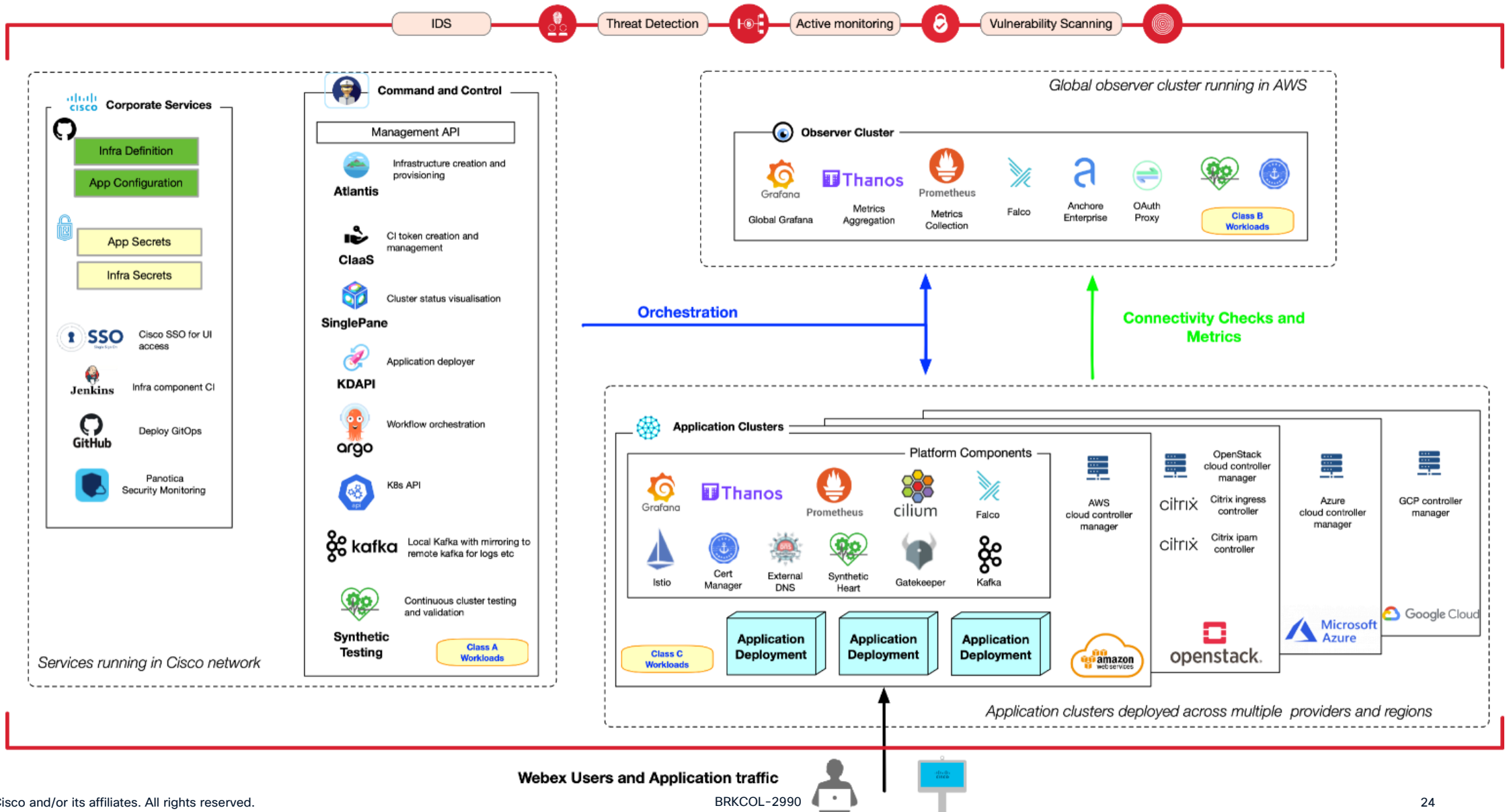
CI/CD

Webex Platform Principles

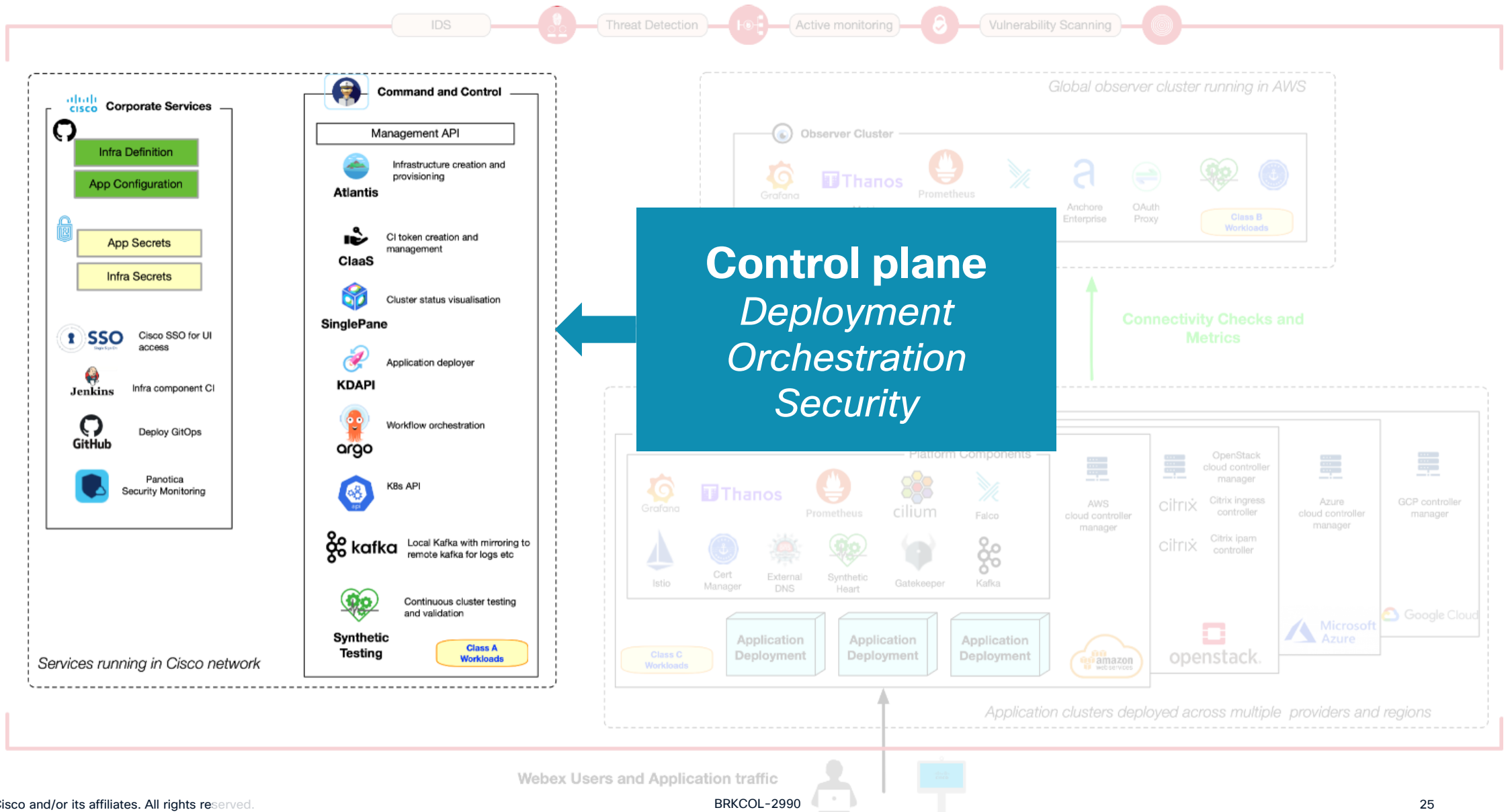
- Best-in-class off-the-shelf SaaS components
- Common control plane
- On-demand scaling
- Standardized app deployments
- State of the art metrics, analytics, monitoring and alerting
- 24/7 Site Reliability Engineering (SRE) + DevOps



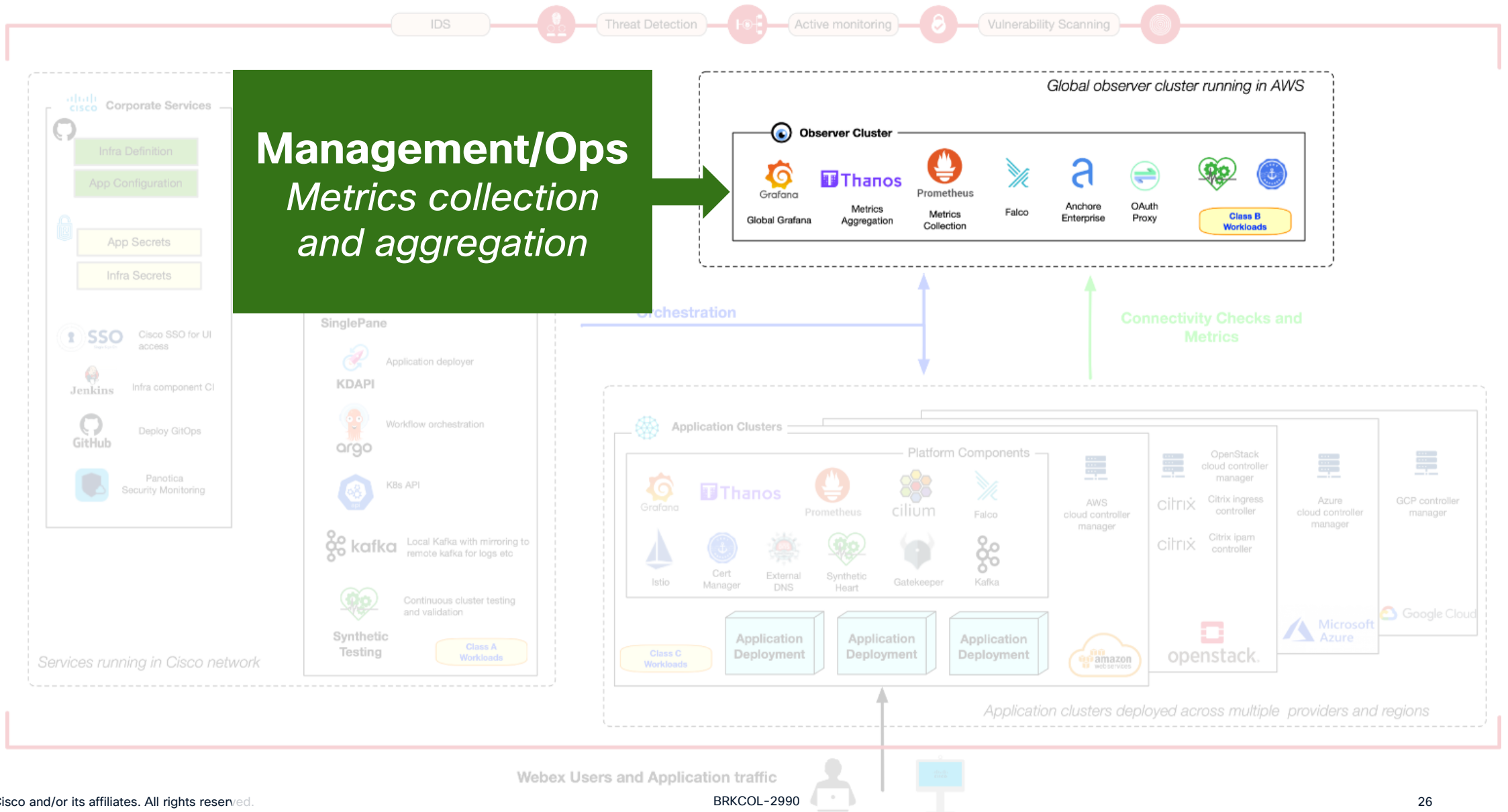
Webex Cloud Native Platform Overview



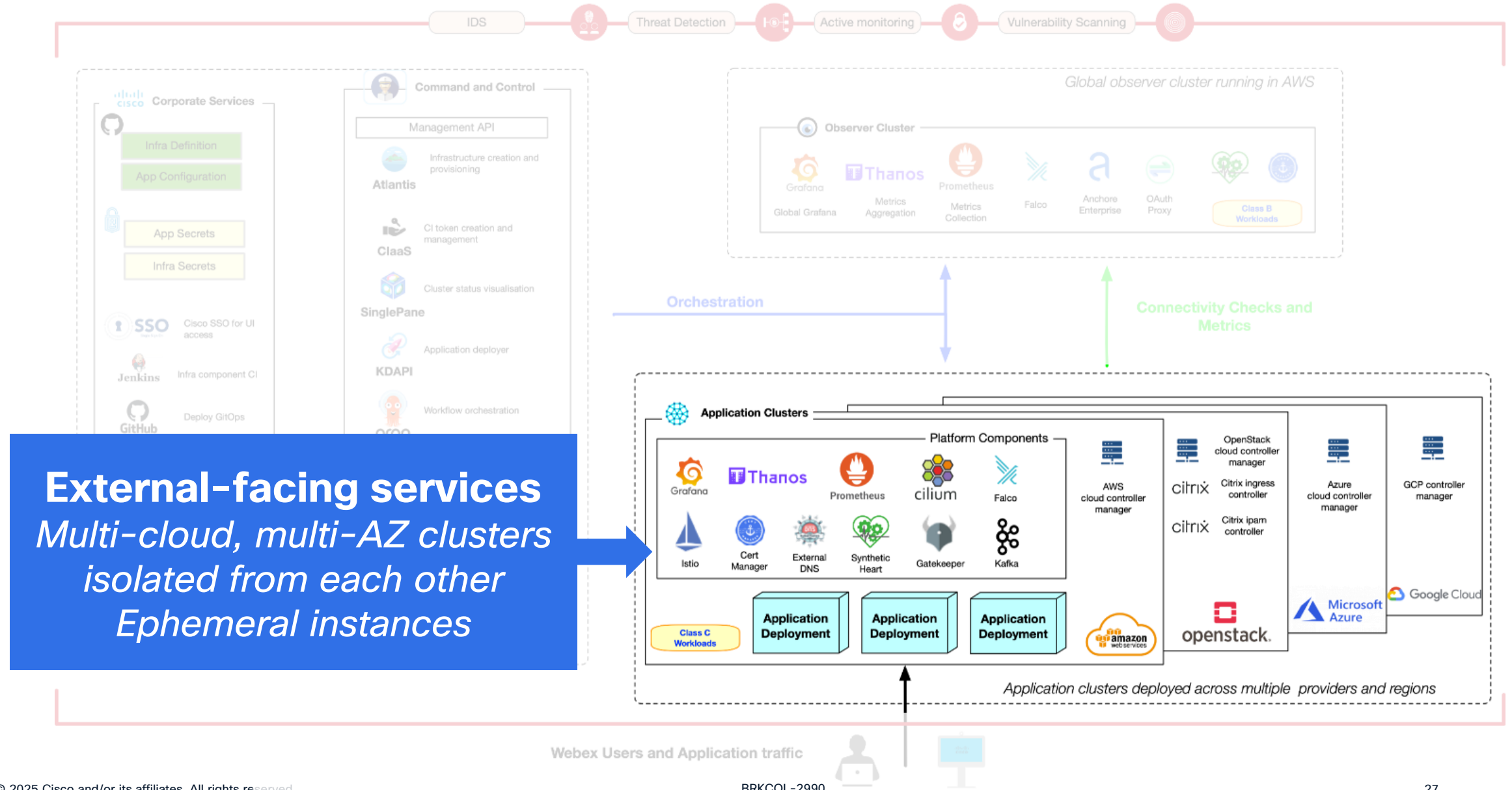
Webex Cloud Native Platform Overview



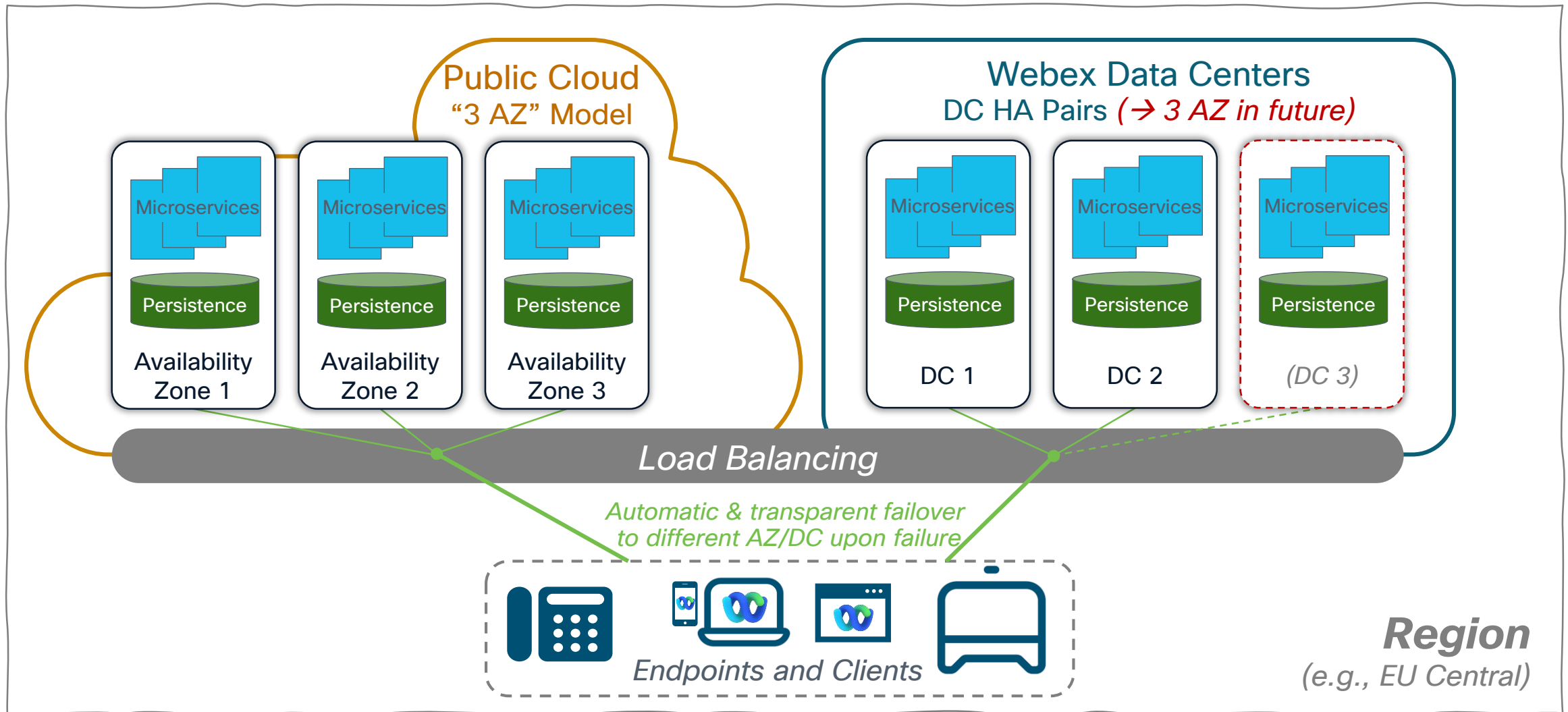
Webex Cloud Native Platform Overview



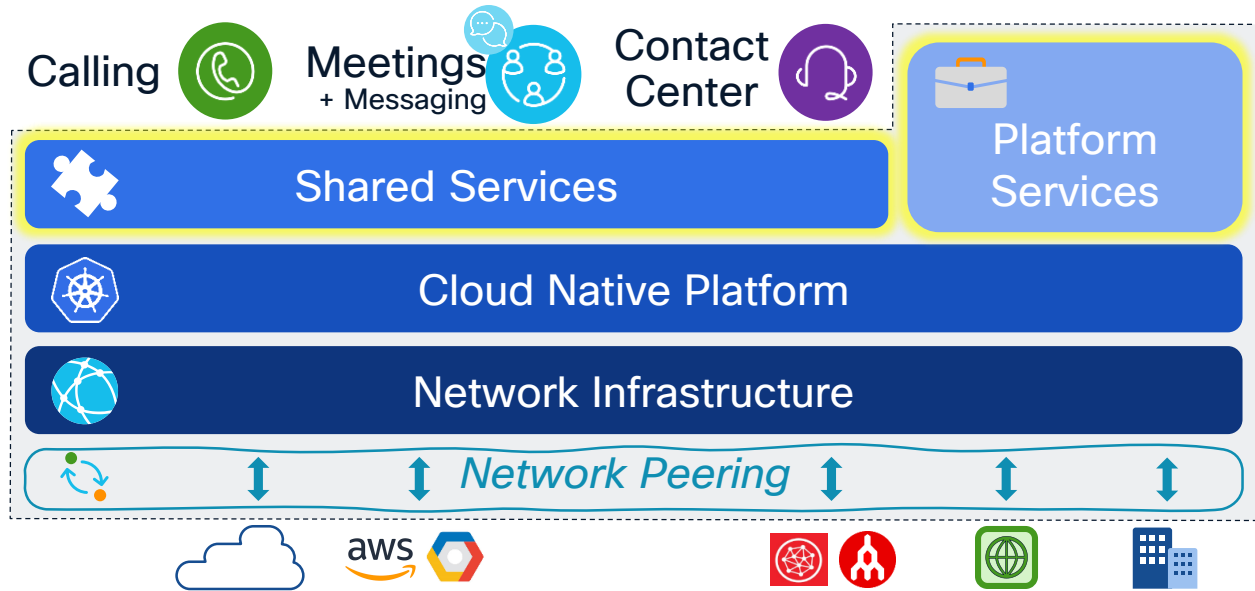
Webex Cloud Native Platform Overview



High Availability and Scalability



Agenda

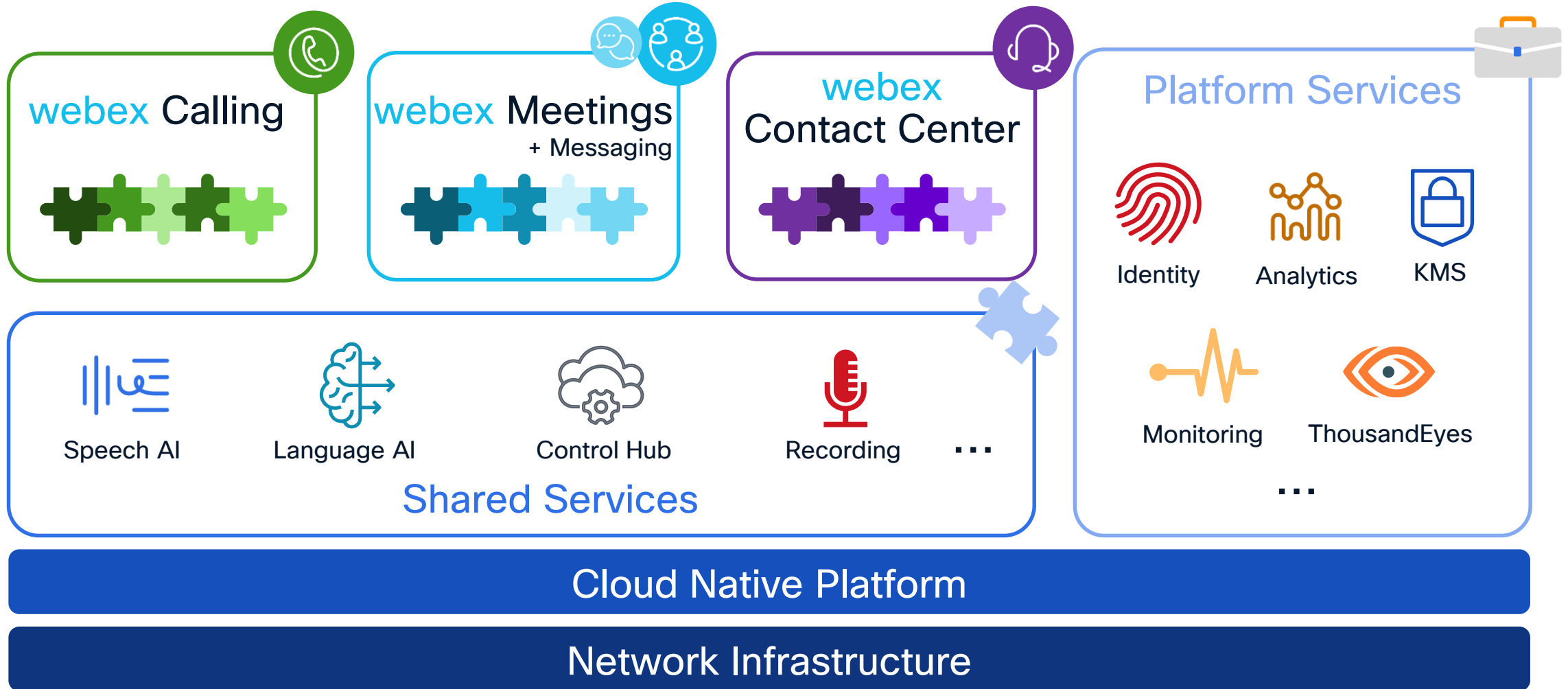


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Platform & Shared Services



Platform & Shared Services



Platform Services

Identity Management



Identity Provisioning and Synchronization

- Cisco Directory Connector
- SCIM integration
- Control Hub, People API, CSV, ...

Authentication and Authorization

- SSO integration with multiple IdPs
- Multi-Factor Authentication
- SAML, OAuth 2.0, OpenID Connect, PKCE support
- Comprehensive RBAC capabilities in Control Hub

On-premises Identity Partners



Identity as a Service Partners



For more details: **BRKCOL-2007** "Authentication, Authorization and Provisioning for Cisco Collaboration"

Platform Services

Analytics



- Deployed in all environments (*private cloud, public cloud, FedRAMP, ...*)
- GDPR compliant
- Federated



Calling



Meeting



Devices



Messaging

Data Variety

Data Volume

Data Velocity

Empowers



Client

- Media Quality
- System Stats
- Engagement Data
- Logs



Server

- Media Quality
- Server Stats
- Usage Metrics
- Logs



User

- Identifier
- Relations
- Organization



Business

- Billing
- Usage



100 TB+/day



300K+ messages/sec

- End User Analytics
- IT analytics
- Troubleshooting
- Business Intelligence
- Partner Analytics
- API – Partners
- ...

Platform Services

Webex Key Management Service (KMS)

- Manages application-level encryption for persistent User-Generated Content:

Messages, Files, Annotations, Whiteboards, Recordings, Transcripts, AI Summaries, Voicemails

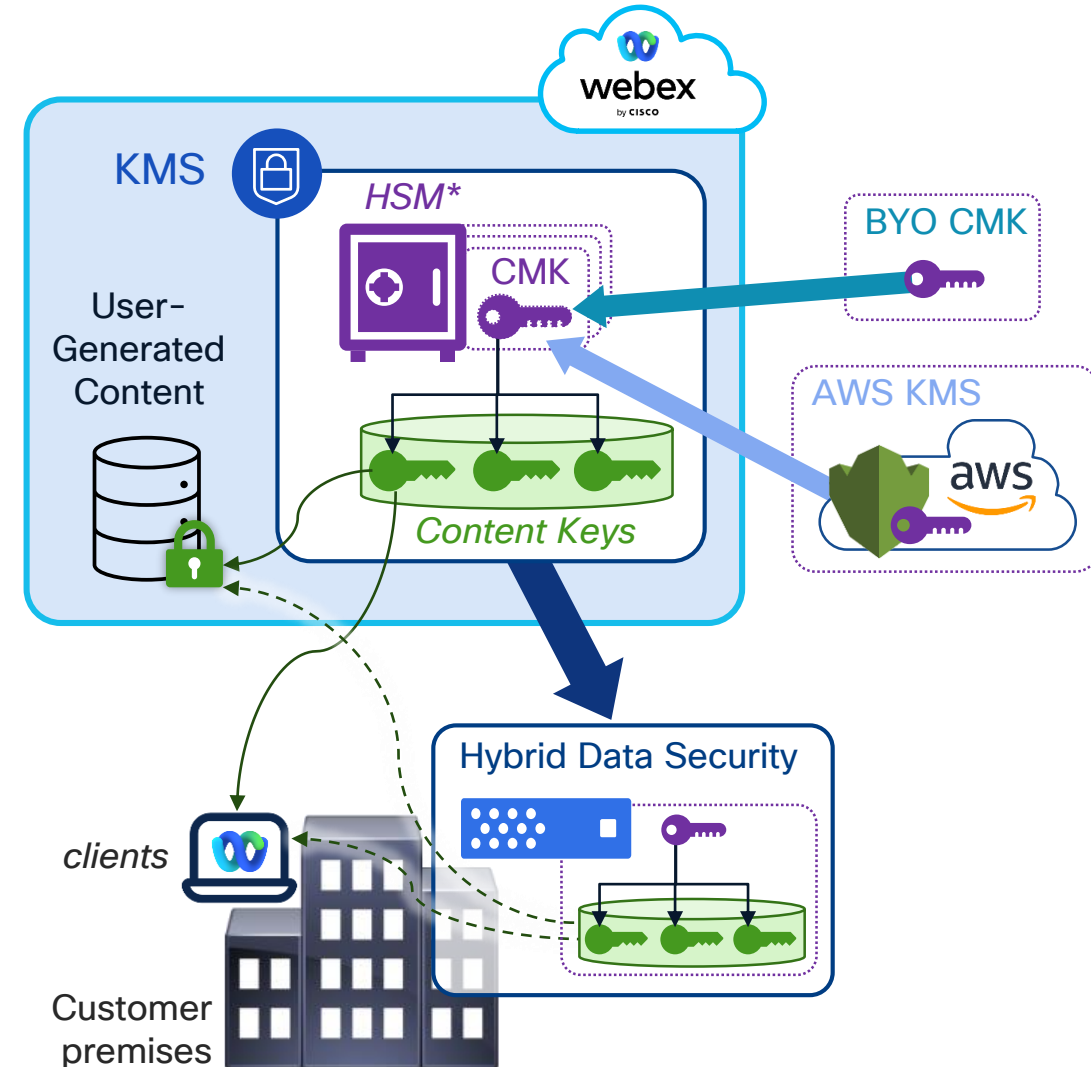
- Hierarchical encryption key architecture:

Customer Main Key (CMK) → Key Encryption Keys → Content Keys

- “BYO” options for key storage/mgmt:

BYO CMK, AWS KMS, Hybrid Data Security

- Deployed in multiple Webex regions, all instances federated



* HSM: Hardware Security Module

Platform Services

Webex Key Management Service (KMS) - References

For more information on KMS and content encryption:

- Webex Messaging Security technical paper:
https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/cloudCollaboration/spark/esp/cisco-spark-security-white-paper.pdf
- Webex Suite Meetings: KMS-encrypted meeting content and data residency:
<https://help.webex.com/en-us/article/b38ajk/Webex-Suite-Meetings:-KMS-encrypted-meeting-content-and-data-residency>
- Manage your own customer main key:
<https://help.webex.com/en-us/article/yih9oo/Manage-your-own-customer-main-key>
- Deployment guide for Webex Hybrid Data Security:
<https://help.webex.com/en-us/article/n5hs5mg/Deployment-guide-for-Webex-Hybrid-Data-Security>

Platform Services

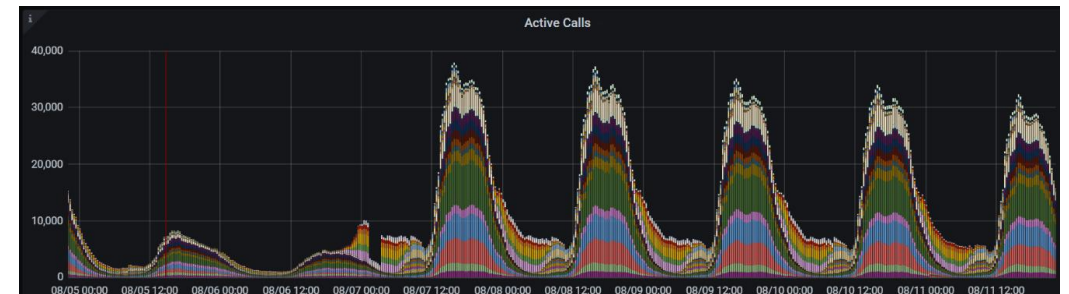
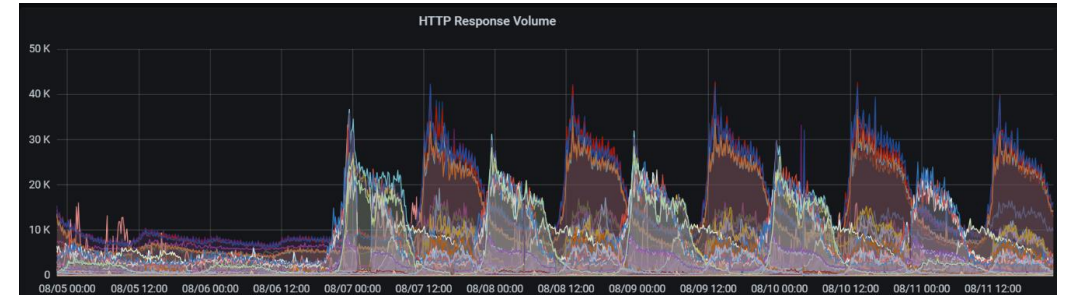
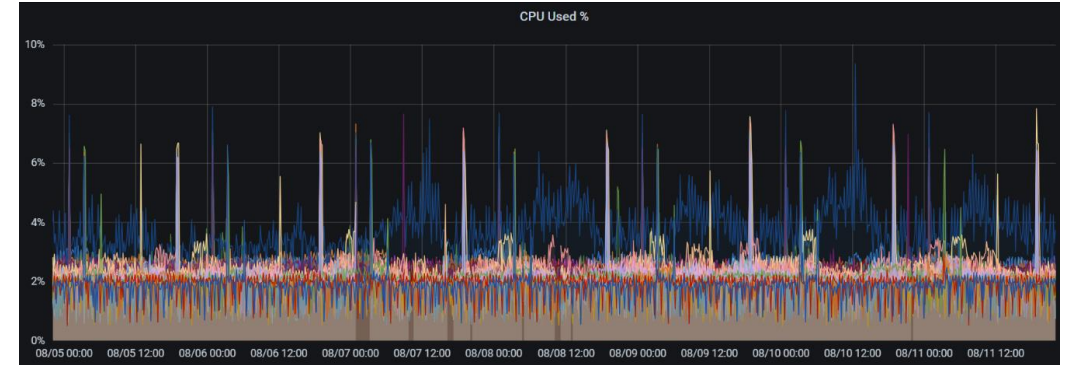
Monitoring and Alerting (Internal)



- Every aspect of system performance is monitored, including but not limited to:

Disk I/O, DB Performance, Network Performance, DNS, Firewalls, CPU, RAM, Thread Pools, SIP Errors, HTTP 4xx and 5xx errors, Media Quality, Anomalous and unusual service usage patterns (Calls, Chats, Meetings, etc.), Request Latency, etc.

- Alerting thresholds are set across all metrics with automated paging of on-call engineers



Platform Services

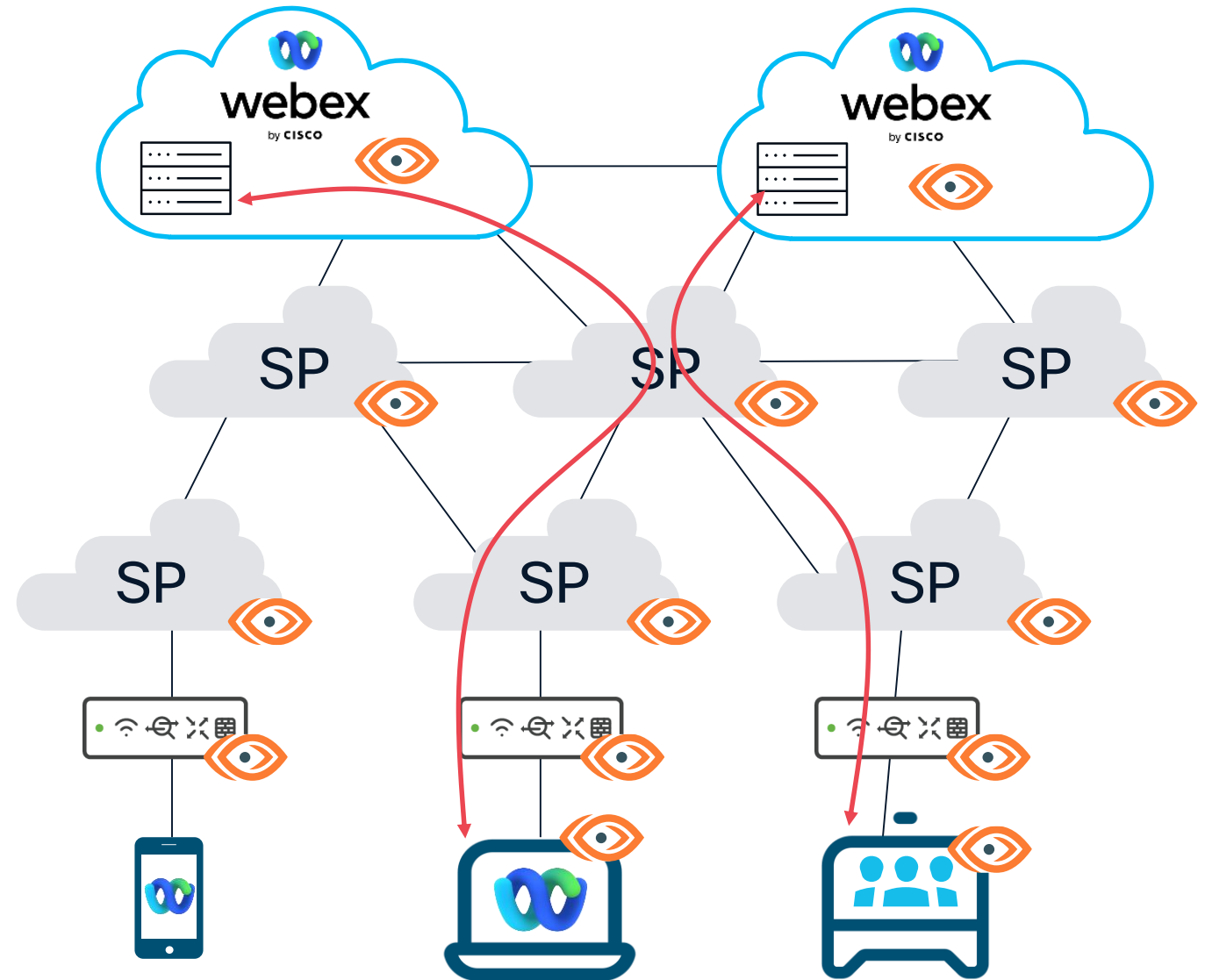


Observability: ThousandEyes Integration

- Special Cloud Agents installed directly in Webex Data Centers
- Bi-directional monitoring of traffic to/from the Webex Cloud
- Support for specific types of tests
- For more on this integration:

BRKCOL-2662 “Webex Troubleshooting Superpowers with ThousandEyes and Meraki Integrations”

<https://www.thousandeyes.com/solutions/webex-monitoring>



Platform Services

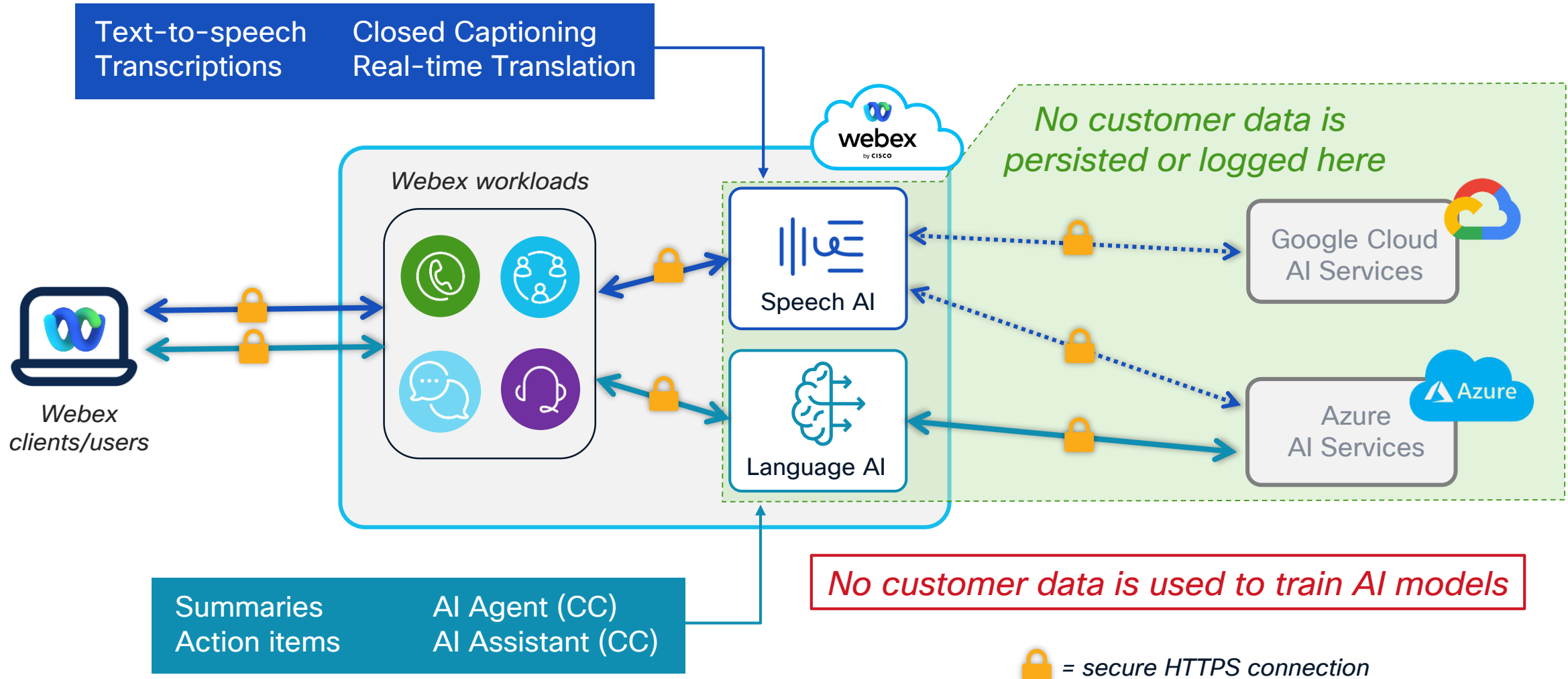
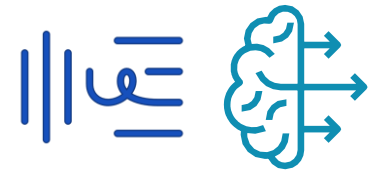


ThousandEyes Integration: Webex Cloud Agents



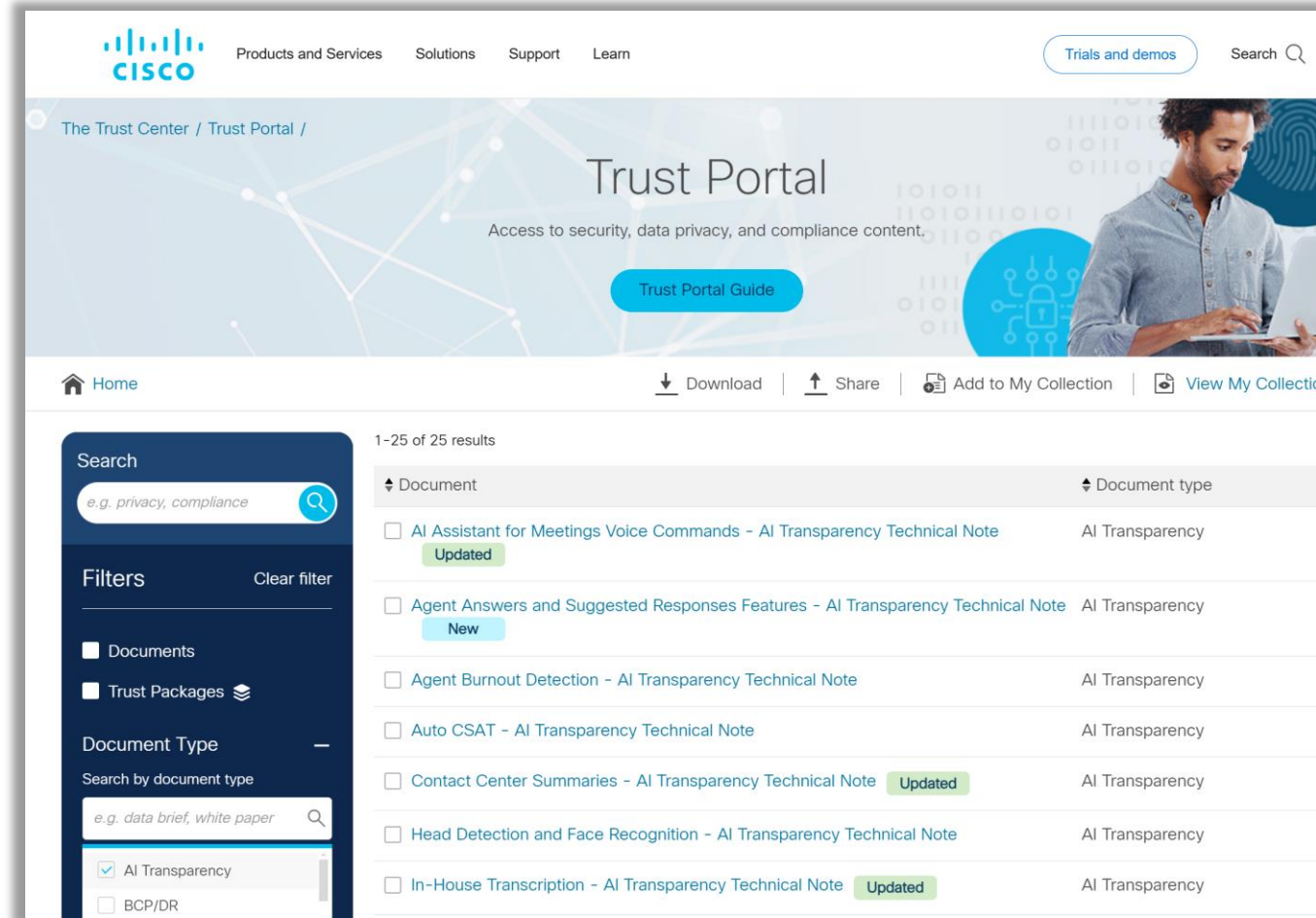
Shared Services

Speech and Language AI Services



Shared Services

AI Transparency Notes



The screenshot shows the Cisco Trust Portal interface. At the top, there is a navigation bar with the Cisco logo, links for Products and Services, Solutions, Support, and Learn, a 'Trials and demos' button, and a search bar. Below this is a hero section titled 'Trust Portal' with the subtitle 'Access to security, data privacy, and compliance content.' and a 'Trust Portal Guide' button. A user is shown interacting with a laptop. Below the hero section is a navigation bar with 'Home', 'Download', 'Share', 'Add to My Collection', and 'View My Collection' options.

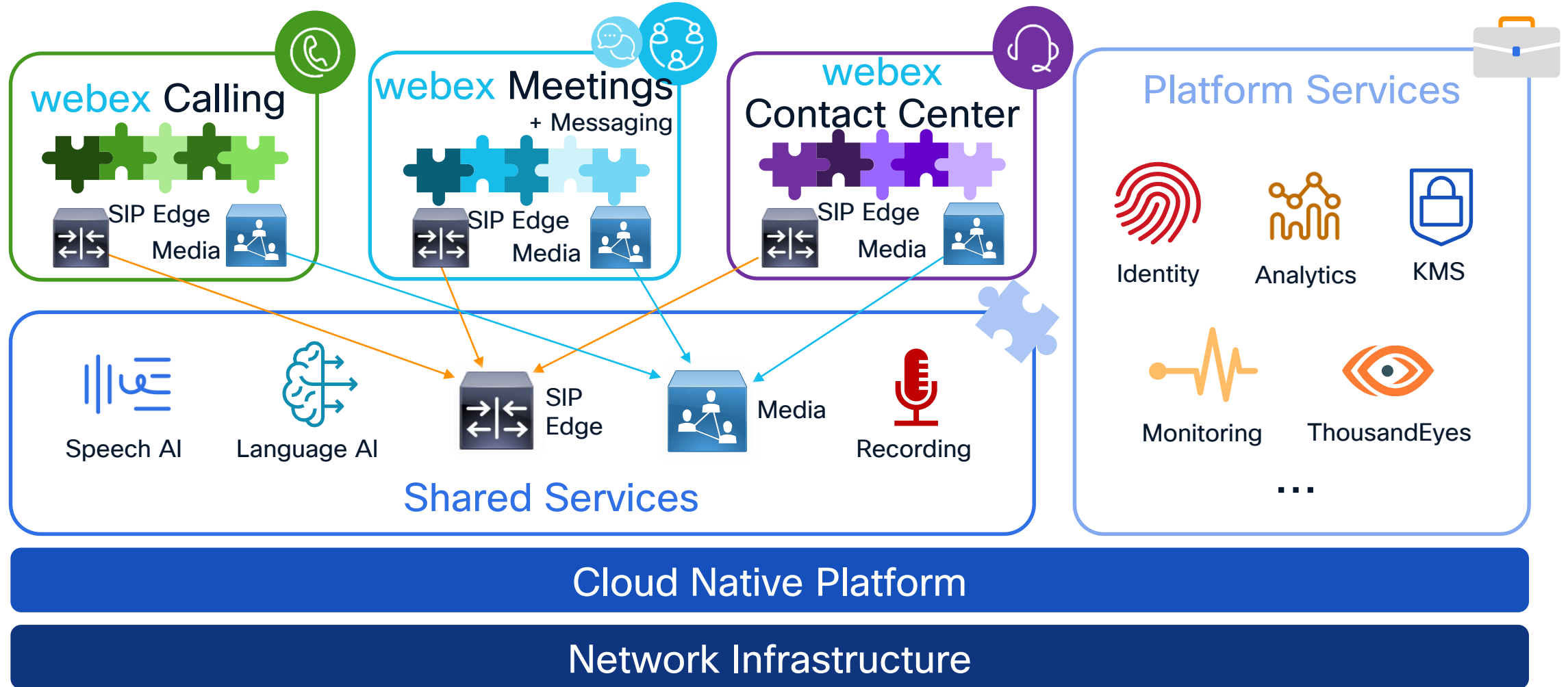
The main content area displays search results for 'AI Transparency'. On the left, there is a search sidebar with a search bar containing 'e.g. privacy, compliance' and a search icon. Below the search bar are filter sections: 'Filters' with a 'Clear filter' button, 'Document Type' with a search bar containing 'e.g. data brief, white paper', and a list of document types including 'AI Transparency' (checked) and 'BCP/DR'. The main results area shows '1-25 of 25 results' and a table of document entries.

Document	Document type
<input type="checkbox"/> AI Assistant for Meetings Voice Commands - AI Transparency Technical Note Updated	AI Transparency
<input type="checkbox"/> Agent Answers and Suggested Responses Features - AI Transparency Technical Note New	AI Transparency
<input type="checkbox"/> Agent Burnout Detection - AI Transparency Technical Note	AI Transparency
<input type="checkbox"/> Auto CSAT - AI Transparency Technical Note	AI Transparency
<input type="checkbox"/> Contact Center Summaries - AI Transparency Technical Note Updated	AI Transparency
<input type="checkbox"/> Head Detection and Face Recognition - AI Transparency Technical Note	AI Transparency
<input type="checkbox"/> In-House Transcription - AI Transparency Technical Note Updated	AI Transparency

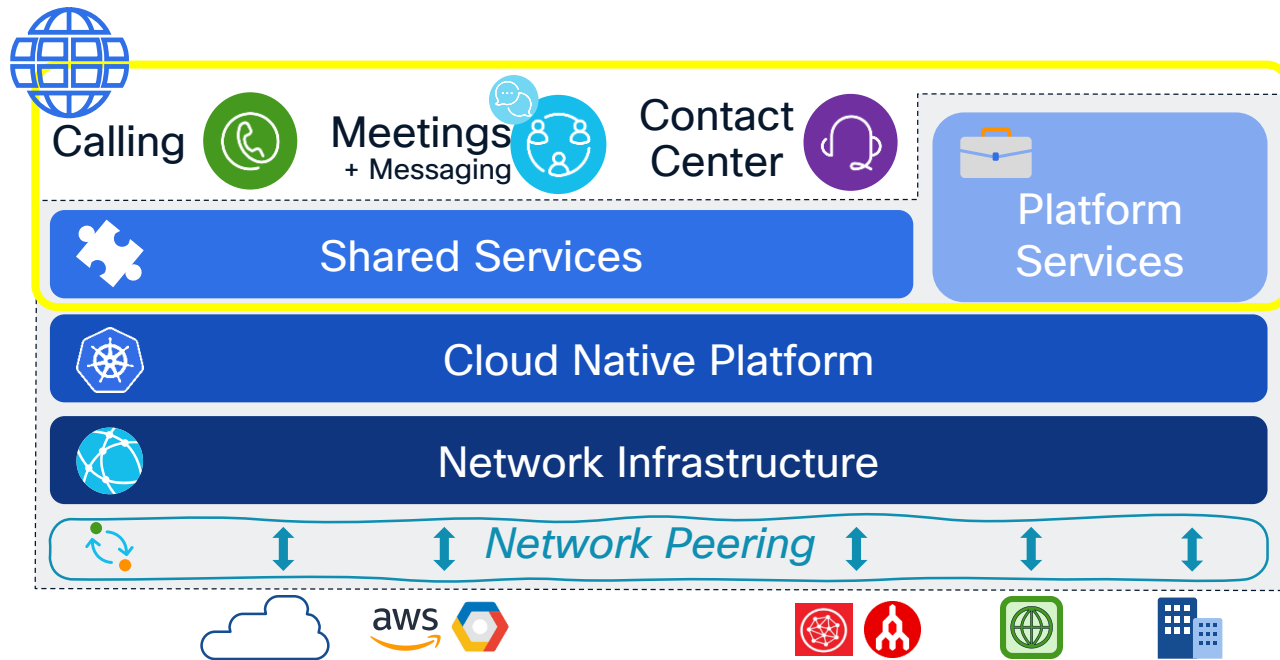
<https://trustportal.cisco.com/c/r/ctp/trust-portal.html?doctype=AI%20Transparency>

Shared Services

SIP Edge and Media Consolidation (ongoing)



Agenda

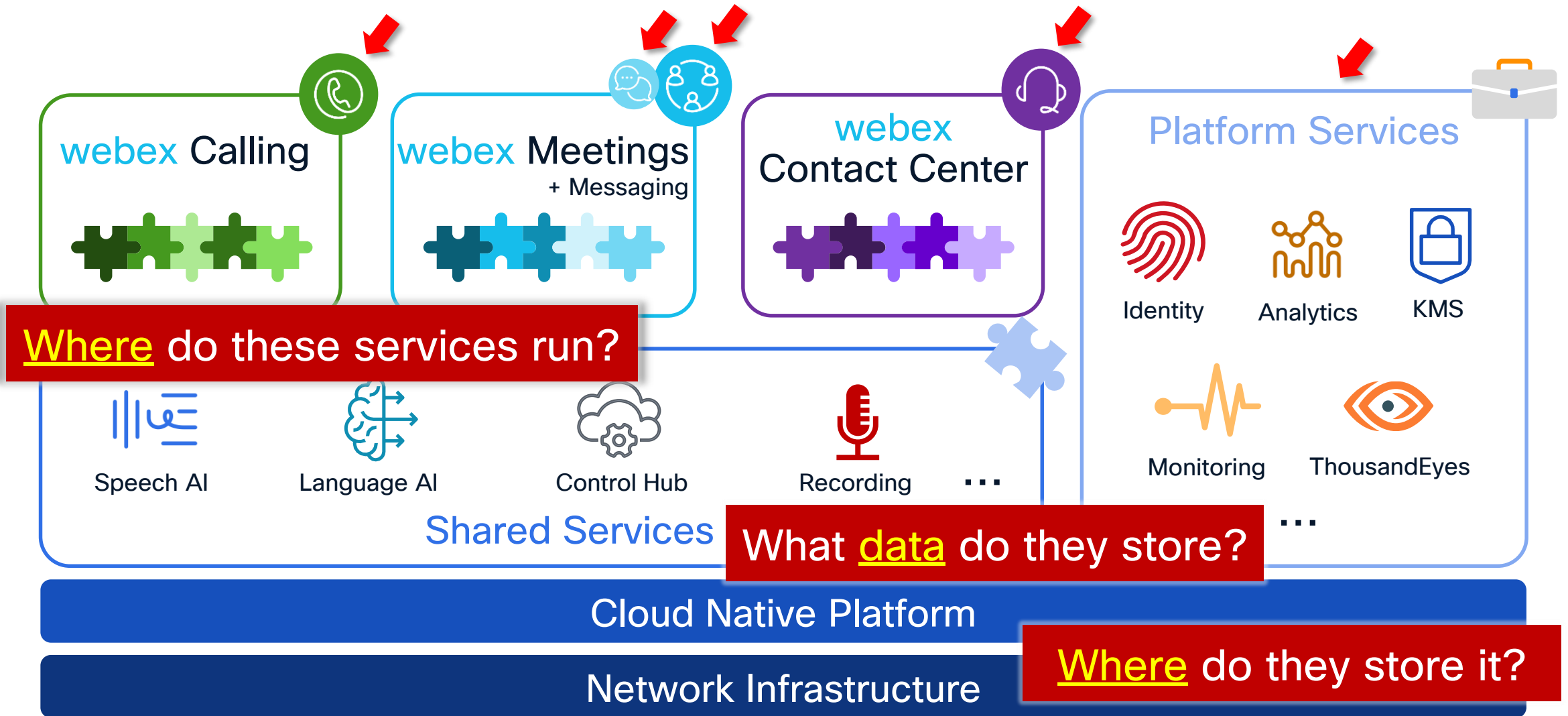


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Data Residency

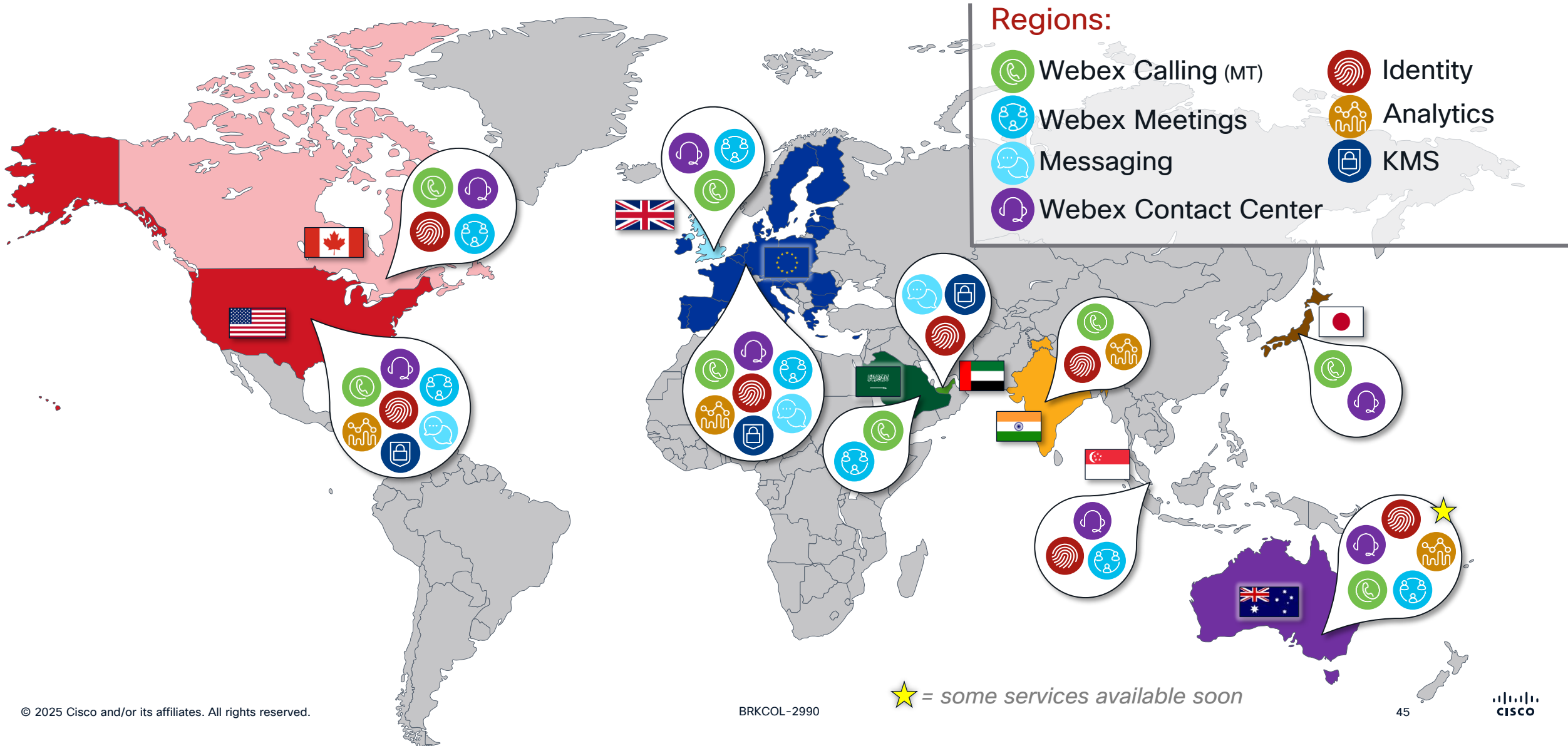


Data Residency



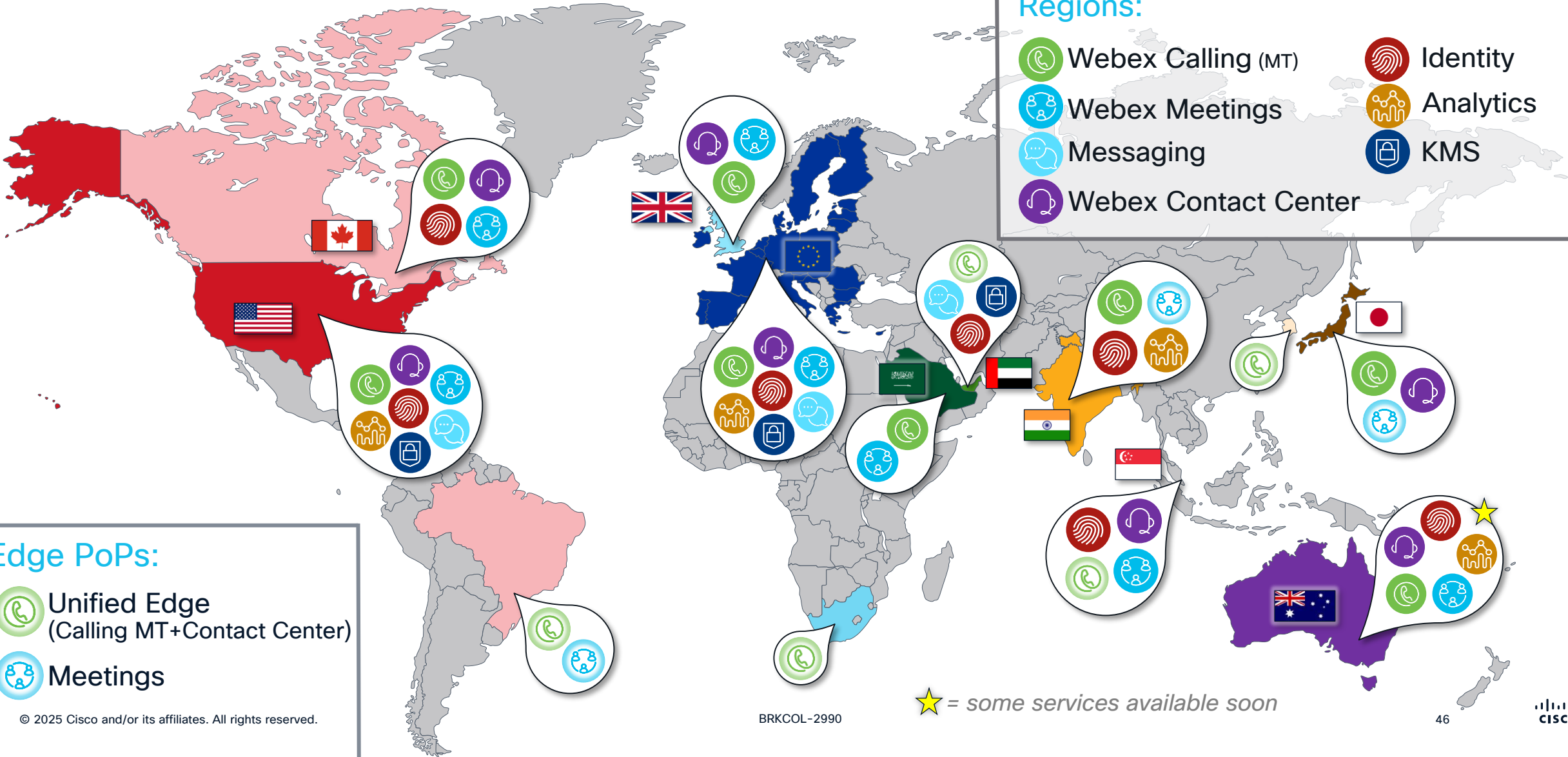
Data Residency

Webex Regions



Data Residency

Webex Regions and Edge PoPs



Regions:

- Webex Calling (MT)
- Webex Meetings
- Messaging
- Webex Contact Center
- Identity
- Analytics
- KMS

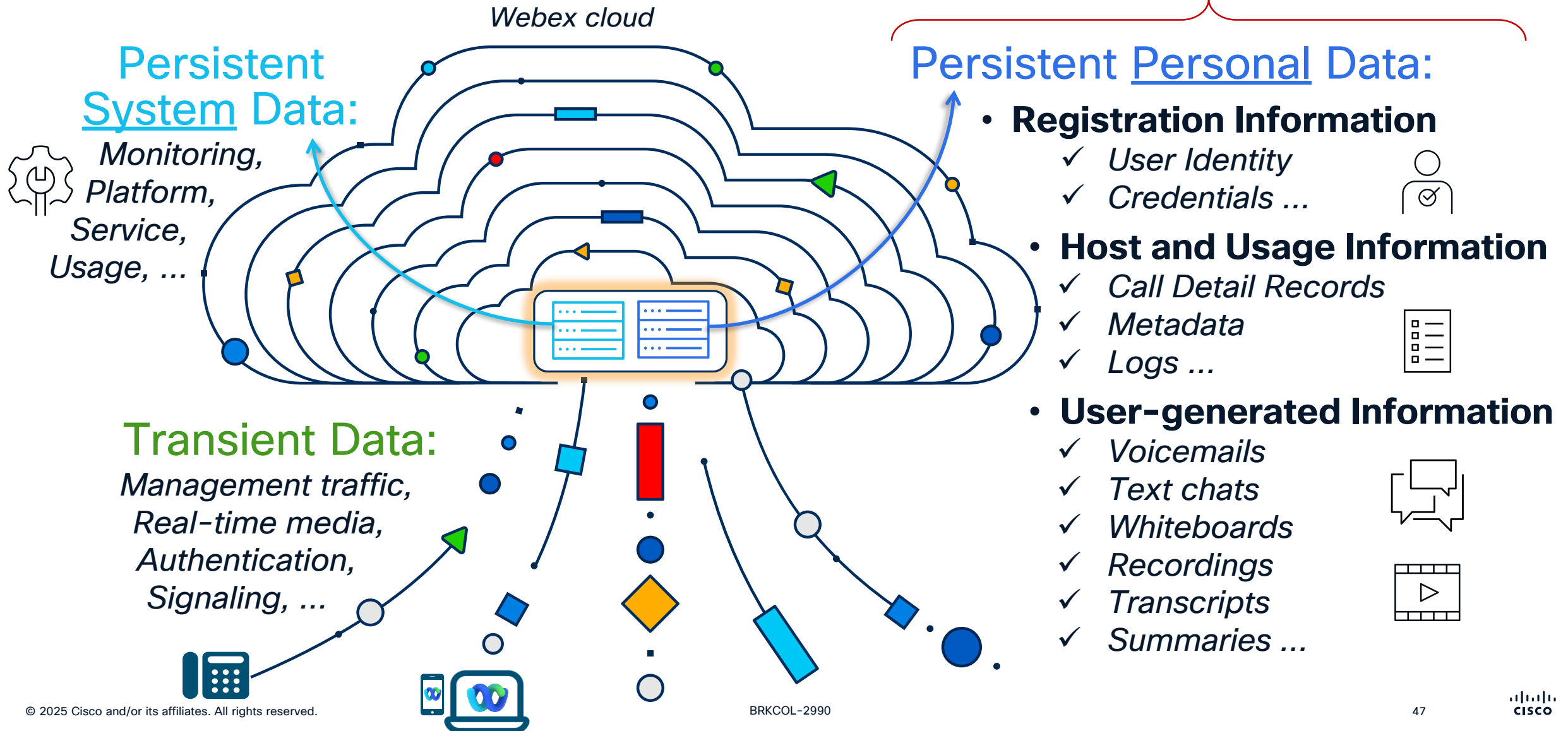
Edge PoPs:

- Unified Edge (Calling MT+Contact Center)
- Meetings

Data Residency

Types of Data

Focus of this section



Data Residency: Platform Services (+ Messaging)

Organization's Data Residency Country

When the org is created, the choice of **Data residency country or region** determines the residency of:

- **Registration Information:**

- User identity
- Auth tokens



- **Host and Usage Information:**

- Logs, Call Detail Records
- Analytics and metadata



- **User-generated Information:**

- Messages, Files
- Whiteboards
- Key Management Service (KMS)



Start a new trial

Customer Information

Organization name ⓘ
Owen's Cisco Live Amsterdam Trial

Administrator email
ofrielwebex+clams@gmail.com
Administrator email that you enter will be used to determine whether there is an existing customer account.

Business vertical
Education

Data residency country or region
Netherlands
Select your customer's country or region, or a supported location closest to your customer. Your customer's location determines accurate data residency (user data, encryption keys, and user-generated content). [Learn more about Data residency in Webex](#)

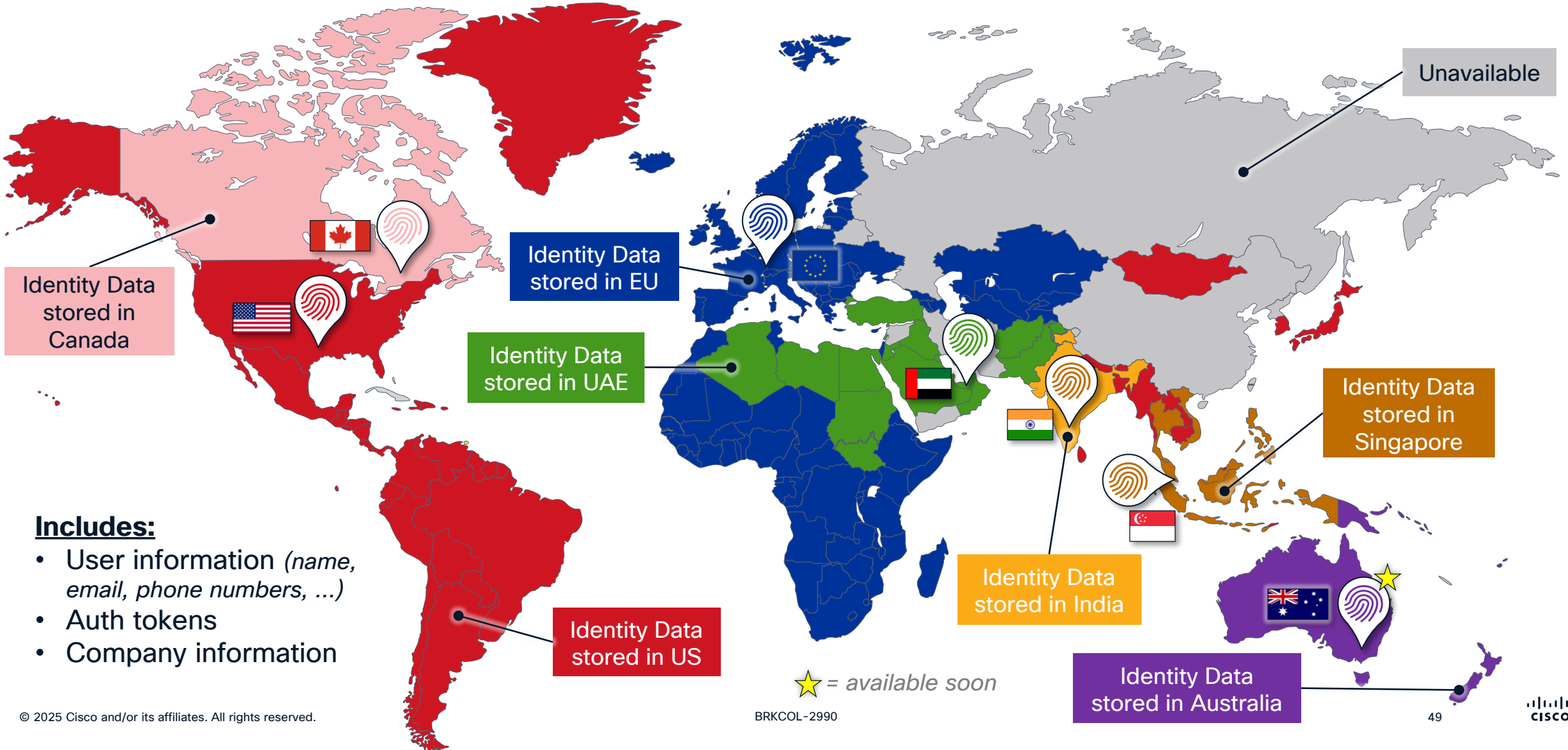
I certify that this customer is in a supported location for Cisco Webex

Cancel Next

Data Residency: Identity

Country to Region Mapping

Current view
Subject to change



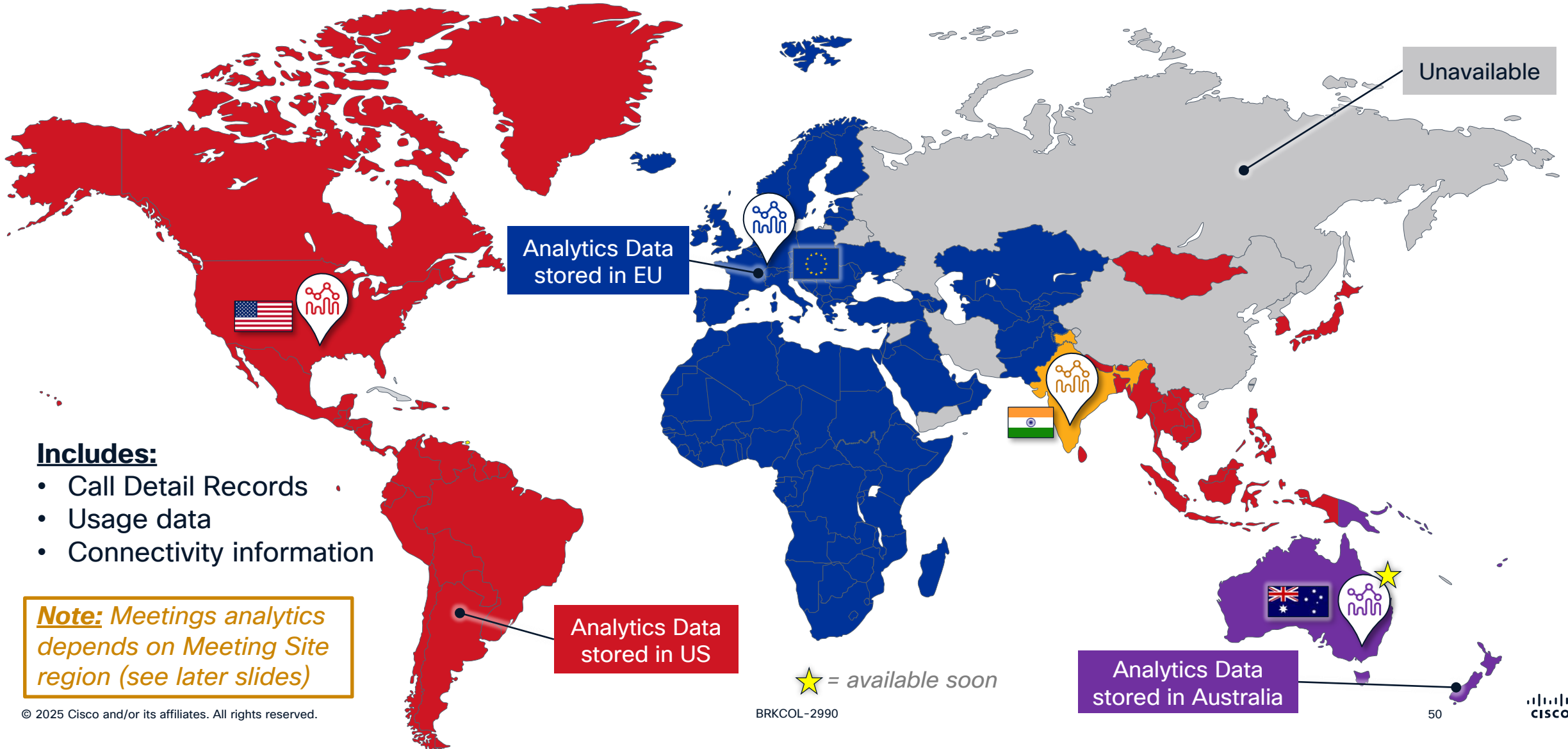
Includes:

- User information (*name, email, phone numbers, ...*)
- Auth tokens
- Company information

Data Residency: Analytics

Country to Region Mapping

Current view
Subject to change



Includes:

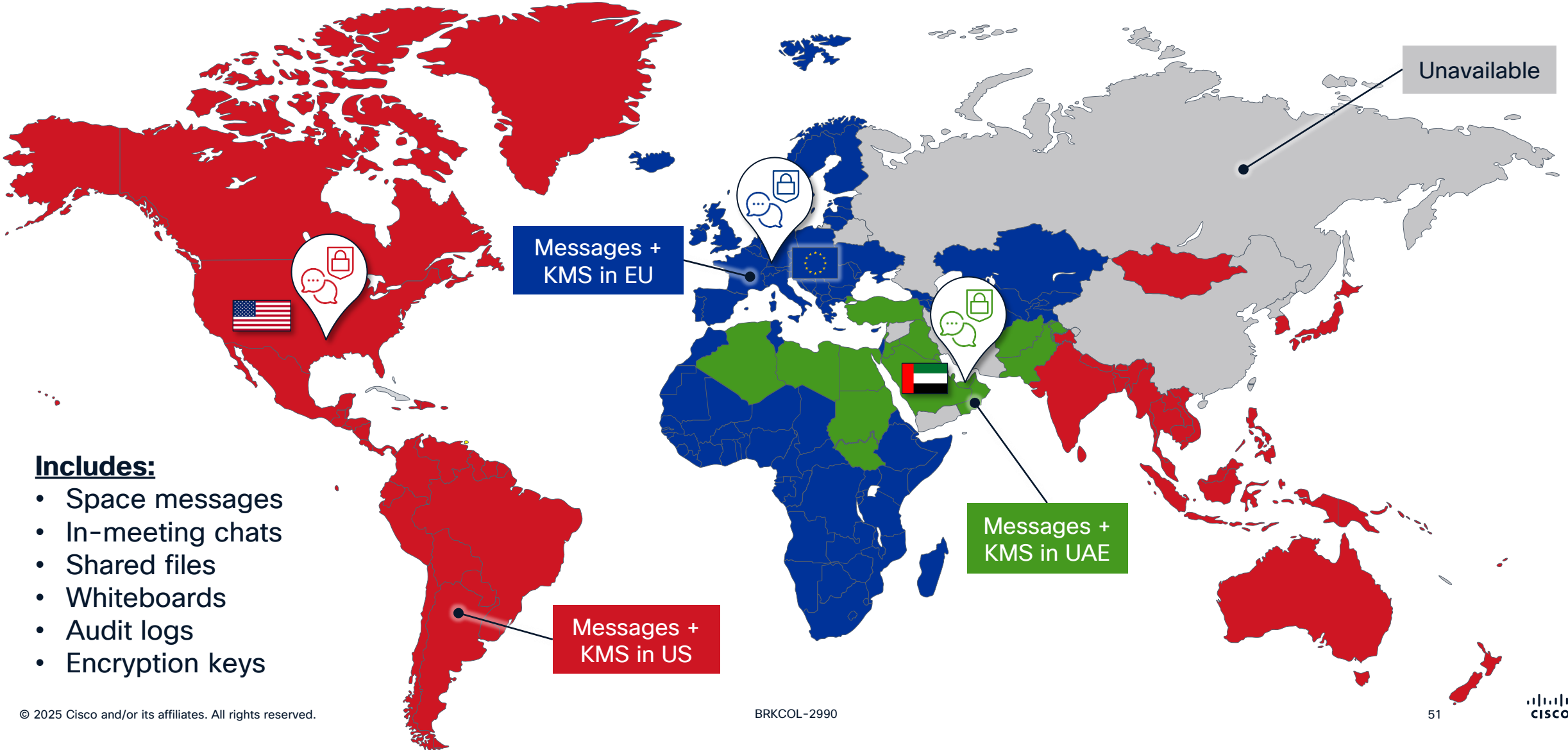
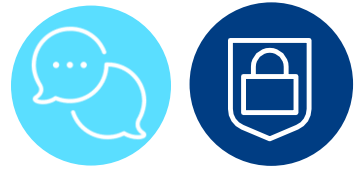
- Call Detail Records
- Usage data
- Connectivity information

Note: Meetings analytics depends on Meeting Site region (see later slides)

Data Residency: Messaging + KMS

Country to Region Mapping

Current view
Subject to change



Includes:

- Space messages
- In-meeting chats
- Shared files
- Whiteboards
- Audit logs
- Encryption keys

Data Residency: Webex Calling (Multi-tenant)



First (Headquarters) Location

Configured **Country / Region** of first Headquarters Location determines residency of:

- **Registration Information:**

- Calling user data

- **Host and Usage Information:**

- Calling feature configuration

- **User-generated Information:**

- Media files (greetings, announcements, ...)
- Voicemails
- Call recordings*
- Transcripts*
- Summaries*

** Storage destination of these can be specified per Location*

Set up your headquarter's location

The country or region with the majority of your users is your headquarter's location. Calling data is stored here. Keep in mind that this first location is required to set up Webex Calling. You can edit or delete your headquarter's address any time in Control Hub.

Location name *
Headquarters

Country / Region *
Netherlands

Address *
Europaplein 24, 1078 GZ Amsterdam, Netherlai

Address line 2 (optional)

City / Town *
Amsterdam

State / Province / Region
North Holland

ZIP / Postal Code
1078 GZ

Latitude: 52.3434978 [Edit](#)

Longitude: 4.8897995

Timezone *
Europe/Amsterdam

Email language ⓘ
English - American English

Map Satellite

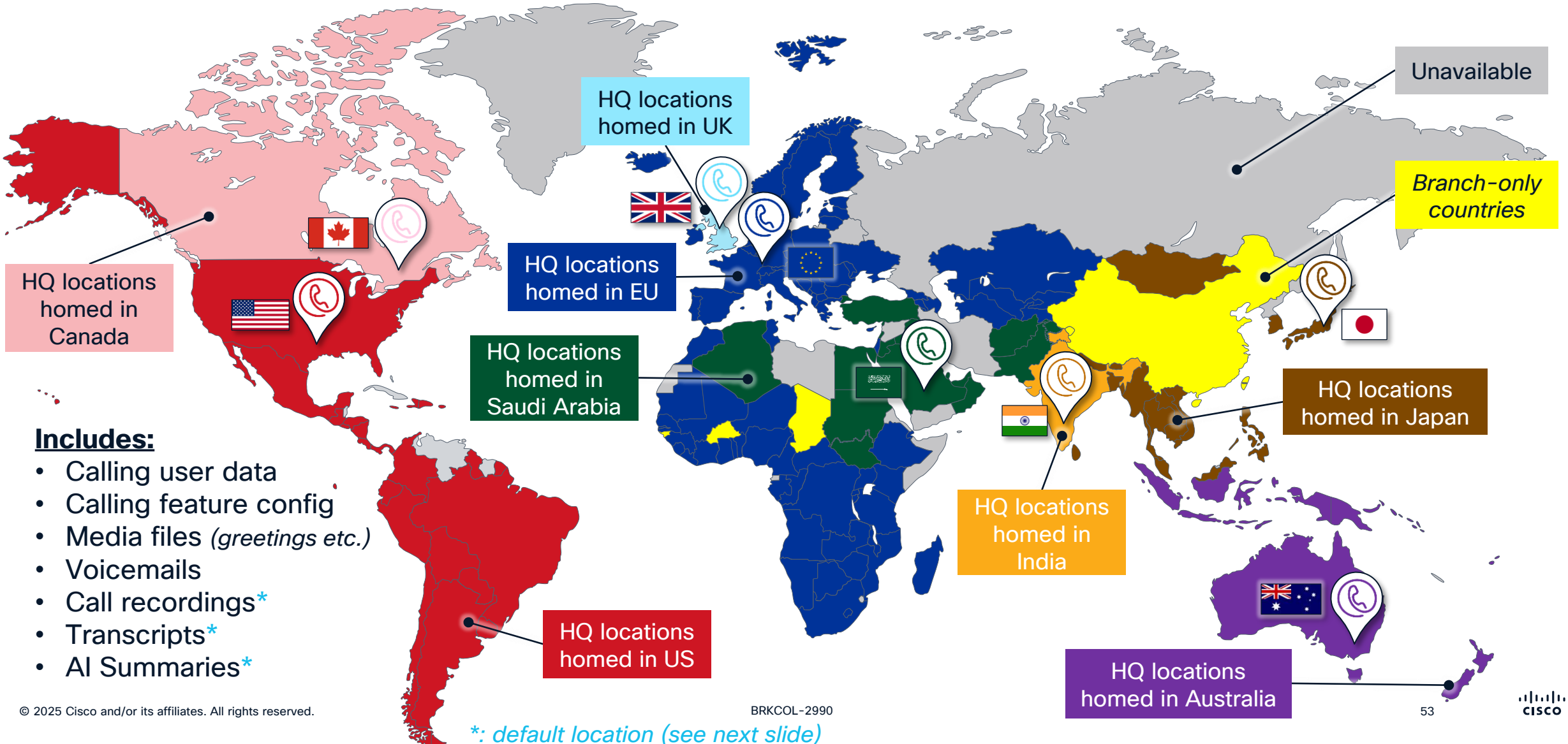
Drag pin to the center of the location. Dragging the pin will update the latitude/longitude and the address if a match is found.

Data Residency: Webex Calling (MT)

Current view
Subject to change



HQ Location to Region Mapping



Includes:

- Calling user data
- Calling feature config
- Media files (*greetings etc.*)
- Voicemails
- Call recordings*
- Transcripts*
- AI Summaries*

Data Residency: Webex Calling (MT)



Webex Recording Storage Options (Control Hub)

- Option for branch locations to override default storage location for Call recordings
 - Includes transcripts and AI summaries
- Applicable if Webex is the call recording provider
- *Soon to include Voicemails (Control Hub screens will change accordingly)*

Hartford
Location ID: 724ae5bb-7f3e-47b0-b5c2-4a7c5922df2d
1 user · 0 workspaces

Overview Floors **Calling**

< Calling

Call recording

Provider

Choose which call recording provider this location will use.

Default provider - Webex
The defaults are based on your organization's settings.

Select a different provider

Webex

Choose a storage region. This determines where the call recordings will be physically stored for this location. (

Default storage location - United States
The defaults are based on your organization's settings.

Select a different storage location

United States

Call

If cal

Australia

Canada

Germany

United Kingdom

Com

India

Plays

Enab

Japan

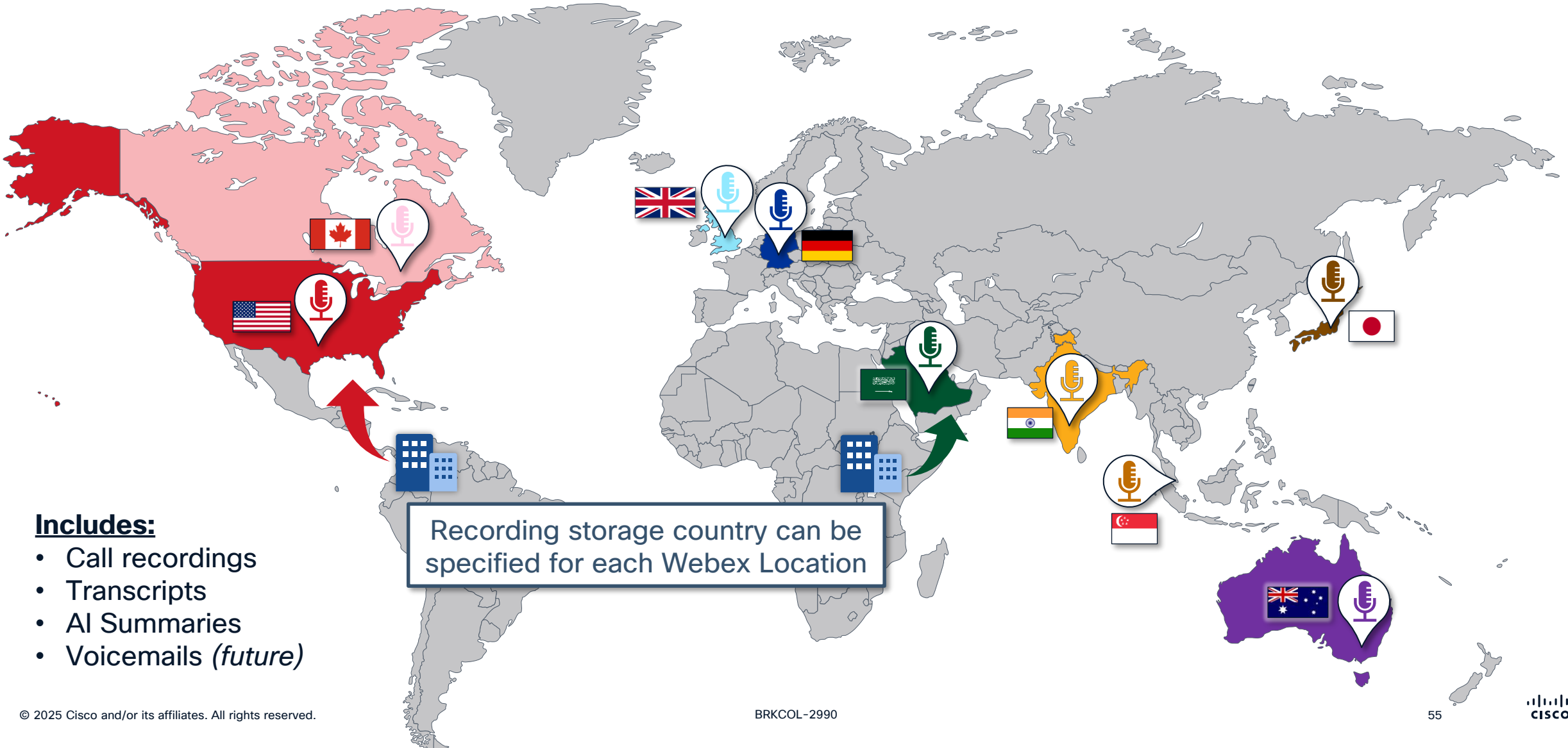
Singapore

United States

Data Residency: Webex Calling (MT)



Webex Recording Storage Options



Includes:

- Call recordings
- Transcripts
- AI Summaries
- Voicemails (*future*)

Recording storage country can be specified for each Webex Location

Data Residency: Webex Contact Center



Country of Operation

Selecting **Country or region** in Webex Contact Center setup wizard determines residency of:

- **Host and Usage Information:**

- Tenant configuration
- Call Detail Records
- Reporting

- **User-generated Information:**

- Call recordings
- Digital channels

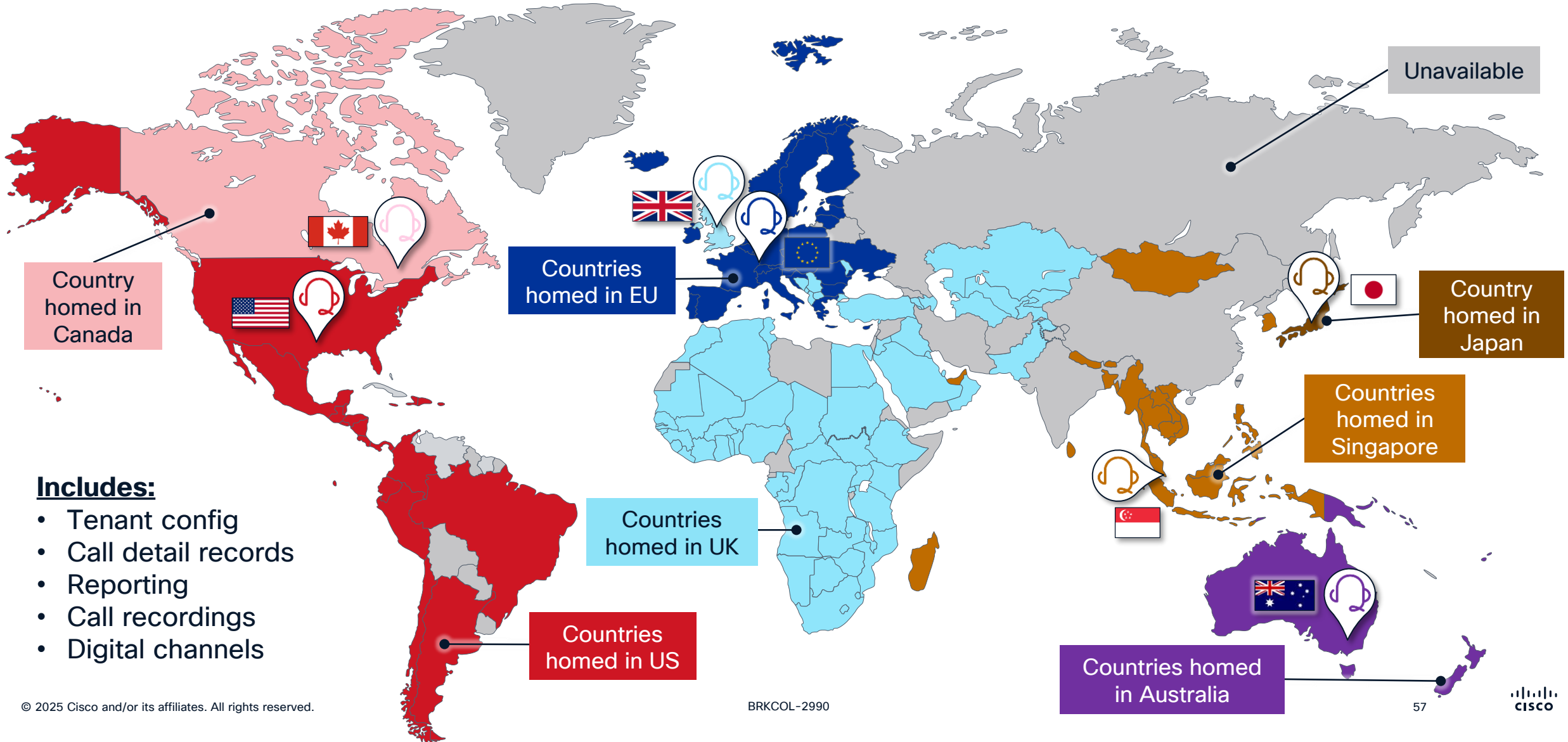
The screenshot shows the 'Set up your Contact Center tenant' step in the Webex Contact Center setup wizard. The page has a progress bar at the top with four steps: 'Calling setup' (completed), 'Contact Center Setup' (current step), 'Review', and 'Done'. The main heading is 'Set up your Contact Center tenant' with the instruction 'Select the country and timezone of the region where your contact center is operating.' Below this, there are two dropdown menus. The first is labeled 'Country or region' and has a 'Text Input' placeholder; it is highlighted with a red border. Below it is a note: 'Webex Contact Center tenants will be mapped to the closest regional data center. For more information on data center locations, [see where data centers for Webex Contact Center are based](#)'. The second dropdown is labeled 'Timezone' and is set to '(GMT-7:00) America/Los Angeles'. Below it is another note: 'Webex Contact Center and Webex Connect use this timezone. You can change the Webex Contact Center timezone in Control Hub but not the Webex Connect timezone once provisioned.' At the bottom, there is a section titled 'Webex Contact Center Telephony' with the text: 'To learn more about Contact Center telephony, see how to [set up voice channels for Webex Contact Center](#)' and a note: '① Webex Calling is the only telephony option supported for Webex Contact Center.'

Data Residency: Webex Contact Center

Current view
Subject to change



Country of Operation to Region Mapping



Includes:

- Tenant config
- Call detail records
- Reporting
- Call recordings
- Digital channels

Data Residency: Webex Meetings



Meeting Site Region Selection

When creating a Meeting Site, selected **Time Zone** determines residency of:

- **Registration Information:**

- Basic user identity

- **Host and Usage Information:**

- Meeting metadata
- Meeting logs
- Meeting media analytics

- **User-generated Information:**

- Meeting recordings (audio/video)
- Transcripts
- AI Summaries

Step 2 of 3
Subscription Id: Sub-prod090822ciscolabs
✓ **identitylab10c.webex.com**
User management via Webex Control Hub

We don't recommend adding more URLs, except for access to early software updates or test deployment sites.

i New sites will be automatically created on the [Webex Suite meeting platform](#) [↗](#) If you need this site converted back to the legacy platform, reach out to Webex support or your Customer Success Manager after site setup. (Applies only if your existing sites remain on the meetings center (legacy) platform.)

Add another site
test-site-idlab10c .webex.com

Advanced Settings
 Set up Webex site for early releases ⓘ

Add Site

Audio Package: Webex Audio

Select Time Zone

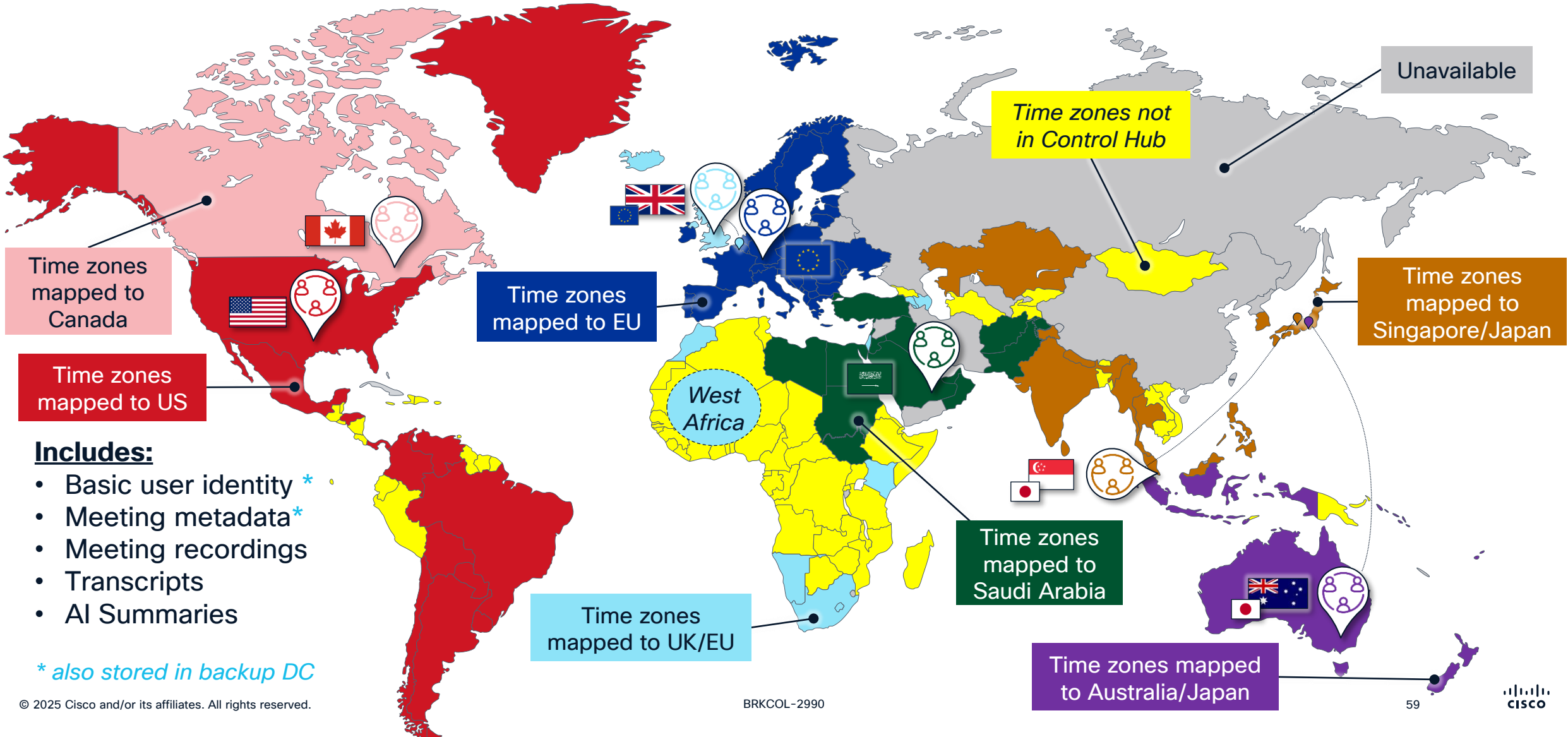
- (GMT +01:00) Amsterdam
- (GMT +01:00) Paris
- (GMT +01:00) Prague
- (GMT +01:00) Berlin
- (GMT +02:00) Athens
- (GMT +02:00) Bucharest
- (GMT +02:00) Cairo
- (GMT +02:00) Pretoria

Next

Data Residency: Webex Meetings

Meeting Site Time Zone to Region Mapping

Current view
Subject to change



Time zones mapped to Canada

Time zones mapped to US

Time zones mapped to EU

West Africa

Time zones mapped to UK/EU

Time zones not in Control Hub

Time zones mapped to Singapore/Japan

Time zones mapped to Saudi Arabia

Time zones mapped to Australia/Japan

Unavailable

Includes:

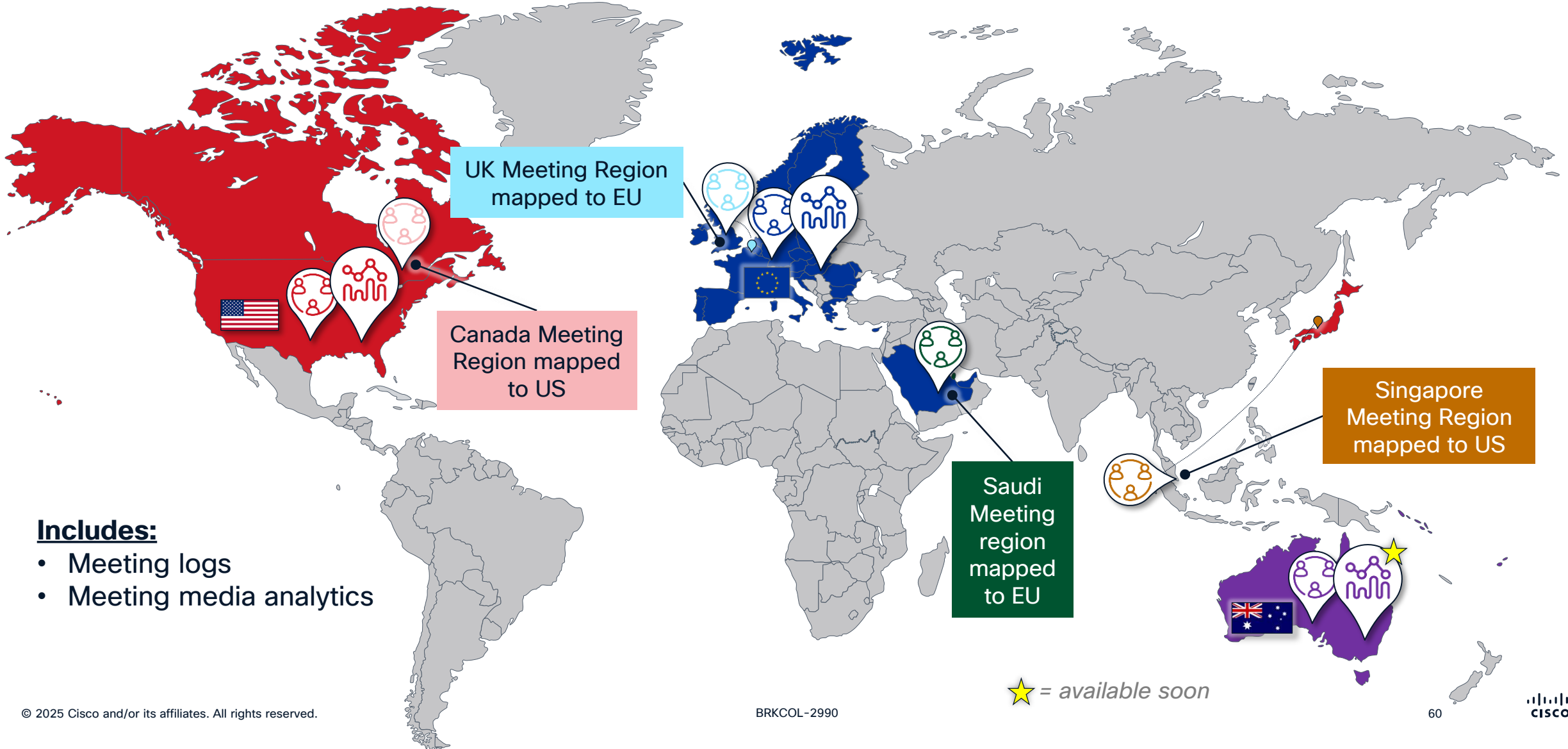
- Basic user identity *
- Meeting metadata*
- Meeting recordings
- Transcripts
- AI Summaries

* also stored in backup DC

Data Residency: Webex Meetings Analytics



Meeting Site Region to Analytics Region Mapping



Includes:

- Meeting logs
- Meeting media analytics

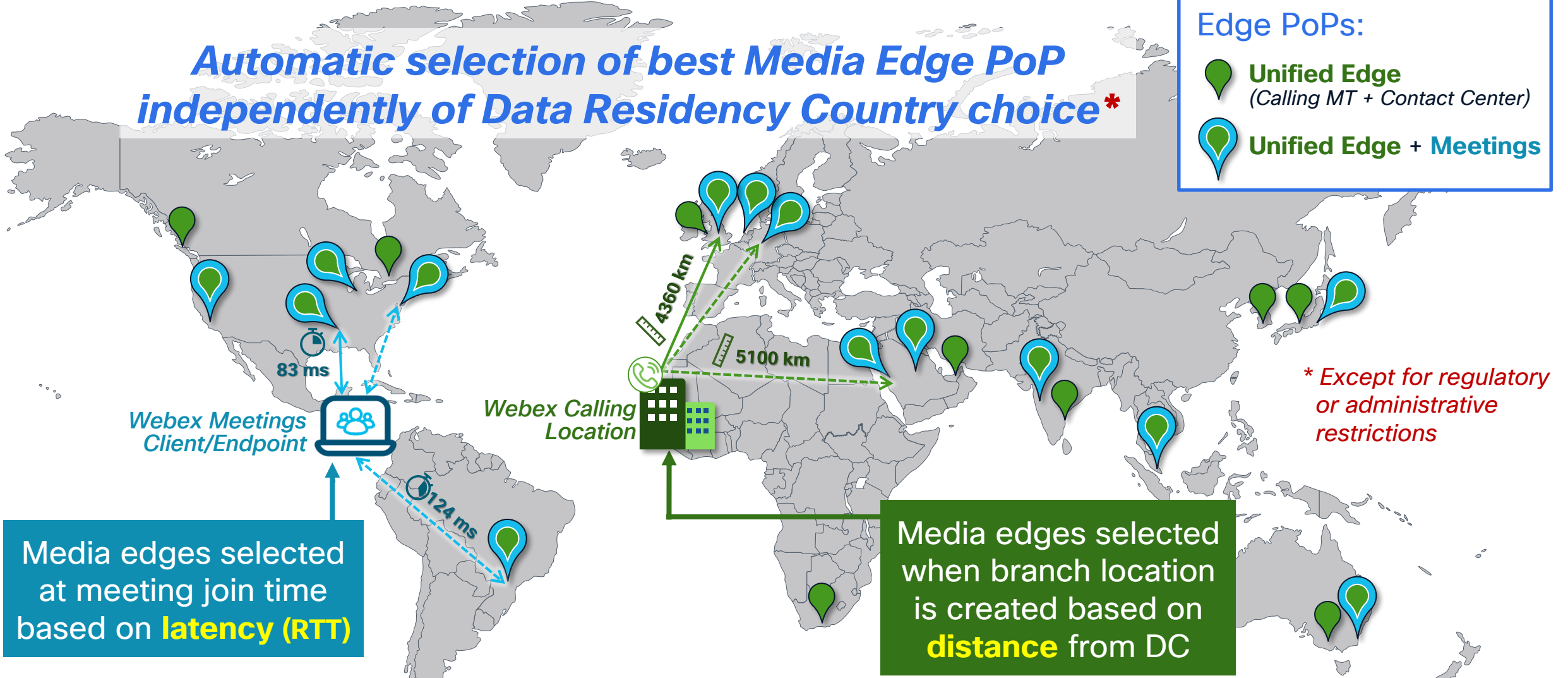
Data Residency: Real-time Media

Media Edge PoP Selection

Automatic selection of best Media Edge PoP independently of Data Residency Country choice*

Edge PoPs:

-  **Unified Edge**
(Calling MT + Contact Center)
-  **Unified Edge + Meetings**



Media edges selected at meeting join time based on **latency (RTT)**

Media edges selected when branch location is created based on **distance** from DC

** Except for regulatory or administrative restrictions*

Data Residency

Check your Data Locations in Control Hub

The screenshot shows the Webex Control Hub interface. The left sidebar contains navigation options: Overview, Getting Started Guide, Alerts center, MONITORING (Analytics, Troubleshooting, Reports), MANAGEMENT (Users, Groups, Workspaces, Devices, Apps, Account, Organization Settings), and SERVICES (Updates & Migrations, Messaging, Meeting, Calling, collaborationorg). The main content area is titled 'Account' and includes tabs for Info, Subscriptions, New Offers, and Privacy. The 'Info' tab is active, showing the 'Organization profile' section with fields for 'Organization name' (collaborationorg) and 'Organization ID'. Below this is a 'Data Locations' table, which is highlighted with a red border. A red arrow points to the 'Account' menu item in the sidebar.

Data Type	Covered Data	Data Location
> Meetings	Recordings, transcripts, files, meeting titles, attendee names and emails, and user profiles in Webex site administration portal	European Union
Messaging	Messages, files, avatars, spaces, and organization metadata	United States
Common application data	All Webex identity platform data, such as full user profiles, user groups, and other organization settings	United States

Note:
Webex Calling data coming soon

Data Residency

Check your Data Locations in Control Hub – Contact Center

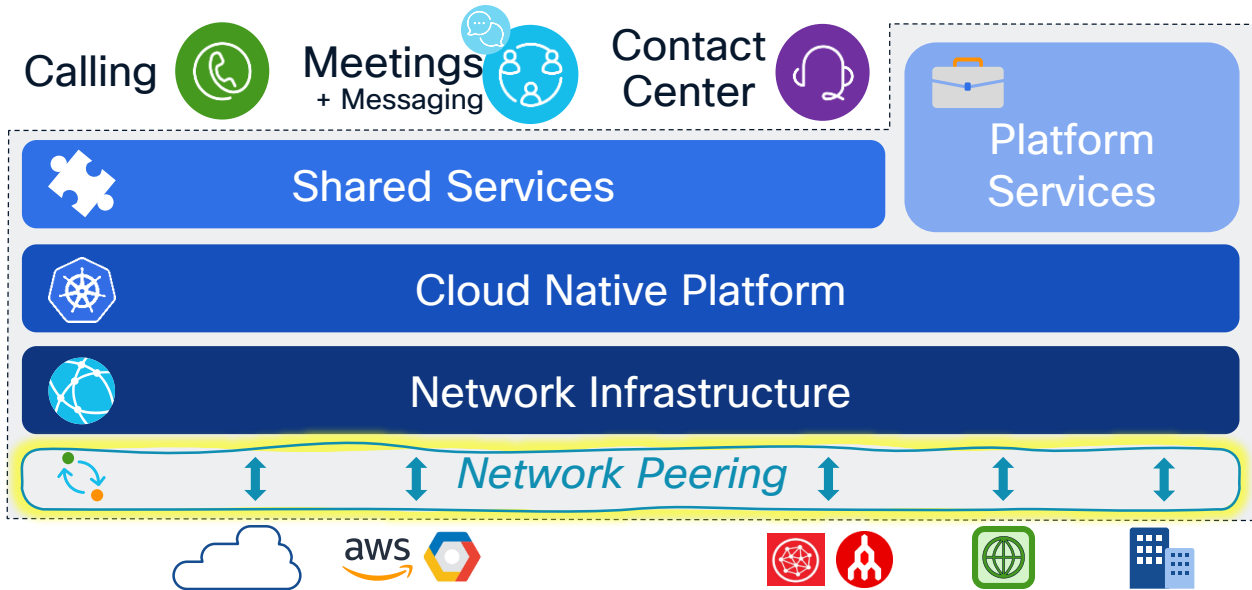
Webex Contact Center > Tenant Settings – General

The screenshot displays the 'General' settings page in the Webex Control Hub. The left sidebar contains navigation options such as 'Sites', 'Skill Definitions', 'Skill Profiles', 'Teams', 'User Profiles', 'Contact Center Users', 'DESKTOP EXPERIENCE', 'Multimedia Profiles', 'Outdial ANI', 'Desktop Layouts', 'Dial Plans', 'Address Books', 'Desktop Profiles', 'Idle/Wrap-up Codes', 'TENANT SETTINGS', 'General', 'Security', 'Voice', 'Digital', 'Desktop', 'Integrations', 'Bulk Operations', and 'Addons'. The main content area is titled 'General' and includes sections for 'Advanced Configuration', 'Synchronize Users', and 'Service Details'. The 'Service Details' section contains several fields: 'Country of operation' (highlighted with a red box and set to 'United States of America'), 'Tenant Timezone' (set to '(GMT-08:00) Pacific/Pitcairn'), 'Platform details' (set to 'Webex Contact Center'), 'Digital channel' (set to 'Webex Connect'), 'Voice media platform' (set to 'Real Time Media Service'), and 'Telephony' (set to 'Webex Calling'). A note at the bottom of the 'Service Details' section states: 'This PSTN Connection type was selected during first-time setup. To learn about Contact Center telephony please read the [Setting Up Voice Channel for Cisco Webex Contact Center document](#).'

Data Residency References

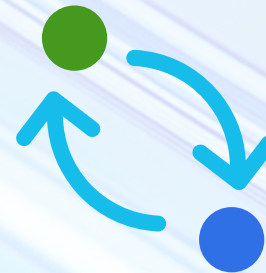
- **Data residency in Webex:**
https://help.webex.com/en-us/article/oybc4fb/Data-residency-in-Webex#id_102372
- **Webex Calling Privacy Data Sheet:**
<https://trustportal.cisco.com/c/r/ctp/trust-portal.html#/1574459558946549>
- **Webex Meetings Privacy Data Sheet:**
<https://trustportal.cisco.com/c/r/ctp/trust-portal.html#/1554085468927155>
- **Data Locality in Webex Contact Center:**
<https://help.webex.com/en-us/article/n0p6xa1/Data-Locality-in-Webex-Contact-Center>
- **Webex Suite Meetings: KMS-encrypted meeting content and data residency:**
<https://help.webex.com/en-us/article/b38ajk/Webex-Suite-Meetings:-KMS-encrypted-meeting-content-and-data-residency>
- **Migrate your organization's Webex data to another region in Control Hub:**
<https://help.webex.com/en-us/article/2d73oy/Migrate-your-organization%E2%80%99s-Webex-data-to-another-region-in-Control-Hub>

Agenda



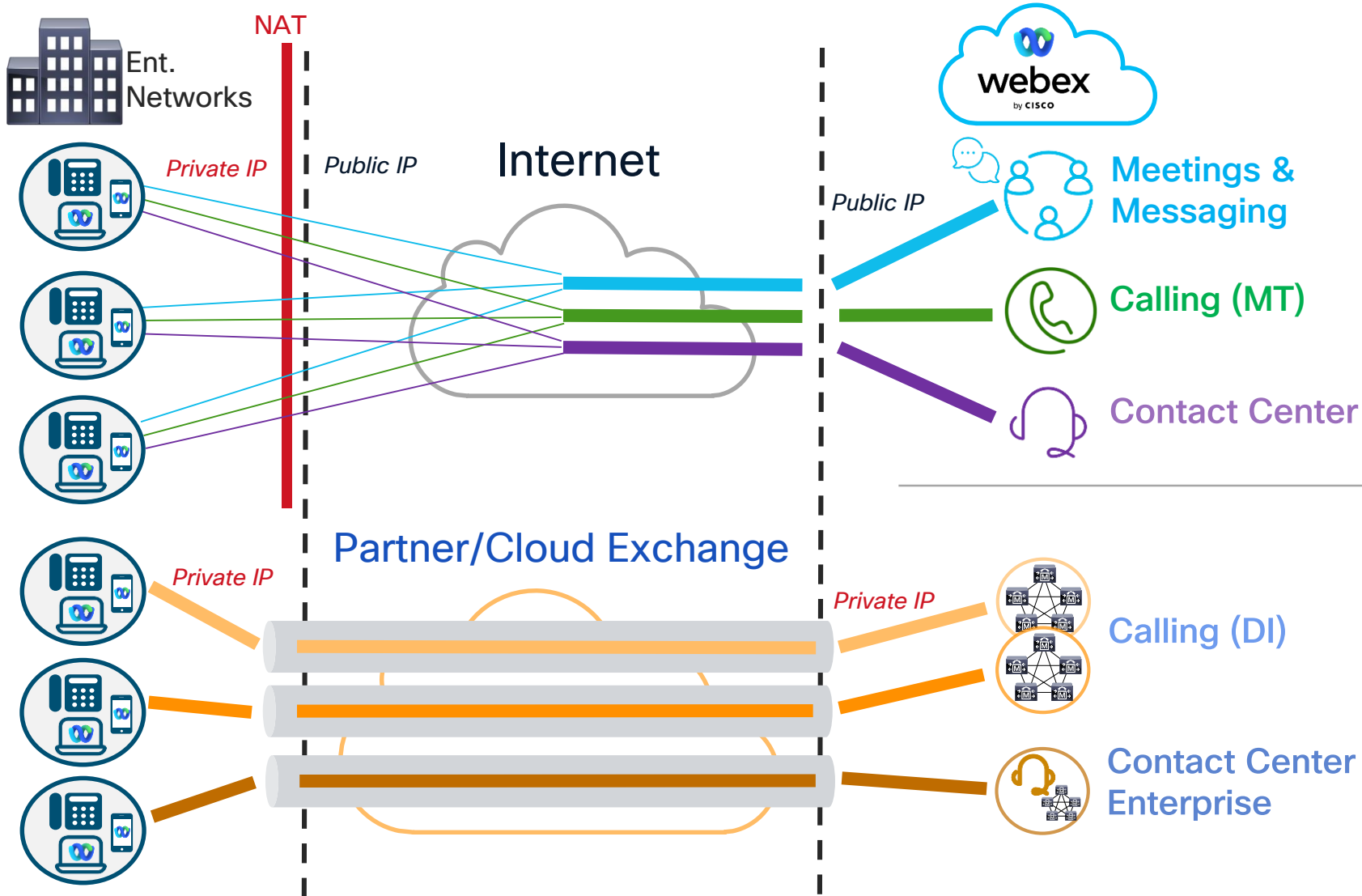
- 01 Introduction
- 02 Network Infrastructure
- 03 Cloud Native Platform
- 04 Platform & Shared Services
- 05 Data Residency
- 06 Edge Connectivity and Network Peering + IPv6
- 07 Summary

Edge Connectivity and Network Peering



Edge Connectivity

Multitenant vs Dedicated Offerings



Multitenant Offerings

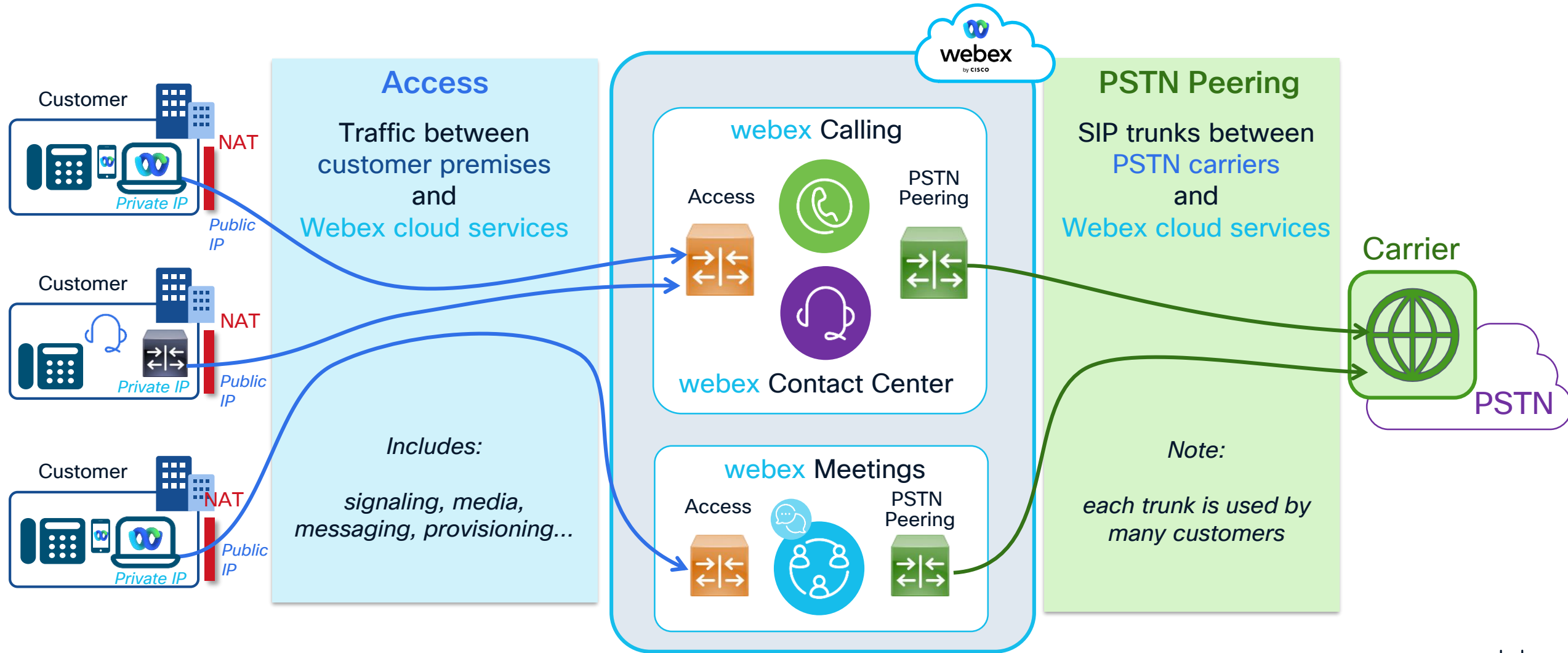
- **Shared** services
- **Public** IP subnets
- NAT OK
- OTT access

Dedicated Offerings

- **Per-customer** services
- **Private** IP subnets
- No NAT
- Isolated network access (VPN/NNI)

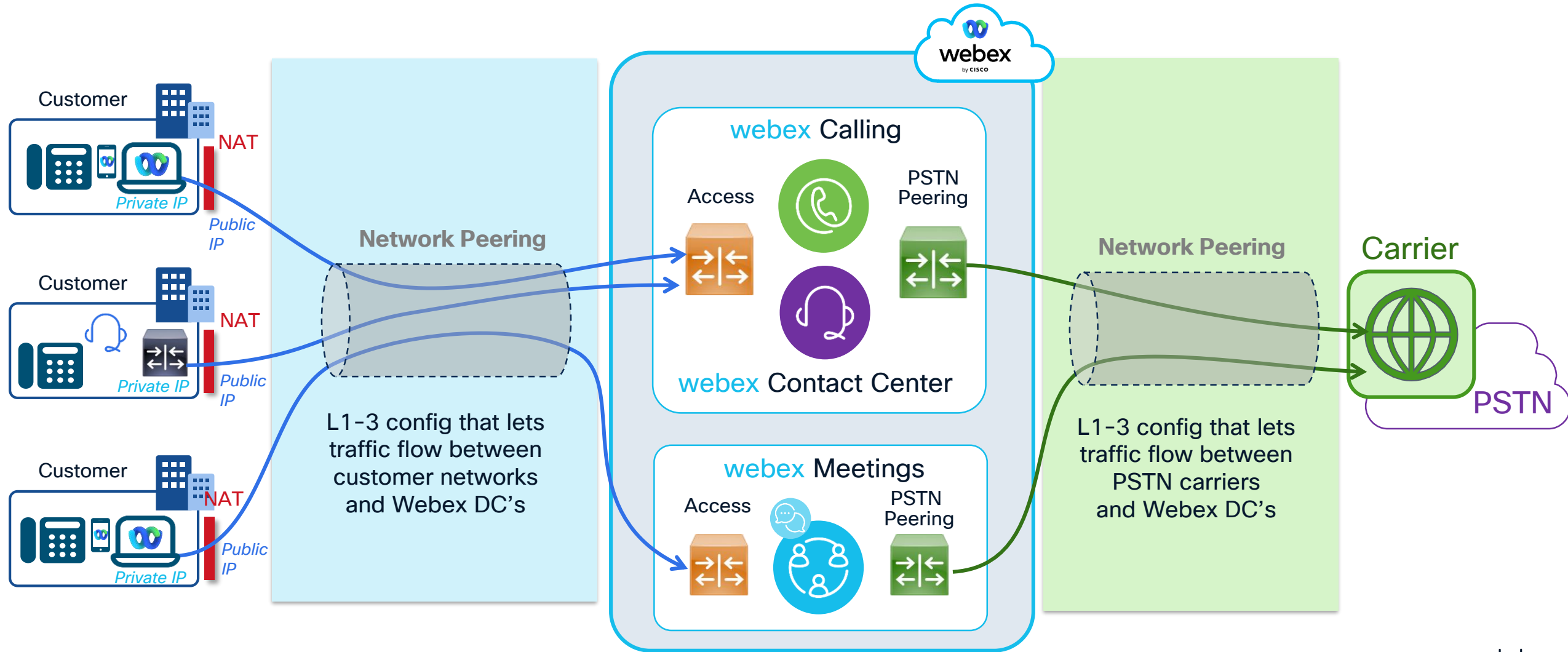
Edge Connectivity

Access vs PSTN Peering



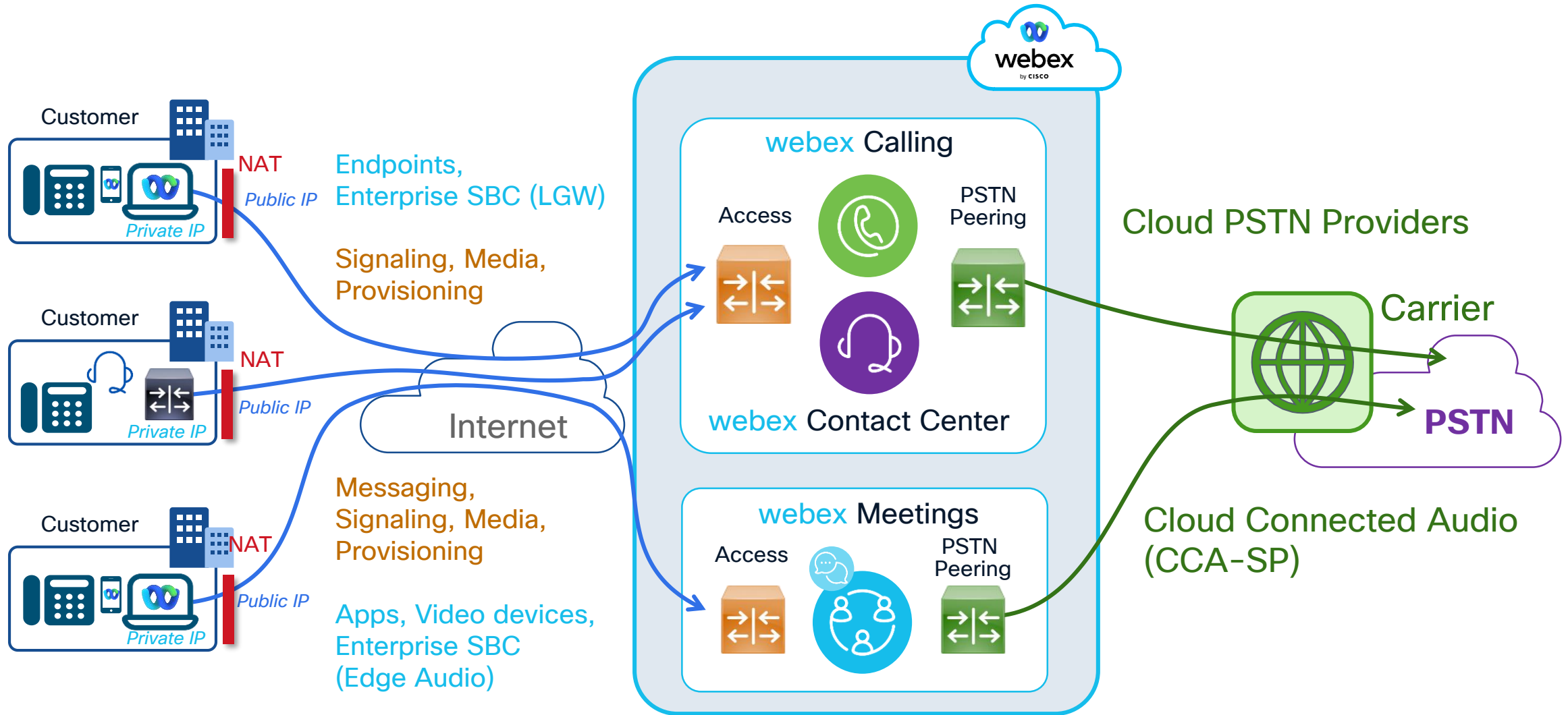
Edge Connectivity

Network Peering



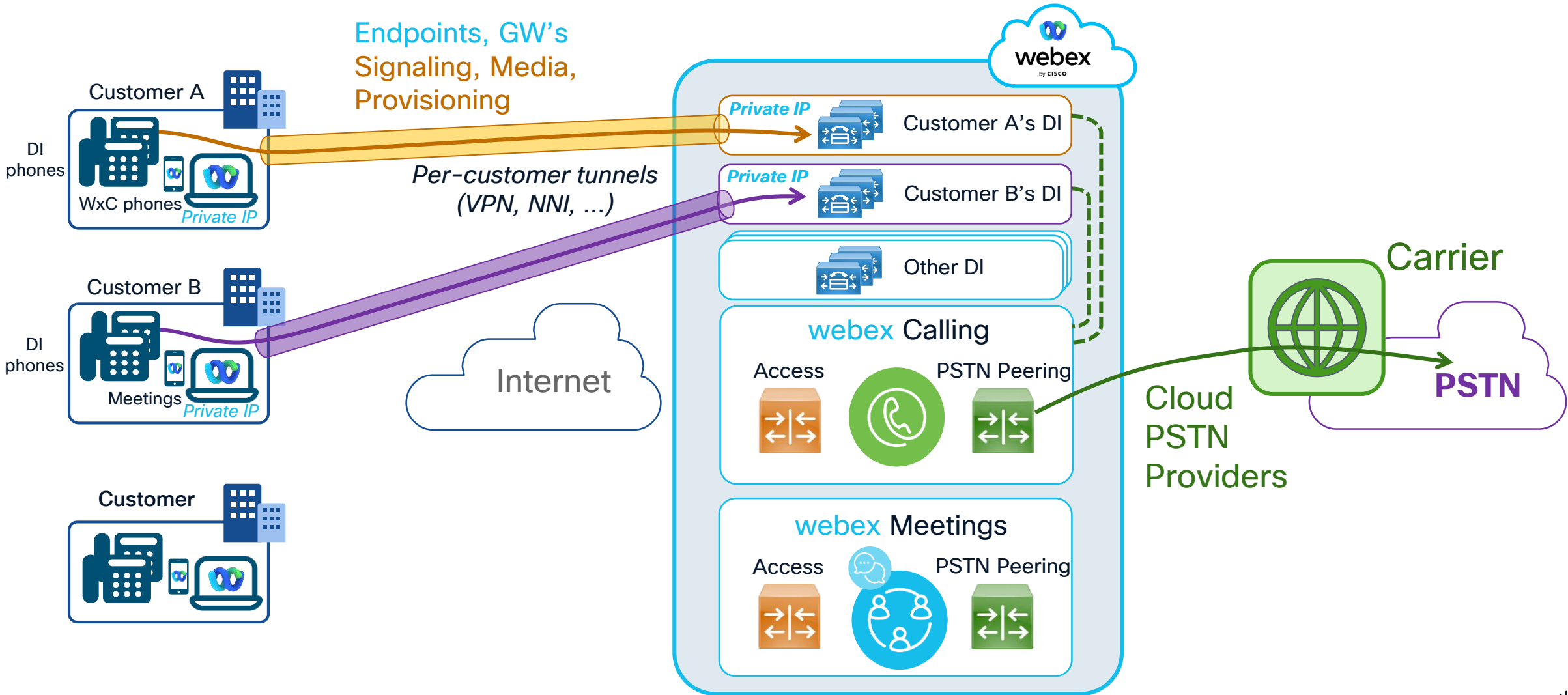
Edge Connectivity

Multitenant Offerings

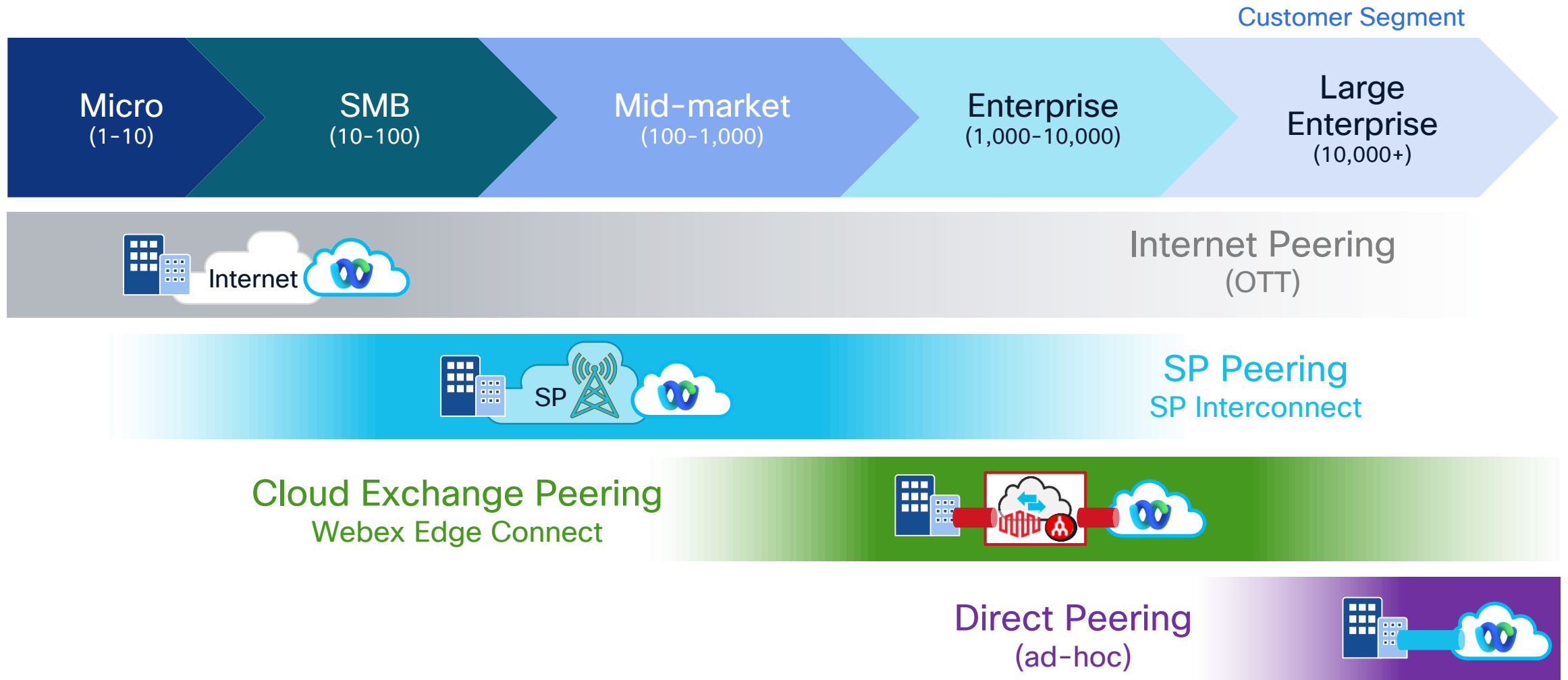


Edge Connectivity

Dedicated Offerings: Webex Calling DI

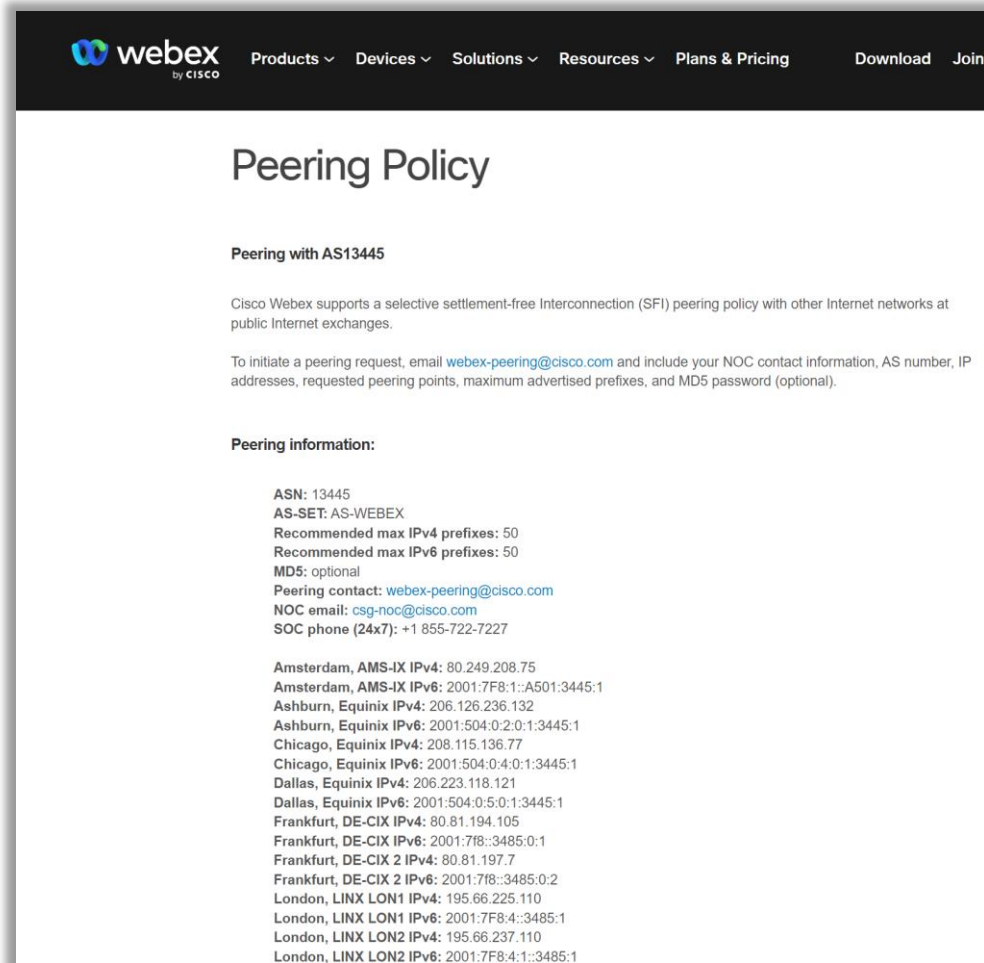


Network Peering Options



Internet Peering

Webex ISP Peering Policy



The screenshot shows the Cisco Webex website's Peering Policy page. The navigation bar includes the Webex logo, 'Products', 'Devices', 'Solutions', 'Resources', 'Plans & Pricing', 'Download', and 'Join'. The main heading is 'Peering Policy'. Below it, the section 'Peering with AS13445' is followed by a paragraph stating that Cisco Webex supports a selective settlement-free Interconnection (SFI) peering policy with other Internet networks at public Internet exchanges. A paragraph below explains that to initiate a peering request, one should email webex-peering@cisco.com and include NOC contact information, AS number, IP addresses, requested peering points, maximum advertised prefixes, and MD5 password (optional). The 'Peering information:' section lists the following details:

- ASN: 13445
- AS-SET: AS-WEBEX
- Recommended max IPv4 prefixes: 50
- Recommended max IPv6 prefixes: 50
- MD5: optional
- Peering contact: webex-peering@cisco.com
- NOC email: csg-noc@cisco.com
- SOC phone (24x7): +1 855-722-7227

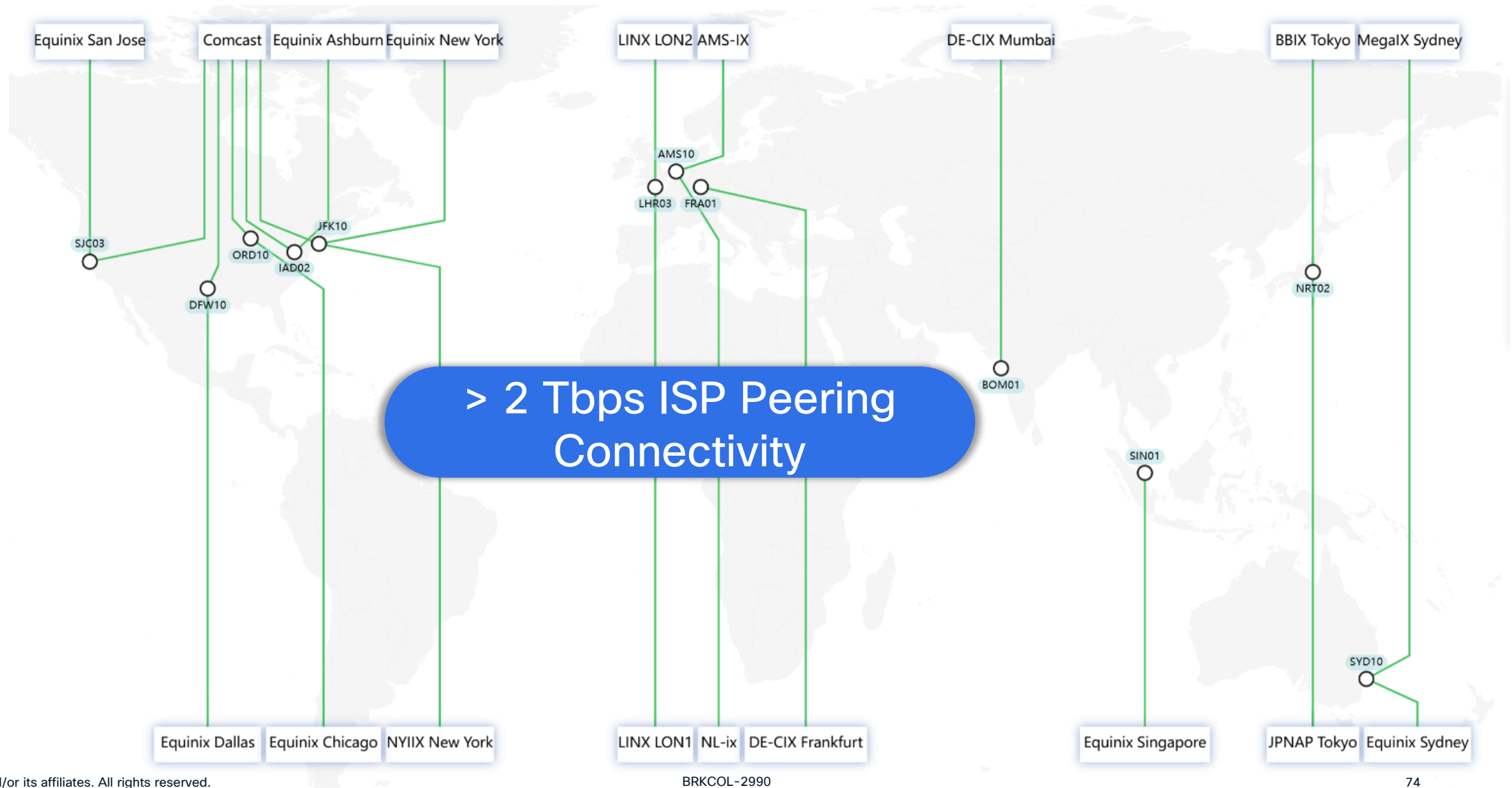
Below this, a list of peering points is provided:

- Amsterdam, AMS-IX IPv4: 80.249.208.75
- Amsterdam, AMS-IX IPv6: 2001:7F8:1::A501:3445:1
- Ashburn, Equinix IPv4: 206.126.236.132
- Ashburn, Equinix IPv6: 2001:504:0:2:0:1:3445:1
- Chicago, Equinix IPv4: 208.115.136.77
- Chicago, Equinix IPv6: 2001:504:0:4:0:1:3445:1
- Dallas, Equinix IPv4: 206.223.118.121
- Dallas, Equinix IPv6: 2001:504:0:5:0:1:3445:1
- Frankfurt, DE-CIX IPv4: 80.81.194.105
- Frankfurt, DE-CIX IPv6: 2001:7F8::3485:0:1
- Frankfurt, DE-CIX 2 IPv4: 80.81.197.7
- Frankfurt, DE-CIX 2 IPv6: 2001:7F8::3485:0:2
- London, LINX LON1 IPv4: 195.66.225.110
- London, LINX LON1 IPv6: 2001:7F8:4::3485:1
- London, LINX LON2 IPv4: 195.66.237.110
- London, LINX LON2 IPv6: 2001:7F8:4:1::3485:1

- Webex supports Settlement-Free Interconnection (SFI) peering at public Internet Exchanges
- More details and eligibility criteria at: <https://www.webex.com/peering-policy.html>

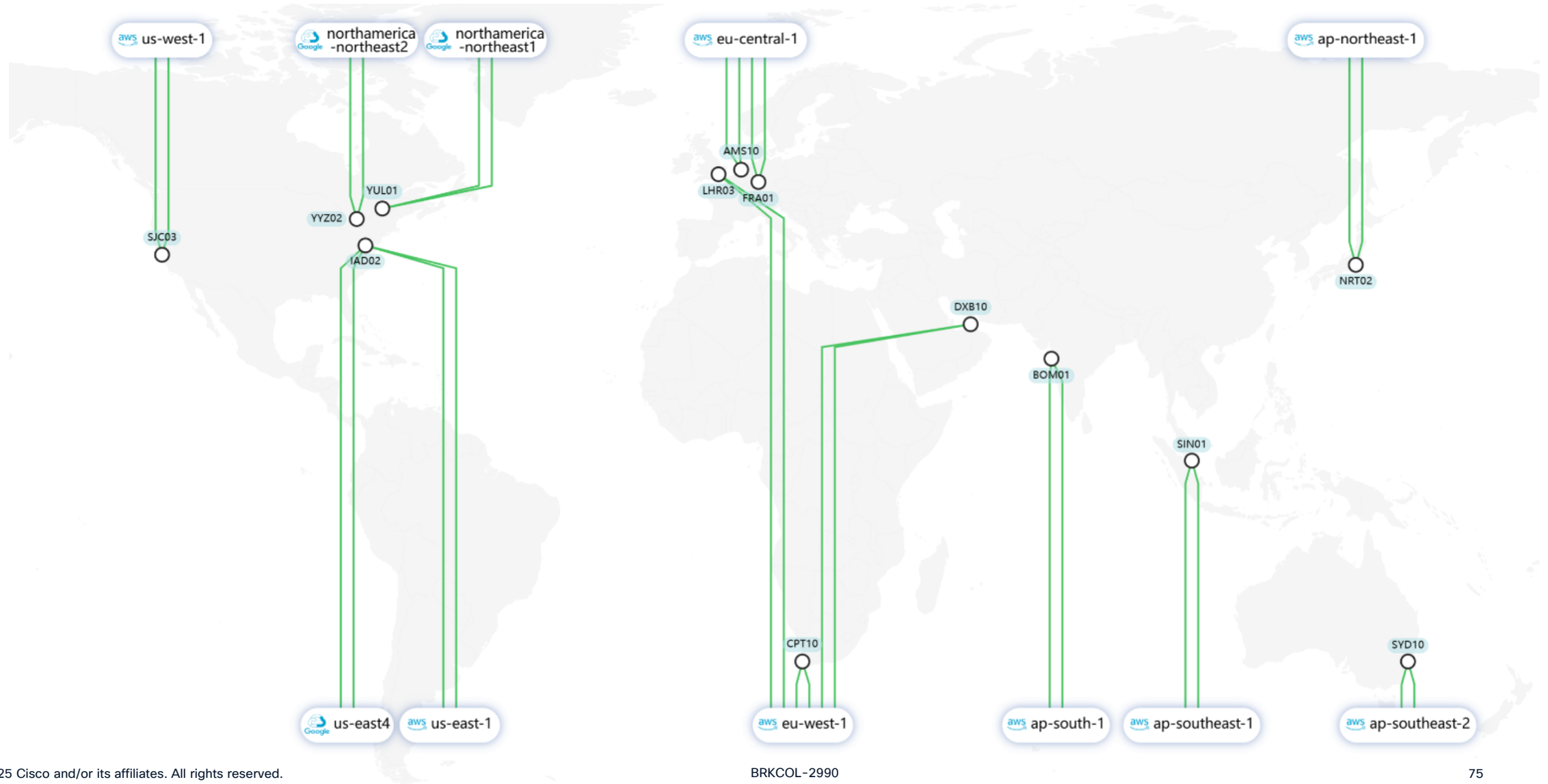
Internet Peering

ISP Peering Landscape



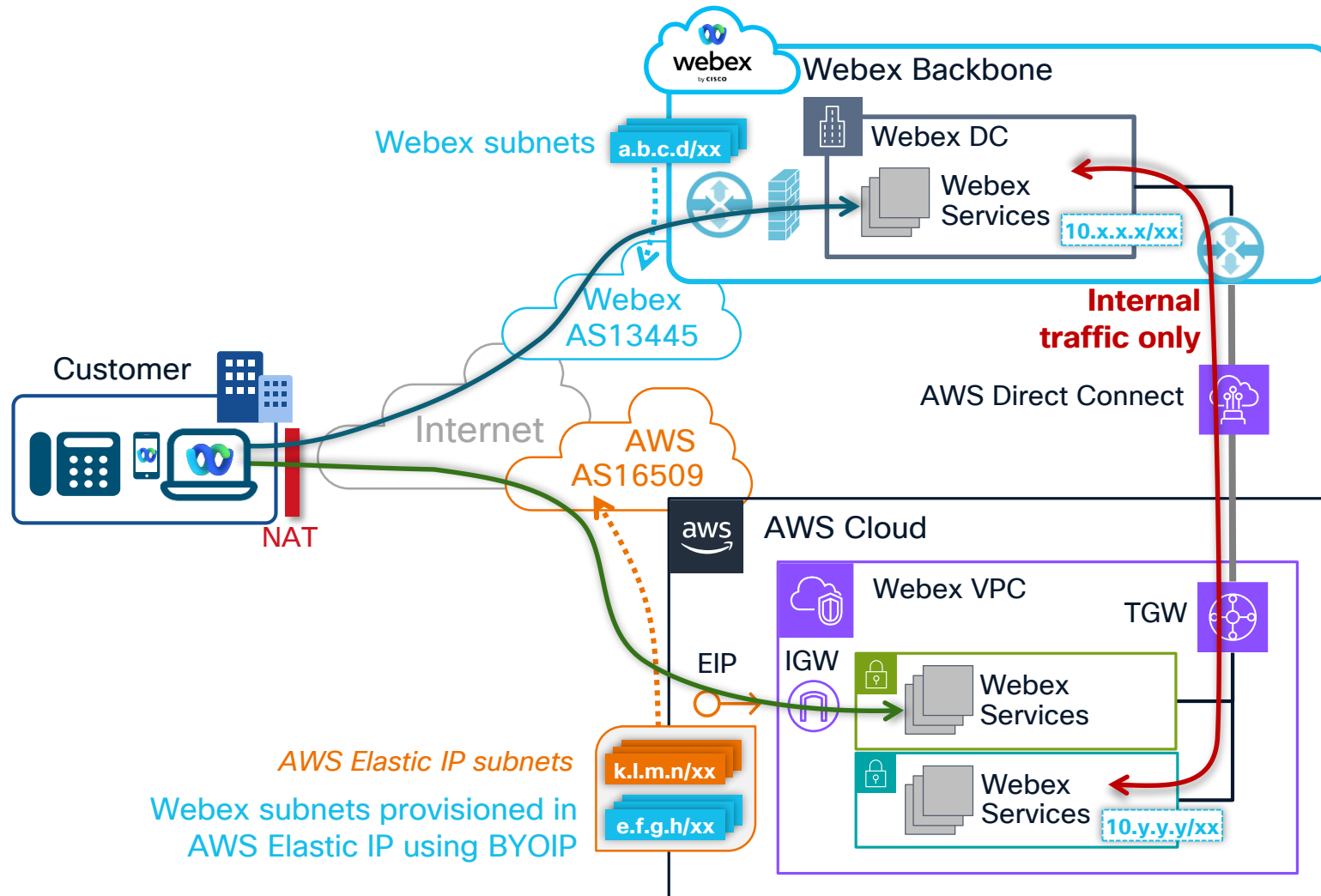
Internet Peering

Public Cloud Peering Landscape



Internet Peering

Hybrid Cloud: Internet via Webex Backbone and Public Cloud



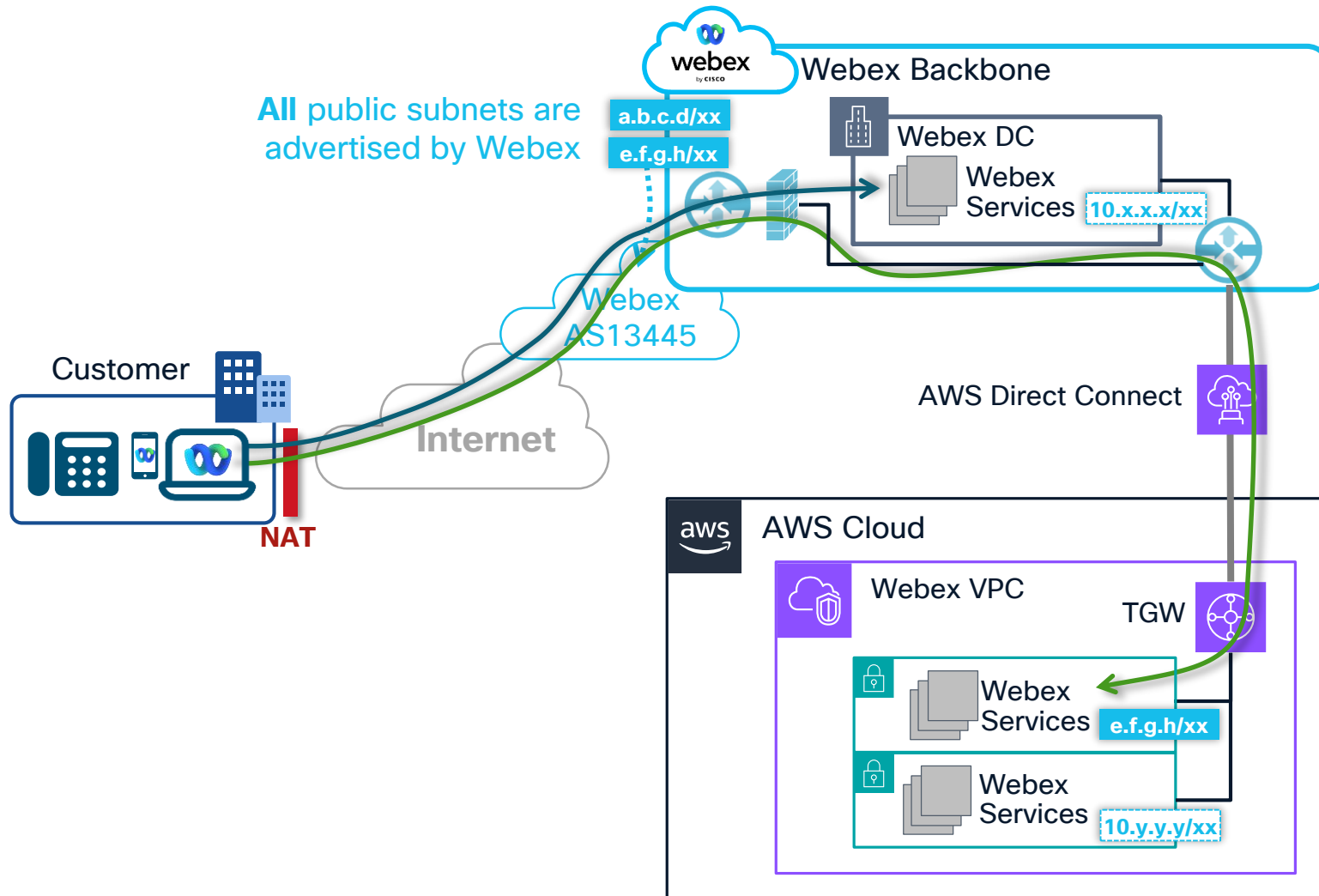
- Services running in public cloud are reached via the public cloud
- Leverages public cloud connectivity & presence
- Design best suited for:
 - Non-media services
 - Market expansion

Legend:

- `a.b.c.d/xx` Public IP subnet
- `10.y.y.y/xx` Private IP subnet
-➔ BGP route advertisement

Internet Peering

Hybrid Cloud: Internet via Webex Backbone



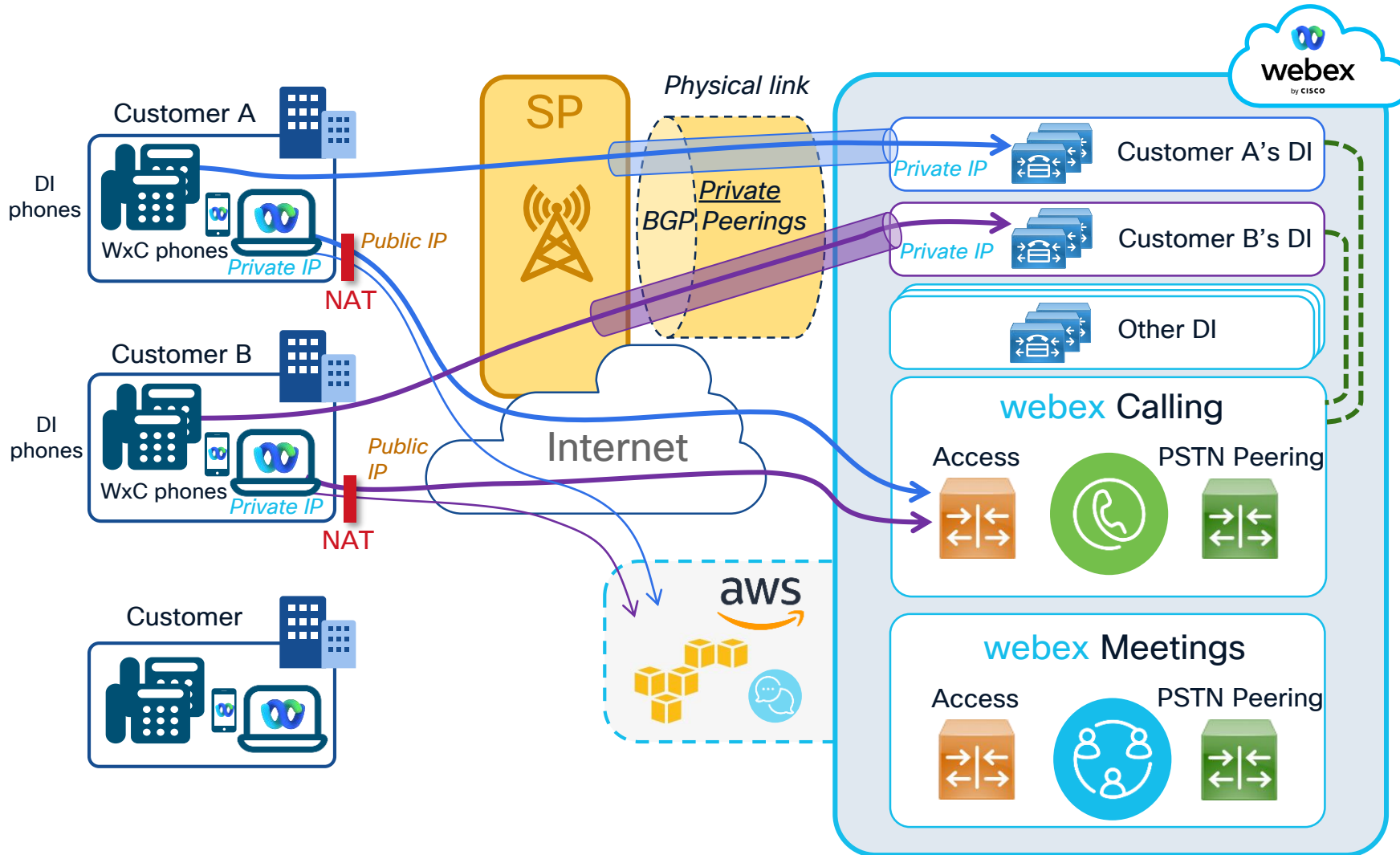
- Services running in public cloud are reached via the Webex backbone
- Public cloud seen as extension of Webex cloud
- Design best suited for:
 - Media services
 - Partner/customer peering

Legend:

- a.b.c.d/xx** Public IP subnet
- 10.y.y.y/xx** Private IP subnet
->** BGP route advertisement

SP Peering

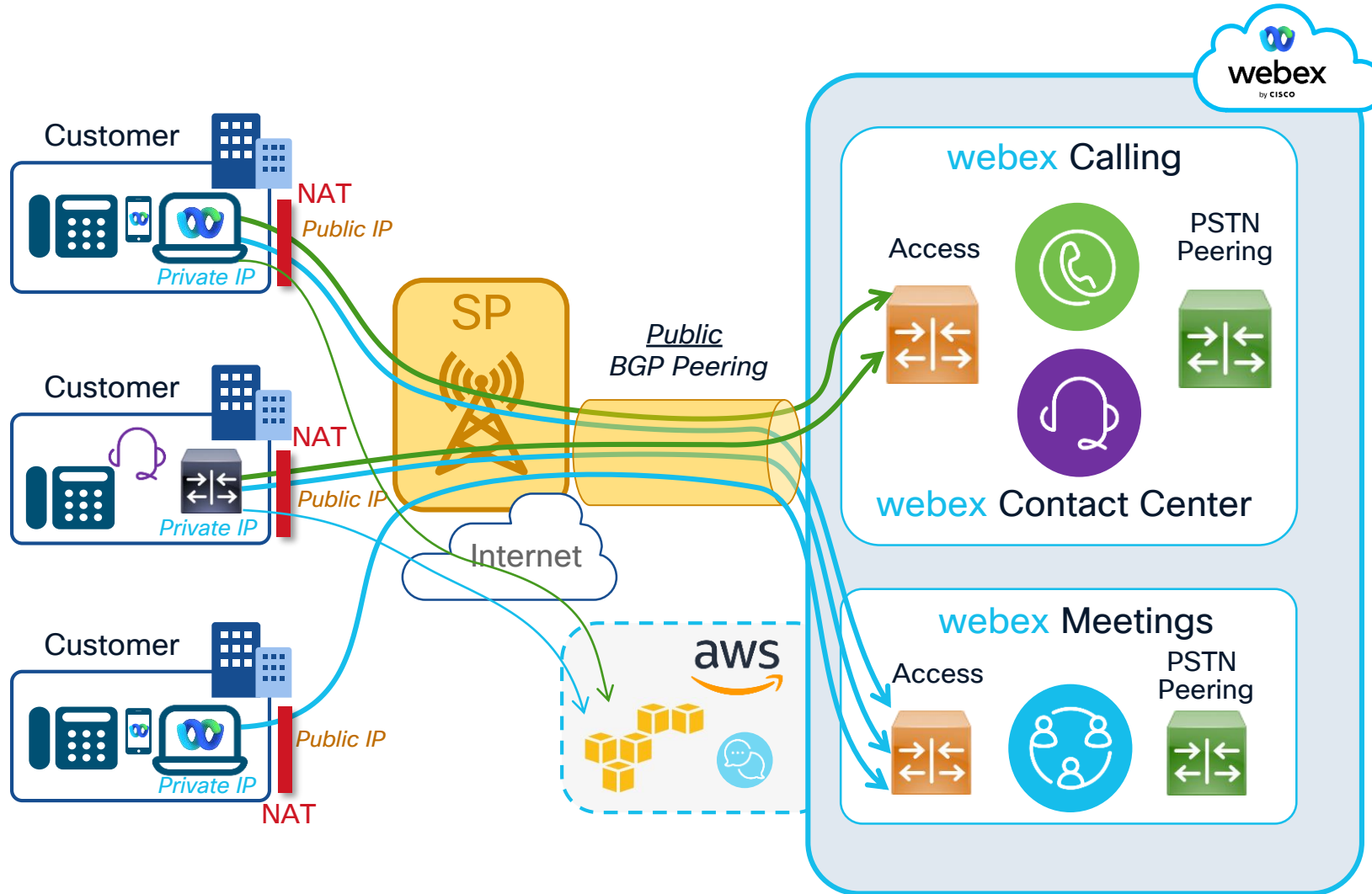
Dedicated Offerings: Partner Connect for Calling DI



- Shared peering link with per-customer VRF's
- Private peerings **only** towards customer's Dedicated Instance applications
- Multitenant offerings and public cloud services are still reached OTT

SP Peering

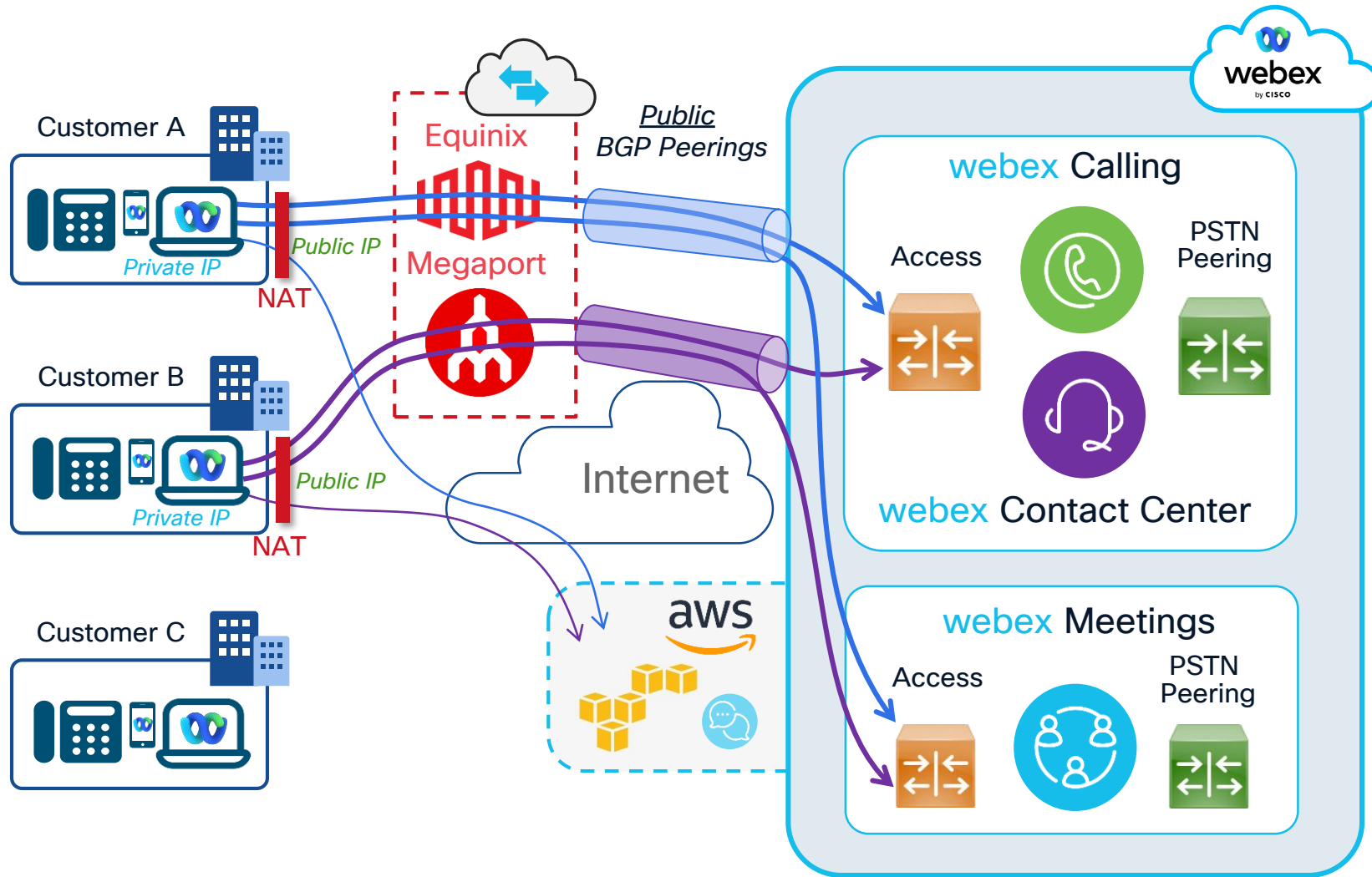
Multitenant Offerings: SP Interconnect



- Peering between SP and Webex cloud (public IP subnets)
- SP peering link carries **aggregate** traffic from all the SP's customers
- Some public cloud services are still reached OTT

Cloud Exchange Peering

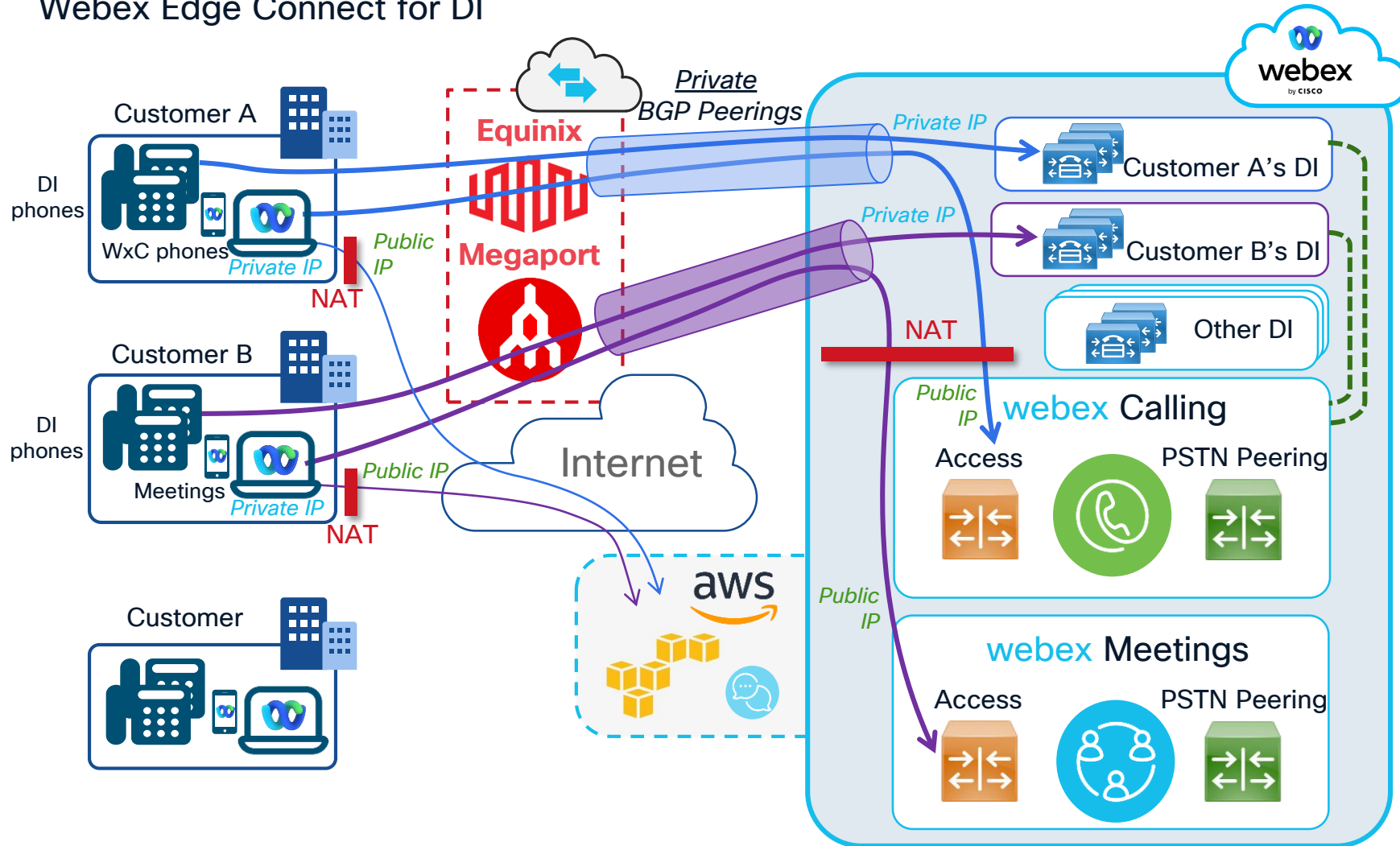
Webex Edge Connect for Meetings & Calling



- Per-customer peering via a Cloud Exchange provider
- Requires customer presence in Equinix/ Megaport POP and licenses
- Per-customer VRF with Cisco SLA
- Some public cloud services are still reached OTT

Cloud Exchange Peering

Webex Edge Connect for DI




- Single per-customer private peering for:
 - Dedicated Instance applications
 - Multitenant offerings
- NAT in Webex cloud provides access to public subnets of multitenant offerings
- Some public cloud services are still reached OTT

For more details: **BRKCOL-2094** “Webex Edge Connect Design and Deployment for Webex Meetings, Calling and DI”

Cloud Exchange Peering

Summary

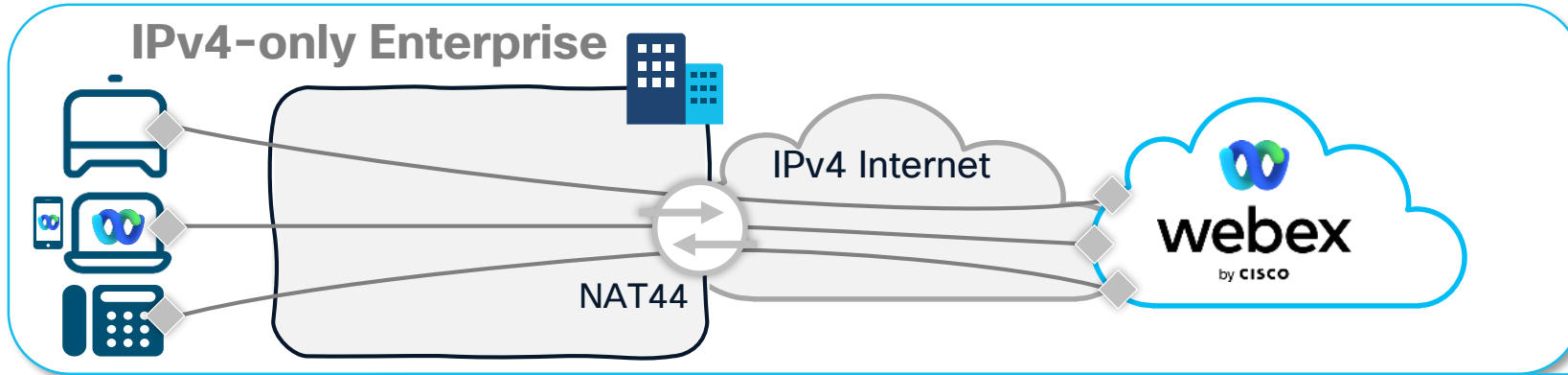
Calling (MT) Meetings Contact Center Calling DI Contact Center Enterprise

Solution	BGP Peering Type					
Webex Edge Connect for Meetings & Calling	Public	✓	✓	✓	✗	✗
Webex Edge Connect for DI	Private	✓	✓	✓	✓	✗
Webex Edge Connect for CCE	Private	✓	✓	✓	✓	✓

→ Only for Webex Calling DI customers

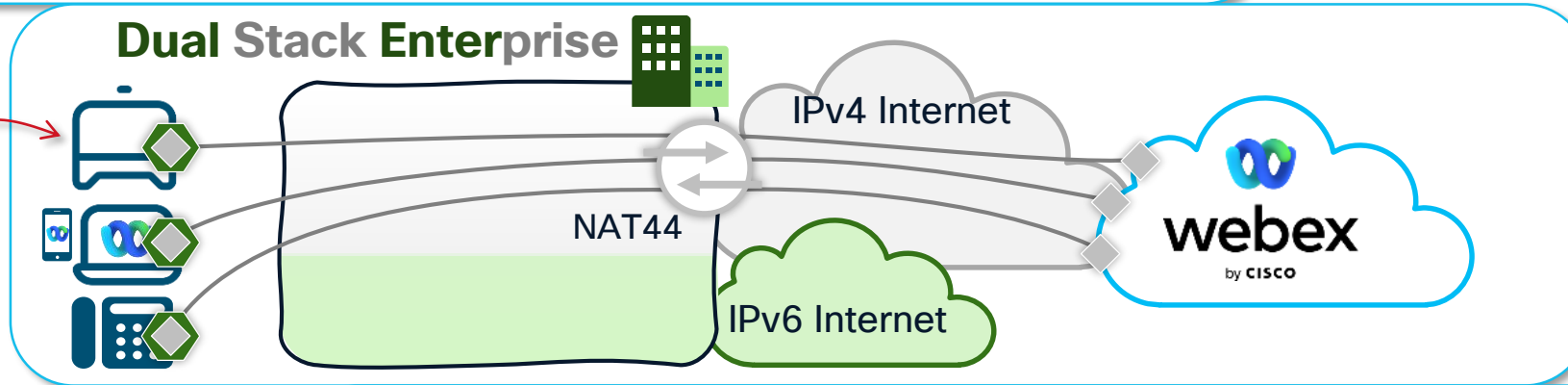
https://www.cisco.com/c/dam/en/us/td/docs/solutions/PA/EdgeConnect/PA_Edge_Connect_Design.pdf

IPv6: Deployment Types

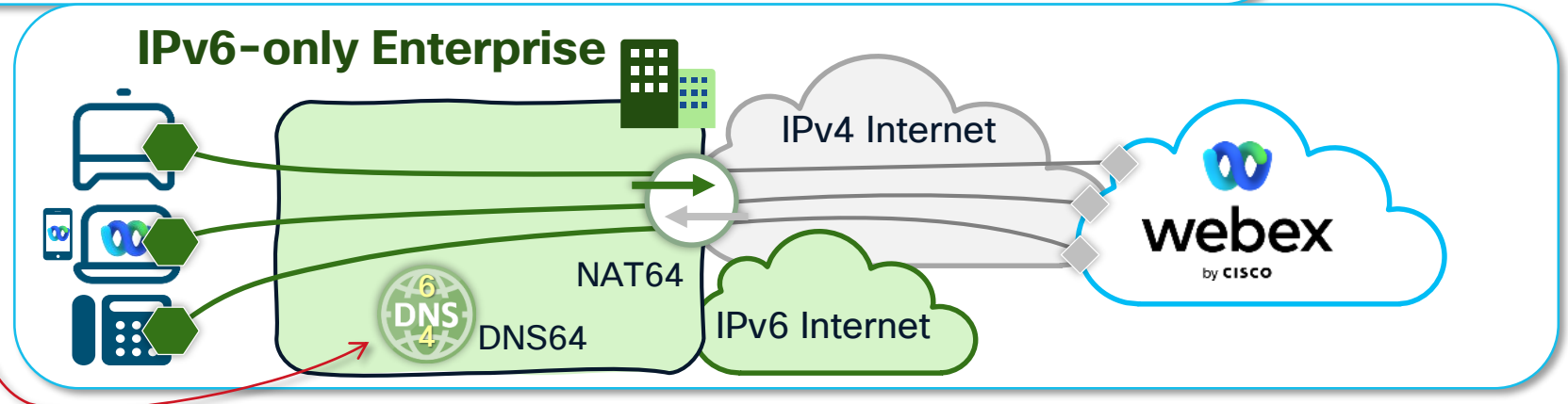


- ◆ IPv4 address
- ◆ IPv6 address
- ◆ IPv4 & IPv6 address
- IPv4 traffic
- IPv6 traffic

Webex apps and endpoints prefer IPv4 (today)

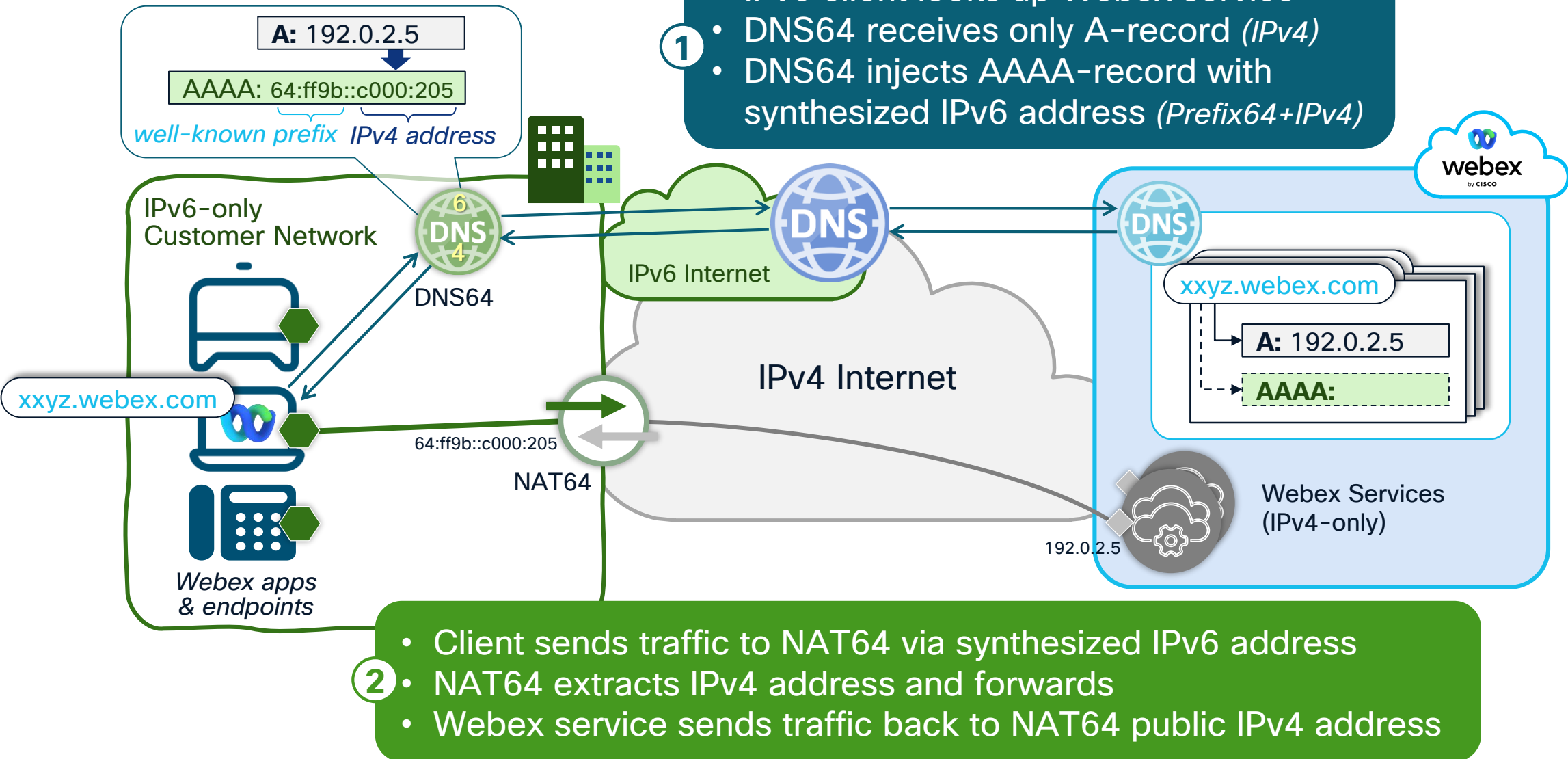


DNS64 and NAT64 required in IPv6-only networks today



IPv6

DNS64/NAT64



IPv6

DNS64/NAT64: Recommended Versions



Meetings* & Messaging



Room Devices:

Release 11.11.1.9 or higher



Webex App (desktop/mobile):

Release 45.2 or higher



Webex Web App:

Chrome, Edge, Safari



Video Mesh Node

* Meeting Suite Platform only (not “classic”)



Calling (BETA**)



Room Devices:

Release 11.6 or higher



Webex App (desktop/mobile):

Release 44.5 or higher



MPP Phones:

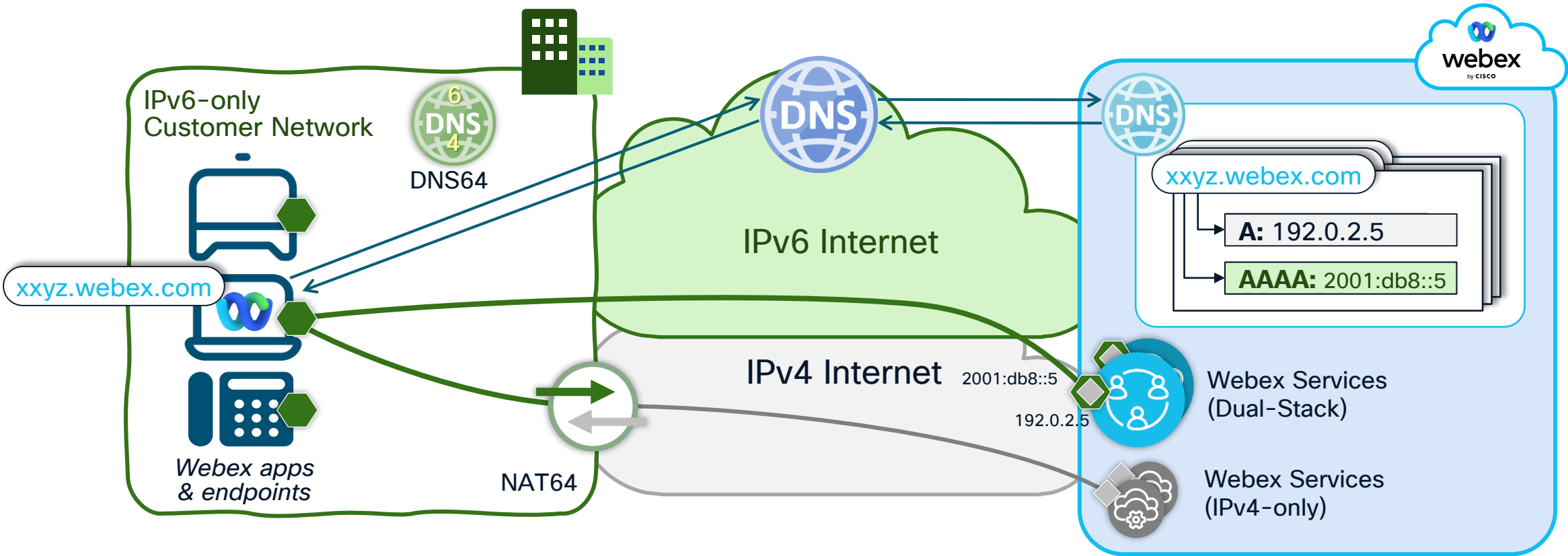
Release 12.0(5) or higher

** Contact Cisco Account Team to join Beta program

IPv6

Dual-Stack Webex Services: Meetings Media and Signaling

BETA

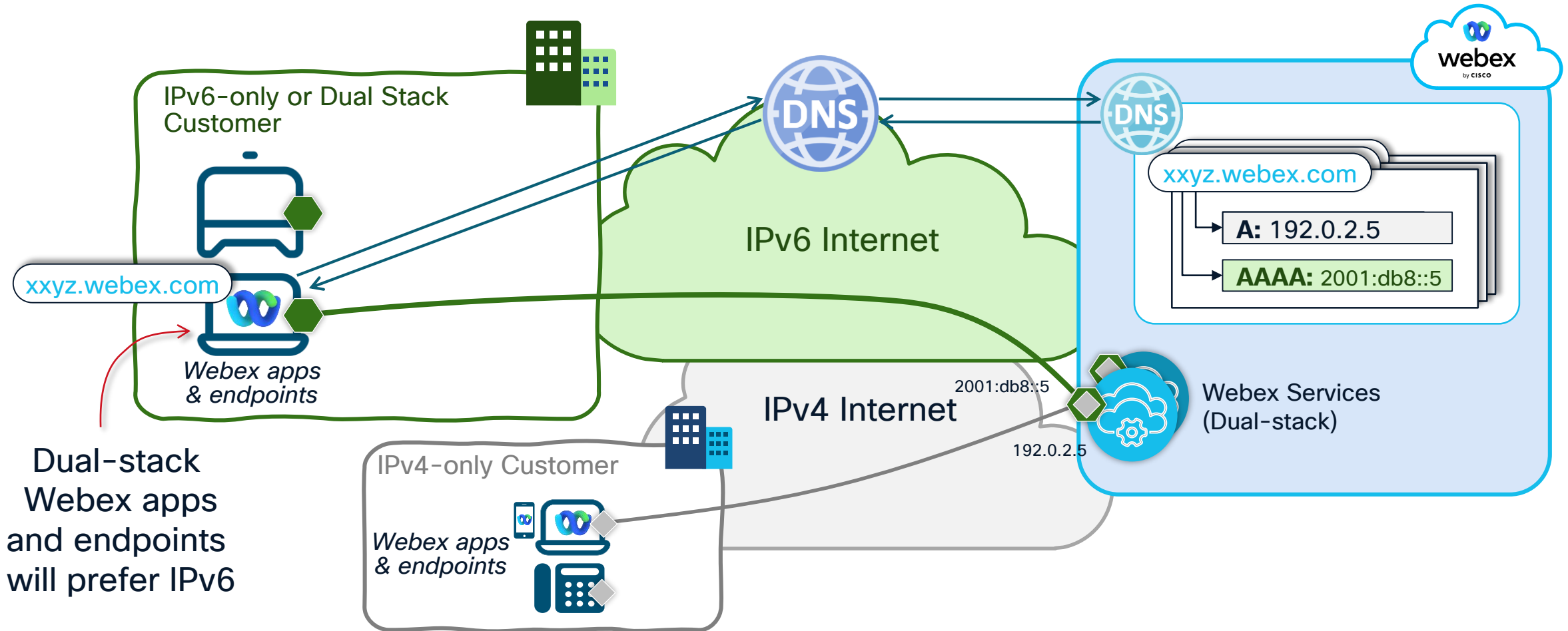


- **BETA***: Adding native IPv6 support for **Meetings media and signaling**
- DNS64/NAT64 still required for other types of traffic
- Plan to gradually enable dual-stack (IPv6-IPv4) on all Webex services

IPv6

Dual-Stack Webex Services: End Goal

Future
subject to change



IPv6

Dual-Stack Webex Services – IPv6 Subnets

- Prepare your network and firewall configuration with the Webex IPv6 subnets (*already added to public documentation*):

2402:2500::/34 (*APAC*)

2607:fcf0::/34 (*AMER*)

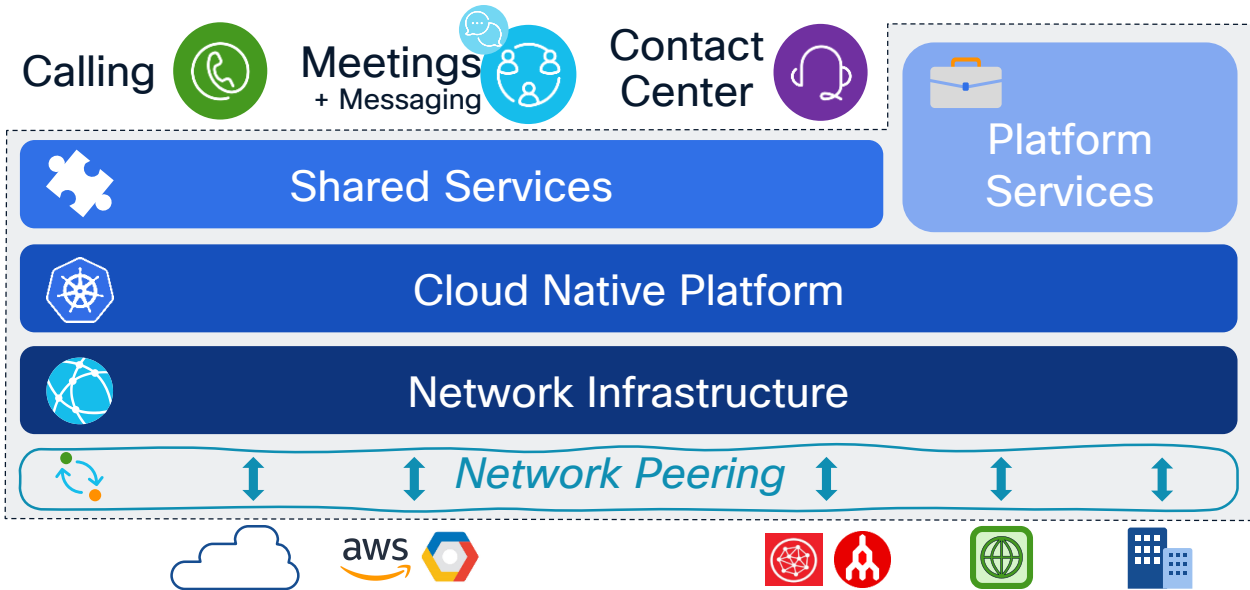
2a00:a640::/34 (*EMEA*)

<https://help.webex.com/en-us/article/WBX000028782/Network-Requirements-for-Webex-Services>

IPv6 References

- Administration guide for Webex Suite Meetings Platform: IPv6 support using customer-provided DNS64 and NAT64
<https://help.webex.com/en-us/article/040des/Administration-guide-for-Webex-Suite-Meetings-Platform:-IPv6-support-usingcustomer-provided-DNS64-and-NAT64>
- Cisco IP Phone 8800 Series MPP 12.0(5) Release Notes
https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cuipph/MPP/8800/firmware/12-0-5/p880_b_8800mpp-rn-1205.html#support-for-dns64-and-nat64
- IPv6 breakout sessions at Cisco Live San Diego:
 - **BRKIPV-2191** “IPv6:: It’s Happening!”
 - **BRKENT-2008** “Goodbye Legacy, the Move to an IPv6-only Enterprise”
 - **BRKENT-3340** “The Hitchhiker’s Guide to Troubleshooting IPv6”

Agenda



- 01 Introduction
- 02 Network Infrastructure
- 03 Cloud Native Platform
- 04 Platform & Shared Services
- 05 Data Residency
- 06 Edge Connectivity and Network Peering
- 07 Summary

Summary

Summary

Key Aspects of the Webex Platform

- Hybrid cloud infrastructure combining private cloud and public cloud for global reach and high performance
- Modern **cloud native** architecture built on top of best-in-class off-the-shelf SaaS components
- Common services shared across applications
- Data residency options for persistent personal data
- Multiple network peering options

Webex Insider

Powered by Cisco Insider

Form the Future of Webex

Participate in our continuous research and feedback program



Already part of the Cisco Insider Program?
Expand your reach by joining the collaboration track



Complete Your Session Evaluations



Complete a minimum of 4 session surveys and the Overall Event Survey to be entered in a drawing to win 1 of 5 full conference passes to Cisco Live 2026.



Earn 100 points per survey completed and compete on the Cisco Live Challenge leaderboard.



Level up and earn exclusive prizes!



Complete your surveys in the Cisco Live mobile app.

Continue your education



Visit the Cisco Showcase for related demos



Book your one-on-one Meet the Engineer meeting



Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs



Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand

Contact me on Webex at: stefanog@cisco.com

Thank you

CISCO Live !

