



Webex Wholesale Route-to-Market (RTM)

Technical Decision Maker Overview



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- Solution overview
- Platform
- Architecture, Scale & Redundancy
- Billing
- Wholesale API's
- Webex Assist
- Migration Tool
- Partner Hub & Control Hub
- Network Diagram
- Devices
- Emergency Calling
- PSTN Connectivity
- Failure Scenarios High Availability, Monitoring
- Partner Hub Analytics
- Branding
- Resources

Business calling available anywhere

Cloud innovation with calling deployment flexibility

The screenshot displays the Cisco Webex user interface. On the left, a sidebar shows a list of contacts including Brandon Burke, Identity Design, Giacomo Drago, and Brenda Song. A 'Call settings' pop-up is open, showing options for 'Hunt group' (enabled), 'Forward phone calls to' (set to Voicemail), and 'Single number reach' (with 'Mobile' checked and two phone numbers listed). A 'Call forwarding, single number reach, Hunt group' label points to these settings. The main area shows a conversation with Brandon Burke, including text messages and a video call in progress. A 'Visual voicemail' label points to the voicemail icon in the sidebar. A 'Multiline' label points to the 'Call pickup' button at the bottom. A 'Personal preference Management' label points to the 'Call settings' button. A 'Hold / resume, transfer, merge / conference' label points to a call control menu overlaid on the video call, which includes options like Hold, Transfer, Merge, Add a person, and Keypad. On the right, a 'Calling options' panel shows multiple phone numbers for Brandon Burke (Work, Mobile, Home) and a 'Webex Teams Call' option. A 'Desk-phone & room device pairing and control' label points to the 'Connect to a device' button at the top right. Below the main interface, two mobile app screens are shown, one for a man and one for a woman, both displaying a video call. A 'Messaging, Integrations & Team Tools' label points to the top navigation bar.

Visual voicemail

Call-forwarding, single number reach, Hunt group

Personal preference Management

Multiline

Audio and video calls or meeting

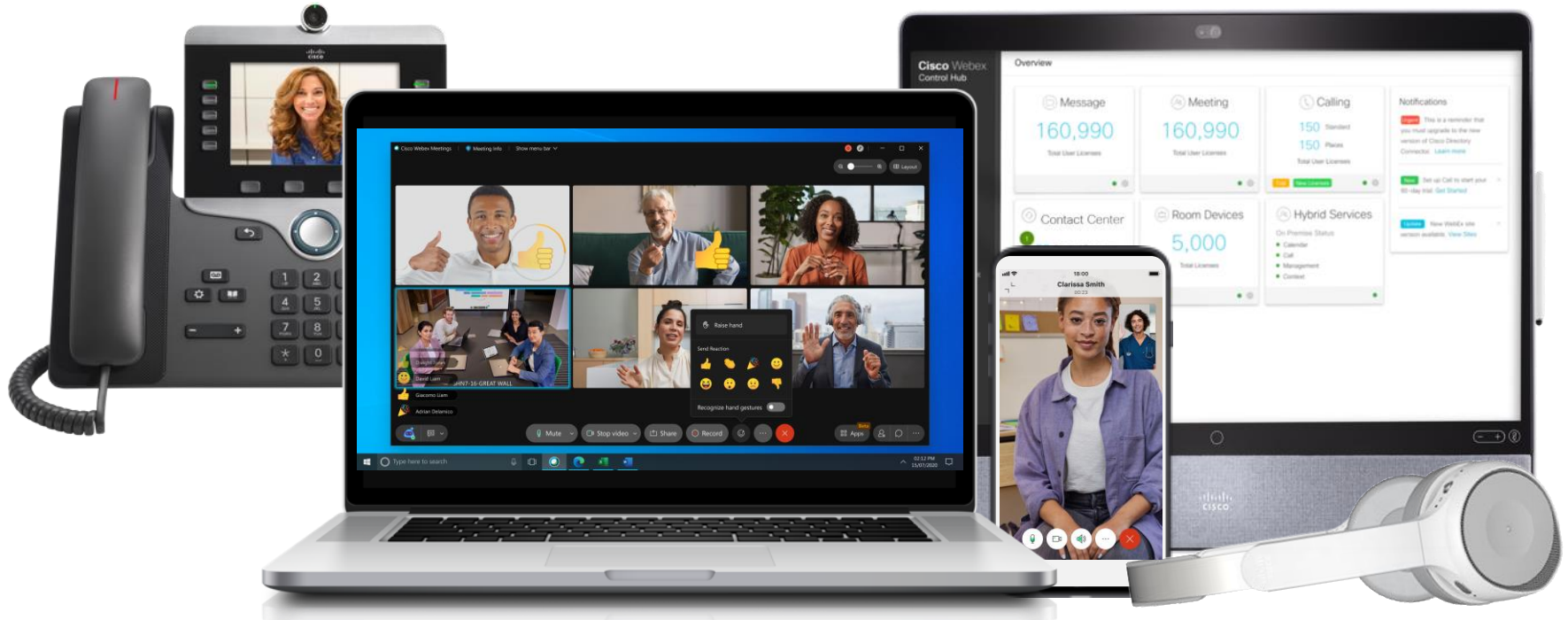
Messaging, Integrations & Team Tools

Calling options

Desk-phone & room device pairing and control

Hold / resume, transfer, merge / conference

Seamless experiences across all your devices



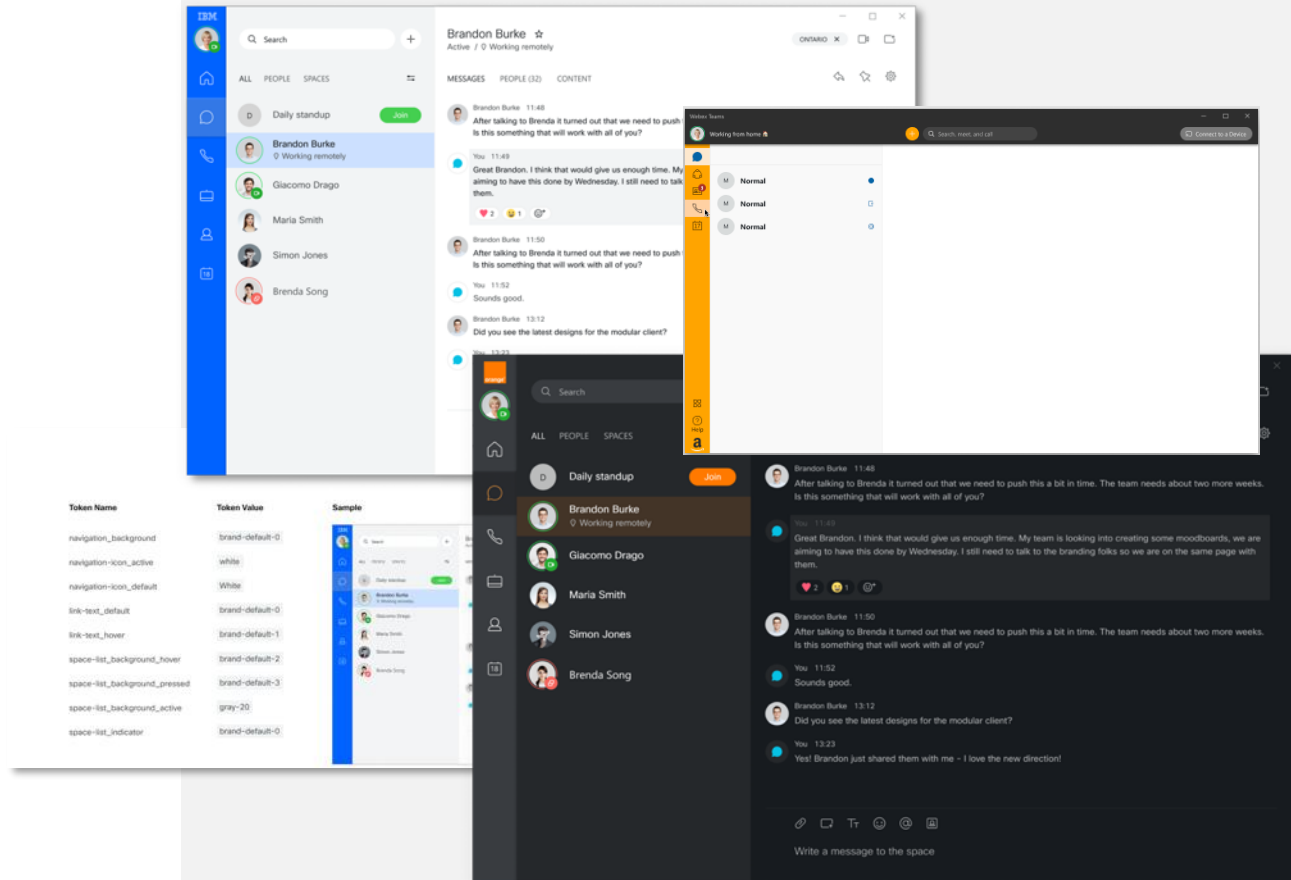
Integrations

Improve your efficiency and get things done faster

- Share and view files from OneDrive, Google, Microsoft, or Box within the Webex App
- Schedule, start and join meetings from Slack, Google Cloud, Microsoft, and Salesforce
- Use Webex within other apps and with third party devices



Webex App with your brand



Cisco and You:

Better together



Partner

- Strong recognized brand
- Extensive customer reach
- Quality of service & support
- High-velocity, high-volume business
- Mobile & access networks, PSTN
- Managed Service wrappers

Cisco

- Rapid innovation cycles
- One unified client experience
- Integrated hardware portfolio
- Full-stack, cross-architecture offers
- Single, secure platform
- Simplified management

A man with grey hair, wearing a blue suit jacket over a blue button-down shirt, is walking outdoors. He is wearing large black over-ear headphones and holding a black smartphone in his right hand. He is smiling and looking to his left. A black bag strap is visible over his shoulder. The background shows a modern building with large glass windows and some greenery, slightly out of focus.

Wholesale Route-to-Market

Platform overview

Introducing a new Wholesale route-to-market for Service Providers to sell with a wholesale monthly consumption model enabling high-velocity, transactions ideally suited for the SMB

- New APIs
- New Partner Portal features
- New Billing
- With simple user experiences
- Support for 3rd party devices
- Co-branded with you

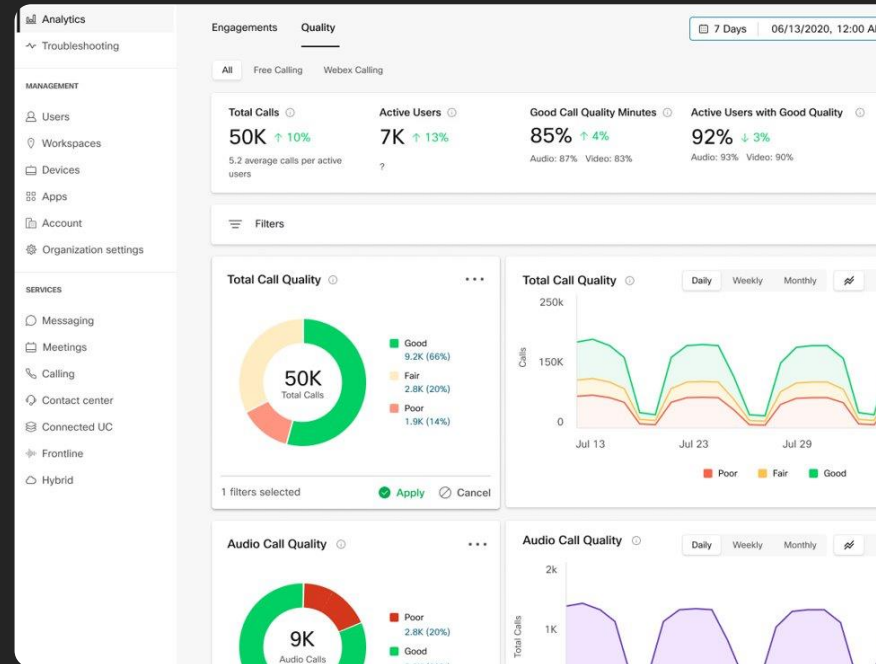


Wholesale portal

Partner Hub is built on top of Control Hub with access to everything available in Control Hub

Partner Hub provides capabilities to:

- Set up Partner administration
- Co-Brand the offer
- Manage templates
- Manage customers
- View analytics



Wholesale API

The Wholesale API automates the partner digital workflows

- Manage templates
- Provision customer organizations
- Provision users

Future Wholesale APIs will:

- Manage group and locations
- Configure user services
- Perform Bulk provisioning

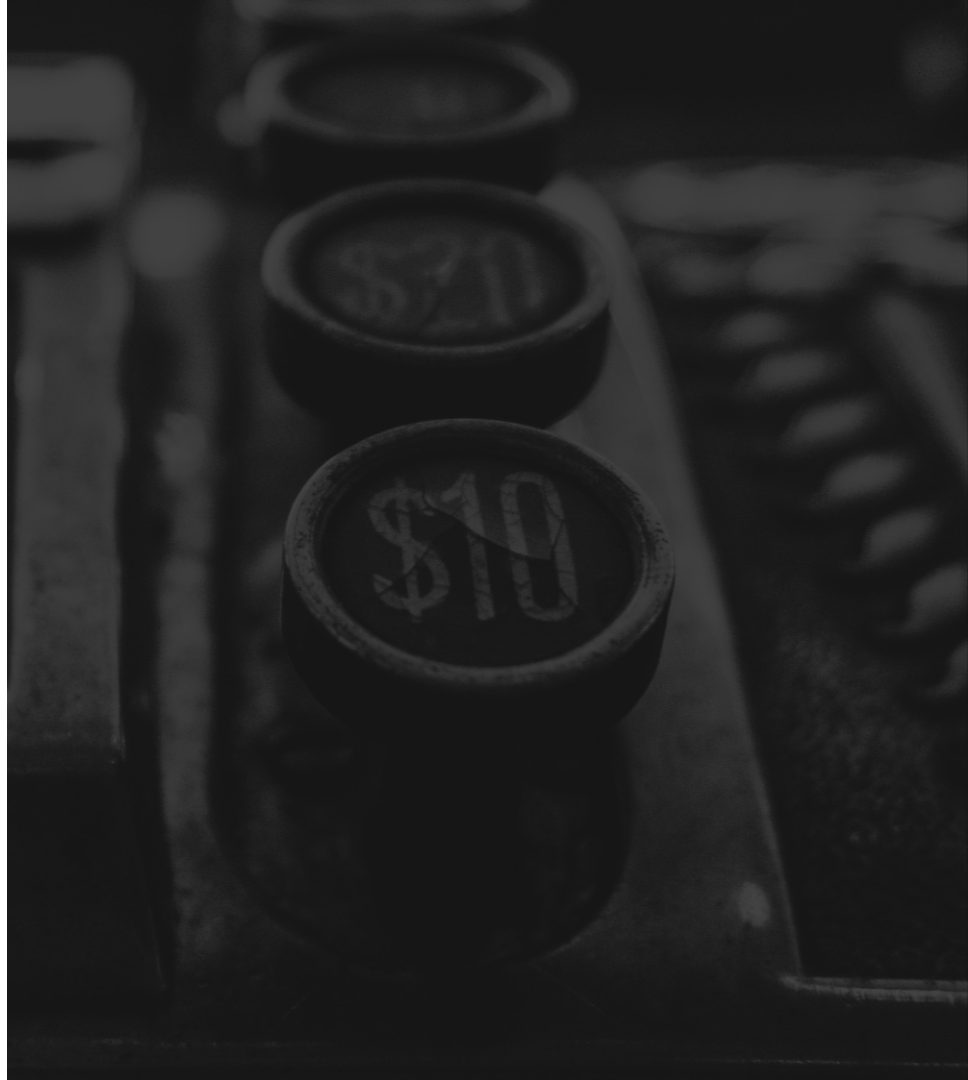
Wholesale billing

The Wholesale RTM introduces consumption-based billing

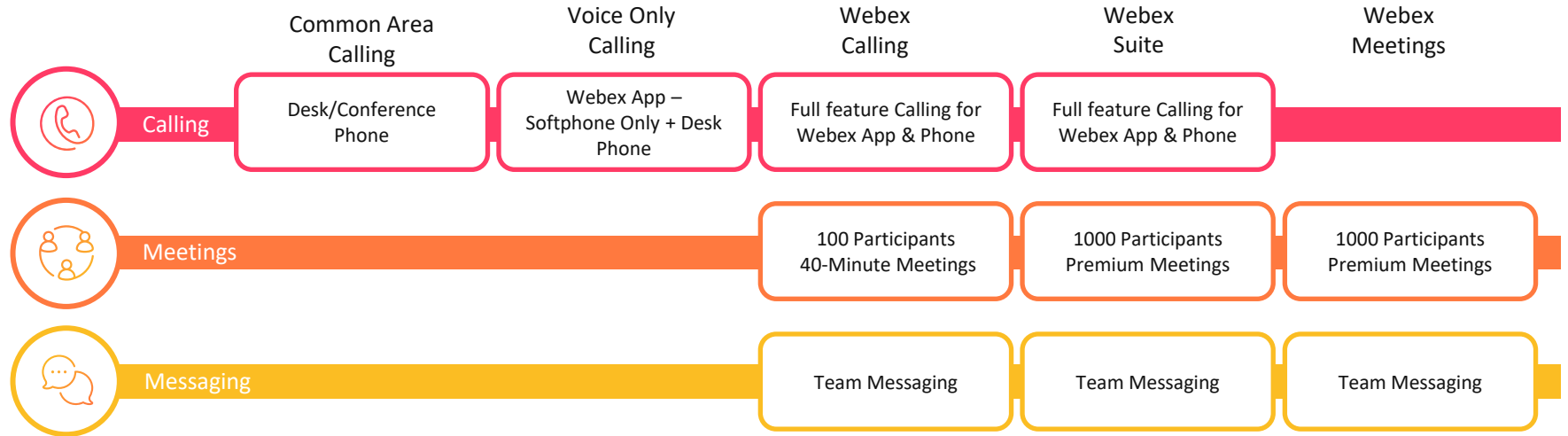
- Fixed, predictable per-user/per-month package pricing
- Monthly invoices in arrears
- Net number of active subscribers pro-rated to provisioning date

Partners also have access to the following information:

- Call Detail Records - total or per customer
- Current subscription consumption
- On-demand detailed billing reports



Webex packages



Wholesale RTM Value Proposition to Partners

1

Utility-based, high-velocity transaction model for Webex Calling

2

Evolution path for BroadCloud Carrier partners with seamless migration

3

Highly competitive collaboration solution targeted at SMB

4

Single pane of glass management without the complexity

5

Rich solution with continuous investment from Cisco

Wholesale RTM provides Cisco partners with our richest collaboration solution in a commercial model designed for the SMB segment

A man with a beard and glasses, wearing a blue and black striped sweater and khaki pants, is walking in a modern office. He is wearing a headset and holding a smartphone in his right hand and an orange mug in his left hand. The background shows a bright office space with red chairs and pendant lights. A large blue circle is overlaid on the right side of the image, containing the text 'Architecture Scale, Redundancy' in white.

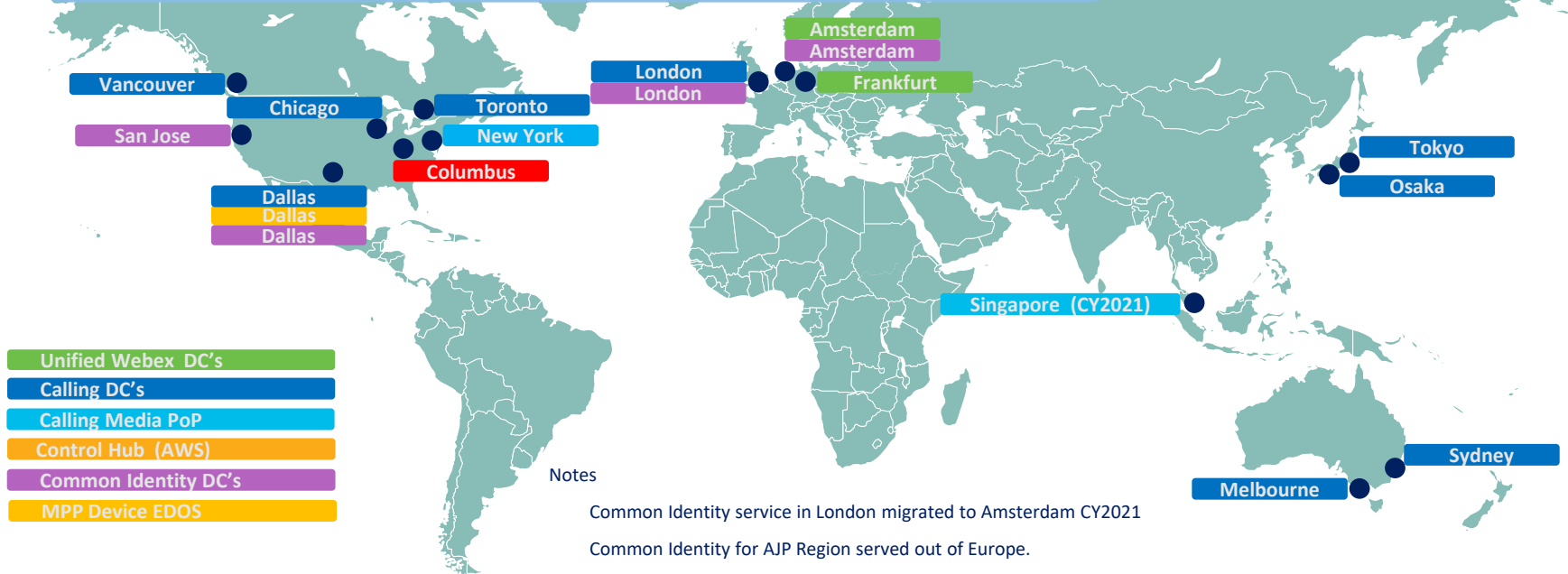
Architecture Scale, Redundancy

Webex Global Footprint

Global platform offers services to multinational customers from a single region

Global backbone purposely designed for audio and video transport

Low loss 100+ Gigabit interconnectivity with multiple redundant paths

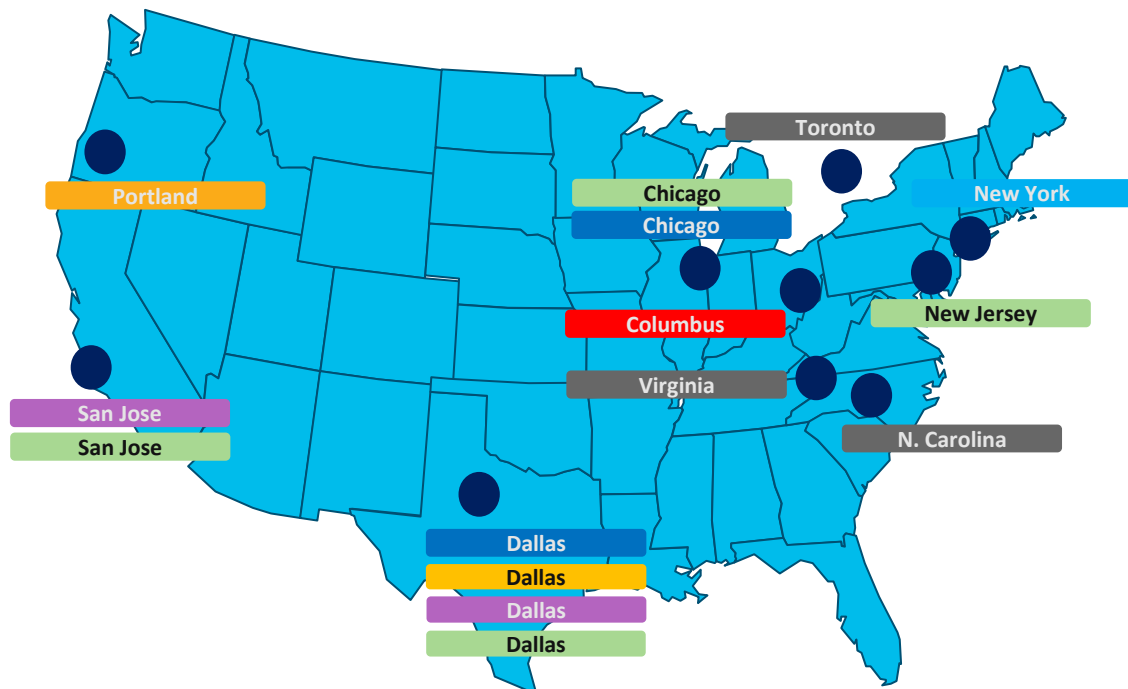


Webex US Footprint – Data Centers

Global platform offers services to multinational customers from a single region

Global backbone purposely designed for audio and video transport

Low loss 100+ Gigabit interconnectivity with multiple redundant paths



Webex Internet PoPs

Webex Data Centers

Calling Data Centers

Calling Media PoP

Control Hub (AWS)

Common Identity DC's

MPP Device EDOS

<https://help.webex.com/en-US/article/WBX28754/Where-are-the-Webex-Data-Centers-and-iPOP-Locations?>

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Wholesale Workflows

SP Billing

Cisco IT

I2C

SBP

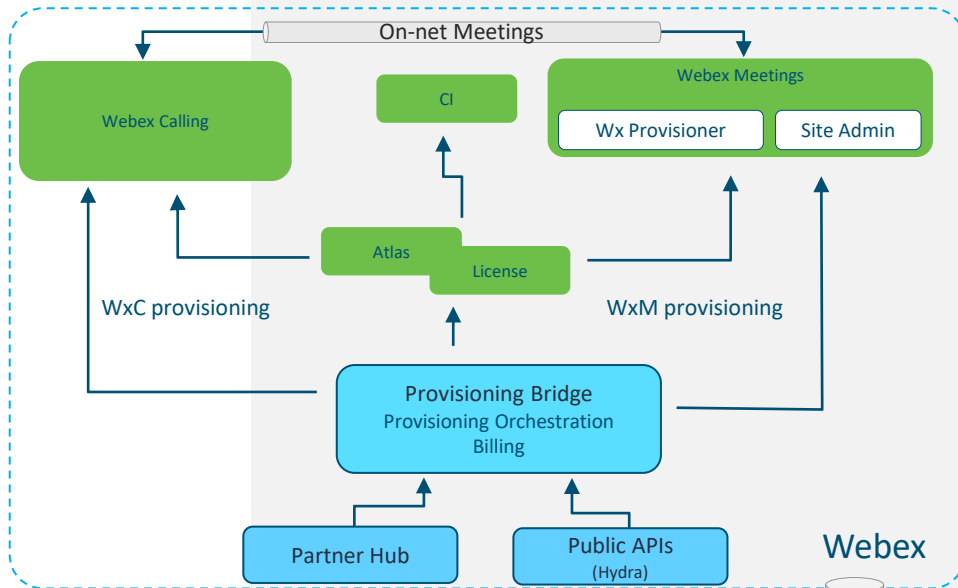
CCW

2 Monthly Invoice
(Post Paid, Usage Based)

1 Single Wholesale PO



1T/Disti



SP Administration



SP
Seller/
Admin

Order Management
Customer Billing

2a

Pricing

2b

Order Fulfillment
Customer Mgmt
Analytics
Billing
Reconciliation

Webex

Network Peering

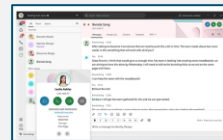
- ✓ Access VNC
- ✓ SIP Interconnect

SP Network

Customer Access

Control Hub

End User Portals



Webex App



Phones



Room Systems

webex



Billing



SP Billing

Typical Hierarchy

Billing Party

The entity (like a Distributor) who manages contract with Cisco

Contracted Service Provider

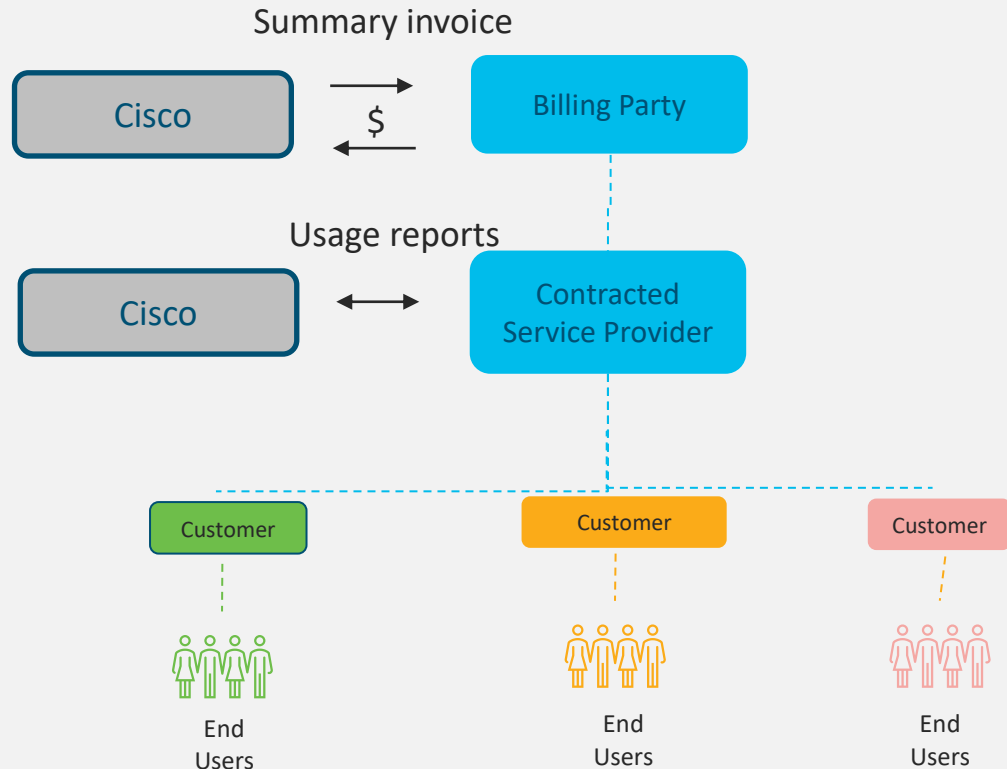
The Contracted Services provider who has agreed to offer Cisco Collaboration either directly or via Billing Party. SP billed based on combined usage of all Customers under it.

Customer

These are the end customers, purchasing services of their Service Provider.

End Users

These are the end users of the system, associated with each end customer.



SP Billing – Summary Invoice

Invoice focuses on overall cost to contracted Service Provider.

- No Breakdown of Usage Per Customer

This detail will instead be exposed via Billing/Usage Reports accessible via report API and Partner hub.

Sample Invoice Content



CISCO **INVOICE** **COPY** PAGE NO.
1 of 3

CISCO SYSTEMS, INC.
170 West Tasman Drive,
San Jose, CA 95134

REMIT TO:
[REDACTED]

BILL TO:
[REDACTED]
UNITED STATES

SERVICE TO:
[REDACTED]
UNITED STATES

Billing inquiries: us-dist@cisco.com, +1 408-434-1377

INVOICE NUMBER	TRK DATE	AMOUNT
[REDACTED]	01-SEP-2022	25,000.00
PO NUMBER	DUE DATE	CURRENCY
[REDACTED]	01-OCT-2022	USD
PREVIOUS TRANSACTION #	TERMS	WEB ORDER ID
[REDACTED]	30 NET	[REDACTED]
CUSTOMER NUMBER	BILL TO NUMBER	ORDER DATE
[REDACTED]	[REDACTED]	[REDACTED]

SUMMARY OF CHARGES	
RECURRING CHARGES	25,000.00
USAGE/OVERAGE CHARGES	0.00
OTHER CHARGES	0.00
SUBTOTAL (EXCL. TAX)	25,000.00
TAXES	0.00
TOTAL AMOUNT (INCL. TAX)	25,000.00

RECURRING CHARGES								
PO LINE#	LINE NO	SERVICE DESCRIPTION	DURATION MONTH(S)	QTY	RATE PRICE	TAX RATE (%)	TAX AMOUNT	EXTENDED AMOUNT (Excl. Tax)
A-WHOLESALE Webex for Wholesale Subscription ID: [REDACTED] Billing Period: 1-Sep-22 to 30-Sep-22 Reseller - [REDACTED] Reseller Number - [REDACTED] Reseller Site Id - [REDACTED]								
0	1	A-W-CS-MNTH-Wholesale Committed Monthly Spend	1	25,000	1.00 Per USD / mh	0	0.00	25,000.00
SUB TOTAL							0.00	25,000.00

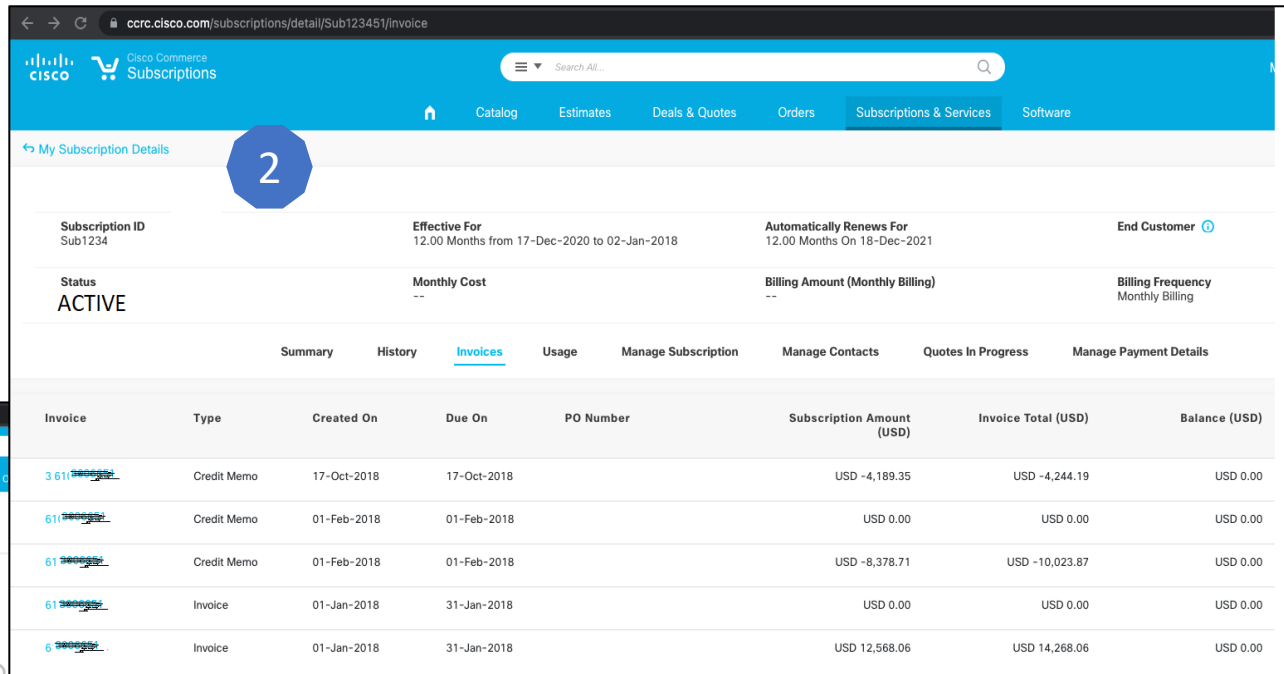
USAGE/OVERAGE CHARGES								
PO LINE#	LINE NO	SERVICE DESCRIPTION	DURATION MONTH(S)	QTY	RATE PRICE	TAX RATE (%)	TAX AMOUNT	EXTENDED AMOUNT (Excl. Tax)
SUB TOTAL							0.00	0.00

OTHER CHARGES								
PO LINE#	LINE NO	SERVICE DESCRIPTION	DURATION MONTH(S)	QTY	RATE PRICE	TAX RATE (%)	TAX AMOUNT	EXTENDED AMOUNT (Excl. Tax)
SUB TOTAL							0.00	0.00
TOTAL							0.00	25,000.00
Total Amount (Incl. Tax)							USD 25,000.00	

EXTENDED AMOUNT (Excl. Tax) = (DURATION * QTY * (RATE PRICE/PRICING TERM))

Download Invoice

Email to billing contact by default
CCW
B2B integrated(existing B2B
commerce partner)



ccrc.cisco.com/subscriptions/detail/Sub123451/invoice

My Subscription Details

Subscription ID: Sub1234

Effective For: 12.00 Months from 17-Dec-2020 to 02-Jan-2018

Automatically Renews For: 12.00 Months On 18-Dec-2021

End Customer

Status: ACTIVE

Monthly Cost: --

Billing Amount (Monthly Billing): --

Billing Frequency: Monthly Billing

Summary History **Invoices** Usage Manage Subscription Manage Contacts Quotes In Progress Manage Payment Details

Invoice	Type	Created On	Due On	PO Number	Subscription Amount (USD)	Invoice Total (USD)	Balance (USD)
3 61	Credit Memo	17-Oct-2018	17-Oct-2018		USD -4,189.35	USD -4,244.19	USD 0.00
61	Credit Memo	01-Feb-2018	01-Feb-2018		USD 0.00	USD 0.00	USD 0.00
61	Credit Memo	01-Feb-2018	01-Feb-2018		USD -8,378.71	USD -10,023.87	USD 0.00
61	Invoice	01-Jan-2018	31-Jan-2018		USD 0.00	USD 0.00	USD 0.00
6	Invoice	01-Jan-2018	31-Jan-2018		USD 12,568.06	USD 14,268.06	USD 0.00

URL: <https://ccrc.cisco.com/subscriptions/landing>

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SP Billing – Billing Reports

API

- APIs provides customer and user breakdown reports to the Service Providers or Partners.
- Viewing billing reports requires a partner administrator auth token with spark-admin:wholesale_billing_reports_read scope
- Creating, Deleting billing reports require a partner administrator auth token with spark-admin:wholesale_billing_reports_write scope

Method	Description
GET https://webexapis.com/v1/wholesale/billing/reports	List Wholesale Billing Reports
GET https://webexapis.com/v1/wholesale/billing/reports/{id}	Get a Wholesale Billing Report
POST https://webexapis.com/v1/wholesale/billing/reports	Create a Wholesale Billing Report
DELETE https://webexapis.com/v1/wholesale/billing/reports/{id}	Delete a Wholesale Billing Report

<https://developer.webex.com/docs/api/v1/wholesale-billing-reports>

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Wholesale Billing Reports

PARTNER
Report

CUSTOMER
Report

USER
Report

	A	B	C	D	E	F	G	H	I
1	PARTNER_NAME	PARTNER_ORG_ID	SUBSCRIPTION_ID	SERVICE_NAME	SKU	DESCRIPTION	CONSUMPTION_START_DATE	CONSUMPTION_END_DATE	QUANTITY
2	BPB_Wholesale_Billing_TtY2lzY29zcGFyazovL3\	Sub12345		WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Webex Suite Usage	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	4876.25
3	BPB_Wholesale_Billing_TtY2lzY29zcGFyazovL3\	Sub12345		WEBEX_CALLING	A-W-WXC-CALL-U	Wholesale Webex Calling Usage	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	4842.3333
4	BPB_Wholesale_Billing_TtY2lzY29zcGFyazovL3\	Sub12345		MEETINGS_TOLL_DIALIN	A-W-TOLL-DIALIN-U	Wholesale Webex Toll Dial-in Usage	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	4360.8333
5	BPB_Wholesale_Billing_TtY2lzY29zcGFyazovL3\	Sub12345		COMMON_AREA_CALLING	A-W-CA-CALL-U	Wholesale Common Area Calling Usage	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	9718.9158

SKU	Sum of QUANTITY
A-W-CA-CALL-U	9718.9158
A-W-TOLL-DIALIN-U	4360.8333
A-W-WXC-CALL-U	4842.3333
A-W-WXS-SUITE-U	4876.25
Grand Total	23798.3324

Partner Report Above gets you primarily SKU & associated Total.



Wholesale Billing Reports-Customer level consumption

PARTNER Report

CUSTOMER Report

USER Report

	A	B	C	D	E	F	G	H	I	J	K
1	PARTNER_NAME	PARTNER_ORG_ID	SUBSCRIPTION_ID	CUSTOMER_ORG_ID	CUSTOMER_EXTERNAL_ID	SERVICE_NAME	SKU	DESCRIPTION	CONSUMPTION_START_DATE	CONSUMPTION_END_DATE	QUANTITY
2	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09SROFI	Sub12345	Y2lZy29zcGFyazovL3VzL09SROFI	evl nFIIK nPWl nI7WD	WFBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1179.9582
3	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	CUSTOMER_ORG_ID + SKU	Sum of QUANTITY		:BEX_CALLING	A-W-WXC-CALL-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	664.1249
4	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S		= Y2lZy29zcGFyazovL3VzL09S		ETINGS_TOLL_DIALIN	A-W-TOLL-DIALIN-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	664.1249
5	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-CA-CALL-U		1944.3327	MMON_AREA_CALLING	A-W-CA-CALL-U	Wholesale Com	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1843.9165
6	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-TOLL-DIALIN-U		972.1248	:BEX_CALLING	A-W-WXC-CALL-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1156.2086
7	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-WXC-CALL-U		972.1248	:BEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	837.4585
8	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-WXS-SUITE-U		971.8749	ETINGS_TOLL_DIALIN	A-W-TOLL-DIALIN-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	837.4585
9	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	= Y2lZy29zcGFyazovL3VzL09S		4352.1245	MMON_AREA_CALLING	A-W-CA-CALL-U	Wholesale Com	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1994.0415
10	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-CA-CALL-U		1843.9165	:BEX_CALLING	A-W-WXC-CALL-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1103
11	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-TOLL-DIALIN-U		664.1249	:BEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	940.2501
12	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-WXC-CALL-U		664.1249	ETINGS_TOLL_DIALIN	A-W-TOLL-DIALIN-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	940.2501
13	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-WXS-SUITE-U		1179.9582	MMON_AREA_CALLING	A-W-CA-CALL-U	Wholesale Com	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	2042.8753
14	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	= Y2lZy29zcGFyazovL3VzL09S		4825.1671	:BEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	946.7083
15	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-CA-CALL-U		1994.0415	:BEX_CALLING	A-W-WXC-CALL-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	946.875
16	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-TOLL-DIALIN-U		837.4585	ETINGS_TOLL_DIALIN	A-W-TOLL-DIALIN-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	946.875
17	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-WXC-CALL-U		1156.2086	MMON_AREA_CALLING	A-W-CA-CALL-U	Wholesale Com	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1893.7498
18	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-WXS-SUITE-U		837.4585	:BEX_CALLING	A-W-WXC-CALL-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	972.1248
19	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	= Y2lZy29zcGFyazovL3VzL09S		4734.2081	ETINGS_TOLL_DIALIN	A-W-TOLL-DIALIN-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	972.1248
20	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-CA-CALL-U		1893.7498	:BEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	971.8749
21	BPB_Wholesale_Bill	Y2lZy29zcGFyazovL3VzL09S	A-W-TOLL-DIALIN-U		946.875	MMON_AREA_CALLING	A-W-CA-CALL-U	Wholesale Com	2021-01-01T00:00:00.000	2021-12-31T23:59:59.999	1944.3327
22			A-W-WXC-CALL-U		946.875						
			A-W-WXS-SUITE-U		946.7083						
			= Y2lZy29zcGFyazovL3VzL09S		5026.3755						
			A-W-CA-CALL-U		2042.8753						
			A-W-TOLL-DIALIN-U		940.2501						
			A-W-WXC-CALL-U		1103						
			A-W-WXS-SUITE-U		940.2501	Microsoft Excel					
			Grand Total		23798.3324	Worksheet					
										webex	
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Wholesale Billing Reports- User level consumption

PARTNER
Report

CUSTOMER
Report

USER
Report



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	PARTNER_NAME	PARTNER_ORG_ID	SUBSCRIPTION_ID	CUSTOMER_ORG_ID	CUSTOMER_EXTERNAL_ID	TYPE	SUBSCRIBER_ID	USER_ID	WORKSPACE_ID	SERVICE_NAME	SKU	DESCRIPTION	CONSUMPTION_START_DATE	CONSUMPTION_END_DATE	QUANTITY	
2	BPB_Wholesale_Bil	Y21zY29zcGFyazovL3	Sub12345	Y21zY29zcGFyazovL3Vz	eivLoFJIKLooPWJplZWD	USER	Y21zY29zcGFyazovL3VzL1NVQINDUKRCVlvmDc3Ym	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T03:50:42.000	2021-12-31T23:59:59.999	36.8333				
3	BPB_Wholesale_Bil	Y21zY29zcGFyazovL3	Sub12345	Y21zY29zcGFyazovL3Vz	eivLoFJIKLooPWJplZWD	USER	Y21zY29zcGFyazovL3VzL1NVQINDUKRCVlvmMTQ3Nn	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T01:16:32.000	2021-12-31T23:59:59.999	36.9167				
4	BPB_Wholesale_Bil	Y21zY29zcGFyazovL3	Sub12345	Y21zY29zcGFyazovL3Vz	eivLoFJIKLooPWJplZWD	USER	Y21zY29zcGFyazovL3VzL1NVQINDUKRCVlvmMWM3Z	WEBEX_CALLING	A-W-WXC-CALL-U	Wholesale Web 2021-11-25T02:04:35.000	2021-12-31T23:59:59.999	36.875				
5	BPB_Wholesale_Bil	Y21zY29zcGFyazovL3	Sub12345	Y21zY29zcGFyazovL3Vz	eivLoFJIKLooPWJplZWD	USER	Y21zY29zcGFyazovL3VzL1NVQINDUKRCVlvmMWM3Z	MEETINGS_TOLL	A-W-TOLL-DIALIN-U	Wholesale Web 2021-11-25T02:04:35.000	2021-12-31T23:59:59.999	36.875				
6	BPB_Wholesale_Bil	Y21zY29zcGFyazovL3	Sub12345	Y21zY29zcGFyazovL3Vz	eivLoFJIKLooPWJplZWD	USER	Y21zY29zcGFyazovL3VzL1NVQINDUKRCVlvmMjYzGf	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T03:49:57.000	2021-12-31T23:59:59.999	36.8333				
7	BPB_Wholes	CUSTOMER_ORG_ID + SKU Row Labels					CALL TYPE USER		WORKSPACE	Grand Total	zovL3VzL1NVQINDUKRCVlvmMjcyN2U	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T03:56:15.000	2021-12-31T23:59:59.999	36.8333
8	BPB_Wholes						Y21zY29zcGFyazovL3VzL09SROFOSvpBVEIPTI82ODVhOBjMl0xZmQ1LTQSMWQyTjYhYyOSYjM0NDU4ZWwZUW	2916.1245			1944.3327	4860.4572	zovL3VzL1NVQINDUKRCVlvmMmE4N2	WEBEX_CALLING	A-W-WXC-CALL-U	Wholesale Web 2021-11-25T01:01:34.000
9	BPB_Wholes	A-W-CA-CALL-U				1944.3327	1944.3327	1944.3327	zovL3VzL1NVQINDUKRCVlvmMmE4N2	MEETINGS_TOLL	A-W-TOLL-DIALIN-U	Wholesale Web 2021-11-25T01:01:34.000	2021-12-31T23:59:59.999	36.9167		
10	BPB_Wholes	A-W-TOLL-DIALIN-U				972.1248		972.1248	zovL3VzL1NVQINDUKRCVlvmMmFmM	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T02:44:05.000	2021-12-31T23:59:59.999	36.875		
11	BPB_Wholes	A-W-WXC-CALL-U				972.1248		972.1248	zovL3VzL1NVQINDUKRCVlvmMmMzM	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T04:57:12.000	2021-12-31T23:59:59.999	36.7917		
12	BPB_Wholes	A-W-WXS-SUITE-U				971.8749		971.8749	zovL3VzL1NVQINDUKRCVlvmMzFmYTI	WEBEX_SUITE	A-W-WXS-SUITE-U	Wholesale Web 2021-11-25T04:27:32.000	2021-12-31T23:59:59.999	36.7917		
13	BPB_Wholes	Y21zY29zcGFyazovL3VzL09SROFOSvpBVEIPTI9IMjUzZmZlOS02NTg1LTQ4MmYyYjYwZC1lYmVhYjN2UwMjk				2508.208	1843.9165	4352.1245	zovL3VzL1NVQINDUKRCVlvmMzQwZD	WEBEX_CALLING	A-W-WXC-CALL-U	Wholesale Web 2021-11-25T04:57:04.000	2021-12-31T23:59:59.999	36.7917		
14	BPB_Wholes	A-W-CA-CALL-U					1843.9165	1843.9165	zovL3VzL1NVQINDUKRCVlvmMzQwZD	MEETINGS_TOLL	A-W-TOLL-DIALIN-U	Wholesale Web 2021-11-25T04:57:04.000	2021-12-31T23:59:59.999	36.7917		
		A-W-TOLL-DIALIN-U				664.1249		664.1249								
		A-W-WXC-CALL-U				664.1249		664.1249								
		A-W-WXS-SUITE-U				1179.9582		1179.9582								
		Y21zY29zcGFyazovL3VzL09SROFOSvpBVEIPTI9IMjUzZmZlOS02NTg1LTQ4MmYyYjYwZC1lYmVhYjN2UwMjk				2831.1256	1994.0415	4825.1671								
		A-W-CA-CALL-U					1994.0415	1994.0415								
		A-W-TOLL-DIALIN-U				837.4585		837.4585								
		A-W-WXC-CALL-U				1156.2086		1156.2086								
		A-W-WXS-SUITE-U				837.4585		837.4585								
		Y21zY29zcGFyazovL3VzL09SROFOSvpBVEIPTI9KZGjNjg5Y1hNTk1LTQzQmJlYmVhYjUwM2M0S0NjQ0QWQ1YmQzQ0Q				2840.4583	1893.7498	4734.2081								
		A-W-CA-CALL-U					1893.7498	1893.7498								
		A-W-TOLL-DIALIN-U				946.875		946.875								
		A-W-WXC-CALL-U				946.875		946.875								
		A-W-WXS-SUITE-U				946.7083		946.7083								
		Y21zY29zcGFyazovL3VzL09SROFOSvpBVEIPTI9Mzc4ZjNjMDYyYjA1LTk1YjYyQ0Q0NTk1ZjY2ZjY				2983.5002	2042.8753	5026.3755								
		A-W-CA-CALL-U					2042.8753	2042.8753								
		A-W-TOLL-DIALIN-U				940.2501		940.2501								
		A-W-WXC-CALL-U				1103		1103								
		A-W-WXS-SUITE-U				940.2501		940.2501								
		Grand Total				14079.4166	9718.9158	23798.3324								



Microsoft Excel
Worksheet





Microsoft Excel
Worksheet

webex

Wholesale APIs

Webex APIs

Summary

Webex APIs focus on Customer provisioning & service setup (I.e. Order fulfillment)

- The expectation is that the SP manages all aspects of Customer Relationship, Order Management and End Customer Billing from their CRM/BSS systems.
- Any Number Porting, Reservation for a Customer also occurs in advance of Customer/Users on Webex via these APIs.

Webex APIs are a mix of new and existing APIs

- New Wholesale APIs to allow for Customer/User Onboarding.
- Existing/Future Webex APIs for ongoing Customer/User/Service management

Wholesale APIs

Wholesale Customers

The Wholesale Customers API allow SPs to manage Wholesale customers, with a focus on service assignment (Packages, AddOns).

They do support initial service setup, but they are they are not customer configuration APIs for Webex Calling.

API	Detail
POST /wholesale/customers	• Creates a new Webex Customer, enabling necessary Wholesale services (Packages/AddOns). • Also supports attachment of Wholesale services to existing Webex Customers. • This API accepts initial parameters needed to setup Wholesale Calling. Including: • Site/Location Info • Telephone Numbers (reserved or ported in advance)
GET /wholesale/customers	• Search/List Wholesale Customers
GET /wholesale/customers/{id}	• Retrieve details for an individual Wholesale customers • Response focuses on service assignment (Packages/AddOns).
PUT /wholesale/customers/{id}	• Update Wholesale services (Packages/AddOns) assigned to a Customer
DELETE /wholesale/customers/{id}	• Remove all Wholesale services from a Customer (does not delete Customer completely from Webex)

WEBEX

Wholesale APIs

Wholesale Subscribers

The Wholesale Subscribers API allow SPs to manage users, with a focus on service assignment (Packages, AddOns).

API	Detail
POST /wholesale/subscribers	• Creates a new Webex user, enabling necessary Wholesale services (Packages/AddOns). • Also supports attachment of Wholesale services to existing Webex users. • This API also allows for number assignment as part of Calling service assignment.
GET /wholesale/subscribers	• Search/List Wholesale Subscribers
GET /wholesale/subscribers/{id}	• Retrieve details for an individual Wholesale subscriber • Response focuses on service assignment (Packages/AddOns).
PUT /wholesale/subscribers/{id}	• Update Wholesale services (Packages/AddOns) assigned to a Subscriber
DELETE /wholesale/subscribers/{id}	• Remove all Wholesale services from a Subscriber (does not delete User completely from Webex)

Generic Webex APIs

Webex Supports a series of Public APIs for Customer/User/Service Management.

The list below focuses on subset of these APIs, that may be of interest to Wholesale Calling SPs.

API Resource	Detail
People APIs	• https://developer.webex.com/docs/api/v1/people • Generic Webex User Management APIs • SP must use these APIs to fully delete a user from Webex.
Organization APIs	• https://developer.webex.com/docs/api/v1/organizations • Generic Webex Customer Management APIs • SP must use these APIs to fully delete a customer from Webex.
Location APIs	• https://developer.webex.com/docs/api/v1/locations • Generic API to retrieve info on Webex Calling Sites/Locations. • SPs must query this API when determine a locationId to provision a Wholesale subscriber against
Webex Calling Person Settings	• https://developer.webex.com/docs/api/v1/webex-calling-person-settings • Generic Webex Calling API to manage calling settings for a user
Webhooks APIs	• https://developer.webex.com/docs/api/v1/webhooks • Allows for an SP to be notified of activity on Webex. • These will be extended to notify the SP of Wholesale Customer/User Provisioning

Webex Wholesale Setup Assist

Overview

The Webex Wholesale Setup Assist service provides Cisco Webex Wholesale partners with a customer onboarding service provided by Cisco for a fee.

The service is optimized for small customer locations but can be used for larger customer locations as needed. To that end, the service is delivered via two SKUs:

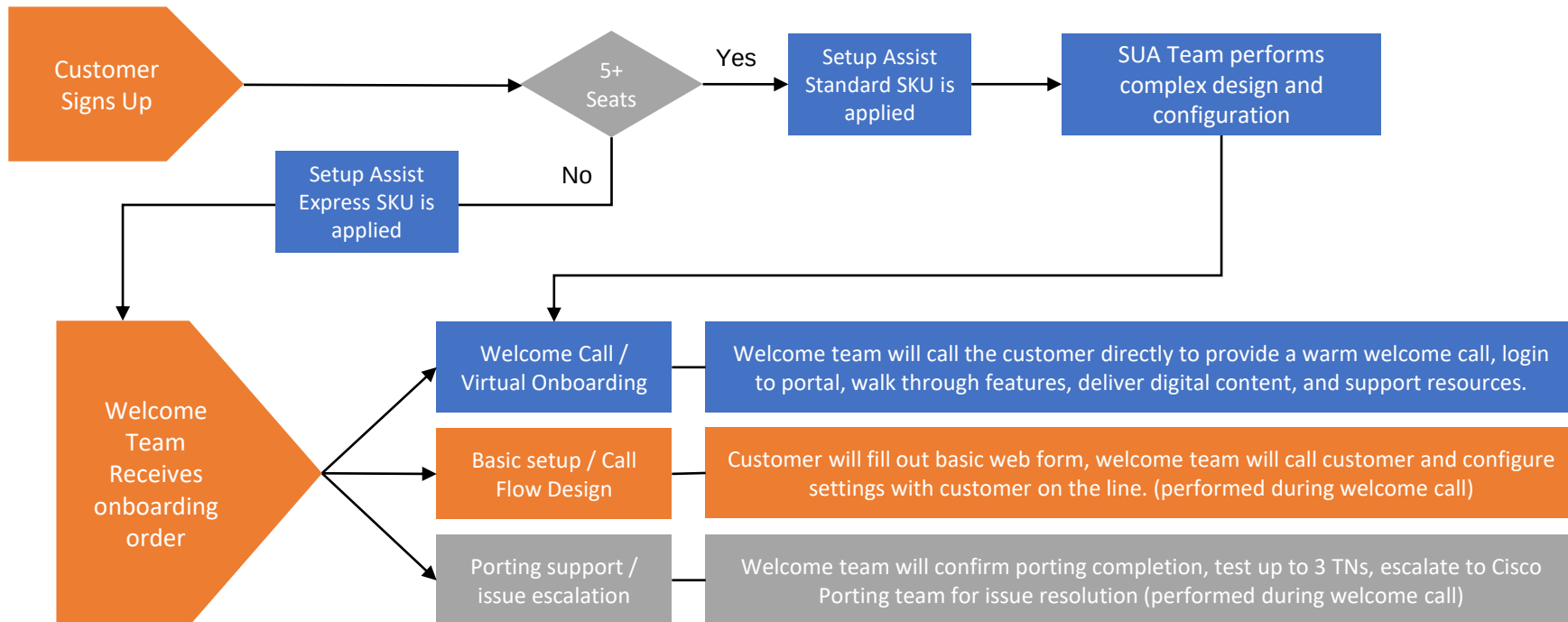
- **Setup Assist Express** - Flat charge to set up a location of up to 5 seats
- **Setup Assist Standard** - Per-user charge to set up a location with more than 5 seats

Both Wholesale Setup Assist services includes the following services:

- Basic User and Service Configuration (including call flows)
- Welcome Call (Day-of-Install support)
- Porting support

The Webex Wholesale Setup assist service is ordered by the partner through the Partner Hub or the Webex Wholesale provisioning API, either as part of the customer provisioning process, or subsequently.

Wholesale Setup Assist Ordering Workflow



Wholesale Setup Assist Express vs Standard

Wholesale Setup Assist Express	Wholesale Setup Assist Standard
Task-based Onboarding service for small location, delivered in a 1h virtual engagement with the customer Basic Setup/Call Flow design •Auto Attendant •Hunt Group •Call Queue •Music on Hold •Voice Portal •Other location services •Add approved devices Call scheduled with customer •Verify login to CH •Walk through CH features •Walk through CH user portal •Send email PSTN Porting Support •Porting support confirm •Importing TNs to CH	Complete migration and onboarding service for customer of any size, managed as a project through a suite of customer engagements and deliverables •Project Plan •Data Gathering Workbook •Migration runbook •Onboarding execution •Test Plan



Wholesale Migration Program



Two parallel workflows

Technical migration



Pre-work/tech readiness

Execute migration

Post-migration activities

Messaging campaign

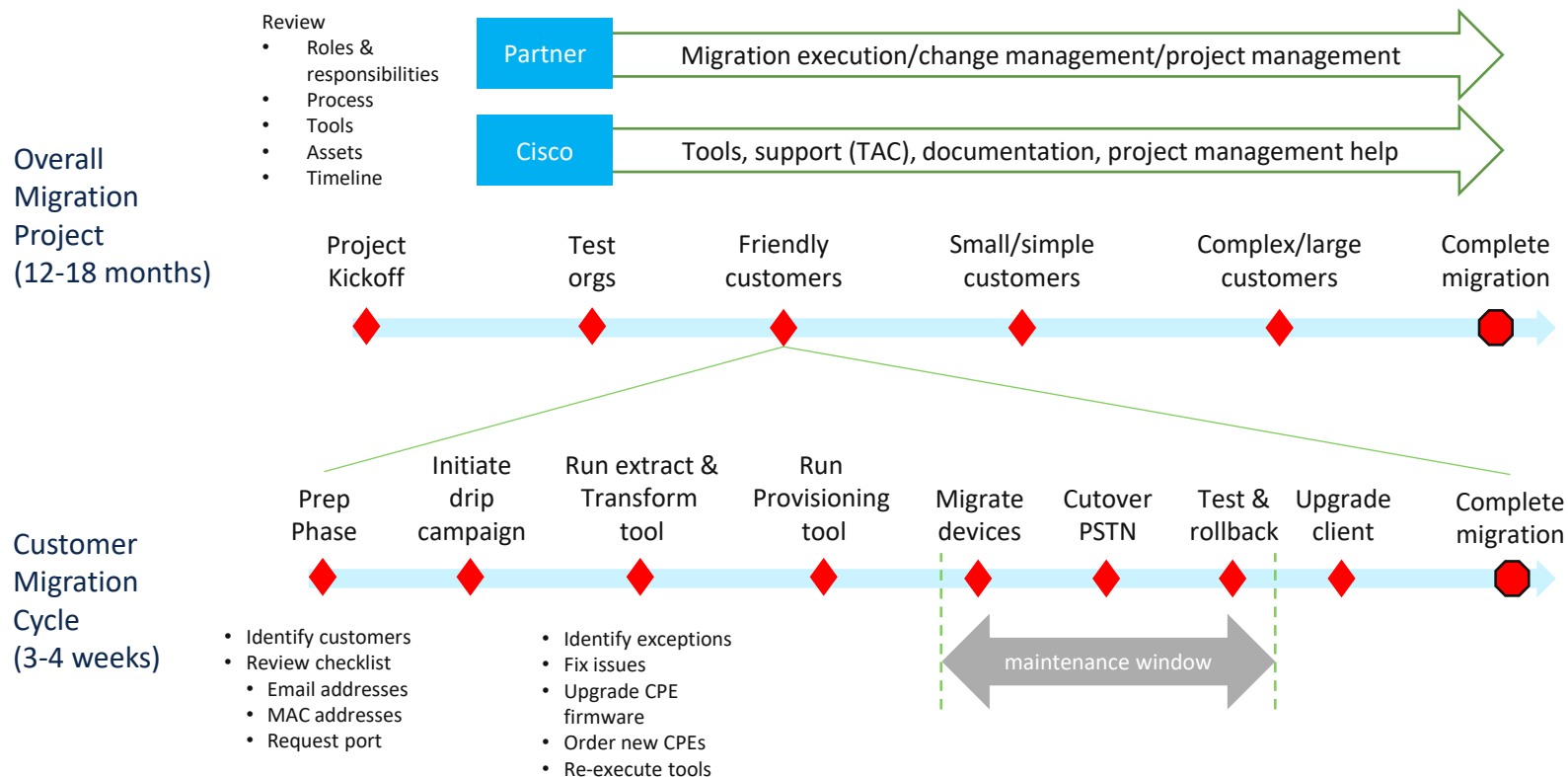


Preparation and planning

Content customization

Initiate end user communications

End-to-End Wholesale Migration Project Overview



Roles & Responsibilities

Technical Migration Roles & Responsibilities

Area	Activities	Cisco	Partner
Migration prep	• Verifying customer LANs, devices and firmware • Verifying DHCP and SBC configurations • Obtaining MAC addresses, email addresses, billing addresses • RedSky provisioning	Cisco provides partner with the pre-migration checklist	Partner is responsible for validating migrated customers against the pre-migration checklist
Customer Migration	• Customer migration • Site migration • User migration • Group & user service configuration	Cisco provides automated migration tools, TAC support and documentation	Partner uses the tools to executes the migration.
PSTN routing migration	• Update TN routing to the new hosting platform	Cisco provides guidance on PSTN routing migration	Partner is responsible for migrating PSTN
Client Migration	• Client branding • Client publishing • Client download, login & test	• Cisco publishes the client • Cisco provides migration landing page	• Users download the Webex client • Users create new Webex password
Device Migration	• Configuration update • Registration & test	Cisco provides automated migration tools, TAC support and documentation	Partner uses the tools to executes the migration.

Migration Change Management & GTM

		Responsibility		Target	
Activity	Description	Cisco	Partner	Admin	Users
Upgrade campaign	Inform customers, administrators and users of the upcoming functionality through a multi-touch campaign (videos, value proposition, use-cases, etc.)	Content	Execution		
Upgrade MOP	Provide administrators and users with specific dates and instructions related to the migration (e.g. restart device, download clients, documentation, etc.)	Content	Execution		
Post migration test	Execute remote testing of new solution and have admin perform some on-site tests of new functionality	Test suite	Execution		
Adoption campaign	Promote new functionality and monitor usage of clients and new features to ensure adoption and address issues proactively	Content	Execution		

Technical Migration Overview

Powerful Set of Automated Migration Tools



Automation & Scalability

Migrate users from BroadCloud/BroadWorks to the Webex Wholesale platform

Designed and optimized for customers below 100 seats



Exception handling

Analyze customer and user data to identify exceptions (e.g. unsupported devices, unsupported services, etc.)

Allows for rollbacks



Modular & Customization

Only use the functionality you need

Configurable to handle exceptions, map services and map packages between platforms as needed

Webex Wholesale Migration Tools Scope

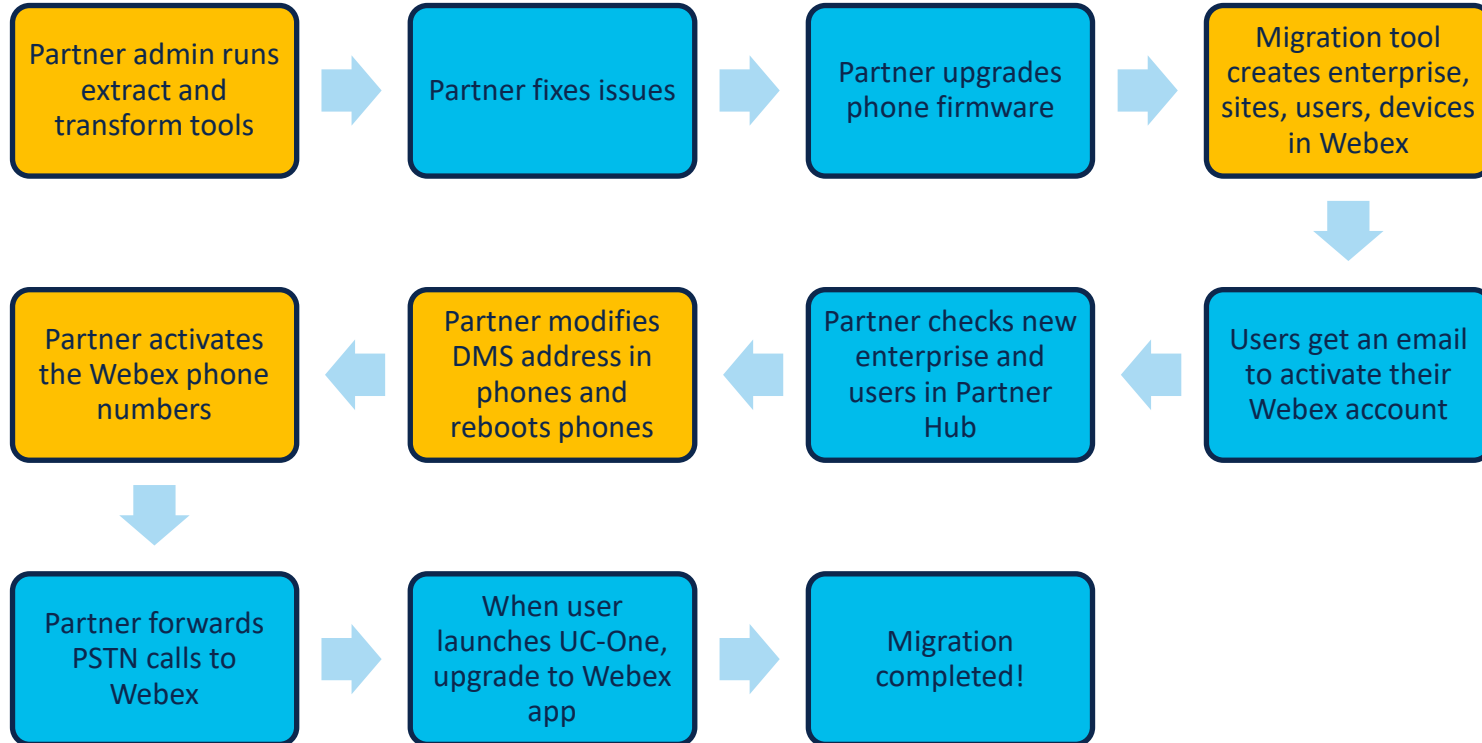
- Customer and User Identities
- Entitlements & Services
- Devices
- Clients
- User service configuration
 - Most used features
- Group service configuration
 - Most used features
 - Site information and user mapping is maintained

Migration Tool Architecture

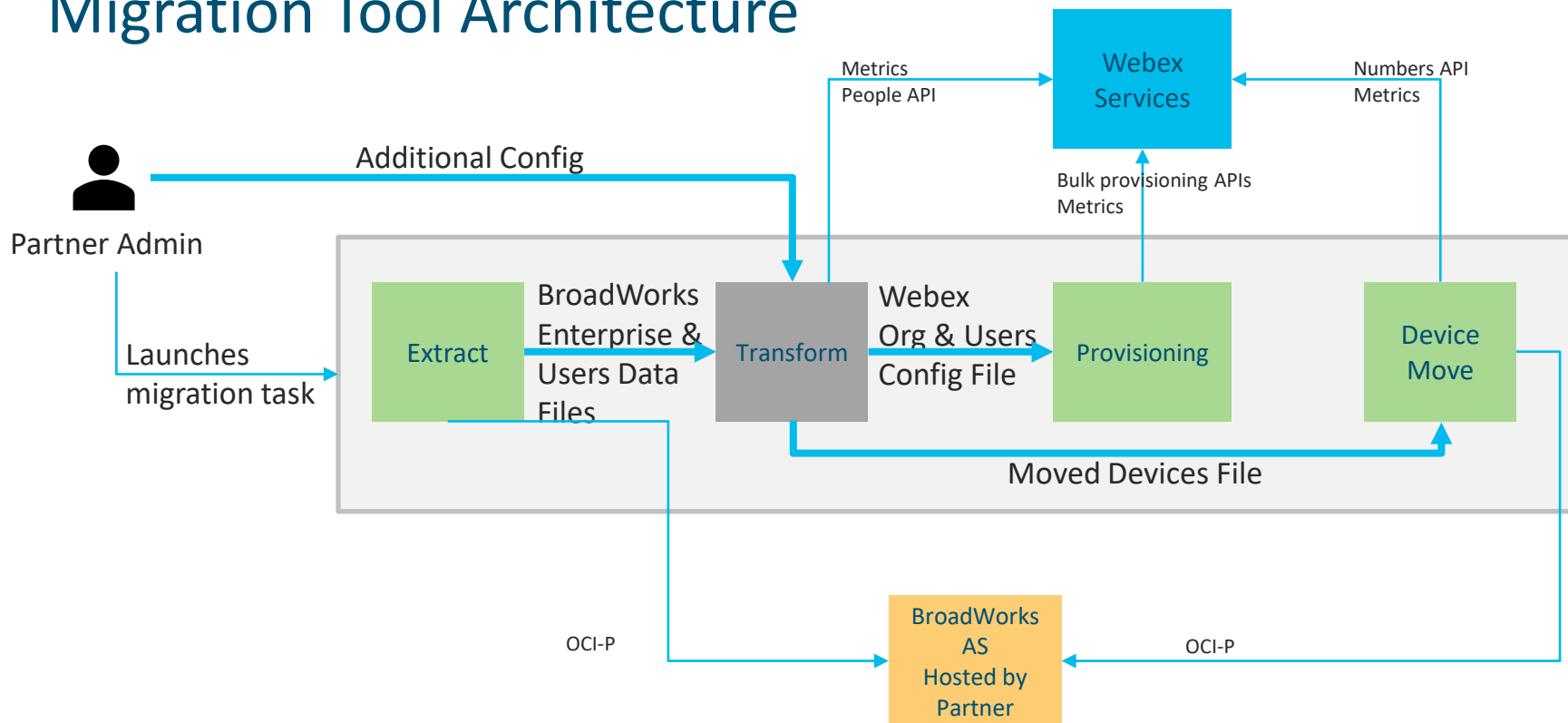
Migration Tools architecture consists of four different tools that perform various operations:

- Extract Tool- Extracts the enterprises, groups, numbers, users, services, phones, and soft clients from BroadWorks.
- Transform Tool- Transforms the information extracted by the extract tool into a JSON file that can be edited.
- Provisioning Tool- Uses the Transform Tool JSON output file as an input and provisions the customers, locations, numbers, users, services, and phones using Webex Public APIs.
- Device Move Tool
 - Uses the Transform Tool JSON output file as an input to rebuild the profiles and reboot the phones, activates numbers in the Wholesale RTM solution, and deactivates phone numbers in BroadWorks.
 - Supports reverting phone and soft client profiles and number activation back in BroadWorks.

Steps for Migrating an Enterprise



Migration Tool Architecture



Extract Tool

- Runs on the BroadWorks AS of the partner
- Connects to the BroadWorks AS of the partner through OCI-P
- Writes to files all data related to a list of enterprises
- Stored data
 - Enterprise profile
 - Group features
 - Users, their profile, their features
 - Devices: make, model, MAC address, firmware version
 - Phone numbers
 - Phone lists
 - SIP trunks

Transform Tool

- Role: make BroadWorks enterprise data suitable for Wholesale Calling
- Inputs
 - BroadWorks enterprise data file from the Extract tool
 - BroadWorks userid to email address mapping file
 - Site address
- Outputs
 - Webex Wholesale Calling provisioning file (used by the Provisioning tool)
 - Devices that must be moved (used by the Device Move tool)
 - Exception list that will require manual provisioning by the partner admin

Provisioning Tool

- Role: Creates customers, subscribers and devices in Webex Wholesale Calling
- Inputs
 - JSON configuration files from the Transform Tool. There is a separate JSON file per customer.
- Outputs
 - Running this tool, customers, users, services, and feature settings are provisioned on Partner Hub and Control Hub.

Device Move Tool

- Runs on the BroadWorks AS of the partner
- Connects to the BroadWorks AS of the partner through OCI-P
- Reads the output file from the Transform tool
- For all supported devices in an enterprise, this tool overrides the device profile template at the group level to add a redirection link to the DMS URL of Webex Calling
- This tool also adds an upgrade request to the device profile template of UC-One clients in the enterprise
- Finally, the tool rebuilds the device profiles and reboots the devices

Rollback from Webex Wholesale Calling to BroadWorks

- Exceptional procedure, applies to one enterprise at a time
- Can be performed for as long as the partner keeps the enterprise and its users in BroadWorks
 - Users will lose any configuration changes they made in Webex Calling
- Procedure
 - In BroadWorks: Partner Admin uses the Device Move tool to change the DMS URL back to the service provider DMS URL in device profiles
 - In Webex Calling: Ops Team uses the Device Move tool to set the DMS URL to the DMS URL of the service provider and reboot phones
 - In Webex Calling: partner deactivates phone numbers of the enterprise
 - Partner Admin forwards PSTN calls back to BroadWorks

Partner/Control Hub



What is Control Hub / Partner Hub

Control Hub is a web-based, intuitive, single-pane-of-glass Collaboration management portal hosted by Cisco Webex.

Partner Hub is a section of the Control Hub that allows Wholesale RTM partners to manage their customers, users, branding and view analytics. Customer View allows the partner view/manage each individual customer if necessary. Partners may access their individual 'Customer Control Hub' instances from the Partner Hub.

High Level Features- Customer Control Hub

- **Role** based access control
- Manage customer **Authentication**
- Provision and Manage **users**
- Manage Webex personal and shared **devices**
- Manage **global settings** (branding, security, domains, email)
- Manage services (App, calling / meetings / hybrid features)
- Messaging / Meeting / Calling **Feature management**
- Audit, Reports, Analytics, Troubleshooting

High Level Features – Partner Hub

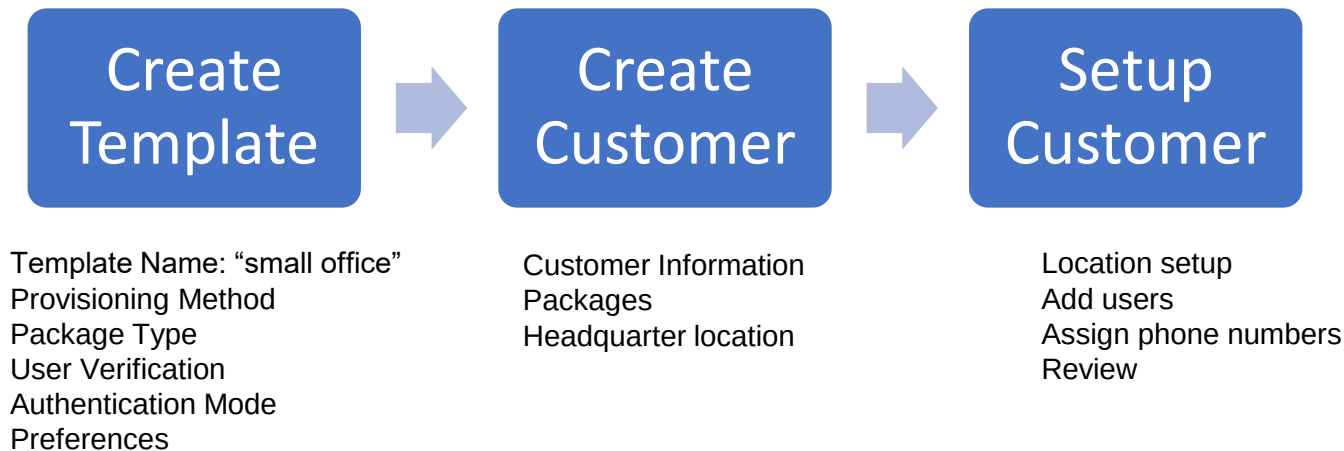
- **Role** based access control
- Provision and Manage **customers/users**
- Manage customer **templates**
- Partner Hub specific (create customers, trials), Help Desk
- Audit, Reports, Analytics
- Billing
- Branding

Partner/Control Hub

Provisioning Templates



Customer Onboarding Workflow



Templates

The provisioning template is step 1, and must be created prior to creating a customer

In the provisioning template, you create a common set of attributes shared by multiple customers, making deployment faster.

- Country
- PSTN
- Authentication method
- Common settings

Choose a template

To begin, choose a template option.
(Note: You can't edit or modify this selection later.)



Webex for Wholesale

Create a template for wholesale customers



Webex for BroadWorks

Create a template for Webex for BroadWorks customers

● Template details — ○ Service settings — ○ Authentication — ○ Common settings — ○ Review

Primary settings

Template name

Enter template name

Country or region

Select country or region ▼

Service provider admin

Select service provider admin ▼

Wholesale subscription

Select Subscription ▼

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Create Template

Select Cloud Connected PSTN Provider

Authentication method is a key part of Provisioning Template Creation. For Webex Wholesale customers the key options are:

Webex authentication

Cisco provides authentication via Cisco Control Hub

Partner authentication

A third party identity provider is used for authentication/SSO and managed via the Cisco Partner

The image displays two screenshots of the Webex provisioning interface, specifically the 'Authentication' step in a five-step process (Template details, Service settings, Authentication, Common settings, Review).

The top screenshot shows the 'Authentication' step with the following elements:

- Progress bar: Template details (selected), Service settings, Authentication, Common settings, Review.
- Section: Wholesale calling
- Label: Cloud Connected PSTN provider
- Form: Select provider (dropdown menu)

The bottom screenshot shows the 'Authentication' step with the following elements:

- Progress bar: Template details, Service settings, Authentication (selected), Common settings, Review.
- Section: Authentication
- Options:
 - ☒ Webex authentication
Use this option to enable all users to sign in to Webex using Cisco Common Identity as their Identity Provider (IdP).
 - ☐ Partner authentication
Use this option to enable all users to sign in to Webex using an Identity Provider (IdP) provided by a partner.
- Form: IDP Entity ID (text input field)

Create Template

Common Settings

Restrict admin-invite emails
when attaching to existing
orgs

Prevent emails upon
subscriber onboarding

The screenshot shows the 'Common Settings' tab selected in a multi-step wizard. The tabs are: Template details, Service settings, Authentication, Common settl..., and Review. The 'Common Settings' section is titled 'Email settings' and contains two fields: 'Brand name for emails *' with a help icon and a text input field containing 'Enter brand name', and a toggle switch for 'Allow admin-invite emails when attaching to existing orgs' which is currently turned off.

Create Template

Final Review step: review template details prior to committing them (can always edit later)

● Template details

● Service settings

● Authentication

● Common settin...

○ Review

Here's what you'll set up

Before submitting, review all your template settings to make sure they're correct.

Template details

Primary settings

Template name
TDM-test1

Country or region
United States of America

Service provider admin
vipuljindal1+adminwxbwks@gmail.com

Edit

Service settings

Wholesale calling

Cloud Connected PSTN provider
Tata (US)

Edit

Authentication

Authentication Mode
Webex authentication

Edit

Back

Submit

Partner/Control Hub

Create Customer Flow



Manual Customer Creation

A Wholesale partner is manually creating a customer.

Create Customer:

- Customer Information
- Packages
- Headquarter location

Customers

Customers

Templates

Search customer details

1

Select a filter...

↑

Create customer

▼

Customer Name	Services	Provisioning Status	Subscription Status
CDW Fun Launch Pro		✓ Provisioned	● Active
Chew's Test Demo Pro		✓ Provisioned	● Active
Christi Telecom Pro		✓ Provisioned	● Active
Cisco Hong Kong Pro		✓ Provisioned	● Active
First Digital is Launching Pro		✓ Provisioned	● Active
Help Desk Customer Pro		✓ Provisioned	● Active
LGU plus Wholesale demo Pro		✓ Provisioned	● Active
Liberty Pro		✓ Provisioned	● Active
Mani Chennai Pro		✓ Provisioned	● Active
Matteo Test 2 Pro		✓ Provisioned	● Active

Create Customer

Customer Information:

- Legal Company Name
- First Admin Email
- Customer Template

Select Packages

- Webex Calling
- Webex Meetings
- Common Area Calling
- Webex Suite
- Webex Voice

Customer informationPackagesHeadquarters locationReview

Customer information

Tell us about your new customer, starting with their email address and country code.

Legal company name *

abc567

Administrator email *

abc567@gmail.com

External customer ID * ⓘ

abc4567

Country *

United States of America

Choose a template *

aug172022

PackagesCustomer informationPackagesHeadquarters locationReview

Packages

Choose your customer's Webex packages.

Webex Calling

Our secure, reliable cloud phone system with powerful calling features across any devices, anywhere.

Webex Meetings

Our powerful video conferences drives engaging meetings with intelligent automation and inclusive features.

Common Area Calling

Webex Calling for shared usage between phones. This is limited to a single device and not intended for individual users.

Webex Suite

Our premium enterprise suite for a powerful hybrid collaboration experience. The suite includes full Meeting, Messaging, Calling, and more.

Webex Voice

Use your mobile phone, tablet, or desktop for the Webex app. You'll see call logs, the phone dialer, contacts, and more.

Create Customer

Headquarter Location

- Location
- Main number
- Announcement language
- Country or Region
- Physical address
- City, State, Zip
- Time Zone

Customer information Packages Headquarters location Review

Headquarters location

Tell us your customer's headquarters. This is their main calling data location. If they change headquarters, edit or delete the address in Control Hub. Note that if a country isn't listed, it's not supported. [Learn more about supported countries](#)

Location *

Location

Announcement language *

Select a language

Country *

Country

☐ I verify that this customer is in a Cisco Webex supported location.

Address *

Address line 1

Address line 2

City *

City

State / Province / Region *

Select state

ZIP / Postal code *

ZIP / Postal code

Time zone

Select a timezone

☐ I verify that this customer is in a Cisco Webex supported location.

Create Customer

Customer informationPackagesHeadquarters locationReview

Here's what you'll set up

Review your customer's information and subscription service setup.

Customer information

Legal company name

vwevwrg

Administrator email

vipuljindal1+avavegrear...

External ID

veron

Template

abcd

[Go back and edit](#)

Packages

Selected Packages

Webex Meetings
Common Area Calling

Add-ons

None selected

[Go back and edit](#)

Headquarter location

Location

vdsvd

Announcement Language

en_us

Country or region

US

Address

2334
vdfv
75094

Time Zone

America/Denver

[Go back and edit](#)

Customer Setup Final Review:

- Customer Information
- Packages
- Headquarter location

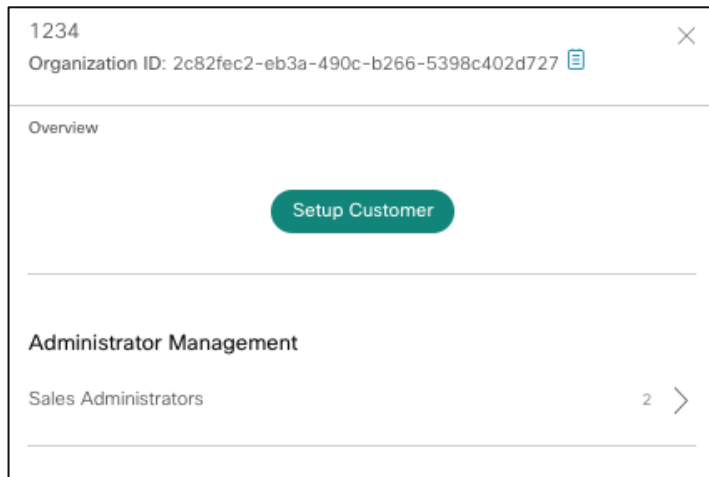
Partner/Control Hub

Setup Customer Flow



Setup Customer Flow

A Wholesale partner is manually
setting up a Customer



Manual Customer Setup Flow: Add users

A Wholesale partner is manually adding users to a Customer. This can be done here in Partner Control Hub, or via API

- First Name
- Last Name
- E-mail
- Package Type

Add UsersAssign phone numbersReview

Add users

Tell us about your customer's users, including their names, email addresses, subscription plans, and locations.

First Name	Last Name	Email	Package type
Enter first name	Enter last name	Enter email address	Webex Calling
Enter first name	Enter last name	Enter email address	Webex Calling
Enter first name	Enter last name	Enter email address	Webex Calling
Enter first name	Enter last name	Enter email address	Webex Calling
Enter first name	Enter last name	Enter email address	Webex Calling

[Add users +](#)

Create User

- Main Number
- Phone Number
- Extension

Add UsersAssign phone numbersReview

Add main number and assign phone numbers

For extension-only customers, this is your caller ID number. For PSTN calls, you can assign this number to users or features.

Main number ⓘ

Main number

To use extension-only dialing based on the main number, enter an extension for each user.

Assign your new users a phone number or extension. You can always edit or add different phone numbers and extensions later in Control Hub.

Name	Package type	Phone number * ⓘ	Extension * ⓘ
vipuljindal1+WS3user1 vipuljindal1+...	Webex Calling	+19728885568	5568 ×

Create User

Review Config
and create users

Add UsersAssign phone numbersReview

Review what you have entered
First, take a moment to make sure everything looks right. Once you review the information, click create users

User	Email	Package type	Phone number ⓘ
vipuljindal1+WS3user1 vipuljindal1+...	vipuljindal1+WS3user1@gmail.com	Webex Calling	+19728885568 Ext 5568

Back

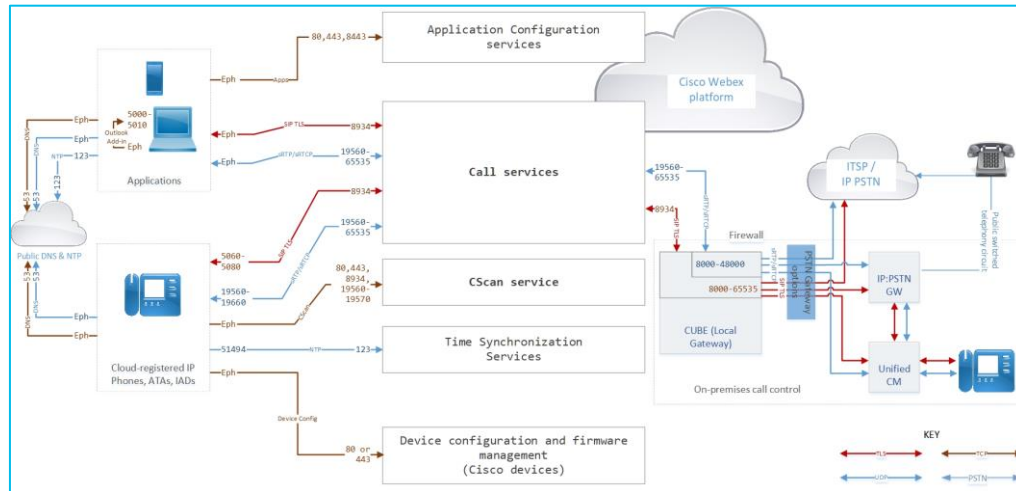
Create users

Network Requirements

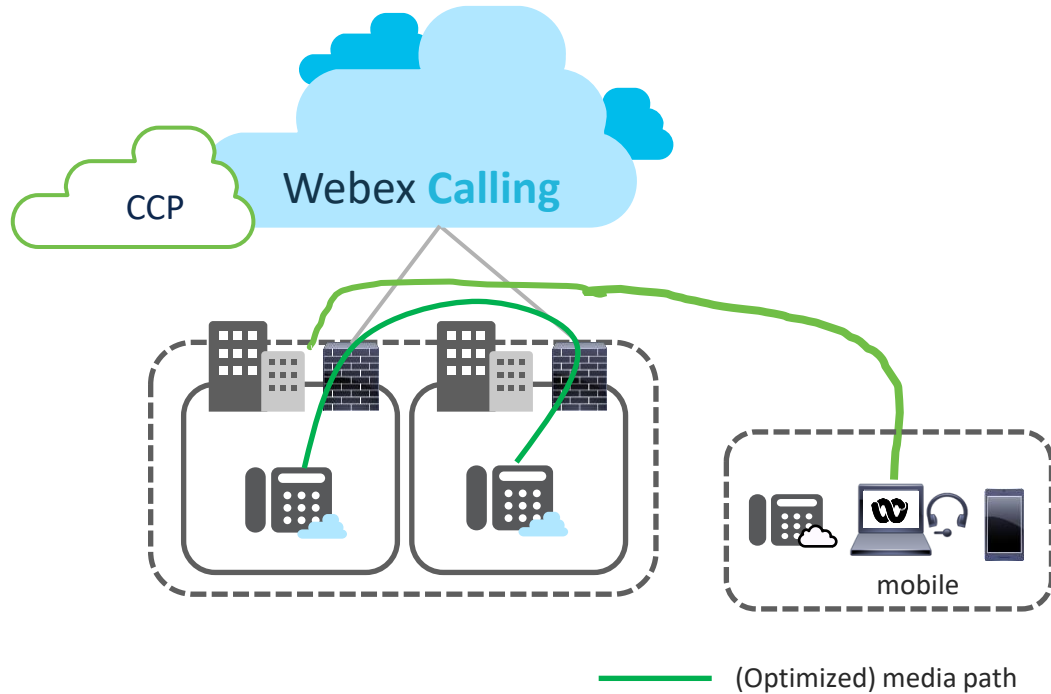


Port Reference Information

- Port reference: <https://help.webex.com/en-us/b2exve/Port-Reference-Information-for-Cisco-Webex-Calling>



Optimized Media - ICE



- Inter-location media traffic w/ media direct
 - Media not anchored in the cloud
- Server reflexive transport addresses
 - Public/external transport address
- Mobile and Remote Users

A man with a beard and glasses, wearing a blue and black striped sweater and a headset, is walking in a modern office. He is holding a smartphone in his right hand and an orange mug in his left hand. The office has wooden tables, red chairs, and several red pendant lights hanging from the ceiling. A large blue circle is overlaid on the right side of the image, containing the word "Devices" in white text.

Devices

Complete Support for Cisco Collaboration Devices

Hybrid Devices

All-in-one premium collaboration and co-creation



Webex Desk



Webex Desk Pro

Personal desktop collaboration



Webex Desk Hub

USB camera



Webex Desk Camera

Headsets



500 Series



700 Series

Desk phones



68/78/80xx Series

Office Devices

Team collaboration and co-creation



Webex Board Series

Video-first kits



Webex Room Kit Series

Video-first integrated systems



Webex Room Series

Immersive boardroom



Webex Room Panorama Series

Office navigation and in-room control



Webex Room Navigator

Content share and conference



Webex Share



Webex Room Phone

Frontline Devices

IP wireless phones



8821



Webex Wireless Phone

DECT phones



6825



DBS-210

Manage.
Secure.
Optimize.

Single pane of glass management and analytics (troubleshooting?)



Webex Control Hub

webex

Yealink Models Supported

Desk Phones

- IP Desk Phones - T41S*, T42S*, T46S*, T48S*, EXP40/50, T58A / T58V, T53W, T54W, T57W, T33G, T43U, T46U, T48U

Conference Phones

- IP Conf Phones – CP920*, CP960*

* Due to the "IdenTrust Commercial Root CA 1" requirement for the Cisco SSE/MSE, these devices require a firmware update. Update is pending from Yealink



Polycom Models Supported

Desk Phones

- VVX 101, 150, 201, 250, 301, 311, 350, 401, 411, 450, 501, 601

Conference Phones

- Trio 8300 / 8500 / 8800 Conf Phones



Other Devices

ATAs (Cisco-Managed)

- 191
- 192
- VG400

Non-phone Devices (Customer-Managed)

- SingleWire Fusion Server (emergency)
- Grandstream Door and Paging Devices
- Cyberdata Door and Paging Devices
- Algo Paging Devices
- 2N IP Verso Door Devices



Emergency Calling



Emergency call routing regulation for Enterprises

FCC recently adopted new 911 regulations, effective Feb 16th 2020



Kari's Law :

- All MLTS enabled callers to reach “911” directly with no prefix required
- Notification to another location or party of the emergency call
 - 1) Fact that a 911 call is made
 - 2) Callback number
 - 3) Location as conveyed to PSAP

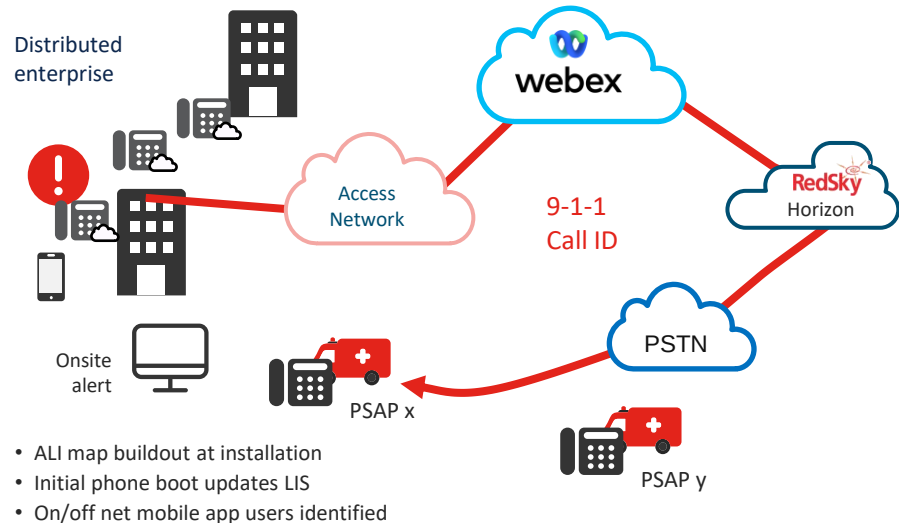
Ray Baum's Act :

- Dispatchable location is conveyed to PSAP for wired devices
- Dispatchable location for wireless devices on-prem and off-prem (January 2022)

Note: Customers and Partners should engage their legal counsel to determine their specific obligations

Webex® solution partner | RedSky

- Complete line of cloud-based next-generation 911 location discovery and routing products
- Addresses nomadic user needs and key regulatory requirements that enterprises face today
- Target market includes large buildings, campus deployments, and distributed enterprises
- Covers SIP-based U.S. and Canada service areas
- Meets the NENA i3 specification for interoperability and functionality



Emergency calling options for Webex



Kari's Law
Ray Baum Act phase 1

Emergency Call Notification	✓	Email	✓	SMS, Email, Screen Pop, Bridged Call (+ recording)
911 access without steering digit/prefix	✓	Yes	✓	Yes
Emergency Call Back Number and PSAP call backs (ECBN, aka ELIN)	✓	Route to DID (TN)	✓	Route to DID (TN)
Emergency Service Address with sublocation (ESA, aka ERL)	✓	Per DID (TN)	✓	Per Device
Automatic location update	✗	No	✓	Yes
User access to change location address	✗	No	✓	Yes

Note - proper configuration may be required to meet compliance
- only apply to US users only.

webex

Emergency calling summary

	Webex Calling Default	RedSky Enabled Sites
Geographies	All supported geographies	US and Canada sites only (Enterprise may have mixed RedSky and non-RedSky sites)
How ESA is determined	Emergency Call Back Number configured for end-user sent to PSTN provider that maps to ESA	HELD* used on devices to determine ESA
Fixed Phone ESA	Based on configured Emergency Call Back Number	Determined by network wire map
Laptop/Desktop/Tablet ESA	Based on configured Emergency Call Back Number (warning is provided to user in application)	Determined by network wire map (on-prem) or end-user entered address (off-prem)
Mobile Phones	Native dialer used	Native dialer used
Emergency Call Barge-in	No	Yes**
Emergency Call Recording	No	Yes**
Emergency Call Metrics and Logs	No	Yes
Notifications	Email	Email, SMS

PSTN Connectivity

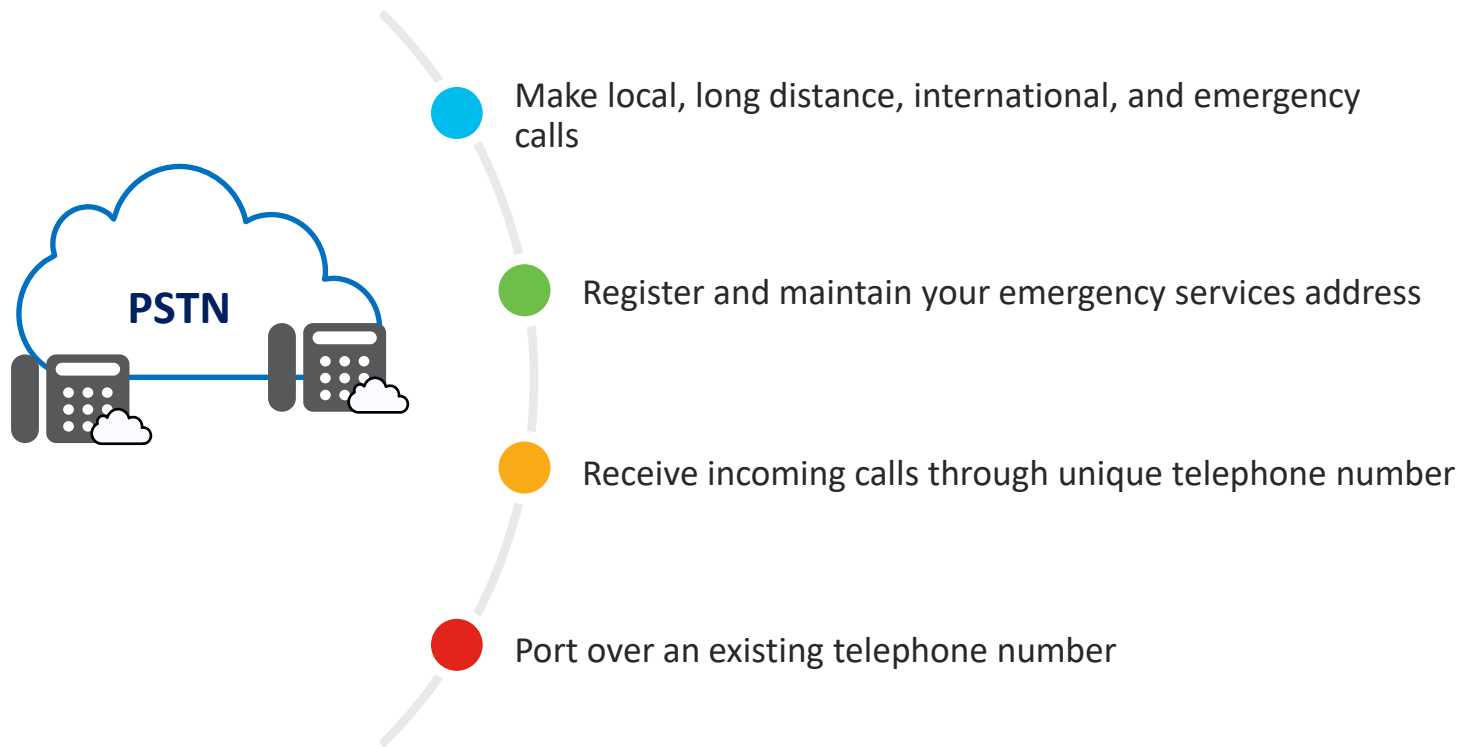
PSTN Solutions

CCPP Program

Cisco PSTN SP Validation Process



What is PSTN connectivity



Integrated and flexible calling plans

Customers can consume the way they want



Cloud Connected Calling Provider

Buy direct calling solutions from a cloud-connect PSTN/calling provider that is Cisco-approved

Service Provider (Cisco Cloud Calling + PSTN)

Service Provider offer that bundles their Calling solution with Webex services

Cisco Calling Plans (Cisco PSTN)

- Intended for VARs ONLY
- Cisco provided Cloud Calling integration into our Webex services
- Easy automated setup & centralized management in Control Hub
- Single offer from Cisco through partners

Partner Calling Plans

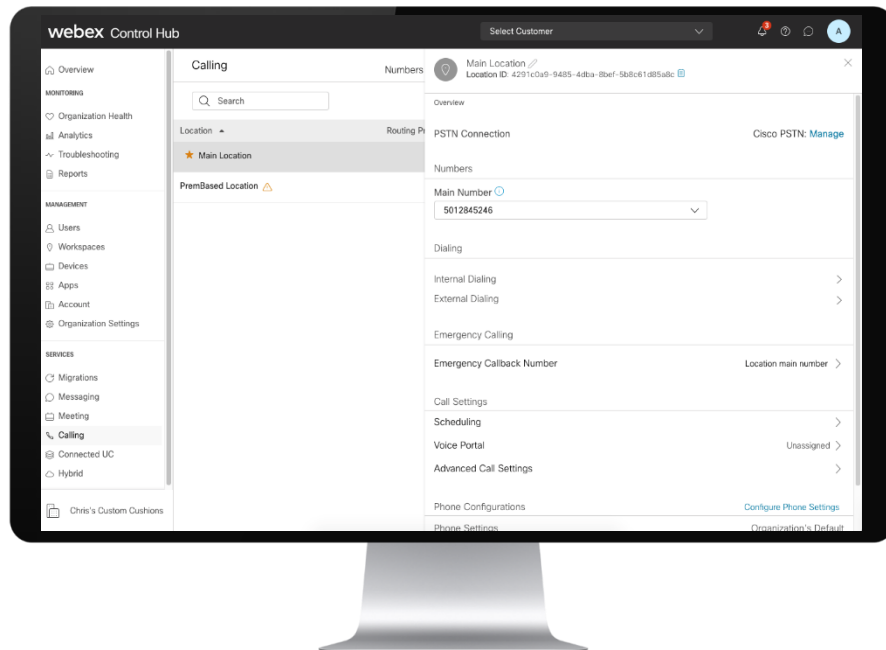
Cisco Calling Plans

webex

PSTN flexibility

Global coverage, optimized for cost and quality

- Support multiple PSTN providers
- Define PSTN providers at the location level
- Centralized management with Control Hub



PSTN Solutions

Webex Wholesale PSTN Options: CCPP and Cisco PSTN

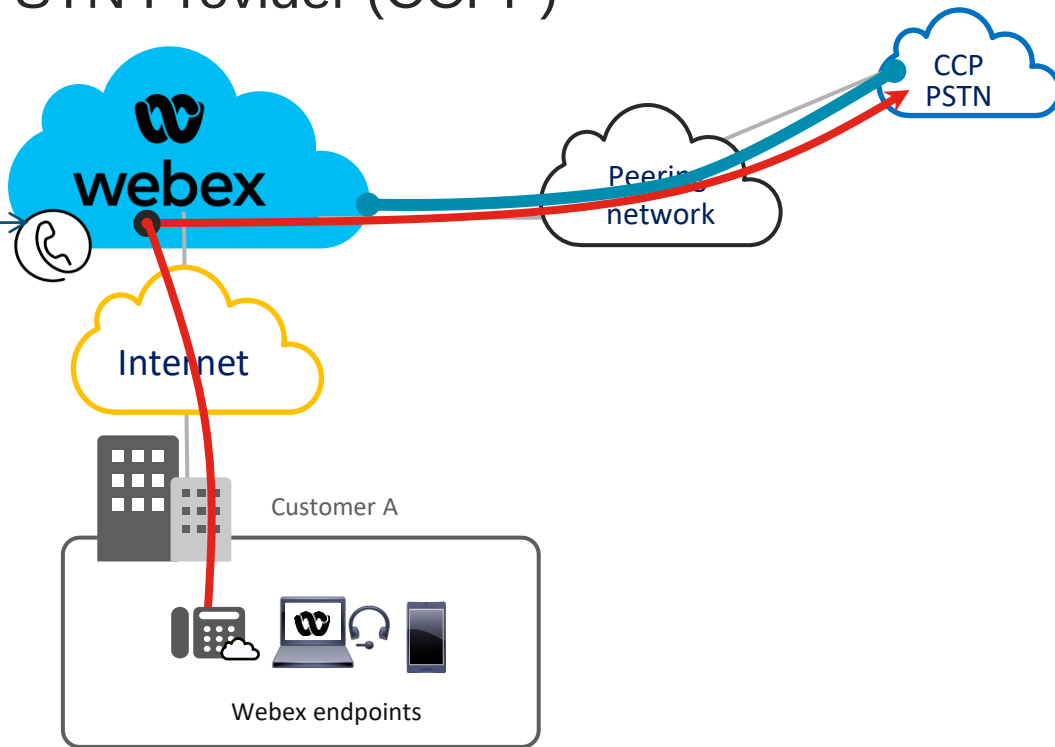


- Two Options for providing customers PSTN in Webex Wholesale Program: CCPP and Cisco bundled PSTN
- PSTN access through peering with a selection of Cloud Connected partners integrated into the Webex® Calling cloud
- Partner helps enterprise procure and provision PSTN
- CCPP is available to service providers who serve customers with locations outside of their PSTN footprint

Call routing

Single Cloud Connected PSTN Provider (CCPP)

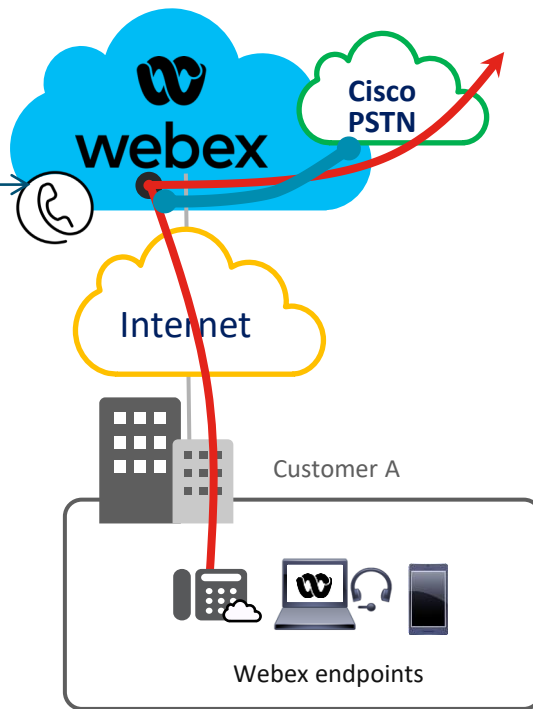
Webex® sends calls that do not match the customer's intra-org calling destinations to the Cloud Connected PSTN Provider



Call routing

Cisco PSTN

Webex® sends calls that do not match the customer's intra-org calling destinations out to a public carrier via Cisco PSTN



Benefits of the CCP Program to CCPP Partners



Quick to market

Easy and inexpensive start with non-integrated, with the option for API-based provisioning integration later



Access to Cisco Resellers

Maximize channels and opportunities by becoming a PSTN option to Cisco Resellers and Channels



Proven Technical Model

One of the largest interoperability and interconnection platform worldwide



Revenue opportunities

More opportunities to tap into the fast growing Webex Calling market, including Dedicated Instance; CCPP interconnect is also the right one for WxCC

The partnership between Cisco and the Cloud Connected PSTN Partner (CCPP) is intended to be a **win-win** enabling the CCPP to provide Cisco's Webex Calling customers access to the CCPP's quality PSTN products and services

- ✓ The Program is managed by the Webex Calling BU and only available by invitation from the BU
- ✓ Cisco certifies and authorizes CCPP for interconnection to its Webex Calling Cloud
- ✓ Cisco exposes CCPP's services to customers and VAR (unless CCPP opts out)
- ✓ CCPP sells, bills, deploys, and supports Cloud Connected PSTN services to end-customer, and is responsible for all regulatory obligations for PSTN

The CCPP partnership with Cisco

General terms*

- Mutually non-exclusive partnership
- CCPP and Cisco are each responsible for their respective costs associated with testing, deploying, and maintaining their interconnections and services as part of the CCPP program
- Cisco and CCPP commit to onboarding efforts and timelines, including certification and interconnections
- CCPP Agreement must be accepted and executed between Cisco and CCPP in order to launch onboarding project and secure Cisco resources
- Note that terms and conditions of Agreement are broad and general; Cisco does not accept redlines to template

Cisco's role and responsibilities*

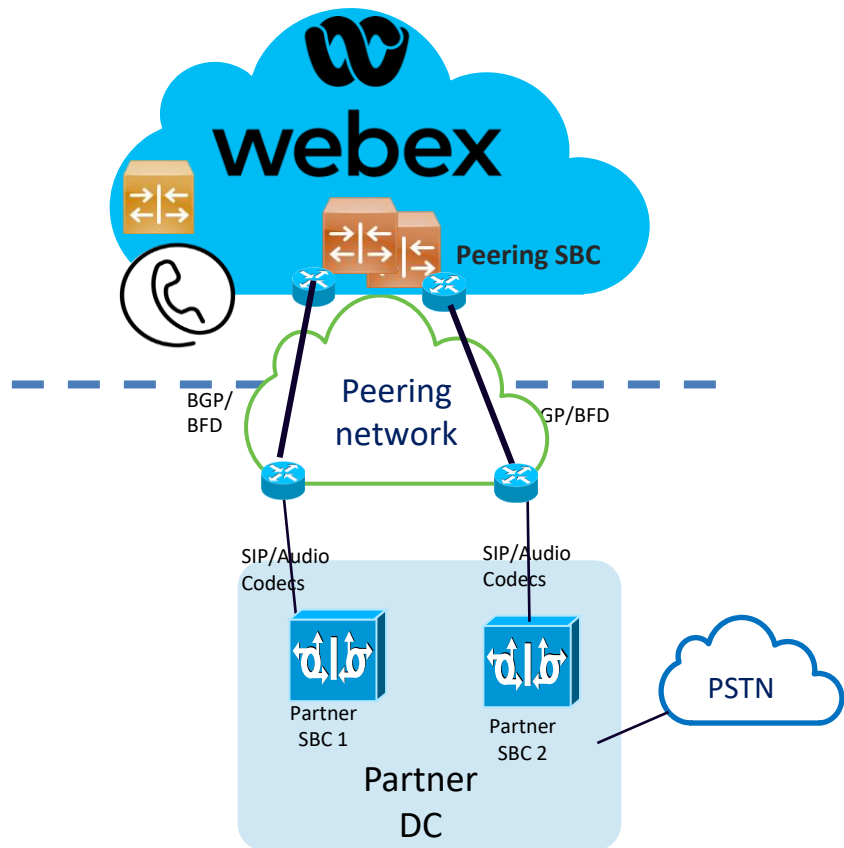
- Providing CCPP interconnection(s) to its Cloud Calling global infrastructure and customers
- Providing ongoing support of CCPP interconnection to Cisco's Cloud Calling infrastructure
- Bringing awareness to customers and Partners of the Cisco/CCPP partnership
- Appropriately triaging and redirecting technical support cases that relate to the CCPP, as well as providing support of cases brought through the CCPP

CCPP's role and responsibilities*

- Providing and maintaining interconnection(s) to Cisco's Webex Calling cloud infrastructure, with interconnections in each region where CCPP provides local service
- Providing all pre-sales, sales and technical support directly with end-customer and CCPP's agents or Partners (if applicable)
- Providing limited, free PSTN for Webex Calling trials (up to 90 days) for prospective customers
- Billing all end-user PSTN services directly to end-customers
- All PSTN related regulatory compliance and taxes elements such as emergency calling, legal intercept, etc
- GTM compliance, including readiness by mutually agreed target date
- Actively selling and promoting Webex Calling related PSTN services

**Refer to CCPP Agreement for comprehensive terms and conditions for the CCPP program*

Cisco CCP Partner Topology



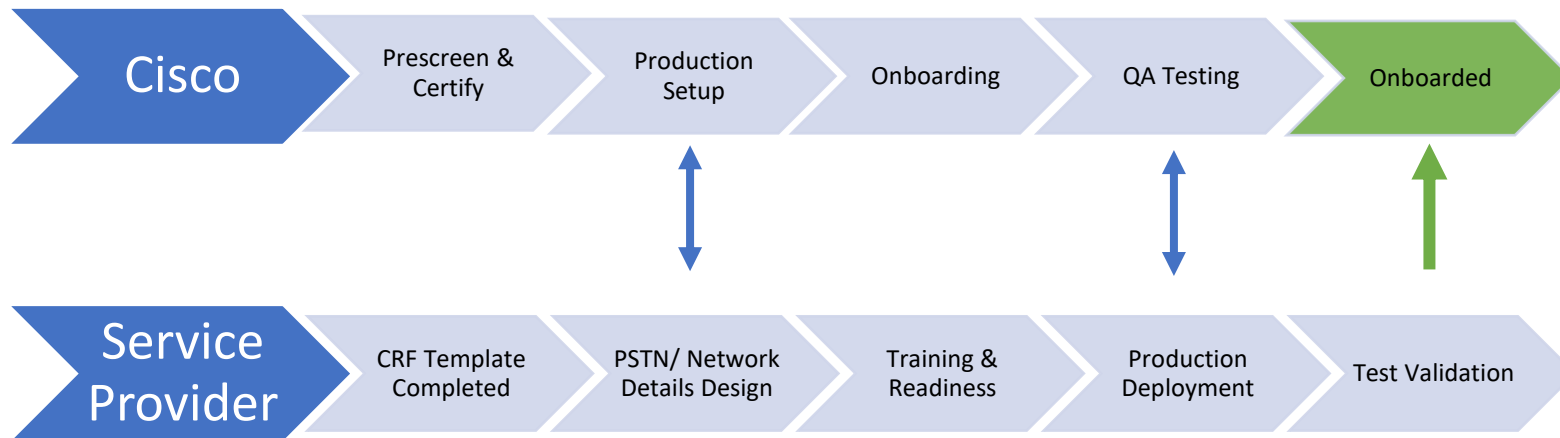
Highlights

- Hot Standby Webex Cloud Audio Services
- Call destinations not within Customer Webex Org sent to Partner network
- SIP Signaling and Audio traffic to flow between Webex Peering SBC and Partner SBC.
- Multiple active peering connections. At least 2 full GigE BGP/BFD peering links in different locations.

Cisco CCPP Peering Validation



Cisco CCPP/PSTN Onboarding Process



One time process, per CCPP program

SP Partner SIP Certification Details

This test plan is separated into test sections which cover distinct functional areas intended to fully exercise the SIP interface and media interactions.

Test Section A: Setup

Covers configuration of the PSTN interconnect, SIP OPTIONS exchange, and basic call scenarios.

Test Section B: Basic Call

Covers SIP basic call scenarios including inbound/outbound calls, Calling Line ID, call failure responses, DTMF, ringback and early media, session audit, and codec renegotiation.

Test Section C: BroadCloud Call Control

Covers SIP call control scenarios performed by a Cisco BroadCloud endpoint including Call Diversion, call hold, call waiting, call transfer, and ad hoc conference.

Test Section D: DUT Call Control

Covers SIP call control scenarios performed by a PSTN-side endpoint including Call Diversion, call hold, call waiting, call transfer, and ad hoc conference.

Test Section E: BroadCloud Services

Covers Cisco BroadCloud services that impact the signaling and/or media

Test Section F: Fax

Covers SIP fax call scenarios including fax over G.711 and T38.

Test Section G: Failover/Failback

Covers SIP request failover and failback scenarios.

Test Section H: Dial Plans

Provides dial plan test cases for each country or numbering

SP Partner SIP Certification Endpoints (Phones)

Endpoints (phones)

The SIP phones/endpoints used for testing should be configured via Control Hub. Endpoints are normally configured with codec preferences as follows:

- ☐ North America & Japan: OPUS, G.722, G.711u, G.729, and G.711a

- ☐ EMEA, APAC: OPUS G.722, G.711a, G.729, and G.711u

It is not expected that OPUS and G.722 to be negotiated on the PSTN interconnect unless there is peering to another IP endpoint. Not all BroadCloud phone support OPUS, G.722 or G729. Some test cases require re-ordering of the codecs to ensure that G.729 is negotiated.

Failure Scenarios
High Availability,
Monitoring

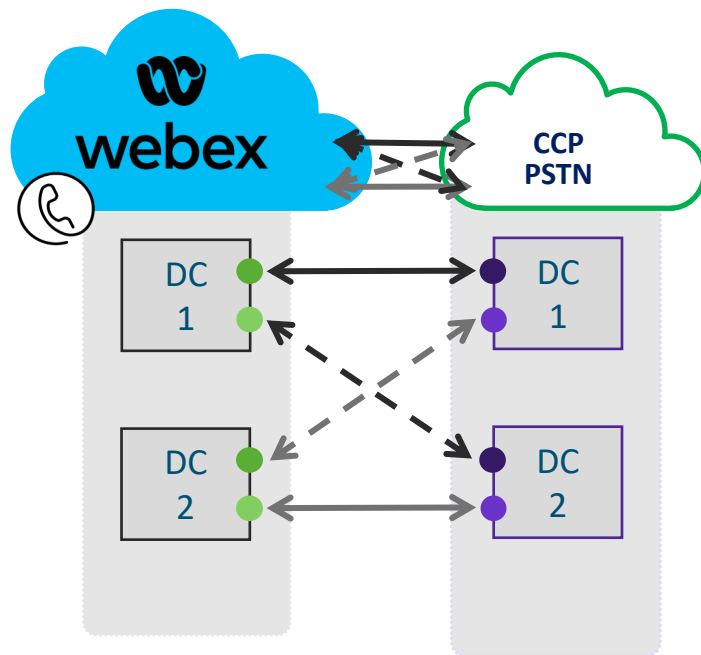
Cloud Connected PSTN (CCPP)

High Availability Design

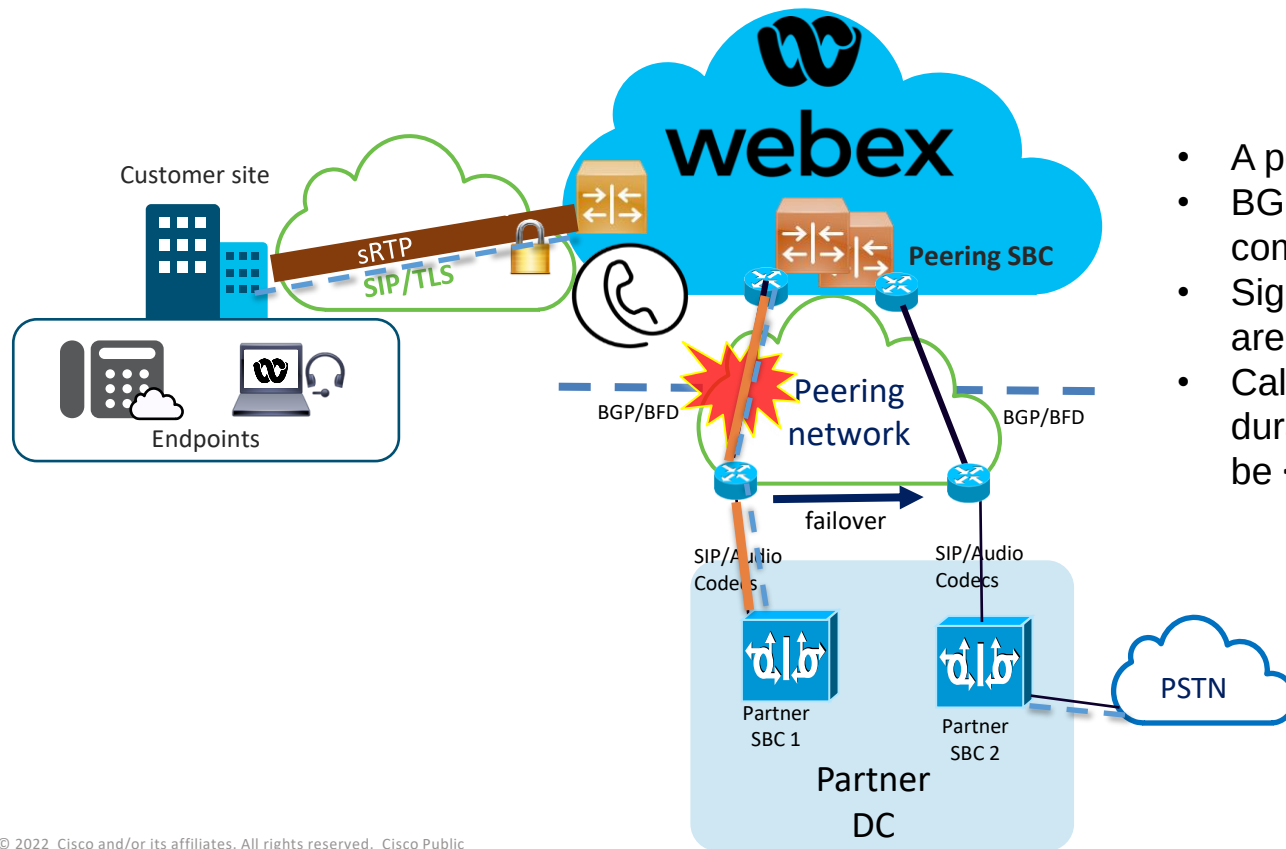
Static SIP trunk from Webex Calling data centers to CCPP provider data centers

Redundancy model: active-active full mesh connectivity between two Webex Calling data centers and two CCPP provider data centers

Failover is automatic and transparent to end users

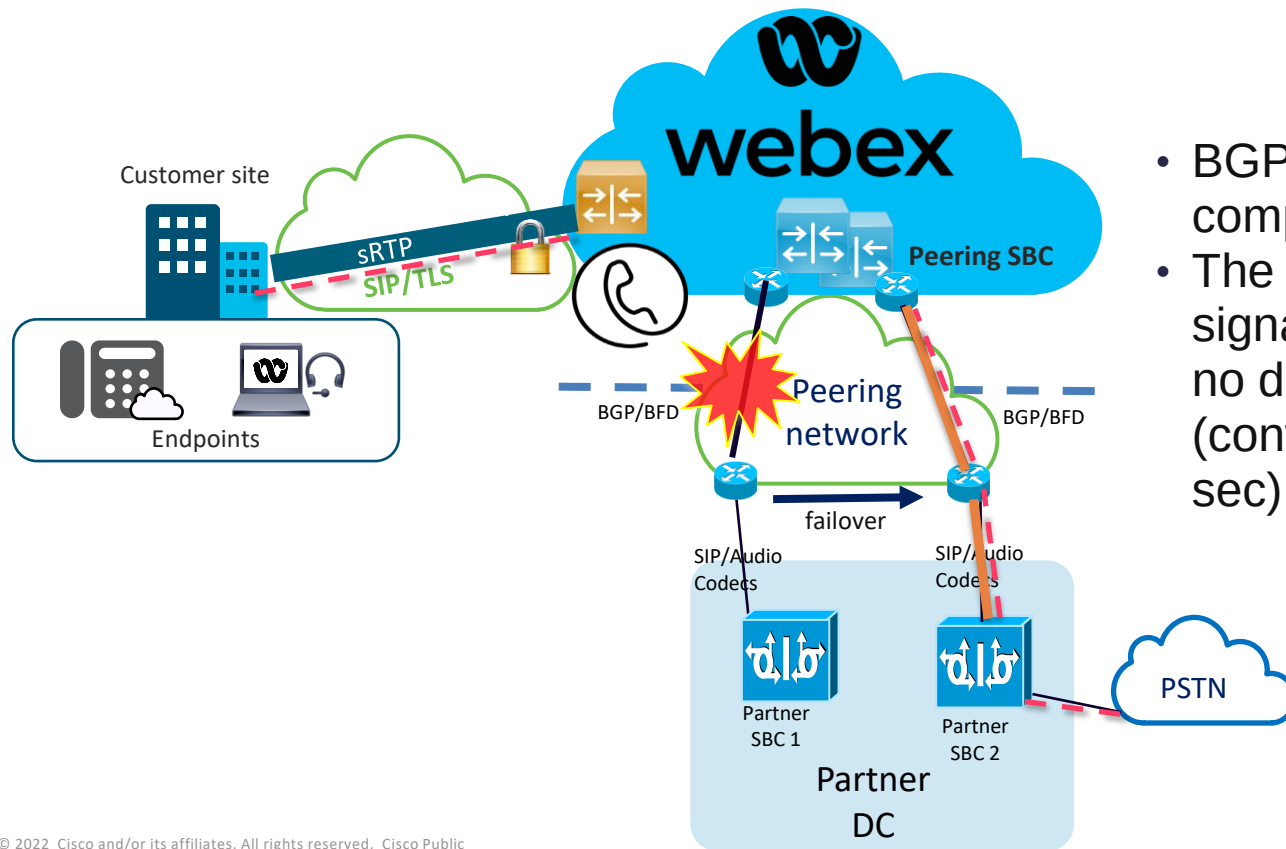


Peering Link Failure, CCPP Example



- A peering link is interrupted
- BGP Convergence commences
- Signaling and media packets are lost during convergence
- Callers hear silence for the duration of the event (should be < 3 s)

Peering Link Recovery, CCP Example



- BGP Convergence completes
- The flow of media and signaling resumes with no dropped calls (convergence time < 3 sec)

Webex Geographic HA and Redundancy

Local (DC-level) redundancy

- Webex SBC's use box-to-box and inbox redundancy methods native to the platform
- Webex microservices, audio services, calling services, and conference services use proprietary redundancy model that makes individual components failure seamless to the end user

Geographic redundancy

- Webex services are deployed in pairs, in separate locations
 - Each telephone number is routed to a specific “primary” audio service, for as long as that service is operational.
 - Audio service failure results in calls being routed to the remaining microservice from the pair

Link Redundancy

- Webex requires at least 2 BGP connections per region
- Failure of a peering link is mostly seamless to the end users, due to the typically sub-second convergence BFD allows

Service and Network Monitoring

Layer 3 monitoring

- We recommend that IP SLA probe information is exchanged between the Webex SBCs and the corresponding SBC on SP's side in a full mesh scheme per region (as always, no inter-region probing or indeed, communication is allowed)

Layer 7 monitoring

- SP is required to accept and reply to SIP OPTIONS pings on all of its Webex-facing SBC with a frequency of at least one every 30 seconds
- We recommend that SP monitors the Webex SBCs it faces with SIP OPTIONS pings

The SIP OPTIONS pings incoming to Webex must not exceed the frequency of one every 30 seconds

Webex may perform synthetic transaction monitoring not more often than one every 300 seconds



Partner Hub Analytics



Partner Hub Analytics

Partner can look at consolidated metrics of all customers with included packages usage across users .

Analytics dashboard helps partners to have a perspective on their customers to either drive adoption or upsell.

After a customer assigns a user to a package, we start billing the partner on a monthly basis. There's no contract or terms.

Only historical reports are considered (refresh every 24hrs), which shows data going back to 13 months

Provides Analytics to Wholesale Partners with only Wholesale Customer Orgs. If a wholesale partner has both wholesale & non-wholesale customer orgs, then we show only wholesale ones.

Partner Hub Analytics– New Role

- New role will be created for Wholesale Partners to access Partner Hub Analytics
- Full Sales Admin + Wholesale Admin will be enabled with Read Only access

Partner Org	Partner user role	Customer List	Create Paid Customer	Wholesale customer mgmt	Flex customer mgmt	Administrators	Templates	Analytics
Non-wholesale enabled	Partner Full Admin	See all customers	No	No (since partner can't sell wholesale)	Yes	Yes	No (not enabled for non-wholesale)	No (non-wholesale analytics not scoped in MVO)
	Partner Admin	See partial customers	No	No	Yes	No	No	No
	Partner Read-only Admin	See all customers	No	No	Yes if assigned	Read only	No	No
Wholesale enabled	Partner Full Admin	See all customers	No	Yes (no systematic block)	Yes	Yes	No	Yes
	Partner Full Admin + Webex for Wholesale Admin	See all customers	Yes	Yes	Yes (no systematic block)	Yes	Yes	Yes
	Partner Admin	See partial customers	No	Yes if assigned	Yes if assigned	No	No	No
	Partner Read-only Admin	See all customers	No	Read only	Read only	Read only	No	Yes

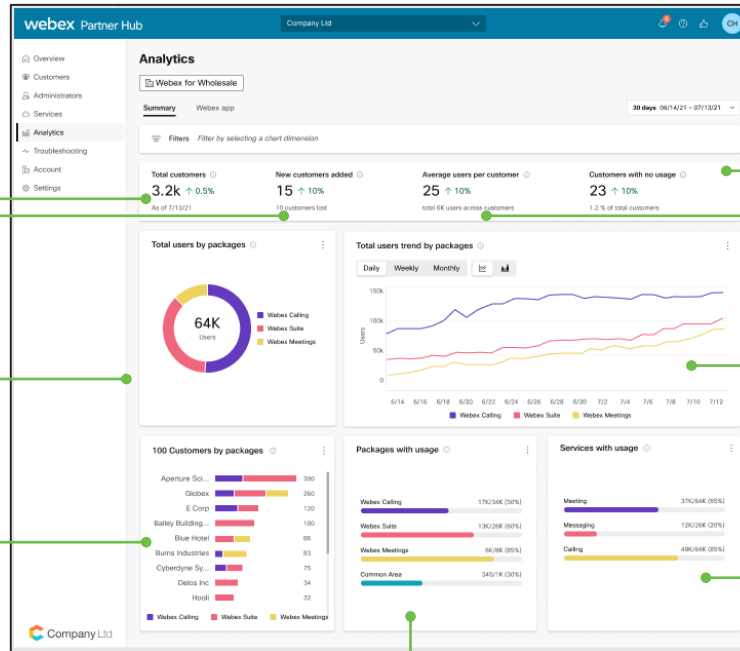
Partner Hub Analytics - Summary

Total number of all Customer for the Partner in selected time range

Number of customer added in selected time range

Number of user across customer breakdown by package

Top 100 customers by number of packages



Average number of users per customer

Number of customers who have no activity in selected time range

Number of user trends across customers breakdown by packages

Number of users that has usage in each service during selected time range

Usage of each packages that has usage during selected time range

Partner Hub Analytics – Webex App

Average daily active users on webex app during selected time range

Avg daily active meeting users on webex app during selected time range

Avg daily active users/total users of each package

Meetings breakdown by number of participants per meetings

Avg daily active users/total users

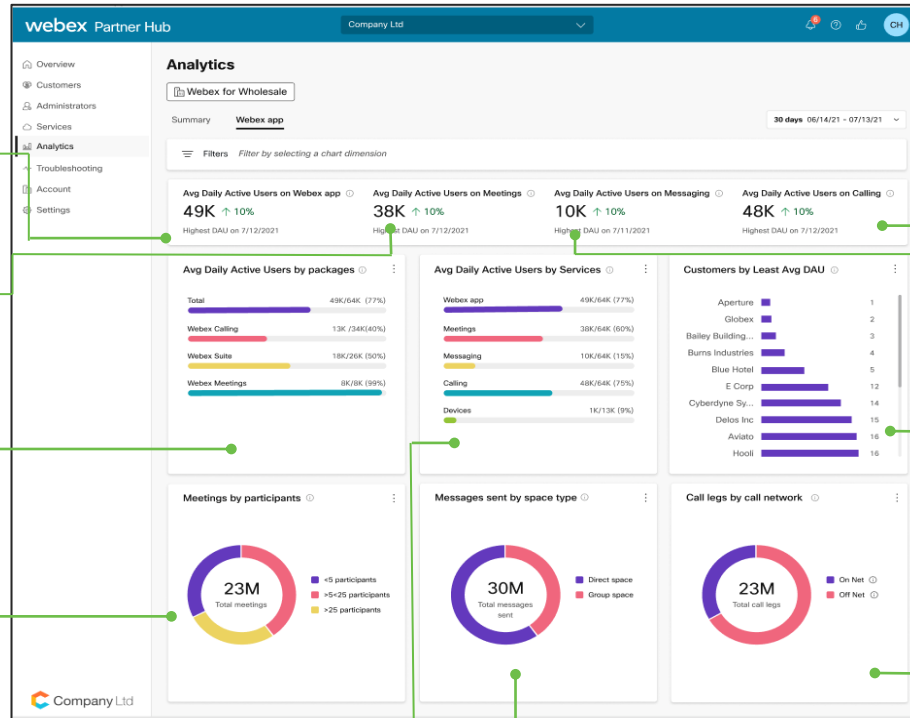
Total messages sent breakdown by space type

Avg daily active messaging users on webex app during selected time range

Avg daily active calling users on webex app during selected time range

100 Customers by least avg daily active users

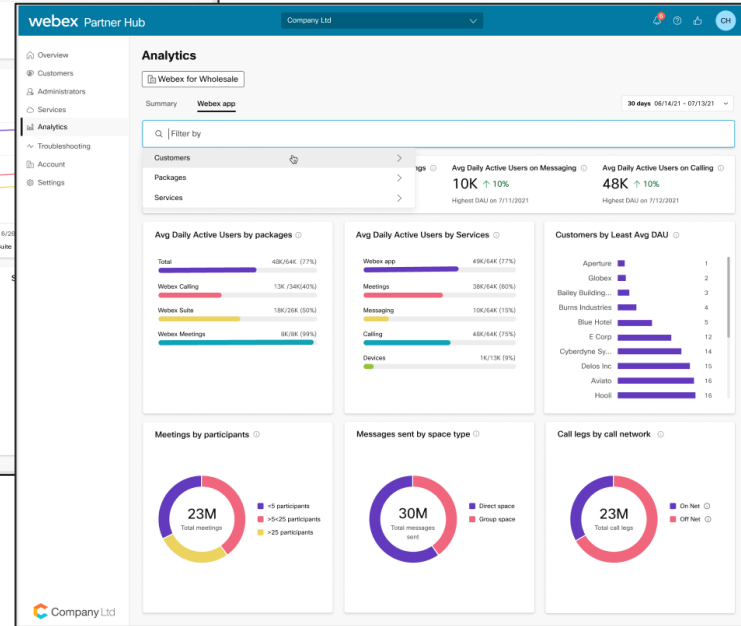
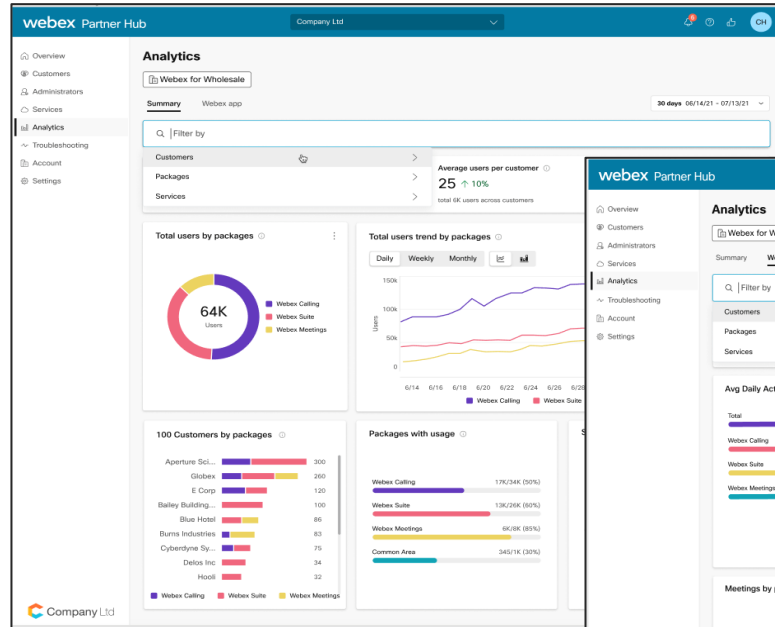
Call legs breakdown by call network; On Net = Webex Calling network, Off Net = out of Webex calling network(e.g. PSTN)



Partner Hub Analytics – Summary/Webex app

Filter by

- Customers
- Packages
- Services
- Tags
- Group



Branding

- Control Hub managed
- Webex App
- Partner Selected colors and logos
- Embedded URLs
- ELUA, Terms of Service, Help
- Mobile & Desktop Support
- In Control Hub Preview

Branding

Brand your customers' application experience by using your own logo and colors.

Applications ⓘ

[Basic customization](#) [Advanced customization](#)

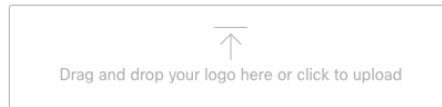
Brand your customer's experience with Cisco applications by uploading your company logo below.

For customers not using the latest version of Webex.

For advanced customization for the Webex service, go to [Cisco Webex Meetings Sites](#), choose a site, then click Configure Site > Common Settings > Branding.

☐ Use default Cisco logos

☒ Use your own logo
[\(see example\)](#)



For best results, logo should be transparent, with no padding around the outside of the image. Image file size must be less than 1 MB.

☐ Custom color in the Webex app
Changes the navigation bar's color in the Webex app

Hex color

☐ Enable all customers to use their own logo and color
[\(see example\)](#)

Branding- Light and Dark Mode

Applications ⓘ

Basic customization [Advanced customization](#)

Brand your customers' application experience by using your own logos, colors, URLs and App-links.

For customers using the latest version of Webex.

Light Mode



Dark Mode



[Customize Branding](#)

For advanced customization for the Webex service, go to [Cisco Webex Meetings Sites](#), choose a site, then click Configure Site > Common Settings > Branding.

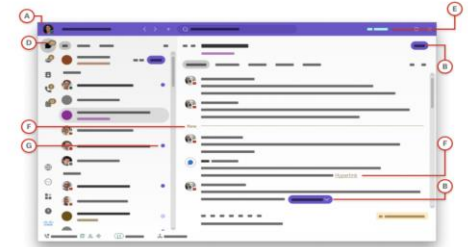
☐ Enable all customers to use their own logo and color
([see example](#))

Light Mode Colors

Use custom colors to bring your brand's identity to Webex.

Custom Colors

Desktop iOS Android Sign In Email



Light Mode >

Light Mode

Dark Mode

A. Primary color	#ffffff	#000000
B. Buttons	#000000	#ffffff
C. Navigation icons (active) *	#000000	#ffffff
D. Navigation badges	#1110CF	#1170Cf
E. Connect to a device	#0352A6	#64b4fa
F. Hyperlinks / New Banner	#0352A6	#64b4fa
G. Indicators	#0352A6	#64b4fa

*These color fields won't be applied on this interface.

Getting Support from Cisco's Technical Assistance Center (TAC)

Open Technical Support Cases through Cisco TAC

To open a case with TAC, partners will need:

1. **Cisco Connected Online ID (CCO ID)** - partners can obtain a CCO ID, [register today!](#)
2. Look up wholesale id to pull contract id.
3. **Software Technology:** Cloud and Hybrid Products, Sub-Technology Webex Calling for SP (formerly Cisco BroadCloud Calling...).

For more information, visit the [Service and Support for BroadSoft Integration Website](#)

Accessing Cisco Technical Assistance Center (TAC)

Phone
Support

1-800-553-2447 U.S.
[Global support numbers](#)

Online
Support

support.cisco.com

Case
Management

[Support Case Manager](#)

Note on # 3: Subtech may change to be 'Webex Calling Wholesale' – in review with CX Engines team. In the meantime, use Webex Calling for SP...

References Page

External link:

[Webex calling presentation](#) @ CiscoLive

A free account at ciscolive365.com is required for access

Internal only links: (please ask your account team for a copy)

Link to [Webex Calling TDM deck](#):

please remember, not all features of Webex Calling are available today such as BYOPSTN and the local Gateway connectivity options, refer to this Webex Wholesale deck for PSTN connectivity options

Link to [Webex Messaging TDM deck](#):

Link to [Webex Meetings TDM deck](#):

Link to [Webex Devices TDM deck](#):

Link to Partner Control Hub help articles:

[Start and Manage a Webex Trial in Partner Hub](#)

[Webex Wholesale Solution Guide](#)

[Adding Users to a Control Hub Organization](#)



Thank you

