

IP-DECT

Cisco Webex Calling Multi-Tenant

Customer Managed Interoperability Guide

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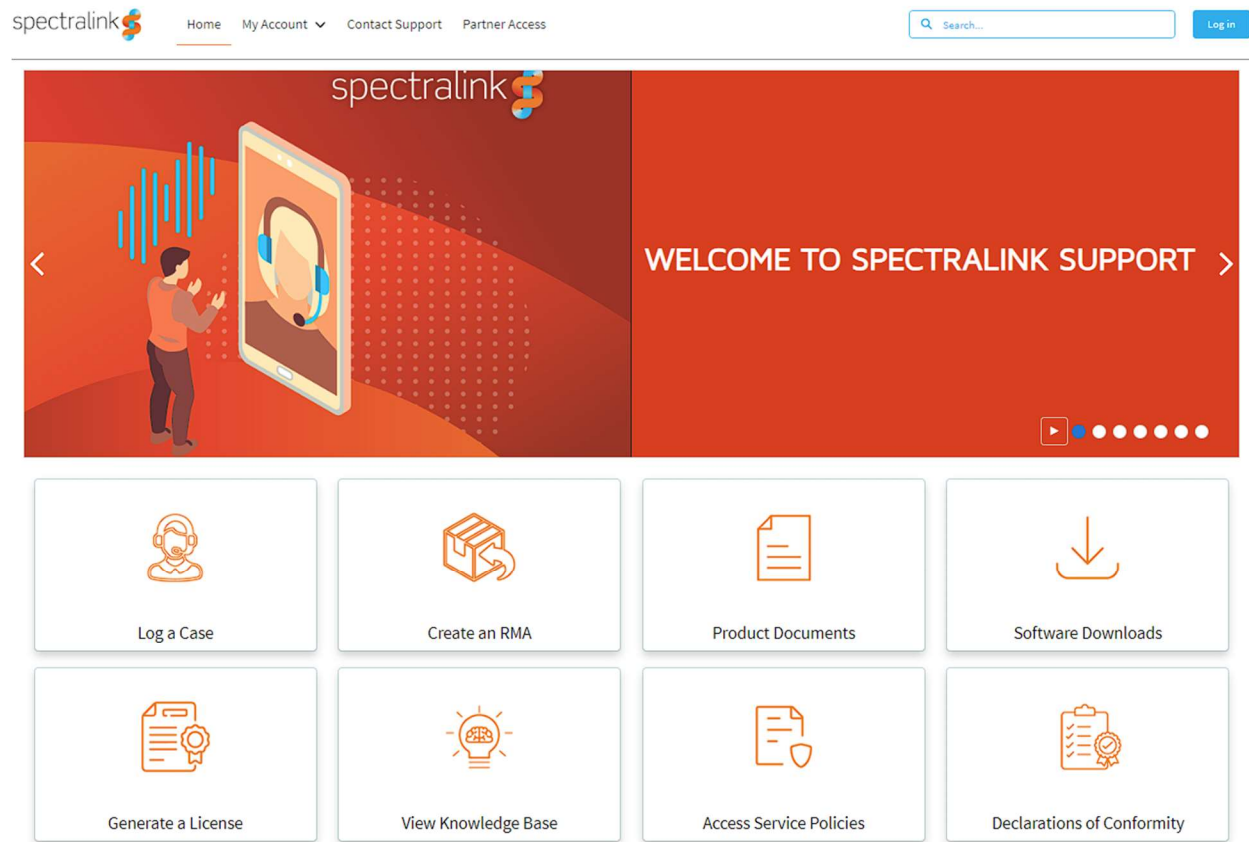
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Spectralink References

All Spectralink documents are available at <http://support.spectralink.com>.



To go to a specific product page:

Select the Product Documents and choose the Product Category from the next page. Then select the Product Type.

All resources for that particular product are displayed by default under the All tab.

Documents, downloads and other resources are sorted by the date they were created so the most recently created resource is at the top of the list. Downloads require a login to access them, but all product documentation is free to access.

The documentation list can be further sorted by selecting one of the tabs found at the top of the list. Click the document title to open the link.

Conventions Used In This Document

Icons

Icons indicate extra information about nearby text.



Spectralink recommends:

Our recommendations for successful deployments.



Warning

The *Warning* icon highlights an action you must perform (or avoid) to avoid exposing yourself or others to hazardous conditions.



Caution

The *Caution* icon highlights information you need to know to avoid a hazard that could potentially impact device performance, application functionality, successful feature configuration and/or affect handset or network performance.



Note

The *Note* icon highlights information of interest or important information that will help you be successful in accomplishing a procedure or understanding a concept.



Tip

The *Tip* icon highlights information that may be valuable or helpful for users to know, such as special techniques, shortcut methods, or information that will make user tasks easier to perform.



Web

The *Web Info* icon highlights supplementary information available online such as documents or downloads on support.spectralink.com or other locations.



Timesaver

A time-saving tip is typically used to mention or highlight a faster or alternative method for users who may already be familiar with the operation or method being discussed.



Admin Tip

This tip advises the administrator of a smarter, more productive or alternative method of performing an administrator-level task or procedure.



Power User

A Power User Tip is typically reserved for information directed specifically at high-level users who are familiar with the information or procedure being discussed and are looking for better or more efficient ways of performing the task. For example, this might highlight customization of a feature for a specific purpose.



Troubleshooting

This element can be used in any type of document and is typically used to highlight information to help you solve a relevant problem you may encounter, or to point to other relevant troubleshooting reference information.



Settings

The Settings icon highlights information to help you zero in on settings you need to choose for a specific behaviour, to enable a specific feature, or access customization options.

Typography

A few typographic conventions, listed next, are used in this guide to distinguish types of in-text information.

Convention	Description
Bold	Highlights interface items such as menus, soft keys, file names, and directories. Also used to represent menu selections and text entry to the handset.
<i>Italics</i>	Used to emphasize text, to show example values or inputs, and to show titles of reference documents available from the Spectralink Support Web site and other reference sites.
<u>Underlined blue</u>	Used for URL links to external Web pages or documents. If you click on text in this style, you will be linked to an external document or Web page.
Bright orange text	Used for cross references to other sections within this document. If you click on text in this style, you will be taken to another part of this document.
<code>Fixed-width-font</code>	Used for code fragments and parameter names.

This guide also uses a few writing conventions to distinguish conditional information.

<i>Convention</i>	<i>Description</i>
<MACaddress>	Indicates that you must enter information specific to your installation, handset, or network. For example, when you see <MACaddress>, enter your handset's 12-digit MAC address. If you see <installed-directory>, enter the path to your installation directory.
>	Indicates that you need to select an item from a menu. For example, Settings > Basic indicates that you need to select Basic from the Settings menu.

Summary

This document details the interoperability test results between Spectralink IP-DECT and Cisco Webex Calling.

The Spectralink IP-DECT server was running software version PCS24Ad.

The following features were tested and approved:

Call Test	Result	Comments
G711 Calling	Pass	
TLS 1.2	Pass	Default CA Certificates
Attended transfer	Pass	
Blind Transfer	Pass	
Call Hold and Retrieve	Pass	Remove G726 from codec list
DTMF	Pass	
Caller ID	Pass	
Calling Line ID Delivery Blocking	Pass	
Call Forward Always	Pass	
Call Forward Busy	Pass	
Call Forward No Answer	Pass	
Call Forward Not Reachable	Pass	
Call Waiting	Pass	
Voice Mail	Pass	
Voice Mail Notification	Pass	
Direct Voicemail Transfer	Pass	
Call Park and Retrieve	Pass	
Call Return	Pass	
Do Not Disturb	Pass	
Last Number Redial	Pass	

Full list of tested features can be found in Appendix A, including the commands to access the features.

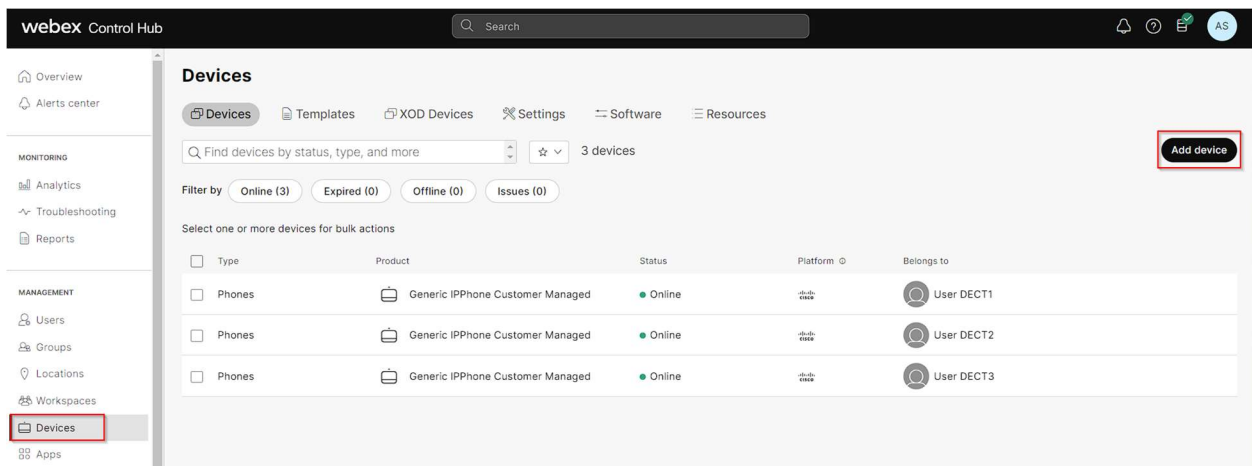
Chapter 1: Webex Calling Setup

This section details the setup of the device accounts on the Cisco Webex calling platform.

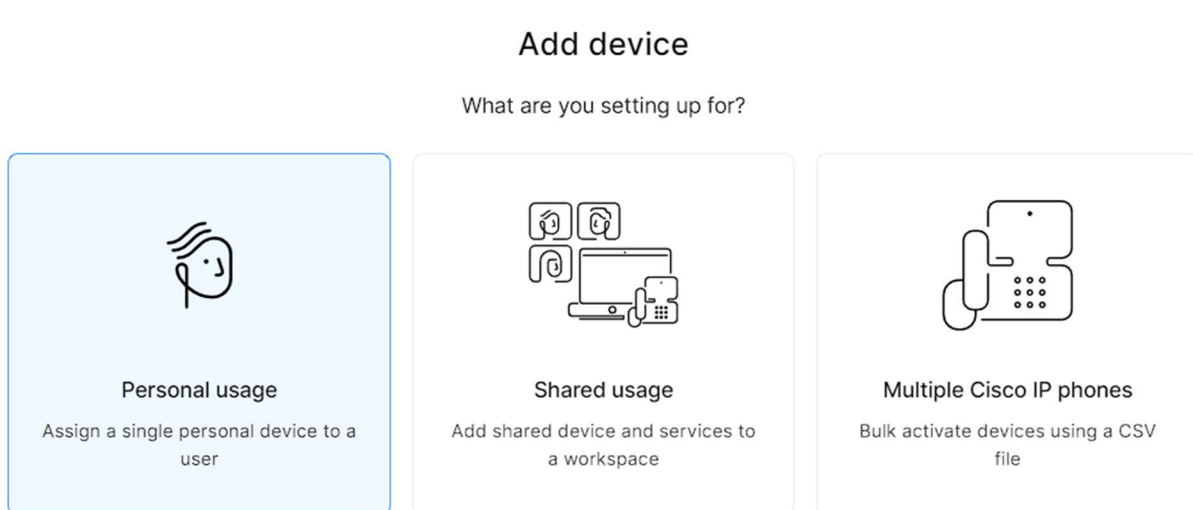
Webex Control Hub

Full details of managing user accounts and devices can be found in the online guides for Webex. The following information shows the basic requirements to allow Spectralink IP-DECT devices to register.

In the Webex Control Hub, in the management section, choose **Devices**, and then **Add Device**



Select **Personal Usage**, and choose **Next**:



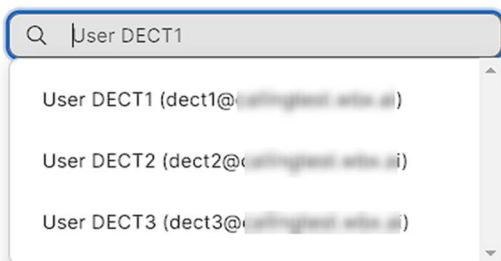
Search for a previously created User, and click on **Next**:

Add device

Which user will this device belong to?

① Multi-platform capabilities are only supported with shared devices.

User

A search dropdown menu for users. The search bar contains the text "User DECT1". Below the search bar, a list of three users is displayed: "User DECT1 (dect1@...)", "User DECT2 (dect2@...)", and "User DECT3 (dect3@...)". Each user entry is preceded by a small circular icon containing a checkmark.

Q User DECT1

- User DECT1 (dect1@...)
- User DECT2 (dect2@...)
- User DECT3 (dect3@...)


Select **Cisco phone, ATA or 3rd Party device** and from the from down box choose **Customer Managed Devices**.

Select device

A dropdown menu with the text "Customer Managed Devices" and a downward-pointing chevron icon on the right side.

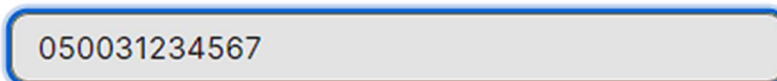
Customer Managed Devices

Device Vendor

A dropdown menu with the text "Generic IPPhone Customer Managed" and a downward-pointing chevron icon on the right side.

Generic IPPhone Customer Managed

Enter MAC address

A text input field with a blue border and a light gray background, containing the text "050031234567".

050031234567

☒ *I confirm that creating this device profile will expose sensitive credentials that could be misused and exploited by users.

Select the **Device Vendor** as **Generic IPPhone Customer Managed**

Enter the **MAC address** as the **IPEI of the Spectralink DECT phone**.

**Tip**

The MAC address is not validated against the IPEI but the value in this field must be unique. Using the IPEI guarantees that the value is unique and allows for information to be found about a specific DECT phone using the Control Hub.

Once a user has been created, you will be presented with the following screen:

Add device



Device successfully added

Details

User Name

User

Device vendor

Generic IPPhone Customer Managed

Line ID ⓘ

hgwdh3e4wh@98027369.us10.bcl.d.webex.com

Outbound proxy

dfw06.hosted-us.bcl.d.webex.com

MAC address

150930000216

SIP username

mUP9vXSsU9

SIP password

XXXXXXXXXX

⚠ Enter this password into the device to link it. As needed, record this password, since it will never be visible again. The administrator is responsible for maintaining and securing these credentials.

⬇ Download credentials as .csv

📄 Configuration documentation

These details need to be entered into the user account in the IP-DECT server for the DECT user to register with Webex.

**Tip: Record the SIP password**

Enter the SIP password into the device to link it. As needed, **record this password, since it will never be visible again**. The administrator is responsible for maintaining and securing these credentials.

The mappings are as follows:

Webex Device	IP-DECT User
SIP Username	SIP Username / Extension
Line ID (before the @ symbol)	Authentication User
SIP Password	Authentication Password
MAC Address	The IPEI of the DECT device

Other values from the Device account page are required to be entered into the IP-DECT server and will be detailed in the next section.

The example below shows how the credentials from the Webex device confirmation page should be entered on the IP-DECT server user account fields.

Production Time	2025-07-10T10:00:00Z
IPEI	15093 0000216
Access code	
User	
Standby text	3003
DECT to DECT	<input type="checkbox"/>
Disabled	<input type="checkbox"/>
Phone Language	Default ▼
SIP	
Username / Extension *	hgwdh3e4wh
Secondary username	
Domain	
Displayname	
Authentication user	mUP9vXSsU9
Authentication password	*****
Features	
Call forward unconditional	
Admin rights	<input type="checkbox"/>
<div>Save Delete Cancel</div>	
*) Required field	

Chapter 2: IP-DECT Server Setup

This section details the values that are required to be set on the IP-DECT Server for a successful integration with Cisco Webex.

Configuration/SIP Menu

Change the **Transport** to **TLS**

DNS Method to **DNS Serv**

Default Domain is set to the **Line ID value after the @ sign** on the Webex device summary screen.

Line ID ⓘ

hgwdh3e4wh@98027369.us10.bcld.webex.com



Timesaver

The Host CA Certificates that Webex Calling uses for TLS are already installed by default on the IP-DECT Server. No additional certificates are required to be installed.

Example: SIP Configuration

Configuration		Users		Administration		Firmware	
Media Resource	Security	Certificates	SIP	Statistics	Provisioning	Import/Export	Factory Reset

SIP Configuration

General

Local port *

Transport *

DNS method *

Default domain *

Allow wildcard certificate ☐

Register each endpoint on separate port ☐

Send all messages to current registrar ☐

Allow internal routing fallback ☐

Registration expire(sec) *

Max pending registrations *

Handset power off action

Max forwards *

Client transaction timeout(msec) *

Blacklist timeout(sec) *

SIP type of service (TOS/Diffserv) *

SIP 802.1p Class-of-Service *

GRUU ☒

Use SIPS URI ☐

TLS allow insecure ☐

TCP ephemeral port in contact address ☐

NAT keepalive

NAT keepalive interval(sec)

Send Hold before REFER ☒

Send BYE with REFER ☒

Convert SIP URI to phone number ☒

Alert-Info header

Internal ringtones incoming calls

Auto answer incoming calls

Proxies

Proxies

Set the **Proxy 1** field to the **Outbound Proxy** Value that is shown on the Webex Device configuration summary screen.

Outbound proxy

dfw06.hosted-us.bcl.d.webex.com

Example: Proxies Configuration

Proxies			
	Priority	Weight	URI
Proxy 1	1	100	sip:dfw06.hosted-us.bclld.webex.com
Proxy 2	2	100	
Proxy 3	3	100	
Proxy 4	4	100	

Authentication	
Default user	
Default password	
Realm	

DTMF signalling	
Send as RTP (rfc2833)	<input checked="" type="checkbox"/>
Offered rfc2833 payload type	96
Send as SIP INFO	<input type="checkbox"/>
Tone duration(msec) *	270

Message waiting indication	
Enable indication	<input checked="" type="checkbox"/>
Enable subscription	<input type="checkbox"/>
Subscription expire(sec) *	3600

Media

Remove the G726 Codec, set PCMU/8000 as codec priority1 and PCMA/8000 as codec priority 2.



Spectralink recommends:

Disabling G726 on all installations. With G726 enabled in the codec list, poor audio was experienced when reconnecting to a held call.

Example: Media Configuration

Media	
Packet duration(msec) *	20 ▾
Jitter buffer min(msec)	10
Jitter buffer max(msec)	500
Media type of service (TOS/Diffserv) *	184
Media 802.1p Class-of-Service *	5
Port range start *	58000
Codec priority *	1: PCMU/8000 ▾
	2: PCMA/8000 ▾
	3: None ▾
	4: None ▾
	5: None ▾
	6: None ▾
Add G729A media type for G.729 codec	<input type="checkbox"/>
SDP answer with preferred codec	<input type="checkbox"/>
SDP answer with a single codec	<input type="checkbox"/>
Ignore SDP version	<input type="checkbox"/>
Enable media encryption (SRTP)	<input checked="" type="checkbox"/>
Require media encryption (SRTP)	<input type="checkbox"/>
Include lifetime in SDES offers	<input type="checkbox"/>
Include MKI in SDES offers	<input type="checkbox"/>
Enable ICE	<input type="checkbox"/>
Enable TURN	<input type="checkbox"/>
TURN server	
TURN username	
TURN password	
Call status	
Play on-hold tone	<input checked="" type="checkbox"/>
Provide Music-on-Hold	<input type="checkbox"/>
Display status messages	<input checked="" type="checkbox"/>
'#' key ends overlap dialing	<input type="checkbox"/>
Call waiting	<input checked="" type="checkbox"/>
Allow automatic offhook	<input type="checkbox"/>
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

* Required field ** Required control

Appendix A: Tested Features

Function	Code	Alternative Code	Notes	Spectralink IP-DECT Supported
Anonymous Call Rejection Activation	*77			Yes
Anonymous Call Rejection Deactivation	*87			Yes
Anonymous Call Rejection Interrogation	*52*	*76		Yes
Automatic Callback Deactivation	#8	*8		No
Automatic Callback Menu Access	#9	*9		No
Call Bridge	*15			No
Call Forwarding Always Activation	*72		Enter *72, followed by the phone number you want to forward calls to and then #.	Yes
Call Forwarding Always Deactivation	*73			Yes
Call Forwarding Always Interrogation	*17			Yes
Call Forwarding Always to Voicemail Activation	*21			Yes
Call Forwarding Always to Voicemail Deactivation	#21	*36		Yes
Call Forwarding Busy Activation	*90			Yes
Call Forwarding Busy Deactivation	*91			Yes
Call Forwarding Busy Interrogation	*67*	*18		Yes
Call Forwarding Busy to Voicemail Activation	*40			Yes
Call Forwarding Busy to Voicemail Deactivation	#40	*42		Yes
Call Forwarding No Answer Activation	*92			Yes
Call Forwarding No Answer Deactivation	*93			Yes

Call Forwarding No Answer Interrogation	*61*	*19		Yes
Call Forwarding No Answer to Voicemail Activation	*41			Yes
Call Forwarding No Answer to Voicemail Deactivation	*35			Yes
Call Forwarding Not Reachable Activation	*94			Yes
Call Forwarding Not Reachable Deactivation	*95			Yes
Call Forwarding Not Reachable Interrogation	*63*	*20		Yes
Call Park	*68		Enter R*68, followed by the extension at which you want to park the call or # to park the call on your own extension.	Yes
Call Park Retrieve	*88		Enter *88, followed by the extension the call is parked at. If the call is parked against your own extension, press #.	Yes
Call Pickup	*98			No
Call Recording	*44			No
Call Recording - Pause	*48			No
Call Recording - Resume	*49			No
Call Recording - Stop	*45			No
Call Retrieve	*11			No
Call Return	*69			Yes
Call Return Number Deletion	#92#	*89		Yes
Call Waiting Interrogation	*53*	*38		Yes
Call Waiting Persistent Activation	*43			Yes
Call Waiting Persistent Deactivation	#43	*46		Yes
Calling Line ID Delivery Blocking Interrogation	*54*	*56		Yes
Calling Line ID Delivery Blocking Persistent Activation	*31			Yes

Calling Line ID Delivery Blocking Persistent Deactivation	#31	*32		Yes
Calling Line ID Delivery Blocking per Call	*67			No
	184 (Japan)			
Calling Line ID Delivery per Call	*65			No
	186 (Japan)			
Cancel Call Waiting	*70			No
Connected Line Identification Restriction Interrogation	*56*	*59		Yes
Direct Voicemail Transfer	*55		You can transfer a call to your voicemail or to another person's voicemail if they're in the same group. For example, to transfer a call to another person's voicemail, press the transfer soft key, then enter *55, followed by the person's extension.	Yes
Directed Call Pickup	*97			No
Directed Call Pickup with Barge-in	*33			No
Do Not Disturb Activation	*78			Yes
Do Not Disturb Deactivation	*79			Yes
EOCP Sustained Authorization Code Lock	*37			Yes
EOCP Sustained Authorization Code Unlock	*47			Yes
Executive Call Filtering Activation	#61			No
Executive Call Filtering Deactivation	#62			No
Executive-Assistant Call Push	#63			No
Executive-Assistant Initiate Call	#64			No

Executive-Assistant Opt-in	#65			No
Executive-Assistant Opt-out	#66			No
Group Call Park	#58	*58	Enter *58, get a dial tone, and then enter the number for the group call park.	No
Last Number Redial	*66			Yes
Make Outgoing Call with Selected Caller ID	#80	*85	Dial #80 followed by the caller ID and the call gets connected to an IVR which prompts to key-in the destination number.	No
Make Outgoing Call with Default Caller ID	#81	*81	Dial #81 followed by the destination number and the call directly connects to the destination number without an IVR.	No
Monitoring Next Call	#84	*84		No
Music On Hold Per-Call Deactivation	*60			No
No Answer Timer	*610	*10		Yes
Push to Talk	*50			No
Selective Call Forwarding Activation		*25		Untested
Selective Call Forwarding Deactivation	#77			Yes
Selective Call Forwarding Interrogation	*51*	*16		Yes
Silent Monitoring	#82	*82		No
Speed Dial 100	*75			No
Supervisor Coaching	#85			No
Voicemail Clear MWI	*99			Yes
Voicemail Retrieval	*86			Yes
Voice Portal Access	*62			Yes
Webex Anywhere E.164 Dialling	*14			No

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