



# Cisco Community Support Talks

Say Hi! to TAC Connect Bot

Arun Arunachalam, Cisco Principal Engineer

Paul Anholt, Technical Leader

Michael A. Whitaker, Technical Engineer, CCIE #5187

November 19<sup>th</sup>, 2020

# News & Upcoming events



# Ask Me Anything following the event

Now through Friday November 27<sup>th</sup>, 2020



With  
Arun, Paul & Michael

<https://bit.ly/ama-TACcboot>



Arun Arunachalam  
Principal Engineer



Paul Anholt  
Technical Leader



Michael Whitaker  
Technical Engineer  
CCIE #5187

# Upcoming Support Talks events

## Collaboration Solutions Analyzer

December 3rd, 2020

With Kristof Van Coillie

Participate: <https://bit.ly/csa-tool>

## Cisco CLI Analyzer

December 17th, 2020

With Magnus Mortensen & Nick Oliver

Participate: <https://bit.ly/CLI-tool>



A  
**Support Talks**  
Series

**New TAC Tools Explained!**

A set of series that will walk you through the different Cisco support tools and their features.

Learn more!

# Become an event Top Contributor!

Participate in Live Interactive Technical Events and much more

<http://bit.ly/EventTopContributors>



A screenshot of the Cisco Community website's "Events Top Contributors" page. The page header includes the Cisco logo and "Cisco Community". Below the header is a search bar and navigation tabs for "Technology &amp; Support", "For Partners", "Customer Connection", "Events", and "Members &amp; Recognition". The main content area is titled "Events Top Contributors" and includes a description of the program, a "2014 2013" filter, and two contributor profiles: Julio Carvajal and Ryota Takao. A small video thumbnail is visible on the right side of the page.

## Cisco Designated VIPs

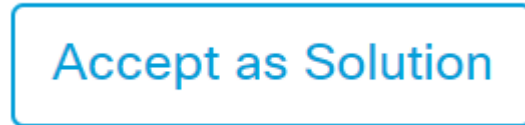
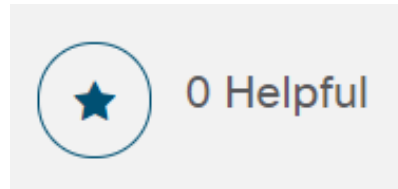


The Cisco Designated VIP program recognizes the top external individual contributors in Cisco's online communities, including the Cisco Support Community (CSC), Cisco Learning Network (CLN) and the Cisco Developers Network (CDN). Cisco Designated VIPs are recognized by their peers for their expertise and tireless contributions, and their abundant participation is vital to community success. With this program, Cisco formally recognizes the positive, valuable influence our top individual members exert on the communities overall. [FAQs](#)

# Rate content at the Cisco Community

Help us to recognize the quality content in the community

Rate documents,  
Videos & blogs!



Encourage and acknowledge people who  
generously share their  
time and expertise



# Cisco Community Experts



Arun Arunachalam  
Cisco Principal Engineer



Paul Anholt  
Technical Leader



Michael A. Whitaker  
Technical Engineer

Thank You For  
Joining Us Today!



Download Today's Presentation  
<https://bit.ly/slides-tacbot>



# Submit Your Questions Now!

Use the **Q&A** panel to submit your questions and the panel of experts will respond.

They will be answered eventually



Please take a moment to complete the survey at the end of the event



# TAC Connect Bot

Personal Assistant for Customers,  
Partners and You

Cisco Customer Experience  
November 2020

<https://tacconnect.cisco.com>



# Agenda



Introduction



Accessing the Bot



Conversations



Help, Commands & Feedback

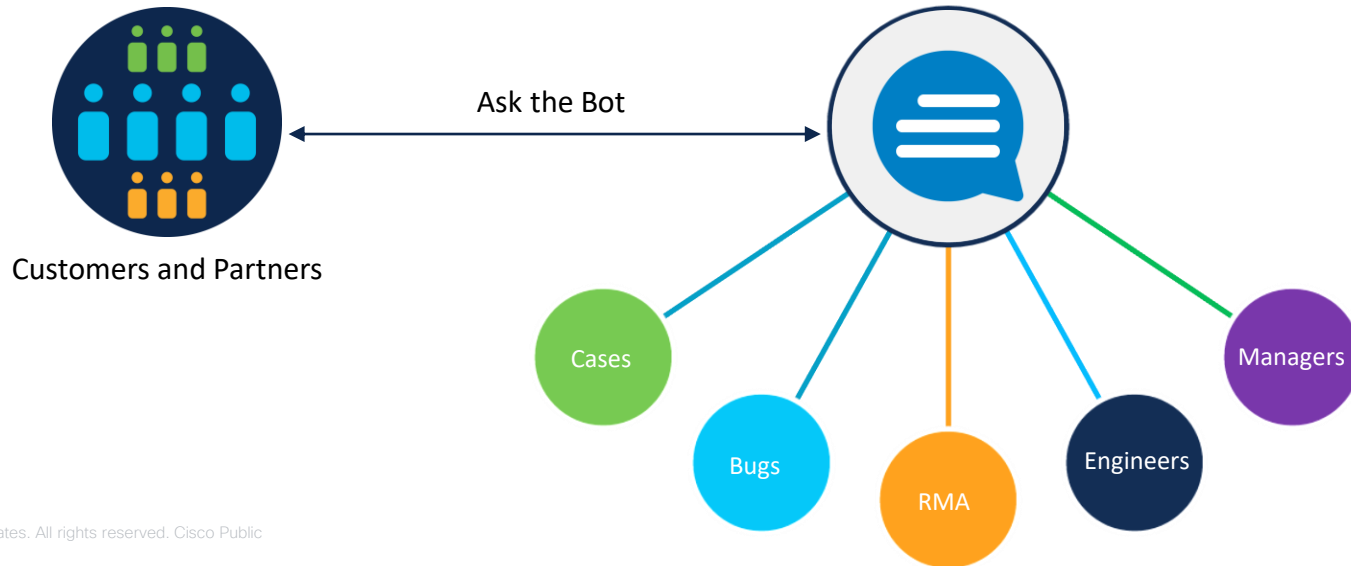
# Polling Question 1

How frequently do you interact with Cisco TAC?

- A. Daily
- B. Weekly
- C. Monthly
- D. Not frequently

# Why a Personal Assistant?

A significant percentage of incoming calls to Cisco TAC Frontline are about existing cases. Common inquiries include “what is the latest status of my case” and “I want to talk to my engineer”. TAC Connect Bot enables a self-service experience for these interactions.



# Self-Service Experience for TAC Engagements

## Get Things Done Quicker Without Waiting in Queue

Get status

Case, Bug, RMA and BEMS

Update

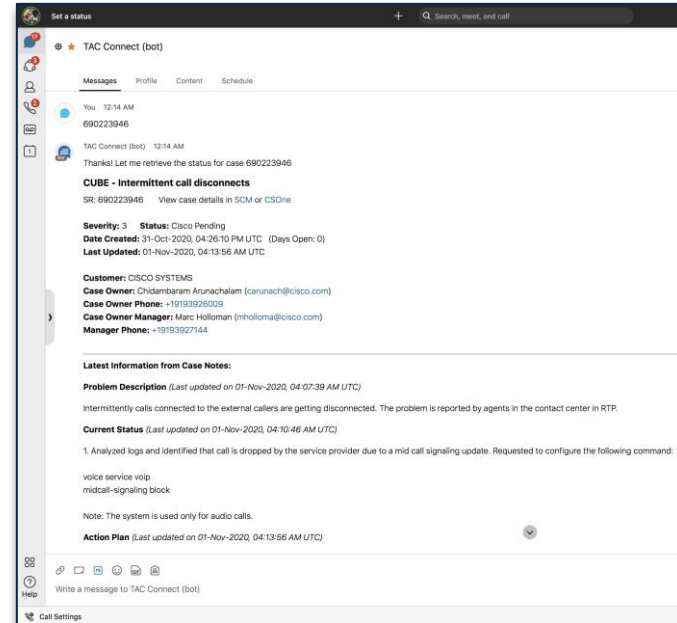
Add case notes and feedback

Connect

Engineer via Virtual Spaces or Phone Callback

Initiate

Schedule dispatch, Raise severity, Escalation, Case Closure



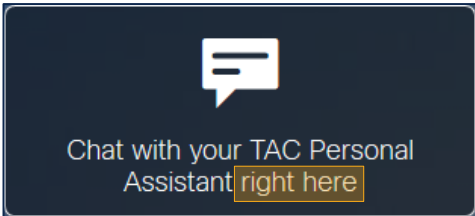
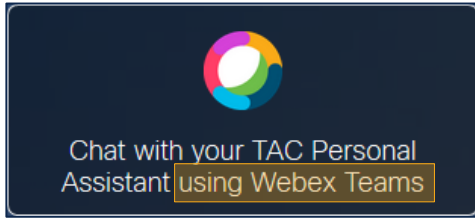
Natural language and text commands

# Accessing the Bot



# Multiple ways to interact with the Bot

<https://tacconnect.cisco.com>



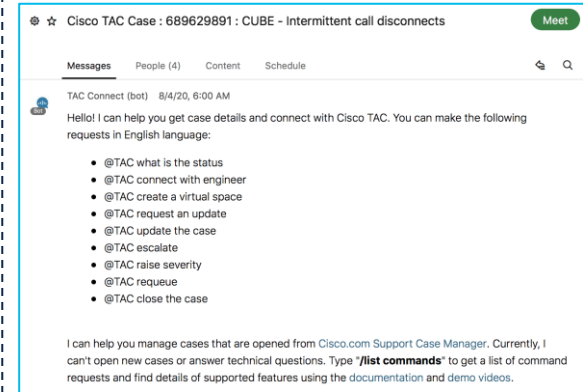
Support Case Manager

| Actions       | Case      | Created    |
|---------------|-----------|------------|
| ☆ ASK THE BOT | 689690559 | 08/12/2020 |
| ☆ ASK THE BOT | 689644400 | 08/05/2020 |
| ☆ ASK THE BOT | 689517089 | 07/17/2020 |

Hi there! I can help manage your cases.



Virtual Spaces



Cisco TAC Case : 689629891 : CUBE - Intermittent call disconnects

Messages People (4) Content Schedule

TAC Connect (bot) 8/4/20, 6:00 AM

Hello! I can help you get case details and connect with Cisco TAC. You can make the following requests in English language:

- @TAC what is the status
- @TAC connect with engineer
- @TAC create a virtual space
- @TAC request an update
- @TAC update the case
- @TAC escalate
- @TAC raise severity
- @TAC request
- @TAC close the case

I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type **/list commands** to get a list of command requests and find details of supported features using the documentation and demo videos.

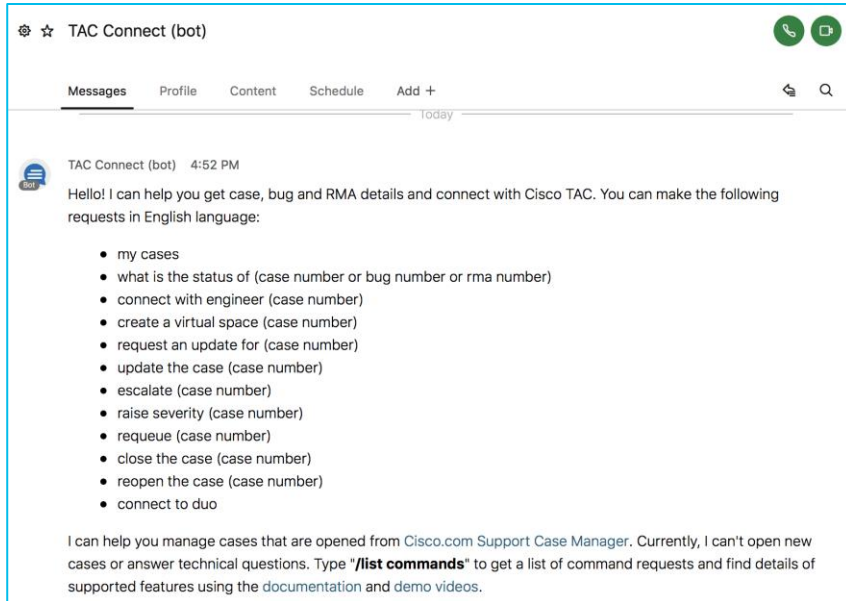
Created in the context of a TAC case

"The tool is amazing for me, personally overnight it changed TAC and customer workflow management and I love it."

- Matt Buttner, Systems Architect, Sales



# Welcome Message Has Everything to Get Started



The screenshot shows a WhatsApp chat interface for a contact named "TAC Connect (bot)". The chat header includes a settings gear, a star, the contact name, and icons for voice and video calls. Below the header is a navigation bar with tabs for "Messages", "Profile", "Content", "Schedule", and "Add +", along with a share icon and a search icon. The main chat area shows a message from "TAC Connect (bot)" at 4:52 PM. The message text reads: "Hello! I can help you get case, bug and RMA details and connect with Cisco TAC. You can make the following requests in English language:". This is followed by a bulleted list of 13 commands: "my cases", "what is the status of (case number or bug number or rma number)", "connect with engineer (case number)", "create a virtual space (case number)", "request an update for (case number)", "update the case (case number)", "escalate (case number)", "raise severity (case number)", "requeue (case number)", "close the case (case number)", "reopen the case (case number)", and "connect to duo". At the bottom of the message, there is a paragraph: "I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type **"/list commands**" to get a list of command requests and find details of supported features using the documentation and demo videos."

TAC Connect (bot)

Messages Profile Content Schedule Add +

Today

TAC Connect (bot) 4:52 PM

Hello! I can help you get case, bug and RMA details and connect with Cisco TAC. You can make the following requests in English language:

- my cases
- what is the status of (case number or bug number or rma number)
- connect with engineer (case number)
- create a virtual space (case number)
- request an update for (case number)
- update the case (case number)
- escalate (case number)
- raise severity (case number)
- requeue (case number)
- close the case (case number)
- reopen the case (case number)
- connect to duo

I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type **"/list commands**" to get a list of command requests and find details of supported features using the documentation and demo videos.

# Prerequisite

- **What** – The email address that is used to login to Webex Teams **MUST** be the primary email address associated with your Cisco.com profile.  
[https://rpfa.cloudapps.cisco.com/rpfa/profile/profile\\_management.do](https://rpfa.cloudapps.cisco.com/rpfa/profile/profile_management.do)
- **Why** – To protect customer data.
- **How** – The email address of Webex Teams user account is mapped to Cisco.com user-id. This user-id is used to authorize case, bug and RMA data access.

# Get Started!

Create a Webex Teams account using your primary email address associated with your Cisco.com user profile. The exact email address can be found in Account Profile Tool.

Cisco Webex Teams

## Make teamwork your best work.

Webex Teams is an app for continuous teamwork with video meetings, group messaging, file sharing and white boarding.

Try Teams free

Download Teams

## Account Profile Tool

[https://rpfa.cloudapps.cisco.com/rpfa/profile/profile\\_management.do](https://rpfa.cloudapps.cisco.com/rpfa/profile/profile_management.do)

## Download

<https://www.webex.com/products/teams/index.html>

## Get Started

<https://help.webex.com/ld-n0bl93g-CiscoWebexTeams/Webex-Teams-App#>

# Demo

[Cisco Video Playlist](#)

[YouTube Playlist](#)



## Polling Question 2

What is your preferred communication preference?

- A. Email
- B. Phone
- C. Webex Teams
- D. Web chat
- E. Bots

# Conversations: Status view and Case Updates



# Prioritized View of Your Cases



You 2:08 PM

my cases



TAC Connect (bot) 2:08 PM

Thanks! Let me retrieve the cases for user ID carunach

---

## Cisco pending cases

1. (S3, 06/04/2019) [686863960](#) - GCI Test case: Call center agents get disconnected mid conversation.
2. (S3, 07/12/2019) [687108421](#) - Test case
3. (S3, 07/13/2019) [686587936](#) - Test case

---

## Cases that needs my confirmation to close

1. (S3, 05/16/2019) [686442481](#) - This is a test case to test out DS recommendation alert. 000096: Jun 14 07:43:4

# Get Case Status

You 8:11 PM

status 683752332

TAC Connect (bot) 8:11 PM

Thanks! Let me retrieve the status for case 683752332

**DNS DDoS Proactive Detection (Test case)**

SR: 683752332 View case details in [SCM](#) or [CSOne](#)

**Severity:** 3 **Status:** Customer Updated

**Date Created:** 11-Jan-2018, 08:04:07 AM UTC (Days Open: 562)

**Last Updated:** 27-Jul-2019, 04:16:40 AM UTC

**Customer:** CISCO SYSTEMS, INC.

**Case Owner:** Chidambaram Arunachalam ([carunach@cisco.com](mailto:carunach@cisco.com))

**Case Owner Phone:** +1 919 392 6009

**Linked Bugs:**

- [CSCtz27004](#)
- [CSCvd04266](#)

**Problem Description** (Last updated on 08-Jul-2019, 07:44:54 PM UTC)

Unexpected spike in DNS traffic to host [172.18.110.100](#) detected by Tetration Analytics Platform. Issue was identified to be a DNS DDoS attack. Test.

Changing from internal to external.

**Action Plan** (Last updated on 10-Jul-2019, 09:59:32 PM UTC)

- (1) Monitor the system and SDN controller policy deployed to mitigate DNS DDoS traffic.
- (2) Upgrade software to NX OS 6.2(10)S16
- (3) Monitor device after upgrade and close the case if everything works well.

**Resolution Summary** (Last updated on 08-Jul-2019, 07:44:56 PM UTC)

Issue was mitigated by rerouting DNS traffic from 10.x.x.x network to a blackhole and storing 10% in the data collection server. SDN Controller policy to automatically detect issue and take rerouting action has been developed, tested and provided to customer.

Proactive Recommendation:

Note: External users can access the case data only if there are authorized. This requires the user to have the service contract used to open the case to be associated with their [Cisco.com profile](#).

Adding the user's email address in the CC Recipients field at the time of case open in Support Case Manager does not enable case data access.



# Get Bug Status

You 8:15 PM

status CSCtz27004

NEW MESSAGES

TAC Connect (bot) 8:15 PM

Thanks! Let me retrieve the status for bug csctz27004

**NVRAM correction when bad sectors found.**

CSCtz27004

- **Status** : Fixed
- **Product** : Cisco Nexus 7000 Series Switches
- **Severity** : Enhancement(6)
- **Click [here](#) to view known affected and fixed releases.**

---

**Bug Release-note :**

Symptom:  
Supervisor-1 may log the following messages and report NVRAM Gold diagnostic failure:

```
%KERN-2-SYSTEM_MSG: Invalid cksum for block 17 expected 0x304 got 0x384 - kernel
%KERN-0-SYSTEM_MSG: NVRAM Error: (line 464):Invalid cksum for block 17 expected 0x304 got 0x384 - ker
```

%DEVICE\_TEST-STANDBY-2-NVRAM\_FAIL: Module 5 has failed test NVRAM 20 times on device NVRAM due to error Bad blocks found on nvram  
%DIAGCLIENT-STANDBY-2-EEM\_ACTION\_HM\_SHUTDOWN: Test has been disabled as a part of default EEM action

Conditions:  
NVRAM diagnostic test verifies that stored cksum matches the cksum computed for block contents. If there is a mismatch in cksum values, the condition is logged and test will be disabled after multiple consecutive failures.

Workaround:  
NVRAM block failure may be a result of a single-event upset / bit-flip (transient condition). Prior to this enhancement, no error-correction is performed and the issue will only be cleared by reload of the affected supervisor.

Details of this enhancement:  
This enhancement provides error correction for NVRAM data corruption caused by single-event upsets by replacing corrupted blocks with contents from mirrored copy in DRAM. The NVRAM Gold diagnostic will continue to log the initial checksum failure, but will perform a block rewrite that will prevent further test iterations from failing.

If multiple test failures occur for the same NVRAM block, a hard-failure may have occurred and a TAC case should be opened for RMA.

# Get RMA Status



You 8:17 PM

status 88238608



TAC Connect (bot) 8:17 PM

Thanks! Let me retrieve the status for RMA 88238608

## **RMA 88238608:Service Order RMA API**

- **Status:** Closed
- **Contact Name:** Jonathan Menendez
- **Contact Email:** <mailto:jonmenen@cisco.com>
- **Contact Phone:** 1919 574 6788
- **Order Date:** 2018-01-10
- **Requested Ship Date:** 2018-01-10
- Click [here](#) to view the shipment, tracking and return details

---

### **Shipping address:**

Jonathan Menendez  
CISCO SYSTEMS  
7025 KIT CREEK RD  
RESEARCH TRIANGLE PARK  
NC  
US

# Update a Case



You 2:26 PM

update case 683752332



TAC Connect (bot) 2:27 PM

Please enter the note details.



You 2:27 PM

The problem reoccurred today and we have attached the logs.



TAC Connect (bot) 2:27 PM

Thanks! Successfully added the note to the case 683752332

# Request Latest Update on a Case

TAC Connect Bot

**Problem Description** (Last updated on 07-Feb-2020, 09:18:56 PM UTC)  
Unexpected spike in DNS traffic to host 172.18.110.100 detected by Tetration Analytics Platform.

**Current Status** (Last updated on 20-Feb-2020, 02:15:17 PM UTC)  
Customer is currently monitoring the implemented solution and will inform results to us.

**Action Plan** (Last updated on 10-Mar-2020, 02:21:48 PM UTC)  
(1) Customer - Monitor the system for 1 week and provide confirmation that the policy is working well or report any related issues.  
(2) Customer - Upgrade software to NX OS 6.2(10)S16 is scheduled on 3/18, monitor system stability.  
(3) Engineer - Close case after customer provides confirmation.

**Resolution Summary** (Last updated on 07-Feb-2020, 09:18:56 PM UTC)  
Issue was mitigated by rerouting DNS traffic from 10.x.x.x network to a blackhole and storing 10% in the data collection server. SDN Controller policy to automatically detect issue and take rerouting action has been developed, tested and provided to customer.  
Proactive Recommendation:  
The syslog message "%KERN-2-SYSTEM\_MSG: Invalid cskum" is observed in a number of Nexus 7K switches. The root cause of this message is due to CSCtz27004. Workaround is to reload the device. Customer needs to upgrade to NX OS 6.2(10)S16. Recommendation has been provided to customer's support team and AS engineers.

/request-update 687405514

Thanks! I have informed the case owner to review and provide you the latest case update

Enter message

Rate your experience Chat in WebEx Teams Start Over Help

## Bot Notification to Engineer



TAC Connect (bot) 8:28 PM

Chidambaram Arunachalam, [carunach@cisco.com](mailto:carunach@cisco.com) has requested case owner to review and provide the latest update regarding the case [683752332](#). Please reach out to customer.

# Provide Case Closure Confirmation

close case 687405514

Sure. I will inform the case owner to close this case.  
Thanks!

## Bot Notification to Engineer



TAC Connect (bot) 8:37 PM

[carunach@cisco.com](mailto:carunach@cisco.com) has requested to close the case [683752332](#).


Please take next steps. Thanks!

# Conversations: Engineer Communication





# Connect to Engineer


Engineer is available


 You 4/2/18, 3:47 PM  
connect to engineer

 TAC Connect 4/2/18, 3:47 PM  
Would you like to speak with the owner of 683752332, "DNS DDoS Proactive Detection (Test case)"? Please enter "Yes" to use this case number or provide another case number.

 You 4/2/18, 3:48 PM  
yes

 TAC Connect 4/2/18, 3:48 PM  
Can the engineer call you at 19197447009? Please enter "Yes" to use this phone number or provide another phone number.

 You 4/2/18, 3:48 PM  
yes

 TAC Connect 4/2/18, 3:48 PM  
Thanks! Let me check if the engineer is available to call you.  
Engineer is available and will call you soon at 19197447009. Thanks!

# Connect to Engineer

Engineer **isn't** available



You 4/2/18, 3:53 PM  
connect to engineer



TAC Connect 4/2/18, 3:53 PM  
Please provide a case number.



You 4/2/18, 3:53 PM  
683752332



TAC Connect 4/2/18, 3:53 PM  
What is your phone number? Please include the country code. Example: 491701234567.



You 4/2/18, 3:53 PM  
19197447009



TAC Connect 4/2/18, 3:53 PM  
Thanks! Let me check if the engineer is available to call you.  
Engineer is not available right now. Please leave a message to the engineer.



You 4/2/18, 3:54 PM  
test



TAC Connect Stage 4/2/18, 3:54 PM  
Your message has been sent and the engineer will call back.  
If you need immediate assistance, please call Cisco TAC and request the case to be reassigned. Cisco TAC phone numbers:  
<http://www.cisco.com/c/en/us/support/web/tsd-cisco-worldwide-contacts.html>



# Connect to Engineer



You 8:10 AM

connect to engineer 689629891



TAC Connect (bot) 8:10 AM

What is your phone number? Please enter a valid phone number including the country code without the + or - signs. Example: 491701234567



You 8:10 AM

19193926009



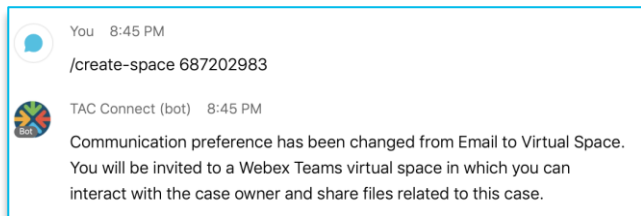
TAC Connect (bot) 8:10 AM

Thanks! Let me check if an engineer is available to call you.

Engineer is not available right now and will call back in 15 minutes.

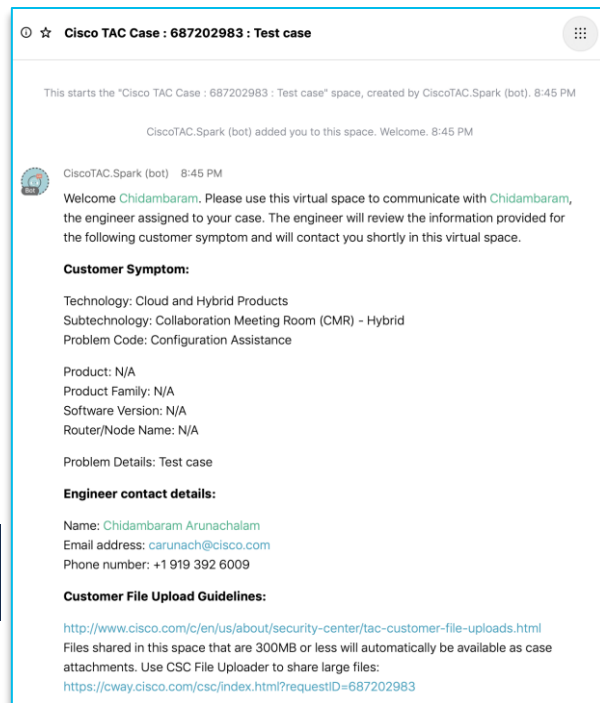
Engineer **isn't** available  
right now but will callback in  
15 / 30 / 60 minutes

# Use Virtual Space as the Communication Preference



A screenshot of a chat window. The first message is from 'You' at 8:45 PM, containing the command `/create-space 687202983`. The second message is from 'TAC Connect (bot)' at 8:45 PM, stating: 'Communication preference has been changed from Email to Virtual Space. You will be invited to a Webex Teams virtual space in which you can interact with the case owner and share files related to this case.'

Webex Teams Virtual Space with  
case contacts and owner



A screenshot of a Webex Teams chat window titled 'Cisco TAC Case : 687202983 : Test case'. The chat contains the following messages:

- A system message: 'This starts the "Cisco TAC Case : 687202983 : Test case" space, created by CiscoTAC.Spark (bot), 8:45 PM'
- A message from CiscoTAC.Spark (bot): 'CiscoTAC.Spark (bot) added you to this space. Welcome, 8:45 PM'
- A message from CiscoTAC.Spark (bot): 'Welcome **Chidambaram**. Please use this virtual space to communicate with **Chidambaram**, the engineer assigned to your case. The engineer will review the information provided for the following customer symptom and will contact you shortly in this virtual space.'

**Customer Symptom:**

- Technology: Cloud and Hybrid Products
- Subtechnology: Collaboration Meeting Room (CMR) - Hybrid
- Problem Code: Configuration Assistance

Product: N/A  
Product Family: N/A  
Software Version: N/A  
Router/Node Name: N/A

Problem Details: Test case

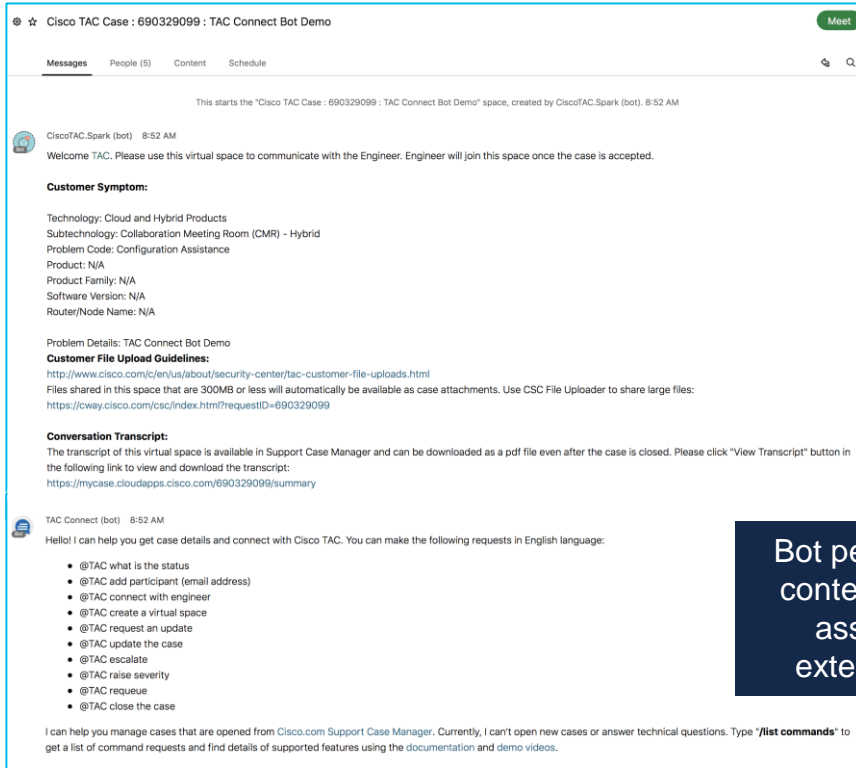
**Engineer contact details:**

- Name: Chidambaram Arunachalam
- Email address: [carunach@cisco.com](mailto:carunach@cisco.com)
- Phone number: +1 919 392 6009

**Customer File Upload Guidelines:**

- <http://www.cisco.com/c/en/us/about/security-center/tac-customer-file-uploads.html>
- Files shared in this space that are 300MB or less will automatically be available as case attachments. Use CSC File Uploader to share large files:
- <https://cway.cisco.com/csc/index.html?requestID=687202983>

# Bot is automatically added to external virtual space



Cisco TAC Case : 690329099 : TAC Connect Bot Demo

Messages People (5) Content Schedule

This starts the "Cisco TAC Case : 690329099 : TAC Connect Bot Demo" space, created by CiscoTAC.Spark (bot), 8:52 AM

CiscoTAC.Spark (bot) 8:52 AM  
Welcome TAC. Please use this virtual space to communicate with the Engineer. Engineer will join this space once the case is accepted.

**Customer Symptom:**

Technology: Cloud and Hybrid Products  
Subtechnology: Collaboration Meeting Room (CMR) - Hybrid  
Problem Code: Configuration Assistance  
Product: N/A  
Product Family: N/A  
Software Version: N/A  
Router/Node Name: N/A

Problem Details: TAC Connect Bot Demo

**Customer File Upload Guidelines:**  
<http://www.cisco.com/c/en/us/about/security-center/tac-customer-file-uploads.html>  
Files shared in this space that are 300MB or less will automatically be available as case attachments. Use CSC File Uploader to share large files:  
<https://cway.cisco.com/csc/index.html?requestID=690329099>

**Conversation Transcript:**  
The transcript of this virtual space is available in Support Case Manager and can be downloaded as a pdf file even after the case is closed. Please click "View Transcript" button in the following link to view and download the transcript:  
<https://mycase.cloudapps.cisco.com/690329099/summary>

TAC Connect (bot) 8:52 AM  
Hello! I can help you get case details and connect with Cisco TAC. You can make the following requests in English language:

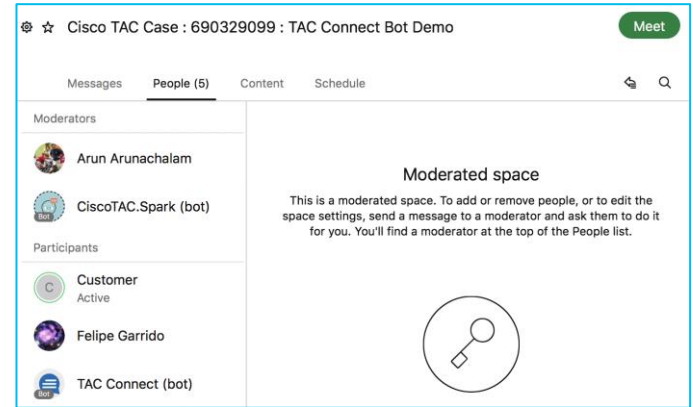
- @TAC what is the status
- @TAC add participant (email address)
- @TAC connect with engineer
- @TAC create a virtual space
- @TAC request an update
- @TAC update the case
- @TAC escalate
- @TAC raise severity
- @TAC requeue
- @TAC close the case

I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type **"/list commands"** to get a list of command requests and find details of supported features using the documentation and demo videos.

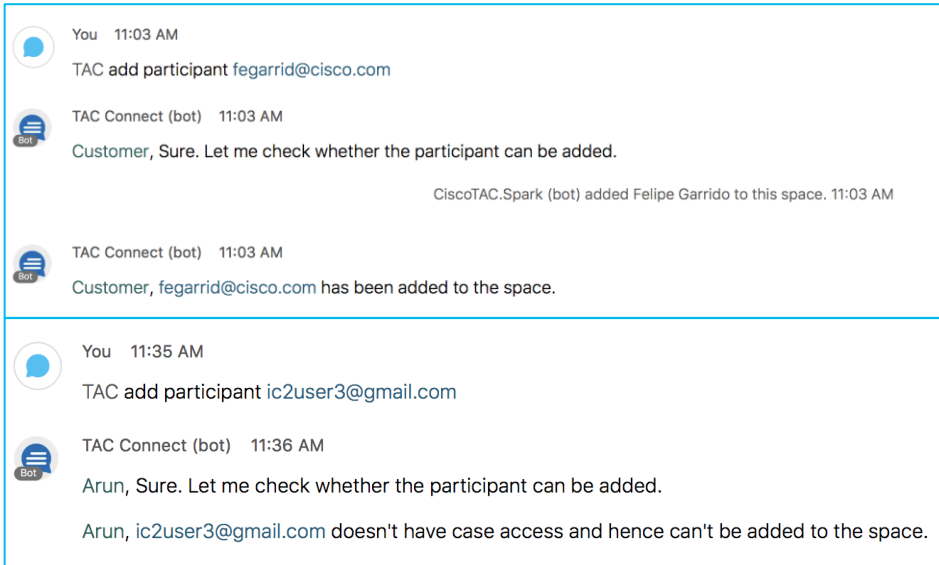
Bot performs tasks in the context of the TAC case associated with the external virtual space.

# Virtual Spaces

- Case owners are added as moderator.
- Customers can add authorized participants using `@TAC /add-participant <email-addr>`
- Files up to **300MB** can be shared in the space and are transferred to case.
- When the case is closed
  - All human participants are removed
  - Automatic import of text messages
  - Virtual space is deleted
- Conversation Transcript is available in Support Case Manager



# Add Authorized Participants to the Virtual Space



The screenshot shows a chat interface with two messages from 'You' and two responses from 'TAC Connect (bot)'. The first message from 'You' is at 11:03 AM: 'TAC add participant fegarrid@cisco.com'. The bot responds: 'Customer, Sure. Let me check whether the participant can be added.' A system message follows: 'CiscoTAC.Spark (bot) added Felipe Garrido to this space. 11:03 AM'. The second message from 'You' is at 11:03 AM: 'TAC Connect (bot) 11:03 AM'. The bot responds: 'Customer, fegarrid@cisco.com has been added to the space.' The second message from 'You' is at 11:35 AM: 'TAC add participant ic2user3@gmail.com'. The bot responds: 'Arun, Sure. Let me check whether the participant can be added.' and 'Arun, ic2user3@gmail.com doesn't have case access and hence can't be added to the space.'

You 11:03 AM  
TAC add participant fegarrid@cisco.com

TAC Connect (bot) 11:03 AM  
Customer, Sure. Let me check whether the participant can be added.

CiscoTAC.Spark (bot) added Felipe Garrido to this space. 11:03 AM

TAC Connect (bot) 11:03 AM  
Customer, fegarrid@cisco.com has been added to the space.

You 11:35 AM  
TAC add participant ic2user3@gmail.com

TAC Connect (bot) 11:36 AM  
Arun, Sure. Let me check whether the participant can be added.  
Arun, ic2user3@gmail.com doesn't have case access and hence can't be added to the space.

Authorized participants are users who have **case access**. This is determined based on the contract or subscription associated with the user's profile.

# Add Participants to the Virtual Space Temporarily

End users who don't have access to a case can be added temporarily **by customers and partners** to facilitate troubleshooting.



You 10:49 AM

TAC add participant ic2user1@gmail.com



TAC Connect (bot) 10:49 AM

Customer, Sure. Let me check whether the participant can be added.

Customer, ic2user1@gmail.com doesn't have access to this access. Hence it will require your explicit approval to add the user to this virtual space temporarily for 48 hours for troubleshooting purposes. Please enter 'Yes' or 'No' to approve / disapprove. Thanks!



You 10:50 AM

TAC yes

CiscoTAC.Spark (bot) added IC2 User1 to this space. 10:50 AM



TAC Connect (bot) 10:50 AM

Customer, ic2user1@gmail.com has been added to the space.

# Virtual Space Conversation Transcript

## Support Case Manager

Details for TAC FastStart (tacfaststart@gmail.com)

690329099  
TAC Connect Bot Demo ASK THE BOT

**Note: You will be invited to a virtual space in Webex Teams after the case has been created. The engineer will join the space after taking ownership.**

1 / 2

Summary Notes Attachments Launch Webex Teams ADD NOTES ADD FILES VIEW TRANSCRIPT SAVE AS PDF

### CASE SUMMARY

| STATUS                      | SEVERITY        | CREATED    |
|-----------------------------|-----------------|------------|
| Cisco Pending <span></span> | 3               | 11/17/2020 |
| REQUEST TYPE                | LOSS OF SERVICE |            |
| Diagnose and Fix my Problem | No              |            |

Click "View Transcript"

### Virtual Space Transcript for case 690329099

Space Id: Y2ltY2ZzcGFyaXNlL3VlL1JP  
00wMWMZM2YwYzZAMjYyOXMWVWfWmYjINGQ5OTQ0 DlyAGUJ3 (GMT)

2020-11-17 13:52:31 (GMT) tac.connect@webex.bot  
Hello! I can help you get case details and connect with Cisco TAC. You can make the following requests in English language: @TAC what is the status @TAC add participant (email address) @TAC connect with engineer @TAC create a virtual space @TAC request an update @TAC update the case @TAC escalate @TAC raise severity @TAC request @TAC close the case I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type "list commands" to get a list of command requests and find details of supported features using the documentation and demo videos.

2020-11-17 13:52:23 (GMT) cisctotaspark@webex.bot  
Welcome TAC. Please use this virtual space to communicate with the Engineer. Engineer will join this space once the case is accepted. Customer Symptom: Technology: Cloud and Hybrid Products Subtechnology: Collaboration Meeting Room (CMR) - Hybrid Problem Code: Configuration Assistance Product: N/A Product Family: N/A Software Version: N/A Router/Node Name: N/A Problem Details: TAC Connect Bot Demo Customer File Upload Guidelines: <http://www.cisco.com/c/en/us/about/security-center/tac-customer-file-uploads.html> Files shared in this space that are 300MB or less will automatically be available as case attachments. Use CSC File Uploader to share large files: <https://cway.cisco.com/csc/index.html?requestID=690329099> Conversation Transcript: The transcript of this virtual space is available in Support Case Manager and can be downloaded as a pdf file even after the case is closed. Please click "View Transcript" button in the following link to view and download the transcript: <https://mycase.cloudapps.cisco.com/690329099/summary>

SAVE AS PDF CANCEL

# Conversations: Case Handling Tasks





# Change Case Severity



You 2:28 PM

raise severity 683752332



TAC Connect (bot) 2:28 PM

I can increase the case severity. Please note that you are expected to be available for live troubleshooting of severely degraded network conditions impacting your business. Would you like to continue? Please respond with **yes** or **no**. Thanks!



You 2:28 PM

yes



TAC Connect (bot) 2:28 PM

What is your phone number? Please include the country code. Example: 491701234567.



You 2:28 PM

19193926009



TAC Connect (bot) 2:28 PM

Let me check the availability of the current case owner.

Engineer is not available. However, a Customer Service Representative will call you soon to increase the severity to S2 and to connect you to the next available engineer.

# Requeue a Case



You 12/14/18, 1:28 PM

/requeue 684345515



TAC Connect (bot) 12/14/18, 1:28 PM

I can check whether the current case owner is available to talk with you. Would you like me to check? Please type "Yes" or "No".



You 12/14/18, 1:28 PM

yes



TAC Connect (bot) 12/14/18, 1:28 PM

Can the engineer call you at 19197447009? Please enter "Yes" to use this phone number or provide another phone number.



You 12/14/18, 1:28 PM

yes



TAC Connect (bot) 12/14/18, 1:28 PM

Thanks! Let me check if the engineer is available to call you

Engineer is available and will call you soon at 19197447009. Thanks!

# Schedule Dispatch a Case

You 12:26 PM  
requeue 689382051

TAC Connect (bot) 12:26 PM  
Please select when you would like to requeue?  
[Now](#) [Specific Time](#)

TAC Connect (bot) 12:26 PM  
If your case is requeued, it will change ownership to different engineer. This may increase resolution time. Would you still like to requeue?

You 12:27 PM  
yes

TAC Connect (bot) 12:27 PM  
Please select a specific date and time. If it's the same day, choose a time slot that starts at least 1 hour ahead.

Date  
2020-08-15

Time Slot  
08:00 AM - 10:00 AM

Time Zone  
America/New\_York

[Submit](#)

TAC Connect (bot) 12:28 PM  
Thanks! Let me request the requeue.  
Your case is set to be requeued on 2020-08-15 during the time slot 08:00 AM - 10:00 AM hours, America/New\_York. New engineer will contact you after the case is accepted.

# Escalate a Case – Contact via Phone

DM **is** available

The screenshot shows a chat interface with the following messages:

- You** 6:43 AM: escalate 687405514
- TAC Connect (bot)** 6:43 AM: An escalation request will inform a manager that the case needs attention. The manager, duty manager or customer service representative will call you to discuss further. If you would like to raise severity or requeue the case, please use **/raise-severity** and **/requeue** commands. Would you still like to continue? Please enter 'Yes' or 'No'.
- You** 6:43 AM: Yes
- TAC Connect (bot)** 6:43 AM: Please provide the escalation reason. This will help the manager understand the situation better.
- You** 6:43 AM: Lack of timely progress
- TAC Connect (bot)** 6:43 AM: How would you like the manager to contact you? Please enter 'email' or 'phone'.
- You** 6:44 AM: phone
- TAC Connect (bot)** 6:44 AM: Would you like to be called at 19197447009? Please enter 'Yes' to use this phone number or provide another phone number.
- You** 6:44 AM: yes
- TAC Connect (bot)** 6:44 AM: Contacting the manager of the engineer assigned to this case. This may take up to 5 minutes.  
It looks like manager ([joselmar@cisco.com](mailto:joselmar@cisco.com)) is not available.  
I'll contact a duty manager next. This may take up to 3 minutes.  
Duty manager is available and will call you at 19197447009. Thanks!

# Escalate a Case – Contact via Phone

DM isn't available

The screenshot shows a chat interface with a light blue border. It contains a series of messages between a user and a bot named 'TAC Connect (bot)'. The messages are as follows:

- You 6:51 AM**: escalate 687405514
- TAC Connect (bot) 6:51 AM**: An escalation request will inform a manager that the case needs attention. The manager, duty manager or customer service representative will call you to discuss further. If you would like to raise severity or requeue the case, please use **/raise-severity** and **/requeue** commands. Would you still like to continue? Please enter 'Yes' or 'No'.
- You 6:51 AM**: Yes
- TAC Connect (bot) 6:51 AM**: Please provide the escalation reason. This will help the manager understand the situation better.
- You 6:51 AM**: Lack of timely progress
- TAC Connect (bot) 6:51 AM**: How would you like the manager to contact you? Please enter 'email' or 'phone'.
- You 6:52 AM**: phone
- TAC Connect (bot) 6:52 AM**: Would you like to be called at 19197447009? Please enter 'Yes' to use this phone number or provide another phone number.
- You 6:52 AM**: yes
- TAC Connect (bot) 6:52 AM**: Contacting the manager of the engineer assigned to this case. This may take up to 5 minutes.  
It looks like manager ([joselmar@cisco.com](mailto:joselmar@cisco.com)) is not available.  
I'll contact a duty manager next. This may take up to 3 minutes.  
It looks like Duty Manager is not available. I'll put you in contact with a Customer Service Representative who will call you shortly.

# Escalate a Case – Contact via Email

Manager **is** in the office

You 6:56 AM  
escalate 687405514

TAC Connect (bot) 6:56 AM  
An escalation request will inform a manager that the case needs attention. The manager, duty manager or customer service representative will call you to discuss further. If you would like to raise severity or requeue the case, please use **/raise-severity** and **/requeue** commands. Would you still like to continue? Please enter 'Yes' or 'No'.

You 6:57 AM  
Yes

TAC Connect (bot) 6:57 AM  
Please provide the escalation reason. This will help the manager understand the situation better.

You 6:57 AM  
Lack of timely progress

TAC Connect (bot) 6:57 AM  
How would you like the manager to contact you? Please enter 'email' or 'phone'.

You 6:57 AM  
email

TAC Connect (bot) 6:57 AM  
Contacting the manager of the engineer assigned to this case.  
  
Manager [joselmar@cisco.com](mailto:joselmar@cisco.com) will reach you via email at [carunach@cisco.com](mailto:carunach@cisco.com). Thanks!

# Escalate a Case – Contact via Email

Manager **is** out of the office

An escalation request will inform a manager that the case needs attention. The manager, duty manager or customer service representative will call you. You can use `/raise-severity` and `/requeue` commands.

Would you still like to continue?

Yes

Please provide the escalation reason. This will help the manager understand the situation better.

Lack of timely progress

How would you like the manager to contact you?

Email

Contacting the manager of the engineer assigned to this case.

Case owner's manager (joselmar@cisco.com) is out of office.

I'll contact a duty manager next. This may take up to 3 minutes.

Duty manager is available and will reach you via email at carunach@cisco.com. Thanks!

Enter message (Use Shift + Enter to add a new line)

Rate your experience 😊 😞

Docs and Videos Chat in Webex Teams Start Over Help

# Escalate a Case – Contact via Email

Manager is OOO and DM isn't available

How would you like the manager to contact you?

Email

Contacting the manager of the engineer assigned to this case.

Case owner's manager (joselmar@cisco.com) is out of office.

I'll contact a duty manager next. This may take up to 3 minutes.

Duty Manager is not available. I have informed the Duty Manager Team. The next available DM will reach you via email at carunach@cisco.com.

The bot informs High Touch Operations Managers (HTOM) when a case is escalated by SP Advantage, TS Advantage or High Touch Expert Care customers.



# Reopen a Case

reopen 689517089

Sure. Let me check whether the case can be reopened.

This case can be reopened. Please provide the reason. This will help the engineer understand the situation better.

Problem reoccurred again and we have collected the logs this time

Thanks. Let me reopen the case.

I have reopened the case and informed the current case owner. The case owner or the next available engineer will reach out to you on next steps.

Cases that are closed within the last 14 days can be reopened.

# Connect to Duo



# Connect to Duo Support

connect to duo

Please enter your 10-digit Account ID in the format 1234-5678-90.

Submit

Please enter a valid phone number without dashes (-)

+1 9193926009

Select country code from dropdown then enter telephone number

Submit

+19193926009

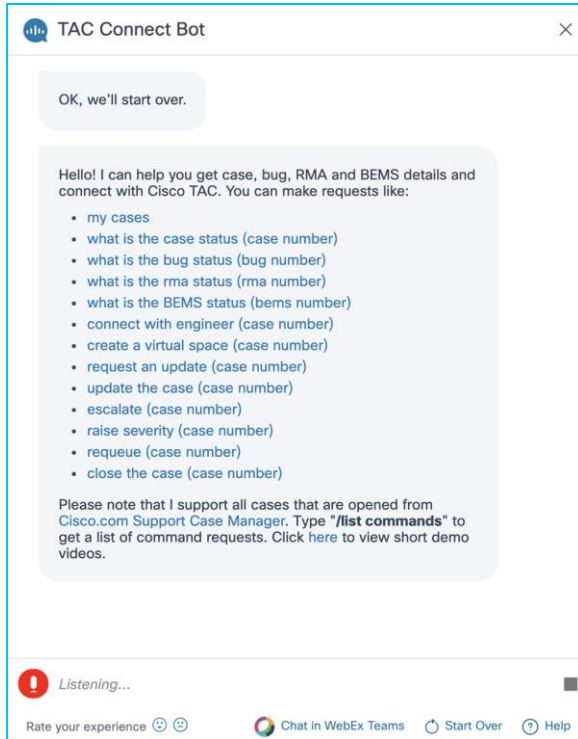
Thanks! You will receive a callback from Duo Support.

Bot calls Duo support number, informs customer's account ID to engineer and then connects to customer via callback.

# Conversations: Talk to the Bot!



# Ask for Status of a Case, Bug and RMA



TAC Connect Bot

OK, we'll start over.

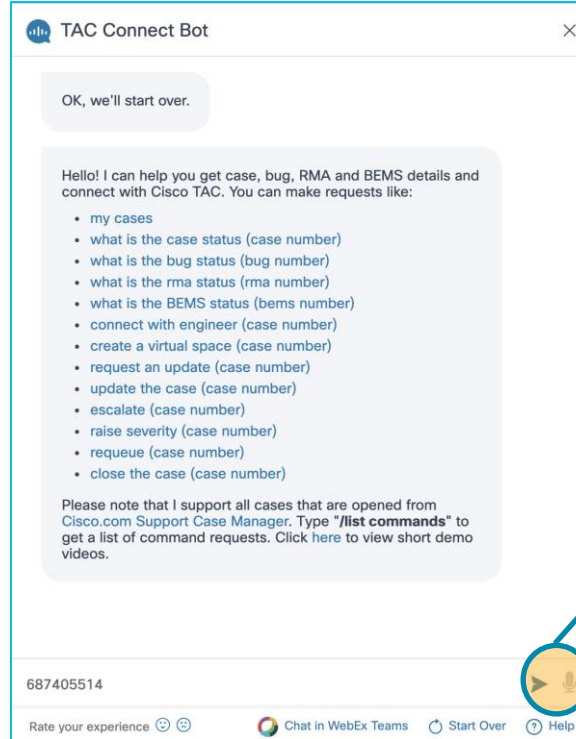
Hello! I can help you get case, bug, RMA and BEMS details and connect with Cisco TAC. You can make requests like:

- my cases
- what is the case status (case number)
- what is the bug status (bug number)
- what is the rma status (rma number)
- what is the BEMS status (bems number)
- connect with engineer (case number)
- create a virtual space (case number)
- request an update (case number)
- update the case (case number)
- escalate (case number)
- raise severity (case number)
- requeue (case number)
- close the case (case number)

Please note that I support all cases that are opened from Cisco.com Support Case Manager. Type **"/list commands"** to get a list of command requests. Click here to view short demo videos.

Listening...

Rate your experience Chat in WebEx Teams Start Over Help



TAC Connect Bot

OK, we'll start over.

Hello! I can help you get case, bug, RMA and BEMS details and connect with Cisco TAC. You can make requests like:

- my cases
- what is the case status (case number)
- what is the bug status (bug number)
- what is the rma status (rma number)
- what is the BEMS status (bems number)
- connect with engineer (case number)
- create a virtual space (case number)
- request an update (case number)
- update the case (case number)
- escalate (case number)
- raise severity (case number)
- requeue (case number)
- close the case (case number)

Please note that I support all cases that are opened from Cisco.com Support Case Manager. Type **"/list commands"** to get a list of command requests. Click here to view short demo videos.

687405514

Rate your experience Chat in WebEx Teams Start Over Help

Microphone and Send buttons

# Help, Commands Q&A, Feedback



# Help



You 12:45 AM

help



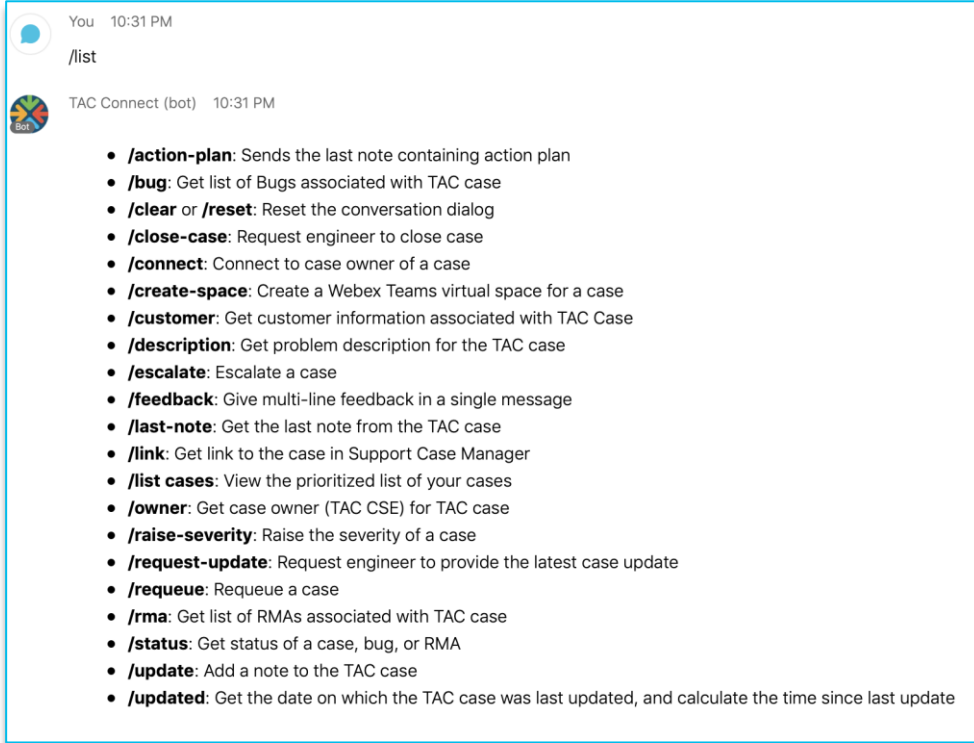
TAC Connect (bot) 12:45 AM

Hello! I can help you get case, bug and RMA details and connect with Cisco TAC. You can make requests like:

- my cases
- what is the status of (case number or bug ID or RMA number)
- connect with engineer (case number)
- create a virtual space (case number)
- request an update for (case number)
- update the case (case number)
- escalate (case number)
- raise severity (case number)
- requeue (case number)
- close the case (case number)

Please note that I support all cases that are opened from [Cisco.com Support Case Manager](#). Type **"/list commands"** to get a list of command requests.

# Command List



The screenshot shows a chat window with a blue border. At the top left, there is a circular profile picture of a person and the text "You 10:31 PM". Below this, the text "/list" is entered. Further down, there is a circular profile picture of a bot with a colorful, multi-segmented design and the text "TAC Connect (bot) 10:31 PM". The main content of the chat is a bulleted list of commands and their descriptions.

You 10:31 PM

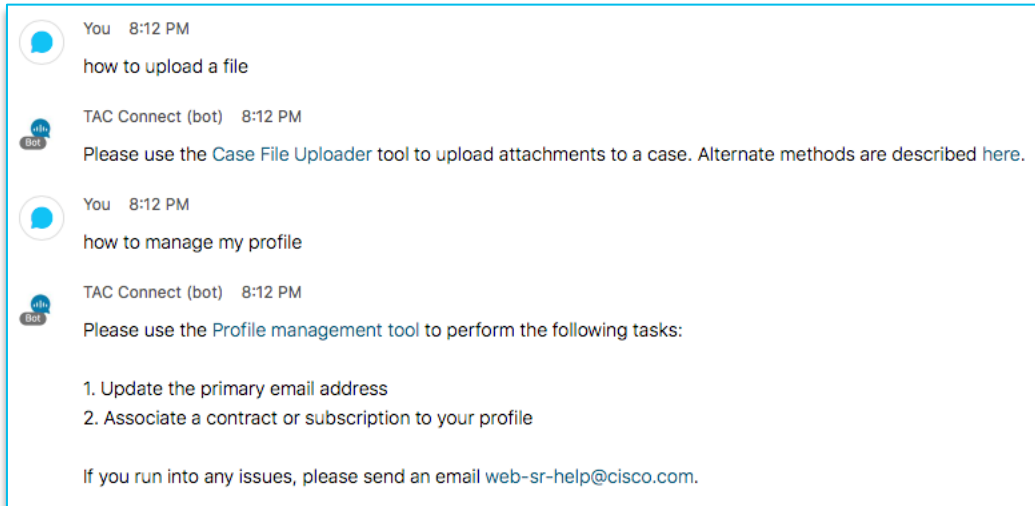
/list

TAC Connect (bot) 10:31 PM

- **/action-plan**: Sends the last note containing action plan
- **/bug**: Get list of Bugs associated with TAC case
- **/clear** or **/reset**: Reset the conversation dialog
- **/close-case**: Request engineer to close case
- **/connect**: Connect to case owner of a case
- **/create-space**: Create a Webex Teams virtual space for a case
- **/customer**: Get customer information associated with TAC Case
- **/description**: Get problem description for the TAC case
- **/escalate**: Escalate a case
- **/feedback**: Give multi-line feedback in a single message
- **/last-note**: Get the last note from the TAC case
- **/link**: Get link to the case in Support Case Manager
- **/list cases**: View the prioritized list of your cases
- **/owner**: Get case owner (TAC CSE) for TAC case
- **/raise-severity**: Raise the severity of a case
- **/request-update**: Request engineer to provide the latest case update
- **/requeue**: Requeue a case
- **/rma**: Get list of RMAs associated with TAC case
- **/status**: Get status of a case, bug, or RMA
- **/update**: Add a note to the TAC case
- **/updated**: Get the date on which the TAC case was last updated, and calculate the time since last update




# Simple Case Management Related Q&A




The screenshot shows a chat interface with a light blue border. It contains four messages in chronological order:


- You** (8:12 PM): how to upload a file
- TAC Connect (bot)** (8:12 PM): Please use the [Case File Uploader](#) tool to upload attachments to a case. Alternate methods are described [here](#).
- You** (8:12 PM): how to manage my profile
- TAC Connect (bot)** (8:12 PM): Please use the [Profile management](#) tool to perform the following tasks:
  - 1. Update the primary email address
  - 2. Associate a contract or subscription to your profileIf you run into any issues, please send an email [web-sr-help@cisco.com](mailto:web-sr-help@cisco.com).


# Share Feedback

 You 10:49 PM  
/feedback demo worked great!

 TAC Connect (bot) 10:49 PM  
Thanks! Your feedback has been provided to my creators.

Bot Feedback

 You 7:34 AM  
/case-feedback The case was handled well

 TAC Connect (bot) 7:34 AM  
Thanks! I have updated the case with your feedback.

Case Feedback

# Latest Release-Notes in Web Interface

The screenshot displays the Cisco TAC Connect Bot interface within a web browser. The bot's message reads: "Hello! I can help you get case, bug and RMA details and connect with Cisco TAC. You can make the following requests in English language:" followed by a list of 15 commands. Below the list, it states: "I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type **'list commands'** to get a list of command requests and find details of supported features using the documentation and demo videos." At the bottom of the chat window, there is a navigation bar with several buttons: "Rate your experience", "Release Notes", "Docs and Videos", "Chat in Webex Teams", "Start Over", and "Help". A red dot is positioned on the "Release Notes" button, which is highlighted by a blue box and a blue arrow pointing to a callout box on the right. The callout box contains the text: "Red dot indicates new features and bug fixes!".

TAC Connect Bot

Hello! I can help you get case, bug and RMA details and connect with Cisco TAC. You can make the following requests in English language:

- my cases
- what is the case status (case number)
- what is the bug status (bug number)
- what is the rma status (rma number)
- connect with engineer (case number)
- create a virtual space (case number)
- request an update (case number)
- update the case (case number)
- escalate (case number)
- raise severity (case number)
- requeue (case number)
- close the case (case number)
- reopen the case (case number)

I can help you manage cases that are opened from Cisco.com Support Case Manager. Currently, I can't open new cases or answer technical questions. Type **"list commands"** to get a list of command requests and find details of supported features using the documentation and demo videos.

Rate your experience

Release Notes

Docs and Videos

Chat in Webex Teams

Start Over

Help

Red dot indicates new features and bug fixes!

# Latest Release-Notes in Web Interface

Hello!

Thanks for taking the time to use me. Please find the latest Release-notes below.

## **July 31, 2020**

Enhancements:

- You can request a case to be re-opened if it was closed within the last 14 days.
- You can request a case to be schedule dispatched by specifying the date, time and time zone.
- Link to Release-notes is available in web interface.

Bug Fixes:

- Case title is missing in "my cases" response. This is applicable only for Webex Teams desktop clients.
- Concurrent requests of the same type (e.g. connect to engineer) must not be allowed.

## **June 28, 2020**

Enhancements:

- Interact with me in the [external virtual space](#) associated with the TAC case.

## **June 26, 2020**

Enhancements:

- You can request to be contacted via email for escalation follow-up.

Bug Fixes:

- %20 is displayed in Engineer and Manager phone number instead of space character.

## **May 29, 2020**

Enhancements:

- Phone number input made easy in web interface!
- Case owner manager information is shown in case status response.
- The definition of case escalation is explained and confirmation obtained prior to escalation.

# Automatic Release Notifications in Webex Teams



TAC Connect (bot) 12:42 AM

Hello!

I just got upgraded today!

Please find Release-note details below:

**New intents:**

- create a virtual space «case number»

**New commands:**

- /create-space: Create a Webex Teams virtual space for a case

**Enhancements:**

- When a customer or partner clicks the "Chat with your TAC Personal Assistant using Webex Teams", the system displays the email address that will be used to create a 1:1 space with the user and bot.
- "connect with engineer" is now allowed for cases closed within the last 14 days.

**Bug Fixes:**

- Incorrect intent detection for /owner and /last-note commands.

Thanks for taking the time to use TAC Connect bot!

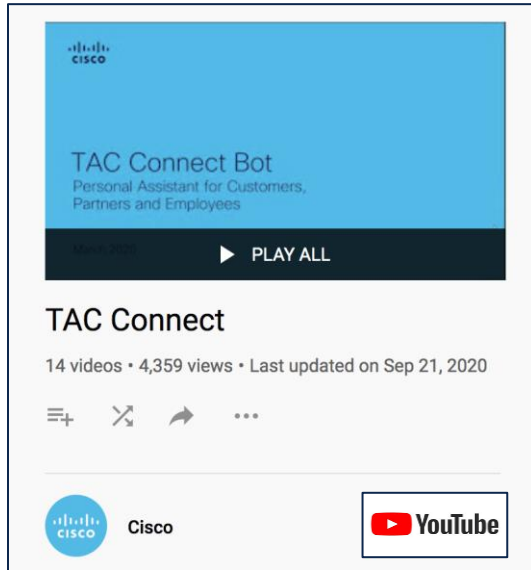
# Take Action



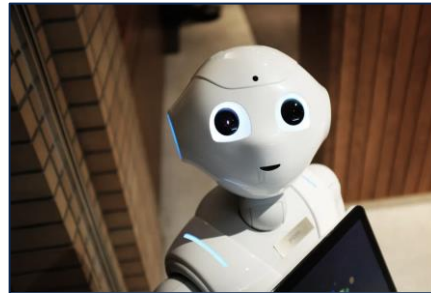
# Call To Action

## Use Virtual Spaces and TAC Connect Bot to Save Time!

[At-a-Glance](#) | [Support Case Manager](#) | [Get Started](#)



[Video Playlist](#)



[Customer Blog](#)

Chuck Robbins on CNBC praises the TAC Connect BOT and Webex Warriors (Covid volunteers)



[Cisco on Cisco](#)

## Polling Question 3

Will you use TAC Connect Bot in the future?

A. Yes

B. No

Make your wish (enhancements) for TAC Connect Bot:

---

*(Please write your comments)*





Please visit [Cisco.com page](#) and contact [tac-connect@cisco.com](mailto:tac-connect@cisco.com) for questions and feedback.

Submit Your  
Questions Now!



Use the Q&A panel to submit your  
questions, our expert will respond.

# Ask Me Anything following the event

Now through Friday November 27<sup>th</sup>, 2020



With  
Arun, Paul & Michael

<https://bit.ly/ama-TACcboot>



Arun Arunachalam  
Principal Engineer



Paul Anholt  
Technical Leader



Michael Whitaker  
Technical Engineer  
CCIE #5187

# Collaborate within our Social Media



## Twitter

- @Cisco\_Support
- <http://bit.ly/csc-twitter>

## Facebook

- Cisco Community
- <http://bit.ly/csc-facebook>

Learn About Upcoming Events

# We invite you to review our Social Media Channels

## YouTube

- Cisco Community
- <http://bit.ly/csc-youtube>



## App

- Cisco Technical Support



## LinkedIn

- Cisco Community
- <http://bit.ly/csc-linked-in>





# Find further events and sessions on the Cisco Community

Check the events calendar here:

<https://community.cisco.com/t5/custom/page/page-id/Events?categoryId=technology-support>

Thank you for Your  
Time!

Please take a moment to complete  
the survey



*Thanks For Joining today!*



