



Innovation in TAC

Technical Support Reimagined

Ullie Versavel – Snr. Director TAC Engine

Cecilia Diaz – Snr. Manager TAC Engine

Yogesh Ramdoss – Principal Engineer

Camilo Hernandez – Technical Leader

Luis Hernandez – Technical Consulting Engineer

Haitham Jaradat – Snr. Technical Leader

Shankar Ramanathan – Principal Engineer

Wednesday March 1, 2023



Introduction: Technical Support Reimagined

Ullie Versavel



Agenda: Technical support *reimagined*



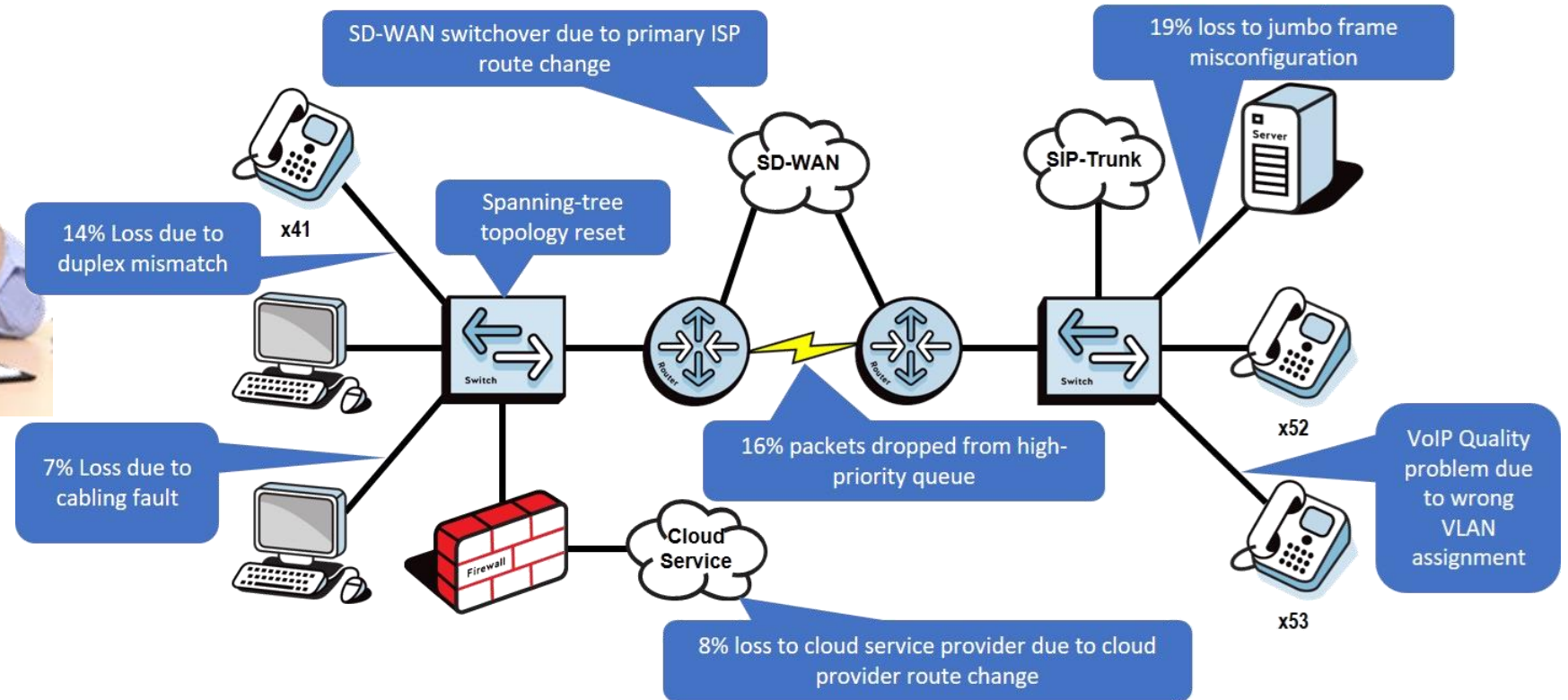
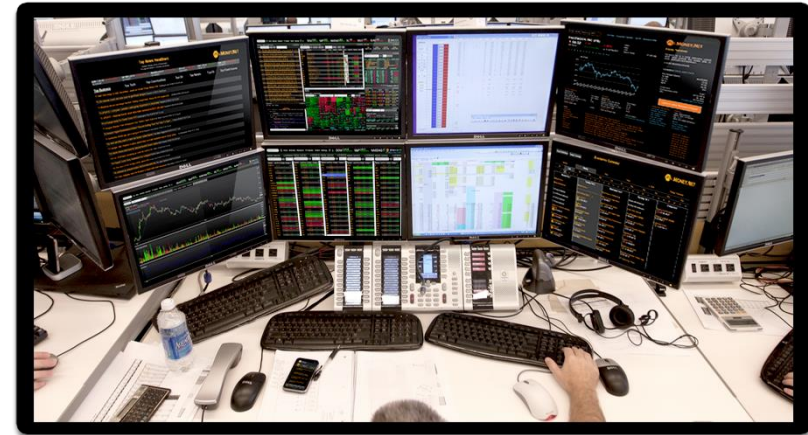
1. Rapid Problem resolution using **Remote Automation Development Kit**
2. Building Self-Service Capabilities fueled by digital insights
 1. Cisco Support Assistant
 2. Automated Nexus Health Check
3. Q&A

Cisco Remote Automation Development Kit – RADKit

Haitham Jaradat

Why RADKit:

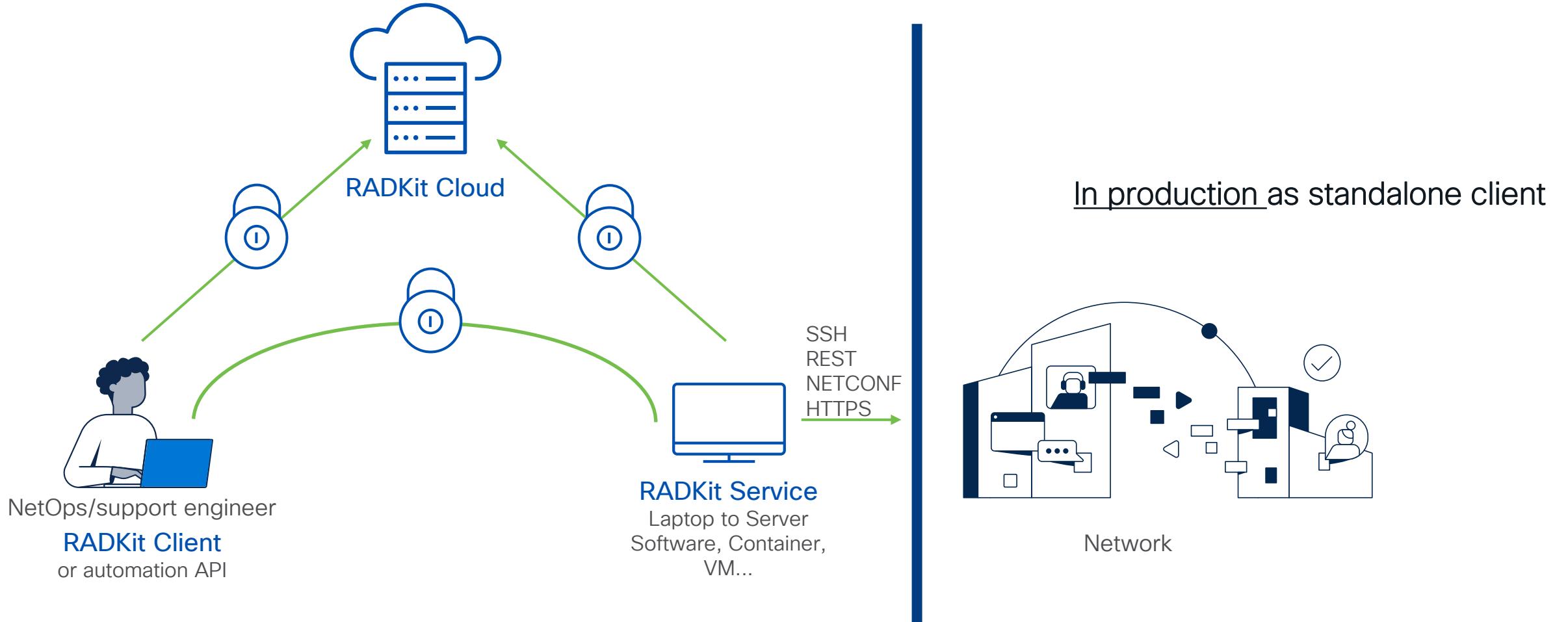
How painful is this?



How can RADKit make it Painless?

Focus on critical business, not busywork

Cisco Remote Automation Development Kit (RADKit) - CSDL "read-to-ship"

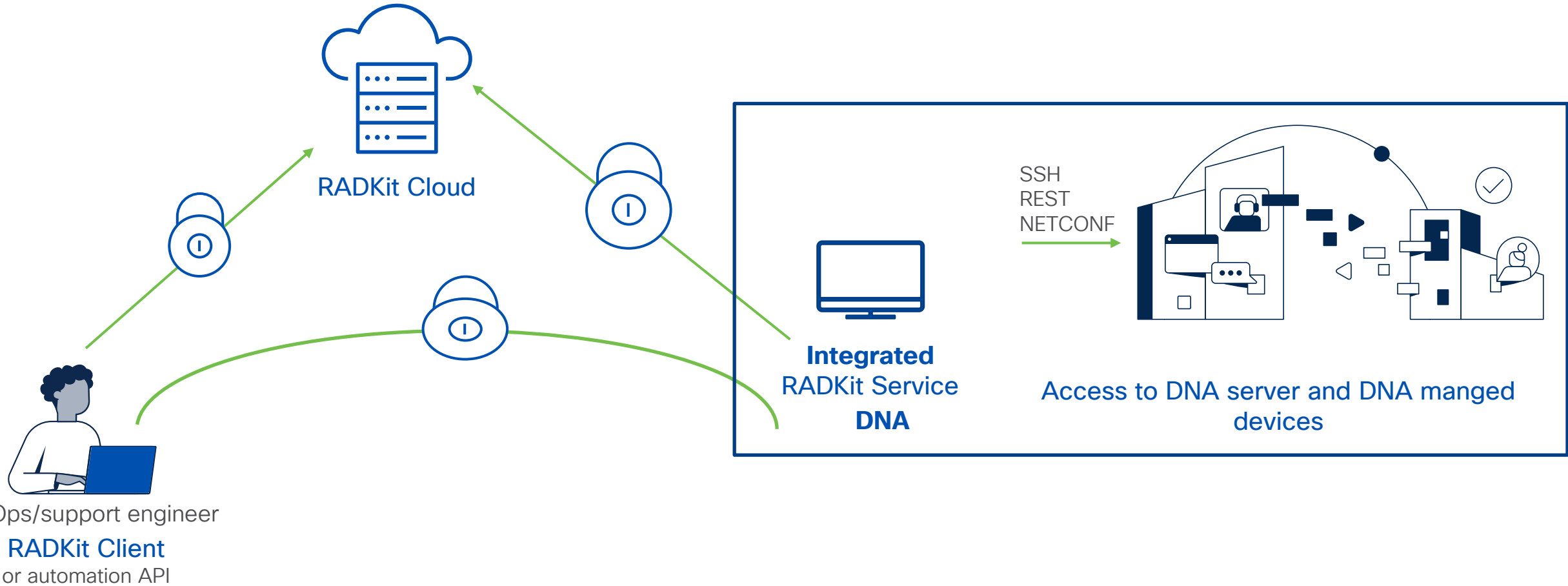


“The use of RADKit is projected to **free up 100 - 120 business days** where we can re-focus on critical work.”

Jorge Carreño
Sr. Product Owner
Telstra, Australian Service Provider

DNAC Remote Support

RADKit embedded



NetOps/support engineer

RADKit Client
or automation API



RADKit DEMO

Haitham Jaradat

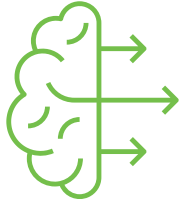


Technical support **reimagined**

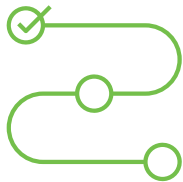
Building self-serve capabilities fuelled with digital insights

Cecilia Diaz

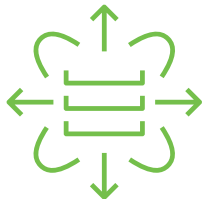




The journey begins with **digitizing** the knowledge and insights of our **expert TAC engineers** who handle over 3 million cases annually



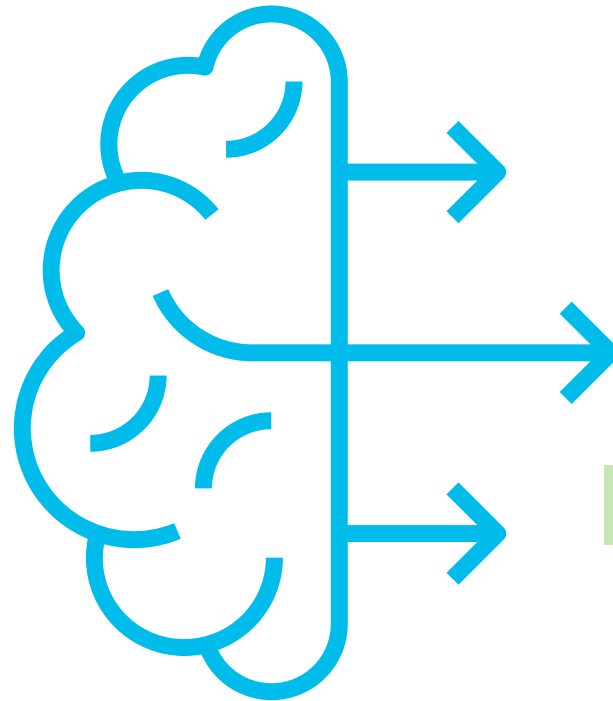
We insert **digital insights** directly into our **workflows**, both internally and externally



We **automate** workflows and significantly **reduce** your time to final resolution

Digitization

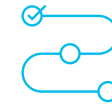
Defect IC



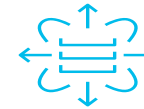
Syslog

Diagnostic IC:

Healthchecks – Best practices



Connected products



Automated workflows



Augmented analysis



Anomaly detection



Deep data analysis



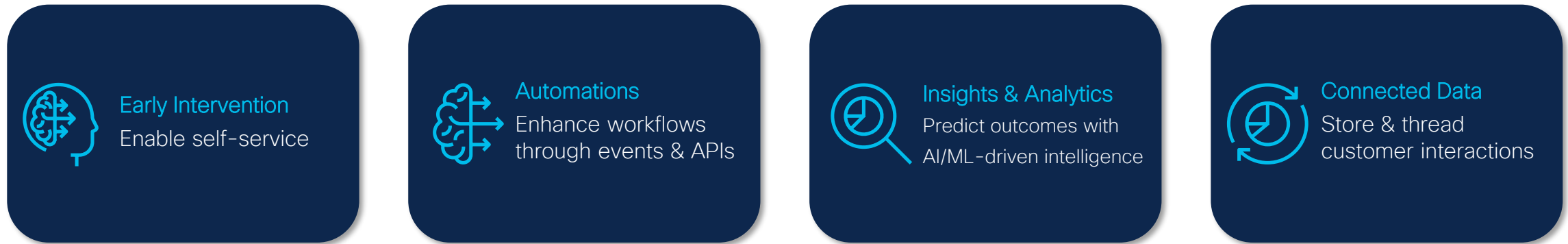
Self-service



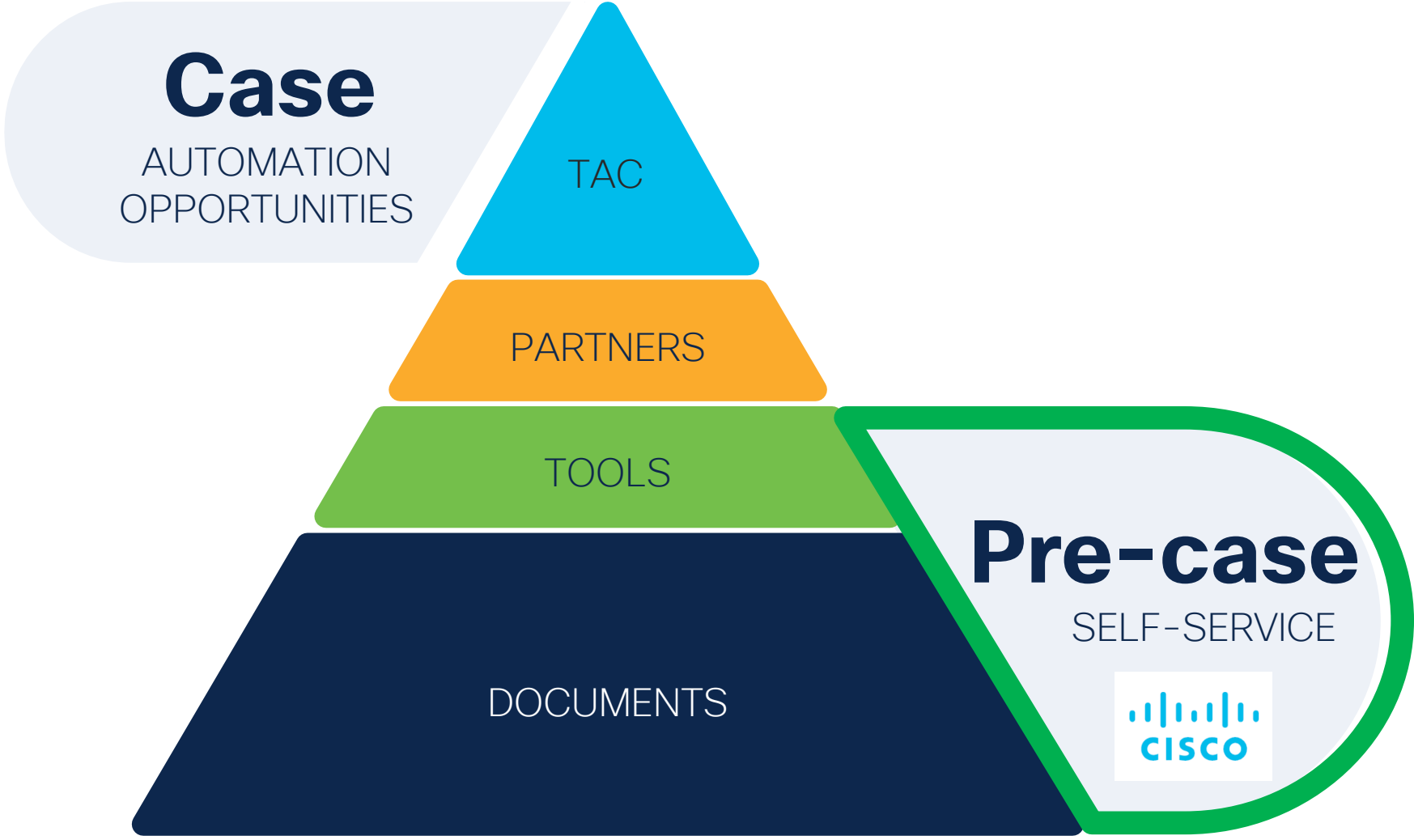
Proactive outcome

Workflow: Automation Platform

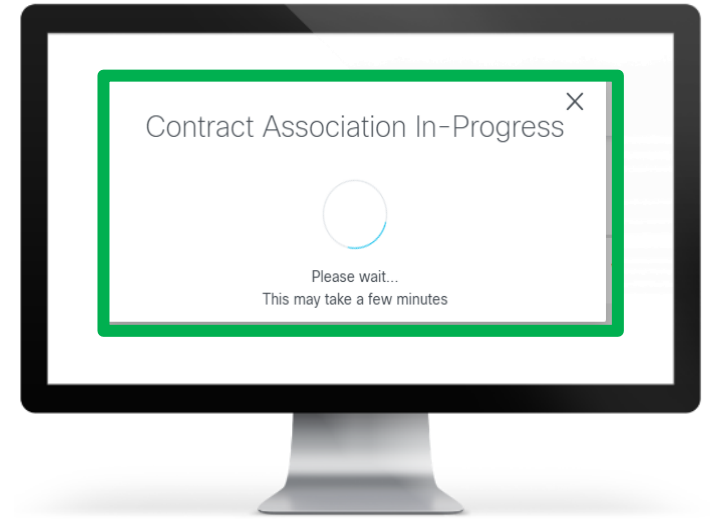
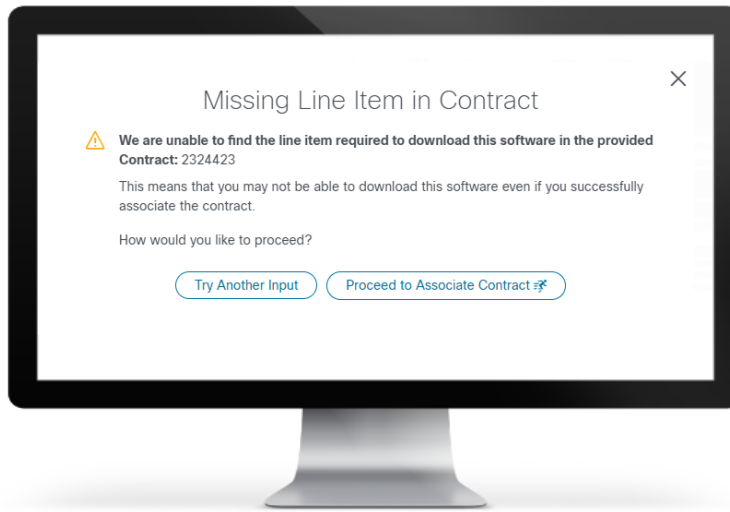
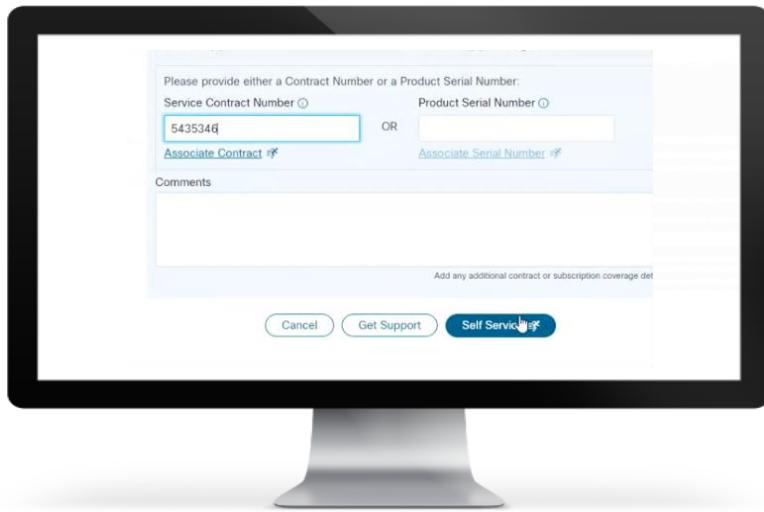
Leveraging bots, automations, analytics, and enterprise data to augment and automate the support workflow



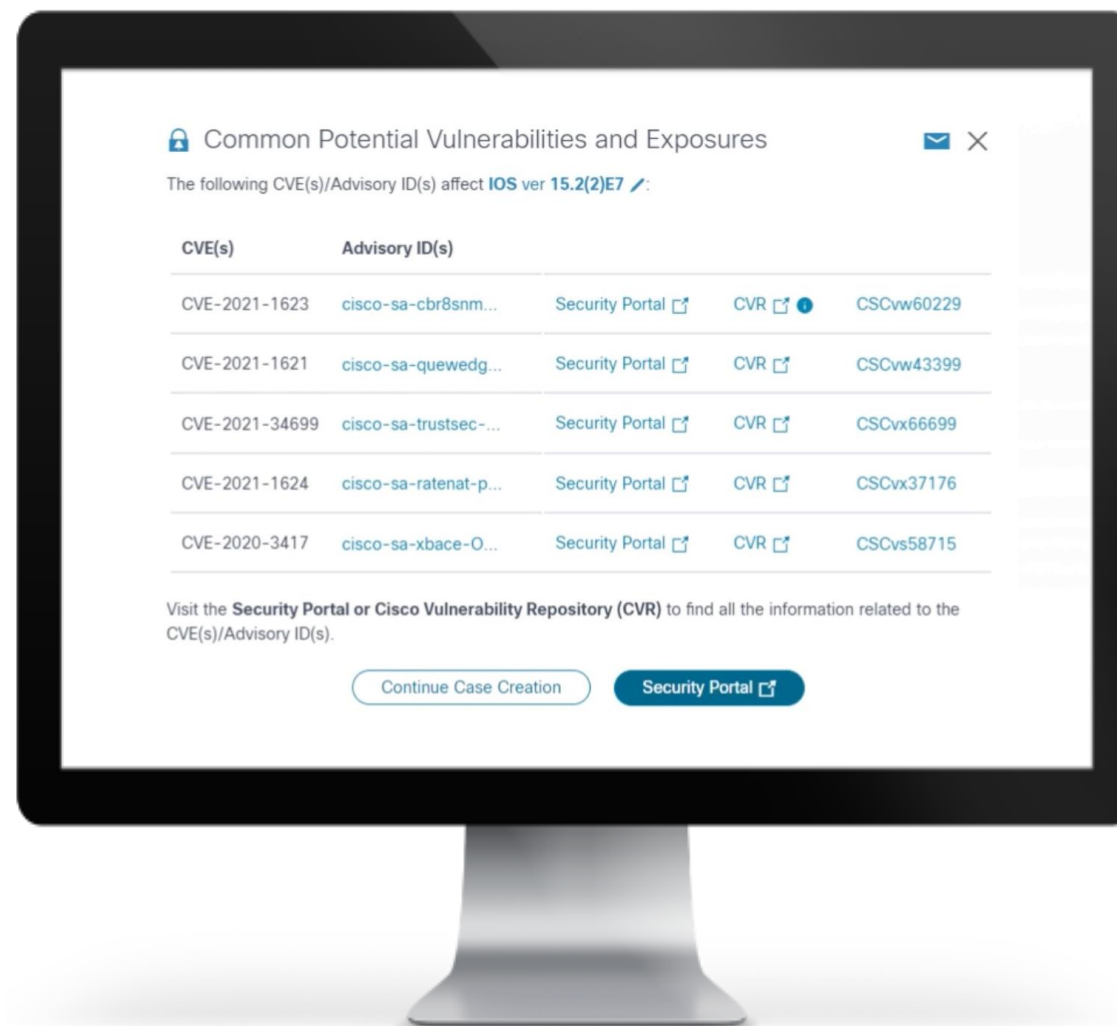
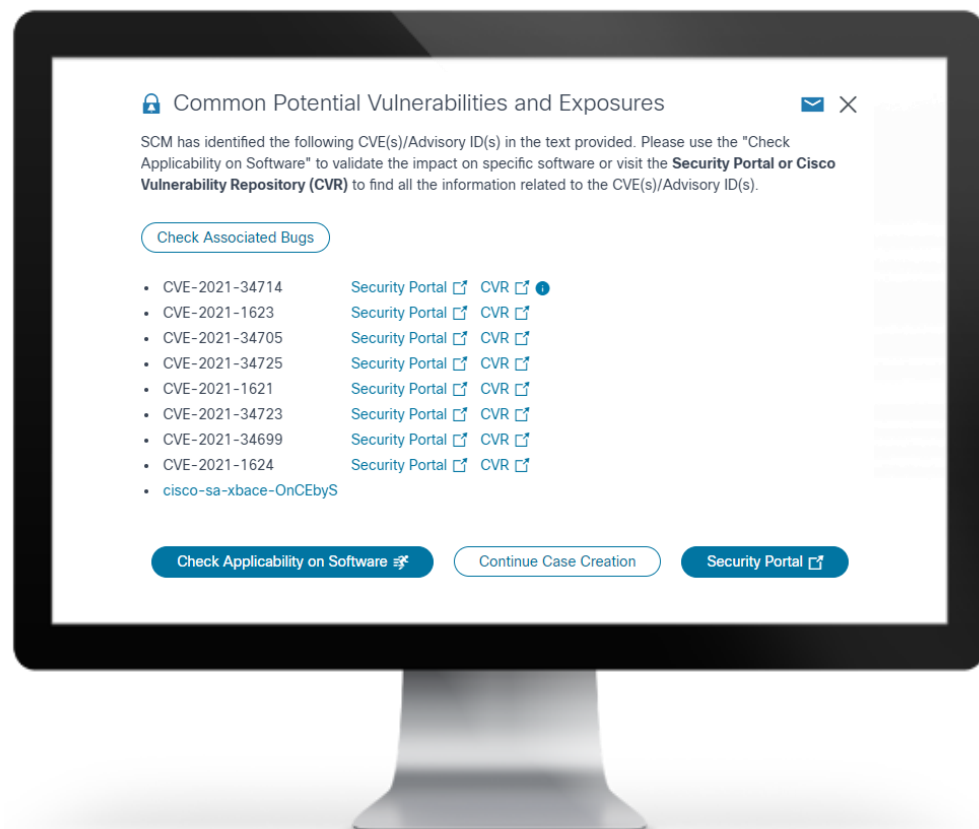
Automation potential



Software Download: Self-Service



Support Case Manager: Self-Service

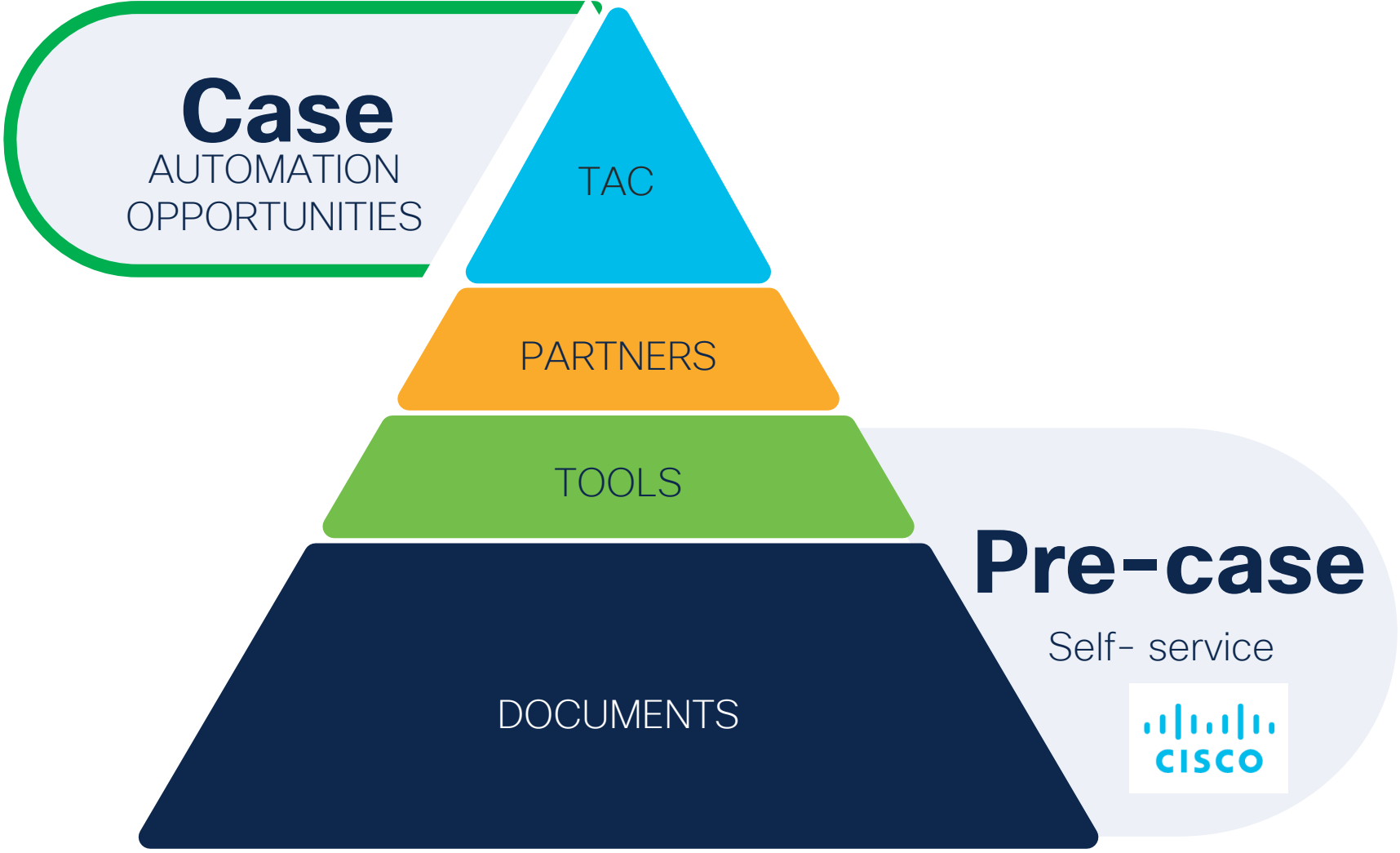


Pre-Case Self Service Workflow DEMO

Shankar Ramanathan



Automation potential

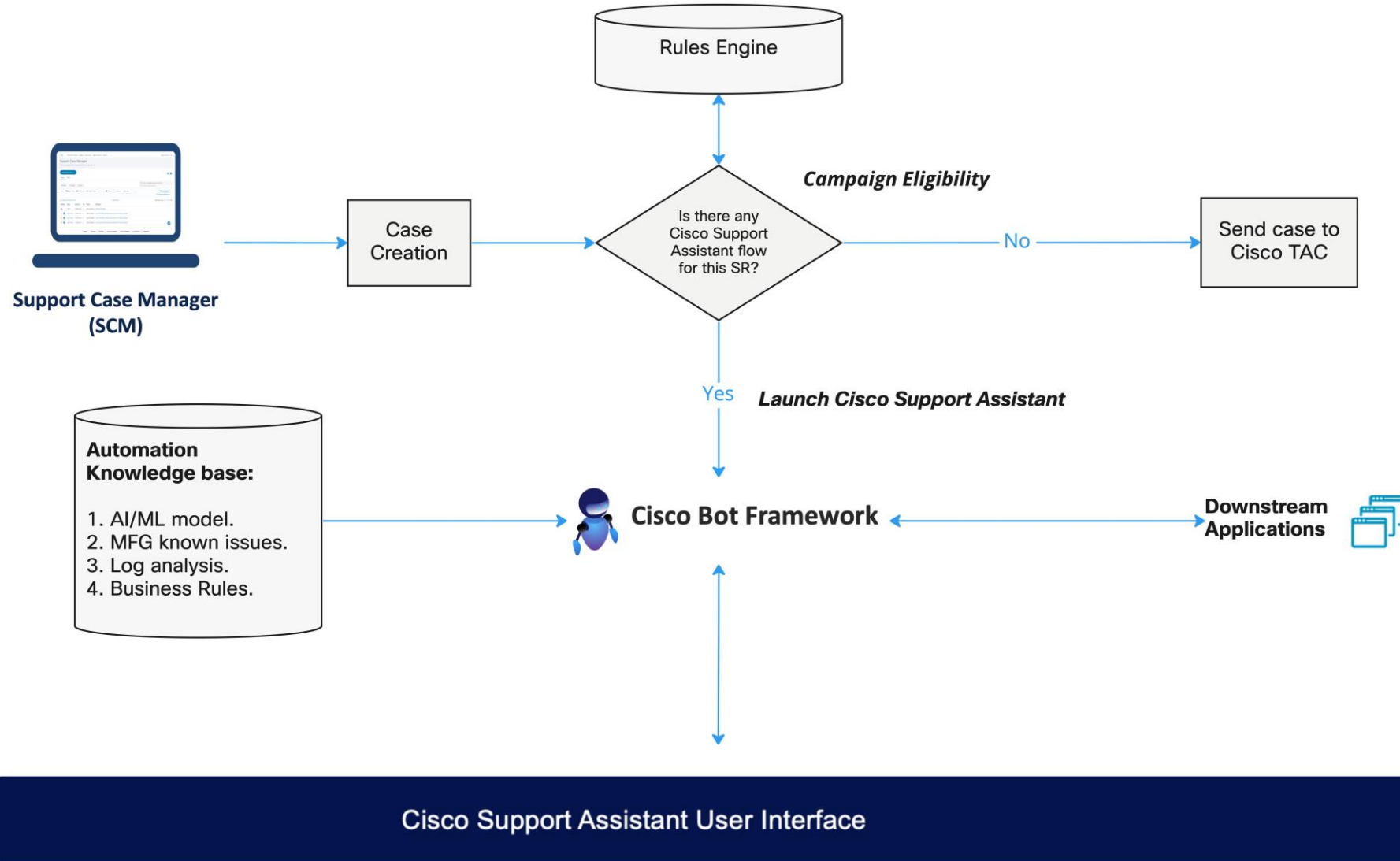


Cisco Support Assistant

Luis Hernandez & Camilo Hernandez



Cisco Support Assistant



Cisco Support Assistant for Cisco Platforms



- **Catalyst 9400, 9600, 4500 and 6000**
 - Linecard / Supervisor
 - Port / PoE
 - Power Supplies and Fans
- **Catalyst 9300 and 3850**
 - Power Supplies
 - Fans
- **Nexus Platforms**
 - Power Supplies
 - Fan
 - Transceivers
- **ISR 4400 and ISR 4300**
 - Power Supplies
 - Fan
- **Telepresence Platforms**
 - Power Supplies
 - MIC, Cables
 - Monitors
- **UCS**
 - DIMM memory
- **Security**
 - Software upgrade path recommendation

Cisco Support Assistant example for Power Supply



Products & Services Support How to Buy Training & Events Partners

Support Case Manager

Create and manage Support cases for Camilo Hern\00E1ndez (camihern@cisco.com) ▼

Open New Case ▾

1

Technology

Cisco Suggestions ?

OR

Manually Select A Technology

Problem Area

Choose Problem Area

Select Technology

Q 3850 X

LAN Switching

- Cat**3850** - Switching Issues
- Cat**3850**/3650 - Memory Leak
- Cat**3850**/3650 - Unexpected Reboot

Wireless

Wireless Converged Access Issues (3650, **3850**, 5760, Cat4500/Supervisor 8-E)

Cancel Select

2

Problem Area

CONFIGURATION	INSTALLATION
Configuration Assistance	Configuration Assistance
Error Messages, Logs, Debugs	Error Messages, Logs, Debugs
Hardware Failure	Hardware Failure
Interoperability	Install, uninstall, or Upgrade
Licensing	Interoperability
Password Recovery	Licensing
Software Failure	Password Recovery
	Software Selection/Download Assistance
	Software Failure

3

Problem Area is eligible for Cisco Support Assistant

Cisco Support Assistant example for Power Supply



Cisco Support Assistant
Knowledge Scope: Hardware Troubleshooting Guided Experience
Case Details: 694325776 : PS Issue

Hi there! I'm Cisco Support Assistant.

12:39:43

I can help with troubleshooting failed hardware components, upload diagnostic logs to the case & create RMA if replacement is required.

12:39:43

4

Please try the steps below

Do you see smoke, spark or smell anything? Yes No

Please verify the PSU model is the right one for the switch model? Yes No

Ref: [Data Sheet](#) for Power Supply specifications to see if Power Supply is supported for the switch model.

Verify input power source is correctly connected. Is the issue still present? Yes No

Please try reseating the Power Supply (wait for 10 seconds to reinsert). Is the issue still present? Yes No

Please insert a known working Power Supply in the same slot. Is the issue still present? Yes No Not Available

Please provide more details about Power Supply LED status

Please try the steps below

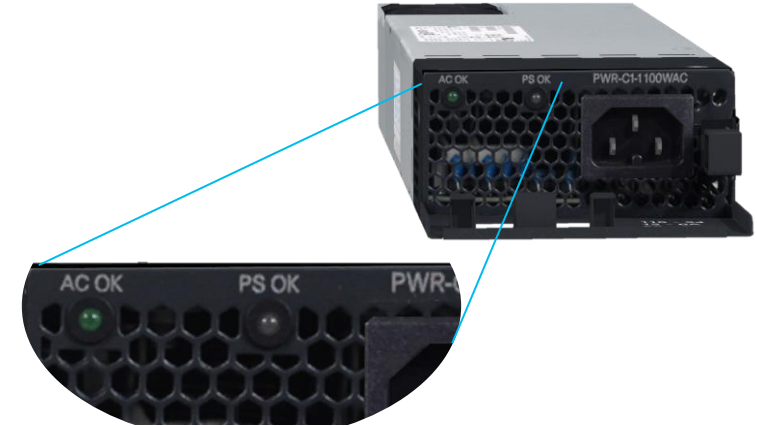
What is the color of AC OK LED? Green Red Off

What is the color of PS OK LED? Green Red Off

Continue

5

I'm checking for known defects and Field Notices to see if this device is affected. This may take couple of minutes.



Cisco Support Assistant – Nexus Demo

Luis Hernandez





Cisco Support Assistant Email to Launch feature

Luis Hernandez

Intelligent Self-Service Capabilities

In numbers

>100K Transactions per quarter

Benefits

10% Improvement in CXSAT

80% Improvement in first day final resolution

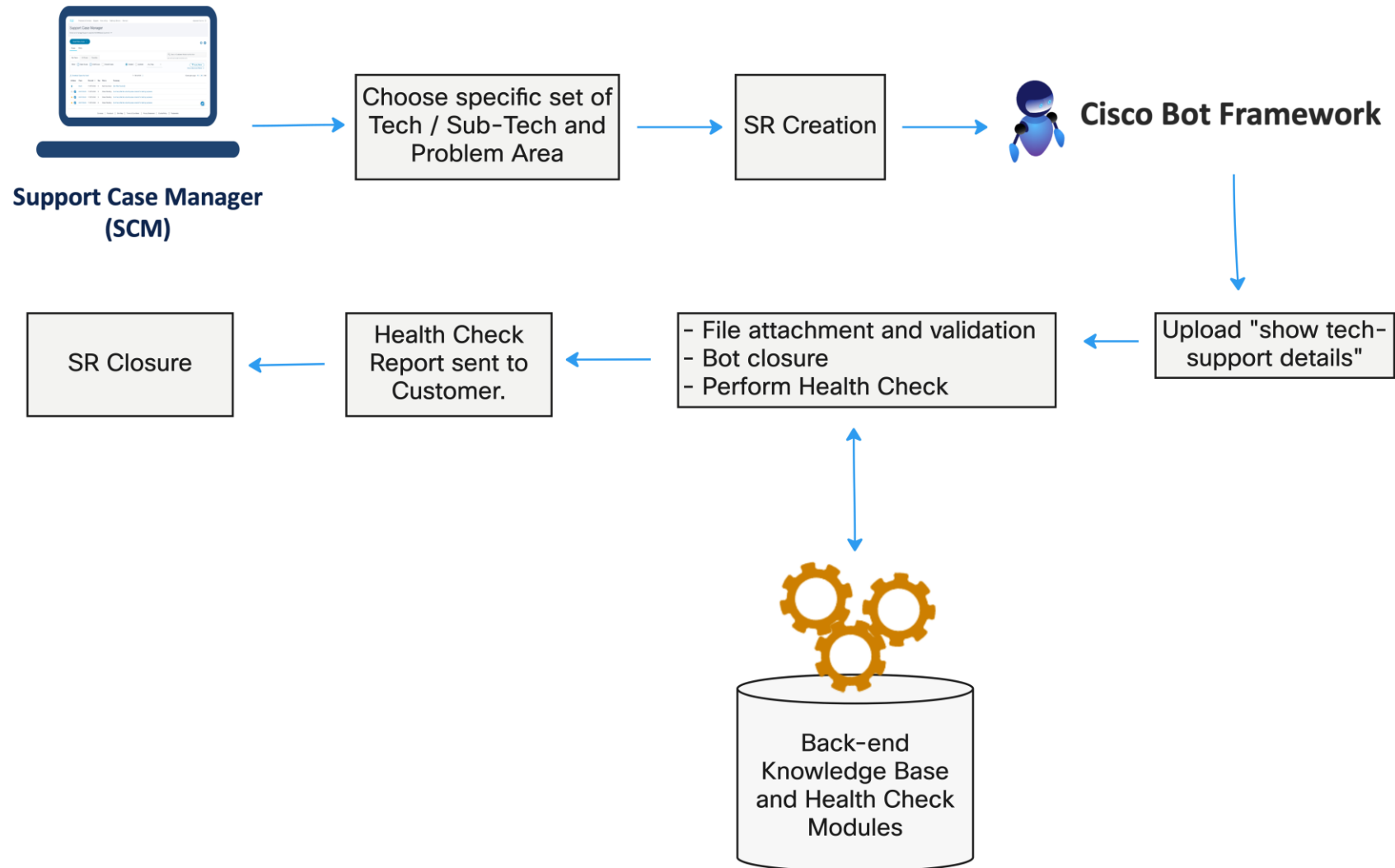
30% Improvement in SRs solved in < 5 days

Automated Nexus Health & Config Check

Yogesh Ramdoss



Automated Nexus Health & Config Check - Flow



Automated Nexus Health & Config Check - Scope

Platforms and NX-OS Supported:

- Nexus 3k/9k running 7.0(3)I or later releases
- Nexus 7k running 7.0.x or later releases

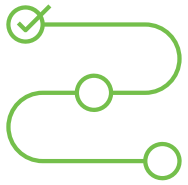
Health Check Modules:

- **General Hardware/Software Check** – recommended releases, EoS/EoL, PSIRTs/FNs
- **System Resources** – CPU, Memory, Inter-process communication
- **Hardware Failures** – Sup, Module, FEX, PSU & FAN failures, SFP validation
- **Configurations** – Best practices
- **L2/L3 control-plane** – Features, vPC, STP, Port-channel, HSRP
- **Unicast/Multicast Routing** – Routing over vPC, VRF, OSPF/EIGRP, BGP

Automated Nexus Health & Config Check - Demo



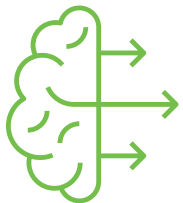
Automated Nexus Health & Config Check - Value



Closely monitor health of the devices



Achieve Consistency



Get Expert Guidance

Q&A



Cisco Community

More than 1 Million Members

Cisco Community is a platform where you will find solutions through **peer-to-peer** interactions. Populated by experts from all regions worldwide, you can share your questions any time and find assistance from other community members.

We collect valuable documents as TKB and have guides, tips, recommendations and videos from all kinds of contributors. There are no bad questions, if we can help, you'll find an approved solution or get an answer!

Validate your Solutions

Accept solutions that are correct and compliment those that helped you! Help other users find the correct answers in the search engine.

Accept as Solution

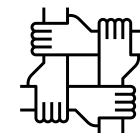
Helpful Votes

Highlight other members. Helpful votes motivate enthusiastic members by offering them a token of recognition!



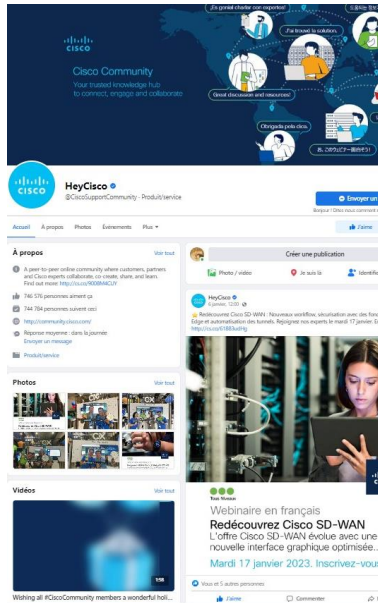
0 Helpful

Connect, Engage, Collaborate!





7 Languages and Social Networks



LinkedIn

[Cisco Community](#)

Twitter

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Do you have any questions?

If you asked a question on the Q&A panel or are coming back to the community in the days following our webinar, our experts can still help you!

Ask new question into our discussion forum before March 10, 2023

<https://bit.ly/CLWdoc-mar23>

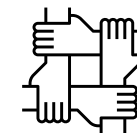
Make your opinion known

Take our survey to...

- ✓ Suggest new topics
- ✓ Assess our experts and content
- ✓ Send your comments or suggestions

A survey will be displayed in your browser at the end of the webinar. Help us to improve our events!

Connect, Engage, Collaborate!





The bridge to possible

Appendix

Camilo Hernandez Technical Leader



Is Cisco TAC technical leader for enterprise switching. He has nine years of experience in the Cisco Catalyst Switching portfolio, and layer 2 design and troubleshooting on Cisco IOS/IOS XE platforms. Camilo holds a degree in electronics engineering, obtained in his home country – Colombia. He currently resides in Mexico City.

Luis Hernandez Technical Consulting Engineer

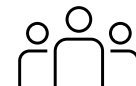


Software engineer from the Enterprise Innovation Engine team at Cisco, leading and developing innovative projects for multiple technologies. Previously, Luis worked as a wireless engineer in Cisco TAC. He has more than six years of experience working with enterprise networks.

Yogesh Ramdoss Principal Engineer



Yogesh Ramdoss has 19+ years of experience in the internetworking technologies. Since joining Cisco TAC in 2003, he has helped customers design, build, operate, manage, and troubleshoot enterprise as well as datacenter networking infrastructure. He has expertise in Routing & Switching protocols, DC Infrastructure, and Day2Ops Cloud/SaaS products, and has led several digitization and automation projects. He is a computer engineering graduate and holds CCIE (#16183) and Google Cloud certified Cloud Architect certifications. He co-authored Containers in Cisco IOS-XE, IOS-XR, and NX-OS: Orchestration and Operation (by Cisco Press) and Network Analysis using Wireshark 2 Cookbook (by Packt publishing) books. Yogesh is a distinguished speaker with 22+ breakouts and labs presented at Cisco Live since 2010.



Appendix

Ullie Versavel

Snr Director TAC Engine



Cecilia Diaz

Snr Manager TAC Engine



Haitham Jaradat

Technical Leader



Shankar
Ramanathan

Principal Engineer



Shankar is a Principal Engineer in CX for Cisco Unified Wireless Network and IoT. Shankar is an author/active contributor to Wireless innovation tools like Wireless Debug Analyzer, Wireless Config Converter, CLI analyzer, and holds Cisco patents and publications in IEEE. He did his M.S. in Electrical Engineering specializing in communication and signal processing from University at Buffalo, NY. Shankar is a distinguished speaker at Cisco Live and has delivered several technical training sessions to partners, customers, and sales on a wide range of topics.

