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| TAC Case Management Process | | | |

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# 

# Purpose

This process provides guidance to engineers on how to manage service requests to troubleshoot customer issues.

# Scope

This process applies to the following organizations adopting Case Management tools for customer support case handling.

|  |  |
| --- | --- |
| **Organizations Affected** |  |
| TAC (Global/Regional) | **X** |
| High Touch Technical Support (HTTS) | **X** |
| Global TAC Sourced Support – Contact Center Services (TFL) | **X** |
| Global TAC Sourced Support – CSE Services | **X** |
| Cloud & Managed Services (CMS) |  |
| Global Service Logistics & Operations (SLO) |  |
| Services Entitlement Team |  |
| Technical Services Product Management (TSPM) |  |
| Failure Analysis Operations (FA) |  |
| Media Convergence Server(MCS) Support |  |

# Customer Data Protection

This process may involve usage of customer-related information. CSEs should understand the importance of protecting different types of customer data. For more information about your responsibilities in customer data protection (CDP), refer to [Customer Data Protection Policies site](http://wwwin.cisco.com/c/cec/organizations/cisco-services/resources/data-protection/cdp-policy.html).

All customer information within a support case is Cisco confidential, and subject to the storage and destruction requirements outlined in the [Data Protection Standard](http://wwwin.cisco.com/infosec/policies/standards/protection.shtml).  The care and handling of all customer information must conform to Cisco’s Code of Business Conduct.  Contracted employees who provide technical assistance services to Cisco customers, must adhere to the content within their Non-Disclosure Agreement with Cisco Systems, Inc.

# Overview

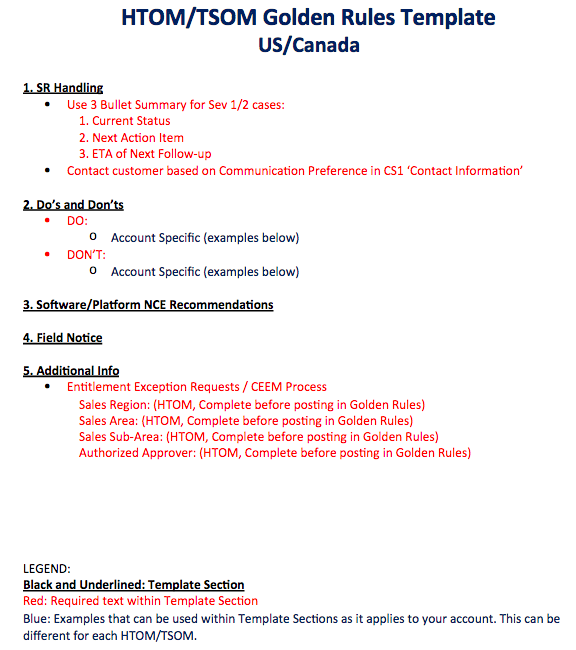
## Customer Information

All customer information within a support case is [Cisco confidential](http://wwwin.cisco.com/infosec/policies/classification.shtml), and subject to the storage and destruction requirements outlined in the [Data Protection Standard](http://wwwin.cisco.com/infosec/policies/standards/protection.shtml).  The care and handling of all customer information must conform to Cisco’s Code of Business Conduct.  The Global Delivery Partner (GDP, as well as all other contracted employees), who provides technical assistance services to Cisco customers, must adhere to the content within their Non-Disclosure Agreement with Cisco Systems, Inc.

## Servicing Customers with Golden Rules

While supporting TAC/HTTS TSA customers, engineers should consistently follow the customer’s golden rules. The golden rules are created and maintained by HTOMs using a standard template. However, any important piece of information that TS engineers need to know prior to working on any case can be put into the golden rules.

For reference, the following is the golden rules template (US/Canada):



As noted in the above template, included in all customer golden rules in the ‘**SR Handling’** section are details on keeping the case notes updated for the customer to have a quick and simple view of their case: Update the current status of the case, the next action to be taken, and the anticipated ETA or next expected follow-up period.

Here is a ***sample*** of how to provide the 3 Bullet Summary noted in the template:

**1) CURRENT STATUS:**

Error messages seen on node xyz

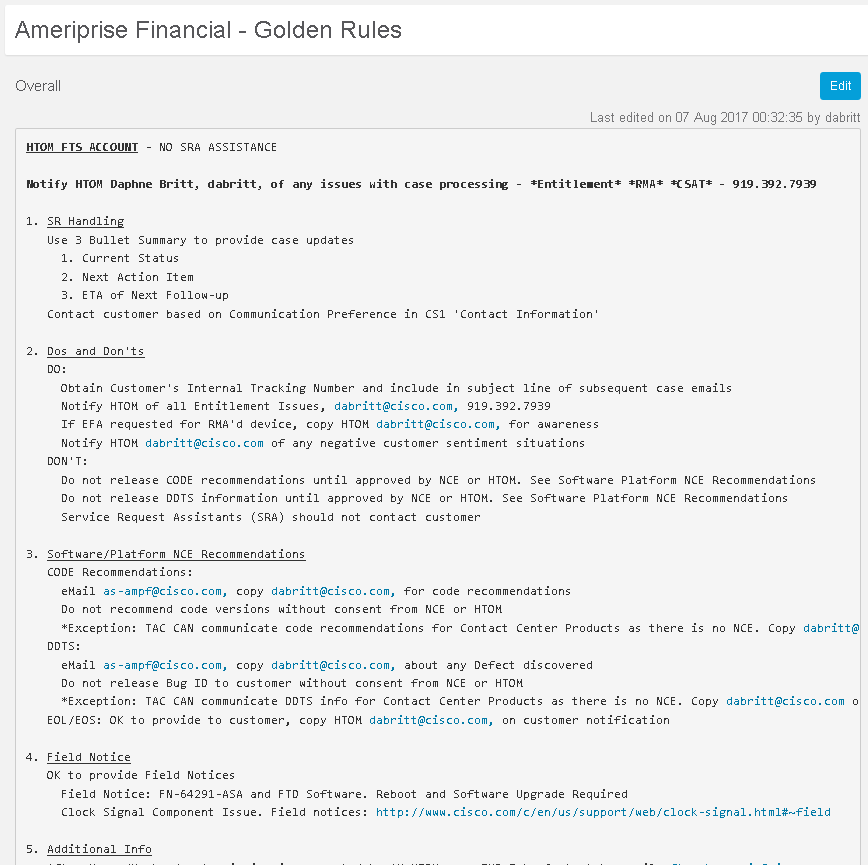
**2) NEXT ACTION ITEM:**

Pending TAC review of logs received yesterday and BU input

**3) ETA ON NEXT FOLLOW-UP:**

Engineer will follow up with customer on Friday, between 2-4pm ET

The following is a completed set of a customer’s golden rules:



If you have questions on a customer’s golden rules, contact the HTOM for that customer.

## Local Language Support

If understanding a customer’s spoken language poses a challenge or the customer requests local language support when working a case, engage [Translation and Interpretation Services](https://cisco.jiveon.com/docs/DOC-1020064) for assistance. If translation services are used, specify customer’s preferred language in an “Internal” case note. The link is also available in MyWorkZone.

## Customer Entitlement Issues

If TAC Support entitlement issues arise when working a case, engage the CIN [Service Relations Team](http://wwwin.cisco.com/c/cec/organizations/cisco-services/ts/tso/gtc/cin/agent/tacfl.html). For additional entitlement information, refer to the [Cisco Entitlement Exceptions Management (CEEM).](https://cisco.jiveon.com/docs/DOC-1075856)

**Examples of TAC Support entitlement issue:**

A user opens a case for **one entitled product, but actually requests support for another product**.

##### If hardware entitlement issues arise, engage the [SLO Entitlement.](http://sscddm.cloudapps.cisco.com/support/dmrtool/home.dm) An example of a Hardware entitlement issue is when the SORT tool indicates the customer is not entitled during RMA creation, or when the user requests a higher service level than prescribed by the contract.

##### For software entitlement issues involving security advisories or PSIRT communications, refer to the [Software Availability Guidelines for TAC](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-689580&ver=approved) document for guidance. Also, check related software advisory documents for additional guidance when such documents apply.

##### When Entitlement issues are encountered, TAC will reach out to CIN GSR (for TAC support) or SLO Entitlement (for Hardware support) to gain entitlement approval, exception handling approval or otherwise resolution of the entitlement issue

##### If CIN GSR or SLO Entitlement cannot immediately verify the entitlement status, TAC to request the Entitlement team to take ownership of the case until the entitlement issue is resolved.

### Proactive Maintenance Window Support (MWS) or Detailed Root Cause Analysis (RCA).

For maintenance window support (MWS) and root cause analysis (RCA), refer to the table below to understand what is covered by each team.

TAC should refer customers to CIN [**Service Relations**](http://wwwin.cisco.com/c/cec/organizations/cisco-services/ts/tso/gtc/cin/agent/tacfl.html)upon receiving a request for Proactive MWS or Detailed RCA.

| Offer Deliverable | TAC | Solution Support | HTTS |
| --- | --- | --- | --- |
| **Reactive Maintenance Window Support** Activity required to troubleshoot or fix a problem associated to a TAC case. | X | X | X |
| **Proactive Maintenance Window Support** Customer-initiated activity, unrelated to a problem that needs resolution. |  | X | X |
| **Standard RCA**provides a summary statement including root cause and preventive actions. | X | X | X |
| **Detailed RCA** provides a report that may be multiple pages long and take hours to create. |  | X | X |

For additional information refer to the [Proactive MWS and Detailed RCA Jive Page](https://cisco.jiveon.com/groups/maintenance-windows-root-cause-analysis/pages/home), [**TSA HTTS Maintenance Window Guidelines**](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-11642795&ver=approved)**and**[**Root Cause Analysis**](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-974758&ver=approved) **Process.**

### Smart Services Customer Entitlement

##### Smart Services

##### Below you can find contract type needed to get Onboarding or TAC support for Smart Services – SNTC Smart Assist, SNTC Partner Smart Assist, PSS, and DSS.

##### SNTC Smart Assist

##### A customer must have one of the following contracts to receive Onboarding or Day 2 TAC Support for SNTC Smart Assist: CSAS, AMSP, AMSS, AMST, FTSS, or NLS1, TSAP, TSAG, TSAS, TSAB

##### SNTC Partner Smart Assist

##### A customer must have one of the following contracts to receive Onboarding or Day 2 TAC Support for SNTC Partner Smart Assist: PNSAS

##### Partner Support Service (PSS)

##### A customer must have one of the following contracts to receive Onboarding or Day 2 TAC Support for Partner Support Service (PSS)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| PSUT | PSRT | PSUE | PSUP | PU2P | PSOE |
| PSOP | PSO2 | PSUS | PSUU | PSRE | PSRN |
| PSRP | PSRU | PSCC | PSEA | PSTP | PS4N |
| PSDN | PSEN | PSBU | PSCU | PSSD | PSSE |
| PSSP | PSSW | PSW2 | PSW3 | PSW4 | PSW5 |
| PSW6 | PSW7 | PSWD6 | PSWD7 | PSJ1 | PSJ2 |
| PSJ3 | PSJ4 | PSJ6 | PSJ7 | PSJ8 | PSJD6 |
| PSJD7 | PSPS | PSPN | SUSA | PSB1N | PSB14 |
| PSB3N | PSB34 | PSPNB | PSPNE | PSPNP | PSPS2 |
| PSPCS | PSP4S | PSP4P | PSPC2 | | |

##### Partners and CIN will need to bypass entitlement to open PSS cases

##### Distributor Support Service (DSS)

##### A customer must have one of the following contracts to receive Onboarding or Day 2 TAC Support for Distributor Support Service (DSS)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DSN | DSNO | DSE | DCP | DSO | DSCC |
| DSCO | | DSS1 | | DSU1 | |

##### Partners and CIN will need to bypass entitlement to open DSS cases

##### If a customer contacts CIN for Smart Services support, CIN agents should reference information on the TAC Frontline [SMARTnet and SNTC Convergence](http://wwwin.cisco.com/c/cec/organizations/cisco-services/ts/tso/gtc/cin/agent/tacfl/smart-net.html) page.

##### If a customer is able to reach any of the Smart Services queues, or if an internal stakeholder opens a case on behalf of a non-entitled customer without prior Smart Services managerial approval, the CSEs should leverage the below templates to explain to the customer that he or she is not entitled.

##### FOR SNTC CASES (**INTERNAL**) WITH NO VALID SUPPORT CONTRACTS

Hello <Customer Name>,

My name is <CSE Name>. I am a member of Smart Services Support Team and the current owner of your case, <SR Case Number>.

In reviewing your case details, I was unable to find a valid contract for SNTC Smart Assist Support. In order to further assist you on this case, a valid SNTC Smart Assist Contract must be provided. These include contract types NLS1, CSAS, AMSS, AMSP, AMST, or FTSS.

Self-onboarded customers (SNTC type contract) are entitled to technical support and assistance on the [SNTC Community](https://supportforums.cisco.com/community/4891/smart-net-total-care) but are not entitled to TAC Support for the Smart Collector or Portal. The SNTC Community is moderated by multiple technical and business resources to ensure your needs are addressed.

Additionally, for internal SNTC support you can utilize the internal Community available here:

<https://supportforums.cisco.com/community/5836/smart-net-total-care-internal>

Please let me know if there are any questions. At this time, I’ll be closing the case. If a valid contract is secured, I’m happy to re-engage at any time.

Thank you,

<Signature>

##### FOR SNTC CASES (**EXTERNAL**) WITH NO VALID SUPPORT CONTRACTS

Hello <Customer Name>,

My name is <CSE Name>. I am a member of Smart Services Support Team and the current owner of your case, <SR Case Number>.

In reviewing your case details, I was unable to find a valid contract for SNTC Smart Assist Support. In order to further assist you on this case, a valid SNTC Smart Assist Contract must be provided. These include contract types NLS1, CSAS, AMSS, AMSP, AMST, or FTSS.

Self-onboarded customers (SNTC type contract) are entitled to technical support and assistance on the [SNTC Community](https://supportforums.cisco.com/community/4891/smart-net-total-care) but are not entitled to TAC Support for the Smart Collector or Portal. The SNTC Community is moderated by multiple technical and business resources to ensure your needs are addressed.

If you would like to learn more about Smart Assist Service, please reach out to your Account Manager. You can also learn more about Smart Assist on Cisco.com at: <http://www.cisco.com/go/sntc>

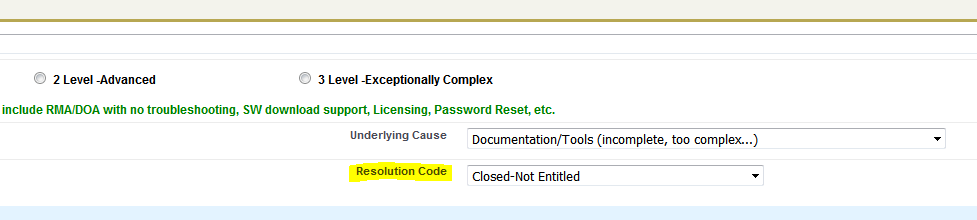
Please let me know if there are any questions.

Thank you,

<Signature>

##### Please wait for the case opener to acknowledge the email and then close the case (if they’re unable to provide a valid contract number or suggests that there should be one in place). If no acknowledgement is received within 3 business days, the case may be closed.

##### When Closing the SR, the CSE should ensure that Resolution Code is set to “Close-Not Entitled” to avoid generating a survey to customer.



## Addressing Licensing Issues

Open a collaboration request with GLO team for performing the following tasks during the process of resolving a Customer reported Technical issue:

##### Re-generate or Activate License

##### Re-host License to another device

##### Verify Licensed features

##### Obtain Upgrade, Temporary Licenses

##### Extend License expiration time

##### Complex license installation which requires additional licensing (for instance, merging a number of license files into one)

For more details, refer to [Global TAC and GLO Collaboration procedure](http://wwwin-eng.cisco.com/BMS/CA/CSE_Global/1441026_Global_TAC_and_GLO_Collaboration_Procedure.doc@3) document.

## Accessing Customer Networks

Prior to accessing any customer’s network via any method (WebEx, SSH, TELNET, etc.) ensure the customer understands the inherent risk and potential impact associated with accessing and troubleshooting a production network. This includes, but is not limited to, the following:

##### Set the customer’s expectation – Explain what action(s) are planned for this remote session such as:

* + Review current configuration
  + Recommend changes
  + Make changes
  + While Cisco protects customer data, ensure customers are aware of the risk factors while sharing their IP address with TAC.

##### Discuss associated risk and impact of action(s) with customer (using a classification probability / business impact)

##### Advise the customer to refer to their internal change management process

##### Ensure the customer understands and agrees to any configuration or network changes

##### When changes are needed on an active network into a device configuration or setting (either in order to fix an issue or in order to perform troubleshooting) the CSE will request for the customer to make changes during a maintenance window. If they decline, document the recommendation and that the customer agreed to proceed despite Cisco’s warning.

##### Document any action(s) taken and the associated approval granted by the customer in the external case notes

##### Document/copy the existing configuration or network/server diagram(s), before making any changes. Ensure this information is in an “Internal” case note.

## Cases with Multiple Customer Issues

##### Customers may experience issues caused by multiple technical issues. Include multiple issues in a case when the additional issues are related and need to be addressed jointly.

##### In situations where a customer has separate unrelated issues, create another case for each of the issues using the customer’s CCO ID. Using the case clone functionality to open a new case will ensure the correct serial number and/or contract information is used. Engineers should ensure entitlement is verified for each cloned case. Once each new case is created, CSE informs the customer of the new case number.

##### Link related cases together.

## Cases with a Designated Support Manager Support

DSMs manage the support experience for their assigned customers. DSMs monitor, track, intervene, coordinate and communicate internally to ensure the customer’s issues are handled in a timely manner. DSMs are the primary point of communication for all escalated cases. DSMs also provide assistance to TAC when delays or obstacles for resolution exist on the customer’s end.

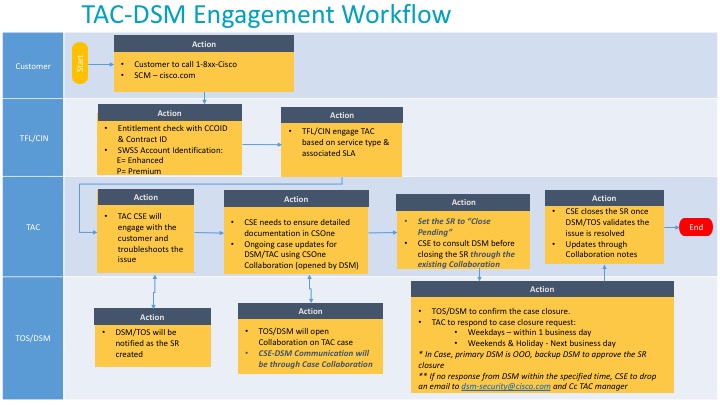
DSMs are not intended to replace any of the other teams in TAC, including CIN, CSEs, Duty Managers or other management roles. DSMs coordinate with these teams, provide assistance and communicate information on behalf of the teams.

Premium customer cases are handled differently and are higher priority than non-premium customer cases.

* + Premium customer Tier 1/Tier 2 cases
    - CIN and/or Tier 1/Tier 2 agents strive to meet the SLO targets. The assigned DSM may follow the escalation process defined in the TAC Escalation process if the SLO targets are not met.

Visit the [DSM Playbook](https://cisco.jiveon.com/docs/DOC-1770059) for more information on the DSM role and how they engage with TAC.

Process Flow:



## Case Note Maintenance

Maintain case notes to allow any CSE the ability to assume ownership of the case without requiring the customer to repeat information already provided.

Adequate notes allow any non-CSE the ability to assess the customer’s situation, follow progress, and understand the problem without requesting duplicate information from the customer or by directly engaging the CSE.

External notes are viewable by customers therefore, engineers do not include information such as passwords, access information, or Cisco confidential information. For additional information on how to store customer passwords and credentials see section 3.7.2 of this document.

Internal notes are not viewable by customers and are only for TAC internal use.

### GCI Requirement

Based on the Case Severity, engineers should update the GCI based on the SLO.

|  |  |
| --- | --- |
| Topic | Description |
| **Global Consistency Initiative (GCI)** | * **Problem Description** (PD) * **Business Impact** (BI) * **Action Plan** (AP) * Example information to include for the action plan:   + Specific tasks to be completed   + An agreed upon timeframe (with the customer) to complete each action   + Who is responsible / owns each action   + Business impact of the problem reported such as:     - Are there deadlines?     - What users are affected?     - Is this a Catastrophic Outage?     - Is this a Health or Safety issue? |
| **Case Severity Change** | The customer sets the Case Severity level. Follow-up discussions may result in the need to change the severity: *this can only be done with the customer’s consent.*   * Document the severity change in the case notes:   **Customer consents**  Check the relevant box in MWZ to acknowledge customer consent.  **Customer does not consent**  Complete reason for the severity change.   * + - The reason entered in the text box is included in an [email](http://ecm-link.cisco.com/ecm/view/objectId/090dcae185944aae/versionLabel/CURRENT) sent to notify the customer, and any other contacts on the case, of the severity change. |
| * **Software Version** * **Software Product Type** * **Hardware Product Type** * **Problem Type** | If the problem encompasses more than one platform, include these details in the case notes for *each platform*:   * **Case titles** - Reflects the current case situation.   + The title **does not** contain internal information such as case owner’s initials or other symbols. * **Collected data** – Included as case notes or attachments. * **Data analysis** and possible causes, as applicable. * **Actions taken** to date. |

### Steps to Include Sensitive Information in the Case

Case notes are not only referred to by CSEs, but also by others who are involved in troubleshooting the customer issue. Therefore, highly confidential information such as customer passwords and credentials need to be stored securely.

Since attachments to case notes are encrypted, it is the preferred method to store customer password and login credentials.

1. To ensure that the customer does not provide sensitive information such as login password and related network details such as IP addresses, network diagrams and configuration details, encourage customers to provide these as an attachment to the case notes. Guidelines for this can be found at this link: http://www.cisco.com/c/en/us/about/security-center/tac-customer-file-uploads.html
2. If a customer has shared credentials, CSEs will not store this information anywhere outside the case attachment, including, but not limited to, case notes, TechZone, Pen/Thumb/Flash Drive, CDs, or DVDs.

If the customer shared the information in the case notes, open a case with IT to have the sensitive data removed using the following steps:

* 1. Go to http://isupportit.cloudapps.cisco.com/portalHome.do
  2. Select ‘Open Case’
  3. Type in ‘CSOne’, then select ‘Go’
  4. Provide the case number and the specific information to be deleted.

------------------------Note-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Using Instant messaging conversation in case notes is governed by the [Instant Messaging Policy](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-718910&ver=approved). CSEs shall refer to the policy for appropriate use and treatment of chat content via Instant Messaging (IM) and other Internet-communication tools.

## Case with RMA/SORT

##### Refer to the [TAC RMA Process](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/db977962-cd32-4a99-9ffc-5c5c49fbde6f) when a customer needs to return parts or products for repair or replacement.

##### Refer to the [DOA New Replacement Policy](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/4eb2a92d-b78b-4fb2-b214-daab166807b1) “Global Dead on Arrival (DOA) Policy for New Product Shipments (DOA-New)” when a customer needs to return new products to manufacturing.

##### Refer to the [Failure Analysis Process](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/cf85ab13-d075-46da-9691-25782bedfff9) only as it relates to a submitted RMA that is linked to a case. “Failure Analysis Pending” status is only used for RMA cases that do, indeed, have a failure analysis pending.

## Case with Software Bugs

##### Reference the [TAC Bug Management Process](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-811432&ver=approved) for the established bug management process. Cases are not to be put into DE Pending status until a bug is linked to the case. Place cases linked to resolved bugs, but without an available release date for the customer, in **Release Pending** status. Refer to [Case Status](#CaseStatus) in [Additional Defined Terms](#_Additional_Defined_Terms) section of this document for further details.

## Case involving 3rd Party Solution Partner

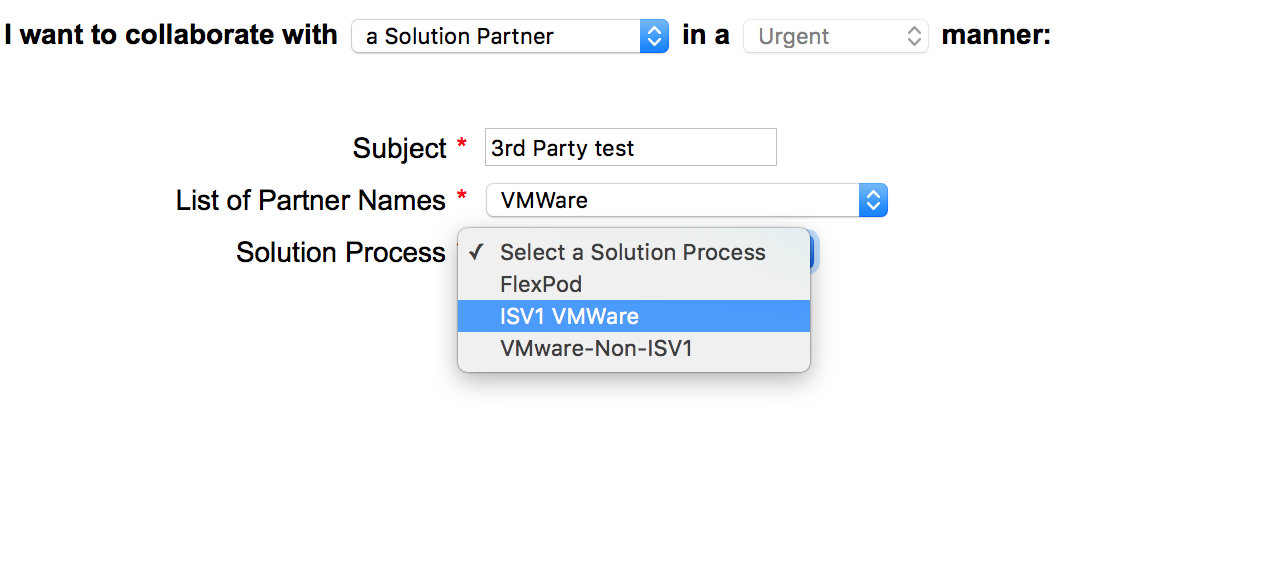
When a Cisco TAC engineer determines that 3rd Party Solution Partner needs to be involved in the troubleshooting of customer reported issue, TAC CSE should follow one of the options I, II or III enlisted below:

1. **Use CSOne “Initiate Collaboration”** within Case management page

to initiate collaboration with 3rd Party Solution partner

1. Select “a Solution Partner” in an “urgent’ manner” from the drop-down menu on the screen.
2. In the “List of Partner Names” menu, select the 3rd Party Vendor
3. In the “Solution Process” menu, choose the specific solution/product you need to collaborate with
4. Press “Go”

Sample screenshot:



1. Follow the instructions on how to engage with the 3rd Party you will receive on the next screen.
2. **A) If CSOne tool is not accessible**

**OR**

**B) If we can’t find 3PV Partner in the list in CSOne:**

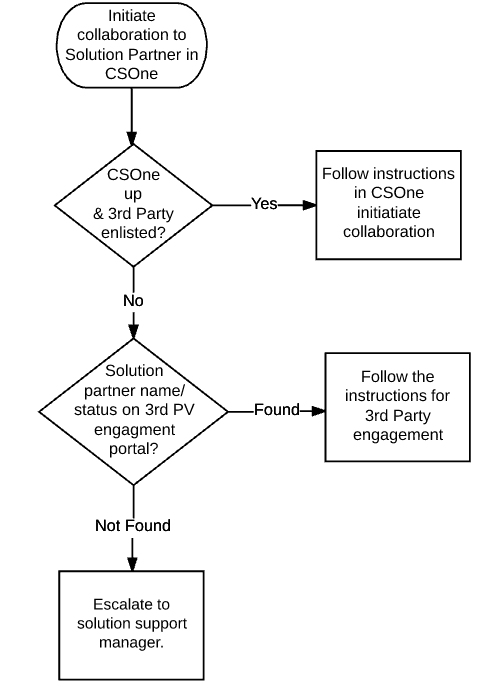
Follow instructions for specific 3PV on 3rd Party Vendor Engagement Portal:

<https://cisco.jiveon.com/groups/3rd-party-vendor-engagement-portal>

1. **\*Only\* If 3rd Party Solution Partner is not enlisted in either CSOne or 3PV Engagement Portal:**

##### For the specific Solution, Product, that customer opened SR for, escalate issue to TAC management and ask for further instructions.

##### Process flow:



## Case involving WebEx Customers

##### When a Cisco TAC engineer speaks with a WebEx customer inquiring about a case, use Topic Search to get the case information. First time users will have to complete a **license request** **form**; approval is automatic and provides a fast response.

##### Do the following to complete a search:

1. Open Topic Search https://wwwin-tools.cisco.com/srchui/Search.do?method=getHomePage,
2. Enter the WebEx C3M case number into the search box (HD0008742756)
3. Topic will verify you are looking for a WebEx case number – “Did you enter a C3M(WebEx) Identifier?”
4. Clicking on that link will bring the user directly to the read-only, C3M case details

##### Please keep in mind that it is important for the customer to have a seamless Cisco experience. Do not say to the customer ‘Your issue is with a different team and within a different case system.’

##### Reference the [CCCM Read Only User Guide](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-1498714&ver=approved) for more information.

## Case Reviews

##### Regular case reviews are an essential part of the overall Case Management Process, serving 3 main purposes:

* Verification of compliance to case management, collaboration and transfer, etc., Processes, Policies and Procedures.
* Identification of cases which are not progressing technically, and thus are unlikely to meet customer expectations for timely resolution. Mentoring, escalation, Collaboration or focused training may be appropriate remedies in these circumstances.
* Identification of further CSE soft skills development opportunities.

##### Case management is global in nature, and designed to apply to all areas of Cisco TS business, the details of an appropriate case review process may be expected to vary on a center by center, and even workgroup by workgroup basis.

##### Each workgroup Manager has the flexibility to determine a case review process, which meets the needs of their part of the business at any given time. Such a case review process will be documented and approved by the next level manager, before it is implemented. Each workgroup based process addresses the 3 major areas above; address specific local workgroup needs at the time; and make appropriate variances if local tools are being utilized.

##### In the event a workgroup specific process has not been documented and approved, the following default process shall apply.

## Case with Security Issues

##### Follow the [Product Security Incident Assistance Process](http://wwwin-eng.cisco.com/CA/PSIRT/Procedures/PSIAP.html) (PSIAP) whenever a customer is experiencing a security-related issue with a Cisco product.

## Case with Business Significance

##### A simple “Business Significance” use case would be a large event support engagement that the business would like to ensure receives specialized handling. Special keywords (HVER codes) will be used in the subject line, which will identify the engagement, as High Visibility Event Routing (HVER) and the engagement will follow the special handling rules that apply to the specific event.

## Cases with an EPiC Special Handling Indicator

Effortless and Proactive Customer Support (EPiC) customers, are noted in CaseMon with the following special handle indicator.



If an engineer has a technical skill set >2 and soft skill >3, they are required to use their education, experience, and exposure to provide premium customers with differentiated service capabilities of EPiC.

EPiC consists of 3 capabilities: Faster Cisco Support Engagement (FuSE) also internally known as Fast Start, the ‘Support Model’ and Beyond the Fix (BTF).

With FuSE, premium customers can create an S1/S2 case online in Support Case Manager (SCM) then connect to an engineer directly, bypassing the entry level support (CIN). EPiC and FuSE cases should be prioritized in their work queue and backlog.

The Support Model means the EPiC engineer should try to maintain ownership of the case from creation to resolution.

Beyond the Fix means that during the life cycle of the service request the engineer should identify and share issues outside of the caller’s original problem to prevent future service requests (exception like Golden Rules or Customer was in a hurry apply). BORG scripts can flag these potential issues for the engineer. Install the BTF Big JavaScript Broker Module to document every EPiC case received.

For more information on EPiC, visit the [EPiC Jive page](https://cisco.jiveon.com/docs/DOC-1586302).

# Case Management Process

## Log In to CaseMon

1. User logs into CaseMon and activates his profiles and sets the auto logout time to X hrs.
2. If the difference between login time and X hrs. is greater than 12hrs, the system will log the User out of CaseMon and display the "Activity Time Out Message" (profiles will be deactivated as well).
3. If the difference between login time and X hrs. is less than 12hrs, the system will uncheck the User's profiles at X hrs. and log the User out.
4. Upon relogin, CaseMon will remember the User's profile settings (automatically check the profiles activated in the previous session) and the 12 Hr. logout timer begins.

## Determine Catastrophic Outage Status

Although 5000+ users impacted is the threshold for what constitutes a Catastrophic Outage, please use your best judgment. Keep in mind that there may be cases where the number of affected users is less, but given the business risk and/or risk on society, may still be considered a Catastrophic Outage. Carefully evaluate the customer situation to determine if it is a Catastrophic Outage.

A case is considered a “catastrophic outage” if it meets **both** of the following criteria:

* The customer reports that the issue affects more than 5,000 users. There may be exceptions to this as stated above.
* The customer reports that the issue impacts Critical Infrastructure. An outage involving Critical Infrastructure often attracts the scrutiny of the media or of legal advisors.

If **both** criteria **DO NOT apply,** continue with step 4.3.

If **both** criteria **apply,** take the following actions:

##### CSE contacts on-shift TAC DM for action.

##### The TAC DM contacts the CAP DM for evaluation.

##### The CAP DM, upon validation, will determine the required resources to address the situation and coordinate resolution.  The TAC DM will assist in coordinating TAC resources, which includes engaging the Technical Manager to drive resolution.

* If escalation is determined not to be a catastrophic outage by the CAP DM, SR returns to normal business process.

## Assess Any Claimed Health or Safety Issues

Carefully evaluate the customer situation to determine if the claim is valid.

##### Follow the [TAC/CIN Product Hazard Alert Procedure](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/e18a1b87-f139-43e8-9b8c-3192b40d2c72) whenever a customer states that a Cisco product, Cisco personnel, or other Cisco actions are a cause of or contributor to any of the following:

* Death of a person
* Injury of a person
* Endangerment of a person
* Destruction of property
* Damage to property
* Any event in which, in the judgment of the CSE, Cisco is claimed to be “at-fault” related to a health or safety issue

##### If the customer’s initial claim is misrepresented or misunderstood, and the request for support does not include health or safety risks, follow normal support processes by continuing with the next step.

## Smart Bonding Business-to-Business (B2B)

Smart Bonding Business-to-Business (B2B) is integration and synchronization of a customer or partner support case management system with Cisco.

B2B enables the customer or partner to create, monitor, update and close Cisco service requests from their own ticketing system. It also synchronizes case information instantly between Cisco and the customer/partner. This eliminates the delays associated with iterative status updates.

##### Identifying Smart B2B cases:

* All Smart Bonding B2B cases have the “**B2B**” flag set.
* Special Handling Instructions are updated for B2B cases
* All Smart Bonding B2B cases are “**Entitled Under Contract**”
* B2B Updates to the case can be from partner or customer system.
* Notes contain Customer contact information, partner case numbers, recent changes

##### Opening B2B cases

* B2B cases can be opened from the customer system or by the partners. These are Dormant or Shadow cases.
* B2B cases will auto-route to a Group = B2B-\* or \*-B2B when the partner is working the issue. Case Urgency = **B2B Transferred To Partner** and **B2B Dormant**.
* Cases in B2B queues are not monitored by Cisco. These are holding queues only, as the partner is working the issue.
* CSEs **never** manually route to these B2B queues, as no one monitors these queues.

##### Auto-routing of B2B cases

* Once Urgency = **B2B Escalated**, the B2B\_APP will route the case to a normal C3/CSOne queue based on contract settings and Tech / Sub-tech / Problem Code.
* Once routed to C3/CSOne queue, TAC actively works on the case. The case cannot be manually assigned back to B2B queue. When it is necessary to send the case back to B2B queue, autoroute the case by selecting the correct **Tech/Sub-Tech/Problem** code.
* For all Sev 2 and Sev 1 cases opened by Smart Bonding B2B, the partner also needs to call Cisco with the customer.
* All “E” (for external) case notes and updates in C3 will be shared directly into the partner system while “CO” and “Private” case notes are not visible in the partner system.
* Updates from the partner system will continue to be added by the B2B\_APP as external information.

##### Unique VCE Rules

* “VCE” is a coalition between Cisco, VMware, VCE, LLC and EMC for Data Center
* If case started at Cisco, and TAC needs to get assistance from EMC / VMware / VCE LLC
  + - In CSOne, select note type “Other” and status “E” (for external)
    - Enter one of the following:
      * ASSIGN TASK TO EMC
      * ASSIGN TASK TO VMWARE
      * ASSIGN TASK TO VCE LLC:
    - Add notes following “:  explaining request to EMC/VMware/VCE LLC
    - Select “Update SR” and submit
* Only ASSIGN TASK to one company at a time

Unique SAP Rules

* “SAP SE” is an enterprise company which provides business-management software products and solutions.
* If case started at Cisco different case management rules apply:
  + - Section 5.13 Close the Case does not apply
    - Send the SAP case to the customer when an answer or solution has been provided to the customer and the customer agrees that the issue is resolved. This includes service restoration, workaround, or resolution milestone.
      * To assign the SAP case to the customer:
    - In select status “customer pending” and save.
    - In CSOne, select note type “other” and status “external”.
    - Enter the following:
* SEND TO CUSTOMER
* Add notes following next line explaining the status change.
* Select “save”
  + - * In CSOne select status “close pending” and save

Once the customer confirms (aka close) the SAP incident B2B will update the CSOne case status to “customer requested closure”. If the customer does not confirm the SAP incident the incident will be closed automatically after 90 days. Once the status is updated to “customer requested closure” continue with section 5.13.1.

* + - 3-Strike-Rule in Section 5.13 Close the Case does not apply
      * If you have attempted to contact the customer with at least 3 attempts - using all known methods of contacting the customer - you need to assign the SAP case to the customer and keep the CSOne case open in status “close pending” - see above.
    - Section 5.15 does not apply. Once the CSOne case is closed the B2B connection between the SAP incident management system and CSOne is dropped. Reopen a closed case will not re-enable this linkage.
    - If case started at Cisco and TAC needs to get assistance from SAP
      * To assign the SAP case to SAP Support:
    - In CSOne select status “3rd party pending” and save
    - In CSOne, select note type “other” and status “E” (for external)
    - Enter the following:
* SEND TO SAP
* Add notes following next line explaining the status change.
* Select “save”
  + - * Inform the SAP Global Partner Support by email ([resolve@sap.com](mailto:resolve@sap.com)) you returned a SAP incident to SAP for further processing and ask them to move it into the appropriate component (aka queue).

Upon B2B escalation, all SAP cases auto-route to WW-DCN-Solutions group

Note

Upon B2B escalation, all VCE cases auto-route to WW-SV group.

### Unique Rules for Solution Support Service

* Customers that procure Cisco Solution Support Services utilize contract GSP and contract number routing to dedicated work queues and CSE’s. Service Request will route to these solution support teams using these two methods based on the requirement that the customer must use the Solution Support service contract when engaging Cisco. If the customer chooses to not use the Solution Support contract, standard case routing will apply.
* Unique 3rd party support policies and procedures will be stored and managed by the dedicated solution support team(s).
* Solution Support Service team will use "Click to Collaborate" functionality to gain support from TAC.
* When applicable, [Solution Support (SSPT)](https://cisco.jiveon.com/groups/solution-support-service) teams will follow the global Cisco polices already established with TSANet.

[EDCS-685594 – TSANet Case Handling Policy and Procedure](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-685594&ver=approved)

## Accept and Retain Case, Work Case to Closure

##### For transferring cases, refer to Change of Ownership section of [TAC Collaboration Process](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/888b1efc-62a1-4701-ae89-0c5c49d074ff) and [TAC Case Transfer Process](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/2a31ee8a-7388-48f1-aefd-df31a75050eb) as appropriate.

##### During Warm-Handoffs where CIN is involved, refer to [CIN-to-TAC Handoff Procedure](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/45750335-de60-4d3c-a8bf-86f7f8984d33).

##### Resolve customer problems through collaboration and not through case ownership transfers. Seek local technical assistance when necessary. When there is a misqueued case in the queue, ensure the correct Technology, Sub Technology and Problem Code is selected prior to requeuing the case. This is to ensure the customer case is transferred to the correct team for technical support. Use RDMT in situations where a case needs to be manually requeued.

##### See the Global TAC Collaboration Process for collaboration guidance.

##### Accept S1 / S2 case as warm transfers when appropriate (refer to the above note for details). If a CSE declines a case, the decline reason needs to be updated. In Casemon, an email with the declined reasons will be created and sent to the CSE’s manager.

##### Accept Cases in accordance with established Case Severity Designation levels:

* **S1 / S2:** Case accepted by a CSE within **15** minutes of receiving the case in queue.
* **S3 / S4**: Case accepted by a CSE within **60** minutes of receiving the case in queue.

### A Phone ring notification will occur for an Urgent case in the queue. CSE can set the preferences to select which communications preferences (E-mail, IM, E-page) they would like to set for receiving notifications of case information outside of the tool.

##### Look for special handling instructions in the Personal Queue, Collaboration Queue, Soft Assigned Queue and when viewing other CSE’s Personal Queue. In situations where a case is at the top list for multiple CSEs, an icon is included which identifies the CSE who is best matched to the case.

##### Check and comply with the customers Golden Rules and/or SCH (Special Case Handling) Instructions. For HTTS engineers Golden Rules are contained in the FTS [ePortal](http://eportal/). If there is a special note mentioning a specific workgroup or treatment, and it is appropriate to transfer the case to a different Workgroup Queue, transfer the CASE accordingly and provide a transfer reason. Otherwise, accept the case and confirm that the case is in “CE Pending” status.

##### Identify the technical problem, describe it in the case problem description, develop an action plan and provide resolution for the case.

##### Initiate customer communications by using the customer’s preferred communication method noted in the case notes. Use all available channels for acquiring additional information pertinent to the case, including automated queries, phone calls, e-mail, remote access, CSE tools. Use the customer’s preferred communication method noted in the case when requesting information. HTTS CSEs will also refer to the Golden Rules to review any communication guidelines/preferences specific to the customer.

##### A tool to log phone call conversations will automatically pop up when using the “Click to Call” button to contact customer (Cases in My Required Work Queue only). The CSE will have the option to attach the call log as an internal or external note.

## Cases with Service level agreements (SLAs)

##### Cisco TAC has standard Service Level Objectives (SLO), but we now offer Service Level Agreements (SLA) to our customers as well.

##### SLA’s have **financial penalties** and are offered as a premium to our customers. SLOs are primarily internal goals and if not met, internal changes should be made to reach the goal moving forward.

##### SP Base SLA is an offer to small and medium size businesses desiring an SLA associated with Cisco Services. SLAs are a contractual agreement to provide TAC response time and hardware RMA arrival at a lower cost than the existing TS Advantage offer.

##### Accept Cases with the SLA (Service Level Agreement) special handling indicator in accordance with terms of the offer:

* + S1 Case accepted by a CSE within 15 minutes from when the case is created.
  + S2 Case accepted by a CSE within 30 minutes from when the case is created.

## Make Initial Customer Contact

##### Contact the customer using the customer’s preferred method of communication as noted in the case. If the preferred communication method is blank, contact the customer first by phone then by email. HTTS CSEs also refer to the Golden Rules to review any communication guidelines/preferences specific to the customer.

##### Ensure all emails include a signature that has the first and last name of the CSE, a direct phone number for the CSE, and follow the legal statement and link; “For corporate legal information go to <http://www.cisco.com/web/about/doing_business/legal/cri/cri.html>.

##### 

##### For all accepted cases:

* Document the Problem Description in the external case notes. Ascertain the customer issue from the available problem description when understood. Summarize the Problem Description in the case notes under a heading of “Problem Description” when known. In addition, include a prioritized list of concerns/symptoms. If applicable, use KT; include a description of the problem and a clear problem statement (e.g. one object/one deviation).
* Set the customer’s expectation relating to when he/she will be updated - document this timeframe in the external case notes. An initial response does not require a solution or troubleshooting results, but it is appropriate to include them, if possible.
* Provide CSE contact information e.g. CSE userid@cisco.com and desk phone number and provide the customer with the Cisco World-Wide Contact information. This empowers the customer to get immediate attention in case the case owner is not available.
* Collect and review existing customer provided data such as: additional problem symptoms, frequency, conditions, number of affected units, topology, configurations, etc. It also includes information to support the collection of data such as remote access details and passwords. Data review may require a new problem statement. If the CSE is unable to collect this data during a S1 or S2 call, note the reason(s) in the case notes.
* If the customer is concerned about restoration of the network AND there is a danger of losing data for a root cause analysis, the customer needs to make the decision to pursue restoration at the possible expense of finding the root cause OR to troubleshoot and/or collect data first. Note customer’s name and decision in the external case notes.
* Use the appropriate Case Status after initial contact. For example, if the action pending is that of the CSE, the case status would be “**CE Pending**”. If the case is waiting on the customer, the case status would be “**Customer Pending**”. If there is action pending both the customer and CSE, the case status would be “CE Pending”.

## Troubleshoot Customer Issue

##### Identify the technical problem, describe it in the case problem description, and review case knowledge, such as:

* Device Information (device logs, asset location, etc.)
* Customer Information (topologies, desired outcome, SLA, previous support histories)
* Product Information (previous case histories, comm. threads
* Current issue summary & symptoms
* Complete internal & external information searches
* Determine if a customer needs a failure root cause analysis prior to a network restoration. Advise customers that efforts to restore network functionality may eliminate the opportunity to discover the root cause for network problems.
* Review BORG alerts in the case notes
* CSEs may use various options available to gather relevant solution content like Solution Buddy and non-TechZone (External) contents, **outputs of specific BDB scripts**. This external content can be linked to MWZ.

##### Analyze data, identify potential causes and test possible problem resolutions prior to any remedial actions in the customer’s network. When possible, verify and / or resolve the issue when the cause and solution to the problem is known.

##### If unable to solve the issue independently promptly seek assistance through collaboration. Refer to TAC Collaboration Process.

##### When required, refer to the pick-list of 3rd party vendors with whom Cisco can open cases, while transparently servicing the customer. The ticket number for any case opened with 3rd party vendor will be updated in the CaseMon and the 3rd party vendor list can be viewed by opening the case details in the case console view.

### Cloning a Case

##### If a CSE is working on a case with a customer contact and needs to open another case for a different issue for the same contact, the CSE takes approval from customer/partner and uses the “Clone” feature to open a new case in the Case Edit: New Case.

##### Choose “**New**” for the case status in order to successfully clone a case.

##### Contract Validation is not required for cloned cases since users are unable to change Contract field entries.

##### Choose “**Save**” to complete the entry.

##### Complete the routing information when the **Routing** page appears.

##### Choose “**Submit**” to finish cloning the case.

## Share Case Status with Customer

### For cases that are not on hold, communicate current case status to the customer based on the severity of the case, the action plan and the actions taken. Provide status updates using the preferred communication method as agreed with the customer:

* S1 / S2 – Update customer at least once daily
* S3 / S4 – Update customer at least once every 5 Business Days

### For cases that are not on hold, High Touch Technical Support (HTTS) engineers will provide status updates using the preferred communication method as agreed with the customer:

* S1 / S2 – Provide a status update at minimum twice per Business day
* S3 / S4 – Provide a status update at minimum once every 2 – 3 Business days

If the customer's situation does not require daily updates to their S1/S2, and the customer agrees, the CSE documents both the reasoning and customer approval in the case.

## Use Local Engineer Support Knowledge

### Engage locally available TAC resources to obtain guidance or instruction for resolving customer issues.

## Request and Provide Collaboration Support

### Refer to [CaseMon Training](https://videosharing.cisco.com/vportal/VideoPlayer.jsp?ccsid=C-2fce6412-bcb8-4efe-8f9b-47e2bf28ba70:1) materials for guidance in obtaining technical collaboration support.

### CSEs can add themselves as Participant to the engagement to provide collaboration support. The CSE/Manager can directly join the Case Team (sneaker-net style). The functionality is still available for collaborator to contact the Owner and request that the Owner complete the sneaker-net click, which will add the collaborator to the team as a Participant. For details on collaboration refer to Collaboration process document.

## Contact Customer for Verification

### Call the customer (if appropriate) to confirm effectiveness of the fix. Send a closing email, which includes the following basic elements:

* List of original concerns
* Resolution summary for each concern
* Request final confirmation that the original problem has been resolved
* Verify that the customer does not have other issues related to the original problem for which they require further assistance on this SR
* Steps to follow if the same problem recurs and a fix has not been found
* CSE contact information and office hours

## Putting a Case “On Hold”

### For cases where the next step towards resolution is pending on customer or a software release process that will take at least 7 calendar days (week), case owner can discuss the option of putting the case on hold with customer, get agreement on the duration of case hold, document it as a case note and then put the case on hold.

### Specific scenarios include:

* 1. Customer is out of the office for more than a week
  2. Customer has informed that it will take at least a week to apply work-around or verify software fix due to change management processes
  3. It will take more than a week for the Software release to be generally available for all customers in Cisco.com website and case status is Release-pending.

When customer is available and is working with CSE actively, do not put the case on hold. Only use this process when the case owner is available to work with the customer when the case is taken off hold on a future date. If the case owner is not available when the case is due to come off the hold status, use the schedule dispatch process outlined in this document instead of case on hold.

### Steps to put the case on hold

### Go to the Case Console view and click the Hold link.

### Complete the On-Hold logic page by entering the date and time when the case will be taken off hold in customer’s time zone. Select “Yes” for “Are you available at this time” field.

### The On-Hold Action Item page will be displayed

### Complete fields on the On-Hold Action Item page and save. This action triggers an email notification to customer informing that the case is put on hold.

### The word “ON HOLD” will be displayed next to the Case status in the Contact tab of Case Console View

### Taking the case off hold

### If the customer becomes available to work with the case owner prior to the case off hold date, CSE can manually take the case off hold by using the following steps:

### Go to the Case Console view and click the Hold link.

1. Set the status field to **Cancelled** and save
2. Refresh the Case Console view page for the given case.

* The word “**ON HOLD**” will not be displayed next to the Case status in the Contact tab of Case Console View.

The case management system automatically takes the case off hold on the specified date and time by setting the status field to **Completed** and sends an email notification to CSE informing that the case is taken off hold. After the case is taken off hold, CSE resumes work with the customer.

(See the [Appendix](#_Appendix_B._On) – On-Hold and Standard Item creation for a process flow diagram.)

## Close the Case

##### Close the case when an answer or solution has been provided to the customer and the customer agrees that the issue is resolved. This includes achieving service restoration, workaround, or resolution milestone.

##### HTTS

##### A case is only closed for the following reasons:

* **Customer permission – CSE receives agreement from the customer that the case can be closed. Document this approval in an external case note.**



##### Global/Regional TAC **ONLY**

##### A case is only closed for the following reasons:

* **Customer permission – CSE receives agreement from the customer that the case can be closed. Document this approval in the external case note.** Record the status as ‘**Closed’** when it is closed with the customer’ permission.
* **3-Strike Rule** - If you have attempted to contact the customer with at least 3 attempts – using all known methods of contacting the customer – you may close the case if the customer is non-responsive. These attempts must span a minimum of two (2) calendar weeks. This process is commonly known as the “3 Strike Rule”. When the customer is not responsive, close the case with the **Closed w/o Customer Confirmation** status.   
    
  CSE should engage HTOM and/or account team to drive a customer response.  Exception:  HTOM/Account Team approval for case closure is acceptable if **those** parties have confirmed customer approves case closure or if they provide explicit instruction to close the case due to prolonged lack of customer response.

**Note**: The “3 Strike Rule” should not be used for HTTS customers.

For TAC EMEA specifically, please refer to the GTAC EMEA Deviation Process - [EDCS-1245568](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-1245568&ver=approved)

Note-------------------------

* When attempting to close a case from CaseMon, the system will provide messages and re-direct the user if that case contains open tasks.
* When a collaboration case is transferred or closed, all collaboration requests associated with that case will be marked as “Closed” in the activity log.
* Cases with certain resolution codes and all cases opened longer than a year may be considered for manager approval. For more details, refer [Sec 11.2. Resolution Code](#_Resolution_Code).

Note:

### Case closure details

Provide all of the necessary details below to successfully close a case.

* Hardware product family
* Software Product when appropriate, including:
  + Name
  + Product
  + Version #
* “Case Information” sections by selecting [Status](#_Case_Status_Definition)
* Complexity - Considering the definitions of each level of complexity, select the complexity level best fitting the work conducted on this case. Refer to Cisco Service Level Definitions and Matrix summary in **Appendix A** to decide on the complexity levels
* [Underlying Cause](#_Underlying_Cause) - Select the underlying cause that most closely reflects the root issue experienced by the customer. Refer to the appendix section for the Underlying Cause possible values.
* [Resolution Code](#_Resolution_Code_Definitions) - Select the resolution code that most closely reflects the solution provided for the case. Refer to appendix section for definitions of all Resolution Codes.

Correct Resolution Code Selection

When closing a case, please ensure you are selecting the specific Resolution Codes that apply to the case. Incorrect code selection has negative and financial impacts on our partners.

**Incorrect code selection = reduced partner margins = reduced Cisco credibility with our partners!**

* “Hardware Details” section if not previously completed
* Complete the “Case Closure Notes” by selecting:
  + Symptom summary
  + Resolution summary
* Verify that the service loss field is correctly set prior to closure. Set the service loss field to **Yes** if the issue triggered a complete loss of primary functionality for all or part of the customer’s network or environment.
* Adjacent to the Service Loss field is a ‘check box’ stating, "I have verified the Service Loss field".



When closing the case:

1. Review the current value of the **Service Loss field** for accuracy; Update it, if necessary.
2. Select/**Check the box** next to the statement, “I have reviewed the Service Loss field”.
   * This field **must be checked prior to case closure**. It will turn red if you try to close without checking the box.

* Technology/Sub-Technology/Problem Code - Check T/ST/PC for accuracy when closing the SR. Many business decisions are based on this information and the T/ST/PC is maintained throughout the life of the case.

## Scheduled Dispatches

##### Customers may request an existing case be dispatched to a TAC team at a specific time and date for support.

##### **→** P1/P2 cases can be schedule dispatched as is: it is not necessary to reduce the severity of the case.

##### TAC follows the Schedule Dispatch option in CaseMon.

1. Select Schedule Dispatch from routing section.
2. The details are populated from the case.
3. Select “Follow the Sun” if required.
4. Update requeue notes and Action Plan
5. Update Requested Dispatch time
6. Optionally select “Notify the customer via email”
7. Click “Route”

##### When CaseMon is not available, refer to Scheduled Dispatch to schedule the customer-specified case support time and date. The CIN agent, TAC CSE, or Cisco employee setting up the scheduled dispatch documents the day and time the customer must be contacted in the case notes using the following format:

* Time: 24hr Customer Local Time and with UTC correspondence
* Day: mm/dd/yyyy
* For example: A scheduled dispatch for a customer in France needing assistance on Friday, Oct 14th, 2011 at 10 pm will be documented:
  + 10/14/2011 at 22:00 CET (UTC+2).
  + The title of the case will be updated with “Disp SJ Friday 10/14/2011 13:00” by the Scheduled Dispatch Tool which may not be applicable for TAC Service Request Tool used by TAC users.

Note:s

* In the case of a S1 / S2 warm transfer to another CSE, with a continuation of service, place the case in **CE Pending** - refer to Case Status Definition section. In the case of a S3 / S4 case being transferred to another CSE, place the case in **Requeue** status prior to the transfer. When a case in CSE’s backlog gets escalated from S3/S4 to S1/S2, alert notification is sent to the owner.
* For cases requested to be dispatched on weekends, the scheduling CSE is to inform the customer that a “best effort” would be made by the TAC to provide support. A request for a CSE to be on a customer’s conference call for a maintenance window is an example where support would be rendered on a “best effort” basis. Prior to scheduling the weekend dispatch, inform the customer of this weekend support. This would help the scheduling CSE properly set the customer’s expectation.
* If the customer belongs to a different time zone; example: Euro based customer opens a case during Americas time zone or vice versa; ask the customer if (s)he wants to work with an Engineer based in the time zone (s)he works.
* An indicator is added for cases in the queue that have been schedule dispatched

## Reopen the Engagement If Necessary

##### When a customer requests that a closed case be reopened, verify whether the closed case is related to the problem that the customer is currently experiencing.

* If the closed case is concerning the same problem, the CSE may reopen the case if the case was closed within 14 calendar days.
* If the case was closed more than 14 calendar days prior, the CSE suggests a new case be opened and places a link back to the closed case in the case notes.
* CSEs will make every effort not to reopen a case that is more than 14 days (two weeks) beyond the original close date, however, do what makes the most sense based on the situation.
* The CSE will open a new case on the customer’s behalf and route if needed and not send them back to the CIN.

## Engagement During System Failure

##### When MyWorkzone/CaseMon/CSOne is unavailable use the Web Ticket tool process established in the [Web Tickets User Guide](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/51f9b878-8206-499c-9d99-238298d2dc55).

# Process Compliance

Compliance with Cisco processes is required. Compliance to this process may be verified through various methods, including but not limited to, reports from available business tools, internal and external audits, self-assessment, and/or feedback to the policy owner. TAC managers will enforce compliance with this policy.

## Compliance Effective Date

This process becomes effective upon the last date of approval as noted in EDCS.

## Compliance Exceptions

Exceptions to the terms of this process are handled on a case-by-case basis only. Exceptions require written approval by Executive (Director or above) to non-comply for strategic business reasons. Documented exceptions and justifications will be communicated to affected technical services organizations immediately upon approval.

Any records of exceptions including Theater-specific handling requirements (local processes) should be approved and archived according to the [Cisco Records Management Process](http://wwwin.cisco.com/process/bes/iso/doc_control.shtml), and not on an individual’s laptop.

## Non-Compliance

Compliance with Cisco processes is required. Deviations or non-compliance with this process, including attempts to circumvent the stated process by bypassing or knowingly manipulating the process, system, or data may result in disciplinary actions per Cisco’s company policies, up to and including termination.

# Trainings and Documentation

[My Work Zone (MWZ) Training Site](https://cisco.jiveon.com/groups/my-work-zone-training)

# Related Policies, Processes, and Procedures

Refer to the TS Service Delivery Policy, Process and Procedures website for all policies, processes, and procedures related to TS Service Delivery:

<http://wwwin.cisco.com/CustAdv/ts/tso/globalops/gsde/ServiceDeliveryPPPs.shtml>

[HCS Solution Support](http://wwwin-eng.cisco.com/cgi-bin/edcs/edcs_info?EDCS-1089468)

[FTP Handling Policy and Process](https://docs.cisco.com/share/proxy/alfresco/url?docnum=EDCS-1266852&ver=approved)

# Definitions

Defined terms are located in EDCS as [1147899 TAC Glossary of Terms](https://docs.cisco.com/share/page/site/nextgen-edcs/document-details?nodeRef=workspace://SpacesStore/d38a23d0-f85e-4a6c-add6-6aab86a6f814).

# Approvals

For a record of the approval history, go to this document’s Information Page.

| Organization | Name |
| --- | --- |
| TAC Americas Delivery (East) | Ullie Versavel |
| TAC Americas Delivery (West) | Hector Acevedo |
| Global TAC Sourced Support – Contact Center Services (TFL) | Brian Fady (Proxy - Brendon Nilson) |
| Global TAC Sourced Support – CSE Services | Brian Fady (Proxy - Michele Paino) |
| TAC AP Delivery | Allyn Medway |
| TAC - EMEAR | Adrian Purcarea |
| Cloud Support, CALO & Incident Mgmt. | Marty Martinez |
| TS APJ+GC | Colin Soh |
| TS EMEAR | Rik Boven |
| TS Americas & HTTS | Marty Pantoja |

## 

# Appendix A: Case Statuses

| **Term** | **Definition** |
| --- | --- |
| 3rd Party Pending | Indicates that the resolution is dependent upon a 3rd party, often a development partner. |
| 3rd Party RMA Pending | Indicates that the resolution is dependent upon a 3rd party to provide the replacement hardware. |
| 3rd Party Workaround | Indicates that the resolution is dependent upon a 3rd party, often a development partner. A workaround has been provided to the customer. |
| AS Pending Workaround | Indicates that the issue is dependent upon Advanced Services for code recommendations or other actions. A workaround has been provided to the customer. |
| CE Pending | Indicates the CSE assigned to the case is currently investigating or troubleshooting the problem. No workaround has been determined at this time. |
| CE Pending – Lab Recreate | Indicates the CSE assigned to the case needs to replicate the customer situation in a test lab based on known configurations in order to find a viable solution to the problem. |
| CE Pending – No Contact | Indicates that the CSE has tried to contact the customer without success. |
| CE Pending Workaround | Indicates that the CSE is currently investigating or troubleshooting the problem and has the action to provide additional information to the customer. An acceptable workaround or alternative solution has been provided until the reported issue can be fully resolved. |
| Close Pending | Indicates that the CSE has provided an answer/solution to the customer and is waiting for a response from the customer to close the case. |
| Closed with Customer Permission | Indicates that the case issue has been closed and the customer has concurred. |
| Closed after 3 Strikes | Indicates that the case issue has been closed based upon the 3 strikes rule. |
| Customer Pending | Indicates that the CSE has requested information from the customer and is awaiting a response. There should be no current actions pending Cisco. No workaround has been determined at this time. |
| Customer Pending Workaround | Indicates that the CSE has requested information from the customer and is awaiting a response and there are no current actions pending Cisco. An acceptable workaround or alternative solution has been provided until the reported issue can be fully resolved. |
| Customer Requested Closure | Indicates the customer requested closure of the case through the TAC case tools. The case owner was notified to close the case. |
| Customer Requested Closure – No Owner | Indicates the customer requested closure of the case through the TAC case tools, and the case did not have an owner at the time of the request. |
| Customer Updated | Indicates that the customer has updated the case through the Customer Portal or sent an email to attach@cisco.com. New information from the customer is documented as a Web Update Note. |
| DE Pending | Indicates that the CSE has opened a software defect (‘bug’) report and forwarded it to Software Development Engineering (‘DE’) for investigation and resolution. Cases should not be in DE Pending status until a bug has been linked to the case. No workaround has been determined at this time. |
| DE Pending Workaround | Indicates that the CSE has opened a software defect (‘bug’) report and forwarded it to Software Development Engineering (‘DE’) for investigation and resolution. An acceptable workaround or alternative solution has been provided until the reported issue can be fully resolved. |
| Failure Analysis Pending | Indicates that the issue is resolved, but there are on-going investigations on the root cause of the hardware failure. |
| Release Pending | Indicates that development has resolved the issue. However, a bug fix has not been integrated into production software. |
| Re-queue | Indicates that the case has been requeued. |
| Restoration of Service | Indicates that a workaround deemed acceptable by the customer has been provided which restores network service. The CSE has the action to provide additional information to the customer such as the root cause or a final problem resolution. |
| SE Pending Workaround | Indicates that the CSE has requested a Cisco Sales Engineer work with the customer. An acceptable workaround or alternative solution has been provided until the reported issue can be fully resolved. |
| Service Order Pending | Indicates that replacement equipment has been ordered and is being or has been shipped to the customer. |
| Solution Provided Monitoring | Indicates that the solution to the customer’s problem has been provided but the customer wishes to monitor the network or device to verify it. The next action is expected to come from the customer |

# Appendix B: Resolution Code

All cases opened longer than a year require manager approval regardless of the resolution code used.

| **Resolution Code** | **Definition** |
| --- | --- |
| Closed – Not Entitled |          Customer contract does not support an action requested by the customer in the case |
|          Recommend Team Manager Authorization documented in DM logger. |
| Customer Education | Customer is given: |
|          Directions to tools or documentation |
|          Software download support |
|          Password reset           Product software/hardware limitations |
| Duplicate |          Used when the customer has another case open on the same issue. |
|          Recommend Team Manager Authorization documented in DM logger. |
| Hardware Replacement (RMA/SORT) |          Assigned to a case resulting from a hardware failure |
|          Assigned to a case where customers provided replacement hardware from customer spares inventory |
|          Do not use when replacement hardware parts are sent to customers to resolve software defects. Use a SW Defect resolution code and attach or reference a CDETS. |
| Hardware Upgrade – Existing Defect | When hardware is hitting a known internal or external hardware bug. If external, must be attached to the case. |
| Hardware Upgrade – New Defect | When hardware is hitting a new bug and a developer is involved on the case |
| Hardware Upgrade – New Feature/Functionality | A hardware upgrade is required to achieve results by enabling a new feature or functionality |
| License Issues | Assigned to a case involving issues with a license; could be for upgrades, contracts, etc. |
| Network Redesign | Issues with customer environment require fundamental or substantial changes in design or architecture to resolve. Often includes engagement of sales team (direct or partner-led) |
| No Response from Customer | Assigned to a case that has been close after 3 strike rule |
| Opened in Error |          Case does not receive troubleshooting assistance. Created accidentally, as a test, or for other reasons without intent of receiving support. Primarily used by CIN. |
|          Recommend Team Manager Authorization documented in DM Logger. |
| Partner Solved | Assigned to cases that have been resolved by a Cisco support partner |
| Redirect – 3rd Party Support |          Case has been assigned to a different company |
|          A feature or issue that is not supported by TAC that is redirected to 3rd party support or to a Cisco Account Team |
|          Replacement parts were non-Cisco products |
| Redirect – Partner/Reseller Support |          Used if “3rd Party Software” is chosen in the Product Selection Form |
|          Customer’s support contract requires them to first contact the Cisco Partner/Reseller that sold them the support contract (Common in EU and EME) |
|          Recommend Team Manager Authorization documented in DM Logger. |
| Resolved by Customer |          Customer has resolved issues that were the result of cabling or other customer environmental factors |
|          Customer corrects their own configuration errors |
|          Assigned to a case that has been solved without providing configuration changes or upgrades that enable the customer to resolve the problem |
|          Proactive cases when no troubleshooting or configuration assistance is provided |
| Software Configuration | CSE has changed or applied a configuration on software |
| Software Upgrade | CSE has suggested or applied an upgrade on software |
| Software Upgrade – Existing Defect | When software is hitting a known bug; this bug could be internal or external. If external, must be attached to the case |
| Software Upgrade – New Defect | When software is hitting a new bug and we have a developer involved on the case |
| Software Upgrade – New Feature/Functionality | An upgrade of SW version(s), license, or feature set is required to achieve results by enabling a new feature or functionality |
| Un-reproducible Problem |          Error messages that are a one-time event and no clear resolution was identified during troubleshooting (including crashes) |
|          Issue was a one-time occurrence and no resolution was provided |
|          CSE recommends more than one solution in a best effort to resolve a problem that the CSE is unable to reproduce |
| Unresolved Bug | Customer problem is result of a currently unresolved bug. Instead of waiting for bug resolution, customer has chosen to use an alternate solution, workaround, or status quo. |
| Documentation Provided |  |
| New User Access |  |
| Customer Activation |  |
| Reports |  |
| Sandbox Upload |  |
| Application Error - MAC |  |
| Application Error - WPC |  |
| Content Delivered |  |
| New Feature Request |  |
| Content Request |  |
| Content Not Available |  |
| Reset Password |  |
| Mobile - IOS |  |
| Mobile - Android |  |
| Viewer - Installed |  |
| Viewer - Online |  |

# Appendix C: Underlying Cause

| **Underlying Cause** | **Definition** |
| --- | --- |
| Configuration Assistance Needed | Product configuration not intuitive, too complex, inconsistent |
| Debug / Diagnostic Capability | Missing, incomplete, or cryptic diagnostic tools. |
| Design Assistance Needed | Customer seeking configuration best practices, deployment advice, redesign guidance |
| Documentation/Tools | Missing / wrong / confusing / can’t find release notes associated with the product |
| External Environment Issue | Problems related to power outages, burnouts, phase, temperature, humidity. |
| Hardware – non-failure | Limits exceeded, not enough memory, missing parts |
| Hardware functional failure | Hardware failure that requires a replacement part |
| Interoperability / Compatibility | Cisco to Cisco or Cisco to 3rd Party product incompatible |
| Licensing | Calls related to licensing – obtaining license keys, renewals, etc. |
| Non-Cisco Product or Service Problem | 3rd part product failure, Telco environment equipment |
| Software – not a bug | Scalability, version selection, install/upgrade help |
| Software Bug | Software defect – software does not work as advertised / designed and needs to be updated / patched |
| Usability other than configuration | Product hard to use, no console port |
| Unknown Cause / Other | Use ONLY if none of the above apply. |

# Appendix D: Case Risk Assessment Risk Levels

| **Risk Levels** | **Status** |
| --- | --- |
| 0 | On-Hold – Cases pending on customer can be put on hold with customer consent |
| 1 | CE Pending or Customer Updated and S3/4 and last update duration greater than or equal to 7 days or S1/2 and last update greater than or equal to 24 hours. |
| 2 | All S3/4 and last Updated duration greater than or equal to 7 days or S1/2 and last update duration greater than or equal to 24 hours. |
| 3 | CE Pending or customer updated and S3/4 and last update duration greater than or equal to 2 days. |
| 4 | All and S3/4 and last update duration greater than or equal to 2 days and severity change count greater than 1 or workgroup change count greater than 2. |
| 5 | Any relationship customer not in previous risk level. |
| 6 | All other cases not previously identified by a risk level. |

# Appendix E: Cisco TAC Case Complexity Levels

Stakeholders use TAC service levels as follows:

* **Cisco TAC** – Delivers service levels 1-3. Owns governance for this document.
* **Cisco TAC Global Delivery Partners (GDP):** Legal contracts with GDP agencies.
* **Customer Interaction Network (CIN):** Delivers service levels 0 and 1.
* **Cisco Technical Services Marketing**: Technical support terms for Cisco partners (resellers).
* **Services Readiness Engineering:** Technical support terms for OEM (3rd party) providers.
* **Cisco OEM**: Legal contracts with OEM (3rd party) providers.
* **Cisco Services Legal:** Vets changes to service levels from legal perspective.

The above stakeholders are represented by the list of reviewers below, and must approve all changes.

**Reviewers**

|  |  |  |
| --- | --- | --- |
| **Organization** | **Reviewers** | **Business Owner(s)** |
| TS Marketing | Gerard Redublado | Michael Batross |
| Customer Interaction Network | Dejan Puhar, Priya Santosh Singh | Brian Fady |
| Cisco Legal | Julia Hickey | Julia Hickey |
| Cisco TAC | Software & Cloud: Aaron Stanley, David Terwey, David Lizotte, Nancy Okamura.  Hardware: Paul Lukan | Jay Pederson, Marc Holloman, Ramesh Kalanje, Mawgan Wilkens, John Bunney |
| TAC Global Delivery Partners | Michael Paino | Brian Fady |
| Service Readiness Engineering | Steve McKeen | Bryan Waller |
| Cisco OEM Support | Paul Ferralez | Lisa Wall |

**Case Complexity Level Table**

| Case Complexity Level | Context | Service Definition | Case Characteristics |
| --- | --- | --- | --- |
| Level 0 – Procedural | ‘Level 0 Support’ is generally cGolden Rules/3-bullet summary addition. MWS & Root Cause Analysis. EPiC content. onsidered to reflect the range from simple call processing to less skill-intensive than Level 1 product troubleshooting.  Cisco partner programs may include Level 0 support as a partner deliverable. | ‘Level 0 Support’ means:   * Log customer interactions, assign to proper resource team, document symptoms, affected hardware, and software. * Verify service entitlement and severity level. * Provide initial problem categorization and business impact. * Answer general questions using pre-scripted text. * Direct customers to self-help tools or documentation. * For Cloud software product support (including WebEx, Spark, Jabber): * Notify customer of known outages or service level impacts. * Direct customers to status pages. * Help end users through common known usage level issues. * End user “how to” questions. * Attendee support for common know usage problems. * Issues solved by known documented process. | * Same day resolution for the most part. * Does not require technical certification. * Resolution by documented procedures.   Examples of Level 0 cases include but are not limited to:   * Software download support. * Licensing. * Password reset |
| Level 1-Basic | ‘Level 1 support’ is technical with low complexity characteristics. This service level often requires independent judgment and analysis beyond a script.  Cisco partner programs may include Level 1 support as a partner deliverable. | ‘Level 1 Support’ means:   * Provide general information on Cisco products, software and solutions. * Provide assistance with problems uncovered during hardware and software configuration, installation, and upgrade for mature products and technologies. * Identify and resolve obvious hardware problems. * Identify and resolve known problems through available documentation. * Provide basic internetworking troubleshooting expertise. * Provide basic support on standard software protocols and features. * Collect network traces and diagnostic data. * Provide regular status reports to the customer. * Perform simple problem determination and collect relevant technical information. * For Cloud software product support (including WebEx, Spark, Jabber): * Billing and subscription management. * Cloud setup and configuration support. * End user “how to” questions. * Attendee or end user support related to user level device set up. | * Documented problems with technologies that can be resolved with documented technical resolution steps, knowledge and troubleshooting skills.   Examples of Level 1 cases include but are not limited to:   * Hardware failure verification on technologies. * Assistance with configuration issues. * Third party resell only (OEM) – Initial triage between Cisco and 3rd party products. * RMA (Returned Material Authorization) not requiring troubleshooting. * DOA (Dead on Arrival) hardware. |
| Level 2-Advanced | ‘Level 2 support’ is considered the core of advanced technical support, requiring certified resources with specialized education and skills.  Cisco partner programs may include Level 2 support as a partner deliverable. | Level 2 Support’ means:   * Resolve complex configuration problems and simulations (i.e. recreates). * Resolution of software or hardware problems. * Identification of product defects. * Definition of an action plan for troubleshooting/resolution. * Problem prioritization based on business impact, identification of resources needed for a temporary and/or permanent solution based on priority. * Expertise in Cisco and third-party analysis tools. * Expertise in trace analysis, diagnostics and data analytics techniques. * Interoperability testing for software/hardware prior to deployment in production. * Lab testing before deployment of possible fix. * Identify and implement workarounds or alternate options. * If escalating to Level 3, provide complete documentation and recreation steps. * For Cloud software product support (including WebEx, Spark, Jabber): * No additional deliverables. | * Requires skilled analytical problem solving, ability to perform complex research and technical ability to diagnose and resolve problem. * Identify known or new defects, from easy to moderate in nature. * Typically consists of a complex production working environments with complex business implications, but limited interoperability issues.   Examples of Level 2 cases include but are not limited to:   * Assistance with advanced configuration issues. * Troubleshooting performance issues. * Resolving interoperability problems. * Analysis of protocol traces. * Resolution of problems associated with previously identified defects that are not yet fully documented and published externally. |
| Level 3- Expert | Level 3 support is the highest in complexity, and often requires the engineer to have direct and continuous interaction with development engineering resources for product defects.  Cisco partner programs do not include Level 3 support as a deliverable due to required interactions with development, access to defect creation tool, and other internal resources. | Level 3 Support’ means:   * Identify and resolve unknown problems. * Identify and implement workarounds for products and complex solutions that require a specialized expertise level beyond Level 2 support. * Issue reproduction with complex lab simulations. * Acts as interface with Cisco Development Engineering. * Identify interoperability issues that may be caused by 3rd party software/hardware. * For Cloud software product support (including WebEx, Spark, Jabber): * No additional deliverables. | * Requires significant research time. * Requires complex lab recreation scenario. * Requires quality interaction with Cisco Development Engineering * and/or OEM. Involves new defect of significant complexity. * Requires depth of understanding of products and interaction between products. |

1. **Matrix Summary**

| ***Category*** | ***Level 0*** | ***Level 1*** | ***Level 2*** | ***Level 3*** |
| --- | --- | --- | --- | --- |
| **Entitlement** | Verify support entitlement and service level |  |  |  |
| **SR Management** | Logging an end-customer call and assign it to the correct resource or technology team with symptoms, affected hardware, and software version | Provide regular problem resolution status reports to the End User |  |  |
| **SR Management** |  | Filter non-technical problems from technical problems |  |  |
| **Information Capture** |  | Collect relevant technical problem determination information | Provide contact with complete steps to reproduce a problem in event of escalation to Level 3 support |  |
| **Information Capture** |  | Collect captured network traces and diagnostic data |  |  |
| **Problem Definition** | Provide initial problem categorization |  |  |  |
| **Troubleshooting, Analysis, Diagnosis** |  | Provide basic internetworking troubleshooting expertise | Resolve the majority of complex configuration problems by troubleshooting and problem simulation (i.e. recreates) | Resolve problems reported to TAC for the first time in which no documentation exists in respect of the problem on Cisco.com or any other format |
| **Troubleshooting, Analysis, Diagnosis** |  | Resolve known problems through documentation available on Cisco.com or other local resources | Analysis of traces and diagnostic data when appropriate | Identify interoperability issues that may be caused by 3rd party software/hardware |
| **Troubleshooting, Analysis, Diagnosis** |  | Perform base problem determination and collect relevant technical information | Use of external analyzing tools when appropriate |  |
| **Resolution** | Providing references directing customers to available tools or documentation on Cisco.com | Resolve obvious Hardware problems | Resolution of most software or hardware problems | Generate workarounds for hardware and software bugs and troubleshooting bugs that require a specialized expertise level beyond Level 1 or Level 2 support |
| **Resolution** | Answering general questions using pre-scripted text | Provide specific software information and configuration support | Definition of an action plan for troubleshooting/resolution | Provides or interfaces with product and/or software development engineering support for resolution of product defects |
| **Resolution** |  | Provide general product information (pre-sales and post-sales) | Generate workarounds for Hardware and Software bugs (where present or alternate functionalities allow it) and troubleshooting bugs that were not diagnosed or resolved during Level 1 Support. |  |
| **Configuration** |  | Hardware and software configuration, installation, and Update and Feature Set Upgrade support for mature products |  |  |
| **Software** |  | Provide basic support on the standard software protocols and features |  |  |
| **Software** |  | Assist customer with Software upgrades |  |  |
| **Defects** |  |  | Determination of Product defects | Resolving problems associated with previously unidentified bugs that have not yet published on Cisco.com |
| **Testing** |  |  | Lab simulation and problem duplication | Issue reproduction with complex lab simulations |
| **Testing** |  |  | Lab testing before deployment of possible fix |  |
| **Testing** |  |  | Interoperability and compatibility testing for new Software and Hardware releases prior to being deployed into production network |  |
|  |  |  |  |  |
| **SR Characteristics** | Serviceable by non-certified resource | Documented and understood problems with stable product lines which can be solved by support engineers with basic network or technology knowledge and troubleshooting skill | Requires skilled research and technical ability to diagnose and resolve problem | Requires significant research time |
| **SR Characteristics** | Solvable by pre-established or documented procedures |  | Involves a known bug or new bug which is easy to moderate to diagnose. | Requires complex lab recreation scenario |
| **SR Characteristics** | Same day closure |  | Complex production working environments and limited interoperability issues | Requires quality interaction with Cisco Development teams |
| **SR Characteristics** |  |  |  | Involves new bug of significant complexity |
| **SR Characteristics** |  |  |  | Requires depth of understanding of products and interaction between products |
|  |  |  |  |  |
| **SR Example** | RMA (Returned Material Authorization) not requiring troubleshooting | Hardware failure verification on established product lines | Assistance with advanced configuration issues |  |
| **SR Example** | DOA (Dead on Arrival) hardware | Assistance with basic configuration issues | Troubleshooting performance issues |  |
| **SR Example** | Software download support | Installation assistance | Resolving interoperability problems |  |
| **SR Example** | Licensing |  | Analysis of protocol traces |  |
| **SR Example** | Password reset |  | Complex production working environments and limited interoperability issues |  |

# Appendix F: MWZ Solution Buddy- Process Flow



# Appendix G: On Hold & Standard Action Item Creation- Process Flow



# Appendix H: NSA Queue Monitoring- Process Flow



# Appendix I: Troubleshooting: Additional/Secondary Knowledge Gathering

