OPTUM™ Technology

Optum Technology High Priority Incident Management

A Guide for High Priority Incident Management Optum Technology

Released by the Technology Command Center, a team within Optum Technology

Version History

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12/1/2005	Rob Gardner	1	Initial draft
1/15/2007	Mark Vukelich	1.1	Problem ticket process and SCM
2/7/2007	Rob Gardner	1.2	Update refined processes
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7/15/2011	Brian Louhi	2.1	Updates to align to CBT course content.
8/17/2011	Brian Louhi	2.2	Updated the problem record 4.4.3 per ITSM's recommendation.
1/22/2015	David Lane	3	Process updates and branding updates.

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High Priority Incident Management

1. Overview

This document describes the Technology Command Center's protocol for restoring High Priority Incidents within the IT Service Management framework within Optum Technology. It describes the roles, responsibilities and expectations of participants during High Priority Incident restoration activities. This document also provides an overview of the Technology Event Management process.

The Technology Command Center (TCC) organization within Optum Technology operates a full time, 24x7 operations team to monitor the health and availability of Optum Technology assets. The TCC is responsible for coordination of and technical communication during High Priority Service restoration activities for Optum.

2. The Scope

The scope of this document is limited to High Priority Incident Management activities, which includes initiation of Technology Event Management, which is a pre-cursor to, if required, the declaration of a Disaster.

2.1 Purpose

The purpose of this document is to describe the protocol for performing High Priority Incident restoration for High Priority Services within the Optum Technology Service Management framework. It describes the roles, responsibilities and expectations of participants during High Priority Incident restoration activities. This document also provides an overview of the Technology Event Management process.

2.2 Objective

Create awareness and understanding of the protocol for a War Room convened by the Technology Command Center (TCC) to restore high priority incidents and the responsibilities of all parties who may be requested to join a War Room.

The objective of the High Priority Incident Management process includes:

- Restore service as quickly as possible.
- Promptly engage the appropriate technical support.
- Minimize the time commitment for all participants.
- Ensure War Rooms are conducted with urgency, objectivity, consistency, and professionalism.
- Minimize the impact of high priority technology incidents to the business.
- Communicate business impact and progress of Service restoration to key stakeholders.

2.3 Audience

The primary audience of this document includes any application, infrastructure, process, or other technology support resources that interfaces during High Priority Incident restoration activities. This may also include individuals from the business who may be asked to participate in TCC War Room conference calls to facilitate triage, testing, or business validation of incident restoration.

3. High Priority Incident Identification and Prioritization

High priority incidents are identified and reported to the Technology Command Center in two ways:

1) Technology Support Center (TSC) through user/client contact.

   TSC Analysts utilize knowledge bases, including the Service Registration entry in HP Service Manager to categorize the priority of the incident based on the impact and priority definitions. After confirming the incident warrants high priority designation, the TSC Incident Management team notifies the Technology Command Center (TCC) of the incident. The TSC will create a primary incident record.

2) TCC detection of a monitoring alert through instrumentation

   The TCC can be alerted of impact application and / or infrastructure components that warrant's high priority incident designation through instrumentation, if implemented. The TCC creates a High Priority primary incident and initiates restoration activities.
   Example: Monitoring probes for a portal indicates the portal is down, which is confirmed by TCC Incident Analyst as application checkout script fails.

Upon detection of an incident and determination that it warrants high priority (Priority 1 or 2) designation, a primary incident record is created in HP Service Manager. The definitive source for incident related details, the incident ticket will include end user impact, show relation between change and problem records, and will be managed by the command center at all times. War Room protocol and the associated activities from resource engagement through restoration and closure are described in detail in Section 4.

Roles and responsibilities of the various participants involved during the process are discussed in Appendix A.

4. War Room Protocol

It is imperative that all participants understand War Room protocol and their respective roles and responsibilities. This will enable Services to be restored as expeditiously as possible, efficiently utilizing technical resources and minimizing impact to the business.

The TCC is responsible for managing the incident record and driving restoration efforts. The TCC Incident Analyst will assume the **"command and control"** on all high priority primary incidents.

- What is command? Has the authority to allow actions to be taken for Service restoration. Has the understanding of the processes to be followed toward Service restoration.
- What is control? Manages the incident to ensure all actions being taken are aligned toward Service restoration. Maintains objectivity and discipline related to process to ensure compliance.

4.1 Starting a War Room

The TCC utilizes a set of reserved toll-free conference bridges to convene the required parties to restore service. The TCC Incident Analyst initiates the War Room call by opening the conference bridge and immediately sending a page (Technical Page) to the associated technical support groups with the incident number, telephone number and pass code to join the War Room. **In an effort to tactically resolve the issue, only individuals required to facilitate Service restoration activities are requested to join**. This minimizes communication activities that do not contribute directly to Service restoration activities and enables the technical support resources to focus their activities on restoring service either by fixing the issue or implementing a work-around to restore Service.

If an individual who is requested to join the War Room does not respond within 5 minutes, **(for a priority 1 and 10 minutes for a priority 2)** a second page is sent. When five minutes has elapsed after the second page, a page and/or direct communication is sent to the designated escalation contact or the requested participant's manager. This continues at five minute intervals until resources have been secured to facilitate Service restoration activities.

4.1.1 Supplemental Priority 1 War Room Activities

When a Priority 1 Incident severely impacts or has the potential to severely impact mission critical business operations, and/or have high visibility to external customers. As such, there are supplemental participation and communications that are associated with Priority 1 Incidents.

- Senior Exec On-Call Paging Communications
  - Immediately following the distribution of the Technical Page, a page is sent to the Senior Executive On-Call resource to join the War Room call. The incident number, a brief description of the Service impacted, and the conference bridge details are provided.
- Senior IT Leadership Paging Communication
  - Immediately following the distribution of the Senior Executive On-Call page, a Priority 1 page is distributed to IT Leadership to raise awareness to the issue. The incident number is supplied with a brief description of the impacted Service. No conference bridge details are provided in this communication.
- Priority 1 Email Communication Bulletin
  - Within 15 minutes of the Priority 1 incident, an email communication is distributed to individuals who have subscribed to the Priority 1 Email Communications bulletin. This communication contains the impacted Service(s), the incident number, the business impact (if known) and the current status.

4.2 Joining the War Room

The following responsibilities apply to participants joining the War Room for Service restoration efforts:

- After connecting to the call, participants will wait for a clear gap or pause in the conversation, and state their name and workgroup. The TCC Incident Analyst will be recording names in the incident record.
- Participants should mute their phone when not speaking or use #5 to mute and #5 to un-mute the phone.
- Respect others on the call and wait for a gap or pause to respond.
- Participants should review the HP Service Manager incident record or check the Warroom Status Portal to understand the current status of the incident rather than request status upon joining the call. Failure to do so can result in disruption to the call participants as a disproportionate amount of time is spent recapping the issue rather than restoring service.

4.3 During the War Room

Initial War Room discussions involve impact assessment and fault isolation. Activities then ensue to isolate the issue by correlating the incident description, reported impact, recent changes, other active incidents, monitoring alerts, and active system/application health checks performed by technical resources to identify the source of the issue. Upon identification, Service restoration activities commence with the objective of using all prudent measures to restore service to the impacted Service(s) without adversely impacting other Service(s) in the environment.

Incidents are worked at the highest priority that they were established at any time during the incident lifecycle. If the priority of the incident was increased to a Priority 1 from a Priority 2, at no time shall the incident be "downgraded" to a lesser priority – even if the impact has subsided and the then-current impact reflects a lesser priority based on the HP Service Manager Service Registration entry.

The War Room remains open until the incident has been restored. The incident is restored when the initially reported impact is no longer present. If there is lesser impact, a non-High Priority incident can be opened and/or a problem record may be requested and the support teams may continue to progress a permanent fix and/or root cause assessment through the Problem Management process.

There may be extenuating circumstances that present justification for a War Room to be temporarily suspended and a reconvene of the group to be scheduled. Decisions to reconvene are made at the discretion of the TCC. This often happens when there are finite activities that take a period of time to complete. As an example, an incident may require data to be restored from backup media. This could be a multi-hour process due to the volume of data. It would not be a productive use of time for individuals to remain on the War Room call. As such, a reconvene is scheduled with the understanding that if the process completes in less time than forecasted, individuals may be paged to join the War Room call again prior to the scheduled reconvene.

4.3.1 War Room Responsibilities

The following are the high level, role-based responsibilities during the War Room. A more detailed description and list of the responsibilities for each role is described in Appendix A:

- The **TCC Incident Analyst,** may also be referred as **TCC Incident Advisor**, will initiate the War Room call and engage required resources during the call. The TCC Incident Advisor will guide the restoration process in a structured, methodical and consistent manner using TCC Standard Operating Procedures for leading teams, communication, incident documentation and triage according to Optum Technology Service Management process methodology and in accordance with Optum Technology Group General Computing Controls.
- The **Service Level Owner** (or designee) for the impacted Service is expected to have:
  - A detailed knowledge of the Service
  - Knowledge of the infrastructure for which the Service resides
  - Awareness of all applications and infrastructure components for which the impacted Service is dependent on

  As such, the **Service Level Owner** is the individual primarily responsible for directing technical restoration activities.
- For Priority 1 incidents, the **TCC Duty Manager** monitors progress and ensures the restoration activity is proceeding quickly and efficiently. The **TCC Duty Manager** has the authority to escalate to additional technical resources and senior management at the individual's discretion.
- All participants must recognize that all comments may be recorded or used by others on the call. Participants must be sensitive to other business and IT segments on the call and conduct themselves in a professional manner consistent with the Company Integrity policy.

- It is the responsibility of all participants to consciously keep unnecessary conversations to a minimum to maintain focus on Service restoration.
- Only team members actively engaged to resolve the incident will be asked to join or remain on the call. As appropriate, teams or individuals who clearly have no involvement in recovery may ask to leave the call or will be asked to leave. However, at no time are individuals involved with restoration activities permitted to dismiss themselves from the call unless approved by **TCC Incident Analyst**
- The **TCC Duty Manager** will determine if it is necessary, based on business impact and number of participants, to open another War Room. The additional War Room will be used for application support.
    - The **TCC Duty Manager** will identify the leader for the application support War Room.
    - A TCC representative or a TCC designate will provide status updates to the application support War Room.
    - The **TCC Duty Manager** may combine the War Rooms as appropriate.
- The **TCC Incident Analyst** will update the incident record with appropriate content at a frequency no greater than 15 minute intervals.
- The **Service Level Owner** may request decisions from Business Representatives in order to make necessary changes to restore service or implement a temporary workaround.
- The **Service Level Owner** (or designate) is responsible for distributing communications to the affected business stakeholders per the Business Communication Process for High Priority Incidents at the stated intervals.
- For a Priority 1 incident, if the incident has not been restored within 60 minutes, the **TCC Advisor** will declare a breach. The **TCC Advisor** will notify Senior Management via SME paging and Priority 1 Email Bulletin of the status of the incident.
- The **TCC Duty Manager**, **TCC Director**, and/or the **Senior Executive On-Call** will engage Event Management and Technology Event Management teams when appropriate. (See Appendix B for process)
- **War Rooms are designed and resourced to facilitate High Priority incident restoration activities.** Although convenient because of the captive nature and accessibility of resources, all Problem Management discussions and activities **MUST** be performed outside of the War Room calls. The Incident Management process is designed to facilitate Service restoration activities. Once service has been restored the call will be adjourned. It is imperative that **ALL** War Room contributors respect the process to enable the TCC resources to complete remaining documentation required to close the Incident and to free resource to facilitate restoration of other High Priority incidents in the environment.

4.3.2 Incident Change (if required)

During High Priority incident restoration activities, there are instances when there are change-related activities that must be performed to restore service. In these instances, an Incident Change is the only type of Change that can be implemented *prior* to the creation of a Change record and is only used to restore service to a Priority 1 or 2 Incident, which is managed by the Technology Command Center (TCC) via a War Room.

The Change Owner begins to coordinate the implementation of the Change after receiving authorization to proceed from the TCC Duty Manager (Priority 2 Incidents) or the Optum Technology Senior Executive On-Call (Priority 1 Incidents) on the War Room call.

As part of the implementation, the Change Owner is accountable for validating the success of the implementation. Once the change implementation activities are complete and service has been restored, the TCC will create an Incident type Change record in HP Service Manager and relate the

record to the Priority 1 or 2 Incident record. **The Change Owner must update the Change Record within 24 hours of service restoration.**

Note: Changes performed to return components to their pre-incident state, providing the components/functions work exactly as it did prior to the failure do not require Incident change to be performed providing that the required activities will not knowingly cause an outage for any component not already impacted by the Incident.

4.4 Closing the War Room

Once technical restoration activities are believed to be complete, a series of validation activities or "Checkouts" are performed. If successful, a formal impact assessment is made and recorded to enable availability calculations to be performed. If appropriate, a problem record will be created and/or associated with the incident. The incident is then closed and the War Room call is adjourned. This section describes in greater detail each of the aforementioned activities.

4.4.1 Checkout

Prior to closing the War Room, the TCC Incident Analyst must get confirmation from the Service Level Owner and/or Business Representative that service has been restored, a progressive series of Checkouts are performed to validate restoration is complete.

Upon completion of Checkout activities the TCC Incident Analyst will set the status of the Incident to "Restored".

System Checkout

This stage is performed by technical platform owners or infrastructure teams. These teams confirm that the hardware, Operating System and key system processes are enabled and working as intended. They will give the 'all-clear' and state to the TCC Incident Analyst that the infrastructure systems have been validated and are ready for Functional Checkout of the software/application.

Functional Checkout

This two-stage process is performed first by the Service Level Owner to confirm that the platform requirements are configured correctly and running as intended. The second step involves end-users who perform acceptance testing to confirm the software performs as intended. The Application Operations and Maintenance team will engage with the end-users to begin using and testing the application for response and functionality and report back to the War Room participants. Once the end-users have validated their step the Operations & Maintenance team will inform the TCC Incident Analyst that they are ready for Business Checkout as they have confirmed that the Service is functional.

Business Checkout

This final step is the culmination of System and Functional Checkout. The sign-off from business that their capabilities and functionality have been confirmed as restored is handled in this step. This will be reported either by the Business Representative (if present) or the Service Level Owner.

4.4.2 Impact Assessment

The Service Level Owner, with facilitation from the TCC, must validate the incident duration starting at the time of the first Critical or Major monitoring alert, earliest related Incident opened by an end-user or the end time of the Change that caused the issue (if applicable).Then, based on the Vital Business Function (VBF) definitions of the Service Registration record in HP Service Manager, the per-VBF availability modifier (percentage of impact) is assessed for the incident. If percentages are not clearly defined in the Service Registration record, the percentage of impact must be estimated. Note that the TCC is recording

user/business impact: functions which the users or business were unable to perform, regardless of cause or area of failure. This impact does not itself imply responsibility or area of failed technology.

The duration of the impact, per-VBF impact percentage and the weighting of each VBF to the whole service, are used to calculate the service's overall Adjusted Down Time Minutes (ADTM). The TCC Incident Analyst will record the duration, availability modifier, and the name of the individual who assessed the impact in VBFIT.

It is the responsibility of the SLO or delegate to ensure that ADTM for which Optum is not contractually accountable is properly indicated during the impact assessment step of high priority incidents. If applicable, the SLO or delegate must notify the UCC to select the “Not Accountable ADTM” checkbox when recording impact. When selected, the “Not Accountable ADTM” checkbox will remove ADTM from client reporting, since Optum was not able to affect the restoration time. In the event the setting of the “Not Accountable ADTM” checkbox is incorrect--either checked or un-checked--and the incident has already been closed by the TCC, the SLO or delegate must submit a request to the ITSM Incident Management Process team to make the necessary correction. The ITSM Incident Management Process team will confirm the accountability with the SLO before making the change. ADTM will ultimately be used to generate availability reporting for the service.

4.4.3 Problem Record

The TCC Incident Analyst will identify the Problem Owner for:

- All Priority 1 incidents,
- All Priority 2 incidents caused by change,
- All Priority 2 incidents related to a set of pre-defined Services, and
- Other Priority 2 incidents as requested.

The TCC Incident Analyst will denote the need to create a problem record. When a Problem record is created as part of the resolution of a High Priority Incident, the TCC Incident Analyst has the authority to assign that Problem record to a Workgroup and Owner according to their best judgment and information made available during the War Room. The recipient of the problem record (Problem Owner) must be on the War Room. The Problem Owner can initiate requests to various other Infrastructure and Application Support teams through creation of Work Orders associated with the Problem record. Any appeals regarding Problem record assignment should be directed to ITSM Problem Management.

The exception to this assignment process is if the Infrastructure Support team requests assignment of the Problem record or if the incident is clearly caused by a hardware failure.

Note: A single Problem record will be created for each Incident. Contact ITSM Problem Management for additional information on the Problem Management process.

4.4.4 Incident Closure

The TCC Incident Analyst will update the incident record, and assign the incident record to the workgroup whose efforts last contributed to restoring service. The status of the incident in HP Service Manager will be changed to “Closed”. At this point, any future recurrence of impact will require a new incident to be created.

After the incident is closed, post-incident communication activities are performed for Priority 1 Incidents. Paging communications are sent to the Senior IT Leadership paging group to indicate the incident has been restored and the duration of the impact. The Priority 1 Email Communications Bulletin is also distributed to subscribed distribution list.

Appendix A Role Descriptions

The following roles are defined in detail below:

- TCC Incident Analyst
- TCC Duty Manager
- TCC Enterprise Manager
- Service Level owner
- Technical Specialist (SME: Subject Matter Expert)
- Senior Executive On-Call
- Business Representative

A-1 TCC Incident Advisor

The TCC Incident Analyst may also be referred as TCC Incident Advisor, is responsible for documenting all activities associated with the Incident and facilitating the War Room call. The TCC Incident Analyst communicates with the Service Level Owner to assess business impact and identify the technical resources to engage. The TCC Incident Analyst follows TCC Standard Operating Procedures to facilitate the War Room call to drive service restoration.

A-1.1 War Room / Communication

- Performs standard communication (workgroup paging and Priority 1 Email Communications Bulletin) to initiate and progress service restoration activities, and upon closure of the War Room call.
- Must always be present on the call.
- Consistently follows TCC Standard Operating Procedures.
- Adhere to IT Service Management discipline.
- Direct actions in accordance to Optum General Computing Controls.
- Provides regular status communications to TCC Senior Management.
- Coordinates with Event Management and Technology Event Management teams when appropriate. (See Appendix B for process).
- Opens and convenes additional War Rooms as requested by the TCC Duty Manager.

A-1.2 Incident Record Maintenance

- Maintains the incident record, including creation, maintenance and closure of associated Availability Alerts.

A-1.3 Incident Troubleshooting and Restoration

- Responsible for validating incident priority.
- Validates business impact throughout the incident.
- Works with the Service Level Owner to establish the action plan for the technical investigation and restoration of the incident.
- Facilitate troubleshooting activities as directed by the Service Level Owner and TCC Duty Manager.
- Keeps War Room participants focused on service restoration.

- While remaining calm, ensure a professional environment yet maintain a sense of urgency to pursue service restoration.

A-2 TCC Duty Manager

The TCC Duty Manager oversees and drives the process of restoring service during Priority 1 War Rooms.

The TCC Duty Manager has responsibility of all resources on the War Room and for ensuring service restoration activities progress to closure. The TCC Duty Manager ensures the TCC Incident Analyst has sufficient resource engagement and support to manage the incident. The TCC Duty Manager will join all Priority 1 War Rooms to monitor service restoration activities and ensuring that they progress to closure. The TCC Duty Manager is available for escalation related to technical support constraints, obstacles that impede service restoration progress, and to approve Priority 2 Incident Change. The TCC Duty Manager will support the TCC incident Analyst to direct the conversation on the War Room to progress service restoration. The TCC Duty Manager's goal is to optimize and/or reduce mean time to restore for the incident. Specific responsibilities include:

A-2.1 War Room / Communication

- Supports the TCC incident Analyst in directing the War Room conversations.
- Ensures notifications, communications, and escalations to management for high priority incidents occur.
- Ensures War Room governance procedures are followed.
- Manages the escalation process.
- Engages Event Management and Technology Event Management teams when appropriate. (See Appendix B for process).
- Ensures status is appropriately communicated to TCC Leadership.

A-2.2 Incident Record Maintenance

- Ensures the incident record is appropriately maintained by the TCC Incident Analyst.

A-2.3 Incident Troubleshooting and Restoration

- Responsible for ensuring the incident has been prioritized correctly.
- Ensures technical investigation and restoration activities are proceeding as expeditiously as possible, ensuring a consistent and methodical approach to diagnosis and restoration.
- Drives accountability to ensure defined actions are performed and timeframes are met.
- Escalates to higher-level technical resources or senior level management as needed to progress restoration.
- Review Priority 2 Incident Change and authorize or deny the change.
- Responsible for resource prioritization to ensure incidents with the greatest impact to the overall organization have the required attention.

A-3 TCC Enterprise Operations Manager

The TCC Enterprise Operations Manager serves as an escalation point and support for all TCC employees and activities performed in the Technology Command Center. This role provides additional support to ensure progress is being made towards service restoration. If necessary, has

the authority to escalate concerns to Senior Level IT Management to request additional technical support.

The TCC Enterprise Operations Manager will be engaged in the review of and the approval or denial of Priority 2 Incident Change requests, should the Duty Manager become unavailable.

In addition to actively participating on the War Room call, the Enterprise Operations Manager will collaborate in parallel with the TCC Director and the On-call Executive to determine if the incident warrants a "Technology Event". A "Technology Event" is designated when an incident causes impact to the business for an extended duration. For more information regarding the Technology Event management or TEM, you can reference Appendix C.

A-4 Service Level owner

The Service Level Owner is the single point of contact accountable for technical restoration of service when a disruption occurs. An Incident Owner is defined for each Service. At present, this is the individual identified as the Service Level Owner in the HP Service Manager application. The Service Level Owner is responsible for determining, coordinating and managing the technical aspects of the restoration effort. The S works closely with the TCC Incident Analyst and is required to participate in the War Room at all times.

A-4.1 War Room

- Responds within 10 minutes to notification page to join the War Room.
- Responsible to provide the technical direction of the call.
- Always be present on the call.
- Responsible for communicating to the Service Level Owner of the incident impact. The Service Level Owner is responsible for distributing communications to the affected business stakeholders per the Business Communication Process for High Priority Incidents at the stated intervals.
- In some instances, the Service Level Owner will also be the Service Level Owner.

A-4.2 Incident Record Maintenance

- Service Level Owner coordinates with the TCC Incident Analyst to ensure the incident record is updated with appropriate content (timing information, who is involved, changes in status, impact, and milestone activities).

A-4.3 Incident Troubleshooting and Restoration

- Be available for high priority incident restoration activities 24x7 for assigned Services.
- Ensures a backup has been identified for contact when unavailable.
- Assists with the validation of the incident impact and priority determination.
- Accountable for establishing the action plan for the technical investigation and restoration of the incident.
- Accountable for identifying and managing the needed technical resources required for investigation, diagnosis and restoration.
- Escalates to higher-level technical resources (level 3 or strategic partners) or senior level management as needed to progress service restoration.
- Uses a methodical triage approach to quickly narrow faults and find a solution/workaround.
- Works to restore service within the recovery goal of 1 hour for Priority 1 incidents and 4 hours for Priority 2 incidents.

- Facilitates any associated change activity required to restore service.
- Ensures that a Partner ticket is opened for vendor issues, if needed.
- Responsible for communication with the business community on their Service disruption following incident restoration.

A-4.4 Problem Management

- Assists with Problem Owner identification.
- Assists with definition of Root Cause analysis tasks.
- Creates and assigns Work Orders within HP Service Manager to workgroups to facilitate root cause identification and permanent solutions to minimize potential for the incident to reoccur.

A-5 Technical Specialist (SME: Subject Matter Expert)

- The Technical Specialist is the technical Subject Matter Expert (SME) responsible for restoring application or infrastructure components for which they are responsible.

A-5.1 War Room

- Is expected to join the War Room within 10 minutes of being paged. Within those 10 minutes, the SME is responsible for being prepared to troubleshoot the issue before joining the call. Timely engagement and escalation, to appropriately skilled resources, are critical to achieving service restoration within the Service Restoration Goal. The TCC will aggressively escalate when paged resource do not join the War Room within 15 minutes.
- Participates in War Room activities as requested.
- Communicates the progress and status of assigned restoration activities to the TCC Incident Analyst
- Incident troubleshooting and restoration.
- Completes restoration activities as assigned within set timeframes.

A-6 Senior Executive On-Call

The Senior Executive On-Call representatives are the designated Optum Technology Operations Leaders that work on a rotating basis to participate in the War Room call and facilitate restoration. The role was created to ensure there was appropriate visibility and representation from IT operations leadership during Priority 1 Incidents. These leaders also supplement the communication process during extraordinary events.

A-6.1 General Responsibilities

The Senior Exec On-Call has four primary responsibilities:

1) Participate on Priority 1 Incident restoration War Rooms
2) Participate as an approver in Emergency Change Advisory Board (eCAB) meetings
3) Support standard and/or perform supplemental IT Communications during High Priority Incidents and Events.
    a) Facilitate further escalation if necessary to Senior Optum Technology Executive Management.
4) Act as the escalation authority at the Optum Technology level across all IT operational teams.

A-6.2 War Room Responsibilities

When asked to join a War Room, the Optum Technology Senior Executive responsibilities include:

- Promptly join the War Room call within 10 minutes when notified to join the bridge.
- Remain on the Priority 1 War Room call for the duration of the Incident.
- Understand restoration effort status and next steps.
- Ensure all resources required are appropriately engaged.
- Ensure Incident investigation and fault isolation proceeds in a logical and timely manner.
- Oversight, ensuring progress and an appropriate level of urgency.
- As necessary, assist with the identification and engagement of Management resources and other required resources outside of Optum Technology scope of control, including vendors.
- Authorize and approve Incident Change(s) required to restore service.
- Where appropriate
    - Deflect and/or handle distractions to enable technical teams to remain focused.
    - Communicate status to the CIO(s) and all other significant business leaders.
    - Act as the single point of contact for business leadership communications during the High Priority Incident.

A-6.3 Emergency Change Advisory Board (eCAB) Responsibilities

The eCAB process is not part of High Priority Incident Restoration activities, but it is noted here that the Senior Executive On-Call has the responsibility to serve as the Optum Technology leadership representative and approver for Emergency Changes. Similar to a War Room, the Senior Executive On-Call will be paged to join eCAB conference bridges to review the requested change, assess potential impact, and approve or decline the change during the call. The Senior Executive On-Call will be assigned an approval work order in HP Service Manager to be approved or declined based on the response provided on the eCAB.

A-6.4 Communications Responsibilities

Technology incidents have the potential, to become technology events or disasters. This may be caused by a number of contributing factors including impact reassessment or duration and may include, but are not restricted to, multi-day restorations of Priority 1 events, primary system failures that wholly impact a site or sites that incur major work stoppage, Technology or Business Continuity events, or other catastrophic events. For the purposes of this discussion, these will be known as Events.

To better insulate the technology teams, allowing them to remain focused on restoration and to more accurately and thoroughly communicate objectively to all audiences, there are various supplemental communication activities during Events that may be warranted in addition to the TCC Managed War Room bridge(s). This may include: (1) IT Leadership bridges; (2) Technology Event Management bridges; (3) Business bridges (leadership and other types); (4) Other special focus bridges.

During High Priority Incidents, the TCC Duty Manager, the TCC Director, and the Senior Executive On-Call will communicate in parallel to the primary War Room call to determine if the “Incident” warrants “Event” designation. If an Event designation is warranted, these individuals will determine whether it is most appropriate to engage segment IT leadership or to engage the broader Technology Event Management process.

Although each situation will be unique, some general guidelines for Event communications are as follows:

- During Events impacting a finite group of users or business segment, the Senior Executive On-Call will be responsible for convening an IT Leadership update bridge with the affected Segment CIO or designated representation to keep leadership apprised of status.
- If the Event warrants convening the Technology Event Management (TEM) team, the TCC Director will work with the Senior Executive On-Call to initiate the TEM and determine appropriate next steps, up to and including the declaration of a disaster. If more broad business communication is warranted, the decision will be made by TEM to identify the single voice responsible for communication with the business including the frequency and agenda for this communication. This function may or may not be performed by the Senior Executive On-Call due to the duration of the event and decision by the TEM.

The individual identified to be responsible for the communication directly to the Business has the following responsibilities:

- Sponsor the call
  - Take charge to convene regular (discretionary, as determined at a consistent interval) conference calls with the business, business leaders, or EMT to proactively and assertively deliver appropriate and timely communication updates on the system failure and the progress to date.
  - Be on the call in a timely manner, be prepared, be organized, and speak with authority and confidence. Know who is on your call, which businesses they represent, and to some degree what is important to them.
- Manage the call
  - Deliver the updates diplomatically, and appropriately. Manage the expectations, address questions with fact-based, objective responses. Take action to follow up on questions unable to be responded to at the time. Establish communication frequency and intervals, but avoid committing to restoration times without facts to substantiate them.
  - Take a commanding role to ensure documentation is being captured to reflect meaningful events within the lifecycle, including post incident actions. Personal notes may be helpful for post incident review clarity. There also may be a need to do supplemental written communications (in addition to the TCC brief) subjectively driven during an Event.
- Follow up
  - Following restoration, ensure that the business feels they have reasonable closure, and any existing gaps are addressed in real time or are captured as action items, either independently, within the Incident record requesting action in the Problem Management process, or directly into the Problem record.
  - Senior Executives may be requested to participate in the Problem process and post-incident investigation for the Event. Communications that may be warranted include:
    - An accurate, IT summary with relevant milestones and timelines.
    - An accurate and timely IT Leadership summary that includes actions and remediation steps.

This process is intended to improve the client experience, actively communicate both status and progress, better utilize IT resources, and minimize post incident/Event follow up and communications.

A-7 Escalation Authority

In the event there are multiple high priority incidents that are competing for strategic resources, the Senior Executive On-Call leader will work in conjunction with the TCC Enterprise Manager to prioritize and supplement resources from across Optum Technology, non- Optum Technology segments, or third-parties to support high priority incident restoration. This may require use of the Senior Executive On-Call's knowledge of the network of support resources that may not be directly involved with daily support operations.

A-8 Business Representative

The Business Representative is responsible for representing the Business perspective of the Incident. Although representatives from the business are not typically requested to participate on War Room calls, periodically they are requested to facilitate impact assessment and to further articulate the impact of the incident. This helps to enable the technical teams to isolate the issue, resolve the issue either through a permanent resolution or a temporary workaround, and then validate that Service has been restored.

A-8.1 Incident Troubleshooting and Communication

It is imperative that technology incidents are reported to the Technology Support Center promptly. Users must articulate the issue and associated impact to enable correct prioritization of impact and engagement of the appropriate resources to commence and progress incident restoration activities. Providing quality information at the time of incident reporting will better enable IT resources to quickly identify the source of the issue and restore Service. Below are items that should be provided when reporting incidents, when available/known:

- Provide the name of the Service that is not functioning as designed.
- Provide details about the incident including but not limited to:
  - Number of sites impacted
  - Number of people impacted
  - Details on disrupted functionality (i.e., what works, what doesn't work, when it last worked)
- Performs due diligence to ensure procedural issues are not reported as system issues.
- Performs investigation tasks and testing (to duplicate error or validate restoration) as requested. For example, provides screen shots of error messages or where the issue lies.
- Communicates any previous troubleshooting steps.
- Communicate status to other business teams or team members as appropriate.

A-8.2 War Room Conference Bridge

If requested to participate in a War Room Conference Bridge:

- Participates in War Room activities as requested.
- Holds non-critical questions about technical details until post restoration.
- Be respectful of War Room protocol and follows TCC Incident Analyst instruction.

Appendix B Enterprise Resiliency & Response/Event Management

B-1 Event Management Team (EMT) Overview

Incidents that have evolved or escalated to become Events may require engagement with the Enterprise Resiliency and Response (ER&R) or Event Management Team (EMT) to facilitate business planning and communication.

B-2 Optum Technology and EMT Role and Responsibility Delineation

Both Optum Technology and EMT have roles and responsibilities during an Event. It is important to define and understand these roles and responsibilities to minimize confusion and overlap during an Event. During Events, the Optum Technology will be represented by the TCC unless the TEM process has been engaged.

Responsibility	Responsible	Supports
Technical Incident Prioritization	TCC	N/A
Technical Service Restoration Coordination	TCC	N/A
Technology Event Declaration	TCC	EMT
Non-Technology Event Declaration	EMT	TCC
Business Continuity Actions including Staffing Decisions during Technology Events	EMT	TCC
Technology Disaster Declaration	TEM	EMT
Optum Technology Leadership Event Communication	TCC	N/A
Segment IT Leadership Event Communication	TCC	N/A
Impacted Application Business Owner Communication	Service Level Owner	TCC
Segment Leadership Event Communication	EMT	TEM
Senior Leadership Event Communication	EMT	TEM

B-3 ER&R Event Criteria/Categorization

Categorization	Business Impact	Engagement Timelines
Category I Standard Incident	A critical portal is impacted, e.g. 'Myuhc is unavailable'	Issue is supported and managed within IT through the life of the incident
Category II Standard Incident	Several critical applications are impacted, e.g. 'UNET TOPS is experiencing degraded performance affecting B2B and IDT'	Issue is supported and managed within IT through the life of the incident
Category III Standard Incident	Multiple call center operations are impacted, e.g. 'Virtual Contact Center environment is experiencing connectivity issues affecting 4 Ovations call centers'	Issue is reported to EMT within 30 to 60 minutes as an informational notification, no action taken by EMT but they may inform their business constituents
Category IV Non-Standard Incident	One or more segments are unable to perform business operations, e.g. 'Eagan Data Center is experiencing a power outage affecting multiple Uniprise claim and call center applications'	Issue is reported to EMT within 10 to 30 minutes once the assessment is confirmed. EMT to take action in parallel with IT to restoration
Category V Event	Multiple business operations are unable to provide services, e.g. 'Due to extenuating circumstances, Ingenix and AmeriChoice locations will need to send people home, reroute work to other locations, and invoke business continuity plans'	Issue is reported to EMT immediately. EMT to take action in parallel with IT to restoration

Appendix C Technology Event Management (TEM)

Technology Event Management (TEM) is a process initiated upon determination that scope, impact, restoration activities, or communication requirements dictate that extraordinary efforts that may circumvent standard Incident Management process are required to accomplish Service restoration. During these events, restoration activities and communication with affected parties will be coordinated by the TEM team.

TEM will often warrant notification to one or more levels of Senior IT leadership. The purpose for engaging Senior IT Leadership is to inform leadership of significant technology events and receive validation of the plan of action currently being invoked. Depending on the severity of the event and the business impact, a higher level of authority may be required to determine the subsequent course of action (e.g., declaration of a disaster).

The TEM process may be invoked under the following conditions:

- Coordination of technology activities in conjunction with Enterprise Resilience & Response (ER&R) because of the invoking of a Business Continuity plan caused by a natural disaster or pandemic.
- Loss of facility power to a non-Technology Center event is not considered a Technology Event and is handled as a standard Incident unless impact warrants an elevated response.
- Service availability issues deemed to be high impact because of the loss of functionality for one or more High Priority Services for an extended period of time.
- Partial or complete loss of a Technology Center due to natural disaster or a significant environmental or facility issue.

The Technology Command Center (TCC) is responsible for the Technology Event Management process, including the declaration of a Technology Event. During high priority events, the Technology Command Center will liaise with the Senior Executive On-Call leader and Senior IT Operational Leadership to determine if/when to initiate the TEM process. Depending on the circumstances, the management of the event may be passed to other individuals who will preside over the larger event. However, the TCC will remain a focal point for the process.

C-1 Non-Technology Center

C-1.1 ER&R/EMT Initiated

During a Non-Technology Center Event, ER&R or various other groups will notify the TCC of the event through standard process. The TCC will engage with ER&R and other constituents as necessary to discuss the incident and determine if it is an Event. Minor incidents such as facility power or environmental issues are handled within normal incident management process and do not require the TEM process to be engaged. However, major Events affecting one or more sites and potentially regions (e.g., hurricane) will often require initiation of the TEM process. The TCC will manage the technology aspects of the Event including engagement with the necessary support teams. The TCC will report status and communicate with the business through the ER&R (EMT) Bridge at agreed upon intervals throughout the duration of the Event.

C-1.2 Extended High Priority Incident

Periodically, there are technology incidents that breach defined restoration goals, and activities to restore Service may require extended periods of time (days or weeks) to restore Service. This may include, but not be limited to fatal non-redundant hardware failure, data corruption, or security-related events. During these types of Events, extraordinary efforts may be required to restore Service that requires re-prioritization of activities by multiple workgroups. The Service Level Owner for the

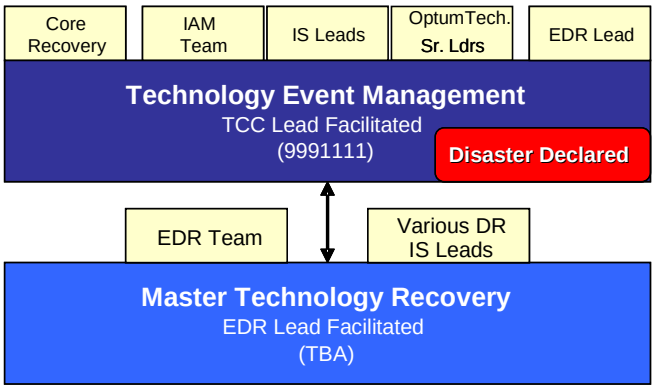
Service impacted by the outage will be engaged in the Incident and has primary responsibility for engaging the Business Segment(s) impacted by the Incident. The Senior Executive On-Call, through discussion with the TCC Duty Manager and TCC Director may determine that it is appropriate to engage the TEM process. This will ensure appropriate and effective leadership, communication, required resource engagement, and reprioritization is brought to the Event.

C-2 Technology Center Event

If a Technology Center Event occurs, the incident will initially be handled as a standard High Priority incident. When impact is determined to be widespread to a Technology Center, the TCC Director will be notified and will invoke the TEM process.

The TCC will open a TEM conference bridge line and initially page the TEM Core Team to the bridge. The TEM core team includes the Sr. VP for Infrastructure Services and immediate Operational direct reports, the Optum Technology BCP lead, and the Enterprise Disaster Recovery Lead. After an initial assessment of the situation, additional groups may be paged including the CRM Team, Infrastructure Services Directors, and Optum Technology Senior Leadership.

If the nature of the Event warrants the declaration of a Disaster, this declaration will be made on the TEM Bridge. The Master Technology Recovery bridge facilitated by the Enterprise Disaster Recovery Lead will then initiate the Disaster Recovery Plan activities based on the scope and location of the disaster. The specifics of this activity are documented and maintained by the Enterprise Disaster Recovery team. m



Within 60 minutes of convening the TEM Bridge, the TCC will notify ER&R (EMT) of the Technology Event. The ER&R team may elect to open the EMT Bridge to advise the business of the Event and provide status accordingly. The TEM will designate a senior individual responsible for providing status to the EMT Bridge on the progress of the Technical Event Management activities.