



Professional Services  
Standard Operating Procedures (SOP)

## **Managed Services Change Management Process**

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## 1 Introduction

The purpose of this document is to provide a definitive description of the WWT Managed Services (MS) Change Management Process. It has been created to:

- Specify in a complete, precise and verifiable manner the characteristics of the process.
- Ensure a consistent, repeatable process that enables MS to offer a high-quality service to our customers.
- Provide an understanding of the process as it is performed across MS.
- Provide a reference point for process queries and discussion.

This process documentation is considered a living document and should be viewed as a model toward which the organization evolves.

### 1.1 Purpose and Definition of Change Management

The purpose of the change control practice is to maximize the number of successful IT changes by ensuring that risks have been properly assessed, authorizing changes to proceed, and managing the change schedule.

The definition of a change is the addition, modification, or removal of anything that could have an indirect or direct effect on IT services.

### 1.2 Outcomes

Successful implementation of the Change Management process will result in the following:

- Request for Changes (RFC) are recorded and classified.
- RFCs are assessed using defined criteria.
- RFCs are reviewed while changes are developed, reviewed, and authorized before implementation.
- A schedule of changes and releases are established and communicated to the stakeholders.
- Approved changes are implemented and tested.
- Unsuccessful changes are reversed or remedied within the change window.

### 1.3 Target Audience

Staff working for or on behalf of MS; particularly those who are accountable and responsible for:

- Delivering services efficiently and at an acceptable cost.
- Delivering services within prescribed service levels.
- Maintaining user satisfaction of MS.

### 1.4 Scope

The Change Management process includes:

- Managing the raising, recording, prioritization, risk, impact, approval, and planning of all CC MS changes (software and non-software) to the in-scope change-controlled environments.
- Assessing the urgency and impact of the Change on the affected infrastructure or user

community.

- Ownership, scheduling and chairing of the Change Advisory Board (CAB) to approve and schedule Changes to the service.
- Managing the required resources and scheduling Downtime.
- Conducting a post-implementation review to assess if the Change met the objectives that were planned and close the Change following CAB approval to close.
- Owning and managing emergency Changes.
- Owning and managing standard changes.

## 1.5 Out of Scope

Externally hosted service where a specific support agreement with MS does not exist.

## 2 Business Rules

The following attributes are fundamental to the success of Change Management. The governance herein defines management's expectations for the practical implementation of these rules.

**Table 1: Business Rules**

Category	#	Statements
1.0 General	1.1	A single change process must be defined for MS.
	1.2	There must be a single accountable process owner.
	1.3	Changes must be performed following formalized processes and procedures.
	1.4	Where relevant, processes, and procedures must comply with WWT Guidelines.
	1.5	This policy must be used in conjunction with and not supersede statutory obligations.
	1.6	Change Records (CR) must be evidenced within a single centralized support tool.
	1.7	All Change Tasks must be completed during the authorized scheduled change window.
	1.8	CRs must be classified using a standardized set of criteria.
	1.9	CRs must be verified on an ongoing basis to ensure performance to formalized processes and procedures.
	1.10	All CRs within scope must follow and be subject to the authority of this Change Process.
	1.11	Where applicable changes to production environments must be replicated in disaster recovery environments following Service Continuity requirements.
2.0 Communication	2.1	Changes must meet multiple-stage acceptance, assessment, approval, and authorization criteria including but not limited to: <ul style="list-style-type: none"> <li>• Acceptance of the RFC.</li> <li>• Assessment of the impact, risk, cost, and complexity of the change.</li> <li>• Approval to build, test, and implement the change.</li> <li>• Authorization to build, test, and implement the change.</li> </ul>
	2.2	The reason and business impact for changes must be documented and communicated.
	2.3	Changes will not be made without thorough analysis or implementation approval by all stakeholders or stakeholder representatives impacted by the change.

Category	#	Statements
	2.4	Relevant technical and business representatives must be consulted about the impact of the change before submitting it to the CAB.
	2.5	Changes that are rescheduled must be re-assessed and re-authorized.
	2.6	Support groups must commit appropriate resources to conduct activities as required by Change Management.
3.0 Change Authority	3.1	A change authority must be defined for each identified category of change.
	3.2	No changes will be made to production systems without authorization from the appropriate change authority.
	3.3	Adjustment of the standardized classification criteria must only be performed by the designated Change Authority.
4.0 CAB	4.1	CAB must meet regularly to review RFCs.
	4.2	A formalized escalation procedure must be provided for handling decision and approval conflicts that cannot be resolved at the CAB level.
	4.3	CAB meetings must include a review of the Change Schedule.
	4.4	CAB meetings must review changes that were implemented and would be ready for formal review and closure.
5.0 Change Notifications	5.1	Customers and users must be notified of changes per documented change procedures.
	5.2	A Change Schedule must be published and available to all interested parties.
6.0 Engagement	6.1	The change process will be accountable for the control and coordination of all MS changes.
	6.2	The release process will be accountable for implementing changes under the guidance of the change process.
	6.3	Release Management must have an active role in all changes to the production environment.
7.0 Testing	7.1	CRs must provide evidence of pre- and post-testing.
8.0 Planned Changes	8.1	Planned changes will be further classified impact and risk as major, moderate, or minor.
	8.2	A list of standards (pre-approved) changes and any conditions that accompany the pre-approval must be maintained.
	8.3	The CAB will be responsible for identifying repeated or potentially repeated change requests and consider if pre-approval status should be granted (standard change).
	8.4	Extending Change Windows with customer approval. During a change window, there may be some dependencies outside WWT's control where the customer may approve a request to extend the Planned Schedule change Window to an agreed upon time. The dependencies can, be but are not limited to acceptance testing, customer technical configurations dependencies, customer-vendor support, etc.
9.0 Exception Changes	9.1	Emergency Changes must only be created in response to: <ul style="list-style-type: none"> <li>• Priority 1 – Critical Incident</li> <li>• Priority 2 – High Incident</li> <li>• High Priority Request from Client that can't meet the timeline for a Normal Change.</li> </ul>

Category	#	Statements
	9.2	Emergency changes must be fully documented via the planned change model within 48 hours of the change being implemented or by the Service Level Agreement timeline for incident resolution time.
<b>10.0 Unauthorized Changes</b>	10.1	Changes made that do not comply with the change Policy will be classified as unauthorized changes.
	10.2	Resources will not be made available for unauthorized changes.
	10.3	MS will have the authority to reverse any unauthorized changes.
	10.4	Unauthorized changes will be recorded and reported to the Executive Management Team.

### 3 Roles and Responsibilities

Role	Responsibility
Change Management Process Manager (Change Manager)	<ul style="list-style-type: none"> <li>Carrying out the standardized process manager responsibilities for the change process.</li> <li>Maintaining the forward schedule of change.</li> <li>Planning and managing support for Change Management tools and processes.</li> <li>Developing and maintaining the change process and procedures.</li> <li>Coordinating interfaces between change and other service management processes.</li> <li>Managing activities relating to P1 Critical and P2 High incident related Emergency Changes.</li> <li>Formal closure of all CRs.</li> <li>Producing and distributing Change Management information to stakeholders.</li> </ul>
Change Authority (Change Manager)	<ul style="list-style-type: none"> <li>Reviews specific categories of Changes.</li> <li>Formally authorizes changes at agreed points in the change lifecycle.</li> <li>Participates in the change review before changes are closed.</li> <li>Attends CAB meetings to discuss and review changes when required.</li> </ul>
Change Sponsor (Customer Experience Champion)	<ul style="list-style-type: none"> <li>Approves funding for the change.</li> </ul>
Change Requestor (Command Center MS Support, Tier 2)	<ul style="list-style-type: none"> <li>Identifying the requirement for a change.</li> <li>Completing and submitting a change request.</li> <li>Attending CAB meetings to provide further information or delegated to change implementor.</li> <li>Reviewing change when requested by Change Management, and specifically before closure.</li> <li>Enter Partner changes into Service Now.</li> </ul>

Role	Responsibility
Change Owner (Command Center – MS Support)	<ul style="list-style-type: none"> <li>• End-to-end accountability for the change request.</li> <li>• Monitoring and reviewing activities of teams and functions that build and test changes to ensure that the work is carried out correctly.</li> <li>• Formally communicating decisions of change authorities to affected parties.</li> <li>• Verifying that change documentation has been correctly completed.</li> <li>• Submitting requests for evaluation to trigger the change evaluation process.</li> <li>• Keep all relevant parties and the CAB informed of the status and progress of the change.</li> <li>• Notify the CAB about the various solutions available for unsuccessful Changes.</li> </ul>
Change Resource/Implementor (Command Center – MS Support, Tier 2 – Engineer)	<ul style="list-style-type: none"> <li>• Manages predefined MACD changes.</li> <li>• Assists with the change assessment.</li> <li>• Performs the build, test, and implementation activities of a Change.</li> </ul>
Business Relationship Manager (Customer Experience Champion)	<ul style="list-style-type: none"> <li>• Single point of contact between the Customer and MS regarding service issues.</li> <li>• Consult with the MS Change Process Owner to review Change performance metrics.</li> <li>• Provides guidance and support to WWT Change Manager and affected Customer(s).</li> <li>• Communicates relevant business impact information during Exception Changes.</li> <li>• Attends Post-Implementation Review meetings.</li> </ul>

## 4 Governance CAB

The CAB provides the overall governance of the Change Management process to minimize inherent risks. CAB members should be chosen to ensure that the requested changes are thoroughly checked and assessed, from both a technical and business perspective. This Board is generally made up of Change Managers and the Process Owner. The team will deliver support through:

- Approving RFCs.
- Assisting in the assessment and prioritization of CRs.
- Evaluating CRs that were completed.
- Closing CRs with proper evaluation and reporting.

The CAB offers multiple perspectives necessary to ensure proper decision-making. There are two types of CAB meetings to approve and authorize a change:



- Weekly CAB meetings would authorize normal CRs; and
- Ad Hoc ECAB meetings authorize ECRs.

## 4.1 CAB Meetings

These types of CAB meetings are formal in nature. The CAB meeting will be held on a regular schedule (typically weekly. The frequency can increase depending on the volume of changes) with change requestors/implementors, management, and other stakeholders to review and approve non-emergency related change requests. Also, the CAB will assess and close changes from the preceding week. The CAB meeting agenda will include a review of the standard and emergency changes that were completed in prior weeks.

The primary role of CAB is to approve the change deployment schedule, or to authorize the change implementation into the production environment, depending on the lifecycle stage of the CR. The change requestor will schedule a change window to implement the initial RFC. This will be reviewed and approved by the appropriate Change Management team members. Approval of the CAB at this stage constitutes approval of the proposed implementation schedule date and time (change window). The agreed implementation date and time will be guided by several factors:

- For problem fixes, the target date will be reviewed and confirmed by CAB and influenced by risk and priority levels.
- For preventative maintenance fixes, the target date may be driven by the security compliance deadline.
- For non-critical problem fixes, the target date may be driven by the next scheduled maintenance window for service in question.
- For enhancement project delivered CR, the target date may be driven by the next scheduled major release of the service in question.

Following the deployment change approval by CAB, the design, development, and testing of the CR will be managed by the appropriate delivery model, problem fix, application enhancement, infrastructure change.

**Note:** For standard changes, requesting engineers do not need to be present at the CAB for approval. Standard changes are pre-approved templates. Standard Changes will be evaluated once they are completed and are ready for review during CAB.

### Emergency Change Advisory Board (ECAB) Meetings

ECAB meetings are held in an emergency, and an ad hoc manner as necessary. These types of meetings will be held with Command Center Solution Architects (SA), requestor/incident resolver, Customer Experience Champion, Service Manager, Change Manager, and any other required stakeholders to review and approve emergency related changes in an event to resolve incident Priority 1 and 2 records. All Emergency Change Records (ECR) created must be initiated, completed, and submitted by the change implementor. Where the change is of a high priority or urgent in nature (*e.g.*, network outage or critical application failure), then the Change Management team calls an ECAB to review and approve the ECR. The ECR is reviewed to assess and validate Urgency, Risk, Impact of the change. The change is validated to ensure that the required change emergency procedures are followed. Any Problems or Incidents relating to the ECR will be linked to the change via the problem tab, Incidents fixed by change tab, or

Incidents caused by the change tab in ServiceNow. Once the change is approved, the change can be implemented immediately. The planned change window is open due to the nature of the ECR. In extreme circumstances, an emergency change approval may be given verbally by the Change Manager or other service management role with sufficient authority to provide the approval. If the ECAB meeting determines that the change is not an ECR, the CR type will be changed to Normal CR and will follow a formal CAB review. Lastly, if the change must be implemented and cannot wait for a formal CAB review, then management approval would be required to implement an Emergency Change.

**Note:** On an exception basis, a few ECRs may result in some testing being bypassed. This will be agreed upon during the ECAB meeting.

## 4.2 Change Category

Change requests are categorized to ensure the cost and difficulty of a change are understood before it is undertaken. The change category determines which change model will be applied to ensure the change is handled in a predefined path and to predefined timescales.

**Table 2: Change Categories**

Category	Sub-Category	Lead Time	Description	Change Authority
Exception	Emergency	N/A	Resolves a Priority 1 or 2 Incident or Problem. A High Priority Request that is time-sensitive and cannot tolerate planned change lead requirements requires a Emergency Change.	ECAB
Planned	Major	20 Business Days	High risk, cost, and complexity rating.	WWT MS Executive Committee/CAB
	Significant	10 Business Days	Significant risk, cost, and complexity rating.	CAB
	Minor	5 Business Days	Low risk, cost, and complexity rating.	Change Manager

## 5 Risk Assessment

A risk-based assessment will be performed to identify the factors that may disrupt the business, impede the delivery of service, or impact corporate objectives and policies. Changes that score above the risk appetite of the CAB will require specific risk treatment actions to bring the risk of the change into acceptable levels.

**Table 3: Risk Matrix**

		Consequence				
		Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Likelihood	5 - Almost Certain	Medium	Medium	High	Critical	Critical
	4- Likely	Medium	Medium	High	Critical	Critical
	3 - Possible	Low	Medium	High	High	Critical
	2 - Unlikely	Low	Medium	Medium	High	High
	1 - Rare	Low	Low	Medium	Medium	High

## 5.1 Risk Treatment

The following table describes the minimum treatment actions required for identified risks.

**Table 4: Risk Actions**

Risk Rating	Minimum Risk Treatment Requirements
Critical	Detailed risk treatment action plan required.
High	Requires senior management (WWT MS Executive) level attention Risk treatment plan to reduce risk within risk appetite.
Medium	Must specify management responsibility.
Low	Manage by routine procedures.

## 6 Priority Levels

The priority rating is used to decide the order changes should be discussed and assessed by the appropriate change authority. Initial impact and urgency will be suggested by the change requestor but ultimately the change authority is responsible for finalizing the priority as required. Incidents with Priority 1 or 2 will have Service Level Agreements (SLA) associated with the change. Normal and Standard change types tend to have Priority 3 thru 4 ratings.

Details regarding the criteria used to determine priority factors can be found in Appendix B.

**Table 5: Priority rating based on the severity of the change**

		Urgency		
		High	Medium	Low
Impact	Major	1	2	3
	Moderate	2	3	4
	Minor	3	4	4

## 7 Change Types

For MS, there are three types of changes:

- Normal change
- Emergency change
- Standard Change

### 7.1 Normal Change

This type of change is formally planned, reviewed, scheduled, and approved on a weekly CAB meeting by the technical teams, management, and key stakeholders. Most of these changes have a higher degree of complexity due to the coordination efforts within environments. This may require a planned outage. It may take a couple of weeks or more to implement a Normal CR.

### 7.2 Emergency Change

This category of change is an exception. The change is normally initiated to resolve an incident or a high priority customer request. This is an unplanned RFC. The change is associated with an incident that is either a Priority 1 or 2 or a high priority request from the client. Emergency changes are designed to address break-fix, or defects impacting services. If the exception is not associated with an incident, then it must be associated to a high priority request from the client that can't meet the normal timeline for changes. To authorize a change, the ECAB will meet with technical leads, management, and change coordinator for final review and approval of the ECR. The ECAB must be able to react at any time. ECABs must be able to assemble within 15 minutes. The operation of ECAB is 24 hours 7 days, 365 days a year. The assumption is there is a major outage and a fix was required immediately.

### 7.3 Standard Change

This type of change is for low risk and repeatable changes that can be implemented without formal CAB review. This type of change is designed to build efficiencies within the CAB to only review more complex changes. Standard changes are typically low to no impact type changes, that are scheduled using a predefined and pre-approved template in ServiceNow. First, the technical team must submit a standard change request template for CAB review and approval. If the template is approved, the Standard Change Catalog is updated with a new Change Template. This will allow engineers to use a pre-approved Change Template when executing CRs in a production environment. No CAB approval is required for these types of RFCs. Once change details are entered, the change requestor will select a schedule to complete the change request. This will allow changes that are predefined as low impact, low risk, and priority to be templated within ServiceNow.

**Note:** Engineers will notify the customer of receipt of change with 24 hours of receiving the request.

## 8 The Lifecycle for CRs

CRs follow a lifecycle. In table 9, the states will go in order from top to bottom. In table 10, the states will go across from left to right based on change types.

**Table 6: Change Request States**

State	Description
New	A CR record has been created but not ready for formal review (draft).
Assess	Peer technical review and approval of the change. Business Service Manager review and approval of the change.
Authorize	CAB review and authorization of the requested change.
Scheduled	Change deployment has been approved and authorized by the CAB and can be implemented on the designated date and time.
Implement	Change is in the process of being implemented during the approved change window.
Review	Change implementation, validation, and testing are complete. Reviewed on next subsequent CAB meeting for closure.
Closed	The change has been completed, reviewed, and formally closed or rejected and closed.
Canceled	Change is no longer required or was opened in error.

**Table 7: Change Request Workflow by Change Type**

Types	New	Assess	Authorize	Scheduled	Implement	Review	Closed
Normal	1 <sup>st</sup> – Initiate Request	2 <sup>nd</sup> – - Peer Review - Business Approval	3 <sup>rd</sup> – CAB Approval pending	4 <sup>th</sup> – Scheduled	5 <sup>th</sup> – Implement	6 <sup>th</sup> – Review	7 <sup>th</sup> – Closed
Emergency		1 <sup>st</sup> – Initiate Request	2 <sup>nd</sup> – ECAB Approval Pending	3 <sup>rd</sup> – Scheduled	4 <sup>th</sup> – Implement	5 <sup>th</sup> – Review	6 <sup>th</sup> – Closed
Standard		1 <sup>st</sup> – Initiate Request		2 <sup>nd</sup> – Scheduled -Customer Notification for customer requested Standard Change	3 <sup>rd</sup> – Implement	4 <sup>th</sup> – Review	5 <sup>th</sup> – Closed

## 9 Create Request

### 9.1 Create RFC “New”

Change Requestor will open an RFC to address a corrective action or an enhancement for a device or CI (configuration item) in the Configuration Management Database (CMDB). Within the change process, the change implementor will outline the information and implementation steps for an initial assessment

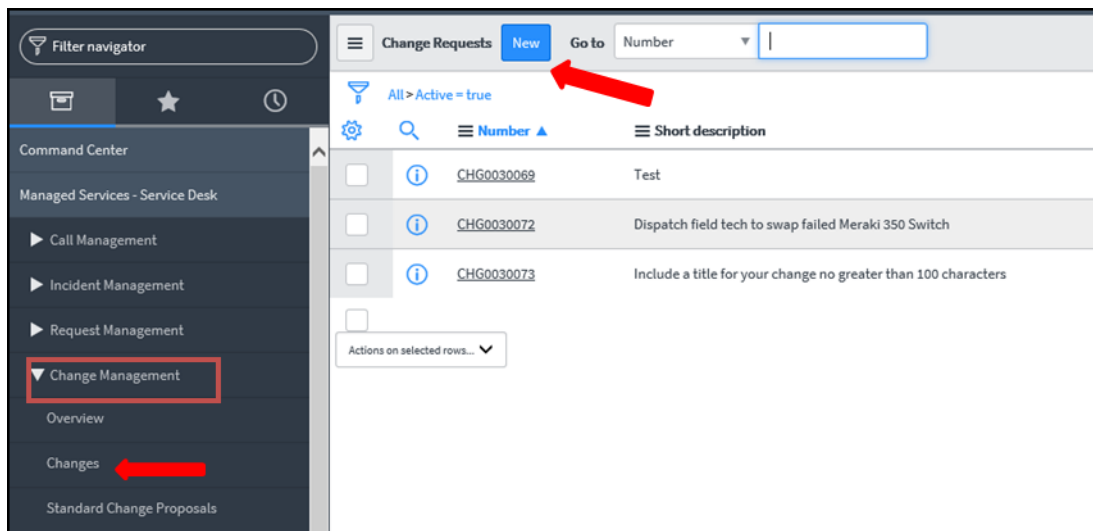
of the change. The change requestor and/or implementor must be able to answer the following: What, Where, How, and When the change will be implemented.

Change Requests are created by engineers or other authorized change requestors when a change needs to be made to one or more CIs. The requirement to make a change to a CI are the following events:

- When an incident occurs, and the fix needs to be deployed into the production environment to resolve an incident.
- When a problem record has a resolution and a change is required and a part of the problem management process.
- When IT is resolving team and/or 3<sup>rd</sup> party subcontractors proactively identify preventative maintenance activities that need to take place.
- When the client or end-users raise a Service Request/Work Order to make a change to a service.
- When hardware/infrastructure/network Changes need to be made to a production environment.
- When a change is opened intending to fix an incident, that incident's SLA Timer can and should be paused. This is done by placing the incident in a Pending Change state. Reminder – The CR itself does not pause the SLA Timer. Once the proper incident evaluation and diagnosis are achieved, and the CR is in a scheduled or implemented state then the SLA Timer can be paused.

New CRs:

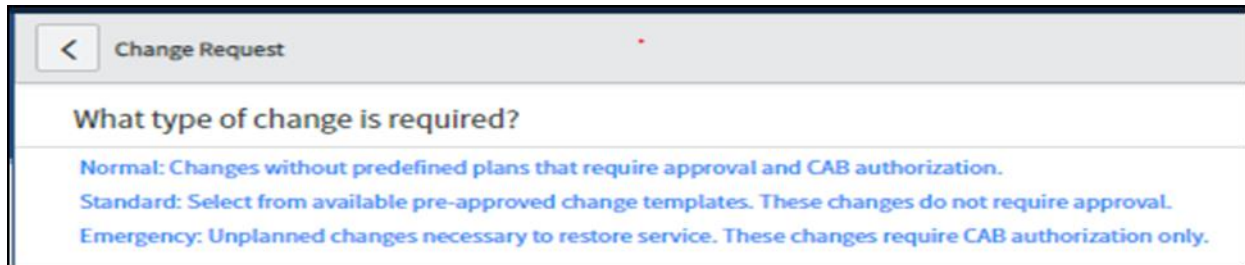
- Change Requestor will click the New Button in Figure 1.



**Figure 1: Open New CR in ServiceNow**

The Change Requestor initiates an RFC in ServiceNow by selecting one of three change types:

- Normal
- Standard
- Emergency



**Figure 2: Select one of the three types of changes**

- Change Requestor will enter the required information for the change request. Some information collected is, but not limited to the following:
- Implementation plan (MOP)
- Risk and impact analysis
- Allocate Priority
- Backout plan
- Test plan
- Schedule Dates
- Add Tasks for any team that has an action for the change
- Change requestor will select all impacted CIs, multiple CIs can be selected for the same client.
- Incidents or problems the change intends to resolve need to be associated with the CR.
- Request Approval:
- Once Change is fully populated, the Requestor will click the “Request Approval” button.
- The state will change from “New” to “Assess”.
- All changes must be submitted by Friday the week before the weekly scheduled CAB meetings on Tuesday.

New	Assess	Authorize	Scheduled	Implement	Review	Closed	Canceled	
Number	CHG0030074			State	New			
Type	Normal			Impact	3 - Low			
Company	WWT			Urgency	3 - Low			
Locations				Priority	4 - Low			
Site ID				Likelihood	-- None --			
Requested by	Ken Kovar			Consequence	-- None --			
Assignment group	ServiceNow Admins			Risk	Moderate			
Assigned to	Kris Reese			Category	Planned			
Time worked	02:29:26 02 29 26			Subcategory	-- None --			
Conflict status	Not Run							
Conflict last run								
* Short description	Upgrade Meraki Power Pack to version 104							
* Description	The current version is 103. This change is to upgrade our Meraki Power Pack to version 104.							

**Figure 3: New CR**

Planning	Schedule	Conflicts	Notes	Closure Information
Justification	version 103 of the Meraki Power Pack conducts up/down status checks via SNMP, and thus does not work for our deployment provided a collector hasn't been deployed to the customer site. version 104 of the Power Pack now conducts up/down against the API.			
Implementation plan	Download the new version of the Power Pack. Install it into PRD <del>Sciencellogic</del>			
Risk and impact analysis	Low. The upgrade of this Power Pack has been performed multiple times before.			
Backout plan	Reinstall version 103 of the Power Pack.			
Test plan	Check the System Availability metric is collecting.			

**Figure 4: Updated CR with change details**



## 9.2 Assess and Validate The RFC

Change Requestor/Implementor will request approval for the change and then moves the CR state from “New” to “Assess.” This state allows for peer technical review and business approvals.

### Technical Review and Approval

- The technical lead of the group assigned to the change will review the implementation plan to ensure
- The MOP plan is accurate and complete.
- The technical soundness of the implementation tasks.
- The architecture and configuration changes make sense and include proper testing and back out plans.
- The technical lead will also review the CR to:
- Confirm the priority, impact, and urgency levels in the CR are correct from a technical perspective.
- Confirm that the technical risk level is set accurately.

### Business Service Management Review and Approval Client and MS Management Review and Approvals

- The Client Experience Champion for the client or the business owner will serve as the business approver for the change. Written approval for any change in the Customer’s environment will be obtained from the Client Representative and attached to the CR.
- The MS Senior Manager will provide written approval for any global or internal change to the MS environment.
- The designated approver will review the business risk, change priority, and confirm that the proposed schedule is an acceptable change window

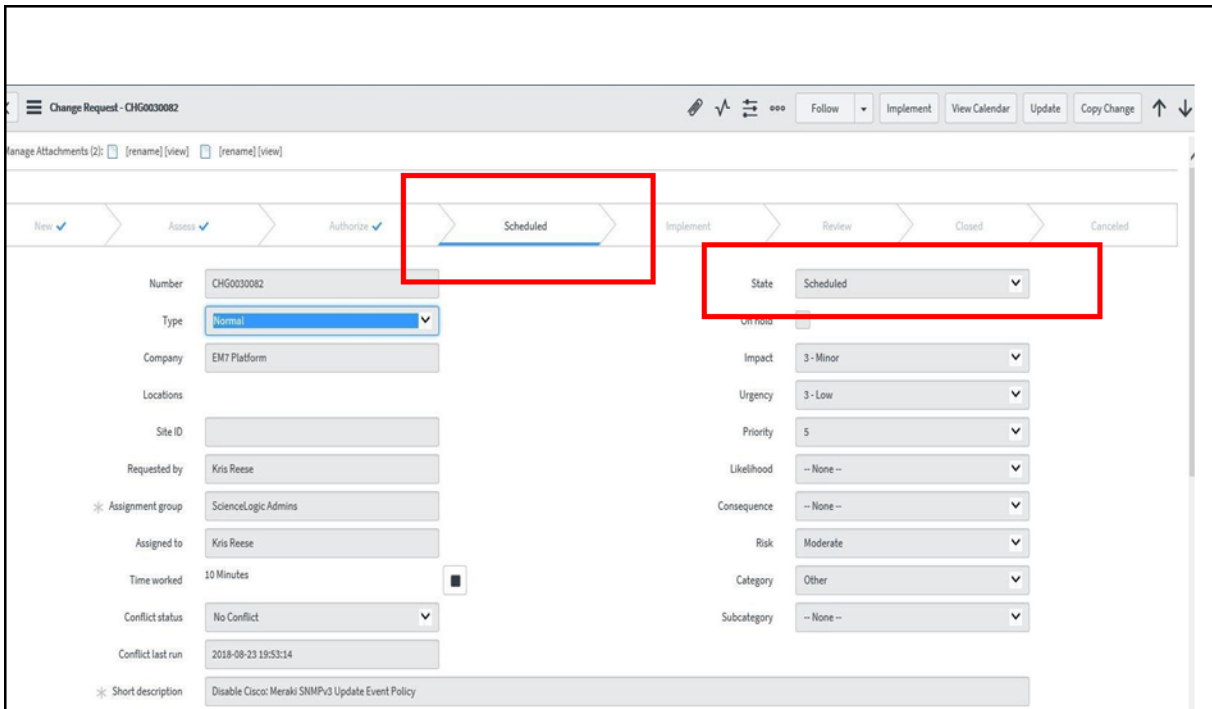
Once the approvers complete all approval tasks, the Change Manager will approve the entire change moving the record status from “Assess” state to “Authorize.” Then the record is ready for CAB review.

## 9.3 Authorized to Scheduled Requests for Change

If it’s a Normal or Emergency Change, the CAB reviews and then authorizes each change. If it is a standard change, then this authorization step is skipped and will move the change to scheduled (standard changes are pre-authorized changes).

### CAB Authorization

1. Each scheduled change is reviewed and approved by the stakeholders represented in the CAB.
2. Purpose and desired outcomes are confirmed.
3. CAB confirms appropriate testing in Development or Test environments has been completed yielding successful results.
4. Risk and impact assessment were properly classified.
5. Approve the Change Window - Scheduled date, time, and absence of potential conflicts are confirmed.
6. When all parties agree change is approved by the CAB owner which moves the change into a “Scheduled” state.



Change Request - CHG0030082

Manage Attachments (2): [rename] [view] [rename] [view]

[New](#) ✓ > 
 [Assess](#) ✓ > 
 [Authorize](#) ✓ > 
 **Scheduled** > 
 [Implement](#) > 
 [Review](#) > 
 [Closed](#) > 
 [Cancelled](#)

Number: CHG0030082  
 Type: Normal  
 Company: EM7 Platform  
 Locations:  
 Site ID:  
 Requested by: Kris Reese  
 Assignment group: ScienceLogic Admins  
 Assigned to: Kris Reese  
 Time worked: 10 Minutes  
 Conflict status: No Conflict  
 Conflict last run: 2018-08-23 19:53:14  
 Short description: Disable Cisco Meraki SNMPv3 Update Event Policy

State: Scheduled  
 On hold:   
 Impact: 3 - Minor  
 Urgency: 3 - Low  
 Priority: 5  
 Likelihood: -- None --  
 Consequence: -- None --  
 Risk: Moderate  
 Category: Other  
 Subcategory: -- None --

**Figure 5: Change is authorized and the record is moved to the "Scheduled" state**

## 9.4 Implementing the Change

During the change window, the change implementor must not start before the change’s scheduled start and must finish the change by the scheduled end time. If the change is being completed outside the change window, then the change process is not being properly followed, and Incidents may occur and will be associated with the change.

The change implementor will perform the following steps when executing an approved change:

- Inform the Command Center Service Desk that a change is about to be implemented, before starting the change.
- The on-call Technical Operations Manager (TOM) or CC team will open a bridge if required to facilitate communication between the implementation engineers for the duration of the change window.
- Send out the “Start of Change” email to the designated list of recipients.
- Move change into “Implement” State by pressing the “implement” button.
- Have the monitoring team suppress alerts.
- Perform the necessary steps outlined in the scheduled change to complete the deployment of applicable software, hardware, or infrastructure updates.
- Update work notes on the progress of the change. It is best practice to record all change steps being completed in the CR.
- Perform quality assurance and test functionality and completeness of the change by following outlined acceptance test criteria. It is best practice to ensure the end-user or business application owner confirms the functionality of the system to ensure the change is completed

and is successful. The feedback from the customer must be captured in the work notes.

- Update Closure Information and notes based on the observed outcome of change.
- In the event a change is not successful the engineer will follow the mandatory documented rollback plan entered in each change during the scheduled change window. The change will be reviewed on the following CAB meeting and will be rescheduled or canceled upon the review.
- Contact the monitoring team to re-enable alerts.
- Send out the “Completion of change” email to the designated recipients.

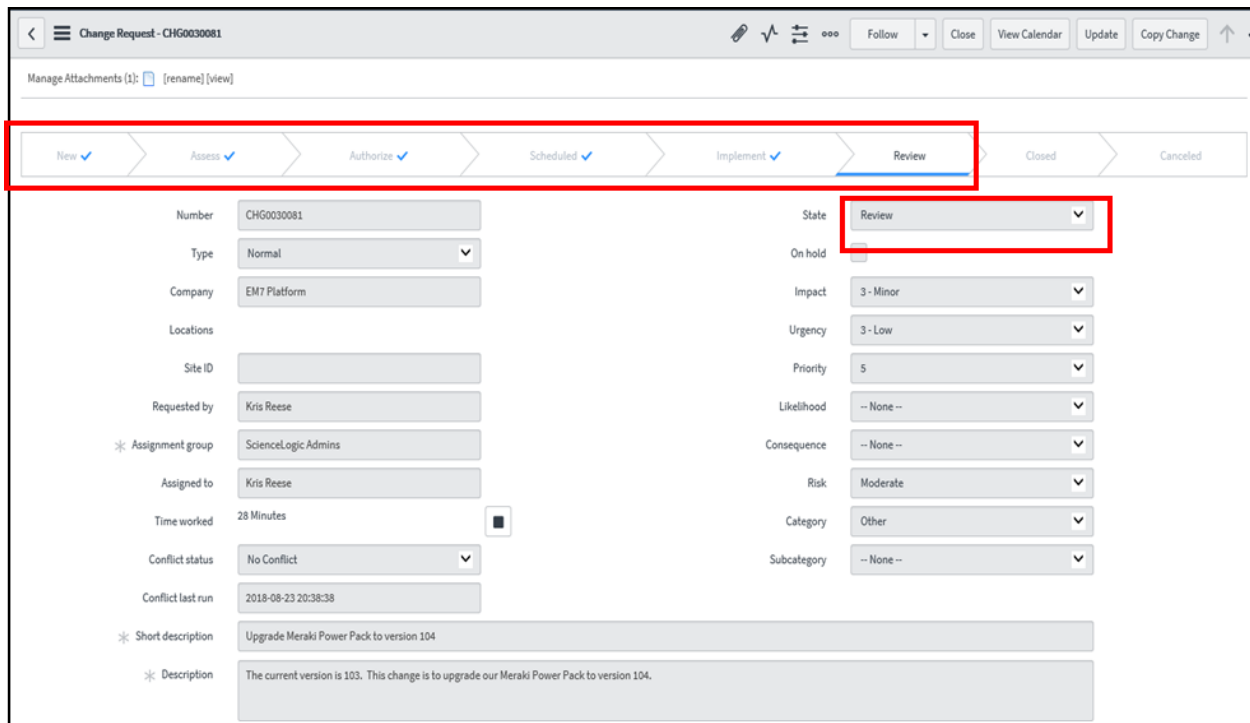
**Note:** Changes must be completed within the CAB approved window. If unforeseen issues arise during the change and it can't be completed successfully within the allotted timeframe, the change must be backed out and closed as unsuccessful. The only exception would be to get customer and WWT management approval verbally or in writing to extend the change window. This would be the exception not the rule and must be documented appropriately.

## 9.5 Review the Change

After completing the scheduled change update the closure code and move the change into the "Review" state. This will let the Change Manager know that the CR is ready for CAB review.

The CAB reviews all completed changes at the next CAB meeting. During the CAB meeting, the following will be performed before the Change Manager closes out the CR:

- The technical team and CAB will review completion outcomes.
- Confirm testing was completed successfully.
- Discuss any further actions required.
- The team reaches a consensus that the change is ready for closure.



Change Request - CHG0030081

Manage Attachments (1): [rename] [view]

Process: New ✓ > Assess ✓ > Authorize ✓ > Scheduled ✓ > Implement ✓ > **Review** > Closed > Canceled

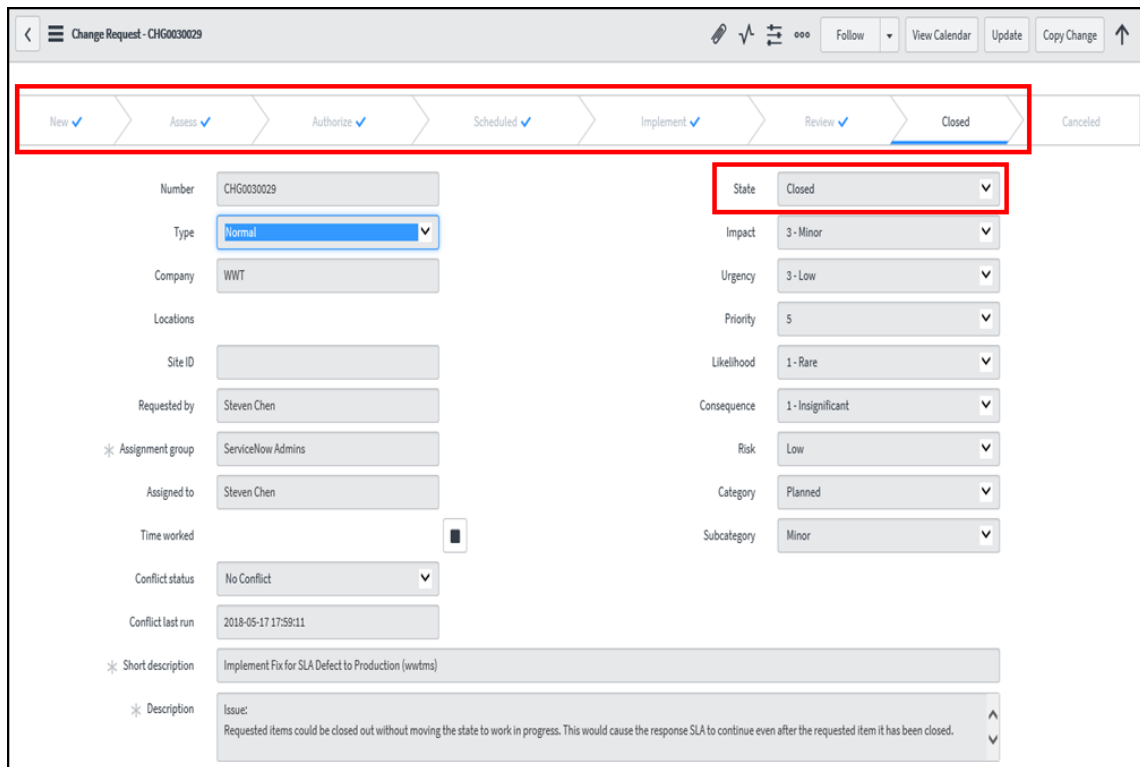
Number: CHG0030081  
 Type: Normal  
 Company: EM7 Platform  
 Locations: Site ID  
 Requested by: Kris Reese  
 Assignment group: SciencelLogic Admins  
 Assigned to: Kris Reese  
 Time worked: 28 Minutes  
 Conflict status: No Conflict  
 Conflict last run: 2018-08-23 20:38:38  
 Short description: Upgrade Meraki Power Pack to version 104  
 Description: The current version is 103. This change is to upgrade our Meraki Power Pack to version 104.

State: Review  
 On hold:   
 Impact: 3 - Minor  
 Urgency: 3 - Low  
 Priority: 5  
 Likelihood: -- None --  
 Consequence: -- None --  
 Risk: Moderate  
 Category: Other  
 Subcategory: -- None --

**Figure 6: "Review" state for CAB final review and closure**

## 9.6 Close the Change

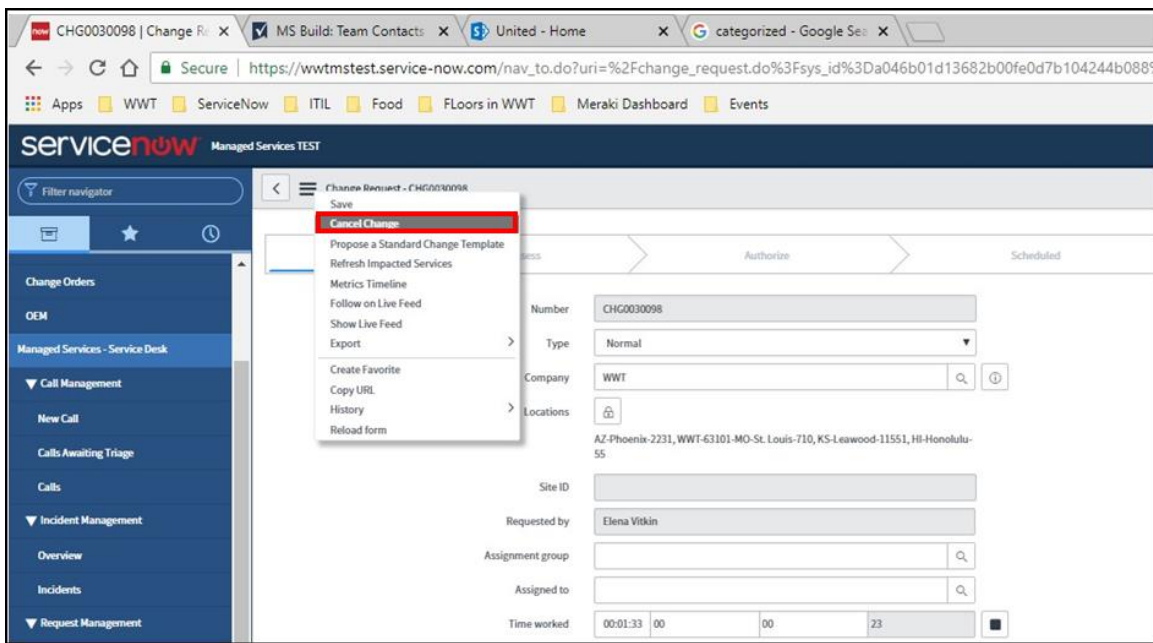
Every week, the CAB will review all changes that are in a Review state, and confirm that the change implementor completed all changes as per the change process. The Change Manager will review the Closure Information tab and add a note to the Note section if necessary, and move the CR to the "Closed" state.



**Figure 7: Closing the Change**

## 9.7 Cancel the Change

The Change Requestor, implementor, Change Manager, or proper authority can cancel a CR at any time in the CR lifecycle. The user may go to the menu bar and select “Cancel Change.”



**Figure 8: Canceling a Change**

## 10 Change Reporting and Communications

CRs will be distributed weekly by ServiceNow automation. The objective is to ensure all teams are aware of scheduled change activities and can plan accordingly for any potential impacts.

WWT Change Manager will implement and distribute an external-facing change calendar (TBD). If contractually required, WWT will appoint an engineer to represent WWT on any customer-driven CABs, to speak to scheduled changes.

## 11 Reference

**Table 8: List of References**

References	Relationship
Reference Guide	MS Change Management Reference Guide
MOP	Method of Procedure (MOP) Implementation template
Best Practice	ITIL
Tools	ServiceNow

## 12 Definitions

**Table 9: List of Definitions**

Term	Meaning
Change	<ul style="list-style-type: none"> <li>The addition, modification, or removal of a baselined CI.</li> </ul>
RFC	<ul style="list-style-type: none"> <li>A formal proposal stating the intent to be achieved by a change.</li> <li>RFCs are only used to submit requests; they are not used to communicate the decisions of the CAB change process or to document the details of the change.</li> </ul>
CR	<ul style="list-style-type: none"> <li>The record containing the details of a change and used to manage the lifecycle of that change.</li> <li>Each CR documents the lifecycle of a single change and contains all the required information about it.</li> </ul>
Change Model	<ul style="list-style-type: none"> <li>A predefined method of handling a particular type or category of change.</li> </ul>
Change Authority	<ul style="list-style-type: none"> <li>The role, person, or group who grants the power to carry out the proposed change.</li> </ul>
IT System	<ul style="list-style-type: none"> <li>A grouping of components that make up an end-to-end IT solution</li> </ul>
IT Component	<ul style="list-style-type: none"> <li>One part of something more complex i.e. software, server, laptop, or mobile device.</li> </ul>
Risk (ISO 31000)	<ul style="list-style-type: none"> <li>The effect of uncertainty on objectives. An 'effect' is a deviation from the expected – positive and/or negative.</li> </ul>

## 13 Version Control

Version	Date	Author/Contributor	Summary of Changes
V1.0 Draft	08.05.19	Ken Kovar	Initial Version.
V1.0 Draft	05.27.20	Julie Somerville, Leslie Okere	Ownership change to Command Center MS. Reviewed and modified sections 2 -9 where needed. Updated all figures and tables.
V1.0 Draft	06.03.20	Kay Bryant, Bizzy Gonacha	Technical edit and baseline versioning (SOP Administration adaption) process.
V1.0 Draft	08.01.20	Julie Somerville, Leslie Okere	Additional edits.
V1.0 Published	08.24.20	Kay Bryant, Bizzy Gonacha	Final tech edit and publishing.
V1.1	03.22.21	Julie Somerville, Leslie Okere	Updated Emerency change definitions and removed Urgent change. Updated Client and Senior MS approval section.
V1.1 Published	04.14.21	Bizzy Gonacha, Kay Bryant	Technical edit and publish.
V1.2	06.28.21	Julie Somerville, Leslie Okere	Updated Business Rules 1.7.
V1.2	07.07.21	Bizzy Gonacha, Kay Bryant	Technical edit and publish.

## Appendix A: Risk Factors

**Table 10: Appendix A - Risk Likelihood Definitions**

Likelihood	Definition
Almost Certain	<ul style="list-style-type: none"> <li>Is expected to occur in most circumstances (&gt;95%) or;</li> <li>The event has happened in the business unit in the past 12 months or it seems very likely that the event will happen.</li> </ul>
Likely	<ul style="list-style-type: none"> <li>Will probably occur (50 – 95%) or;</li> <li>Event has happened elsewhere in the enterprise and the circumstances where the risk could crystallize can be readily envisaged.</li> </ul>
Possible	<ul style="list-style-type: none"> <li>Might occur in the future (10 – 49%) or;</li> <li>Event has never occurred within the enterprise and circumstance when the risk could crystallize is considered possible but unlikely or;</li> <li>Event has happened previously but the circumstances where the risk could crystallize cannot be readily envisaged.</li> </ul>
Unlikely	<ul style="list-style-type: none"> <li>Could occur but doubtful (2 - 9%).</li> <li>The event has never occurred and would require a highly unusual circumstance for the risk to crystallize.</li> </ul>
Rare	<ul style="list-style-type: none"> <li>Highly unlikely to occur (&lt; 2%).</li> </ul>

**Table 11: Appendix A - Risk Consequence Definitions**

Consequence	Definition
Catastrophic	<ul style="list-style-type: none"> <li>&gt;\$500,000</li> <li>Fine or enforcement from a regulatory agency or;</li> <li>Extended international/national media/public attention or;</li> <li>Major impact on the achievement of business objectives or mid-term plan Impact on external customer (&gt;x%) or;</li> <li>Impacts &gt;x% of staff in the area concerned or;</li> <li>Loss of critical function &gt; 12 hours; requires support from an external service provider.</li> </ul>
Major	<ul style="list-style-type: none"> <li>\$100,000 – \$500,000</li> <li>High-level of interest from a regulatory body or;</li> <li>High-level attention from multiple media outlets and or heightened concern by a local community or Significant impact on external customers (x – x%) or;</li> <li>Significant impact on the achievement of business objectives or mid-term plan or Impacts 50 - 75% of staff in the area concerned or;</li> <li>Loss of critical functions 8 – 12 hours; repairable within a day or overnight.</li> </ul>



Consequence	Definition
Moderate	<ul style="list-style-type: none"> <li>• \$50,000 - \$100,000.</li> <li>• Requirements to inform regulatory body or;</li> <li>• Severe and sustained local public or media attention and complaints or;</li> <li>• Impact on the business unit's external customers &gt;x% or;</li> <li>• Minor impact on the achievement of business objectives or mid-term plan or Impacts 25 – 50% or staff in the area concerned.</li> <li>• Loss of critical functions 4 – 8 hours or Some data may be lost or corrupted or may require specialist resources to resolve.</li> </ul>
Minor	<ul style="list-style-type: none"> <li>• \$10,000 - \$50,000.</li> <li>• Locally recorded and managed; regulator imposing a low statutory penalty or Sustained media attention and complaints or;</li> <li>• Affects small group of external customers.</li> </ul>

## Appendix B: Priority Factors

The priority of a request is determined by assessing its impact and urgency. The customer or end-user offers input to guide this assessment, which is compared to the following standardized criteria.

**Table 12: Appendix B - Change Impact Definitions**

Impact	Definition
1 – Major	<ul style="list-style-type: none"> <li>Service down or affects the entire organization, department or line of business.</li> <li>50% outage impacting 50% or more of devices or end-users on covered equipment.</li> </ul>
2 – Moderate	<ul style="list-style-type: none"> <li>Service down for a single user.</li> <li>Service degraded for a group of users.</li> <li>10% or more of total end-users on covered equipment at a site.</li> </ul>
3 – Minor	<ul style="list-style-type: none"> <li>Non-outage or service impairment issue affecting &lt; 10% of users at a site.</li> <li>The request is for a single user.</li> </ul>

**Table 13: Appendix C - Change Urgency Definitions**

Urgency	Definition
1 – High	<ul style="list-style-type: none"> <li>Core (critical) Business Service as identified by formal Business Impact Analysis (BIA).</li> <li>Critical peak business period (e.g. Month-end, Start of Day).</li> <li>Business process stopped; users cannot work.</li> <li>No workaround available.</li> </ul>
2 – Medium	<ul style="list-style-type: none"> <li>Support Service that directly supports the execution of a core business service (e.g. Medium BIA rating).</li> <li>Business Processes affected; key functionality unavailable.</li> <li>No workaround available.</li> </ul>
3 – Low	<ul style="list-style-type: none"> <li>Non-urgent service that is not time-sensitive (e.g. Low BIA rating) or;</li> <li>Process degraded or;</li> <li>Workaround available.</li> </ul>

## Appendix C: Priority Examples

**Table 14: Appendix C - Change Priorities and Examples**

Priority	Descriptions	Corrective Example	Enhancement Example
Critical	Treat as an ECR.	Corrects a P1 incident or problem.	Not appropriate
Urgent	To be given the highest priority for change build, test, and implementation resources.	Corrects P2 incident or problem causing significant loss of revenue or the ability to deliver important business services.	Time-sensitive; cannot tolerate lead time requirements of the planned change process.
High		Corrects P2/P3 incident or problem severely affecting some key users or impacting a large number of users.	Meets legislative requirements. Supports new business initiatives that will increase company market position. Responds to short term market opportunities or public requirements.
Medium		Corrects P3 incident or problem; no severe impact, but the rectification of incident or problem cannot be deferred until the next scheduled release or upgrade.	Maintains business viability. Supports planned business initiatives.
Low		Corrects a P4/P5 incident or problem (P4/P5). A change is justified and necessary, to resolve but can wait until the next scheduled release or upgrade.	Improvements in the usability of a service. Adds new facilities.