## Document Change Control

<table>
<thead>
<tr>
<th>Version #</th>
<th>Date of Issue</th>
<th>Author(s)</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1/21/2013</td>
<td>J. Worthington</td>
<td>Initial draft for HUIT Review</td>
</tr>
<tr>
<td>2.0</td>
<td>1/21/2013</td>
<td>J. Worthington</td>
<td>Working document</td>
</tr>
<tr>
<td>3.0</td>
<td>1/25/2013</td>
<td>D. Ravenelle</td>
<td>Revisions pursuant to review (Harwood, Baskette, Wollman, Aisner, Ravenelle)</td>
</tr>
<tr>
<td>4.1</td>
<td>1/29/2013</td>
<td>J. Worthington</td>
<td>Added: Visio edits; Process Integration section, Related Procedures section</td>
</tr>
<tr>
<td>5</td>
<td>1/31/2013</td>
<td>D. Ravenelle</td>
<td>Minor editorial and formatting changes; policy regarding information in tickets</td>
</tr>
<tr>
<td>5.1</td>
<td>2/12/2013</td>
<td>J. Worthington</td>
<td>Minor edits as a result of open session preparation; added 'single school' to Impact, clarification to End User role (guideline), and changed diagram in the integration section.</td>
</tr>
<tr>
<td>6</td>
<td>2/12/2013</td>
<td>D. Ravenelle</td>
<td>Minor edits, formatting</td>
</tr>
</tbody>
</table>
Introduction
This document describes the standard Incident Management process used by HUIT. This document will establish a standard process; future improvement cycles will focus on increasing the capability and maturity of the process as needed.

During the initial phase (targeting all existing HUIT Remedy users for June 2013 release), a process will also be established to address generic (unstructured) Service Requests. This will facilitate the separation of Requests and Incidents, and provide a basis for further definition of Request Fulfillment in subsequent phases. For this reason the process has been referred to as Request “light”.

Purpose
The purpose of the Incident Management process is to restore normal service operation as quickly as possible minimizing the adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained.

The incidents described here can include failures; questions or queries reported by the users, by technical staff, or automatically detected and reported by event monitoring tools.

Objectives
The objectives of the HUIT Incident Management Process are:

- To restore normal service operation as quickly as possible and minimize the adverse impact on business operations
- Provide users with a consistent high-quality experience during the Incident Management and Request Fulfillment process
- Provide better communication during the Incident Management and Request Fulfillment process
- Adopt a single standard process and tool across HUIT and its partners based on industry best practices
  - Targeting all existing HUIT Remedy users for June 2013 release
- Improve IT staff satisfaction with the overall Incident Management and Request Fulfillment process
- Define and measure the critical KPIs that will drive improvement in the processes
- Use Incident Management to eventually provide input into the Problem Management and Knowledge Management processes
Scope

The scope of the process is as follows:

- Any break/fix issues associated with teams that are currently using HUIT Remedy and CA Remedy
  - HUIT Remedy targeting June 2013
  - CA Remedy targeting November 2013
- Includes Request “light” which covers
  - A generic request process
  - Incrementally adding structured requests over time, e.g. specialized online form, specific approvers, specific fulfillment plans
- Incidents and requests will be coming through
  - Phone, email, self service portal integrated with HUIT website or a partners website with alternate branding), walk-ins / walk-by, integration with monitoring
  - Customer groups who have access create tickets directly to the appropriate IT group
- Integration: ACD, source of faculty + staff + student, authentication

Out of Scope

Specifically discussed as areas out of the scope of Incident Management included:

- Customer Relationship Management
- Project Management (including requesting projects)
- Application Development / bug tracking / enhancement requests
  - In scope is the integration between processes, i.e. the transition of an Incident into the bug tracking process
- Ticketing tools and related processes not currently supported in HUIT or CA Remedy:
  - Will not be considered for integration until Phase 1 (June 2013) and Phase 2 (November 2013) have been completed
  - Those migrated into HUIT remedy prior to March 2013 will be included
Process Flows

Incident & Request Process

1. **Incident/Request Identification & Logging** – Incidents/Requests may be identified by users, IT staff, automated systems (Incidents) and/or suppliers. There are several ‘triggers’ for the identification of Incidents and/or generic (unstructured) Requests:

   1.1. Phone call to the Service Desk, 1st Line resource or Walk-In
      1.1.1. Service Desk or 1st Line resource creates Incident or (generic Request) ticket and logs into the Incident Management system.
      1.1.2. Confirmation e-mail is sent to the contact of the Incident/Request.
      1.1.3. The Service Desk or 1st Line resource proceeds to Classification & Priority (2)

   1.2. E-mail
      1.2.1. Users, IT staff, IT system (monitoring tool) or supplier detects an Incident and creates an e-mail message and sends to a pre-designated e-mail address
      1.2.2. The ITSM tool places the e-mail in a specific queue associated with the e-mail address or a generic queue for the Service Desk
      1.2.3. Confirmation e-mail is sent to the contact of the Incident/Request. (E-mails from monitoring tools will require a pre-defined interface specification)
      1.2.4. The group assigned the ticket proceeds to Classification & Priority (2)

   1.3. IT Portal
      1.3.1. User enters ticket on self-service portal
      1.3.2. The ITSM tool creates a ticket and places it in a specific queue in the Service Desk
      1.3.3. Confirmation e-mail is sent to the originator of the Incident/Request
      1.3.4. The Service Desk proceeds to Classification & Priority (2)

   1.4. IT Staff Direct Entry
      1.4.1. Authorized IT Staff create ticket in Incident Management tool
      1.4.2. Confirmation e-mail sent to contact on the ticket (if the IT Staff member is not the person listed as the contact) based on parameters set by the IT Staff member opening the ticket
      1.4.3. The IT Staff proceeds to Classification & Priority (2)

2. **Classification & Priority** – The ticket is classified as an Incident or Request, categorized based on a defined categorization structure and prioritized based on business impact and business urgency.

   2.1. Until the Service Desk or the 1st Line resource escalates the ticket to the next Assignment Group, this group remains the Ticket Owner.
   2.2. The Ticket Owner will categorize the Incident or Request based on the Incident and Request categorization structure (see Appendix A)

---

1 *Technical Requirement:* Screen pop from phone system. Exists today from CA Remedy

2 *Technical Requirement:* If the ticket is resolved in the same session that it was created, then do not send the confirmation email.

3 *Technical Requirement:* need to be able to open a ticket without a Contact Record

Sub-requirement: if no Contact Record can be matched to an incoming e-mail, the Incident goes to the Service Desk for triage

*Sub-requirement:* check upon submission on known email addresses & affiliates (e.g. gmail address)
HARVARD UNIVERSITY
Information Technology

2.3. The Ticket Owner will prioritize the Incident or Request based on business impact and business urgency (see Appendix B)
2.4. The Ticket Owner will determine whether the priority indicates a Major Incident, and if so will initiate the Major Incident process (see Major Incident process)
2.5. If the Incident is a repeat of another active Incident, the Ticket Owner will link the Incidents (e.g. Create a Parent-Child relationship)
2.6. The Ticket Owner will proceed to Investigation & Diagnosis (3)

3. Investigation & Diagnosis — The Ticket Owner will perform investigation and diagnosis of Incidents, and/or assign and complete tasks required for fulfilling the Request.
3.1. The Ticket Owner will resolve the Incident and/or complete the tasks required to fulfill the Request, record any activity in the work notes, then proceed to Resolution & Recovery (4)
3.2. If unable to resolve the Incident and/or complete the tasks required to fulfill the Request, Ticket Owner will escalate the Incident or Request as follows:
   3.2.1. The Ticket Owner will assign the Incident or Request to the default Assignment Group.
   3.2.2. The Ticket Owner will make appropriate notations within the work notes and notify the End User of the escalation.
   3.2.3. Ownership of the Ticket will pass to the new Assignment Group at the time it is assigned.
   3.2.4. The Ticket Owner may assign the Ticket to an individual member of the Assignment Group:
      3.2.4.1. If the Ticket Owner has been collaborating with that individual; or
      3.2.4.2. By prior arrangement with the Assignment Group. 4
3.3. The Assignment Group is accountable for responding to the ticket within the stated Service Level Targets.
3.4. If the Incident or Request is incorrectly categorized, the Ticket Owner will correct the category.
3.5. The Ticket Owner is accountable for communicating regular updates on the progress to the End User.

4. Resolution & Recovery — The Ticket Owner completes the requirements for resolving the Incident or fulfilling the Request.

4.1. The Ticket Owner will ensure that all activities required to restore service have been completed, acceptable workarounds have been implemented and/or fulfillment tasks are completed successfully
4.2. The Ticket Owner will complete the resolution notes with enough information to repeat the resolution if needed
4.3. The Ticket Owner will confirm whether the Incident is a repeat of another Incident and create a parent-child relationship if needed, or unlink erroneous parent-child relationships
4.4. The Ticket Owner will verify with the End User that the Incident has been resolved or the Request fulfilled to their satisfaction either by direct communication or via Closure e-mail as described below (5)

5. Closure — Resolution of the Incident or fulfillment of the Request is verified from the End User and closed.

5.1. Unless the Incident is resolved or the Request is fulfilled during the initial contact with the user, the End User receives the resolution e-mail. The End User may:
   5.1.1. Reply that the Incident has not been resolved or the Request has not been fulfilled to their satisfaction.
      5.1.1.1. This will result in the ticket being reopened and assigned to the last Assignment Group, which closed the ticket.
   5.1.2. If the user does not reply within 5 business days, the Incident Management system will automatically close the Incident or Request 5
   5.1.3. A Satisfaction Survey link may be provided.

4 Technical Requirement: Can we turn on tasks for specific products / services?
5 Technical Requirement: Cannot be re-opened after 5 days. Need to create another ticket.
Process Flow Chart – Incident & Request

Figure 1 - Incident & Request Process Flow, page 1

Incident & Request Process

<table>
<thead>
<tr>
<th>User</th>
<th>ITSM Tool</th>
<th>First Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Email</td>
<td>Ticket is created, confirmation is emailed to user and ticket is placed in a specific queue for that email address</td>
<td>Ticket is categorized which will set the default assignment group</td>
</tr>
<tr>
<td>User sends email to <a href="mailto:____@harvard.edu">____@harvard.edu</a></td>
<td>Create a ticket, confirmation is emailed to user</td>
<td>Ticket is prioritized based on impact and urgency</td>
</tr>
<tr>
<td>Start Phone / Walk-In</td>
<td>Ticket is created, confirmation is emailed to user and ticket is placed in a specific queue if predefined, or to the Service Desk</td>
<td></td>
</tr>
<tr>
<td>User calls or walks up to the appropriate front line team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start Portal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User enters ticket on the self service portal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Major Incident process**

- **Major Incident?**
  - Yes
  - Initial diagnosis or fulfill request (if appropriate)
  - Continue Next Page
  - No
Figure 2 - Incident & Request Process Flow, page 2
Structured Requests Process

1. **Structured Request Identification & Logging** – Structured Requests are for standard services and in fact are called Standard Service Requests. These are frequent requests where pre-defined workflows, or Request Models, can be identified. The formal evolution of Request Fulfillment and establishment of Request Models will begin after the establishment of a standard Incident Management process in June 2013.

   1.1. Users will submit Structured/Standard Service Requests via the IT Portal, which will categorize and prioritize the Requests based on the Request Model

   1.2. The IT Portal tool will trigger pre-determined approval workflows and create appropriate tasks

      1.2.1. Approvers will approve or deny Requests, and inform the Requestor of status and rationale or issue for any requests that cannot be approved

   1.3. Approved Requests will trigger the creation of fulfillment tasks based on the Request Model

      1.3.1. Task progress will be monitored for completion

   1.4. When all tasks have been completed, the user/requestor will be notified via e-mail that their request has been fulfilled

---

Technical Requirement: Add requirement to IAM: integrate with request portal
Process Flow - Structured Request Process

Specific Structured Request Process

- **Requester**
  - Start
  - Submit request in ITSM Tool
    - Trigger approval workflow, if required
    - Inform requester of Status & Rational or issue
      - No
      - Yes
        - Approve request?
          - Yes
            - Complete tasks
          - No
            - All tasks have been completed?
              - Yes
                - Inform requester that request was fulfilled
                - End
              - No
                - Create tasks based on tasks associated with the catalog item

Figure 3 - Structured Request Process Flow
Roles & Responsibilities
Note: For Major Incidents refer to Major Incident Process documentation.

End User Guidelines

We cannot dictate End User behavior but adhering to the following principles will help HUIT provide users with the highest support possible.

- To request support use the self service portal, email, walk-in to the Walk-in Clinic or call the Service Desk or identified first line team.
- For an Urgent issue, call the Service Desk when resources are available to grant access and/or assist in diagnosis and troubleshooting.
- When completing the description of the issue in the portal or when sending an email requesting support, be as descriptive as possible, e.g. describe the screen you are on, the error message you see, the steps you performed just prior to the issue, etc.
- Provide contact information and inform the first line if it changes during the life of the Incident or Request. Providing a mobile phone number is encouraged.
- If HUIT asks for more information about the issue, please respond in a timely manner as work cannot continue unless you get back to us.

First Line (initial contact)

- When recording an Incident, be as descriptive as possible or use a template where appropriate, to minimize the need for the technical resource to ask the user for additional information.
- Attempt to identify whether the Incident is similar to or a repeat of another active Incident.
  - If so, relate the tickets in the tool (e.g. create a parent-child relationship).
- Before escalating the Incident, search for and apply the relevant Standard Operating Procedures (SOPs) and/or knowledge articles.
- If you notice that the Incident is wrongly categorized, correct the category.
- Record any activity performed in the work notes.
- Assign to the appropriate second or third line support group.
- When resolving an Incident, be succinct but descriptive enough to be able to repeat the resolution, i.e. describe what you did as opposed to entering “done” and “fixed”.
- Communicate regular updates to the user, if you currently “own” the ticket.

Technical Resource (escalation point)

- If you notice that the Incident is wrongly categorized, correct the category.
- Record any activity performed in the work notes.
- If further assignment is necessary, assign to the appropriate support group and provide the reason in the work notes.
When resolving an Incident, be succinct but descriptive enough to be able to repeat the resolution, i.e. describe what you did as opposed to entering “done” and “fixed”.

- Confirm whether the Incident is similar to or a repeat of another active Incident.
  - If tickets are erroneously linked, unlink them.
  - If they are not linked and should be, then link them.
- Communicate regular updates to the user, if you currently “own” the ticket.

Assignment Group Manager

- **Accountable** for the activities and resources required to resolve all escalated Incidents and assigned Requests per the service level targets
- **Accountable** for providing up-to-date on call contact details to appropriate parties
- **Accountable** for providing up-to-date information on group members
- **Accountable** for ensuring that End Users receive regular updates on open tickets assigned to the group
- Act as a further escalation point for the team
- Monitor the team’s queue and assigns Incidents and Requests to the appropriate individuals within their team
- Ensure that work on Incidents and Requests is completed within agreed timescales and according to HUIT policies and procedures
- Liaise with other Assignment Group Managers to ensure handover, continuity and consistency
- Ensure all tickets have current status updates
- Review Incident and Request aging reports and ensures their team are working the tickets

Service Owner (Product Owner, Practice Manager)

- Analyze Incident and Request reports and trends
- Identify and sponsor improvement initiatives for how their service handles Incidents and Requests
- Accountable for providing input into the Incident and Request categorization scheme
- For Major Incidents:
  - Service owner representative must attend the Major Incident conference bridge.
  - Notify the Service Desk during business hours of any Major Incident.
  - Identify the business impact from the incident.
- **Accountable** for communicating externally to the customers of the service, end-users or any other non-HUIT parties with updates every hour or as previously agreed upon.

- **Accountable** for ensuring a record of events throughout the incident is maintained.

- **Accountable** for confirming resolution of the Major Incident, and notifying HUIT and any external parties of the resolution.

### Incident Management Process Owner

- Sponsor, design and provide change management to the process and its metrics
- Define the process strategy and assist with the process design
- Ensure that appropriate process documentation is available and current
- Define appropriate policies and standards to be employed throughout the process
- Periodically audit the process to ensure compliance to policy and standards
- Periodically review the process strategy to ensure that it is still appropriate and change it if required
- Review opportunities for process enhancements and for improving the efficiency and effectiveness of the process
- Sponsor and pursue improvements to the process

### Incident Management Process Manager

- Work with the process owner to plan and coordinate all process activities
- Manage resources assigned to the process
- Work with service owners and other process managers to ensure the smooth running of services
- Monitor and report on process KPIs
- Identify improvement opportunities
- Make improvements to the process that are sponsored by the process owner
- Develop and maintain the incident management process and procedures.
- Validate new categories in a timely manner
Policies

1. A single Incident Management and Request Fulfillment process is followed by in-scope HUIT Teams and HUIT Partners
2. All Incidents and Requests must be logged, tracked and managed in the single authorized Service Management tool, from initiation to closure
3. If the user contacts a second or third level support analyst directly, the analyst must get the ticket logged, categorized and prioritized as would normally be done by the first line analyst.
4. Every Incident or Request initiated must include meaningful and appropriate updates and resolution and/or fulfillment details as part of its historical record.
5. The following items are Level 4 High Risk Confidential Information and must never be included in clear text in a ticket:
   a. Social Security number
   b. Driver’s License number or state-issued identification card number
   c. Financial account, credit or debit card number
   d. Identifiable research subject data
   e. Biometric identifier
6. Timely and accurate information regarding known, unplanned or expected degradation of a service is provided to users and IT personnel.
7. Escalations should occur between Assignment Groups. The current Ticket Owner will not escalate a ticket to a specific individual in another group without prior agreement.
8. Incidents and Requests are managed and resolved according to service level targets and customer-driven priorities.
9. An Incident and/or Request will be owned by the group to which that ticket has been functionally escalated. The group owning the ticket is responsible for communicating to the End User(s), tracking, monitoring and invoking hierarchical escalation procedures as necessary.
10. When ticket ownership or assignment is unknown or in question, reassignment of Incidents or Requests between support queues will be coordinated by the ITSM Group.
11. All group queues for Incidents and Requests will be actively managed by an Assignment Group Manager. (A queue is an assignment group.)
12. An Incident or Request can only be put on-hold (taken off the service level target clock) for the following reasons:
   a. Waiting for user information
   b. Waiting for approval
   c. Scheduled future appointment
   d. Waiting for Change / Request
13. If the support analyst realizes the Incident they just created is the same as another open Incident (possibly from another user), they must link the new Incident (child) to the existing Incident (parent). Any changes
to the parent’s status, category, or assignment will automatically update all child Incidents, e.g. if the parent is resolved, all children are automatically resolved.

14. After an Incident is resolved or a Request is fulfilled the assigned group will attempt to verify with the user that the Incident/Request was resolved to their satisfaction.

15. Failing to receive verification from the user within 5 business days, the Incident will automatically close.

16. The Incident Management and Request Fulfillment process will capture user satisfaction information and Incident Management and Service Owners should review and act on the information

17. [Future policy] If the support analyst discovers that the Incident was caused by a Change and/or Release, they must link the Incident to the appropriate Change and/or Release record.
Incident Categorization

All Incidents and Requests will be categorized. A category is a way to group services in a logical manner, and is the first level of categorization.

Service is the second level of categorization and describes the service, application or technology. The service is typically a noun such as “Server”.

The last category is the Symptom (for Incidents) or Operation (for Requests), and is usually a verb such as “Remove”.

Categories should be kept as simple as possible in order to maintain ease and speed of assignment, and to facilitate reporting. **If the assignment group needs to be changed for a specific Incident, staff should not use categories to change it --- just change the assignment group and leave the category as is.**

On the other hand, if the Incident or Request is clearly mis-categorized, it should be corrected.

The table below illustrates the HUIT category structure, which can be found at  

<provide link here>

<table>
<thead>
<tr>
<th>Category</th>
<th>Service</th>
<th>Symptom / Operation</th>
<th>Incident</th>
<th>Service Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>Asperin</td>
<td>Add/Remove/Change Access</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>Asperin</td>
<td>Consultation/Training</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Administrative</td>
<td>Asperin</td>
<td>Data Inconsistency</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Impact, Urgency and Priority

Priority will be assigned based on the business impact and business urgency of the Incident or Request. Priorities may be adjusted up or down as additional information is obtained.

Impact, Urgency & Priority for Incidents
The table below illustrates how priority for Incidents will be calculated based on business impact and business urgency.

Table 2 - Incident Priority Matrix

<table>
<thead>
<tr>
<th>Impact</th>
<th>1 – University-wide</th>
<th>2 – Multiple Groups or a Single School</th>
<th>3 – Single Group</th>
<th>4 - Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Work blocked</td>
<td>1 – Major Incident</td>
<td>1 – Major Incident</td>
<td>2 – High</td>
<td>3 – Moderate</td>
</tr>
<tr>
<td>2 – Work degraded</td>
<td>1 – Major Incident</td>
<td>2 – High</td>
<td>3 – Moderate</td>
<td>4 – Normal</td>
</tr>
<tr>
<td>3 – Work not affected</td>
<td>3 – Moderate</td>
<td>3 – Moderate</td>
<td>4 – Normal</td>
<td>4 – Normal</td>
</tr>
</tbody>
</table>

Note: * VIP individuals automatically get 1 higher level of priority.

Technical Requirement: Default ticket values will be pre-populated as:

- Impact: 4 – Individual
- Urgency: 2 – Work degraded

Impact
- University-wide / PR issue
- Multiple Groups or a single school
- Single Group
- Individual

Urgency
- Work blocked / compliance issue / critical time period / security issue
- Work degraded
- Work not affected
Impact, Urgency & Priority for Generic Requests

The table below illustrates how priority for Generic Requests will be calculated based on business impact and business urgency.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Impact</th>
<th>Urgency</th>
<th>Impact</th>
<th>Urgency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 – University-wide</td>
<td>1 – Work blocked</td>
<td>1 – Urgent Request</td>
<td>Work blocked / compliance issue / critical time period / security issue</td>
</tr>
<tr>
<td>2</td>
<td>2 – Multiple Groups or a Single School</td>
<td>2 – Work degraded</td>
<td>2 – High</td>
<td>Work degraded</td>
</tr>
<tr>
<td>3</td>
<td>3 – Single Group</td>
<td>3 – Work not affected</td>
<td>3 – Moderate</td>
<td>Work not affected</td>
</tr>
<tr>
<td>4</td>
<td>4 – Individual</td>
<td></td>
<td>4 – Normal</td>
<td></td>
</tr>
</tbody>
</table>

Note: * VIP individuals automatically get 1 higher level of priority.

Technical Requirement: Default ticket values will be pre-populated

- Impact: 4 – Individual
- Urgency: 2 – Work degraded

**Impact**
- University-wide / PR issue
- Multiple Groups or a single school
- Single Group
- Individual

**Urgency**
- Work blocked / compliance issue / critical time period / security issue
- Work degraded
- Work not affected
Service Level Targets

Service Level Targets – Production Incidents
The table below illustrates the service level targets for production Incidents. (Business hours calculated from 9AM to 5PM)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Target Time to Assign</th>
<th>Target Time to Resolve (User can move forward with service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Major Incident</td>
<td>30 minutes</td>
<td>4 hours</td>
</tr>
<tr>
<td>2 – High</td>
<td>60 minutes</td>
<td>1 business days</td>
</tr>
<tr>
<td>3 – Moderate</td>
<td>4 business hours</td>
<td>2 business days</td>
</tr>
<tr>
<td>4 - Normal</td>
<td>6 business hours</td>
<td>5 business days</td>
</tr>
</tbody>
</table>

Service Level Targets – Desktop Incidents
The table below illustrates the service level targets for desktop Incidents. (Business hours calculated from 9AM to 5PM). One individual not being able to work vs. single group work degraded is treated as 4-Normal.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Target Time to Assign</th>
<th>Target Time to Resolve (User can move forward with service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Major Incident</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2 – High</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3 – Moderate **</td>
<td>30 minutes</td>
<td>1 business day</td>
</tr>
<tr>
<td>4 - Normal</td>
<td>2 hour</td>
<td>3 business days</td>
</tr>
</tbody>
</table>

** Desktop staff is to be paged for tickets of Moderate priority or if VIP or work interrupted.

---

7 ISSUE: We created a separate target for Desktop Incidents; needs approval
Service Level Targets – Generic Requests
The table below illustrates the service level targets for generic Requests. The due date will default to target time to fulfill.

Table 6 - Service Level Targets - Generic Requests

<table>
<thead>
<tr>
<th>Priority</th>
<th>Target Time to Assign</th>
<th>Target Time to Fulfill</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Urgent Request</td>
<td>30 minutes</td>
<td>4 hours</td>
</tr>
<tr>
<td>2 – High</td>
<td>4 business hours</td>
<td>2 business days</td>
</tr>
<tr>
<td>3 – Moderate</td>
<td>6 business hours</td>
<td>4 business days</td>
</tr>
<tr>
<td>4 - Normal</td>
<td>2 business days</td>
<td>8 business days</td>
</tr>
</tbody>
</table>

Service Level Targets – Desktop Requests
The table below illustrates the service level targets for Desktop Requests. Business hours are 9AM – 5PM.

Table 7 - Service Level Targets - Desktop Requests

<table>
<thead>
<tr>
<th>Priority</th>
<th>Target Time to Assign</th>
<th>Target Time to Resolve (User can move forward with service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Major Incident</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2 – High</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3 – Moderate **</td>
<td>30 minutes</td>
<td>1 business day</td>
</tr>
<tr>
<td>4 - Normal</td>
<td>2 hour</td>
<td>3 business days</td>
</tr>
</tbody>
</table>

** Desktop staff is to be paged for tickets of Moderate priority or if VIP or work interrupted.

ISSUE: We created separate targets for Desktop Requests; needs approval
Functional and Hierarchical Escalation Notification

Functional Escalation - Group
Functional escalation can be to a group or to an individual. When a ticket is assigned to a group, an email is sent to the group or a specific email distribution list (or this email notification can be turned off by the group).

The assignment group manager is responsible for assigning the ticket to an individual.

Functional Escalation - Individual
When a ticket is assigned to an individual, an e-mail is sent to that individual.

The assigned individual is responsible for addressing the ticket and accountable for communicating the progress on the ticket.

Hierarchical Escalation
The table below illustrates the hierarchical escalation for Incidents and Requests.

Table 8 - Hierarchical Escalation

<table>
<thead>
<tr>
<th>Priority</th>
<th>Target</th>
<th>Hierarchical Escalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Major Incident</td>
<td>Time to Respond:</td>
<td>• Follow Major Incident process. Incident Commander is responsible for hierarchical escalation.</td>
</tr>
<tr>
<td></td>
<td>Time to Resolve:</td>
<td>• At 75%, email “assigned to” person</td>
</tr>
<tr>
<td>1 – Urgent Requests</td>
<td></td>
<td>• At 100%, email “assigned to” person + assignment group manager</td>
</tr>
<tr>
<td>2 - High</td>
<td>Time to Assign:</td>
<td>• At 100% of time to assign, email assignment group manager</td>
</tr>
<tr>
<td></td>
<td>Time to Resolve:</td>
<td>• At 75%, email “assigned to” person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• At 100%, email “assigned to” person + assignment group manager</td>
</tr>
<tr>
<td>3 - Moderate</td>
<td>Time to Assign:</td>
<td>• At 100% of time to assign, email assignment group manager</td>
</tr>
<tr>
<td></td>
<td>Time to Resolve:</td>
<td>• At 75%, email “assigned to” person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• At 100%, email “assigned to” person + assignment group manager</td>
</tr>
<tr>
<td>4 – Normal</td>
<td>Time to Assign:</td>
<td>• (no email)</td>
</tr>
<tr>
<td></td>
<td>Time to Resolve:</td>
<td>• At 100%, email “assigned to” person + assignment group manager</td>
</tr>
</tbody>
</table>
# Incident Management

The following table details Critical Success Factors (CSF) and Key Performance Indicators (KPI) for the Incident Management process at this time:

## Table 9 - Incident Management KPIs

<table>
<thead>
<tr>
<th>Critical Success Factor (CSF)</th>
<th>Key Performance Indicator (KPI)</th>
</tr>
</thead>
</table>
| Resolve Incidents as quickly as possible minimizing impacts to the business | • Mean time to achieve Incident resolution or circumvention, broken down by impact code  
• Percentage of Incidents closed upon initial user contact without reference to other levels of support (often referred to as ‘first point of contact’) |
| Maintain quality of IT Services | • Total numbers of Incidents (as a control measure)  
• Size of current Incident backlog for each IT Service  
• Number and percentage of Major Incidents for each IT Service |
| Maintain user satisfaction with IT Services | • Average user/customer survey score (total and by question category)  
• Percentage of satisfaction surveys answered versus total number of satisfaction surveys sent |
| Align Incident Management activities and priorities with those of the business | • Percentage of Incidents assigned within agreed time (Incident response-time targets may be specified in SLAs, for example, by impact and urgency codes) |
| Ensure that standardized methods and procedures are used for efficient and prompt response, analysis, documentation, ongoing management and reporting of Incidents to maintain business confidence in IT capabilities | • Number and percentage of Incidents incorrectly assigned (re-assigned at least 3 times)  
• Number and percentage of Incidents incorrectly categorized  
• Number and percentage of Incidents processed per Service Desk agent |
Request Fulfillment
The following table details Critical Success Factors (CSF) and Key Performance Indicators (KPI) for the Request Fulfillment process at this time:

Table 10 - Request Fulfillment KPIs

<table>
<thead>
<tr>
<th>Critical Success Factor (CSF)</th>
<th>Key Performance Indicator (KPI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requests must be fulfilled in an efficient and timely manner that is aligned to agreed service level targets for each type of Request</td>
<td>• The mean elapsed time for handling each type of service request</td>
</tr>
<tr>
<td></td>
<td>• The number and percentage of service requests completed within agreed target times</td>
</tr>
<tr>
<td></td>
<td>• Percentage of service requests closed upon initial user contact without reference to other levels of support (often referred to as ‘first point of contact’)</td>
</tr>
<tr>
<td></td>
<td>• Total number of requests (as a control number)</td>
</tr>
<tr>
<td>User satisfaction must be maintained</td>
<td>• Level of user satisfaction with the handling of service requests (as measured in some form of satisfaction survey)</td>
</tr>
<tr>
<td></td>
<td>• The size of the current backlog of outstanding service requests</td>
</tr>
</tbody>
</table>

Additional Indicators and Operational Reports
The following are additional reports identified; (the list below does not include ad hoc reports).

- Number and percent of incidents that were re-opened
- Assignment group queue aging report (dashboard report and daily email)
- Incident/requests on my watch list
- List of Major Incidents
- Service requests where my team has a task
- Daily number of tickets currently opened by assignee
- Number of tickets opened and closed per month
- Number of tickets touched per month
Process Integration

The figure below provides a high-level illustration of the process integration between Incident Management and related ITSM processes.

NOTE: The initial deployment of HUIT Incident Management (June 2013) will establish a standard process; additional improvement cycles associated with Incident Management and related processes will be needed to address the complete scope of all Incident Management process integration.

This could include potential integration with Jira bug tracking, as future improvement cycles and related process areas provide the details and ‘touch-points’ between the service and application development lifecycles.

![Figure 4 - Process Integration](image-url)
Related Procedures
There will be procedures for specific types of Incidents and Requests, commonly known as process models, in order to make clear how the specific Incident and/or Request will be handled. Some of these procedures may have related policies (i.e., Major Incidents, Security Incidents).

Incident Management

Major Incident Management
The Major Incident Management procedure is available here <link>.

Bug Tracking
When the ticket owner determines that an Incident is related to an application error or “bug”, the ticket owner should:
1. Gather as much information on the Incident as possible.
2. Using available standard operating procedures and knowledge resources, try to alleviate the symptom of the Incident so the user can become productive again, e.g. give the user a manual/temporary workaround, update the database from the back-end (may require an emergency change), etc.
3. Communicate to the user that the Incident is being escalated to the appropriate development team and will be tracked as a bug and prioritized and worked on based on other pending bugs and enhancements.
4. Invoke the Bug Tracking process (link to bug tracking initiation instructions), including opening a ticket in the Bug Tracking system. The Incident now becomes a Bug and accountability for tracking, communication to the user(s) and resolution passes to the appropriate Development team.
5. Resolve the incident noting the bug ticket number in the resolution description and that tracking of the work will continue in the Bug Tracking system

Request Fulfillment (Structured Requests)
Generic Practice Attributes

Generic attributes apply to all processes and are primary drivers of maturity. The following findings present opportunities for improvement, particularly around those generic practice areas that were *Not* or only *Partially* achieved:

- **PA 2.2 Work Product Management** – The establishment of a uniform standard for Incident and Request records, along with improvements in process support (tools) present opportunities to improve the management of process work products (inputs/outputs)

- **PA 3.1 Process Definition** – All these attributes will be addressed to some degree except GP 3.2.1 (Determine the sequence and interaction between the processes so that they work as an integrated whole); this attribute will require improvements in other processes.

As procedures begin to be integrated into the standard process, effective and efficient mechanisms for managing the process work products may present themselves and should be taken advantage of as new work habits are formed.

Base Practice Attributes

A major finding of the Assessment Report dated 6/22/12 was that there was not a standard Incident Management or Request Fulfillment process across HUIT. This improvement cycle directly addresses the following recommendations outlined in the report:

- **INC.1** Clarify process boundaries and scope
- **INC.2** Homogenize Incident Management policy
- **REQ.1** Isolate all Service Requests from Incidents and Changes
- **REQ.3** Clarify process boundaries and scope
- **REQ.4** Expand Self-Help capabilities

Once a standard process is achieved, efforts can be made to address other recommendations (Identify re-usable procedures, build a resolution/known error database and integration of Incident Management with other process areas).
Categorization Table

<Attach or provide link>