

Data Center Services

Production Support ServiceCenter

**Providing Call, Incident, and Change Management for customers
throughout the Johns Hopkins Enterprise**



The Johns Hopkins Health Systems And The Johns Hopkins University

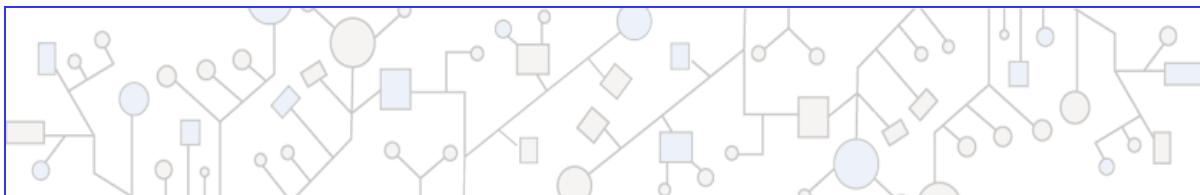


*Service Level Provision
Prepared by; ETSO – Production Support*

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IT@ Johns Hopkins' primary focus is to support the missions of the Johns Hopkins Institutions. We provide technology solutions for our faculty, staff, patients, and students in support of teaching, research, and patient care.



Support Center Services (Helpdesk)

Support Center Services provides 24/7 call coverage for all enterprise customers on all campuses and remote sites who have contracted with Information Technology to manage their reported incidents. The Support Center is responsible for first level support. Clients of the Johns Hopkins Community contact the center via one of our 3 (help) extension lines: (410) 955-HELP (4357); or by either of our email addresses: help@jhmi.edu and help@jhu.edu. Staff in this area performs triage service, and handling of specific incidents for which they are trained. The Support Center is located at the Mt. Washington campus. Supported operations include:

- Management of supported problems reported through the Support Center (Help Desk).
- Escalation to appropriate groups for problem determination and resolution.

Support Center Services consists of three groups:

- **Support Center (Help Desk)** - provides customers with a single point of contact for IT/Network related questions or problems, with immediate resolutions or escalation to second and third level support.
- **Quality Assurance** – provides assurance to adherence of IT processes concerning call and problem management.
- **Production Support** - bridges the processes and procedure between application development, technical support, and operational areas for application implementation management and support services.
- **ServiceCenter Administration** – application development services, system maintenance, and system enhancements. Works with the Support Center, Quality Assurance, and Production support Teams to provide the Service Management Application for recording & escalation of interactions with customers. In addition, provide the same services for the change management application.

Production Support – HP ServiceCenter

HP ServiceCenter software provides Service Management best practices based on industry standards, such as the IT Infrastructure Library (ITIL), combined with capabilities in change management, reporting, and integration. ServiceCenter integrates several applications, which provide online management of calls, incidents, and changes within the IT environment at Johns Hopkins Hospital and University supported customers. Service Management and Incident Management provide a fast responsive way to service Enterprise wide customers, while Change management provides an online accessible way to track and notify staff, of changes within the IT environment.

Service Management

ServiceCenter Service Management provides the ability to track all calls effectively, even calls that are not considered an incident. Incidents are considered to be calls that require additional resources, and cannot be resolved by helpdesk staff. Service Management allows calls received from customers, or technical staff, to be associated to an incident. Multiple calls can be associated with a single incident when calls are generated for incidents that affect many users.

Incident Management

ServiceCenter Incident Management is the central location for documenting incidents from customers, and service technicians. Incidents can have multiple calls attached, which provide a central location for incident resolution. Incident Management provides incident escalation, assignment, and integrated knowledge management ensuring that incidents are quickly resolved or assigned and managed.

Change Management

ServiceCenter Change Management enables the IT organization to track all types of changes or modifications made with the IT supported environment. Change Management automates the approval process according to the type of request made and risk associated with the task.

Service Management - Processes and Guidelines

ServiceCenter provides the means by which all Calls/Incidents reported to IT@JH (Information Technology at Johns Hopkins) are tracked and documented through to completion. ServiceCenter is also used to ensure orderly control of all information system changes by authorized personnel and to provide the means of tracking all changes.

The following is a sample of the guidelines which have been developed to document the processes currently defined in ServiceCenter for Call and Incident Management.

Service Management Calls and Incidents

1. All Calls/Incidents are entered into ServiceCenter to ensure proper tracking, complete documentation and timely service.
2. The customer calls or sends an email to the Support Center (Help Desk) requesting assistance with a problem. A Support Center staff member will enter the problem into ServiceCenter as a Call. If the Support Center staff member can resolve the issue they will close the Call with the appropriate resolution; if they cannot resolve the issue the Call will be turned into an Incident. Incidents are then assigned by the helpdesk to the appropriate technical support group for resolution.
3. The Incident queue should be monitored by each technical support group. When an Incident appears in the queue for a particular group, it is that group's responsibility to ensure that a technician is assigned to the Incident. Making contact with the customer will avoid confusion and sets the expectation for service. Communicating with the customer is essential when working on an Incident.
4. All communication and steps taken to resolve the Incident should be documented in the incident ticket.
5. Incidents should be updated and closed according to the Priority Guidelines.

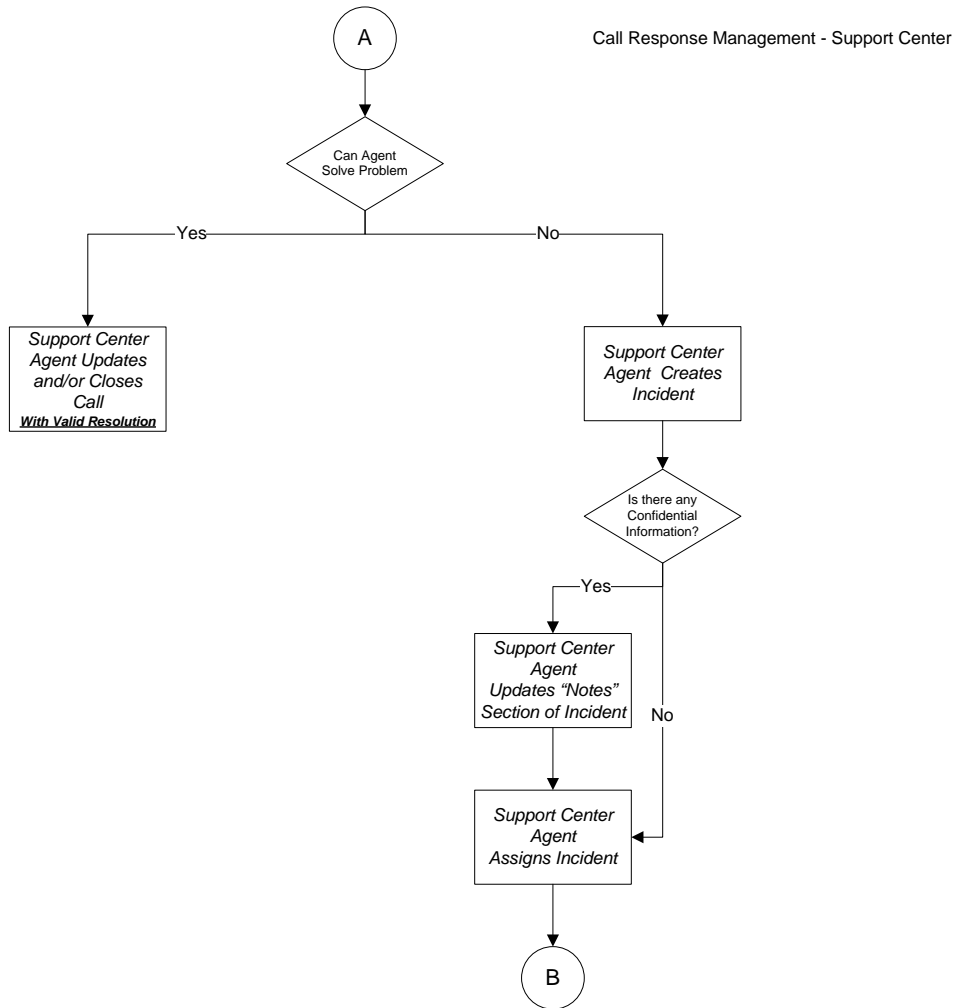
To see more of the Incident Management Document please see:

<http://www.it.jhu.edu/applications/servicecenter/files/IncidentMgmt2008.DOC>

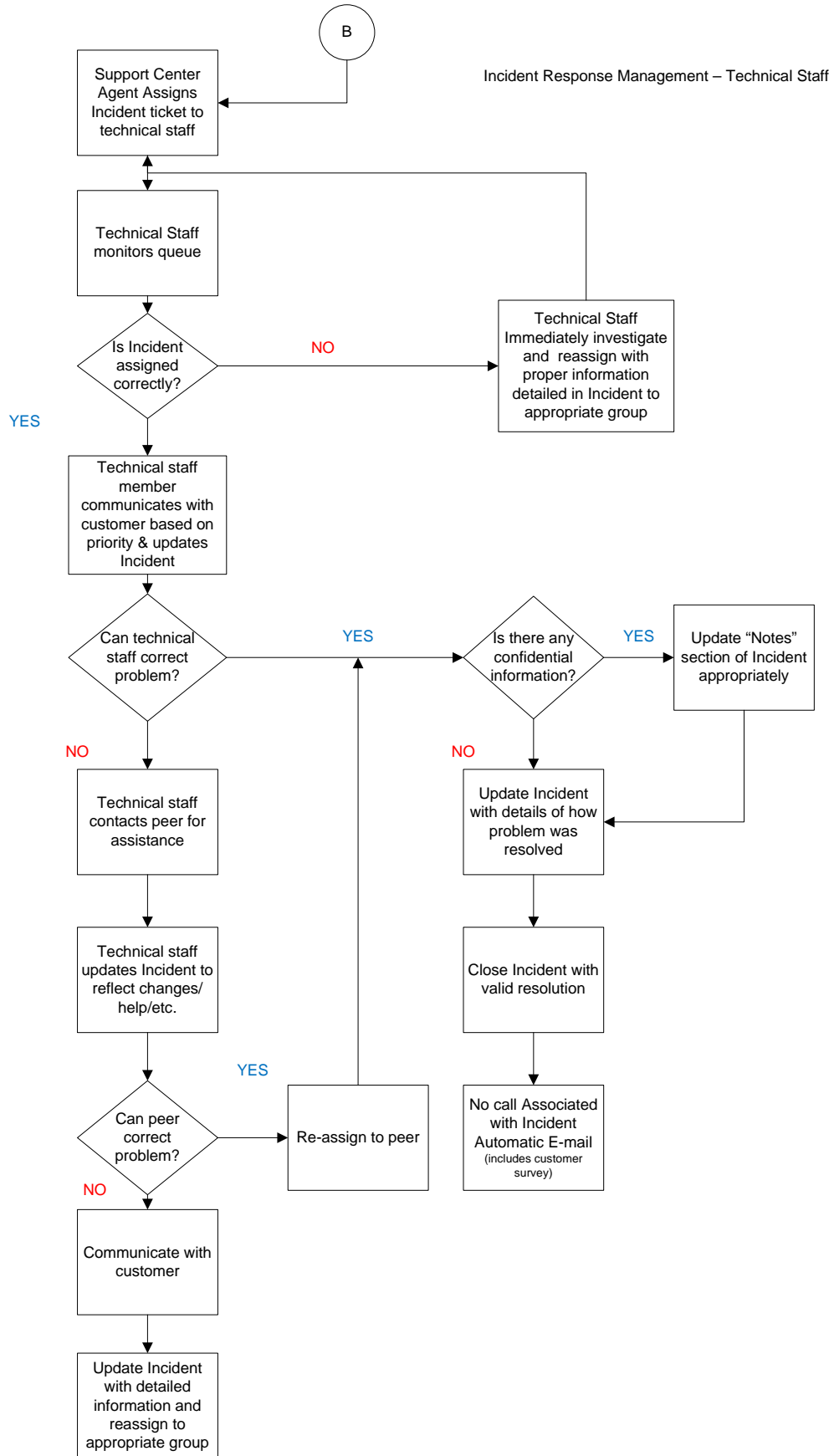
Priority Guidelines

Levels	Description
<p>Priority 1</p> <p>NOTE - The technician receiving a Priority 1 Incident should contact the Support Center (Help Desk) verifying that they have received the page. This will avoid the Incident being escalated to management.</p>	<p>The highest severity assigned where there is an extensive service disruption and customer functions are disabled. Priority 1 status is assigned when there is a network outage, when an application is unavailable, when a platform is unavailable, or when a department's operations are severely impacted, requiring immediate response from IT.</p> <p>Priority 1 Incidents are responded to by support personnel within fifteen minutes, during normal business hours (07:00 to 17:00). After hours, response time is within twenty minutes, with onsite response within two hours, if an Incident cannot be resolved from home. The Incident will be worked around the clock until a resolution is reached.</p>
<p>Priority 2</p> <p>NOTE</p> <p>The technician receiving a Priority 2 Incident should contact the Support Center (Help Desk) verifying that they have received the page. This will avoid the incident being escalated to management.</p>	<p>Described as a critical incident where customer service is affected and immediate response is required. Production abend, viruses, VPN issues, printers and workstations performing critical functions (either clinical or administrative) are examples of issues that would be assigned as a priority two.</p> <p>Priority 2 Incidents are responded to within fifteen minutes during normal business hours. After hours, response time is within twenty minutes, with onsite response within two hours, if an incident cannot be resolved from home.</p>
<p>Priority 3</p>	<p>Described as non-critical, low-impact Incidents, usually affecting a single customer.</p> <p>Priority 3 Incidents are responded to within 8 business hours. Calls received after hours or on weekends are responded to the next business day.</p>
<p>Priority 99</p> <p>NOTE</p> <p>Quality Assurance will monitor and determine when Incidents will be opened as Priority 99 (Root Cause).</p>	<p>An Incident that has been resolved and an investigation is taking place to find the root cause of the issue. An Incident that had an impact and is waiting for a vendor release or parts. Priority 99 Incidents should be resolved within 30 business days.</p>

Call Work Flow



Incident Work Flow



Change Management – Processes and Guidelines

1. All changes that could impact service to customers of information technology controlled by Information Technology @ Johns Hopkins (IT) must be recorded in the Change Management component of the ServiceCenter System. A Change Request and all associated information are required for all changes.
2. The manager of the area that submits a change is responsible for ensuring that all changes have had proper customer authorization, sufficient lead time, fully coordinated scheduling, completed and approved testing, updated documentation, all change control forms are completed as required and for ensuring that all appropriate documentation is maintained for audit purposes. It is the responsibility of the requestor, and the approving manager to ensure the change request is completed and validated in a timely manner.
3. The requestor and/or assignee of a change request must have representation at the weekly change meeting which occurs every **Wednesday at 8:30am, as well as representation at the IT morning status meeting the day before, the day of, and day after the execution date of the change request. This representation allows for questions or concerns if conflict occurs. The meeting is call based and can be access by dialing: 1-877-996-9631 Access code:5397508**

Change Risk Levels

There are four risk levels for changes. Changes that could cause serious disruption to service should problems occur during implementation require a greater degree of evaluation and control than changes with less impact. The change requestor identifies the risk level. The appropriate area managers, Change Control Manager, or Change Control Committee may override risk selection.

All of the following factors are relevant to a change's risk level:

- a. Potential risk of change installation.
- b. Complexity of the change.
- c. Difficulty and length of time to install the change.
- d. Ease of recovery, if the change must be backed out.
- e. Potential impact of change failure.
- f. Overall effect on customers.

Determining the Change Risk Level

All change requests must have the appropriate change risk category assigned, according to the guidelines presented in this procedure. The following table provides information that will assist in determining the appropriate risk level for a change. Also provided are a few examples of changes with their associated change risk level.

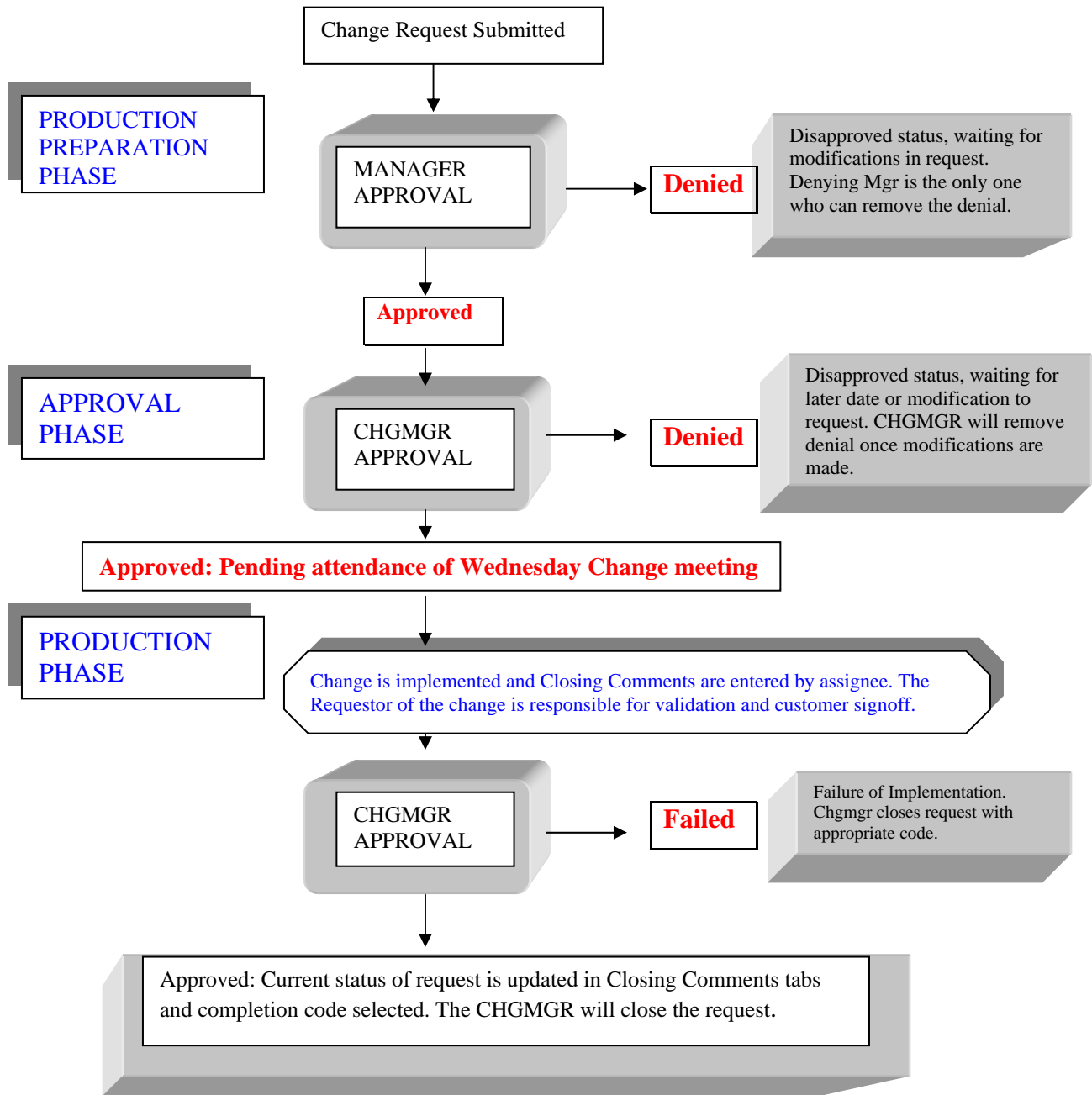
In general, if most aspects of a specific risk level apply, that risk level is most likely the correct one. Depending on unique conditions, some types of changes are candidates for one of several change risk levels. When this occurs, the higher risk level (lower number) should be selected.

To see more of the Global Change Management Document please see:
<http://www.it.jhu.edu/applications/servicecenter/files/Change2007.DOC>

Change Management - Risk Level Evaluation Chart

CHANGE ASPECT	RISK LEVEL 1	RISK LEVEL 2	RISK LEVEL 3	RISK LEVEL 4
RISK	uncertain of success	slight chance of failure	high probability of success	reliable (known to work)
COMPLEXITY	all (or most) systems and applications	multiple systems and applications	multiple systems but single application	single system or application
INSTALL PROCESS	complex; may be first time done	difficult; seldom done	simple; done frequently	easy; commonly done
BACK-OUT EFFORT	difficult or impossible; more time than install	involved; time consuming	moderate; less time than install	simple, quick
IMPACT OF FAILURE	major; difficult error detection	major; easy error detection	minor; easy error detection	insignificant or none; easily detected errors
CUSTOMER AFFECT	all or most customers; training or procedure changes required	significant number of customers; may require training or procedure changes	limited number of customers; training normally not required; Chapter 5 documentation affected (UNV)	one or no customers; transparent
CATEGORY	EXAMPLES			
SYSTEM HARDWARE	new install, major upgrades	microcode updates	engineering	
SYSTEM SOFTWARE	new releases, conversions	sysgen, i/o gen, new program products	minor enhancements, new tools	table updates, minor tuning
NETWORK	new equipment	node name/path	spool device	
DESKTOP/LAN	server upgrades			
FACILITIES	major electrical/cooling			moves, recabling
APPLICATIONS	new releases, conversions	specific fixes	functional enhancement	JCL, file reorganization
DATABASE		file organization		normal file reorg

The process of a change request



Production Support – ServiceCenter Administration

ServiceCenter administration provides coordinated technical activities concerning enhancement requests in the development of system design to address business requirements. We also provide coordination of infrastructure requirements with infrastructure support and operational groups.

ServiceCenter uses JHED authentication for access and password protection, as well as populating customer information into the Service Management module. ServiceCenter is available 24/7/365 for all staff, to facilitate the direction of reported issues from customers for resolution, and provides access for technical staff to update or resolve issues assigned to their assignment group.

ServiceCenter provides notification Enterprise-Wide of major outages and application failures by means of email, pager, or hand held devices. Notification is also provided via email to any staff member whenever an issue is opened and assigned to them, or if an issue is re-assigned to them.

Support Hours

Support Hours identify the level of support, support staff, and support hours.

Level of Support	Support Staff	Hours of Support	Requirements	Response Time
Access Request or Instructional Direction	ServiceCenter Admin	Normal Business Monday – Friday 08:30 – 17:00	ServiceCenter Incident Ticket	8 business hours from time of receipt
Access Issues or Error encountered within system	ServiceCenter Admin	24hr/365days a year	ServiceCenter Incident Ticket	8 business hours from time of receipt
System Unavailable	ServiceCenter Admin	24hr/365days a year	Report to Helpdesk and request Administrator be notified	15 minutes from time of receipt
Enhancement Request For Incident Management	ServiceCenter Admin	Normal Business Monday – Friday 08:30 – 17:00	*ServiceCenter Enhancement request link/form completed.	Estimated 20 business days depending on complexity
Enhancement Requests Change Management	ServiceCenter Admin	Normal Business Monday – Friday 08:30 – 17:00	*ServiceCenter Enhancement request link/form completed	Estimated 20 business days depending on complexity.

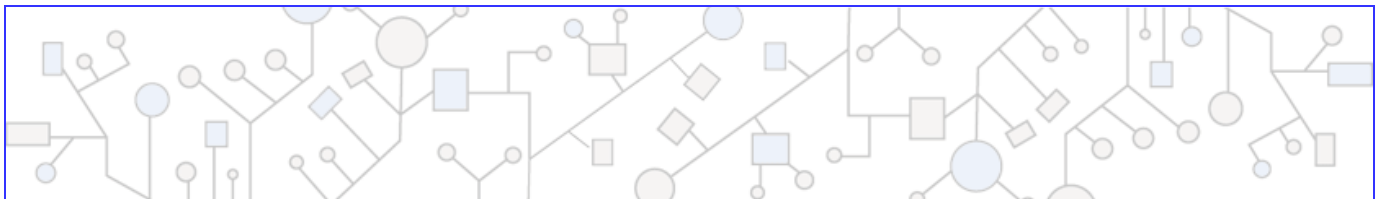
* The ServiceCenter Status Team meets every other week, to discuss and prioritize enhancement requests. Each request received is evaluated for approval and given a priority for development. The ServiceCenter Administrator will contact the requestor regarding the committee's decision to move forward with the request or an explanation why a request is denied

Service Management Contacts

Manager of Production Support
Ned Fields
(410) 735-4014
efields@jhmi.edu

Senior ServiceCenter Administrator
Patti Cappucci
(410) 735-7611
pcappuc@jhmi.edu

ServiceCenter Administrator
Brenda West
(410) 735 -7721
bwesta@jhmi.edu



Enhancement Requests

- Enhancements request can be submitted via the web using the following url: <http://www.it.jhu.edu/applications/servicecenter/enhancerequest.html>
- Before a new IT Technology system or application can go live and be supported by the helpdesk, enhancements and modifications must be made within ServiceCenter to allow the Helpdesk Staff to correctly enter the issues reported.
- A minimum of one month notice is required in order to ensure modifications are developed and implemented by the go live date. Once the request has been received and evaluated, the ServiceCenter administrator will review the request, and contact the requestor if there any questions, or if additional information is needed.
- The ServiceCenter Status Team meets every other week, to discuss and prioritize enhancement requests. Each request received is evaluated for approval and given a priority for development. The ServiceCenter Administrator will contact the requestor regarding the committee's decision to move forward with the request or an explanation why a request is denied.

The screenshot shows the 'New Product Enhancement Request Form' on the IT@Johns Hopkins ServiceCenter website. The page layout includes a header with navigation links (Home, Getting Started, Connectivity, Email, Support, Site Tools) and a search bar. A sidebar on the left lists various application categories like Administrative Applications, Clinical Applications, Enterprise Services, Student Services, Support, Teaching & Learning, and Technical Professionals. The main content area features a title 'New Product Enhancement Request Form' and a brief introduction. Below this is a form with the following fields and options:

- Submitted By**: Text input field.
- Phone Number**: Text input field.
- Manager's Name**: Text input field.
- Affiliation**: Dropdown menu with "-- Select from the following --".
- Department**: Text input field.
- Email Address**: Text input field.
- Enhancement Type**: Checkboxes for "Incident Management" and "Change Management".
- New Application Name**: Text input field.
- Go Live Date**: Text input field with a calendar icon and a red 'X' icon.
- Brief Description**: Text area with "System/Application" label.
- Top Five Problems**: Text area with "(During Test Phase)" label.
- Customer Base**: Text input field.
- Contact Person or Oncall Schedule?**: Text input field.
- Contact Person's Beeper Number**: Text input field.
- Type of Support Required**: Checkboxes for "24 X 7" and "Daytime Work Hours".
- Names of Support Staff**: Text area with "(Full Name or JHED ID)" label.

At the bottom of the form, there is a note: "Fields marked with "*" are required." and a "Send Form" button.

Access Requests

- Access request can be submitted via the web using the following url: <http://www.it.jhu.edu/applications/servicecenter/accessrequest.html>
- All requests are verified with the requestors management and internal Operations Management for validity and business scope.
- Once the request has been submitted, the requestor will be notified via email once the access has been granted. Please expect at least a 24 hour turn around time for access.
- Phone Number and Pager Fields should be entered without spaces or hyphens.

Information Technology
JOHNS HOPKINS
INSTITUTIONS

Home Getting Started Connectivity Email Support Site Tools Print This Page

Administrative Applications
- Select A Link -

Clinical Applications
- Select A Link -

Enterprise Services
- Select A Link -

Student Services
- Select A Link -

Support
- Select A Link -

Teaching & Learning
- Select A Link -

Technical Professionals
Contact IT@JH

IT@Johns Hopkins
ServiceCenter
Access Request Form

Please provide the following information to ensure that your application is processed accurately.

Name *

JHED Id *

Office Phone *

Pager # / Address

Pager Type Alpha Text Two Way

Pager Vendor

Email Address *

Affiliation
School / Division

Setup Like
Co Workers Name

Supervisor or
Managers Name *

Supervisor or
Managers Office
Number *

Additional
Information

Fields marked with "*" are required.

ITSO Home
Data Center Service Home
Computer Operations
Production Support
Service Center
Problem Matrix Document
Incident Priority Usage
Manuals
Training
Request Forms
*Access Request
*Enhancement Request
*Support Request
Helpful Hints
SC Web Client
SC Download
Support Center

ServiceCenter System Administration

System Monitoring

- ServiceCenter is monitored by Production Support Staff on a daily basis, and reviewed periodically throughout the business day. The system schedule is monitored daily to ensure all systems tasks are running and in good status. The system status is reviewed daily for system record locks and license usage. Events connecting to the system or events being sent out of the system are reviewed periodically to ensure data integrity and connectivity.

Roles and Responsibilities

The following describes the roles and responsibilities of key personnel for ServiceCenter System Administration

System Admin

The ServiceCenter Admin maintains and manages the Application at the Server and Client level.

- Monitoring of Event Processors Events.
- Monitoring of System Scheduler.
- Monitoring of System Task and System Locks.
- Maintenance Proprietary Database, and relational Data Dictionaries and Tables.
- Maintenance of the Global Variable Table.
- Development and maintenance of Notification Macros for IT Staff and subsidiaries.
- Development and maintenance of field and format calculations, and validations, derived from internal enhancement requests.
- Development and maintenance of Link Definitions.
- Maintenance of the Operator and Group Profiles.
- Maintenance of operator security and access requests.
- Creation and maintenance of operator tables, assignment groups, and associated queue views.
- Maintain Documentation of all requests and internal formats.
- Installation of Client Software within the Johns Hopkins Enterprise.
- Understanding of HP Licensing and installation of License Keys.
- Perform Upgrades and Patches for SC Server and Client.
- Respond to High Priority Production Incidents within 15 minutes.
- Respond to Single reported Incidents within 1 hour.