Procedure: Technology Event Notification and Escalation

Procedure Date: 10/27/2009

1.0   Purpose

Information Technology Services (ITS) provides and manages technology in support of the College mission. Changes and failures of technology are managed by ITS through business processes that minimize service disruptions to the College. Communications concerning changes to the technology environment and failures of technology are critical to supporting the business of the College. This document includes procedures for notification to the College community of the schedule and impact of planned outages and for expediting immediate notifications to the College community in the event of unplanned outages. This document is intended for all CCBC faculty and staff.

2.0   Description

Planned outages are the result of a planned action on the part of CCBC Information Technology Services. Planned outages are used to upgrade, replace, or install new hardware and software systems. Upgrades include application-based security patches, operating system patches (critical, hot fixes, and service packs), regularly scheduled maintenance, etc. Planned outages are scheduled with a specific schedule and agenda of actions are communicated to the College community through the ITS Change Management Process.

Unplanned outages are the result of a fault or failure or some other catastrophic event that disrupts service to some part of the College community. Examples of unplanned outages include, but are not limited to, telephone system failure or power loss, computer application failure such as email, hardware failures which may impact multiple applications, and a partial or widespread network failure. The ITS department takes various steps to minimize as much as possible the occurrence of unplanned outages. This strategy is effected through use of a Change Management Process, standardization of the technology environment, replacement cycle on equipment, and vendor provided maintenance contracts on hardware and software systems so that these systems are kept up to date.

3.0   Notification and Escalation Procedures

3.1 Planned Outages

Planned outages are requested and approved through the ITS Change Management Process (See Change Management Procedures). Once approved, notification of the planned change is posted in the ITS Change Management SharePoint repository. College notifications are submitted to the CCBC *Daily Post*; and, depending upon the impact on services, voice mail and/or email messages may be sent to the College community or the affected department(s) informing them of the scheduled system outage. Actions taken are documented in the notification plan component of the change request and approved by the Change Management Committee in accordance with the Change Management Procedures document. Notification will be made at least five days in advance of the planned outage, and will include date and time of the scheduled maintenance event and a brief summary of the proposed outages, including

- Impacted assets or services
- Justification for the change
- Expected duration of the disruption and estimated time of service restoration

3.2   Roles and Responsibilities

Helpdesk Administrator

Posts the action items on the Change Management SharePoint repository and provides notifications to the College community. He or she is also responsible for providing a *Daily Post* article at least five days before the scheduled change. The Helpdesk Administrator reviews planned action items with the Helpdesk.

Helpdesk

The Helpdesk creates a trouble ticket in the Parature trouble ticket management system and records the ticket number on the Change Request Form. The Helpdesk also creates an Event Notification that informs all CCBC and Presidium 24 x 7 customer service representatives of the scheduled outage.

Once the change is complete, an Event Notification is sent advising that service has been restored. Other responsibilities for scheduled changes are outlined in the Change Management Policy.

3.3   Unplanned System Outages

Unplanned outages require urgent response in order to restore service to the College community as quickly as possible. Critical failures requiring immediate action will not require a Change Request Form to be generated before restoration efforts begin. Examples of critical system outages include power failures or hosted system failures. Response for most other unplanned outages, however, will begin with a Change Request Form (See the Change Management Procedures document). This step ensures that the outages are thoroughly reviewed and appropriate actions are taken. Before any change is implemented, approval must be obtained from the CIO or his or her designee.

A notification plan to the College must be implemented. The approver of the change is responsible for the notification plan to the College. This plan must include

- Notification to the office of the Vice President of Administrative Services
- Helpdesk ticket and Change Event Notifications to the Helpdesk and Presidium
- College-wide email and/or voice mail describing the event and its impact
- Scope and duration of the service disruption
- Estimated time of service restoration

Depending upon the nature of the event, other possible notification strategies may include

- *Daily Post* notifications
- Targeted email lists
- Individual telephone calls to affected departments and individuals
- CCBC Web site posting
- Recorded messages on CCBC phone lines

Once service is restored, status updates and resolution notifications are to be made by the change requestor. Resolution notification includes at a minimum a Change Event Notification to the Helpdesk and Presidium indicating that the service has been restored and that normal operations have resumed. Additional notification strategies will depend on the nature of the outage and may include

- Notification to the office of the Vice President of Administrative Services
- College-wide email and/or voice mail describing the event and its impact
- *Daily Post* notifications
- Targeted email lists
- Individual telephone calls to affected departments and individuals

- CCBC Web site posting
- Recorded messages on CCBC phone lines

3.4   Roles and Responsibilities

Helpdesk Customer Service Representative

The CCBC Customer Service Representative (CSR) first alerted to the outage will assess the situation and attempt to verify if it is a service disruption or a single user problem.   If he or she determines or suspects the problem to be a system outage, the CSR will enter a trouble ticket, escalate to the appropriate queue, and notify the team lead or Helpdesk Manager. If the team lead or Helpdesk Manager is not available, the CSR will contact the designated Tier III emergency contact to report the outage event. The Tier III representative will enter an Event Notification in Parature, or may request Helpdesk's assistance to post one for them, specifying

- Impacted assets or services
- The affected users
- Any other details about the problem and the work to be performed

In the event a Presidium CSR is the first alerted to the outage, he or she will assess the situation and attempt to verify if it is a system outage or a single user problem. If he or she suspects the problem to be a system outage, the CSR will enter a trouble ticket, escalate to the appropriate queue, and immediately notify the CCBC Helpdesk to report the problem. The CCBC Helpdesk will then proceed as outlined above.

If, however, the problem occurs outside CCBC's Helpdesk hours of operation, the Presidium CSR will contact his or her supervisor for authorization to call the CCBC emergency Tier III contact and will also issue an Event Notification in Parature (See Helpdesk Support Center Policy). Tier III emergency responders are on call 24x7. See Attachment A for contact information.

When the failure has been resolved, Tier III staff will be responsible for the posting of Event Notifications. During normal business hours, Tier III staff may contact the Helpdesk with instructions to post a service restoration Event Notification. Helpdesk staff are then responsible for promptly posting this event. If restoration occurs outside of normal Helpdesk hours, Tier III staff must post the Event Notification in Parature.

<u>Team Lead or Helpdesk Manager</u>

Once alerted to a possible outage, the team lead or Helpdesk Manager is responsible for determining the scope of the outage. If it is confirmed or suspected that an unplanned service disruption has occurred or is imminent, he or she will notify the appropriate Tier III Network, Systems, Applications, or Instructional Technology manager, providing detailed information. In the event that a Tier III resource cannot be reached directly, the Tier III emergency telephone number will be used to contact the on-call Tier III specialist. Emergency telephone numbers are listed in the table at the end of this document. The team lead or Helpdesk Manager will ensure that a Parature Event Notification is sent to advise all CCBC and Presidium CSRs of the outage. Email notification is also sent to helpdesk@ccbcmd.edu and SupportCenter@ccbcmd.edu .

<u>Tier III Manager or Emergency Contact</u>

Critical failures requiring immediate action will not require a change request form to be generated before restoration efforts begin. If in the judgment of the Tier III Manager, a critical failure has occurred or is about to occur, the action will be to notify the CIO and/or immediate supervisor to outline the nature of the service outage, recommended remediation, and secure approval to proceed without a formal Change Management review.

A notification plan to the College must be implemented including a Parature Event Notification. Examples of critical failures include power outages, partial or complete network failure, or hosted system failures. Response for most other unplanned outages, however, will begin with a Change Request Form (see the Change Management Procedures document).

Tier III support is responsible for notification of the outage to the College community. The notification will be in the most appropriate format available including voice mail, email notification, *Daily Post*, targeted telephone calls, or other strategies appropriate to the situation. The notification will include the nature of the outage, services impacted, and estimated time for reinstatement of service. The Tier III resource will either complete the notification or personally ensure a handoff so that the notification has been made. The notification strategy will be included in the trouble ticket notes. College wide notification resources include

- Tier III Directors
- Administrative Assistant to the CIO
- Helpdesk Manager
- Helpdesk System Administrator

- Helpdesk Team Leads
- Office of the College Registrar
- Office of Public Safety

The Tier III Manager is responsible for sending appropriate status updates at two hour intervals to SupportCenter@ccbcmd.edu . Tier III is also responsible for the posting of a Service Restored Event Notification and for closing open trouble tickets.

<u>CIO or Designee</u>

The CIO is responsible for determining if the service disruption warrants a critical response, or a scheduled change. The CIO authorizes or rejects the proposed actions and remediation plans. He or she is also responsible for ensuring that an appropriate College notification plan is implemented.

4.0   Emergency Contact Information

Emergency contact information is indicated on Attachment A.

5.0   Related Policies

ITS Change Management Procedures
CCBC Helpdesk Contact Center Procedures

**Technology Event Notification and
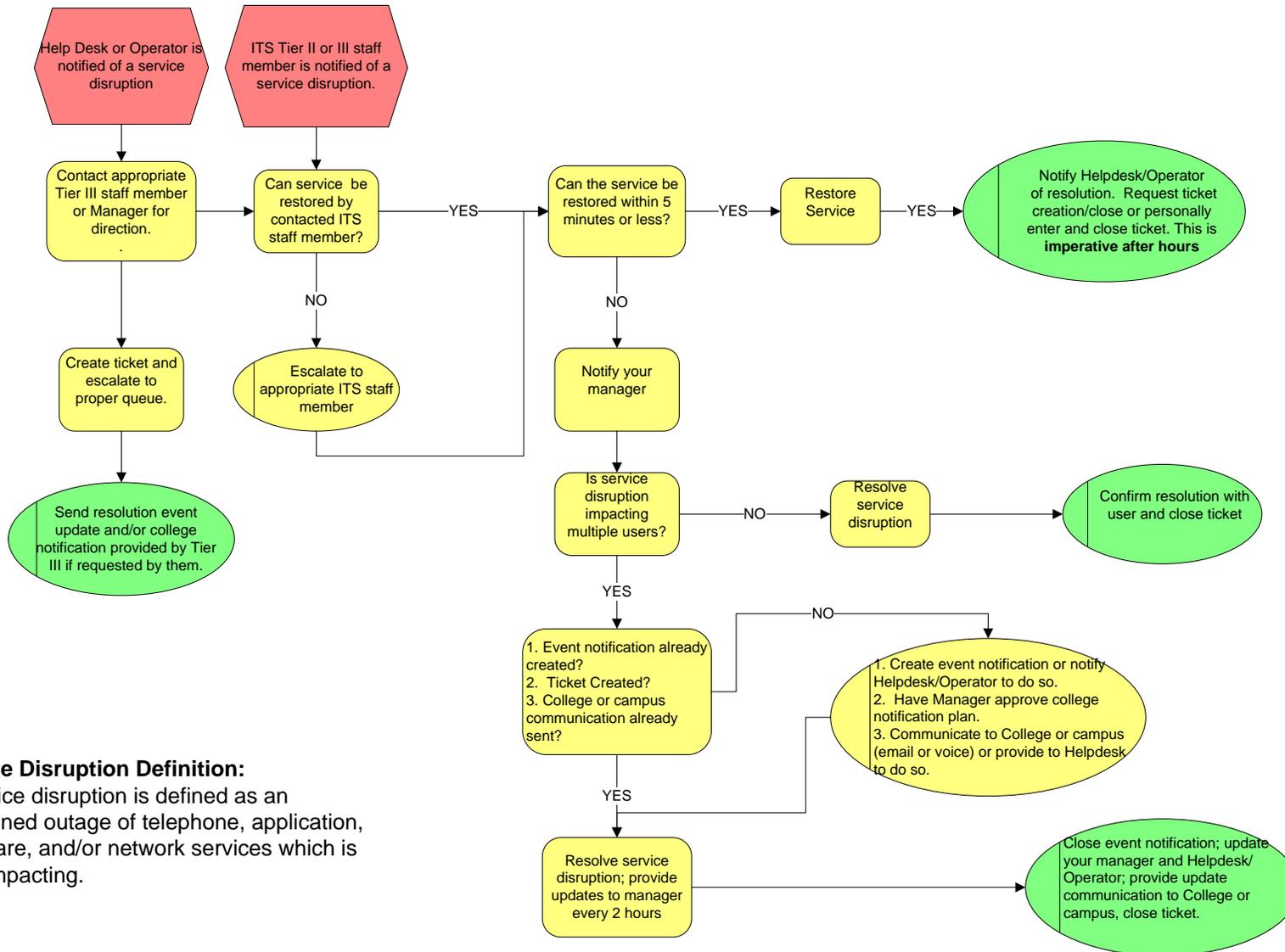Escalation Procedures**

**Schedule A
Emergency Contacts**

Problem Type	Area	Name	Email	BB or Cell	Other	1st Escalation	2nd Escalation
Banner/Simon	Applications Development	Jim Hughes	jhughes@ccbcmd.edu	443-604-1274	410-391-5008 Home 443-840-1690 Office	Chris O'Kane 410-456-4497	Darrow Neves 410-303-9065
	Applications Development	Ron Nabors	rnabors@ccbcmd.edu		301-595-4787 Home 443-840-5098 Office	Chris O'Kane 410-456-4497	Darrow Neves 410-303-9065
CCBC Systems	Systems	On Call Staff	systemsengineering@ccbcmd.edu	443-928-8800	410-978-8780	Bill Wiley 410-978-8780	Joe Traino 410-274-6863
CCBC Network	Network	On Call Staff	networkengineering@ccbcmd.edu	443-928-8800	410-978-8770	Ben Thompson 410-978-8770	Joe Traino 410-274-6863
WebCT	Instructional Technology	WebCT Admin	webctbb@ccbcmd.edu	410-802-4950	410-458-7139 Joel BB	Margaret Gilbert 410-404-0439	Darrow Neves 410-303-9065
CCBC Helpdesk	Helpdesk Manager	Chuck Miller	cmiller@ccbcmd.edu	410-458-7246	443-840-5746 Office	Linda Panella 410-303-0654	Darrow Neves 410-303-9065
	Team Lead Catonsville	Elliott Raczkowski	Eraczkowski@ccbcmd.edu		443-840-5732 Office	Chuck Miller 410-458-7264	Linda Panella 410-303-0654
	Team Lead Essex	Carol Sherry	csherry@ccbcmd.edu	410-274-0152	443-840-5761 Office	Chuck Miller 410-458-7264	Linda Panella 410-303-0654
	Team Lead Dundalk	Russ Rekoski	rrekoski@ccbcmd.edu		443-840-5751 Office	Chuck Miller 410-458-7264	Linda Panella 410-303-0654
	Team Lead Extension Centers	Cindy Ruth	cruth@ccbcmd.edu	410-409-0708	443-840-5775 Office	Chuck Miller 410-458-7264	Linda Panella 410-303-0654
Parature	Presidium 24x7 Ops Manager	Brandon Heath	bheath@presidiumlearning.com	606-219-3356	606-274-2639		
Parature		Jason Murphy	J_murphy@presidiumlearning.com	606-872-1702	606-274-2633		

**Technology Event Notification and
Escalation Procedures**

EVENT NOTIFICATION PROCESS FLOW

Help Desk or Operator is notified of a service disruption

ITS Tier II or III staff member is notified of a service disruption.

Contact appropriate Tier III staff member or Manager for direction. .

Can service be restored by contacted ITS staff member?

Can the service be restored within 5 minutes or less?

Restore Service

Notify Helpdesk/Operator of resolution. Request ticket creation/close or personally enter and close ticket. This is **imperative after hours**

YES

YES

YES

NO

NO

Create ticket and escalate to proper queue.

Escalate to appropriate ITS staff member

Notify your manager

Send resolution event update and/or college notification provided by Tier III if requested by them.

Is service disruption impacting multiple users?

NO

Resolve service disruption

Confirm resolution with user and close ticket

YES

1. Event notification already created?
2. Ticket Created?
3. College or campus communication already sent?

NO

1. Create event notification or notify Helpdesk/Operator to do so.
2. Have Manager approve college notification plan.
3. Communicate to College or campus (email or voice) or provide to Helpdesk to do so.

YES

Service Disruption Definition:
A service disruption is defined as an unplanned outage of telephone, application, hardware, and/or network services which is user impacting.

Resolve service disruption; provide updates to manager every 2 hours

Close event notification; update your manager and Helpdesk/ Operator; provide update communication to College or campus, close ticket.