Policy: Computer Room Procedures

Policy: Draft 12/14/2009

1.0 Purpose

The purpose of this document is to establish procedures for the Community College of Baltimore County (CCBC) Information Technology Services (ITS) computer rooms.

CCBC is equipped with 3 computer rooms, one at each main campus location:

- Catonsville H-204
- Dundalk J-115
- Essex M building

This document addresses access to the computer rooms including, management of contractors and visitors to the computer rooms. The document establishes procedures for the security of the rooms, management of the equipment and facilities in the rooms, and roles and responsibilities for the rooms. This document is intended for all CCBC faculty and staff.

2.0 Computer Room Procedures

2.1 Access

The ITS computer rooms are limited access areas. Access is provided via keys and/or key code. Only designated ITS Operations Staff, designated ITS Technical Staff, and staff in the Facilities and Public Safety units will be issued keys. CCBC staff possessing keys have unsupervised access to the rooms but are expected to comply with the room procedures contained in this document. The Manager of Computer Operations and the CIO will approve issuance of keys to the computer rooms.

The Manager of Computer Operations will annually review the key list to the computer rooms and recommend alterations to the list to the CIO. Annually the CIO will review the computer room access and approve recommendations to alter the list of CCBC staff members who have key access to the computer rooms. Combination locks to the computer room doors will have the passcode changed every 6 months. In the event that a CCBC staff member with
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Knowledge of the passcode leaves the employment of the College, the passcode will be immediately changed.

All other individuals entering the computer rooms are considered guests. Guests include ITS staff members without keys to the computer rooms, CCBC staff members, contractors, equipment vendor representatives, equipment delivery personnel, and visitors. In all cases the person entering the computer room must be accompanied by an ITS staff member with key access to the computer room. In all cases the guest must sign into the computer room log sheet. The sign in information must include the name, date, time, purpose of entry into the computer room, and name of the CCBC staff member supervising the entry. The guest must verbally notify the on duty Computer Operator of the nature and purpose of the entry and must provide specific detail on any work to be performed on equipment and facilities in the computer room.

The Manager of Computer Operations, and by designation the on duty computer operator, is responsible for the CCBC computer rooms and the continuity of CCBC business operations. No equipment in the CCBC computer rooms is to be touched by any person other than an on duty CCBC computer operator without the direct and specific consent of the Manager of Computer Operations or by delegation, the on duty computer operator.

All contractors hired to perform work in the computer rooms including electrical, mechanical, and telecommunications contractors, must coordinate their work with the Manager of Computer Operations and appropriate ITS Tier 3 staff.

All equipment deliveries to the computer rooms must be coordinated with the Manager of Computer Operations to ensure proper receipt and storage. ITS Tier 3 staff will be responsible for acceptance of the equipment.

Requests for tours and other access to the computer rooms should be submitted to and must be approved by the Manager of Computer Operations.

All off-hours work within the computer rooms must be approved through the ITS Change Management process. The Manager of computer Operations will participate in the Change Management business process for all changes that require access to the computer rooms.
2.2 Computer Room Facilities Management

All space allocations within the computer rooms are the responsibility of the Manager of Computer Operations.

All physical changes within the computer rooms require the approval of the Manager of Computer Operations. Changes include hardware, furniture, flooring, shelving or other materials altered, removed, or added to the computer rooms. All physical changes in the computer rooms must be reviewed, approved, and scheduled through the ITS Change Management Process.

Equipment to be installed in the computer rooms must be reviewed and approved by the Manager of Computer Operations prior to order placement. The Manager of Computer Operations will validate rack mount, floor space, power, network, and other facilities required to accommodate the proposed equipment.

Equipment decommissioned from service must be reported to the Manager of Computer Operations within 30 days of the decommission. The Manager of Computer Operations will remove decommissioned equipment from the computer rooms within 30 days of the notification of decommission.

All computer room work areas must be kept clean and free of debris. Upon completion of any work in the computer rooms, staff performing the work must ensure they have left the area as clean as it was before their work began.

All rack enclosures must be kept neat and free of manuals, diskettes, cables, etc. Doors on all racks should remain closed at all times except during performed work.

2.3 Infrastructure

2.3.1 Cooling

Air temperature and air quality are essential to the reliable operation of computer equipment and must be maintained within acknowledged computer room standards:

- Humidity levels in the Computer rooms will be maintained at 45% – 50%.
- Temperature levels in the computer rooms will be maintained at 69 – 72 degrees
All changes made to the computer room cooling systems must be reviewed, approved, and scheduled through the ITS Change Management Process.

The Manager of Computer Operations will schedule Plant Operations maintenance activities to the cooling systems on a monthly basis.

2.3.2 Cabling

All cabling in the computer rooms must adhere to industry standards cable management. This includes appropriate cable trays, raceways, bundling of cables, labels, and documentation on cables.

Cables should never be strung outside of rack enclosures. Cabling between rack enclosures of adjacent racks is accepted provided sufficient pass-through chassis are in place.

All decommissioned communications cabling, including voice, data and fiber must be removed within 30 days of decommission. Decommissioned cables are defined as cables that are abandoned and will no longer be used in the computer rooms.

All changes to device cabling must be reviewed, approved, and scheduled through the ITS Change Management Process.

2.3.3 Electrical

Electrical Power in the computer rooms will comply with accepted IEEE standards and local electrical codes. All power cables must be dedicated to specific equipment and equipped with isolation ground within the raised floor areas.

All power cables within the computer rooms are installed for specific purposes. Power cable usage is the responsibility of the Manager of Computer Operations. Any alterations of power usage must be reviewed and approved by the Manager of Computer Operations. The Manager of Computer Operations will maintain an up to date inventory of power cables and usage.

Power cable requirements for new equipment must be provided to the Manager of Computer Operations before any scheduled implementation. The Computer Operations Manager will coordinate with Plant Operations for installation of new power sources.
Electrical work performed in the computer rooms is the responsibility of Plant Operations. Such work is scheduled through the ITS Change Management Process. Only plant operations personnel or delegated electrical contractor may open or change any power panel or power distribution unit.

As a general rule, power strips are not to be used in the computer rooms. The only exceptions to this rule are as follows

- In cases of emergency installations where equipment must be brought into service before the permanent power source can be installed. If used in this manner, the power strip must be tagged, dated and approved by the Manager of Computer Operations.
- For certain types of telecommunications equipment where power strips are actually deemed the preferred means of supplying power. Such use of power strips is in the sole discretion and approval of the Manager of Computer Operations.

No radios or other non-computer related equipment may be plugged into any dedicated circuit or equipment within the computer rooms without the approval of the Manager of Computer Operations.

No work will be done below the raised floor area without the approval of the Manager of Computer Operations.

All electrical testing will be conducted during off-hours under the supervision of the Manager of Computer Operations.

### 2.3.4 Labeling

All equipment in the computer rooms must be labeled in the front panels with identification information.

All equipment must have a label affixed identifying the power distribution unit and the main power panel to which it is attached.

All power cables must be labeled and identified for its specific use and identified by its amperage, voltage, type connector and length of cable.
All device-to-device cables installed within the computer rooms must be labeled to identify their use and/or purpose. This label must be at both ends.

2.3.5 Documentation

The Manager of Computer Operations will maintain accurate inventories of the following:

- Equipment in the Computer rooms
- Power distribution to all equipment
- Network distribution to all equipment
- Floor plan of computer rooms

The Manager of Computer Operations will supervise updates to inventory documentation.

The Manager of Computer Operations will maintain computer operations procedures. Documentation will be fully task-based to ensure that business continuity is maintained in the event that operations personnel leave the institution. The Manager of Computer Operations will supervise updates to all documentation serving CCBC computer rooms.

The Manager of Computer Operations will regularly review logs and reports to ensure full compliance with operations procedures for system backups, monitoring of systems performance, problem identification, and problem reporting.

The Manager of Computer Operations will train operations staff on documentation and procedures.

3.0 Roles & Responsibilities

3.1 Manager of Computer Operations

The Manager of Computer Operations is responsible for the day to day operations of the CCBC computer rooms and for the business continuity of computer and network services. The Manager is responsible for full implementation of all procedures relevant to oversight and management of the CCBC computer rooms.

Operations staff are solely authorized to approve technical work on equipment. In the event of a disagreement on access to equipment, the weight of responsibility and authority is with the Operations staff. The Manager of Computer Operations will review and resolve any
conflicts with the CIO.

In addition, the Manager of Computer Operations is responsible for the physical security of the computer rooms and for changing door lock combinations and safe combinations as documented in this procedures document.

3.2 Computer Operations Staff

The Computer Operations staff are responsible for full implementation of CCBC computer room procedures. This includes operations procedures related to running jobs, running system backup tasks, monitoring system and network performance, and performing coordination and notification roles in the event of service failures. The operations staff are responsible for ensuring that CCBC staff and guests who enter the computer rooms follow the procedures in this document.

Operations staff are responsible for the business continuity of CCBC systems. Technical staff are responsible for fully briefing Operations staff on the intended scope of activity and for ensuring that the Operations staff have provided approval for technical staff to perform work on equipment. In the event of a disagreement on access to equipment, the weight of responsibility and authority is with the Operations staff.

3.3 ITS Technical Staff

ITS Technical Staff will comply with computer room access policy described in section 2.1.

ITS technical staff require console access to perform certain tasks related to server/storage allocation, configuration, and troubleshooting. This type of work can have a major impact on ongoing production services. Technical staff are responsible for fully briefing Operations staff on the intended scope of activity and for ensuring that the Operations staff have provided approval for technical staff to perform work on equipment. In the event of a disagreement on access to equipment, the weight of responsibility and authority is with the Operations staff.

ITS staff are responsible for following proper change management procedures and ensuring all work is completed with the minimal disruption to current systems.

ITS staff are responsible for reading, understanding and following the above procedures.

3.4 Facilities and Public Safety
Facilities and Public Safety must sign in on the computer room log sheet and notify the Manager of Computer Operations or Computer Operations Staff of the purpose of the visit.

3.5 Visitors

Visitors must sign the log in sheet. Visitors must be accompanied by an ITS Staff member with access to the computer room. Visitors must provide first and last name, company name, and time of visit, and reason for the visit.