

## **1. Purpose**

The purpose of this document is to define and clarify the policies, principles, guidelines, and responsibilities related to the security of the AUA's information technology resources.

## **2. Principles**

The AUA acknowledges the standards and expectations established by the University System Information Technology Security Policy. The Policy provides the following directions:

- **Assignment of Responsibilities:** Policy contains description of roles and responsibilities related to securing information resources.
- **Consistency of Security Provisions:** The AUA is maintaining access controls to servers, network, Internet) used to retain, access, or transport the information.
- **Separation of Duties:** The AUA administers security responsibilities separate from other duties that might result in compromises to the protection of the AUA's information resources.
- **Expectation of Appropriate Security:** Users of the AUA's information processing facilities can be confident that the facilities are secure and provide reasonable protection to the information the AUA retains or transports.

## **3. Scope**

This policy applies to all AUA employees, AUA's students and others authorized to use the AUA's information technology resources.

Implementation of this policy helps to insure that the following characteristics apply to information technology resources:

- *Confidentiality* - sensitive information is protected against unauthorized access.
- *Integrity* - information is protected from tampering, unauthorized modification, or falsification.
- *Availability* - legitimate users of the AUA's information technology resources can access those resources in a timely manner.

## **4. Enterprise Roles**

ICTS Department

On behalf of the enterprise, the Department will:

- Maintain security administration tools adequate for departments to control access to the information held, processed, or transported by the department on their behalf.
- Administer security for ICTS Department staff and services.
- Assist departments with the implementation of access control decisions.
- Assure that security policy and technology are addressed in enterprise information technology planning and implementation projects.
- Establish AUA-wide standards for computing and network (AUA Computer and Network Appropriate Use Policy)
- Establish and implement strategies to periodically monitor compliance with security policy standards.
- Identify the names of custodians of AUA departmental databases. The custodian will be held responsible for proper distribution of individual access to AUA departmental databases.
- Ensure new AUA-wide software tools used to retain, access, or transport data are properly secured.

### **4.1 Roles and Responsibilities**

The AUA has identified roles, responsibilities and relationships related to the security of information technology resources of the AUA.

The roles and responsibilities for security in the AUA include the following:

## **4.2 Chief Information Officer (CIO)**

The AUA's Chief Information Officer (CIO) is the Director of ICTS. The CIO is responsible for the configuration of the AUA's information technology resources and for the development, promulgation, and enforcement of the university's security policies.

The CIO is responsible for issuing the security policies, procedures, and relationships among various information technology security functions within the AUA. The CIO appoints the Information Security Officer; all security functions report to the Information Security Officer who reports to the CIO.

## **4.3 Information Security Officer**

The Information Security Officer is the Network Manager

The Information Security Officer will:

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- Identify Associate Information Security Officer (or Information Security Associate) and assign responsibility for specific security functions.
- Monitor unusual activities, e.g., violation reports.
- Identify training requirements, determine the frequency of training, provide or assist in arranging for training for the Associate Security Officer.
- Develop AUA disaster recovery procedures.
- Develop and implement strategies to make users aware of security policies, procedures, and benefits; determine the frequency of awareness training and information.
- Communicate the direction for AUA security standards, procedures and guidelines.
- Enforce AUA security policies.
- Work with the AUA Physical Security Officer as needed.

The Information Security Officer is responsible for establishing processes to assure security, and communication with end users, including for example:

- Standardizing the format and process for all employees to acknowledge an understanding of the security requirements;
- Strategies and processes for regular reminders of the security responsibility of all users.

In case of urgent necessity, the Information Security Officer can order the Associate Information Security Officer to stop network services and investigate problems on the network even if it will require some privacy infringement.

The ICTS Department may require pre-employment screening for the position of Information Security Officer and/or for individuals who are delegated the security functions.

The Chief Information Officer and Information Security Officer develop and disseminate guidelines and examples for users to assist them in maintaining good security practices. This material may include brochures, electronic reminders, desk references, web sites, text documents and spreadsheets, etc. and should include but not be limited to information on passwords and password protection, logon id, virus protection strategies, etc.

Due in part to licensing requirements and software compatibility issues, AUA has a policy stating that installation of all workstation hardware and software must be authorized by the ICTS Department.

Confidential information should not be on the workstation hard drive for security and business reasons. Most workstations pose a risk of unauthorized access because the hard disk drives are not private or restricted to the user who is normally assigned to a workstation.

Software that includes a terminal locking feature, e.g. screen saver with password protection, must be available to all users. The use of password protection and terminal locking is mandatory for the Information Security Officer and Information Security Associates.

## **4.4 Associate Security Officer**

The Associate Security Officer is the System Administrator, who works under the guidance of and reports to the Information Security Officer.

The Associate Security Officer will:

- Provide AUA local and cloud hosted servers' and services security.

- Establish access controls.
- Assign access privileges based on matching the privilege to an appropriate job function.
- Perform the role of e-mail platform administrator adding new users and deleting those terminated their contracts.
- Performs housekeeping of the AUA users databases.
- Perform timely backups of the AUA servers.
- Develop disaster recovery procedures for the AUA servers.
- Monitor unusual activities, e.g., violation reports.
- Provide remote and VPN connections security.

The Associate Information Security Officer is responsible for establishing processes to assure security, and communication with end users, including for example:

- Publishing guidelines to create passwords.

#### ***4.5 Computer Labs Security Officers***

Computer Labs Security Officers are Lab Assistant and proctors. They are responsible for installation of Windows updates and other required software on all labs computers. They are custodians of the lab workstations administrative passwords and are responsible for keeping them confidential. They are also responsible for physical security of lab equipment. Lab Security Officer can't leave his working place without a short -term transfer of the lab supervision to a devoted person.

#### ***4.6 AUA Departmental Database Custodians***

AUA Departmental Database Custodians are department employees appointed by Heads of Departments. They work in cooperation with Information Security Officer and Security Associate and are responsible for:

- Security of departmental databases,
- Granting access rights to the departmental server data,
- Timely backup of departmental server data.

#### ***4.7 Workstation Security Officers***

Workstation Security Officers are the ICTS Department IT Specialists. They are responsible for checking workstations software for viruses, antivirus program and other application program installation.

#### ***5. AUA Users***

AUA Users include faculty, staff, students, and other customers who are authorized to use the information technology assets and have an access to the AUA network and Internet. AUA users are responsible for timely updates of Windows updates.

### **6. Physical Access to Network Equipment**

#### ***6.1 General Introduction and Requirements***

The AUA has established controls over physical access to critical or sensitive hardware and the physical environment of that hardware for AUA. In addition to following the AUA guidelines, the ICTS Department has established more stringent controls over access to servers and enterprise network environment. Physical access to network servers may result in access to data on those systems.

AUA Network manager and System administrators must work in cooperation with the AUA Security Service to implement physical access and environmental control measures to protect the AUA's computing infrastructure. These security measures, which cover routers, switches, wireless equipment, all types of servers, desktop and laptop computers, and other mobile technology, should be commensurate with the value placed on the assets by the Department. Security measures should not adversely affect productivity and should be appropriate for the facility where the equipment is located.

All reasonable efforts should be made to ensure the safety and security of the hardware that comprises the AUA Network.

The following measures should be taken to physically safeguard the Department's information technology equipment and environment.

*a. Risk Assessment & Security Review*

The Department Head, or other department -assigned person, for each Department must periodically assess the physical security of information technology at each network site. The Departments' plans for security must be submitted to the AUA's Vice President and Chief Information Officer for approval. The Chief Information Officer, the Information Security Officer, the Security Associate, the Inventory Control Supervisor, and the Vice President will periodically review security procedures in all Departments.

*b. Access Control*

All Department's production files, databases, communications servers and all other critical network related equipment should be in secure environments; test files and equipment should be secured when possible, but less emphasis is put on these. In all situations, the list of individuals who have access to secured areas must be on file with the Chief Information Officer, Information Security Officer, and Associate Security Officer.

## **6.2 Workstation Security**

Reasonable efforts should be made to safeguard individual workstations. Workstations can be secured by securing the rooms where they are located and by physically attaching them to tables or work areas so that special tools are required to remove them from the premises. AUA also requires the following:

- Passwords should not be built into the logon script for auto- sign on.

### ***Faculty/Staff Workstations***

Faculty and staff are on site during normal business hours from 9:00 a.m. to 5:45 p.m. Due to flexible schedules and project requirements faculty/ staff may be on site both earlier and later. AUA faculty and staff are responsible for keeping the doors of their offices locked in their absence. Unauthorized access to offices is partly controlled by AUA Security Service.

### ***Student Workstations***

Student workstations are available in the computer labs during the posted hours. Lab assistant and proctors should be on duty for all hours of service. Students should be monitored when using computers in labs or classrooms. Computer classrooms are locked when classes are not in session.

## **7. Backups**

All servers' data is backed up routinely. The AUA should have a Disaster Recovery procedures established by ICTS Department. Backup procedures for central servers and databases are developed by the Information Security Officer and Associate Security Officer. The Information Security Officer in cooperation with departmental information custodians will develop disaster recovery and backup procedures for departmental servers and databases.

The Information Security Officer and Associate Security Officer will develop the schedule of backups.

## **8. Laptop and other portable technology**

Portable technology refers to any device designed to be carried from place to place, such as notebook, laptop, cell phones, tablets, LCD panels, etc. This equipment may be connected to a server for terminal emulation where modems and authority are provided.

The following applies to all uses of portable technology:

- AUA employees or consultants who are granted this permission may check out portable equipment. Availability is on a first come, first served basis.
- The work unit responsible for the unit will maintain a checkout log. This log, which may be electronic, should include the user's name, date of pick up and return, and where the equipment will be used. Checkout and check-in procedures will also include an inspection of the equipment, e.g. requisite cables and spare parts.
- Portable equipment and related software may only be used for AUA business.
- All copyright laws must be observed. Use of property for personal gain, or by non-AUA employees, except for authorized consultants, is prohibited.
- Where appropriate to the equipment and the location, it must be plugged into a surge protection device and kept in a locked, protective carrying case when not in use. Where possible, the equipment should be placed in a locked file or supply cabinet.
- Equipment should not be left unattended unless appropriately secured.

- Equipment should not be left in a vehicle where it could be exposed to temperature damage or theft.
- Be observant of surroundings when using equipment on the road to access AUA systems.

## 9. Home Placement of AUA-Owned Computer Equipment

In some cases, job duties require network access from home and it may be undesirable to check out a Department laptop or use an individual's personal computer. Requests for an AUA -owned computer to be placed in one's home will require justification, signoff by the employee's supervisor, and written approval from the Vice President. A copy of the written approval should be sent to the Chief Information Officer and the Inventory Supervisor. The ICTS End User Support team will maintain a list of individuals with AUA provided computers for off-campus work and this list will be available to those assigned to monitor any access activity.

## 10. Risk Assessment

Security is a critical application design feature. AUA will continue to use technology to secure data, e.g., security components of the Windows servers platform for the network. Risk must be assessed in relation to the following factors:

- Quality of the control mechanism
- Size of the threat
- Potential loss

Strategies for Security are cumulative and include:

- Low security required. Routine data backup, mechanisms to detect data corruption, and refresh corrupted data. Group ids are appropriate at this level only for general purpose/general access. The response to a security threat at this level is follow - up to determine the source of the threat depending upon the consequences of that threat to the university.
- Medium security required. Equipment is kept in locked facilities, user authentication is required at the time of access, individual user ids are required, passwords are encrypted, list of user ids to verify passwords, tools to assure that the individual accessing the system continues to be the person who logged on, possible time-out during long sessions to verify that the legitimate user continues to be the person accessing the system. The response to a security threat results in an examination of the source(s) of the threat.
- High security required. Equipment is kept in access -controlled facilities. Security measures include logging of users and access times, intruder detection alarms, regular security audits, encryption, and individual user ids. Network access of this device(s) should be excluded from access through the firewall. The response to a security threat results in energetic efforts to investigate the source of the threat and to implement strategies to prevent the threat from reoccurring.

## 11. Computer Crime

All users of information technology resources who are issued a user id must be aware that the following policy violations are considered as Computer Crimes:

- Accessing or attempting to access another individual's data or information without proper authorization (e.g., using another person's password to look at their personal information) Obtaining, possessing, using, or attempting to use someone else's password regardless of how the password was obtained
- Tapping phone or network lines (network sniffers)
- Sending an overwhelming number of files across the network (e.g., spamming or e- mail bombing)
- Intentionally releasing a virus or other program that damages, harms, or disrupts a system or network
- Intentionally preventing others from accessing services
- Sending forged messages under someone else's id
- Unauthorized access to data or files even if they are not securely protected.

## 12. Escalation

If an exposure to a breach of security is identified, report the exposure to the Chief Information Officer as soon as possible. The CIO will determine:

- The best course of action.
- The number of individuals who need to know about the exposure.
- If the exposure is beyond the Department's boundaries and will affect the AUA.

If so, the CIO will report the exposure to the Vice President.

## 13. Training

The AUA's CIO will arrange training for the Information Security Officer and those to whom the CIO has delegated authority. This training will address responsibility, authority, requirements for access and exemptions to access.

The AUA's CIO will regularly participate in training regarding responsibilities to design, implement, maintain, and upgrade a sound configuration of the

AUA's information technology assets. The CIO will also participate in training regarding strategies to train security staff in security responsibilities.

The Information Security Officer will regularly participate in training regarding emerging technology and strategies to protect university information technology resources. Associate Security Officer will participate in training identified by the Information Security Officer.

The Database Custodians in the Departments will participate in training regarding their respective roles as custodians of university data.

All department users of electronic assets of the AUA will receive training regarding AUA security policies and procedures and their respective responsibilities in relation to protection of the AUA's information technology assets.

#### **Related Documents**

**AUA Incident Management Procedure**

**AUA Risk Management Procedure**

**Change Management Procedure**

**IT Data Access Granting Procedure**