Purpose

Network security monitoring is an essential tool in detecting network traffic that violates existing laws, regulations, and policies. This document describes the monitoring, logging, and retention of network traffic at UCSF for the purposes of ensuring the confidentiality, integrity, and availability of UCSF systems, Electronic Information Resources (EIRs) and Electronic Communication Records (ECRs).

Definitions

Authorized User

Any UCSF faculty, staff, student, or other individual affiliated with UCSF who has been granted authorization to access an Electronic Information Resource or invokes or accesses an Electronic Information Resource for the purpose of performing his or her job duties or other functions directly related to his or her affiliation with UCSF. The authorization granted is for a specific level of access to the Electronic Information Resource in accordance with University policy. An example of an Authorized User is someone who handles business transactions and performs data entry into a business application or someone who gathers information from an application or data source for the purposes of analysis and management reporting.

Computer Support Coordinator (CSC)

A CSC is a UCSF staff member who provides comprehensive support for computing technology within a defined department.

Electronic Communications Records (ECR)

The contents of electronic communications created, sent, forwarded, replied to, transmitted, distributed, broadcast, stored, held, copied, downloaded, displayed, viewed, read, or printed by one or several electronic communications systems or services. This definition of electronic
communications records equally applies to attachments to such records and transactional information associated with such records.

Electronic Information Resource (EIR)

A resource used in support of UCSF activities that involve the electronic storage, processing, or transmitting of data as well as the data itself. Electronic Information Resources include application systems, operating systems, tools, communications systems, and data—in raw, summary, and interpreted form—and associated computer server, desktop, communications, and other hardware used in support of UCSF activities. Personally owned systems are included in this definition if they connect to the UCSF network or are used to process or store UCSF information.

Exceptions to Policy

Any deviations from this Policy, as to the business need or operational requirement must be documented and reviewed by Enterprise Information Security to assess the appropriateness and impact of the exception. Documentation must include requestor, policy exception, reason for exception, and length of time. Documentation can be in the form of email, paper document, or electronic document.

Resource Proprietor

The individual designated responsible for the information and the processes supporting the University function. Resource Proprietors are responsible for ensuring compliance with federal or state statutory regulation or University policy regarding the release of information according to procedures established by the University, the campus, or the department as applicable to the situation. Responsibilities of Resource Proprietors may include, for example: specifying the uses for a departmentally-owned server; establishing the functional requirements during development of a new application or maintenance to an existing application; and/or determining which individuals may have access to an application or to data accessible via an application. All Electronic Information Resources are University resources, and Resource Proprietors are responsible for ensuring that these Resources are used in ways consistent with the mission of the University as a whole.

Restricted Information

The term restricted information describes any confidential or personal information that is protected by law or policy and requires the highest level of security protection whether in storage or in transit. See BFB IS-2 for further discussion on Restricted Information.
Examples of Restricted Information include:
- Personally Identifiable Information (PII) protected by SB1386
  e.g. SSN number, driver license information, financial account information
- Electronic Protected Health Information (ePHI)
- University financial information
- Proprietary information
- Information that, if disclosed, would cause embarrassment or damage to the University.

Policy

A. Scope

This policy applies to all users of UCSF EIRs and to all EIRs that are used to conduct business for UCSF. This includes personal and third party systems that are used for UCSF business purposes and extends from the networking peering points between UCSF-controlled networks to the end-user system.

B. Privacy

The University of California respects the privacy of the members of the University community and has established policies and procedures consistent with federal and California law to guide the conduct of University activities relating to personal information. The monitoring of network traffic and the use, storage, disclosure, handling, and disposal of this information shall be done within applicable laws and policies.

C. Associated Policies and Procedures

Collection and monitoring of network traffic is addressed in the University of California Electronic Communications Policy (ECP). Privacy and Confidentiality is addressed in ECP Section IV. Monitoring and analysis of network traffic for security related matters are covered in ECP Section IV.C (b) and in ECP Section V.B.

UCSF definitions of information types and roles and responsibilities are found in UCSF Policy 650-16: Information Security and Confidentiality.

D. Access With and Without Consent

The ECP allows for routine monitoring and analysis of network traffic without user consent (ECP Section IV.C (b)). Analysis and monitoring that extends beyond routine practices requires user consent. Access without consent may be granted if the conditions detailed in ECP Section IV.B (Access without Consent) are met. Each instance of access without consent must be documented.

E. Requirements

- UCSF employees who operate and support EIRs may observe network traffic during regular business practices. Systems personnel shall not intentionally search the contents of electronic communications or transactional information for violations of law or policy.

- If system personnel inadvertently discover or suspect improper activity that violates policy or law they must notify Enterprise Information Security (EIS) or report violations consistent with
the Policy on Reporting and Investigating Allegations of Suspected Improper Governmental Activities (the "Whistleblower Policy?").

· Network traffic traversing UCSF networks is inspected on a routine basis by EIS and Medical Center information security, primarily to confirm malicious or unauthorized activity. Inspections do not require user consent.

· Network traffic traversing UCSF networks may be inspected or captured for the purposes of network and system administration by parties other than EIS or Medical Center security staff. The content of such traffic may not be disclosed to other parties except to assist in network and system administration. Any such disclosure shall be conducted on a least-perusal basis: data must be destroyed when no longer needed and access must be restricted to only those responsible for necessary network or system administration.

· Monitoring or capturing of network traffic conducted on a routine basis outside these parameters must be approved by the Information Security Committee.

· Routine inspection for malicious or unauthorized activity is conducted by use of information security tools such as network intrusion detection systems, network traffic monitors, firewalls, and system logging. Inspection may include monitoring or logging and retention of network packets and must be conducted on a least-perusal basis.

· All inspections must abide by applicable laws, regulations, and guidelines.

· Analysis and inspection of network traffic for malicious or unauthorized activity must be completed by a UCSF employee designated as having the authority of ensuring the confidentiality, integrity, and availability of UCSF EIRs.

· Access to analyzed or captured network traffic used for security monitoring must be logged and shall be restricted to EIS and Medical Center information security staff. Access by other staff members for the purposes of determining authorized and unauthorized activity shall be limited to a least perusal basis. Request for access by other staff beyond this scope shall be handled as an access-with or -without consent request.

· In exigent circumstances, access to analyzed or captured network traffic for incident resolution may be granted on a least perusal basis to other UCSF employees or non-UCSF persons as determined by EIS or Medical Center information security. This access must be documented and adhere to the requirements of this policy and any other applicable regulations and guidelines. Access must be terminated as soon as it is deemed no longer necessary by EIS or Medical Center information security.

· Anonymized or aggregated network traffic may be made available for the purposes of network or security performance analysis or education.

· Analyzed or captured network traffic must be disposed of when it is determined to be no longer useful for the purposes of information security or network or system administration.

F. Implementation
Implementation of this Policy is the responsibility of each Department and School within UCSF and all Users. All Users are responsible for understanding this Policy and ensuring that their use falls within its scope.

G. Violations and Sanctions

Minor or accidental violations of this Policy may be handled informally, either through electronic email, education, or discussion.

More serious or repeated Policy violations may result in temporary or permanent loss of access privileges or modification of these privileges.

Violators of this Policy may be subject to disciplinary action up to and including dismissal or expulsion under applicable University policies and collective bargaining agreements. They may also be subject to any federal or state penalties for violations.

Individuals who become aware of a violation or potential violation of this Policy should inform their supervisor, department head, or Internal Audit.

In the event of a violation of this Policy that involves possible unlawful action by an individual, the Locally Designated Official, the employee's immediate supervisor, or other appropriate official should immediately be notified in accordance with the Policy on Reporting and Investigating Allegations of Suspected Improper Governmental Activities (the "Whistleblower Policy"). Notification should be made before any action is taken, unless prompt emergency action is required to prevent bodily harm, significant property loss or damage, loss of significant evidence of one or more violations of law or of University policy, or significant liability to the University or to members of the University community.

*Resources* found in violation of this Policy may be removed from the UCSF network or prohibited from connecting to the UCSF network until the violation is mitigated. Notifications of disconnects will be communicated to the Resource Proprietor as quickly as possible; however, Resources may be disconnected prior to notification.

UCSF may disconnect or limit access to a *Resource*, groups of *Resources*, the UCSF network, and the Internet without notice in order to protect *Resources*, both external and internal, under exigent circumstances.

Responsibilities

Contact Responsible Office (above) with any questions.

Related Policies

- [650-16 - Information Security and Confidentiality](#)

References

- [UCSF Access With and Without Consent](#)