Purpose
This document provides guidance on the procedures used in defining data that needs to be kept in archives in the event of deletion, whether incidental or intentional. It also serves to define the methodology for backing up data, storing backed up data, validating required data, and restoring data.

Scope
This procedure applies to all data stored within systems owned by the Computer Science Department.

Data Definition
Data requiring backups to be kept includes (but is not limited to) the following:
1. User owned data stored on EMC file servers.
2. Financial data.
3. All email stored on either Unix mail servers or Microsoft Exchange servers.
4. Archived user data.
5. User account definitions including, but not limited to NIS/LDAP databases.
6. Research data at the discretion of the data owner and the Director of Computing Resources.
7. All other data not explicitly defined in 1-5 at the discretion of the data owner and the Director of Computing Resources.

Backup Procedure
- A full backup of all data to tape is to be performed on the first Friday of every month.
- An incremental backup of all data to tape should be made at a minimum of once every 24 hours, preferably during times of minimal system use.
- Times at which backups are taken are at the discretion of the Backup Administrator and the Director of Computing Resources.
- Additional backups, either global or specific may be performed at the discretion of the Backup Administrator and the Director of Computing Resources.

Data Integrity Verification Procedure
- The Backup Administrator is to perform a test of restoring data at a minimum of once per semester to ensure the integrity of backed up data. Additional tests may be performed at the discretion of the
Backup Administrator and the Director of Computing Resources. Restore requests may serve in place of this verification procedure at the discretion of the Backup Administrator and the Director of Computing Resources.

**Data Storage Procedure**
- All backup tapes are to be stored in a separate building from the systems on which data resides. Exceptions for this are system backups on the backup system itself, including but not limited to indexes and backup logs.

**Restoration Procedure**
- Data may be restored as necessary at the discretion of the data owner, Backup Administrator, or Director of Computing Resources.
- Data restoration requests must be accompanied by a chain of communication in an issue tracking system. The preferred method for this is a request email submitted to root@cs.odu.edu.

**Definitions**
- **User** – Any account of the Computer Science Department systems.
- **Full Backup** – A backup technique in which all files marked for backup are backed up in full regardless of whether previously backed up within any scope of time.
- **Incremental Backup** – A backup technique in which only modified within a given scope of time are backed up.

**Revision History**
Work in progress.