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1.0 PURPOSE:

Computers need to be periodically improved in terms of quality, standard, and performance. The operating system (OS) of a computer is one aspect that can be upgraded to enhance the stability and performance of important software programs.

2.0 SCOPE:

All procedures are relevant and limited to Apple desktop or Apple laptop computers that warrant an upgrade by a supervisor. A computer must meet the minimum requirements before the OS can be upgraded.

3.0 RESPONSIBILITIES:

Trained individuals with competent computer backgrounds are responsible for performing the upgrade. The upgrade should be reported as successful or unsuccessful.

4.0 **DEFINITIONS**:

OS – The operating system of the computer.

Software – Program or groups of programs that perform a specific task.

5.0 REFERENCES:

Mac OS X installation manual.

Mac OS X Panther Support: http://www.apple.com/support/panther/install/

Mac OS X Tiger Support: http://www.apple.com/support/tiger/install/

6.0 EQUIPMENT:

6.0.1 LAPTOP POWER SUPPLY

It is recommended that laptop computers be connected to a power supply during any installation to ensure that the computer does not turn off when the battery life is depleted.

7.0 PROCEDURES:

7.0.1 **SETUP**

- a. Make all the appropriate connections to the machine that will allow for the use of a keyboard, mouse, and monitor. All other peripheral connections are optional.
- b. Turn on the machine.

7.0.2 BACKUP DATA

Do not perform an upgrade on a computer until it's hard drive data has been archived. Refer to SOP: Data Management and Archiving.

7.0.3 ACQUIRE SPECIFICATIONS

Originator:	DOC #:	Active Date:	Retired Date:
Reviewed:		Approved:	
Name & Title	Date	Name & Title	Date

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For a computer running MAC OS 9.x

- a. Select the Apple icon at the top left of the screen and select Apple System Profiler
- b. Record the built-in memory, the OS version, and the processor info.
- c. Close the *Profiler* window and open the hard drive icon.
- d. Record the available hard drive space.

For a computer running Mac OS 10.x

- a. Select the Apple icon at the top left of the screen and select "About This Mac".
- b. Record the current memory, OS version, and processor information.
- c. Click "More info..." for a more comprehensive list of specifications.

7.0.4 CHECK MINIMUM REQUIREMENTS

Mac OS 10.4 (Tiger)

- PowerPC G3, G4, or G5 processor
- Built-in FireWire
- 256 MB of physical RAM
- 3.0 GB of hard drive space available
- DVD drive for installation

Mac OS 10.3 (Panther)

- PowerPC G3, G4, or G5 processor
- Built-in USB
- 128 MB of physical RAM
- 2.0 GB of hard drive space available
- a. Make sure that the specifications meet the requirements for an upgrade. Choose the upgrade to be the maximum allowable OS.
- b. If the computer does not meet the requirements, inform the supervisor. Otherwise proceed with installing the OS.

7.0.5 INSTALL THE OS

- a. Put the first installation disc into the CD/DVD drive.
- b. Double-click the "Install Mac OS X" icon, then click restart.
- c. Follow the onscreen instructions with the following in mind:
 - DO NOT create an Apple ID.
 - During the *Installation Type* step, go to *Customize* and check X11 to be installed. Continue by clicking *Upgrade*
 - When asked what volume to install under, select the main hard drive and choose to Archive and Install
 - Register the supervisor's name with the Robarts Research Institute's address information: 100 Perth Drive, London, Ontario, Canada N6A 5K8.
 - Under *Create Your Account*, choose the shortname to be the supervisor's first and last name in lowercase without spaces.

7.0.6 INSTALL STANDARD SOFTWARE

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The following is a list of standard software that should be installed on the computer.

- Microsoft Word
- Endnote 8
- Deja Vu
- Instat
- Microsoft Explorer
- Chart
- Adobe Photoshop 7
- VFFView (requires MacOSX Xcode Tools)
- MicroView

7.0.7 CHECK FOR WIRELESS INTERNET SUPPORT

This section of the procedure is only applicable for a laptop computer.

To check if the computer has a wireless card:

- a. Select the Apple icon at the top left of the screen and click **About This Mac**.
- b. Click *More info...* in the new window. This runs the *System Profiler*.
- c. Select the **Network** tab on the left panel.
- d. Select the *Airport* tab on the right panel. If you do not see an Airport tab, the laptop does not have a wireless card. You cannot continue with this procedure. Otherwise:
- e. Record the Ethernet address of the Airport card.
- f. Request access to the wireless network by emailing **support@robarts.ca**. Provide the following information in the email:
 - The OS version.
 - Ethernet address of the wireless card
 - Name of the primary user
 - Given name of the computer

NOTE: This is done on a computer with internet access.

g. Wait for a response with further instructions.

7.0.8 SHUTDOWN

IMPORTANT: Do not shutdown the computer if it is performing an installation. Doing so will cause the installation to fail.

- a. Select the Apple icon at the top left of the screen, and select **Shutdown**
- b. Press Shutdown.

7.1 CONTINGENCIES:

7.7.1 INSTALLER DOES NOT OPEN

If the installer does not open after the first install disc has been placed in the CD/DVD tray, restart the computer while holding down the C key. This will boot the computer using the install disc.

8.0 REPORTING AND DOCUMENTATION:

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List information required for report, method of recording, and name and numbers of form(s) to use. Information may include the results of positive and negative samples, standard preparations, calibrations, and equipment monitoring values – that is, any controls that help to ensure that the procedure was performed as specified.
[Unsure of reporting method]

9.0 REVIEWS AND REVISIONS:

This procedure shall be reviewed for compliance and effectiveness and revised as necessary.

10.0 ATTACHMENTS and REFERENCE FORMS:

List attached documents, manuals, sample forms, etc. in the following format:

ATTACHMENT A. (Name)

ATTACHMENT B (Name)

DOC # Active Date: Retired Date:
