

# Computer Setup & Data Management

**Below are the steps you should take to purchase, setup, and manage a new workstation.**

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## Purchasing Computers & Hardware:

When purchasing any computer hardware with SJSU, SJSURF, or Lab-specific funds, we recommend contacting the IT Group by submitting an [IT Helpdesk Ticket](#), so IT can help you find the best hardware to fit your specific needs.

## **Recommended Configurations**

Browse the workstation configurations available and recommended by IT through the SJSU Workstation Refresh program.

- [Workstation Refresh \(No-Cost\)](#)
- [Workstation Refresh \(Discounted\)](#)

## **High Performance Configurations**

- If you or your lab has a need for a high performance machine for a specific purpose, please contact IT by submitting an [IT Helpdesk Ticket](#). The IT Group will work with you to decide what hardware will best suit your needs, whether it is a High Performance Desktop Workstation, a Virtual Machine in the on-premise environment, or a Cloud Compute Instance.

## **Storage Devices**

- **External Hard Drive**

- For backing up your workstation, IT recommends a portable external hard drive. Below are a few recommended drives.
  - [Seagate Backup Plus Slim](#)
  - [Western Digital My Passport](#)

- **Network Attached Storage (NAS)**

- For lab environments, where you may have lots of data that needs to be shared between many workstations, IT recommends purchasing a NAS. These are physical data storage servers, connected to the network, that allow you to keep your lab data in a centralized location and are accessible by whomever you give access.
- Be aware that any lab wanting to purchase a NAS must do so with their own funds.
- If you are thinking of purchasing a NAS for your lab, please submit an [IT Helpdesk Ticket](#). The IT Group will advise and assist in the process of planning, purchasing hardware, and getting the NAS setup for use.

## **Hardware Upgrades**

- In some cases, a slow workstation's performance can be improved by an increase in memory or replacing a hard drive with a solid-state drive. If you are thinking about a hardware upgrade for your workstation, please submit an [IT Helpdesk Ticket](#). For more information, see the [Hardware Upgrades page](#).

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## **Operating System (OS) & Software Configuration:**

### **Operating Systems and Updates**

- Install the latest operating system compatible with your device and perform regular updates to keep it running quickly and efficiently. For more information, visit the

[Recommended Operating Systems page.](#)

## Software Installation

*To see what services and technologies you have access to at MLML, check out our [Service Level Agreements](#).*

- Basic software recommendations include: [Microsoft Office](#), [Adobe CC](#), and [Google Chrome](#)
  - To learn about all software available through MLML and other recommended software visit our [Software Page](#)
  - Software Installation Procedures can be found on our [Knowledge Base](#)
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## Security:

All State-Owned computers will need to meet certain security requirements set by SJSU that IT will install (e.g., Spirion), but a password manager will also need to be setup by you and is required.

## Password Management

- Learn how to keep your passwords robust, safe, and securely stored please visit our [Password Storage & Management Page](#).

## Information Security

- IT **strongly** recommends thoroughly reading and implementing the advice on the [Information Security Overview](#) to keep you and your data safe online.
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## Data Management:

### Computer Backup

There are two methods you may use to backup a computer:

### 1) Backup User Files to Hard Drive

- Purchase an external hard drive to backup your workstation (recommended 1-2 TB)
- This hard drive should be dedicated for this purpose only
- Setup the following backup programs available on your device to backup to your external hard drive:
  1. Time Machine - Apple Mac
  2. File History (or equivalent) - Windows PC

### 2) Create a Disk Image

- Imaging your computer's disk creates a replica of the contents on your computer
- Using a differential setup creates one initial full image of your disk, then the proceeding images save only the content that has changed since the initial image

## Storage Management

- To keep your workstation working properly it is important to properly manage the files and data on the computer
- Backups should be routinely scheduled - can automatically set this up in the backup computer settings (see Backup section above and follow link)

## File Migration

To successfully migrate folders and files from an old device to a new device, visit the [File Migration Page](#).