



## Technology Toolkit

### Scope

- Telework Equipment: maximize use, health/safety, bandwidth issues
- Computer/equipment standards

### Goal

In a working environment where employees are split between telework and on-campus offices, it is important to keep employees connected and productive regardless of their physical location.

Technology can be used to:

- Simplify and standardize communication between all employees
- Empower staff to work efficiently and effectively by providing appropriate software solutions
- Promote a paperless work environment
- Streamline file access and file sharing for all employees
- Ensure Cal Poly data remains safe and secure
- Help employees establish a comfortable, ergonomic work environment
- Create a sense of “office” independent of physical location

By using a well-thought-out combination of hardware and software, much of the friction telework may cause can be eliminated.

### Computer Hardware

The operating assumption here is that employees will not be 100% remote. They will be splitting time between campus and a telework worksite. Moving between locations and having to switch computers can introduce complexities for employees. Here are three different ways to minimize those complexities:

Option one: Each employee has one employer-issued laptop that is shuttled between their telework worksite and on-campus office.

Providing an employee with a laptop is the simplest way to keep employees safe and productive. With a laptop, no matter the employee’s location, they are always working on the same familiar computer. In most cases, this will also alleviate the need to connect to a remote desktop. Additionally, a Cal Poly Corporation issued laptop will:

- Meet minimum operating performance standards as established by IT
- Be properly configured for connecting to any campus network the employee needs to access for work
- Be configured properly for virus protection
- Provisioned to receive software and system updates at the same time as on-campus computers
- Alleviate (in most cases) the need to connect to a remote desktop

It is recommended that employees have a dock to connect and extend their laptops. Doing so allows the use of a full-size keyboard and mouse, as well as an external monitor. This can alleviate many of the ergonomic problems stemming from laptop use.

#### Option two: Employee provided computer to be used at home

A personal computer can be used effectively for teleworking. This does require that the employee have access to a computer when on campus. If the employee will be using shared workstations on campus, they should be configured consistently so the setup will be familiar regardless of the computer they are using.

Home computers should:

- Meet minimum IT specifications
- Follow all campus guidelines for connecting a personal device to the campus network.
  - [Top 10 Security Practices - Information Security - Cal Poly, San Luis Obispo](#)
  - [Faculty and Staff Guide for Remote Work - Cal Poly ITS Knowledge Base - Knowledge Base \(atlassian.net\)](#)

#### Option three: Virtual Desktop Infrastructure (VDI)

\*Note: this option is not currently viable as the campus does not have a VDI environment established.

With VDI, an employee's "computer" is a virtual device running from a central server that can be accessed from anywhere using a variety of devices, including a laptop, tablet, Chromebook, etc. The device used to connect to the virtual computer is simply a thin client. All the software the employee will use is installed on and runs from the virtual computer.

#### Suggested Hardware:

Whichever of the hardware options you choose, please refer to the following guidelines:

- For Corporation, please refer to the CPC Hardware Recs 2021 document (attached)
- For all other employees, refer to the hardware recommendations from ITS:
  - [Recommended Computer Models - Cal Poly ITS Knowledge Base - Knowledge Base \(atlassian.net\)](#)

#### **Software**

The campus has a wide range of software that employees can install and use. While availability does vary some between business units, there are several core applications available to the entire campus, including Microsoft Office 365, Zoom, and Sophos Antivirus. Each business area must establish software standards, so teams are using the same tools.

For purposes of this document, the software is broken down into three general areas:

1. Security: software that is designed to keep individual computers safe
2. Productivity: software that facilitates getting work done
3. Communication: software that facilitates communication between employees

## Security

Any computer connecting to a campus network or using campus resources must have the following applications installed:

- Sophos antivirus
- Global Protect VPN
  - Required to connect to the campus VPN from off-campus
- Duo
  - This is the multi-factor authentication (MFA) application used by campus and is required to access the Cal Poly portal
- LastPass password manager
  - While not required this is strongly recommended to manage and encourage the use of strong passwords

## Productivity

ITS maintains several lists of software available to campus users:

- Basic: [Software - Information Technology Services - Cal Poly, San Luis Obispo](#)
- More comprehensive: [Academic Use Software - Cal Poly ITS Knowledge Base - Knowledge Base \(atlassian.net\)](#)

Choosing software from these lists means you are using software already approved for campus use. In many cases, it is also software that does not require additional licensing fees. The basic recommendations for productivity software that does not require an additional license fee are:

- Microsoft Office 365 for Outlook, Word, Excel, and PowerPoint
  - These are available as either cloud or desktop installed versions
- OneDrive for cloud storage of files
  - Installing the desktop application will streamline file access and management
- Microsoft Planner for lightweight project management
- Microsoft Tasks for tracking to-do's
- Microsoft OneNote for organizing notes

## Communication

Multiple options perform similar functions in this area, so it is important to establish a standard set of tools used in each operational area. A well-thought-out communication plan eliminates the need for employees to use their personal phone numbers for work-related business.

All three of the following options works on PCs, tablets, and smartphones.

- Zoom
  - Video conferencing, team or individual chat, voice calls, desktop sharing
- Microsoft Teams
  - Video conferencing, team or individual chat, voice calls, desktop sharing, OneDrive integration, meeting notes, collaboration
- Slack
  - Video calls, team or individual chat, voice calls, desktop sharing

In addition to software used for computer or smartphone-based communications, there are options for traditional telephone service as well:

- Call center type software for department-specific phone numbers that allow for better call routing when staff schedules are variable
- Softphones
  - Benefits of the softphone
    - No traditional landline needed
    - Calls answered via an application on a smartphone or computer instead of landline forwarding
    - Can initiate outgoing calls from the softphone application instead of a personal mobile phone to eliminate the sharing of a personal mobile phone number
    - ITS is piloting MiColab as the softphone application. It installs on computers and smartphones, with a web-based application as well

**All employees using CPC owed computer equipment for telecommuting purposes must check these items out with CPC IT and fill out all appropriate tracking forms.**