Hardware Requirements - DRAFT

ALL SYSTEM ASSET ACQUISITIONS MUST start with a service request made through the ETS Service Portal.

All system assets owned and operated within The College of Engineering must meet a set of minimum hardware requirements. The following details what must be included at the time of purchase based upon the hardware type and intended location and intended use.

Some requirements are dictated by external agencies. In the event that the requirements change, it may be necessary to modify existing hardware, or retire it, as the circumstance dictate.

It is possible that a specific business need will conflict with one of these requirements. If such a situation occurs, it can be addressed and resolved within the scope of the asset acquisition ticket.

Desktops and Laptops

1. All systems must have a Trusted Platform Module or approved emulator.
   a. Version 2.0 or newer
   b. Applies to both Windows and Linux systems
   c. macOS devices are currently excepted from this requirement
2. All systems must have active firmware and driver support from the selling vendor or manufacturer.
   a. This is a requirement of the ISCR.
   b. Compensating controls and/or exceptions may be made in specific circumstances with older hardware. Requests for the mechanisms must be made through the ETS Service Portal.
   c. If a compensating control cannot be devised and an exception is not approved, the asset becomes non-compliant and would be retired.
3. "Keep Your Hard Drive".
   a. If it is an option at the time of purchase, the Dell "Keep Your Hard Drive" option (or similar for other vendors) must be selected. This allows for the drive to be kept and locally retired rather than having it return to the vendor/manufacturer for warranty repair or like services.
   b. For vendors that do not support this option, depending on the specifics of the data and drive, the asset custodian may be required to purchase a replacement drive rather than allowing the under-warranty/support drive to be repaired off-site or returned to the vendor for a replacement.
   c. The intended operating system for a device must be a purchase option from the vendor. If the OS is not listed as a purchase option, there is a good chance that not all drivers and firmware have been tested, or perhaps even exist, for the desired hardware.

Servers

Servers are usually individualized builds, meeting the specific needs of a specific project or use case. As with any other system asset, the acquisition process starts with a ticket to the ETS Service Portal. Server requests start with a conversation about how the server will be used, budget constraints, and things of that nature. The more detail included with the initial request, the quicker the overall process will go.

If a server is to be housed in an ETS-managed "server room", it must have the following:

   1. A rack-mountable form factor with air-flow passing from front to back.
   2. Rails for mounting in a standard rack.
   3. External dimensions that fit a "standard rack"... 19" wide, up to 36" deep.
      a. Some modern servers require additional depth. ETS may not be able to accommodate such a device, so the sooner this can be discussed the better.
   4. The server must have out-of-band management such as a Dell iDRAC, an HP iLO, or IPMI.
   5. Network and power connections must be compatible with the equipment serving the hosting rack and must connect to the rear of the server.

Warranties and Support/Maintenance Contracts

It is often most cost effective to purchase extended warranties, or vendor-support/maintenance contracts, at the time a device is initially purchased.

In all cases, ETS recommends a minimum of 3 years support on the purchase of all new hardware. For systems that have a high-cost associated with down-time, it is recommended that support be purchased for the full duration of the assets expected life time. In most cases a "next business day, on-site" (NBD) contract is the best option. Same-day options may be available for critical systems.

Where possible, a "keep your hard drive" option should be matched to the full duration of the support contract. If this option is not purchased or is not available, the asset custodian may need to purchase a replacement drive even if the defective drive is under support. Depending on the data classification and use of the drive, sending it to an outside agency may not be permitted.

Note 1: ETS provides hardware support for ETS-managed systems that are under warranty/support contracts. Hardware failures on systems that do not have vendor support may or may not be serviceable by ETS staff depending on the specifics of the issue and current work-load. If the repair requires off-site shipping, it will be the responsibility of the asset coordinator to send and receive the device. ETS does not stock shipping containers or packing materials.

Note 2: A system asset without a support contract is not necessarily non-compliant with ISCR requirements for driver and firmware patches. Many vendors offer such updates regardless of contract status. but not all do. ETS recommended vendors offer this service. If the asset custodian selects a vendor other than an ETS recommended option, it is the responsibility of the custodian to ensure update availability if the asset is used beyond the life of the purchased contracts.
Vendor Selection Considerations

There is an OSU Policy that directs all purchases to the vendors in Workday with the exception provided below.

https://policies.osu.edu/assets/policies/purchasing-policy.pdf

We are mandated to use marketplace (i.e. BuckeyeBuy) sellers. Non-catalog requests are only allowed "When goods and services are not available from internal suppliers or the MarketPlace, when special instructions cannot be provided any other way, or when an emergency dictates the order be expedited, a non-catalog/special request may be placed."