



# Technology Guidelines

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## **Product Support Services**

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## **PURPOSE**

To provide a perspective for hardware and software support services and general guidelines for IT products as it relates to useful life and technical life.

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## **SCOPE**

This document covers hardware and software support for the desktop computers, campus servers, college servers, network equipments, mobile devices, general application/file servers, and related software products.

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## **APPLICABILITY**

This guideline is applicable to servers used for file sharing, print sharing, and other general LAN services to include e-mail, domain name services, security, etc. Also covered are client desktop and notebook computers. Servers required for VCCS Enterprise applications or applications requiring unique or special hardware configurations are not covered.

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## **GUIDELINE**

The information outlined in this document defines a minimum set of hardware and software specifications. The document will be reviewed as necessary to reflect changes in LAN technology and customer requirements.

## **GENERAL INFORMATION**

A customer driven Information Technology Infrastructure requires a common set of expectations from the customer perspective. These expectations can be defined in the

form of connectivity, capability, and support available from the Information Technology Infrastructure.

A primary objective of this document is to define a set of expectations for hardware and software support services. A minimum set of expectations provide benefits which include: more successful roll out of new services, reduced support costs, reduced complexity, and improved system quality and flexibility. Furthermore, guidelines provide and communicate a common direction for technology growth in VCCS.

The information provided below is divided into five general areas. Each general area includes a list of computing equipment and software products, which form the minimum guideline for the area described. A description of 'level of support' is included with each software product which is helpful in setting expectations regarding product information, consulting services, and product defect support. The five general areas include:

- **Client Desktops:** This area includes desktop and notebook computers that are generally assigned for individual use. These systems are connected to a campus LAN that is connected directly to the Network. Virginia or that has remote access to the campus network services.
- **Campus Servers:** This area includes computing systems that provide a variety of services to desktop 'client' computers in a campus network. These systems may serve as file servers, print servers, e-mail servers, LAN domain servers, etc.
- **College Servers:** Same as the campus servers but would provide college-wide services.
- **Network Devices:** This includes all network routers, switches, bridges, gateways, and hubs.
- **Utility Servers:** This category includes computing systems that provide system-wide, college-wide, or regional services. These systems may provide DNS services, e-mail services, computational services, transaction processing, etc.

## **Product Support Expectations**

### **Introduction**

Information Technology Services maintains models and guidelines posted on the System Office web site that detail supported computer hardware and software products. While colleges may use this information to assist with the selection of hardware and software, the intent of the product information is to identify which products have support services and enumerate the level of support available for each. Supported products are items, which have successfully been validated in a VCCS approved pilot project and integrated within VCCS information technology infrastructure.

### **Product Support Considerations**

The primary objective is to support the most current version of software products because they will often offer users more functionality and fewer problems. It is understood that colleges will often need time to implement newer software as it becomes available. Therefore, unless otherwise noted, VCCS will support the most current major version, as well as the last product version or release for all client software products. If the current release has been available for at least one year, then only the current release is supported.

### **Product Support Additions**

Colleges may request that other products or older versions be considered for addition to the list by formally contacting the Vice Chancellor ITS and providing the appropriate justification. VCCS Governance will make the final decision on all requests and questions regarding product support.

### **Product Support Deletions**

The criteria for ending product support is identified as:

1. Newer version or an equivalent product has replaced the existing version of a product.
2. The product vendor no longer provides support.
3. The colleges no longer need the product.
4. The product has been replaced by better technological solutions.
5. Funds are no longer available to support or license a product or staff is no longer available to service a product.
6. A product is no longer compatible with the college or VCCS direction for providing technology.

### **Product Support Services**

The initial point of contact for customers wishing to request product information or report product problems will be provided by the College Customer Support Services or Help Desk organization.

In order to clearly identify the level of support users should anticipate for each software or hardware product listed, three basic services are identified: information, defect, and consulting. These services are more fully described in the following:

1. Information Services  
Users should expect the following information to be available for supported products:
  - a. A brief description of a product's function and features.
  - b. A description of a product's hardware and/or software requirements.

- c. A description of known problems or limitations that should be considered when using the product.
- d. A description of product usage manuals and where they can be obtained.
- e. A description of how to access the product, or information on how to obtain a copy of the product along with basic installation instructions.
- f. A description of how to obtain additional training for a product if training is available.
- g. A description of any known product information sources such as list serves, newsgroups, or user groups, etc.

## 2. Defect Services

Defect services provide users with a resource to identify and resolve software or hardware product failures. Defects include situations where a product ceases to function or does not function as described in product documentation. The System Office Customer Support Organization may provide hardware and software defects support directly or through vendor supplied product support.

## 3. Consulting Services

Consulting services provides users with a resource to answer questions or provide guidance regarding the use of a software or hardware product. Questions will be answered or guidance provided by referencing available documentation or by facilitating consultation with other known experts on and off campus. Each college is expected to provide a minimum level of support for their customers. The college can elect to contract for these services from the VCCS Systems Office or from a service provider.

## Equipment Life Cycle for Information Technology

The following depicts the equipment life cycle for Information Technology. Technical Life as it relates to these guidelines is defined as the period in which vendors initially introduces new products until those products are fully accepted into the general market place. Useful life is defined as replacement within the 30-36 months following the end of technical life.

Technical Life	Useful Life	Equipment
12 - 18 months	30 - 36 months	
<----->	<----->	
<----->		
Replacement 4.5 years		<i>High End Computers</i>
Replacement 4 years		<i>Mainstream Computers</i>
Replacement 4 years		<i>Campus Servers</i>
Replacement 4 years		<i>Other Equipment</i>

The Guidelines outlined in this document sets 4 years as the standard replacement cycle for all equipment identified in this document except high end notebook and desktop computers. The high end computer configurations tend to have a longer technical and useful life thereby potentially extending the deployment of this equipment on the campus. It is highly recommended that a four-year maintenance contract be put in place when the equipment is initially purchased to include any warranty period.

Note: Colleges can document cause to continue use of selective equipment beyond the replacement cycles outlined above but that equipment should not be assigned to mainstream customers or used by students.

## **Software**

### **Primary Operating Systems**

The following table provides a brief summary of primary operating systems and software components in each the platforms listed below.

#### **Transition of Environments**

<b>Platform</b>	<b>Useful Life</b>	<b>Technical Life</b>
Client Desktop	Windows XP, Windows Vista	Windows 7
Client Notebooks	Windows XP, Windows Vista	Windows 7
Campus Servers	Windows 2003, Red Hat Enterprise Linux 4.x	Windows 2008, Red Hat Enterprise Linux 5.x
College Servers	Windows 2003, Red Hat Enterprise Linux 4.x	Windows 2008, Red Hat Enterprise Linux 5.x

Note: Colleges should develop plans for phasing out Windows XP before 2011. An earlier date is recommended should the available technology and funding permit.

## **Hardware**

### **Desktop Hardware Support List**

The following table provides a brief summary of desktop, notebook, and server hardware supported. A more detailed set of specifications can be found in the VCCS Desktop and Notebook Computer Guidelines.

### Transition of Environments

Platform	Useful Life	Technical Life
Client Desktop	Intel Pentium D	Intel Core 2 Duo, Intel Core 2 Quad
Client Notebooks	Intel Pentium D	Intel Core 2 Duo, Intel Core 2 Quad
Campus Servers	Intel Xeon, Itanium	Dual Core Intel Xeon
College Servers	Intel Xeon, Itanium	Dual Core or Quad Core Intel Xeon

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