Information Technology Infrastructure, Architecture, and Ongoing Operations

1.0 Purpose

It is critically important that Virginia Tech’s information technology (IT) infrastructure, architecture, and ongoing operations support the mission of the institution. To help ensure this need is met, decisions affecting these areas must reflect standards, guidelines, and practices found to be effective in the higher education environment. This policy establishes the nationally recognized codes of practice with which the university aligns its IT infrastructure, architecture, and ongoing operations.

The Commonwealth of Virginia Restructured Higher Education Financial and Administrative Operations Act of 2005 grants institutions additional authority over financial and administrative operations, on the condition that certain commitments to the Commonwealth are met. Virginia Tech’s Management Agreement with the Commonwealth of Virginia provides full delegated responsibility for management of the institution’s information technology infrastructure, architecture, and ongoing operations. This delegation includes the authority to conduct these activities in accordance with industry best practices appropriately tailored for the specific circumstances of the university, in lieu of following Commonwealth-determined specifications. This policy documents the industry best practices with which the university will align its infrastructure, architecture, and ongoing operations.

2.0 Policy

The university will maintain a list of specific standards and guidelines that should influence decisions affecting key components of its IT infrastructure, architecture, and operations. These standards and guidelines will align with industry best practices as described by EDUCAUSE, Internet2, and others within higher education, as well as those from selected technology industries. It is not the intent of this guidance to in any way inhibit research or other institutional endeavors that by their nature may require the use of cutting-edge technology not yet appropriate for normal use. The guidance is descriptive rather than prescriptive to achieve flexibility where needed. The ultimate goal is to create logical relationships between information technology resources and the mission of the university and its units.

This policy applies to all university information technology, whether owned and operated by the university, or used for university business through contractual arrangements.
3.0 Procedures

An overview of the framework for infrastructure, architecture, and ongoing operations, along with the standards and guidelines is posted at the Virginia Tech Information Technology website http://www.it.vt.edu.

4.0 Definitions

5.0 References

The following is a sampling of higher education sources for IT best practices and evolving trends:

The EDUCAUSE Center for Analysis and Research (ECAR) Cyberinfrastructure Working Group helps educational institutions develop institutional strategies and plan their resource deployment in this emerging and evolving technological landscape and helps their users harness and optimize the power and capabilities of new integrated IT tools and systems for educational and research applications in higher education.

https://library.educause.edu/topics/infrastructure-and-networking-technologies/cyberinfrastructure

EDUCAUSE is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology.

http://www.educause.edu

Internet2 develops and deploys advanced network applications and technologies for research and higher education, accelerating the creation of tomorrow's Internet.

http://www.internet2.edu

The Mid-Atlantic Research Infrastructure Alliance (MARIA) Inc. is dedicated to facilitating access to advanced information, instruction, and research infrastructure technology and advancing research and education in the United States.

http://www.marialliance.net/

The Postsecondary Electronic Standards Council is a non-profit association of colleges and universities; professional and commercial organizations; data, software and service providers; and state and federal government agencies.

http://www.pesc.org/

6.0 Approval and Revisions

Approved April 28, 2006 by Earving L. Blythe, Vice President for Information Technology.
Approved June 12, 2006 by the Virginia Tech Board of Visitors

• Revision 1
Updated verbiage and hyperlinks.
Approved January 29, 2018 by Vice President for Information Technology and Chief Information Officer, Scott F. Midkiff.