

VLAN Extension Standard

Introduction

A local area network is a computer network located in one physical location. A virtual LAN is used to manage traffic more effectively on the LAN by creating distinct and separate groups or segments of users on the same computer network. Utilizing VLANs allows organizations to add layers of functionality to computer networks and to increase protection of sensitive or confidential data transmitted within certain segments. To achieve a more optimal level of security and overall operational efficiency, OMES places limitations on VLAN extensions.

Purpose

This document establishes the OMES standard to implement VLAN boundaries.

Definitions

VLAN – A virtual local area network that forwards packets for a single broadcast domain.

Core device – The device on which the VLAN’s layer-3 default gateway address resides.

Standard

VLANs are not permitted to extend through core devices beyond the boundaries of a building/site.

Compliance

This standard shall take effect upon publication and is made pursuant to Title 62 O.S. §§ 34.11.1 and 34.12 and Title 62 O.S. § 35.8. OMES IS may amend and publish the amended standards policies and standards at any time. Compliance is expected with all published policies and standards, and any published amendments thereof. Employees found in violation of this standard may be subject to disciplinary action, up to and including termination.

Rationale

To coordinate and require central approval of state agency information technology purchases and projects to enable the chief information officer to assess the needs and capabilities of state agencies as well as streamline and consolidate systems to ensure that the state delivers essential public services to its citizens in the most efficient manner at the lowest possible cost to taxpayers.

Revision history

This standard is subject to periodic review to ensure relevancy.

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| Approved by: Joe McIntosh, Chief Information Officer | |