Proposal for changing the OST VPN

Striving for a more open educational environment

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Outline

Notice

This document is incomplete and a work in progress.

Context

The OST-VPN Solution currently relies on EntraID 9 (SAMLv2 6) authentication for Cisco SSL-VPN. Users can connect to the VPN 8 through the recommended cisco secure client [1] or any compatible client supporting the AnyConnect protocol, such as openconnect [2] .

Argumentation

This Proposal is based on the "Proposal for changing the OST Auth solution". Therefore, all of the talking points regarding open- and closed-source software apply to the arguments for an alternative VPN implementation as well.

Multiple instances of students or professors asking for an alternative, open-source solution have occured, namely Andreas Steffen, creator of strongswan [3] , proposing its implementation for the OST VPN or Raphael Das Gupta, asking for an open-source alternative for Microsoft Authenticator [4] .

Proposal

Strongswan offers itself as an advantageous alternative, being developed by Andreas Steffen, a former Professor at OST. Moreover, the IKEv2/IPSec Protocol outperforms [5], [6] alternatives such as openvpn [7] or wireguard [8] .

Supporters

Many thanks go out to all of the honorable supporters of this project, which include

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Table 1: Supporters

Glossary

OSS		Open Source Software
OER		Open Educational Resources
OTP		One Time Password
FOSS		Free and Open Source Software
SSO		Single Sign-On
SAMLv2		Security Assertion Markup Language 2.0
SSL		Secure Sockets Layer
VPN		Virtual Private Network
EntraID		Microsoft Entra ID (formerly known as Microsoft Azure Active Directory or Azure AD)
IAM		Identity and Access Management
IT		Information Technology

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Illustrations

Tables