

Final Project: ops201d10



Agenda

Team Member Introductions
Problem Domain & Project Overview
Team Process & Documentation
Application Demonstration

Q&A





Heraldo Morales



Techno-Solvers

Navy Veteran served 5 years, did 3 deployments and have substantial experience in the military. Currently interested in the IT industry and the possibilities with Cybersecurity. I am dedicated to take the skills I have learned in other settings and apply them to this industry to hopefully make an impact in the technological world.

LinkedIn GitHub

Tommy S Taylor II



Army Veteran of 20 years. Retired in 2022. I have a BA in Information Systems Security. I currently have the ITIL Foundations Certification and recently graduated the Cyber Security Analyst Certification course through IBM Skills Build. I plan to use all the skills I have obtained to help continue to shape the world of Cyber Security.

LinkedIn/ GitHub



Zachariah Woodbridge





An Air Force Veteran, bringing over 15 years of experience in electronic warfare systems. Complemented by a Master's degree in Philosophy with a focus on responsible Al and data-driven decision-making, my mission is to leverage my expertise to enhance risk management assessments and shape impactful security policies.





Arturo Laguna

E&E for 4 years in the Air Force, separated in 2022. Dealt with aircraft electronics, HVAC systems, LOX, batteries and more. Looking to get into the cyber security industry

LinkedIn GitHub





What's the problem?

A Youtube Company has come to us with the following requirements for their system:

- OS Diversity
- User Provisioning
- Backup Solution
- Email Service
- Shared Files
- Remote Access



Solutions

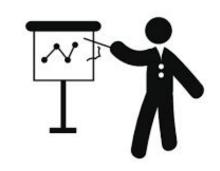
Install OS
Thinkpad
Surface tablet

Cloudflare - Domain Services

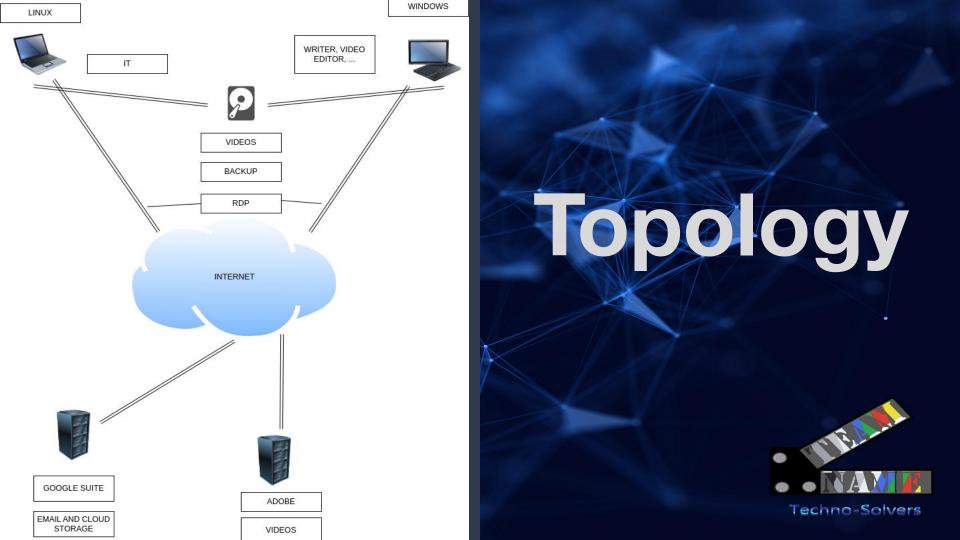
Google Workspace - Cloud Services

Thunderbird - Email Client

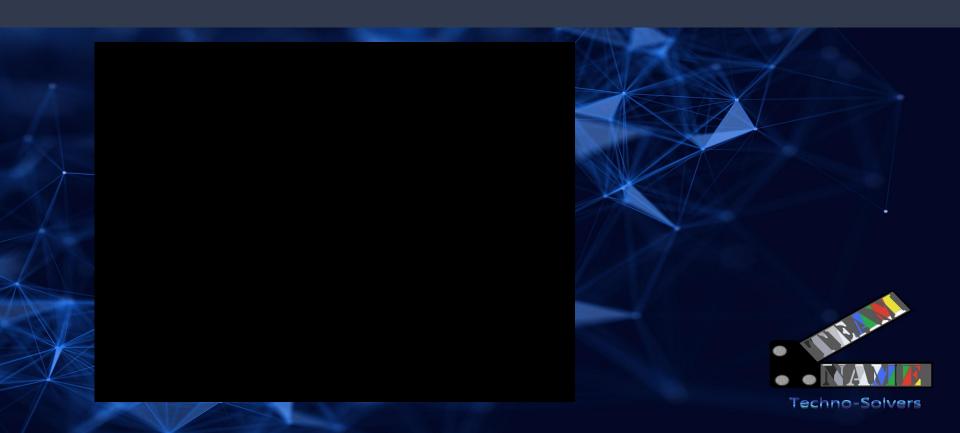
Google Drive for Desktop - Sharing Client







USER PROV DEMO



Remote Access

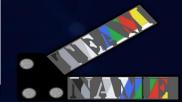
Remote access provides a way for the user to RDP into the SOHO Network within the company.

- Enables access remotely to another system.
- 2. Enables IT Help Desk personnel to remote in a users system using the same network.
- End User can easily work on one system without having to transfer from one to another.



Remote Access Demo!





Network Security: Cloudflare

- Web-Enhancements
- Secure
- DNS services

Cloudflare provides many important domain services:

- 1. Global Content Delivery Network (CDN) Security and DDoS Protection
 - 1.1. Web Application Firewall (WAF)
- 2. DNS Management
- 3. Internet Security Services
 - 3.1. DNSSEC



Network Security: Windows Security

- Robust Defense
- Firewall
- Website Protection

Windows Security provides many important domain services:

- 1. Robust Defense Against Malware:
 - 1.1. Viruses
 - 1.2. Ransomware
 - 1.3. spyware.
- 2. Built-in Firewall
- 3. Phishing Protection



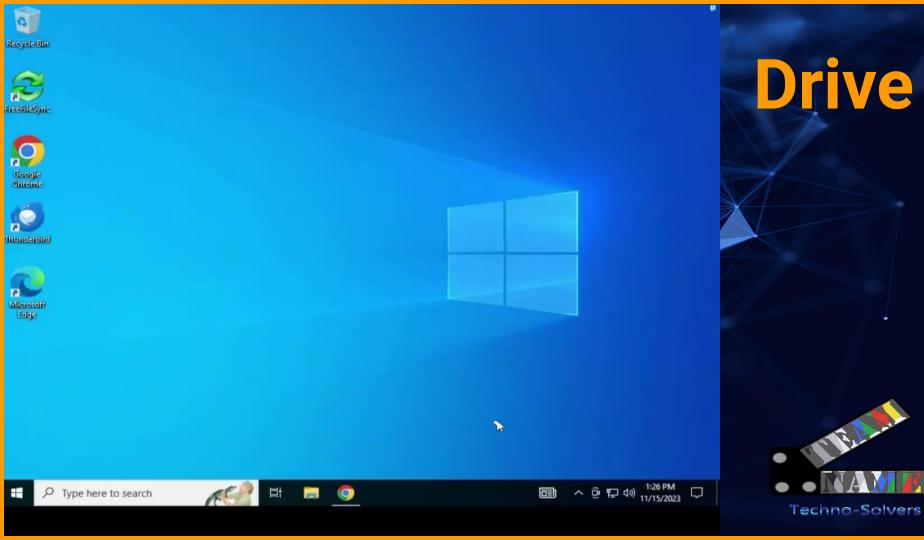
Cloud Service: Google Workspaces

- Cloud-based solution
- Easily setup
- Scalable

Google Workspaces provides email and file-sharing tools:

- 1. Google Suite of office tools:
 - 1.1. Google Docs
 - 1.2. Google Sheets
- 1.3. Google Forms
 - 1.4. Google Slides.
- 2. Admin/organization tools:
 - 2.4.1. Groups
 - 2.4.2. Calendars
 - 2.4.3. Workcenter Organization
- 3. Straightforward Setup
- 4. Scalable





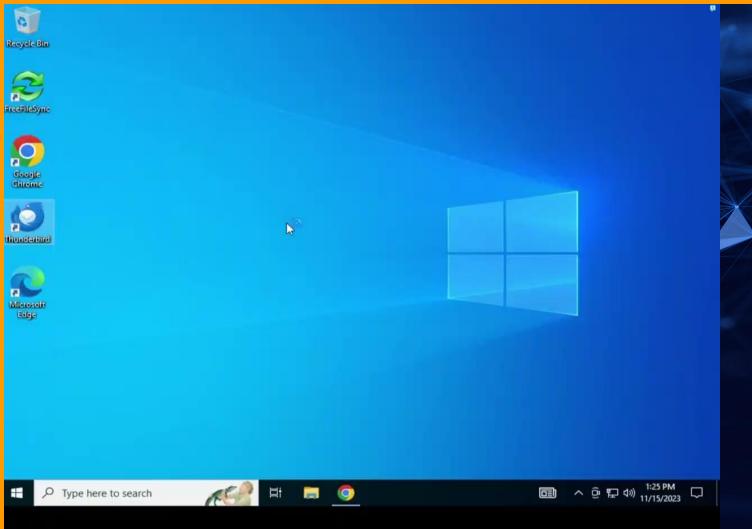
Cloud Service: Thunderbird

- Customizable
- Secure
- Cross-Platform Compatible

Thunderbird Email Client provides a local email client that is:

- 1. Open Source and Customizable:
 - 1.1. Community Driven Development
- 2. End-to-end encryption through S/MIME and OpenPGP
- 3. Cross-Platform Compatibility (Linux/Windows/Mac)
- 4. Calendar Sync







Backup Solutions:

Backup Solutions are extremely necessary when certain errors or failures occur that wipe out data. They can help users recover certain files and documents with ease. There are many conventional Backup programs in use today and our top two examples will be:

- Google Drive
- Freefilesync



FreeFileSync:

A program that is free and open source, able to run on Windows flawlessly and with a simple UI that allows users to quickly understand what it does and how to do it. It allows users to compare and synchronize files and folders on different storage devices, such as hard drives, USB drives, network storage, and more.

What useful features does it have?

- 1. File Comparison: It uses a comparison algorithm to detect differences between files and folders, ensuring accurate synchronization.
- 2. Synchronization Modes: Offers various synchronization modes like mirror, two-way, update, and custom to cater to different user needs.
- 3. Filtering and Exclusion: Users can specify file filters and exclusions to control which files and folders are included or excluded from the synchronization process.



FreefileSync Backup Demo:



Google Drive for Desktop

- Easily setup
- Syncs
- Lócal Backups

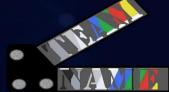
Google Drive for Desktop provides a local file share client for employees.

- 1. Syncs files between computer and Google Workspace (15GB)
- 2. Provides Offline Access to folders and files
- 3. Automatic Backup and Sync between computer and Google Drive
- 4. Allows 'Mirroring,' similar to a Raid 1, but completely automated
 - 4.1. Automatically creates local backup of all documents in Google Drive.
- 5. Integrated with other Google Services



Google Drive: Demo





Techno-Solvers

Resources & Thanks

Team Name Techno-Solvers GitHub

Tools



Google Workspace









