

GXtechnic

Division of GlobeX

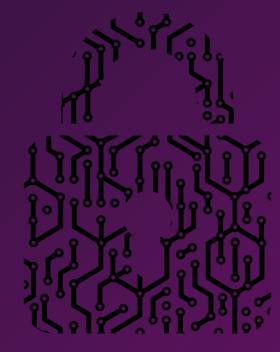
Network & Security

Established in the spring of 2023 as the Cyber Security and Information Technologies division for GlobeX USA. A team was needed to build and start this division. That team would come to be known as GXtechnic.

Agenda:



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



COMPANY PROFILE





- Mack Dirks
- Ben Hobbs
- Justin Dotson
- Marcelo Clark
- Raphael Chookagian

Mack Dirks

Sunshine State Cyber Professional

- BA in criminal justice from FAU
- U.S. Army veteran
- 26 airborne jumps 1 in a foreign country with Fuerzas Armadas de México
- Enjoys video games and exploring Al
- Why the transition into Cyber?

I joined Cybersecurity to become an asset of the future, and provide security for those who can not secure themselves





Ben Hobbs

Arizona Cyberwarrior

- Originally from Northern California
- Real Estate Agent
- Marine Corps and Navy Veteran (Logistics)
- Why Cybersecurity?
- Fun Fact: l <u>love</u> trivia!
- Career Ambition: To become a leader in the Purple Team Community and create a widely used tool for Information Security

"Knowing is not enough, we must apply. Willing is not enough, we must do." -Bruce Lee





Justin R. Dotson

Washington State Techie

- Originally from Hawaii
- Professional Photographer
- IT Network Technician
- Love to build computers
- Enjoy figuring out Puzzles or solutions to challenges

"It was time to expand on my college experience in computers and take it to the professional level!"





Marcelo Clark

Cyber Security Professional and U.S. Army Veteran

- Creative outlet is writing Science fiction
- Interested in new technologies being developed
- Stationed in Hawaii for 3 years as infantry
- Adores helping people with their problems
- Determined to get any task done in a timely manner

"With every safeguard you put in place, you pave the way for a safer digital future."





Raphael Chookagian DevSecOps

- U.S. Army Veteran
- Commercial Fashion Photographer
- Fullstack JavaScript Software Engineer
- Experience with public and in house programs, design, scaffolding and builds.
- International experience working with private, commercial, civilian and government services.
 - "Drop me off anywhere on earth with a task list and mission and I will get the job done."





Problem Domain:

GXtechnic needs to update the core IT infrastructure of a recent client company acquisition.

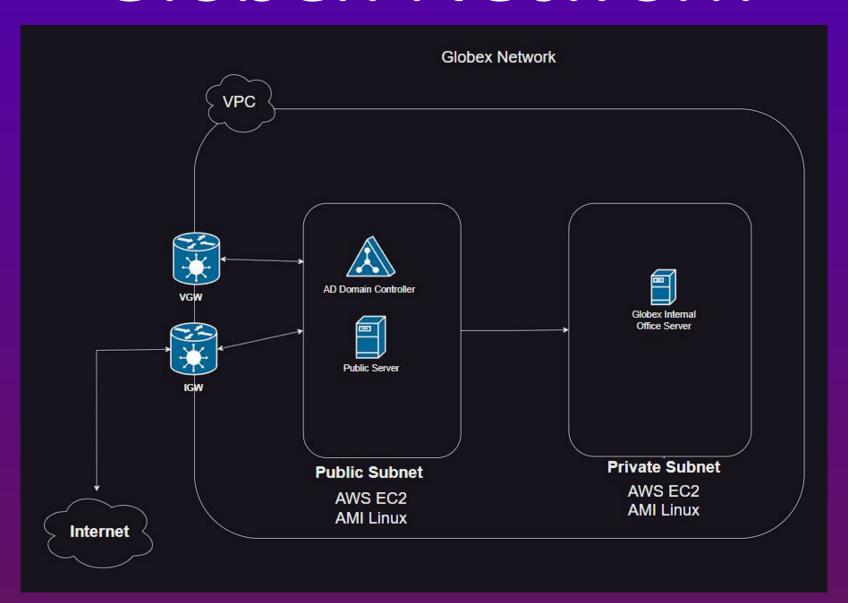
- Requires integration into the Globex corporate domain and cloud infrastructure.
- Prototype the process of integrating new companies to be used for future acquisitions.
- Implement a VPN connect between the two entities.
- Automate-Update the Active Directory

Corporate Acquisition Scenario:

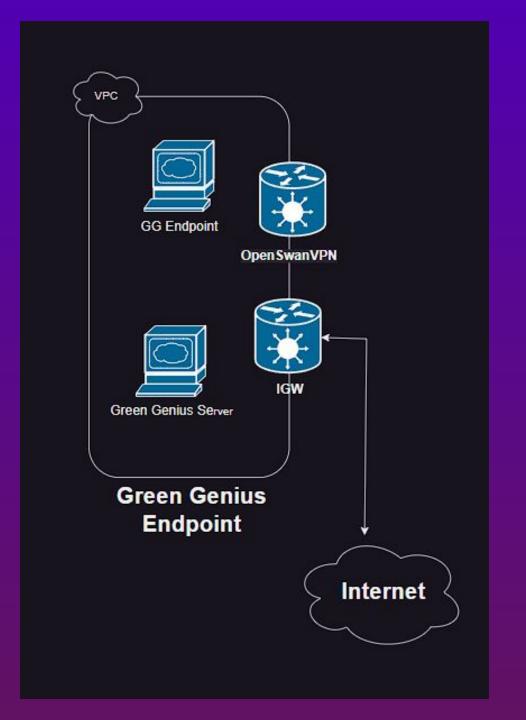
GreenGenius

GreenGenius is a startup that develops Al-powered energy management systems for homes and businesses. Their platform uses machine learning algorithms to analyze energy consumption patterns and optimize energy usage, reducing waste and saving users money on their electricity bills.

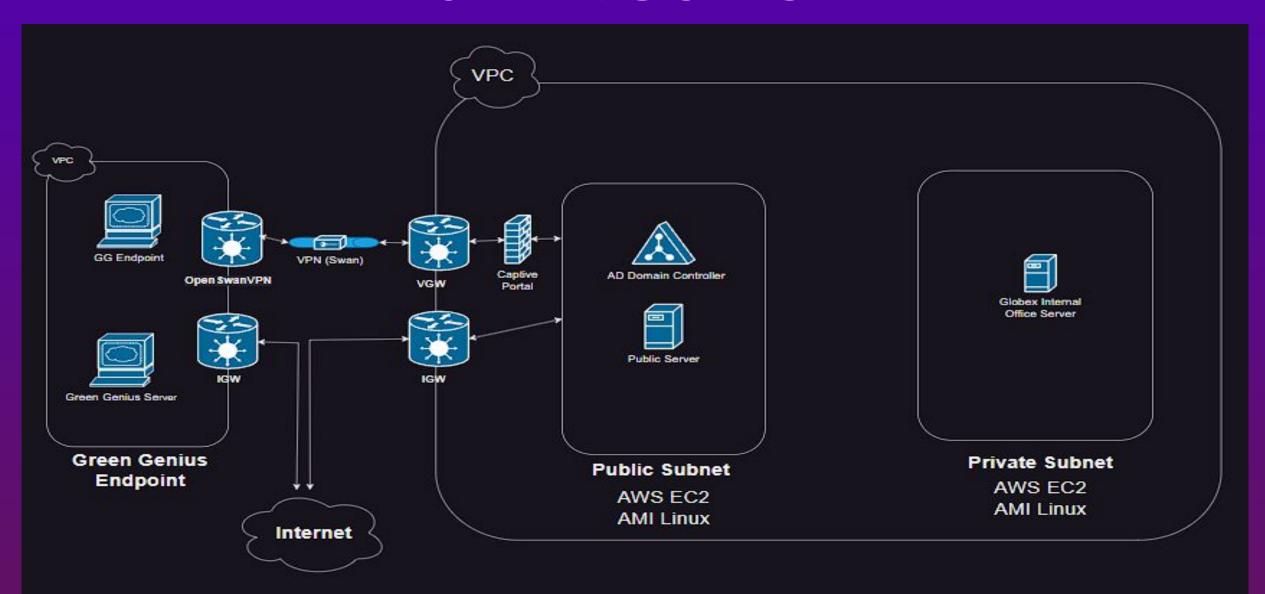
Globex Network



GreenGenius



Full Network



Solutions

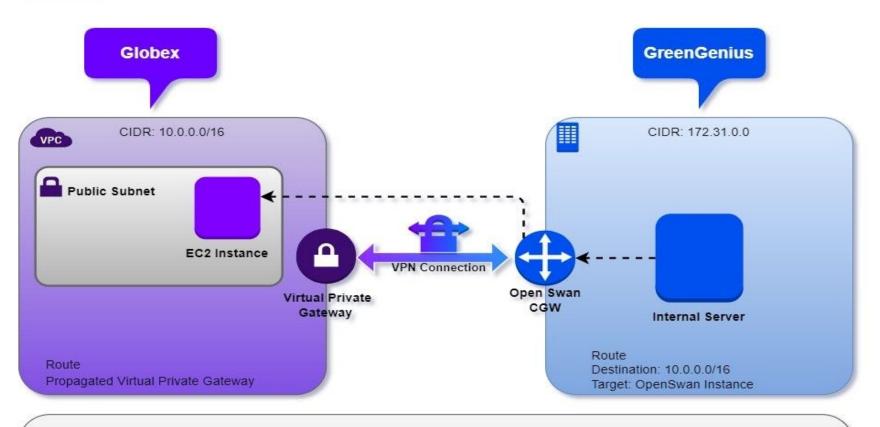


- Implement a VPN connection from the Green Genius Server to GXtechnic using OpenSwan
- secure connection from acquisition's office network to the VPC
- Connecting local endpoints to the domain
- Configuring a captive portal on a local router authenticate using Active Directory
- Adding and organizing the new employees in Active Directory



Site-to-Site VPN Solution





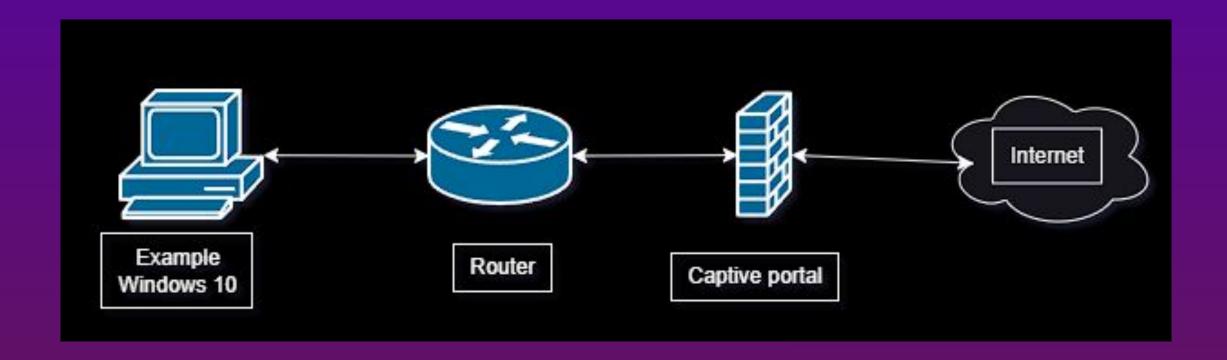
AWS Site-to-Site Benefits:

- Reduced-cost network solutions
- . Business growth scalable accomodations
- . Compatability with already a client's existing network infrastructure
- . Enhanced security features (encryption, access control, etc.)
- . Security and integrity of all the data transferred via encrypted VPN Tunnel
- Redundant VPN connections in order to create better backup options and improve reliability
- Integrated Network environment for collaboration, resource sharing, and access to applications and services accross different networks



Captive Portal

GXtechnic.com



Automation

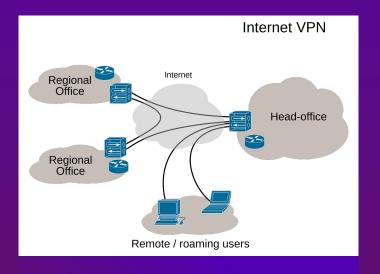
GXtechnic.com



AWS Cloud Services Integration



Windows Server 2019



Secure Connectivity

Resources & Thanks

- Teammates
- Ethan and the TA's
- Classmates
- ChatGPT
- pfSense Documentation

- AWS Documentation
- Windows Server Documentation
- Windows Active Directory
 Documentation
- Automation in AD

Questions?





https://github.com/GXtechnic







Thank you for joining us.

THANK YOU

CONTACT US



Phone Number





Email Address

info@GlobeX.com



Location

Springfield, Oregon



Website

www.GXtechnic.com

