EnergyWise Integration

J-AAT:
Jesús' Apostles of Advanced Technology

Agenda

1. Team Member Introductions

2. Problem Domain & Project Overview

3. Team Process & Documentation

4. Application Demonstration

5. Q&A

J-AAT

Jesús' Apostles of Advanced Technology.

1. Jesús Ceja
2. Andrew Perry
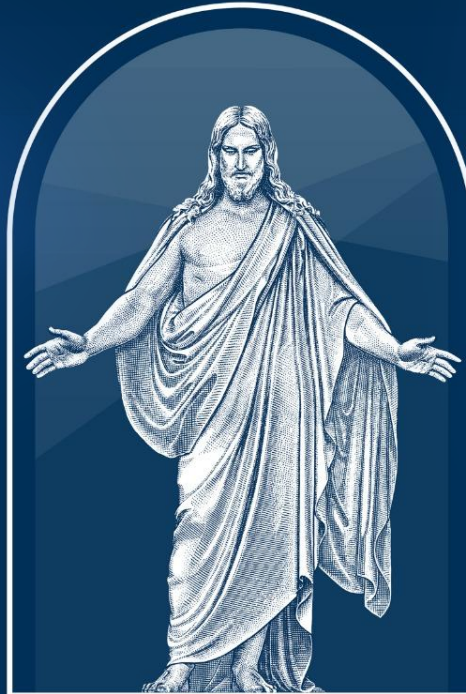3. Alexander Echols
4. Tyler Housden

LinkedIn

Alexander Echols

- Co Founder / Lead Code Tester of J-AAT
- Jr. Network Administrator
- Physical penetration tester
- Master of Disguise
- Creating an obstacle course for my chickens to run

Andrew Perry

- Life of service in all things.

- Emergency Medical Technician

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

- 3rd Infantry Division, United States Army

- ~ Let us live so that when we come to die even the undertaker will be sorry ~

Tyler Housden

Hime
(HeMay)
Japanese for
Princess
Breed:
Pixiebob

- USMC Veteran
- Transitioning from fighter jet (F18,F35,F16) avionics tech to IT.
- Cyber security student who wants to make a difference in the military sector.

- Hobbies:
  - Hiking (Grand Canyon)
  - Snowboarding (Hakuba, Japan)
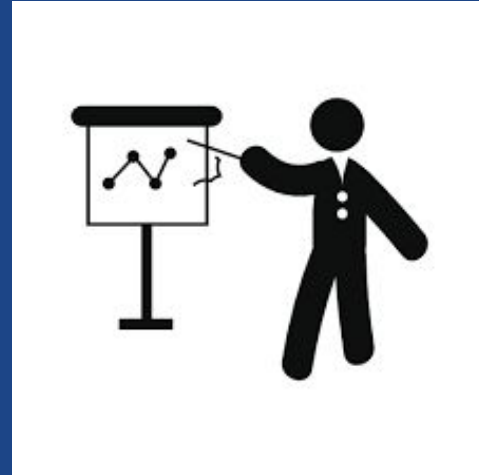 - Passionate about the Tech industry.

Problem Domain

- Requires full infrastructure update to integrate with GlobeX

- Deployment methods to configure a new WinServer
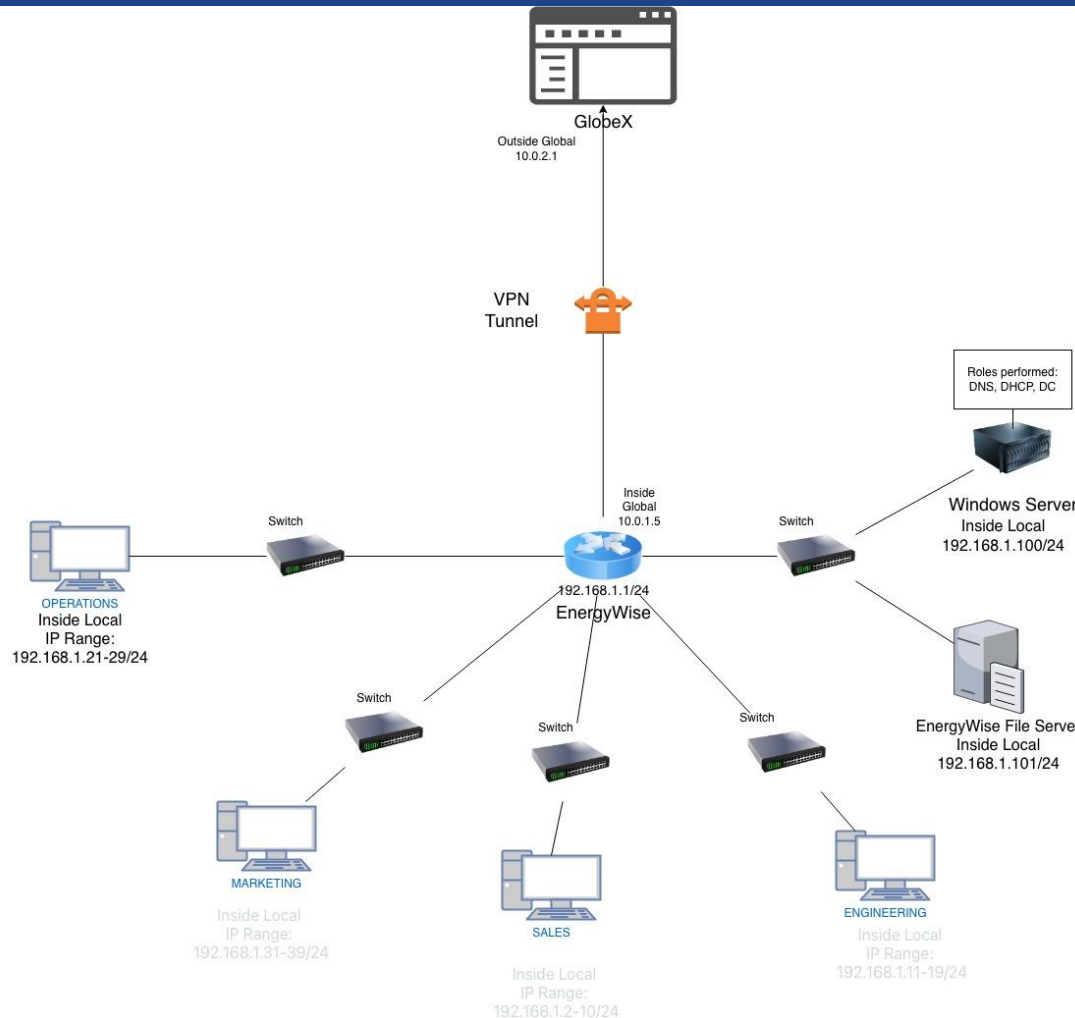
- Necessary Site-to-Site VPN

Our Solutions

- Powershell script to configure the Win Server

- Site-to-site VPN for secure file sharing between Globex and EnergyWise

- FreeRADIUS to authenticate employees

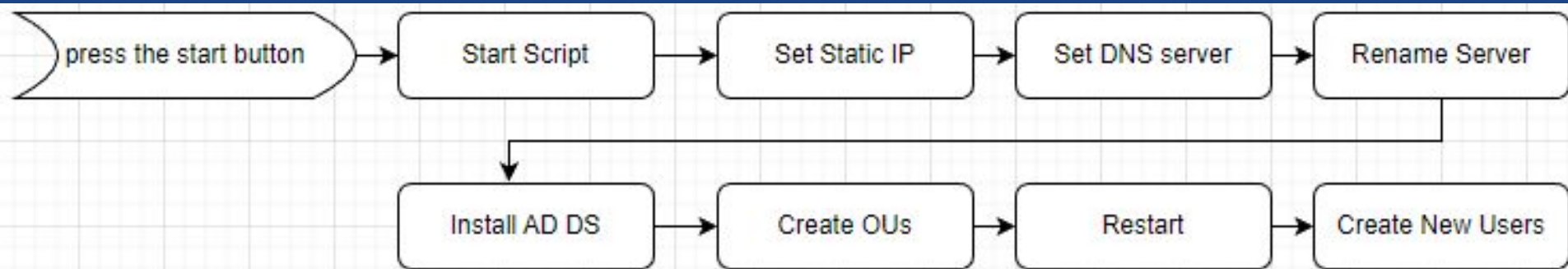- Captive Portal to secure logins at the user level.

Demo!

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GlobeX

Outside Global
10.0.2.1

VPN
Tunnel

Roles performed:
DNS, DHCP, DC

Inside
Global
10.0.1.5

Switch

Windows Server
Inside Local
192.168.1.100/24

Switch

192.168.1.1/24
EnergyWise

Switch

OPERATIONS
Inside Local
IP Range:
192.168.1.21-29/24

EnergyWise File Server
Inside Local
192.168.1.101/24

Switch

Switch

Switch

MARKETING

Inside Local
IP Range:
192.168.1.31-39/24

SALES

Inside Local
IP Range:
192.168.1.2-10/24

ENGINEERING
Inside Local
IP Range:
192.168.1.11-19/24

Automation of Server Configuration

press the start button → Start Script → Set Static IP → Set DNS server → Rename Server → Install AD DS → Create OUs → Restart → Create New Users

VPN Topology
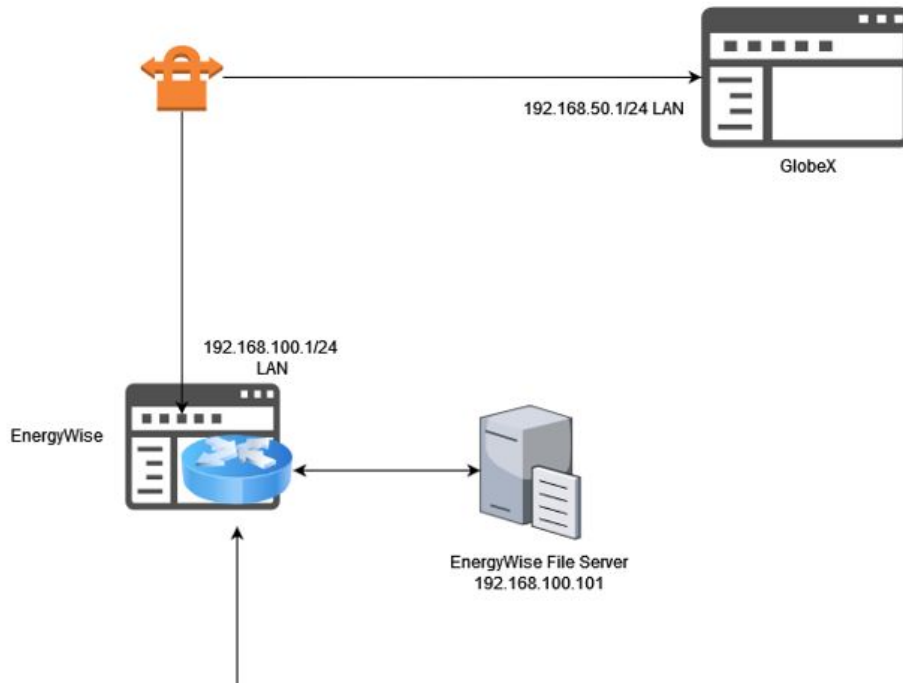
- Connecting EnergyWise to GlobeX network.

- Access to a file server.

- Companies also have access to Google Workshop for cloud collaboration.

Resources & Thanks

- Thanks to the team of J-AAT for all your hard work.

- Thanks to the instructional team for their guided assistance.

- Thank you to the TA's for your continued patience

- Thank you to ChatGPT for its continued guidance

Questions?