# Ops 301 Final Project Guidelines

## Scenario & Problem Domain

GlobeX has made a number of strategic acquisitions this year, but the IT infrastructure of the new subsidiary companies is outdated. In order to maintain the levels of regulatory compliance required for federal contracts, GlobeX needs to update and reconfigure its subsidiary's IT infrastructure. For each acquisition, a task force has been assembled under the umbrella of the GlobeX special projects division to accomplish this project.

Your team has been assigned to assist with standardizing IT infrastructure for one of the newly-acquired subsidiaries. Your instructor will play the role of operations manager at the subsidiary, who will guide you through the process via email.

## Assignments & Deliverables

Keep an eye on Canvas for assignments due this week.

- Remember to complete nightly Project Report assignments. These assignments are easy to forget as you get swept up in interesting project subject matter.
- Necessities such as team agreement (conflict resolution, etc.) and project plan will be created in your Project Prep assignments. Instructor approval is required before progressing to the next Project Prep assignment.
- By demo day, you'll need these deliverables assembled:
  - Demo day slide deck
  - Project report
  - Project plan
  - GitHub repo
  - Google drive docs (if used)
- Track your individual contributions throughout the project so that you can easily submit your individual contributions writeup on demo day for grading.

## Standup

Every day, the instructional team with circulate to your group for a formal "Standup Meeting". Standup should take approximately 10 minutes per team. Some instructors will opt for a "retro" later in the day to review how things went.

> Standups give the instructional team insight into the current status of your project and the progress the team hopes to make each day.

During standup, each team member will address these three points:

1. What you individually accomplished yesterday
2. What you individually plan to accomplish today
3. Anything that is blocking you from making progress

## Presentation Prep

Your team will practice your presentation prior to the final presentation day. This is typically scheduled by the instructional team. During the practice presentation, the instructional team will provide constructive feedback about the flow of the presentation and delivery of the subject matter.

Practice and prepare your technical demonstrations in advance of demo day to rule out any quirks/bugs.

General slide deck guidelines:

- The presentation slides must use the aesthetic formatting of the [template slide deck](#).
  - Remember to create your own copy of the template and do not edit the template itself.
- Ensure your timing is no more than 25 minutes long, including some time at the end for questions.
- Present from the final product, deployed site, or official documentation that you produce.
- Each member should introduce themselves with their personal pitch.
  - The "About Us" page provides a great backdrop for this portion of the presentation.

Each member of the team must have a speaking part. It is okay to use presenter notes/outlines but remember to avoid reading notes verbatim and to present naturally as if speaking to a friend.

Components of the presentation must include:

- A. Team members individually introduce themselves. (5 min)
  - A1. One interesting/fun fact about yourself
  - A2. Your career ambitions (where you've been, where you're going, and why)
- B. Topical Overview (5 min)
  - B1. As the "Problem Domain", describe the project scenario you were assigned and the overall client requirements.
  - B2. What solutions to the problem domain will your team be presenting today? Why did you choose these solutions?
  - B3. Before & After Network topology diagram of the subsidiary's network(s).
    - What kind of network is this?
    - Design philosophy
    - Remote access considerations
- C. Improvements made to network infrastructure to accommodate remote employees and site-to-site connectivity (5 min)
  - C1. Implementation of virtual private networking (VPN)
  - C2. Network access controls system
    - How does your system achieve AAA network security management principles?
- D. Powershell script that automates DC deployment (5 min)
  - D1. Present the scenario org chart
  - D2. Script should demonstrably perform:
    - Assigns the Windows Server VM a static IPv4 address
    - Assigns the Windows Server VM a DNS
    - Renames the Windows Server VM
    - Installs AD-Domain-Services

- Creates an AD Forest
- Creates Organizational Units (OU)
- Creates users
- E. Final thoughts on how the project went (5 min)
  - E1. The team's approach to planning and communication throughout the project
  - E2. A technical obstacle or two and how those obstacles were overcome
  - E3. A portion of the outcome that each team member is particularly proud of
- F. Q&A (5 min)

The appropriate dress code is business casual - not too formal and not too casual.

Be cognizant of the environment you're presenting from. A clean backdrop, good lighting, and quality mic and webcam go a long ways.

In addition to the scheduled practice session, the team is encouraged to continue to practice on their own. Keep track of the time and adjust accordingly. Practice transitioning speaking segments.

Speak clearly and do not use slang or profanity. Take it seriously and be professional.

# Grading

Each team member's grade is split between their individual effort, and the project's technical merit.

Individual effort is graded based on contributions to project deliverables, and professionalism in the presentation.

Technical merit of the project overall is evaluated according the requirements.

## Deliverables

Submit to instructor a single "Project Report" Google Doc. All team members are to contribute an equal share to documentation corresponding to the components they worked on and should clearly indicate which components each contributed to in their individual project submission notes.

Here is a list of requirements the GlobeX VP of Special Projects would like to see addressed in your final project report:

- G. Network design
  - G1. A network topology diagram of your systems architecture design, pasted into your Google Doc.
  - G2. All components must be labeled, and network diagram must be presentable (straight lines) and free of defects/typographical issues. Take your time to create a quality network diagram; do not rush!
  - G3. Explain and justify your network diagram in detail. Clearly indicate what devices are hosting network services, like DHCP, DNS, etc.
- H. How the core network services will be administered.
  - H1. Provide network configuration details:
    - DHCP range
    - Subnet mask
    - IP address of all devices clearly indicated on network diagram
- I. How will OS version control be handled?
  - I1. Describe in detail how OS version control will be handled centrally from a server-based solution. Hint: Read Windows Server Update Services{:target="_blank"}.

Teams are encouraged to ask their instructional team for feedback on project report, slide deck, and other deliverables. The client point of contact should be contacted via email regarding scenario-specific scoping.