

CyberSecNET

A Networked Future



Dear Infinite Network Solutions,

Congratulations! Your network team has been hired to run the Australia division of CyberSecNET, an international company with locations in Germany, France, Tanzania, Brazil, USA, India and Canada.

The Australia division consists of three branches, namely; Brisbane, Sydney and Melbourne. These branches are newly acquired and your team has been hired to evaluate the current communication networks in place at all three branches, recommend changes to these communication networks, where needed, and then implement these changes.

The following information has already been gathered from the branches:

- Each branch has an internet connection, but this connectivity is currently primarily used by employees for surfing the web.
- Each branch needs to be able to connect securely with every other branch. CyberSecNET deals with sensitive information and the protection of this information as it passes through public networks must be guaranteed.
- There are many areas of these LANs that are misconfigured or have design flaws.
- Secure WiFi is required for all employees at all LANs, as well as guests visiting these branches.
- Each LAN should cater for at least 100 employees.
- A consolidated IPv4 addressing scheme must be used across the LANs.
- VoIP is required, but does not seem to be working at any branches.
- Network event logs for key network devices must be kept for all branches.

Your team is initially tasked with the following:

- Each LAN must be evaluated against established network design principles and the desired changes identified by your team must be documented in a 'Request for Change' document.
- Once approved, you will use the 'Request for Change' document to implement the changes in the networks.
- It must be noted that no 'Request for Change' document will be approved without proper motivation.
- A detailed logical network topology must be created.

- Detailed network device documentation lists must be created for each LAN and populated with as much detail about network devices as possible.

***Please note:** In an effort to save costs, it is advisable to redeploy existing equipment to branches where they may be better utilized, rather than purchasing new equipment. New equipment will be considered if motivated.

Any technical related questions can be directed to **Prof Kerry-Lynn Thomson** via email.

Wishing you all the best for the project ahead,

A handwritten signature in black ink, appearing to read "Chris F. Smith". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

On behalf of CyberSecNET CEO