Hand-in assignment I: KEA System Security F2022 course

Assignment:
Consider a system environment for an organisation running the basic services. The services are:

- Time service
- Network service – at least a single device routing, firewalling and switching
- Domain Name Service (DNS) – both autoritative and resolvers? you decide

Create a report describing the following in main chapters:

- Company back story, create back story for your fictive company, half a page
- Describe the software requirements for each of the above systems, copy paste the requirements from a home page for some software perhaps
  Dont forget that these systems cannot float in free space, but requires one or more operating systems. Maybe include some monitoring and configuration management like Ansible.
- Describe the hardware requirements for your initial proof-of-concept deployment or what is there now. Evaluate if this is sufficient for a more production ready system. Do you need some redundancy or scalability?
- Suggest an initial deployment overview or document what is there now – include a little detail, with a naming scheme to use for servers, physical and virtual
  I would probably end up with about 10 devices for a small PoC
- Create a list of skills requirements for running this environment. Consider job postings for similar jobs, and you may copy parts of that and adapt

Note: you decide the versions to base this on.

The report should include the following sections at least:

- Title
- Confidentiality agreement – Write "Confidential" on each page
- Overview - description of the project
- Table of contents, page numbers, headlines - business report style
- Results - including method description and screenshots

- Executive summary
- Appendices

Formal requirements:
To be handed in at latest February 21, 2022 by fronter, or email to xhek@kea.dk

Teams up to 3 are allowed. Make sure to list team members in the report.

Expect PDF as A4, portrait mode around 15 pages with illustrations as needed. No more than 25 pages if 3 members.

Recommend to use a report template with table of contents, front matter, page numbers etc. You can use Word, Google Docs, LaTeX, whatever you feel most comfortable with.

You are NOT expected to spend more than 25-30 hours on this. Less is also OK.

The report is not graded, but feedback will be given.

Hints:
Consider this a proposal for your imaginary management team.

Help may be found in the Defensive Security Handbook, about Asset Management and Documentation

Hints about running these services can be found in the documents *Campus Network Security: High Level Overview* and *Campus Operations Best Current Practice*, both are from the Network Startup Resource Center.

Think about what you would like to receive if you were responsible for buying hardware, selecting software and hiring people.

If you need more help contact me,

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