

Network Storage Project

Your team's job is to deploy a service (like Apache, IIS, mysql, exchange ...) that uses a remote file system for its storage. You can use a Distributed File System or a Centralized/Shared File System.

Pick a topic and teammates today, and begin researching and integrating. You will be demoing this project in much the same manner as you did for Network Management and Docker.

Here are a few references to stimulate topic discovery:

- https://en.wikipedia.org/wiki/Comparison_of_distributed_file_systems
- https://en.wikipedia.org/wiki/Network_File_System
- https://en.wikipedia.org/wiki/Server_Message_Block
- http://www.pnfs.com/Google_Cloud_Storage
- <https://www.certdepot.net/rhel7-configure-iscsi-target-initiator-persistently/>
- <http://www.techrepublic.com/blog/10-things/10-open-source-storage-solutions-that-might-be-perfect-for-your-company/>

Constraints:

- A simple Windows SMB or DFS File share for user directories or profiles on Server 2019 **is not** what we are after
- If vcenter2.cyber.local solution does not work for whatever reason, then team needs to re-assess project topic/scope **or** create local VM non-vcenter setup

Requirements:

1. Pick a topic that meets the constraints criteria (see rubric). **If you are in doubt, ask the instructor.**
2. Develop a presentation that contains:
 - An overview with a high level architecture drawing
 - Description of the major components
 - Clear description of the use case and the test for the use case (i.e. Test Script)
 - Conclusion stating pros and cons and a description of the level of difficulty
 - Professionally delivered
 - It's own slide deck, included with overall documentation
 - Can include within video recording

3. Demo as a team recording

- The demonstrators should orient the audience, and discuss and demonstrate their use case "live"
- Demonstration includes the Test Script as realistic and live test procedure
- Team Members have equal time within the recording
- Provide a shared link to team's demonstration video

4. Build Docs and Reflection

- Provide a shared GitHub link to your detailed build instructions, make sure you have a brief test script to guide you in your demonstration. For guidance, see the example in the Appendix. here is the one created for GlusterFS: [GlusterFS-S17](#) (THIS IS AN EXAMPLE; DO NOT USE GLUSTERFS AS YOUR TOPIC).
- You can share your technical documentation for each team member but your reflections should be your own.

💡 These build instructions should be integrated into your tech-journal and should be professional, have links to configuration files and images/diagrams where appropriate. This should be a showcase of your work for future employers when you get the inevitable request for your github site or an example of your technical writing.

Admin notes

- A vanilla team environment will be available should you need one which will consist of:
 - New router
 - 2x Windows servers
 - Windows workstation
 - 3x Ubuntu servers
 - You will note that the Ubuntu systems each have a second unconfigured disk. Other systems can be requested, though not promised.
- Pro Tip: For Windows Servers, highly advise sconfig to turn updates to manual. Otherwise, patching will take some time & storage.
- It is expected that every team member shares objectives and thus shares effort.

- Instructors will reserve the right to grade individually, if the above becomes an issue