

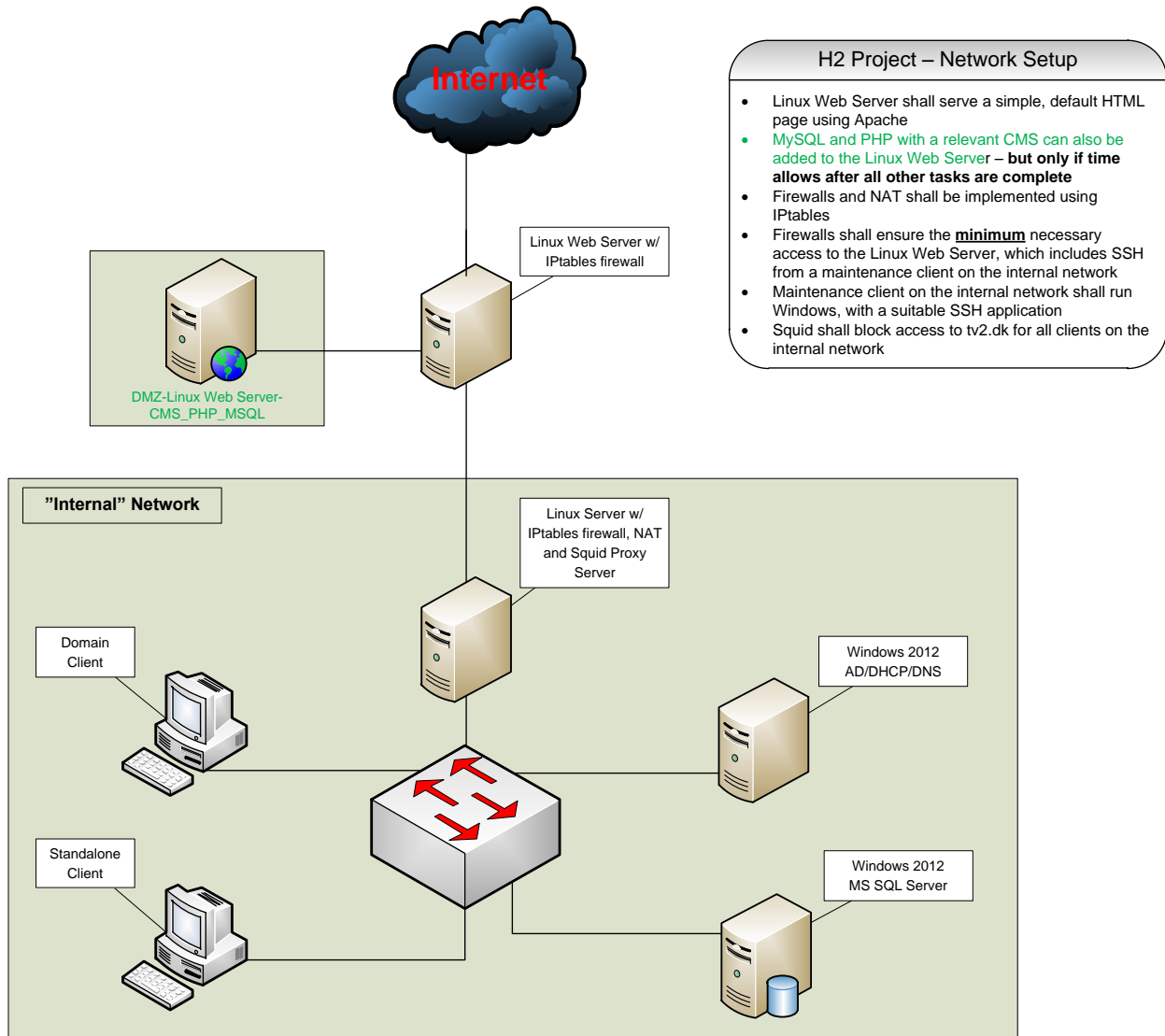
H2 – Project

Project Instructions:

- Project is supposed to be done in a group of 2 to 4 students.
- Choose at least 5 requirements. Requirement 1 and 7 are mandatory. Extra work would be taken as bonus.
- Each requirement must be clearly documented with detail description and screenshots.
- Documentation must be send to
 - orso@mercantec.dk
 - rael@mercantec.dk
- Deadline for sending documentation: **15:15 hrs Thursday 10th Sep 2015.**
- Document name should be **Groupname.docx.**
- Evaluation will happen on **Friday 11th Sep 2015.**

Requirement 1: (Mandatory)

Create following infrastructure. You **MUST** install all WINDOWS related add roles and features (e.g AD, DNS) with powershell scripts.



Requirement 2:

Create a BASH script to check if the Linux Web Server is “up” and run it automatically once every five minutes from the “internal” Linux Server. Send an e-mail from the script if a failure is detected.

Requirement 3:

Create a script which asks a user to input the name of processname and display the detail of entered processname. Write appropriate code if the processname is invalid or processname does not exist. Provide script with error handling code blocks. Save it on C:\scripts directory on both domain client and standalone client. Establish a power shell remote sessions from AD to both domain client and standalone client and run the script on AD.

Requirement 4:

Create a script F.PS1 on AD. The script should have three functions filter-service, sort-service and error-list. Filter-service should prompt user to enter the name of service and display the filtered service on power shell interactive shell. Sort-Service prompts user to enter column name of service and display them in descending order. The error-list function outputs last five errors if there are errors otherwise display “no error” message on prompt.

Source the script into AD powershell interactive shell. Run the functions in shell. Document only screen shots

Requirement 5:

Briefly comment all lines of following script function. Explain words with yellow background.

1. function google
2. {
3. \$IE = new-object -com "InternetExplorer.Application"
4. \$IE.navigate2("http://www.google.com/search?q=\$args")
5. \$IE.Left = 50
6. \$IE.Top = 50
7. \$IE.Width = 974
8. \$IE.Height = 718
9. \$IE.visible = \$True
10. \$WshShell = new-object -com "WScript.Shell"
11. \$Result = \$WshShell.AppActivate("Windows Internet Explorer")
12. }

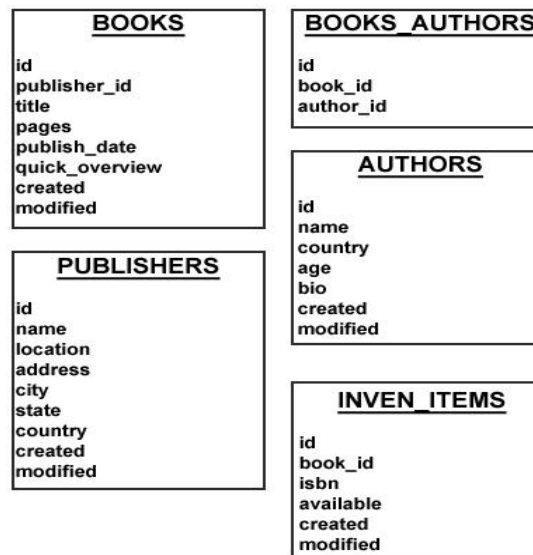
13. google "\$args"

Requirement 6:

Write a script PC1.PS1 which takes as string parameter \$computername and retrieve the process detail of a process running Powershell. Conditions with script are that if no parameter is entered nothing should happen. If correct parameter is entered the output is properly displayed. If wrong parameter is entered an error message is displayed "Error trying to connect and retrieve process from \$ComputerName". Use try catch to achieve goal.

Requirement 7 A: (Mandatory)

On SQL Server create a books.sql script that should create a database BOOKS_DB. The script should also create tables according to following diagram.



Execute books.sql script SQL Powershell environment.

Requirement 7B: (Mandatory)

By using Powershell insert five generic records into books table. Then create a menu script books.ps1 that should make a connection to books table in BOOKS_DB database. The script displays following menu

1. Insert a book
2. Search book details by title
3. List all books
4. Exit

Insert a book selection allows user to insert a book record. Search a book allows a user to enter the title to retrieve rest of the details of a book. List all books should displays all records from books table. Exit should exit script. If a user search a book which is not in books table, a message is displayed stating

"THE BOOK IS NOT IN DATABASE" with red colour background.

Requirement 8:

Add a Linux FTP server to the internal network. Provide two areas on the server: one where anonymous users can upload and download files freely and one where logon is required for upload and download.