

Lab Report

STUDENT NAME: Cameron Austin Heine

ESXI Hostname: Coyote 4

ESXI IP Address: 192.168.1.55

Sysadmin Number: sysadmin10

QUESTIONS (10%)

1. What are the differences between http and https?
 - HTTPS uses ssl to encrypt normal HTTP requests as HTTP anyone can see information going back and forth.
2. What is CA (Certificate Authority)?
 - Responsible for issuing certificates to verify identities on the internet
3. Why do we need a certificate for web servers?
 - So you can trust you are getting the right message from the person's key and not someone else.
4. What is the default port for HTTP and HTTPS?
 - HTTP uses port 80 and HTTPS uses port 443
5. What is your Apache server version?
 - Apache /2.4.37 (centos)
6. What is directory indexing?
 - when a web server expose's directory listings on a site that could yield potentially confidential data.
7. What is mod_rewrite?
 - Converting URLs to readable URLs
8. How to change the default port to 8080?
9. What is ModSecurity?
 - An apache module helping proteck your website from external attacks
10. What is the name of Apache log files?
 - Errorlog, TransferLog, and CustomLog
11. What is CSR?
 - Certificate signing request, Information used in your certificate such as country name, province, Locality, Organization, your name, server's hostname, etc.
12. What is Virtual Hosting?
 - For a single server to host multiple web pages
13. What is WebLogic?
 - Application server for developing and deploying multitier distributed enterprise applications.
14. What is DocumentRoot?

- Configuration directory for apache and HTTPS which reads contents visitors will access over browser.
15. What is the difference between Apache Web Server and Apache Tomcat?
- Apache tomcat is a web container and could be used as a HTTP server. Apache web server is designed to create web servers and host one or more HTTP based web servers.

LINUX COMMANDS (10%)

List all the UNIX Commands that you used in this lab and explain each command:

CONFIGURATION FILES (40%)

Explain all enabled lines of /etc/httpd/conf/httpd.conf and /etc/httpd/conf.d/ssl.conf.

Submit /etc/httpd/conf/httpd.conf and /etc/httpd/conf.d/ssl.conf

- /etc/httpd/conf.d/ssl.conf

Listen 443 https

SSLPassPhraseDialog exec: /usr/libexec/httpd-ssl-pass-dialog

SSLSessionCache shmcb:/run/httpd/sslcache(512000)

SSLSessionCacheTimeout 300

SSLCryptoDevice builtin

SSLCryptoDevice ubsec

<VirtualHost _default_:443>

DocumentRoot /var/www/secure

ServerName: www.csusbcody.net

ErrorLog logs/ssl_error_log

TransferLog logs/ssl_access_log

LogLevel warn

SSLEngine on

#SSLProtocol all -SSLv3

#SSLProxyProtocol all -SSLv3

SSLHonorCipherOrder on

SSLCipherSuite PROFILE SYSTEM

SSLProxyCipherSuite PROFILE=SYSTEM

SSLCertificateFile /etc/pki/tls/certs/www.csusbcody.net.crt

SSLCertificateKeyFile /etc/pki/tls/private/www.csusbcody.net.key

<FileMatch “\.(gilshtml | phtml | php)\$”>

SSLOptions *StdEnvVars

</FileMatch>

<Directory “/var/www/cgi-bin”>

SSLOptions +StdEnvVars

</Directory>

BrowserMatch “MSIE [2:5]” \

nokeepalive ssl-unclean-shutdown \

Downgrade-1.0 force-response-1.0

CustomLog logs/ssl_request_log \

“%t %h %(SSL_PROTOCOL)x %[SSL_CIPHER]x \” “%r\” %b”

</VirtualHost>

- /etc/httpd/conf/httpd.conf

ServerRoot “/etc/httpd”

Listen 80

Include conf.modules.d/*.conf

User apache

Group apache

ServerAdmin root@localhost

<Directory />

AllowOverride none

Require all denied

</Directory>

DocumentRoot "/var/www/html"

<Directory "/var/www">

Options Indexes FollowSymLinks

AllowOverride None

Require all granted

</Directory>

<IfModule dir_module>

DirectoryIndex index.html

</IfModule>

<Files ".ht*">

Require all denied

</Files>

ErrorLog "logs/error_log"

LogLevel warn

<IfModule log_config_module>

LogFormat "%h %l %t \"%r\" %b \"%{Referer}i\" \"%{User-Agent}i\"" combined

LogFormat "%h %l %t \"%r\" %b" common

<IfModule logio_module>

LogFormat "%h %l %t \"%r\" %b \"%{Referer}i\" \"%{User-Agent}i\"" combinedio

</IfModule>

CustomLog "logs/access_log" combined

</IfModule>

<IfModule alias_module>

ScriptAlias /cgi-bin/ "/var/www/cgi-bin/"

</IfModule>

<Directory>

AllowOverride None

Options None

Require all granted

</Directory>

<IfModule mime_module>

TypesConfig /etc/mime.types

AddType application/x-copmass .Z

AddType application/x-gzip .gz. tgz

AddType text/html .shtml

AddOutputFilter INCLUDES .shtml

</IfModule>

AddDefaultCharset UTF-8

<IfModule mime_magic_module>

 MIMEMagicFile conf/magic

</IfModule>

EnableSendfile on

IncludeOptional conf.d/*.conf