



# Unix for Telecommunications

## Portfolio Task – P-Lab-04-Basic-Apache Credit Level Task

### I. INTRODUCTION

In this lab you will learn about the Apache web server application. You will perform some basic configuration of your RULE host to provide web services using Apache.

### II. PURPOSE

To gain and/or enhance the following practical skills:

- Deploying and configuring Apache to provide password protected access to a segment of a single website
- Understand issues relating to service configuration
- Process and respond to error messages in log files
- Self-investigation skills to learn how to deploy new ideas

### III. PREPARATION

You should not attempt this task until you complete the **Pass** level task **P-Lab-04-Basic-Apache**

### IV. METHODOLOGY

#### A. Prepare your private Web page

The first step will be to create the part of the web site we will eventually deploy password protection to

- 1) Create a sub-directory in the Apache served directory (*where you put your web site*) called `private`
- 2) Create and install some more content in the private directory  
**Hint:** *It is helpful to make sure this is slightly different than your original web site*
- 3) Browse to the private web site to ensure that it functions
- 4) Ensure that when you are browsing to `http://ruleXX.caia.swin.edu.au/private` you are presented with a web page and not a directory index

#### B. Researching Simple Authentication

- 1) Use the web to research the contents of the `.htaccess` file. What are some of the things you can configure with `.htaccess`  
**Hint:** *a good place to start is [http:// www.javascriptkit.com/ howto/htaccess.shtml](http://www.javascriptkit.com/howto/htaccess.shtml)*
- 2) Look up how to use the `htpasswd` command  
**Hint:** *a good place to start is the man page for `htpasswd`*  
**Hint:** *pay particular attention to the `-c` option*

#### C. Setup Apache to use `.htaccess`

Edit the section in `httpd.conf` that refers to serving your web site

- 1) Change the line that reads “`AllowOverride None`” to “`AllowOverride All`”
- 2) Restart Apache

Why did you need to restart Apache?

#### D. Create the password file

We will be installing password protection to the private site, we need to create a password file containing the authorised username/password using the `htpasswd` command. You need to investigate creating a password file with the following properties

- 1) Password file is **NOT** located in any web-accessible directory
- 2) Password file is called `.htpasswd`
- 3) Username is `ruleperson`
- 4) Password is `ruleperson`

Why is the password file not stored in either the root web directory or the private web directory?

#### E. Create the `.htaccess` file

Create a `.htaccess` file in the private directory which enables Basic authentication using the previously generated (`.htpasswd`) password file. It is your task to investigate what options need to be deployed in the `.htaccess` file to achieve this

#### F. Testing

- 1) Browse to the private folder on your web site <http://ruleXX.caia.swin.edu.au/private>
- 2) If you are not asked to enter a username/password it may be because the website is cached from your initial testing. Reload the page

What have you achieved? – or should have achieved

### V. ASSESSMENT

The due date for completion of practical work is **11:00pm**, exactly **six** days after your scheduled class.

**Note:** *The nominated submission day/time holds regardless of whether that day is a non-teaching day or public holiday*

#### A. Self Assessment

You can self-assess your progress at any time via the marking script available at <http://ruleprimary1.caia.swin.edu.au>

#### B. Completion of task in Doubtfire

Download the PDF output of the marking script from <http://ruleprimary1.caia.swin.edu.au> and submit it to Doubtfire. Your tutor will confirm completion of the lab by examining the rule marking log files on the rule server.

If you complete the task during class beforehand, you may demonstrate completion in class to your tutor.

**Note:** *The downloaded PDF is not evidence of successful completion of the lab, it is a document to demonstrate completion within your portfolio. Your tutor will assess the evidence via either direct confirmation via the marking script or via the log files generated when you run the marking script*

#### C. Tutor Discussion

In order for the submission to be marked as complete, you must discuss your work with the tutor