

**NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC
QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY**

PRESCRIPTION: IN610 WEB SITE ADMINISTRATION (Web Master)

AIM OF MODULE:	To enable students to install, configure and administer a secure web server.
CREDITS:	7
KNOWLEDGE ASSUMED FROM:	IN500 Internet
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	July 2010
PRESCRIPTION EXPIRY DATE:	November 2013

Level and Assessment Schedule

TOPICS	Highest Skill Level				Suggested Assessment Percentage
	R	C	A	P	
1. Installation and Configuration			*		40
2. Administration and Maintenance			*		20
3. Performance and Caching Issues			*		40
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LEARNING OUTCOMES

The student will:

- C 1 Install and configure a secure web server.
- C 2 Perform routine administration and maintenance on the server.
- C 3 Install and configure a caching http proxy server.

CONTENT

1 INSTALLATION AND CONFIGURATION

- Background to the World Wide Web
 - http 1.2; properties of and transfer methods
 - Server distributions and their evolution, including GWS IIS and APACHE. Relative merits of each.
- Legal Issues
 - Legal issues, including copyright, privacy act, libel, fair use
- Browsers and browser set-up
 - Different browsers and their evolution and relative merits, including Internet Explorer, Firefox and Chrome.
 - Browser configuration, including helper applications, MIME typing of data streams and plug-ins.
- Installation and configuration
 - Installation and configuration of Apache http
 - Logging and “the common log-file format”
 - Error logs and checking
 - Personal home page areas and their locations
 - Common image areas and other devices to ensure successful caching
 - HTTP server Forums
 - Mechanisms for information owners to upload files
 - Statistics generation and reporting
 - Virtual hosts
 - Setting up a local site as a search engine.

2 ADMINISTRATION AND MAINTENANCE

- Server administration including server structure and hierarchies. File & directory ownership issues.
- Server security issues
 - CERT bulletins and advisory notices
 - Known security issues, particularly concerned with CGI
 - Secure transactions/SSL/https/certificates
 - Setting restrictions to control access:
 - by IP number
 - by login and password

3 PERFORMANCE AND CACHING ISSUES

- http proxy servers (including caching) and their installation and configuration. Proxy automatic configuration files
- Caching issues