

CIS Lab and Server Manual

**Configuration and Security of a heterogeneous OS and network
environment including Linux, Solaris and FreeBSD.**

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Abstract

Here begins the abstract

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Chapter 1

Introduction

1.1 INTRO

1.1.1 intro2

Chapter 2

Solaris

GOALS: To install, configure, secure and set up any daemons and software packages on a Solaris system.

2.1 Compiling Apache on Solaris

Apache is slightly tricky if you want to compile your own. Here is one way to compile apache and related modules in a step-by-step format:

1. Configure apache from within the source tree as follows:

```
./configure \  
--prefix=/usr/local/apache \  
--enable-module=so \  
--enable-rule=SHARED\_CORE \  
--enable-rule=SHARED\_CHAIN \  
--enable-shared=access \  
--enable-shared=actions \  
--enable-shared=alias \  
--enable-shared=asis \  
--enable-shared=auth \  
--enable-shared=autoindex \  
--enable-shared=cgi \  
--enable-shared=dir \  
--enable-shared=env \  
--enable-shared=imap \  
--enable-shared=include \  
--enable-shared=log\_config \  
--enable-shared=log\_agent \  

```

```
--enable-shared=log\_referer \  
--enable-shared=mime \  
--enable-shared=mime\_magic \  
--enable-shared=negotiation \  
--enable-shared=proxy \  
--enable-shared=rewrite \  
--enable-shared=setenvif \  
--enable-shared=speling \  
--enable-shared=status \  
--enable-shared=unique\_id \  
--enable-shared=userdir \  
--enable-shared=usertrack \  
--enable-shared=vhost\_alias
```

2. make; make install
3. Compile modules with a line like so:

```
./configure --with-apxs=/usr/local/apache/bin/apxs
```

4. 'make'; 'make install' on the modules
5. Modules installed on the Solaris system include: mod_php and mod_python
6. Edit the /usr/local/apache/etc/conf/httpd.conf file and make sure everything is set up properly.

Chapter 3

Linux

Chapter 4

freebsd

Chapter 5

Software

Individual software setup and configuration, tips on making things work correctly, and strange problems – and the fixes.

5.1 Java

5.1.1 Downloading and Installation

Download Java 1.4.0_1 from java.sun.com

For the solaris machines you want the 32bit version first of the J2SDK then you want the 64bit version.

5.1.2 CLASSPATH and other configuration tweaks

Do not add a global `$CLASSPATH` variable to any computers if you need to include a different classpath, say, for example, `/export/home/public/Java`. The problem here is that when including a different classpath, java won't initialize it's internal classpath structure. Lets assume we have two added class library folders that we want to add. One is named "ann" and the other "hoj" (which is the case currently in the CIS labs) lets take the following steps to get this into the classpath:

1. Traverse into the `j2sdk1.4.0_1/jre/lib` directory.
2. Once here, make a directory called "JKWORK" or something similar.
3. Copy `jk.jar` over to your newly created directory and unjar it using `'jar xvf jk.jar'`
4. Move over the "ann" and "hoj" directories to this directory.
5. Move `jk.jar` to `jk-backup.jar` (just in case)

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6. Rejar up the new information using `'jar cvf0 rt.jar ann com hoj java javax META-INF org sun sunw'`
 7. Keep in mind you are creating a jar file with no compression (the 0 option).
 8. The resulting .jar should be close to the same size as your backup .jar file.
 9. Copy this jk.jar one directory below (should reside in the j2sdk1.4.0/jre/lib directory)

Chapter 6

Security

Chapter 7

Network

Chapter 8

hardware

Bibliography

[1] *<http://www.freebsd.org>*

