REVISION HISTORY

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Available in HTML or PDF. Links to all my articles here. Created with AsciiDoc.

Upgrading FreeBSD to the latest -STABLE version.

## 1 Introduction

FreeBSD changes all the time, and changes to the source are checked in every day. Upgrading to the latest -STABLE version provides all this new code without breaking installed programs.

### 2 That Word Does Not Mean What You Think It Means

The name "-STABLE" is frequently misunderstood. It does not mean solid or steady. -STABLE means that while code can change, the ABI (Application Binary Interface) will remain stable and not change. Programs compiled to run on FreeBSD 10.0-RELEASE, or 10.1-RELEASE, or 10.1-RELEASE will continue to work on FreeBSD 10-STABLE. Effectively, -STABLE is the latest version of FreeBSD you can get without breaking installed software.

## 3 Using svn(1)

The FreeBSD source code in /usr/src is updated with svn(1) from the devel/subversion port. This example shows updating to FreeBSD 10-STABLE. If an old /usr/src directory already exists and was not created by svn, remove or rename it first. Do not check out source over an existing directory, it will cause unexpected problems later.

The Handbook has a list of Subversion mirror sites. Pick one close to you.

Installing and using Subversion is described in the Handbook.

The first step is a *checkout* of the source code. svn connects to the mirror and downloads the entire *stable/10* source to the */usr/src* directory:

```
# svn checkout https://svn0.us-west.freebsd.org/base/stable/10 /usr/src
```

Verify the server fingerprint against the fingerprints shown in the Subversion mirror sites link above.

The checkout only needs to be done once. Afterwards, the source can be quickly updated to the latest version in the Subversion repository with an *update* command:

```
# svn up /usr/src
```

#### 4 Now What?

After the source is updated, build and install world and kernel as normal. See Simplifying FreeBSD Kernel Config Files and Building FreeBSD World And Kernel