Getting Started With Subversion

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Abstract

This document is meant to serve as a quick introduction to Subversion. It does not replace the help documentation, it does not preclude reading the introductory book by Collins-Sussman, *et al.*[1], and it is not necessarily accurate. Use this as a quick-start guide if you like, but please at least skim the book before you start having troubles.

1 The Essentials

First, you should decide how and where you want your server to be configured. Fortunately, the basic operations are all the same, regardless of where the repository is stored. The only difference is what you'll enter for your one time check-out.

After you have your server selected, you need to download your software. If you are going to run SVN from a shell console, then you'll want to install SVN itself (`http://subversion.tigris.org/`). If you plan to use a GUI in Windows, then you'll want TortoiseSVN (`http://tortoisesvn.tigris.org/`).

2 Create A Repository

The act of creating a repository differs slightly with the avenue you choose. DreamHosters, for instance, has an http-based svn system set-up that allows you to access your repository as a url. If you are manually creating a repository on a server (without a GUI), your command should look something like this:

```
svnadmin create --fs-type fsfs /local/path/to/repos
```

Don't put anything in your repository when you create it, we'll do that later. Just use an empty folder.

3 Check-Out The Repository

Next, you check out your repository. Select an *empty* folder on your local computer to act as your local access to the repository. This is where you will access all the files in your repository while you're on that particular computer.

The exact command you use here depends on the type of server you're using. In TortoiseSVN, all you'll need to enter will be the actual address (i.e. you won't

need to type "svn checkout", but you'll still need to use the correct address for the proper server). I'll run through a couple brief examples here:

An HTTP address:
```
svn checkout http://svn.example.com/
```

A local repository, or one on a mapped network share:
```
svn checkout file:///path/to/repos
```

A SSH server:
```
svn checkout svn+ssh://path/to/repos
```

4 Populate The repository

Once the repository has been checked out, start populating it with files. For now, just plop the files you want down in your local repository. Once you're done, either use TortoiseSVN or enter the command `svn add *` to add everything to your repository. Always be sure to add new files to the repository database using the "Add" tool before you commit your changes. If you forget, then whatever you created won't be sent to the server until you Add and Commit it.

5 Check-In the Repository

Now that you have your files in it, check-in the repository using the "Commit" command in Tortoise or the command `svn commit`. Before you upload your changes, you will be prompted to enter a message describing your changes (you can add `-m 'Description'` to the end of the commit command to condense these steps). Once you have entered your message, the changes will be committed to the server.

6 Check-Out the Repository Elsewhere

You can now check-out your repository from the server on any other computer.

7 Conclusion

This concludes the tutorial. Please consult some of the help literature for more information on SVN before you try to do anything more complex. You can save yourself much grief this way.

References

[1] Collins-Sussman, B., B.W. Fitzpatrick & C.M. Pilato. Version Control with Subversion, Online Preprint, http://svnbook.red-bean.com/ http://svnbook.red-bean.com/ (2007).