Ant Ain't Hard

David Epler
Sr. Software Developer
depler@aboutweb.com

About Me

- Developing with ColdFusion since 4.0
- Using Ant for over 6 years
- Built Unofficial Updater 2 with Ant and Ant Installer
- Like consistency and lazy

What is Ant?

- **A**nother **N**eat **T**ool
- It is a build tool
  - Others are Make, Maven, Gradle
- Inspired NAnt (C#), Phing (PHP)

Why Use Ant?

- Free and Open Source

- Well-known and widely supported

- Runs inside Integrated Development Environments

- Cross platform support

- Makes it easy to bring developers into a project

- Integrates testing into the build processes

- Enables continuous integration

Ant Versions

- First release Ant 1.1 on July 19, 2000
- Ant 1.7.1 (June 27, 2008)
  - Eclipse 3.5, CF Builder 2.0
- Ant 1.8.2 (December 27, 2010)
  - Eclipse 3.7, CF Builder 2.0.1
- Ant 1.8.3 just released February 29th

Installing Ant

- Download binaries from Apache
- Windows
  - WinAnt
- Mac OS X
  - Already installed, 10.6.8 has Ant 1.8.2
    - Doesn't have all dependency libraries installed for tasks
- Linux
  - Package managers depending upon distribution
    - yum install ant
    - apt-get install ant ant-optional
  - Might not be the latest version of Ant

Build Files

- Usually named ***build.xml***
- Build file contains one project
- Project contains multiple targets
- Targets can depend upon other targets
- Targets contain tasks
- Tasks do the work

Similar to CFML

<property />	<cfparam>
<target />	<cffunction>
<import/> & <taskdef />	<cfinclude>
<copy /> <delete />, etc	<cffile>
<mkdir />	<cfdirectory>
<echo />	<cfoutput>
<echoproperties />	<cfdump>
<zip />	<cfzip>
${property}	#variable#

Ant Contrib

- Adds several "missing" tasks to make it easier to write ant scripts
  - For, Foreach
  - If/Then/Else
  - Switch
  - Try/Catch
  - Variables

Source Code Management

- Built in task definitions for
  - CVS
  - ClearCase
  - Perforce
  - PVCS
  - Microsoft Visual Source Safe
- Additional task definitions for
  - Subversion
  - Git

Ant + Subversion

- Tasks provided by
  - SVNAnt
    - Latest version 1.3.1 for Subversion 1.6.x
    - Supports most svn commands
  - svntask
    - Latest version 1.0.8, appears defunct
- Better option is to use <exec> and svn command line client

Ant + Git

- Tasks provided by
  - JGit
    - Very limited support of Git commands
    - See Mike Henke's blog post
- Best option is to use <exec> and git command line client
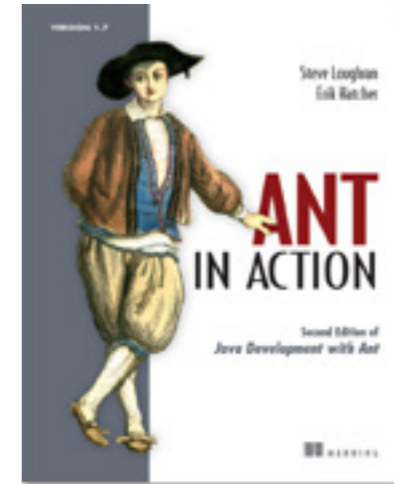
Ant + Everything Else

- Testing
  - MXUnit, CFCUnit, Selenium
- SQL / Databases
- JavaScript & CSS Compression
  - JSMin, YUI Compressor
- ColdFusion
  - varscoper, queryparam, compile, Ant4CF
- Flex
- GUI and Packagers
  - Ant Installer, AntForm

Ant Installer

- Allows you to build GUI and text input around Ant with ***antinstall-config.xml***

- Can package Ant and ***build.xml*** into runnable .JAR

- Unfortunately bit dated (2007) but is better than Antigen

Additional Resources

- Book
  - Ant in Action

- Internet
  - Apache Ant Documentation
  - Jim Priest's Ant Wiki
  - Mike Henke's Blog
  - And there is always Google

Q & A

Need to patch ColdFusion 8.0.1 or 9.0.1
Be sure to check out Unofficial Updater 2,
http://unofficial.updater2.info