

# Apache Ant Fundamentals

## Introduction to Ant

Rusty Lowrey

[rastyrori@yahoo.com](mailto:rastyrori@yahoo.com)



**pluralsight**  
hardcore dev and IT training 



# What Is Ant?

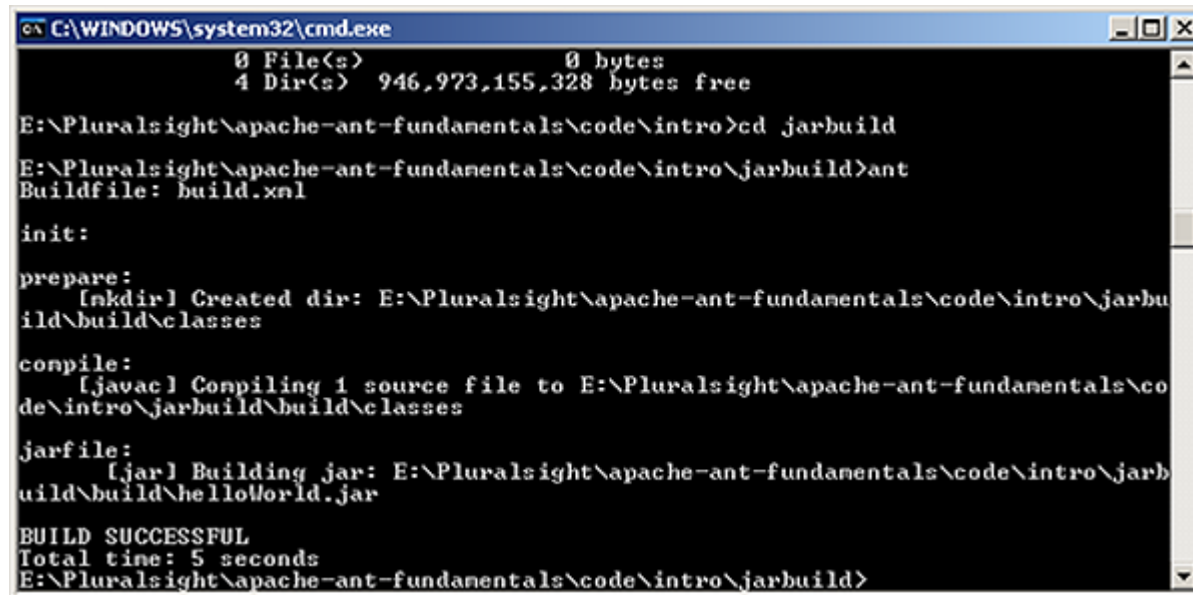


# What Is Ant?

Open Source Java Application



# What Is Ant?



```
C:\WINDOWS\system32\cmd.exe
0 File(s)          0 bytes
4 Dir(s)  946,973,155,328 bytes free

E:\Pluralsight\apache-ant-fundamentals\code\intro>cd jarbuild
E:\Pluralsight\apache-ant-fundamentals\code\intro\jarbuild>ant
Buildfile: build.xml

init:

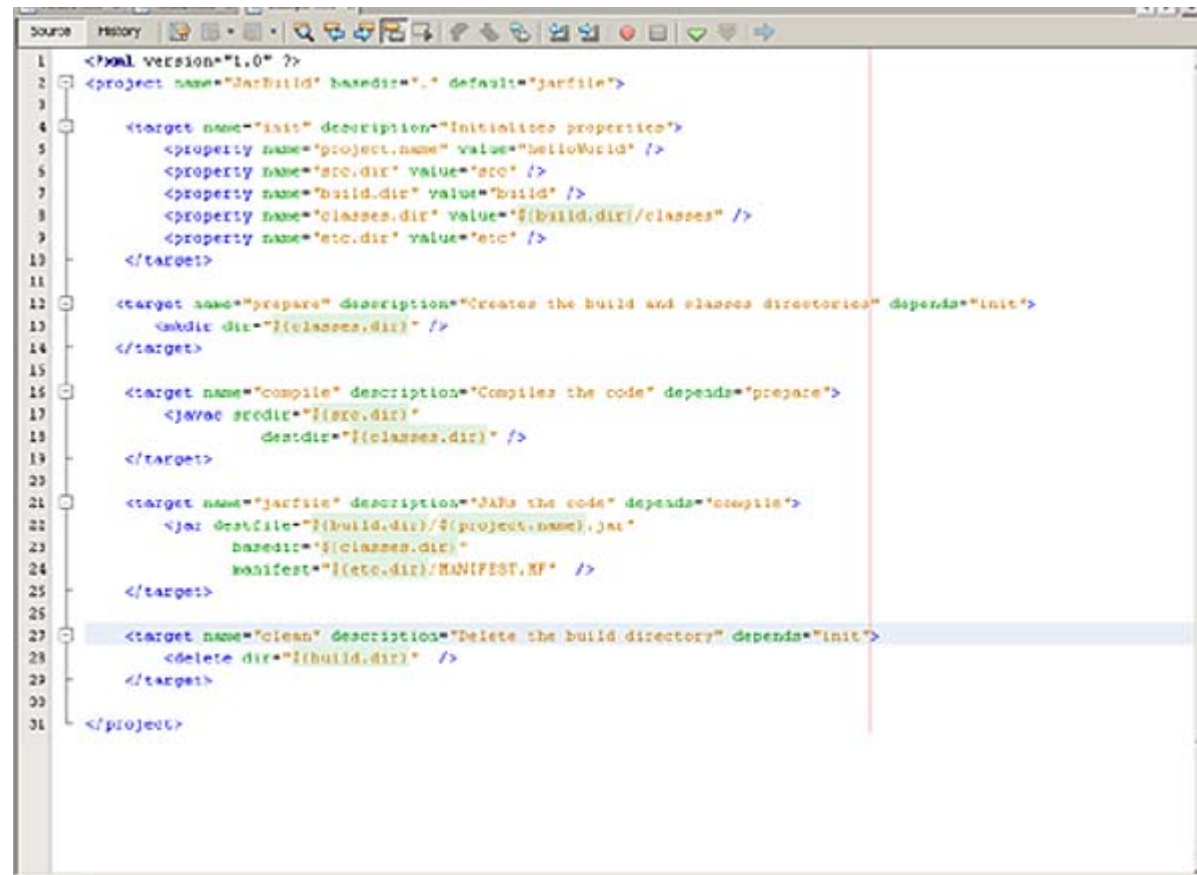
prepare:
    [mkdir] Created dir: E:\Pluralsight\apache-ant-fundamentals\code\intro\jarbuild\build\classes

compile:
    [javac] Compiling 1 source file to E:\Pluralsight\apache-ant-fundamentals\code\intro\jarbuild\build\classes

jarfile:
    [jar] Building jar: E:\Pluralsight\apache-ant-fundamentals\code\intro\jarbuild\build\helloWorld.jar

BUILD SUCCESSFUL
Total time: 5 seconds
E:\Pluralsight\apache-ant-fundamentals\code\intro\jarbuild>
```

# What Is Ant?

A screenshot of an IDE window showing an Ant build.xml file. The window has a title bar with standard OS icons and a menu bar with 'Source' and 'History'. The code is displayed in a text area with line numbers on the left. The code defines a project named 'JarBuild' with several targets: 'init' (initializes properties), 'prepare' (creates build and classes directories), 'compile' (compiles the code), 'jarfile' (jars the code), and 'clean' (deletes the build directory). The 'clean' target is highlighted with a blue background. The code uses XML syntax with tags like <project>, <target>, <property>, <mkdir>, <javac>, <jar>, and <delete>.

```
1 <?xml version="1.0" ?>
2 <project name="JarBuild" basedir=".." default="jarfile">
3
4   <target name="init" description="Initializes properties">
5     <property name="project.name" value="helloWorld" />
6     <property name="src.dir" value="src" />
7     <property name="build.dir" value="build" />
8     <property name="classes.dir" value="${build.dir}/classes" />
9     <property name="etc.dir" value="etc" />
10  </target>
11
12  <target name="prepare" description="Creates the build and classes directories" depends="init">
13    <mkdir dir="${classes.dir}" />
14  </target>
15
16  <target name="compile" description="Compiles the code" depends="prepare">
17    <javac srcdir="${src.dir}"
18          destdir="${classes.dir}" />
19  </target>
20
21  <target name="jarfile" description="JARS the code" depends="compile">
22    <jar destfile="${build.dir}/${project.name}.jar"
23         basedir="${classes.dir}"
24         manifest="${etc.dir}/MANIFEST.MF" />
25  </target>
26
27  <target name="clean" description="Delete the build directory" depends="init">
28    <delete dir="${build.dir}" />
29  </target>
30
31 </project>
```

# What Is Ant?

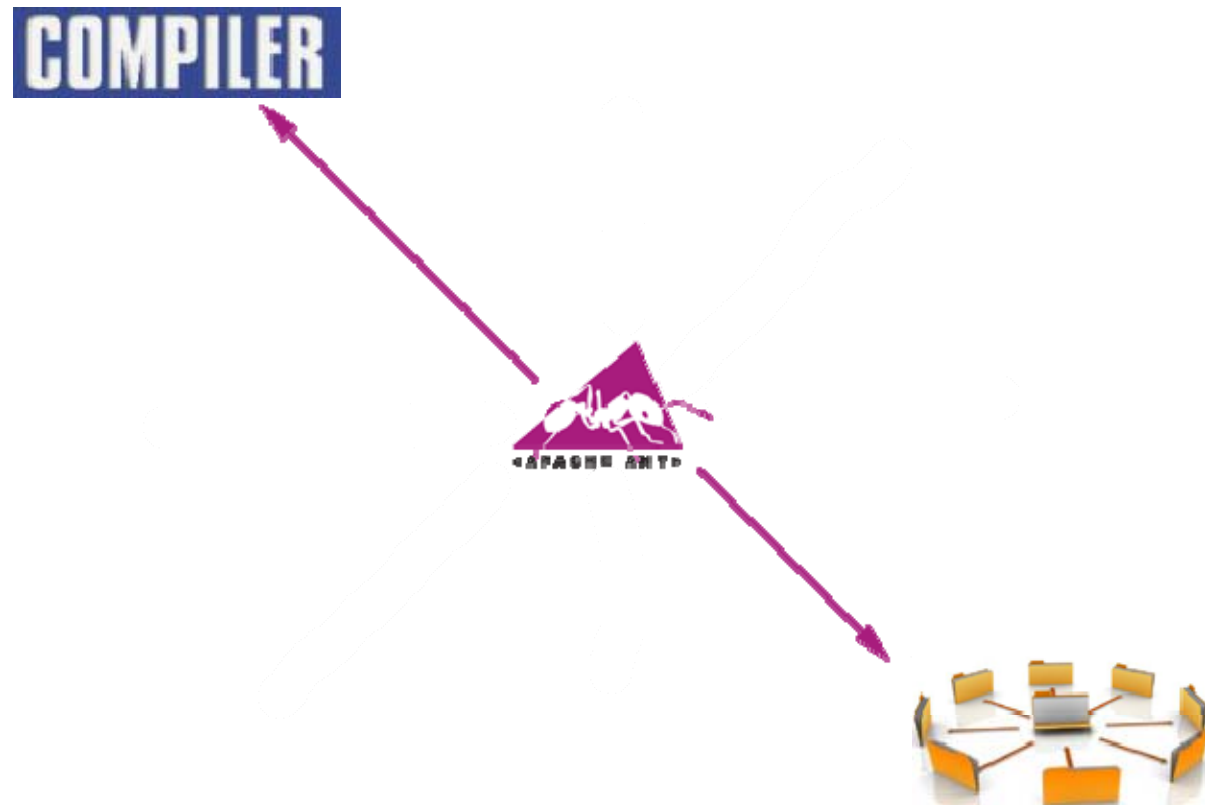


# What Is Ant?

COMPILER

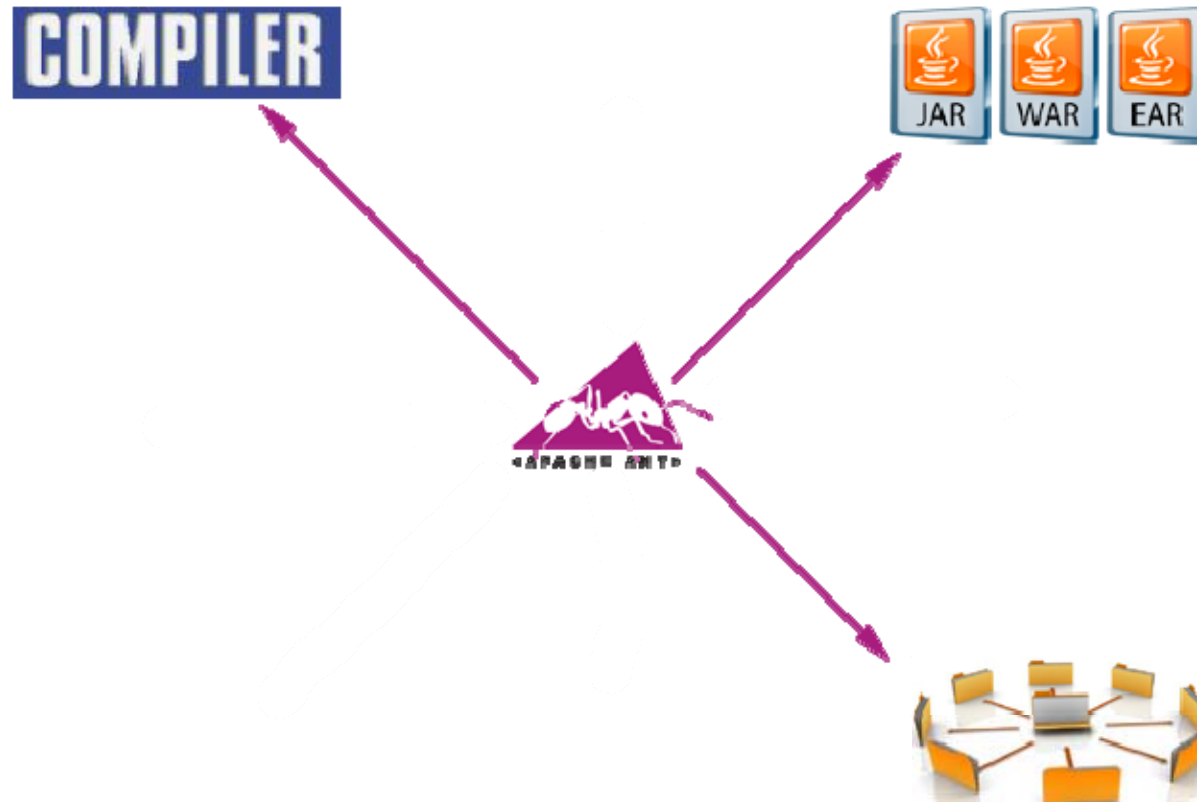


# What Is Ant?

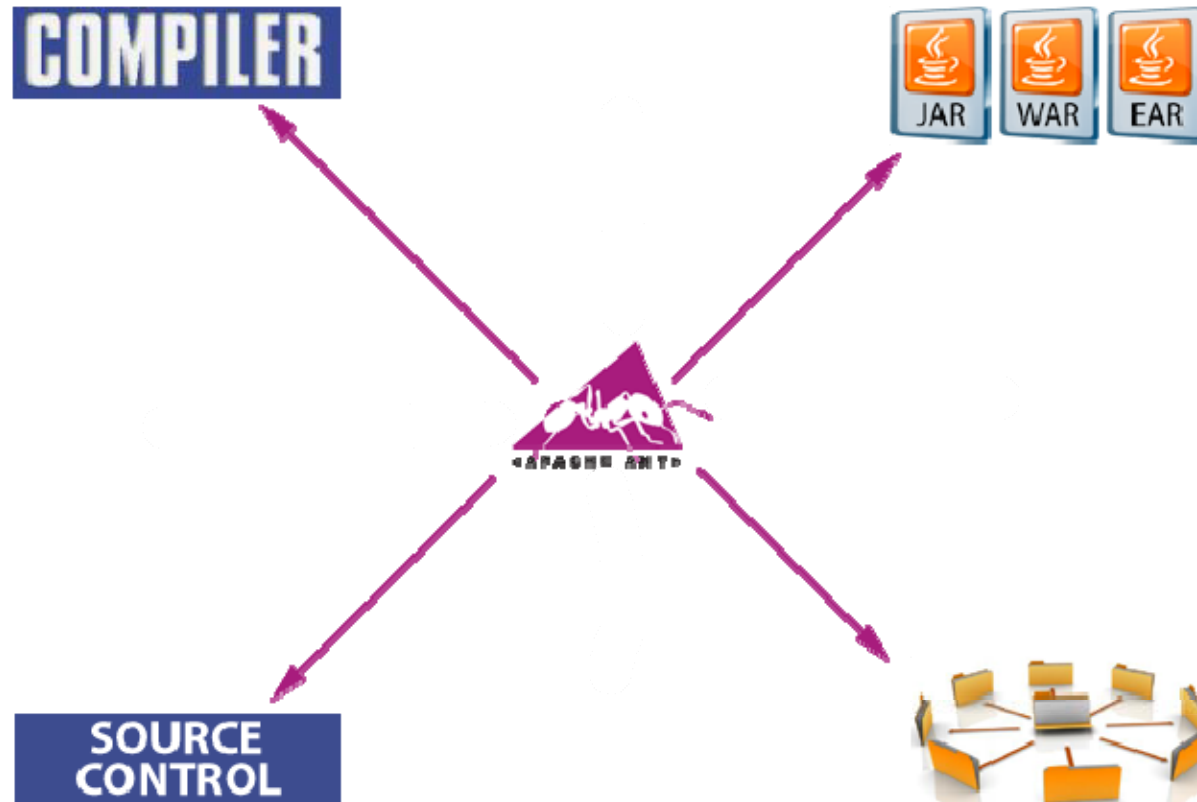




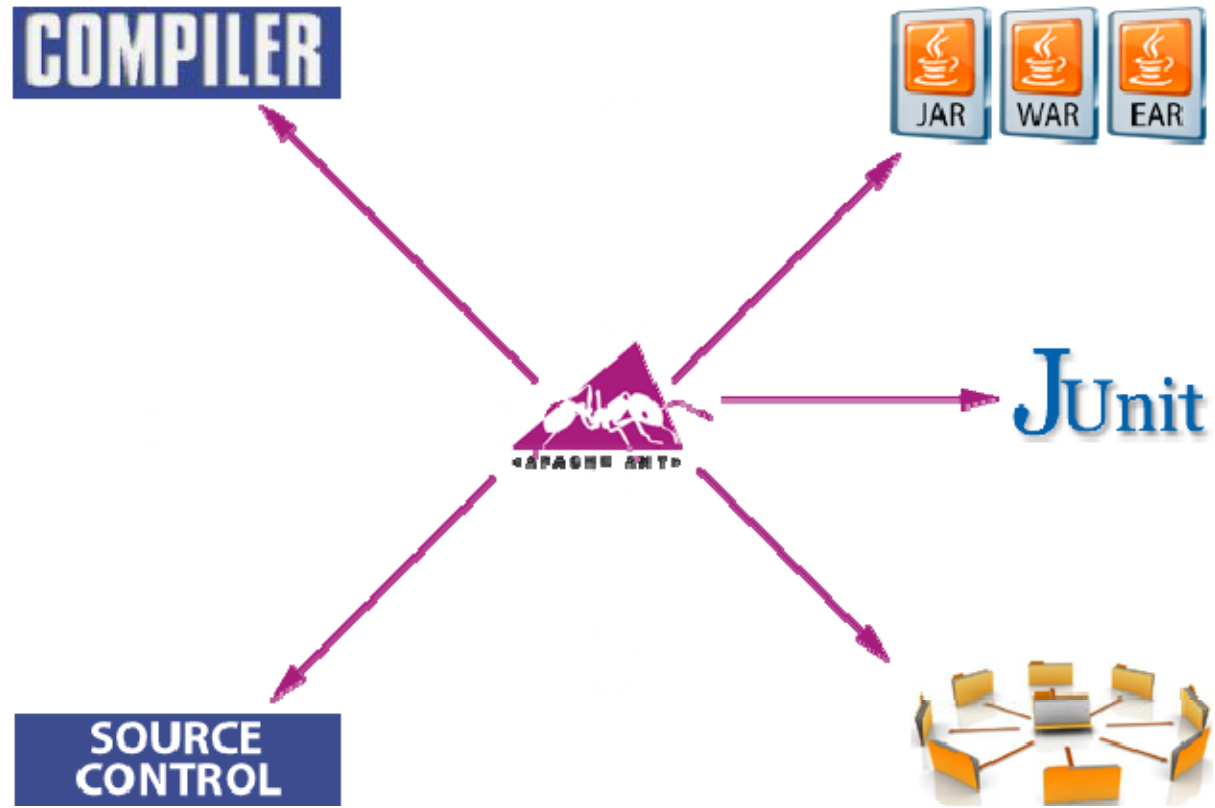
# What Is Ant?



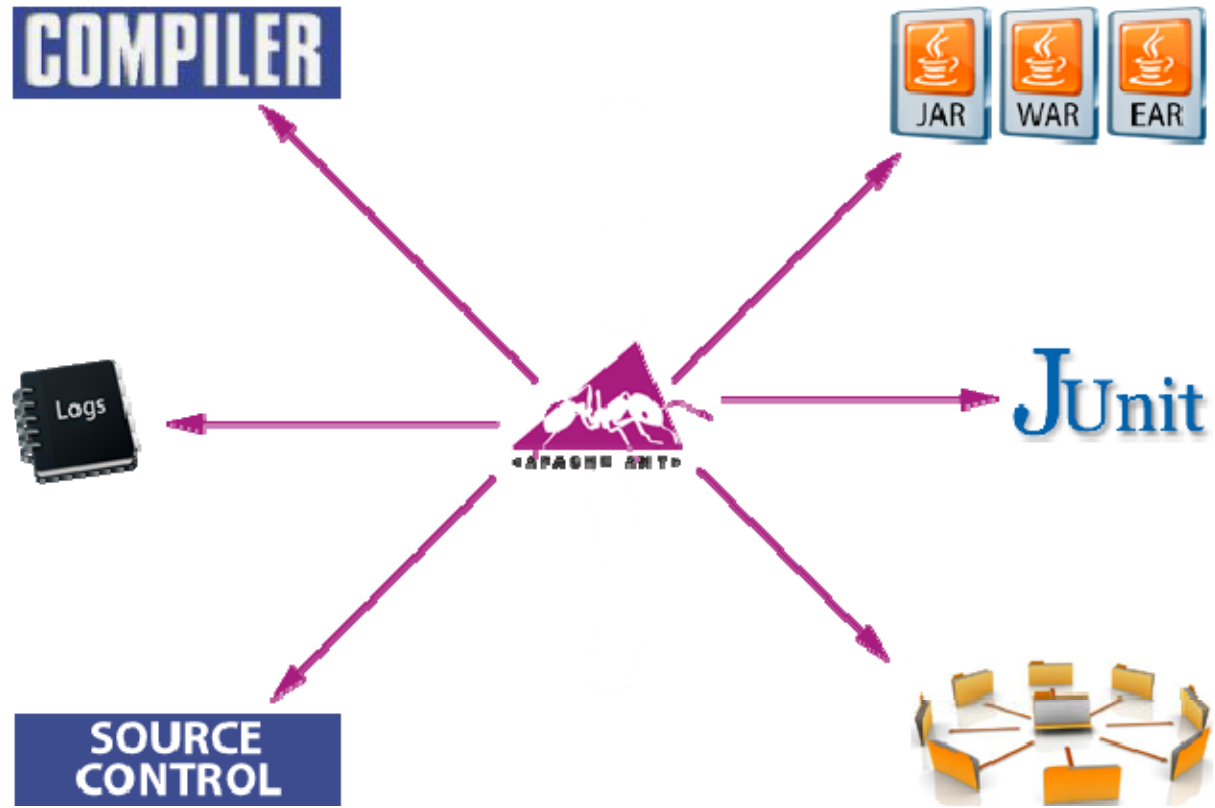
# What Is Ant?



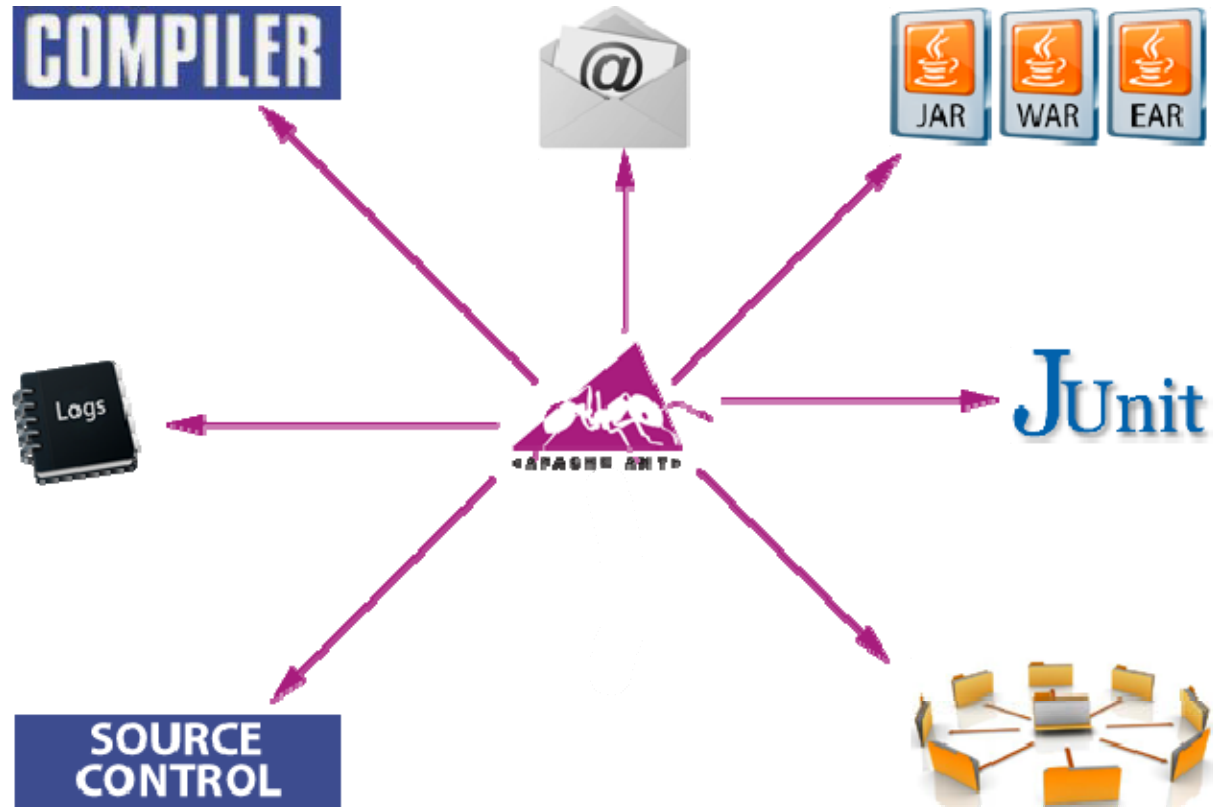
# What Is Ant?



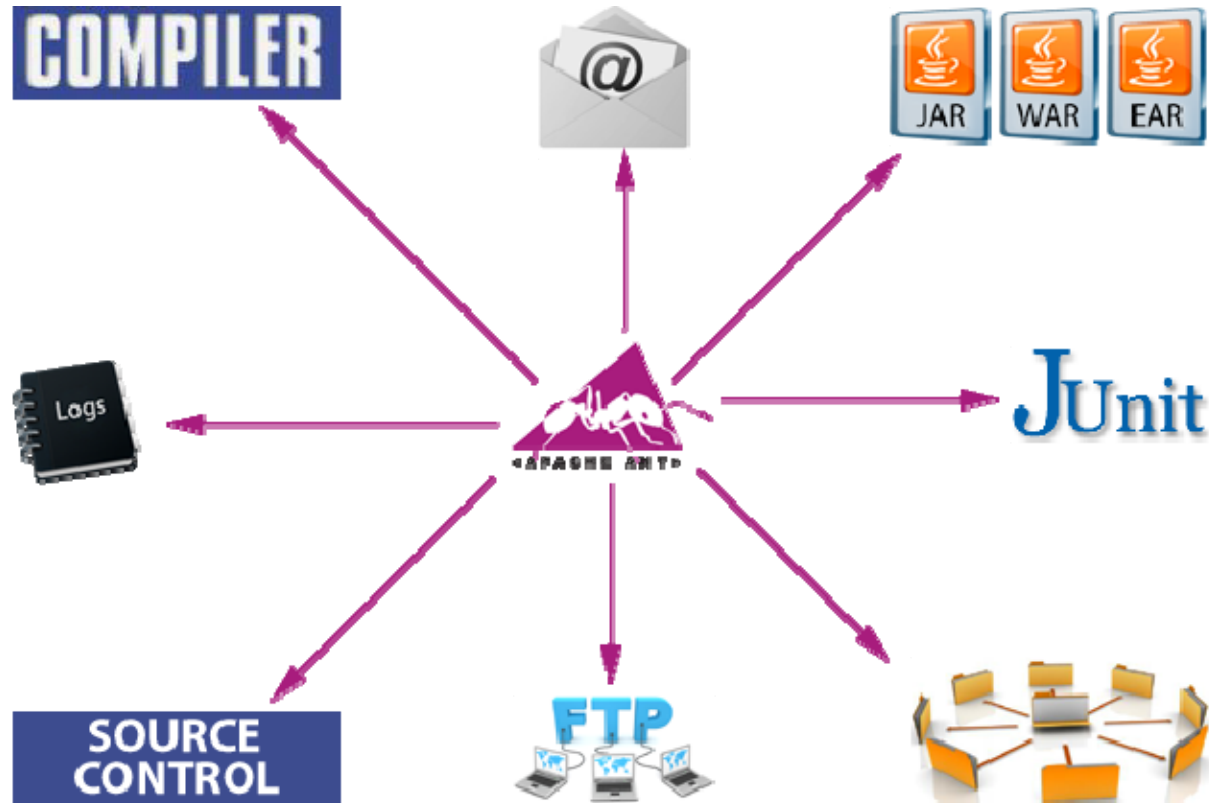
# What Is Ant?



# What Is Ant?



# What Is Ant?



# What Is Ant?



**Windows**



**Unix**



**Mac**

## What Is Ant?

**<?xml?>**



# What Is Ant?



## What Is Ant?

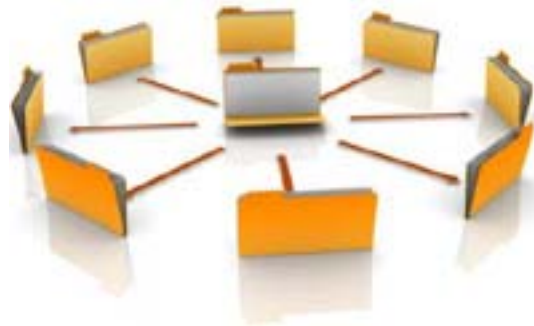
C

C++

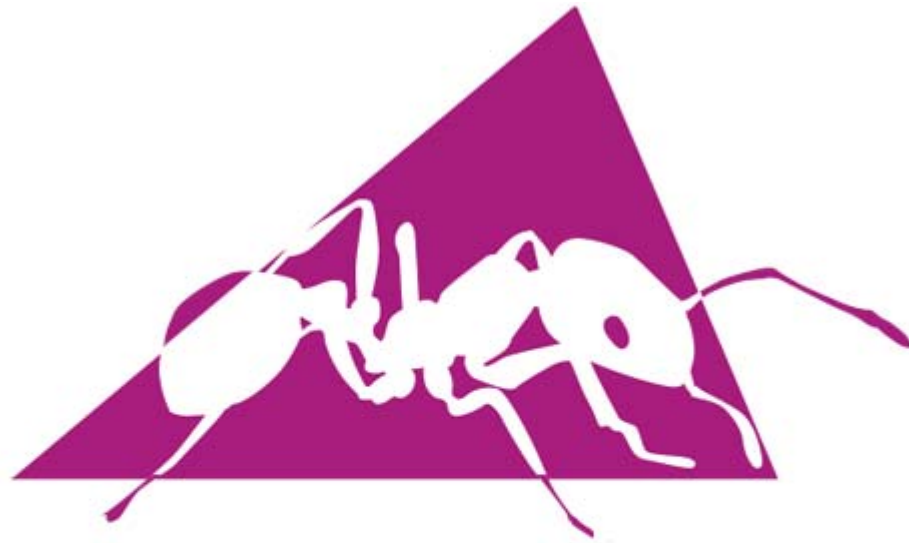
# What Is Ant?

C

C++



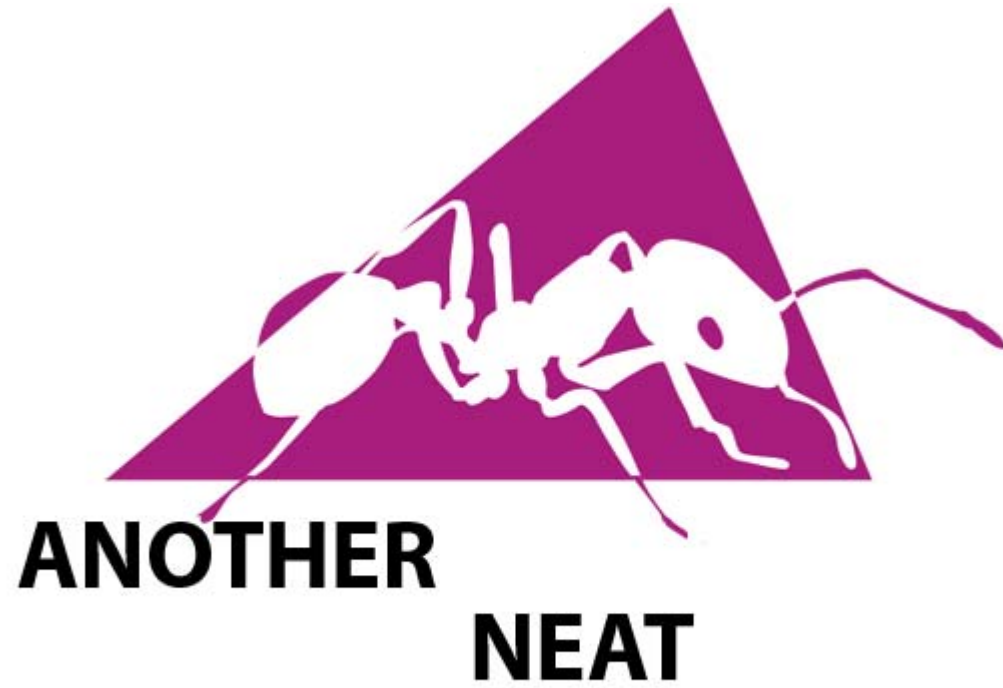
# What Is Ant?



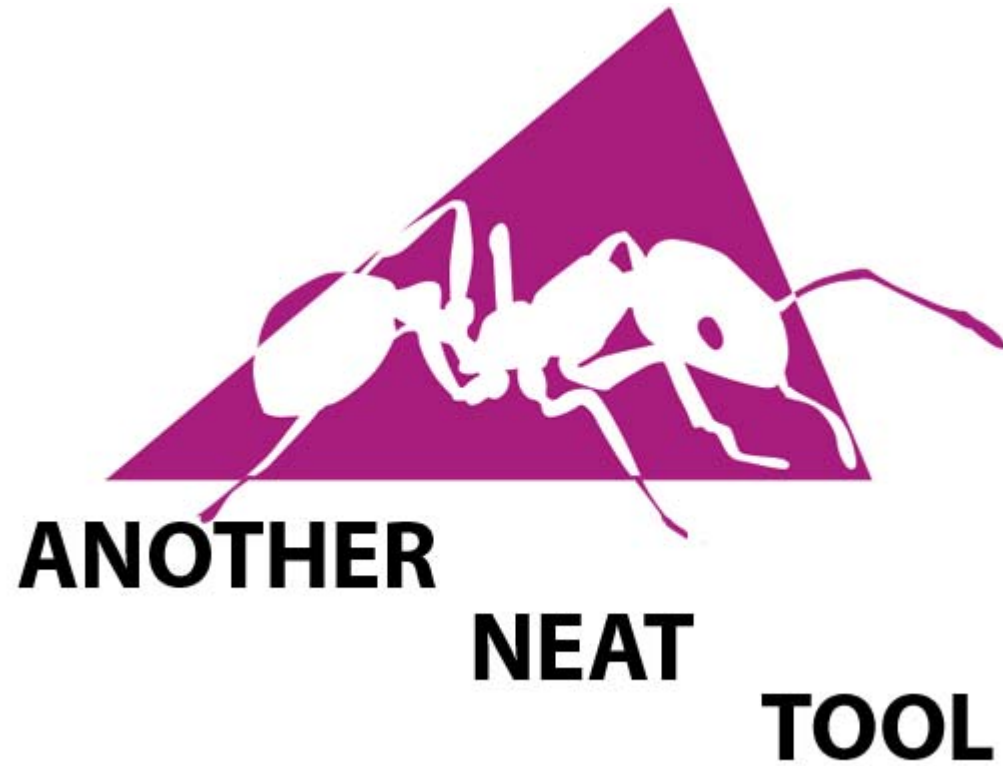
# What Is Ant?



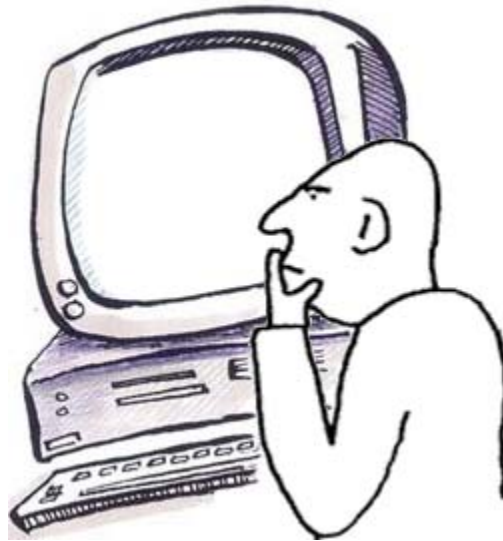
# What Is Ant?



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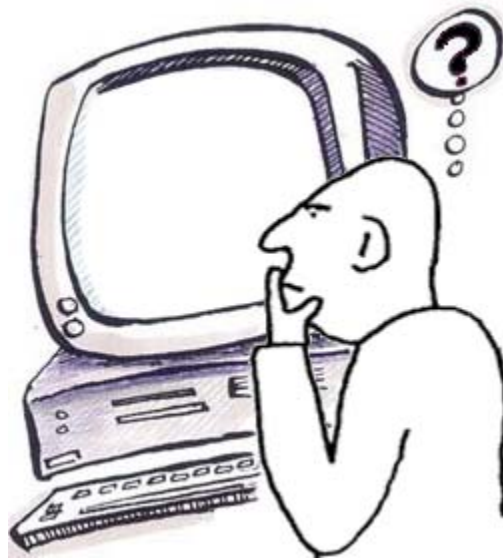


# What Is Ant?





# What Is Ant?



# What Is Ant?



# What Is Ant?

Installing/Configuring



# What Is Ant?

Installing/Configuring

Command Line



# What Is Ant?

Installing/Configuring

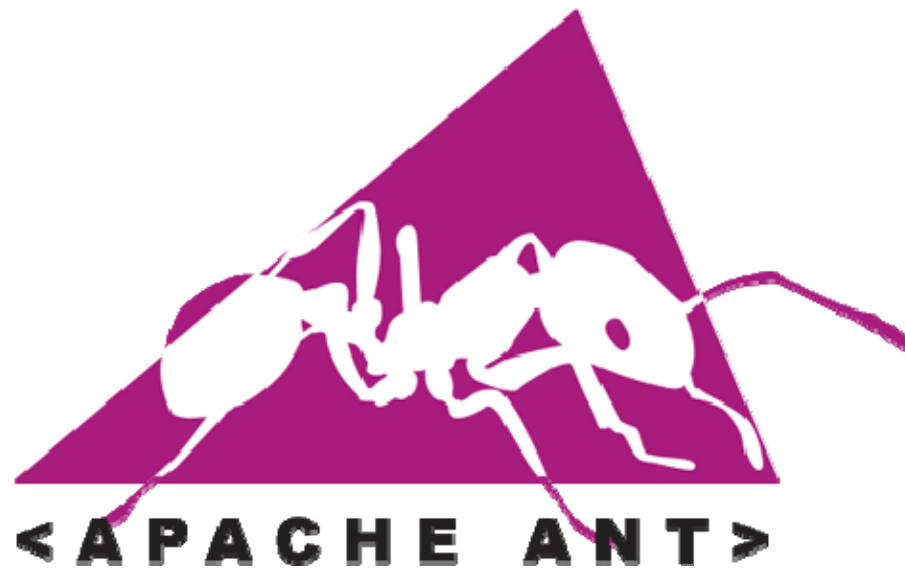
Command Line  
or IDE



# What Is Ant?

Installing/Configuring

Command Line  
or IDE



Ant Tasks

# What Is Ant?

Installing/Configuring

Command Line  
or IDE



Ant Structure

Ant Tasks

# What Is Ant?

Installing/Configuring

Command Line  
or IDE

Nightly Build



Ant Structure

Ant Tasks



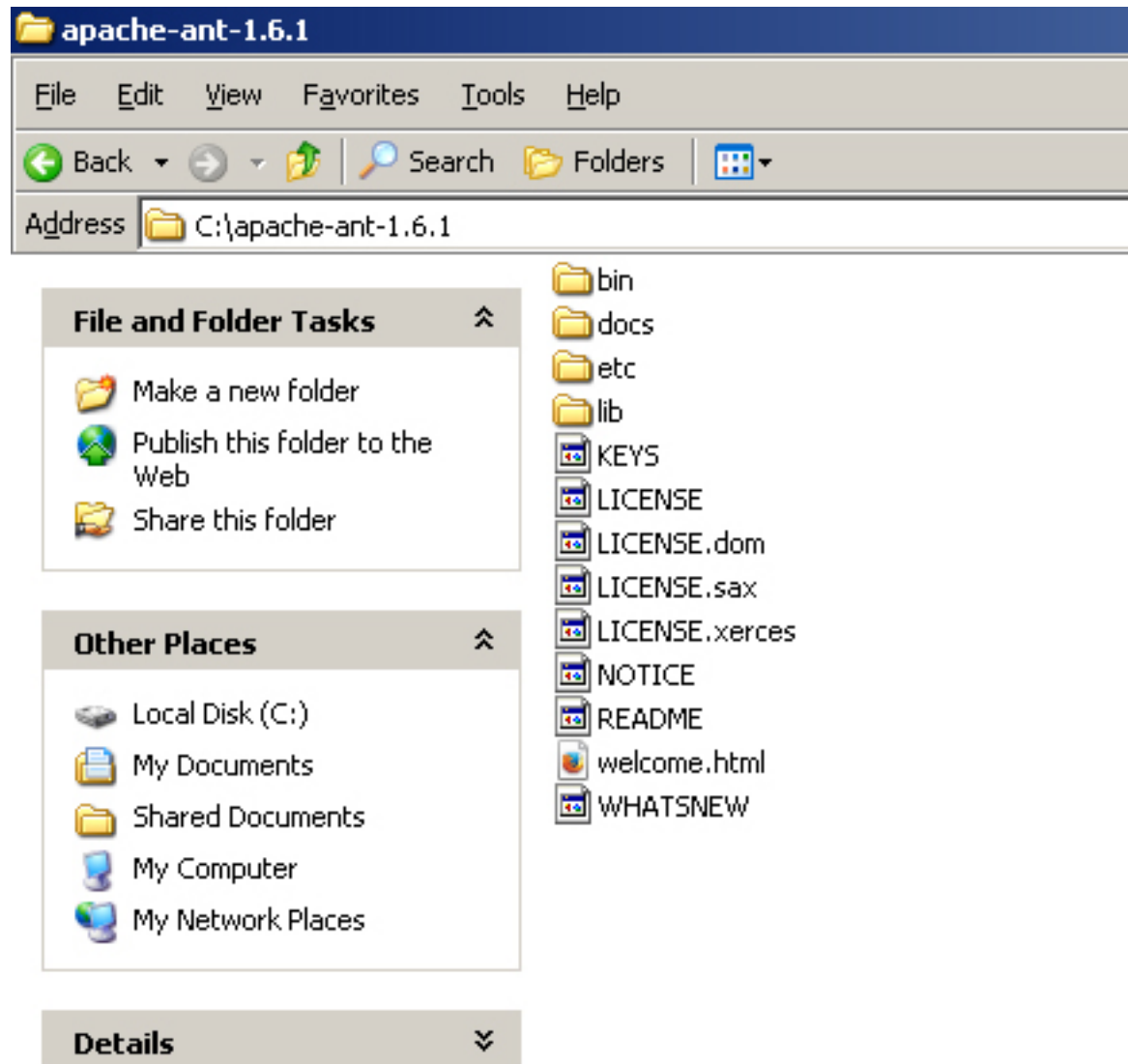
# Installing Ant



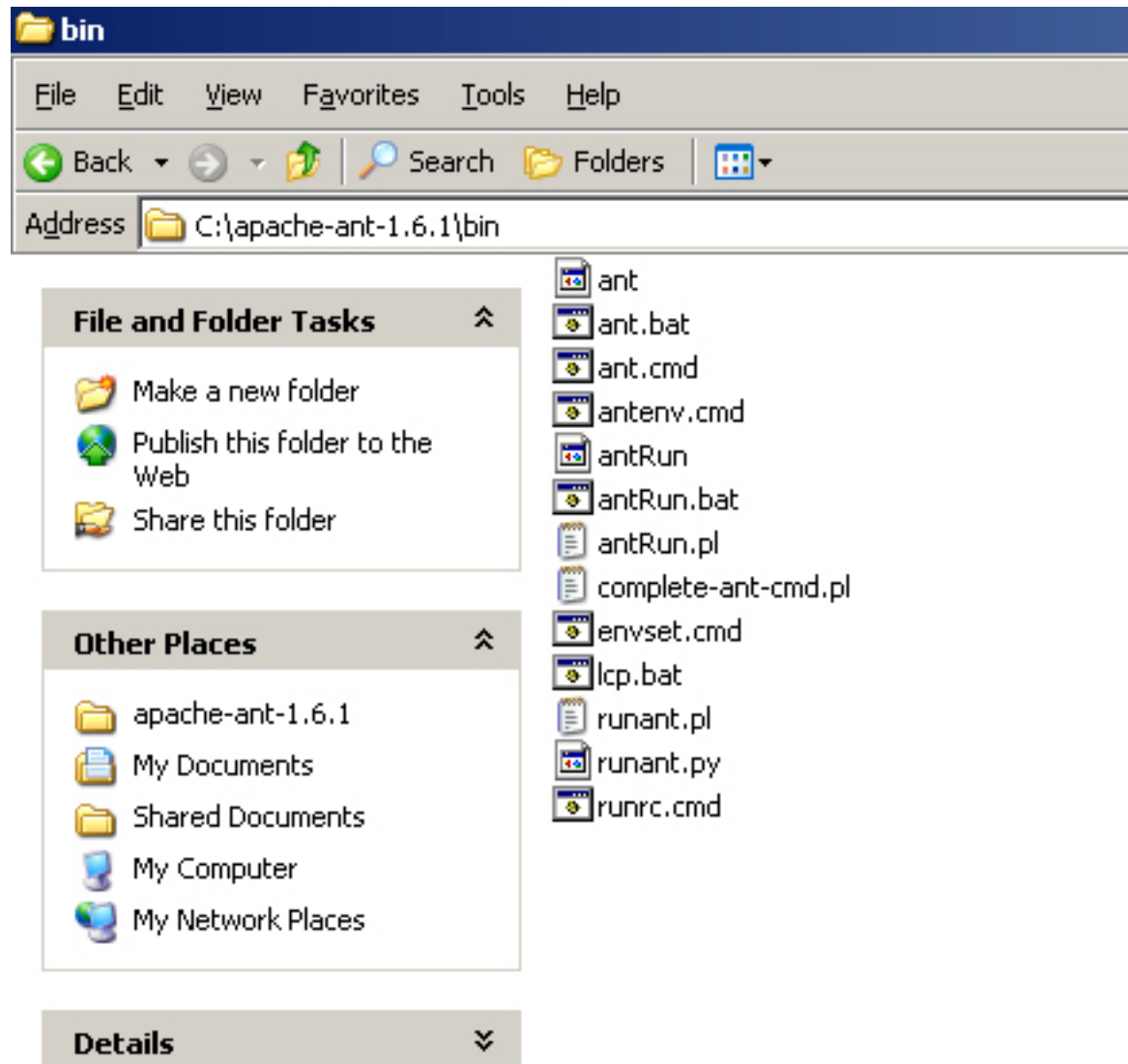
# Installing Ant

- Java Development Kit (JDK) 1.5 or greater
- Download Ant: <http://ant.apache.org/bindownload.cgi>

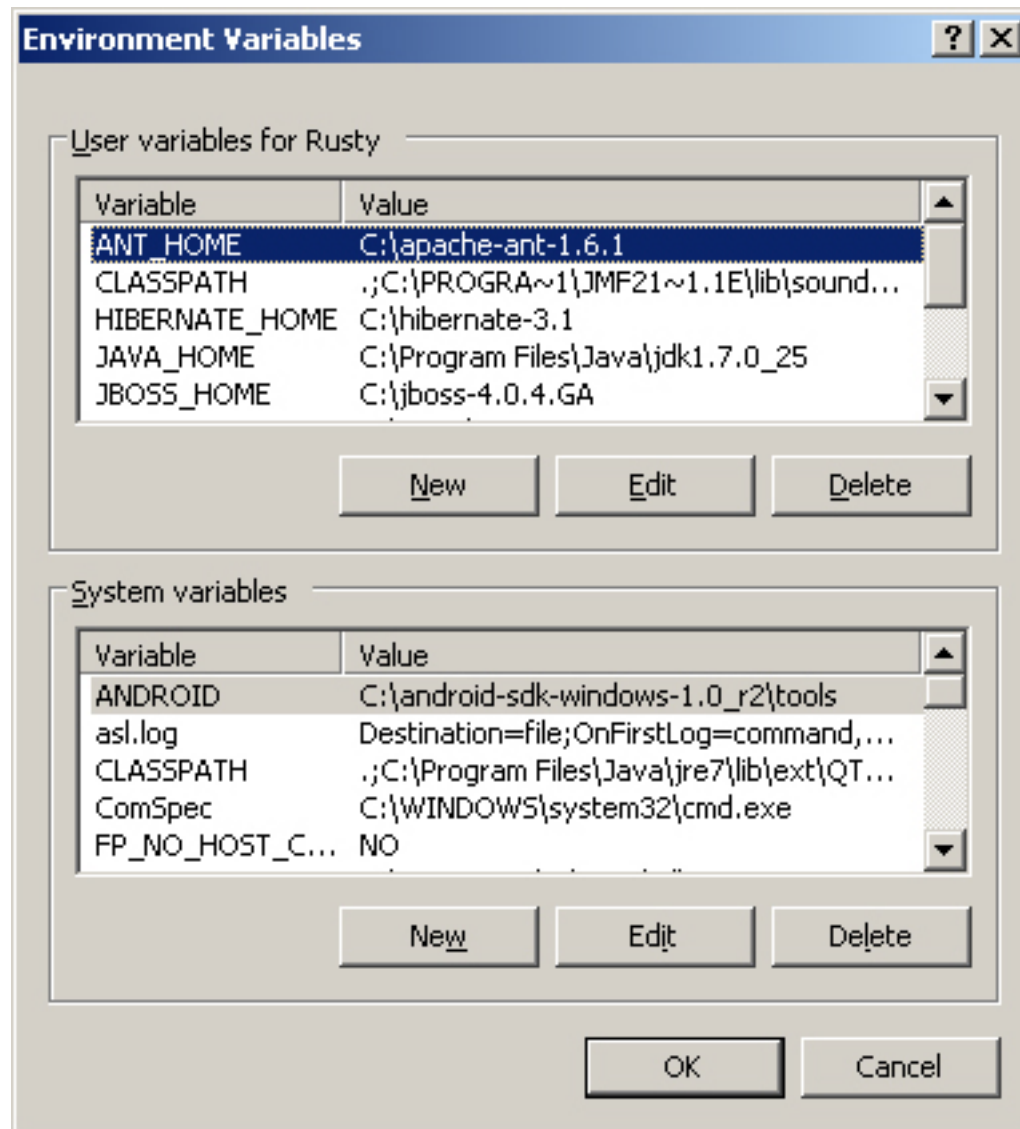
# Installing Ant



# Installing Ant



# Installing Ant



# Summary

