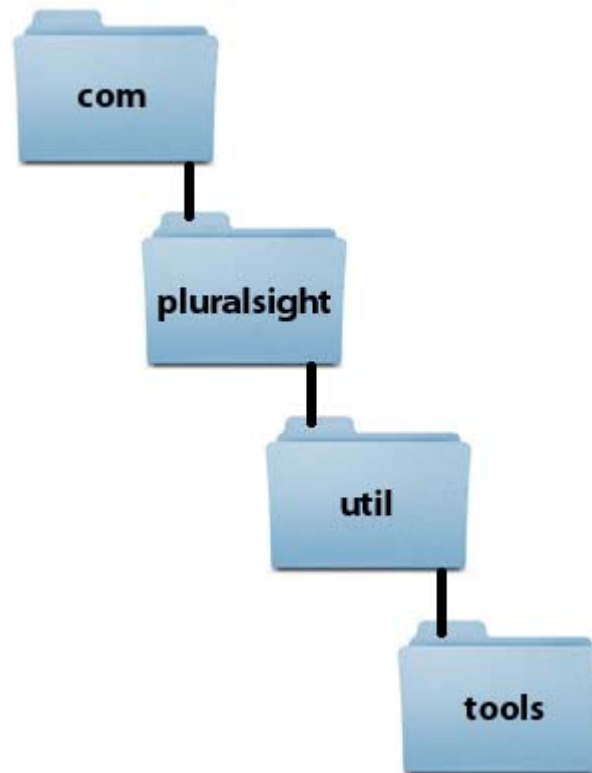


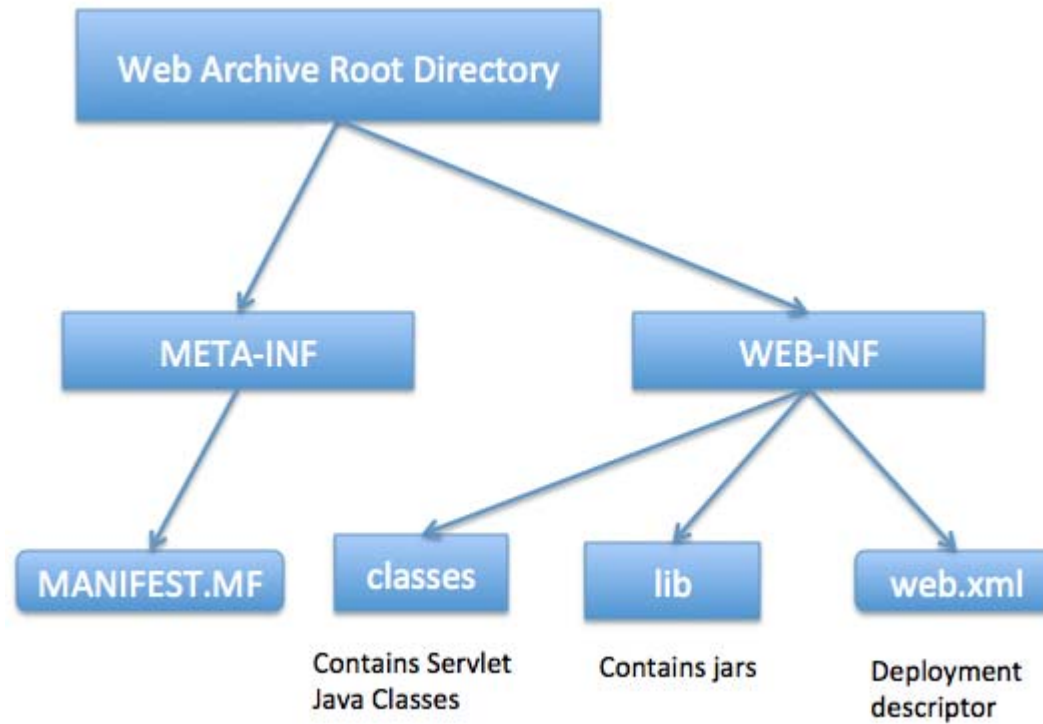
Java Directory Structure



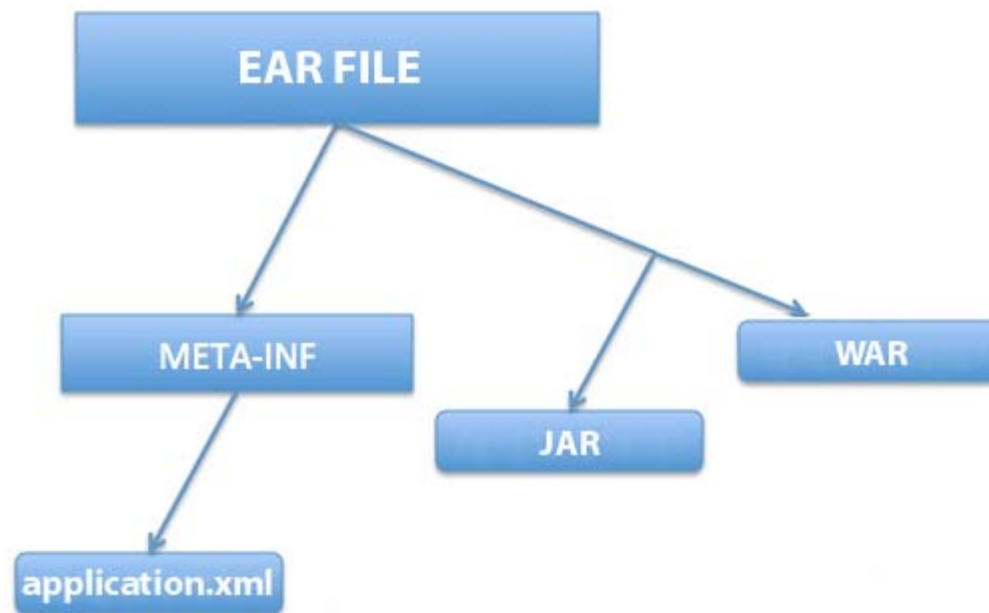
Java Compilers

- classic (the standard compiler of JDK 1.1/1.2)
- modern (the standard compiler of JDK 1.3/1.4/1.5/1.6/1.7/1.8)
- jikes (the Jikes compiler)
- jvc (the Command-Line Compiler from Microsoft's SDK for Java / Visual J++)
- kjc (the kopi compiler)
- gcj (the gcj compiler from gcc)
- sj (Symantec java compiler)
- extJavac (run either modern or classic in a JVM of its own)

WAR File Structure



EAR File Structure



Built-In Properties

ant.file - The full location of the build file

ant.version - The version of the Apache Ant installation

Basedir - The basedir of the build

ant.java.version - The version of the JDK that is used by Ant.

ant.project.name - The name of the project

ant.project.default-target - The default target of the current project

ant.project.invoked-targets - List of the targets invoked in the current project

ant.core.lib - The full location of the ant jar file

ant.home - The home directory of Ant installation

ant.library.dir - The home directory for Ant library files

Ant Version Control Systems

- **CVS**
- **Visual SourceSafe**
- **ClearCase**
- **Continuus/Synergy**
- **PVCS**
- **SourceOffsite**

Ant's Mail Task

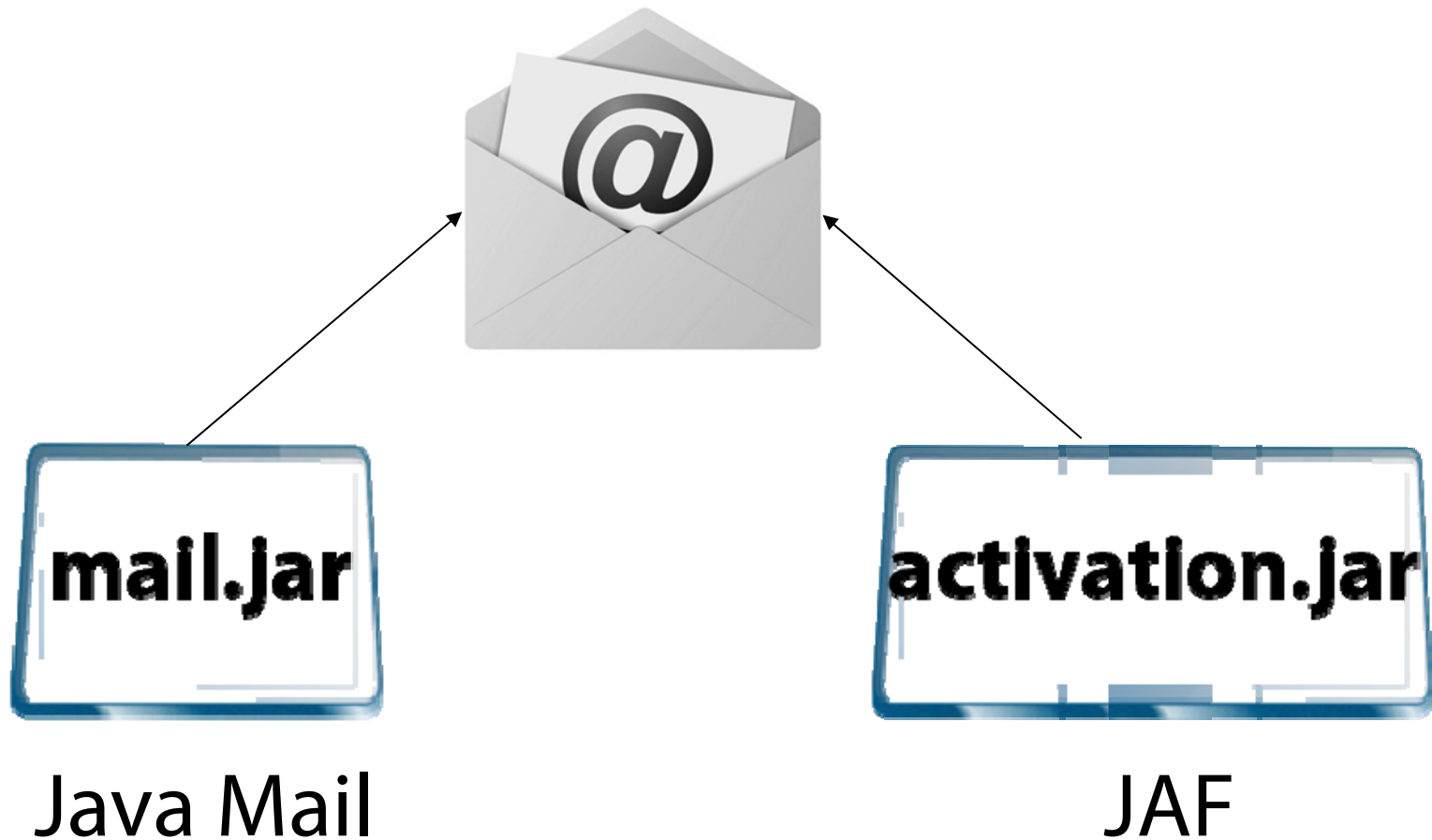


Ant's Mail Task



Java Mail

Ant's Mail Task



Ant's Mail Task

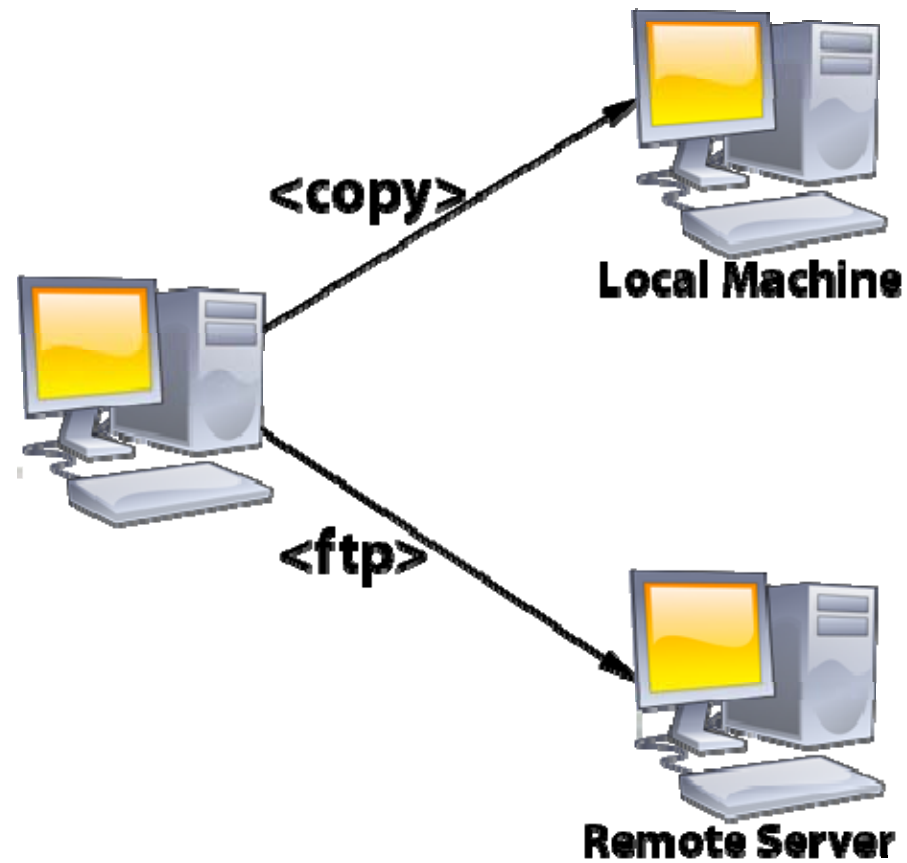
Java Mail

<http://www.oracle.com/technetwork/java/index-138643.html>

JAF

<http://www.oracle.com/technetwork/java/jaf11-139815.html>

Deployment



Ant's FTP Task

Apache Commons Net

<http://commons.apache.org/net/>

Jakarta ORO

<http://attic.apache.org/projects/jakarta-oro.html>

Summary



Ant Tasks

COMPILER

<javac>



Ant Tasks

COMPILER

<javac>



<jar>, <war>, <ear>



Ant Tasks

COMPILER

<javac>



<jar>, <war>, <ear>



<javadoc>

Ant Tasks

COMPILER

`<javac>`



`<jar>`, `<war>`, `<ear>`



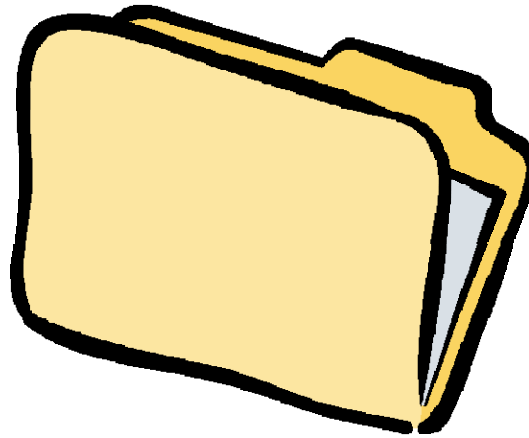
`<javadoc>`



`<copy>`, `<move>`, `<sync>`

Ant Tasks

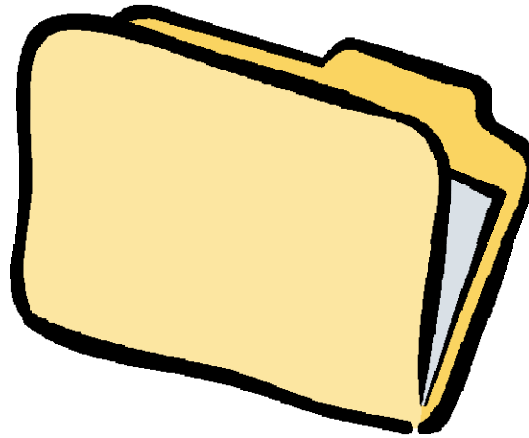
Properties Files



Ant Tasks

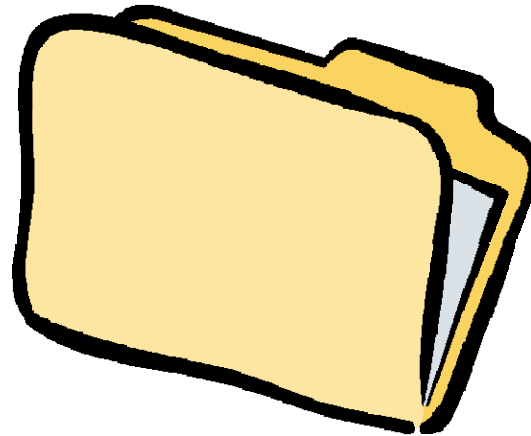
Properties Files

<property>



Ant Tasks

Properties Files



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Ant Tasks

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Ant Tasks



<CVS>

Ant Tasks



<CVS>



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Ant Tasks



<CVS>



<mail>



<copy>

<ftp>

Summary

