**Types**

**ClassFileSet:**

Note: In order for some of these tags to work, you’d need bcel.jar library. And you need to place it in the $ANT\_HOME/lib directory. (Download link : <https://commons.apache.org/proper/commons-bcel/> ).

A **classfileset** is a specialized type of fileset which, given a set of "root" classes, will include all of the class files upon which the root classes depend. This is typically used to create a jar with all of the required classes for a particular application.

Example is included in the files (refer folder : “Types\example1”)

Note : This example also talks about **<descripiton> <patternset><fileset>**

<filelist

id="docfiles"

dir=".”

<file name="Test.class"/>

<file name="HelloWorld.class"/>

</filelist>

<dirset dir="${build.dir}">

<patternset id="non.test.classes">

<include name="apps/\*\*/classes"/>

<exclude name="apps/\*\*/\*Test\*"/>

</patternset>

</dirset>

**MultiRootFileSet**

A MultiRootFileSet is a group of files or directories. MultiRootFileSet acts as a union of FileSets and DirSets that share the same patterns and selectors.

<multirootfileset basedirs="${build.dir},${other.project.dir}">

<include name="apps/\*\*/classes"/>

<exclude name="apps/\*\*/\*Test\*"/>

</multirootfileset>

**FilterSet**

FilterSets are groups of filters. Filters can be defined as token-value pairs or be read in from a file. FilterSets can appear inside tasks that support this feature or at the same level as <target>—i.e., as children of <project>.

You are copying the version.txt file to the dist directory from the build directory but wish to replace the token @DATE@ with today's date.

<copy file="${build.dir}/version.txt" toFile="${dist.dir}/version.txt">

<filterset>

<filter token="DATE" value="${TODAY}"/>

</filterset>

</copy>

Define a FilterSet and reference it later.

<filterset id="myFilterSet>

<filter token="DATE" value="${TODAY}"/>

</filterset>

<copy file="${build.dir}/version.txt" toFile="${dist.dir}/version.txt">

<filterset refid="myFilterSet"/>

</copy>

The above are popular ones, and that will suffice. But if you need more:

Apache Link ref: https://ant.apache.org/manual/conceptstypeslist.html