Sweet Ant Tools 1.0

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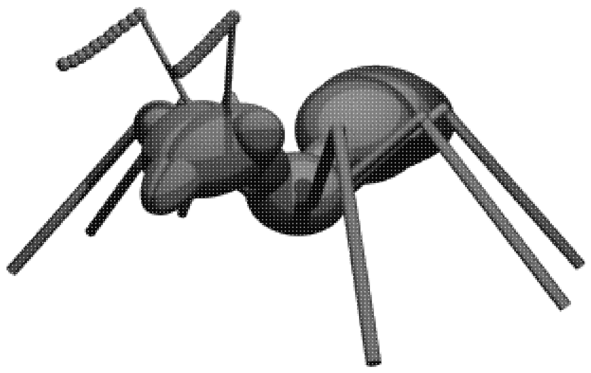
SAT is a set of tools for Ant under Apache license. You will find console mode (that runs Ant in a console that lets you type commands to run builds for instance) that boosts build times. You'll find also tasks to launch Beanshell scripts from within Ant ones, to perform XSLT formatting using XT and to manage XML documents (merge, split or include them in other files). An Ant mode for Emacs is also included. This package is used to generate my web site and Éditions O'Reilly's web site.



Install SAT

Zip Archive sat-0.9.zip

You must first install a Java Virtual Machine version 1.2 or 1.3. You can download one for free on Sun web site. The latest version of SAT is available on my personal web page.

To install SAT, unzip the archive in a directory where you want to install it. Then copy files in the *lib* directory into the *lib* directory of Ant.

Compile SAT

To compile SAT, you must install Ant version 1.3 or 1.4. You can download it on Apache web site. You must also install jar files of Ant (*ant.jar*) and a JAXP XML parser (for instance the one you can download on Sun's web site) in the *lib* directory of SAT.

To generate the SAT *jar* file, type `ant jar` in the *prj* directory. Then put the generated *jar* file (*sat.jar* in the *lib* directory) in the *lib* directory of Ant. You will then be able to generate the documentation and zip archive by typing *ant* on the command line (SAT uses itself to generate it's documentation and the zip archive).

Ant Console

This tool runs Ant in a console (in a terminal or within your favorite IDE) and lets you type commands to run targets of the loaded build file. This method runs much faster than Ant because it saves time to launch the Java Virtual Machine, JIT compilation time and build file loading. You can run builds up to 5 times faster than running Ant on the command line. It is obvious than you save more time on small builds (when time spent in usefull code is small compared to startup time).

Installation

Go in the *bin* directory of your Ant installation, copy the *ant* script (or *ant.bat* for OS disabled people) to file *antc* (or *antc.bat*). Replace `org.apache.tools.ant.Main` with `net.cafebabe.sat.ant.Console`. This script will launch the Ant console instead of traditional Ant. Make sure that this script is in your `PATH`.

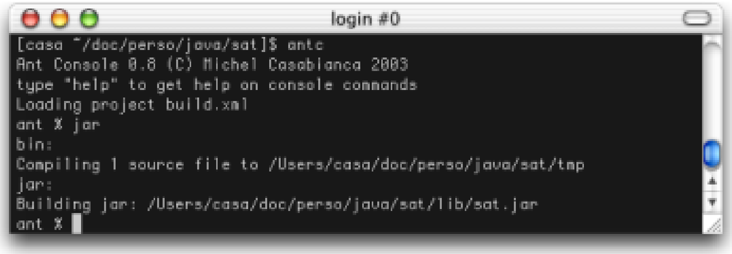
You must, of course, install SAT by dropping the file *sat.jar* in the *lib* directory of your Ant installation.

Usage

To run the Ant console, go in the directory of your project (where is living your *build.xml* file) ant type `antc`. You will display an help screen typing `antc -help` on the command line :

```
Ant Console 0.8 (C) Michel Casabianca 2003
type "help" to get help on console commands
Usage: antc [-help] [-version] [-timer] [-file file] [-find file]
-help    Print this help screen
-version Print the version
-timer   Print build times
-file    To set the build file
-find    To search for the build file
```

When you launch the Ant console, you will be promped as following :



```
[casa ~/doc/perso/java/sat]$ antc
Ant Console 0.8 (C) Michel Casabianca 2003
type "help" to get help on console commands
Loading project build.xml
ant % jar
bin:
Compiling 1 source file to /Users/casa/doc/perso/java/sat/tmp
jar:
Building jar: /Users/casa/doc/perso/java/sat/lib/sat.jar
ant %
```

Ant Console running

To display an help screen about the console commands, type `help` in the console :

```
Commands you can run in the console are the following:
  help          To display this help screen
```

```
         exit           To quit the console
         desc           To describe the loaded project
         load file      To load the build file
         find file      To find the project file
         reload         To reload the current project
         timer on/off   To set timer on/off
         target foo     To run the target foo
         targetname     To run the target (can't be a console command)
         <empty>        To repeat the last command
```

Note that you can launch a given target by typing its name (this is a shortcut for the `target` command) provided that this target hasn't the same name than a console command. You can repeat the last command by typing `ENTER`.

You can load a build file using the `load` command (the path is then relative to the current directory) and search for a build file recursively in the file system with the `find` command (that behaves like the `-find` command line argument for Ant). You can also reload the current project with `reload`. This may be necessary when the build file changes on disk or when the project is corrupted (which happens sometimes after a build error because some tasks don't work after an error).

The `desc` command describes the current project (behaves like the `-projecthelp` command line parameter for Ant).

I have also implemented a timer (to display execution time for builds) that you can switch *on* or *off* using the `timer` command. The result is in milliseconds (because the builds are so fast :o)

Notes

Builds in the console are faster because you save startup times, thus performance gains are more important for small builds. For instance, for an empty build (that doesn't do anything), the build in the console takes about 30 ms and 5 seconds in Ant (more than 100 times slower). Nevertheless, performance boost should not be neglected for real world project. For instance, rebuilding the whole SAT project takes about 12 seconds in the console and 25 seconds running Ant (more than 2 times slower).

Furthermore, this console supercedes my `server` task which is far more complex to use and I don't integrate it from the 0.9 release (you can still download it in version 0.7.

The console was developped and tested using the latest stable Ant release, that is version *1.5.3-1*. Le me know if you have tested with other versions.

Tasks description

SAT is a set of optional tasks for Ant, thus for each task there is a *taskdef* element (to tell Ant which class is associated to a given task) and an XML element.

File, dir et fileset

All those tasks select files using *file* and *dir* attributes and the *fileset* element. These attributes and element use the following syntax:

- **file**: This is an attribute that contains a list (coma separated) of files to process.For instance, *file="foo"* selects the file *foo* while *file="foo,bar"* selects the files *foo* and *bar*.
- **dir**: This is an attribute containing a (coma separated) list of directories to process. This selects all files in a directory but not those in a subdirectory. For instance, `dir="foo"` selects all files in the *foo* directory, but none in a *foo/bar* subdirectory. `dir="foo,bar"` selects all files in directories *foo* and *bar*.
- **fileset**: This is a nested element to select files. See Ant documentation for more details about this element.

Files or directories with relative path are relative to the Ant script. Thus, the attribute `file="foo"` in the script */home/casa/build.xml* selects the file */home/casa/foo*.

It is possible to mix the *file* and *dir* attributes and *fileset* elements to select files. For instance:

```
<foo file="file" dir="dir">
  <fileset dir="dir2" includes="*.xml"/>
</foo>
```

Selects the file *file*, files in the directory *dir* and XML files in the *dir2* directory.

Bsh

Description

This task launch a Beanshell script. This script may be nested in the element or written in a file. It is also possible to give arguments to the script with the *args* attribute or a nested script.

The declarative element (after the <*project*> one) is the following:

```
<taskdef name="bsh" classname="net.cafebabe.sat.bsh.BshTask"/>
```

This task was successfully tested with Beanshell version 1.1a18 (which jar file is included in this package). It doesn't work with version 1.1a12 or older (the interface `bsh.ConsoleInterface` was different for those versions) and with version 1.2b1 (due to a bug).

Parameters

Attribute	**Description**	**Required**
file	Beanshell script(s) to execute	No
dir	Directory(ies) with Beanshell scripts to execute	No

Attribute	Description	Required
args	Argument list (coma separated) to pass the the Beanshell script. You can access this argument array using `this.interpreter.get("bsh.args");`	No
reset	Indicates if the Beanshell interpreter should be reset before to launch the script. Can take the *true* or *false* values.	No (defaults to *true*)

Nested elements

You may select scripts to launch using <*fileset*> nested elements. See Ant documentation for more details about this element.

Nested text

A script may be nested within a <*bsh*> element.

Ant properties

A Beanshell script can access Ant properties using `setAntProperty()` and `getAntProperty()` commands. See below for a short sample script.

Beanshell Commands

This package also provides Beanshell commands to access Ant properties (defined using `property` elements) from within a Beanshell script. Those commands have the following signature:

- `void setAntProperty(String name,String value)`: defines a property called *name* with a value *value*. This property doesn't have to be defined in a `property` element.
- `String getAntProperty(String name)`: returns the value of the Ant property called *name*.

Another command resolves a file name according to the directory where the Ant script is running. In an Ant script, a file name is relative to the directory of the script (instead of the current directory). The signature of this method is the following:

- `File resolveAntFile(String file)`: return the file resolved according to the directory where the script is running.

This task defines a variable called *antProject* in the Beanshell interpreter. This variable contains a reference to the running Ant project.

Examples

To launch a script *bsh.bsh* in the *test* directory, you may write:

```
<bsh file="test/bsh.bsh"/>
```

You can also write the script in the *<bsh>* element:

```
<bsh>
  print("Hello World !");
</bsh>
```

Note that a script nested in a *bsh* element is parsed when the Ant script is executed. Thus it should not contain < nor & characters or it must be nested in a in a *CDATA* declaration as following:

```
<bsh>
  <![CDATA[
  print("<date>"+new Date()+"</date>");
  ]]>
</bsh>
```

To pass a *foo* argument to the script (as if it was was passed on the command line), you may use an *args* attribute:

```
<bsh file="test/bsh.bsh" args="foo"/>
```

Now a more complex sample:

```
<bsh file="test/bsh.bsh" args="foo,bar">
  nested="nested";
</bsh>
```

Where the script *test/bsh.bsh* is the following:

```
#!/usr/local/bin/bsh
// display arguments on the command line
args=this.interpreter.get("bsh.args");;
if(args!=null) {
    for(int i=0;i<args.length;i++)
        print("Argument "+i+": "+args[i]);
}
// display argument in nested script
print("Argument nested: "+nested);
```

Will produce the following output:

```
bsh:
    [bsh] Arguments: foo bar
    [bsh] Executing nested script...
    [bsh] Executing script 'test/bsh.bsh'...
```

```
            [bsh] Argument 0: foo
            [bsh] Argument 1: bar
            [bsh] Argument nested: nested
```

This trace shows the evaluation order of the beanshell code:

1. The arguments are declared first.
2. Then the nested script (if any) is executed.
3. Then the selected script(s) are executed.

The following script displays the value of *foo* property and give a value to the *bar* property.

```
        print(getAntProperty("foo");
        setProperty("bar","Hello World!");
```

XTask

Description

This task uses the XT XSLT processor from James Clark to transform an XML document. This processor is, according to many benchmarks, the fastest Java processor (but the author doesn't develop it anymore).

The task declaration (after the <*project*> element) is the following:

```
        <taskdef name="xtask" classname="net.cafebabe.sat.xml.XTask"/>
```

Parameters

Attribute	Description	Required
file	File(s) to transform.	No
dir	Directory(ies) of the files to transform.	No
style	The stylesheet to use for transformation.	Yes
tofile	The generated file (if there is only one).	No
todir	Directory(ies) of the generated files.	No
extension	The file extension of the generated files.	No (defaults to *.html*)
force	Force the transformation even if the generated file already exists and is newer than the XML file and the stylesheet. May take *true* or *false* values.	No (defaults to false)

Nested elements

You may select files to transform with a nested <*fileset*> element. See Ant documentation for more details about this element.

It is also possible to pass arguments to the XSLT processor using <*arg*> elements. For instance, to assign the value *bar* to the parameter *foo*, you should nest within the <*xtask*> element:

```
<arg name="foo" value="bar"/>
```

This element may not contain text.

Examples

To transform a file *foo.xml* to *bar.html* using the *transfo.xsl* stylesheet, you may write:

```
<xtask file="foo.xml"
       style="transfo.xsl"
       tofile="bar.html"/>
```

To assign the value *bar* to the parameter named *foo*, you will write the element:

```
<xtask file="foo.xml"
       style="transfo.xsl"
       tofile="bar.html">
  <arg name="foo" value="bar"/>
</xtask>
```

Note

This task was previously distributed alone on my page (version 0.1). It is now part of the SAT package.

Valid

Description

This task validates XML files. You may validate a file against its DTD or simply check the XML syntax (check that the document is well formed). You can choose to stop Ant compilation while an error is encountered, the error level or the maximum number of parsing errors to display for each file.

The declarative element (after the <*project*> one) is the following:

```
<taskdef name="valid" classname="net.cafebabe.sat.xml.ValidTask"/>
```

Parameters

Attribute	**Description**	**Required**
file	File(s) to validate.	No
dir	Directory(ies) of the files to validate.	No
dtd	Tells the parser if the file(s) to parse have a DTD (stated in the *DOCTYPE*) or if it should only check the XML syntax (if the value of this attribute is *false*).	No (defaults to *true*)
failonerror	Tells the parser to stop Ant buildfile processing when it encounters an error (if the value of this attribute is *true*).	No (defaults to *true*)
errorlevel	The error level to check (errors of that level or higher are displayed and may interrupt Ant processing). Possible values are *warning*, *error* and *fatal*.	No (defaults to *fatal*)
maxerrors	This is the maximum number of errors to display for an XML file. This number must be greater than 0.	No (defaults to *100*)

Nested elements

The files to merge can be selected using a *<fileset>* element. See Ant documentation for more details about this element.

This element may not contain text.

Examples

To validate all XML files of the a directory, copy the following buildfile in that directory:

```
<?xml version="1.0" encoding="iso-8859-1"?>

<project name="xml" default="valid" basedir=".">

 <taskdef name="valid" classname="net.cafebabe.sat.xml.ValidTask"/>

 <target name="valid">
  <valid dtd="true"
         failonerror="true"
         errorlevel="fatal"
         maxerrors="100">
    <fileset dir="." includes="*.xml"/>
  </valid>
 </target>

</project>
```

Then launch Ant typing `ant` on the command line. Note that attributes have their default values. Adapt this file to meet your needs.

If you want to validate all Ant buildfile on your disk, launch in the root directory the following file:

```
<?xml version="1.0" encoding="iso-8859-1"?>

<project name="xml" default="valid" basedir=".">

 <taskdef name="valid" classname="net.cafebabe.sat.xml.ValidTask"/>

 <target name="valid">
  <valid dtd="false"
         failonerror="false"
         errorlevel="warning"
         maxerrors="1">
   <fileset dir="." includes="**/build.xml"/>
  </valid>
 </target>

</project>
```

The `dtd` attribute is *false* because buildfile do not have a DTD, you ask the parser not to stop when it encounters an error to scan the whole disk, you put the error level on the lowest value to detect any problem and you ask to display only one error per file in order to avoid too many error messages.

Merge

Description

This element is for merging XML files into one. This file contains the root elements within a nesting one.

The task declaration (after the <*project*> element) is the following:

```
   <taskdef name="merge" classname="net.cafebabe.sat.xml.MergeTask"/>
```

For instance, this element may merge the following XML files:

```
<?xml version="1.0"?>
<root>
  <element1/>
  <element2/>
  <element3/>
</root>
```

and:

```
<?xml version="1.0"?>
<root>
  <element4/>
```

```
    <element5/>
  </root>
```

In a single file like this one:

```
  <?xml version="1.0"?>
  <index>
    <root>
      <element1/>
      <element2/>
      <element3/>
    </root>
    <root>
      <element4/>
      <element5/>
    </root>
  </index>
```

This element is useful to generate composite documents. For instance, the index page of my site is generated using this task. A presentation text, news and links (that are small distinct files) are merged in a single XML file. This file is transformed into an HTML page using XSLT.

Parameters

Attribute	**Description**	**Required**
file	File(s) to merge.	No
dir	Directory(ies) of the files to merge.	No
tofile	File name of the resulting file.	Yes
encoding	This is the encoding of the resulting file. For instance, the encoding for western European languages is iso-8859-1. This gives the following XML declaration element: `<?xml version="1.0" encoding="iso-8859-1"?>`.	No (defaults to ASCII encoding)
doctype	This is the second part of the doctype declaration. For instance, a doctype such as *article PUBLIC "-//CASA//DTD article//FR" "article.dtd"* would result in the doctype `<!DOCTYPE article PUBLIC "-//CASA//DTD article//FR" "article.dtd">`. The root element of the document is extracted from this doctype. If no doctype is provided, the root element is *<index>*.	No (defaults to no doctype)

Nested elements

The files to merge can be selected using a *<fileset>* element. See Ant documentation for more details about this element.

This element may not contain text.

Examples

To merge XML files in the *index* directory using *ISO 8859-1* encoding into a file called *index.xml* with no doctype (and a root element *index*), you may write:

```
<merge dir="index"
       tofile="index.xml"
       encoding="iso-8859-1"
       doctype="index PUBLIC '-//CASA//DTD index//FR' 'index.dtd'"/>
```

To merge the XML files in the *xml* directory and subdirectories, in a single *index.xml* file, you may write:

```
<merge tofile="index.xml"
       encoding="iso-8859-1"
       doctype="index PUBLIC '-//CASA//DTD index//FR' 'index.dtd'">
  <fileset dir="xml" includes="**/*.xml"/>
</merge>
```

Insert

Description

This task is for replacing a processing instruction with the content of a given file. You can thus include an HTML file fragment in an HTML file. This is the way menus are included in the web pages of my site.

The task declaration (after the <*project*> element) is the following:

```
<taskdef name="insert" classname="net.cafebabe.sat.xml.InsertTask"/>
```

Parameters

Attribute	**Description**	**Required**
file	File(s) to process.	No
dir	Directory(ies) of the files to process.	No
pattern	This is the name of the processing instruction to replace. For instance, if the pattern is *foo*, the processing instructions to replace are `<?foo ?>`.	No (defaults to *insert*)
source	File to insert to replace processing instructions.	Yes

Nested elements

You can select the files to process using a <*fileset*> element. See Ant documentation for more details about this element.

This element may not contain text.

Examples

To replace <*?menu ?*> processing instructions of files in the *html* directory with the content of the *menu.html* file, you may write the following element:

```
        <insert dir="html"
                pattern="menu"
                source="menu.html"/>
```

Nest

Description

Using this task, you can nest files within a given one, replacing a given processing instruction. You may this way nest HTML fragments in a page template.

The task declaration (after the <*project*> element) is the following:

```
        <taskdef name="nest" classname="net.cafebabe.sat.xml.NestTask"/>
```

Parameters

Attribute	**Description**	**Required**
file	File(s) to process.	No
dir	Directory for files to process	No
pattern	The name of the processing instruction to replace. For instance, if this pattern value is *foo*, the replaced processing instructions are `<?foo ?>`.	No (defaults to *nest*)
source	The file to nest around selected files.	Oui

Nested elements

You can select the files to process using a <*fileset*> element. See Ant documentation for more details about this element.

This element may not contain text.

Exemples

To nest files in the *html* directory within the file *page.html*, replacing the `<?body ?` processing instruction, you may write the following element:

```
       <nest source="page.html"
             pattern="body"
             dir="html"/>
```

Split

Description

This task splits files using processing instructions. The name of the generated files is written in the processing instruction.

The task declaration (after the <*project*> element) is the following:

```
       <taskdef name="split" classname="net.cafebabe.sat.xml.SplitTask"/>
```

For instance, the following file:

```
       <?xml version="1.0"?>
       <?split file="page1.html"?>
       <html>
       ...
       </html>
       <?split file="page1.html"?>
       <?split file="page2.html"?>
       <html>
       ...
       </html>
       <?split file="page2.html"?>
```

Will be split in two files (*page1.html* and *page2.html*):

```
       <html>
       ...
       </html>
```

Most of XSLT processors (such as XT or Xalan) implement extensions to produce more than one file but this task allows you to avoid to pollute your XSLT code with proprietary one.

Parameters

Attribute	Description	Required

Attribute	Description	Required
file	File(s) to process.	No
dir	Directory(ies) of the files to process.	No
pattern	This is the name of the processing instruction used to split the files. For instance, if this pattern is *split*, the processing instructions where to cut files look like `<?split file="foo"?>`.	No (defaults to *split*)

Nested elements

You can choose the files to process with a nested <*fileset*> element. See Ant documentation for more details about this element.

This element may not contain text.

Examples

To split a file called *foo* using processing instructions that look like `<?cut file="bar"?>`, you would write:

```
<split file="foo"
       pattern="cut"/>
```

XML Word Count

Description

This task counts words in an XML document. Useful when you write an XML file with word count constraints (for an article for instance). The text in any element of the document is taken into account while the text in attributes is ignored. This default behavior may be changed using the task parameters.

The task declaration (after the <*project*> element) is the following:

```
<taskdef name="xwc" classname="net.cafebabe.sat.xml.WordCountTask"/>
```

Parameters

Attribute	Description	Required
separators	The list of separator characters (characters between words).	No (defaults to a reasonable list of separators).
excludeElements	A coma separated list of elements to exclude from the word count.	No (defaults to no elements).

Attribute	Description	Required
singleElements	A coma separated list of elements that count as a single word.	No (defaults to no elements).
includeAttributes	A coma separated list of attributes to include in the word count. Those attributes are written as *element@attribute*, thus an attribute is associated to an element.	No (defaults to no attributes).
documentProperties	A file that contains the properties of the document (that is a list of elements to exclude, single elements and attributes to include). This is a properties file containing the properties `separators`, `excludeElements`, `singleElements` and `includeAttributes`. Each of these property may be empty.	No (no properties are loaded when empty).
property	The Ant property where the word count is put.	Yes
propertyFiles	The Ant property where to put the file count.	No (defaults to no property).
quiet	If set to *yes*, the task doesn't display any word and file count.	No (default to *no*).

Nested elements

You can choose the files to process with a nested <*fileset*> element. See Ant documentation for more details about this element.

This element may not contain text.

Examples

Let's say you want to count words in the XML files of the current directory except *build.xml* and want to exclude the `source` element of the word count. You may write the following target:

```
<target name="wc">
 <xwc excludeElements="source">
  <fileset dir="." includes="*.xml" excludes="build.xml"/>
 </xwc>
</target>
```

This will produce the following output:

```
$ ant wc
Buildfile: build.xml

wc:
      [xwc] 8414 words in 2 file(s).

BUILD SUCCESSFUL
```

```
Total time: 4 seconds
```

Now let's suppose that we want to write the count rules in a properties file named *document.properties*:

```
excludeElements=comment,source
singleElements=file,keyb,code
includeAttributes=sect@title
```

This file indicates the following rules:

- We must exclude elements `comment` and `source` from the word count.
- The elements `file`, `keyb` and `code` must count as a single word.
- The text in attributes `title` in the `sect` elements must be taken into account.

To count words in XML documents of the *xml* directory using those rules and put the result in the `wc` Ant property, we might write:

```
<target name="wc">
 <xwc property="wc"
      documentProperties="document.properties">
  <fileset dir="xml" includes="*.xml"/>
 </xwc>
</target>
```

Link

Description

This task checks links in HTML files. It distincts two kinds of links: *local* links (that point to a file in the same site and are relatives) and *external* ones (that point to other sites and start with a protocol indicator such as `http:` or `ftp:`).

The task declaration (after the <*project*> element) is the following:

```
<taskdef name="link" classname="net.cafebabe.sat.html.LinkTask"/>
```

Parameters

Attribute	**Description**	**Required**
file	File(s) to process.	No
dir	Directory(ies) to process.	No
external	Indicates if external links should be checked.	No (defaults to *false*).

Attribute	Description	Required
interrupt	Indicates if processing should stop with an error message if a broken link is met.	No (defaults to *false*).
log	The name of the file where to log link checks.	No

Nested elements

You can choose the files to process with a nested *<fileset>* element. See Ant documentation for more details about this element.

This element may not contain text.

Examples

Let's suppose that you want to check HTML files in the *html* directory and it's subdirectories and want to stop processing if a broken link is met. You would write:

```
<link external="false"
      interrupt="true">
 <fileset dir="html" includes="**/*.html"/>
</link>
```

If a broken link is met, the compilation will stop with an error message that gives the file and link.

If you want to to check external links (which may be quite long) without stopping on error and log checks in a file named *links.txt*, you may write:

```
<link external="true"
      interrupt="false"
      log="links.txt">
 <fileset dir="html" includes="**/*.html"/>
</link>
```

Emacs mode

Ant is widely used to build Java projects, and thus is integrated to many Java development tools (such as JDE, an Emacs mode for Java development). Nevertheless, Ant also proves to be helpful in many other occasions, such as generate HTML documentation from XML source files. That's what lead me to develop this standalone Ant mode for Emacs.

To install this Ant mode, copy *el/ant.el* file in a location where Emacs will find it and add the following lines in your *.emacs* configuration file:

```
(load "ant")
(ant-mode)
```

When you restart Emacs, an `Ant` menu appears, with the following entries:

- **Build**: Launch Ant. A prompt in the minibuffer enables you to type the target to launch. If you enter no target, the default one will run. You may give more than one target, separating them with a white space.
- **Rebuild**: Launch Ant using the target you used in last execution.
- **Build File**: The default behavior is to search for the build file recursively in the directory tree. Using this menu option, you can use any build file.
- **Targets**: Prints the list of targets in the minibuffer.
- **Help**: Print an help screen on the build file (a list of targets and their description).
- **Start Server**: Starts Ant in server mode (see the `server` task bellow). This feature is quite experimental and buggy).
- **Stop Server**: Stops Ant running in server mode.

The result of the build is printed in the compilation buffer and you may thus click on an error message to open the responsible file in an Emacs buffer.

It may be useful to bind keys to Ant calls. For instance, my *.emacs* file has the following lines:

```
    (global-set-key [f2] 'ant-build)
    (global-set-key [f3] 'ant-rebuild)
```

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History

Version 0.9 (2003-07-14)

Upadtes are the following:

- The `server` task has been removed from the project and is not supported anymore. Use the Ant Console instead, which is much simpler to use.

Version 0.8 (2003-07-13)

Updates are the following:

- All tasks have been moved in the package `net.cafebabe.sat`. This is the last time, I swear :o)
- I have developped a console (which is far more efficient than the server mode).
- Scripts *antc*, to run the console, and *ants*, to run the server, have been added in the *bin* directory.

Version 0.7 (2002-11-11)

The documentation uses my new DTD and has been updated.

New tasks:

- Server: Boosts builds.
- Nest: New XML management task.
- XML Word Count: To count words in XML documents.

Bug fix and enhancements:

- Task XTask debugged (to run in server mode).
- Encoding management enhanced in `merge` task.
- Updated to Ant version 1.5.1.

Version 0.6 (2001-10-27)

The task `Marge` has been optimized (using `StringBuffer`). The task is about 30 times faster !

Version 0.5 (2001-10-17)

New `Valid` task to validate XML files.

Version 0.4 (2001-09-22)

New `Link` task to check links in an HTML file.

Version 0.3 (2001-09-18)

Test tasks attributes. File attributes (such as `file` and `dir`) are checked.

Bug correction (file path are now relative to the project file location instead of the current directory).

It is now possible to set and get Ant properties from within a Beanshell script using `setAntProperty()` and `getAntProperty()` commands.

Tasks are no more executable outside Ant (this was much more simple within Ant and painful to maintain).

The code was ported to the last versions of Beanshell (version 1.1a18 works, but 1.2b1 doesn't due to a bug).

Added unit tests (in the *prj/test* directory).

Version 0.2 (2001-08-20)

The JAXP API is now used in the XTask. Permits to instanciate the XML parser in a generic way (independent from the parser implementation, provided that it implements the JAXP API). This class also search correctly for files (in the directory of the *build.xml* file).

Version 0.1 (2001-06-06)

The tasks have been modified (after intensive usage to generate my web site) to be more efficient/user friendly. Changes are the following:

- **bsh**: <*arg*> nested elements have been removed (parameters are set in a nested script). *args* attribute have been implemented to pass arguments to a script (as if they had been written on the command line launching the script). *source* attribute have been replaced with *file*. Attribute *dir* has been implemented. <*fileset*> element have been implemented. The output of the scripts have been redirected in the standard way (after a [bsh] tag).
- **xtask**: Bug correction. All attributes have changed (they where inefficient for real usage). <*fileset*> have been implemented.
- **merge**, **insert** and **split**: *file* and *dir* implemented. No more *verbose* attribute (output have been tailored). <*fileset*> element implemented.

There should not be any syntax modification in future versions, that should only stabilize the code (attributes have to be tested to produce informative error messages).

Version 0.0 (2001-05-28)

First distributed version of SAT. The tasks *Bsh*, *XTask*, *Merge*, *Insert* and *Split* have been implemented.

Enjoy !