

# Rake



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AlamoCoders May 2009

<http://www.slideshare.net/armmer/alamocoders-may-09-rake-1424692>

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# Manual Builds

- Compile + X-Copy
- Zip file



# Why Automate?

- Once done, rarely need to touch it again
- Immediate feedback
- Can work on other stuff besides the build
- Remove human interaction (decrease errors)
- Reproducible



# Current Solutions

- NAnt
- MSBuild



# Old School: NAnt

```
<?xml version="1.0" encoding="utf-8"?>
<project name="HelloUser" default="complete" xmlns="http://nant.sf.net/schemas/
nant.xsd">
  <property name="build.dir" value="build" />
  <property name="dist.dir" value="dist" />
  <property name="build.number" value="0.0.0.1" />
  <property name="product" value="HelloUser" />
  <property name="copyright" value="Copyright 2008-2009 Jason Meridth. All
rights reserved" />
  <property name="clr.version" value="v3.5" />
  <property name="msbuild" value="{environment::get-variable('WINDIR')}/
Microsoft.NET/Framework/{clr.version}/MSBuild.exe" />

  <target name="complete" depends="prepare, compile, setup, unit_test,
create_zip" description="Compile and Run Tests" />

  <target name="prepare" description="Deletes all generated folders and files to
start with clean folder structure">
    <delete dir="{build.dir}" />
    <delete dir="{dist.dir}" />

    <mkdir dir="{build.dir}" if="{not directory::exists(build.dir)}/>
    <mkdir dir="{dist.dir}" if="{not directory::exists(dist.dir)}/>
  </target>

  <target name="compile" description="Compiles debug solution">
    <exec program="{msbuild}">
      <arg value="HelloUser.sln" />
      <arg value="/verbosity:minimal" />
      <arg value="/p:Configuration=debug" />
      <arg value="/p:WarningLevel=0" />
    </exec>
```

```
    <copy todir="{build.dir}" overwrite="true">
      <fileset basedir="HelloUser\bin\Debug">
        <include name="HelloUser.exe" />
        <include name="HelloUser.pdb" />
        <include name="HelloUserLibrary.dll" />
        <include name="HelloUserLibrary.pdb" />
      </fileset>
    </copy>
  </target>

  <target name="setup" depends="compile">
  </target>

  <target name="unit_test">
    <exec program="nunit-console.exe" basedir="lib\nunit">
      <arg value="HelloUserLibraryTests\bin\Debug
HelloUserLibraryTests.dll" />
    </exec>
  </target>

  <target name="create_zip">
    <zip zipfile="{dist.dir}\HelloUser-bin-{build.number}.zip">
      <fileset basedir="{build.dir}">
        <include name="*" />
      </fileset>
    </zip>
  </target>
</project>
```



# What is **Rake**?

“...a simple Ruby build program with capabilities similar to make”  
~ Jim Weirich (creator)



## TESTS

MAKE SURE THEY'RE ALL GREEN OR ELSE

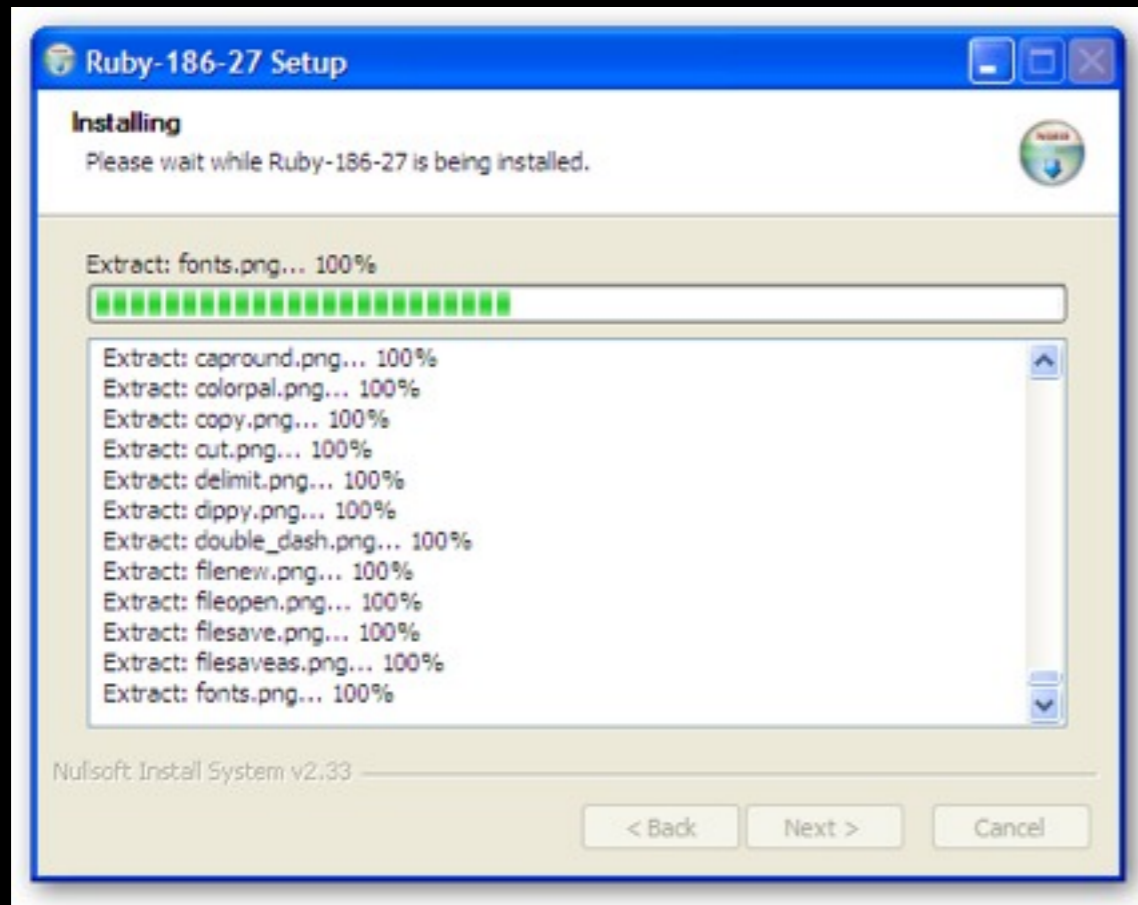


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# Install on Windows

One Click Installer



Cue VM...



<http://rubyforge.org/projects/rubyinstaller/>

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# Hello World

```
# Rakefile (or rakefile or rakefile.rb or Rakefile.rb)
```

```
require 'rake'
```

```
desc "Hello World!"
```

```
task :hello_world do
```

```
  puts "Hello World!"
```

```
end
```





# rake -T (--tasks)

```
jasonmeridth@laptop ~/code/presentations/rake $ rake -T  
(in /Users/jasonmeridth/code/presentations/rake)  
rake hello_world # Hello World!
```



# run rake

```
~/code/presentations/rake $ rake hello_world  
(in /Users/jasonmeridth/code/presentations/rake)  
Hello World!
```



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# A good Rakefile

## Example

JAGreggory's Fluent-NHibernate Rakefile  
(<http://github.com/jagregory/fluent-nhibernate>)



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# Gotchas

It is the RubyZip gem, `_NOT_` ZipRuby.  
(Go ahead Joe, laugh)



# I can haz **knowledge**

- One click install
- Obeying Pragmatic Programmers - Learn a new language once a year
- Easy to extend
- Easy to read
- Easy to learn



You can haz **questions**

???



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# Resources

- <http://rake.rubyforge.org>
- <http://github.com/jimweirich/rake>
- <http://martinfowler.com/articles/rake.html>
- <http://derickbailey.lostechies.com/archive/2009/05/08/how-a-net-developer-learned-ruby-and-rake-to-build-net-apps-in-windows.aspx>
- <http://railsenvy.com/2007/6/11/ruby-on-rails-rake-tutorial>
- <http://github.com/jagregory/fluent-nhibernate/tree/master>

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