SpringSource **Tool Suite** 2.7.0

- New and Noteworthy -

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Updated for 2.7.0.RELEASE



ENHANCEMENTS – 2.7.0

General Updates

Eclipse Indigo (3.7)

STS now ships by default on top of the just released Eclipse Indigo (3.7.0) release. Eclipse Helios is still supported via the appropriate update site.

With this release, we drop support for Eclipse 3.5, aka Galileo.

Mylyn 3.6

The Mylyn version within STS is upgraded to the latest Mylyn release 3.6.

EGit 1.0

STS now comes with EGit being installed by default. No need to install additional support, just start using Git right from within STS.

Scala IDE 2.0.0 beta

We added the latest beta builds of the Scala IDE to the list of possible extensions to STS to ease the use and installation of Scala for your projects. This plays nicely together with the Cloud Foundry integration within STS now supporting the direct deployment of Lift applications into Cloud Foundry.

Since the Scala IDE is still in beta status, we marked this extension as "experimental".

Memory Settings

We raised the default memory settings for the PermGen when running STS slightly from a max. of 256m to 384m. If you would like to use a different value or increase the heap size, you can easily tweak them in your sts.ini file of your STS installation.

Spring Development Tools

Updated template projects

STS 2.7.0 comes with updated Spring Template Projects (go to the File > New > Spring Template Project) that you can use to bootstrap your development with the various features of the Spring frameworks. These templates have been refreshed to reflect newer versions of the Spring projects, making it a snap to build current, correctly configured applications.

In addition to update the Spring templates, we cleaned up the list of template projects and removed the OSGi related ones from that list. The OSGi tooling support continues as part of the Eclipse Virgo project.

dm Server Tools



Contribution to Eclipse Virgo

This release of STS is the last one that ships a new build of the dm Server tooling. If you are already using Eclipse Virgo as your runtime environment for enterprise OSGi development, you should consider to move to the Eclipse Virgo IDE tooling (which basically is the contributed version of the dm Server tooling from STS) in the future.

If you use the tooling together with dm Server 1.0 or dm Server 2.0, you will be able to install this last version of the dm Server tooling as an optional component.

Grails Development Tools

GSP content assist now recognizes arguments coming from controller actions

In the screenshot below, you can see that the controller action (list) returns a map of two elements. The map values are available as variables in the associated GSP. You can see that in the content assist list. Also, STS makes a best effort to infer the types of all of these arguments.

```
🛮 🛭 UserController.groovy - STS_2.7.0_M2/grails-app/controllers/com/springsource/sts
▶ 😂 STS_2.7.0_M2 ▶ 进 grails-app/controllers ▶ 🌐 com.springsource.sts ▶ 😉 UserController
    package com.springsource.sts
  3 class UserController {
        def list = {
                       ax = Math.min(pa
                                                    .int('max') : 10. 100
             [userInstanceList: User.list(params), userInstanceTotal: User.count()]
🛭 👩 list.gsp - STS_2.7.0_M2/grails-app/views/user

<g:each in="${userInstancesist}"</pre>
29⊜
                         30
                                      @ userInstanceList : List
                            31
```

GSP content assist now recognizes empty tags

As described here (http://grails.org/Doc+Comments+for+GSP+tags), it is now possible to specify that your custom GSP tags should be 'empty' when being applied in content assist. This means that your tag will be filled in like this:

<q:myTaq />

instead of like this:

<q:myTag></q:myTag>

To do so, simply create a javadoc for your custom tag and ensure that the @emptyTag attribute is somewhere in the Javadoc on its own line.

Grails 1.4-M2 will be taking advantage of this for all of its standard tags (eg-def, set, etc).

Improved GSP content assist inside of scriptlets



We have made many small enhancements to content assist is GSPs, especially when inside of groovy scriptlets. You will have a much smoother experience when editing GSP files.

GSP Search

The Eclipse search engine will now look inside GSP files for search results. References inside of scriptlets will be found:

```
🛭 🛭 User.groovy - STS2.7.0/grails-app/domain/com/springsource/sts
▶ 🔗 ▶ 😕 grails-app/domain 🕨 🌐 com.springsource.sts 🕨 😉 User 🕨
    package com.springsource.sts
    class User {
 5⊜
        static constraints = {
 6
7
🛭 🕝 create.gsp - STS2.7.0/grails-app/views/user 🔭
                           ⇒30
                           </div>
34⊜
                   <div class="buttons">
                       conon class "butt
 2 E
                                                              - -
🧬 Search 🛭
                   'com.springsource.sts.User' - 17 references in workspace (no JRE)
  create.gsp (3 matches) - user - views - grails-app - STS2.7.0
  edit.gsp (2 matches) - user - views - grails-app - STS2.7.0
  list.gsp (2 matches) - user - views - grails-app - STS2.7.0
  show.gsp (2 matches) - user - views - grails-app - STS2.7.0
▶ G UserController – com.springsource.sts – grails–app/controllers – STS2.7.
```

Also, references to tags will be found:

```
🛮 🛭 UserTagLib.groovy - STS2.7.0/grails-app/taglib/com/springso
▶ 😂 ▶ 🕮 ▶ 🌐 com.springsource.sts 🕨 😉 UserTagLib 🕨 🍙 some : C
    package com.springsource.sts
  3 class UserTagLib {
        static namespace = 'user'
        def some = { }
  6
    }
🖾 🔓 create.gsp - STS2.7.0/grails-app/views/user
28
         $30⊜
             <user:some>
⇒31
              <user:some/>
⇒32
             </user:some>
             33
 3.1
   4.0
🔗 Search 🛭
                   'com.springsource.sts.UserTagLib.some' - 3 references in workspace (no J
  create.gsp (3 matches) - user - views - grails-app - STS2.7.0
```



Service field declaration content assist

Content assist inside of Grails artifacts at a location where a new field can be declared will now display all available services as proposals:

```
package com.springsource.sts

class User {

def spleenService

sp

A specialService - New property
A springSecurityService - New property
A sprocketService - New property

A sprocketService - New property
```

Grails 1.4 Support

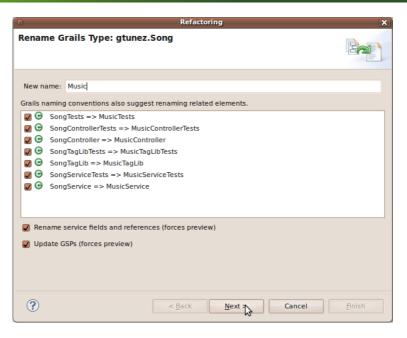
Greclipse and STS Grails tooling can now work with Grails 1.4.M1.

Grails Aware Rename Type Refactoring

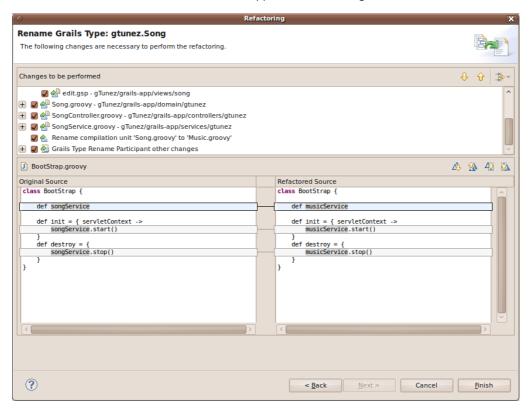
When a rename type refactoring is invoked from the Groovy Editor or the Project Explorer in the Grails perspective the refactoring will be 'Grails Aware'. A Grails specific rename type wizard will popup allowing the user to enable or disable Grails specific support:

- Grails Type Awareness:
 - Rename related types (for example when renaming a Domain class also rename associated Controller, Test and Service classes).
- Service Awareness:
 - o Updating autowired service fields when a Service class is being renamed
- GSP Awarenes:
 - Updating references to the renamed type(s) inside of GSP files.
 - o Renaming the associated views folder when a Controller class is being renamed.



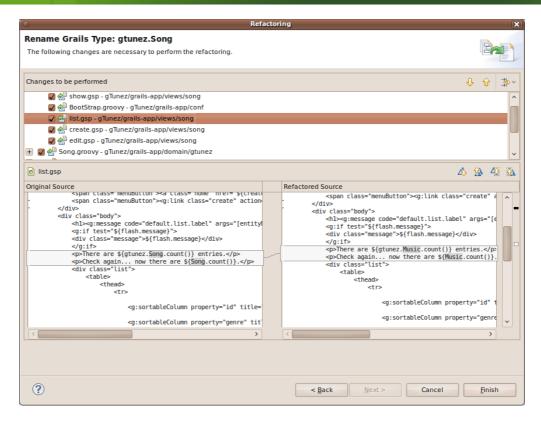


Grails Rename Type Wizard Page One



Grails Rename Type - Preview





Grails Rename Type – GSPs

Groovy-Eclipse

Groovy-Eclipse 2.5.1 is now available and is installable from the extensions page on the dashboard. See:

http://groovy.codehaus.org/Groovy-Eclipse+2.5.1+New+and+Noteworthy

for the 2.5.1 New & Noteworthy and

http://groovy.codehaus.org/Groovy-Eclipse+2.5.0+New+and+Noteworthy

for the 2.5.0 New & Noteworthy.

Groovy-Eclipse Compiler

The 2.5.1 release of the groovy-eclipse-compiler plugin for Maven is now available. This allows you to compile your groovy-maven projects using Groovy-Eclipse outside of the IDE. Using this compiler plugin avoids many of the stub generation issues of GMaven and also compiles your projects more quickly.

For documentation on how to use the groovy-eclipse-compiler, see:

http://groovy.codehaus.org/Groovy-Eclipse+compiler+plugin+for+Maven



This page also includes a link to an archetype project that can get you started quickly with using the compiler plugin.

Global location for DSLDs

Groovy-Eclipse now supports a global location to place your DSLDs (see

http://blog.springsource.com/2011/05/08/better-dsl-support-in-groovy-eclipse/

for a description of DSLDs).

You will notice that there is a new classpath container on all of your Groovy/Grails projects:



This classpath container contains all of the global and plugin DSLDs for your projects.

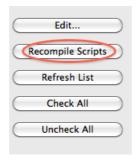
If you want a DSLD file to be applicable to all of your Groovy projects in the workspace, then place your global DSLDs in the ~/.groovy/greclipse/global_dsld_support/dsld directory. A package statement of 'package dsld' is required. These DSLDs will appear in the global_dsld_support class folder.

DSLDs that are specific to a single version of Groovy-Eclipse are located in the plugin_dsld_support class folder.

Note: Eclipse 3.6 and earlier suffer from

https://bugs.eclipse.org/bugs/show_bug.cgi?id=305172

where these external classfolders will not be updated automatically. Instead, every time that you make a change to the global_dsld_support folder, you should go to the DSLD preferences page (Preferences -> Groovy -> DSLD) and click "Recompile Scripts":

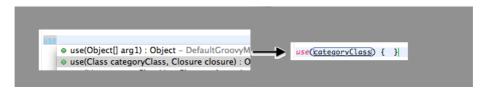


In the coming weeks, we will be supplying several default DSLD files to handle the common builders and AST transforms inside of Groovy-Eclipse (such as Swing Builder, and HTML builder). These DSLDs will appear in the plugin_dsld_support folder.

Groovier way of handling closure arguments in content assist



When applying a content assist method proposal that has a closure as its last argument, Groovy-Eclipse will now automatically use the standard Groovy idiom of placing the closure expression outside of the parens. See, for example this screenshot:



Support for \$//\$ multiline strings

Groovy-eclipse now recognizes \$//\$ style strings that have been introduced in Groovy 1.8.

Conditional breakpoints for Groovy code

Conditional breakpoints are now supported in Groovy files using groovy syntax:

```
3 class UserController {
         static allowedMethods = [save: "POST", update: "POST", delete: "POST"]
        def index = {
             redirect(action: "list", params: params)
        def list = {
    parame .max = Math.min(prome .max ? parame .int('max') : 10, 100)
    [userInstanceList: User.list(parame), userInstanceTotal: User.count()]
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                  Properties for com.springsource.sts.UserController$_closure2 [line:12] - list
        def creat
def u
userI
retur

Breakpoint Properties
                                                 Line Breakpoint
                                                  Type: com.springsource.sts.UserController$_closure2
        }
                                                  Line Number: 12
                                                  Member:
                                                                list
            if (u
                                                  ▼ Enabled

    Suspend thread  Suspend VM
```

This is built on top of the same infrastructure that the Groovy debug support uses. So, enhanced debug support must be activated and JDT Weaving must be enabled. See the blog post about Groovy Debug support in STS for more information:

http://blog.springsource.com/2010/11/30/new-groovy-debug-support-in-sts-2-5-1/.

Groovy 1.8 support

Support for the Groovy 1.8 compiler is available. It will not be installed by default with the rest of Groovy-Eclipse. Instead, it is available as a separate feature that can be installed from the Groovy-Eclipse update site. For information on how to do this, see Compiler Switching in Groovy-Eclipse:

http://groovy.codehaus.org/Compiler+Switching+within+Groovy-Eclipse

Script outline view



When working with scripts, the outline view displays contents in a more Groovy-like way. The run, and main methods are hidden. Instead, script variable declarations are displayed.

The enhanced outline view is part of Groovy-Eclipse and is available for third party plugins to use their own outline extender. For more information, see the feature request here:

GRECLIPSE-1029: http://jira.codehaus.org/browse/GRECLIPSE-1029

Read access and Write access differentiation when searching

When doing a find references in the Groovy editor (CTRL-Shift-U on Windows/Linux), read occurrences are highlighted differently from write occurrences:

```
class User {
         String name
 3 }

    5 def user = new User()

7 println user.name
  9 def user2 - new User()
⇒10 user2.<mark>name</mark> = "Bob"
⇒11 println user2.name
🤗 Search 🖾
'name' - 5 occurrences in 'UserScript.groovy'
😘 1: String name
5: user.name = "Linda"
% 6: println user.<mark>name</mark>
49: user2.name = "Bob"
$10: println user2.name
```

Better inferencing for Generics

Groovy-Eclipse now recognizes more complex forms of generics to help seed type inferencing. For example, in the following code, Groovy-Eclipse can determine that the second call to "get()" is declared by the WeakReference class and returns a java.lang.Class object:

```
3 import java.lang.ref.WeakReference
class MyMap extends HashMap<String,WeakReference<Class>>> {
    MyMap cache;
    cache.get("name").get() .canonicalName
    Class java.lang.ref.Reference.get()
```



For more information, see GRECLIPSE-997: http://jira.codehaus.org/browse/GRECLIPSE-997

Gradle

STS 2.7.0 includes an initial, basic set of features to support working with Gradle projects inside of STS. The following list of features are provided:

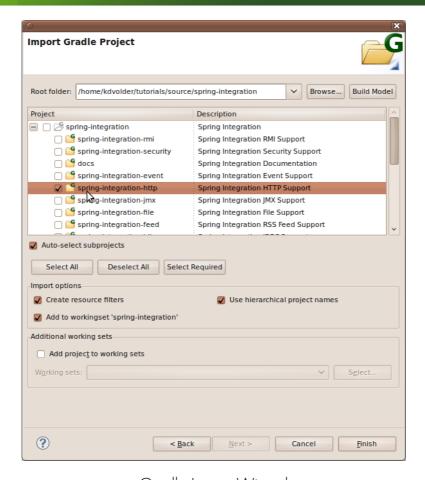
First set of features

- Supports working with nested Gradle "multi projects":
 - o mapping hierarchical structure onto a flat set of "linked" Eclipse projects with appropriate automatically configured resource filters.
 - o flexible name mapping, allows user to adopt two different default name mapping schemes and also rename individual projects in the workspace without breaking the tools.
- Gradle Import Wizard:
 - o ease importing existing Gradle (Multi) Projects with a number of subprojects.
 - o ease the importing of a subset of "interesting projects", without breaking project dependencies.
 - o allow incrementally importing additional projects after initially importing only a subset.
- Manage Gradle dependencies: (so projects can "build/compile" using the Eclipse JDT tools)
 - o Classpath container that manages Gradle Jar dependencies on the Eclipse classpath
 - o configure source folders automatically
 - o configure project dependencies automatically
- Task Execution UI allows users to...
 - o create, store, edit, manage and execute lists of Gradle tasks as Eclipse launch configurations from within STS.
 - o Since this leverages the standard Eclipse launching framework, you can also
 - relaunch from a list of favorites
 - relaunch from a "recent history" list
 - store launch configurations in files that can be shared via a code repository like SVN, CVS or git.

For more information see the documentation:

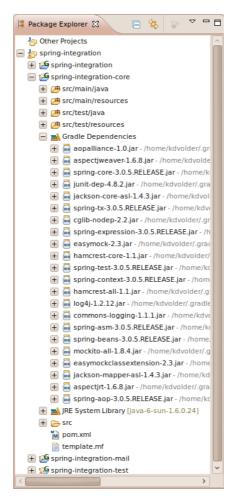
http://static.springsource.org/sts/docs/2.7.0/reference/html/gradle/index.html





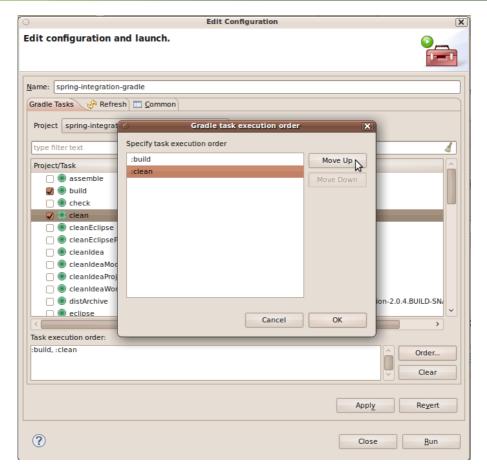
Gradle Import Wizard





Gradle Classpath Container





Gradle Launch Configuration Editor

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.7.0 release:

https://issuetracker.springsource.com/secure/IssueNavigator.jspa?reset=true&jq|Query=project+%3D+STS+AND+fixVersion+in+%2811205%2C+11001%2C+11000%2C+10999%2C+10998%29+AND+status+in+%28Resolved%2C+Closed%29

