

SpringSource Tool Suite 2.3.3.M2

- New and Noteworthy -

Christian Dupuis 2.3.3 July 15, 2010

Updated for 2.3.3.M2

NEW FEATURES – 2.3.3.M2

Spring Development Tools

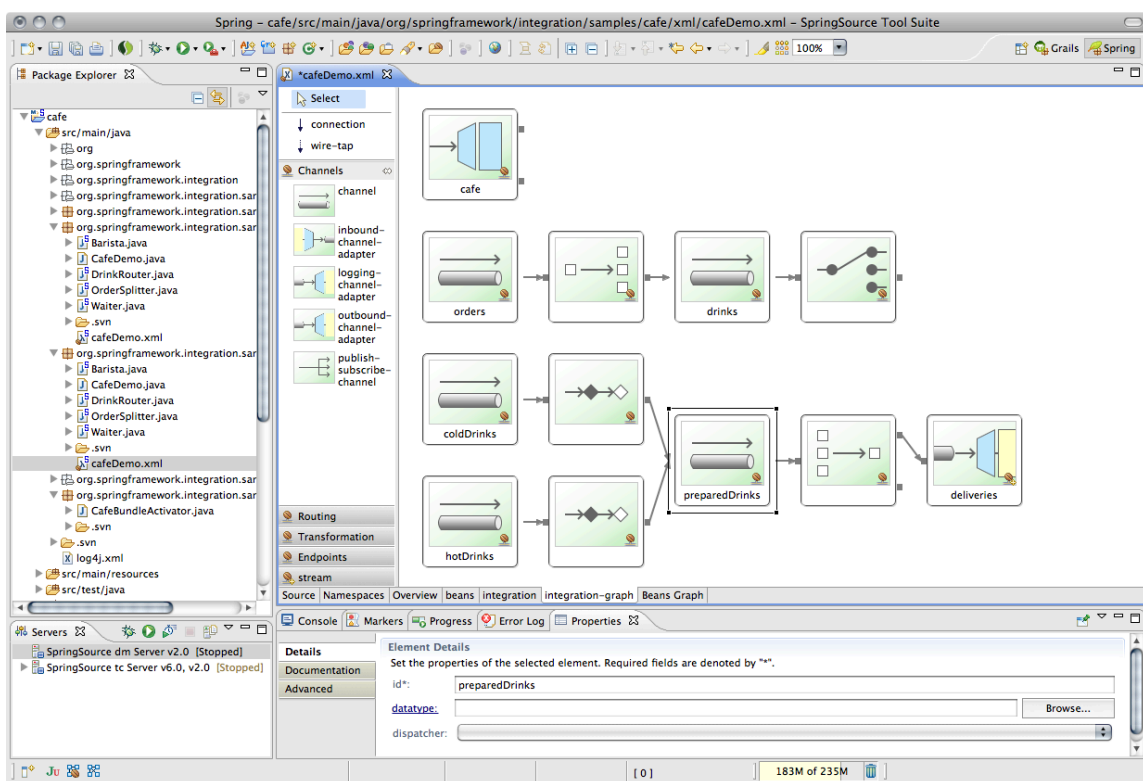
Support for Spring Roo 1.1.0.M2

STS has been updated to support Spring Roo 1.1.0.M2. Roo 1.1.0.M2 is also the version bundled with STS and available from the Extension install.

The new Roo milestone comes with new commands to create add-on projects. Support for those new commands has been added to the STS New Roo Project wizard.

Visual Editor for Spring Integration

STS 2.3.3.M2 now comes with visual editing support for Spring Integration configuration files. This editor is accessible from a separate “integration-graph” tab of the Spring Configuration Editor, which is the STS default editor for any Spring XML configuration file.



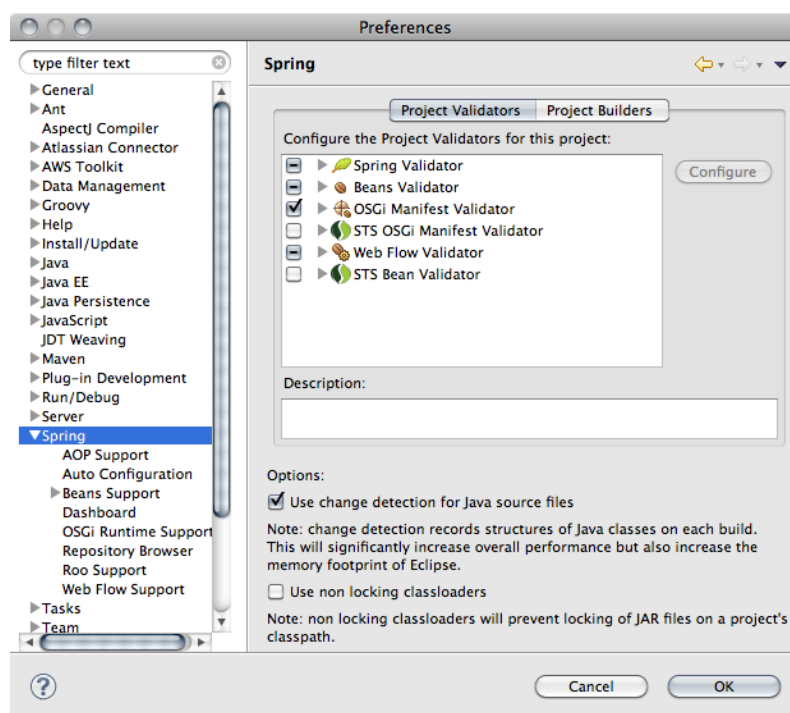
Non-locking ClassLoader Infrastructure

STS now comes with infrastructure to prevent file locking due to classes loaded from a particular JAR. This is especially useful if you use automatic dependency management with Maven or Ivy.

Read more about this in the following JIRA:

IDE-1088: Spring IDE retains file lock on classpath jars –
<http://jira.springframework.org/browse/IDE-1088>

This feature can be enabled from the Spring preferences:



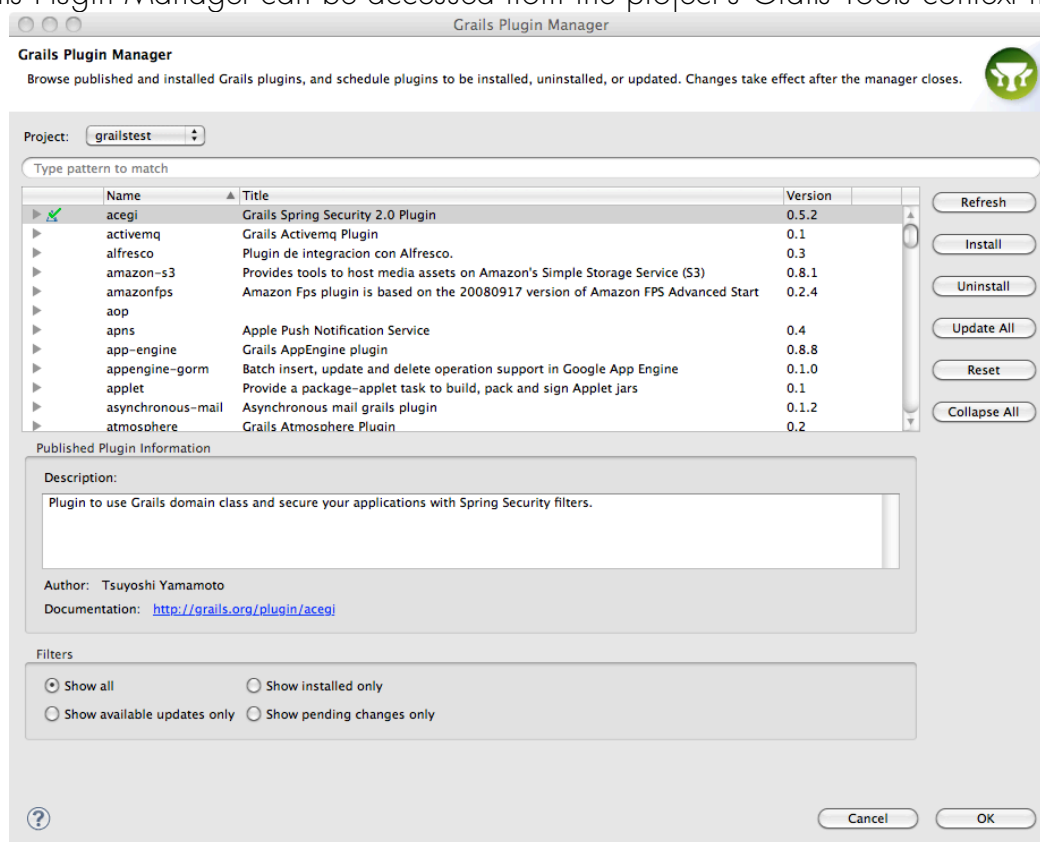
Groovy & Grails Development Tools

Plugin Management

The Grails Plugin Manager allows you to manage a Grails project's installed plugins. Several operations are possible through the plugin browser:

- Browse/search installed and available plugins
- Navigate to documentation for a plugin
- Install, update or uninstall plugins

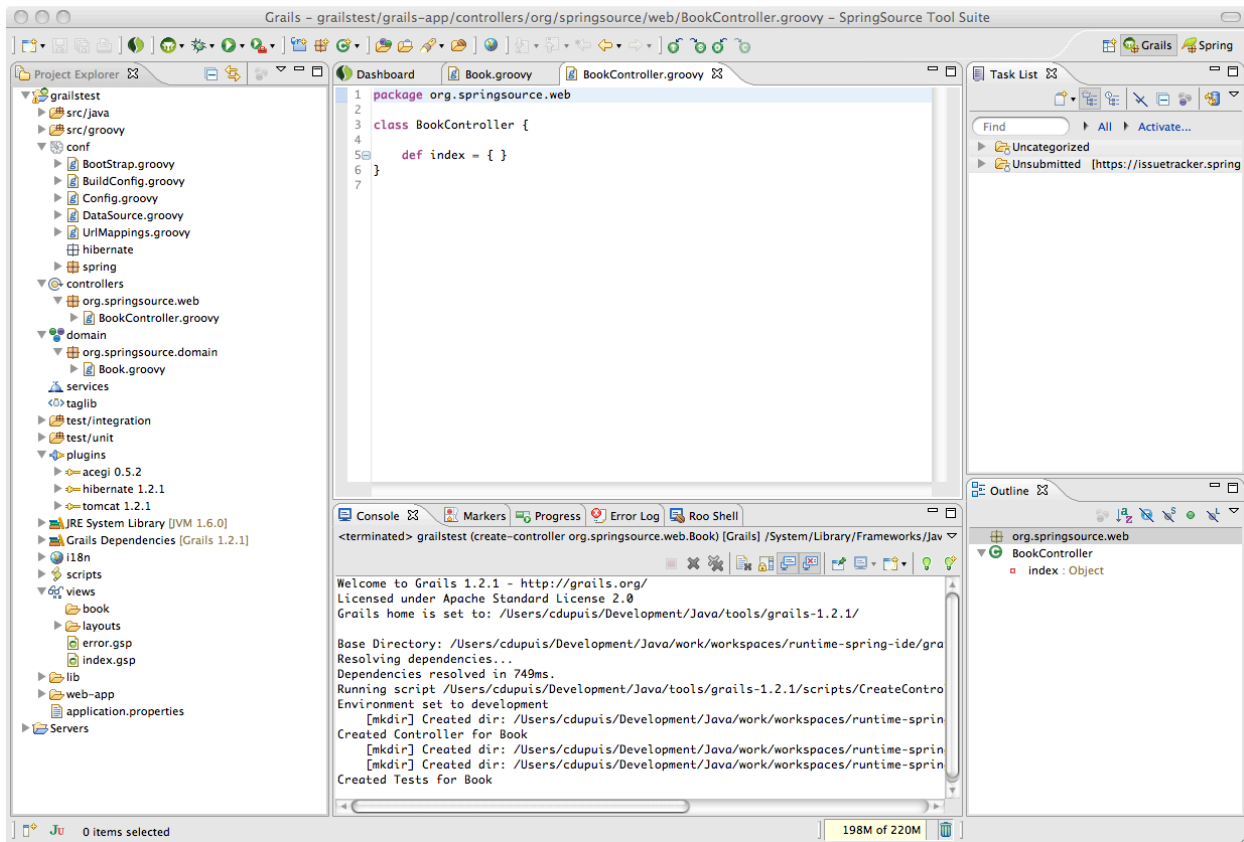
The Grails Plugin Manager can be accessed from the project's Grails Tools context menu.



Grails Explorer

STS Grails tooling now ships with a Grails Perspective that consolidates all Grails-related commands, views, and actions in a single area. The core piece of the Grails perspective is the Grails Explorer (an extension to the Eclipse Project Explorer), which provides a Grails-centric view of your workspace.

Grails projects are displayed in a format that emphasizes the interesting components of Grails:



Improvements to the Command Prompt

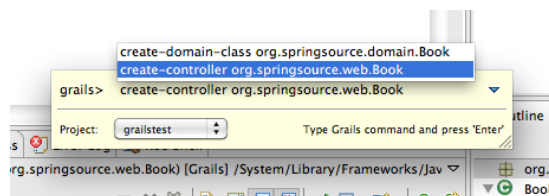
We have included a number of improvements to the Grails command prompt:

Launch directly from the toolbar

While in the Grails perspective, the command prompt can now be launched directly from the toolbar by clicking the "Grails" icon.

Show active project

The Grails prompt now displays the currently active project and allows users to change the target project of the command to any other Grails project in the workspace.



There is now a Grails command history available. You can access the most recently executed commands from the action bar (only when using the Grails perspective).

Now available anywhere

The Grails prompt is now accessible anywhere in the workspace using the keyboard command (CTRL-Shift-CMD G on Mac). If a Grails project is not currently active, then the previously active Grails project is selected.

Pin

You can now select that the Grails command prompt should be pinned using the following menu item. This will ensure that the prompt does not disappear when it loses focus.

Support for In-place Plugins

The in-place plugin support now provided in STS enables Grails application projects to depend directly on plugins from their development folder. There is no need for a plugin developer to package and publish their plugin in order to depend upon it. To use it simply add the necessary plugin dependency line to your application `grails-app/conf/BuildConfig.groovy`:

```
grails.plugin.location.blog = "../blog"
```

Run Grails Tools > Refresh Dependencies on the Grails application project. The Grails Explorer will reflect the new dependency in the 'plugins' section:

ENHANCEMENTS – 2.3.3.M2

Subversion Support installable from Extension Install

Both Subclipse and Subversive are now installable from the Extension install.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.3.3.M2 release:

Sub-tasks

- [STS-553] - Add cmd+click navigation for Grails artefacts
- [STS-579] - Add completion for GORM methods and dynamic finders
- [STS-644] - Decide what elements to display in the graph
- [STS-680] - Icon work
- [STS-692] - Fix search box on dashboard
- [STS-851] - support relative paths in directory descriptors
- [STS-852] - add filter attribute for stable/integration builds
- [STS-854] - change dependencies to Atlassian JIRA connector
- [STS-891] - fix support for installing multiple IUs on Eclipse 3.5
- [STS-892] - add test plan that builds and runs against Helios
- [STS-897] - Add provisional support for the Integration adapters
- [STS-905] - ensure that automatic workspace configuration works on Eclipse 3.5 and 3.6
- [STS-907] - Contribute adapter elements to the tool palette
- [STS-908] - Adapter elements only appear on the root of the graph
- [STS-915] - add configuration UI for triggering auto configuration

- [STS-918] - add documentation to help plugin
- [STS-920] - Make sure tests pass in Eclipse 3.6
- [STS-925] - Support implicit input-channel elements
- [STS-926] - Centre the connections coming out of the channel icons
- [STS-927] - Connections should not obscure icons
- [STS-928] - Get icon samples and information to our graphic designer
- [STS-929] - Implement a forms based properties view
- [STS-931] - Remove toolbar from the graph page, and move the toggle layout button into the graph palette
- [STS-932] - Settle on an appropriate visual representation for showing a sequence of elements within a chain
- [STS-933] - Hovering over a connection anchor should display the anchor's title
- [STS-934] - Support bidirectional connections on gateway elements
- [STS-936] - Support moving endpoints on existing connections
- [STS-937] - Support zooming in the graphical editor
- [STS-938] - Titles on elements should be directly editable
- [STS-939] - When an element has no id, hide the title and only display it on hover
- [STS-942] - Implement a placeholder element
- [STS-943] - Support drawing a connection between an output-channel node and an input-channel node
- [STS-945] - Support wiretap connections from channel elements
- [STS-949] - verify that tooling supports the latest version of STS
- [STS-955] - Implement quick fix for adding a bean config file to a config set
- [STS-956] - Auto generate an id when placing a new channel
- [STS-957] - Consider making channel renaming into a refactor operation
- [STS-972] - Reverse the direction of connections on inbound gateways
- [STS-973] - Add a context menu on implicit channels to make them explicit
- [STS-977] - Config editor beeps when a graph page is selected
- [STS-981] - support new launcher default action
- [STS-985] - NPE from graph editor
- [STS-986] - Truncate long labels
- [STS-987] - Add a fit to page option to the zoom combo
- [STS-989] - Add an 'Open in Properties View' context menu item to graph elements
- [STS-990] - Add a 'Reveal in Source' context menu item to graph elements
- [STS-991] - Do not display implicit channels on channel-adaptor elements
- [STS-994] - Add badges to element icons
- [STS-1011] - Streamline icon hovers
- [STS-1022] - fix NPE when Insight is enabled when Running application on server
- [STS-1075] - add extension listings for Subversive and Subclipse

Defects

- [STS-468] - Refactor doesn't update Spring config XML when package is moved
- [STS-770] - editing spring app in IDE, deployments to tc server crash
- [STS-857] - [grails] save() method in GORM domain classes returns Boolean when it should return "this"
- [STS-859] - Extensions Dashboard Panel - Infinitest and PMD remain after installation
- [STS-864] - BeansActiveFoldingListener exception when opening beans files
- [STS-881] - .springWebflow config file must have constant order of entries

- [STS-900] - [AJDT] Enabling of AJDT weaving service does not "stick" - After enabling it and restarting, you get prompted again to enable it
- [STS-914] - Impossible to start Roo shell again after exit
- [STS-919] - [Grails] IDE unable to resolve types from plugin
- [STS-921] - NPE in BundleManifestUtils.locateManifestFolder
- [STS-923] - The STS downloaded PetClinic application cannot be built
- [STS-941] - Dashboard tab on Dashboard view unable to retrieve updates from Springsource site
- [STS-951] - Dependency solving problems for Grails 1.3.0.RC2 and STS 2.3.2
- [STS-964] - wrong package and Valve name in tcserver for spring insight from sts
- [STS-997] - NPE when refreshing dependencies, Grails launched in infinite loop
- [STS-999] - Integration element selection makes it look like titles are editable, but it's not
- [STS-1001] - NPE in Integration editor
- [STS-1002] - Initial double click on element does not set selection for Properties view
- [STS-1003] - Would be nice if newly created element is always shown in editor
- [STS-1004] - Manual layout behaves unexpectedly while adding new element
- [STS-1005] - FileNotFoundException in dashboard if feed is unavailable
- [STS-1009] - ReflectionWorldExceptions while working with SI config file
- [STS-1013] - Virgo tooling not deploying web bundles with the correct context path
- [STS-1019] - Update button on Knowledgebase tab fails to download knowledgebase data from Springsource site
- [STS-1035] - NullPointerException in new Roo Project wizard
- [STS-1037] - IllegalAccessException looking at namespaces tab in Spring XML editor
- [STS-1041] - change default policy when installing extensions
- [STS-1042] - libraries fail to get deployed
- [STS-1043] - roo auto configuration pickup /root directory

Stories

- [STS-93] - As a user, I would like to get quick fix option when a bean cannot be found
- [STS-153] - Add visual editing support to the config editor for the integration namespace.
- [STS-248] - As a developer, I'd like the Eclipse Bundlor plugin to detect aspects and AspectJ types that are woven into classes
- [STS-718] - As a user, I want to have SVN support bundled with STS
- [STS-850] - As a user, I want a separate extension listing for nightly builds
- [STS-853] - As a user, I would like to use the Atlassian Eclipse Connector
- [STS-917] - As a user, I would like to have access to documentation on how to create task-focused tutorials
- [STS-948] - As a user, I would like to use STS with tc Server 2.0
- [STS-962] - Grails command prompt - provide history
- [STS-1030] - grails command prompt: show indication of project and perhaps make it selectable
- [STS-1031] - Package Explorer filter for Roo ITDs should be available to Project Explorer, too
- [STS-1049] - Spring namespace XSDs not already in the XML Catalog take a very long time to resolve
- [STS-1050] - Unable to add back "tc Server 2.0 Developer Edition" Server after it is

- removed from workspace.
- [STS-1052] - Support @Inject in addition to @Autowired

Tasks

- [STS-757] - [grails] Syntax highlighting for dynamic finders
- [STS-1033] - [grails] Remove those annoying underlines when working in Config.groovy and BuildConfig.groovy
- [STS-1039] - Add support for auto-discovery of MessageDispatcherServlet config files, like for DispatcherServlet

NEW FEATURES – 2.3.3.M1

Spring Development Tools

Support for Spring Roo 1.1.0.M1

STS has been updated to support Spring Roo 1.1.0.M1. Please note that this change will prevent usage of earlier Roo versions from the 1.0.x line. This is due to some architectural changes within Roo.

In addition STS has been extended to provide support for Google Plugins for Eclipse when working with Roo's newly added support Google Web Toolkit. More information about this integration is available from <http://blog.springsource.com/2010/06/02/using-springsource-tool-suite-2-3-3-m1-with-roo-and-gwt/>.

Runtime Integration

Support for Eclipse Virgo

STS 2.3.3.M1 supports early preview versions of Eclipse Virgo. Virgo is the new name of SpringSource dm Server which has been donated to the Eclipse Foundation by SpringSource.

ENHANCEMENTS – 2.3.3.M1

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.3.3.M1 release:

Defects

- [STS-965] - NPE in ToggleMarkOccurrencesAction

ENHANCEMENTS – 2.3.2.RELEASE

Fixes for regressions introduced with STS 2.3.1

Two regressions have been fixed with STS 2.3.2 that were producing false error markers in the Spring XML configuration files.

IDE-1098: Unexpected Exception parsing error ClassCastException ScopedProxyMode when using @Scope("request") - <http://jira.springframework.org/browse/IDE-1098>

IDE-1097: Spring AOP Problem created when using tx:annotation-driven with JSF 303 validation - <http://jira.springframework.org/browse/IDE-1097>

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February, 18th 2010

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.3.2.RELEASE release:

Sub-tasks

- [STS-554] - Parse plugin metadata (plugin.xml) for each plugin to obtain info about new methods/properties added by the plugin for code completion
- [STS-645] - Implement element creation & connection tools
- [STS-836] - use platform APIs for HTTP access

Defects

- [STS-562] - Authoring button not available in cheatsheet editor
- [STS-566] - Template wizard should not allow project names with spaces when creating a bundle project.
- [STS-731] - Cannot retrieve extensions behind a proxy
- [STS-779] - Memory settings for tc Server too restrictive?
- [STS-821] - Drawing problems with Spring Batch graph editor
- [STS-866] - Spring Source Tools 2.3.1 does not work with IBM JDK 5.0

- [STS-867] - Can't add GRAILS support
- [STS-868] - Cannot access STS Tutorials
- [STS-872] - Manifest generation fails on IllegalAccessorError with Scan output folders turned on
- [STS-874] - Error log is spammed on startup with IllegalArgumentException: ImageRegistry key already in use
- [STS-875] - Manifest not updated from template.mf
- [STS-882] - Cannot find class file for org/springframework/asm/ClassVisitor with @Aspect + @Before("... @annotation")

Stories

- [STS-459] - As a user I would like to be able to use an NTLM proxy
- [STS-822] - Export Batch graphs to external file (e.g. image)

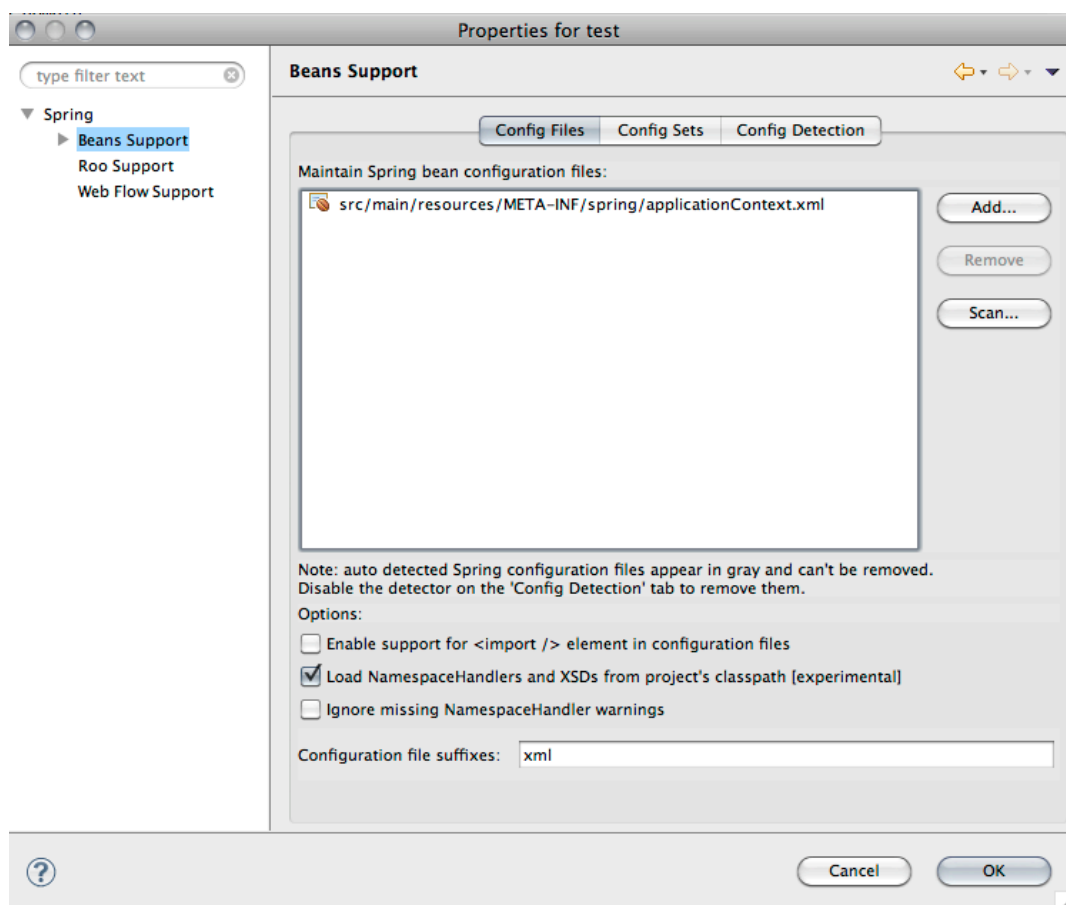
NEW FEATURES – 2.3.1.RELEASE

Spring Development Tools

Namespace Handlers can now be loaded from the Project's Classpath

With 2.3.1 users can now decide to let STS search for XML Namespace Handlers on the project's classpath. This will allow using namespaces that are not known to STS or different versions of known namespaces.

This feature needs to be enabled from the project preferences as shown below:



Runtime Integration

Enablement of Spring Insight changed

With STS 2.3.1 the user can now enable or disable collection of metrics with Spring Insight.

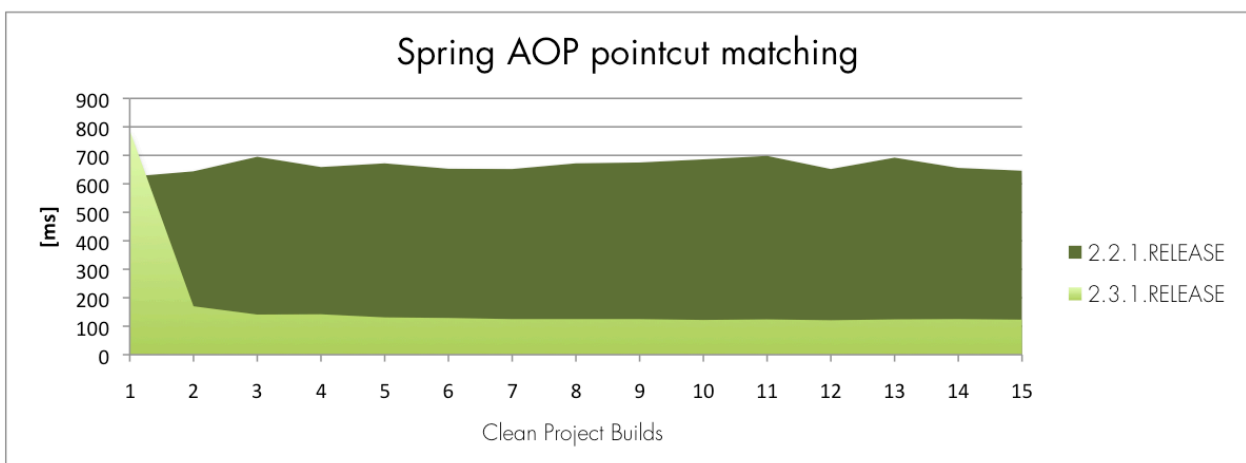
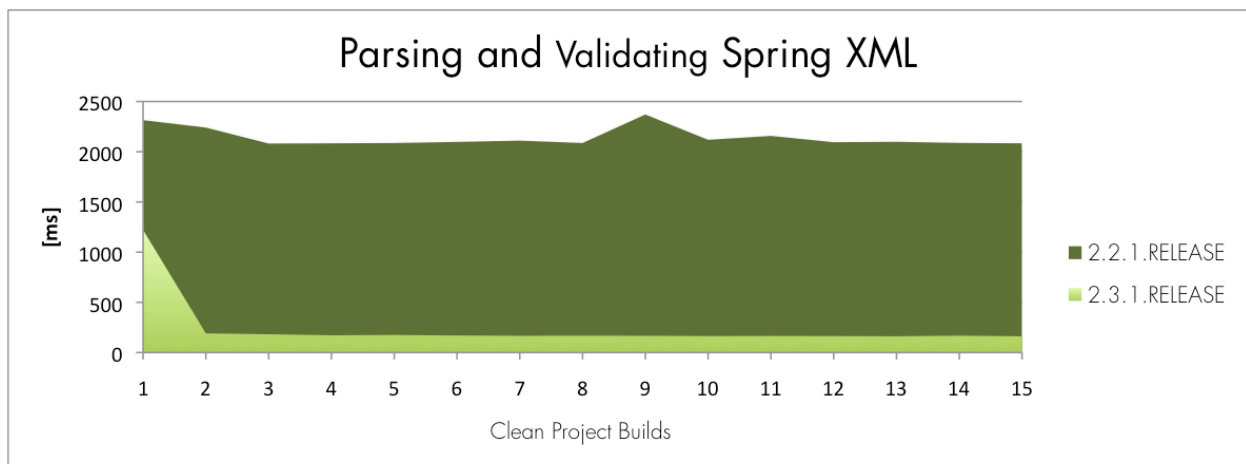
To enable Spring Insight with tc Server please open the Server editor by double-clicking the tc Server in the Servers view and enable the checkbox in the Spring Insight section. Save the configuration changes and restart tc Server to apply the change.

ENHANCEMENTS – 2.3.1.RELEASE

Performance and Memory Consumption Improvements

The memory consumption of STS has again been reduced. Comparisons between version 2.3.0 and 2.3.1 show an additional 50% decrease of startup memory consumption; results may vary on operating system and other plug-ins installed and active.

Besides lower memory consumption, STS was improved to be more responsive on large projects when doing full and incremental compilations and validations.



Updated Dependencies

STS 2.3.1 has been updated to build on top of Eclipse Galileo SR2 (3.5.2).

Additionally the bundled M2Eclipse has been updated to version 0.10.0. STS continues to ship the M2Eclipse AJDT Integration.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.3.1.RELEASE release:

Sub-tasks

- [STS-443] - replace shell scripts with ant based build
- [STS-550] - Implement an editor for GSP, Grails' default view technology
- [STS-552] - Add commands to easily switch between controller, domain, tag library and views for a given convention
- [STS-643] - Add hyperlink & content assist to form widgets
- [STS-646] - Implement a facility for switching between coordinate & algorithm based layouts
- [STS-647] - Implement a coordinate based layout for the graph
- [STS-648] - Implement serialization of graph coordinates
- [STS-652] - adopt Buckminster aggregator for dependency management
- [STS-656] - Implement and test new Bundlor API usage
- [STS-657] - Implement and test new deployer API usage
- [STS-658] - Implement and test core implementation for plan deployment
- [STS-659] - Implement and test UI implementation for plan deployment
- [STS-664] - The graph does too much work when it redraws
- [STS-681] - Collapse Update section when content cannot be read
- [STS-698] - Implement a new layout manager for container parts
- [STS-699] - Reuse BeanClassRule in as-you-type validation
- [STS-701] - Reuse BeanConstructorArgumentRule in as-you-type validation
- [STS-702] - Reuse BeanDefinitionHolderRule in as-you-type validation
- [STS-703] - Reuse BeanDefinitionRule in as-you-type validation
- [STS-704] - Reuse BeanDeprecationRule in as-you-type validation
- [STS-705] - Reuse BeanFactoryRule in as-you-type validation
- [STS-706] - Reuse BeanInitDestroyMethodRule in as-you-type validation
- [STS-707] - Reuse BeanMethodOverrideRule in as-you-type validation
- [STS-708] - Reuse BeanPropertyRule in as-you-type validation
- [STS-709] - Reuse BeanReferenceRule in as-you-type validation
- [STS-710] - Reuse NamespaceElementsRule in as-you-type validation
- [STS-711] - Reuse RequiredPropertyRule in as-you-type validation
- [STS-712] - Reuse SpringParsingProblemsRule in as-you-type validation
- [STS-728] - Make Spring Security 3.0 XSD accessible
- [STS-729] - Implement namespace validation for Spring Security 3.0
- [STS-751] - Can't undo graph movement
- [STS-753] - Graph pages should have a form header
- [STS-754] - Move the layout toggle button from the window toolbar into the editor header
- [STS-755] - In manual layout mode, adding a new element should drop it in place
- [STS-756] - Coordinate persistence should be split out on a perfile basis
- [STS-759] - fix compile errors on Eclipse 3.4
- [STS-764] - Can't add an object onto graph canvas when in automatic layout mode.
- [STS-765] - add test coverage reporting to build
- [STS-774] - support installation of multiple features per discovery entry
- [STS-775] - support filtering of directory entries

- [STS-776] - add check for updates button
- [STS-777] - improve extension point documentation
- [STS-778] - indicate if extension have already been installed
- [STS-783] - fix failing config editor tests
- [STS-789] - add check box to tc Server editor
- [STS-790] - show PONT dialog on first launch
- [STS-793] - specify platform filters for bundles that use new extension point format
- [STS-794] - verify that insight actions are only displayed when insight application is available and enabled
- [STS-795] - only show tc Server and dm Server extensions if not installed
- [STS-801] - copy insight configuration files to workspace
- [STS-835] - create contribution for default Eclipse welcome page
- [STS-836] - use platform APIs for HTTP access

Defects

- [STS-136] - Error creating new class implementing an interface
- [STS-415] - Quickfix validation does not understand nested property paths
- [STS-480] - Update batch-graph features for Spring Batch 2.1
- [STS-481] - Package version changes on selecting its properties in the manifest overview tab
- [STS-509] - Quick fix and as-you-type validation don't understand class and method names and bean references in namespace elements
- [STS-517] - Strange validation errors in spring xml files (not found)
- [STS-562] - Authoring button not available in cheatsheet editor
- [STS-566] - Template wizard should not allow project names with spaces when creating a bundle project.
- [STS-662] - Problem starting Spring tcServer - Missing expected file or folder tijars.
- [STS-695] - Make sure as you type quickfixes correspond to Spring IDE validations
- [STS-697] - STS's WTP Web Project Config Detection of MVC app fails to detect ContextLoaderListener context file
- [STS-717] - Fix STS Dashboard layout problems
- [STS-719] - Graph chokes when an item defines an transition onto itself.
- [STS-720] - Crash on launch after clean install
- [STS-722] - Installing Groovy/Grails tool support and Grails runtimes at once does not configure the Grails install
- [STS-723] - mvc:view-controller element causing unexpected exception in xml parsing
- [STS-724] - Roo commands not added to roo history
- [STS-731] - Cannot retrieve extensions behind a proxy
- [STS-732] - Regression: Premature end of file error when reading custom namespace schemas from jar
- [STS-736] - Spring roo and svn to execute a command in the "roo shell be running the light of progress of the task from running other tasks.
- [STS-745] - STS Grails support: Grails dependency support adds .svn directories to plugin source directories when using in-line plugins
- [STS-746] - @Inject annotated dependencies don't show up in Bean Graph
- [STS-749] - New Template Project -> Could not read initialization data for template error
- [STS-750] - Unexpected exception parsing XML document - IllegalArgumentException:

- Could not resolve placeholder
- [STS-752] - Persist section collapse state on dashboard restart
- [STS-763] - [grails] Refresh dependencies doesn't work with Selenium RC and Grails 1.2.0
- [STS-768] - Web template projects should change the context root and resource ids
- [STS-769] - Fix failing GEF editor tests
- [STS-772] - Bean reference quickfix needs to take into account beans that are defined but not yet saved
- [STS-779] - Memory settings for tc Server too restrictive?
- [STS-780] - Filenames are too long
- [STS-784] - Support dynamic generation of form content for the config editor
- [STS-785] - Remove attribute restriction while reporting messages in quickfix validation
- [STS-786] - Roo Shell display fails while running on server
- [STS-787] - STS will hang (sort of) for ages with the message "Invoking 'Spring Project Builder' on /proj"
- [STS-798] - Fix duplicate proposals shown for quick fix
- [STS-799] - Add Remove @Deprecated quick fix proposal for class and method
- [STS-804] - Class loader error when opening template.mf
- [STS-805] - New Roo projects require Java 1.6 compiler compliance
- [STS-809] - mvc-ajax sample: The constructor String(byte[], Charset) is undefined
- [STS-812] - [Config Editor] Required fields should be highlighted in some manner.
- [STS-813] - [Config editor] Pre-fill fields with their default values.
- [STS-816] - Not possible to define Javadoc locations for jars under "Grails Dependencies"
- [STS-818] - Template projects broken in existing workspace after upgrade
- [STS-820] - Delay and timeout loading Spring Batch 2.0 schema
- [STS-824] - Can not install Tasktop Pro
- [STS-826] - Fix NPE in content assist in bean wizard
- [STS-827] - Problem Unzipping SpringSource
- [STS-828] - Unable to get to tutorials on 1024x768 resolution screens.
- [STS-829] - factory-method attribute
- [STS-833] - Typo under Preferences->Spring->Repository Browser
- [STS-842] - Cannot view tutorials on dashboard
- [STS-846] - Grammatic error in the installation dialog
- [STS-847] - Autowired dependency graph does not render dependency between @Component being injected with DataSource created by <jdbc:embedded-database/>

Stories

- [STS-145] - Add forms support to the config editor for the integration namespace
- [STS-276] - Improve the modularity of the releng scripts
- [STS-323] - As a developer I want to be able to make and deploy 'plans' on to the dm Server in STS
- [STS-459] - As a user I would like to be able to use an NTLM proxy
- [STS-514] - Add Spring Security 3's schema to eclipse catalog
- [STS-528] - As a new Roo user, I would like to have a more intuitive experience when getting started
- [STS-639] - As a user, I want to use the new dm Server 2.0 deployer API

- [STS-640] - As a user, I want to use a newer version of Bundlor embedded inside STS
- [STS-716] - As a Grails STS user, I want that .project (and .classpath) files could be shared with other team members via version control (so that they don't include user specific directory paths)
- [STS-730] - As a user, I want to have support for Spring Security 3.0
- [STS-747] - As a user, I would like to be able to configure namespace prefixes
- [STS-773] - As a user, I want to install additional extensions and see and update installed extensions
- [STS-788] - As a user I would like to be able to disable Spring Insight when running to Server
- [STS-834] - As a user, I would like to get a welcome page contribution when installing the plug-in version
- [STS-838] - As a user I want to be able to compile projects against versions of spring framework projects other than what STS ships with internally and do so without causing tooling incompatibility

Tasks

- [STS-70] - Customizable Dashboard
- [STS-669] - Attaching source jars to entries of the Grails Dependencies classpath container
- [STS-739] - Configure source locations for Grails installs
- [STS-743] - Propose a way to use STS without m2eclipse
- [STS-832] - Refreshing Flex artifacts (.swf, .swc) should not cause bundle refresh

NEW FEATURES – 2.3.0.RELEASE

Spring Development Tools

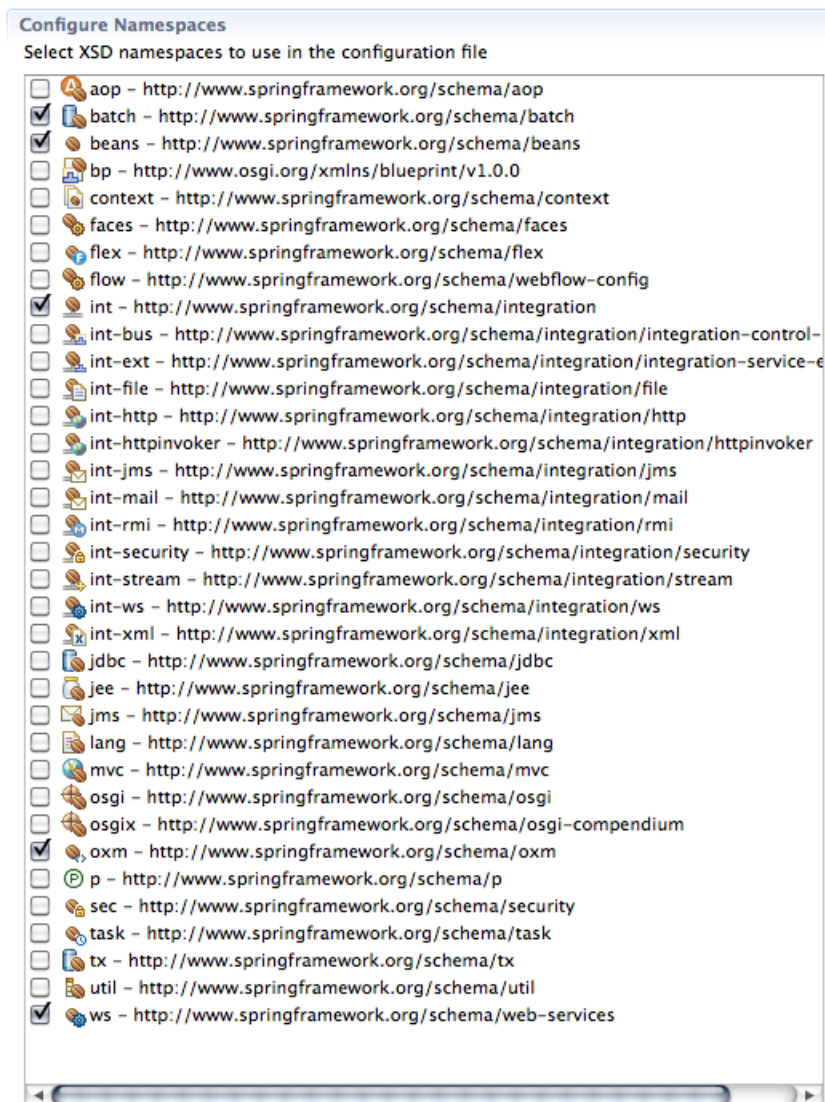
Support Spring 3.0.0.RELEASE

STS has been updated to support latest versions of Spring 3.0.0.

Support for Spring Integration

STS 2.3.0 now supports Spring Integration, Spring Flex and Spring Web Services namespaces out of the box. The XSDs are registered with the XML Catalog and the XML editor provides content assist, hyperlinking and validation based on the schemas.

Here is the full list of supported namespaces:



The Spring Configuration Editor has preliminary support for editing Spring Integration configurations through the UI. We are working on a full visual editor for Integration configuration files.

Spring Roo Integration

STS has been updated to ship Roo RC4.

The deprecated Roo project template has been removed. Please use the New Roo Project Wizard instead.

Groovy & Grails Development Tools

Update to Grails Tools

The Grails tooling has been updated to work with latest snapshot versions of Grails 1.2.0.

Additionally improvements in the area of content assist and inferencing with Grails Domain and Controller classes have been made. The GSP Editor now also offers content assist for Grails tab libraries.

Please note that content assist in Grails artifacts and GSPs will be much improved in future versions. We are currently working in this area. Stay tuned for more soon.

Tutorials and Help

Extension Point to override URLs used by STS

With 2.3.0 we introduce an Eclipse extension point that allows companies running STS behind corporate firewalls to override default URLs. This is useful if you want to restrict Internet usage triggered from STS or simply want to add your own content.

If you are interested in this feature please contact your SpringSource support person.

ENHANCEMENTS – 2.3.0.RELEASE

Performance and Memory Consumption Improvements

The startup memory consumption of STS has been greatly reduced. Comparisons of versions 2.2.0, 2.2.1 and 2.3.0 showed about 70% less memory usage when opening the same workspace.

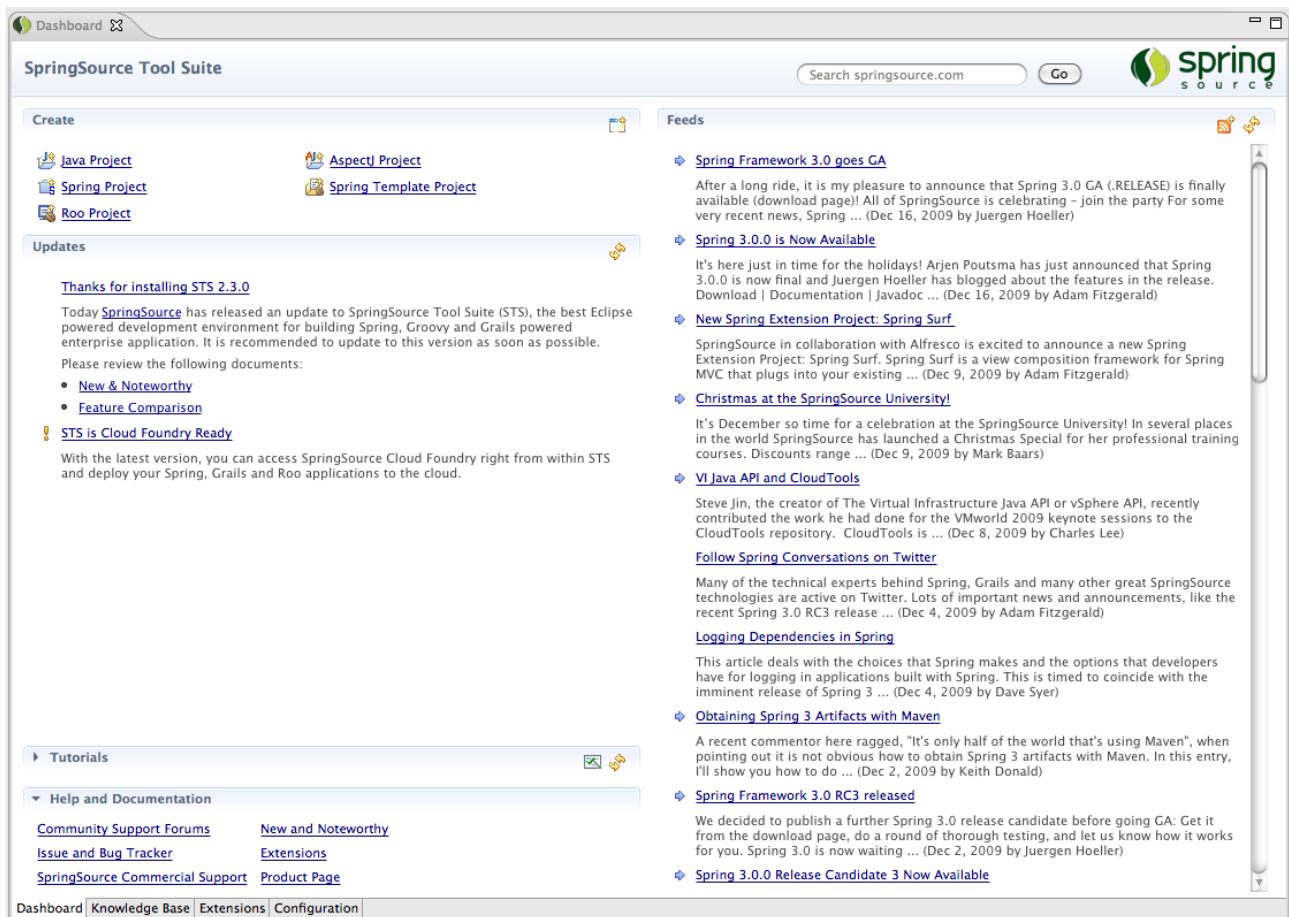
Opening a clean workspace will now consume ~41MB instead of 160MB; results may vary on operating system and other plug-ins installed and active.

Besides lower memory consumption, STS was improved to be more responsive on large projects when doing full and incremental compilations and validations.

Improvements to the Dashboard

The STS Dashboard has been re-worked and now provides access to more content.

The RSS section can be configured to include custom feeds: to configure the displayed URLs simply select the Configure URLs action in the section's toolbar.



64 bit JVM Detection in the Installer

The installer will verify that the installed and selected JDK matches the downloaded installer package. This will prevent installations of a 32 bit STS package on a 64 bit JDK and vice versa.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.3.0.RELEASE release:

Sub-tasks

- [STS-374] - Implement and test dm server install
- [STS-375] - Implement and test tc server install
- [STS-508] - provide a simple entry point to CloudFoundry deployment and account creation

- [STS-581] - Add code completion for Grails controller methods (render/redirect/etc.)
- [STS-625] - investigate using p2 touchpoint instructions for adding servers
- [STS-628] - [relog] create scripts for building server bundles
- [STS-630] - fix configuration error when using tc Server VMware integration in guest mode
- [STS-631] - Create fix imports option for groovy plugin
- [STS-634] - provide UI for entering JMX credentials
- [STS-635] - ignore port conflict when starting local tc Server in VMWare
- [STS-642] - design and review a cleaner Dashboard layout
- [STS-649] - Create wireframe for dashboard
- [STS-650] - Implement UI for dashboard base on wireframe
- [STS-651] - Query URL extension to display feeds on the dashboard
- [STS-653] - create extension point for URL contributions
- [STS-654] - extract URLs from source and move to extension
- [STS-660] - Add toolbar action to Roo shell to quickly create a new Roo project
- [STS-663] - [relog] setup PDE build for server bundles
- [STS-665] - support deploying through JMX
- [STS-668] - Create extension points for new project section on dashboard
- [STS-672] - fix remote shutdown of tc Server
- [STS-674] - redirect server output to a file and show in Eclipse console
- [STS-675] - monitor if server has initialized
- [STS-681] - Collapse Update section when content cannot be read
- [STS-682] - Fix text alignment in the dashboard title
- [STS-683] - Update content in dashboard
- [STS-686] - Default layout should be horizontal
- [STS-687] - create configuration UI for setting urls

Defects

- [STS-122] - dm Server feature is not displayed in about dialog
- [STS-256] - Grammar error on Coverage Configurations screen
- [STS-382] - STS installer should prompt user before quitting while installing
- [STS-391] - When a target manifest.mf/test.mf has syntax errors bundlor does not overwrite it
- [STS-396] - If I fix build path issues with Refresh Bundle Classpath Container only direct descendants get their issues fixed as well
- [STS-418] - Creating new 'Spring MVC Project' from template does not populate artifactId in pom.xml causing project compile problems
- [STS-462] - Unable to update the eclipse 3.4 from spring update site
- [STS-541] - Spring Template Project creates invalid pom.xml when using a top-level package name with depth greater than 3
- [STS-547] - Cleaning a tc Server instance via WTP results in a publish error
- [STS-568] - class loader error from org.eclipse.hyades.trace.ui plug-in
- [STS-571] - [linux] borders in dm Server editor Redeploy and Artefact sections are cut off
- [STS-590] - Add support for spring-integration namespace
- [STS-593] - STS 2.2.0 does not start up after installing either subclipse or subversive plugin in Windows XP env
- [STS-605] - Change the "Quit" button label on the last page to "Finish"

- [STS-611] - STS 2.2.0 startup issue after installing plugins
- [STS-616] - ClassLoaderError on startup when extension page is initialized
- [STS-617] - NPE in CloudFoundryDecorator
- [STS-618] - Installing Groovy and Grails plugins failed.
- [STS-632] - NoClassDefFoundError on startup
- [STS-637] - New Bean class quick fix does not fill in package name if package does not exist
- [STS-655] - VM arguments list has missing double quote at end
- [STS-670] - I am not able to import projects in the latest Linux version (springsource-tool-suite-2.2.1.RELEASE-e3.5.1-linux-gtk-installer.sh) I downloaded on Ubuntu
- [STS-677] - Support for workspace utility projects (WTP feature) with CloudFoundry
- [STS-678] - "Publish" button in CloudFoundry Server (WTP view) does not republish the project
- [STS-679] - Unable to install extensions behind proxy
- [STS-690] - Fix dashboard project wizard error
- [STS-691] - Grails plugin dependencies not being picked up in STS
- Story
- [STS-167] - As a user, I want to install dm and tc server from the WTP server adapter install
- [STS-227] - As a Spring User, I want to be able to compile Groovy files
- [STS-633] - As a user I would like to deploy applications into a tc Server running in VMware
- [STS-638] - As a corporate user, I want to contribute my own URLs for everything that STS consumes from the internet
- [STS-641] - As a user, I want a cleaner Dashboard
- [STS-673] - As a user I would like to see the console output of a tc Server running in VMware in Eclipse
- [STS-688] - update Spring perspective

Tasks

- [STS-563] - show link to create Roo project if no Roo project exists
- [STS-666] - Provide the option to specify a run mode for the server when using Roo shell's 'deploy' cmd
- [STS-684] - Show warning when deprecated class is used in Spring bean configuration file

NEW FEATURES – 2.2.1.RELEASE

Spring Development Tools

Spring Roo Integration

The Roo integration requires Spring Roo 1.0.0.RC3 to be installed. Due to API changes previous versions are not supported anymore.

The Roo Shell now supports hyperlinking of created and modified resources as shown in following screenshot. Clicking the hyperlink in the Shell will open the linked file in the default editor registered for the selected file type.



```
roo> entity --name org.springframework.domain.Pet --testAutomatically
Created SRC_MAIN_JAVA/org/springframework/domain/Pet.java
Created SRC_TEST_JAVA/org/springframework/domain/PetDataOnDemand.java
Created SRC_TEST_JAVA/org/springframework/domain/PetIntegrationTest.java
Created SRC_MAIN_JAVA/org/springframework/domain/Pet_Roo_Entity.gj
Created SRC_MAIN_JAVA/org/springframework/domain/Pet_Roo_ToString.gj
Created SRC_MAIN_JAVA/org/springframework/domain/Pet_Roo_Configurable.gj
Created SRC_TEST_JAVA/org/springframework/domain/PetDataOnDemand_Roo_Configurable.gj

roo>
```

The CTRL+R (or CMD+R on Macs) shortcut has been modified to allow global invocation; no need to open a file before invoking the command.

Additionally STS 2.2.1 features a new New Roo Project wizard to create new Roo projects by running the Roo command 'project'.

STS will come preconfigured with an external Roo installation ready to use from within STS.

The integrated template has been updated to latest available version. Please note that the project template available in the New Project Template Wizard has been deprecated in favor of the new Roo Project Wizard.

Groovy & Grails Development Tools

Update to Grails Tools; now with GSP Editor

The Grails tools have been updated to support an editor for GSP files. Within STS, the new GSP Editor will be the default editor for *.gsp files.

Also the keyboard shortcut to open the Grails Quick Command Prompt has been changed to CTRL+ALT+G to prevent conflicts in certain views of Eclipse. The shortcut is now globally available; no need to open a file before invoking the command.

STS 2.2.1 will not come with a Grails installation out of the box. Instead Grails can be installed from the Extension Install available from the STS Dashboard.

For more details please visit:

<http://www.grails.org/STS+Integration>

Note: the Grails tools are not considered final and are still in early development stage. Please add your comments to <https://issuetracker.springsource.com/browse/STS-487>.

Runtime Integration

Support for dm Server 2.0.0.M6

STS 2.2.1 supports the latest milestone M6 of SpringSource dm Server 2.0.0. Several bugs and issues have been solved that prevented using dm Server 2.0.0.M6 with STS.

ENHANCEMENTS – 2.2.1.RELEASE

Windows 64 bit package and installer

STS 2.2.1 makes a package and installer for Windows 64-bit available. Please make sure to use a 64-bit JDK with this version of STS.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.2.1.RELEASE release:

Sub-tasks

- [STS-432] - investigate PDE's manifest formatter for reuse possibility
- [STS-433] - hook formatter into manifest auto-generation tools
- [STS-438] - investigate the new server view's common navigator api
- [STS-440] - implement problem markers in the servers view
- [STS-441] - ensure functionality falls back gracefully on Eclipse 3.4
- [STS-558] - Don't explicitly mark groovy classes as public

Defects

- [STS-114] - Built in tc Server cannot be stopped
- [STS-274] - STS unusable when using a certain workspace
- [STS-351] - Incremental Bundlor adds imports for packages exported by the bundle
- [STS-386] - Put Tomcat back in the distro
- [STS-436] - Not finding tomcat server configuration for tcServer
- [STS-510] - Quickfix and validate as-you-type doesn't understand factory-method and reports an error about a missing constructor
- [STS-530] - Exception when running installation package
- [STS-567] - error logged when opening help
- [STS-569] - IllegalStateException error logged on startup
- [STS-570] - [windows] editing of property values fails in tc Server properties section
- [STS-574] - The focus button in the Spring Explorer should not be enabled if no task is

active

- [STS-592] - Jars in lib folders are not added to the Grails project classpath
- [STS-594] - Incompatibility between dm Server Runtime and Apache Studio 1.4 (LDAP tools)
- [STS-602] - NullPointerException on workspace startup
- [STS-603] - STS 2.2.0 Release uses *much* more memory than STS 2.1
- [STS-604] - Grails Command prompt doesn't popup when no groovy file is open
- [STS-606] - Outline view does not respond to page changes in the config editor.
- [STS-607] - The properties view for the config editor should respond to selections in tables
- [STS-608] - Issue with STS & latest DM Server Mile Stones
- [STS-609] - Manifests regularly end up with imports for packages only referenced in test code
- [STS-615] - High CPU utilization when doing normal things in STS
- [STS-619] - java.lang.NoClassDefFoundError:
com/springsource/server/ide/ui/editors/model/ImportBundleHeader

Stories

- [STS-228] - As a user, I would like a Windows x64 version of STS
- [STS-392] - As a user I want to configure that generated manifests/test.mf are always autoformatted

Tasks

- [STS-613] - Provide the ability to use Ctrl+G command from inside GSP file

The change log is also available at:

<https://issuetracker.springsource.com/secure/ReleaseNote.jspa?projectId=10010&styleName=Html&version=10441>

NEW FEATURES – 2.2.0.RELEASE

Spring Development Tools

Only IDE to fully support latest Spring 3.0

STS has been updated to support latest versions of Spring 3.0 (including RC1 and RC2).

Editing, Validating and Visualization of Autowire-based Configurations

Spring configurations based on `@Autowired`, `@Resource` and custom annotations can now be visualized and validated within STS. This feature can be mixed and matched with traditional XML-based configurations and understands qualifier annotations and XML definitions.

To enable the visualization of autowired bean dependencies, open the STS preferences and navigate to Spring -> Beans Support and check the "Display extended content" option.

In order to turn on validation warnings and errors displayed in the Java Editor, enable the "Annotation-based Autowiring Rule" of the "Beans Validator" (Preferences -> Spring -> Project Validators).

The screenshot displays the STS IDE interface. The top part shows a Beans Graph visualization where a central bean named 'annotatedBean' is connected to three other beans: 'testBean', 'nestedTestBean1', and 'nestedTestBean2'. The 'annotatedBean' node has three dependency indicators (green 'G' icons) with values 1, 0, and 1. The bottom part shows the XML configuration file for 'testConstructorResourceInjectionWithMultipleCandidatesAsCollection-context.xml'. The XML content is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:context="http://www.springframework.org/schema/context"
  xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd
    http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context-2.5.xsd">
  <context:annotation-config />
  <bean id="annotatedBean"
    class="org.springframework.beans.factory.annotation.AutowiredAnnotationBeanPostProcessorTests$ConstructorsColl...
  <bean id="testBean" class="test.beans.TestBean" />
  <bean id="nestedTestBean1" class="test.beans.NestedTestBean" />
  <bean id="nestedTestBean2" class="test.beans.NestedTestBean" />
</beans>
```

The bottom of the IDE window shows tabs for 'Source', 'Namespaces', 'Overview', 'beans', 'context', and 'Beans Graph', with 'Beans Graph' currently selected.

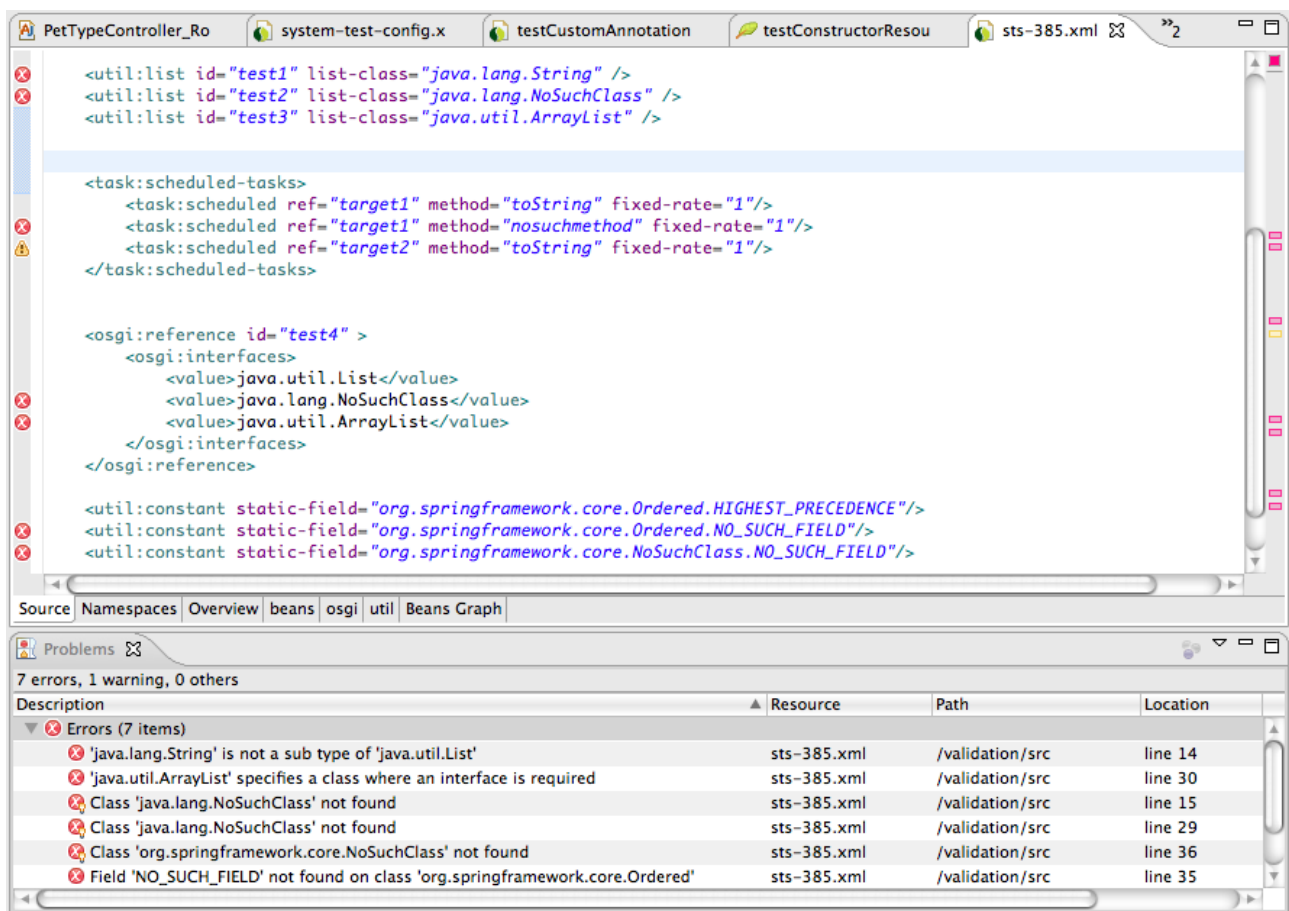
Visualization and Testing of REST and MVC Applications

Usages of @RequestMapping annotations can now be visualized in a separate view called “@RequestMappings”. To open the view select the configuration file of configuration set in the Spring Explorer and select “Show Request Mappings” in the context menu.

The view allows accessing the URL in an embedded web browser. The user is queried for required values defined in the REST-style URL.

Validation of Namespace-based Configurations

STS now validates namespace elements in XML configurations files. In order to turn on validation warnings and errors displayed, enable the “XSD Tool Annotation Rule” of the “Beans Validator” (Preferences -> Spring -> Project Validators).



The screenshot shows the STS IDE with the following XML configuration in the editor:

```
<util:list id="test1" list-class="java.lang.String" />
<util:list id="test2" list-class="java.lang.NoSuchClass" />
<util:list id="test3" list-class="java.util.ArrayList" />

<task:scheduled-tasks>
  <task:scheduled ref="target1" method="toString" fixed-rate="1"/>
  <task:scheduled ref="target1" method="nosuchmethod" fixed-rate="1"/>
  <task:scheduled ref="target2" method="toString" fixed-rate="1"/>
</task:scheduled-tasks>

<osgi:reference id="test4" >
  <osgi:interfaces>
    <value>java.util.List</value>
    <value>java.lang.NoSuchClass</value>
    <value>java.util.ArrayList</value>
  </osgi:interfaces>
</osgi:reference>

<util:constant static-field="org.springframework.core.Ordered.HIGHEST_PRECEDENCE"/>
<util:constant static-field="org.springframework.core.Ordered.NO_SUCH_FIELD"/>
<util:constant static-field="org.springframework.core.NoSuchClass.NO_SUCH_FIELD"/>
```

The Problems view at the bottom shows 7 errors and 1 warning:

Description	Resource	Path	Location
✘ 'java.lang.String' is not a sub type of 'java.util.List'	sts-385.xml	/validation/src	line 14
✘ 'java.util.ArrayList' specifies a class where an interface is required	sts-385.xml	/validation/src	line 30
✘ Class 'java.lang.NoSuchClass' not found	sts-385.xml	/validation/src	line 15
✘ Class 'java.lang.NoSuchClass' not found	sts-385.xml	/validation/src	line 29
✘ Class 'org.springframework.core.NoSuchClass' not found	sts-385.xml	/validation/src	line 36
✘ Field 'NO_SUCH_FIELD' not found on class 'org.springframework.core.Ordered'	sts-385.xml	/validation/src	line 35

Namespace Schema Versions derived from Classpath

When using the “New Spring Configuration File” wizard or the Spring Config Editor to add or remove namespace definitions, STS will now inspect the project’s classpath to derive appropriate schema versions used in the “schemalocation” attribute.

This behavior can be overridden in the STS preferences by navigating to Spring -> Beans Support -> Namespace Versions. Disabling the option "Use highest XSD version that is available on the project's classpath" will allow explicitly setting the default version to use. Those can be configured on the same preference page.

Visualization support for @Transactional and @Secured

Usage of @Transactional and @Secured annotations and appropriate XML configuration to enable annotation processing for those annotations will now be reported in the Beans Cross References View.

This enables validation of transactional and security cross-cutting configurations right inside the IDE.

Spring Roo Integration

The Spring Roo support will now only use externally configured Roo installations; this is similar to the way Java Runtimes are configured with Eclipse. To configure available Roo installations open the preferences and navigate to Spring -> Roo Support.

STS will come preconfigured with an external Roo installation.

The integrated template has been updated to latest available version: Spring Roo RC2.

Groovy & Grails Development Tools

First Eclipse-based IDE to provide Grails Tools

For the first time ever on the Eclipse platform, STS 2.2.0 provides support for Grails application development. For more details please visit:

<http://www.grails.org/STS+Integration>

Greatly improved Groovy language Support

STS now offers easy install for the greatly improved Groovy Eclipse plug-in. For a detailed New & Noteworthy visit:

<http://groovy.codehaus.org/Groovy-Eclipse+2.0.0M1+New+and+Noteworthy>

OSGi Development Tools

Support for OSGi Blueprint Services Specification

STS 2.2.0 provides support for editing, validating and visualizing OSGi Blueprint Services XML configuration files.

The Blueprint XML namespace is available in the same way as any other Spring namespace is available.

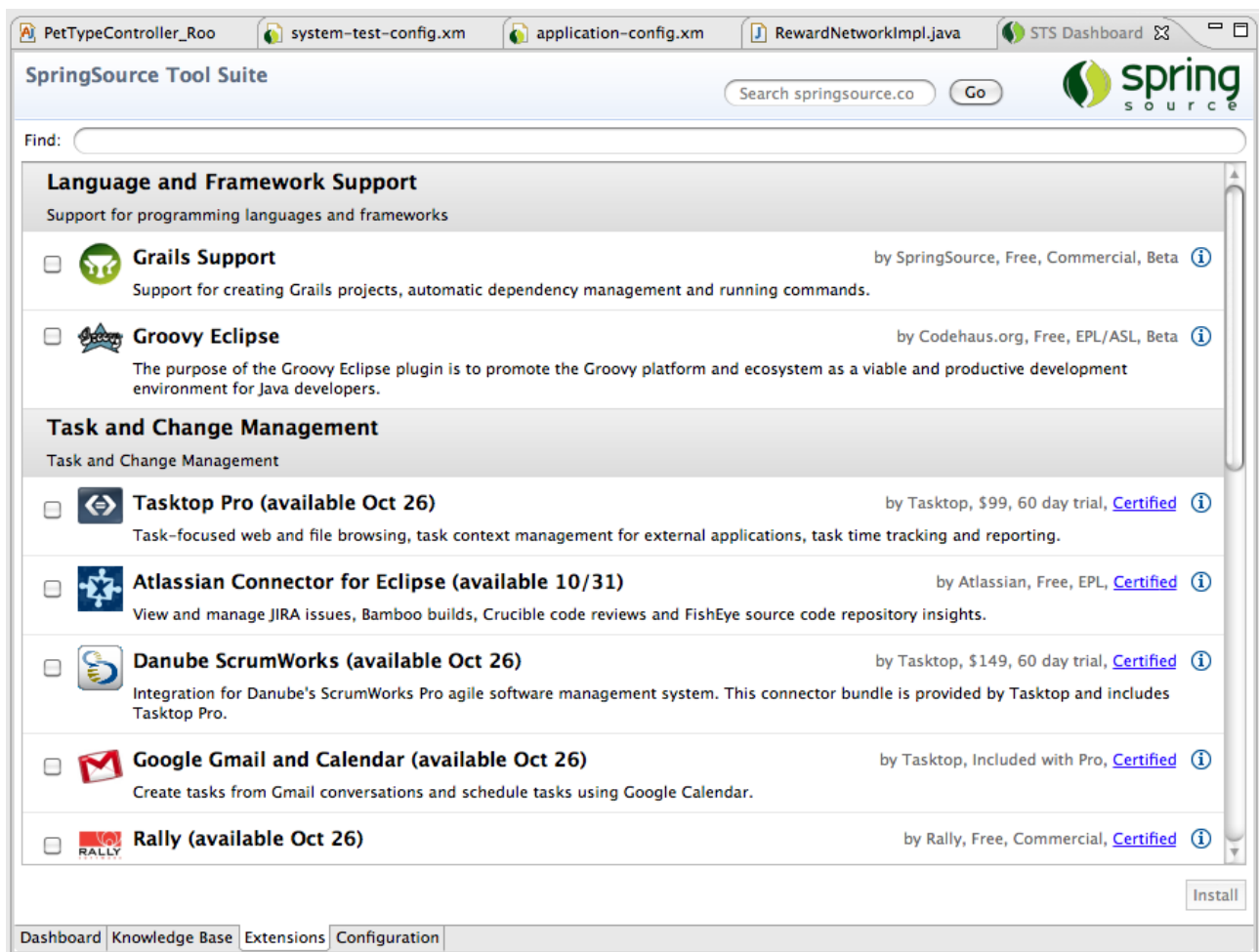
Tutorials and Help

www.springsource.com

Easy install of ALM Connectors and Third Party Plug-ins

STS features a new Extension install mechanism that provides easy access to installing the most commonly used Eclipse third-party plug-ins into STS.

The Extension install is available from the STS Dashboard; Extension tab.



Runtime Integration

Integration of tc Server Developer Edition with Spring Insight

To open the Spring Insight dashboard from with STS, select the tc Server in the Servers view and right-click to open the context menu; select Open Dashboard.

Within the Spring Insight Dashboard you can navigate back to source code by selecting "Go to STS" in a frame within the transaction stack.

The screenshot displays the Spring Insight Dashboard interface. The top browser window shows the URL `http://localhost:8080/insight/applications/traces`. Below the browser, a 'Trace Detail' window for a request at 7:19:39 PM (1125 ms) is expanded. It shows a hierarchy of operations: a POST request to `/clinicroo/pettytype` (1,125 ms), a Spring Web Dispatch (1,123 ms), and the `PetTypeController#create(PetType, BindingResult, ModelMap)` method call (1,102 ms). The 'Method Call' section provides details: Label: `PetTypeController#create(PetType, BindingResult, ModelMap)`; Arguments: 1. `org.springframework.clinic.reference.PetType`, 2. `org.springframework.validation.BeanPropertyBindingResult`, 3. `org.springframework.validation.support.BindingAwareModelMap`; Return Value: `redirect:/pettype/1`. Below the method call, a transaction `[PetType.persist]` is shown with a duration of 394 ms, including a JDBC INSERT (42 ms) and a JDBC CALL (14 ms). The bottom window shows the source code for `PetTypeController_Roo_Controller.aj`, with the `create` method highlighted.

```

privileged aspect PetTypeController_Roo_Controller {
    @RequestMapping(value = "/pettype", method = RequestMethod.POST)
    public String PetTypeController.create(@ModelAttribute("pettype") PetType pettype, BindingResult result, ModelMap
    if (pettype == null) throw new IllegalArgumentException("A pettype is required");
    for (ConstraintViolation<PetType> constraint : Validation.buildDefaultValidatorFactory().getValidator().valid
    result.rejectValue(constraint.getPropertyPath().toString(), "pettype.error." + constraint.getPropertyPath
    }
    if (result.hasErrors()) {
        modelMap.addAllAttributes(result.getAllErrors());
        modelMap.addAttribute("pettype", pettype);
        return "pettype/create";
    }
    pettype.persist();
}

```

VMware Workstation Integration for running dm and tc Server in "local clouds"

STS allows to start, stop and debug tc and dm Server instances running inside VMware Workstation. Only a JVM needs to be installed in the Guest OS as the server runtimes can be provisioned into the guest on demand.

VMware Workstation 6.5 and 7 are supported. Guest operation systems we support an Linux distribution.

Bundled tc Server updated

STS bundles latest version of SpringSource tc Server 6.0.20.C.

ENHANCEMENTS – 2.2.0.RELEASE

Tutorials and Help

Template Project Wizard Improvements

Template projects will no be downloaded on first access from our download servers. This allows us to keep the template up-to-date without shipping a new version of STS.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.2.0.RELEASE release:

Sub-tasks

- [STS-203] - Build mirror
- [STS-206] - Write blog post
- [STS-221] - Create JUnit tests for AMS integration
- [STS-345] - Migrate Bundlor JDT over into the dm Server Tools repository
- [STS-353] - Implement and test version detection
- [STS-355] - Update Bundlor dependencies and adjust code and tests to new API
- [STS-356] - Implement and test automatic creation of a MANIFEST.MF if non exists.
- [STS-357] - Implement and test web.xml scanning based on the Bundlor implementation
- [STS-358] - Implement and test improvements to the command history on the dm Server Console page
- [STS-359] - Implement and test warning if stage directory is not accessible
- [STS-360] - Implement and test changes to Bundlor project builder
- [STS-361] - Implement and test configuration UI
- [STS-362] - Implement and test feature to enable tailing on the fly
- [STS-364] - Add a working set selector to the new par bundle & par project wizards and test the feature.
- [STS-365] - Implement an API for gathering @RequestMapping annotations.
- [STS-366] - Create an @RequestMapping table
- [STS-367] - Implement a model for the view
- [STS-368] - Investigate Mylyn discovery portal for possibility of extension or reuse.
- [STS-369] - Implement and test a plugin discovery portal
- [STS-370] - Implement and test download on demand for the templates.
- [STS-371] - Implement improvements to the existing UI
- [STS-372] - Implement improvements to the JSON descriptor
- [STS-373] - Implement improvements to the replacement infrastructure
- [STS-376] - Implement a Javadoc display for the @RequestMapping selection.
- [STS-377] - Implement UI and functionality for open URL in embedded browser
- [STS-383] - Improve error handling during template project creation
- [STS-384] - Ensure proper project import for template project creation
- [STS-385] - Implement and test detection of classpath changes
- [STS-388] - Implement a sorter for the view
- [STS-389] - Implement context menu actions for selection
- [STS-405] - add UI polish
- [STS-406] - review content and create descriptions and screenshots
- [STS-408] - support specification of version constraints for remote content
- [STS-424] - review UI and implementation
- [STS-426] - Investigate possible possible solutions
- [STS-427] - Implement and test class and interface usage
- [STS-428] - Implement strategy for making sure updated RSS feeds are saved
- [STS-429] - Implement RSS feeds persistence
- [STS-430] - implement and test a mechanism for saving an editor's last active tab
- [STS-431] - Determine format and location to persist RSS feeds

- [STS-434] - implement a preference option for enabling/disabling graphical capabilities
- [STS-435] - rework the config editor to honour the graphical capabilities preference
- [STS-437] - Add project location option to new template project wizard
- [STS-442] - Implement bean rename refactoring from renaming @bean methods
- [STS-444] - investigate and extend auto deployment implementation
- [STS-445] - design dashboard UI for installing server runtimes
- [STS-446] - modify tutorials to reuse Tomcat installed through configurator
- [STS-447] - support editing of property files
- [STS-448] - add support for recognizing static resources
- [STS-449] - Update templates to use new json descriptor
- [STS-470] - allow running from workspace metadata configuration
- [STS-473] - Dashboard should display cached feeds on startup
- [STS-488] - Implement classpath management (source folders for plugin sources, JAR for dependencies)
- [STS-489] - Implement functionality to run Grails commands in STS
- [STS-490] - Implement UI to configure Grails installation locations and selection on a per project basis.
- [STS-493] - Update build to use Eclipse 3.5.1
- [STS-494] - Drop Eclipse 3.4 support
- [STS-495] - Test STS on Eclipse 3.5.1
- [STS-496] - Build STS 2.2.0.RELEASE and all dependencies
- [STS-497] - Create installer packages
- [STS-498] - Upload release to S3
- [STS-499] - Update New & Noteworthy and other release documentation
- [STS-500] - Update download web sites and wiki
- [STS-501] - Implement and test core WTP server integration for Cloud Foundry
- [STS-502] - Implement and test UI WTP server integration for Cloud Foundry
- [STS-504] - Test dm Server support on Workstation 6.5 and 7
- [STS-505] - Test tc Server support on Workstation 6.5 and 7
- [STS-507] - Document release process
- [STS-511] - Update bundle projects and products
- [STS-515] - Implement support for RFC 124
- [STS-522] - implement categorized discovery view
- [STS-524] - provide a tooltip and decoration for applications
- [STS-525] - investigate drag and drop on modules
- [STS-531] - Implement and test detection of Autowired annotation in the annotation outline
- [STS-532] - Implement and test core support for Autowiring
- [STS-533] - Implement additions to the Beans Dependency Graph
- [STS-535] - Implement 'Run on Server...'
- [STS-536] - Connect Cloud Foundry account when user finishes the server wizard
- [STS-539] - update to latest API
- [STS-542] - create a Cloud Foundry feature
- [STS-543] - Disable CF server finish button until credentials are entered
- [STS-545] - redeploy applications instead of recreating the deployment
- [STS-548] - Use URL field for creating new CF account
- [STS-549] - prompt for credentials when connecting to server

- [STS-557] - create a feature for installing m2eclipse
- [STS-572] - put Cloud Foundry feature into Extensions / STS category
- [STS-575] - link to current New & Noteworthy from Help

Defects

- [STS-107] - Template project wizard: projects listed twice in drop down
- [STS-110] - Template wizards: allow placeholder names to be more unique
- [STS-114] - Built in tc Server cannot be stopped
- [STS-119] - webflow "open graphical editor" hangs eclipse IDE
- [STS-218] - Test all tutorials
- [STS-252] - Lab Manager - Deploying an image works, but gives error
- [STS-269] - Workspace hosed by ClassDefNotFound
- [STS-321] - Invalid log4j.xml generated by Spring MVC Template Project
- [STS-328] - Quick Fix for Import-Bundle doesn't offer all matches, and returns matches that don't satisfy the version range in the manifest
- [STS-331] - Documentation still talks about Spring AP
- [STS-335] - Bundle project is trying to add extra files to itself during incremental build
- [STS-336] - Exported dm Server project has a corrupted MANIFEST.MF
- [STS-338] - dm Server project export does not warn if exported file already exists
- [STS-341] - WEB-INF/web.xml should not be copied to the root of the project for standard WARs
- [STS-349] - Manifest generation fails when using property substitution with Maven pom and property declared in parent pom
- [STS-378] - Interacting with the Servers view results in a NoClassDefFoundError. Starting a Server creates 10s of them.
- [STS-380] - PAR exporter prompts twice when attempting to overwrite an existing file
- [STS-387] - Bundle Classpath container disappears
- [STS-390] - Cannot install STS from update site
- [STS-394] - A trailing comma in a export/import list of a template.mf/manifest is not marked as a syntax error
- [STS-395] - Null pointer exception in outline view
- [STS-398] - Eclipse Web Developer tools is broken
- [STS-399] - Workspace hosed with NoClassDefFoundError
- [STS-400] - Bundlor manifest generation locks up eclipse
- [STS-402] - Unable to start spring sts-2.1.0.SR01 in windows xp professional 64 bit and windows 7 ultimate 64 bit
- [STS-407] - Content assist for favorites does not work reliably
- [STS-411] - Changes to a messages.properties file aren't detected
- [STS-412] - Code completion doesn't work reliably
- [STS-436] - Not finding tomcat server configuration for tcServer
- [STS-451] - Starting second time of STS, it creates new workspace which is different from i determined at the first starting.
- [STS-452] - NPE while building Spring AOP reference model
- [STS-453] - Add refresh button for template wizard
- [STS-458] - STS 2.1.0 with AJDT consumes 100% CPU for minutes...
- [STS-463] - Request Mapping view does not refresh if project is closed.
- [STS-471] - Template project wizard should show better messages
- [STS-472] - Fix template wizard UI nits

- [STS-475] - Workspace hangs on Eclipse startup
- [STS-477] - installer fails to recognize JDK version
- [STS-478] - publishing fails if Serve modules without publishing is enabled
- [STS-479] - batch-graph editor pane needs scroll bars
- [STS-482] - Installation of subclipse plugin fails
- [STS-483] - STS fails to start after installing Subversive plugin
- [STS-484] - Template selection wizard should show arrow if there is a new version to download
- [STS-485] - Fix download template errors after updating to 2.2.0
- [STS-512] - Deadlock on workspace startup
- [STS-521] - Still OverlappingFileLockException occur
- [STS-526] - bundle deployment via STS has no effect if target dm server installed to path with space in the name
- [STS-527] - Spelling mistake on the first screen of the Roo shell
- [STS-529] - Roo: NPE whilst trying to create project
- [STS-534] - When restarting STS with an open config editor, the editor does not load the beans graph page.
- [STS-540] - Regression: WTP Config detection fails with web.xml that uses xml entity fragments
- [STS-555] - Strange names in RequestMapping
- [STS-556] - Request/Mapping view may crash if the file it points to is deleted or project is closed.
- [STS-559] - [grails] A grails project should remember the grails version used to build it and commands should respect that rather than the global setting
- [STS-570] - [windows] editing of property values fails in tc Server properties section
- [STS-585] - [grails] if configuring the grails installs via the new grails project wizard, on return to the wizard it doesn't know what has happened

Stories

- [STS-143] - Improve Spring Project Wizard
- [STS-161] - The config editor should remember the last selected page on a per file basis
- [STS-166] - As a user, I want STS to auto-discover different versions of dm and tc server in the package
- [STS-170] - As a user, I want to get visual web URL mappings for REST and other controller configurations
- [STS-171] - As a user, I want to use RFC 124 with STS
- [STS-177] - As a user, I want browse, navigate and validate my Spring autowired configurations
- [STS-179] - As a user, I want to easily install third-party plugins into STS
- [STS-181] - As a developer, I want improvements to the Project Template Wizard and infrastructure
- [STS-234] - As a user, I want to enable application tailing when the server is running
- [STS-244] - Use smart default for XSD version in config file wizard
- [STS-246] - Provide tabular view of @RequestMappings
- [STS-247] - Show Javadocs from @RequestMapping method in mapping view
- [STS-266] - As a user, I want to use Bundlor M5 in STS
- [STS-267] - As a user, I want Bundlor to scan byte code or source code

- [STS-281] - Developer wishes to add a new bundle project or new par project to a working set during project creation
- [STS-288] - As a developer I would like to use Bundlor to build a bundle in Eclipse using only a manifest
- [STS-293] - As a user, I want to be able to access my command history in the Eclipse-based OSGi console
- [STS-296] - As a user, I'd like to get a warning if the staging directory is not accessible
- [STS-301] - As a user, I want bundlor in STS to work without a pre-existing MANIFEST.MF
- [STS-302] - Bundlor should scan Eclipse class folder to compute MANIFEST.MF content
- [STS-347] - As a user, I want my web.xml files to be scanned by Bundlor in STS
- [STS-348] - As a user, I want static resource to not trigger application refreshes in tc Server
- [STS-381] - As a user, I want STS to re-validate the Spring structure model on classpath changes
- [STS-393] - Memory Leak in LOB Reading in Oracle??
- [STS-414] - As a user, I want to get validation errors for missing classes referenced from namespace elements
- [STS-419] - As a user, I want RSS feeds to be cached
- [STS-420] - As I user, I want a unified experience to install SpringSource servers as well as Tomcat within STS
- [STS-421] - Improve tc Server support
- [STS-422] - As a user, I want to specify new template project location
- [STS-423] - As a user, I want support for bean rename refactoring when renaming @Bean methods
- [STS-425] - As a user, I want to disable embedded graphs in the config editor
- [STS-486] - As a user, I want to sign up and deploy to Cloud Foundry right from within STS
- [STS-491] - As a user, I want to use Eclipse 3.5.1 with STS
- [STS-492] - Release STS 2.2.0.RELEASE
- [STS-503] - As a user, I want to deploy applications to dm and tc Server running in VMware Workstation 6.5 and 7
- [STS-513] - consume Mylyn 3.3 changes

Tasks

- [STS-66] - MANIFEST is placed in src/main/java and not in src/main/resources
- [STS-187] - Create 2.1.0.RELEASE (binary, update site, documentation, blog)
- [STS-413] - Improve SpringSource logo in template selection wizard
- [STS-461] - feature license issues

The change log is also available at:

<https://issuetracker.springsource.com/secure/ReleaseNote.jspa?projectId=10010&styleName=Html&version=10332>

NEW FEATURES – 2.1.0.RELEASE

Tutorials and Help

Task-Focused Tutorials

The Task-Focused Tutorials are now downloaded on-demand and can also be updated without shipping a new version of STS.

Spring Development Tools

Spring Roo Integration

The integrated Spring Roo and accompanying project template has been updated to latest available version; Spring Roo RC1.

Additionally the embedded Roo Shell View now features a toolbar action to open shells for multiple projects right from the view; no need to go through the project context menu.

Runtime Integration

Bundled tc Server updated

STS now bundles latest version of SpringSource tc Server 6.0.20.A.

ENHANCEMENTS – 2.1.0.RELEASE

Spring Project Builder Performance Improvements

The performance of the validation and building infrastructure has been greatly improved. The Spring Project Builder is responsible for validating Spring configurations, managing the AOP cross-reference model as well as the stereotype usage information.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.1.0.RELEASE release:

Sub-tasks

- [STS-189] - re-author tutorials that include the SpringTravel project
- [STS-191] - create a command for downloading Tomcat
- [STS-192] - Investigate technology for UI tests
- [STS-194] - UI test for content assist in config editor
- [STS-195] - UI test for quickfix
- [STS-196] - create command to import dependency project
- [STS-197] - create UI that prompts for Tomcat download
- [STS-198] - write test case that downloads Tomcat
- [STS-199] - UI test for visual editing
- [STS-200] - UI test for vmware lab manager integration

- [STS-201] - UI test for AMS integration
- [STS-202] - Build STS
- [STS-203] - Build mirror
- [STS-204] - Build distribution and upload
- [STS-205] - Update New and Noteworthy and Feature Comparison
- [STS-206] - Write blog post
- [STS-213] - extract SpringTravel project
- [STS-215] - Implement script to mirror and upload the update site
- [STS-216] - re-author tutorials that require Tomcat
- [STS-222] - Create JUnit tests for Lab Manager
- [STS-226] - Core & UI tests for the manifest editing
- [STS-230] - Create native installers with pack200 support
- [STS-232] - write a test that checks for leaks of the XML model during the config editor lifecycle
- [STS-233] - create a test that opens an external manifest
- [STS-237] - make SWTBot tests run as part of continuous build
- [STS-238] - create releng script that creates a zip files for each tutorial and shared sample project
- [STS-239] - integrate deployment of tutorials and assembly of tutorial descriptor into build
- [STS-240] - implement mechanism for reading remote descriptor for available tutorials and samples
- [STS-241] - download tutorials and samples on demand
- [STS-242] - indicate locally downloaded and new tutorials on the dashboard
- [STS-249] - Convert junit tests to junit4 tests
- [STS-257] - convert existing tutorial descriptors and publish on website
- [STS-258] - support new descriptor fields in authoring tools
- [STS-259] - download dependent sample projects with tutorials
- [STS-261] - Investigate & fix latest SWTBot related build errors in the nightly build.
- [STS-263] - Test STS package on Linux
- [STS-324] - Be able to add a bundle classpath container to a project without giving it a bundle nature first
- [STS-374] - Implement and test dm server install
- [STS-375] - Implement and test tc server install

Defects

- [STS-17] - Error when Subclipse Mylar Integration (1.0.1) requires plugin "org.eclipse.mylar.tasks.core (0.9.2)", or later version.
- [STS-19] - The filename or extension too long: Unable to Create directory
- [STS-20] - NullPointerException during the tutorial: "Creating a Spring-powered OSGI Bundle"
- [STS-21] - Create new runtime error analysis hangs
- [STS-24] - Broken link in SSTS Eclipse documentation.
- [STS-25] - Typo in SpringSource logo in (at least) the PetClinic sample application.
- [STS-28] - Too Long directory/filenames in Windows Eclipse Distributions (springsource-toolsuite-1.0.0.RC1-e3.4-win32.zip)
- [STS-29] - Validation error with ehcache configuration
- [STS-30] - Missing 'Note' and 'Tip' icons in help pages

- [STS-31] - Java Build Path disappears after on selecting "Focus on Active Tasks" - delete/close, problem with eclipse and my system it appears.
- [STS-33] - Login for update-site not accepted
- [STS-34] - When unzipping the package, On Vista Home Preimum, so of the files (.... AOP....) will not unzip because the class NAMES are too long.
- [STS-35] - When a project is running on Spring AP, the r-click >> Run As >> Run on Server has no effect
- [STS-38] - Test Bug
- [STS-39] - TEST bug
- [STS-40] - (TEST) Error setting component for JIRA issue. Component id is null: Unknown
- [STS-41] - Test Bug submitted from STS. Please ignore or delete.
- [STS-42] - Test Bug
- [STS-43] - Tutorial not found in path "com.springsource.platform.tutorials.introduction/" from plug-in "org.springframework.osgi.tutorials"
- [STS-44] - Test bug
- [STS-45] - Knowledge Base tab doesn't repaint properly
- [STS-47] - My Support Issue
- [STS-49] - Classpath Container Exclusion doesn't work properly
- [STS-50] - Not all required dependencies are downloaded from the repository, for a certain library
- [STS-51] - The Bundle Repository Browser doesn't display all available options
- [STS-52] - Red error markers inside manifest file don't disappear if dependencies are downloaded using the Bundle Repository browser
- [STS-53] - Authoring tool doesn't save the step's context as defined by author
- [STS-54] - test
- [STS-57] - Constant "updating bundle classpath" between two projects
- [STS-63] - JUnit version included in STS is incompatible with Spring 2.5+ test classes
- [STS-65] - Manifest parse Exception
- [STS-73] - test
- [STS-74] - STS Dashboard > Knowledge Base > "Update from SpringSource" fails behind a proxy
- [STS-79] - Spring WebFlow TFT checks flow configs against the old Webflow XSDs
- [STS-82] - 500 error in webflow TFT
- [STS-88] - Download dm Server link should not have to go out to internet
- [STS-91] - After installing an svn plugin and restarting: "The state indicates the bundle is resolved"
- [STS-92] - Inconsistent warning/error markers in Spring XML files when beans
- [STS-100] - Not able to disable PMD or change settings
- [STS-101] - Not able to uninstall SpringSource Tool
- [STS-106] - Null assertion fails in project template wizard
- [STS-111] - STS 2.1.0.M1 doesn't start on Linux 64
- [STS-112] - SpringSource template projects do not show up in New->Project... dialog
- [STS-113] - Error in workspace when removing project from tc Server
- [STS-116] - Generation of MANIFEST.MF from template does not indicate when it fails
- [STS-117] - Aptana cannot be installed
- [STS-120] - Properties page on "Software updates and addons
- [STS-123] - Adding a Spring Bean Definition file generates many instances of the same dialog box

- [STS-126] - Intermittent error running bundlor
- [STS-127] - STS 2.0.2 restarts in a loop due to osgi exception
- [STS-129] - Unmet org.eclipse.swt requirement when updating
- [STS-130] - Eclipse won't start after installing or updating plugins twice
- [STS-134] - Project created by Spring "Create a new Shared Services Project" template has errant manifest.mf entry
- [STS-135] - par editor fails when file from local file system is opened
- [STS-144] - STS 2.1.0.M2 won't start after installing Subclipse and Yourkit plugins
- [STS-184] - LinkageError while opening batch job config
- [STS-185] - Spelling mistake in web-application-config file in Getting Started with Spring Web Flow
- [STS-229] - Support for XML namespace usage in elements not at root level
- [STS-235] - Bundle refresh happens even when changing tests in /src/test/java
- [STS-243] - Support RFC66 WARs in the PAR export wizard
- [STS-250] - DataSourceTransactionManager bean definition error: no setter found for property dataSource
- [STS-251] - Adding a config files explicitly that's already included through an import breaks the AOP tooling
- [STS-253] - Lab Manager - Error messages appear in triplicate
- [STS-260] - Spring Web Flow configuration issues
- [STS-262] - DM Server Clean option from STS
- [STS-264] - errors when opening help
- [STS-265] - [e3.5] startup on Linux fails
- [STS-270] - Configured Roo installation directory not picked up
- [STS-272] - Configuring STS to point to a newer version of Roo does not work.
- [STS-275] - Dashboard ignores proxy authentication settings
- [STS-325] - Shared services war and shared libraries war added as par dependencies are not able to uninstall even if they are removed from par editor in STS
- [STS-330] - Adding OSGi project bundle nature breaks Java EE dependencies on other projects

Stories

- [STS-124] - As a user, I want to use STS with Eclipse 3.5
- [STS-154] - Enable manager app in included tc Server and Tomcat
- [STS-155] - Include Spring-Travel as an example project
- [STS-157] - Prompt to download Tomcat if tutorial requires it
- [STS-163] - Increase test coverage for UI components
- [STS-164] - As a user, I want to be able to download nightly snapshot builds from one consolidated update site
- [STS-167] - As a user, I want to install dm and tc server from the WTP server adapter install
- [STS-175] - As a user, I want to install tutorials and project templates on-demand and get notifications for new items
- [STS-244] - Use smart default for XSD version in config file wizard
- [STS-255] - Add Groovy and Grails support in Eclipse/STS
- [STS-273] - As a user, I want to use Roo RC1 with STS
- [STS-344] - Maven Bundlor property substitution causes errors in STS

Task

- [STS-26] - Password not remembered for update site
- [STS-46] - Support for maven2 and subversion
- [STS-68] - Launching server using clean argument
- [STS-90] - Upgrade bundled org.springframework.batch.core from RC3 to RELEASE
- [STS-94] - Provide support for automatically adding Spring Project Nature when attempting to create a new Spring Bean Definition file
- [STS-104] - Subversive Plugin
- [STS-121] - Ensure Roo template can be used with a 2-part top level package name
- [STS-187] - Create 2.1.0.RELEASE (binary, update site, documentation, blog)
- [STS-254] - Console view not available on Mac

The change log is also available at:

<https://issuetracker.springsource.com/secure/ReleaseNote.jspa?projectId=10010&styleName=Html&version=10183>

NEW FEATURES – 2.1.0.RC1

Spring Development Tools

Automatic addition of Spring Project Nature

The New Spring Bean Definition and New Web Flow Definition file wizard now provides the option to automatically add the Spring Project Nature if not already present.

OSGi Development Tools

Validation of `template.mf`

STS will now validate the Bundlor `template.mf` file along `MANIFEST.MF` and `TEST.MF`.

ENHANCEMENTS – 2.1.0.RC1

Support for Eclipse 3.5

STS 2.1.0.RC1 now supports installation into Eclipse 3.5 Galileo as well as Eclipse 3.4 Ganymede. For installation please point your update manager to:

<http://www.springsource.com/milestone/e3.4>

Package downloads are also available based on Eclipse 3.4 and 3.5.

Additionally STS 2.1.0.RC1 can now be updated with nightly snapshot builds from the following update sites:

Spring IDE: <http://dist.springframework.org/snapshot/IDE/nightly>

dm Server Tools: <http://dist.springsource.com/snapshot/DMS-TOOLS/nightly>

STS: <http://dist.springsource.com/snapshot/STS/nightly/e3.4>

In order to successfully install STS from an update site the following plugins need to be installed or at least available from any enabled update site:

AJDT: <http://download.eclipse.org/tools/ajdt/35/update> or
<http://download.eclipse.org/tools/ajdt/34/update>

Mylyn: <http://download.eclipse.org/tools/mylyn/update/e3.4>

Mylyn Extras: <http://download.eclipse.org/tools/mylyn/update/extras>

PMD: <http://pmd.sourceforge.net/eclipse>

Failed Restart after Installation of Third-Party Plugins

STS 2.1.0.M1 and M2 would not start after installation of various third-party plugins due to a missing Equinox Weaving Feature. Details can be found in JIRA:

STS-91: After installing an svn plugin and restarting: "The state indicates the bundle is resolved" <https://issuetracker.springsource.com/browse/STS-91>

This problem has been addressed.

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.1.0.RC1 release:

Defects

- [\[STS-45\]](#) - Knowledge Base tab doesn't repaint properly
- [\[STS-47\]](#) - My Support Issue
- [\[STS-49\]](#) - Classpath Container Exclusion doesn't work properly
- [\[STS-50\]](#) - Not all required dependencies are downloaded from the repository, for a certain library
- [\[STS-51\]](#) - The Bundle Repository Browser doesn't display all available options
- [\[STS-52\]](#) - Red error markers inside manifest file don't disappear if dependencies are downloaded using the Bundle Repository browser
- [\[STS-53\]](#) - Authoring tool doesn't save the step's context as defined by author
- [\[STS-54\]](#) - test
- [\[STS-57\]](#) - Constant "updating bundle classpath" between two projects
- [\[STS-63\]](#) - JUnit version included in STS is incompatible with Spring 2.5+ test classes
- [\[STS-65\]](#) - Manifest parse Exception
- [\[STS-73\]](#) - test
- [\[STS-92\]](#) - Inconsistent warning/error markers in Spring XML files when beans
- [\[STS-100\]](#) - Not able to disable PMD or change settings
- [\[STS-101\]](#) - Not able to uninstall SpringSource Tool
- [\[STS-106\]](#) - Null assertion fails in project template wizard
- [\[STS-112\]](#) - SpringSource template projects do not show up in New->Project... dialog
- [\[STS-113\]](#) - Error in workspace when removing project from tc Server
- [\[STS-120\]](#) - Properties page on "Software updates and addons"
- [\[STS-123\]](#) - Adding a Spring Bean Definition file generates many instances of the same dialog box
- [\[STS-126\]](#) - Intermittent error running bundlor
- [\[STS-127\]](#) - STS 2.0.2 restarts in a loop due to osgi exception
- [\[STS-129\]](#) - Unmet org.eclipse.swt requirement when updating
- [\[STS-130\]](#) - Eclipse won't start after installing or updating plugins twice
- [\[STS-134\]](#) - Project created by Spring "Create a new Shared Services Project" template has errant manifest.mf entry
- [\[STS-135\]](#) - par editor fails when file from local file system is opened
- [\[STS-144\]](#) - STS 2.1.0.M2 won't start after installing Subclipse and Yourkit plugins
- [\[STS-184\]](#) - LinkageError while opening batch job config

Task

- [STS-46] - Support for maven2 and subversion
- [STS-90] - Upgrade bundled org.springframework.batch.core from RC3 to RELEASE
- [STS-94] - Provide support for automatically adding Spring Project Nature when attempting to create a new Spring Bean Definition file
- [STS-104] - Subversive Plugin

The change log is also available at:

<https://issuetracker.springsource.com/secure/ReleaseNote.jspa?version=10313&styleName=Text&projectId=10010>

Defects

- [DMST-2] - PAR export does not include bundle jars
- [DMST-30] - Refresh of synthetic context bundle causes shared services war and shared libraries war are not working which are part of par in tooling
- [DMST-36] - Changes in static resources not published to dm server
- [DMST-42] - Artifact not found when redeploying PAR after error
- [DMST-44] - Closing or deleting a deployed par project doesn't undeploy it from the server
- [DMST-45] - Remove OSGi Project Nature doesn't clear markers
- [DMST-46] - Stage area is not kept in sync with user code
- [DMST-47] - VM arguments sometimes overwritten
- [DMST-55] - Required-Bundle in com.springsource.server.ide.runtime.core not causing referenced bundles to install
- [DMST-57] - Confusing warning message on exporting non-existing packages in MANIFEST
- [DMST-58] - Manifest errors continue to show even after removing the Bundle Dependencies class path container
- [DMST-59] - Manifest not updated from template.mf
- [DMST-61] - Removing a bundle from a Server does not undeploy the underlying bundle
- [DMST-64] - Failing bundles removed from Server view are not uninstalled.
- [DMST-65] - MANIFEST.MF generation fails silently on very small "problems"
- [DMST-67] - BundleClasspathContainer: re-importing exported package causes build path problems
- [DMST-75] - The Eclipse JPA bundle doesn't show up in the tools at it's latest version.
- [DMST-81] - Manifest tooling generates loads of errors and popups
- [DMST-82] - Intermittent error from bundlor plugin
- [DMST-83] - Bundlor + CVS created exports for the .cvs directories
- [DMST-85] - JUnit Test with @Transactional fails
- [DMST-86] - Can no longer deploy a bundle on to a dm server instance.
- [DMST-91] - NPE when opening a .mf file
- [DMST-93] - Running Bundlor with an invalid template fails very quietly
- [DMST-100] - Bundles are published even if the server is stopped
- [DMST-103] - NPE in BundleManifestsOutlinePage

Story

- [DMST-3] - As a user, I'd like to be able to add existing bundle jars to my PAR project
- [DMST-77] - As a user, I want my template.mf to be validated
- [DMST-98] - support Eclipse 3.5

Task

- [DMST-38] - Add binary bundles to par project in eclipse
- [DMST-40] - Add PAR Export Wizard
- [DMST-62] - Change dm Server Tools to use the new Manifest Parser

The change log is also available at:

<https://issuetracker.springsource.com/secure/ReleaseNote.jspa?projectId=10080&styleName=Html&version=10329>

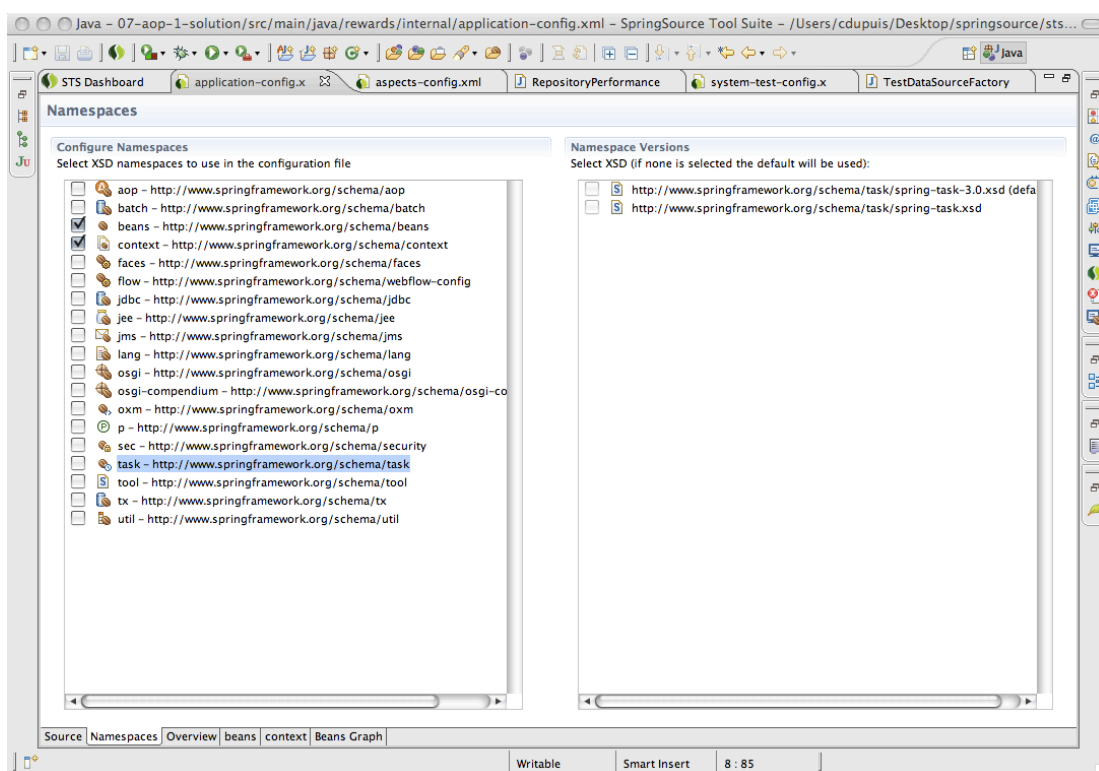
NEW FEATURES – 2.1.0.M2

Spring Development Tools

Update to Spring 3.0 M3

STS has been updated to internally use Spring Framework 3.0.0.M3. This ensures that STS understands configurations that use Spring 3.0 features.

The new `<task:* />` and `<jdbc:* />` are both now available and are integrated into STS as the other Spring namespaces with content assist, hyperlinking and validation.



Spring Batch Visual Editor

The visual editor for Spring Batch has been greatly improved and does now support a much broader range of editing tasks.

To access the Batch Editor open a Spring XML bean definition file with Batch jobs in it with the Spring Config Editor and select the batch-graph tab.

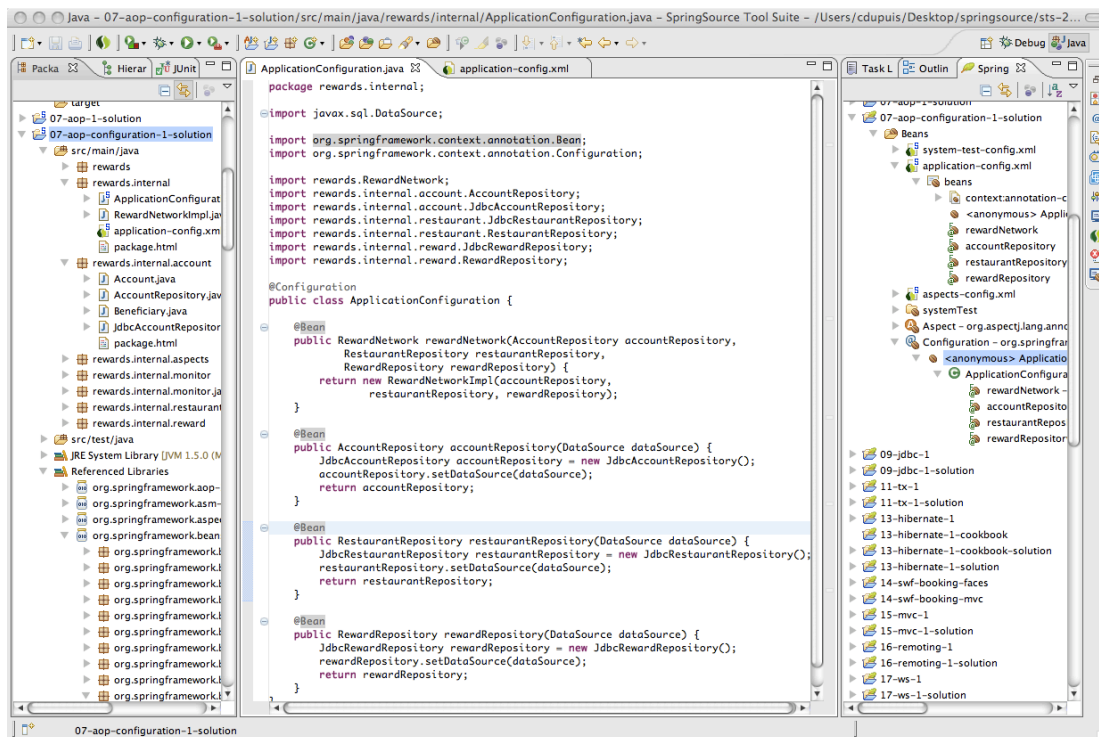
If you are a Spring Batch developer check it out and let us know what you think.

Support for @Configuration Classes

Spring 3.0 introduces a new Annotation-based configuration approach through the use of @Configuration and @Bean annotations. Those annotations are now supported by STS: Spring beans configured by @Bean are visible within the Spring Explorer, Dependency Graph and can be referenced in Spring XML.

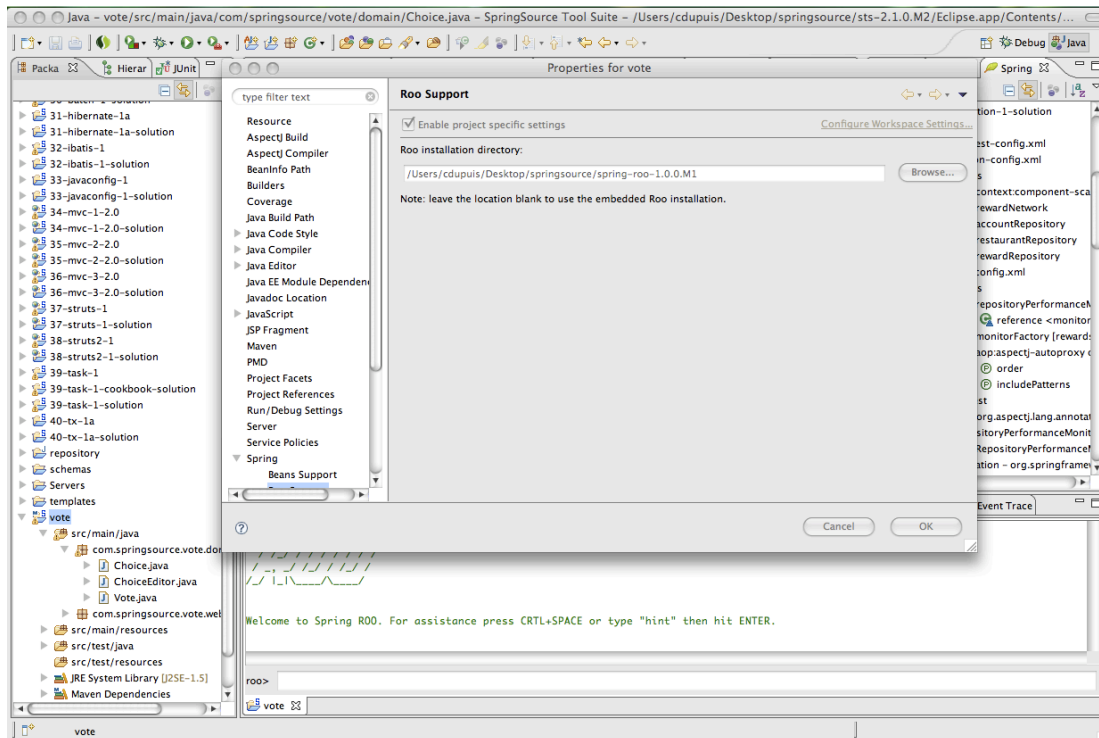
Additionally those new annotations have been added to the Stereotype and Annotation Grouping Support of STS. This provides easy access and navigation of configuration classes.

The integration will also validate configuration classes and report problems (e.g configuration class declared as final, see the Spring 3.0 documentation for more details on restrictions) within the Java Editor.



Spring Roo Integration

The Spring Roo integration has been updated to ship the latest 1.0.0.M1. Additionally developers can now configure an external Roo installation to be used inside STS instead of the bundled one. This allows usage of new Roo versions and add-ons without the need of a new STS version.

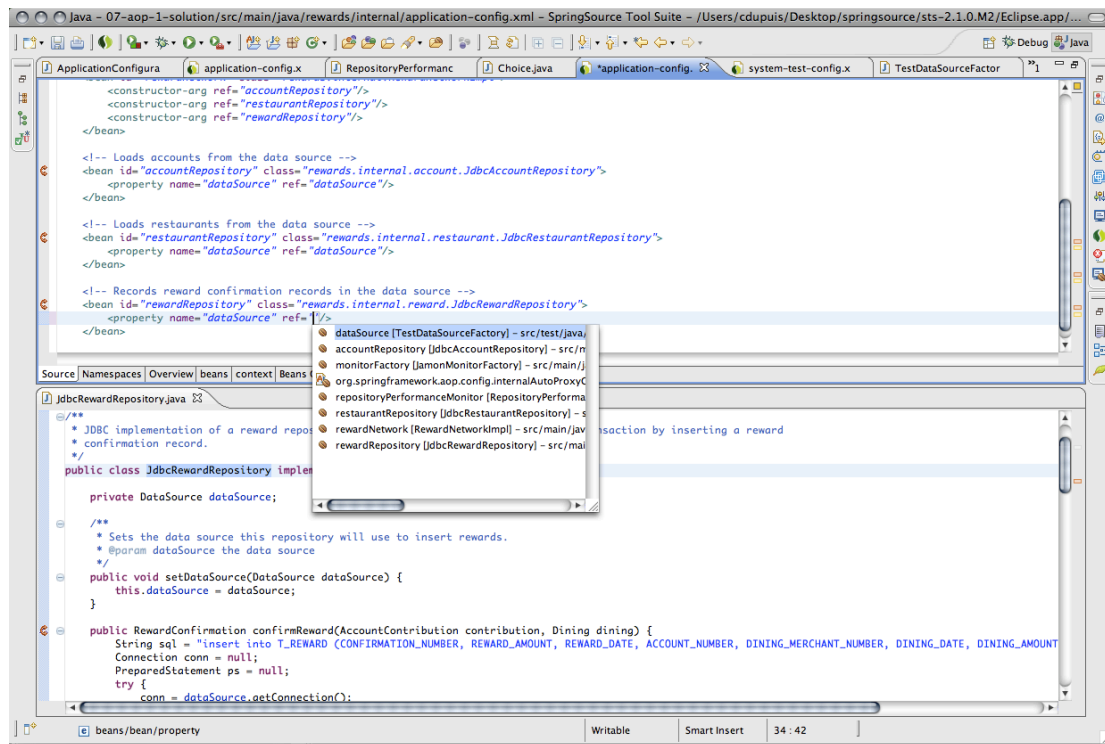


The Roo installation can be configured on a per project or workspace level; this allows to target workspace projects to use different versions of Roo and a different set of add-ons.

The Roo project template has been updated to be compatible with 1.0.0.M1.

Type-aware Bean Reference Content Assist

A long-standing feature request has been added in STS 2.1.0.M2: content assist for Spring bean references now prefers beans that match property and constructor types. Beans that match the property or constructor argument type get a higher priority and are clearly separated in the content assist proposal UI.



Runtime Integration

Management of tc Server Instances and Groups

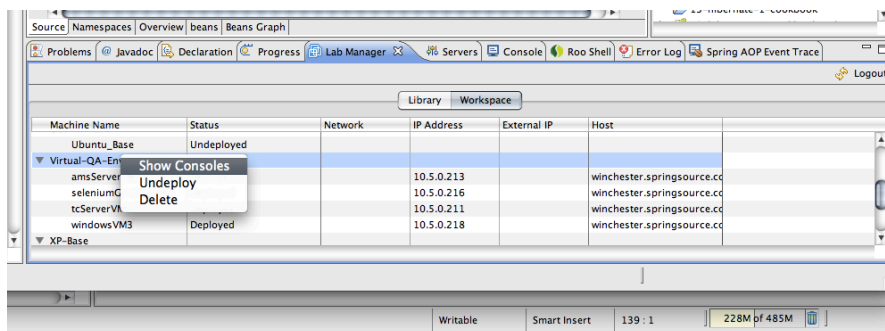
STS now allows managing of groups and single instances of tc Server right inside the IDE. The tc Server integration, introduced with STS 2.0.2, has been extended to allow start and stop operations as well as remote application deployment on tc Server instances that are managed by SpringSource AMS.

To configure a group or single instance within STS, open the WTP Servers view and create a new server. In the New Server wizard select SpringSource AMS server type and complete the wizard.

VMware Lab Manager Integration

STS includes a view called 'Lab Manager' which allows you to connect to a VMware Lab Manager installation and browse configurations. Also users can start, stop configurations and open consoles for the VM instances right inside the IDE.

This feature can be installed from the update site at <http://www.springsource.org/milestone/e3.4>. It will be included in the distribution with the next release.



ENHANCEMENTS – 2.1.0.M2

Performance Improvement

STS 2.1.0.M1 exhibited excessive CPU usage under certain conditions, which could require killing the process. This issue has been reported by the community and been addressed and verified to solve the issue. The issue details are available at:

STS-98: Excessive CPU Usage <https://issuetracker.springsource.com/browse/STS-98>

Fixed Bugs and Enhancement Requests

Here is a full list of resolved bugs and enhancement requests for the 2.1.0.M2 release:

Defects

- [STS-83] - STS 2.1.0.M1 embedded tcServer has extraneous wtpwebapps directory
- [STS-84] - NullPointerException in Roo Tab completion
- [STS-95] - Roo Simple project template uses Apple JVM container
- [STS-97] - STS 2.0.2 fails to start after installing SVNKit Connectors
- [STS-98] - Excessive CPU Usage
- [STS-99] - STS crash report: Error during shutdown AssertionFailedException
- [STS-102] - Eclipse wont start-up raising AssertionFailedException: null argument
- [STS-103] - ensure that tc Server webapps are deployed to proper directory
- [STS-109] - NPE from quickfix code under java 6

Task

- [STS-85] - update Roo project template to latest Roo version
- [STS-86] - Spring beans do not appear in context tab and quick context
- [STS-96] - Add the template project wizard to the New menu

The change log is also available at:

<https://issuetracker.springsource.com/secure/IssueNavigator.jspa?reset=true&pid=10010&fixfor=10302>

NEW FEATURES – 2.1.0.M1

Spring Development Tools

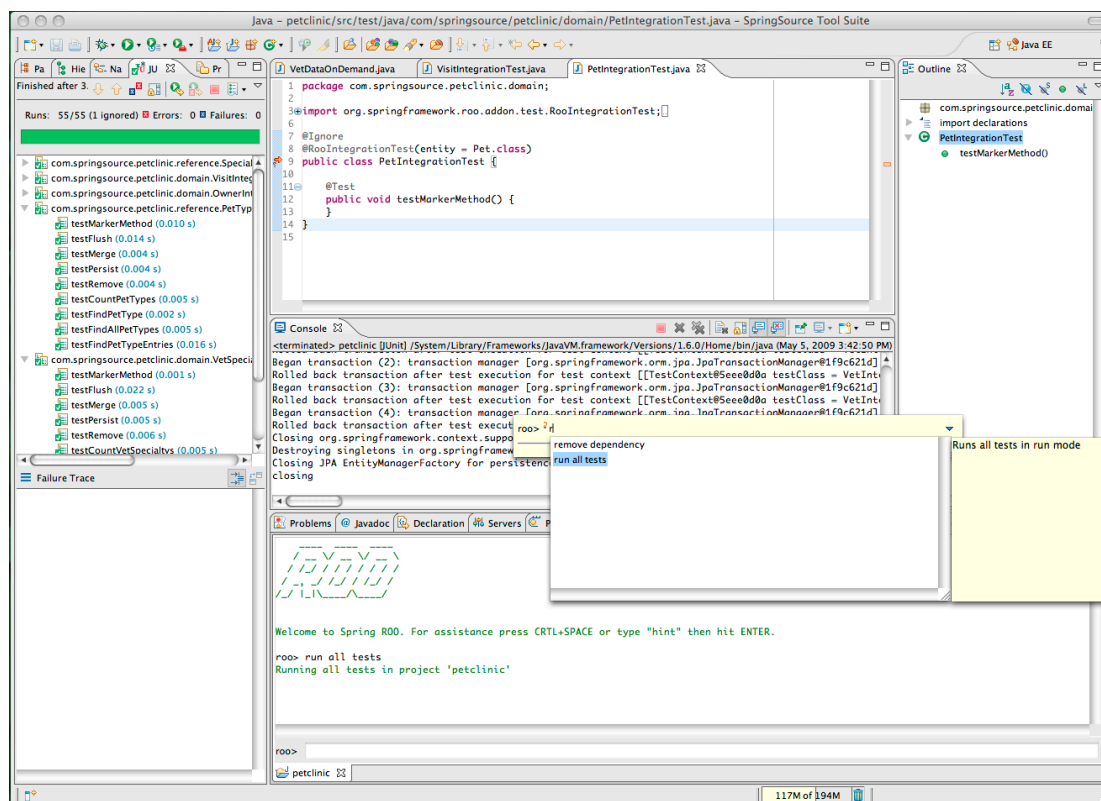
Project Templates

STS 2.1.0.M1 contains project templates to help jumpstart new Spring-based projects with little to no effort. The following projects templates are available:

- Spring MVC
- Spring Web Flow
- Spring Faces
- Spring Batch
- Spring Roo
- OSGi Bundle for SpringSource dm Server

Spring Roo Integration

In order to make the productivity advantages of Spring Roo available inside the IDE, STS integrates the Roo Shell and provides a Quick Roo Command Prompt (CTRL+R or CMD+R on Mac).

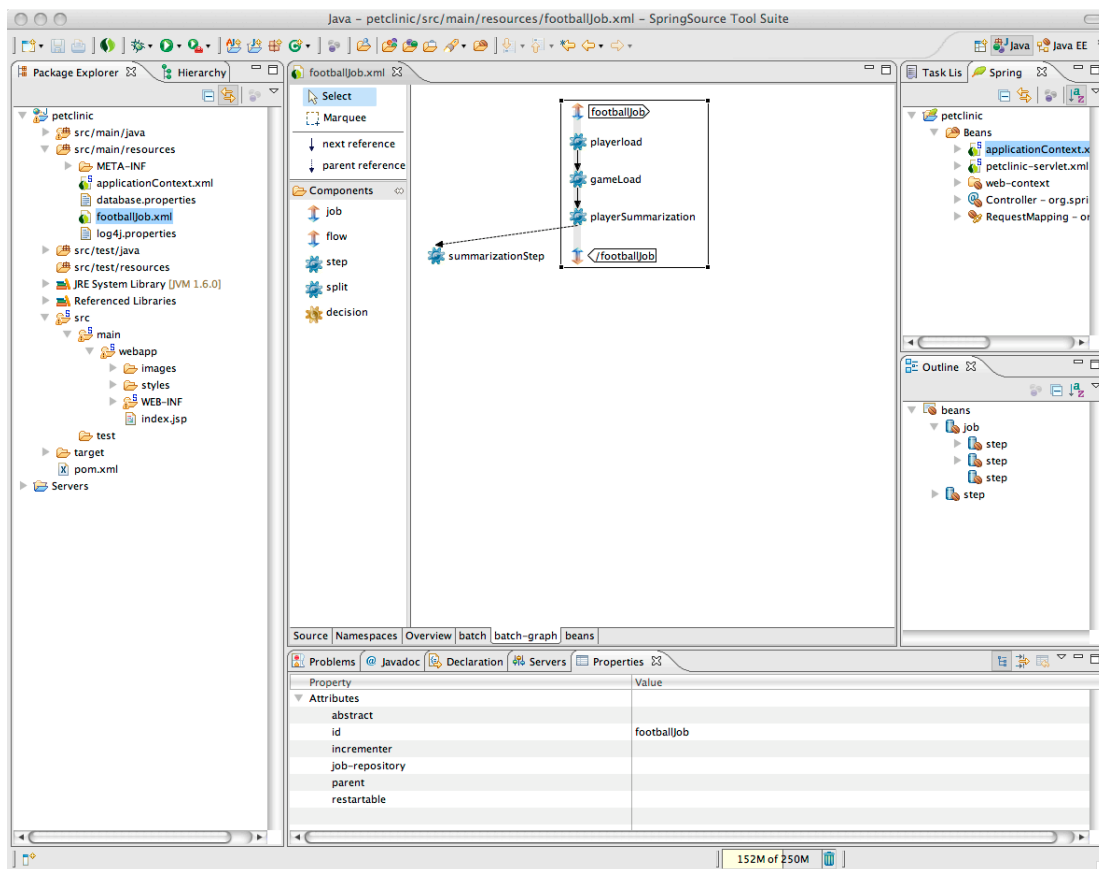


Additional Roo commands are available that provide access to Eclipse/STS functionalities:

- `deploy -server "<WTP server name>"` – Deploys the Roo project to a WTP server, like dm or tc Server, and starts the server.
- `runldebug all tests` – Executes all JUnit tests in Eclipse/STS and opens the JUnit view.

Spring Batch Visual Editor

The Visual Spring Configuration Editor, which has been introduced with STS 2.0.0, has been extended to allow visual editing of Spring Batch Jobs and Flows.



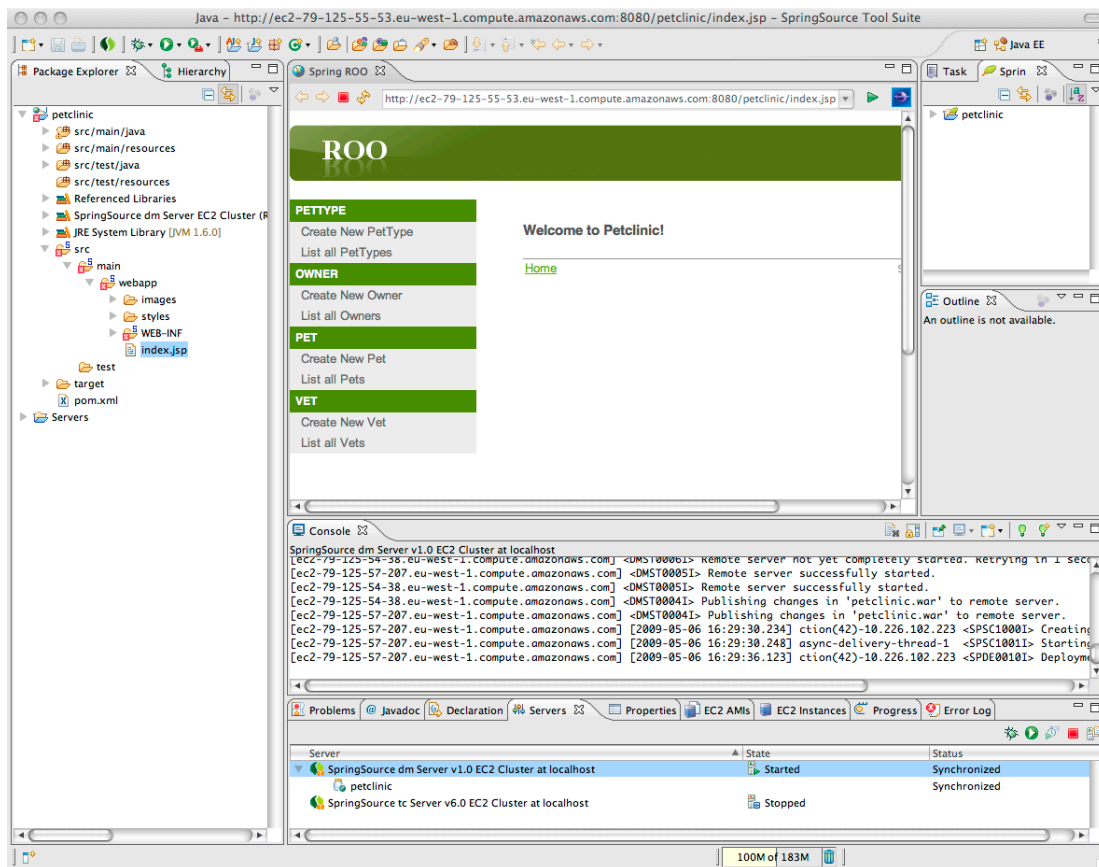
This editor is in its very early stage. Every feedback is welcome.

Runtime Integration

Amazon EC2 Integration and Deployment Support

STS allows to deploy WAR applications, OSGi bundle and PAR projects to dm and tc Server running in the Amazon EC2 cloud. Corresponding AMIs for dm and tc Server have been published by SpringSource.

The EC2 integration will automatically handle the setup of the application server cluster and load balancer if required.



Deploying to the cloud is simply a matter of dragging your project to the integrated cluster in the WTP Servers view!

Bundling of dm and tc Server

STS 2.1.0.M1 comes equipped with both SpringSource server runtimes, ready for use. On first opening of a Workspace STS will auto-configure those server runtimes and make them available from the WTP Servers view.

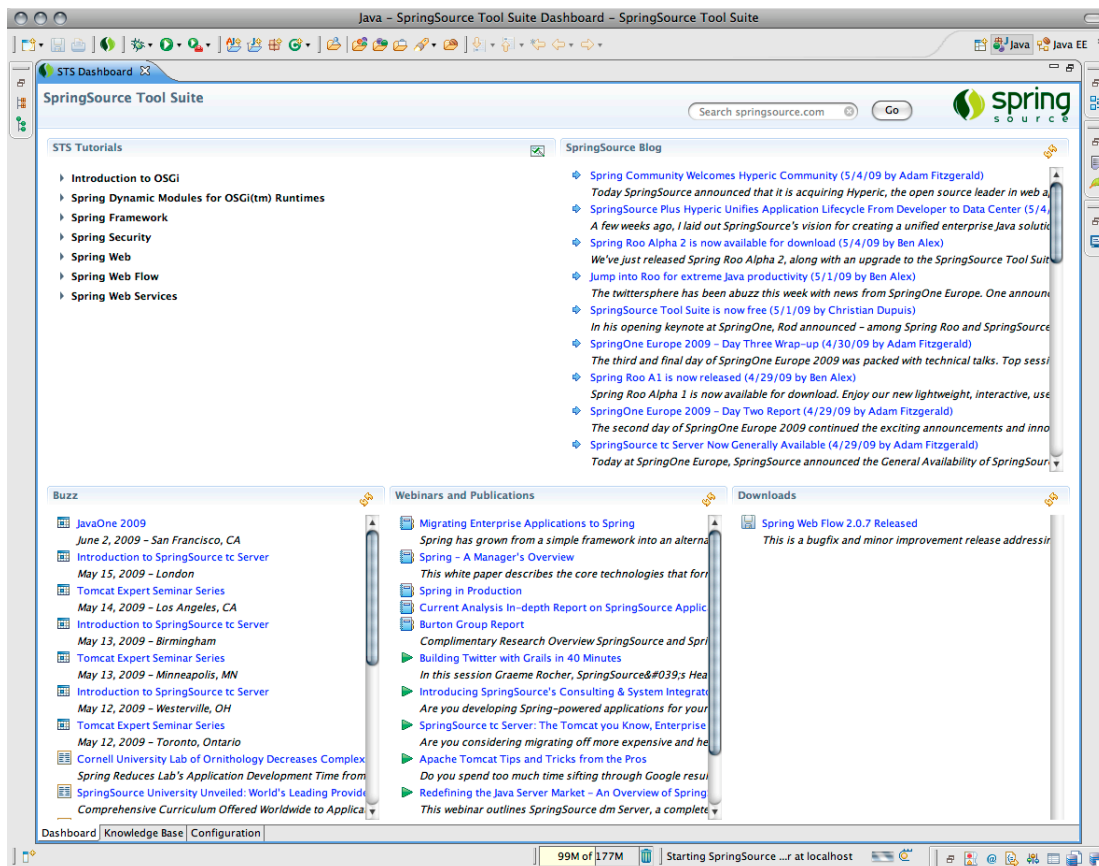
Also both server runtimes can be used outside of STS: you'll find them in the root folder of the STS installation next to the sts-2.1.0.M1 folder.

Note: this only applies for the distribution download.

Integration

Dashboard

STS has been updated to contain a more modern and content-rich Dashboard for easy access to all news, buzz and downloads around Spring and SpringSource.

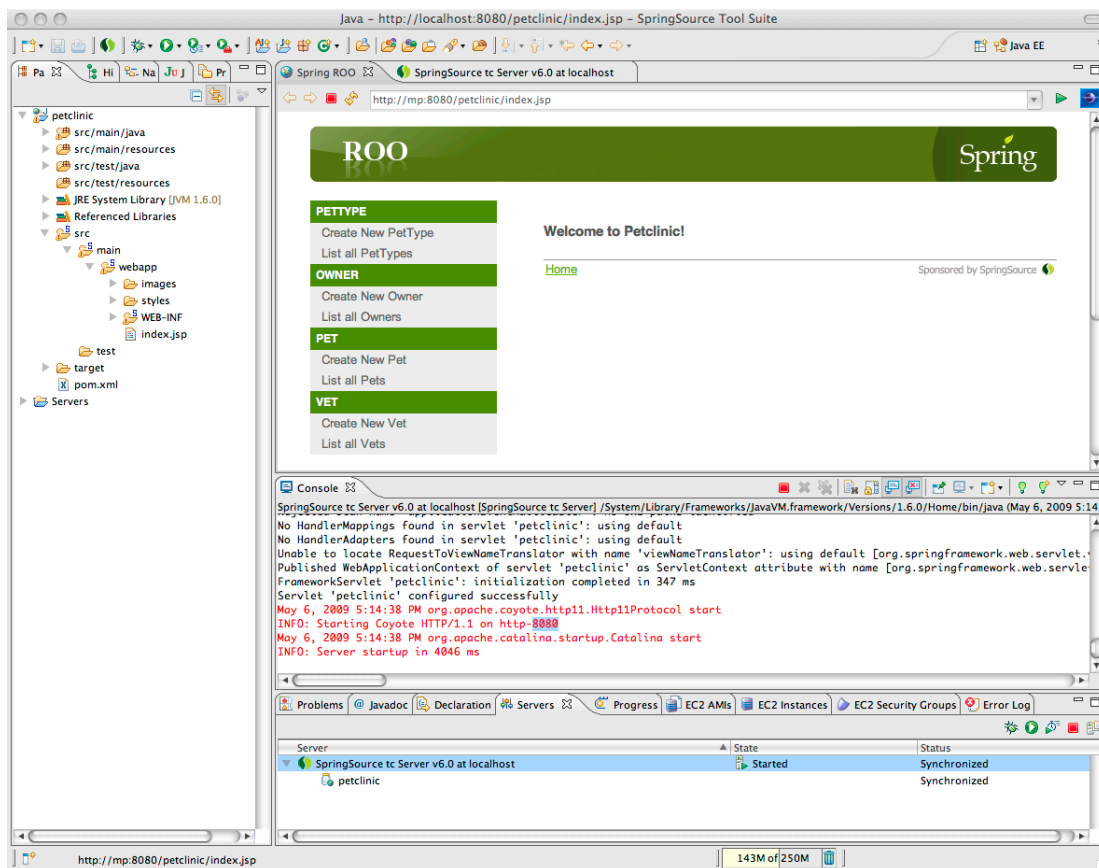


NEW FEATURES – 2.0.2

Runtime Integration

Support for SpringSource tc Server

STS 2.0.2 ships with integrated WTP support for SpringSource tc Server. It is now very simple to use tc Server as a deployment target inside of STS.



ENHANCEMENTS – 2.0.2

Change in Package Folder Name

When extracting the SpringSource Tool Suite ZIP archive, you'll notice that the name of the top-level folder has been changed from eclipse to sts-2.0.2.RELEASE. This has been done to make it easy to keep several versions of STS around.

Fixed Bugs and Enhancement Requests

There are no resolved issues or feature requests in 2.1.0.M1 as this version is the first available build.

NEW FEATURES – 2.0.1

Spring Development Tools

Performance Enhancements

The performance of the Spring Project Builder (responsible for validating Spring XML configuration files, creating the AOP cross-cutting model, extracting the Annotation stereotype information) for processing incremental changes of Java source files has been greatly improved.

Integration

Integration of m2eclipse

STS 2.0.1 bundles the open-source Maven plug-in m2eclipse.

Updates to Eclipse components

STS 2.0.1 has been updated to incorporate Eclipse Mylyn 3.1.

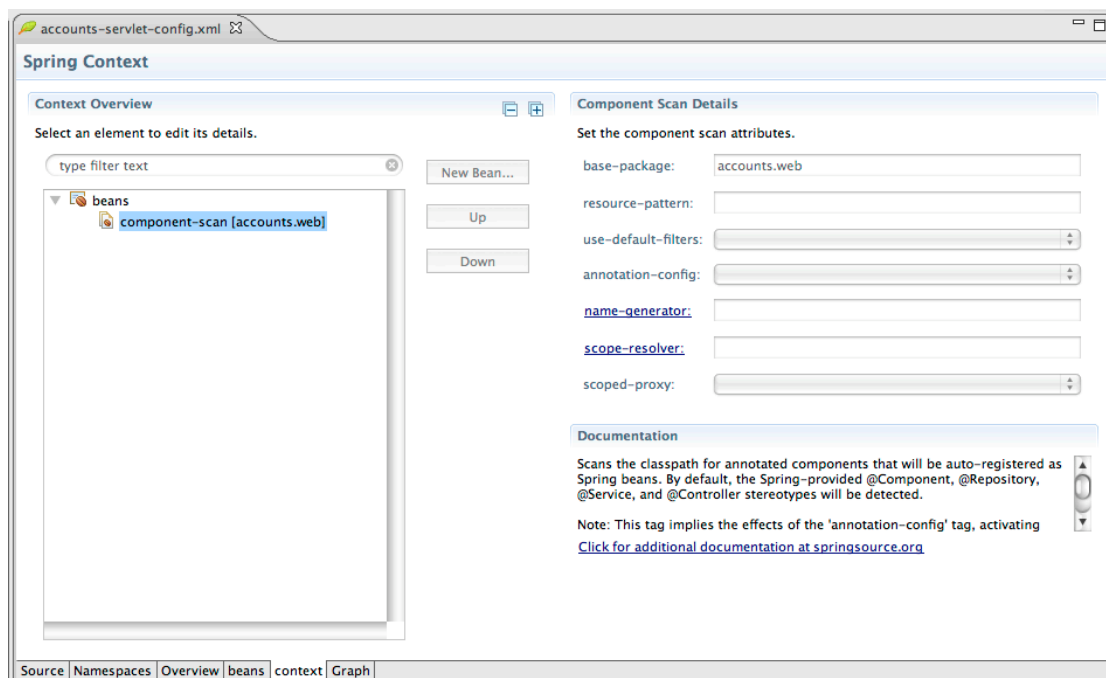
NEW FEATURES – 2.0

Spring Development Tools

Spring Configuration Editor

Spring XML application files can now be edited from a rich forms-based UI. Each XSD namespace dynamically adds a new Tab to the editor. The editor provides content-assist and hyperlinking for the input fields as well as validation and access to documentation from the XSD.

The editor embeds the classic XML Source Editor and Spring IDE's Bean Dependency Graph on separate tabs.



STS provides extension points for integrators or customers to provide their own UI for in-house namespaces.

In STS the Configuration Editor becomes the default editor for Spring XML files.

Project Creation Wizard

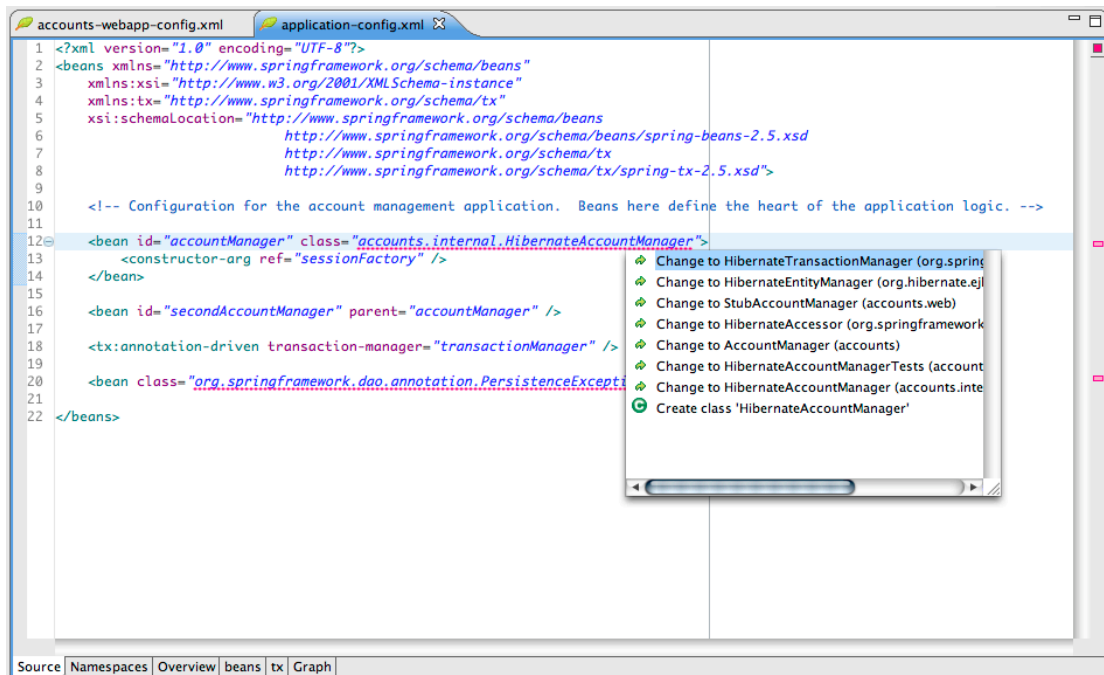
STS provides a template-driven New Project Wizards that uses pre-defined best-practice project templates to create user projects. The generic infrastructure can query the user for required input (project name, top level package name, as well as self-defined placeholders).

Access the Project Creation Wizard from File -> New -> Other... -> SpringSource Tool Suite -> Template Project

Quick Fixes and Quick Assist

Spring IDE provides validation of Spring XML configuration files but never provided hints to solve reported problems (e.g. missing bean class, missing referenced bean).

STS will now provide Quick Fixes for reported problems. Furthermore the same validation and quick fixes are accessible while editing the file (validate as-you-type) and not only after a file save.

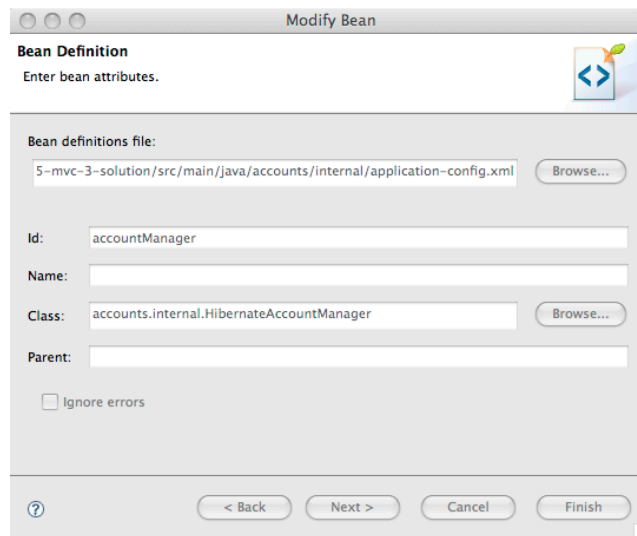


The following Quick Fixes are available:

- Change to Class/Property/Method
- Create missing Class/Property/Method
- Change to Bean
- Create missing Bean

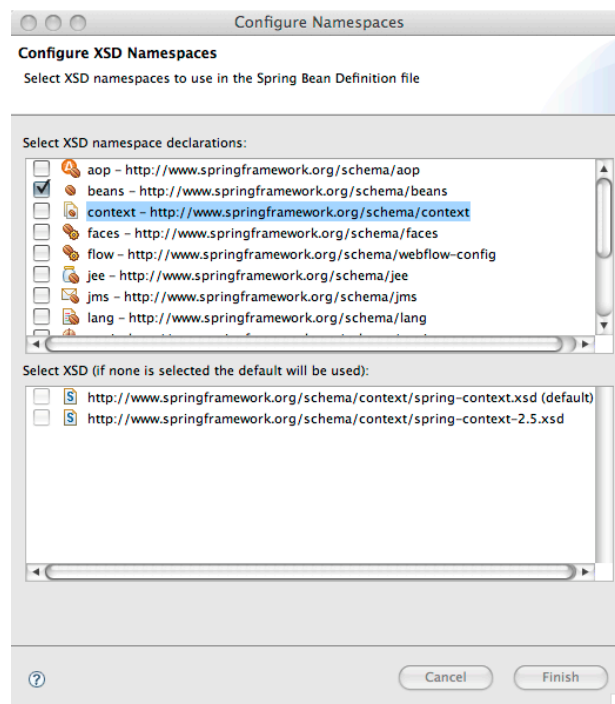
Bean Creation Wizard

STS now has a wizard for easing the creation and modification of a bean definition. The wizard can be opened from the File menu, the New wizard or the Spring Explorer.



Namespace Configuration Dialog

STS 2.0 makes it easy to add/remove namespace declarations from Spring XML application files. Simply use the context menu **Configure Namespaces ...**



OSGi Development Tools

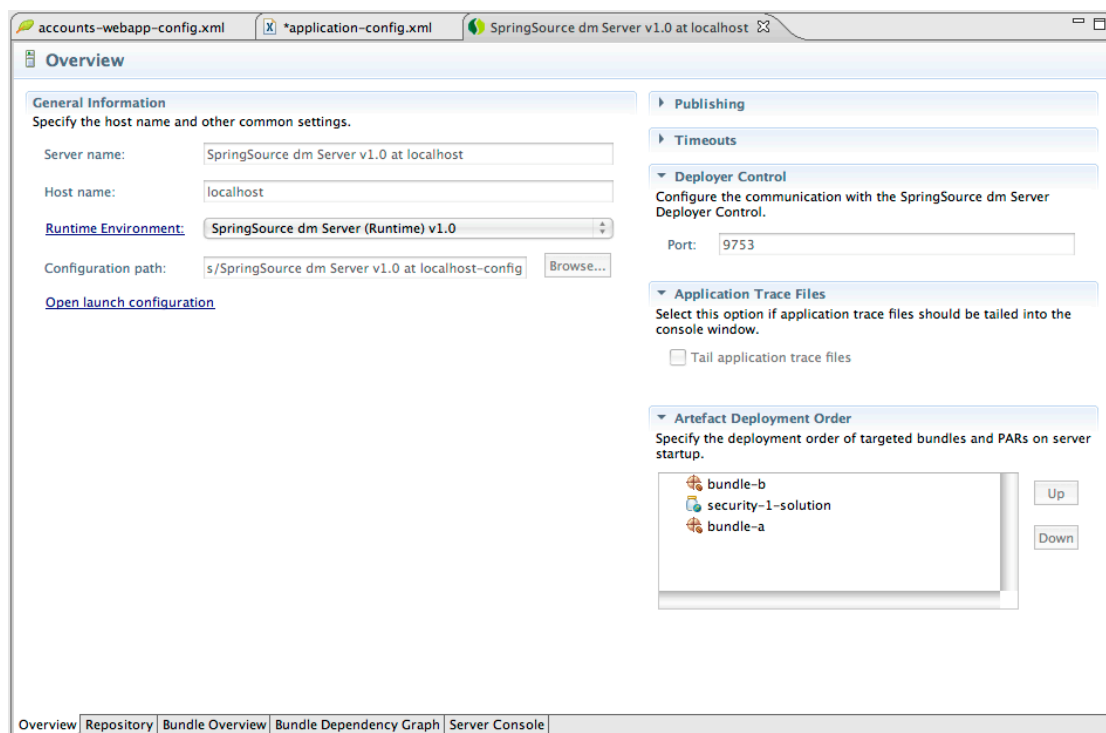
Artifact Deployment Order

The deployment order for bundles and PARs when restarting a dm Server instance from the tools can now be configured.

To change the deployment order open the WTP Server Editor by double-clicking on the dm Server instance in the Servers View.

Please note that changing the order will not be reflected in the Servers View, which is always sorted alphabetically. This is a limitation of the current architecture of WTP and will hopefully be corrected in Eclipse 3.5.

Feature is available in the dm Server Tools.



Application Trace File Tailing

It is now possible to tail the application trace files into the Eclipse console window. Configure the tailing from the Server Editor.

Feature is available in the dm Server Tools¹.

¹ SpringSource dm Server Tools is a separate open-source product licensed under the EPL v1.0 and bundled with STS.

Bundle Overview

STS 2.0 provides a Bundle Overview page that is essentially a graphical view of the Equinox OSGi console.

The page allows you to inspect bundle dependencies based on package import/exports as well as services. Furthermore information about the bundle and its MANIFEST.MF is available.

The Bundle Overview page is accessible from the Server Editor (third tab).

To use the feature the dm Server must be running as this information is currently collected from the running server.

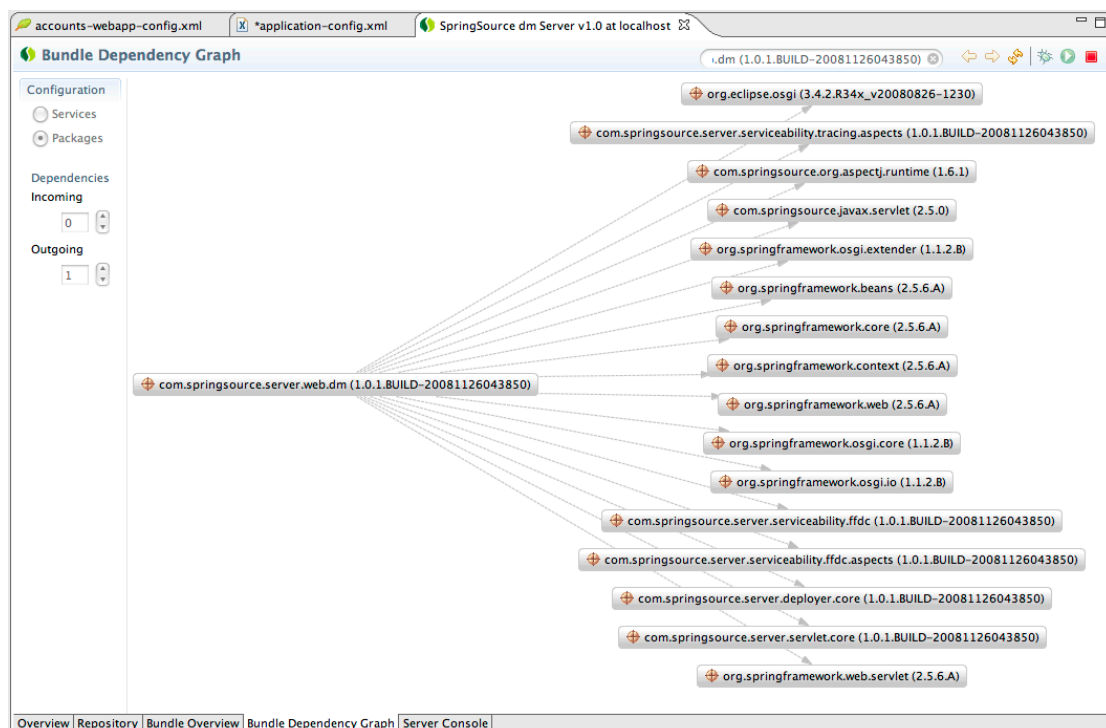
Feature is NOT available in the dm Server Tools.

Dependency Graph

STS can now visualize the bundle dependencies based on package import/export relationships and service consumption.

The Bundle Dependency Graph page is accessible from the Server Editor (4th tab).

To use the feature the dm Server must be running as this information is currently collected from the running server.



Feature is NOT available in the dm Server Tools.

OSGi Console

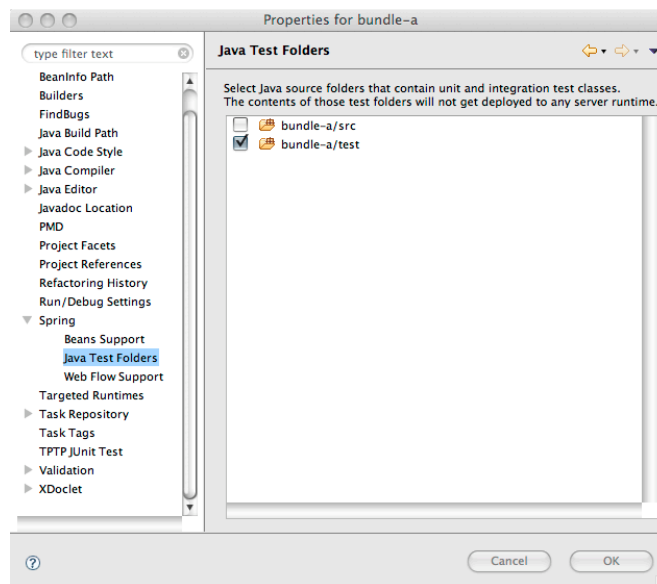
STS offers easy access to the Equinox console without the use of telnet. Open the last tab on the Server editor to access the console.

Feature is NOT available in the dm Server Tools.

Test dependencies based on TEST.MF

Source folders can now be marked as being "Test source folders". Open the project preferences and then Spring -> Java Test Folders to select the test folders. If the tools find a META-INF/TEST.MF in a test source folder the dependencies will be added to the Bundle Dependencies Classpath container.

For now there is no validation that application code does not accidentally access test dependencies. This is planned for dm Server 2.0.



Feature is available in the dm Server Tools.

PAR and Bundle Project Export Wizard

Both PAR and Bundle projects can be exported into a PAR or JAR archive that is deployable in the SpringSource dm Server. The Export Wizard can be launched from the STS/Eclipse Export menu (File -> Export...) or the Overview Page of the Manifest Editor.

Feature is available in the dm Server Tools.

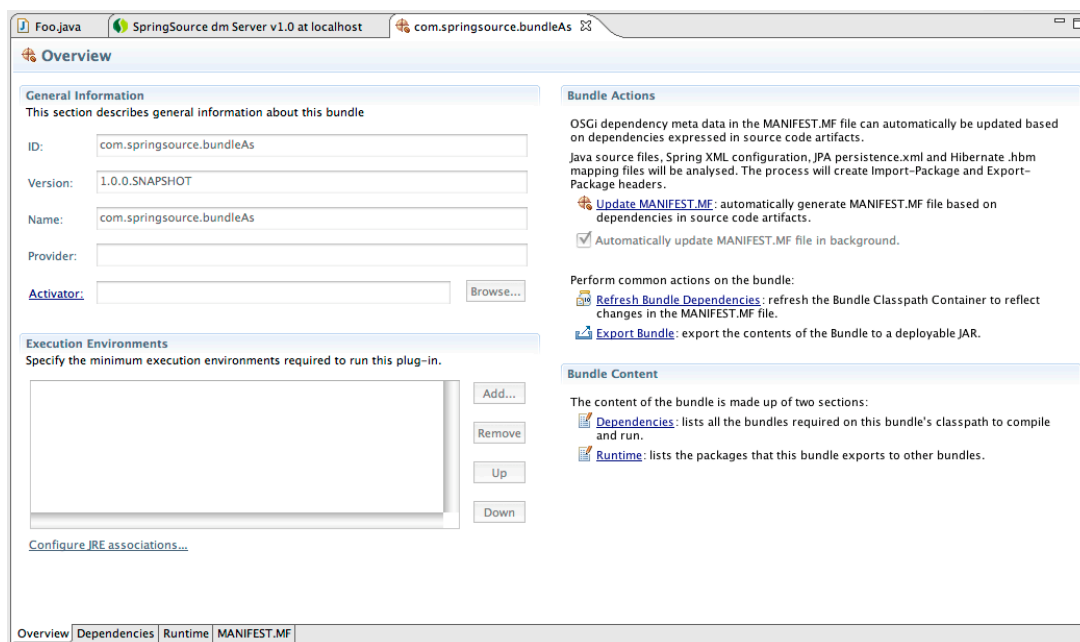
Manifest Generation

Import- and Export-Package Manifest headers can be auto-generated using the integrated SpringSource Bundlor. Bundlor scans the source code of the project (Java artifacts, Spring

XML configuration files, Hibernate .hbm mapping files and JPA persistence.xml) and creates appropriate Import- and Export-Package headers.

The Bundlor integration can be triggered on-demand from the Overview Page of the Manifest Editor. Furthermore Bundlor can be integrated into the project build to automatically update the Manifest of code changes in an incremental fashion. This can be configured on the Overview Page of the Manifest Editor.

Bundlor expects a file called template.mf in the root of the project. If the project has configured source folders, Bundlor will generate a TEST.MF for the test-only dependencies.

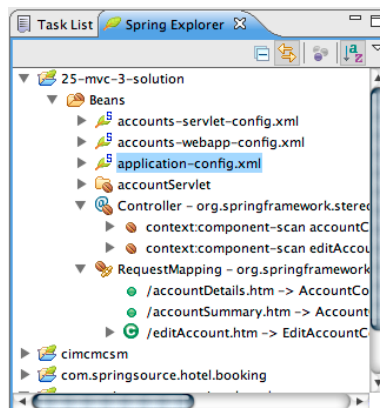


Feature is available in the dm Server Tools.

ENHANCEMENTS – 2.0

Annotation Grouping

Since version 1.0, STS provided tools to group Bean definitions based on meta data like Stereotype Annotations. This feature needs to be enabled through the Spring Meta Data Builder from Project Builders tab (Spring Project or Workspace preferences).



This is useful for projects that use @MVC Controllers as it displays the URL-to-HandlerMethod mapping in the Spring Explorer and allows to easily navigate URL mappings.

Spring Configuration Auto-discovery

STS will auto-detect Spring XML configuration files for well-known project types and automatically configure Spring IDE. All auto-detected configuration files will be added to a Config Set.

STS will automatically detect configuration files in the following project types:

- WTP Dynamic Web Projects (based on web.xml and Spring conventions)
- SpringSource Bundle Project (META-INF/spring/*.xml or Spring-Context Manifest header)

This can be extended to integrate with customer standards and project layouts.

XML Configuration Files from external JAR files

Spring XML configuration files from workspace external locations can now be configured with Spring IDE. That enables users to reference XML files in JARs that are linked in through a Maven Classpath Container or the M2_REPO classpath variable.

Spring IDE uses bundles from the SpringSource Bundle Repository

Underlying Spring IDE now uses bundles from the Bundle Repository.

Eclipse components updated to latest versions

STS 2.0 has been updated to include latest versions of required components:

- Eclipse Platform 3.4.2
<http://download.eclipse.org/eclipse/downloads/drops/R-3.4-200806172000/whatsnew3.4/eclipse-news-part1.html>
- JDT 3.4.2
<http://download.eclipse.org/eclipse/downloads/drops/R-3.4-200806172000/whatsnew3.4/eclipse-news-part2.html>
- PDE 3.4.2
<http://download.eclipse.org/eclipse/downloads/drops/R-3.4-200806172000/whatsnew3.4/eclipse-news-part4.html>
- AJDT 1.6.4
<http://www.eclipse.org/ajdt/whatsnew164/>
- WTP 3.0.4
<http://www.eclipse.org/webtools/releases/3.0.0/newandnoteworthy/>
- Mylyn 3.0.5
<http://www.eclipse.org/mylyn/new/new-3.0.html>