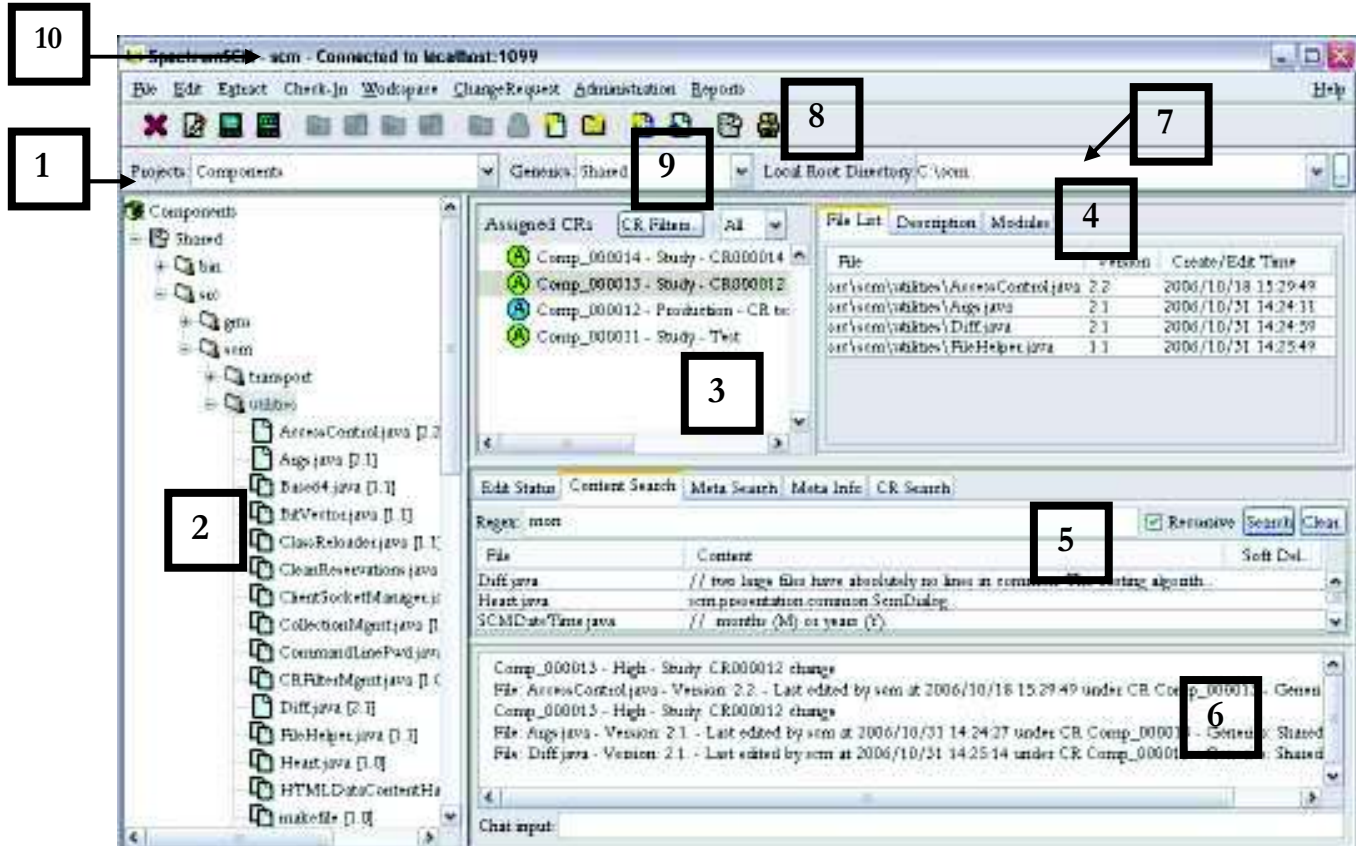


4 SpectrumSCM Main Screen

The SpectrumSCM system is designed to provide complex functionality while being as easy to use as possible. The Main Screen is uncluttered, easy to learn, and easy to use. All features are only a click or two away. The look and feel of the SpectrumSCM screens can also be customized by each user. In this chapter, users will also learn how to customize preferences with respect to screen look and feel, fonts, and editors.

4.1 Areas and Features of the Main Screen

This is the main screen of the SpectrumSCM application. The main areas and features are identified by numbers and described below: Detailed explanations for these features are described in the relevant chapters



1. The Project Selection Box and the Generic Selection Box.

The **Project Selection Box** will display all projects that the user has permission to access (is a member of the project team). Select which of your projects you wish to work with. On the screen above, the project “Components” has been selected.

To the right of the Project selection box is the **Generic (Branch) Selection Box**. From this pull down you can select the code branch you want to work with. All generics for a project will be available in this pull-down menu. The SpectrumSCM directories for the selected generic are displayed in the project tree.

When the SpectrumSCM client is closed and re-opened, the last selected project, generic and local root directory will be displayed.

4.2 Project and Generic (Branch) Views/Filters



If you have a significant number of projects and/or configuration items (generics/branches and/or folders), you can specify views to reduce those to just the sets that you wish to work on at any particular point in time.. For example, if you have 100 projects to which you need access in general, but on a day-to-day basis you are working on maybe 5. You can define a project view to display only those 5.

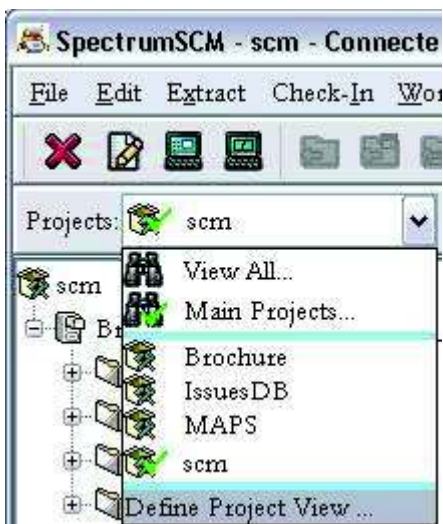


Figure (1)

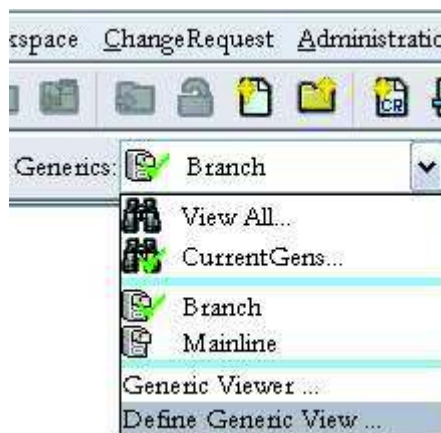


Figure (2)

Similarly with generics/branches and folders, you can define a view to constrain the display to just those frequently used items. Multiple views can be defined and saved so that the user can select the

appropriate view at the appropriate time. A visible icon (a pair of binoculars) indicates when a view is active, so the user knows that they might be seeing a restricted set of data.

To define a project or generic view, select the selector at the bottom of the appropriate toolbar list, as shown in figure (1) and/or figure (2) above. The definition screen as shown in Figure (3) or Figure (4) will be presented.

Figure (3)

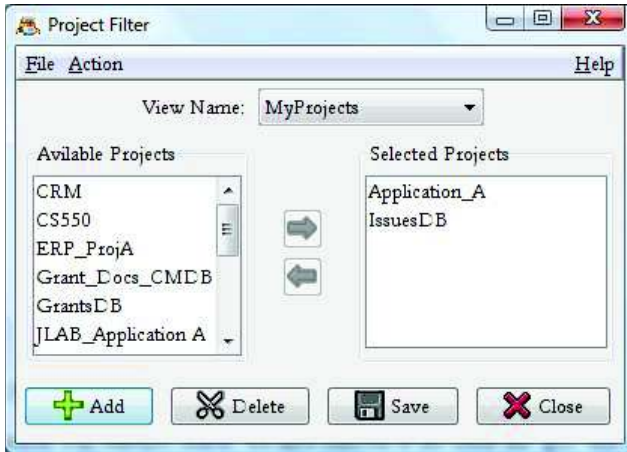
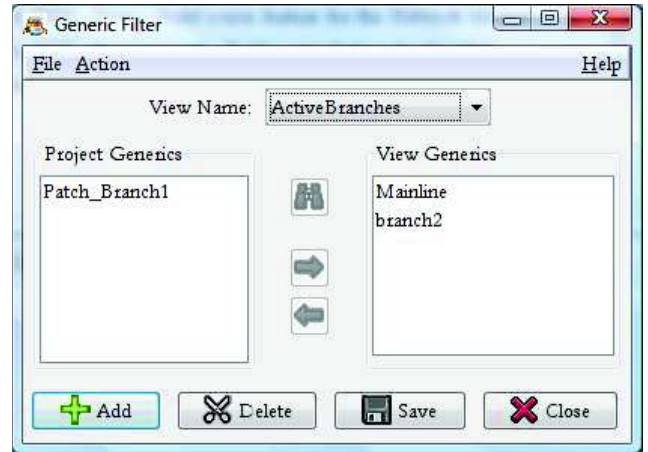


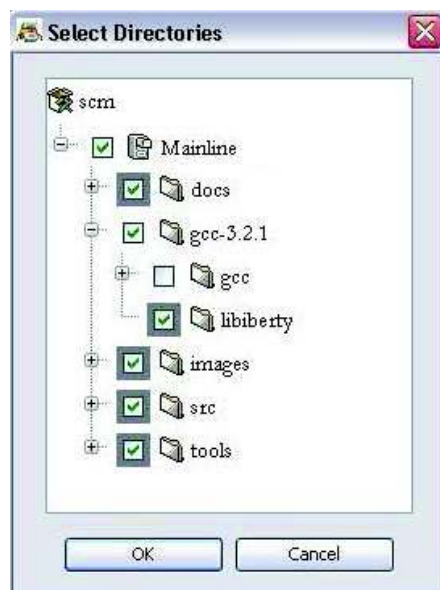
Figure (4)



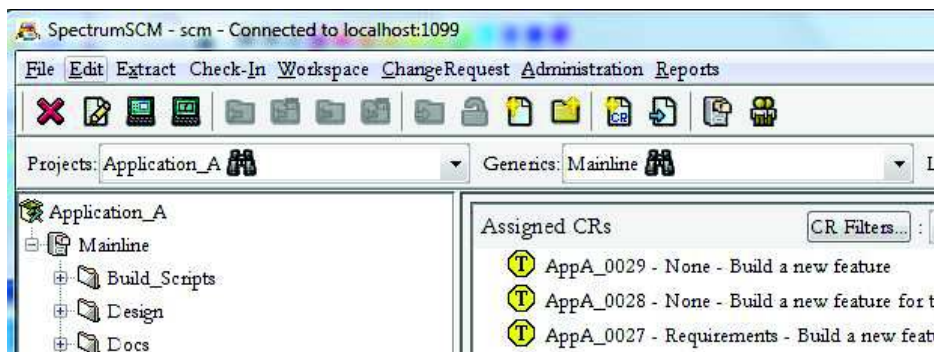
For project and generic views, you have the capability to create **new** views (the **Add** button), and **rename**, **clone** and **delete** existing views. These action items are available from action menu items and/or on the screen.

For generic views you have the additional capability to be able to filter directories. For example, in Figure (5) below, we have selected to not show the "gcc" sub-directory when this view is active. Dark checkboxes (like "docs") imply that all that directories contents will be displayed. Light checkboxes (like "gcc-3.2.1") imply that partial contents will be displayed.

Figure (5)



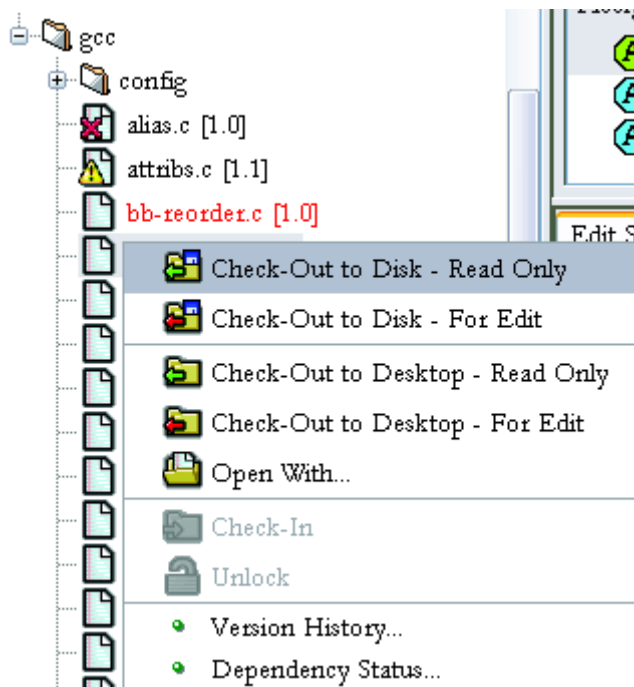
Once a view is defined it can be saved so that it can be easily re-used. When a view is made active it shows with a green tick mark when the project or generic choice boxes are open (as shown in Figure (1) and (2)). When the choice boxes are closed, the fact that a view is active is indicated by the **binoculars icon** shown in Figure (3).





To de-activate a view simply select the "View All" option (see Figure (1)). In this way all the project or generic information will be displayed.

2. The Project Tree

The project tree shows the structure of the project, including the generics (baselines, branches) and all their related files and directory structures. If you single select an item, its brief description will be shown in the Messages Area. If you double click on a file, it will be opened into the default editor or the alternate editor if one has been defined. Right clicking an item in the project tree will open a context sensitive menu system with actions that can be applied to the selected item.



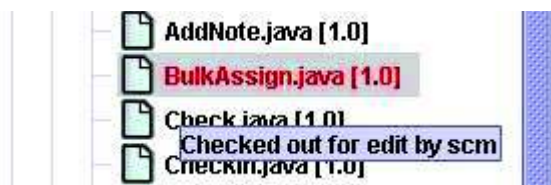
The context sensitive menu system provides quick access to the major file oriented functionality found in the main screen menu systems and tool bars. Directories have context sensitive menus to allow quick access to extract functionality. The contents of this popup menu are sensitive to the user preference, the type of item selected as well as the state of the item selected. Specifically, the context menu presents a single pane in its default “regular” mode. In the “advanced” mode, extra options and the indirect panels are added. In regular mode, this keeps the essential features quickly to hand. In advanced mode, more options are provided but at the expense of a slightly more complicated menu structure.

With the **Workspace Analyzer** turned on (can be toggled on/off from the main screen *workspace* menu), you might also see red ‘X’ marks () and yellow caution symbols () as indicated against the files *alias.c* and *attrs.c* respectively. The ‘X’ indicates that while the file is stored in the repository, it is not currently present in the current local root directory. The yellow caution symbol indicates that the local workspace file contents are different from those in the repository. These meanings are also explained in the tool tips shown when the mouse is held over these symbols.

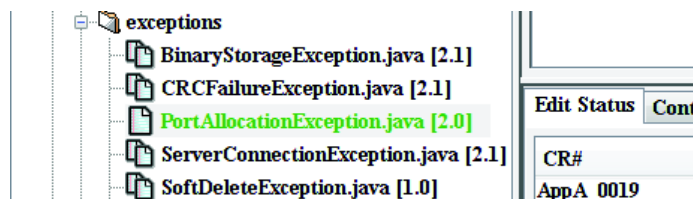
If a file item is already out for edit, only the check-in and unlock functionality will be selectable. When a directory is selected in the project tree only the *Extract Files*, *CreateDirectory* and *Paste* (move) functionality will be available.

Additional symbols and colorizations:

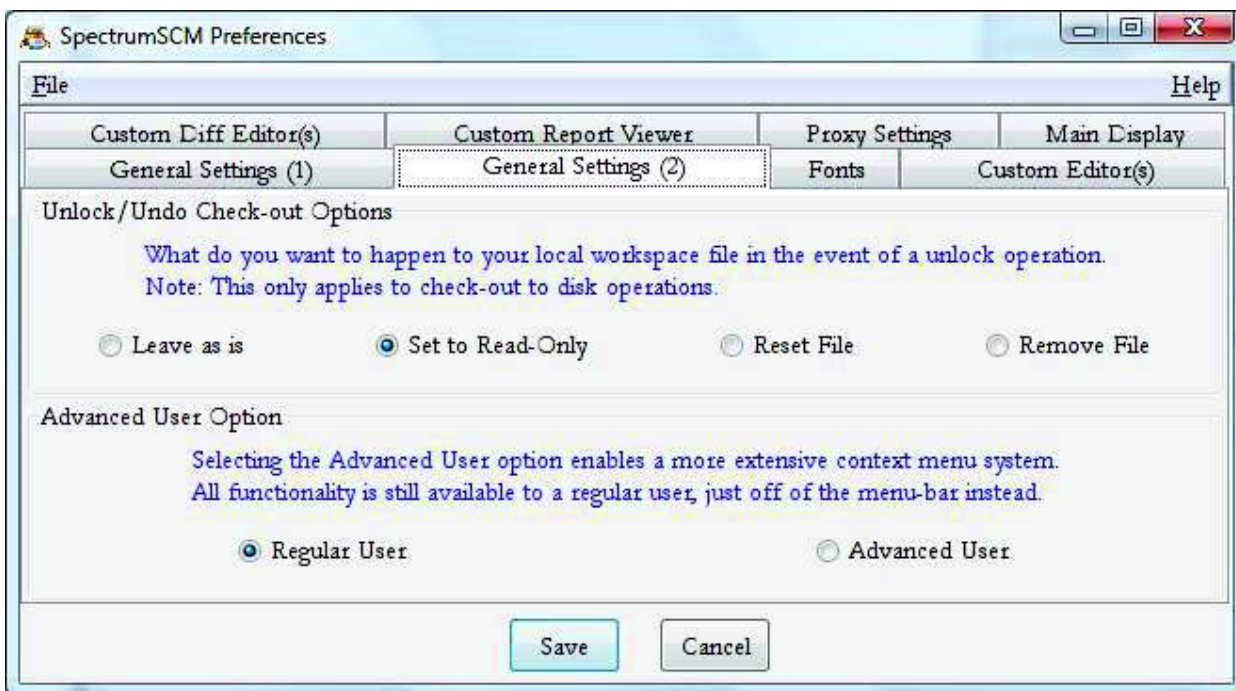
- The single sheet of paper as shown against the file *Args.java* indicates that this file is not currently common with any other generics.
- The double sheet of paper as shown against the file *Base64.java* indicates that this file is currently common with at least one other generic. If you single click on this file the message area will show the file details including the list of generics this file is currently common with.
- If the “paper” shown contains ones and zeroes, then this indicates that the file type is binary. If the paper is blank then the file type is textual.
- A file node will be colored **RED** if it is currently checked out for edit by some one else and the tool tip will provide information regarding the user who has the file out for edit.



- A file node will be colored **GREEN** if it is currently checked out for edit by yourself.



There are two sets of context sensitive menus, depending on the option chosen in the **Edit->Preferences->General Settings (2)** pane. The default provides a simpler direct access to the main CM functions such as check-out and check-in. The **Advanced User** option includes more options and sub-menus, such as move, rename and common/uncommon choices. Note that even with the **Regular User** option selected, all the functionality is still available, it just needs to be accessed off of the menu bar.



File Rename/Move

If the *Advanced User* option is selected under the user preference, then rename and move functionality will be available on the context menu as well as under the File menu.

Rename – Right clicking on a file in the resource tree opens the context sensitive menu for the selected file. To rename a file, choose the Rename option from the menu and specify the new name for the file.

Cut – To move a file to another directory, choose the Cut option from the menu. This copies the file to the clipboard. Select the target directory and choose the Paste option from its context sensitive menu to move the file.

A file can also be moved by selecting it and dragging it into the target directory. Renaming or moving a file does not destroy its version history. The rename and move features cannot be accessed from the menu bar or tool bar.



Open With

The Open With context menu option works with your custom editor preferences.




With the “*Matching executables*” option selected only those editors matching the file type of your selected file will be displayed. Also, if the selected file is a text file, the SpectrumSCM editor will be displayed as an option.

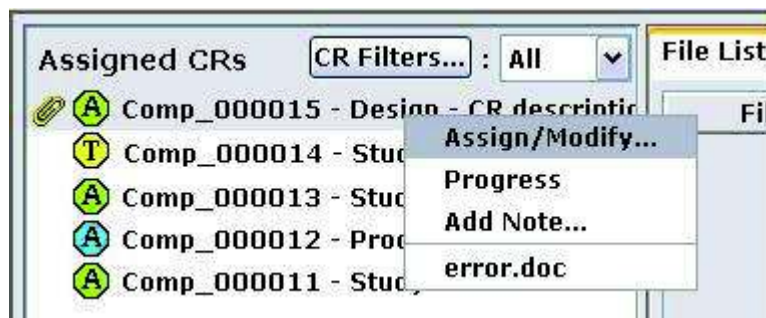
With the “*All executables*” option selected all of your custom editors will be displayed. The SpectrumSCM editor will also be displayed as an option.

Select the editor you wish to use and then select the actual edit operation type you wish to perform from the buttons on the right.

3. Assigned CRs

Change Requests that are assigned to the user or that need user attention.

- If the CR is assigned to the user, a green **A** is displayed . The user can perform development (or requirements etc.) work relative to this CR.
- If a CR is assigned to the user, but not editable a blue **A**  is displayed. The user can perform testing or deployment activities for this issue/task, but the repository files can not be changed. If a file needs to be changed relative to this CR, then the CR needs to be moved back to an editable phase in the life-cycle (ex: development, requirements etc.)
- If a CR has been progressed and is in the TBA (to be assigned) state, it is shown to all users with assignment permissions with a yellow **T** . Users without assignment permissions will not see the TBA CRs in their Assigned CRs panel.

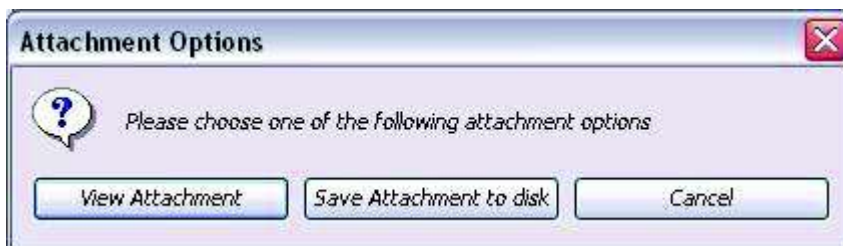


Select a CR (one click) and its brief description will be shown in the Messages area (Severity, State and Header, if it is checked out and by whom). If you double click on a CR, its CR report will be run and displayed in the Reports Viewer.

By right clicking on a CR the context sensitive menu system for Change Requests will be posted to the screen. The context sensitive menu allows the user to quickly open the CR Assign/Modify screen as well as the CR Progression screen and also displays a list of attachments that are currently associated with the selected CR.

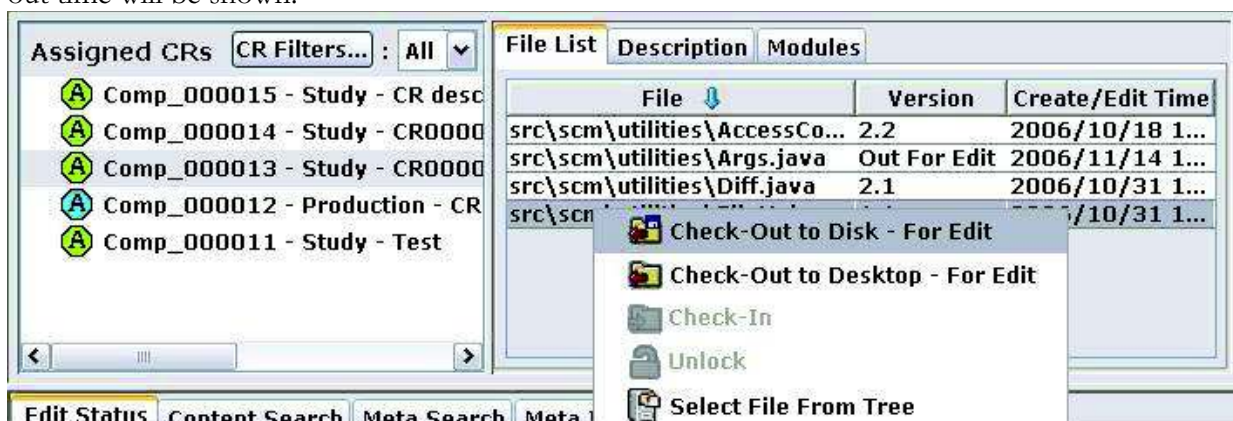
In this example the selected CR has a single file attachment, *error.doc*. The menu also allows the user to quickly access the Assign/Modify and Progress screens.

Clicking on a CR attachment will open the attachment operation screen. This screen allows the user to open the attachment directly to the desktop, or to save the attachment to a file on the local file system.



4. File List/Description/Modules Panel

File List tab lists the files associated with a CR. Select a CR and click on **File List** tab, the files that have been edited related to the selected CR will be displayed on this panel with file version and create/edit time details. If files are currently out for edit, they are shown with the "Version" column marked as "Out For Edit". The Create/Edit Time column shows when the file was last touched relative to this CR. For a check-in, the check-in time will be shown. For an ongoing edit, the check-out time will be shown.



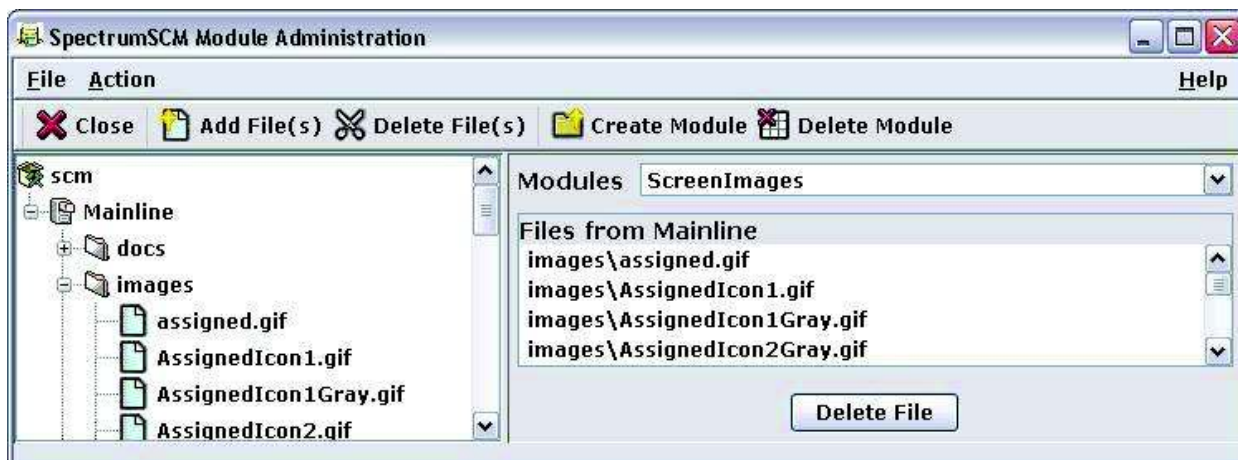
Right-click context sensitive menus give access to check-out, check-in and unlock functionality. The "Select File From Tree" option will open up the repository tree to select and show the corresponding file, this can be most useful when working with a large, diverse repository tree.

Description tab displays CR description. Select a CR and click on Description tab, full description of the selected CR will be displayed on this panel.

Modules tab lists the modules currently defined by this user. Modules can be used to operate on a group of files with one button selection. Modules can be defined for any grouping of files that the user desires. Once a module has been defined, it can be used to check-out to disk (or check-in from disk) all of the related files at the same time. Modules are created using the **Administration->Module Admin** menu option available via the Main Screen. To define a module select the **New**

tool-button and enter the desired module name. Then select the files from the project tree on the left that you want in the module.

Files can be deleted from the module using the Delete File button. A module can be deleted by selecting the **Scissors** tool-button. A file can be removed from the module by selecting the file and using the **Delete File** button. To extract or check in all files associated with a module, select a CR, the module and the function.



(See details on using modules for file management in Chapter 8).

5. The Middle Panel

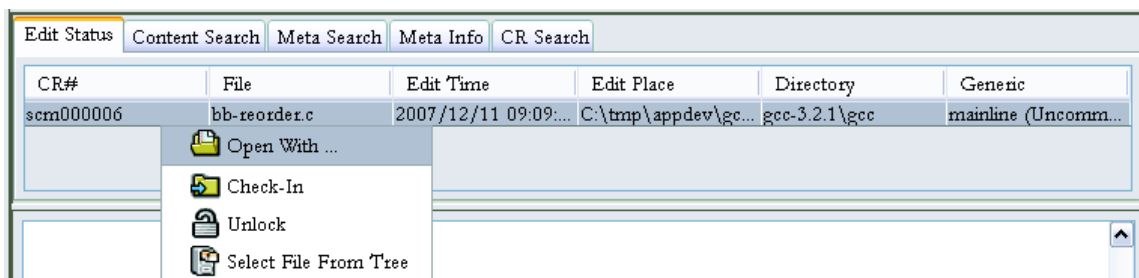
The middle panel has five tabs to show the status of files currently checked out for edit, and to allow various search capabilities.

On the **edit status** tab, files that are currently out for edit by you are indicated. The display includes the date and time that the file was checked out, which change request and generic are associated, and where the edit is being performed (desktop or file-system).

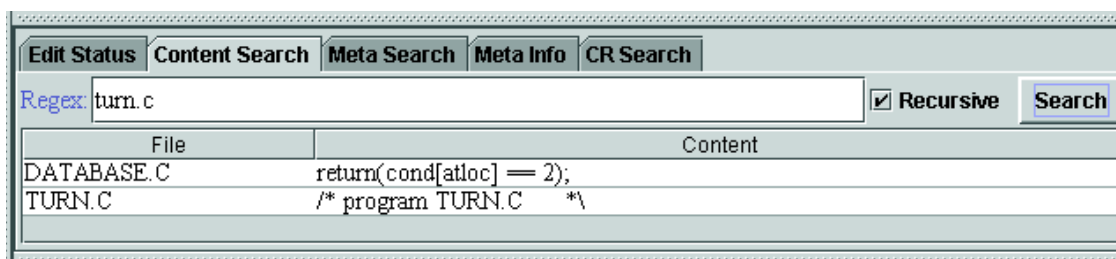
Edit Status						
CR#	File	Edit Time	Edit Place	Directory	Generic	
Genesis000004	STDIO.H	2002/06/10 08:...	C:\Genesis\src\STDIO.H	src	Gen 1.0 (...)	
Genesis000004	ITVERB.C	2002/06/10 08:...	Desktop	src	Gen 1.0 (...)	

Double-clicking an item will open that file in your selected editor. If the edit was “to the desktop”, the option to continue that edit will be presented. If the file is out for edit “to the disk”, then the right-click menu will also have an “Open With” option to allow you to pick one of your custom editors.

Check-in and unlock functionality is also available by right clicking with the mouse. Multiple files may be checked-in or unlocked simultaneously.



The **Content Search** tab and the **Meta Search** tab enable searching of the projects source files. The search will cover all the appropriate files contained in the selected directory in the SpectrumSCM system project tree. This feature is highly useful for finding text within the sources themselves.



A content search will search the text files in the repository and report on those that contain matches against the requested search pattern. Only the first match is displayed against each file.

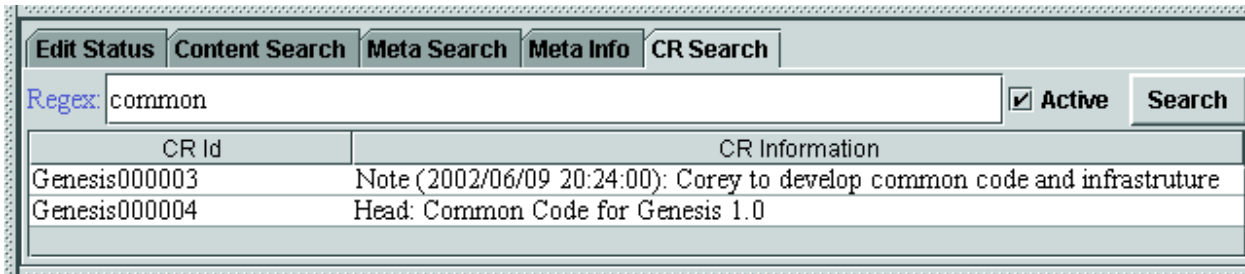
Double-clicking a selected entry will open your default editor against the repository version of this file. Right-clicking an entry will open the repository tree view to the selected file, this then enables quick and easy access to all of the extended file operations such as check-in/out, rename etc.

A **meta search** is controlled the same way, but searches the meta information associated with a file instead of its contents. Meta information is most useful when considering binary files such as drawings or pictures that would otherwise not be searchable. The meta information can be established for any file with a description of what that file contains or any other useful text. Another example would be if SpectrumSCM was being used as a documentation control library, then the meta information could be used to store key words. Double-click and right-click operations function the same as under the content search panel.

Meta information is maintained using the Meta Info tab, based on the selected project tree entry. When a file is added into SpectrumSCM its meta information is initialized to its filename and path. This enables files to be found by name in even the largest of projects simply by searching the meta information.

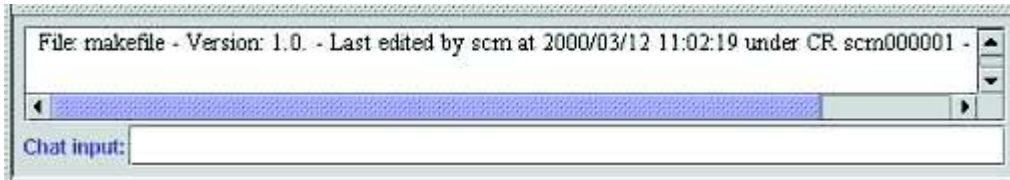
CR search provides the capability to search the change requests for any text matching the requested search pattern. Control is defaulted to only search for active CRs but can be expanded to search all CRs. Note however, that on a large project, searching all CRs could involve a lot of work and therefore a response might be a while in coming.

Double-clicking an entry will present the CR report for the selected change request. Right-clicking an entry will provide easy access to the Assign/Modify screen if you have the appropriate permissions.



6. The Messaging Area

System and chat messages are displayed here.



7. The "Local Root Directory"

The root directory defines the location on the local hard disk where files to be checked in are found and files extracted to the hard drive are placed. This is needed because files stored under SCM have only relative path names. An example "root directory" would be the directory in which you perform your local product builds or compiles. Another example would be a directory that you use when you are loading source into SCM from the directory.

Subdirectory names in all local root directories need to match the SpectrumSCM file structure in the project tree. Note that you can have multiple root directories if needed. Select the one you wish to work with via the Local Root Directory pull-down menu selection box.

An example local **work** directory in a Windows environment might be C:\GenesisBuild\src. In this case, C:\GenesisBuild would be the local **root** directory. In a Unix or Linux environment, a local **work** directory might be /Genesis_build/src and the **root** directory would be /Genesis_build.





The Browse button can be used to select the root directory from the file system.

8. The SpectrumSCM Main Screen Toolbar



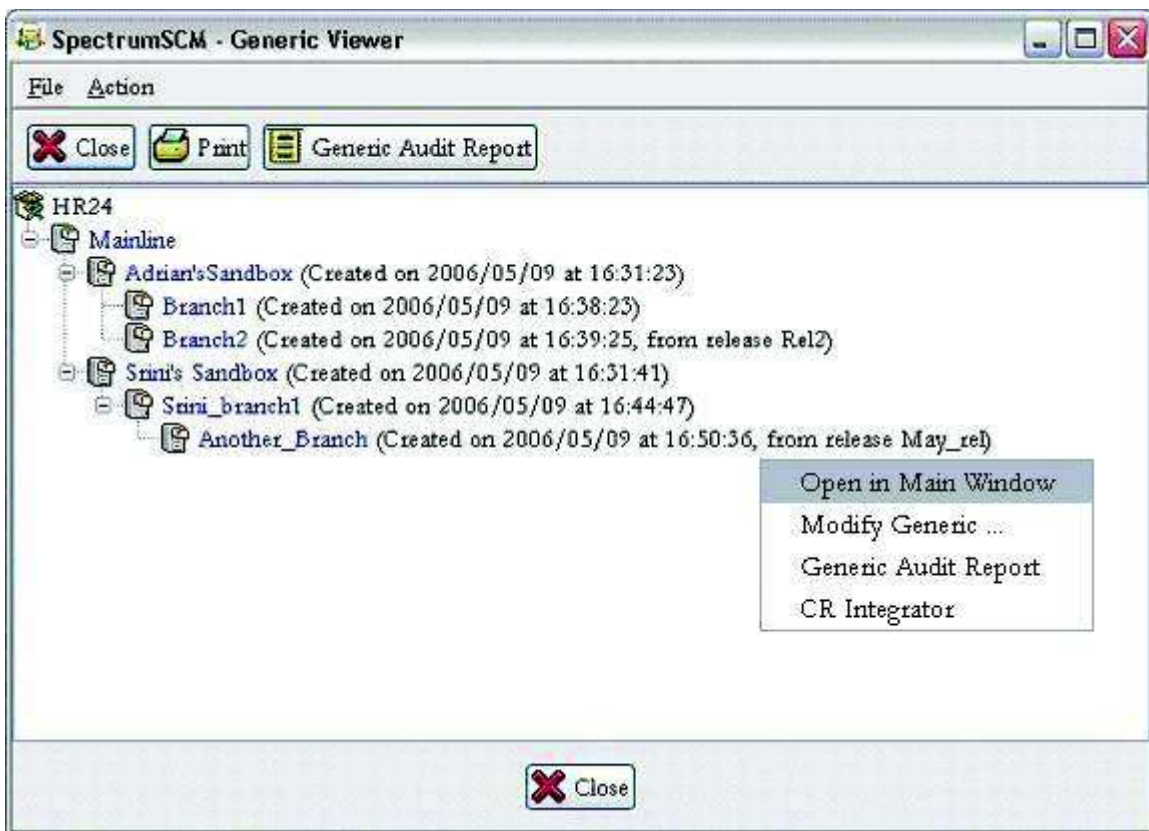
All of the toolbar buttons have explanatory tool tips, which appear as the cursor is passed over each icon. Toolbar functions, in order as they appear on the toolbar from left to right, are:

Exit		Exit the application.
New Editor		Startup a new empty editor panel.
Single Editor		Startup an editor panel on the file selected in the Project Tree.
MultiEditor		Startup a dual editor panel on the file selected in the Project Tree.
Checkout Read Only To the Desktop		Start an editor panel on the selected file in Read Only mode.
Checkout Read Only To the Disk		Write a Read Only version of the selected file to the local disk. The full path is determined from the Local Root and the directory the file resides in, in the project.
Checkout for edit To the Desktop		Start an editor panel on the selected file in Live Edit mode. Note that an Assigned CR must be selected for this operation to proceed. The toolbar button always performs an uncommon edit, for a quick common edit use CTRL K
Checkout for edit To the Disk		Check out a writable version of the selected file to the local disk. Note that an Assigned CR must be selected for this operation to proceed. The toolbar button always performs an uncommon edit, for a quick common edit use CTRL Q
CheckIn		Check in the selected file. The file selection can be made in the Project Tree, the Module window or in the Edit Status middle panel. Note desktop edits must be checked in from the desktop editor.
Unlock		Unlock the item selected on the Edit Status panel.
Add a File		Add a small set of files (individually) into the SCM system.
Add a set of files		Add a set of files identified by a directory and some filters. This feature can be used to load a whole project tree into SpectrumSCM.
Create a New CR		Create a new Change Request.
Progress a CR		Progress the selected Change Request.

Generic Hierarchy		View the current Generic Hierarchy
Active Users		Show the users currently online.

9. Generic Viewer

Generic Hierarchy can be viewed by selecting *Generic Viewer* pull down option in **Generics Selection Box**. The generic viewer can be used to view the details about the existing generics and their relationships to one another. Specifically, when they were created, if they are locked, which generic they were based off of (if any), and if they were based off of a release.



Right-click operations can be performed to switch the main screen generic, open the generic modification window, or perform generic comparisons. Generic comparisons can be run either in the report format or interactively through the CR Integrator.

Pointing at a particular generic will also display the generics description via its tooltip (if a description has been populated). Additionally, if the user does not have “Modify Generic” permissions, that popup menu item will be replaced with a “View Generic Description” option.

10. Current User

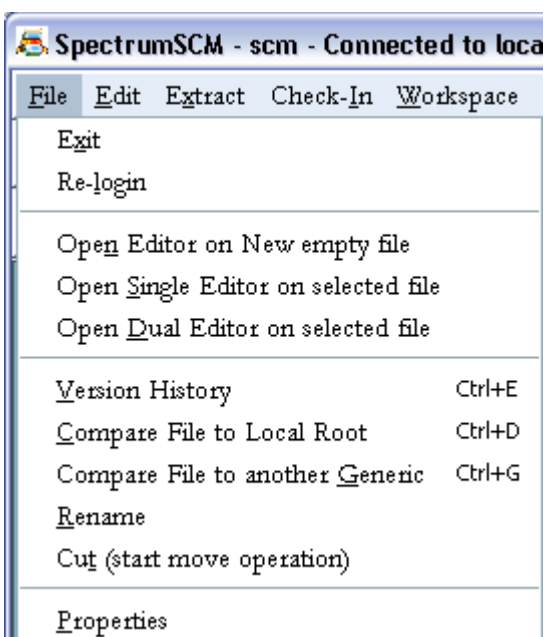
At the very top of the screen, the current user's name is displayed. The title bar also displays the server address and port number the client instance is connected to



In this example, "scm" is the current user.

4.3 Menu Items

4.3.1 File



- **Exit** – Exit the application
- **Re-login** – Close the current session and login as another user. The application does not exit during this action
- **Open Editor on New empty file** – Opens the default editor on a new empty file (*See Chapter 8 for details on using the editor*).
- **Open Single Editor on selected file** – Opens the default editor or custom editor on the Selected file
- **Open Dual Editor on selected file** – Allows the user to view and/or edit two versions of the same file at the same time on a split screen.
- **Version History** – Displays file version history with related CR information
- **Compare File to Local Root** – Opens the merge/dual editor on the selected file. The left-hand panel will contain the repository version of the file. The right-hand panel will contain the local root file system version of the file. The difference buttons can then be used to view and browse any differences.
- **Compare File to another Generic** – First presents a popup to request which other generic you wish to compare to. Then will open the merge/dual editor on the selected file in this generic (left) and the other (right). The difference buttons can then be used to view and browse any differences.
- **Rename** the selected file. File history is maintained such that older file versioned will still be extracted under the old name. Newer versioned of the file will be extracted under the new name. In this way your release build will be maintained and reproducibly correct.
- **Cut File** – Starts a file move operation. To complete the operation, select the target directory, right-click and select the **paste** option. File history will be maintained in that older file versions will be

extracted in the old directory, newer versions will be extracted in the new directory. In this way your release build will be maintained and reproducibly correct.

- **Properties** - Shows the currently selected file(s) character-set and end-of-line expansion properties. The dialog also can allow for the modification of these properties if the user has edit permissions. The meaning and use of these properties are discussed in more detail under Chapter 8 – Source File Management.

4.3.2 Edit

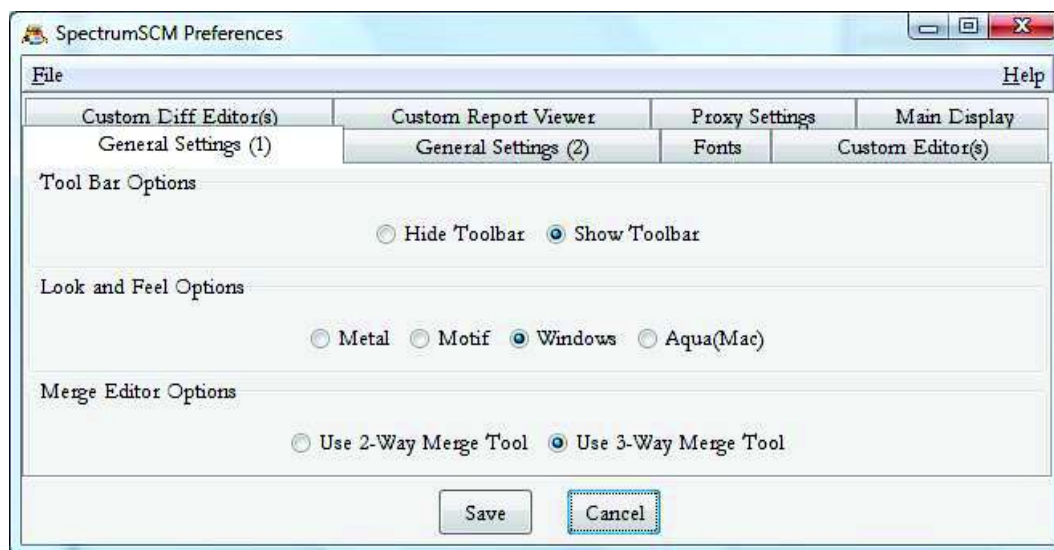
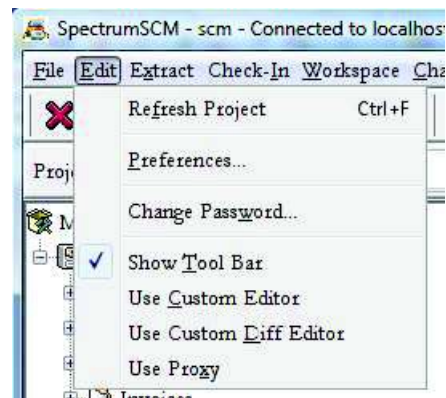
Various options are available under the Edit Menu option

Refresh Project

Refreshes the data displayed on the main screen with any updates from the server. Otherwise, changes made to the server, will not automatically show up on the Main Screen.

Preferences

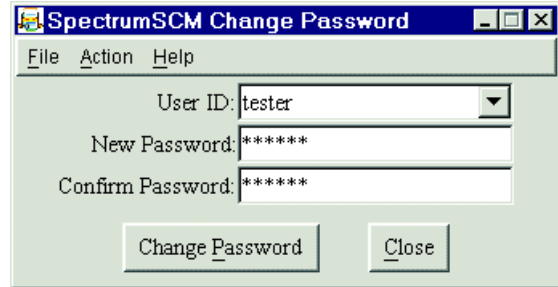
Set your personal preferences. This includes fonts, alternate editor preference, look-and-feel and alternate report viewer.



(See Chapter 5 for details on user preferences.)

Change Password

A user can change his or her SpectrumSCM password. An administrator can reset any user's password.



Show Tool Bar

Quick button for turning on or off the display of the toolbar.

Use Custom Editor

Quick button for turning on or off the use of your custom editor. If the custom editor feature is turned off, the SpectrumSCM editor will be used instead. Note that this can also be toggled via the keyboard quick keys of **Alt+EC**.

Use Proxy

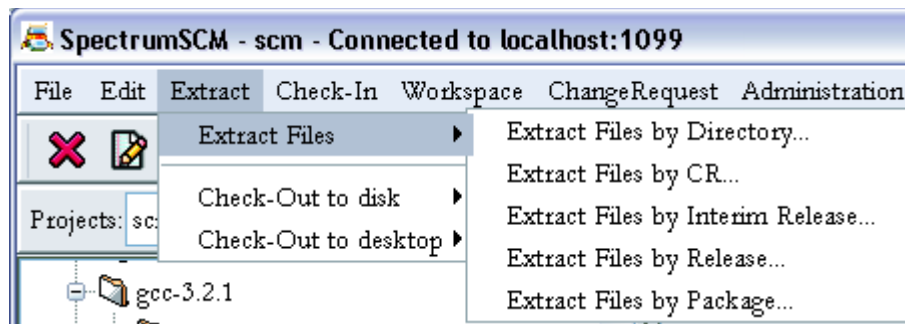
Quick access button for enabling or disabling the use of the SpectrumSCM Proxy

4.3.3 Extract

Extract Files

Files can be extracted en masse or checked out individually. You can also simply **Drag and Drop** files and folders onto your Desktop or any where on your file system.

(See details on *Extract and Checkout* in Chapter 8)



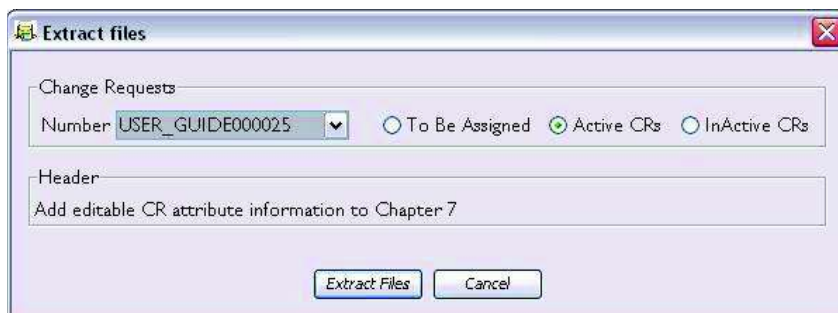
Extract Files by Directory

Select the required directory to extract from the Project Tree. That directory structure will be placed on your local hard disk under your local root directory.

This function allows files loaded into **SpectrumSCM** to be extracted as a group into a specified directory for development and building.

Extract Files by CR

Extract files by CR allows a user to extract to the local hard disk just those files that are associated with the selected CR. The CR extract window gives the user the opportunity to choose which CR to extract and whether that CR comes from the active or inactive list.



Extract Files by Interim Release

Select CR's that have passed a particular phase in your life-cycle and extract the set of files based on that. This feature allows you to extract informal test builds during the later stages of development, or the early phases of testing, before you want to build a formal release.

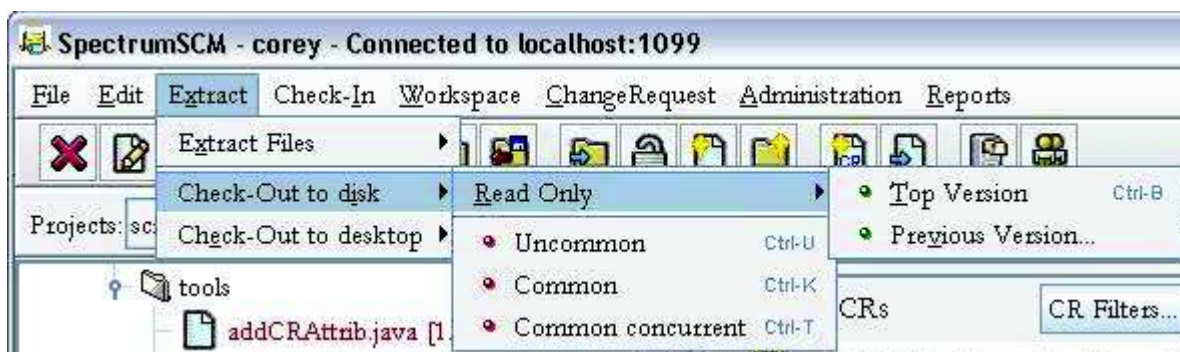
Extract Files by Release

Select the release to be extracted from the presented window. The contents of that release will be placed on your local hard disk under your currently selected local root directory. Releases and their contents are defined under the Release Management screen, this is accessed off of the Administration menu and is described in Chapter 9 of the user guide.

Extract Files by Package

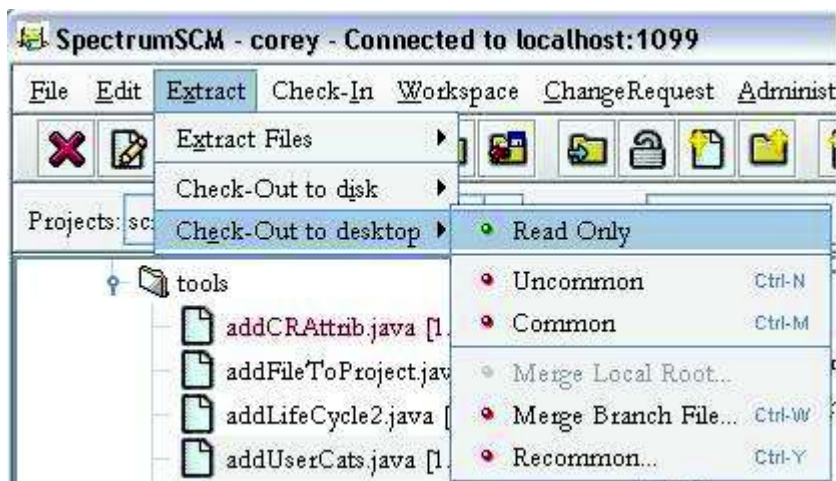
Select the package to be extracted from the presented window. The contents of that package will be placed on your local hard drive under your currently selected local root directory. Packages and their contents are defined under the Package/Component Management screen, this is accessed off of the Administration menu and is described in Chapter 9 of the user guide.

Check-out to Disk



Options to check-out the selected file by version (read-only) or common/uncommon (default mode is “uncommon”) for edit, and common concurrent. Concurrent editing allows multiple users to edit the same file on the same branch at the same time.

Check-out to Desktop



Options to check-out the selected file by common, uncommon, for merge or recommoning to the desktop. (Default mode is as defined in the generic set-up process, see common/uncommon overview below). The file will be extracted but will not be placed under your local root directory. Rather the file will be presented in either the standard SpectrumSCM editor or the appropriately specified custom editor.

Uncommon / Common and Common concurrent

Unless multiple Generics are being used in parallel (for example to maintain 2 similar source bases for 2 different customers) the default check-out mode (uncommon) is all that is required and the developer need not be concerned about these options.

(See Chapters 6 and 8 for details on branching, merging and recommon)

Checking out "**uncommon**" will mean any file changes will only be made against that specific generic. If a check-out is performed "common" then the file changes will be made against ALL the generics with which that file is currently in common with. The list of generics a file is currently common with can be seen by selecting the file and then viewing the message area.

Checking a resource out "**Common Concurrent**" allows for multiple developers to edit the same file at the same time. Upon check-in the system checks to see if the file must be merged or can simply be checked in. If the file requires merging, the multi-paned merge editor is automatically started and the user should then merge the contents with the contents of the repository.

When multiple generics are to be used in parallel the Generic Engineer must decide who is going to make the branching decisions for file check-outs. If it is to be left to the Developer then the generic should be left in the *unlocked* state.

Once the mode of the Generic has been established, if the commonality control is still with the developer, then he/she can choose the appropriate option. Checking out “Common” is a powerful feature since it can be used to apply a single “fix” to multiple generics in one edit, however the developer would have to be careful of side-effects.

- **Common:** Versioned files that are physically the same across generics
- **Common concurrent:** Multiple user, write access to the same file on one generic
- **Uncommon:** The act of physically separating versioned files from multiple generics

Merge Local Root

Merging changes from your local root up into the repository can be performed with this option. This option is enabled if the file on the local hard-drive is different than the repository version and is writable.

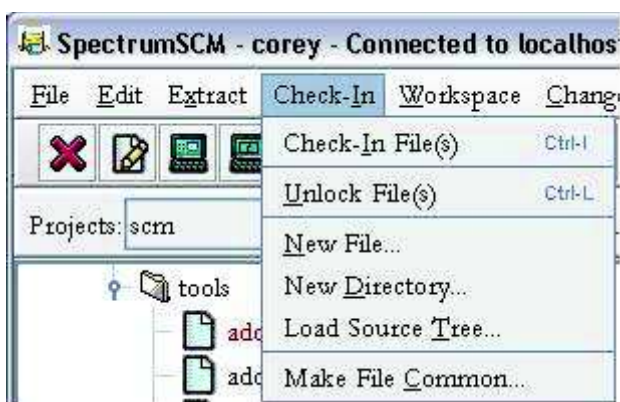
Merging allows the synchronization of files across two branches or the repository and file system versions. Merging in SpectrumSCM is the act of copying the changes made in one version of a file into another file using the SpectrumSCM Merge Editor. Merging two branch files allows the developer to copy/merge differences but retains the separate development paths.

In both the Merge and the Recommon processes, the files selected will be put in the split screen Merge Editor to allow the changes between the two versions to be identified and reconciled.

Merge Branch File & Recommon

Merging changes from your current branch/generic to another. Recommoning brings the two versions of the same file (in two different generics) back into one version shared between the two generics (makes them common again). This is useful when a parallel development effort on a project is brought back together to create one code path.

4.3.4 Check-In



File(s) can be selected in the Project Tree, File List/Module Window or in the Edit Status middle panel. (See Chapter 8 for details on file management)

Check-In

Check in the edits from the currently selected file(s). The check in operation can be performed from the main menu as shown, and can also be performed from the context sensitive menus found in the file tree itself and the edit status panel.

Unlock

Unlock the selected file from edit.

New File

Add a new source file into SpectrumSCM.

New Directory

Create a new directory under the selected repository location.

Load Source Tree

Add a directory structure into SpectrumSCM. You can also simply **Drag and Drop** files and folders onto your Desktop or any where on your file system.

(See details on *Extract and Checkout* in Chapter 8)



Make File Common

Make a file common across several generics at one time. This feature is useful for adding a file commonality relationship across multiple generics, where the file did not exist before. Note, if the file does exist in the other generic(s), then the *Extract->Checkout to Desktop->Recommon* option should be used instead.



4.3.5 Workspace



Workspace Synchronizer

The Workspace Synchronizer enables the user to easily keep their local workspace up to date with respect to other user's repository changes. It also enables a user to synchronize or merge their offline work with the repository.

Automatically Analyze Workspace

Toggle the Workspace Analyzer on and off. When the analyzer is turned on, the repository view of the project files will include additional icon information concerning the difference between files in the local root directory and those in the repository. Additional information includes whether file is in-sync (no icons), out of sync() or missing altogether().

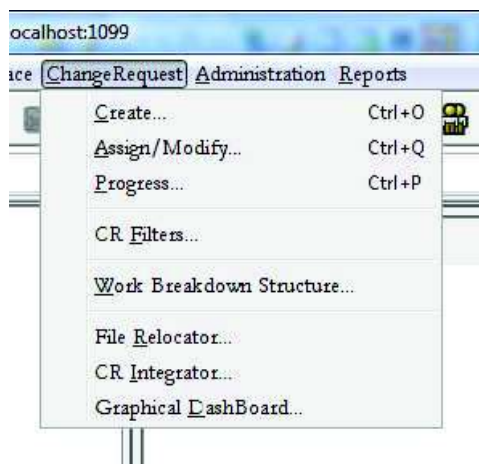
Workspace Diff Tools

Provides the ability to compare any two directory structures or any 2 or 3 files. Directory comparison includes by date, size or checksum. File comparison is performed using the SpectrumSCM 2-way or 3-way diff editor for text files.

4.3.6 Change Request (CR)

CR stands for Change Request. Similar acronyms are MR for modification request and WR for work request. Change Requests are the glue that binds the SpectrumSCM system together. Users are required to make all changes to the system through one or more CRs to track the reasons for and history of the changes. Releases are composed of units of work that are defined by CRs.

See Chapter 7 for details on Change Requests and how they are used for issue tracking, source configuration management and project management.



Create CR

Create a new Change Request, either brand new or based off an existing one by using the Auto Fill feature.

Assign/Modify CR

Assign the Change Request to someone for work or Modify the Change Request attributes, header or description. Note any such changes are tracked through the CR notes for auditability purposes.

Progress CR

Progress a Change Request into the next life cycle phase.

CR Filters

Define and manage your Change Request filters – used to reduce the number of CRs displayed on the Assigned CRs list and/or the CR Assign/Modify screen. (*see section 7.3.4 for a full description of CR filters and their use*). Multiple filters can be defined to present views based on what information you want to see at any point in time.

Work Breakdown Structure

Opens the Work Breakdown Structure main screen. *See chapter 7.5 for a full description of how work breakdown structures work.*

File Relocator

Allows file edits to be relocated from one Change Request to another.

CR Integrator

Compare, Merge and Recommon Generics from a CR and File perspective.

Graphical Dashboard:



This feature is available as an additional optional module (SpectrumSCM Graphical Dashboard 1.0). The SpectrumSCM Graphical Dashboard 1.0 works in conjunction with the SpectrumSCM 3.0 version. The **Graphical Dashboard menu item will be activated** when you purchase this module.

The graphical dashboard is a project **performance and metrics** dashboard which gives software managers, team leads, QA engineers, release managers, Configuration managers, and Auditors quick insight into project risk, status, and trends by presenting the Change request/Tasks progress and status in the form of powerful Graphs and Charts. These displays are available individually or as up to 4 panels within a single Graphical screen. The Dashboard provides an array of views with color-coded status to be able to quickly spot trends and take corrective actions.

The Dashboard provides solutions for measurement and metrics, collecting data from one or more projects, one or more branches/generics, one or more users, one or more releases, or based on CR attributes. Data can also be collected over periods of time. The charts and graphs present intuitive summaries of key information in a single view so that users can analyze trends, perform management by exception, and drill down for more information when necessary.

Furthermore, the Dashboard can display up-to-date project status information in a graphical multilayer format, allowing managers to focus on decision making rather than manually gathering data and compiling reports to help ensure the success of their business. Project Managers and

Stakeholders need not deal with an increasing amount of data, sorting through hundreds of reports and project communications in search of bottlenecks or areas not meeting project expectations.



4.3.7 Administration

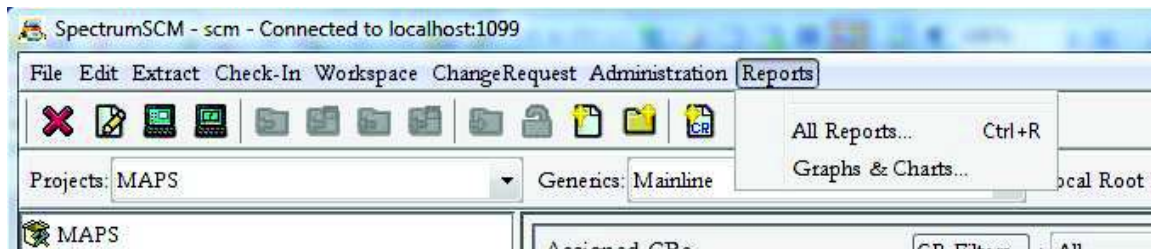


Except for module administration, these functions can only be performed by a user with appropriate permissions. Generally these would be Administrator or Project Engineer authority for the setup items, and Generic Engineers for the “Generic” and Release/Package Management items. Delete would either be controlled (generally) by the Generic Engineer or possibly the senior developers/team leads. (See Chapter 5 for details on User Set-up) (See Chapter 12 for details on Administration functions).

CR Attribute Management	Allows customizing attributes associated with CRs, defining and managing system-wide and project specific change request attributes.
CR Life-cycle Admin	Allows managing the linear life-cycle definitions and their assignments to projects. Note, use of this screen/functionality is mutually exclusive with the Workflow Administration screen. This is because the linear screen defines the life-cycle in the form of a list, whereas the workflow defines it in a 2-dimensional graphical form.
CR Life-cycle & Workflow Admin	Manage the graphical workflow definitions and their assignment to projects.
Create Project Wizard	Create a new project using the interactive project creation wizard
Create Project	Add a new project.
Create Generic	Add a new generic (baselines, branches) to the current project.
Modify Generic	Modify a generic, specifically to manage its commonality lock i.e. whether developers are allowed to perform common edits.
View Generics	View the current generic relationships and operate upon them.
User Admin	Create SpectrumSCM application login-ids. Maintain the system-wide user list, including names, default password and contact information.
User Categories	Define and maintain the set of user categories/roles.
Project-User Admin	Assign Users to a project team and manage the Project-User relationship. I.e. manage which users are assigned to work on which projects and with what roles.
Access Control Admin	Define access permissions for resources within the repository. Access permissions can be assigned at the Generic, Directory and File levels against particular user roles.
Module Admin	Define and Maintain your module definitions.
Release Management	Define a release set, manage the association of change requests with that set.
Package/Component Management	Define a package of components to extract for build or release. Manage the association of components with their packages.
Delete	Delete an item or items (project, generic, files, etc).
View Delete Log	Tabular view of resources that have been deleted from the repository. Items are marked as soft (restorable) or hard deletes, when the delete occurred, which CR was used and who executed the action.
Reload Plugins	Dynamically reload user created custom plugins. Please see chapter 14
System Information	View a graphical representation of the space available in the repository.

4.3.8 Reports

This function lists all reports available to the user. A report or reports can be selected and run. Frequently run reports can be personalized and saved as Personalized Reports that can be rerun by the user who created them. This saves the effort of having to create the report again.



(See Chapter 10 for details on reports)

All Reports

Produce a list of all pre-defined reports.

Personalized Reports

Execute personalized reports such as the “File History Summary” shown above. These are set up through the “All Reports” reports manager window, “Action” menu.

4.3.9 Graphs and Charts

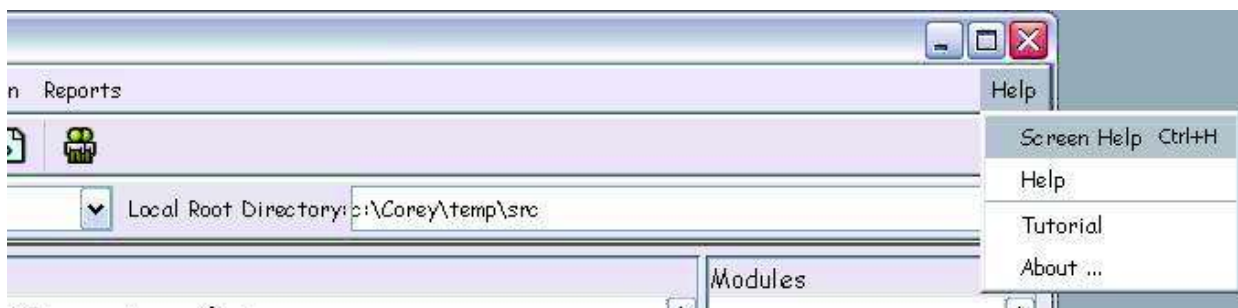


This function lists all the graphs and charts available to the user. A graph can be selected and run. Frequently run graphs can be personalized and saved as Personalized graphs that can be rerun by the user who created them. This saves the effort of having to create the graph again.

This feature is available as an additional optional module (SpectrumSCM Graphical Dashboard 1.0). The SpectrumSCM Graphical Dashboard 1.0 works in conjunction with the SpectrumSCM 3.0 version. The **Graphs & Charts menu item will be activated** when you purchase this module.

(See Chapter 16 for details on Graphs and Charts)

4.3.10 Help



Screen Help

Each screen in SpectrumSCM has screen help available for that screen. It can be accessed from within that screen.

Help

This menu item gives access to all of the help screens available by topics. These are HTML format and hence you can navigate easily by hyperlink to any topic of interest.

Tutorial

There is a simple “Getting Started” Tutorial to aid in learning SpectrumSCM and to get the latest most up-to-date information. The tutorial is accessed via the Help menu. It can be viewed via an Internet link to Spectrum’s website for access to the most current version. The tutorial is also provided on the installation CD and can be installed locally for sites where web access is not available.

The tutorial covers the following topics:

- Installation
- Create a project
- Modify Generic
- Create a User
- Create CR
- Progress CR
- Adding Source
- Check out files
- Branching files
- Recommoning files
- Quick Start
- Create Generic
- Assign life cycle Phases
- Add User Roles/Access Authorization
- Assign CR
- Establish local root directory
- Load Directory Tree
- Check in files
- Merging files
- Review Reports

About - Provides information about the installed version of SpectrumSCM (version number, Service Pack and license data and expiration date) and provides the telephone phone number and email address of the SpectrumSCM support team.

Maximum users indicates the number of users who can concurrently access the SpectrumSCM server.

If you have purchased the graphical dashboard feature (or running an evaluation copy) then this will also reflect the number of graphs user licenses.



4.4 Quick Keys

Quick Keys operate from any screen.

4.4.1 By Function

Menu	Menu Item	Mnemonic Alt+ Key	CTRL+ Key
File			
	Exit	FX	
	Login	FL	
	Edit New	FN	
	Open single editor	FS	
	Open dual editor	FD	
	Version History	FV	E
	Compare Local Root	FC	D
	Compare Generic	FG	G
	Rename	FR	
	Cut	FT	
	Properties	FP	
Edit			
	Refresh	EF	F
	Preferences	EP	
	Change Password	EW	
	Show Toolbar	ET	
	Custom Editor	EC	
	Custom Diff Editor	ED	
	Use Proxy	EX	
Extract			
	Extract files by Directory	XXD	
	Extract files by CR	XXC	
	Interim Release	XXI	
	Extract files by Release	XXR	
	Extract files by Package	XXP	
	Disk – Read – Only Top	XIRT	B
	Disk – Read – Only - Version	XIRV	(use CTRL-E to access the version History)
	Disk - Uncommon	XIU	U
	Disk - Common	XIC	K
	Disk - Concurrent	XIT	T
	Desktop – Read Only	(Use file double-click)	
	Desktop - Uncommon	XEU	N
	Desktop – Common	XEC	M
	Merge Local Root	XEL	
	Merge Generic	XEG	W
	Recommon	XER	Y
Check-In			
	File	II	I
	Unlock a file	IU	L
	Add a New File	IN	
	Add a New Directory	ID	
	Load Source Tree	IT	
	Make File Common	IC	

Workspace			
	Work-Sync	WS	S
	Work-Analyzer	WZ	Z
	Workspace Diff	WD	
Change Request			
	Create	CC	O
	Assign/Modify	CA	Q
	Progress	CP	P
	CR Filters	CF	
	WBS	CW	
	File Relocator	CR	
	CR Integrator	CI	
	Graphical Dashboard	CD	
Administration			
	Attribute Management	AA	
	Life-cycle Management	AL	
	Workflow Management	AW	
	Create Proj Wiz		
	Create Proj		
	Create Generic	AT	
	Modify Generic	AF	
	View Generics	AV	
	User Admin	AU	
	Category Admin	AC	
	PUser Admin	AP	
	ACL	AL	
	Module Admin	AM	
	Release Management	AR	
	Package Management	AK	
	Delete	AD	
	View Delete Log		
	Reload Plugins		
	Database Information		
Reports			
	All Reports	RR	R
	Individual Personalized Reports/Graphs		1-9 (Top 9 personalized reports/graphs)
	Graphs & Charts	RG	
Help			
	Screen Help	HS	H
	Help	HH	
	About	HA	