RSE EXTENSIONS FOR WDSC 6.X AND HIGHER

This document briefly describes the features included in the RSE Extensions for WDSC 6.x and higher.

If you are somewhat familiar with WDSC and its Remote Systems Explorer (RSE), these screenshots should help make the added features fairly obvious to you. If you are not familiar with RSE, then as you become more familiar with using WDSC you should find that these extensions just naturally fall in line with everything else within WDSC. The following screenshot is an example of how WDSC will likely appear when you restart it after installing the RSE Extensions.
Notice that there are new subsystems for spooled files and messages beneath your iSeries connection. These subsystems look and behave similarly to the other connection subsystems that WDSC contributes.

OVERVIEW

The RSE Extensions consists of these primary features:

- The ability to manage and view iSeries spooled files.
- The ability to manage and view iSeries messages.
- A new "perspective" that is optimized for source editing.
- Graphical compare and merge editors for iSeries source code.
- A custom editor for editing the contents of data areas.
- A custom dialog for displaying the properties and contents of data queues.

A description of each feature follows.

WORKING WITH SPOOLED FILES

The RSE Extensions adds a subsystem named iSeries Spooled Files to your iSeries connections. This subsystem will initially include one filter -- Your spooled files -- that shows you all the spooled files associated with the user profile the connection is using to access the iSeries computer. The filter delivers results equivalent to running the WRKSPLF command on a 5250 command line.

The following screen shows the filter in the Remote Systems Details table view. It also shows a spooled file that has been opened in the built-in text editor.
You can create custom filters in the spooled files subsystem just as you can in other RSE subsystems:

All of the standard options for managing spooled files are available for use in the expanded filters.

Because this feature is intended to make it easier for a developer to access compile listings and job logs without leaving the IDE, the ability to view and access more complicated spooled files, such as *AFP with overlays, is very limited.

WORKING WITH MESSAGES

The RSE Extensions also adds a subsystem for iSeries Messages. As with the spooled files subsystem, it implements a standard RSE subsystem that allows you to define filters for messages. A default "Your Messages" filter is created automatically. In addition to these features, which require no additional explanation, there is one other unique feature implemented, and that is the ability to have WDSC monitor your personal message queue in the background and notify you of new messages. Right click on the iSeries Messages subsystem and choose Properties, then click on Message Queue Monitoring. A screen like this appears:
Initially, the Monitor Message Queue checkbox is not checked, so the remaining settings do not appear. The settings are self-explanatory; you are indicating how you want WDSC to handle the various types of messages you receive. If you receive an Inquiry message, WDSC can present a dialog that lets you respond to the message without leaving the IDE.

**ISERIES EDITING PERSPECTIVE**

The iSeries Editing Perspective provided by the RSE Extensions is a new perspective you can switch to when editing source. This feature is mainly a convenience feature. WDSC is very flexible in how you arrange your windows. It also lets you save those arrangements as your own perspective. All we have done is take the best practices we have learned over the years and package those settings up for you. This also allows us to do the one thing that you cannot do yourself, which is give the perspective a unique icon. This makes it easier to visually recognize in the list of open perspectives. Here is a quick description of how to use this perspective:

**Open some source**

First, open a couple of members for editing in RSE. This will make it easier to see the perspective's features.

**Open the Perspective**

To open the perspective for the first time, do Window ▶ Open Perspective ▶ Other. A screen like this appears:
Select the iSeries Editing perspective. Note that once the perspective is open, it is easy to quickly switch between open perspectives. Just use the perspective switcher that appears in the top-right hand corner of WDSC (visible in the next screen). The perspective looks like this:

It may not look like much, but that is the point. As you may already know, when you double click an editor or view in any window it will expand, or "maximize," to fill the whole space. However, when a window is maximized you can see only one window at a time. So instead of forcing you to maximize, this perspective condenses the extra views into a set of toolbar icons at the bottom, allowing the editors to use the entire screen:
Notice how you can now see two members at the same time. Again, you could always do this, but when you are trying to do it at the same time that other views are showing, it is not very helpful. With the extra screen real estate this feature now becomes useful. If you are not aware of how to do this, just click and drag one of the editor tabs to any window edge. The icon changes so you know when to drop the Window. To undo the effect, just drag and drop onto another editor pane, and WDSC will go back to stacking them.

At this point, you might be saying, "OK, but I need some of those views, like the Outline view, or the Remote Systems view." Remember those icons we mentioned, on the bottom toolbar in the previous screenshot? Those are all of the common views you would typically need to access. In this case, we have converted them to something WDSC calls a "Fast View." Click the icon for the Outline view. Your screen now looks something like this:

Notice how the view "slides" into place on top of your editors? In the case of the Outline view, you can expand the outline and click on a field's or procedure name's line number. This takes you to that part of the source, and the Outline view slides back out of sight. (You can also click the minimize button in the view, or click back in your editor, to close the view.) Of course, the perspective switcher makes it easy to just switch back to your other perspective to access to the views there. Perspectives, and fast perspective switching, are among the main architectural features in the Eclipse-based IDEs.
The RSE Extensions provide a graphical compare/merge editor for iSeries source code. These editors are built on top of the powerful compare/merge features that are provided with Eclipse for Java source code. The RSE Extensions handles retrieving and locking your source member from your iSeries source file. It then has to strip the first 12 source file bytes (sequence and date) from the local file so that the Eclipse compare engine can properly analyze the differences of the files. When you save your changes, the source is put back in the source file and the lock released. The sequence and date fields in the member are reset to new values as part of this process.

To access these editors, right-click on the member in your development source file and choose RSE Extensions ➤ Compare or Merge, depending on the action you want to perform.
You will be presented with one of these dialogs, depending on which option you choose.

The values you enter into these dialogs are fairly self-explanatory, especially if you have used PDM option 54 and 55. A notable enhancement to those options, however, is that each source member can come from a different iSeries system. This is because the members are just retrieved and compared on your local workstation. Once you click OK, the members are downloaded and compared and opened in the Eclipse compare or merge editor.
The editor contains all of the same compare/merge features that you get when using it for Java source. The only negative to the editor is that it is not "aware" of the iSeries languages you are comparing/merging. So you do not get the color-coding or other editor features you get when using the LPEX editor. Hopefully, when/if IBM provides these features as part of WDSC itself, those editor features will be available in their implementation.

**CHANGE DATA AREA**

The RSE Extensions provides a custom dialog for editing data areas. Just right-click on a *DTAARA object and choose RSE Extensions ➤ Change Data Area. This brings up a dialog that shows the data area attributes and lets you edit the contents. This can be particularly useful for data areas with lots of text that you want to edit.
DISPLAY DATA QUEUE

The RSE Extensions provides a custom dialog for displaying data queues. Just right-click on a *DTAQ object and choose RSE Extensions ➤ Display Data Queue. This brings up a dialog that shows the data queue attributes and also a preview of the first entry in the queue.
UPDATING THE RSE EXTENSIONS

Newer versions of WDSC have a feature in the Preferences that you can set to automatically check for updates. You can use this feature to update your RSE Extensions as long as you are not behind a proxy server that does not allow this activity. You can check for updates manually by choosing Software Updates ➤ Find and Install from the Help menu. Follow the instructions provided by the wizard.

If you are behind a proxy server that will not allow WDSC's Updates feature to work, then you can install updates by downloading and installing the latest version, as described above. When you do this, the installer detects that the RSE Extensions are already installed and skips most of the wizard screens.