



IBM Software Group

Use of ClearCase in WebSphere Integration Developer (WID)

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WebSphere® Support Technical Exchange



Agenda

- How to use ClearCase in WID
- WID Tested ClearCase Configurations
- What WID files to add to source control
- Best Practices
- Troubleshooting
- Known Issues
- Resources
- Q & A

ClearCase with WID – General Usage Patterns

- There are generally 2 ways of using ClearCase with WID:
 - ▶ Inside WID
 - Use ClearCase Remote Client for Eclipse plugin
 - Use ClearCase SCM Adapter for Eclipse plugin
 - ▶ Outside WID
 - Use ClearCase Explorer
 - Use ClearCase Remote Client Standalone

Use ClearCase Remote Client for Eclipse inside WID

- Switch to Java™ perspective
- Use Software Update to download and install CCRC for Eclipse from your ClearCase server
- Restart WID
- Switch to ClearCase Explorer perspective
- If in base ClearCase mode, create a View (or reuse an existing View)
- If in UCM mode, join a project and create/reuse Views
- Synchronize with ClearCase server
- Create module or import module from the View

How to import modules from CCRC view to WID workspace

1. Switch to ClearCase Explorer perspective
2. Expand the View directory structure until the module(s) is shown
3. Right click on the module, and choose “Import” -> “Import Project into Workspace” in the context menu

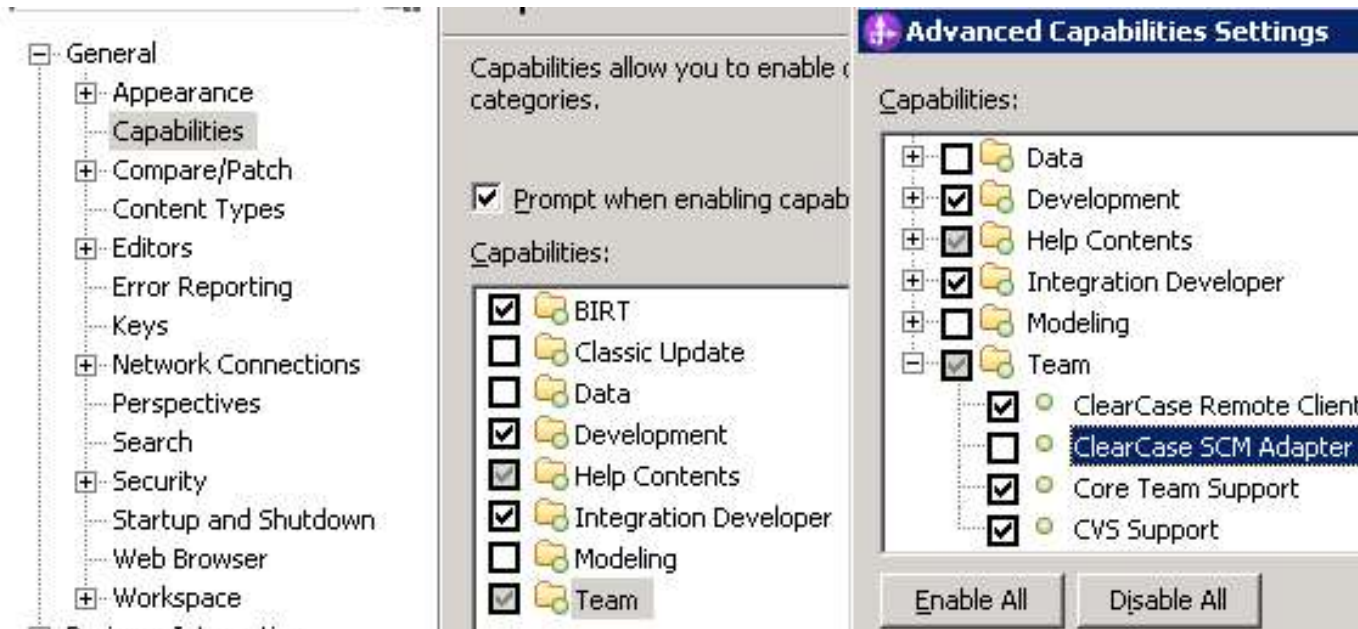


Use SCM Adapter for Eclipse inside WID

- ClearCase SCM Adapter for Eclipse comes with WID as an optional feature, please check ClearCase documents for its compatibility with the ClearCase server you use
- Enable ClearCase Team Capability
- If in base ClearCase mode, create a View (or reuse an existing View)
- If in UCM mode, join a project, and create/reuse Views
- If Snapshot View, synchronize with the server
- Create module or import module from the View

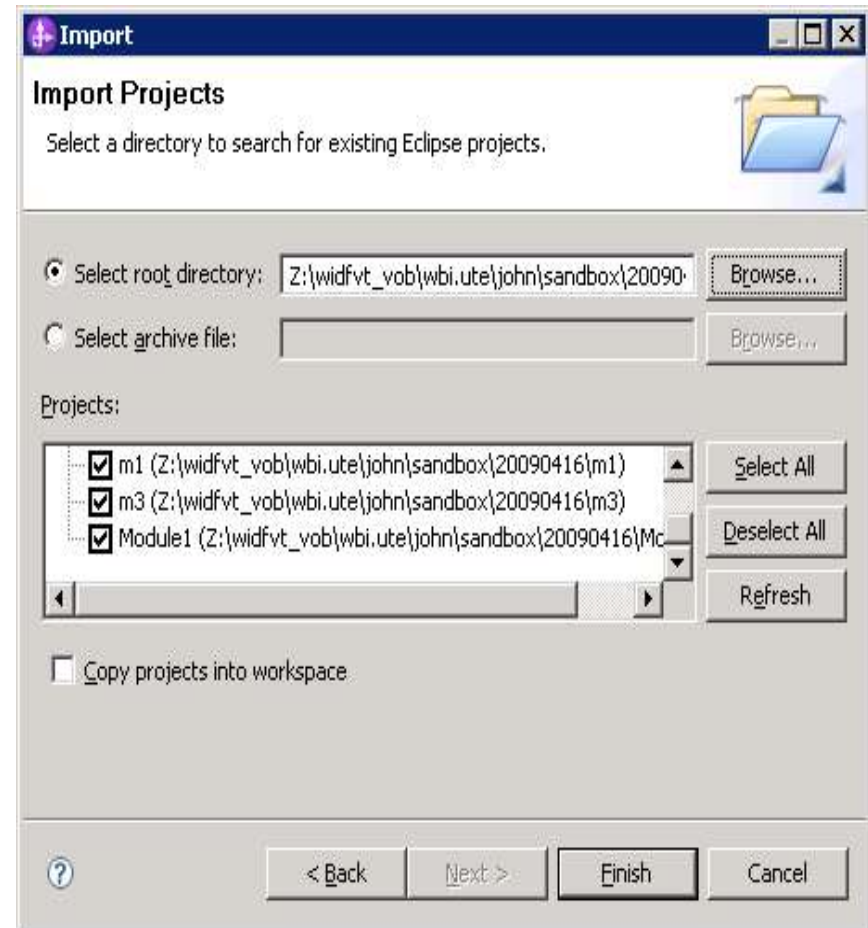
How to enable ClearCase SCM Adapter capability in WID

- Enable in Window -> Preferences -> General -> Capabilities -> Team



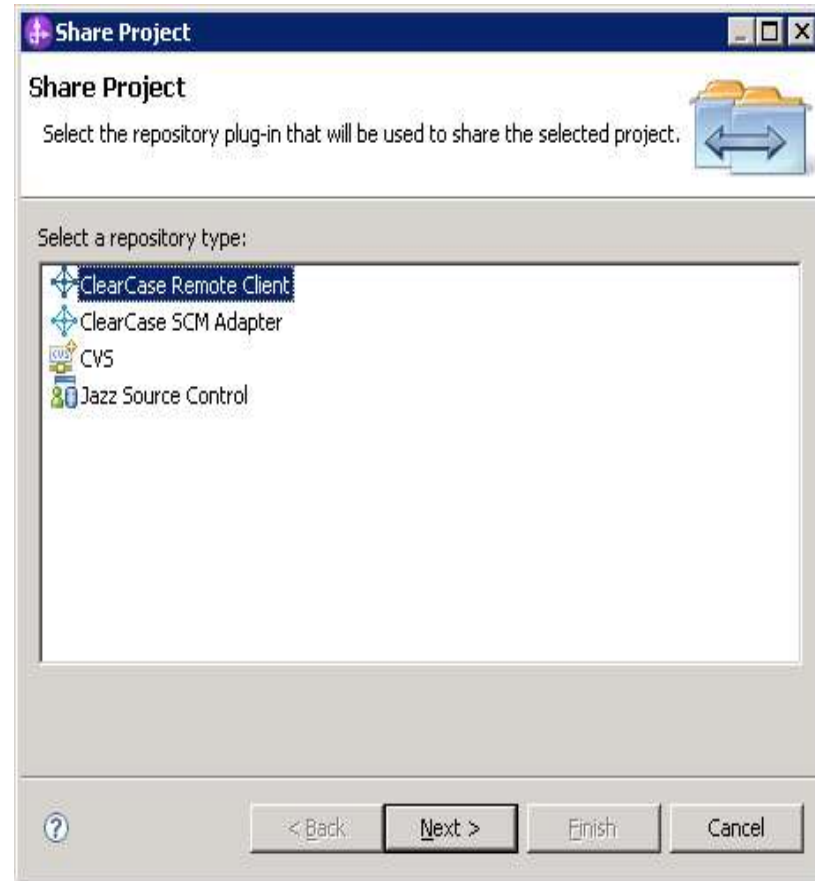
How to import module from Dynamic and Snapshot views

- File -> Import -> General -> Existing Projects into Workspace
- Browse to the View directory structure that contains the modules
- Do NOT check “Copy projects into workspace”



How to add module to ClearCase source control

- Right click on module, Team -> Share Project
- Choose a ClearCase client type
- Choose a ClearCase view
- Choose a sub-directory in the target VOB



How to check out WID artifacts in BI perspective

- There are 2 methods to check out a WID artifact in Business Integration perspective:
 - From Projects view, right click on the artifact, in the context menu, choose Team -> Check Out
 - Open the artifact in the editor, edit the artifact
- Both ways will prompt for checking out the backing files for the artifact (below is an example using method #1 with CCRC)

The selected resources:

Artifact	Comment	Path
<input checked="" type="checkbox"/> testmodule1/bpel1.bpelex		{vob\widfvt_vob\wbit\joef...
<input checked="" type="checkbox"/> bpel1.bpelex		vob/widfvt_vob/wbit/joef/...
<input checked="" type="checkbox"/> bpel1_bpel.mon		vob/widfvt_vob/wbit/joef/...
<input checked="" type="checkbox"/> bpel1.bpel		vob/widfvt_vob/wbit/joef/...
<input checked="" type="checkbox"/> bpel1Artifacts.wsdl		vob/widfvt_vob/wbit/joef/...

A few words about the ClearCase SCM Adapter for Eclipse

- ClearCase SCM Adapter for Eclipse is shipped with WID as an optional feature, which can be installed in Install Manager.
- ClearCase SCM Adapter can not work with a ClearCase server by itself – it needs a ClearCase fat client to be installed in the local system.
- ClearCase SCM Adapter can not decide which ClearCase server to connect to – such setting is in the ClearCase fat client
- Please refer to ClearCase document for more information.

WID Tested ClearCase Configurations

- WID 7.0
 - ▶ CCRC 7.1.1 For Eclipse with ClearCase Server 7.1.1
 - ▶ SCM Adapter For Eclipse* with ClearCase Server 7.1.1
- WID 6.2.0.1
 - ▶ SCM Adapter For Eclipse* with ClearCase Server 7.1.0
- WID 6.2
 - ▶ CCRC 7.0.1 For Eclipse with ClearCase Server 7.0.1
 - ▶ SCM Adapter for Eclipse* with ClearCase Server 7.0.0
- WID 6.1.0.1
 - ▶ CCRC 7.0.1 For Eclipse with ClearCase Server 7.0.1

* As shipped with WID

Authored files to be added to source control

- In general, files that can not be generated by the tools without user information should be added to source control
 - ▶ All authored files, such as .bpel, .wsdl, .xsd, etc.
 - ▶ Files in “<project_root>/settings” folder, etc.
 - ▶ “<project_root>/project” and “<project_root>/classpath” files, etc.
 - ▶ Other custom files that user would like to persist, such as text file, etc..



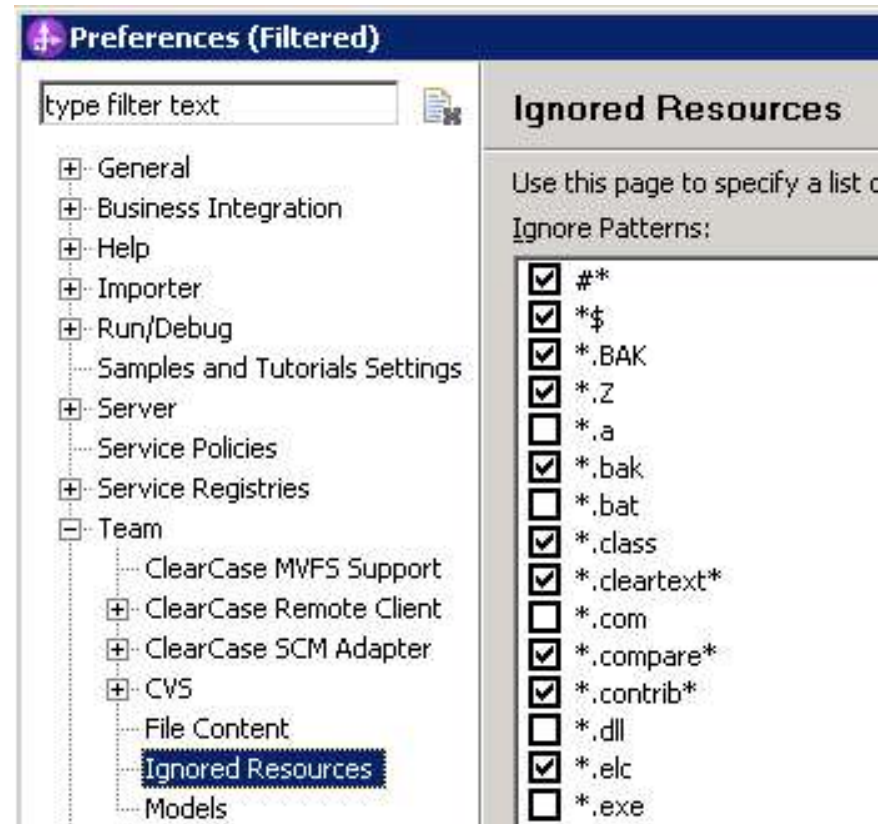
Generated files to be left out of source control

- Files that can be generated by the tools without user information can be left out of source control
 - ▶ Staging projects, such as APP, WEB, EJB projects, etc.
 - ▶ Compiled files, such as Java class files, etc.



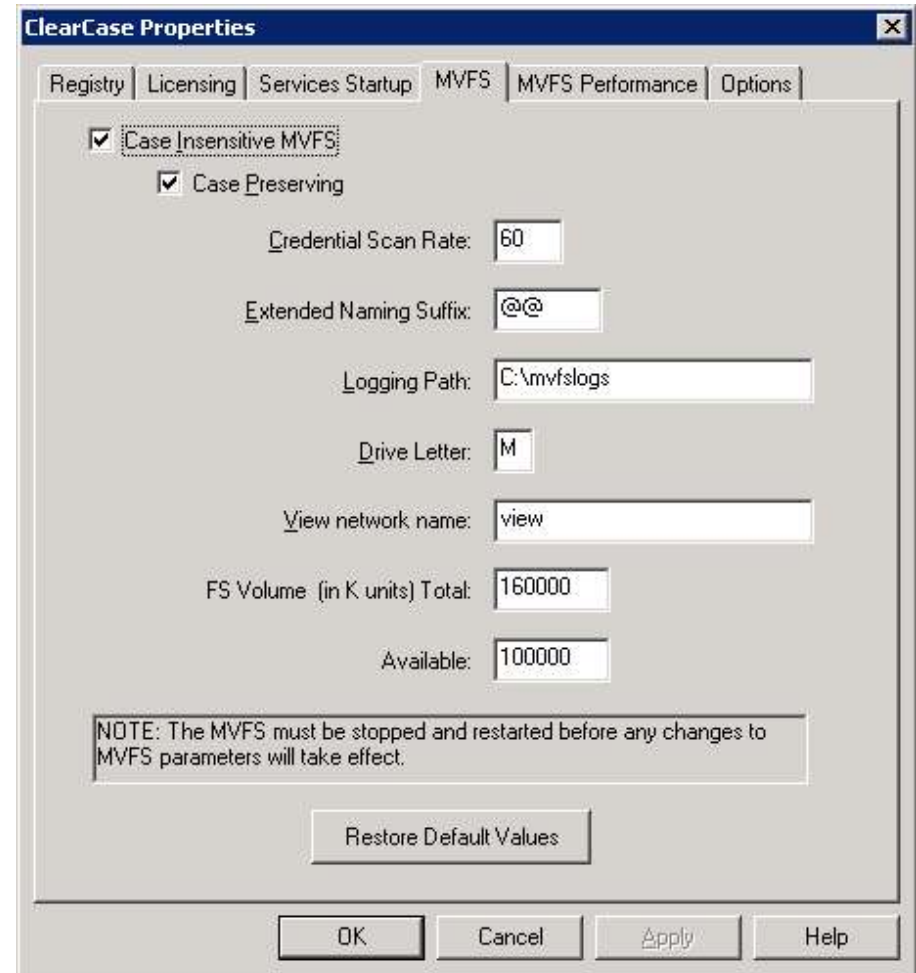
“Ignored Resources” filter setting

- Stay with the default “Ignored Resources” setting as much as possible
 - Window -> Preferences -> Team -> Ignored Resources



Best Practices – Set to preserving case

- Preserve case when using SCM Adapter in Windows®
 - ▶ User can set during install time, or in Control Panel -> ClearCase -> MVFS panel
- ClearCase MVFS will convert all file names to lower case if this is not set.



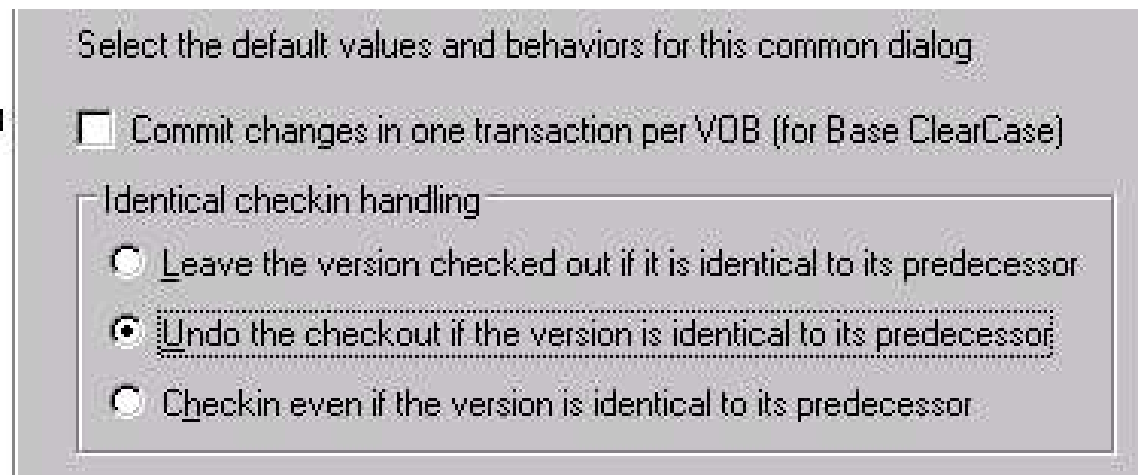
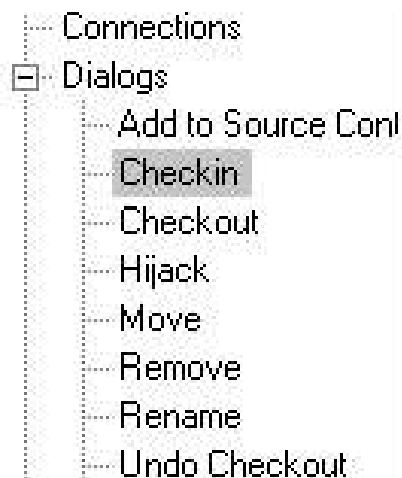
Best Practices – Turn on automatic workspace refresh

- Turn on automatic workspace refresh
 - ▶ Window -> Preferences -> General -> Workspace
- ClearCase decorations may not update if this is not set



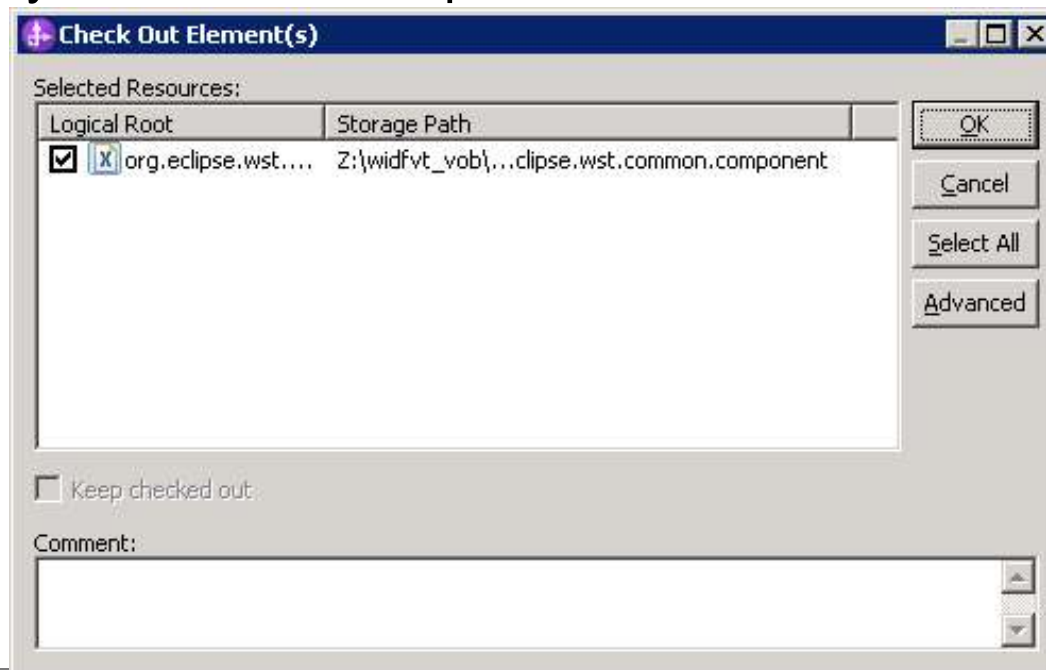
Best Practices – Set CCRC to Undo-Checkout if the version is identical

- CCRC “Undo-checkout if the version is identical to its predecessor” setting can be set as a default setting in Window -> Preferences -> Team -> ClearCase Remote Client -> Dialogs -> Checkin



Best Practices – Allow checkout during build time

- Always allow Checkout during build time.
 - ▶ You may see the following checkout dialogs during build, you need to accept them:



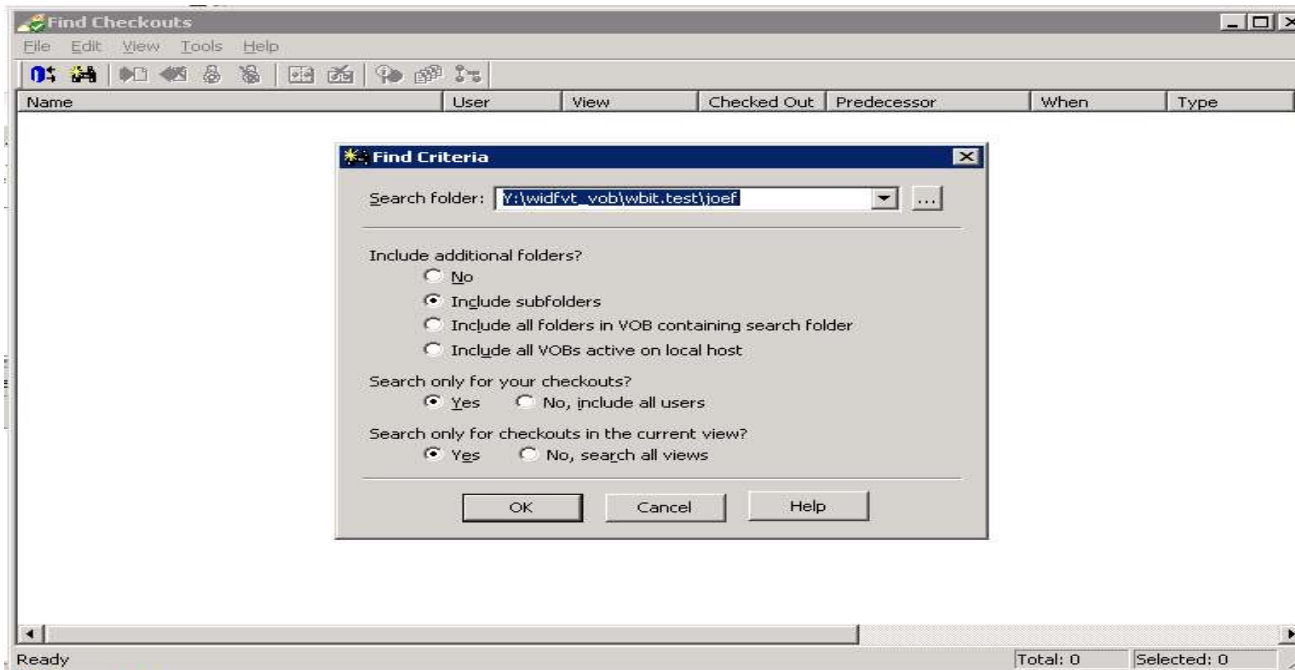
Best Practices – Aggregated Check-in with CCRC

- For CCRC, you can use aggregated check-in at project level: right click on the module, then Team -> Aggregated -> Check In...



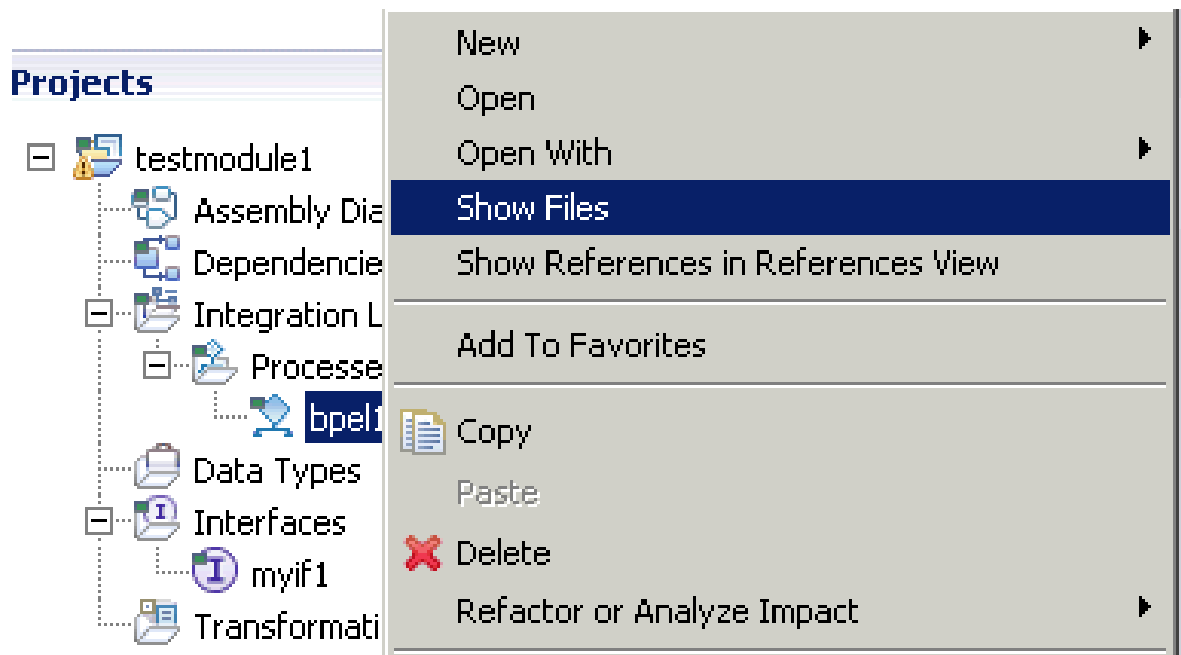
Best Practices – Find Check-outs with ClearCase “Find Checkouts” utility

- For SCM Adapter, you can use the “Find Checkouts” utility that comes with the CC fat client.



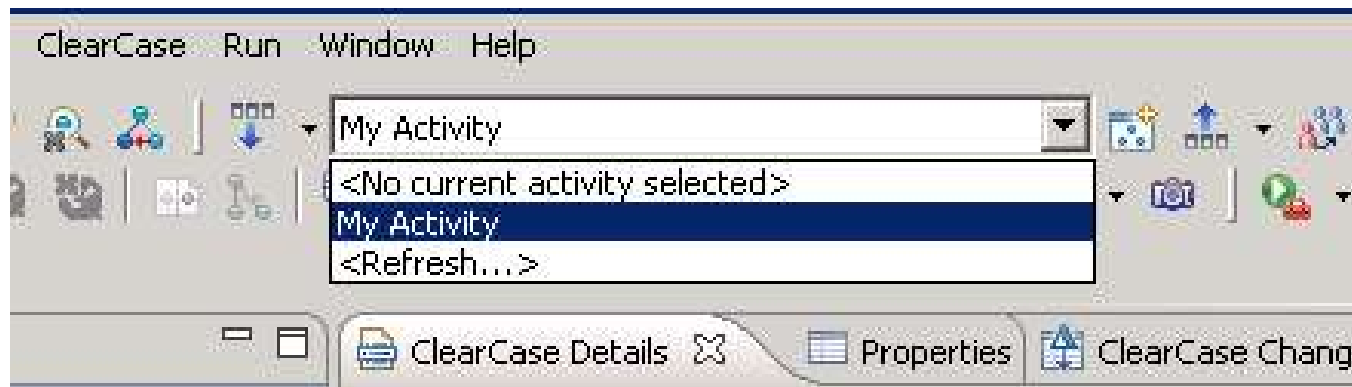
Best Practices – How to find backing files for an artifact

- Use the “Show Files” function in the Business Integration perspective



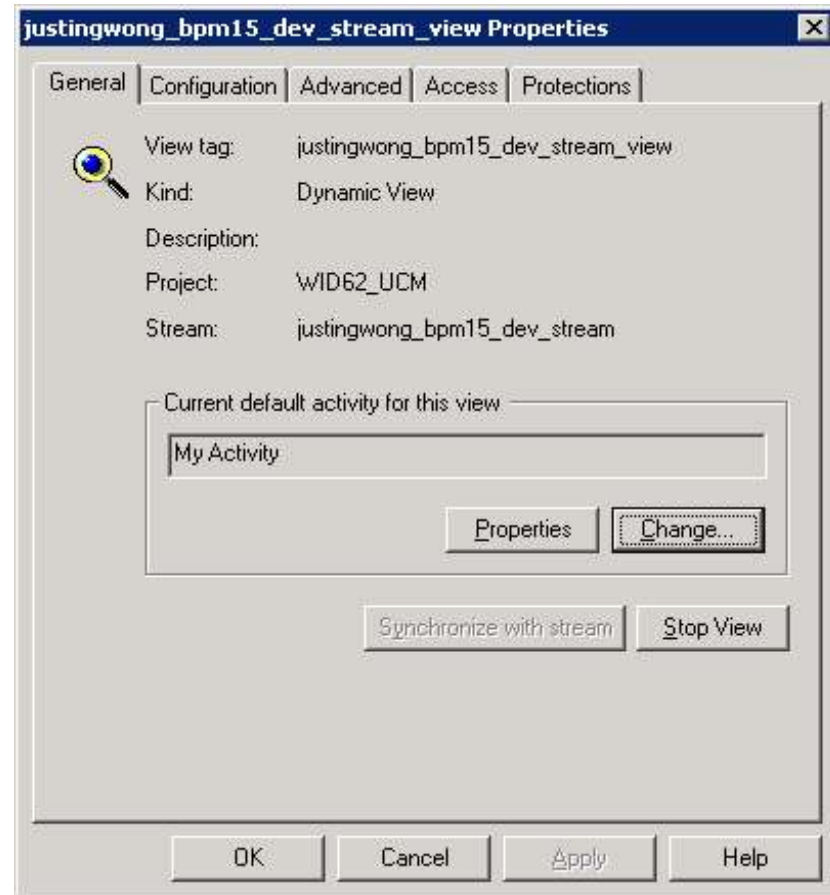
Best Practices – Set default “activity” in CCRC UCM view

- For CCRC view, in CC Explorer perspective, select the UCM “view”, and set the default “activity” in the drop down box



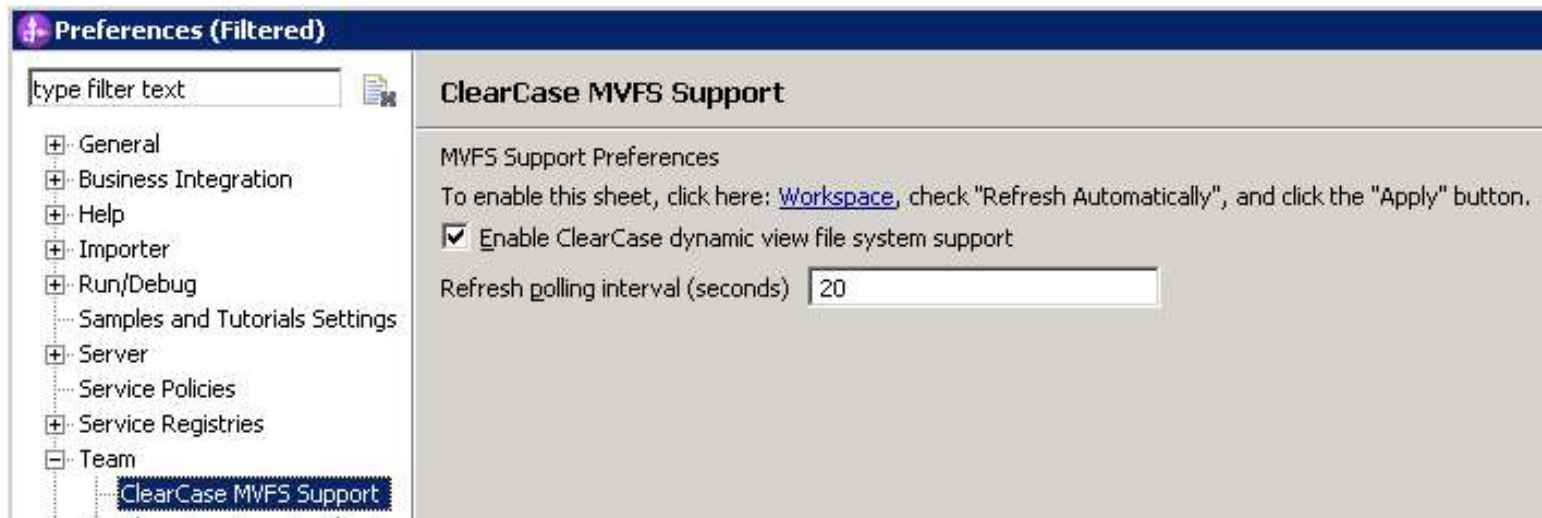
Best Practices – Set default “activity” in Dynamic/Snapshot UCM views

- For Dynamic/Snapshot views, set the default “activity” in “view” properties panel



Best Practices – Enable Dynamic View Auto-refresh

- When using Dynamic View, enable Dynamic View File System Support
 - ▶ Set in Window -> Preferences -> Team -> ClearCase MVFS Support.



Best Practices - Miscellaneous

- Checkout as “Reserved” as much as possible
- Avoid concurrent development on the same artifact (users may work on different artifacts at the same time though)
- Work in “Business Integration” perspective whenever possible
- Always use WID editors to work with WID artifacts
- When multiple ClearCase prompts appearing at the same time, dismiss one, wait until it completes before dismiss another one

Troubleshooting

- If a WID task fails, try to repeat the steps in ClearCase “hijack” mode
 - ▶ If the problem can not be reproduced, it is likely a ClearCase related issue, such as: file can't be checked out, etc. Check to make sure the file can be checked out by using ClearCase Explorer.
- Check workspace .log file for errors such as files not editable, etc.
 - ▶ Workspace .log file is located at `<workspace_root>/metadata/.log`

Useful support information for ClearCase related issues

- Contact IBM® Support with the following information:
 - ▶ WID version
 - ▶ ClearCase server version
 - ▶ ClearCase Remote Client or SCM Adapter version
 - ▶ ClearCase View type
 - ▶ ClearCase mode (Base vs. UCM)
 - ▶ ClearCase client preferences settings (Window -> Preferences -> Team -> CCRC or SCM Adapter)
 - ▶ Eclipse Ignored Resources settings (Window -> Preferences -> Team -> Ignored Resources)
 - ▶ Workspace .log
 - ▶ Reproducing steps
 - ▶ Other information requested by IBM Support

Known Issues

- ClearCase Remote Client 7.1 does not work well with WID 6.2.x in terms of checkin/checkout at WID artifact level
 - ▶ This issue is fixed in ClearCase Remote Client 7.1.1
- Project configuration files (such as files in <project_root>/settings folder, etc.) may be checked out when building the workspace
 - ▶ Always allow checkout during build time, and find the checkouts and check them back in with the “Undo-checkout if identical” option selected (add a link to the tool)
- Files can be checked out silently during build or edit
 - ▶ Always find the checkouts and check them back in after finish working on a workspace
 - ▶ In UCM mode, always set the default “activity” in a UCM View

Summary

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Additional WebSphere Product Resources

- Discover the latest trends in WebSphere Technology and implementation, participate in technically-focused briefings, webcasts and podcasts at:
<http://www.ibm.com/developerworks/websphere/community/>
- Learn about other upcoming webcasts, conferences and events:
http://www.ibm.com/software/websphere/events_1.html
- Join the Global WebSphere User Group Community:
<http://www.websphere.org>
- Access key product show-me demos and tutorials by visiting IBM Education Assistant:
<http://www.ibm.com/software/info/education/assistant>
- View a webcast replay with step-by-step instructions for using the Service Request (SR) tool for submitting problems electronically:
<http://www.ibm.com/software/websphere/support/d2w.html>
- Sign up to receive weekly technical My Notifications emails:
<http://www.ibm.com/software/support/einfo.html>

Questions and Answers