



TPF Toolkit V3.4

TPF Users Group - Spring 2009

TPF Toolkit API

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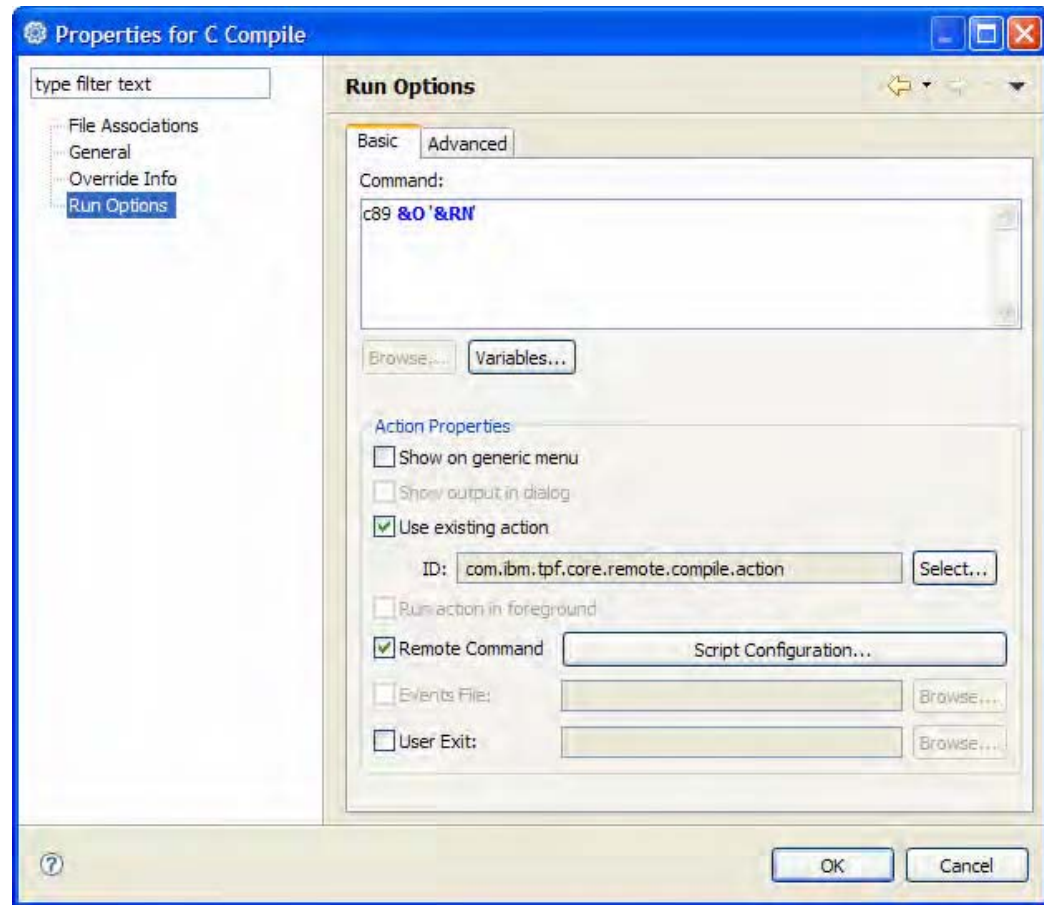
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Overview

- **Extending TPF Toolkit**
 - Menu Manager actions
 - TPFTool command line utility
- **TPF Toolkit API (Java-based)**
- **Demo**
- **Questions/Feedback**

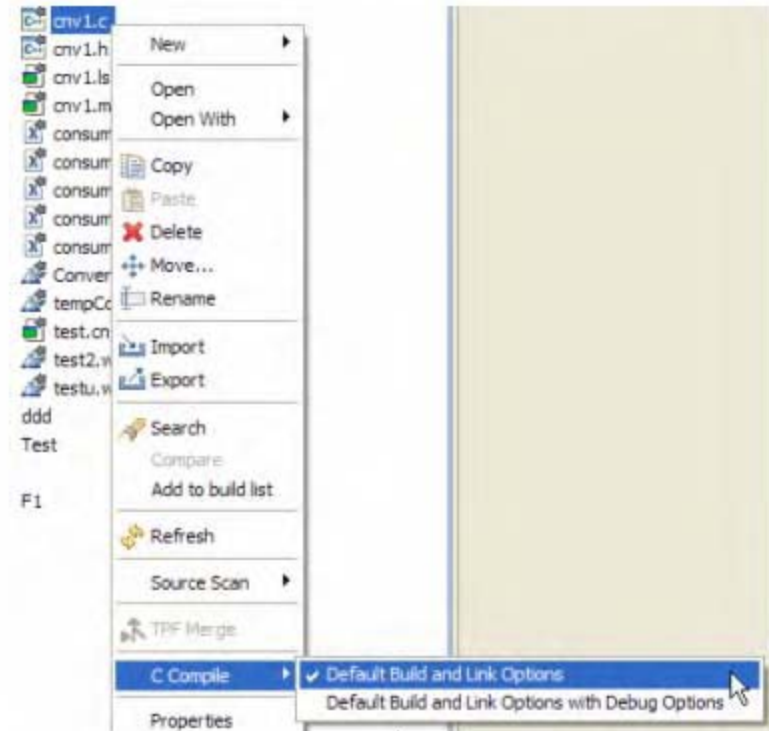
Menu Manager actions

- **Actions appear on the pop-up menu in the project navigator**
- **Local/Remote actions**
- **Use substitution variables to interact with TPF Toolkit**
 - &O returns compile options
 - &RN returns remote path



Menu Manager actions

- Substitution variables are resolved based on selection
- Action is run on the same remote system as the selection



```
Remote Console X
TPFR6011I - TPFMVSXA.POK.IBM.COM > c89 -c -o "/home/ankit/F9035/cnv1.o" -Wc,NOCSCT -Wc,NOEXPORTALL -Wc,LONGNAME
-Wc,STA -Wc,NOXREF -Wc,NOOFFSET -Wc,NOSHOWINC -Wc,NOEXPMAC -Wc,LIST > "/home/ankit/F9035/cnv1.lst"
-Wc,NOSOURCE -Wc,NOTEST -Wc,SEQ'(73,80)' -Wc,NODLL -Wc,RENT -Wc,NOAGGREGATE
-Wc,CHE'(NOAC, NOEN, NOEX, NOGE, NOGO, NOI, NOPAR, NOPOR, NOPPC, NOPPT, NOTRU)'
-Wc,EVENTS'(/home/ankit/e2e/build/cnv1.c.evt)'
/home/ankit/F9035/cnv1.c
```

Menu Manager actions

- **Problem**
 - There is no way to automate TPF Toolkit tasks like project creation, file downloads etc.
- **Solution**
 - Use TPFTool command line utility within Menu Manager actions.

TPFTool command line utility

- **Allows you to “drive” TPF Toolkit from the command line**
- **Services**
 - Create Project
 - Create RSE connections
 - Copy between 2 local/remote locations
 - Run remote commands
 - And many more!

TPFTool command line utility: Usage

Download a file from a remote system to the workstation

Inputs

- **Remote File to download**
- **Local destination folder**
- **User ID information for login**

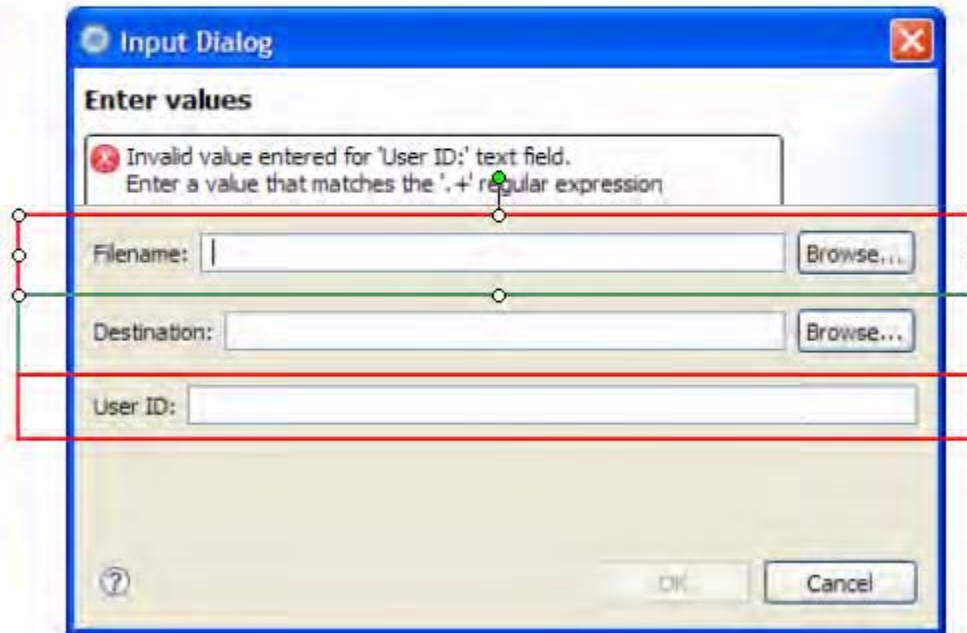
TPFTool command line utility: Usage

```
tpftool.bat -s Download
```

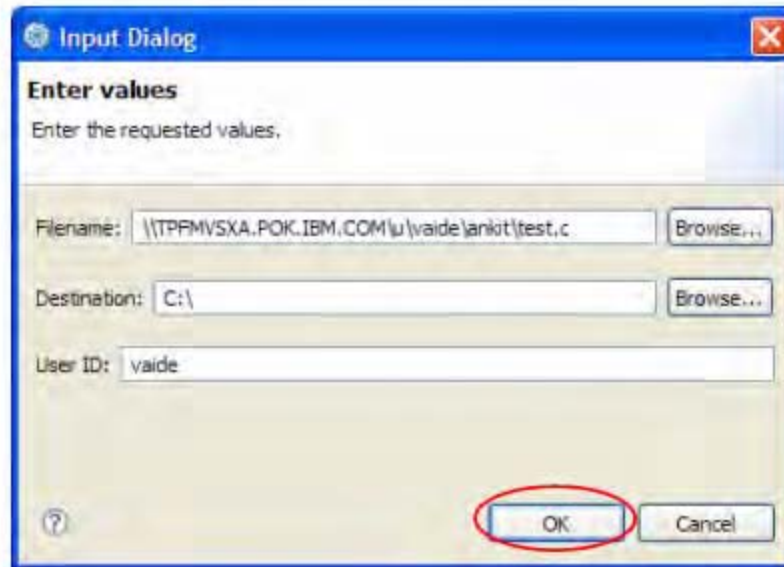
```
-i &PROMPT_BROWSE("Filename:", "remote", "files")
```

```
-d &PROMPT_BROWSE("Destination:", "local", "folders")
```

```
-u &PROMPT_TEXT("User ID:", "", ".+")
```



TPFTool command line utility: Usage



```
tpftool.bat -s Download  
-i \\TPFMVSXA.POK.IBM.COM\vaide\ankit\test.c  
-d C:\  
-u vaide
```

TPFTool command line utility

- **Problem**

- There is no way to interact with TPF Toolkit objects that are not selected.
- There is no way to query certain TPF Toolkit object properties
 - Last modified date for a file
 - Read-only attribute for a file

- **Example**

Download all files within the selected project from a remote system to the workstation that have been changed since yesterday.

This is not possible today!

TPF Toolkit API

Provides a set of Java utilities and interfaces that you can use to write plug-ins that interface with TPF Toolkit.

TPF Toolkit API

- **TPFUG Requirement**
 - V05006: Provide program to program interface
- **Allows TPFTool services to be run through Java**
 - Create Project
 - Create RSE connections
 - Copy between 2 local/remote locations
 - Run remote commands
 - etc.

TPF Toolkit API

- **Provides access to TPF Toolkit objects**
 - Get a list of selected projects
 - Work with filters within a project
 - Manipulate files or folders within a filter
 - Query file properties
 - Query target environment settings on projects and files
 - etc.

TPF Toolkit API : TPFCommonUtil

- S AddFilterString(ITPFToolkitFilter, ArrayList<String>, boolean, boolean)
- S AddFilterString(String, String, ArrayList<String>, boolean, boolean)
- S AddFilterString(String, String, String, ArrayList<String>, boolean, boolean)
- S AddTargetEnvToProject(ITPFToolkitProject, String, boolean)
- S AddTargetEnvToProject(String, String, boolean)
- S deleteBackLevelFeatures()
- S copyFolder(ITPFToolkitFolder, String, int, String)
- S copyFolder(String, String, int, String)
- S copyFile(ITPFToolkitFile, String, int, String)
- S copyFile(String, String, int, String)
- S createFile(String, ITPFToolkitFilter, boolean)
- S createFile(String, ITPFToolkitProject, String, boolean)
- S createFile(String, ITPFToolkitSubProject, String, boolean)
- S createFile(String, String, String, boolean)
- S createFile(String, String, String, String, boolean)
- S createFilterInProject(ITPFToolkitProject, String, String, boolean, boolean)
- S createFilterInSubProject(ITPFToolkitSubProject, String, String, boolean, boolean)
- S createFilter(String, String, String, boolean, boolean)
- S createFilter(String, String, String, String, boolean, boolean)
- S createFolder(String)
- S createFolder(String, ITPFToolkitFilter)
- S createFolder(String, ITPFToolkitSubProject, String)
- S createFolder(String, String, String)
- S createFolder(String, String, String, String)
- S createProject(String, String, String)
- S createRSE_zOSConnection(String, String)
- S createRSE_zOSConnection(String, String, int, String, String, int)
- S createRSE_zLinuxConnection(String, String)
- S createRSE_zLinuxConnection(String, String, int, String, String, int)
- S createRSE_TPFConnection(String, String)
- S internalCreateRSEConnection(String, String, int, String, String, int, String)
- S createSubProject(ITPFToolkitProject, String, String)
- S createSubProject(String, String, String)
- S deleteProject(ITPFToolkitProject)
- S deleteProject(String)
- S deleteSubProject(ITPFToolkitSubProject)

- S importActionFile(String, int, boolean)
- S importRemoteCTemplate(String, boolean)
- S importAllTargetEnv(String, boolean, boolean)
- S importTargetEnv(String, String, boolean, boolean)
- S submitJCL(String, String)
- S writeToRemoteConsole(String)
- S writeToRemoteConsole(String, boolean)
- S modifyAIRSEConnectionServerPath(String, String)
- S modifyAIRSEConnectionServerLauncherType(String, int, String, String, int)
- S modifyRSEConnectionServerLauncherType(String, int, String, String, int)
- S internalModifyRSEConnectionServerLauncherType(String, int, String, String, int, boolean)
- S modifyRSEConnectionName(String, String)
- S modifyRSEConnectionNameForHost(String, String)
- S openFileInEditor(ITPFToolkitFile)
- S openFileInEditor(String)
- S queryFilterStringsForProject(ITPFToolkitProject, boolean)
- S queryFilterStringsForProject(String, boolean)
- S queryFilterStringForSubProject(ITPFToolkitSubProject)
- S queryFilterStringForSubProject(String, String)
- S listTargetEnvironments()
- S listTargetEnvironments(int)
- S listOptionSets(String, int)
- S listOptionSets(int, int)
- S listOptionSets(String, int, int)
- S internalListOptionSets(String, int, int)
- S queryTPFToolkitVersion()
- S queryVariable(String)
- S queryProjectVariable(String, ITPFToolkitProject)
- S queryProjectVariable(String, String)
- S querySubProjectVariable(String, ITPFToolkitSubProject)
- S querySubProjectVariable(String, String, String)
- S queryFileVariable(String, ITPFToolkitFile)
- S queryFileVariable(String, String, String, String, String)
- S queryTargetEnvVariable(String, String)
- S internalQueryVariable(String, String, String, String, String, String)
- S refreshAllProjects()

TPF Toolkit API : ResourceUtil

- S getSelectedTPFToolkitResources()
- S getTPFToolkitProject(String)
- S getTPFToolkitSubProject(String, String)
- S getTPFToolkitFilter(String, String, String)
- S getTPFToolkitFolder(String, String, String, String, boolean)
- S getTPFToolkitFolder(String, String, String, String)
- S getTPFToolkitFile(String, String, String, String, boolean)
- S getTPFToolkitFile(String, String, String, String)

TPF Toolkit API : Example

For a project called “Demo”, print the current target environment name to the remote console.

```
ITPFToolkitProject project = ResourceUtil.getTPFToolkitProject("Demo");  
String targetEnvName = project.getCurrentTargetEnvironment();  
TPFCommonUtil.writeToRemoteConsole(targetEnvName, false);
```


Demo

- **2 popup menu actions**
 - Check out
 - Prompt the user for a project name and check out location
 - Load files from a repository to the checkout location
 - Create a TPF project pointing to the check out location
 - Check in
 - Queries if the file has changed since check out.
 - Check in changed file into the repository.
 - Deletes the file from the project.

Additional information

- **Creating a plugin**
 - Developing in the IDE > PDE Guide > Getting Started
- **Contributing to TPF Toolkit using Menu Manager**
 - Installing, migrating, and configuring > Configuring > Creating custom pop-up menus > Menu Manager extension point
- **TPF Toolkit API help**
 - Reference > APIs > TPF Toolkit API

Questions

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