



TPF Toolkit

# TPF Users Group - Fall 2009 Extending TPF Toolkit

Ankit Pasricha  
TPF Toolkit Task Force

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# Agenda

- **Overview**
- **Eclipse Concepts**
  - Plugin
  - Extension Points
- **Demo**
- **Questions**

# Overview

- **Why extend TPF Toolkit?**
  - Add functionality specific to customer environment
    - For example, add actions to check in and check out code to/from the SCM
  - Customize existing TPF Toolkit functionality
    - For example, add a toolbar action to create a new TPF Toolkit project based on customer specific data

# Overview

- **How do I extend TPF Toolkit?**
  - Custom actions through Menu Manager
    - Local or remote actions
    - Substitution Variables
    - Interactive Substitution Variables
    - TPFTool command line interface
  - External Tools
  - Java based Eclipse plugins

# Overview

- **Advantages of a plugin**
  - Extend other areas of the product that are not extensible through the standard mechanisms
    - Filter and folder popup menu actions
    - Toolbar buttons
      - Main toolbar
      - View specific toolbar
- Java based
  - Create user interfaces like dialogs, wizards etc.
  - Use the Eclipse/Java API to perform complex operations
  - Use the RSE API to communicate with remote systems

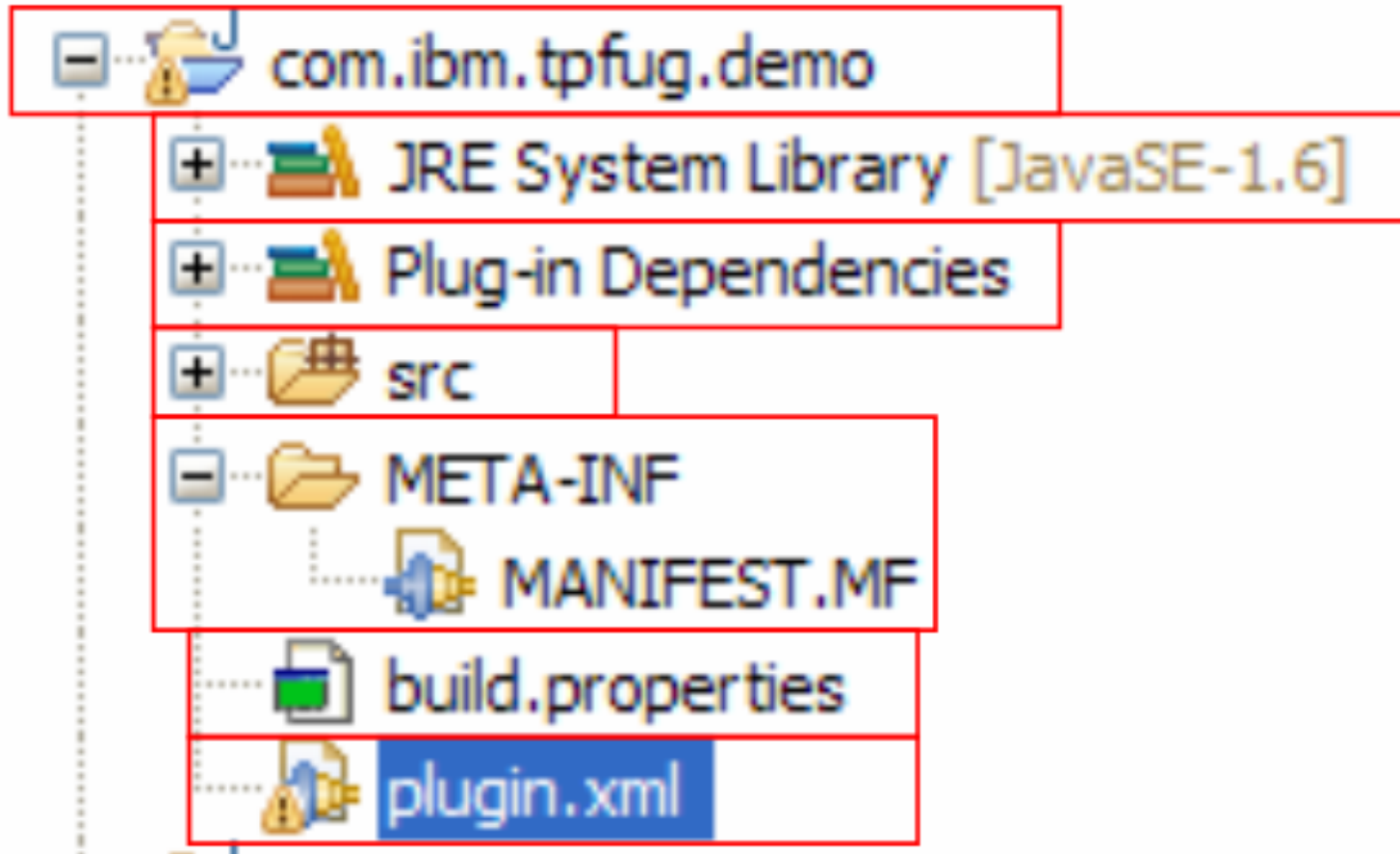
# Eclipse Concepts

- **TPF Toolkit is based on the Eclipse platform**
- **Eclipse**
  - Open source IDE platform
  - Java based
  - Extensible
  - Forms the basis of a number of IBM and non-IBM products
    - Consistent look and feel across products

# Eclipse Concepts: Plugin

- **What is a plugin?**
  - Code written in Java to extend the functionality of eclipse based products such as TPF Toolkit
  - Plug-in to existing **extension points**
  - Created using TPF Toolkit as a development environment
  - Administrators can deploy plug-ins to users in a custom update site

# Eclipse Concepts: Plugin



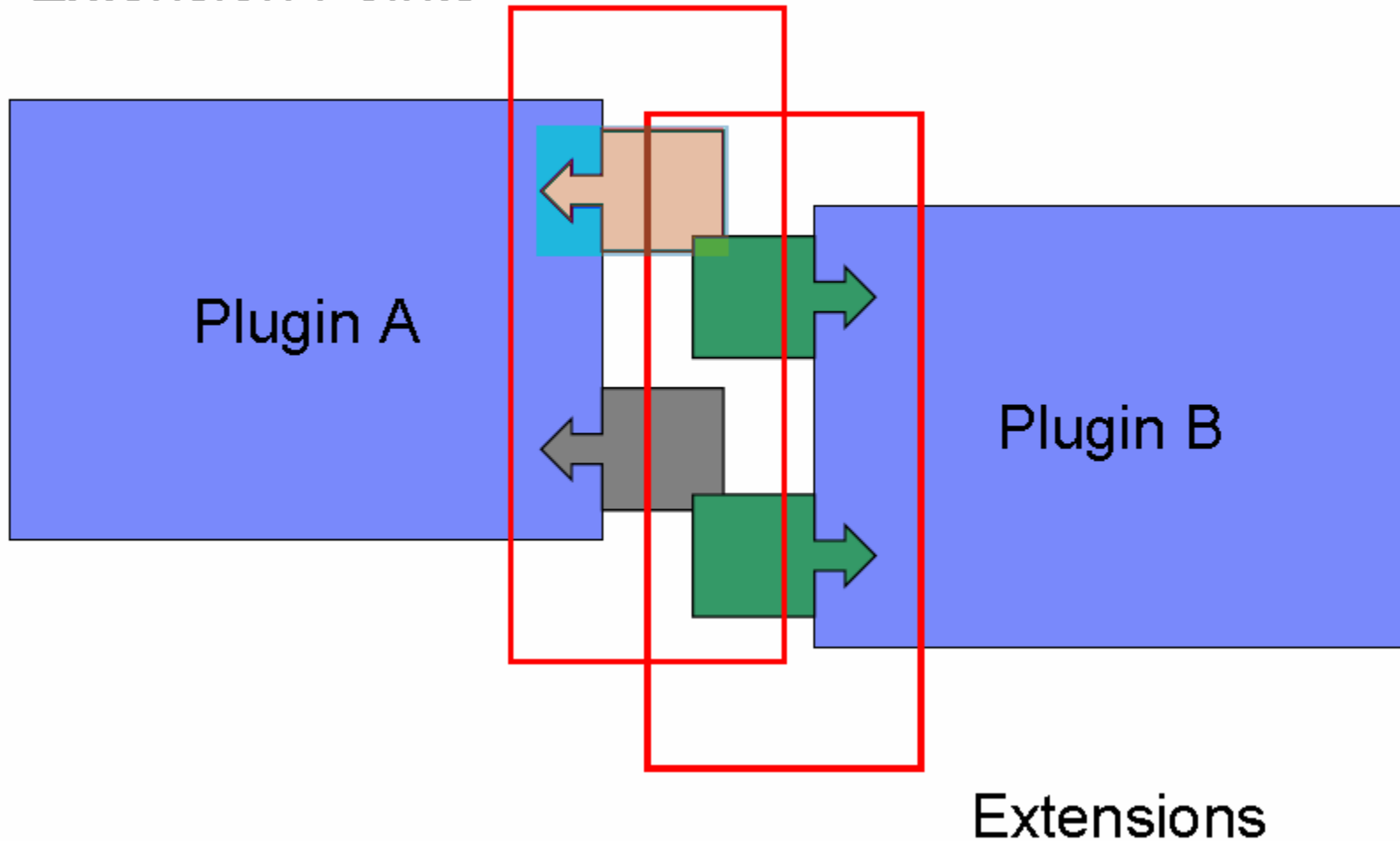


## Eclipse Concepts: Extension Points

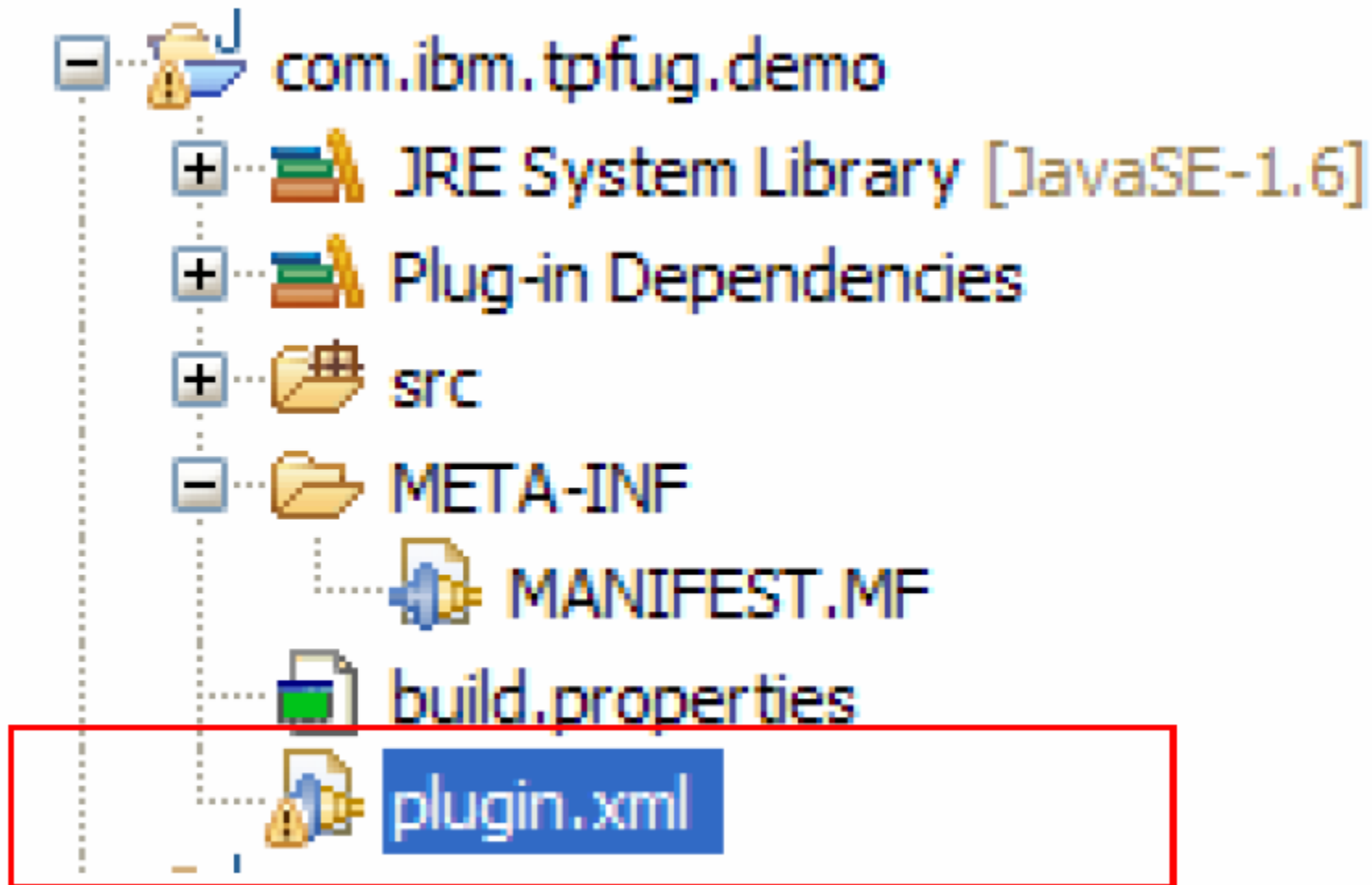
- **Allows extension of functionality provided by a plugin**
- **Example**
  - Eclipse Workbench plugin provides the `org.eclipse.ui.popupMenus` **extension point** to create popup menus
  - A customer plugin can write an **extension** that uses this extension point to add a popup menu to folders in TPF Toolkit

# Eclipse Concepts: Extension Points

## Extension Points



## Eclipse Concepts: Extension Points



# Eclipse Concepts: Extension Points

**Overview**

**General Information**  
This section describes general information about this plug-in.

ID:

Version:

Name:

Provider:

Platform Filter:

Activator:

Activate this plug-in when one of its classes is loaded

This plug-in is a singleton

**Execution Environments**  
Specify the minimum execution environments required to run this plug-in.

JavaSE-1.6

[Configure JRE associations...](#)

[Update the classpath settings](#)

**Plug-in Content**  
The content of the plug-in is made up of two sections:

- [Dependencies](#): lists all the plug-ins required on this plug-in's classpath to compile and run.
- [Runtime](#): lists the libraries that make up this plug-in's runtime.

**Extension / Extension Point Content**  
This plug-in may define extensions and extension points:

- [Extensions](#): declares contributions this plug-in makes to the platform.
- [Extension Points](#): declares new function points this plug-in adds to the platform.

**Testing**  
Test this plug-in by launching a separate Eclipse application:

- [Launch an Eclipse application](#)
- [Launch an Eclipse application in Debug mode](#)

**Exporting**  
To package and export the plug-in:

1. Organize the plug-in using the [Organize Manifests Wizard](#)
2. Externalize the strings within the plug-in using the [Externalize Strings Wizard](#)
3. Specify what needs to be packaged in the deployable plug-in on the [Build Configuration](#) page
4. Export the plug-in in a format suitable for deployment using the [Export Wizard](#)

Overview | Dependencies | Runtime | **Extensions** | Extension Points | build | MANIFEST.MF | plugin.xml | build.properties

## Demo

- **Create a toolbar button that will create a TPF Toolkit project based on given information**
  - Defect number: this will be the project name
  - Target Environment

# Questions

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