

# Powerful UI Framework = Eclipse RCP a sub-set of Eclipse Platform

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# Select a Framework for your App

- Focus on your domain rather than infrastructure -more logic programming
- Help to reduce time of development, reuse constructions and enhance
- Improve the user experience
- Support componentization for adaptation to changing requirements
- Have a good level of control and responsibility when writing an app
- Support the framework an active and strong community
- Support the framework a leader in the informatics industrial field

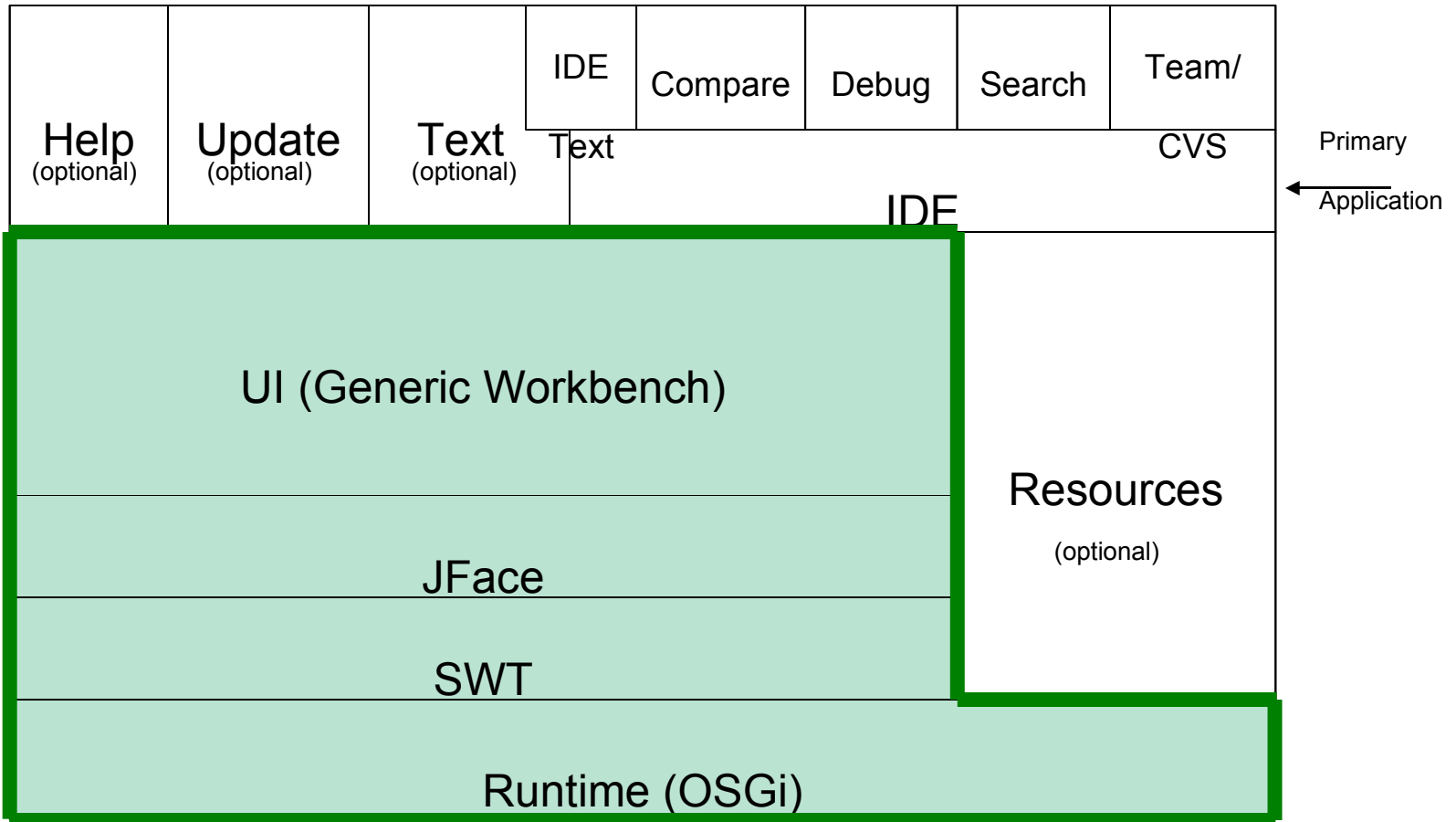
# Eclipse Platform Overview -1

- Provides building blocks(plug-ins) and a foundation for creating other blocks or tools.
- Plug-ins are independent subsystems that contribute functionality to your application.
- The plug-ins interact together
- Everything in Eclipse is a plug-in (menu, windows, libraries)
- The plug-in is the basic unit in the platform

# Eclipse Platform Overview -2

- The platform provides an inherently extensible application framework to your application, allowing other developers to build in your work.
- Easy deployment and server-centric management  
-> lower TCO
- The IDE is integrated with the platform and can be extensible (C, PHP, Perl, Cobol, Fortran, y R)
- Is Open Source, free and Java Based

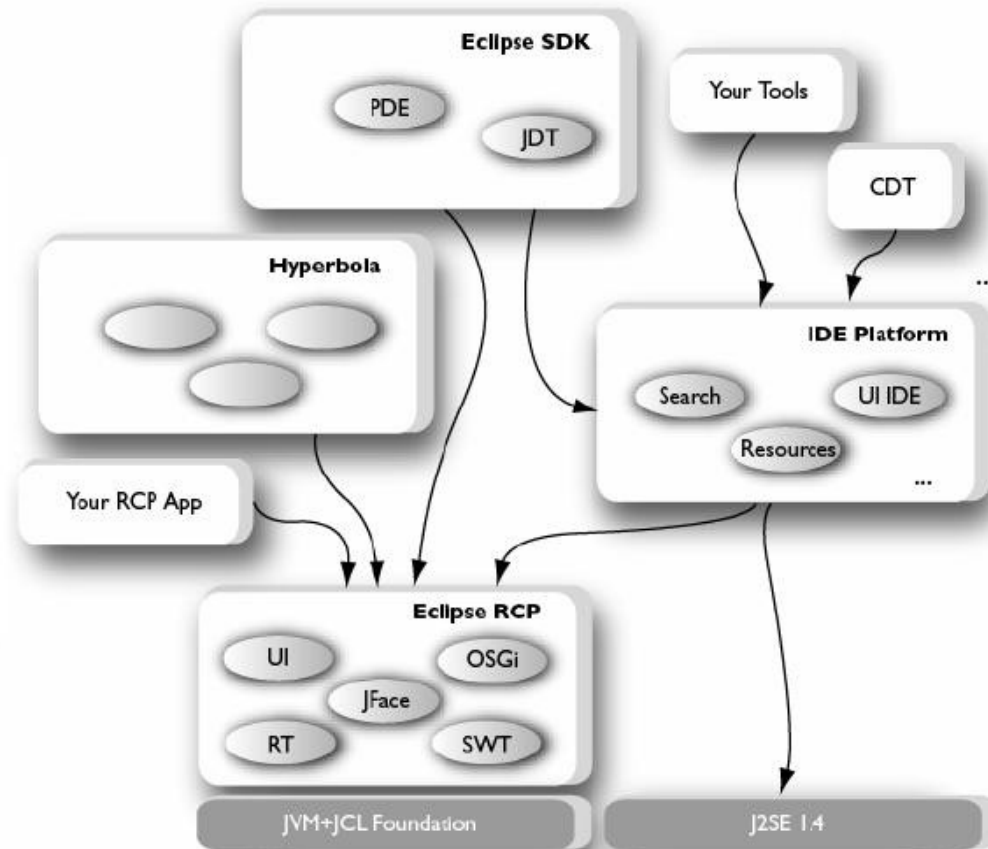
# Eclipse Platform Architecture



# Eclipse RCP Overview

- A subset of the full platform
- For building client applications with Rich functionality
- There are other subsets (EMF, GEF, ..)
- Provide a module reusability(plug-ins) not just class reusability
- Run in multiple platforms (Windows, Linux,..)
- Common interface for apps to reduces user training costs
- The Rich functionality provide are :
  - Intro Support - Provides the “welcome experience” for your product
  - Dialogs and Wizards
  - Cheat sheets - Guides the user through a series of complex tasks to achieve a goal
  - Eclipse Help - Help UI on top of an extensible help content model
  - UI - Framework for building forms-based views and editors

# Community of Plug-ins



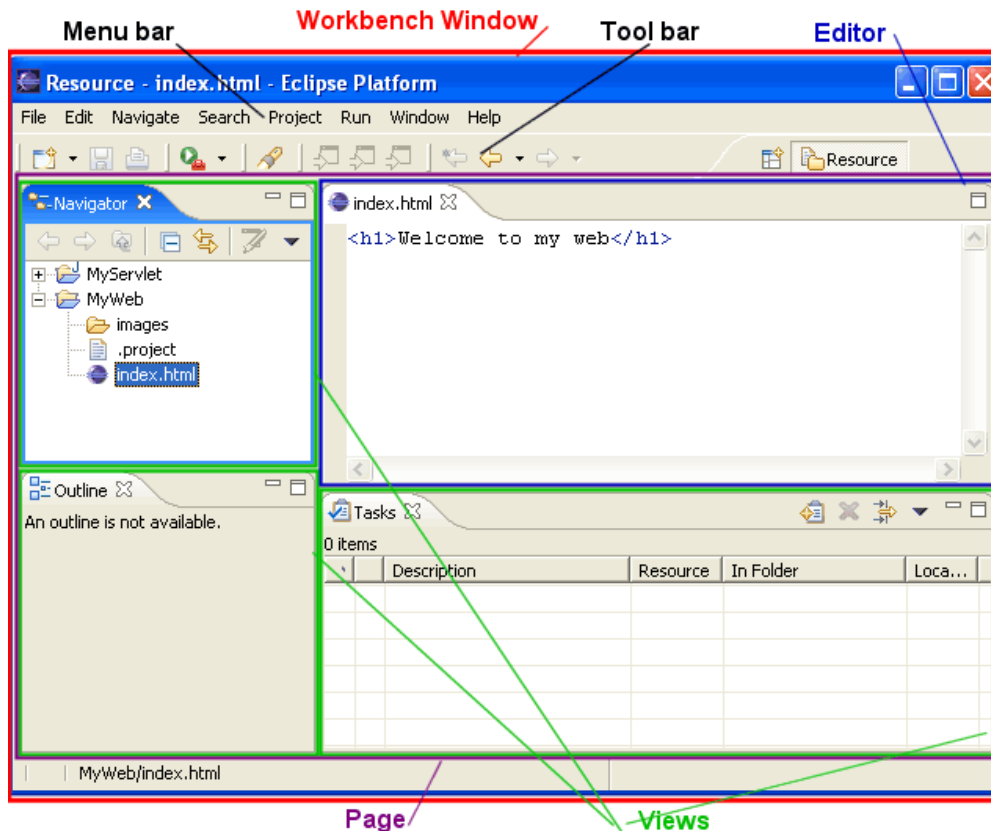
# Eclipse RCP UI – The Workbench

⇒ Defines reusable and extensible UI metaphors

**Provides:**

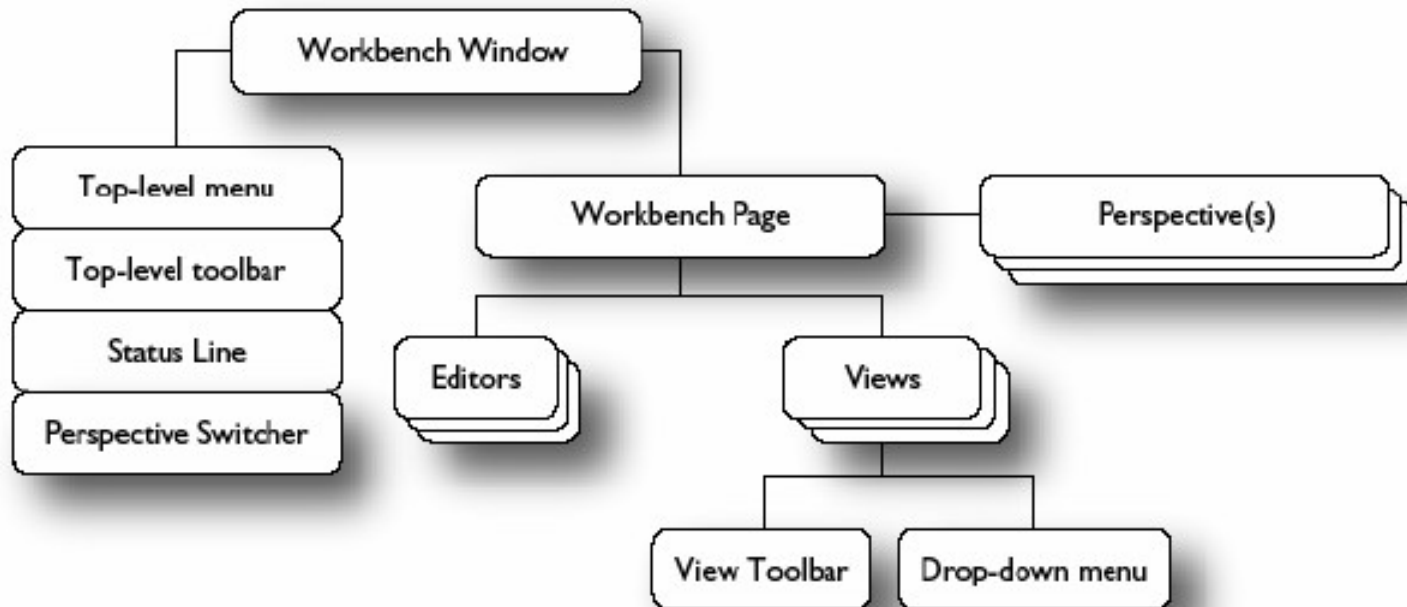
- Views
- Editors
- Action sets
- Perspectives
- Wizards
- Preference pages
- Commands and Key Bindings
- Undo/Redo support
- Presentations and Themes
- ...

Is **Dynamic-aware**: responds to registry changes and adds/removes views, action sets, etc. accordingly



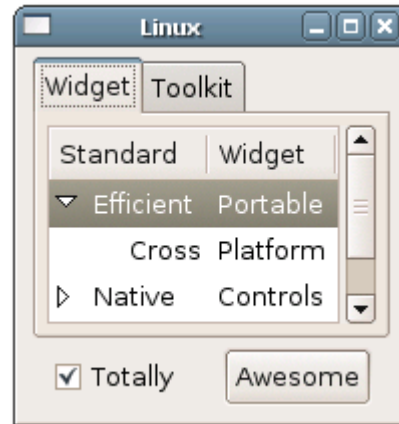


# Eclipse RCP Model



# SWT, for Platform Independent

⇒ To enable platform-independent native widget toolkit

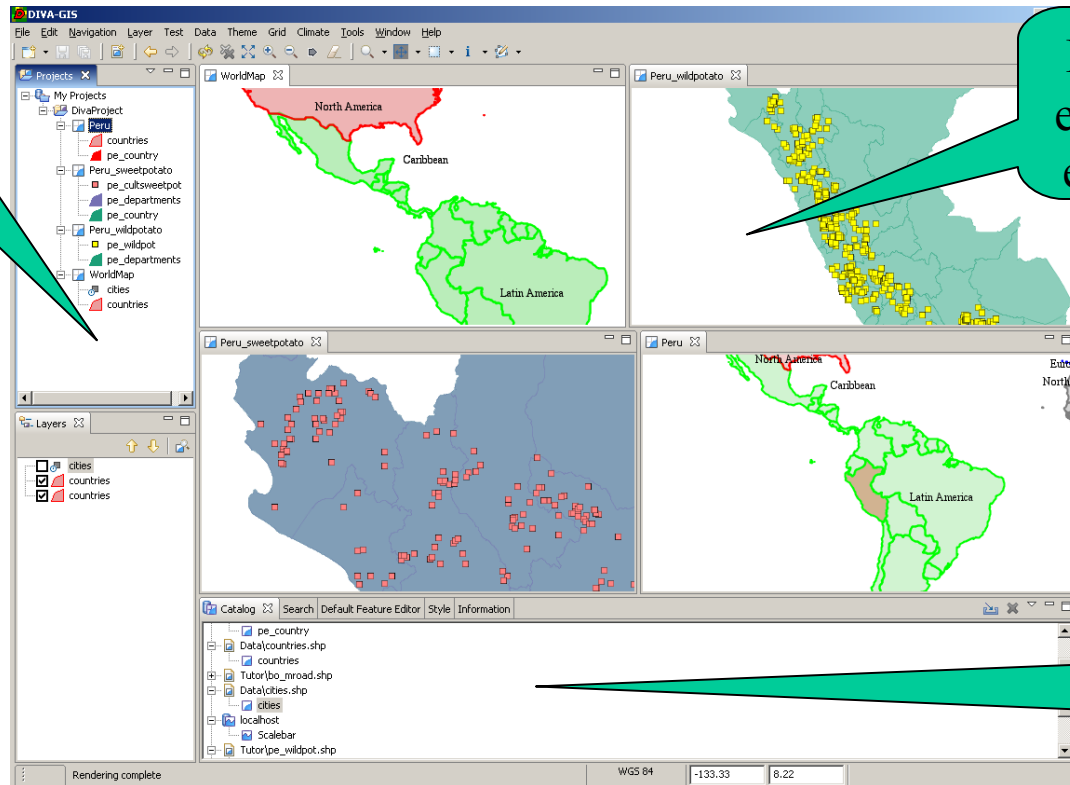


# Web or Local Application ??

	Web App	Local App with <b>Eclipse Platform</b>
Deployment and maintenance facilities to reduce cost	Centralized App in a web server	Centralized components with on-line and automatic update to local client
Provide Rich UI features	Hard and long time to implement	Rich with Eclipse RCP, set of components
High-speed interactions users	Is slow, depend of band width and use request and response model	Fast, Is a local execution
Domains, applications and user became more sophisticated or complex	Hard and slow change to support requirements	Rich UI and plug-in model reuse or extend
Take advantage of the local hardware	Less or nothing	All local resources
??		
??		

# DIVA-GIS and Eclipse RCP, part 1

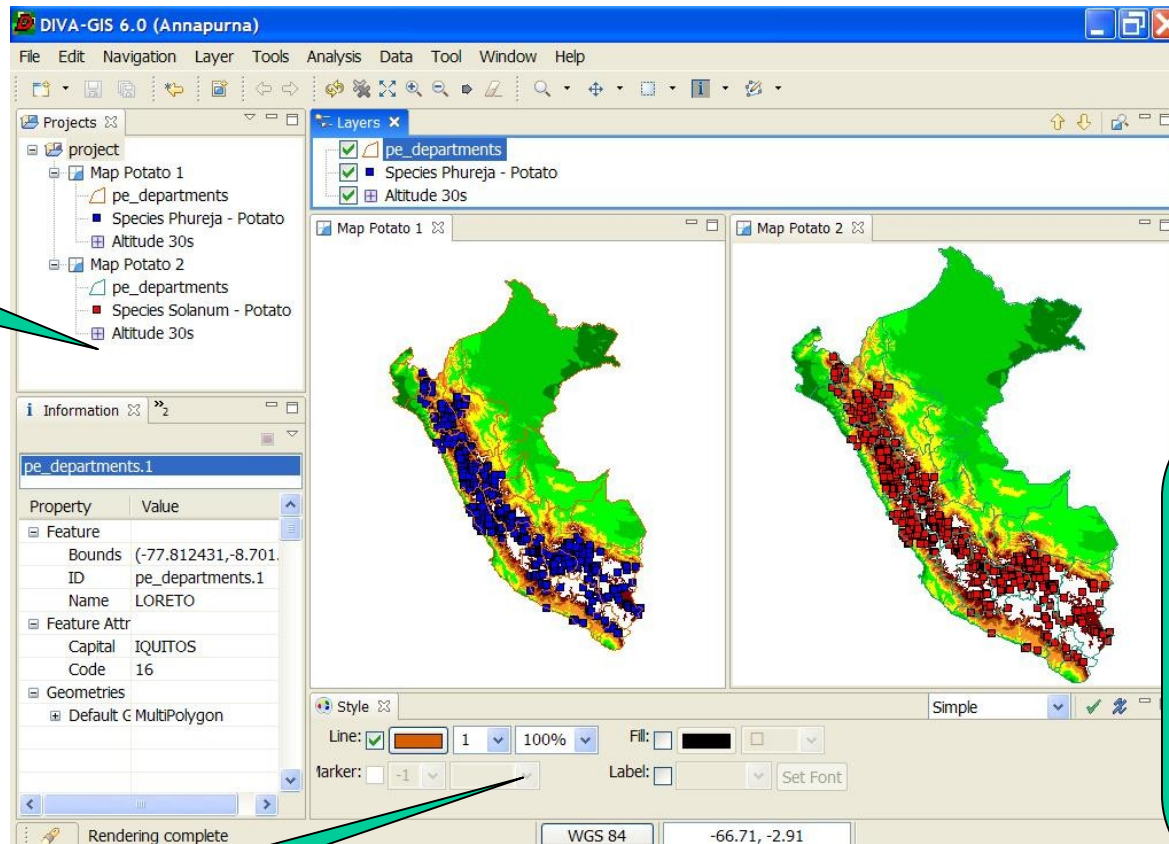
A view listing maps



Different editors for each map

A view showing catalog maps

# DIVA-GIS and Eclipse RCP, part 2

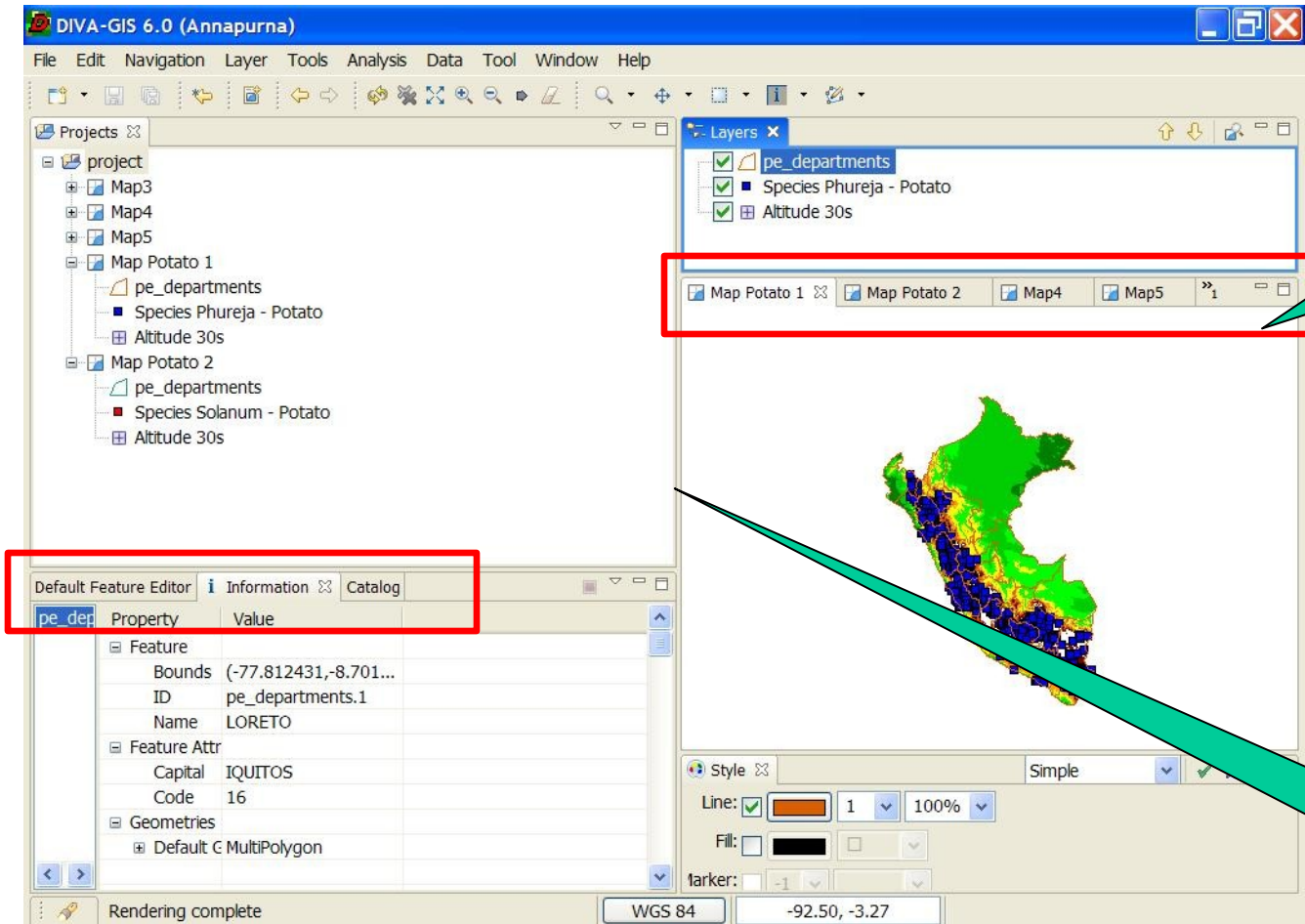


A view type tree

The views and editors can be reorganized (moved in other part of the window)

A view type table with controls

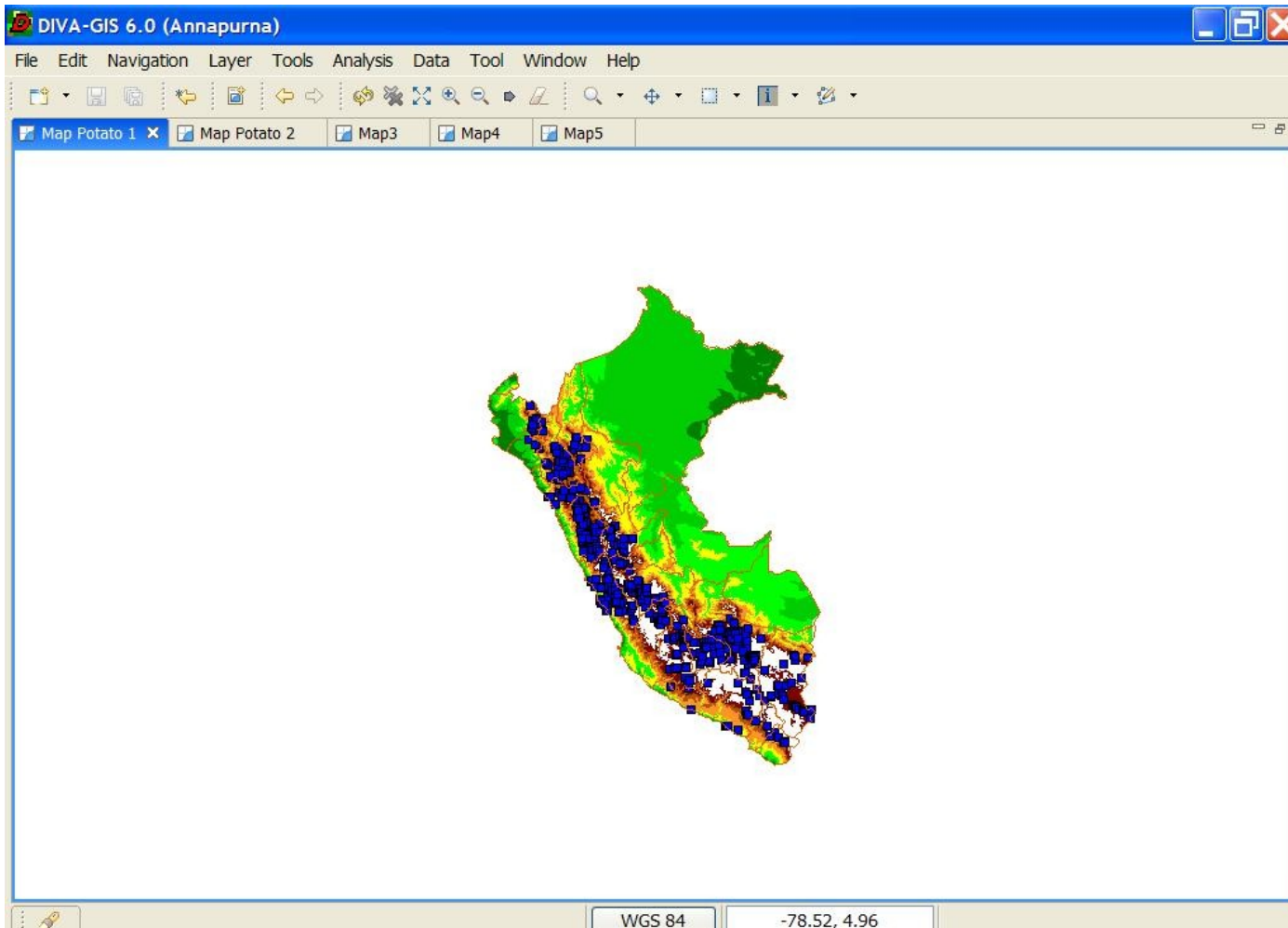
# DIVA-GIS and Eclipse RCP, part 3



The views and editors can be organized in tabs

The views and editors borders can be resized the height and width

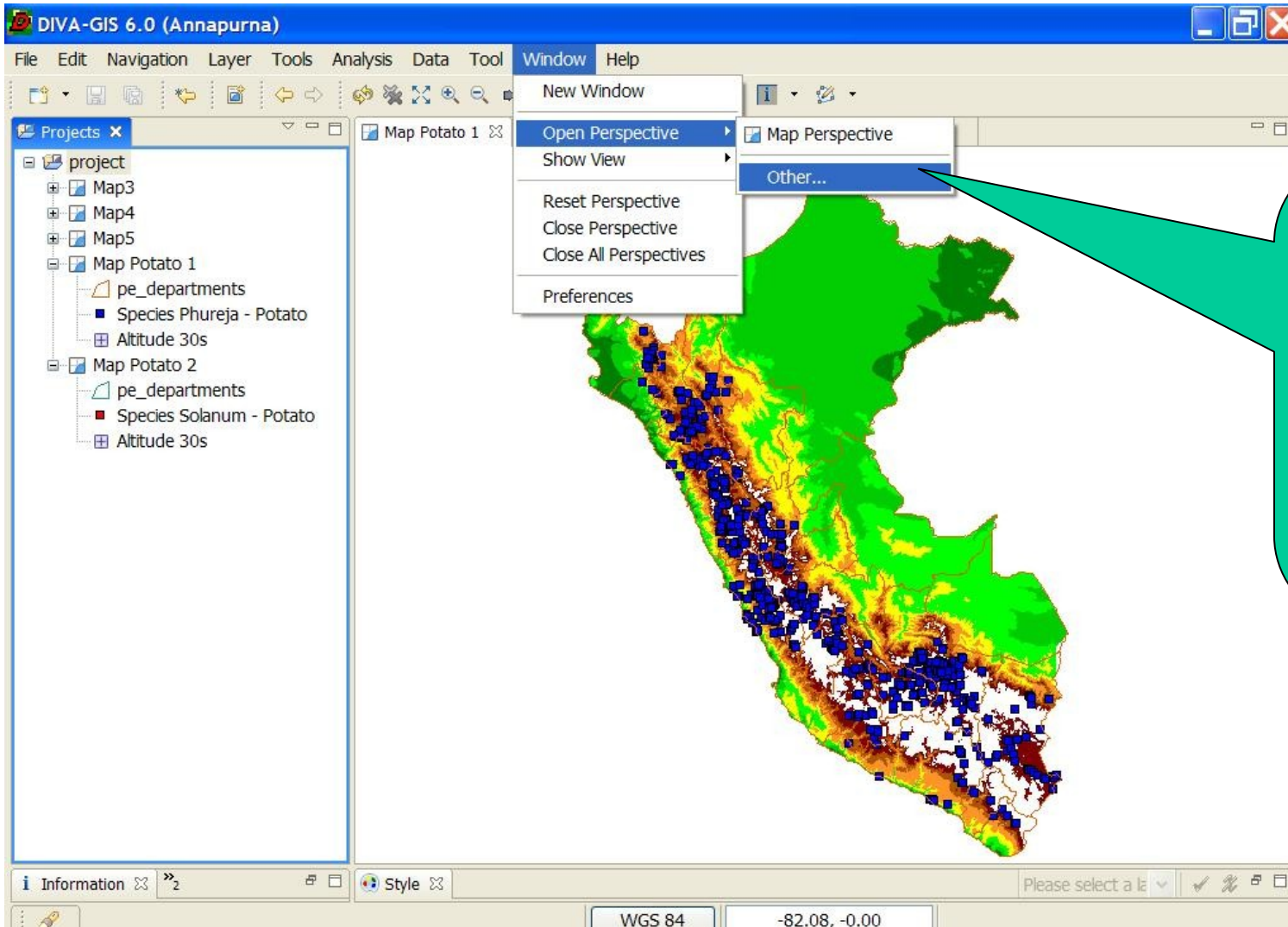
# DIVA-GIS and Eclipse RCP, part 4



One view or editor can be maximized and the others minimized



# DIVA-GIS and Eclipse RCP, part 5



Different views and editors can be grouped in perspectives, normally this is used to access the different modules of a system





# ICIS and Eclipse RCP, Prototype 2

The screenshot displays the ICIS 7.0 application window. The title bar reads "ICIS 7.0". The menu bar includes "File", "Layer", "Analysis", "Data", "Tool", "Window", and "Help". The main interface is divided into several panes:

- Left Pane (SetGen Lists):** A tree view showing a hierarchy of lists. The selected list is "U03DSF3". Other visible lists include "CHECKS", "INGER NOMINATIO", "INGER NURSERY", "SFFD HEALTH UNI", and various "U02WSF" and "U03DSF" entries.
- Top Pane (List 1):** Shows the selected list "IS2004-003 (Edwin L. Javier-BOUNTHONG BOUAHOM, LAOS)". It includes fields for "No. of tagged entries" (2) and "No. of entries" (0). Below this is a table of entries:

Tag	Designation	Cross	Entry Code	Source	GID	Entry ID
	NOK	NOK	IS2004-003		1822355	1
x	MAKFAY	MAK FAY	IS2004-003		1822356	2
	MED GNAY	MED GNAY	IS2004-003		1822357	3
x	PHAE SAVAN	PHAE SAVAN	IS2004-003		1822358	4
	LABOUN	LABOUN	IS2004-003		1822359	5
	MAK HEEN SOUNG	MAK HEEN SOUNG	IS2004-003		1822360	6

- Bottom Pane (Information):** Shows details for the selected list "U03DSF3". It includes fields for "Name" (U03DSF3), "Type" (PN), "Date" (2003- 7-18), and "Levels for Cro" (1). The "Title" is "Upland 2003 Dry season F2,F3 Nursery". It also shows "No. of tagged entries" (0) and "No. of entries" (125). There is a checkbox for "Entry Code Naming Convention" which is currently unchecked.
- Bottom Table:** A table showing a list of entries for the selected list:

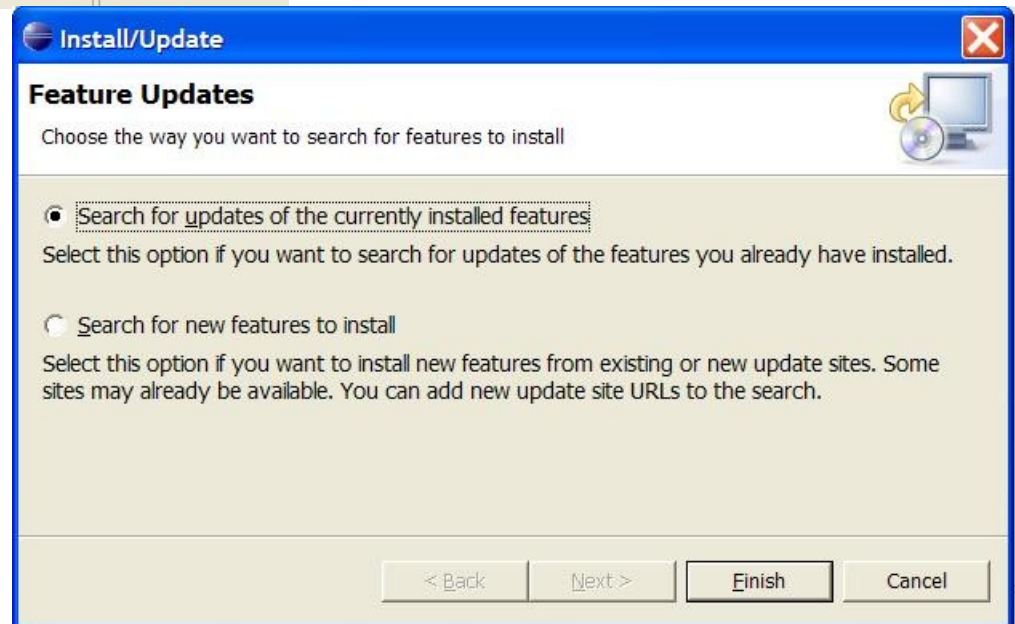
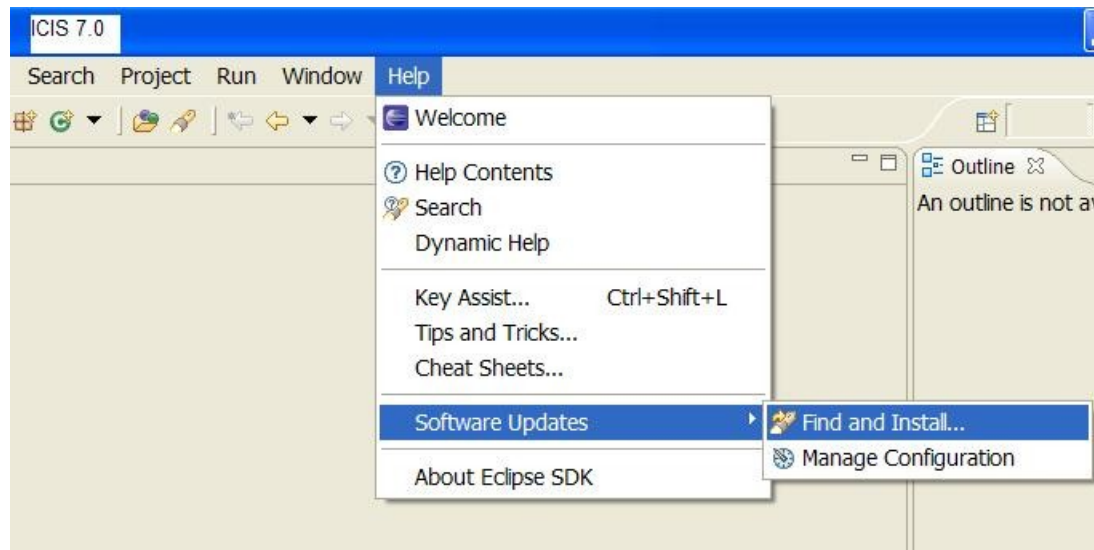
Tag	Designation	Cross	Entry Code	Source	GID	Entry ID
	IR 78913-B-B	B 3632 F-TB-1/B 6144 F-I		U02WSF2-	-6593	1
	IR 78914-B-B	B 3632 F-TB-1/IR 47701-6		U02WSF2-	-6594	2
	IR 78915-B-B	B 3632 F-TB-1/IR 55435-0		U02WSF2-	-6595	3
	IR 78916-B-B	B 3632 F-TB-1/IR 62752-0		U02WSF2-	-6596	4
	IR 78917-B-B	B 6136-3-TB-0-1-5/B 3632		U02WSF2-	-6597	5
	IR 78918-B-B	B 6136-3-TB-0-1-5/B 6144		U02WSF2-	-6598	6

# ICIS and Eclipse RCP, Prototype 3

The screenshot displays the ICIS 7.0 application window. The title bar reads "ICIS 7.0". The menu bar includes "File", "Edit", "Navigation", "Layer", "Tools", "Analysis", "Data", "Tool", "Window", and "Help". The toolbar contains various icons for file operations and navigation. The main workspace shows a table with the following columns: Tag, Designation, Cross, Entry Code, Source, GID, and Entry ID. The table contains 18 rows of data. The status bar at the bottom shows "WGS 84" and coordinates "-78.52, 4.96".

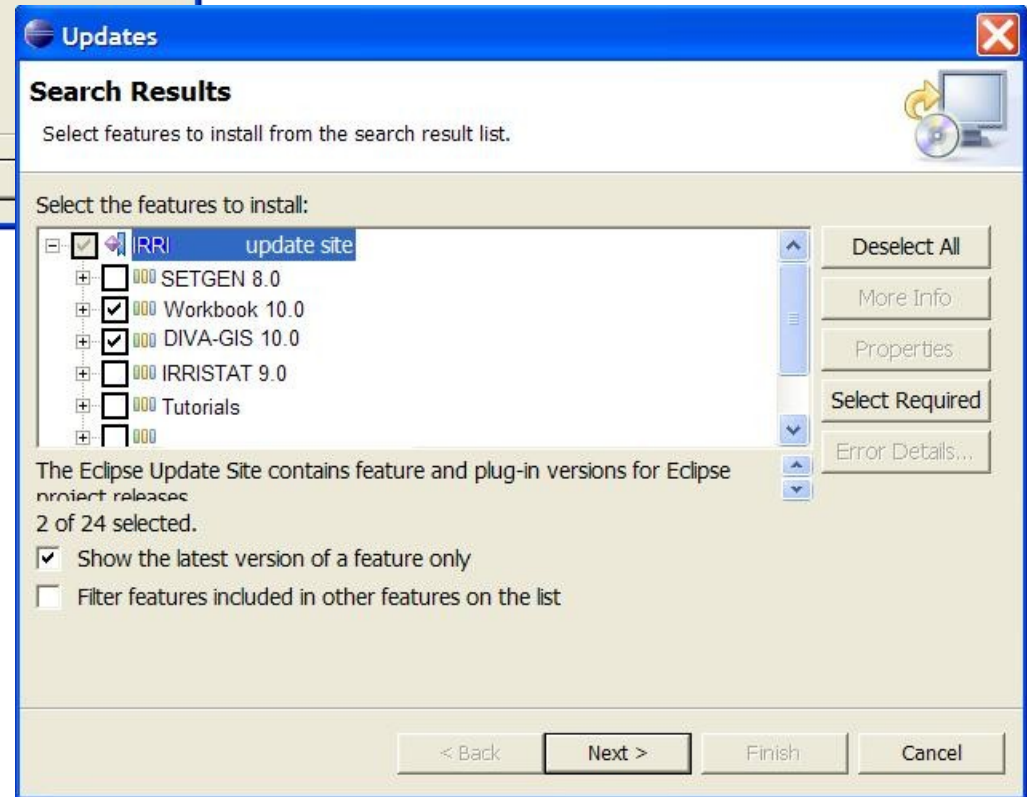
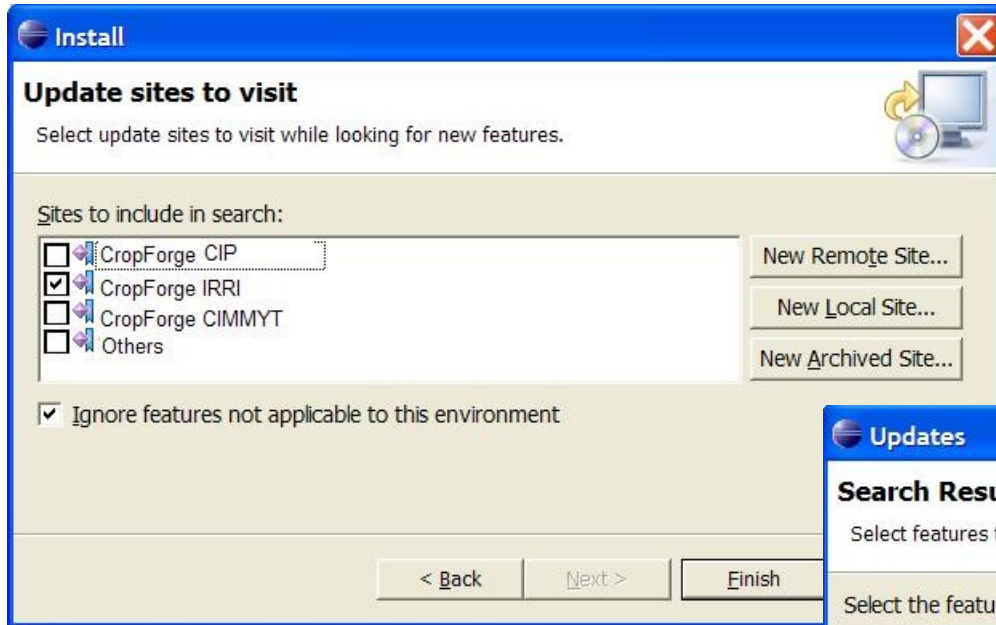
Tag	Designation	Cross	Entry Code	Source	GID	Entry ID
	IR 78913-B-B	B 3632 F-TB-1/B 6144 F-I		U02WSF2-	-6593	1
	IR 78914-B-B	B 3632 F-TB-1/IR 47701-6		U02WSF2-	-6594	2
	IR 78915-B-B	B 3632 F-TB-1/IR 55435-0		U02WSF2-	-6595	3
	IR 78916-B-B	B 3632 F-TB-1/IR 62752-0		U02WSF2-	-6596	4
	IR 78917-B-B	B 6136-3-TB-0-1-5/B 3632		U02WSF2-	-6597	5
	IR 78918-B-B	B 6136-3-TB-0-1-5/B 6144		U02WSF2-	-6598	6
	IR 78919-B-B	B 6136-3-TB-0-1-5/IR 4770		U02WSF2-	-6599	7
	IR 78920-B-B	B 6136-3-TB-0-1-5/IR 554		U02WSF2-	-6600	8
	IR 78921-B-B	B 6136-3-TB-0-1-5/IR 600		U02WSF2-	-6601	9
	IR 78922-B-B	B 6136-3-TB-0-1-5/IR 627		U02WSF2-	-6602	10
	IR 78923-B-B	B 6136-3-TB-0-1-5/IR 659		U02WSF2-	-6603	11
	IR 78924-B-B	B 6136-3-TB-0-1-5/IRGA 3		U02WSF2-	-6604	12
	IR 78925-B-B	B 6144 F-MR-6/B 3632 F-		U02WSF2-	-6605	13
	IR 78926-B-B	B 6144 F-MR-6/B 6136-3-		U02WSF2-	-6606	14
	IR 78927-B-B	B 6144 F-MR-6/IR 47701-		U02WSF2-	-6607	15
	IR 78928-B-B	B 6144 F-MR-6/IR 55435-		U02WSF2-	-6608	16
	IR 78929-B-B	B 6144 F-MR-6/IR 60080-		U02WSF2-	-6609	17
	IR 78930-B-B	B 6144 F-MR-6/IR 62752-		U02WSF2-	-6610	18

# ICIS and Eclipse Platform, Prototype 4-1





# ICIS and Eclipse Platform, Prototype 4-2



# Links

- Eclipse RCP home page, app gallery, and newsgroup
  - <http://eclipse.org/rcp>
  - <http://eclipse.org/community/rcp.html>
  - <news://news.eclipse.org/eclipse.platform.rcp>
- Eclipse Series books
  - “Eclipse Rich Client Platform” by Jeff McAffer, Jean-Michel Lemieux
  - “The Java Developer's Guide to Eclipse” by Jim d’Anjou et al
  - “SWT: The Standard Widget Toolkit, Vol 1” by Steve Northover, Mike Wilson
  - “Official Eclipse 3.0 FAQs” by John Arthorne and Chris Laffra
- Other recent Eclipse Projects and Proposals (<http://eclipse.org/proposals/>)
  - BIRT (Reporting and Charting)
  - Data Tools
  - JavaServer Faces Tooling
  - SOA Tools
  - Supplemental Widgets for SWT