



Rich Client Platform Overview

An introduction to creating applications using the Eclipse Rich Client Platform (RCP).



What is RCP?

- RCP stands for Rich Client Platform
 - *A Platform* for building *Client* applications with *Rich* functionality.
- Open Source / Free
- Available since Eclipse 2.1 (2003)



What do you get with RCP?

- Runtime Components
 - OSGI – Open System Gateway Initiative
 - Applications / Bundles
 - Extensions / Extension Points
 - Contract for the Extensions



What do you get with RCP?

- User Interface Components
 - SWT – Standard Widget Toolkit
 - JFace – Framework for UI Abstractions
 - Workbench UI
 - Views / Editors / Actions / Perspectives...
 - Text / Forms / Graphical Editing Framework (GEF)
 - GEF allows developers to take an existing application model and quickly create a rich graphical editor.



What do you get with RCP?

- User Experience / Assistance
 - Intro Plugin
 - “Welcome to the product” Experience
 - Cheat Sheets
 - “Show me how to do it” Experience
 - Eclipse Help
 - XML / XHTML Based



What do you get with RCP?

- Deployment and Update
 - Deployment
 - Supports Java Network Launch Protocol (JNLP) and Java Web Start
 - Programmatic Update
 - Update UI
 - Feature Update

Why use RCP?

- Native User Experience





Why use RCP?

- Smart Applications
 - Tight Desktop Integration
 - Drag and Drop
 - System Tray
 - Easy Deployment (Update Site Mechanism)
 - Runs on Multiple Platforms / Devices



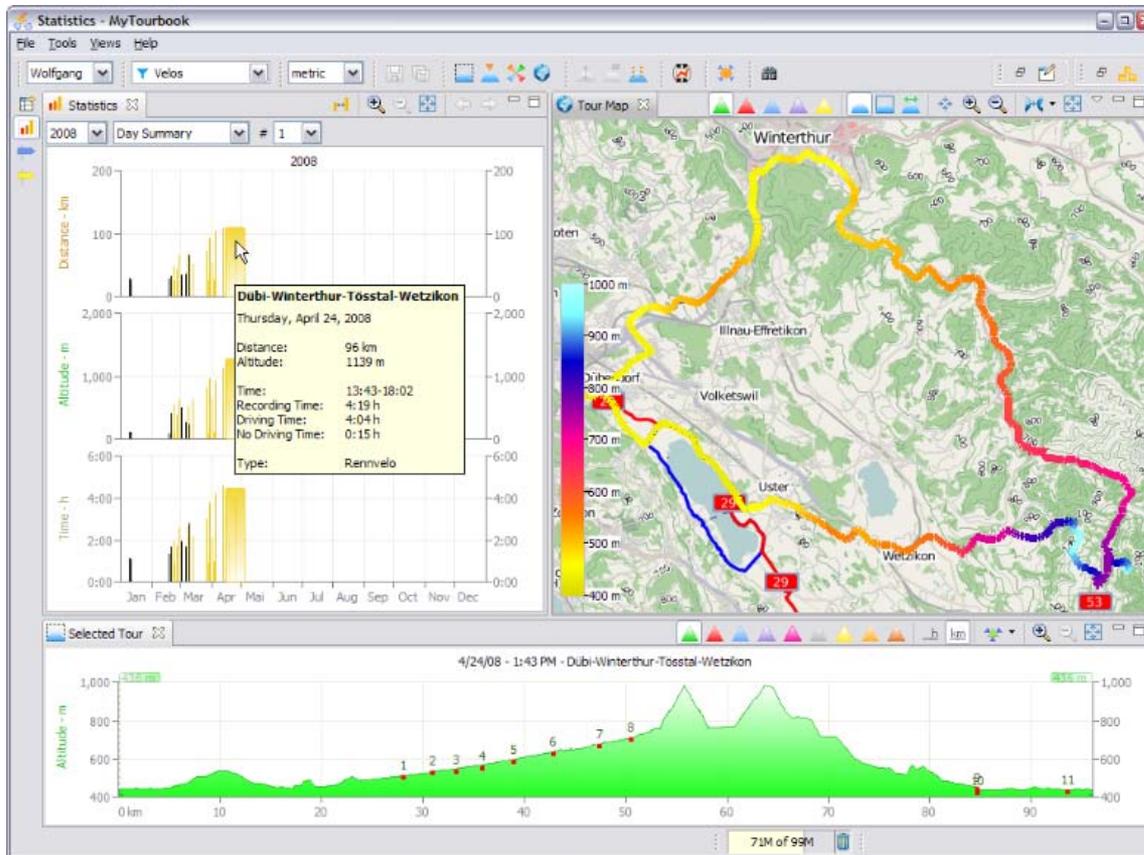
Why Use RCP?

- Reusability / Portability
 - Everything is a plugin
 - Component libraries
 - Don't need to start from scratch
 - It's Java!

What can you do with RCP?



- My Tourbook



What can you do with RCP?



- Zhongwen Development Tool (ZDT)

zdt

File Edit Window Help

Annotations View Flash Card View Category View frequent 1-100 ch17 chinesePod

Card: 20 Left: 21

筷子
kuàizi

- suitable
- dining-hall
- to continue
- chopsticks

Hide Pinyin Next

Characters	Pinyin	Definition
会议	huìyì	meeting; conference
计划	jìhuà	plan; project; program, to...
继续	jìxù	to continue; to proceed w...
价格	jiàgé	price
建议	jiànyì	to propose; to suggest, to...
交通	jiāotōng	(automobile) traffic; com...
经济	jīngjì	economy; economic
筷子	kuàizi	chopsticks
老婆	lǎopó	(informal) wife
奶油	nǎiyóu	cream
气候	qìhòu	climate; atmosphere; situ...
商务	shāngwù	commercial affairs; com...
生活	shēnghuó	life; activity
未来	wèilái	future; tomorrow; approa...

Web Browser View Dictionary View

Search: eclipse Contains Search

Characters	Pinyin	Definition
全蚀	quánsǐ	total eclipse
日蚀	rìshí	eclipse
蚀	shí	eat up slowly; eclipse
月蚀	yuèshí	lunar eclipse; eclipse of the moon

月蚀 (月蝕)
yuèshí
lunar eclipse; eclipse of the moon

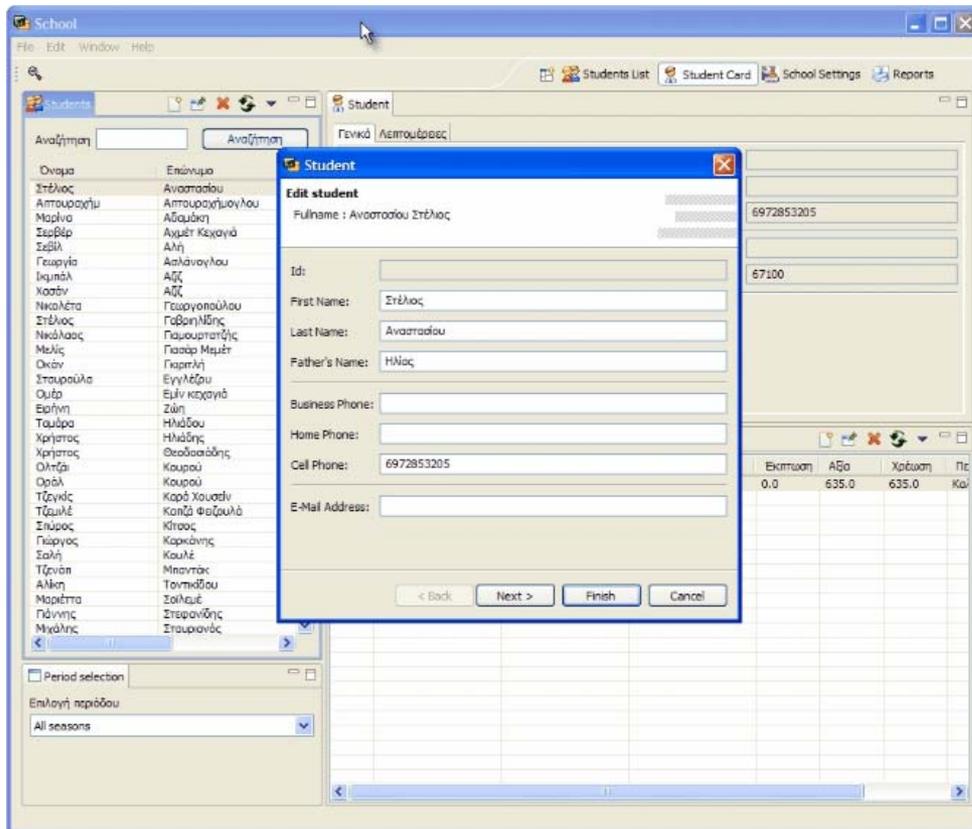
Page 1 of 1: First 1 Last

Found 4 results for 'eclipse' Simplified



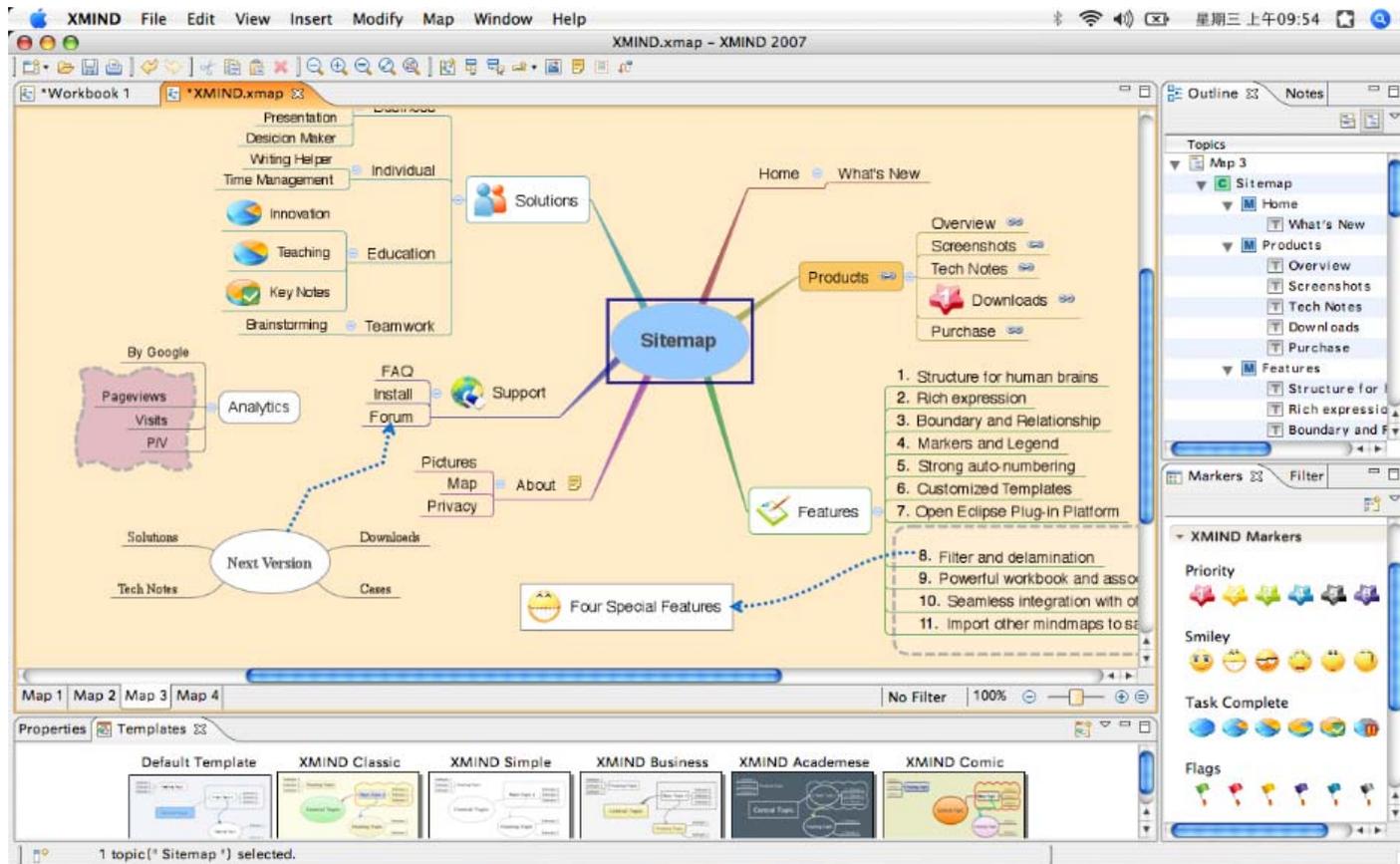
What can you do with RCP?

- Schoolclipse



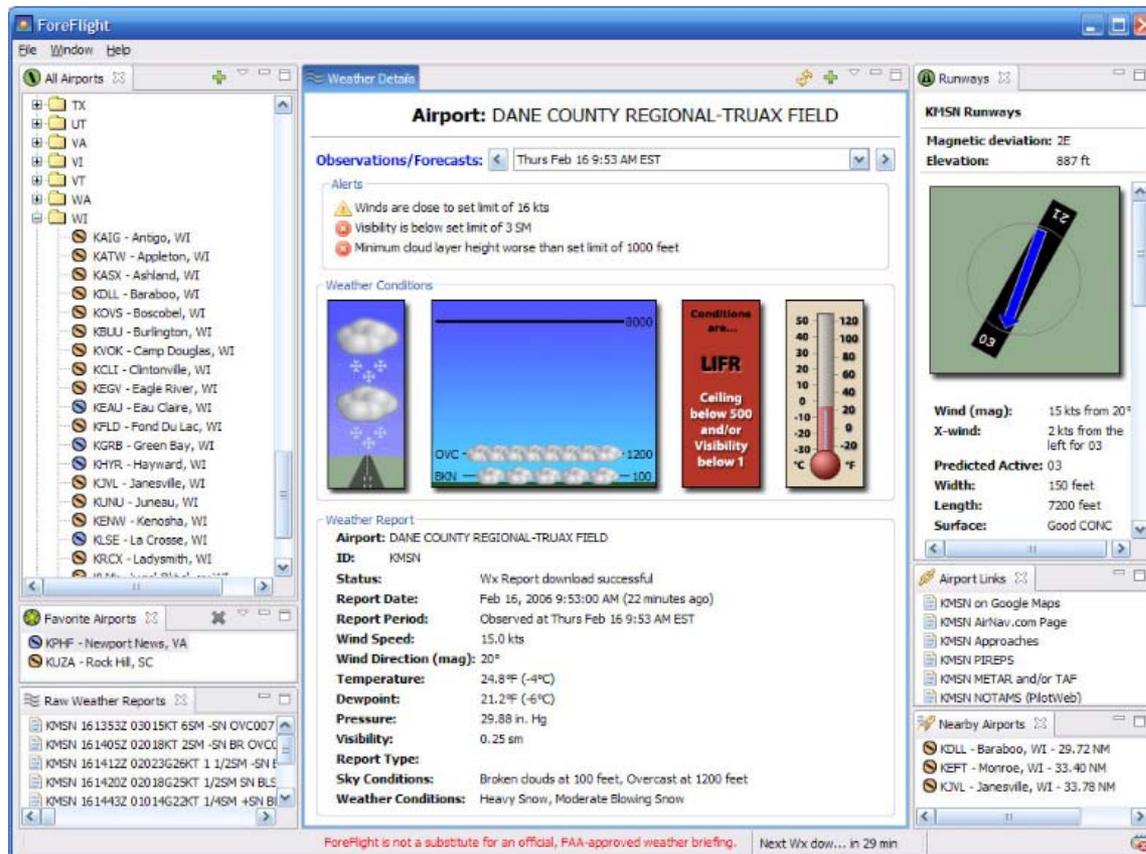
What can you do with RCP?

- Mango Software - XMIND



What can you do with RCP?

- SilverCurve – ForeFlight



The screenshot displays the ForeFlight application window. The main pane shows weather details for DANE COUNTY REGIONAL-TRUAX FIELD (KMSN) on Thursday, February 16, 2006, at 9:53 AM EST. The weather conditions are LIFR (Low Instrument Flight Rules) with a ceiling below 500 feet and visibility below 1 mile. The wind is 15.0 kts from 20 degrees. The temperature is 24.8°F (-4°C) and the dewpoint is 21.2°F (-6°C). The pressure is 29.88 in. Hg and the visibility is 0.25 sm. The sky conditions are broken clouds at 100 feet and overcast at 1200 feet. The weather conditions are heavy snow and moderate blowing snow.

The interface includes several panels:

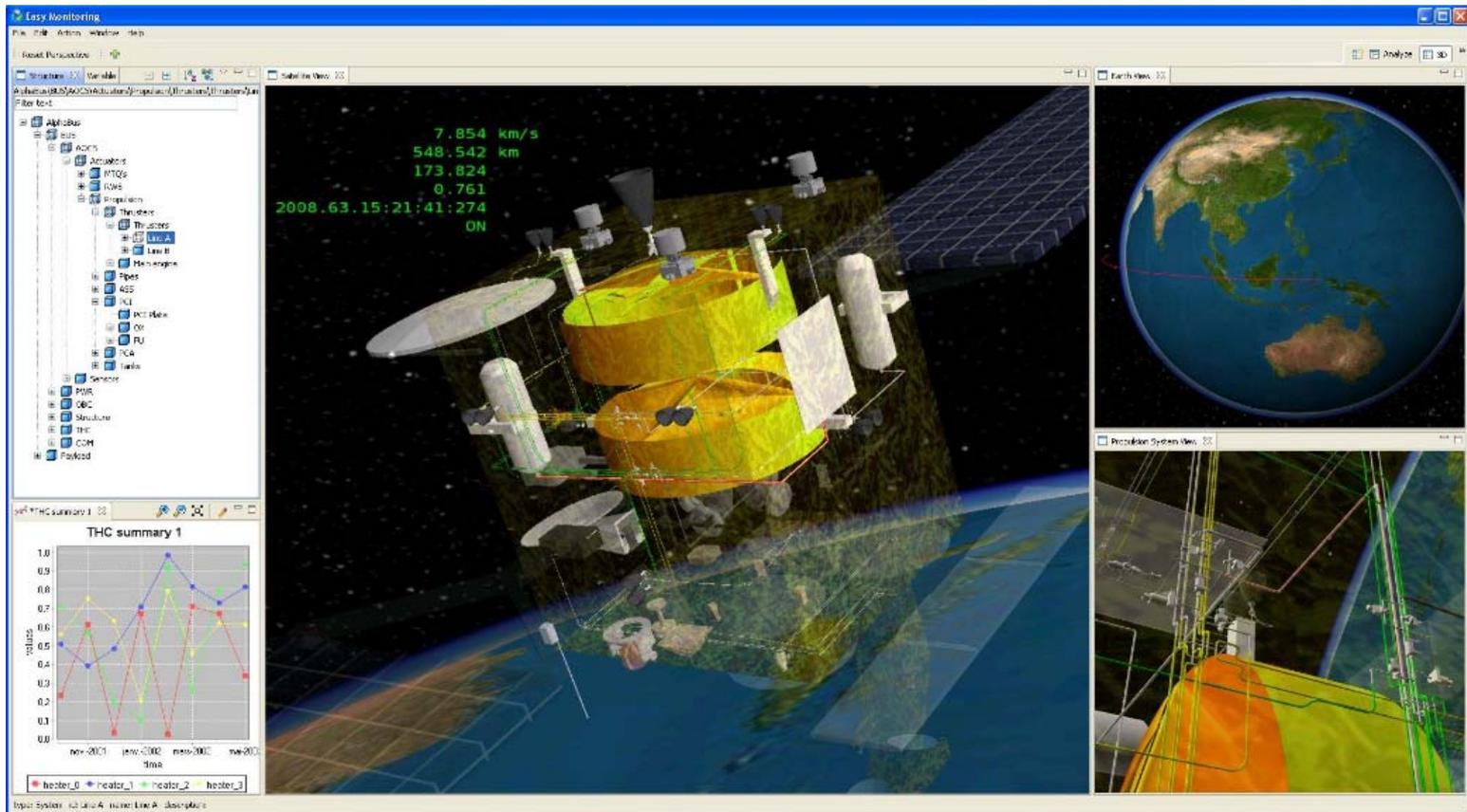
- All Airports:** A list of airports, including TX, UT, VA, VI, VT, WA, and WI, with sub-panels for Favorite Airports and Raw Weather Reports.
- Weather Details:** The main pane showing airport information, observations/forecasts, alerts, weather conditions (including a cloud layer diagram and a thermometer), and a detailed weather report.
- Runways:** A panel showing KMSN Runways with magnetic deviation (2E) and elevation (887 ft).
- Airport Links:** A panel providing links to KMSN on Google Maps, KMSN AirNav.com Page, KMSN Approaches, KMSN PIREPS, KMSN METAR and/or TAF, and KMSN NOTAMS (PlotWeb).
- Nearby Airports:** A panel listing nearby airports such as KDLL - Baraboo, WI - 29.72 NM, KEFT - Monroe, WI - 33.40 NM, and KJVL - Janesville, WI - 33.78 NM.

At the bottom of the window, a status bar indicates: "ForeFlight is not a substitute for an official, FAA-approved weather briefing. Next Wx dow... in 29 min".



What can you do with RCP?

- Global Vision Systems - EasyMonitoring



How do I get RCP?



1. Go to <http://www.eclipse.org/downloads/>
2. Download and install the Eclipse for RCP/Plug-in Developers (175 MB) package.



Eclipse for RCP/Plug-in Developers (175 MB)

A complete set of tools for developers who want to create Eclipse plug-ins or Rich Client Applications. It includes a complete SDK, developer tools and source code, plus Mylyn, an XML editor and the Eclipse Communication Framework. [More...](#)

Downloads: 28,874

Windows
Mac OS X
Linux 32bit
Linux 64bit

Let's create an RCP Application!



- Live Eclipse Portion of Presentation.



Pros and Cons of RCP

Pros

- Free powerful Workbench UI
- Plug-In Architecture
- Advanced features such as help, update manager, preferences, problem markers, etc.

Cons

- Steep learning curve
- Memory intensive
- Larger deployment packages

Want to know more?



- URLs / Newsgroups

- <http://www.eclipse.org>
- [http://wiki.eclipse.org/index.php/Rich Client Platform](http://wiki.eclipse.org/index.php/Rich_Client_Platform)
- <http://www.eclipsecon.org>
- <http://www.javaref.com>
- <news://news.eclipse.org/eclipse.platform.rcp>
- <news://news.eclipse.org/eclipse.platform>



Want to know more?

- Books
 - Eclipse Rich Client Platform: Designing, Coding, and Packaging Java Applications
 - Jeff McAffer, Jean-Michel Lemieux
 - Eclipse: Building Commercial-Quality Plug-Ins
 - Eric Clayberg, Dan Rubel
 - SWT / Jface in Action
 - Scarpino, Holder, Ng, and Mihalkovic

Questions?

