Module 2: Installation

✦ Objective
  ✦ To learn how to install Eclipse and PTP

✦ Contents
  ✦ System Prerequisites
  ✦ Eclipse Download and Installation
  ✦ PTP Installation from an Update Site
  ✦ Installation Confirmation

About the Tutorial Installation

✦ The PTP Tutorial will assume you already have Eclipse installed on your laptop. Please use these slides to install Eclipse and PTP on your laptop before attending.

✦ Note: up-to-date info on installing PTP and its pre-reqs is available from the release notes:

  ✦ http://wiki.eclipse.org/PTP/release_notes/5.0

  ✦ This information may supersede these slides

✦ Questions? Please ask on the ptp-users mailing list: http://dev.eclipse.org/mhonarc/lists/ptp-user/

System Prerequisites

✦ Local system (running Eclipse)
- ✦ Linux (just about any version)
- ✦ MacOSX (10.5 Leopard or 10.6 Snow Leopard)
- ✦ Windows (XP on)

✦ Java: Eclipse requires Sun or IBM Java
- ✦ Only need Java runtime environment (JRE)
- ✦ Java 1.5 or higher
  - ✦ Java 1.5 is the same as JRE 5.0
- ✦ Note: The GNU Java Compiler (GCJ), which comes standard on Linux, will not work!
- ✦ Note 2: OpenJDK, distributed with some linux distributions, has not been tested with Eclipse.
- ✦ See http://wiki.eclipse.org/PTP/installjava

Eclipse Packages

- ✦ Eclipse is available in a number of different packages for different kinds of development
    - ✦ http://eclipse.org/downloads
    - ✦ This is Eclipse 3.7, also known as "Indigo"
- ✦ With Indigo, there is a new package directly relevant for HPC:
    - ✦ Eclipse IDE for Parallel Application Developers
        - ✦ Base Eclipse distribution plus
            - ✦ C/C++ Dev Tools (CDT)
            - ✦ Parallel Tools Platform (PTP)
            - ✦ Fortran Dev Tools (Photran)
            - ✦ Linux Tools
            - ✦ ...
        - ✦ Recommended

Eclipse Installation

- ✦ Download the appropriate package
- ✦ If your machine is Linux or Mac OS X, untar the file
  - ✦ On Mac OS X you can just double-click in the Finder
- ✦ If your machine is Windows, unzip the file
- ✦ This creates an **eclipse** folder containing the executable as well as other support files and folders

Starting Eclipse

+ **Linux**
  + From a terminal window, enter
    "<eclipse_installation_path>/eclipse/eclipse &"

+ **Mac OS X**
  + From finder, open the **eclipse** folder where you installed
  + Double-click on the **Eclipse** application
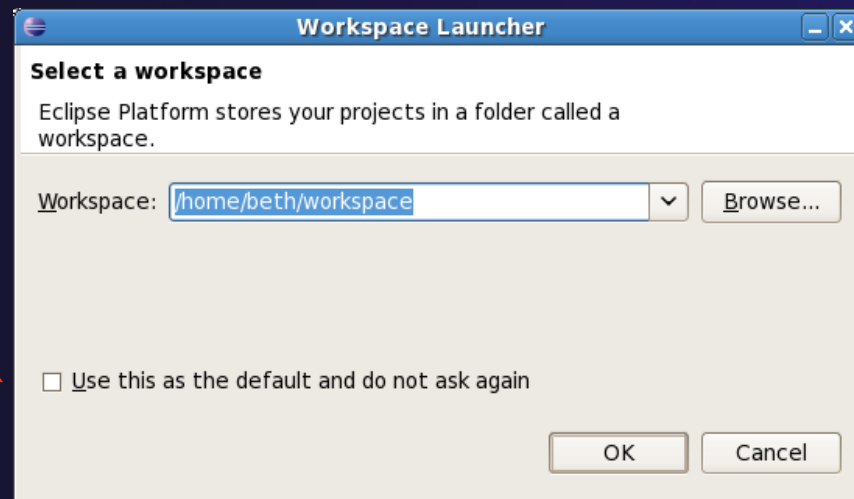 + Or from a terminal window
+ **Windows**
  + Open the **eclipse** folder
  + Double-click on the **eclipse** executable

Specifying A Workspace

✦ Eclipse prompts for a workspace location at startup time
✦ The workspace contains all user-defined data
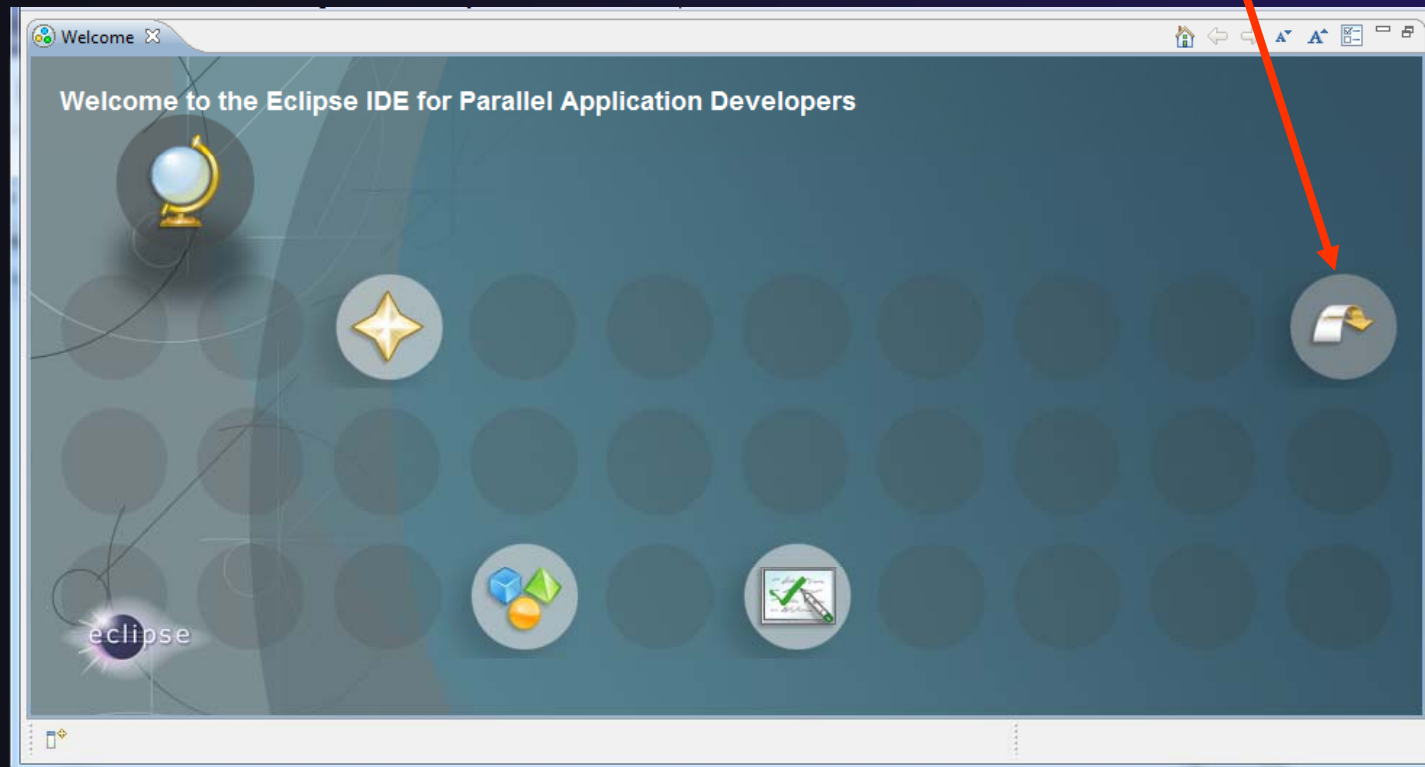   ✦ Projects and resources such as folders and files

The prompt can be turned off

Eclipse Welcome Page

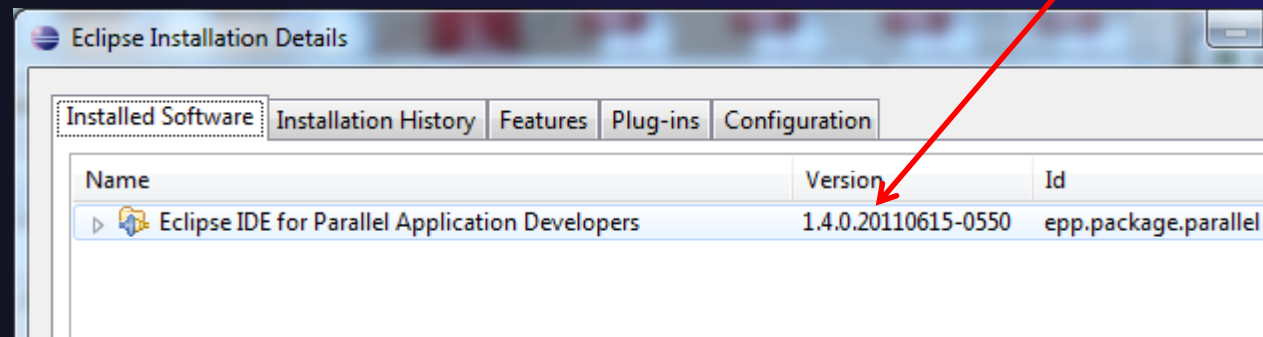✦ Displayed when Eclipse is run for the first time

Select "Go to the workbench"
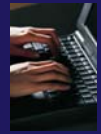
Eclipse
Parallel
App

Check Installation Details

✦ To confirm you have installed OK
  - ✦ Mac: **Eclipse>About Eclipse**
  - ✦ Others: **Help>About**
✦ Choose **Installation Details**
✦ Confirm you have the following installed software

Differs depending on base download

Checking for PTP Updates

✦ From time-to-time there may be newer PTP releases than the Indigo release

   ✦ Indigo updates are released only in Sept and February

✦ PTP maintains its own update site with the most recent release

   ✦ Bug fix releases can be more frequent than Indigo'

✦ You must enable the PTP-specific update site before the updates will be found

Updating PTP

- ✦ Enable PTP-specific update site
  - ✦ **Help>Install new software**
  - ✦ Click **Available Software Sites** link
  - ✦ Enable/Check the PTP site:
    http://download.eclipse.org/tools/ptp/updates/indigo
    - ✦ (should be enabled by default)
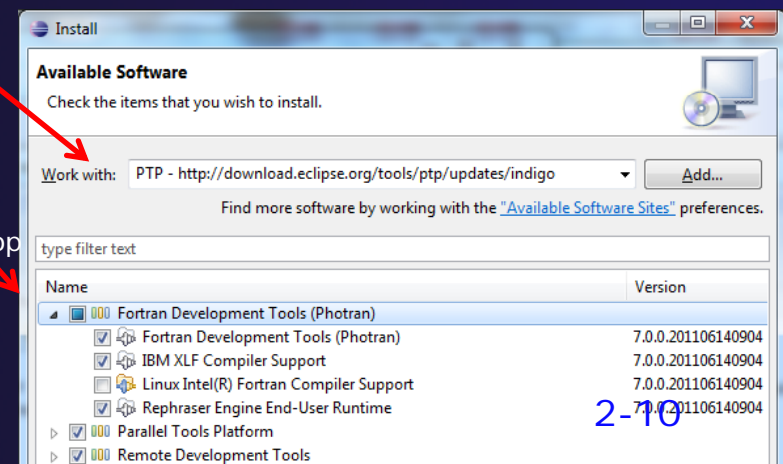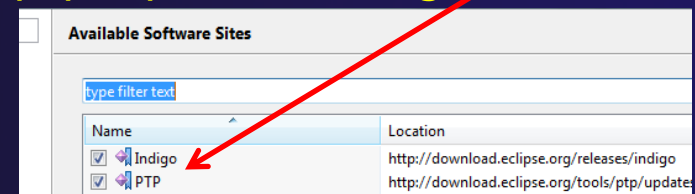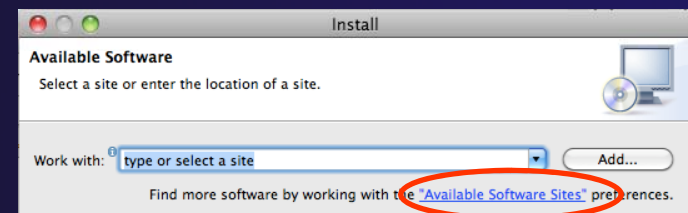 - ✦ Choose **OK**
- ✦ First update:
  - ✦ Choose PTP Indigo update site
  - ✦ Select all PTP components
    - ✦ Except Linux Intel Fortran
      - ✦ Unless you are running Linux on your laptop
  - ✦ Choose **Next, Next**

Updating PTP

✦ Accept Terms of License agreement, **Finish**
  ✦ Allow workbench to restart like normal installation.
  ✦ Note: this explicitly adds PTP, RDT, Photran
    components (check "Help>About Eclipse>Installation
    Details" if you are curious), which enables updates
    for PTP, RDT, Photran.

✦ Subsequent updates:
  ✦ Select **Help>Check for updates**
  ✦ Follow prompts like a normal installation