parallel tools platform
http://eclipse.org/ptp

PTP User’s Meeting
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Parallel Debugging
PTP support for Debugging MPICH Applications

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These slides available at:
http://wiki.eclipse.org/PTP/PTP_User_Meetings
Introduction

- Added support for debugging MPICH applications
  - PTP Debugger previously only supported OpenMPI, IBMPE,
  - Luna release only
  - Available in PTP 8.0 June 2014
- Initially only “MPICH2 Generic Interactive” TSC
- Easy to add others
Dependencies

Required for PTP parallel debugger:

- **Login Node:**
  - Current version of Perl (5.18 or later)
  - Devel::GDB 2.02 or later from cpan.org
  - Perl Expect module
Debug Workflow

- Compile application -g -O0 flags
- Select from main menu:
  - Run->Debug Configurations
- Fill in Resources, Application, Arguments, Debugger and Environment tabs (See following slides)
• Debug Workflow (cont)
- Debug Workflow (cont)
• Debug Workflow (cont)

✦ Click Debug
✦ Debug application
Parallel debugger basics

- Step all processes
- Step a single process
- Current line marker
- Breakpoints
- Run
- Terminating a debug session
Wrap-up

✧ PTP Parallel Debugger will support MPICH2
  ✧ Luna release – PTP 8.0 June 2014
✧ Questions?

✧ Coming Soon:
  ✧ Eclipse Kepler SR2 (4.3.2)– PTP 7.0.4 – Feb 28
  ✧ Eclipse Luna (4.4)– PTP 8.0 – June 25
✧ Next PTP-User Meeting – Feb 26
  ✧ Ideas for topics?