April 2012 Meeting

Date: April 10, 2012 Time: 1:00 PM EDT

Call in information:

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Agenda

1. Overall project, releases, etc.
   - Next builds, releases
     - 5.0 Indigo - 5.0.7 released April 3
     - 6.0 Juno - next milestone: M7+2 is May 8
   - Download stats - 52,997 for SR2 as on 4/9/12; see below for details
   - Git status
   - EclipseCon was Mar 26-29 in Reston, VA
2. Status Reports
   - PTP Core/debug
   - RDT and remote status
     - Synchronized Projects
   - Resource Managers - legacy and JAXB (configurable)
   - Monitoring - incl. new System Monitoring Perspective
   - PLDT
   - ETFw, other tool integrations (GEM, PPW, etc.)
   - Photran
   - Docs, Help, Tutorials
   - Other PTP contributions
3. PTP User call report

- Previous call was Wed April 4, 2012 (4th Wednesday) See PTP/PTP_User_Meetings - answering various user questions
- Next meeting? 4th Wed is April 25
4. Education and Outreach
   - Status of outreach groups (grants etc.)
5. Other Business
6. Next meeting - Tuesday May 8

Parallel Package Downloads

Download numbers, by month, of 'IDE for Parallel Application Developers' available on http://eclipse.org/downloads. This count is since the release of Eclipse Indigo SR1, on 23 Sept. 2011. SR2 was made available on Feb 24, 2012 and the download numbers were reset to 0 for SR2 counts.

Month	Downloads	Total Downloads
Sept 2011	3825	3,825
Oct 2011	8630	12,455
Nov 2011	8777	21,232
Dec 2011	4506	25,738
Jan 2012	8179	32,480
Feb 2012 SR1	6381	40,298
Feb 2012 SR2	7329	7,329
Mar 2012 SR2	43,849	51,178
Apr 2012* SR2		52,997

downloads for April as of April 9, 2012

By platform through March for SR1 only: Windows 24,686; Linux 11,632; Mac 4463

Attendees:

Jeff Overbey, John Eblen, Chris Navarro, Dave Wooton, Greg Watson, Jay Alameda, Wyatt Spear, on the call –

Overall project, releases

Next builds, releases:

On the release side of things, did have 5.0.7 on April 3, this was for IBM, have a product coming out, wanted a point release to correspond to that – that is the last 5.0 release that is planned at this stage, and have not yet incremented version #s to 5.0.8. Have tagged repo for 5.0.7, with tags, there is at least one guy who needs this tag.

Do you think we'll need a 5.0.8 release? No plans from Greg, but if someone requests one, no reason to not do it –

Still bug fixes going into 5.0 branch. Not doing a lot of work on this branch (Greg), outside of bug fixes, not much activity in this

On 6.0/Juno – next milestone is M7, on May 8, this is the last milestone build. After that, RC builds.

Greg is still doing refactoring/API changes, hope to finish way before May 8 – still have some work to do – this is the work that changes significantly how you interact with resource managers. Want to give people time to take a look at this, give Greg feedbacks, onus is on Greg to get this in as soon as possible, with API freeze on May 8. Any concerns on this date?

Don't think so (Jeff) –

Tentatively set the freeze for May 8, next dev call is May 8, we can review this at that point –

Download Stats

Download stats, 53,000 downloads as of yesterday

When asked for breakdown, 50% are coming from China –

Lots of activity over there –

Windows – 25,000, linux, 11,500, mac, is 4,500 – linux is catching up it seems –

Git Status

No git status at this point –

EclipseCon –

A few of us were at eclipsecon week before last, Greg gave presentation on synchronized projects –Chris was this talk, had 30 or so people in the room –

Some questions at the end, some interest –

Some people in the audience, not targeted at them – but definitely some interest and good comments/feedback on eclipsecon website –

This seemed to go well – conference was good, 650 people attended, a little less than normal – whole breadth of the community amazes Greg – the community is alive and well –

Anything from Chris on eclipsecon –

Thought that the git tutorial was very helpful, to help understand the concepts –

Covered a lot of material –

Really enjoyed most of the talks – E4, javafx – interesting retooling – tech lead on this developed swt, this will be successor for swing and java, this looked interesting

Greg found out that CDT – next release, will be 8.1, will not be 9.0 as originally thought –this is an FYI.

And it sounds like 4.2 – Jeff had concerns about performance of 4.2, did raise this at the CDT summer – consensus was that they were going to go with 4.2 rather than 3.8, not experiencing performance issues –

Greg noticed some performance issues, but seems to be better than that

Jeff will try with a new milestone,

Are they using apis exclusive to 4.2 –

At this stage, not using any APIs exclusive to 4.2 – not sure if this is the case for juno in the end. PTP is not using 4.2 APIs.

What else – other thing, with CDT – sounds like addressed a lot of performance issues – in particular, the persistent issue that hear about – in using CDT – is indexer problem – primarily that indexer locks the workspace while indexing

And if you change a file, in previous versions, reindexed whole project, and with large project, this causes large delays –

With juno CDT, have addressed this issue – no longer locks workspace for duration of the indexing – this will hopefully take away one of the major impediments of using CDT –

Don't know this will impact on Photran –

Photran is independent of this, jeff will look into this to make sure though –

Does Photran lock the workspace while indexing –

Don't recall, it might –

Jeff has to look at the issue – code was written a long time ago

And – went to interesting talk (after Greg's) – sergey from google, rewritten refactoring framework in CDT, apparently it works properly now –

There were a lot of issues with more complicated refactorings with CDT, this has been reengineered –

Would be interesting to see what other's experience – this will show up in 8.1 –

Jeff's research group had laundry list of refactoring issues in CDT – don't have a platform for doing decent c/c++ refactoring, hopefully this will address the issue –

Works with CPP as well –

Definitely worth taking a look at –

A lot of work going into multi-core debugging tools

Visualizer for looking into multicore systems, contributed by a vendor in this area –

Similarity to what we are doing with system monitoring, but not much opportunity to integrate these together, they have gone in a different direction, would take a fair amount of work to bring us together –

But what they have is interesting/useful –

Anybody else from EclipseCon?

Jeff –sure attendance was down a little bit, due to economy etc

Did you get a sense that Eclipse is trending any way – are there any serious competitors –

Get the impression that there has not been any significant competition – even Microsoft has Eclipse plugins – downloads are phenomenal – looking – java development package, for eclipse – 2.8million downloads, since SR2 – not counting the other different packages. Get impression that community is growing, if anything –

Wyatt: C//c++ and HPC is still a niche – most activity is in the java space –

Looking forward to 4E, will take some work to make things compatible, but will be worth it in the end –

Status reports –

Resource Managers

Still continuing to work on resource manager bug, hopefully have something in next week or so – hope to preserve as much backward compatibility for existing resource managers – just the jaxb resource managers that work differently – think there will be a different launch configuration –

And a few issues to resolve – still want the XML configuration to specify the monitoring and control, don't think it is api change –

Testing backwards compatibility, things still seem to be working –

Just need to finish off new launching mechanism and a couple of new views, will have something to work on

New branch – sw RM (?) – not sure if pushed up to the main git repository

Anything else anyone needs to take on –

Synchronized Projects

John – what is happening on synchronized stuff –

Still working on relocation bug, this one is really involved, move the copies of big projects – doing a lot of refactoring, of lower level code & and how it works, this is needed to get it to be copied – refactoring is about finished.

Then will get back to merging tool –

One thing at summit: new project wizard – work is underway to provide a new-new-new project wizard, haven't decided name of this – this is the CDT project wizard

John has submitted a patch, several months ago, still waiting on this – this has not been committed – this is for CDT, Greg will ping the CDT

Bug# - 363612

Apptly doing a new more flexible project wizard, changing layout of the project types – Doug wants to make it more template driven, rather than being driven by project types – concern about complexity, not clear what the project types mean – will do some work to fix this, and make more user friendly, and wizard will become more customizable – will like to change the first screen, as we'd like to set up synchronized stuff first, before chose project type, need this flexibility – this would be possible – can have your own first page –

But this shouldn't stop us from fixing what is there now –

Right now, John has it as single page, everything is set up on first page –

Default location is something we want to get rid of – we probably want to change what the first page looks like –

Have you cloned the existing CDT wizard –

Think copied a bunch of code from a variety of places, it is a bit of a mess –

Think the new structure of the new project wizard will make this easier, will have to wait and see –

ETFW
Wyatt?

As you heard, Kevin is working on support for BG/P, and BG/Q – latter is challenging, personality for node layout is still being worked on and not likely stable yet –

For ETFW, some stuff to get spiffed up for future releases, and scaling testing view – this is pretty handy for performance analysis side of things –

Photran
Jeff? –not a whole lot on photran, mainly trying to get going on documentation for stuff added to PTP and for Blue Waters

GSI Authentication
And have been working on thing for Grid authentication, with ssh client, can do a myproxy logon – don't have to logon everytime you drop or reestablish

Downside – have to patch the jsch implementation in platform, doesn't seem to be hopeful to get this back into jsch via jcraft –

Platform patch – for this – can be done via update site at NCSA –

Installs the same as a normal feature, but patches jsch feature in the platform –

Can we add extension point to jsch – this would be nice, but jsch doesn't have any dependencies – we'd have to roll our own plugin mechanism, not sure how amenable they would be to doing this

They have support for multiple authentication mechanisms – but all hard coded in –

Greg – think you are probably right about patching the platform. Have you seen this documented somewhere – Jeff will look around – not sure what restriction was – not installed by default and use at your own risk – want to make sure we are good eclipse citizens –

Greg will take a look to see if can figure out anything –

If can do it through PTP, this would give us much better visibility –

Dave Wooton
– nothing new at this point –

Chris Navarro
 – mostly recently going through the bug list, submitted a patch for remote server extension point, the way the remote server manager, to see if there were any overrides for dstore – submitted a patch for this – problem was one extension point with 2 extensions – the way the code was getting the override was to assume the code was a separate extension, which it wasn't –

375674 is bug ID –

Greg needs to take a look at this, think he wrote this code originally –

The multiple extension points were sharing an extension point, no way to get specific part of the extension point, without looking through configuration elements and see what they contain –

For more significant things – get together with Chris – and Greg –

Think about maybe something – carving off a bigger project for Chris to work on –

PTP User Call
Had a user call last week –

Jeff hosted it – thought it went well, Galen described how to use valgrind support in linux tools – had a really good discussion after that, heading off to discuss documentation, esp for using

11 people on the call –

Don't have a topic for next month yet – one thing that thought on – was to look at python support in Eclipse,

People interested in doxygen – if there is anything to demonstrate there, we could do that –

Python would be a good idea – in HPC community, a lot of interest in using python, driving hpc apps using python, and mentioned this at los Alamos – very interested –

Jeff is interested in attending a XSEDE workshop on python in HPC – so is Greg, this is something we can look at for the next year or two – supporting python in HPC

Other Business
One area – that we should add to the list of things for Chris to work on – getting linux tools to work with synchronized projects – and know Jeff Johnson working on some level of remote support –

That was a discussion that we had, as basically with linux tools, written a proxy layer – that basically allows you to switch in different remote implementations – can use no remote support, or RSE, etc – all using extension points, so no dependencies on external packages, this closely mirrors what is in PTP, with our remote support – see if we can push PTP remote tools support up into CDT, this was well received by both linux tools and PTP – this is something that will be looking at over the next few months – Chris could be involved in this –

This is something to add to the list –

Next Meeting
Anything else – May 8 is both next meeting and API freeze –