DSDP – TM Conference Call, 26-September-2005
Meeting Notes

Attendees:

Wind River – Salzburg, Austria
Michael Scharf –Eclipse Architectural Council (EAC) member for DSDP
Martin Oberhuber – WR Technical lead for DSDP-Target Manager

Accelerated Technologies (aka Mentor Graphics)
Aaron Spear – Architect, Debugger (Nucleus Edge)
Mart – handles Eclipse portion of Nucleus Edge (IDE+Debugger)

IBM
Dave Dykstal – Remote System Explorer (RSE)

Intel
Peter Lachner – Manages XScale component tools project; currently compiler tools

Original Agenda

- Recent News
    - IBM RSE status
    - Connectors by Intel
- Discussions regarding TM Design
- Next steps

Meeting Notes

TM Face-to-face meeting:
Finally Fixed for Oct.12-14 at the Wind River Offices in Downers Grove, Chicago, Illinois.
DD will meet Oct.12-13 and TM will meet Oct.13-14.
Directions to the offices have been sent on the developer mailing lists.
Please register for the event with mailto:sandra.speice@windriver.com, Phone +1(630) 971-5908
She'll be able to assist with any issues.

For accommodation, we recommend the DoubleTree hotel which is adjacent to the WR Office.

Please ask for the Wind River rate which should be $119,-. You can book via +1(930)971-2000

Connectors by Intel:
DaveD: RSE can handle "connectors" Multiple connection types per remote system
PeterL: Idea of connectors is mainly to help in the very big range of possibilities in embedded (OS, hardware, toolchains, …): allow more puzzle pieces to put things together, e.g. hardware vendor could supply a connector which speaks gdb protocol for instance → easy to plug in to an environment that can do "standard gdb". Other vendor could ship just special processor support but nothing more.
MartinO: In RSE it is possible to open up individual subsystems to further extension; also, already talked about adding an extension point to allow a single subsystem to talk to targets via multiple different registered connection methods.
DaveD: Need more information on connectors.
PeterL: Connector is an entity holding both UI and connection method. Can be delivered from a party just providing the services to connecting hardware / services from probably different parties. Connector is a collection of things to allow "talking to a target".
DaveD: Connector tied to a protocol?

PeterL: Yes. For example, a connector could talk RDB protocol to the host but directly manipulate hardware through a JTAG device; such a connector would typically be offered by a hardware vendor.
DaveD: So, Connectors are a lower-level thing; but, "Connections" could easily be made extensible by using "Connectors" which means that they would easily fit into the basic architecture of RSE.
PeterL: Yes.

MartinO: Connector Properties on page 6 of the TCA proposal: Could the "channel class" identifier be replaced by an RSE "subsystem ID"?
PeterL: Wanted to convey the idea that connectors provide "some type of service", didn't want to have the String values fixed, this can be sorted out during detailed design.
MartinO. Might need some more fine-grained description of capabilities. For instance, inside gdb, some capabilities might be supported but others might not (e.g. memory read supported but memory write not; need description of capabilities)

Martin O: Link type "USB" and "JTAG"?
Peter L: Single vendor could provide 2 connectors, one for USB another one for JTAG; then, during installation or connection the user could pick the right one

Aaron S: Chain connectors / protocols together?
Peter L: Thought about that, but did not explicitly request it in the proposal.
Aaron S: Talking gdb over serial or TCP/IP should not be any difference to the higher level applications, so stacking connectors might make sense.

Martin O: Aaron & Mark coming to Chicago? – need to check

IBM RSE Status:
Still working on final OK from legal, hoping not to run into any road blocks; will have time to work on example this week

Next Steps:
We'll work on an agenda for the face-to-face meeting. Suggestions are welcome, agenda will be posted 1 week before the F2F meeting latest. Please send suggestions to the dsdp-tm-dev mailing list.

We can host a phone conference during the Chicago meeting on Oct.16 if there is sufficient interest. Otherwise the next phone conf is scheduled for Monday Nov.7 at the usual time.

Next Meeting:
The face-to-face meeting in Chicago at Oct.13+14, with dial-in possible on Oct.14