

## Extreme-Scale Demonstrators – 2<sup>nd</sup> Discussion Round

### Outlining EsD System Characteristics

Workshop organised by ETP4HPC

23rd June 2016, **International Supercomputing Conference (ISC'16)**, the Marriott Frankfurt Hotel, Frankfurt, Germany

9am – 4:30pm

**Full-day Workshop Session**

Our workshop webpage: <http://www.etp4hpc.eu/en/isc16.html>

**Important:** Please familiarise yourself with the details below and let us know whether you can attend by registering at:

<http://eepurl.com/bUIPzD>

**Please note that you will need to register for the ISC'16 event as well – please follow the details at the end of this document. However, please also register using the link above (we would like to know who will attend our workshop and ISC is not able to provide this information through their registration process).**

This is an update on the Agenda of the up-coming workshop on the Extreme-Scale Demonstrators (EsDs) which will be held on 23<sup>rd</sup> June 2016 from 9am to 4:30 pm during the International Supercomputing Conference 2016 Workshop Day.

Please note that the contents of this event will be different from what had communicated originally and it will focus on the EsDs only (and not on the whole Strategic Research Agenda).

Please also note that this is now a full-day workshop (9am – 4:30pm) and not a half-day as originally planned.

For the Timetable and other logistical details (please note that this workshop is being organised with the ISC'16 event and registration for the ISC Workshop Day is needed) please go to the end of this memo.

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We are inviting you to this event to continue the work started at our workshop which was held in Prague on 12<sup>th</sup> May 2016. We would like to draw your attention to a few important details in order to make this event productive:

**A.** The main part (approx. 2 hrs) will be spent on a discussion between (a) communities representing scientific HPC use cases/applications (including the CoEs), (b) HPC infrastructure providers and (c) HPC technology providers.

We think it will be beneficial to jointly analyse up to four candidates of HPC use cases that require extreme-scale compute capabilities. This will be done in a top-down approach in order to derive several meaningful target characteristics of the envisioned EsD systems. These targets should be expressed on a 'meta-level' which is meaningful both to the "application experts" and "system experts" at the same time. These characteristics are necessary to write the next version of the SRA and to propose the text of the calls for the EsD projects.

**B.** Therefore, it is important that we have a good representation of the use-case/application community! Erwin Laure and Thomas Eickermann will extend this invitation also to teams who were not present in Prague.

**C.** For the 2-hour 'Use-case discussion' session, we need up to four good use-cases as strawmen for this discussion. The "use case teams" interested in taking part should:

- Propose a case in advance (deadline is 16th June, please send proposal to the leaders of this effort, i.e. Thomas Eickermann (th.eickermann@fz-juelich.de) and Erwin Laure (erwinl@pdc.kth.se);
- and during the discussion:
  - Explain why it is a good example for an "extreme/exascale demanding case",
  - Introduce the applications, tools. etc. supporting the case
  - Be prepared to describe the requirements for the underlying HPC system characteristics in whatever terms seen as useful.

**D.** In the following interactive session the proposed "meta-level" characteristics will be identified for all forthcoming actions.

**E.** Before we enter this discussion, there will be two short presentations to set the stage:

1. Hans-Christian Hoppe has volunteered to propose several meaningful meta-level characteristics. They will likely be used for the follow-on work.
2. Thomas Eickermann will present several PRACE scientific cases from the view point of target systems characteristics they drive.

**F.** To complete the agenda in the second part of the workshop, we intend to continue the discussions we started in Prague:

1. Continue the definition of the EsD budget requirements (probably Hans-Christian Hoppe)
2. Better understand the procurement options (Dirk Pleiter)
3. Drive the "composition of consortia-roles and tasks" to the next level (Thomas Eickermann)

The facilitators will present a consolidated view, propose a direction and address questions that are still open for discussions.

**The Agenda** is this:

09:00 - Welcome (SRA Editorial team)

09:15 - PRACE Scientific Cases in the context of target HPC system characteristics (Thomas Eickermann)

09:40 - Examples for meta level HPC system characteristics (Hans-Christian Hoppe)

10:05 - Use case discussion – Part 1 (Erwin Laure, Thomas Eickermann, Mark Duranton)

10:30 - Break

11:00 - Use case discussion – Part 2 (Erwin Laure, Thomas Eickermann, Mark Duranton)

12:30 - Identification of preferred meta-level HPC system characteristics – Part 1

13:00 - Lunch

14:00 - Identification of preferred meta level HPC system characteristics – Part 2

14:30- Recommendations and next steps in :

- EsD budget requirements (probabaly Hans-Christian Hoppe)
- Procurement options (Dirk Pleiter)
- Composition of consortia-roles and tasks" (Thomas Eickermann)

16:00 Outlook and next steps

16:30 End

We look forward to working with you at this workshop. Please contact the ETP4HPC Office team for any questions in relation to this workshop.

## Practical Information (provided by ISC)

\* Venue:

ISC 2016 Workshops

Thursday, June 23

Marriott Hotel

Hamburger Allee 2

60486 Frankfurt am Main

Germany

<http://www.marriott.com/hotels/travel/fradt-frankfurt-marriott-hotel/>

ISC 2016 Tutorials, Conference & Exhibition Sunday, June 19 –Wednesday, July 22 Messe  
Frankfurt Tor Ost/East Gate – Hall Brüsseler Strasse

60327 Frankfurt am Main

Germany

<http://www.messefrankfurt.com/frankfurt/en.html>

\* Accommodation:

The ISC High Performance official hotel partner is the Marriott Hotel

<http://www.marriott.com/hotels/travel/fradt-frankfurt-marriott-hotel/>. Please contact the  
reservations department at: +49 69 7955 2222 or email:

[mhrs.fradt.reservations@marriott.com](mailto:mhrs.fradt.reservations@marriott.com) to check their room availability and refer to the  
booking code: ISC16.

However, there are plenty of other hotels in Frankfurt, some of them situated close to the  
fairgrounds, the central train station and the city centre. We recommend Booking.com  
<http://www.booking.com> and Expedia <http://www.expedia.com> for finding suitable  
accommodation.

\* Registration:

Every participant of a workshop (including speakers and organisers) needs a workshop pass. Yes, it is available via the ISC HPC 2016 conference website: <http://isc-hpc.com/registration.html>. Registration is already open.

For early registration, a workshop pass is EUR 125 for people who also have a conference pass ("workshop add-on") or EUR 175 without a conference pass ("workshop only"). Note that the workshop fee includes food breaks and lunch!

Attendees can register for the workshop day and not for a specific workshop.

\* Schedule:

Full-day workshops are scheduled from 9:00 am to 6:00 pm. Half-day workshops are either from 9:00 am to 1:00 pm (morning) or 2:00 pm to 6:00 pm (afternoon).