

# Current and Future Generation Grid Technology

Summer School 2006

24<sup>th</sup> - 28<sup>th</sup> July, Bonn (Germany)

Version: 3.2 Date: 23.06.06

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## Sponsors

IBM STG Infrastructure Solutions



Sun Microsystems GmbH



## Programme

### MONDAY, 24<sup>th</sup> July 2006

1) **Registration** (B-IT/SCAI) 08:00 - 09:00

2) **Welcome, Overview** (B-IT, Martin Hofmann) 09:00 - 09:15

3) **Introduction to Grid Technologies**

09:15 - 11:00 *"Session: Next Generation Grid"*

- a) Grid Technologies and their evolution (Domenico Laforenza) 09:15 - 10:00
- b) NextGRID Architecture (Stephen Davey) 10:00 - 10:45
- c) Questions / Discussions 10:45 - 11:00

*COFFEE break 11:00 - 11:30*

11:30 - 13:15 *"Session: Grid Principles I"*

- a) Open Grid Services Architecture (Hiro Kishimoto) 11:30 - 12:15
- b) Grid Security (Alvaro Arenas) 12:15 - 13:00
- c) Questions / Discussions 13:00 - 13:15

*LUNCH break 13:15 - 14:15*

#### 4) Grid information, resource management and monitoring

14:15 – 18:15 “Session: Grid RMS and Monitoring”

- a) RMS and Scheduling for Future Generation Grids (Ramin Yahyapour) 14:15 - 15:00
- b) RMS - HPC4U (Simon Alexandre) 15:00 - 15:45
- c) Questions / Discussions 15:45 – 16:00

*COFFEE break 16:00 - 16:30*

- d) Mobile networks and RMS - Akogrimo (Robert Piotter) 16:30 - 17:15
- e) Grid middleware services in CoreGRID (Norbert Meyer) 17:15 - 18:00
- f) Questions / Discussions 18:00 – 18:15

WELCOME RECEPTION “Get together@B-IT” 18:30 – 20:00

## TUESDAY, 25<sup>th</sup> July 2006

#### 5) Web and Grid Services

09:00 - 11:00 “Session: Grid Principles II”

- a) Welcome, context and linking (Wolfgang Ziegler) 09:00 – 09:15
- b) Web Services (Roger Menday) 09:15 – 10:00
- c) Grid Services – WSRF (Roger Menday) 10:00 - 10:45
- d) Questions / Discussions 10:45 – 11:00

*COFFEE break 11:00 - 11:30*

#### 6) Current Grid Platforms and Services

11:30 - 16:00 “Session: Grid Environments”

- a) IBM RMS and distributed Queuing in Grids (Thomas Rueter) 11:30 – 12:15
- b) Distr. RM with the Sun Grid Engine (Constantin Gonzalez) 12:15 - 13:00
- c) Questions / Discussions 13:00 - 13:15

*LUNCH break 13:15 - 14:15*

- d) Resource Orchestration in Grids (Wolfgang Ziegler) 14:15 - 15:00
- e) gLite and GILDA - EGEE (Roberto Barbera) 15:00 - 15:45
- f) Questions / Discussions 15:45 - 16:00

*COFFEE break 16:00 - 16:30*

#### 7) Grid Applications in Life Sciences

16:30 - 18:15 “Session: Grid Applications”

- a) WISDOM project – Grid and neglected diseases (Marc Zimmermann) 16:30 - 17:15
- b) Life Science applications (Jose R. Valverde) 17:15 - 18:00
- c) Questions / Discussions 18:00 – 18:15

## WEDNESDAY, 26<sup>th</sup> July 2006

### 8) Introduction to UNICORE (Research Center Juelich) 09:00 – 18:00 “Session: Grid Practices I”



- a) Welcome, context and linking (Morris Riedel) 09:00 – 09:15
- b) UNICORE: From Project Results to Production Grids (Morris Riedel) 09:15 – 10:00
- c) UNICORE RMS, Workflow (Morris Riedel) 10:00 – 10:45
- d) Discussion / Questions 10:45 - 11:00

*COFFEE break 11:00 - 11:30*

- e) UNICORE Security, Interoperability (Morris Riedel) 11:30 – 12:15
- f) UNICORE Installation (Morris Riedel) 12:15 - 13:00
- g) Discussion / Questions 13:00 - 13:15

*LUNCH Break 13:15 - 14:15*

- h) UNICORE Configuration (Morris Riedel) 14:15 - 15:00
- i) UNICORE Command Line Interfaces & Plugins (Morris Riedel) 15:00 - 15:45
- j) Discussion / Questions 15:45 - 16:00

*COFFEE break 16:00 - 16:30*

- k) Introduction to Unicore/GS (Morris Riedel) 16:30 - 17:30
- l) UNICORE Experiences / Discussion / Questions 17:30 - 18:00

## SOCIAL EVENT “Rhine Riverboat Tour” 18:30 – 24:00



## THURSDAY, 27<sup>th</sup> July 2006

### 9) Grid Computing and the Globus Toolkit (Jennifer Schopf)

09:00 – 18:00 “Session: Grid Practices II”

- a) Welcome, context and linking (Jennifer Schopf) 09:00 – 09:15
- b) Globus Toolkit Introduction (Jennifer Schopf) 09:15 – 10:15
- c) GT4 Components I (Jennifer Schopf) 10:15 – 10:45
- d) Discussion / Questions 10:45 - 11:00

*COFFEE break 11:00 - 11:30*

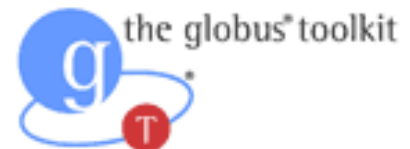
- e) GT4 Components II (Jennifer Schopf) 11:30 – 12:00
- f) GT4 Installation I (Hamza Mehammed) 12:00 – 13:00
- g) Discussion / Questions 13:00 - 13:15

*LUNCH Break 13:15 - 14:15*

- h) GT4 Installation II (Hamza Mehammed) 14:15 – 15:00
- i) GT4 Configuration (Hamza Mehammed) 15:00 - 15:45
- j) Discussion / Questions 15:45 - 16:00

*COFFEE break 16:00 - 16:30*

- k) GT4 Tests (Hamza Mehammed) 16:30 - 17:30
- l) Experiences / Discussion / Questions 17:30 - 18:00



## FRIDAY, 28<sup>th</sup> July 2006

### 10) Grid Applications in Industry – “Life Sciences”

09:00 – 10:45 “Session: Industrial Experiences”

- a) Welcome, context and linking (Martin Hofmann) 09:00 – 09:15
- b) Oracle’s Grid Technology (N.N.) 09:15 - 10:00
- c) The MOAB Grid Suite (Tassilo Eckerle) 10:00 - 10:45
- d) Discussion / Questions 10:45 - 11:00

*COFFEE break 11:00 - 11:30*

### 11) Visions of Future Grids

11:30 – 13:30 “Session: Visions and Discussion”

- a) Vision of UNICORE – Unigrids and beyond (Daniel Mallmann) 11:30 – 11:50
- b) Globus: Where Are We Going For the Next 10 Years? (Jennifer Schopf) 11:50 - 12:10
- c) Vision of Next Generation Grids (Keith Jeffery) 12:10 - 12:30
- d) Panel Discussion on Visions of Future Grids 12:30 - 13:15
- e) Summary, Closing Remarks (Martin Hofmann) 13:15 – 13:30

*LUNCH 13:30 - 14:30*