Community-driven performance modelling & analysis

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Produced with prosper and \LaTeX
Collaborative modelling

Main goals:
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- Open publishing, with meaning
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- Networked repository of well-understood components
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- Encourage re-use and *modelling by reference*
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- Open publishing, with meaning
- Networked repository of well-understood components
- Encourage re-use and *modelling by reference*
- Provide analysis support through our own resources
What we store

- Models
- Measures
- Parameters
- Results
What we store

- **Models** – individual systems or components
- **Measures**
- **Parameters**
- **Results**
What we store

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- **Measures** – model-specific or more general
- **Parameters**
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What we store

- **Models** – individual systems or components
- **Measures** – model-specific or more general
- **Parameters** – use variables within measures
- **Results**
What we store

- **Models** – individual systems or components
- **Measures** – model-specific or more general
- **Parameters** – use variables within measures
- **Results** – combining all three, to give a particular answer
Web technologies

Using REST style, and borrowing from the Semantic Web:

Everything has a Web Address (URI)
Web technologies

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- Everything has a Web Address (URI)
- Models (and versions of models)
- Measures
- Results
- Relationships
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- Changes are made using straightforward HTTP (no WSDL, no SOAP, no WS-*)
Analysis via the site

Provide access to the GRAIL cluster at Imperial.

- 16 nodes:
  - Sun Fire x4100
  - dual 64-bit Opteron 275 processors
  - 8 GB RAM
- Gigabit ethernet and Infiniband interfaces
Future work

- Encourage real users
- More powerful analysis capabilities
- Tool integration
- Publish structured information in useful formats
- Automated daemons to spot ‘interesting’ features
- Feeds and alerts
Fin

Thank you.

<http://aesop.doc.ic.ac.uk/>