SAGA

Installation and Deployment

http://faust.cct.lsu.edu/trac/saga/wiki/NeSC2009

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- We try to follow a semi-strict 6 week release cycle. The current release is 1.3.1 bug fix release 1.3.2 is on the way
- We currently provide source-only releases
- The easiest way to obtain it is through the SAGA website: http://saga.cct.lsu.edu/cpp/download
- Public SVN access is also possible: https://svn.cct.lsu.edu/repos/saga/trunk/



WHAT'S IN THE BOX?

- SAGA C++ Core Libraries and Header files
- · Makefile templates for easy build system integration
- Python language bindings (95% complete)
- · Installation Manual, Programming Guide, API Documentation
- Lots of examples
- Command line utilities for each functional package
- The SAGA shell



WHAT'S IN THE BOX? CONT.

- Job Adaptors
 - Fork (localhost), SSH, Condor, Globus GRAM2, OMII GridSAM, Amazon EC2, Platform LSF
- File Adaptors
 - Local FS, Globus GridFTP, SSH, Hadoop Distributed Filesystem (HDFS), CloudStore KFS, OpenCloud Sector-Sphere
- Replica Adaptors
 - PostgreSQL/SQLite3, Globus RLS
- Advert Adaptors
 - PostgreSQL/SQLite3, Hadoop H-Base, Hypertable



WHAT'S IN THE BOX? CONT.

- Other Adaptors
 - Default RPC / Stream / SD
- Planned Adaptors
 - CURL file adaptor, gLite job adaptor

- In order to build & install SAGA you need at least:
 - A UNIX operating system (Linux, MacOS, etc.)
 - A C++ Compiler (preferably gcc >= 3.4)
 - The Boost C++ Libraries (>= 1.33.1)
 - Python (if you want to build the Python language bindings)
- Adaptors may have additional requirements
 - PostgreSQL / SQLite client libraries
 - Globus / Condor / LSF installations
 - etc ...



- Configure/make based build system
- Top-level configure/make recursively calls configures/makes for each adaptor, language bindings, etc...
- Fault tolerant: if one of the sub-level packages can't be configured (missing prerequisites, etc...) it is simply skipped
- · Sub-level packages can be built outside the source tree
- We also provide XCode and VisualStudio project files



DEPLOYMENT/MEPHISTO

- We provide a simple deployment tool: Mephisto. Get it here: http://macpro01.cct.lsu.edu/mephisto
- It can be used to bootstrap the whole SAGA stack:

```
perl mephisto.pl install -target-dir=/opt/saga/
```

• ... even remotely:

ssh qb.loni.org /usr/bin/perl mephisto.pl install -target-dir=/work/oweidner/meph

SAGA A Simple API for Grid Applications [http://saga.cct.lsu.edu]

DEPLOYMENT PLANS 2009/2010











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THANKS

Questions / Comments?

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