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ITEA 3 is a EUREKA strategic ICT cluster programme

Exploitable Results by Third Parties

13024 COLOC

Project details

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Name: HWLOC

Input(s):	Main feature(s)	Output(s):
▪ A NUMA node, server ▪ shared-memory machine	▪ gathers hardware information about processors, caches, memory nodes ▪ Provide core numbering ▪ C library interface: exposes information gathered to applications and runtime systems in a abstracted and portable hierarchical manner ▪ Portable across system (windows, Max Os, linux) ▪ Works on modern architecture (including KNL)	▪ An abstract view of this NUMA node enabling query by a program ▪ A visual view of this node ▪ Tools for mapping

Unique Selling Proposition(s):	▪ Portability across architecture and system ▪ De facto standard way of abstracting NUMA node
Integration constraint(s):	▪ Need an C compiler ▪ Works better with latest version of the system
Intended user(s):	▪ Runtime system developers (e.g. MPI) ▪ Batch-scheduler developers (e.g. SLURM) ▪ Language developers (e.g. OpenMP, PGAS)
Provider:	▪ Inria and the OpenMPI consortium ▪ https://www.open-mpi.org/projects/hwloc/
Contact point:	▪ Brice Goglin (brice.goglin@inria.fr)
Condition(s) for reuse:	▪ Free software distributed under BSD licence.

Latest update: 05/10/2017

Name: NETLOC		
Input(s):	Main feature(s)	Output(s):
▪ A Parallel super computer	▪ Build network topology of the supercomputer	▪ An abstract view of this supercomputer enabling query by a program ▪ A visual view of the supercomputer
Unique Selling Proposition(s):	▪ Portable across network technology (infiniband, cray, etc.) ▪ Handle main network topologies (tree, torus, dragonfly)	
Integration constraint(s):	▪ Need an C compiler ▪ Need administrator privilege	
Intended user(s):	▪ Batch-scheduler developers (e.g. SLURM) ▪ Supercomputer administrator	
Provider:	▪ Inria and the OpenMPI consortium ▪ https://www.open-mpi.org/projects/netloc/	
Contact point:	▪ Brice Goglin (brice.goglin@inria.fr)	
Condition(s) for reuse:	▪ Free software distributed under BSD licence.	
Latest update: 05/10/2017		

Name: MAQAO UFS		
Input(s):	Main feature(s)	Output(s):
▪ Binary to analyse ▪ Processor characteristics	▪ Cycle-accurate flow simulator ▪ Helps identifying causes of bottlenecks in loops	▪ Detailed reports

Unique Selling Proposition(s):	▪ Static analysis: no execution needed ▪ Good trade-off between accuracy and speed
Integration constraint(s):	▪ Linux Standard Based OS ▪ Supports Intel x86_64 architecture
Intended user(s):	▪ Performance evaluation expert ▪ Researcher
Provider:	▪ University of Versailles Saint-Quentin-en-Yvelines ▪ http://www.maqao.org/index.php
Contact point:	▪ William JALBY - william.jalby@uvsq.fr ▪ contact@maqao.org
Condition(s) for reuse:	▪ On demand

Latest update: 05/10/2017

Name: **Scilab SciMUMPS toolbox on NOVA HPC Cluster**		
Input(s):	Main feature(s)	Output(s):
▪ Sparse matrices / mesh	▪ Provides the functionalities of MUMPS in the Scilab environment	▪ MUMPS solver output for data analysis or visualization in Scilab

Unique Selling Proposition(s):	▪ Integrating MUMPS parallel sparse direct solver in the Scilab platform enables flexible data preparation, data analytics and visualization and provides a way to perform Design of Experiment campaigns orchestrated by Scilab
Integration constraint(s):	▪ Scilab 6 on NOVA HPC Cluster
Intended user(s):	▪ Scilab HPC users
Provider:	▪ Scilab Enterprises, part of ESI Group ▪ http://scilab.io/
Contact point:	▪ team@scilab.io - yann.debray@esi-group.com
Condition(s) for reuse:	▪ Licence

Latest update: 05/10/2017

Name: **Scilab Cloud API Server on NOVA**		
Input(s):	Main feature(s)	Output(s):
▪ Scilab code/ algorithm & data to compute	▪ Enables the execution of Scilab simulation or data analytics compute jobs on a Bull NOVA HPC Cluster	▪ Results of the compute job

Unique Selling Proposition(s):	▪ Provides an easy-to-access cloud/web interface to deploy/run/launch parallel simulation or data analytics compute jobs on a Bull NOVA HPC Cluster ▪ Allows parallel simulation jobs to be launched on the NOVA HPC cluster without the need to be expert of the HPC Cluster.
Integration constraint(s):	▪ Access to a Bull NOVA HPC Cluster ▪ Access to Scilab Cloud
Intended user(s):	▪ Scilab HPC users
Provider:	▪ Scilab Enterprises, part of ESI Group ▪ http://scilab.io/
Contact point:	▪ team@scilab.io , Yann Debray – yann.debray@esi-group.com
Condition(s) for reuse:	▪ Licence

Latest update: 05/10/2017