

Grid Solution for Wide Area Computing and Data Handling

#### ARC6 @ the NG19 Conference, Lund

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# Rolling out the ARC6 release





## There were 6 everywhere





### NORDUGRID Six ways to answer what ARC is (1/6)



#### **Advanced Resource Connector**

Keep in mind that ARC has always been a middleware...

NOROUGRI Out Informer For William A Companing and Countries



NG19, Lund

BAR 4 GRILL

"What do you mean 'let's get rid of the middlemen' - we are the middlemen!"



NG19, Lund

http://www.nordugrid.org/arc/arc6/

5



#### The release preparation (2/6)

We announced ARC6 (almost) on 6 June (6/6):

Maiken messaged at 22:46 on 6/6:

"It is a shame to miss 6/6, but now I feel that it is better to wait until tomorrow morning. Seems a bit silly to send out release email at 23 in the night, not much point. So will send out announcement tomorrow!"

.. after being happy with the 6<sup>th</sup> release candidate
(v6.0.0rc6): v6.0.0 Tagging for ARC 6.0.0 release

-o- 7d48d115 · Edited release note date · 1 week ago

▶ v6.0.0rc6 Sixth and expected final release candidate for ARC 6.0.0

-o- 1b829ea1 · Merge branch 'arc6-translations' into 'master' · 3 weeks ago

 ... that concluded a development work which started in 2016!



## Six major NEW things in ARC6 (3/6)

#### ARC.CONF

- Complete rework, authorization, user mapping, defaults, config blocks, validation
- 2. Scalability & manageability improvements
  - Event-driven internal job loop, startup scripts, logfiles, streamlined packages
- 3. New Runtime Environment framework
  - default, installed, enabled RTEs, introduction of RTE parameters
- 4. ARCCTL, a new server-side sysadmin tool
  - one-stop-shop tool for administrating an ARC CE
- 5. JURA accounting improvements
  - New config, republishing, internal restructuring
- 6. ARCHERY





# Six obsoleted component sets (4/6)

- 1. Large number of config options
- CREAM and UNICORE related client plugins and server-side modules
- All the Windows and Solaris code and builds
- 4. Support for BES, WSRF, non-EMIES WS flavours, JDL, ARCJSDL, RSL
- EMIR indexing service and server-side EGIIS
- ARC-SDK support for top-BDII and GLUE1



# Grid Solution for Wide Area Computing and Data Handling Six thing we postponed to ARC7 (5/6)

- 1. Completion of several Tech Preview solutions:
  - REST Interface
  - Internal Interface
  - Python LRMS
  - Candypond service



- Including arcsub cli option consolidation
- 3. Embracing non-x509 security trends
- 4. Controldir restructuring
- 5. Phasing out gridftp and glue-1
- 6. Better error messages





#### Get ARC6: The Guides (6/6)

#### • Upgrade from ARC5 to ARC6, follow the six step checklist:

#### migrating5to6:

- 1. Rewrite your arc.conf: you can send your configuration to us and we will help to rework it for ARC6.
- 2. Learn the ARC6 packages and services names.
- 3. Get familiar with ARC Control Tool that will simplify your life as an ARC6 administrator.
- 4. Don't forget to enable RunTime Environments (RTE) with arcctl rte enable.
- 5. Be aware of accounting subsystem changes.
- 6. Say "Good Bye!" to EGIIS, the ARC community is migrating over to a DNS-based ARCHERY system.

#### Try ARC6 in six steps, follow the guide:

- Step 1. Enable NorduGrid ARC6 repos
- Step 2. Install A–REX
- Step 3. Run A-REX
- Step 4. Generate user certificate and key for testing
- Step 5. Submit job and check it is running
- Step 6. Play more with the ARC Computing Element







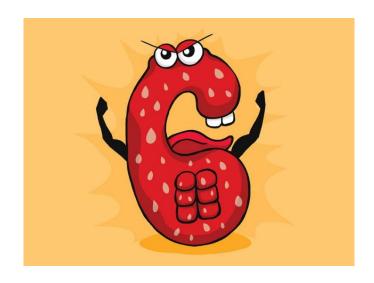
### 6+1: The people

- The <u>ARC developer chat</u> contains 16+1 names; the top ARC6 contributors:
  - Aleksander, Andrii, David, Florido, Mattias
- The <u>ARC6 support channel</u> lists 16+1 names, the top ARC6 sysadmins:
  - Andrej, Dmytro, Jens, Gianfranco
- The <u>ARC technical coordination group</u> consists of 6+1 names:
  - Maiken, Oxana, Anders, David, Aleksander, Mattias and myself
- A big thank to EVERYBODY!



### The NG19 Challenge:

• What is your ARC-related six-pack?



 Send your ARC SIX collection to <u>ng2019@nordugrid.org</u> and win a prize at the Conference dinner ©



#### Six reasons to install ARC6

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.