# Report from regional grid LDG and Middleware Working Group.



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24rd ILDG Workshop March 24, 2016





# Status of global ILDG Services

#### **VOMS**

https://grid-voms.desy.de:8443/voms/ildg

- Stable operation
- > O(38) members suspended because AUP not re-accepted Notifications missed or not received?

#### Webpage

http://plone.jldg.org/ildg

- > Seems rather stable
- Content out of date (e.g. ildg@sapac.edu.au)

#### **INCA**

- Not yet migrated
- Might be (partly) substituted by extensions of Itools



## **MWWG**

#### **New MWWG Members**

> ?

#### **MWWG Discussions and Activities**

- No regular meetings recently
- > Some informal exchanges (OW, ...)
- Some progress on Itools (LDG specific?)



## **LDG**

#### LDG Status:

- All services run stable
- Users have usually no running client software (Itools) any more, but don't know how to do low-level access (and can't be expected to ...)
- > Huge pile-up of CLS configs to be uploaded (about 150 ensembles, 60 000 configs, 250 TB)



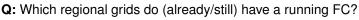
# Itools (re-design)

### Aim and strategy of current re-imlementation of Itools

- rely on availability of common software components on host system (instead of including them in deployed package)
- reduce dependence on problematic components (e.g. java clients)
- upgrade LCG components from lcgutils to gfal2
- additional support for handling of markup and binaries

#### Modular and gradual functionality in new Itools

prerequisites		available
host	regional grid	functionality
perl + curl	MDC	list ensembles and configs download metadata
+ grid-proxy-init	FC	locate configs (e.g. for low-level access)
+ SRM client + voms-proxy-init	SE LDG_MDC	download configs upload metadata (and administration)
+ LCG utils or gfal2	LDG_FC	download + upload configs





# Itools (markup)

#### Support for easy markup (lmu)

#### Assume that users

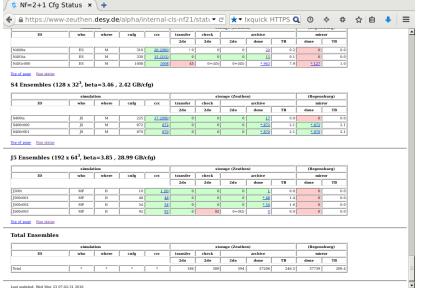
- (i) know how and from where to collect info required for QCDmlConfig (e.g. ad-hoc values, shell commands, custom scripts, ...)
- (ii) are willing to (once) insert info from (i) into some tree data structure (specified by XML or other more handy format, e.g. \item)

#### Then the "markup tool"

- > parses (ii)
- generates corresponding XML output
- replaces content of elements by (i)
  (e.g. specified values, output of commands, or defaults)
- validates XML



# Example: (meta-)data handling in CLS runs





# Itools (binaries)

#### Support for (un-)packing binaries (lpack)

- > pack binary data and ILDG records into lime file (with light-weight and cleaned re-implementation of lime-1.3.2)
- compute checksum (for XML)
- list and extract individual records
- perform integrity and compliance checks (crc, endianess, IEEE, unitarity)



# Itools (checks)

## Support for tests and checks (lcheck)

- no-regression test of Itools functionality
- > test access to main services (MDC, FC, SE)
- check consistency of (LDG) resources
- > collect statistics

- $\rightarrow$  host installation
- → automatic monitoring
- $\rightarrow$  detect errors + zombies
- → status webpage?



## Status of Itools

## Status of Itools development

functionality	implementation
metadata download	ok
config download	ok (gfal2 incomplete)
config upload	delayed
LDG MDC admin	in a a manula ta
LDG MDC admin	incomplete
lcheck	in progress
	<u>'</u>



## **TODO**

#### Plans and pressing issues:

- > Finish new version of Itools
- Update content of webpage(s)
- Alternative concepts for FC (LDG)
- Clarify policy for access restrictions

