



**NORDUGRID**

*Grid Solution For Wide Area  
Computing and Data Handling*

## **Quick overview of various logfiles, loglevels**

Flordio Paganelli, Lund University  
7-9 Nov 2018, ARC Retreat Umeå

# Consistent log configuration

- Every subsystem log is now configured using the same option inside the subsystem block:
  - `logfile=<full path to the logfile>`
  - `loglevel=[0-5]`
- If not specified, defaults will kick in.
- Some blocks have more than one logfile, their configuration varies (see table in next slide)

0	FATAL
1	ERROR
2	WARNING
3	INFO
4	VERBOSE
5	DEBUG

## Subsystem: A-REX

Block Name	Log option	Default loglevel	Default logfile path	What is it
[arex]	loglevel logfile	3	/var/log/arc/arex.log	Main arex logs (former grid- manager.log)
[arex]	joblog	N/A	/var/log/arc/arex- jobs.log	specialized log about started and finished jobs. If not specified no job logs are created.
[arex]	helperlog	N/A	/var/log/arc/ job.helper.errors	Configuration option to specify the location of log for helpers

# Subsystem: A-REX

Block Name	Log options	Default loglevel	Default logfile path	What is it
[arex/cache/cleaner]	loglevel logfile	3	/var/log/arc/ cache-cleaner.log	Logs of the cleaning functionality of the cache
[arex/data-staging]	loglevel logfile	As defined in [arex]	Undefined, if option not present not created	Logs of the data staging capabilities of A-REX.
[arex/ws]	loglevel logfile	N/A	/var/log/arc/ ws-interface.log	Logs of Web Service interfaces

## Subsystem: A-REX

Block Name	Log options	Default loglevel	Default logfile path	What is it
[arex/jura]	loglevel logfile	3	/var/log/arc/jura.log	Logs of the accounting system jura
[arex/ganglia]	loglevel logfile	N/A	/var/log/arc/ gangliarc.log	Logs of the ganglia daemon

# Subsystem: gridftp

Block Name	Log options	Default loglevel	Default logfile path	What is it
[gridftp]	loglevel logfile	3	/var/log/arc/ gridftpd.log	Logs of the gridftp server

# Subsystem: Information System

Block Name	Log options	Default loglevel	Default logfile path	What is it
[infosys]	loglevel logfile	1	/var/log/ arc/ infoprovide rs.log	Logs of A-REX's information providers
[infosys/ldap]	slapd_loglevel	0	System defined	Logs of the ldap server
[infosys/ldap]	bdii_debug_level bdii_log_dir	WARNING	/var/log/ arc/bdii/ bdii- update.log	Logs of the LDAP/BDII subsystem

# Subsystems: DataDelivery, ACIX, nordugridmap

Block Name	Log options	Default loglevel	Default logfile path	What is it
[datadelivery-service]	loglevel logfile	3	/var/log/arc/ datadelivery- service.log	Logs of A-REX's information providers
[acix-scanner]	loglevel logfile	3	/var/log/arc/arc- acix-scanner.log	Logs of The ARC Cache IndexThe ARC Cache Index (ACIX) (ACIX) Scanner (on CEs)
[nordugridmap]	loglevel logfile	3	/var/log/arc/ nordugridmap.log	Logs of the nordugridmap utility (creates gridmap-files)



## Subsystem: ACIX scanner

Block Name	Log options	Default loglevel	Default logfile path	What is it
[acix-scanner]	loglevel logfile	3	/var/log/arc/arc- acix- scanner.log	Logs of The ARC Cache IndexThe ARC Cache Index (ACIX) (ACIX) Scanner (on CEs)

# Log Format

- We tried to unify, but there are still cases in which we preferred better debugging info over strict format (e.g. multiline errors)

**[Date] [Class|Module] [loglevel] [pid/thread] errormsg**

```
[2018-11-06 04:46:45] [Arc.MCC.TLS] [ERROR] [3799177/868] Failed to accept SSL connection
```

```
[2018-11-06 04:31:25] [CEInfo] [INFO] [2048688] ##### A-REX infoprovider started
```

- Jura is different

```
INFO: Initialised, job log dir: /var/spool/arc/jobstatus/logs  
VERBOSE: Expiration time: 2592000 seconds
```

# Logrotation

- As usual, only performed on default locations. You need to create your own system logrotate configfile to tackle your own setup