

EMI

Release Notes

ARC CLIENTS

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Abstract: ARC Clients EMI component refers to a set ARC clients.

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1 RELEASE NOTES

1.1 WHAT'S NEW:

- ARC Clients in EMI-1 "Kebnekaise" release is a major step forward with respect to previous releases, as it completes migration to the new code base. With this release the ng* clients are replaced by the arc* clients.
- Introduction of a modular architecture, which comes to its power in the libarcclient and libarcdata2 libraries.
- Compute client comes with plugins providing functionality for job submission, resubmission, and job management against the pre-WS ARC, A-REX, CREAM and any BES-based Execution Service (ES).
- Compute client supports job migration between A-REX instances.
- Compute client supports resource discovery based on EGIIS, ISIS and BDII index services.
- Compute client offers matchmaking and ranking by shortest queue, clock speed, benchmark or data location.
- Compute client offers job description translation between the XRSL, JSDL and JDL languages.
- Modular libarcclient allows easy extension for additional services, ranking algorithms, or job description languages.
- New plugins-based data library, libarcdata2, replaces previous data library.
- Data access is now managed through DMCs, protocol-specific plugins.
- New data clients (arcls, arccp, arcrm, arcsrmping) replace previous data clients (ngls, ngcp, ngrm, ngtransfer, ngstage, ngacl).
- Improved default output for arcls, now closer to UNIX ls. Options are provided to specify non-default output.
- Improved error messages for arcls and arccp, improved calculation of file checksums.
- Fixed a bug where the check for readability (arcls -c) failed incorrectly in some cases.
- Fixed a bug where metadata from gridftp objects were incorrectly reported.
- arcproxy bugfixes: arcproxy - dteam VO error (bug 2026), arcproxy does not search /etc/vomses recursively (bug 2118), Segmentation fault with arcproxy with invalid vomses file (bug 2155)
- TBD: mention, describe infosys CLIs as well
- TBD: add major fixed issues/bugs for compute part (see data area)

1.2 DEPLOYMENT NOTES:

- With this release the new clients (arc*) utilising the strength of libarcclient and libarcdata2 replace the old clients (ng*).The behaviour and interface of the new clients slightly differs from the old ones, so for compatibility reasons the ng* still distributed as part of the compat package.
- The old arclib is now replaced by the new libraries and tagged as obsolete (though still available).

- Previous clients (ng*) are now available from nordugrid-arc-compat package.
- The new clients (arc*) are available from the nordugrid-arc-client package.
- The libracclient and libarcdata2 libraries are available from the nordugrid-arc package.
- The DMCs and different plugins are available from nordugrid-arc-plugins-needed and nordugrid-arc-plugins-globus (the latter requires globus).
- TBD: describe configuration changes, new client config, optional re-use of old client config, so on.

1.3 KNOWN ISSUES

- The new arc* commands are not 100% compatible with the old ng* commands. A detailed analysis of the differences are provided as part of client component documentation.
- Recursive copy using `ngcp -r` deletes existing files (see nordugrid bug 2132). Use caution when using `ngcp -r` or use `arccp -r` instead.

There are additional non-critical smaller issues registered in NorduGrid bugzilla.