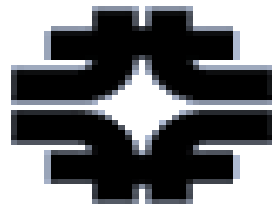


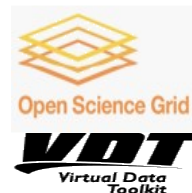


dCache SRM 2.2 evaluation deployment

Patrick Fuhrmann
Timur Perelmutov



additional funding, support or contributions by





SRM 2.2 evaluation deployment

Versions

Interoperability

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Details

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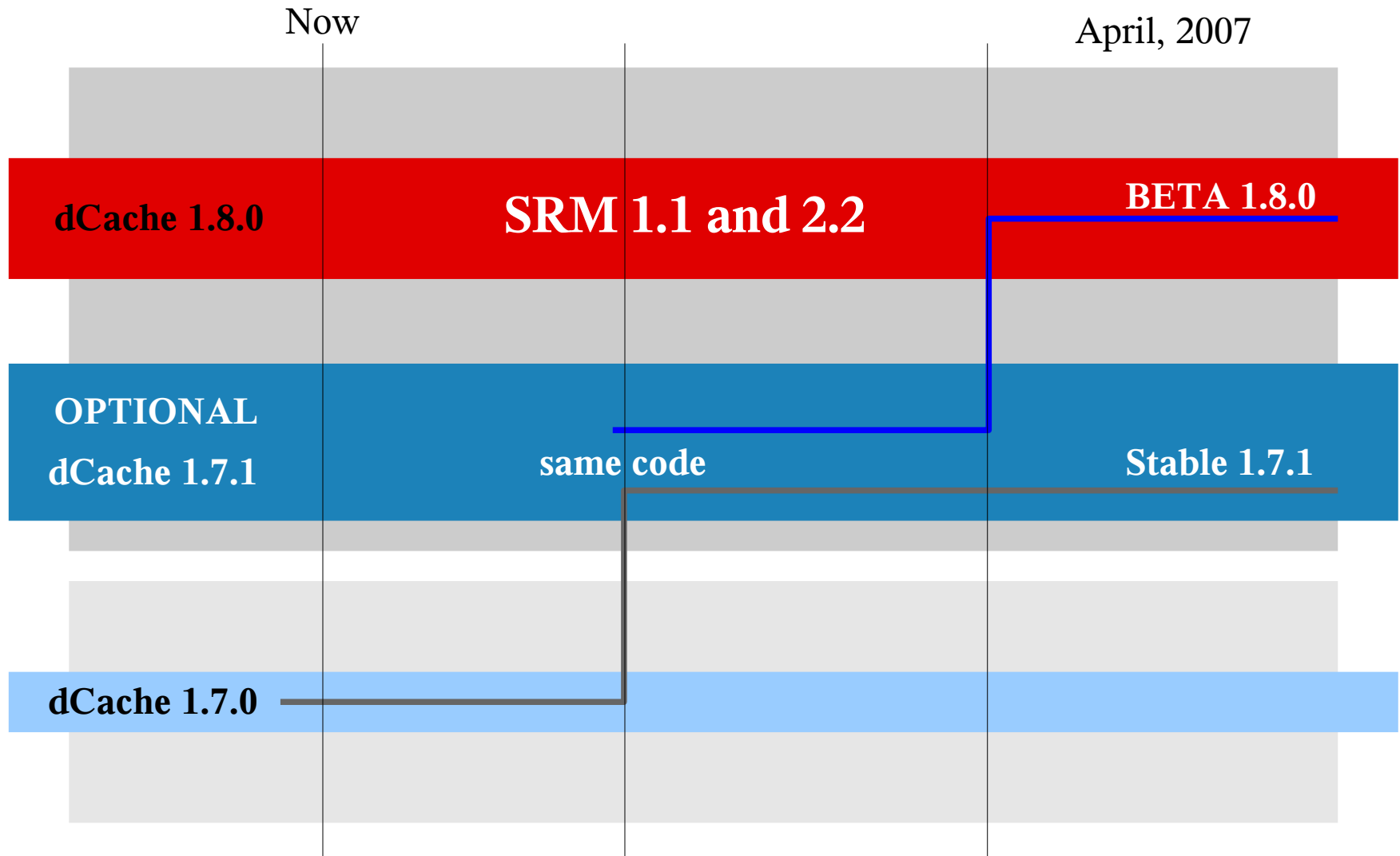
Timing



Versions

dCache.ORG

dCache.ORG





SRM version interoperability issues

Not to forget :

Thanks to Flavia and Maarten for their great and patient work in testing and giving advise.



SRM version interoperability issues

- * File name limitation ≤ 199 characters (full path has no limit)
 - Caused by the underlying file system engine (pnfs)
 - Will be fixed with upcoming new engine (chimera)
 - Production date for chimera is not decided yet (~ end of the year)

- * PUT overwrite
 - very likely fixed within the next week
 - will be certainly fixed in dCache 1.8.0

- * SURL doesn't exist on PUT before data transfer starts
 - Our opinion is that this part of the spec. may introduce usability problems.
 - If client doesn't clean up in case of a problem, subsequent PUT on the same filename will fail until a timeout expires. Except for `overwrite=ALLWAYS`



SRM version interoperability (minor issues)

* prepare to put followed by a 'Done' without data transfer should fail in dCache, but doesn't. *Remember* : dCache doesn't create the SURL on PUT before data transfer has started.

- Agreed in general, but still discussion on details.

* Trying to extend lifetime of expired TURL succeeds but shouldn't.

- Agreed, and will be fixed soon.



SRM version interoperability (details)

- The initial dCache version with SRM 2.2 included, is **dCache 1.8.0**.
- **dCache 1.8.0** and higher will support **SRM 1.1 and SRM 2.2** at the same time on the same TCP Port.
- Both SRM protocol versions will run in the same dCache instance, using just one file system instance. (pnfs)
- Both SRM versions will have access to the **same file name space**.
- Files written with 1.1 can be accessed via 2.2 and vice versa.



SRM evaluation deployment plan (Agreement)

- Sites agreed to deploy dCache 1.8 (SRM2.2) in April :
 - FERMILab, DESY
 - BNL
 - gridKa
 - IN2P3
- For those sites we will closely watch the installation and the behavior.
- Systems will have 1-2 head nodes and ≥ 10 TBytes of disk storage.
- Systems will be connected to a Tape Back-end to support all possible storage classes.



SRM evaluation deployment plan (restrictions)

- Full upgrade to 1.8.0 is a prerequisite for the SRM 2.2 activation.
- There is no way to have dCache versions prior to 1.8 running with SRM 2.2
- The following restrictions apply concerning the agreed test systems :
 - It will be a special dCache evaluation instance, and **not part of the production system**.
 - The service is not part of the production monitoring and may be **shut down at any time**, without further notice.
 - All **data** should be regarded as '**not persistent**' and should be copied to the production system in order to become permanent.



SRM evaluation deployment plan (timing)

April

1. Week : FERMI – DESY transfers
2. Week : Installation at BNL
3. Week : Installation at gridKa
4. Week : Installation at IN2P3

May

RPM and Installation instructions at dCache.ORG



Further steps depend on the success of the procedures described previously.

Just fair to say :

Although it's certainly our goal to be in production shape in July, we can't yet give advice on whether or not to use dCache SRM 2.2 during the Dress Rehearsal.



Further reading

www.dCache.ORG