STFC evaluation of CTA

Status of the DB backends

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Simplified use of relational databases

- 1 CTA DB instead of 8 CASTOR DBs
- Thanks to the CTA object store there are no longer any stager databases
- The 8 CASTOR databases / schemas
  - 3 central DBs (NS, VDQM and VMGR)
  - 5 stager DBs (4 LHC experiments + public)

Supported database backends

- Oracle
  - The current CERN production solution
- PostgreSQL
  - The recommended Tier 1 solution
  - The future CERN production solution
- MySQL
  - Developed by IHEP China for Tier 1s
- SQLite
  - In memory database for C++ unit-tests

Database migration strategy for CERN

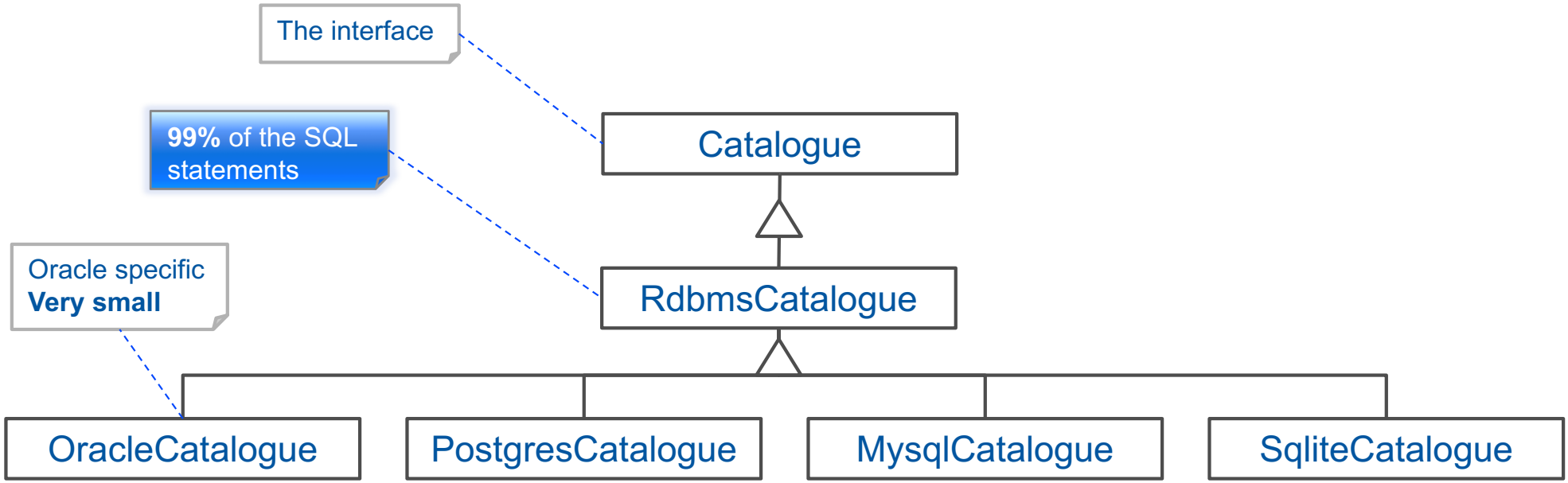
1. For each experiment/VO
   - Migrate CASTOR Oracle to EOS and CTA Oracle

2. Migrate CTA Oracle to PostgreSQL

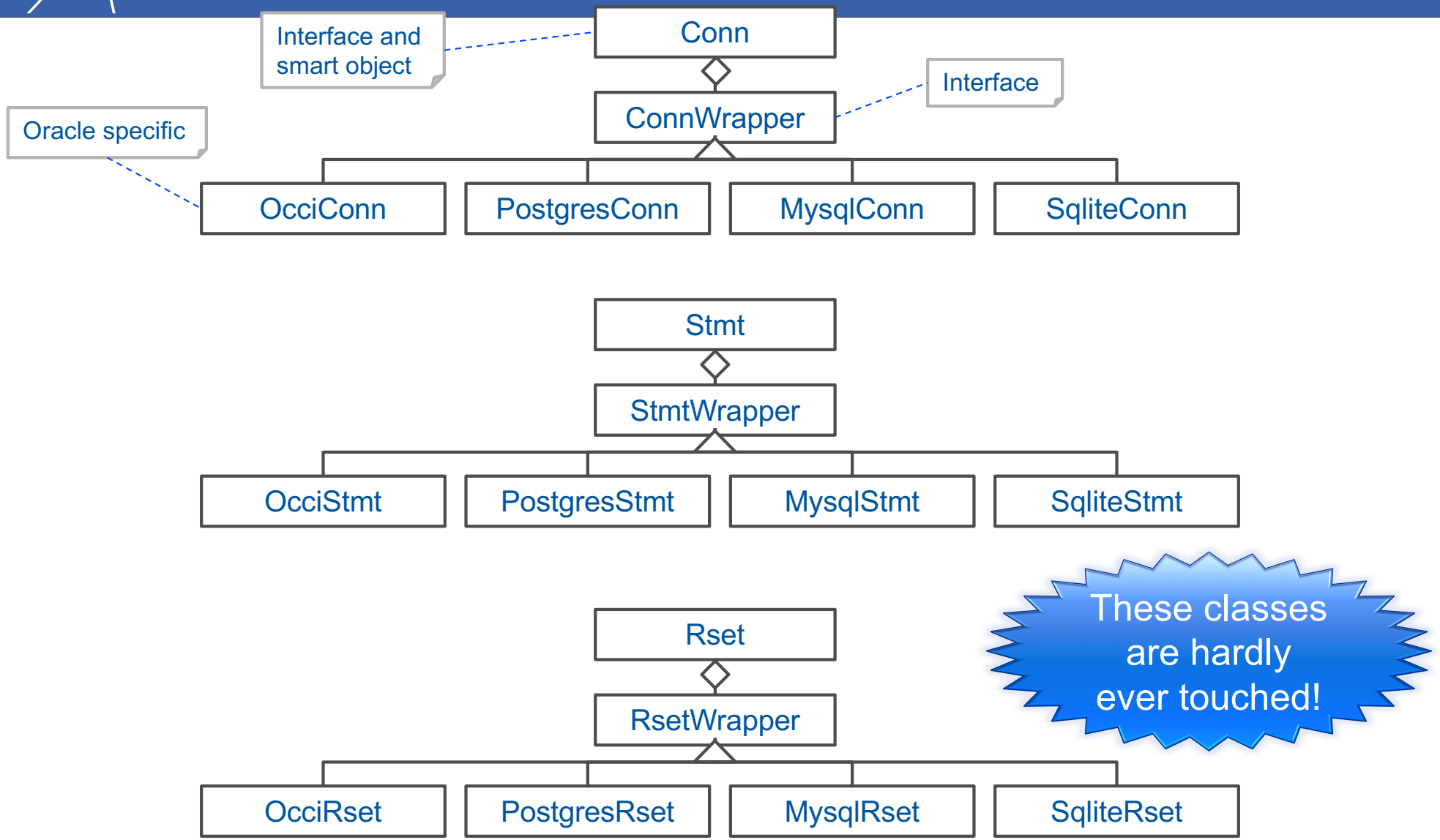
NOTE

- The CTA database will be hosted and operated by the database group of the IT department

Handling database differences 1 of 3



Handling database differences 2 of 3



Handling database differences 3 of 3

99% of the SQL schema

- common_catalogue_schema.sql
- mysql_catalogue_schema_header.sql
- mysql_catalogue_schema_trailer.sql
- mysql_catalogue_schema_trigger.sql
- oracle_catalogue_schema_header.sql
- oracle_catalogue_schema_trailer.sql
- oracle_catalogue_usage_stats.sql
- postgres_catalogue_schema_header.sql
- postgres_catalogue_schema_trailer.sql
- sqlite_catalogue_schema_header.sql
- sqlite_catalogue_schema_trailer.sql