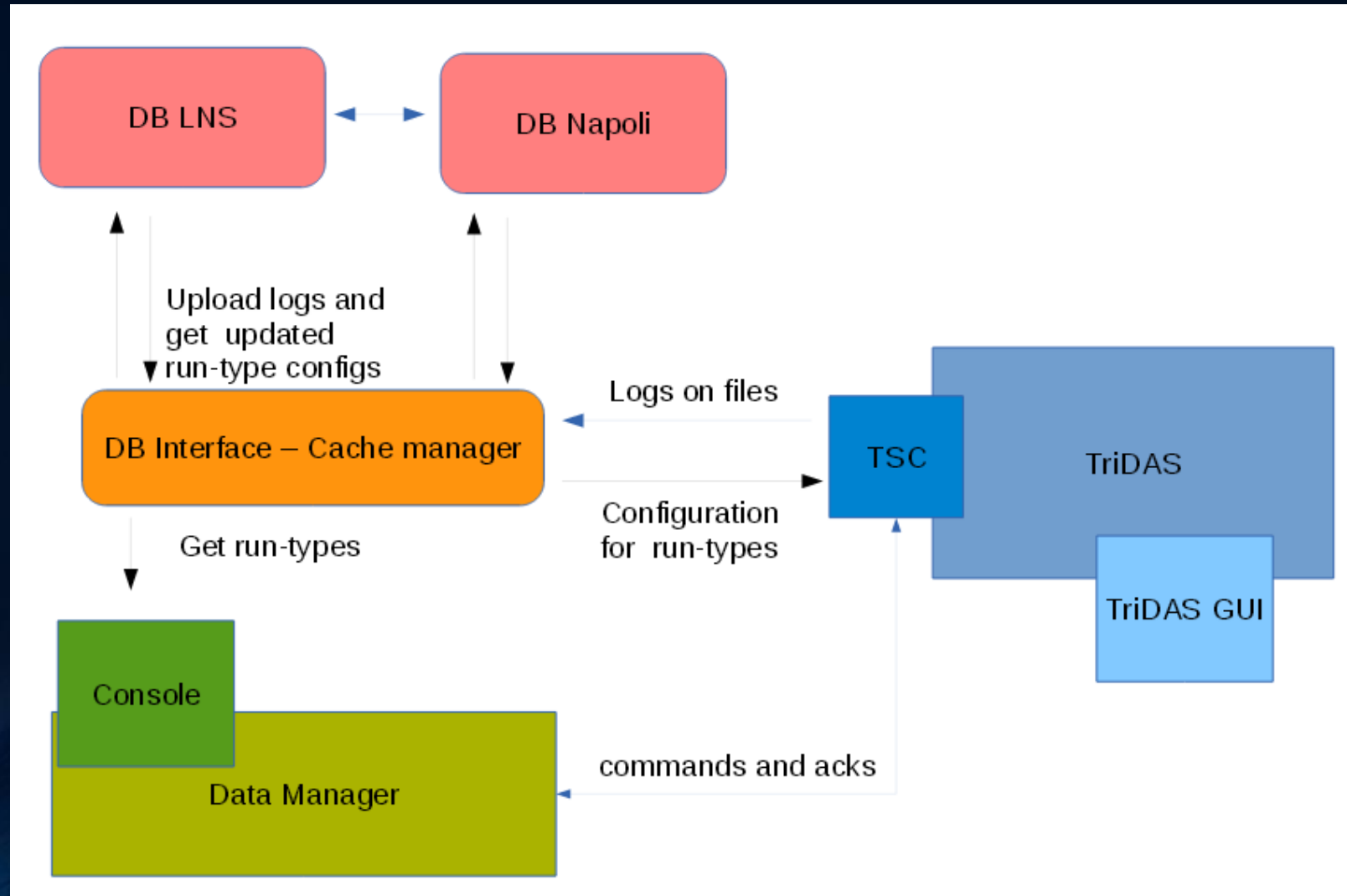


Database Interface for TriDAS

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Database Interface for TriDAS

The basic idea



Database Interface for TriDAS

- Authenticate users
- Download runsetups and runsetup parameters
- Upload monitoring information (logs) from the TSC (TriDAS Slow Control)
- Provide fault-tolerance with respect to local/remote DB
- Use a simple communication protocol

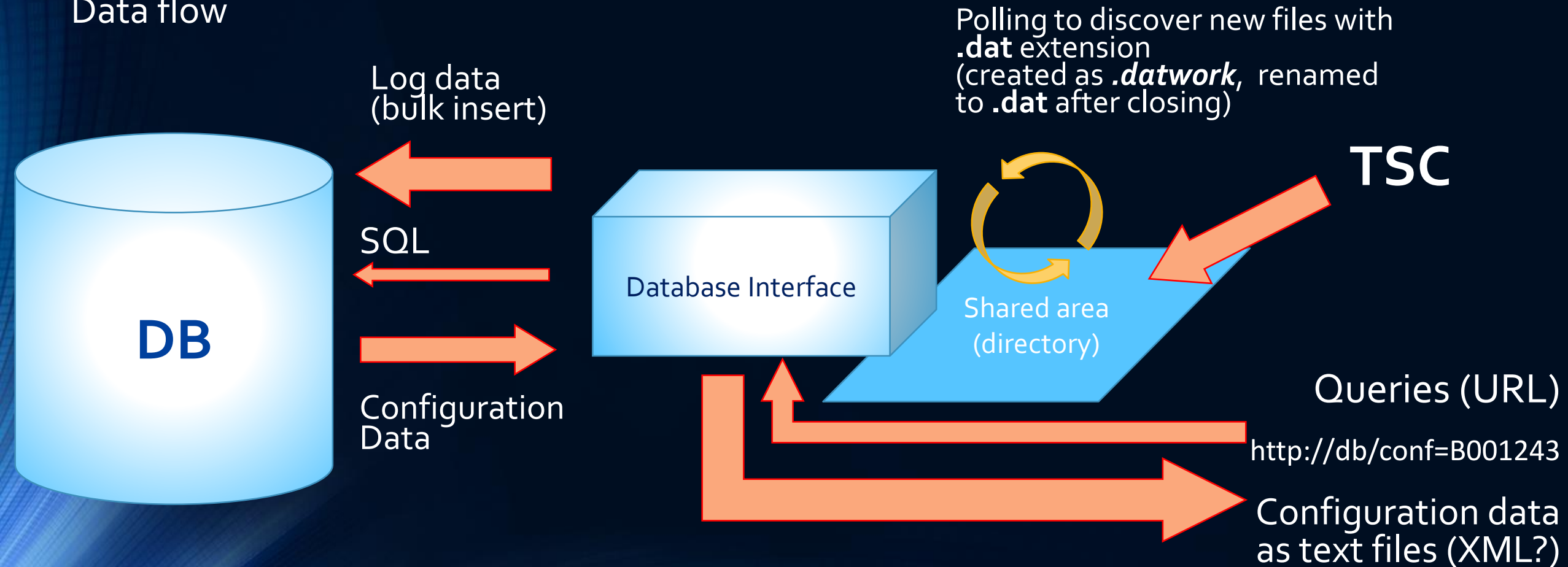
Database Interface for TriDAS

Technology

- Service Application with Web Interface (SAWI)
 - Already used for KM3Ita, KM3Web, ControlUnit (KM3NeT)
 - HTML pages for user interface and service pages for data querying/upload
- Development framework: Mono/.NET (C#)
- Oracle interface: ODP.NET

Database Interface for TriDAS

Data flow



Database Interface for TriDAS

User authentication

- Username/password read from KM3Ita (copied from KM3NeT)
- Local encrypted store
- HTTPS exchange

Database Interface for TriDAS

Runsetup management

- Each runsetup (working configuration) identified by unique code
- Additional: Unique human-readable name for each runsetup
- Additional: Description (limited to 2000 characters)
- Parameters in text format (XML?)

Database Interface for TriDAS

Shifter actions

- Select runsetup type from drop-down list (on console)
 - Optionally read also description
- Confirm (on console)
 - The Data Manager receives the unique identifier and uses it to query the DB interface and get the runsetup configuration
 - The runsetup unique identifier is used to retrieve configuration parameters (e.g.: ***<https://db/runsetup/B00000015?info=full>***)

Database Interface for TriDAS

Protocol details - 1

- Login user
 - *<https://db/login?u=pippo&p=pluto>*
 - *OK / ERROR*
- List runsetups
 - *<https://db/runsetups>*
 - *UID\$TITLE\$DESCRIPTION / ERROR*

Database Interface for TriDAS

Protocol details - 2

- Runsetup short info (UID, Name, Description)
 - *<https://db/runsetup/xxxx?info=short>*
 - *OK / ERROR*
- Runsetup full info
 - *<https://db/runsetup/xxxx?info=full>*
 - *OK / ERROR*