

# Development of a lightweight database interface for accessing JUNO conditions and parameters data

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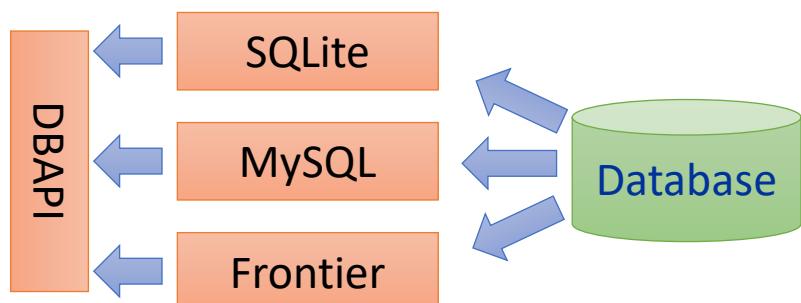
DBAPI is a **header-only, modern C++ unified** database interface to access JUNO conditions and parameters from **multiple backends** including Frontier/MySQL/SQLite.

**1. Fast Reconstruction onsite**

**2. Validation of constants**

**3. Keep Up Production**

**4. Physics Production**



Support Different Use Cases in JUNO

```
dbi::FrontierDB frontierdb{url};  
m_frontierapi = new dbi::DBAPI(frontierdb);  
m_frontierapi->connect();
```

**Initialization  
with different  
backends**

```
auto results = m_frontierapi->query<...>(sql);  
for (auto result: results) {  
    auto [x, y, z] = result;  
}
```

**Result:**  
- std::tuple  
- C++ lambda

```
struct GlobalTag {...};  
for (auto result: m_frontierapi->query<GlobalTag>(sql,  
    [](...) -> GlobalTag { return ... }) {  
}
```



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