



Aida; Accelerator Integrated Data Access

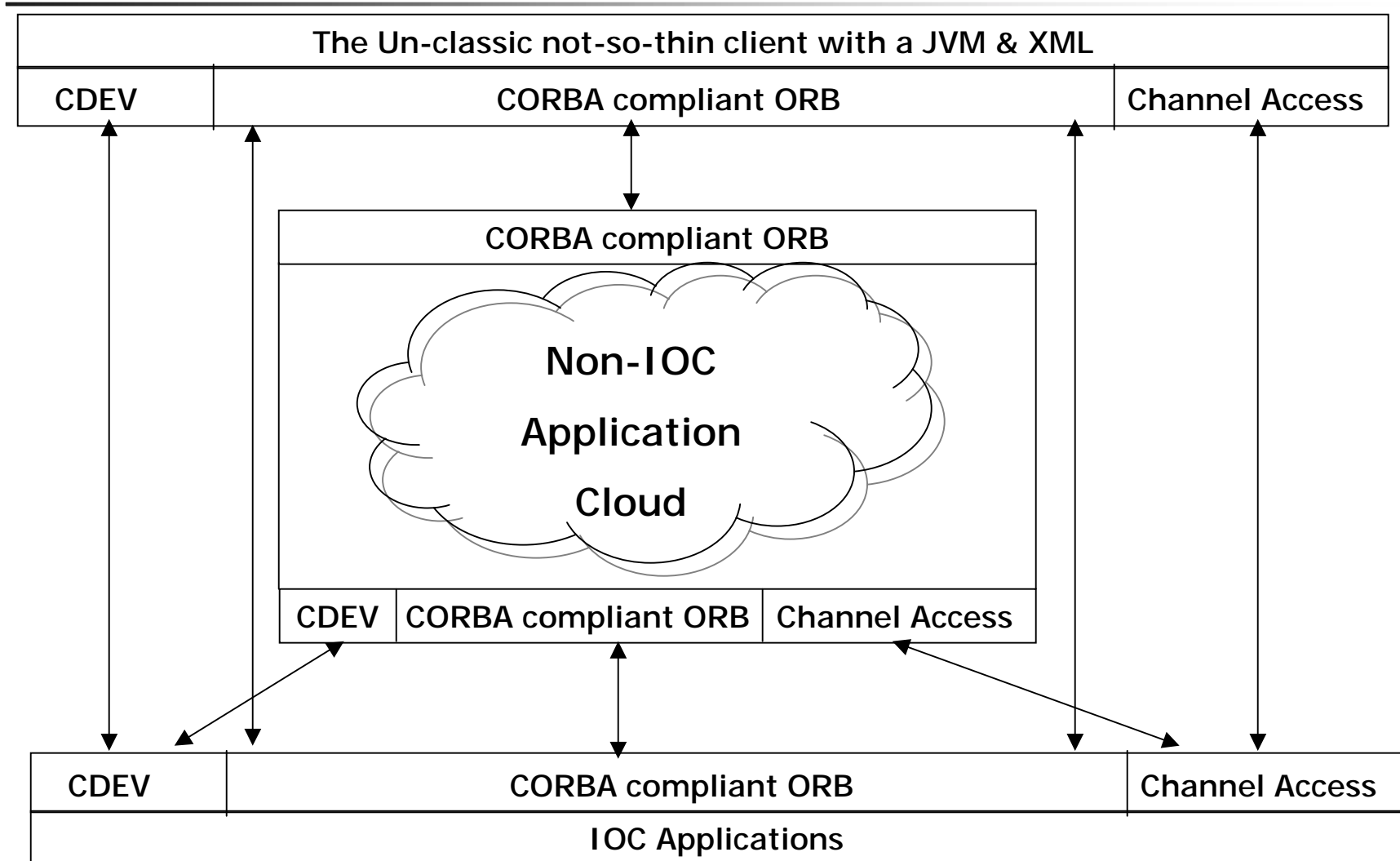
Middleware Continued

Episode 3; Verdi's Revenge

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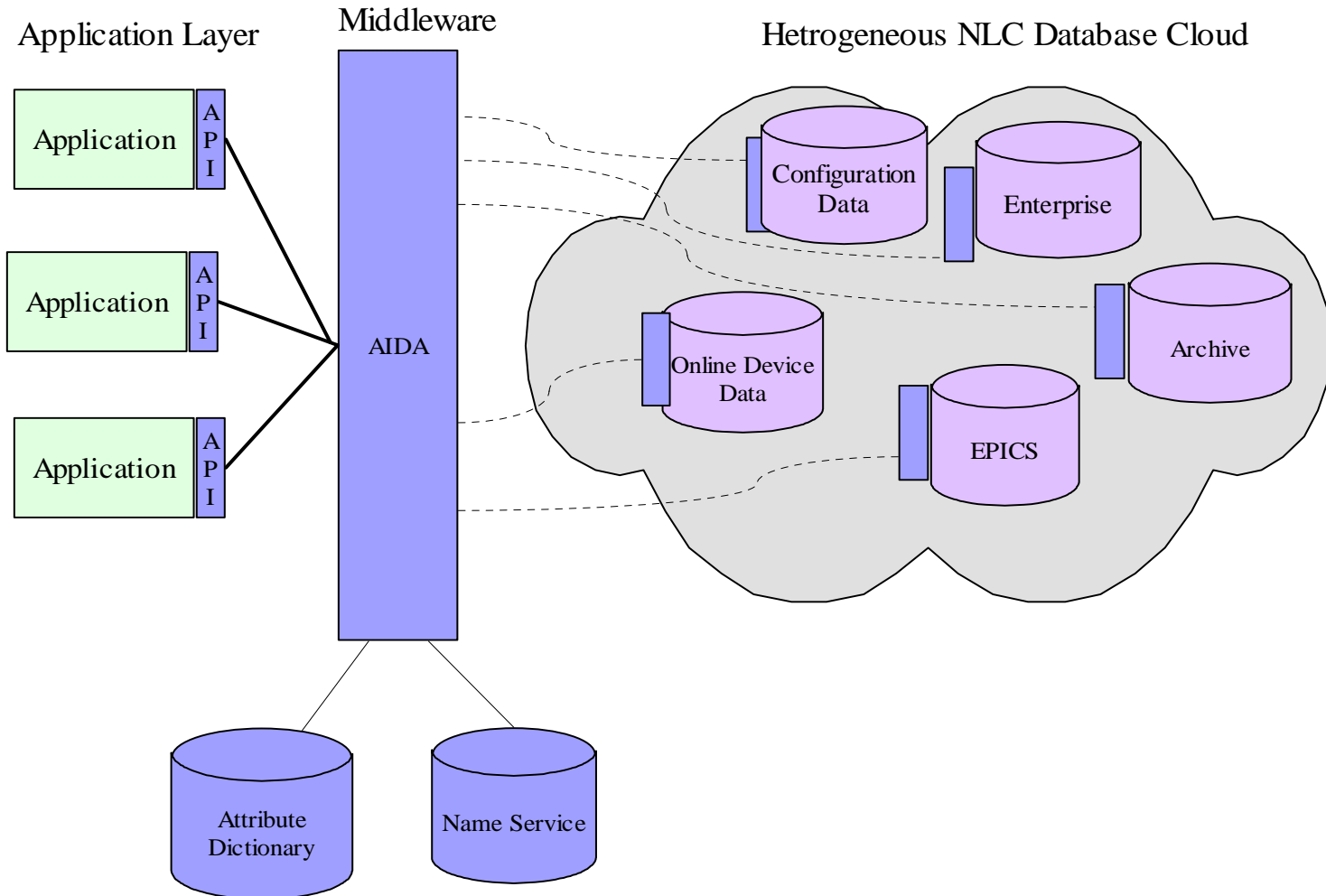


In the Last Episode...



The Current Episode

Support get/set/monitor any data from/to any source



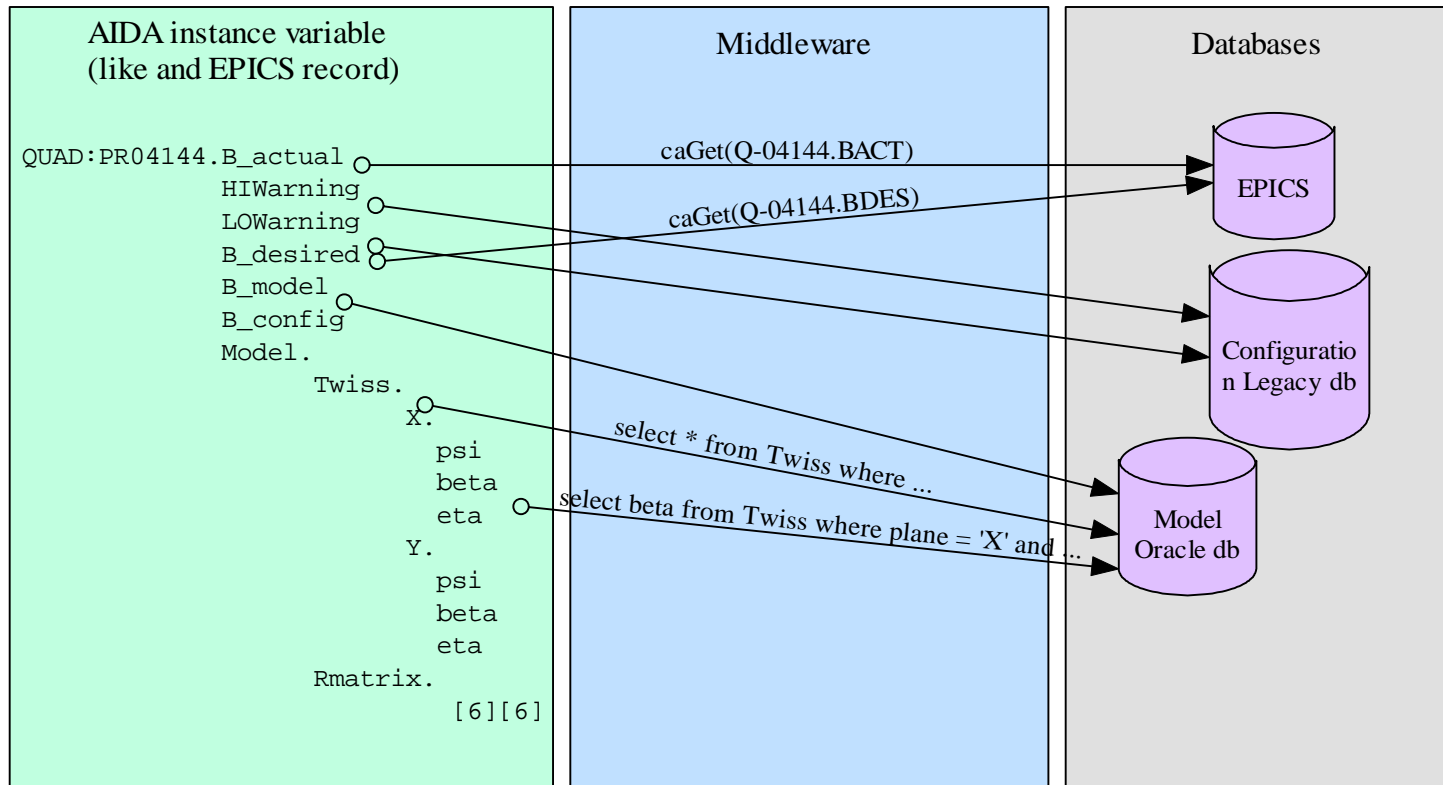


Supporting Ideas

- Name and schema mapping
- Data location discovered at runtime.
- CORBA middleware & services
- Server resilience (auto reconfigure on server down)
- API and OPI
- Language and OS independent
- Collections, Aliases, Range Names



Name and Schema Mapping



Each name.attribute{.attribute}₀₊ maps to a database query



Salient Features

- Given a name.attribute, AIDA finds the source and appropriate query
- Uses its own name services
- Data Location and Query persist/cached (not rediscovered)
- C++ & Java Bindings
- Can code as API or OPI



Simple OO Example

```
Class QUAD {
    private AIDA d;
    QUAD( string name ) { d = new AIDA(name); }

    float get( string attribute ) {
        return d.get( 'B_desired' );
    }
    float[2][6] getTwiss() {
        org.omg.CORBA.Any t= d.getAny( 'Model.Twiss' );
        ...
    }
}
```

```
QUAD fred( 'quad:pr04144' );
float bfieldwanted = fred.get( 'B_desired' );
float twiss[2][6] = fred.getTwiss();
```



Where We're At

- Have a complete set of requirements.
- Accessed EPICS & old SLC data via Corba.
- Java Corba -> JDBC -> Oracle
- C++ Corba -> ODBC -> Oracle
- Sample Name & attribute databases with query mapping to get data
- Have a Java Orb on VMS
- Testing Notify Service for Monitors
- Ready to implement something real



Cosmic CUD

