

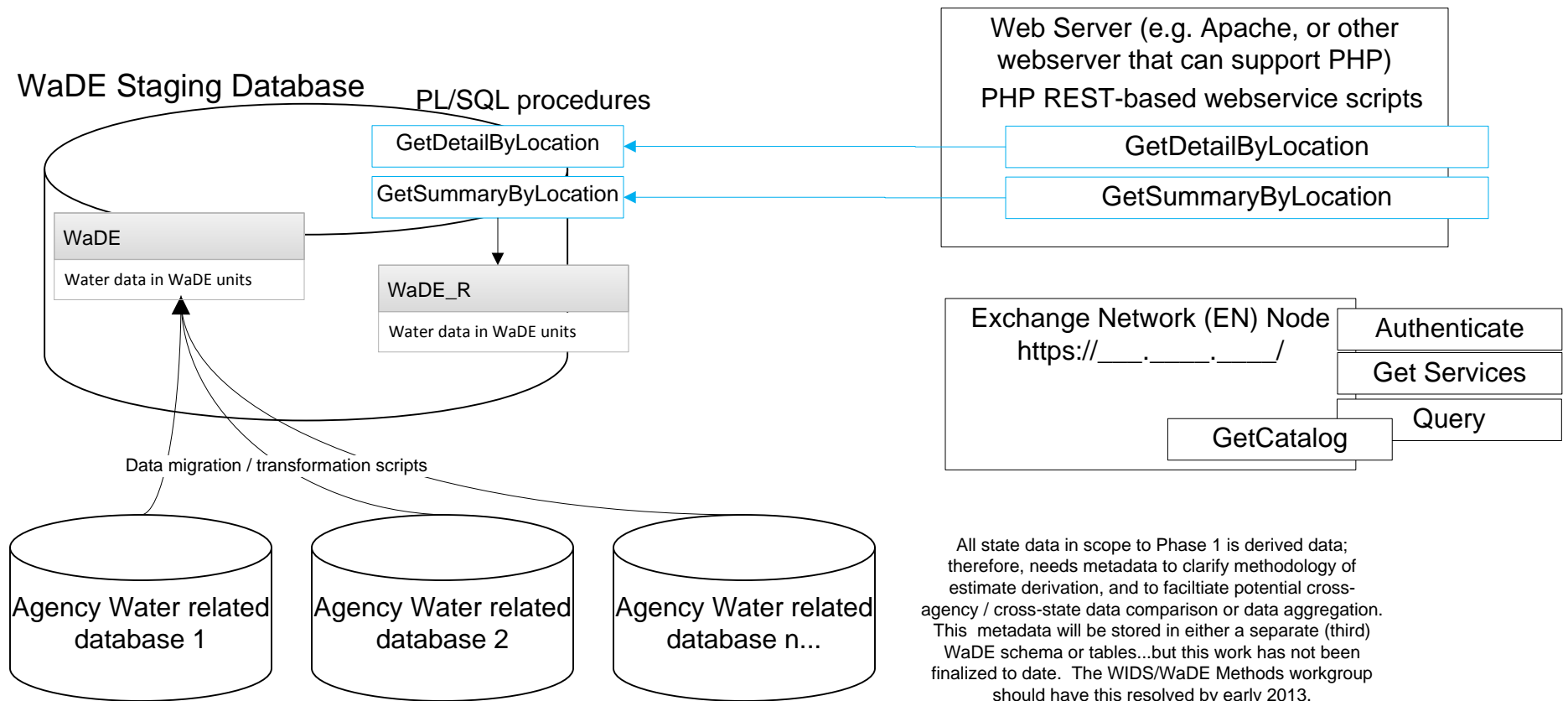




## Proposed / potential default steps to install WaDE components for ORACLE 10 / MS SQL Server 2008 R2 (or higher versions)

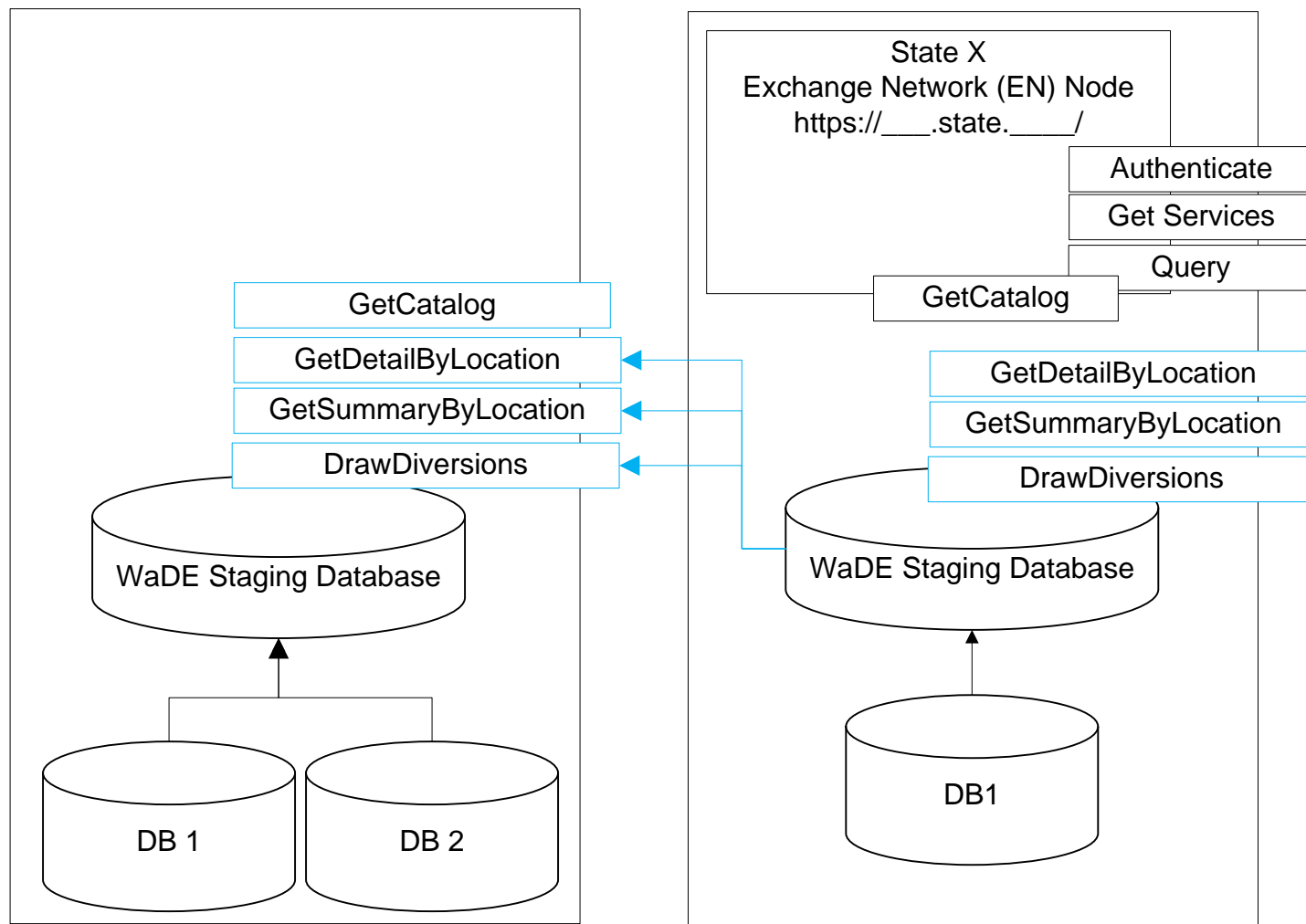
1. Identify or Create Oracle v10 or higher instance (WSWC is using Oracle XE (Express) which supports Oracle v10+)
2. WSWC will provide Oracle dump / MS SQL backup file that can be installed / loaded into the preferred Oracle instance (if your agency has Oracle naming or related standards, the respective Oracle PL/SQL scripts can be provided upon request)
3. The Oracle dump file contains the WaDE Schema, comprised of 2 schemas (WADE and WADE\_R(eporting)), and the PL/SQL procedures / MS SQL functions that will be called by the WaDE PHP webservice scripts. The schemas contains no public synonyms.)
4. Create a few Oracle / MS SQL Server accounts...WADE, WADE\_R?, and a 3<sup>rd</sup> client account that only has read/select rights and will be used by the WaDE PHP webservice scripts for the associated XML creation PL/SQL procedures (MS SQL functions)
5. Create appropriate tablespaces and indexes

- Map data elements from your agency / state water-related database(s) to WaDE database (ERD may be created if required by group)
- Create data migration / transformation scripts to load program area water data into WaDE schema in WaDE units...set to run extraction on a schedule, or run manually at whatever interval you agencies in comfortable publishing new WaDE data
- Install and configure PHP REST-based webservice scripts in an externally available (DMZ) web service and configure to use Oracle read-only account when instantiating respective Oracle PL/SQL procedure



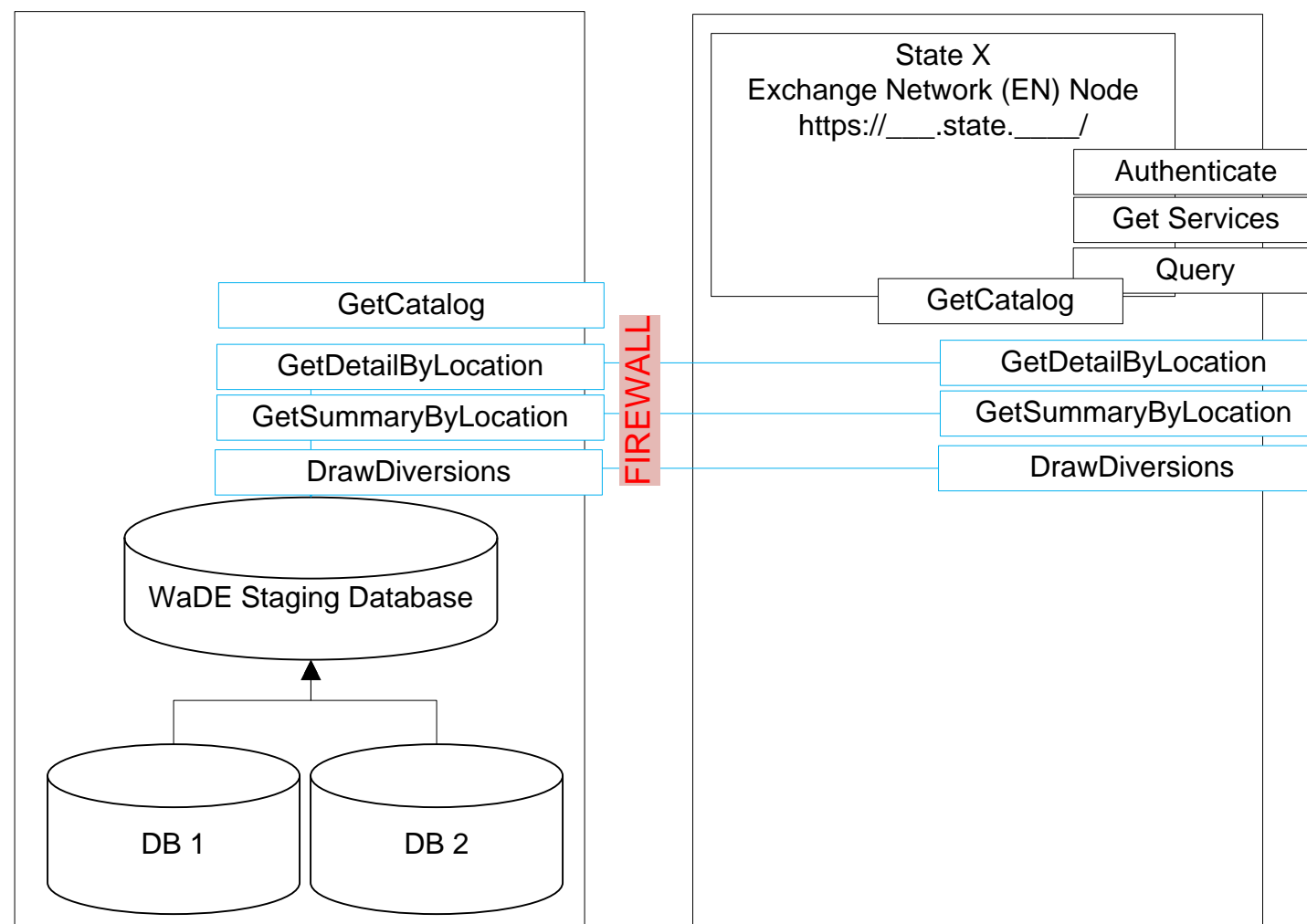
**OPTION 1:**

- Single EN Node per State;
- Both agencies host WaDE staging db and respective REST web services:
- EN Node agency queries WaDE REST web services of other intra-state partner and stores all state data in EN Node agency's WaDE staging db



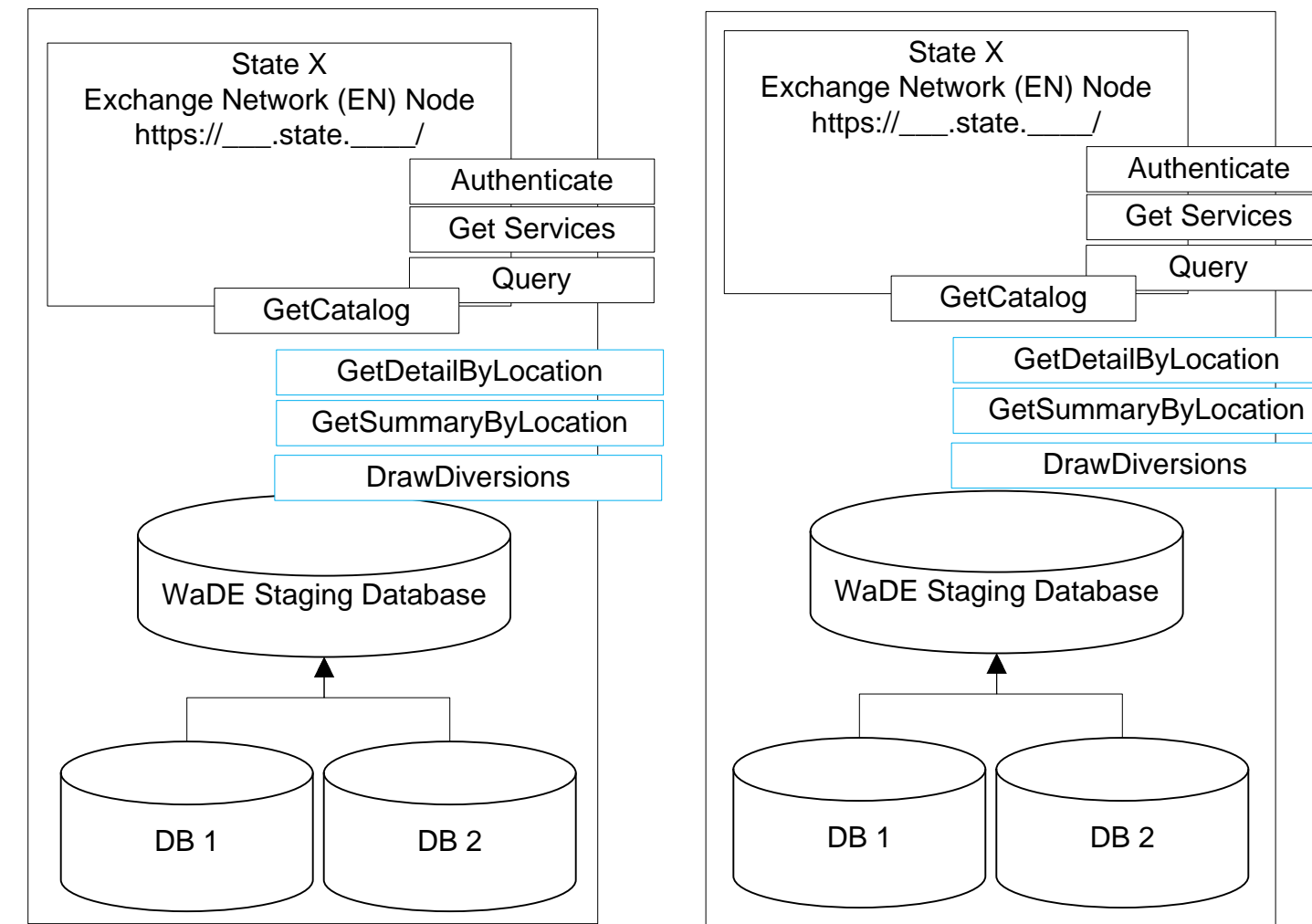
**OPTION 2:**

- Single EN Node per State;
- One agency host WaDE staging db and respective REST web services:
- EN Node agency queries WaDE REST web services of other intra-state partner and stores all state data in EN Node agency's WaDE staging db



**OPTION 3:**

- 2 EN Node per State; one per agency
- One agency host WaDE staging db and respective REST web services:
- EN Node agency queries WaDE REST web services of other intra-state partner and stores all state data in EN Node agency's WaDE staging db



**OPTION X:**

- whatever combination of EN Node(s), EN webServices, and WaDE REST webservices is best for each state

EPA NEIEN Phase 11 Grant - WaDE Implementation  
Legal basis for funding distribution and contracts

