

Selecting a DBMS

Government institutions should follow the software lifecycle guidelines when procuring and implementing database management systems. In particular, the following should be considered when selecting a DBMS:

- Data model [Recommended]
- DBMS Choice [Mandatory]

Data model [Recommended]

Determine the appropriate data model for your DBMS such as relational or NoSQL based on the nature of the data and how it will be used. Relational DBMS tend to be used for structured data while NoSQL supports unstructured or semi-structured data.

DBMS Choice [Mandatory]

- Evaluate different DBMS technologies based on the institution's requirements. Consider factors such as scalability, performance, data consistency, and data security when choosing technologies.
- It is recommended that Government institutions in Rwanda should choose mature systems such as PostgreSQL, SQL, MySQL, MongoDB or Oracle DBMS. The acquisition process should follow the RISA Software Lifecycle management guidelines.