The Geographical Names Database of The Kingdom of Saudi Arabia

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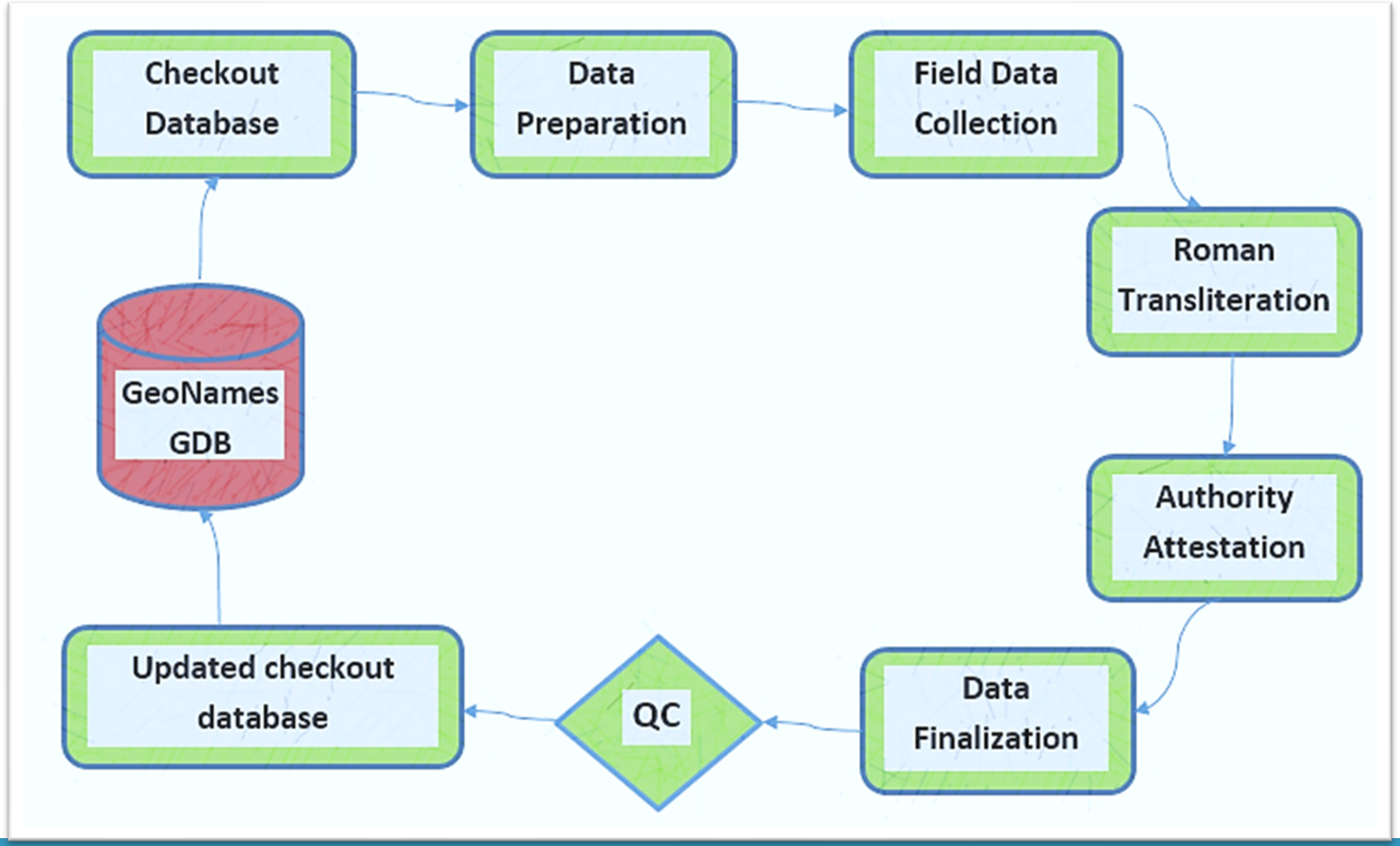
GEOGRAPHICAL NAMES DATA MANAGEMENT - EVOLUTION

Geographical names were stored on papers

Then, we relied on spreadsheets to store names.

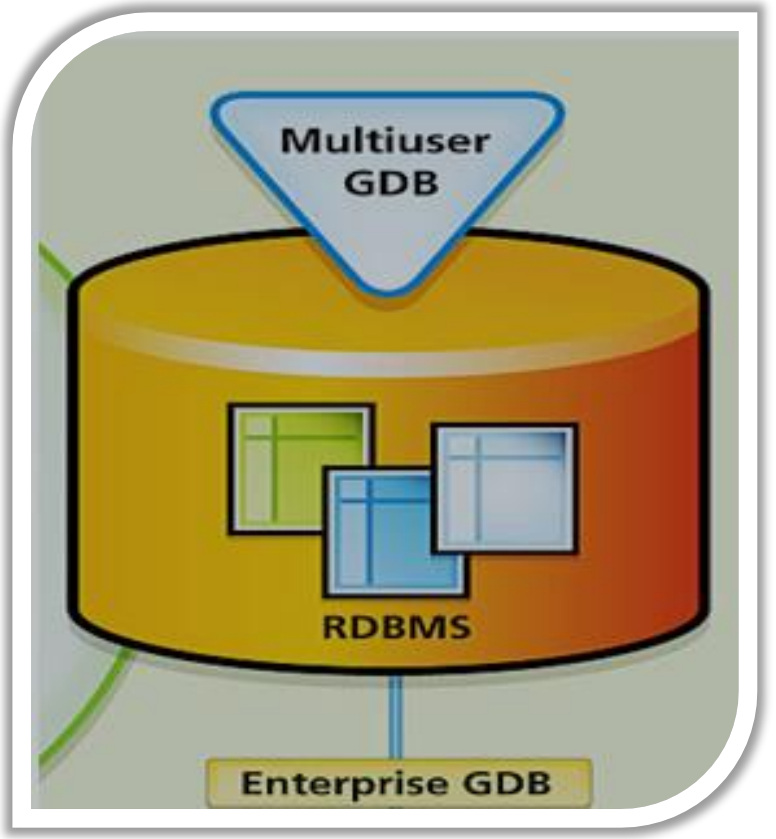
Now, geographical names are stored in a geodatabase

GEOGRAPHICAL NAMES COLLECTION PROCESS

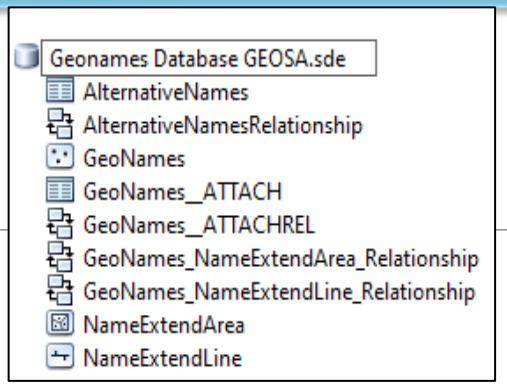


GEOGRAPHICAL NAMES DATABASE OF THE KSA - OVERVIEW

- The Geographical Names Database is an oracle-based enterprise geodatabase.
- The database currently has about 140,000 names stored in it.
- Geographical names are represented with a point feature class, and the names' extent is defined with a polygon and a line feature class.
- The geodatabase also contains an alternative names table and an attachment table.
- In the database, the geographical names are classified into eight themes.



DATABASE ELEMENTS



NameExtendArea

The polygon feature class delineates the extent of the area features such as Mountains, Dunes, etc. The name's extent helps cartographers to place names appropriately on the map

GeoNames_NameExtendArea_Relationship

NameExtendLine

The Line feature class delineates the extent of the line features such as Wadi, Stream, etc. The name's extent help cartographers to place names appropriately on the map

GeoNames_NameExtendLine_Relationship

GeoNames

This is the essential element in the database. This point feature class represents all the geographical names and contains all the information about them.

AlternativeNames

This table stores the alternative names of the geographical names.

AlternativeNamesRelationship

GeoNames__ATTACHREL

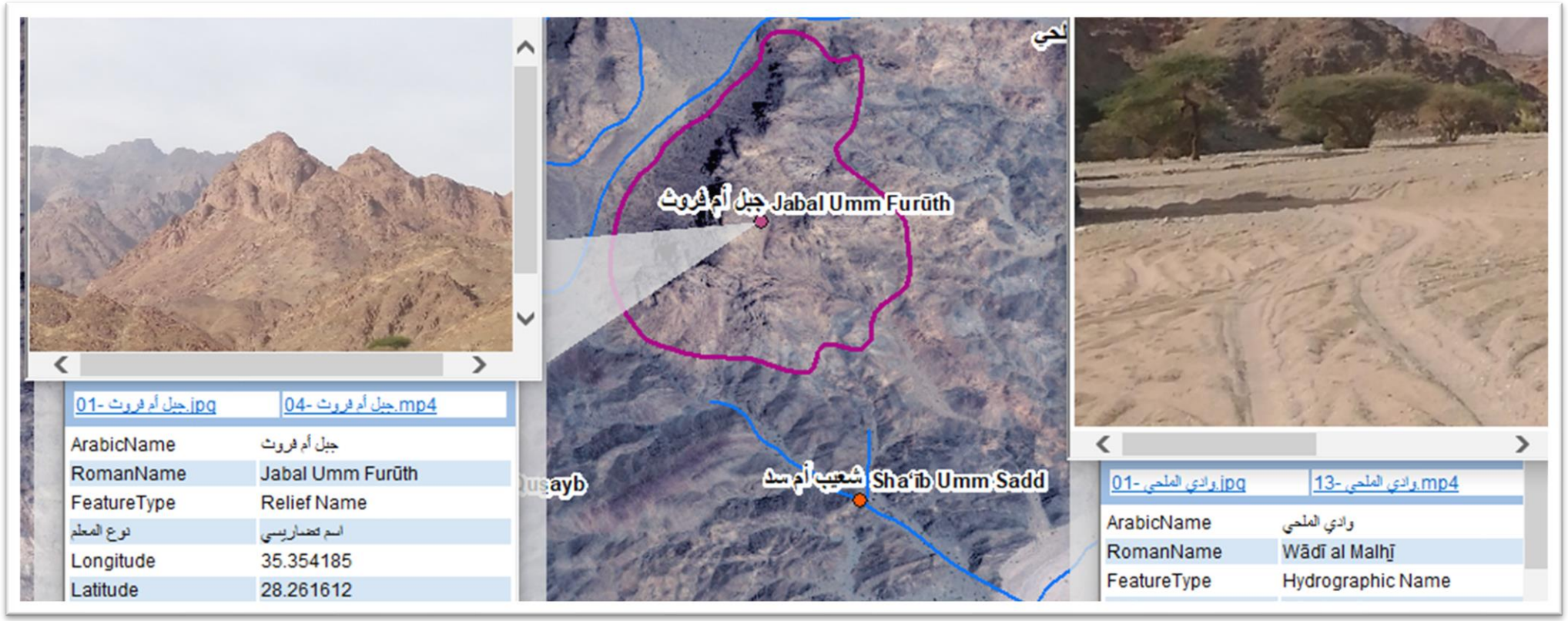
GeoNames__ATTACH

This table stores voice files and pics of the geographical names.

Relationship classes link the Geonames feature class with NameExtent feature classes and tables.

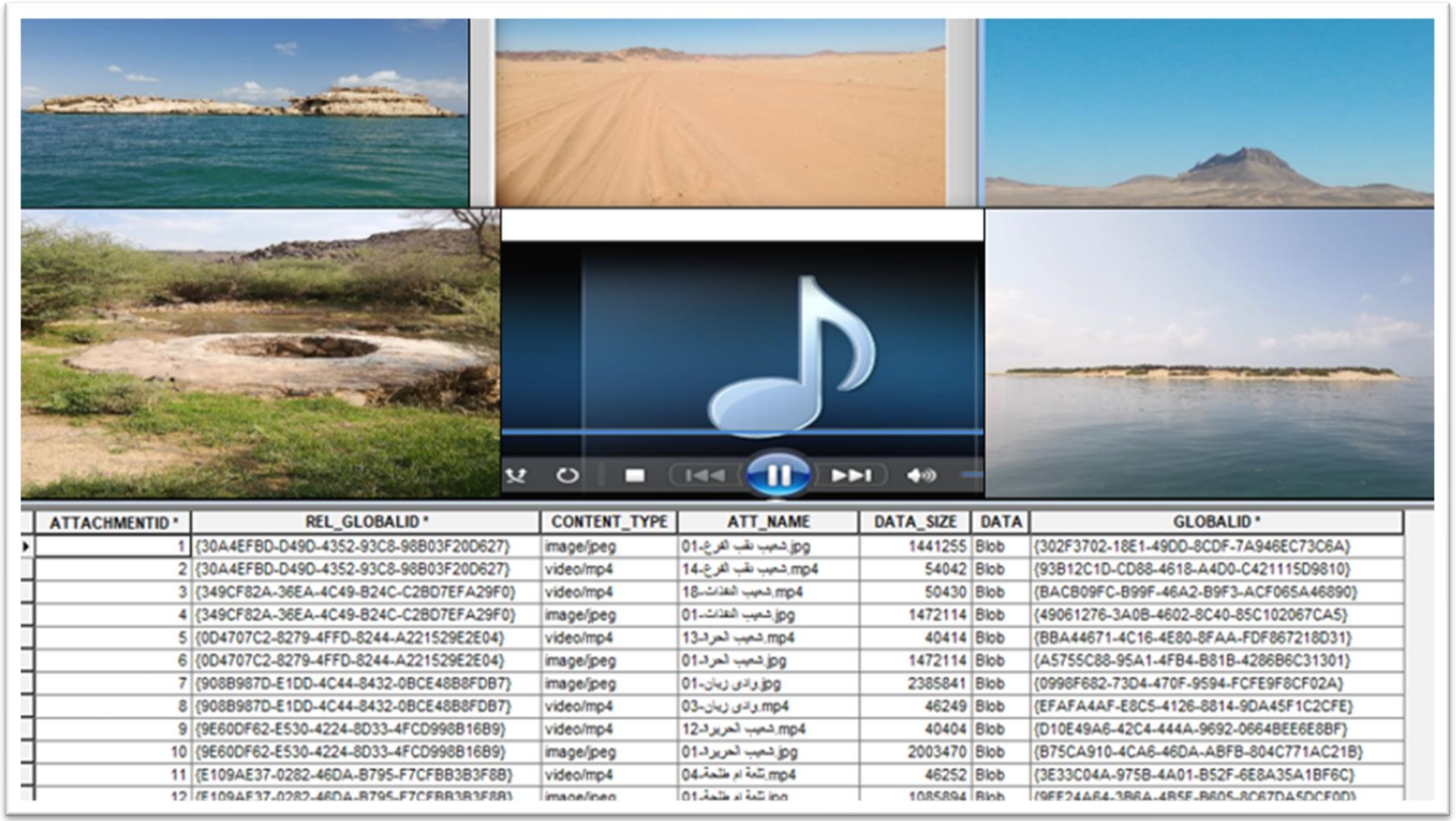
EXTENT OF GEOGRAPHICAL NAMES

- One of the most powerful characteristics of the database is that it can store the “extent” of features.
- Area features like mountains, dunes, etc., are represented with a polygon feature class, and linear features like streams, roads, etc., are represented with a line feature class.
- The name’s extent helps cartographers to place names appropriately and conveniently on maps.



ATTACHMENTS

The geographical names database includes an attachment table that allows attaching files such as voices (pronunciation), pictures, and videos of geographical features.



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THANK
YOU!