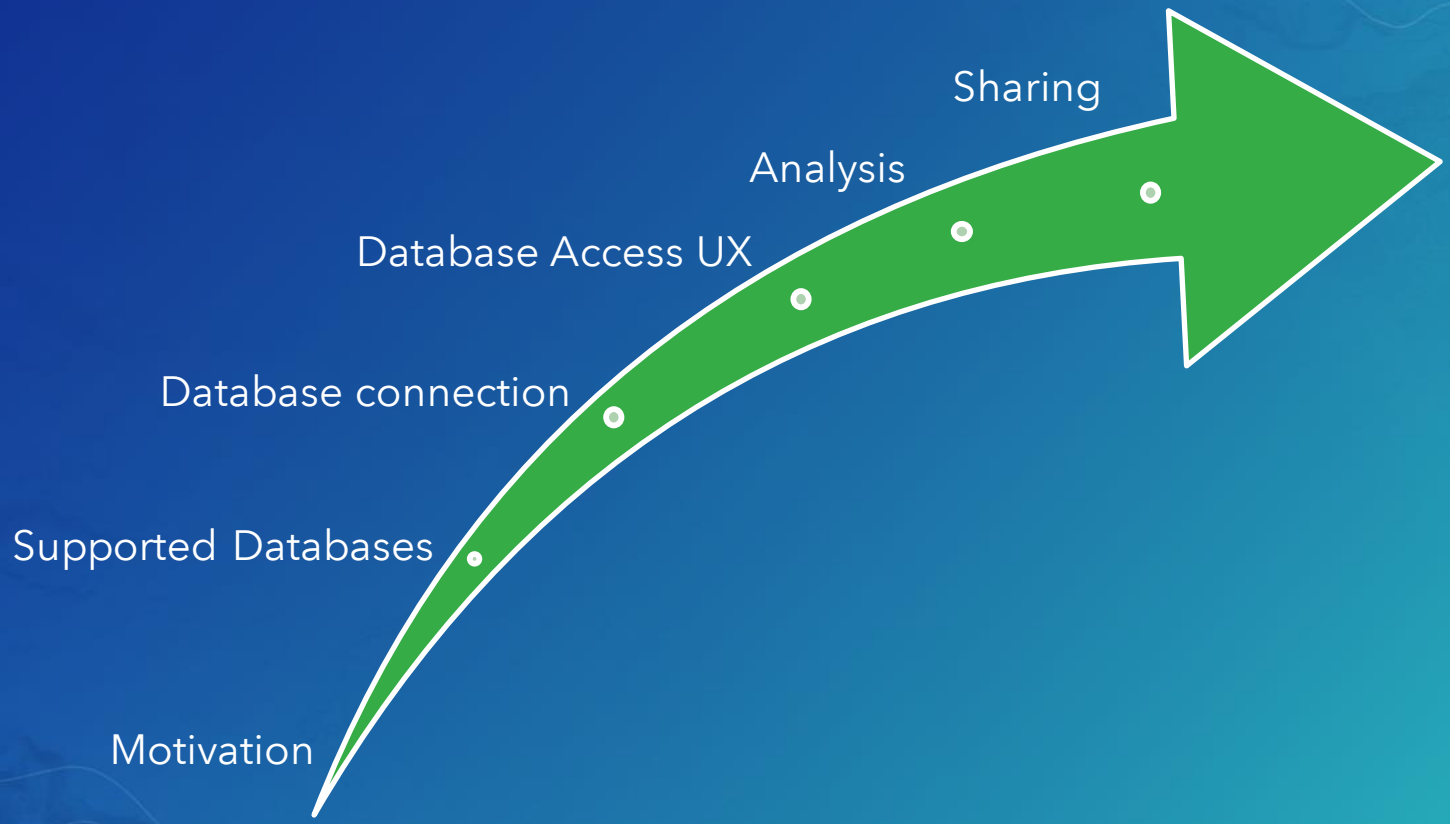
Leveraging Native Spatial Data Types in ArcGIS using Query Layers

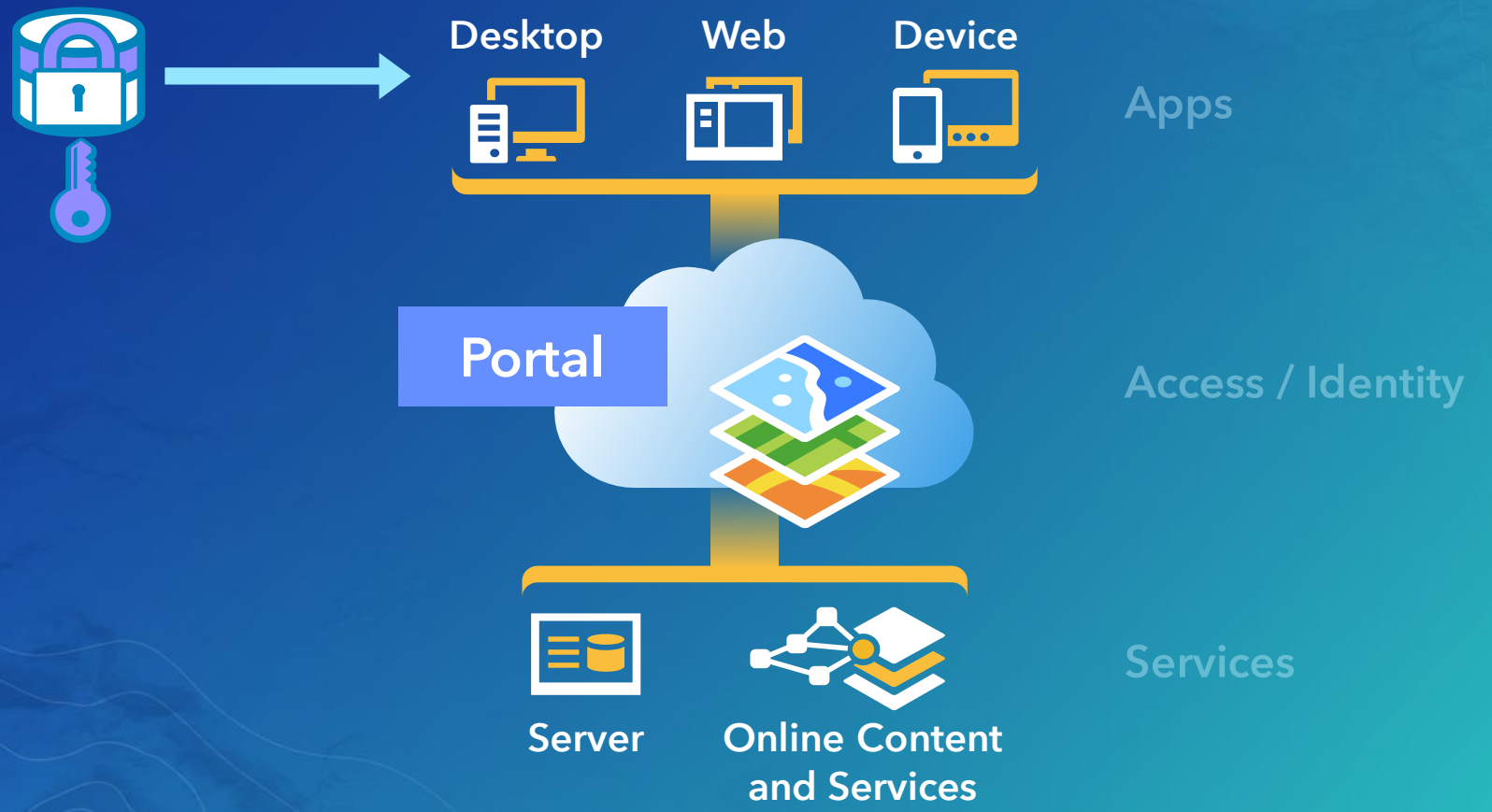
Melissa Jarman | Said Parirokh

Road Map

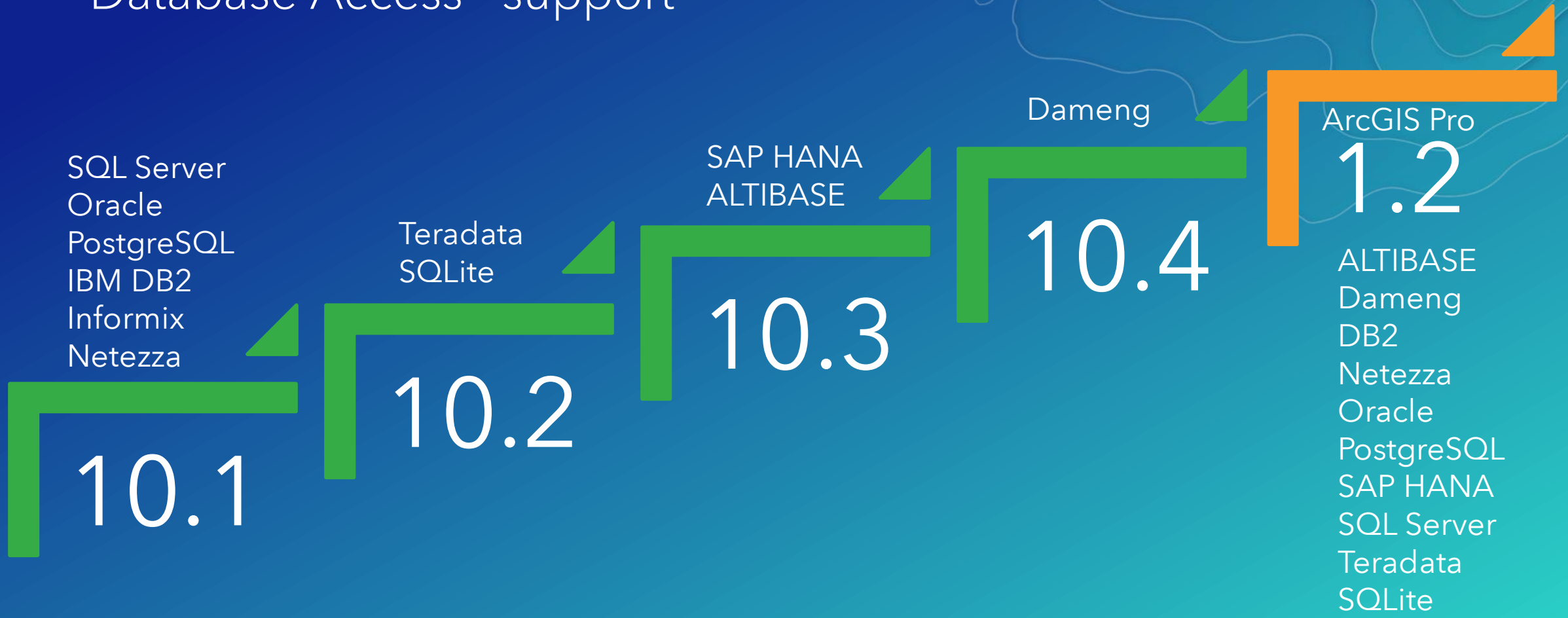
Database Access / Query Layers



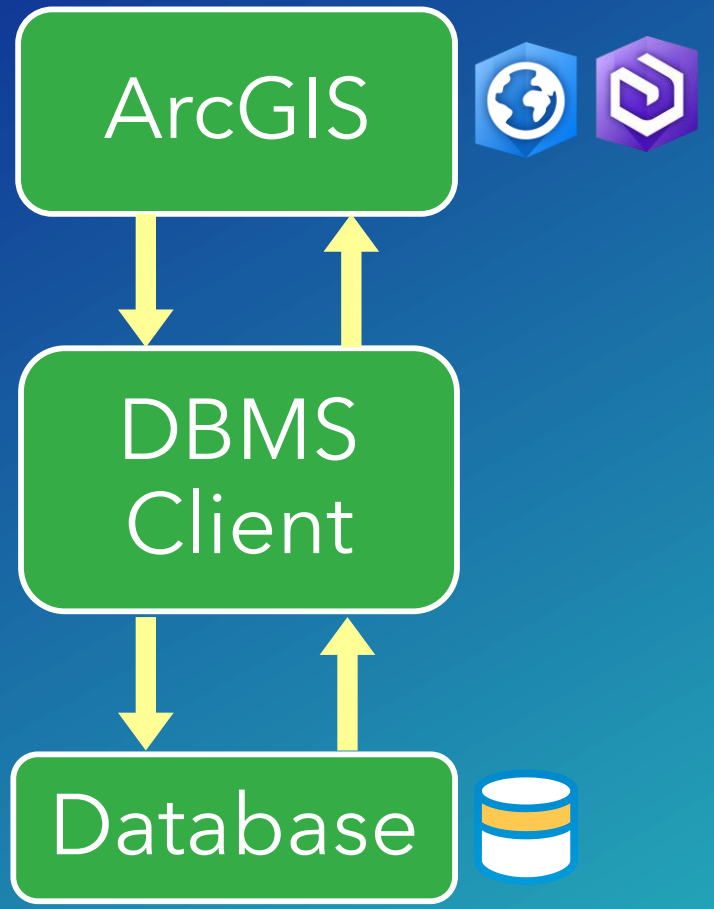
Motivation for Database Access / Query Layers



Database Access - support



How does the database connection work?



Database Access

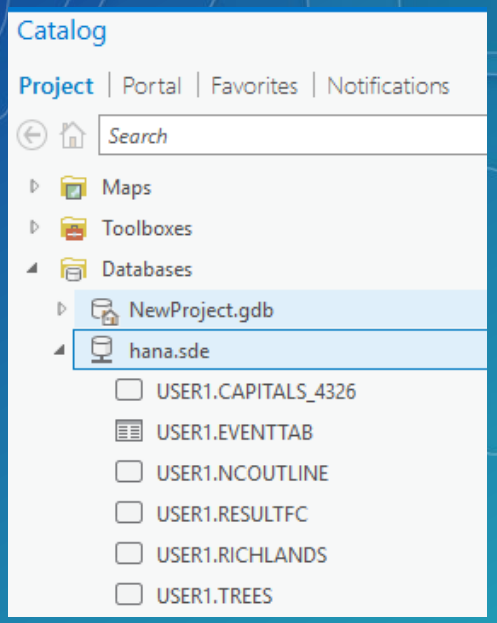
Query layers

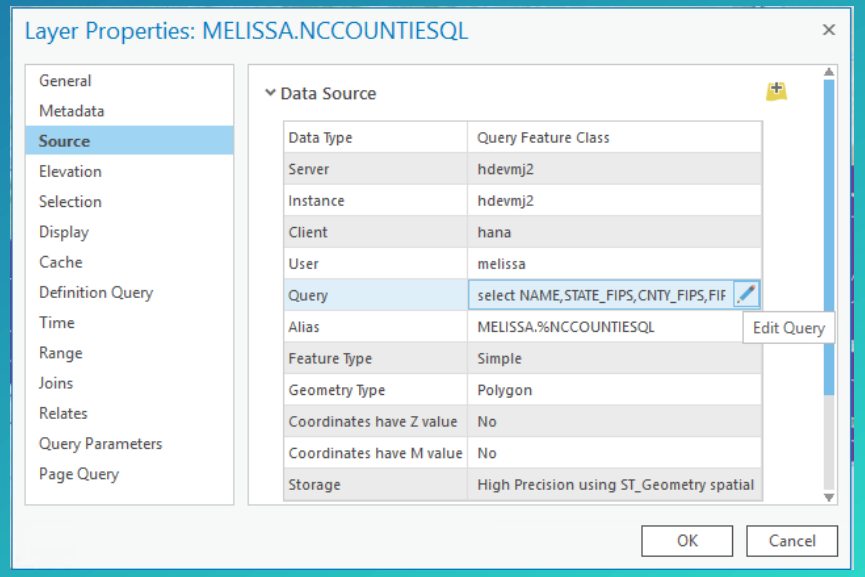
1 - Accessed via database connection

- drag/drop onto map
- query can be edited

2 – Create New Query Layer

- build your own SQL





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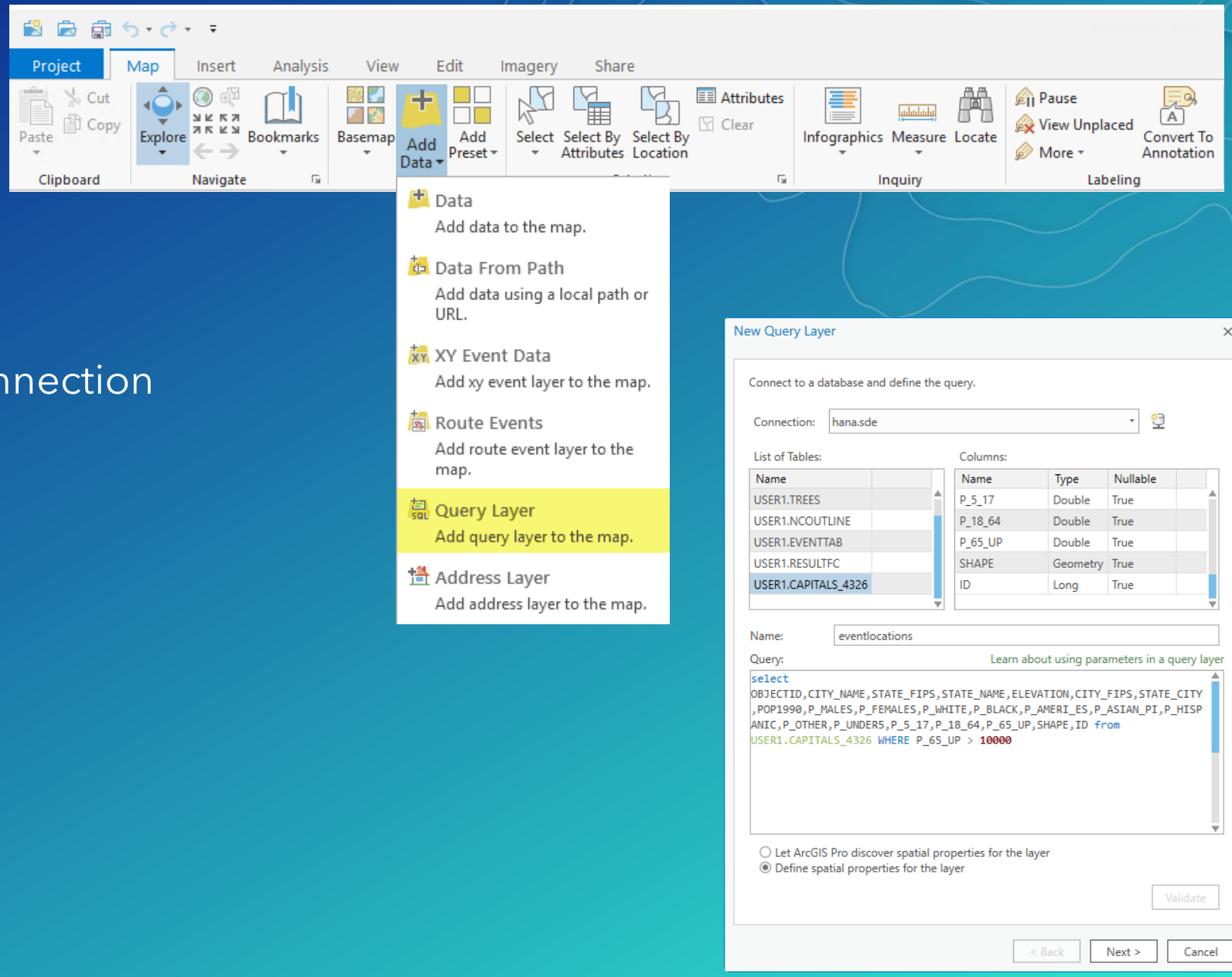

UX – Using query Layers

ArcGIS discovers

- Unique identifier
- Geometry type of spatial field
- Spatial reference and extent

Rules for validation

- Unique Identifier field - not null, contain unique values
  - Datatype: integer, string, GUID, or date
- Single spatial column and single entity type

Feature layer – not a database object

- Stored within .mxd / .aprx

Using query layers

Viewing

- Non-spatial / Spatial (native types)
  - Database tables
  - Unregistered tables within a GDB
- Dynamic information
- Read only via database connection

Using ArcGIS tools

- Tools that perform selections or create outputs
  - Eg: Analysis tools – Buffer

Consume via Insights for ArcGIS

- Oracle, SQL Server, Teradata and SAP HANA

Editing via Server/Portal

- Share via feature service

Creating query layer / sharing

Said Parirokh

New features

- 10.2 – Feature service support
- 10.3.1 -
  - Improvements to map service startup time
  - Added Feature services support for ALTIBSE, SAP HANA, & Teradata
- 10.4 –
  - Feature service publishing of unregistered data from a geodatabase
  - Updated 'New Query Layer' UI to allow for user to define spatial properties
    - Improves performance as only SQL validation is performed
- 10.5/Pro 1.4 – Registering database views with the geodatabase
- Pro 1.4 – Parameterized queries

Resources & Survey

Related Sessions

Visualize Dynamically Aggregated Results from Time Series Data Using ArcGIS Pro and Map Services

Thurs - Drawing Millions of Features in ArcGIS: Advanced Topics

Resources from this session - Geonet

https://geonet.esri.com/docs/DOC-10255

- slides
- scripts from demo
- helpful links

Thank you!
Fill out survey in
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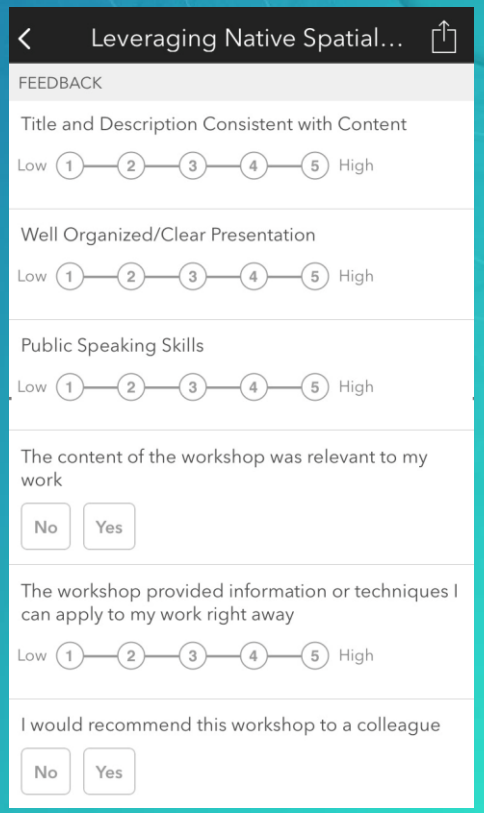

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