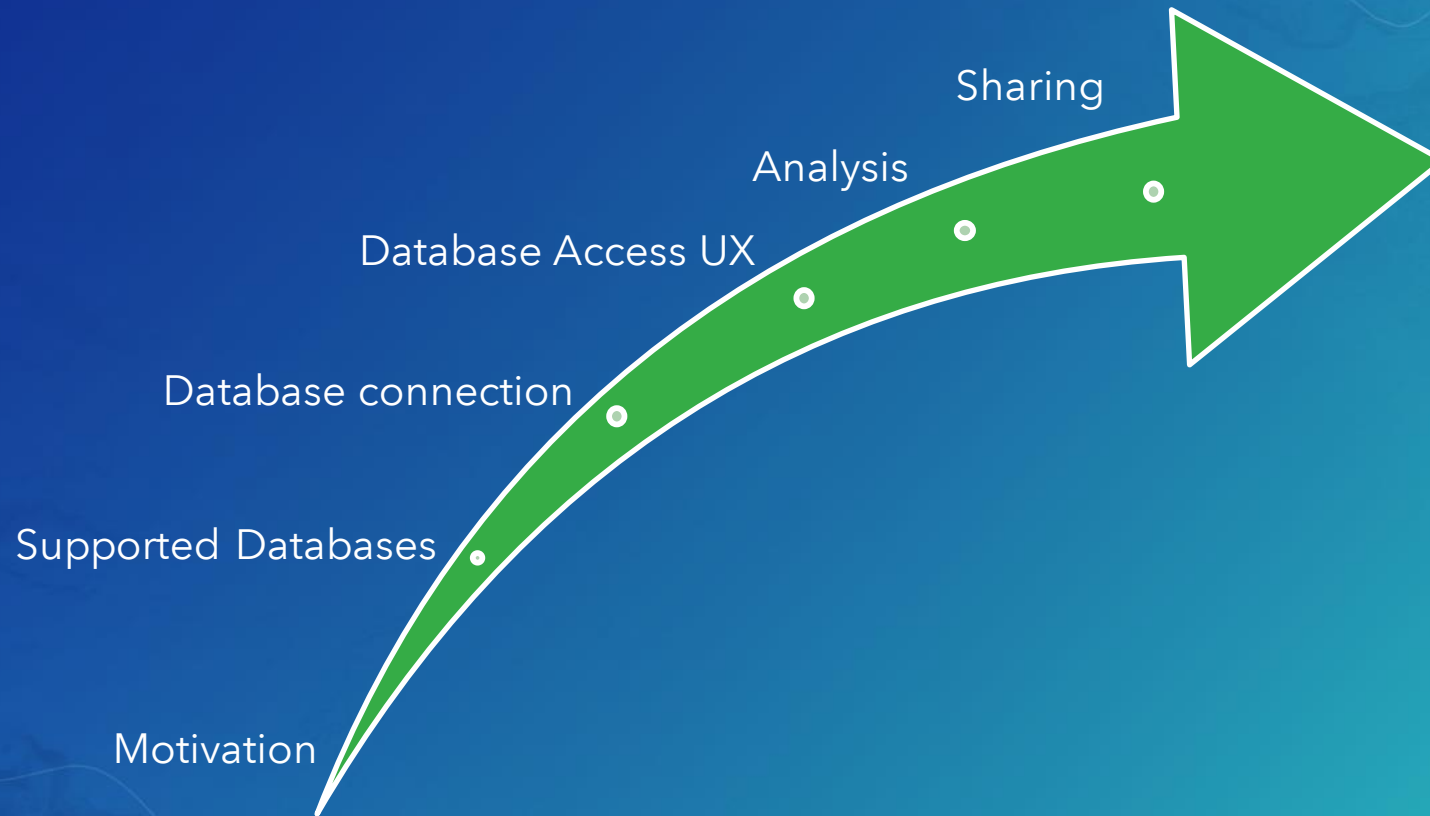


Leveraging Native Spatial Data Types in ArcGIS using Query Layers

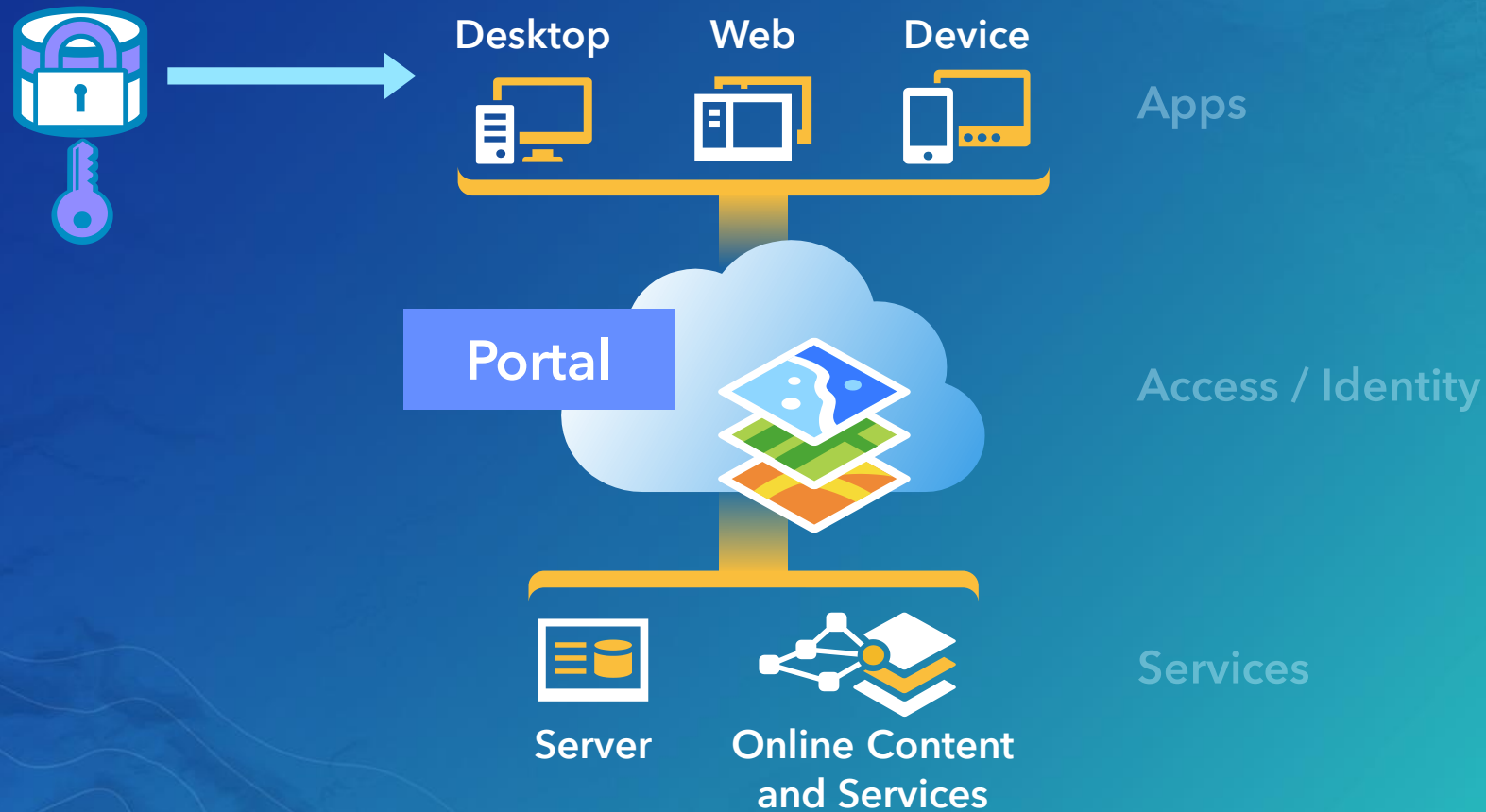
Melissa Jarman | Said Parirokh

Road Map

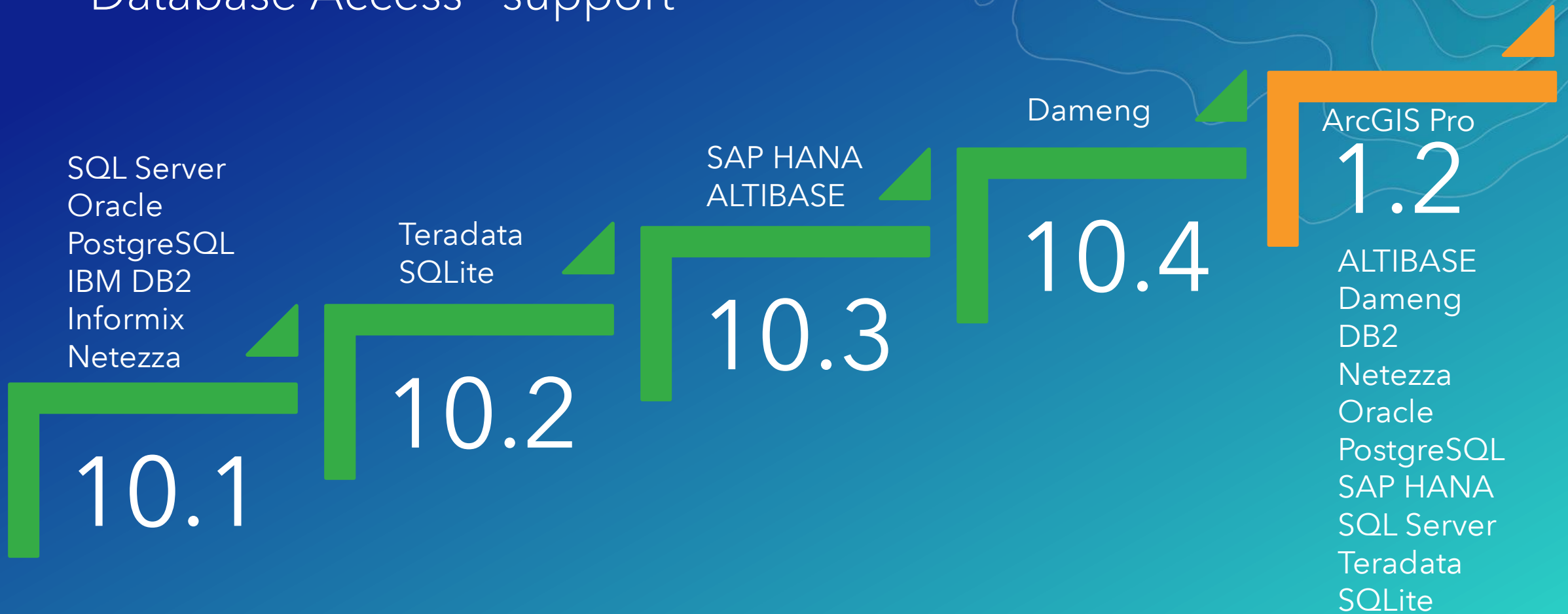
Database Access / Query Layers



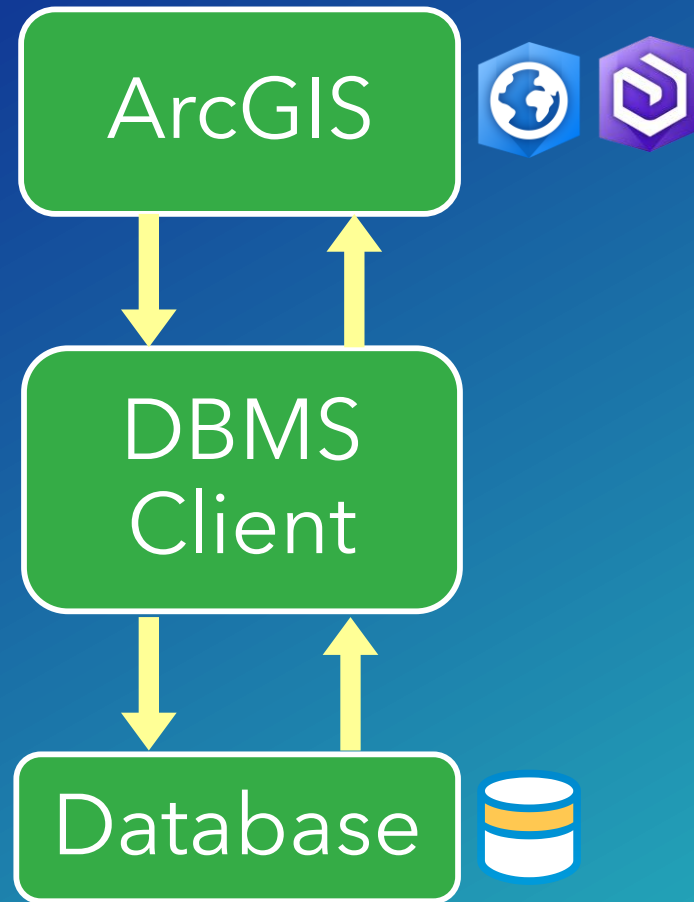
Motivation for Database Access / Query Layers



Database Access - support



How does the database connection work?



Database Access

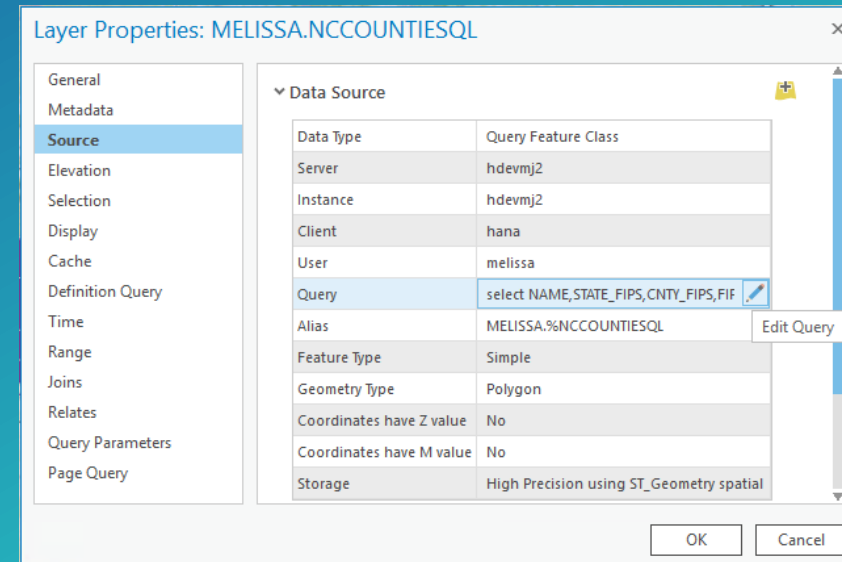
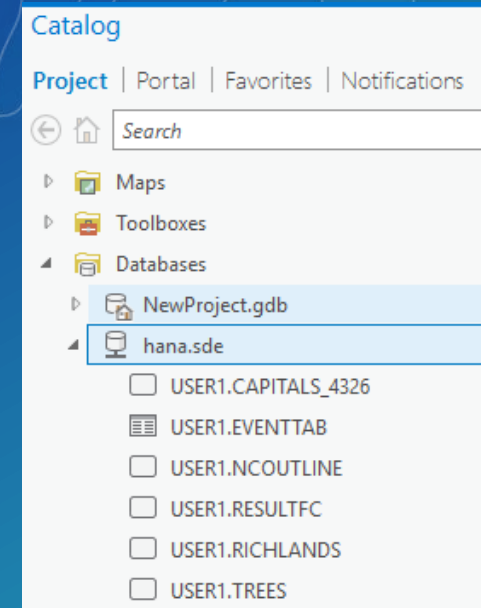
Query layers

1 - Accessed via database connection

- drag/drop onto map
- query can be edited

2 - Create New Query Layer

- build your own SQL



Database Access

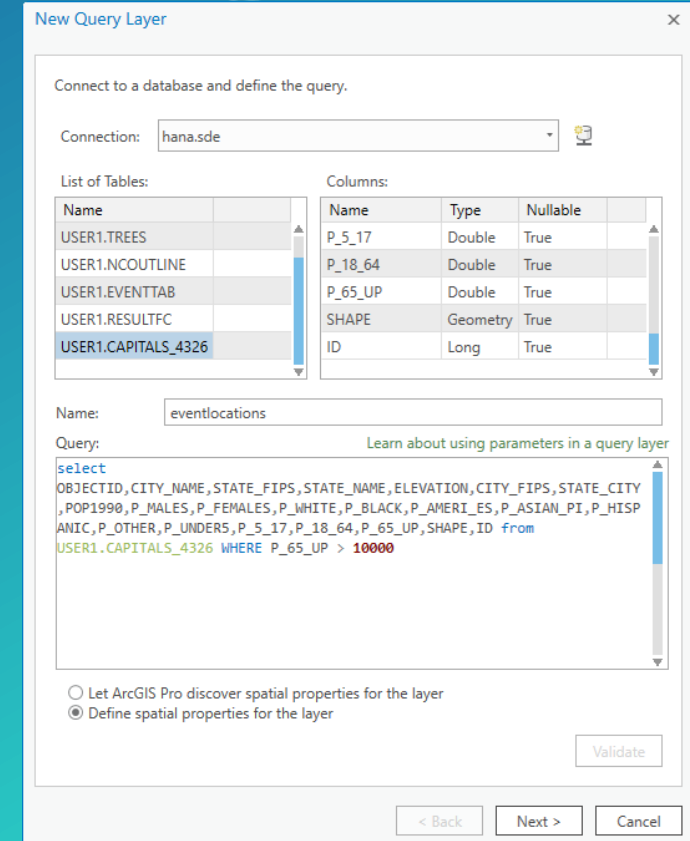
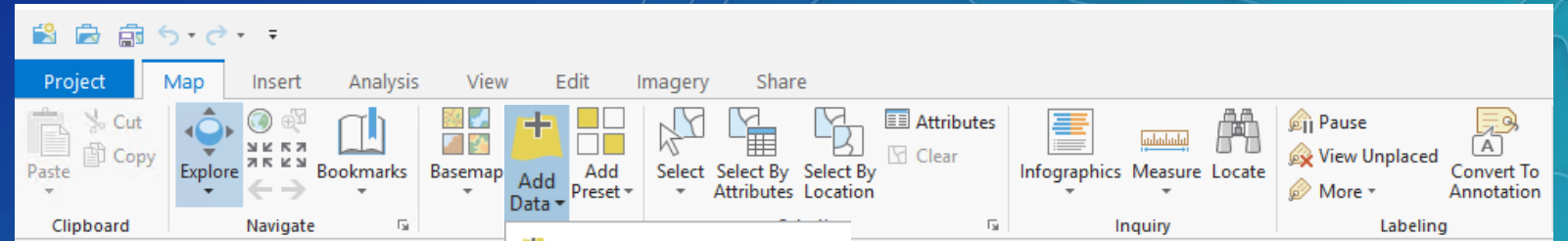
Query layers

1 - Accessed via database connection

- drag/drop onto map
- query can be edited

2 - Create New Query Layer

- build your own SQL



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

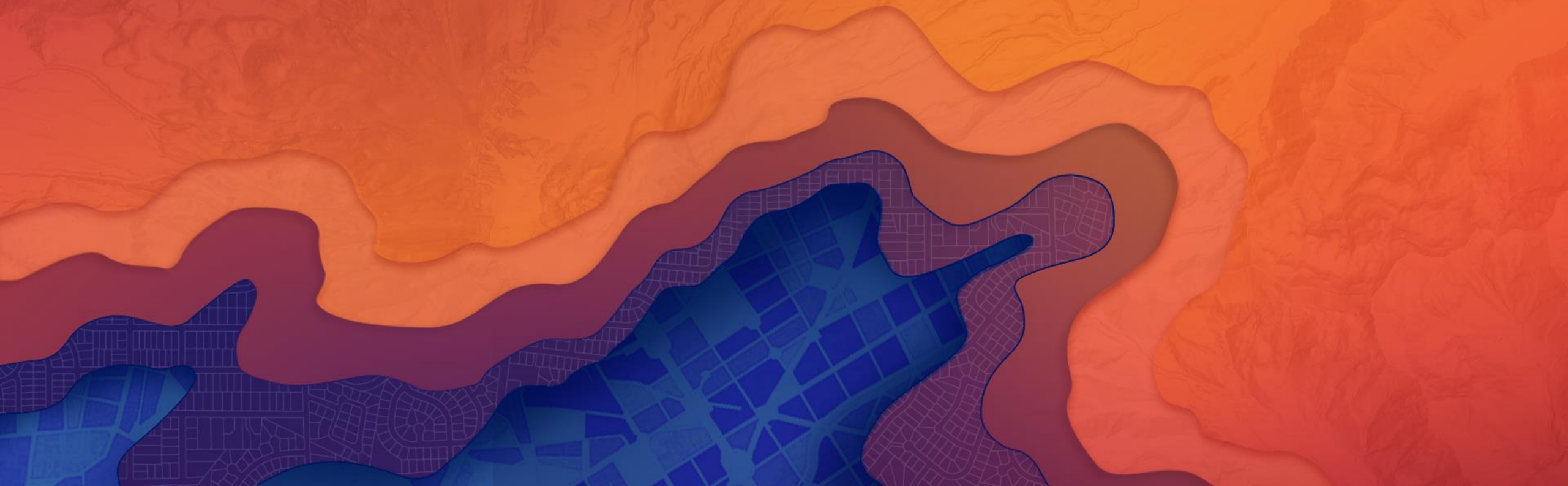
- Oracle, SQL Server, Teradata and SAP HANA

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
Esri Events mobile app

A screenshot of a survey form displayed on a mobile device. The title of the survey is "Leveraging Native Spatial...". The form contains several feedback questions with 5-point Likert scales or Yes/No options. The questions are: "Title and Description Consistent with Content", "Well Organized/Clear Presentation", "Public Speaking Skills", "The content of the workshop was relevant to my work", "The workshop provided information or techniques I can apply to my work right away", and "I would recommend this workshop to a colleague".

FEEDBACK

Title and Description Consistent with Content
Low 1 2 3 4 5 High

Well Organized/Clear Presentation
Low 1 2 3 4 5 High

Public Speaking Skills
Low 1 2 3 4 5 High

The content of the workshop was relevant to my work
 No Yes

The workshop provided information or techniques I can apply to my work right away
Low 1 2 3 4 5 High

I would recommend this workshop to a colleague
 No Yes



esri

THE
SCIENCE
OF
WHERE