Leveraging SAP HANA and ArcGIS

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Outline

Leveraging SAP HANA and ArcGIS

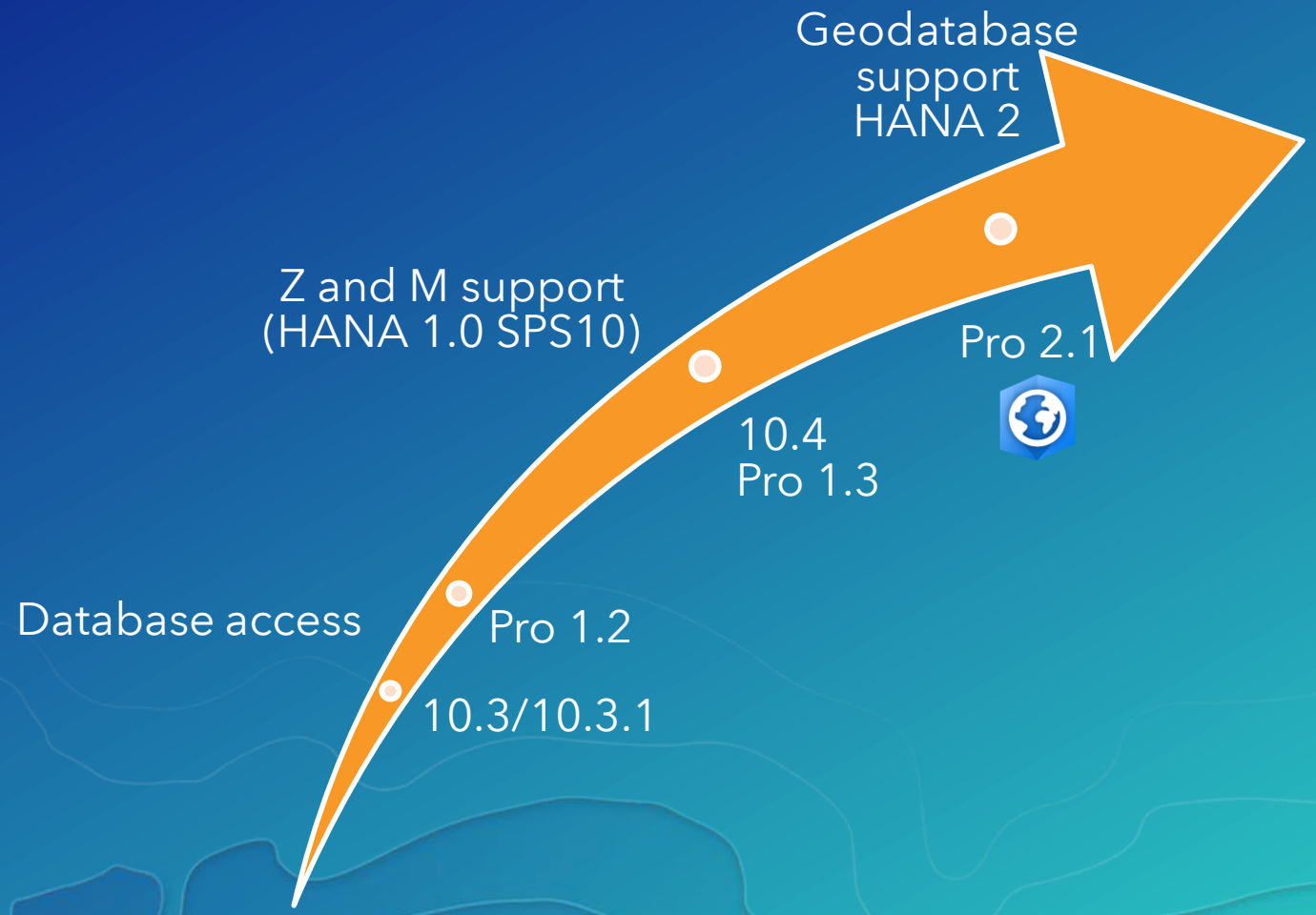
- SAP HANA database
- ArcGIS Support for HANA
- Database access
- Sharing via Services
- Geodatabase support
- Demos

SAP HANA

Leveraging SAP HANA and ArcGIS

- In-memory database
- Support for both row and column store tables
- Designed for both transactional and analytical uses
  - OLTP and OLAP
- Real-time analytics on big data
- High performing native spatial type
- Provided On-premises and via the Cloud (SaaS/PaaS)

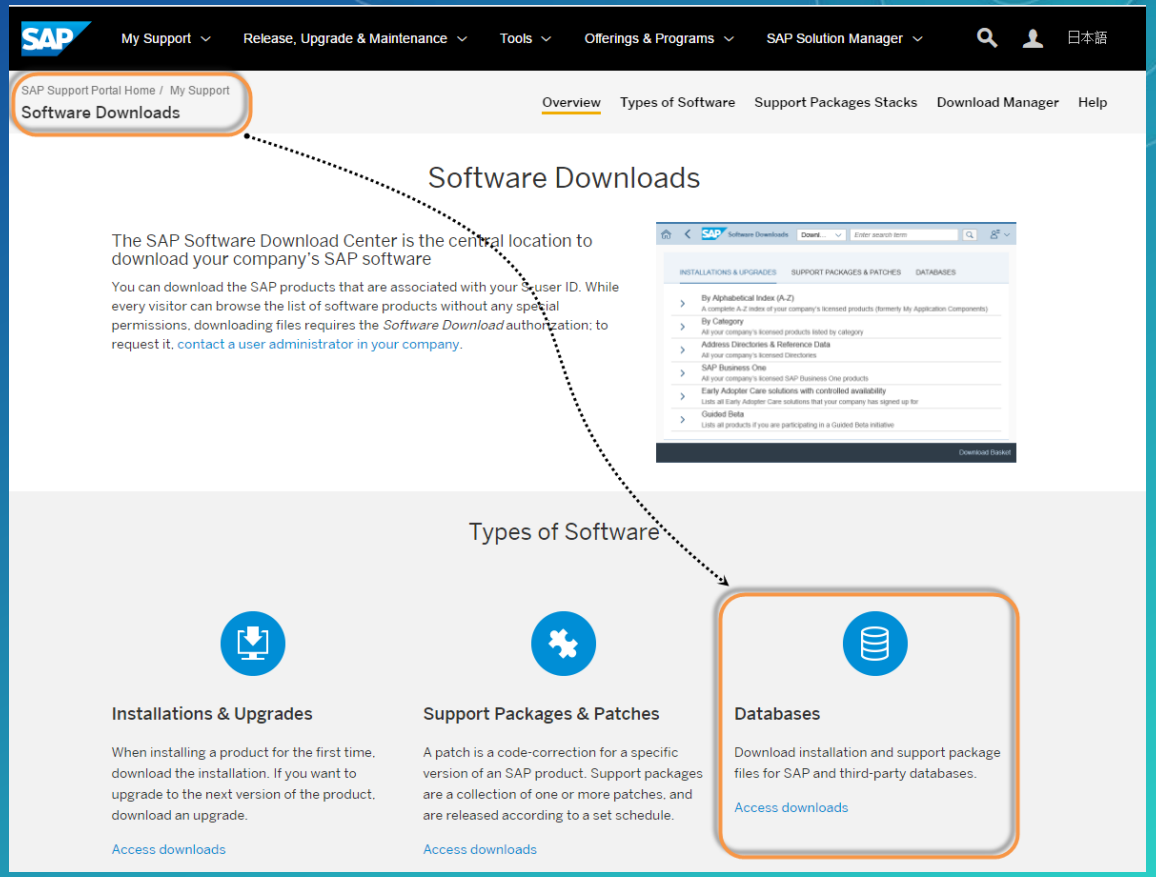
ArcGIS Support for SAP HANA



SAP HANA Database Access

Database connection prerequisites:

- Install HANA ODBC client driver
- Configure 32/64 bit ODBC data source name
  - 32 bit – ArcMap/Catalog
  - 64 bit - Pro and Server
- Connect in ArcMap or Pro



Client install path:

64 bit - C:\Program Files\sap\hdbclient

32 bit - C:\Program Files (x86)\sap\hdbclient

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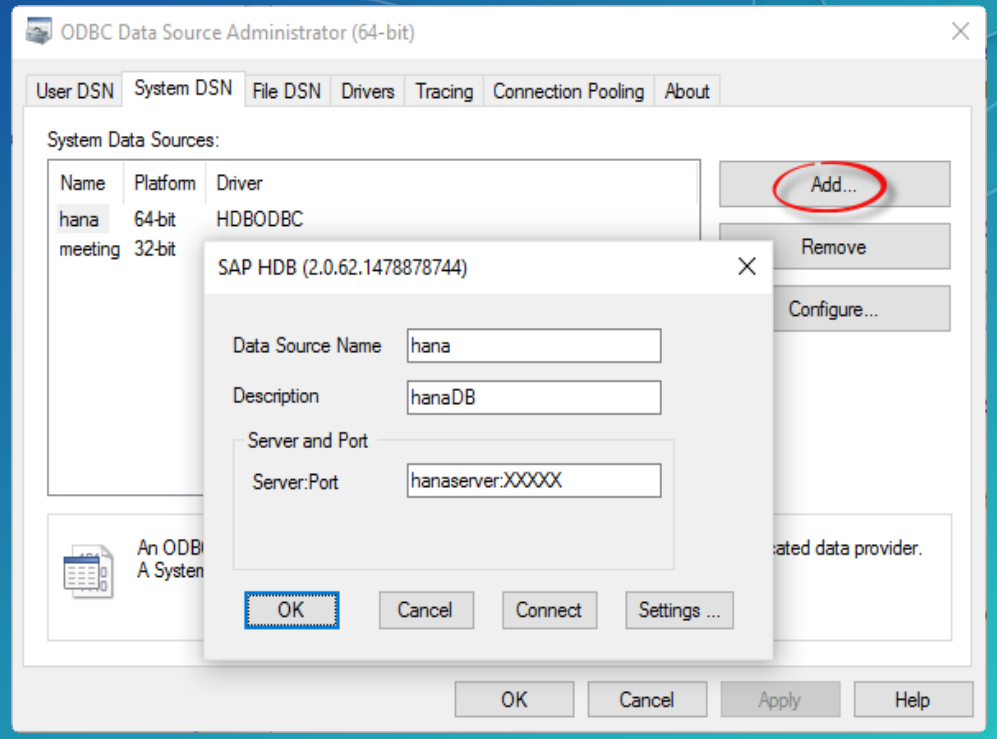

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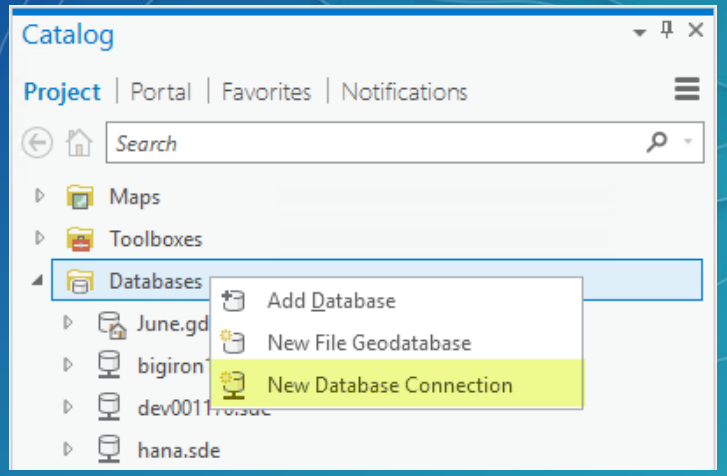
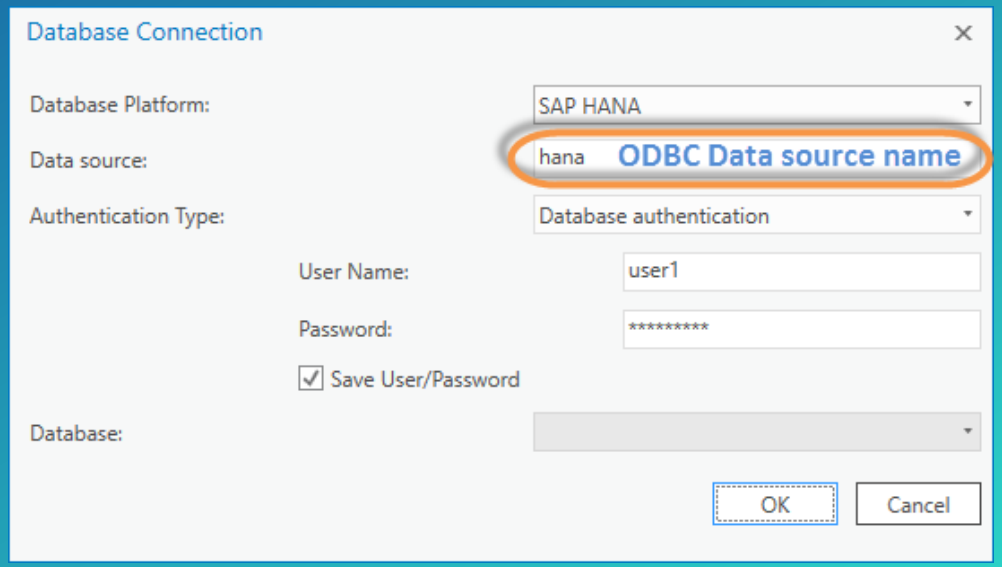




Database Access

Query layers

1 - Accessed via database connection

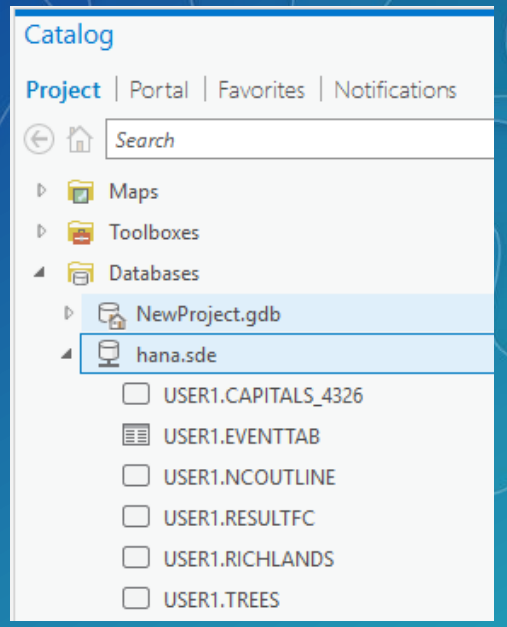
- drag/drop onto map
- query can be edited

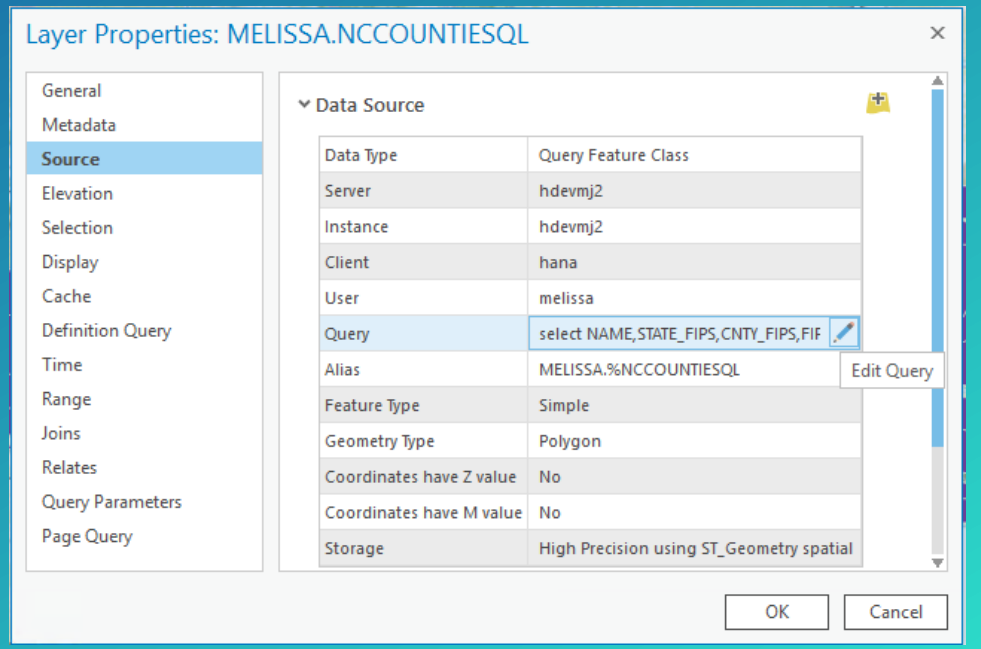
2 – Create New Query Layer

- build your own SQL

ArcGIS discovers

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





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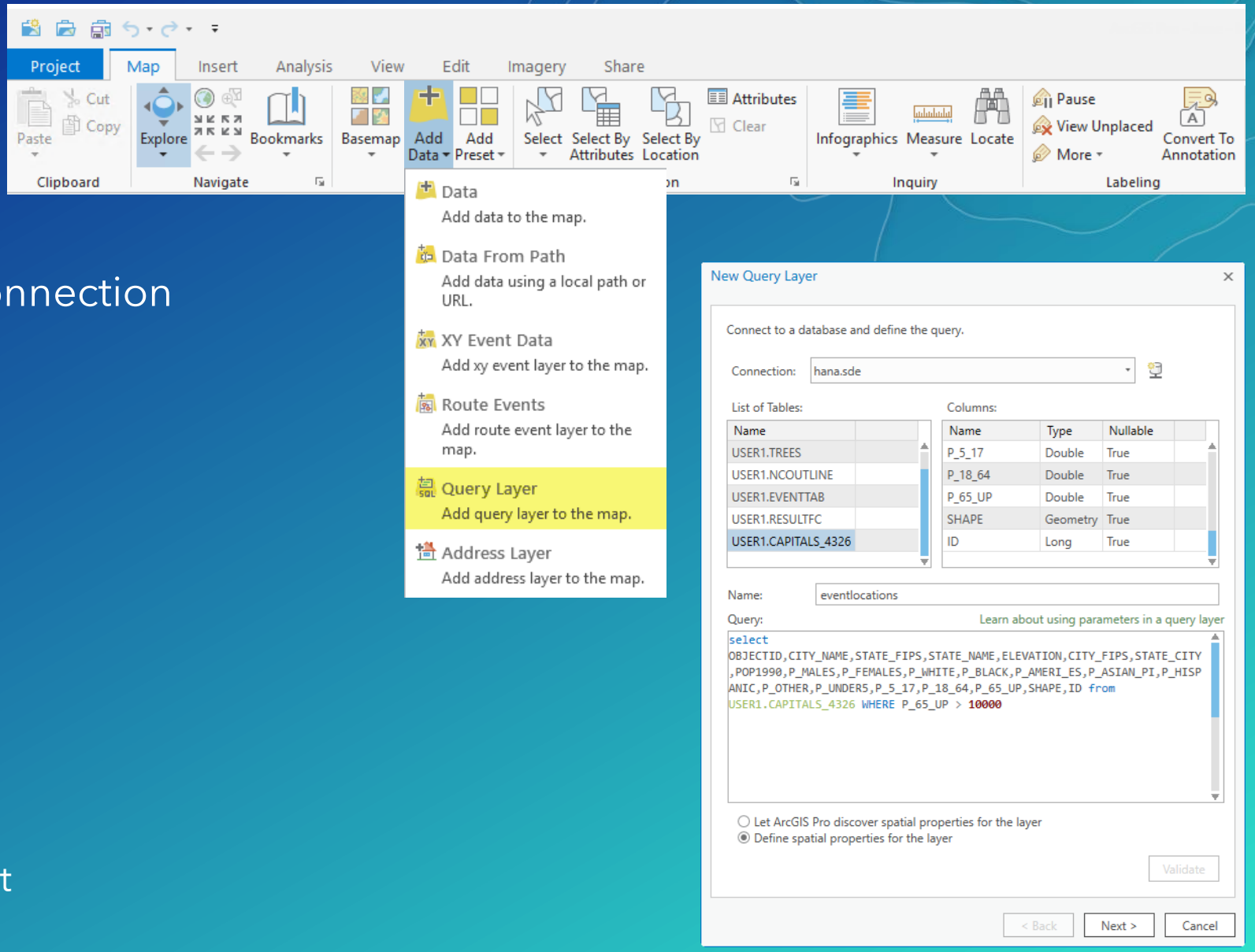


Working with SAP HANA data

Create new data:

- Import datasets into database
- Create new table, feature class, or view

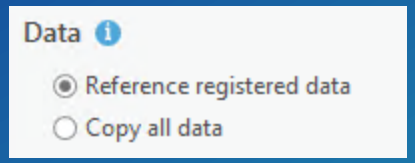
Existing data:

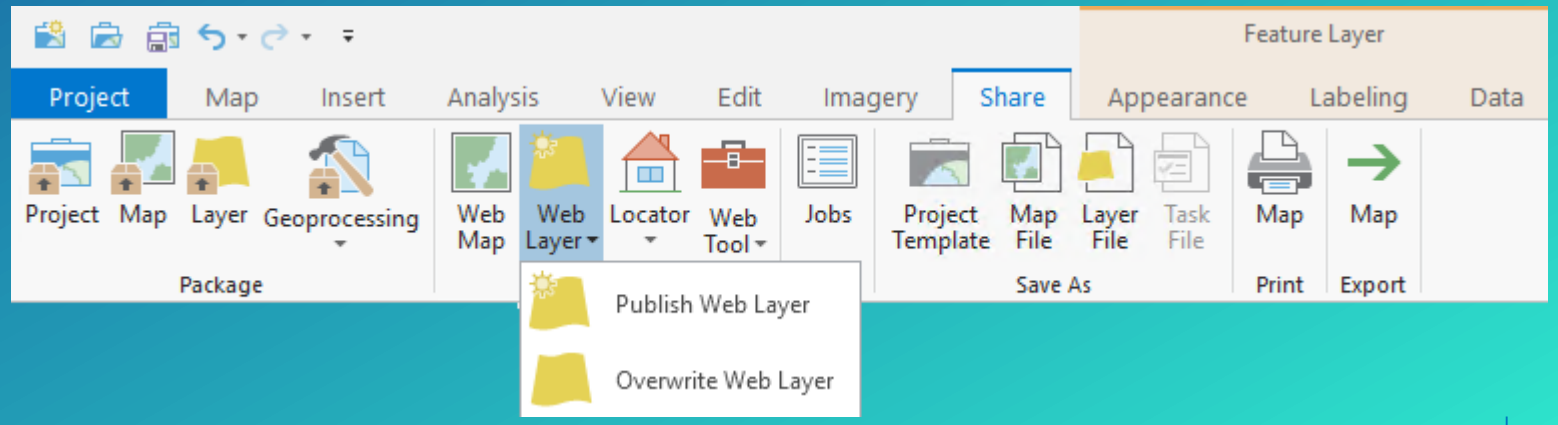
- View & query - spatial & non-spatial data
  - Database connection – read only
- Append new data
- Perform analysis using ArcGIS tools
  - Creating output of analysis
- Edit via feature service
- Consume via Insights

Sharing via Services

- Share data within organization
  - Control access level via the service

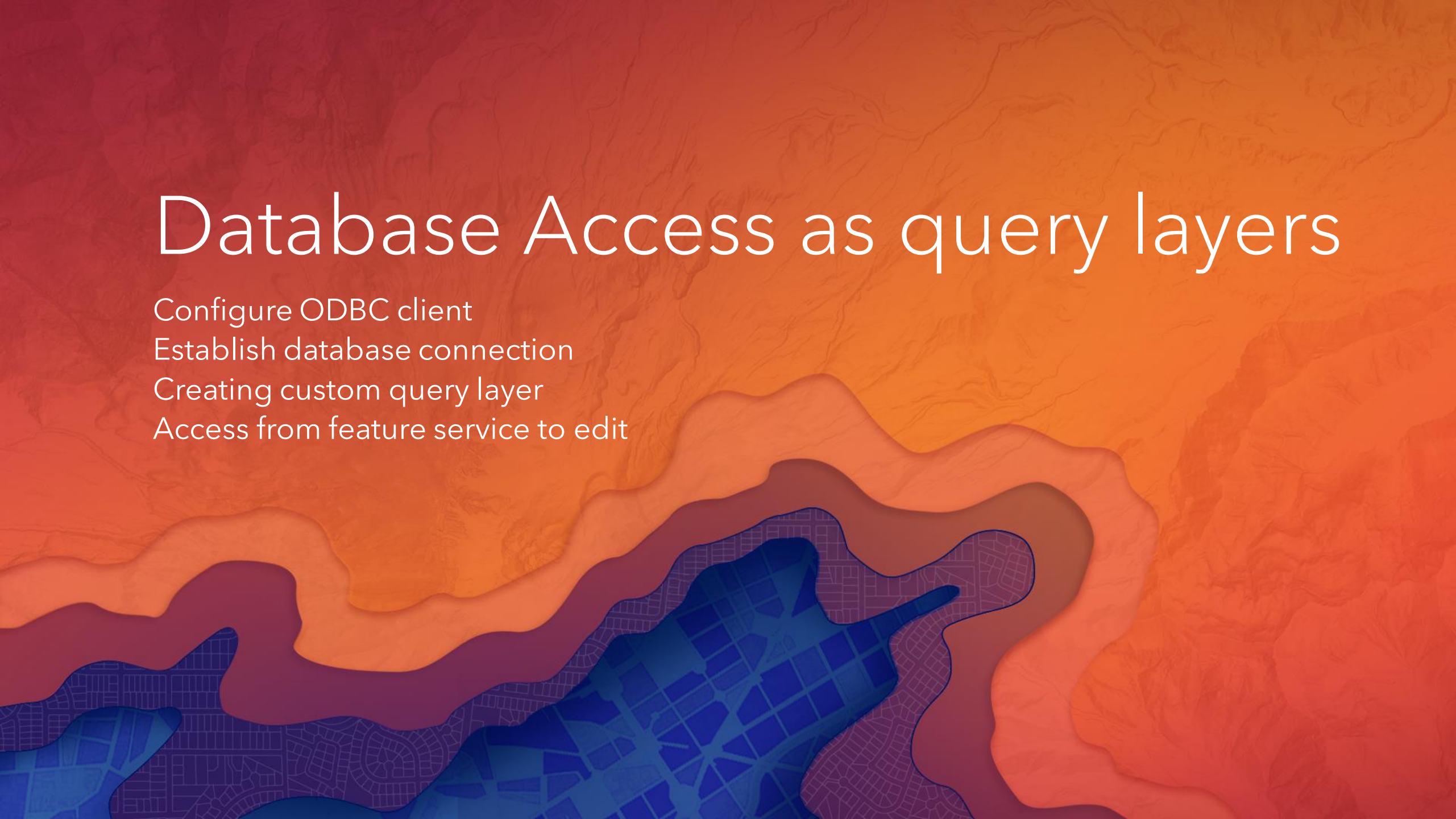
- Publish by reference - Data store registration
  - ODBC data source names must match on client/server machines





Database Access as query layers

Configure ODBC client
Establish database connection
Creating custom query layer
Access from feature service to edit

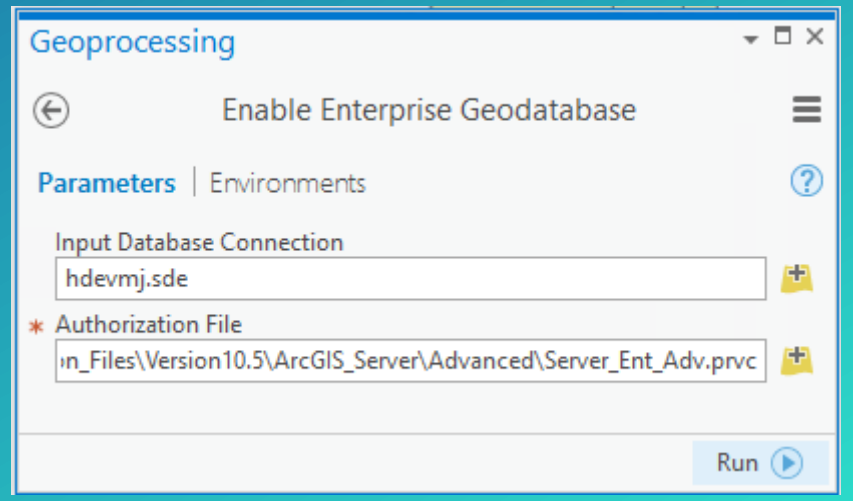


Enable as Enterprise Geodatabase – Pro 2.1

- When you want to do more with your data
- ArcGIS Pro via Enable Enterprise Geodatabase tool
  - Existing HANA database
  - SDE database user with CATALOG READ permission

- Enable Enterprise Geodatabase tool
  - Database connection as SDE user
  - ArcGIS Server license file

Geodatabase support @ Pro 2.1
SQL Server
Oracle
DB2
PostgreSQL
SAP HANA



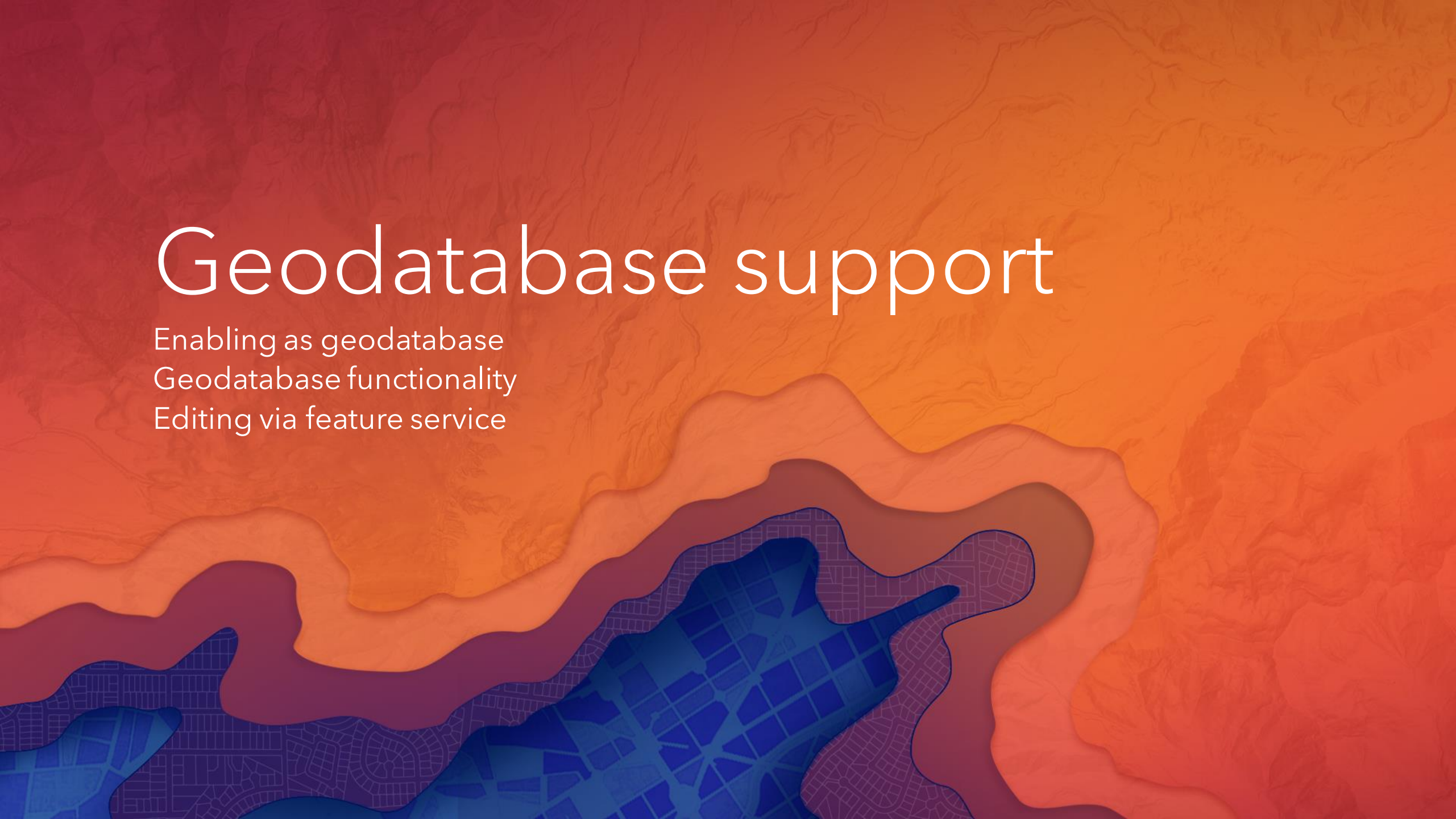
Geodatabase Support for HANA – Pro 2.1

- Subtypes
- Domains
- Relationship classes
- Attachments
- Editor tracking
- Non-versioned archiving
- Offline editing with sync
- New service based transaction model
  - long transactions
- Utility network

Upcoming
- Parcel fabric
- Topology
- Network dataset

Geodatabase support

Enabling as geodatabase
Geodatabase functionality
Editing via feature service



Resources & Survey

Related sessions

July 12 @ 1:30 PM - Geodatabase: An Introduction

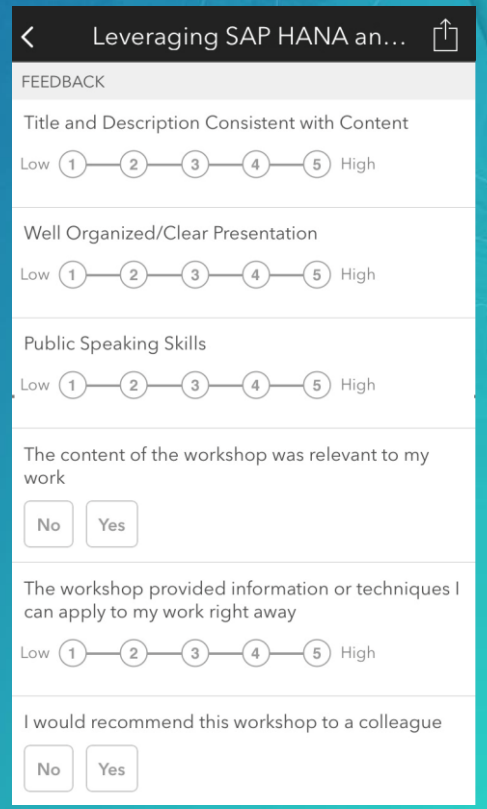
July 12 @ 5 PM - Leveraging Native Spatial Data Types in ArcGIS using Query Layers

Resources from this session

https://geonet.esri.com/docs/DOC-10254

- slides
- scripts from demo
- Helpful links

Thank you!
Fill out survey in
Esri Events mobile app

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