

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



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SAP HANA®

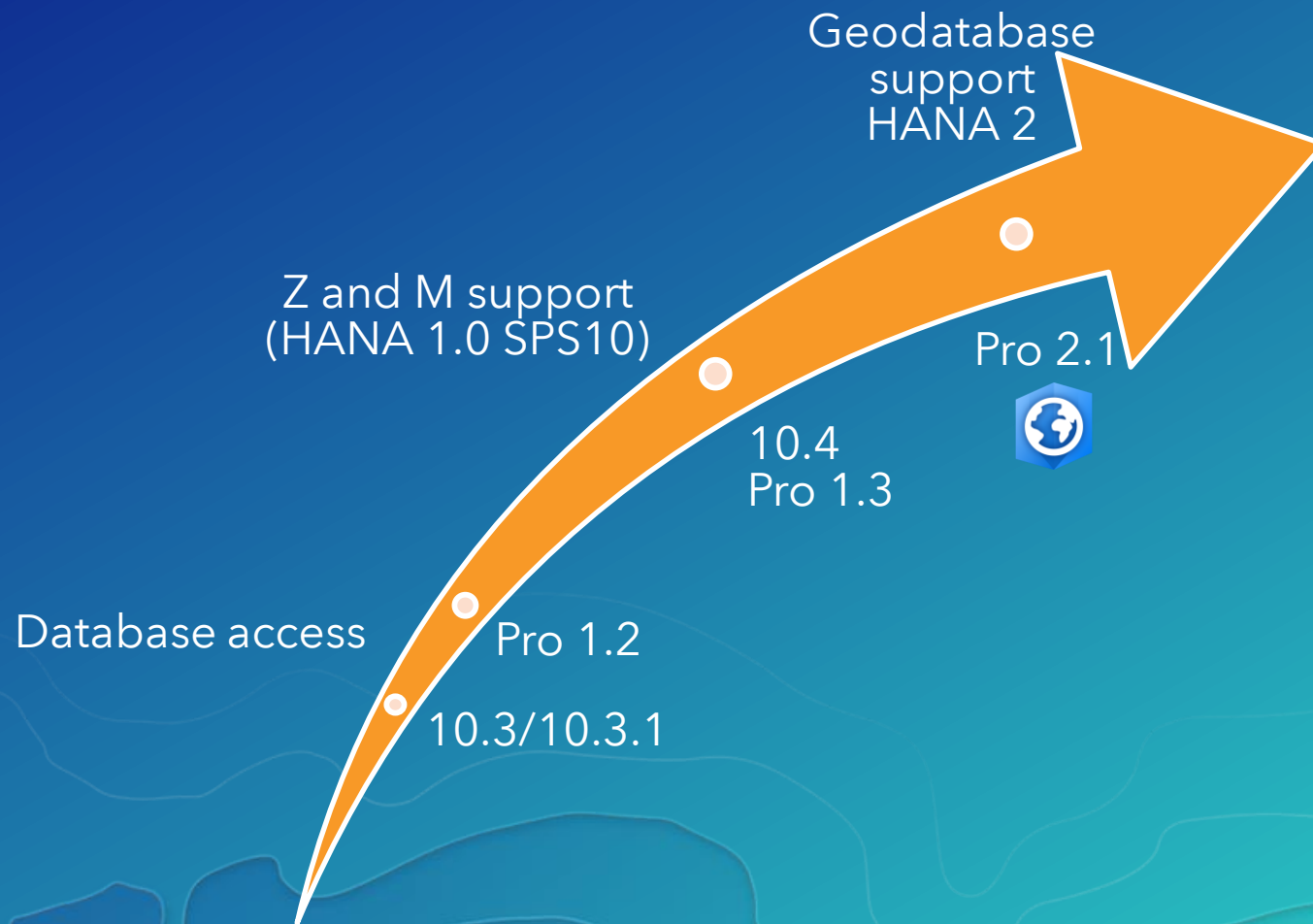
SAP HANA

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

The screenshot shows the SAP Software Downloads portal. The navigation bar includes 'SAP Support Portal Home / My Support' and 'Software Downloads' (highlighted with an orange border). Below the navigation bar, the page title is 'Software Downloads'. The main content area includes a description of the SAP Software Download Center and a list of software categories. A dotted line connects the 'Software Downloads' link in the navigation bar to the 'Databases' category in the 'Types of Software' section. The 'Databases' category is highlighted with an orange border and contains a link to 'Access downloads'.

Client install path:

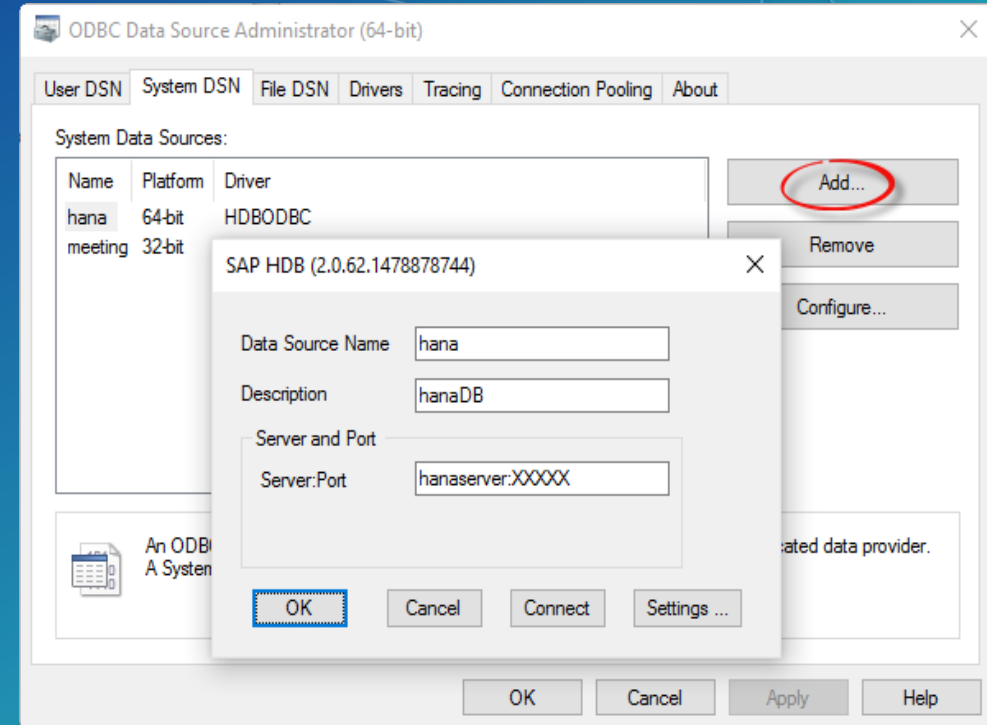
64 bit - C:\Program Files\sap\hdbclient

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

SAP HANA Database Access

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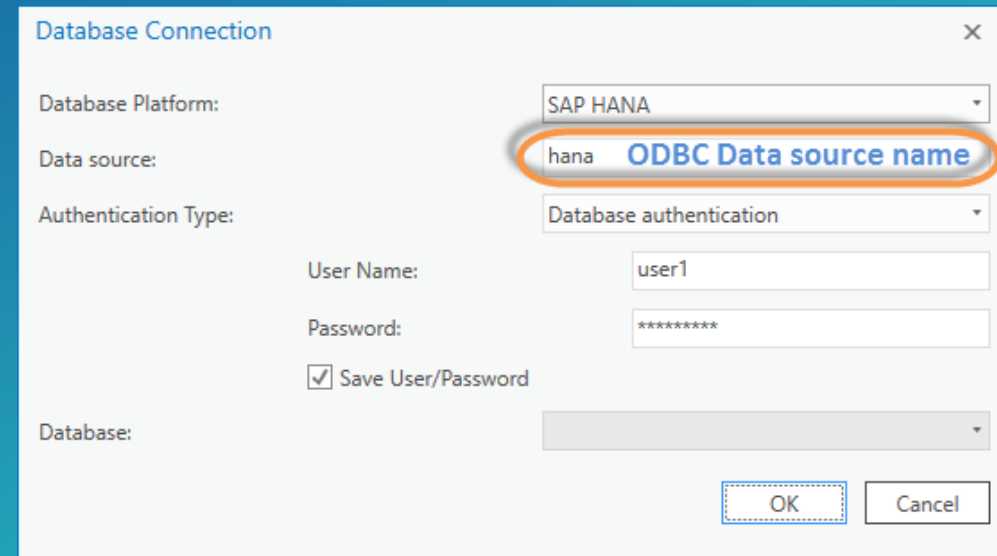
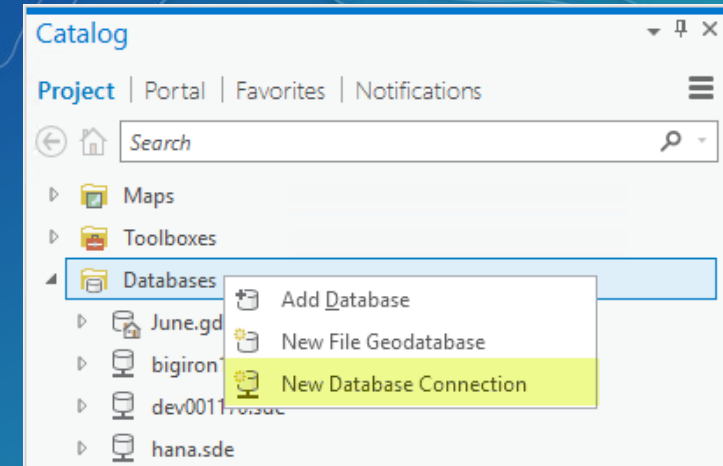
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Database Access

Query layers

1 - Accessed via database connection

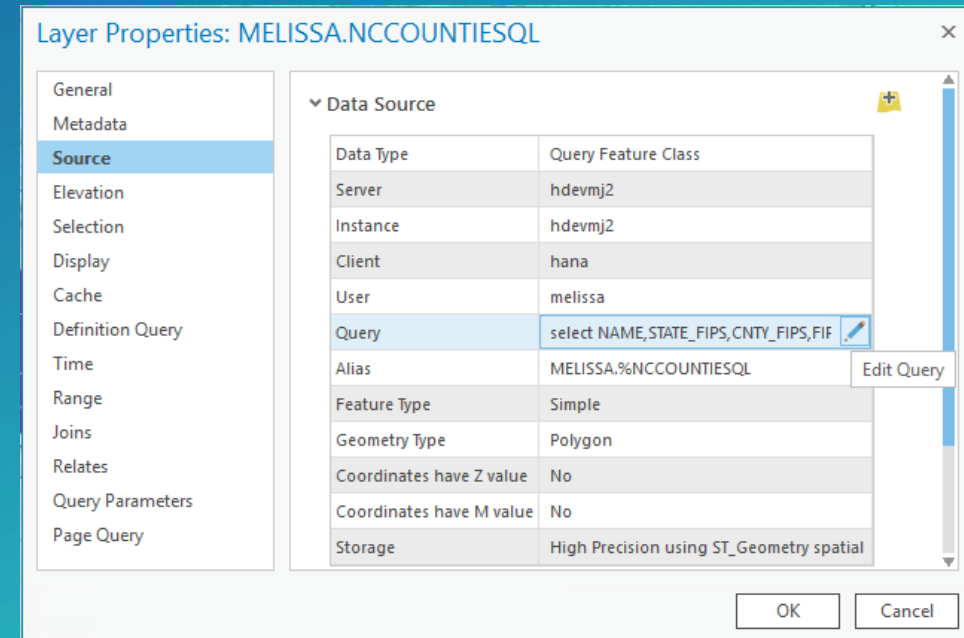
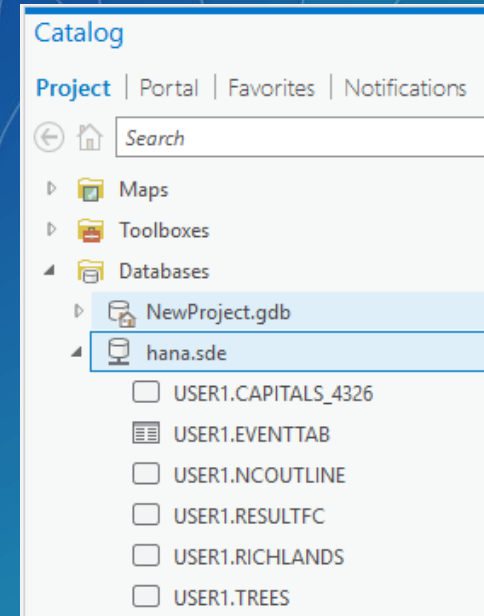
- drag/drop onto map
- query can be edited

2 - Create New Query Layer

- build your own SQL

ArcGIS discovers

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



Database Access

Query layers

1 - Accessed via database connection

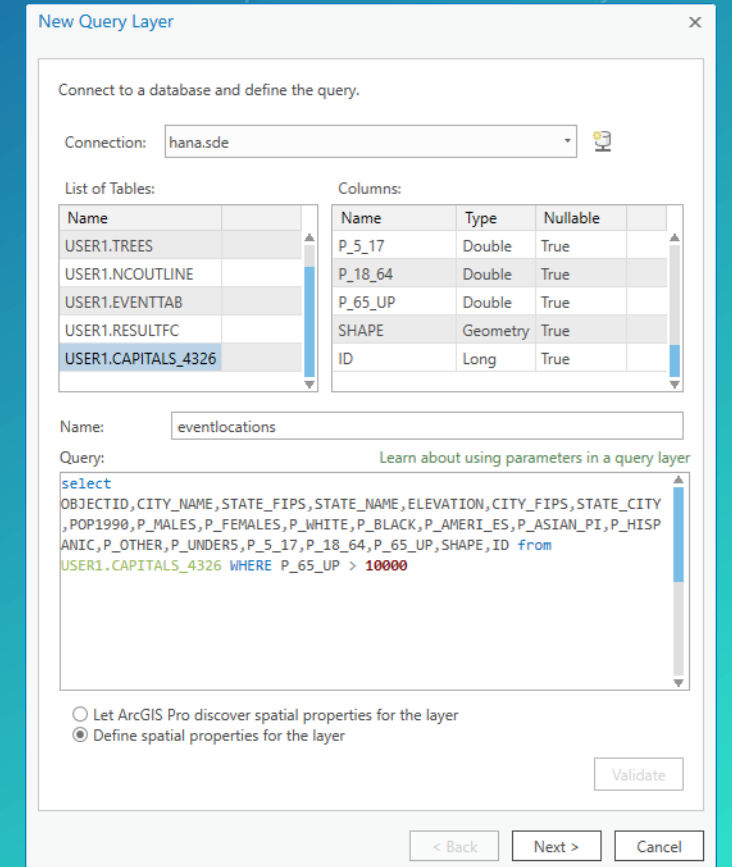
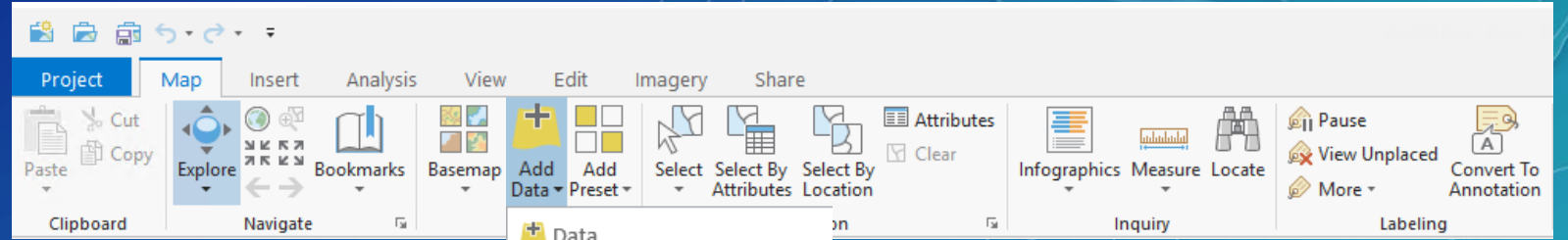
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Working with SAP HANA data



Create new data:

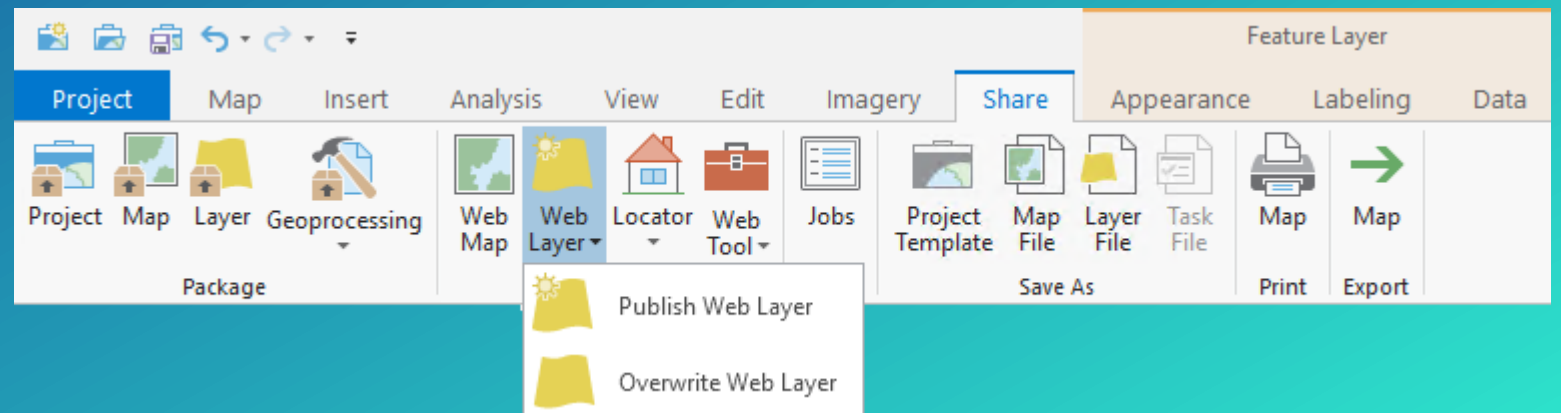
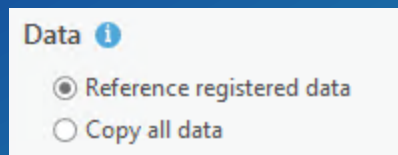
- Import datasets into database
- Create new table, feature class, or view

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

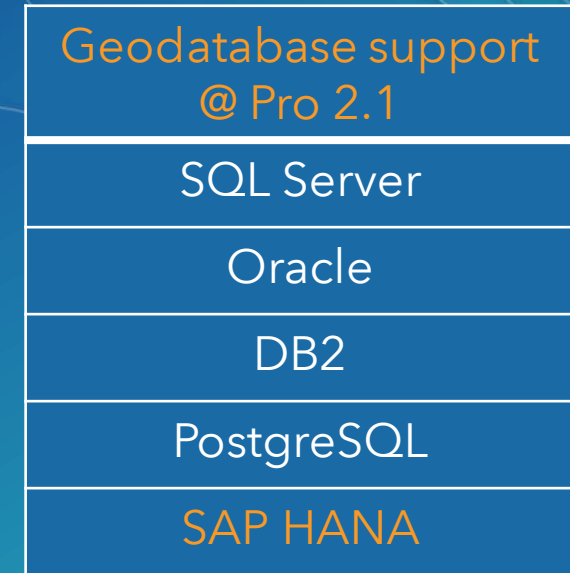
Establish database connection

Creating custom query layer

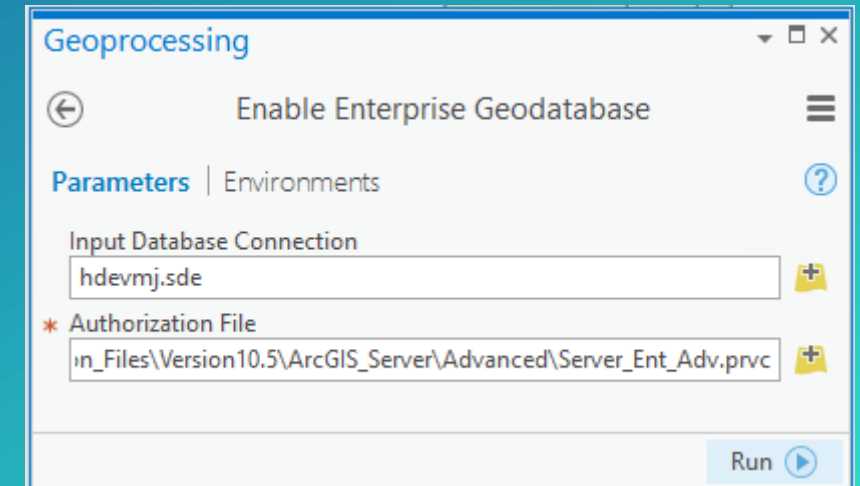
Access from feature service to edit

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 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

A screenshot of a mobile app feedback survey. The title bar shows a back arrow, the text "Leveraging SAP HANA an...", and a share icon. The survey is titled "FEEDBACK" and contains five sections:

- "Title and Description Consistent with Content" with a 5-point Likert scale (Low to High).
- "Well Organized/Clear Presentation" with a 5-point Likert scale (Low to High).
- "Public Speaking Skills" with a 5-point Likert scale (Low to High).
- "The content of the workshop was relevant to my work" with "No" and "Yes" radio buttons.
- "The workshop provided information or techniques I can apply to my work right away" with a 5-point Likert scale (Low to High).
- "I would recommend this workshop to a colleague" with "No" and "Yes" radio buttons.



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