



Nahtlose Integration: Die ArcGIS-Plattform und FME im Zusammenspiel

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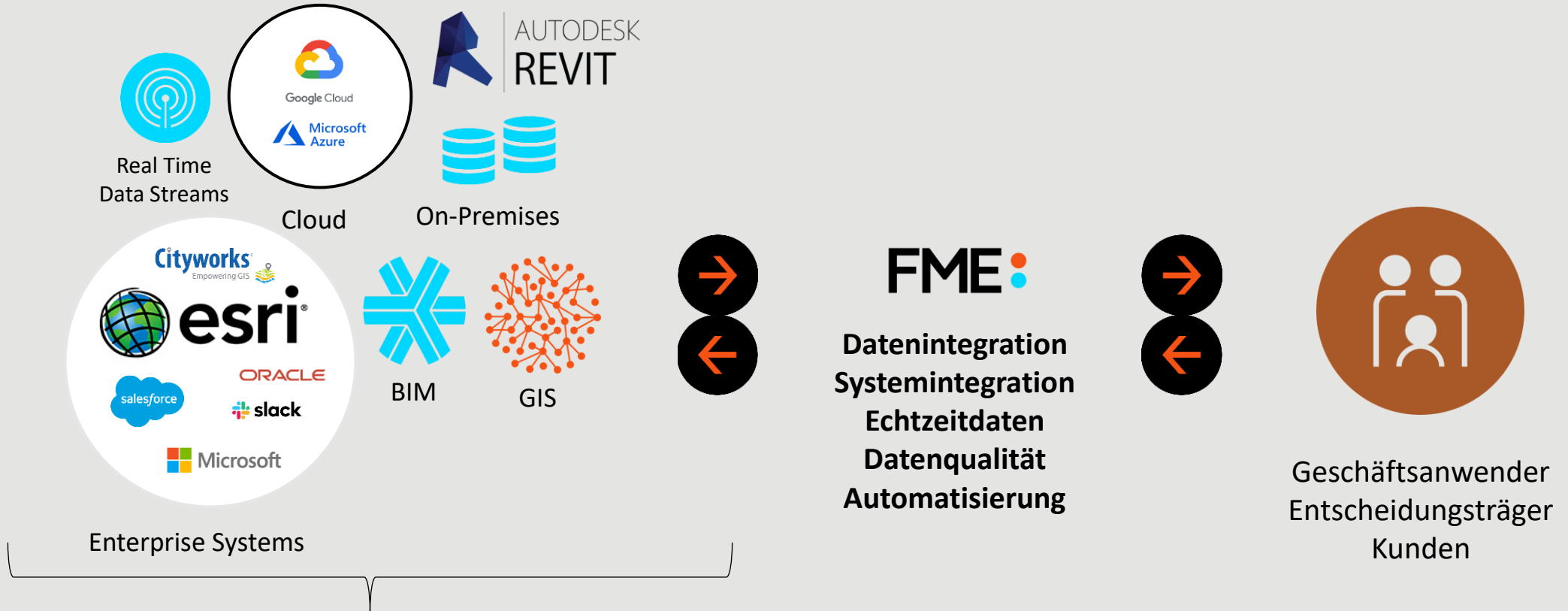
Armin Pflegpeter, axmann geoinformation

Die FME Plattform



- Interoperabilität: unterstützt über 600 Datenformate
- Automatisierung: komplexe Workflows ohne Coding
- Echtzeit-Prozessierung: Datenverarbeitung aus Streaming-Workflows
- No-Code Plattform: niederschwelliger Zugang
- Aktive Community: stetige Erweiterung durch Beiträge aus Anwender-Community

FME und ArcGIS



Räumliche Daten, IT-Systeme, Anwendungen, Echtzeit, BIM,
Datenbanken, Tabellen...

DATEN JEGLICHER ART - NoCode



Mehrwert für Ihr digital Twin Projekt durch FME und ArcGIS

1. Das Aufbrechen von Datensilos

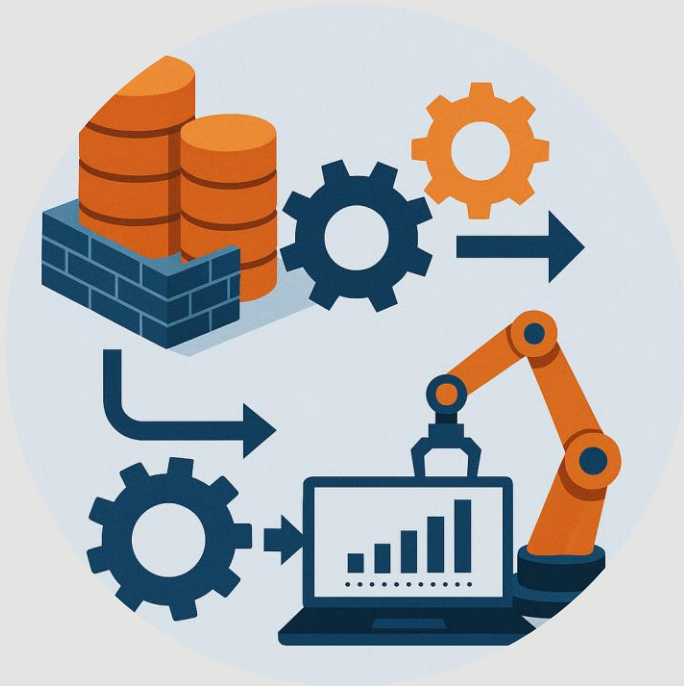
- Anbinden unterschiedlicher Datenquellen im Unternehmen

2. Einen nahtlosen Datenaustausch

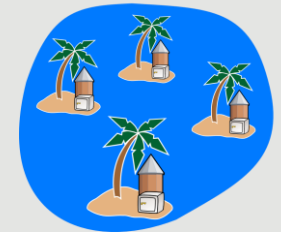
- Integration von unterschiedlichen Systemen in Ihre ArcGIS Produkte

3. Automatisierung von Datenprozessen

- FME Flow Automations
- FME Flow Workspace Apps
- FME Flow REST API
- ArcGIS REST API

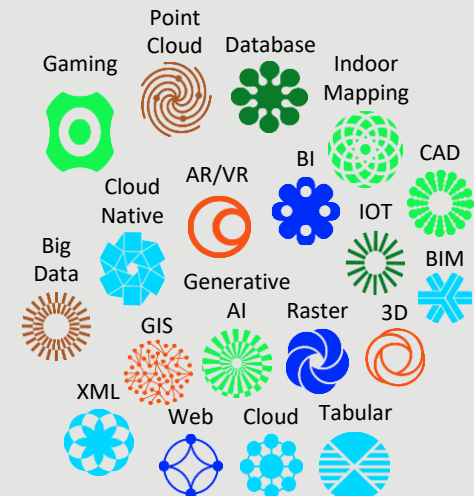


Islands of data
Disconnected data silos



Different:
Standards
Quality
Databases
Semantics

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Demo Datenintegration Automatisierung mit ArcPy

The screenshot displays the FME Workbench interface with a workflow diagram and a translation log. The workflow includes several transformers: a 'GIP Input' transformer, a 'GeometryRemover_2' transformer, a 'Tester_2' transformer, and two 'AttributeKeeper_3' transformers. The translation log shows the following entries:

| Timestamp | CPU | Elapsed | Transformer | Message | |
|-----------|----------|---------|-------------|--------------------|---|
| 1193 | 19:50:34 | 83.3 | 0.0 | PythonCaller_3 | Network Dataset wird finalisiert... |
| 1194 | 19:50:40 | 87.4 | 4.1 | PythonCaller_3 | ND_GIP_IDS erfolgreich erstellt |
| 1195 | 19:50:40 | 87.4 | 0.0 | PythonCaller_3 | PythonFactory script changed the current FME process locale from 'German_Austria.utf8' to 'German_... |
| 1196 | 19:50:40 | 87.5 | 0.1 | ParameterFetcher_3 | ParameterFetcher_3 (TeeFactory): Cloned 1 input feature(s) into 1 output feature(s) |
| 1197 | 19:50:40 | 87.5 | 0.0 | PythonCaller_3 | Optional_process_script_method_not_implemented_not_called... |



Demo Datenintegration IFC -> 3D Scene -> AGOL

The screenshot displays the FME Workbench interface with a workflow designed to process IFC data into a 3D scene and publish it to ArcGIS Online. The workflow consists of the following transformers:

- Read IFC data**: Reads the IFC file.
- Scale and create a coordinate system**: A sub-workflow containing:
 - Scaler**: Scales the data.
 - LocalCoordinateSystemSetter**: Sets the local coordinate system.
 - CsmprReprojector**: Reprojects the data.
- ESRI Scene Layer**: A sub-workflow containing:
 - FeatureWriter**: Writes the data to a scene layer.
 - AttributeManager**: Manages attributes.
 - ArcGISOnlineConnector**: Connects to ArcGIS Online.
- Create 2D Footprint**: A sub-workflow containing:
 - 2DForcer**: Forces the data to 2D.
 - GeometryFilter**: Filters the geometry.
 - Dissolver**: Dissolves the features.

The Data Preview window shows a table with one row of data:

| Dissolver: Area | |
|-----------------|--|
| <no schema> | |
| 1 | |

The Graphics window shows a 3D scene with a pink building footprint overlaid on a map. The Record Information window shows the following properties:

| Property | Value |
|--------------------|------------|
| fme_geometry | fme_donut |
| fme_area | fme_area |
| Geometry | SPHERICAL |
| Coordinate System | SPHERICAL |
| Dimension | 2D |
| Number of Vertices | 65 |
| Min Extents | -8570303 |
| Max Extents | -8569994 |
| Donut | 1 Inner... |



Fazit

- Nahtlose Integration von ArcGIS Produkten in unterschiedlichste Systeme durch FME
- Integration von Daten aus unterschiedlichsten Systemen zur Verwendung in ArcGIS
- Langjährige Kooperation zwischen Safe Software und ESRI
- Einfache Automatisierung komplexer Prozesse