Dira ProSuite for ArcGIS Pro

- Product Overview
- Typical Use Cases
- Collaborative Quality Improvement

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Dira GeoSystems: The Mission

Geospatial data is part of the critical infrastructure of the world. High-quality data is essential for good decision-making. We provide data production and processing software built together with national mapping agencies and other organizations that create geospatial data.
ProSuite: Quality Assurance for Geodata

• Efficient, powerful validation logic (> 130 test algorithms)
• During interactive editing and import/export of geospatial data
• Integrated in ArcGIS or through Python scripting
• Efficient interactive error correction and data editing
• Edit tools are generally useful for efficient editing
ProSuite Applications

- **ArcGIS Pro Add-in**
  - Edit tools
  - Quality verification
  - Worklists

- **Administration and Configuration**
  - Client for configuration database
  - Administration of projects, data models, quality rules

- **Python API**
  - Base for Geoprocessing Tools
  - Quality rules defined in code or XML
  - Call from any clients, from other tools

```python
import prosuite

spec = prosuite.XmlSpecification("\share\QA\basic.qa.xml")
out_dir = "\share\QA\results\basic_output"

service = prosuite.Service(host_name='localhost', port_nr=5151)
service.verify(specification=spec, output_dir=out_dir)
```
Use Case: Data Production

Time

Product release

Edit Sessions

Work packages versions, checkouts

Integrated production database

Arbeitspaket 1

Arbeitspaket 2

Quality checks, Error correction while editing

Final inspection of work package

Final inspection of work package

Final inspection before release

Product release
Use Case: Data Integration

Data to be integrated → Transformation and loading → Staging Geodatabase → Loading / integration → Target Database

Error Features → Error Reports → Inspection - Schema Tests - Data Tests → Verification of the integrated data

Feedback
Collaboration using ProSuite QA

• Datasets are checked centrally
  ▪ And optionally by the producer (shared quality definition)
  ▪ Planned: Verification Service in the Cloud

▪ Specific boundary tests between regional datasets
  ▪ Connectivity, edge matching, attributes

• Error reports and features do not require ArcGIS
  ▪ HTML and Shapefiles/File Geodatabase
  ▪ But: Corrections are more efficient with ProSuite Work-List
 Demo

Data: CNES, Spot Image, swisstopo, NPOC
Dira ProSuite für ArcGIS Pro

• Large part is open source
• Collaboration of NMAs, cantons and software developers
• New tools/features are implemented regularly
  • Parallel execution
  • Feature Transformations and Error Filters
• Customers in 3 countries
• Support for
  • ArcGIS Pro 2.9 - 3.x
  • ArcGIS Server 10.9.1 – 11.x