Dira ProSuite for ArcGIS Pro

- Product Overview
- Typical Use Cases
- Collaborative Quality Improvement
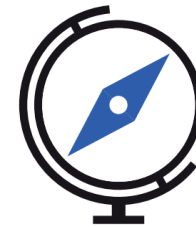
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DIRA GEOSYSTEMS

Dira GeoSystems: The Mission

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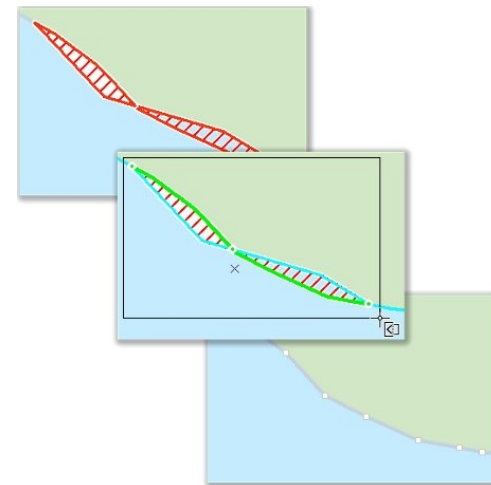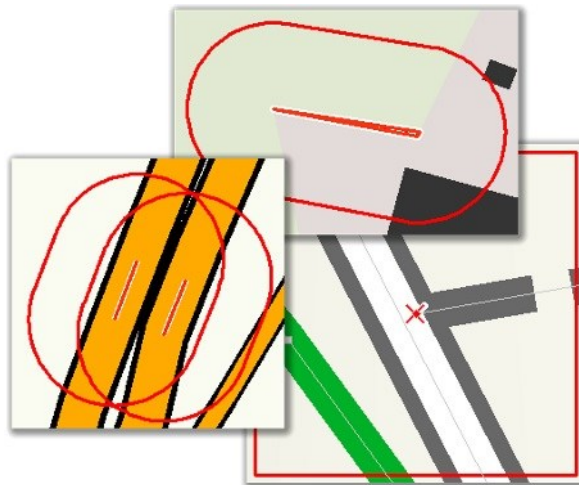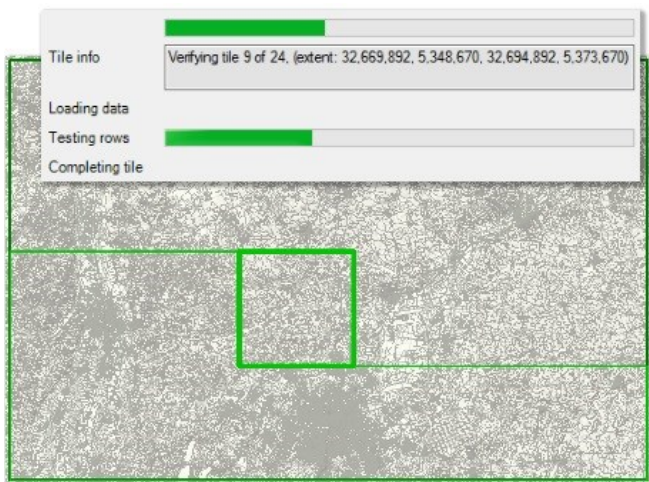
We provide data production and processing software built together with national mapping agencies and other organizations that create geospatial data.

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
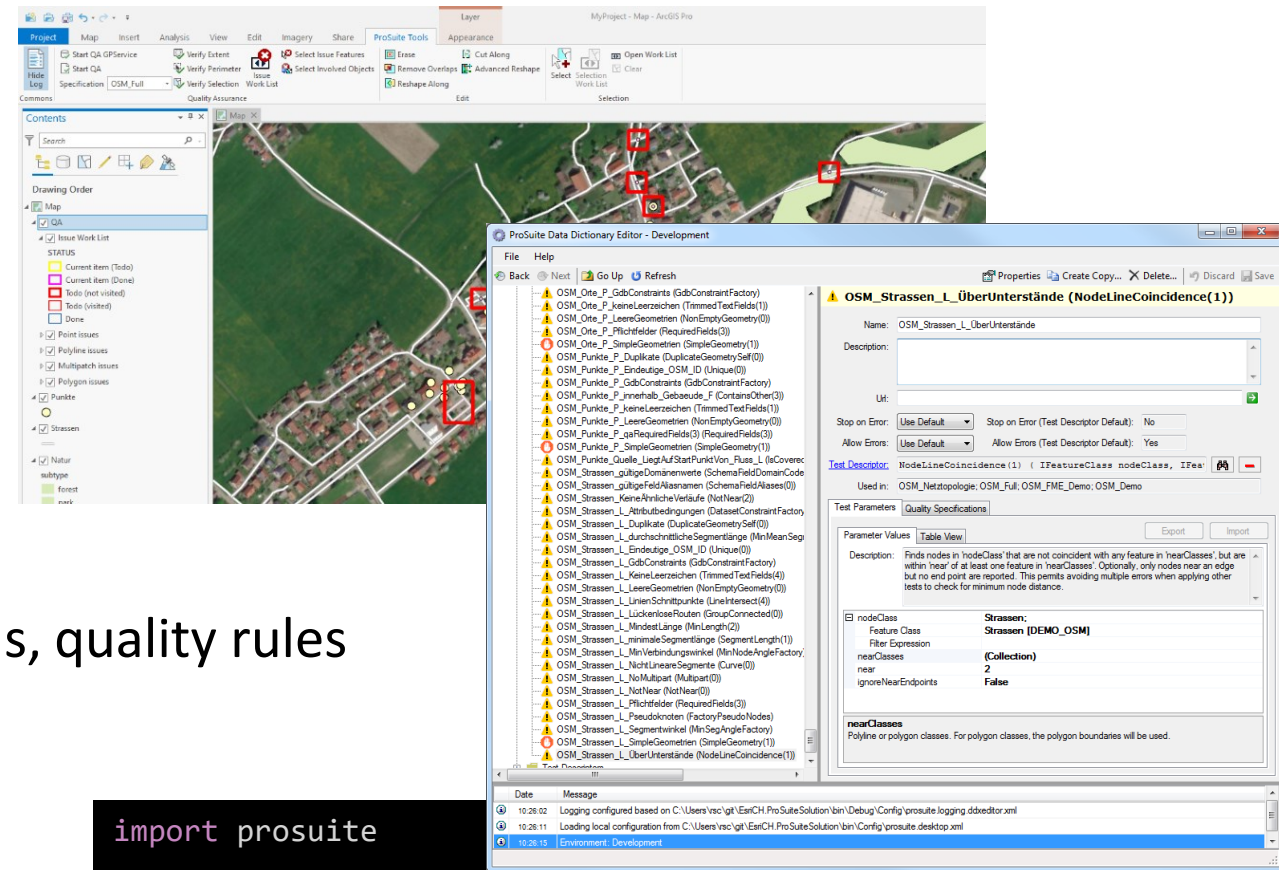
- **ArcGIS Pro Add-in**
  - Edit tools
  - Quality verification
  - Worklists
- **Administration and Configuration**
  - Client for configuration database
  - Administration of projects, data models, quality rules
- **Python API**
  - Base for Geoprocessing Tools
  - Quality rules defined in code or XML
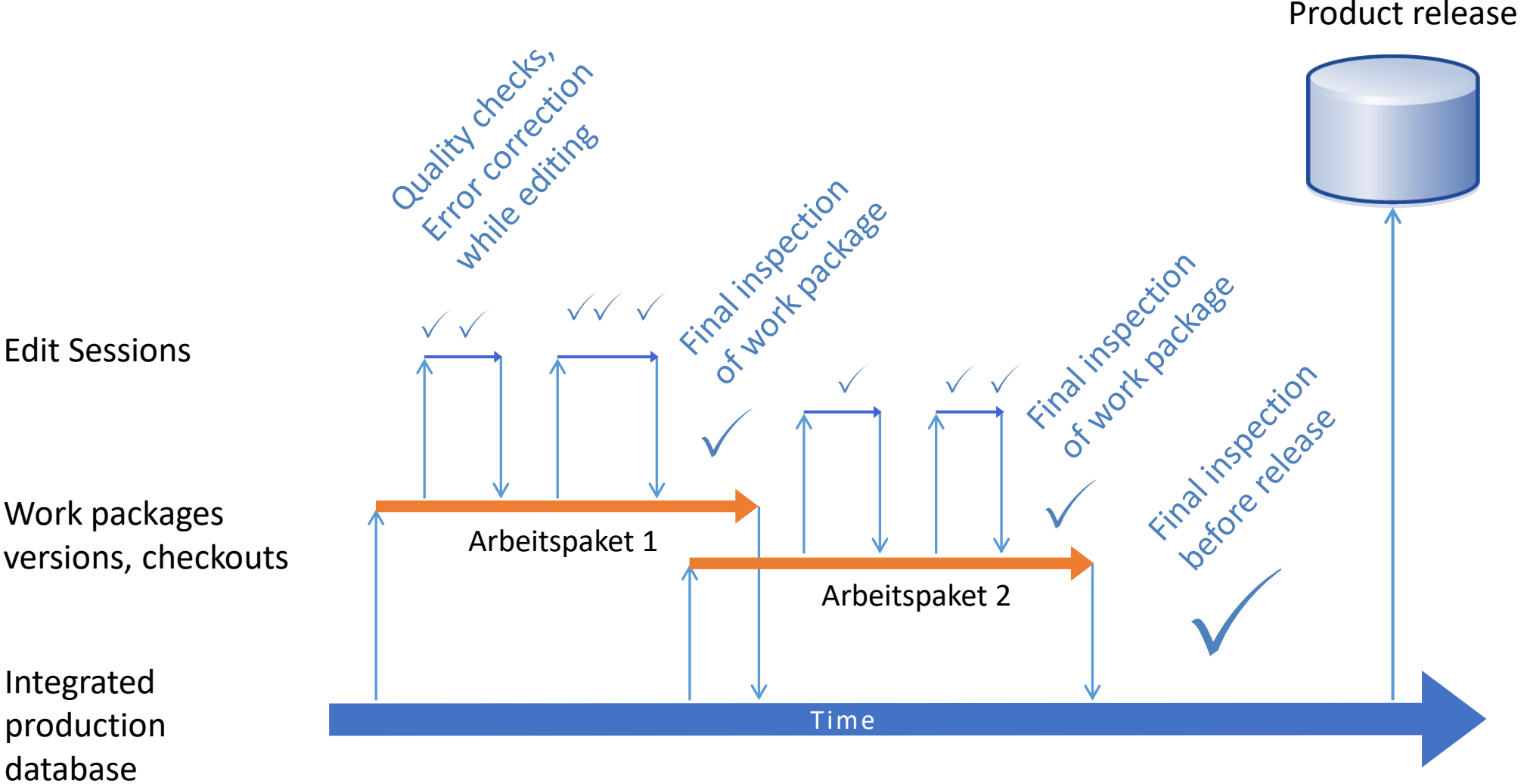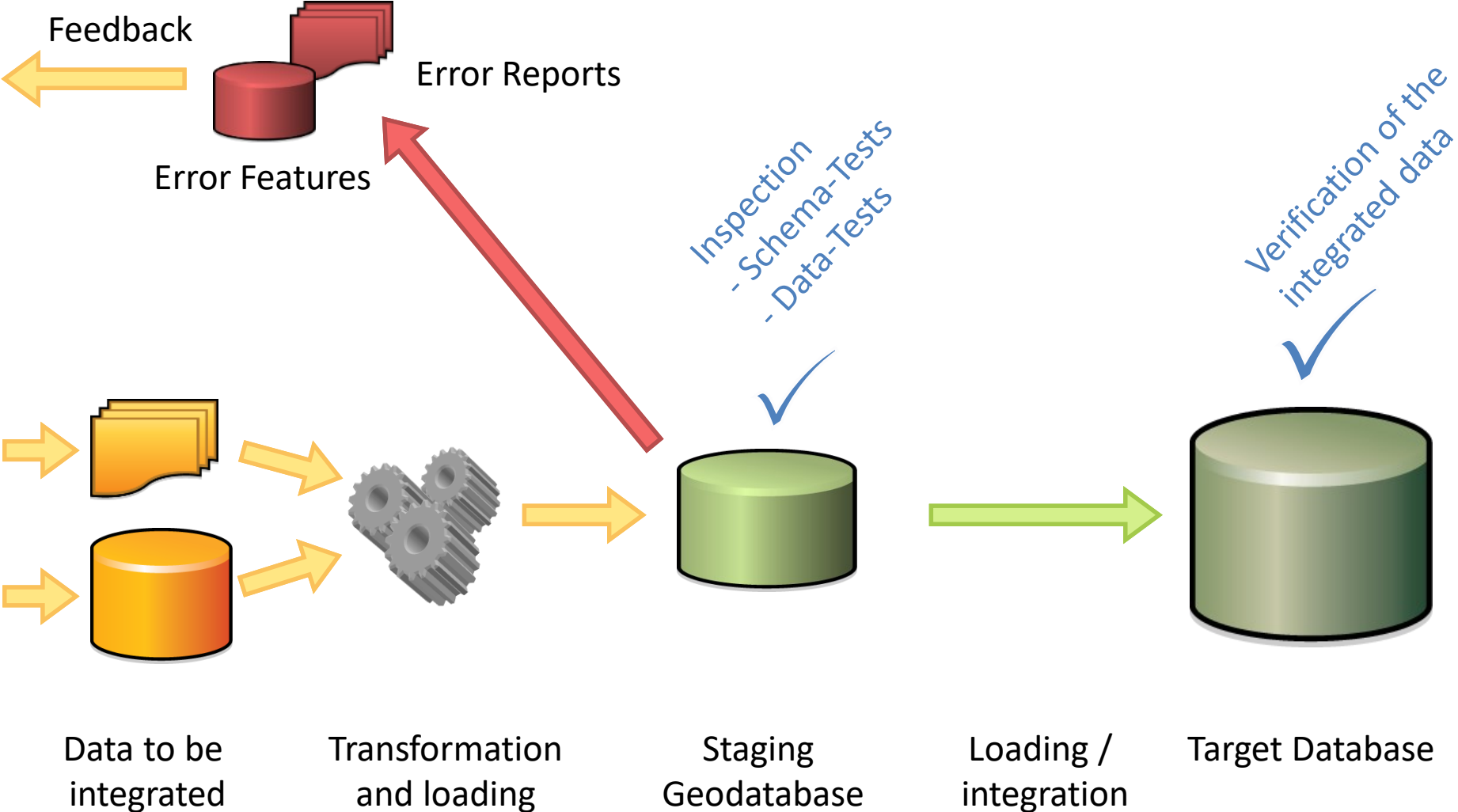 - Call from any clients, from other tools


```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

Use Case: Data Integration
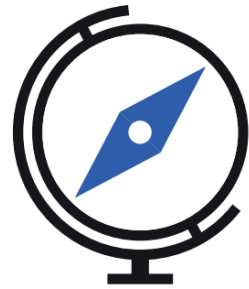

Feedback

Error Reports

Error Features

Inspection
- Schema-Tests
  - Data-Tests

Verification of the integrated data

Data to be integrated

Transformation and loading

Staging Geodatabase

Loading / integration

Target Database

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

DIRA GEOSYSTEMS

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