



3.0 →
THE FUTURE IS NOW

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Outline

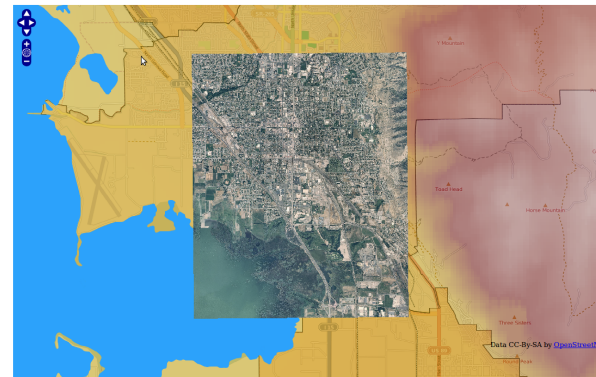
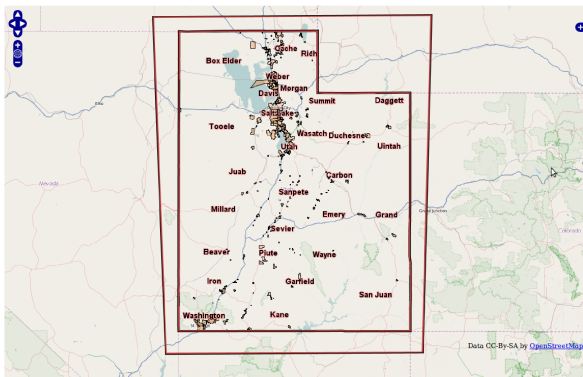
- deegree 3.0 for users
- Under the hood: components of deegree 3.0
- deegree 3.0 for developers
- Back to the future: 3.1 and beyond

deegree 3.0 for users

- Available prepackaged deegree 3 setups
 - *deegree utahDemo*
 - *deegree cswDemo*
 - *deegree wpsDemo*
 - *deegree inspireNode*
- Very simple setup: download archive and start
- Use service management GUI for configuration

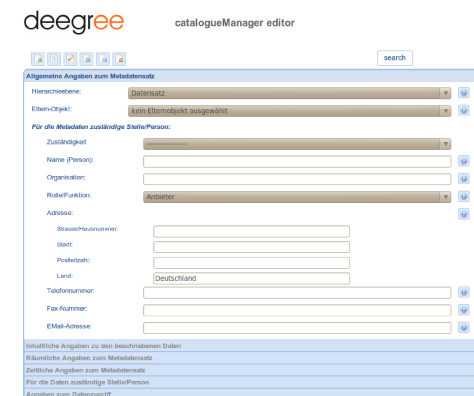
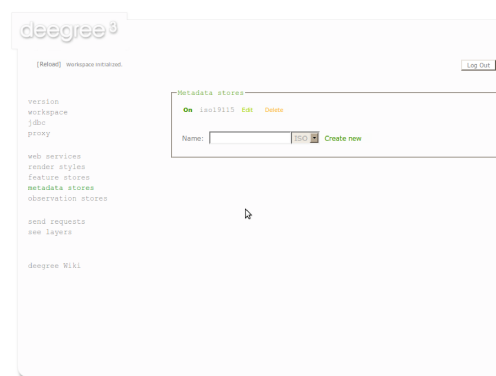
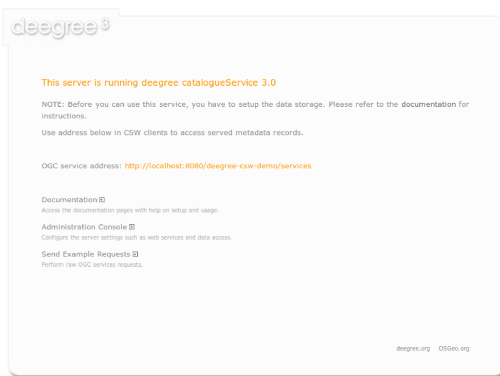
Package 1: deegree utahDemo

- deegree mapService (WMS) + featureService (WFS)
- Demonstrates vector and raster styling
- Good starting point for creating a WMS / WFS setup
- Just adapt to your own data / styles



Package 2: deegree cswDemo

- deegree catalogueService (CSW)
- Setup an ISO / INSPIRE-compliant CSW
- Only few clicks for configuring PostGIS storage
- Bundled deegree catalogueManager



Package 3: deegree wpsDemo

- deegree processingService (WPS)
- Includes Java / Sextante demo processes
- Setup your own process development environment in no time

The screenshot shows the deegree web application interface. On the left, there is a navigation menu with 'Administration Console' and 'Send Example Requests' highlighted. The main content area displays the 'Administration Console' with instructions to configure server settings. Below it, the 'Send Example Requests' section is visible, showing a form for sending requests to the OGC service.

```

wps:Identifier=Buffer.xml
wps:Inputs
  wps:Identifier=OGCInput:ws:Identifier
  wps:Inputs
    wps:ComplexData
      xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" xmlns:gml="http://www.opengis.net/gml" xmlns:ci="http://schemas.opengis.net/1.0.0/2001/XMLSchema-instance"
      srsName="EPSG:4326" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      <gml:Geometry xmlns:gml="http://www.opengis.net/gml" xsi:schemaLocation="http://www.w3.org/2001/XMLSchema-instance http://www.w3.org/2001/XMLSchema-instance" >
        <gml:Point srsName="EPSG:4326" >
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    <gml:Polygon xmlns:gml="http://www.opengis.net/gml" xsi:schemaLocation="http://schemas.opengis.net/gml/3.1.1/base/geometryComplexes.xsd" srsName="EPSG:4326" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" >
      <gml:exterior>
        <gml:LinearRing srsName="EPSG:4326" >

```

The screenshot shows the deegree website's 'deegree 3 processingService' page. The page features a navigation menu, a search bar, and a main content area. The 'Features of the Implementation' section lists several key features, including a complete implementation of the WPS 1.0.0 specification, an easy-to-use API, and support for various input/output parameters. The 'See a demo installation' section provides instructions on how to access the demo server and notes that the XML responses may be broken on browsers that don't have a suitable mode for displaying raw XML.

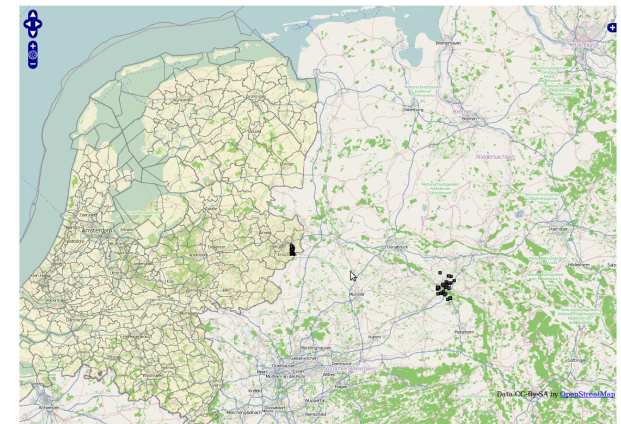


Package 4: deegree inspireNode

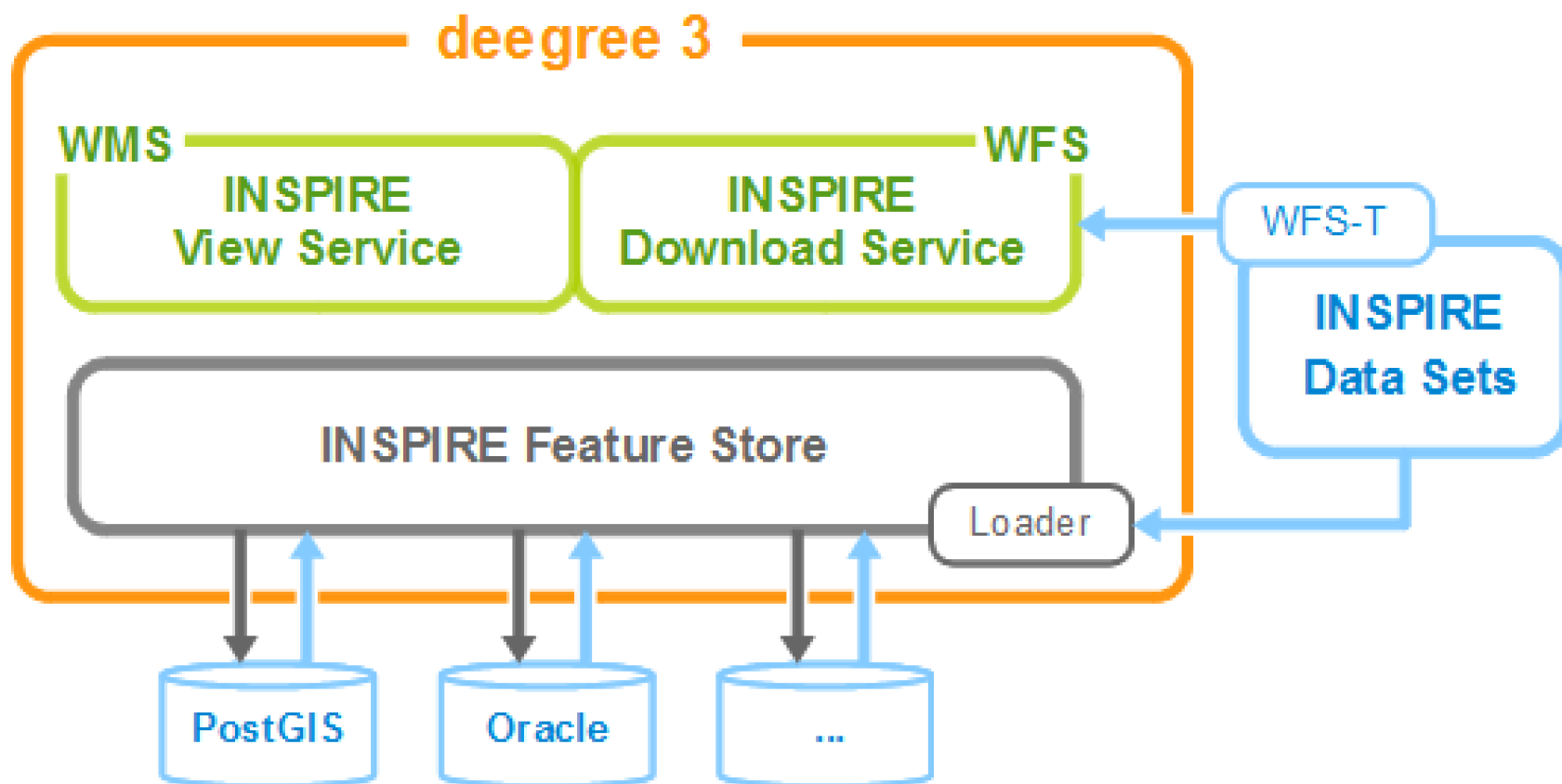
„The OpenSource INSPIRE painkiller“

Package 4: deegree inspireNode

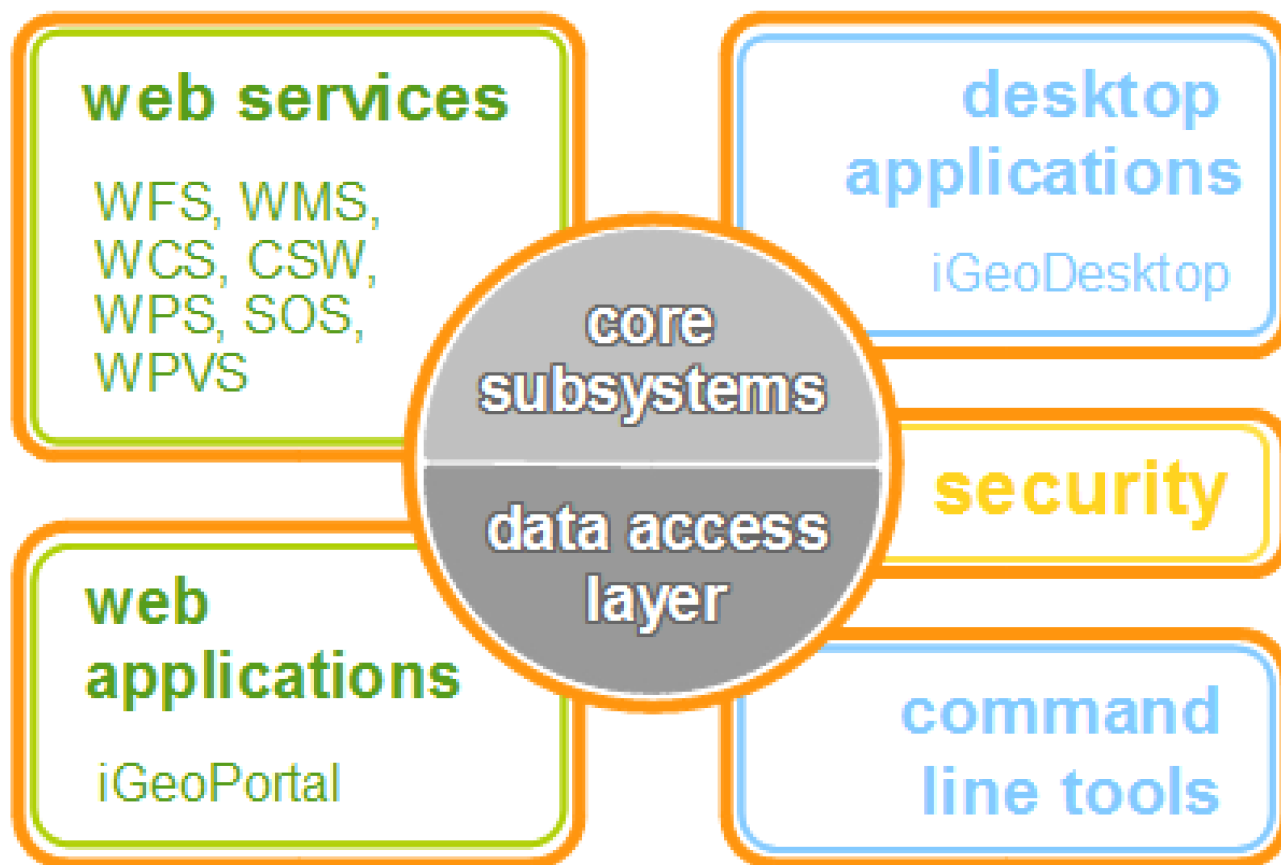
- deegree featureService (WFS) + mapService (WMS)
- Provides INSPIRE View and Download Services
- Configured for all INSPIRE Annex I Data Themes
- Official styling from INSPIRE implementing rules



Seamless data integration



Components in deegree 2 / 3



Components available in deegree 3.0

- Components ported to 3.0
 - Most core subsystems
 - Data access layer
 - Protocol stack / web services
- Stable services in deegree 3.0
 - ***deegree mapService*** (WMS)
 - ***deegree featureService*** (WFS)
 - ***deegree catalogueService*** (CSW)
 - ***deegree processingService*** (WPS)

Major improvements over deegree 1 / 2

- Easier configuration
 - No writing of service capability docs, no XSL
 - Initial version of configuration GUI available
- High scalability
 - Streaming architecture
 - Ready for huge amounts of data

State-of-the-art application schema support

- Handles complex schemas out-of-the box, e.g.

- INSPIRE Data Themes
- XPlanung, ALKIS, ATKIS, AFIS
- GeoSciML

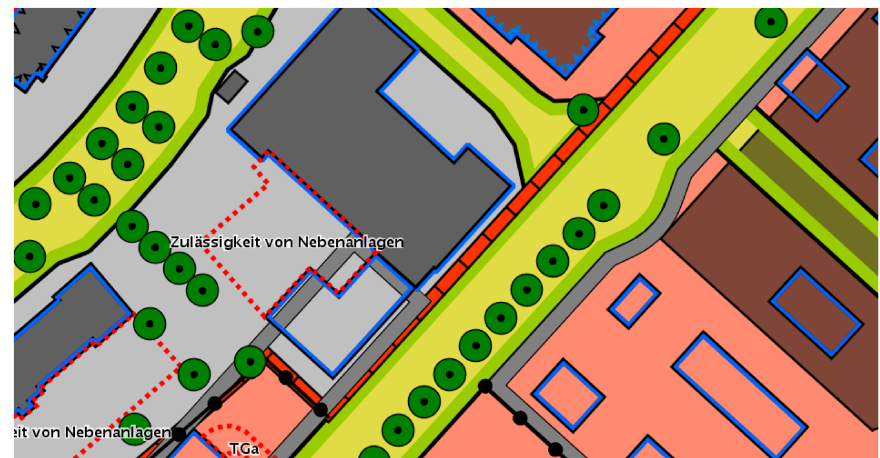


- Configuration based on unmodified schemas
- Work with unmodified GML datasets (e.g. WFS-T)

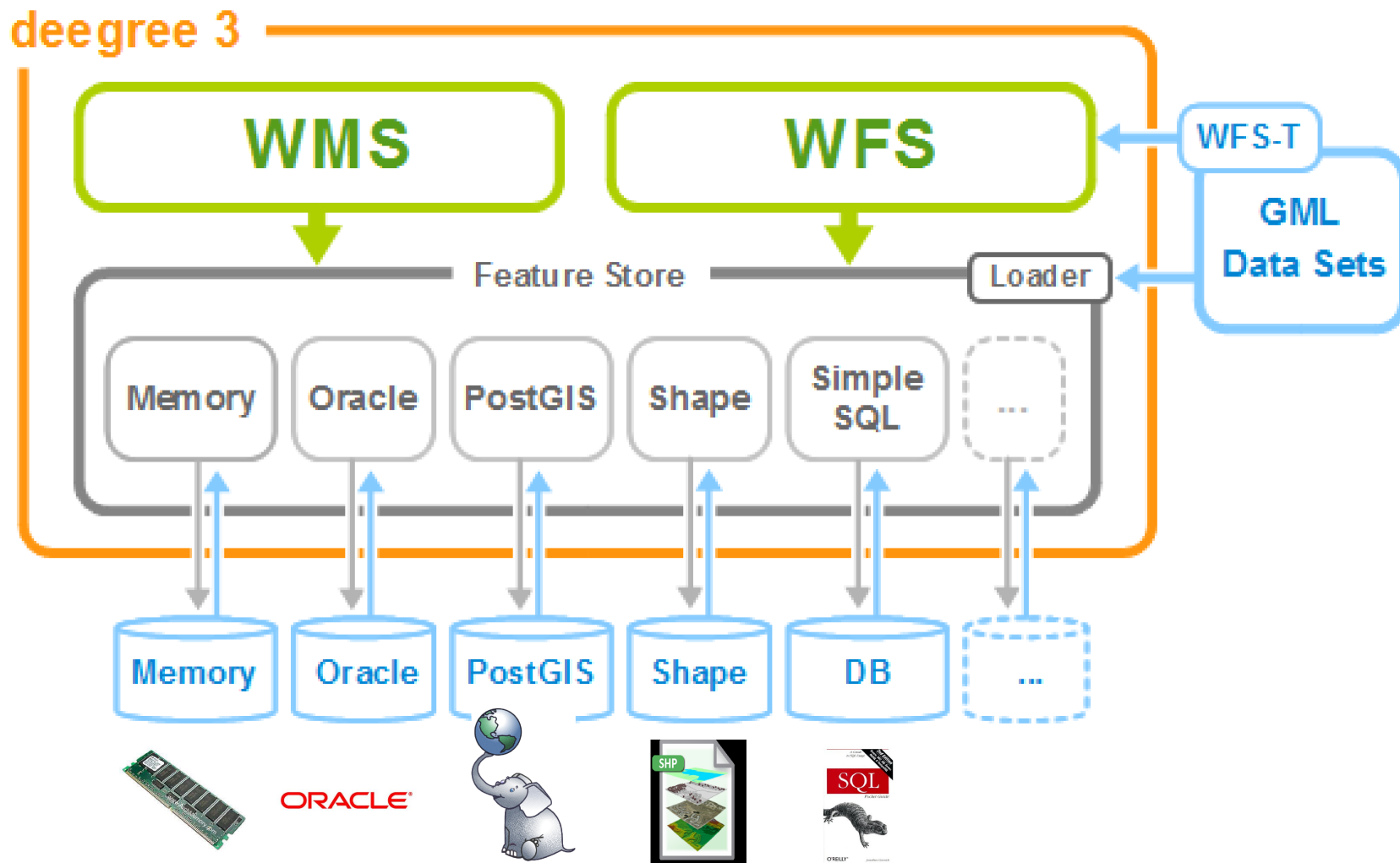
deegree 3 mapService



- WMS 1.1.1 / 1.3.0 (CITE-tested)
- Rendering of complex datasets (e.g. INSPIRE)
- Sophisticated vector / raster stylings
- Supports SLD and SE 1.0
- Streaming data access
- High scalability



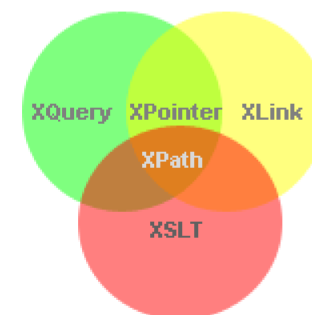
deegree 3: Pluggable feature storage



deegree 3 featureService



- WFS 1.0.0 / 1.1.0 (CITE-tested), 2.0.0 coming
- WFS-T + XLink profiles
- Streaming architecture
- GML 2 / 3.0 / 3.1 / 3.2 output / input
- ISO 19107: Supports complex geometries
- Full XPath 1.0 support in Filters



deegree 3 catalogueService

- Implementation of CSW 2.0.2
- Fully transactional
- Application profile support
 - ISO Application profile + INSPIRE extensions
- High performance / scalability
 - Documented oriented storage
 - Streaming architecture

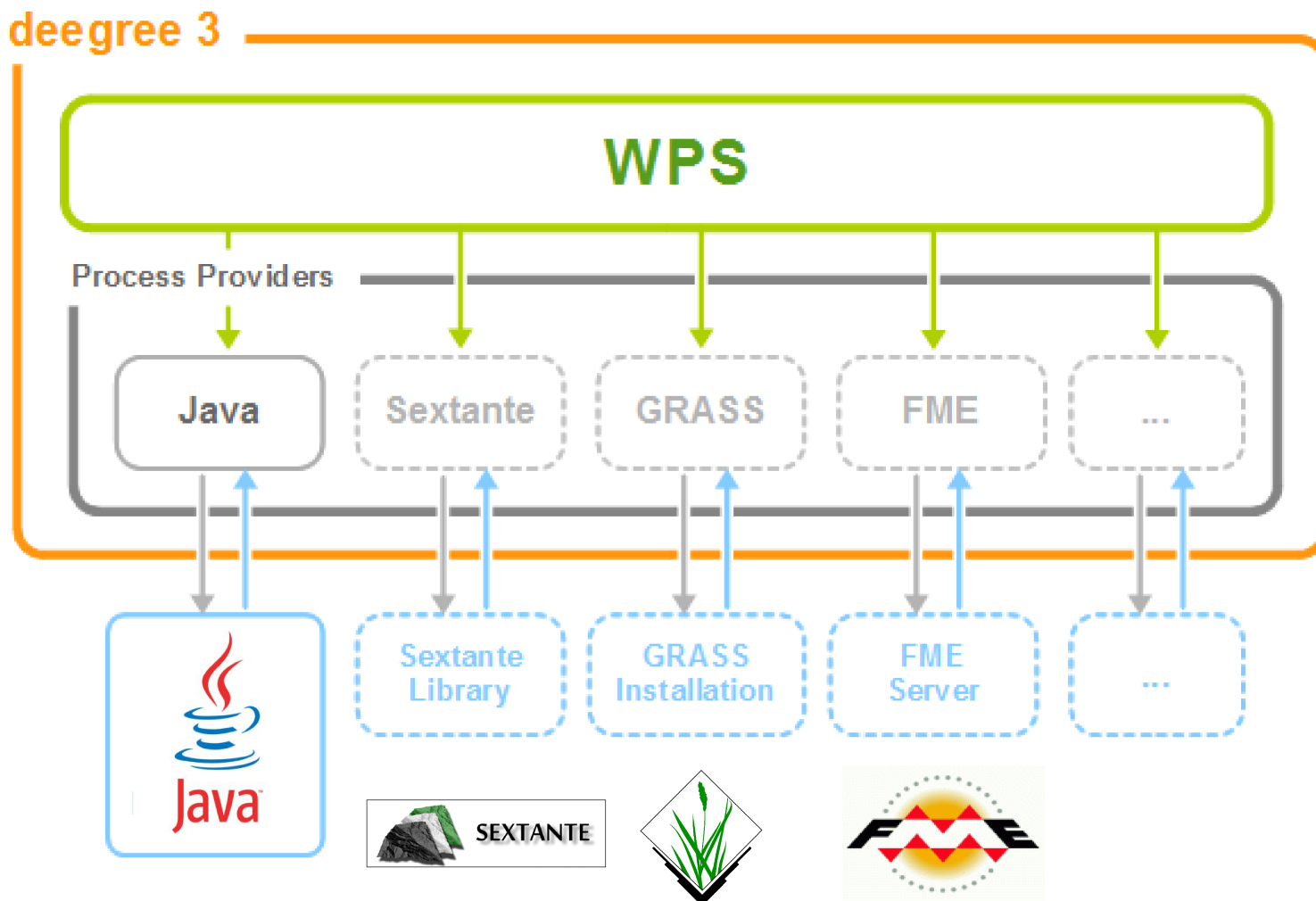


deegree 3 processingService



- Full implementation of WPS 1.0.0 spec.
 - GetCapabilities, DescribeProcess, Execute
 - KVP, XML, SOAP
 - Input / Output parameter variants
 - Asynchronous execution
- Process API abstracts from protocol details
- Streaming access to complex inputs / outputs

Pluggable process providers



deegree 3 for developers

- Enterprise-scale build system **maven**
- Artefacts server: <http://artefacts.deegree.org>
- Clean, modularized architecture
- Plug-in mechanism for many components, e.g.
 - Feature stores
 - Process providers
 - Metadata stores / application profiles

Call for deegree 3 contributions

- Developers
 - Service configuration GUI
 - Additional feature stores
 - Additional process providers
 - ...
- Non-Developers
 - Documentation / tutorials
 - Testing
 - Sponsoring
 - ...

Back to the future: 3.1 and beyond

Release	Codename	Scheduled date
3.0	Celsius	November 2010
3.1	Fahrenheit	February 2011
3.1 + 1	Delisle	August 2011
3.1 + 2	Rankine	February 2012
...

Back to the future: deegree 3.1 (02/2011)

- General improvements, profiling
- More feature store options
 - User-defined complex relational mappings
 - Oracle Spatial
- Metadata store: Oracle Spatial
- Improved CRS identifier concept

Back to the future: deegree 3.2 (08/2011)

- Improved coverage support, tiling + caching
- Security / rights management subsystem
- Missing web services stabilized
 - **deegree coverageService** (WCS)
 - **deegree terrainService** (WPVS)
 - **deegree sensorService** (SOS)
- First stable APIs: CRS, Geometry, Feature, GML

Thank you for your attention!

3.0 
THE FUTURE IS NOW

Download 3.0 today: <http://www.deegree.org>

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