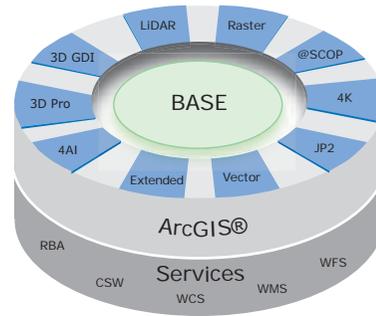# novaFACTORY — Modules

novaFACTORY's modular architecture caters for the ever changing and increasingly demanding needs of those who manage geospatial data. They give you the widest possible flexibility in developing geodata management workflows, allowing your organisation to have the tools it needs, when it needs them, at every conceivable step.

The modules expand novaFACTORY's functionality for reading, processing and integrating spatial data from additional sources and different formats, e.g. RGB and IR aerial photographs, LiDAR data, and Digital Elevation SCOP data.

Raster Module — Designed for the handling of raster formats, e.g. 24-bit digital ortho photos, raster DEMs

Vector Module — Supports vector data, layers, and feature classes and allows for the flexible export to different vector and raster formats

LiDAR Module — Designed for integrating and handling 3D point clouds from laser scanner data (LiDAR) in LAS format

@SCOP Module — Designed for full integration of digital terrain models in SCOP format, with data coming from LIDAR, photogrammetry or any other source

3D GDI Module — Designed for handling and serving 3D city models in CityGML format

3D Pro Module — Designed for the automated generation of 3D buildings with roof structures (LoD 2) from building footprints, LIDAR point clouds and digital terrain models

4K Module — Allows for the flexible handling of 4 color channels (RGB and NIR) aerial photographs

4AI Module — Designed for handling aerial photographs

Extended Module — Offers extended functionality for Spatial Data Conformance Checking
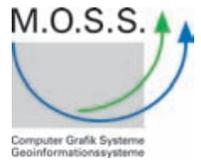
JP2 Module — Enables export to JPG2000 and ECW format

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consult.
develop.
solve.

novaFACTORY
Take control of your spatial data

novaFACTORY is an advanced Spatial Data Management solution for efficient geodata cataloguing, exploitation and dissemination. With novaFACTORY we are leading the way in the full integration of enterprise-wide geospatial data sources which the whole organisation can have access to and work from, covering all aspects of

- Data Import
- Integration
- Date Storage
- Management
- Data Dissemination

Spatial Data Management for your Enterprise

As applications for geodata have grown, so too has the need to efficiently administer them. Many businesses, whether government departments or private companies, are faced with the complex task of managing geospatial data. The challenge is to allow collaboration across the organisation in a meaningful way, from a range of sources and formats located throughout their enterprise.

novaFACTORY is the solution to this challenge. It brings geodata together and eliminates barriers to spatial data usability by automatically uniting disparate data and combining them into one spatial database. It underpins the development of Spatial Data Infrastructures (SDI) through proven technology, allowing for a better management of key spatial data sets and thus optimising business processes. novaFACTORY enterprise class technology is robust, flexible, easy-to-use, and scalable and is designed for seamlessly integrating large geographical data sets from many different sources, e.g. topographic maps, digital surface models, aerial photographs or 3D building models.

Inside novaFACTORY

novaFACTORY enables a seamless flow of spatial data throughout its life cycle, therefore connecting data producers and end users. The end-to-end solution features all necessary services, processes and tools to facilitate effective spatial data management, ranging from data capture to data validation, storage, product distribution and map publishing in a web services environment.

Data Import / Integration

novaFACTORY allows for fail-safe automated data integration and consolidation. New geodata is pulled in the processing engine and fed into the central database via user-defined import templates. The automated scheduling process helps streamline the data import process and increase the workflow efficiency. The centralised import process converts the incoming spatial data into the underlying database format before loading them into the central database. Supported data formats include Raster (1-32bit), 2D and 3D Vector, DGM ASCII and SCOP, LiDAR LAS, and aerial photographs and further more.

Data Storage / Management

After import, geospatial data are organised in an individual data hierarchy and cataloged for fast and easy identification, e.g. by data type or geographic extent. Related metadata is imported and stored in the catalogue alongside the data, enabling easy search and discovery on criteria such as location, revision date, scale or import date. novaFACTORY's architectural design is built to handle large quantities of spatial data efficiently.

Data Dissemination

novaFACTORY offers powerful data preparation functions for creating customised maps on demand or automatically via automated task scheduling. It allows users to schedule the export of data (calendar or event-based triggering), freeing managers from time consuming manual administration. Export allows the fusion of any vector and raster data from the data base with transformation and re-projection into a new digital map products that is immediately usable and useful to end users. When data has been combined from multiple sources into a product ready for delivery, end users can access them using web services fully compliant with OGC standards.