IIC TECHNOLOGIES

EMBRACING IHO S-100 HYDROGRAPHIC DATA FRAMEWORK

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Mar-22-2023

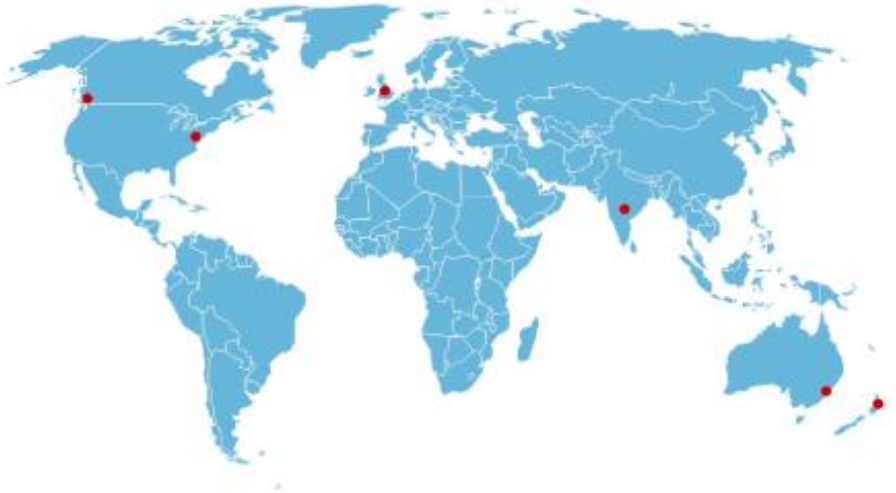
Agenda

IIC TECHNOLOGIES

- IIC Technologies Brief Overview
- Supporting S-100 Framework Development
- Supporting National S-100 Implementations
- S-100 Solutions
- Implementation Challenges
- Conclusions

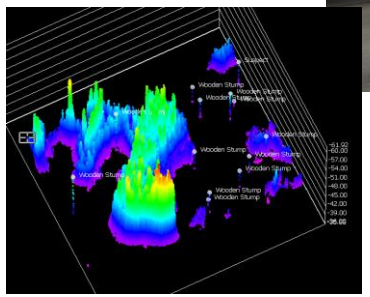
IIC Technologies Overview

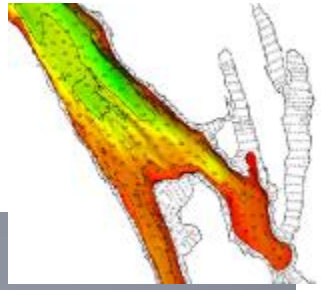
- Established in 1993
- Full-Spectrum Geospatial Services and Solutions Provider
- Dedicated Innovation Center (R&D and software solutions)
- Global presence
- 1000+ geospatial specialists



Marine Services

- Full range of services:
  - bathymetric surveys
  - data processing
  - product generation
  - ongoing product maintenance
  - specialized software solutions
  - training
- Trusted service provider to 30+ national hydrographic agencies
- Active industry expert contributor to IHO and OGC standard development: S-52, S-57, S-58, S-64, and S-100 series
- Over 40 projects supporting S-100 development

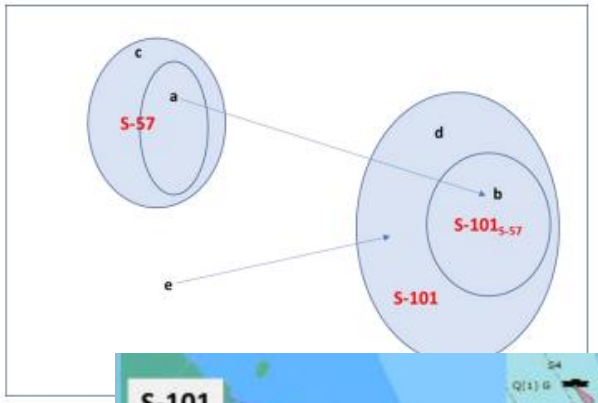


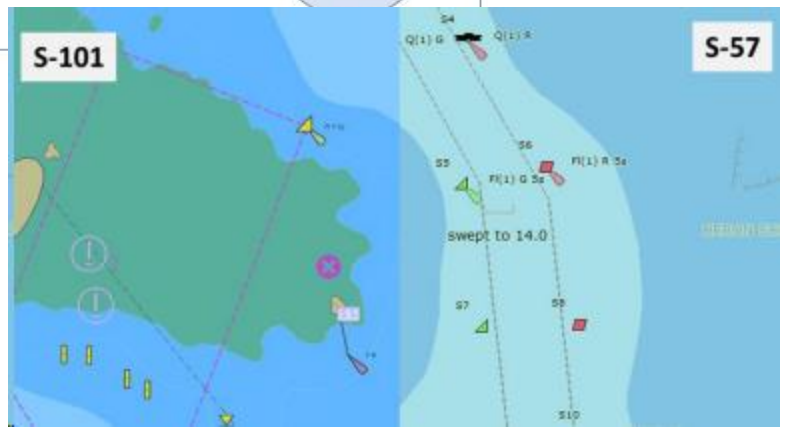


IHO S-100 Framework Development

IIC TECHNOLOGIES

- S-98 Development
- S-57 to S-100 Conversion Studies
- S-100 Portrayal Catalogue Builder Support
- S-100 Test Data Set Analysis and Report
- S-100 Metadata and S-100 Security Schema
- S-100 Streaming Data Support
- S-57 and S-100 Dual Fuel ECDIS
- S-100 Governance Policy
- S-101 Test Datasets Production
- S-164 Ed 1.0.0 Development and Management





JPA (KHOA and NOAA) S-100 Projects

IIC TECHNOLOGIES

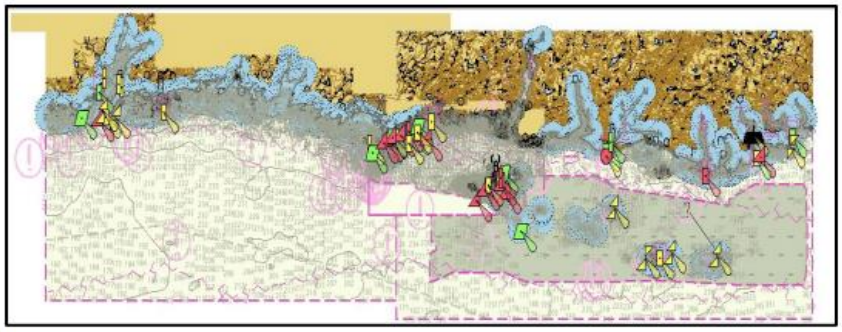
- S-98 Interoperability Catalogue Design
- Streamlining S-100 ECDIS Portrayal
- S-100 Testing Infrastructure
- S-102/S-104/S-111 Testing Rules
- S-98 IC V2 Authoring

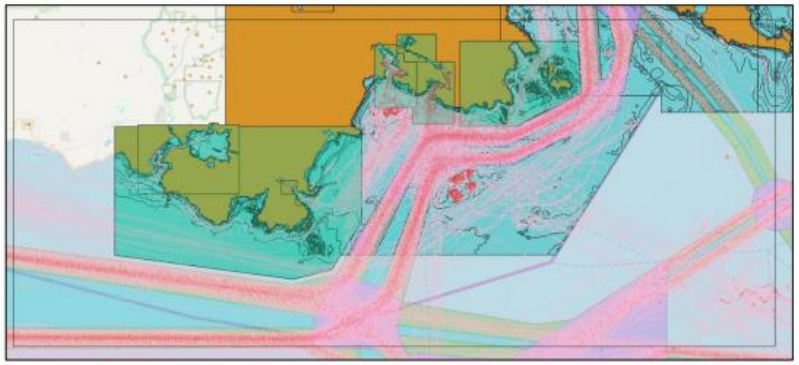
CHS S-100 HPD Restructuring

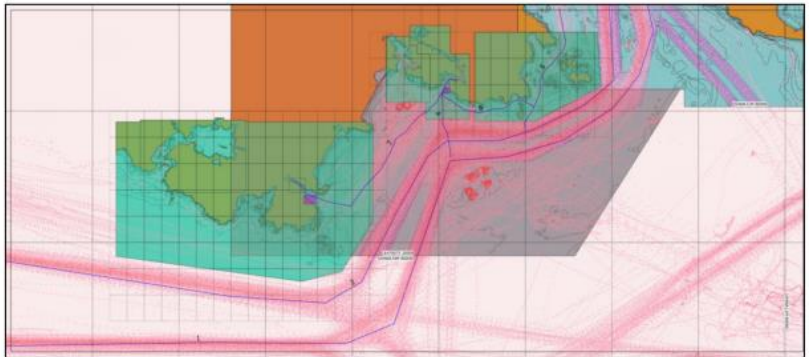
IIC TECHNOLOGIES

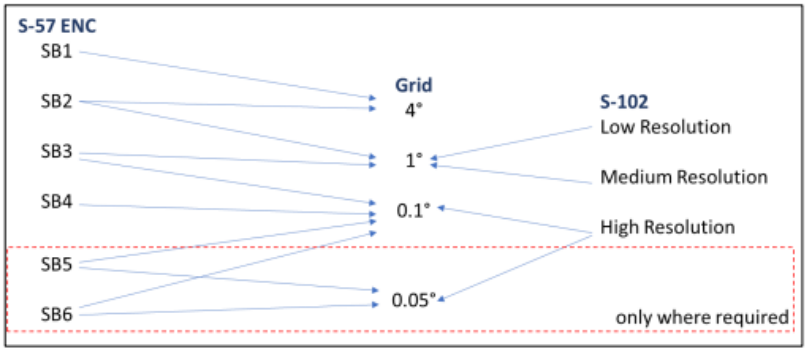
- General Assessment
- Grid Scheme Analysis
- Optimal Grid Sizing
- Cell Naming
- Paper Chart Restructuring

  (separate project)





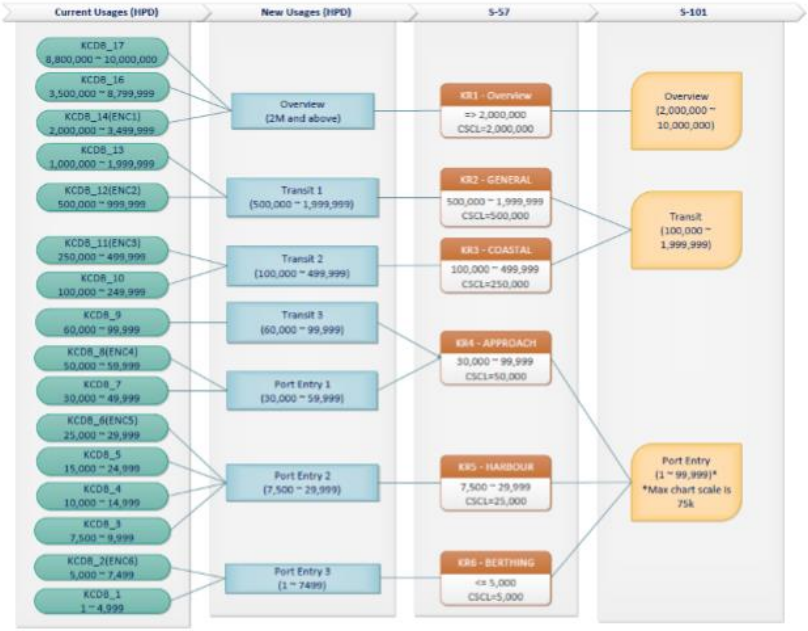


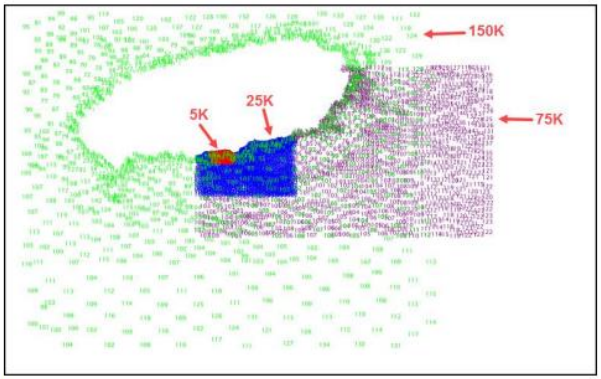


KHOA S-100 HPD Restructuring

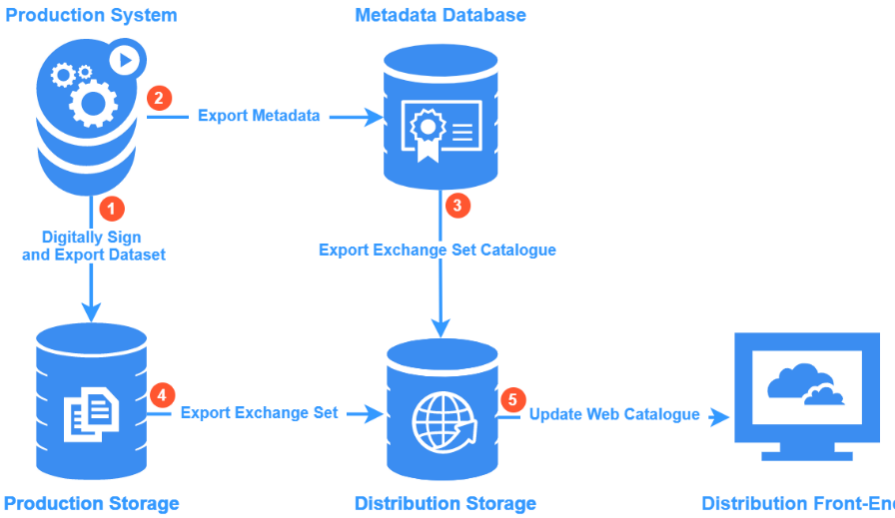
IIC TECHNOLOGIES

- New source DB structure
- New scaleless approach
- Production processes for source data and products
- Production test run
- Production training





NOAA S-100 Metadata DB



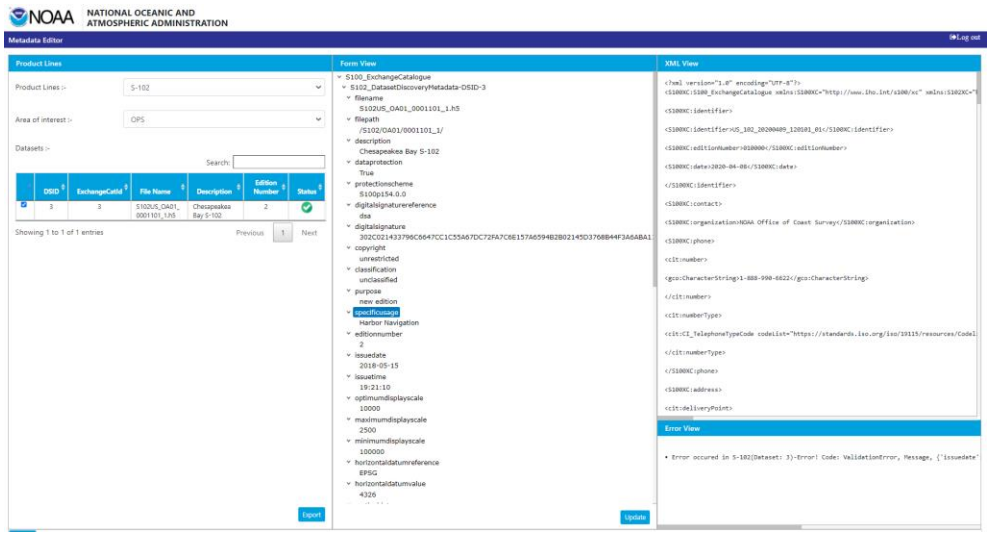
01 Exchange Catalogue Metadata
Information about the Exchange Catalogue

02 Dataset Discovery Metadata
Information about the individual dataset(s) included in the Exchange Set

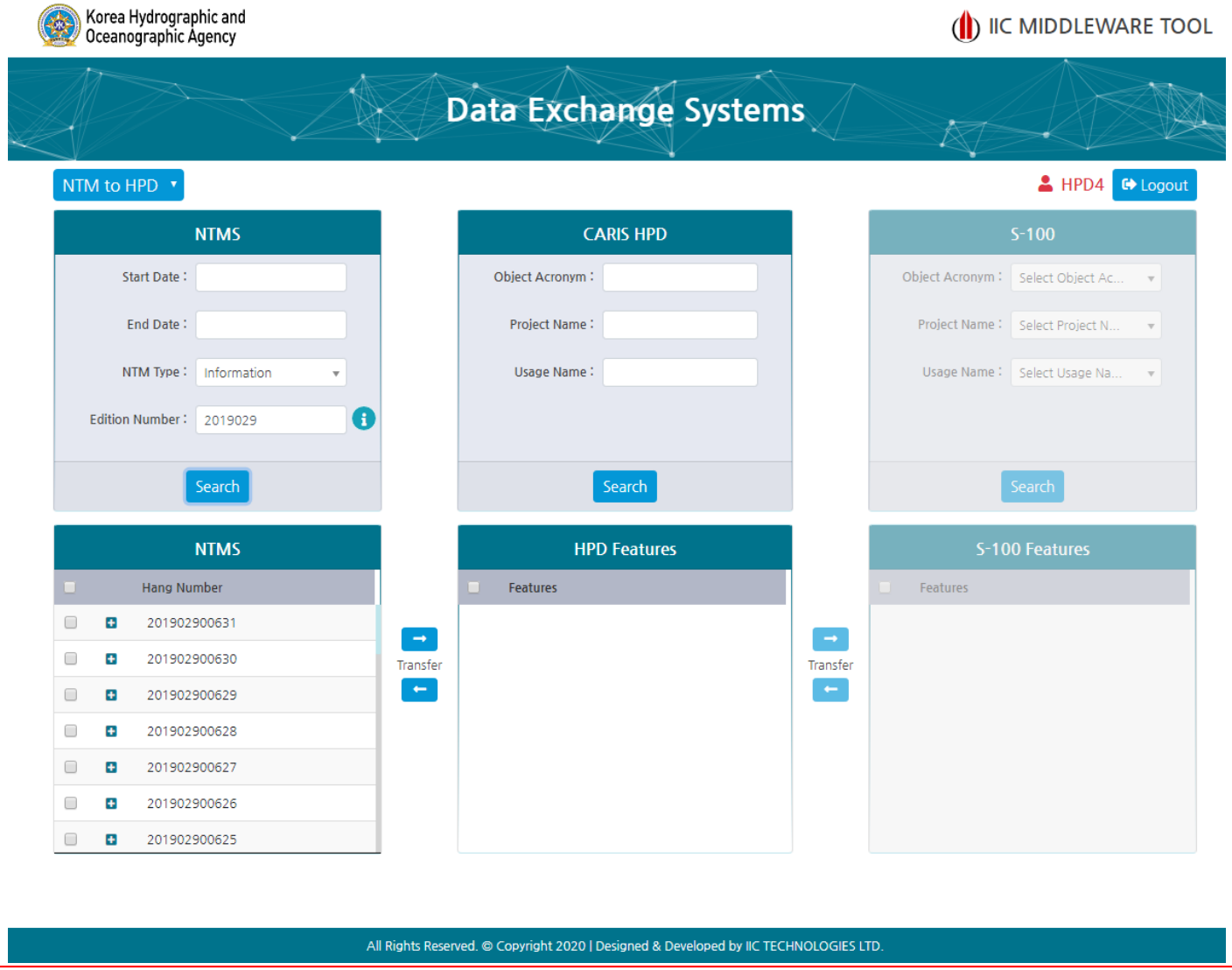
03 Feature Catalogue Metadata
Information about the Feature Catalogue(s) included in the Exchange Set

04 Portrayal Catalogue Metadata
Information about the Portrayal Catalogue(s) included in the Exchange Set

05 Interoperability Catalogue Metadata
Information about the Interoperability Catalogue(s) included in the Exchange Set

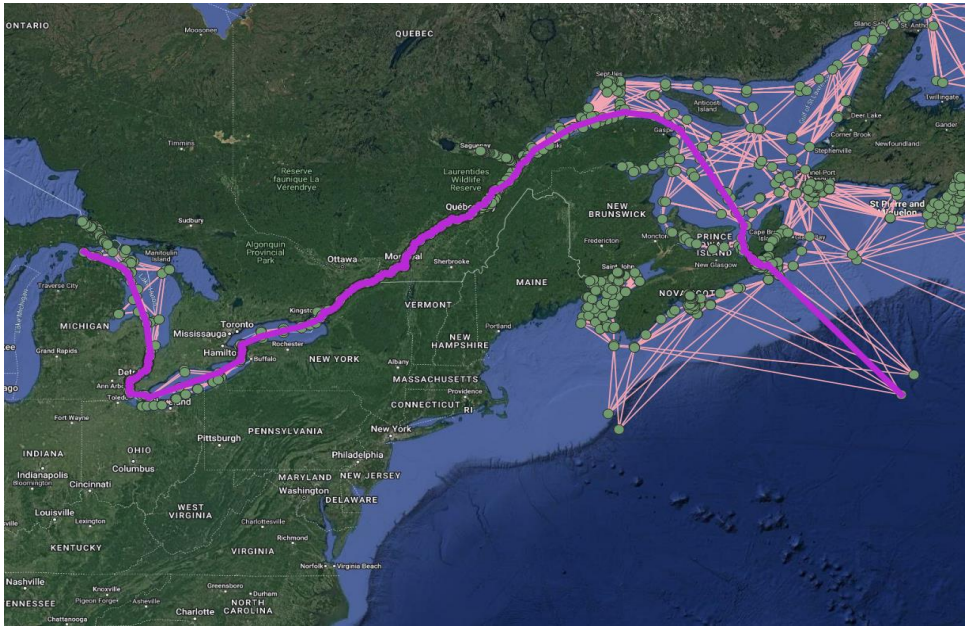


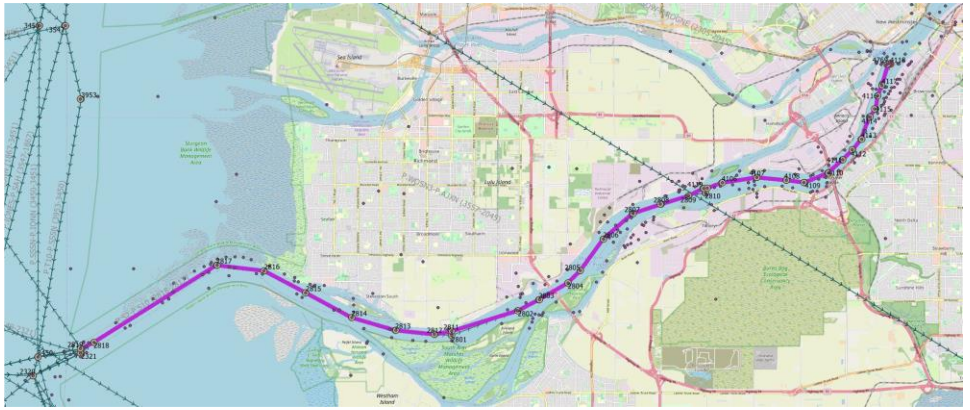
KHOA S-100 Middleware System



CCG S-100 Projects

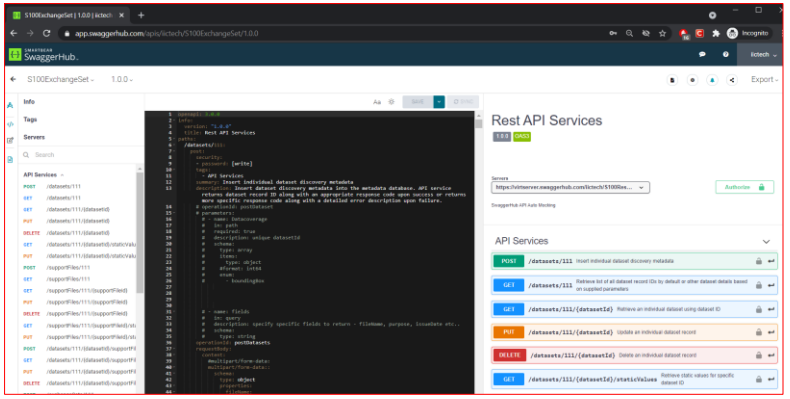
- S-129 UKC Policy Review
- S-127 Data Production for Canada
- S-100 Metadata Proposal Development
- S-100 Training Materials Development
- AtoN DB Conversion Roadmap
- S-123/S-127 Portrayal Development
- S-100 Workflow Visualizations
- S-421 Sample Data Production
- S-123 and S-127 Geoserver Data Visualization
- AtoN DB Sample Conversion
- UKC Safety Analysis

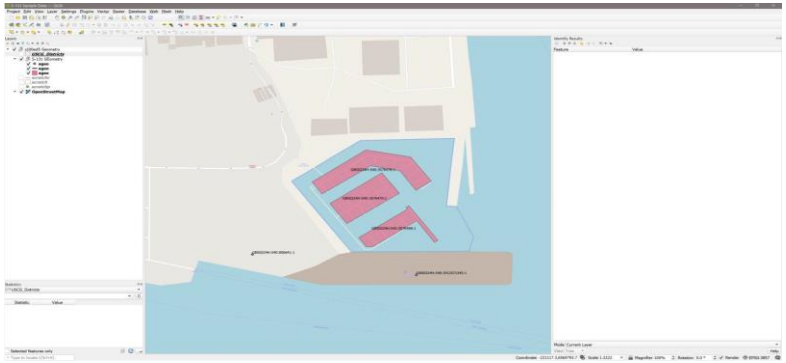




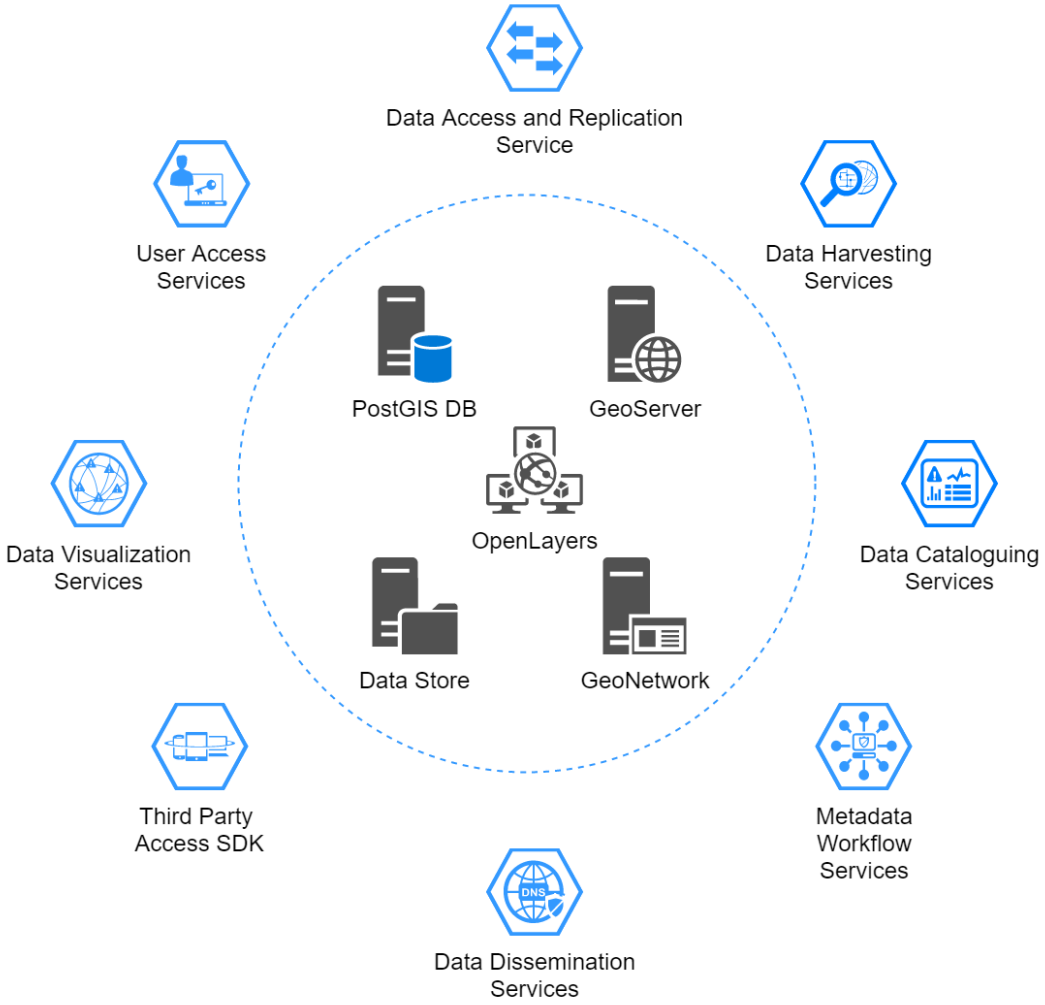
Other S-100 Projects

- OGC S-121
- UKHO S-100 Grid
- GeoNovum S-100 OGC API
- UKHO S-100 Exchange Set Toolset Development
- CHC S-100 Multi-language Metadata Support Design
- CHS S-131 Database API Software Development
- Canada's Ocean Supercluster S-100 Dissemination System Development

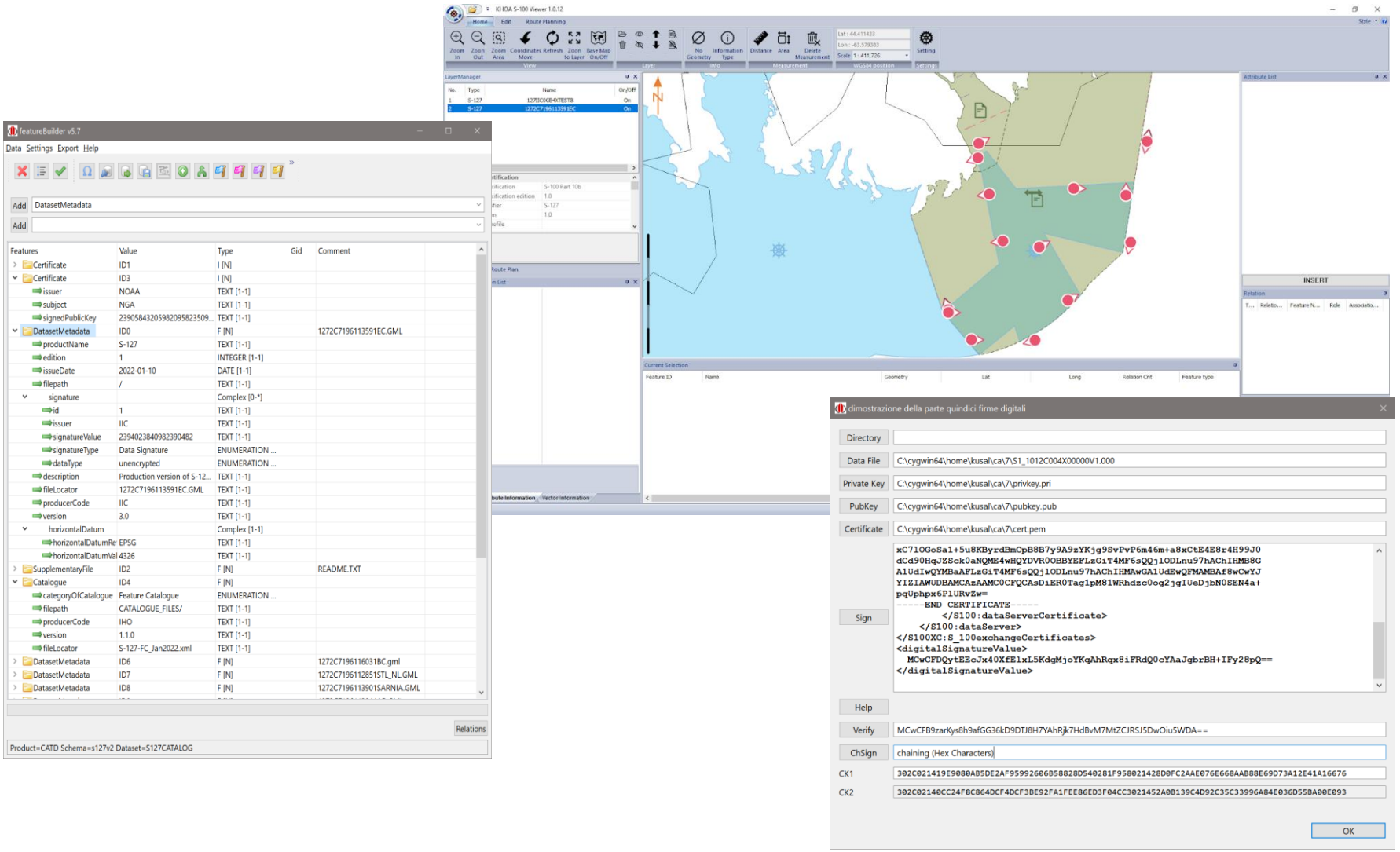




IIC's S-100 Nautilus Cloud



IIC's Production Tools



S-100 Implementation Challenges

IIC TECHNOLOGIES

- Complexity
- Learning curve
- Maturity
- Software tools
- Services

Conclusions

IIC TECHNOLOGIES

- IHO S-100 Universal Hydrographic Data Model supports several highly anticipated innovations
- Firm commitment from all stakeholders including IHO and IMO
- Considerable work is still required to turn S-100 vision into reality
- Implementation challenges do exist but they are solvable
- S-100 Implementation Decade is already well underway!

Thank You!

Questions or Comments

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