

IC-GIS™ v4

IC-GIS is a web server module that integrates Asset Integrity Manager (AIM) with any standards-compliant Geospatial Information System (GIS).

In GIS terms, IC-GIS is a Web Feature Service (WFS) which publishes AIM's asset integrity information according to the Open Geospatial Consortium's OpenGIS® interface standards.

Benefits

AIM offers operators the following benefits:

- **Collaborative Knowledge:** IC-GIS enables the contribution of information from an Integrity Management group to the broader organisation
- **Context:** Information from Asset Integrity Manager can be viewed in the context of asset-related information from the entire organisation
- **Access:** IC-GIS provides an intuitive visual means for navigating to Asset Integrity Information, even for those who don't use AIM on a daily basis

Key Features

AIM offers operators the following benefits:

- **Publishes:** Event and Anomaly data available from AIM which can be shown as separate information layers
- **Integrates:** easily with existing industry-standard GIS systems such as ESRI's ArcGIS, Gaia, GeoSamba, and others
- **Conforms:** to OpenGIS® Web Feature Service Interface Standard v1.0.0 and OpenGIS® Geography Markup Language (GML) as specified in the v2.1.2 Implementation Specification

Overview

Location-based asset, event and anomaly information is captured in Asset Integrity Manager (AIM) and Inspection Manager (IM) throughout their day to day use in monitoring asset integrity. IC-GIS makes this information available for use by any standards-compliant Geospatial Information System (GIS).

Collaborative Knowledge

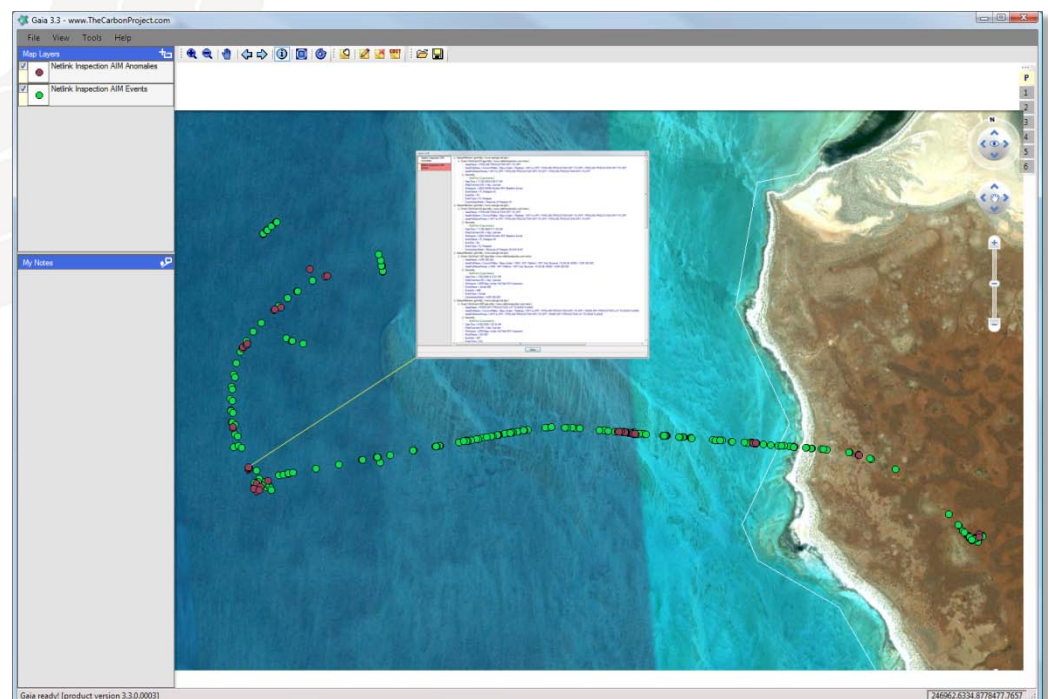
Many organisations already use a GIS system to provide access to a wide range of key operational and reference data, such as field schematics, seabed floor or onshore contour maps, metocean data etc.

IC-GIS allows integrity information to be viewed within the context of operational, geophysical and historical data, enabling a new level of contextually-aware integrity planning and oversight.

Standards Compliant

IC-GIS is a Web Feature Service (WFS) which publishes AIM's asset integrity information in accordance with the Open Geospatial Consortium's OpenGIS® interface standards.

Most common GIS systems, such as ESRI's ArcGIS, integrate Systems' GeoSamba and desktop tools such as The Carbon Project's Gaia can connect to IC-GIS.



Integration

IC-GIS is a Microsoft .Net 2.0 application which is deployed on an IIS web server. Ideally the IIS server ought to be on the same subnet as the AIM database server (it can also be on the same machine as the database.)

GML Conformance

IC-GIS publishes Event and Anomaly data in the form of XML conforming to the OpenGIS® Geography Markup Language (GML), the data interchange standard used throughout the GIS industry.

At present IC-GIS publishes just Event and Anomaly information in the form of "Feature Types" in GML nomenclature. Opposite is a description of the fields returned in each Feature Type.

IC-GIS emits GML version 2.1.2, and supports the GetCapabilities and GetFeatureRequest commands, and the BBOX Spatial Operator of the Filter Capabilities.

WFS services are available over HTTP using POST messages on port 80.

Event Feature Type

- Asset Name
- Workpack
- Event Name
- Event Number
- Date/Time
- Reference Number
- Start/End Co-ordinates
- Direct Access URL
- Comments/Notes

Anomaly Feature Type

- Anomaly Name
- Anomaly Number
- Reference Number
- Description
- Comments
- Asset Name
- Start/End Co-ordinates
- Status
- Priority
- State
- Direct Access URL

Technical Specifications

Software Requirements:

Database Connection: AIM DB running on Microsoft SQL Server 2005 (with Service Pack 2)

Web Server: Microsoft IIS v6.0, with .Net 2.0

Operating System: Microsoft Windows Server 2003, and Windows Server 2003 R2

Minimum Hardware:

Processor: Intel Core 2 Duo, 2GHz

Memory: 1GB RAM

Hard Disk: 30GB

Asia-Pacific

5th Floor
432 Murray Street
Perth, WA 6000
Australia
Telephone: +61 8 6314 2400
Facsimile: +61 8 9226 1424

Europe & Middle East

Caledonian House
234 Union Street
Aberdeen AB10 1TN
Scotland
Telephone: +44 1224 347 300
Facsimile: +44 1224 347 301

The Americas

15115 Park Row
3rd Floor
Houston Texas 77084
USA
Telephone: +1 281 675 1000
Facsimile: +1 281 646 9827