IRIS VDAP Big data analytics platform

Big Data and Next-generation Al

What is IRIS VDAP

Connect all the data across your organization to create a unified view and, Discover meaningful insights with a variety of visualization analysis

Data Platform based on data virtualization





Product/Solution

Data

Interdorono

Structured Data

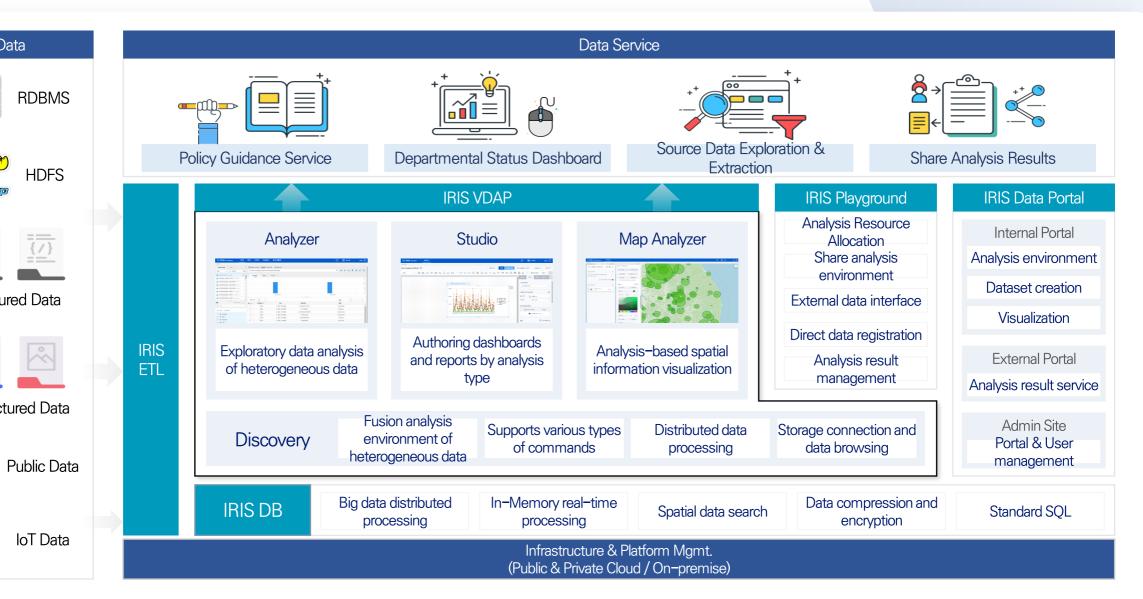
Unstructured Data

IoT Data

RDBMS

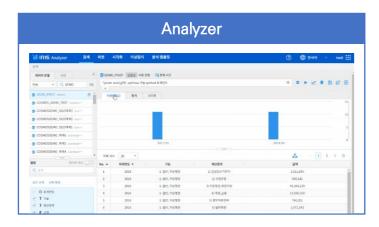
HDFS

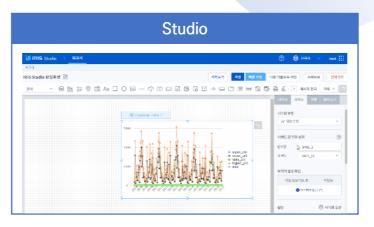
Large-capacity, high-performance Bigdata·Al platform product line - IRIS

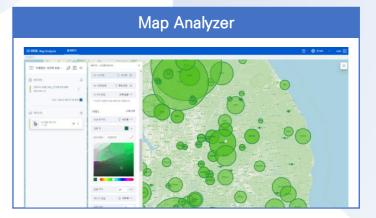


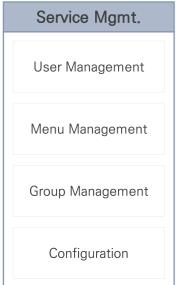


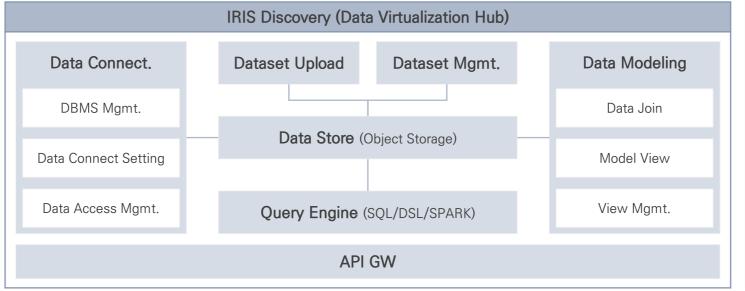
Product/Solution - IRIS VDAP

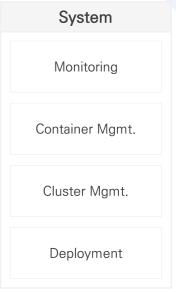










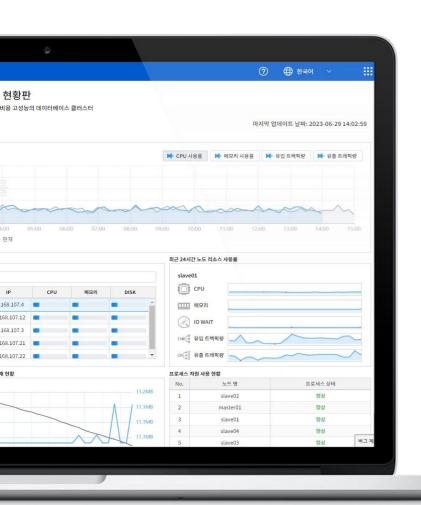






Large-capacity, high-performance Bigdata·Al platform product line - IRIS

Data Business Becomes Real with IRIS VDAP



Data Integration based on Data Virtualization

- Provides multiple data sources in a single view

Collaboration and sharing of analytical tasks and results

- ✓ Manages data access rights by user/group
- Shares task templates with users
- ✓ Transfers analysis results to the external system

Unified visual data analysis from the exploratory data analysis to reports/dashboards

- ✓ Descriptive statistics inquiry of source data
- ✓ Variety of visualization components and options
- ✓ User interface with low code approach

Support for operation in cloud environment

- ✓ Docker-containerized software package
- Designs to optimize system resources according to the workload

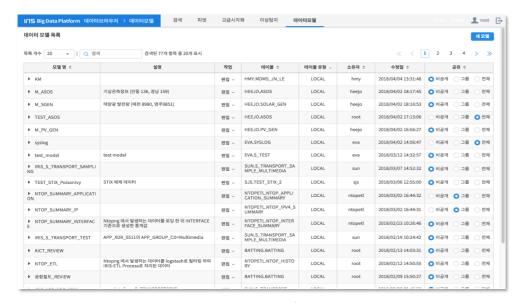


Flexible data connectivity and data virtualization

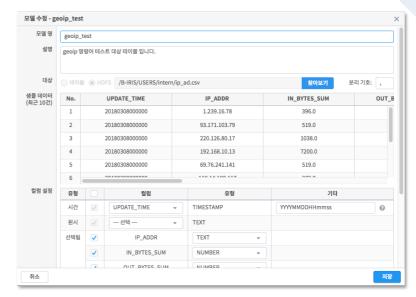


Providing efficiency and flexibility by logical data integration of distributed, various type of DBMS data

Defining and managing model objects for analysis



Select the data and columns for analysis





Data Modeling (Iris Discovery)

















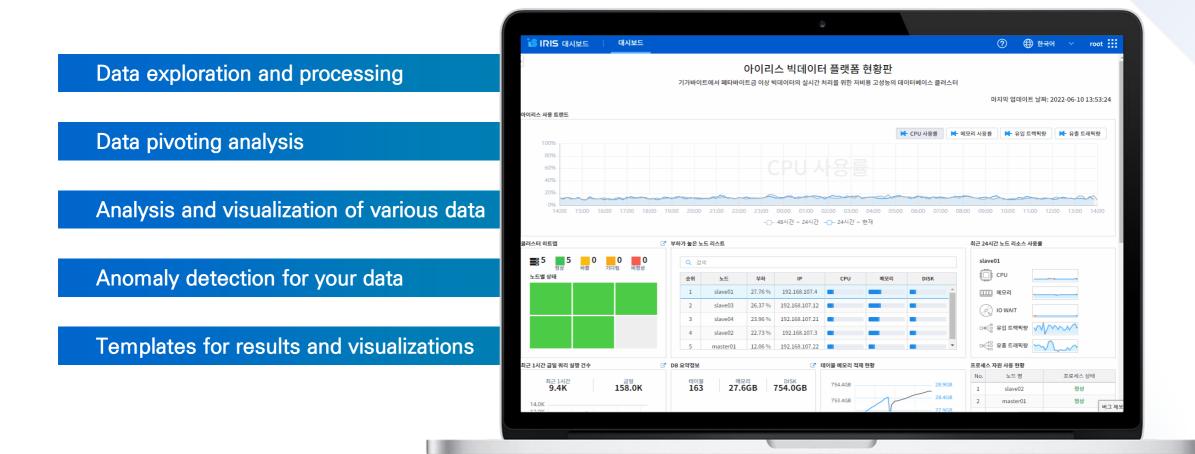
Etc ···



Exploratory Data Analysis



Quick and easy data analytics tool for insights from various data sources



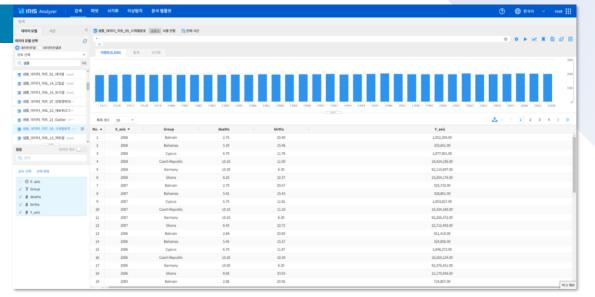


Exploratory Data Analysis



Data exploration and pre-processing

- Accessing data directly and extract the data, transforming raw data into an efficient format for analysis
- Providing various search options and commands for search keywords or full text in terabytes of data
- Shows statistical tables and charts of search results



Data pivoting analysis

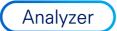
- Perform simple calculations and output results in a table by reordering rows and columns of data.
- Show the output from the table in various chart types and customize each chart with detailed options





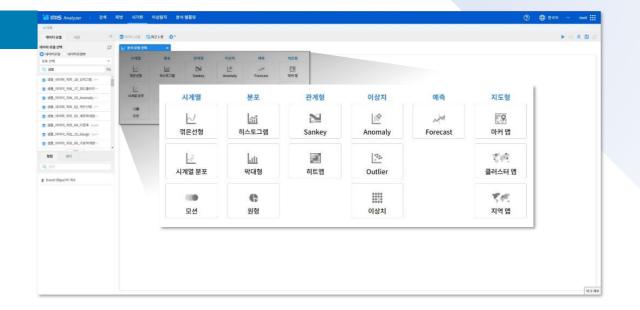
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Exploratory Data Analysis



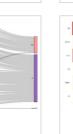
Various visualization of data

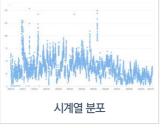
- User-friendly interface enables analysis without complex commands
- A variety of charts and graphs with detailed options
- Categorized into 6 types of analysis, providing typical charts in each group.



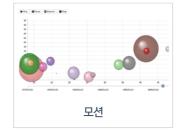


Sankey

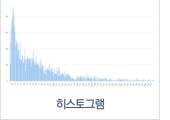


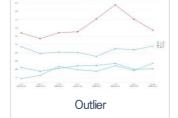


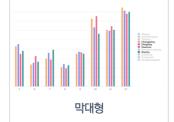


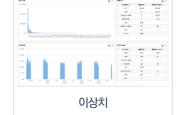


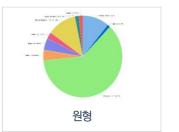


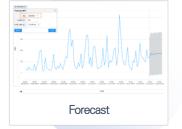












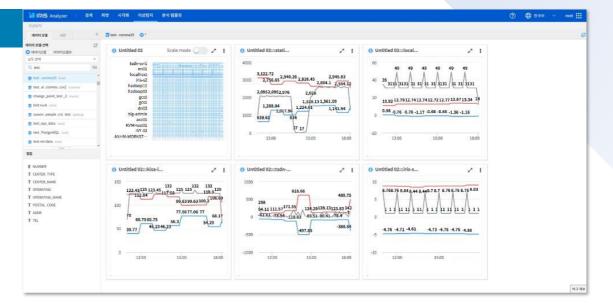


Exploratory Data Analysis



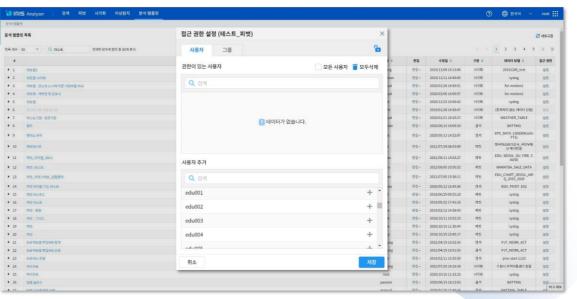
Anomaly detection for your data

- Detect outliers using various options and algorithms within your specified data and time range.
- Create anomaly heatmap and threshold chart for lookup period vs. past reference data.



Templates for results and visualizations

- Providing templates for search criteria and various settings in the analytics screen
- View and editing grant access to user and data model information in the list of analytics templates



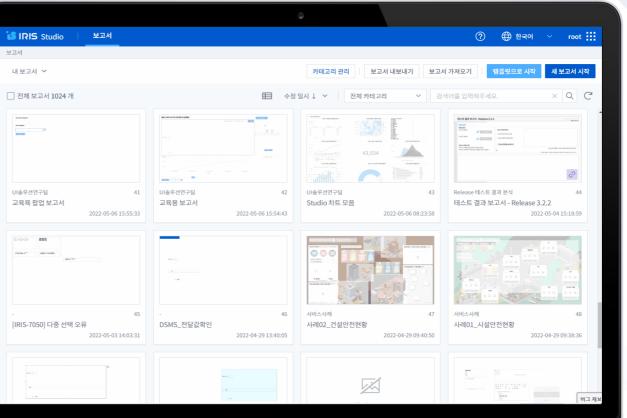


Visualization report and dashboard



Tools that make it easy for anyone to create dashboards and analysis reports with a variety of visualizations

IRIS Studio Build user-defined dashboards and reports 내 보고서 💙 Visual components for dynamic reports A variety of data visualization types 교육욕 팝업 보고서 Data visualization on maps Managing and sharing created reports Managing users and groups



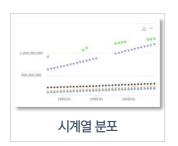


Visualization report and dashboard



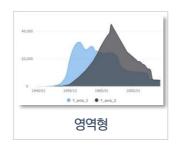
Providing a variety of charts and graphs



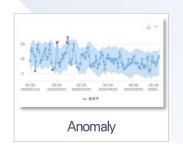






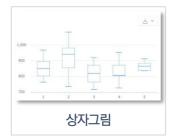




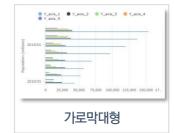






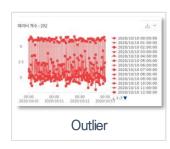


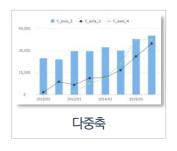


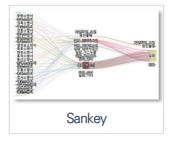




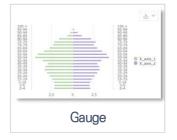














etc ···



Visualization report and dashboard



전체 보고서 1189 개중 검색결과 20 개

스튜디오 입문 (팝업 보고서)

반업내 등단_IRIS8093

정보 변경

카테고리

보고서이름 chart orderby test

디자이테스트

4. 스튜디오 업문 (제어

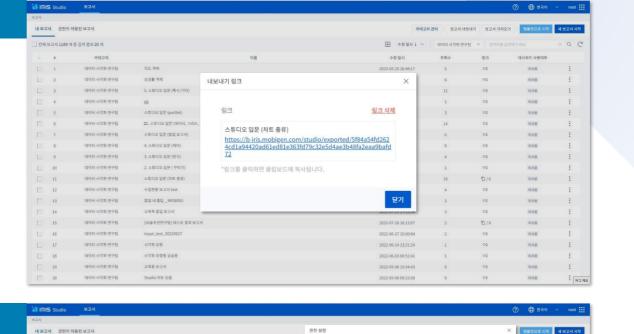
교육육 탑업 보고서

Managing reports and sharing with URL

- Import JSON-formatted reports from Analyzer or Map Analyzer and convert them into visualization reports
- Save the created report in JSON format via the exporting
- Create a shared URL of the report for external users

Data and report access management

- Categorize repots and access permissions to user and group
- Change the owner of report



사용자그룹 권한 있음

3. 스튜디오 입문 (양식)

[UI솔루션연구팅] 테스트 결과 보고서

0, 9

전체 AI응용연구팀

Q test

시각화 유형별 실습용

UI솔루션연구팀

AI플랫폼연구팀

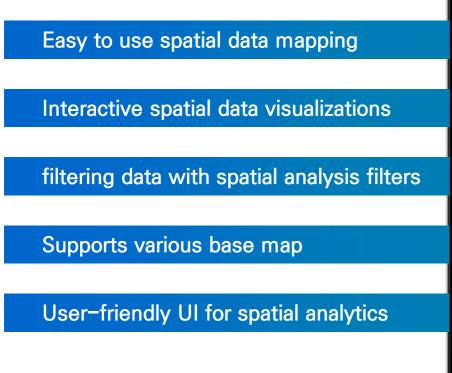


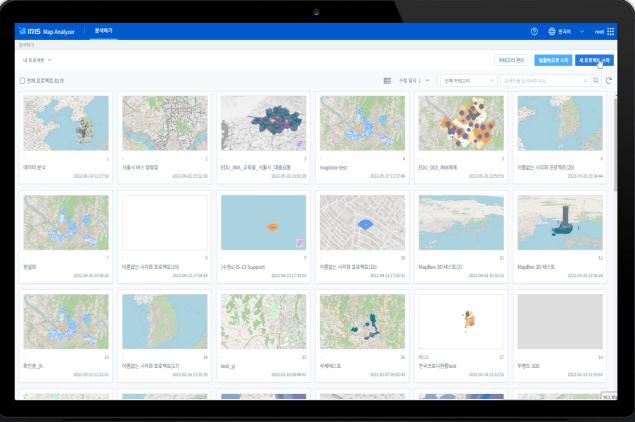
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Geospatial analytics

Map Analyzer

Spatial data analysis tool to visualize and analyze data on a map







Geospatial analytics

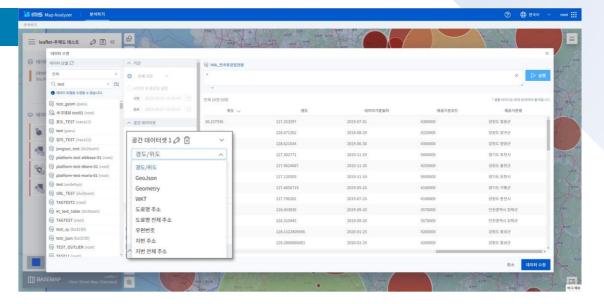
Map Analyzer

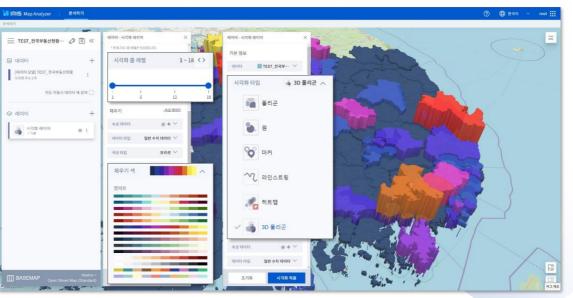
Easy to use spatial data mapping

- Automatically convert location data from registered models to GeoJSON for map visualization
- Latitude, longitude, WKT, street address, zip code, etc.
- It is possible to generate multiple spatial data, and the order of latitude and longitude can be modified.
- Applying DSL syntax can convert multiple geo and statistical data to various formats

Interactive spatial data visualizations

- Customize the visualization of data on a map through layer settings
- Components type to represent cadastral maps, 3d polygons, circles, markers, heatmaps





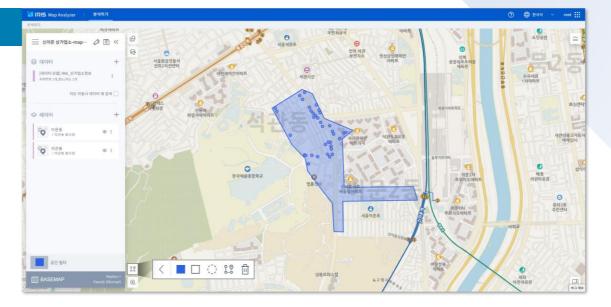


Geospatial analytics

Map Analyzer

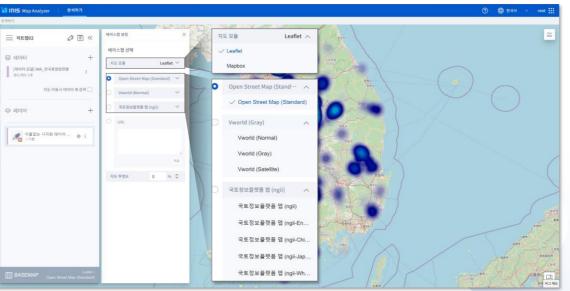
filtering data with spatial analysis filters

- 지리 데이터에서 원하는 지역을 선택하거나 특정 기준에 따라 데이터를 필터링
- 지도 위에 사용자가 원하는 형태의 점/선/면 형식의 시각화 요소를 직접 표현 할 수 있으며, 위치 데이터로 변환하여 데이터를 다운로드 가능



Supports various base map

- Supports a variety types of base maps, with Leaflet and Mapbox modules
- Leaflets and Mapbox support Open Street Map, Vworld, URL direct,



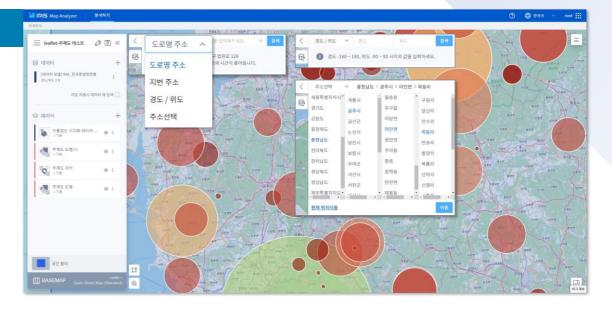


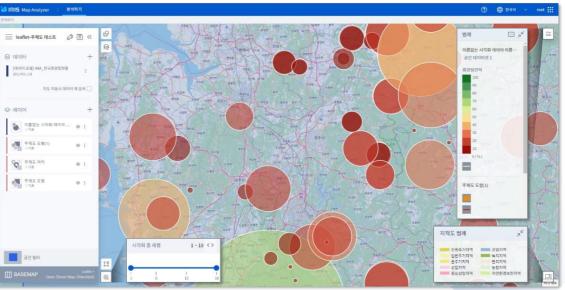
Geospatial analytics

Map Analyzer

User-friendly UI for spatial analytics

- Find a location through address, postal code, street name, or search by longitude and latitude
- Zoom in & out
- Multi layers to show information
- Cadastral map





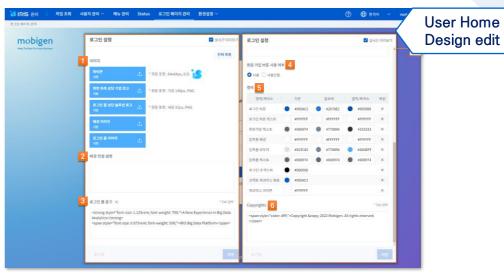


Configuration & Management (IRIS Manager)

Integrated management of big data platform operational-level services

User and Account management





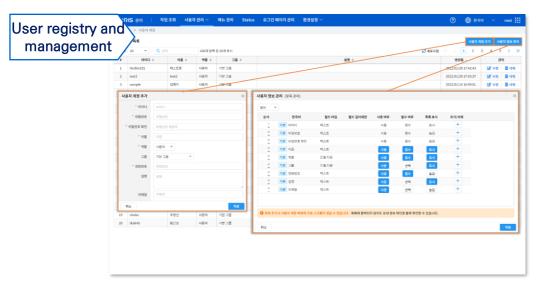
- 1 Help
- 2 UI locale settings
- 3 User features
- 4 User defined Home
- 5 Dashboard
- 6 Account information
- Z Logout
- 8 List of dashboards

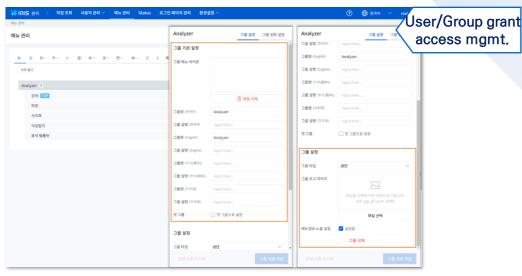
- Image change in Home (Favicons, logos, and background images)
- 2 Background description
- 3 Login form description
- 4 SignIn button activate/deactivate
- 5 Color settings
- 6 Copyrights wording and description

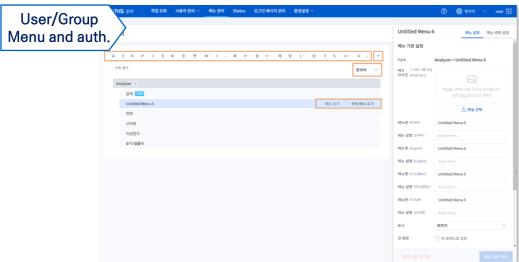


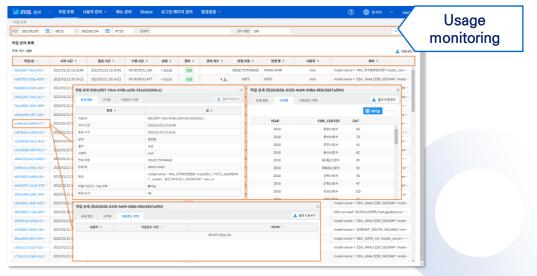
Configuration & Management IRIS Manager













Use Cases

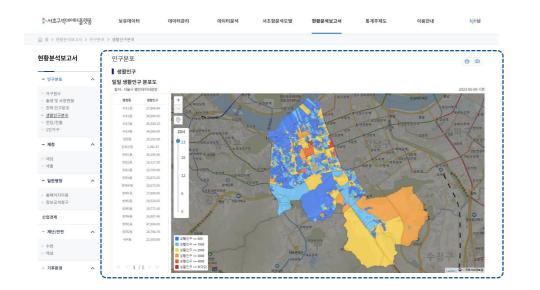
Introducing customers and Best Practice cases

IRIS VDAP – Use Cases

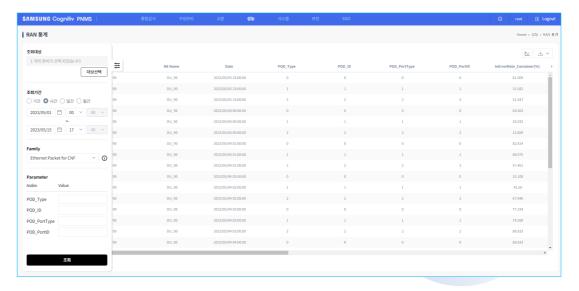
Applies to dashboards, display within portals, stand-alone deployment using the IRIS VDAP visualization tool



Display within a web page



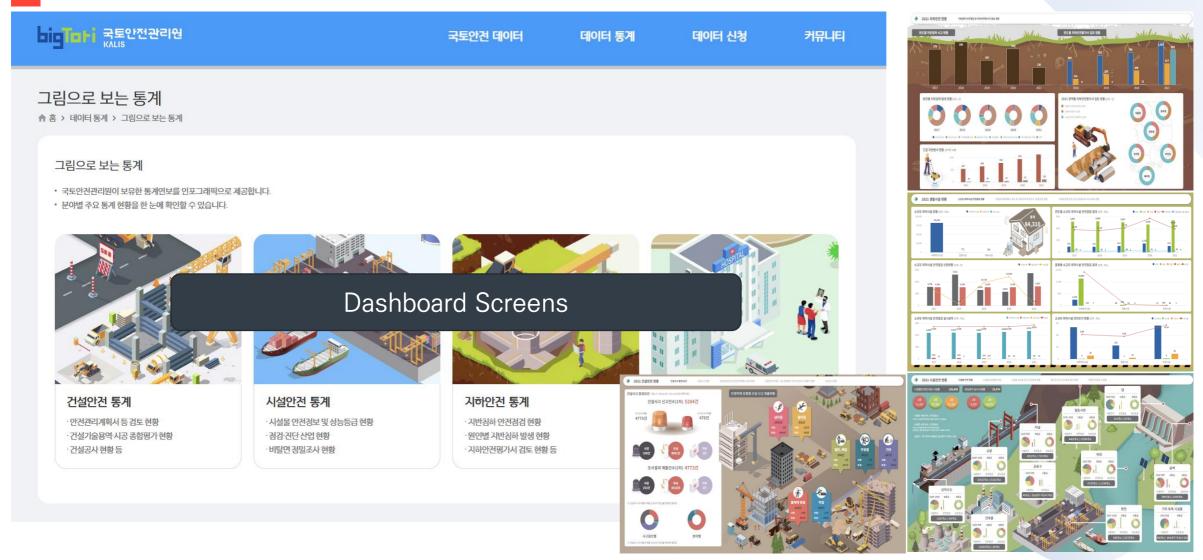
Stand-alone deployment





Implemented four dashboard screens of "Statistics in Pictures" from the Korea Authority of Land & Infrastructure Safety's BigTory site using IRIS Studio

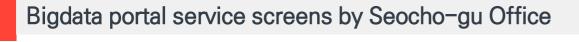
Statistics dashboard at bigTori website by the Korea Authority of Land & Infrastructure Safety

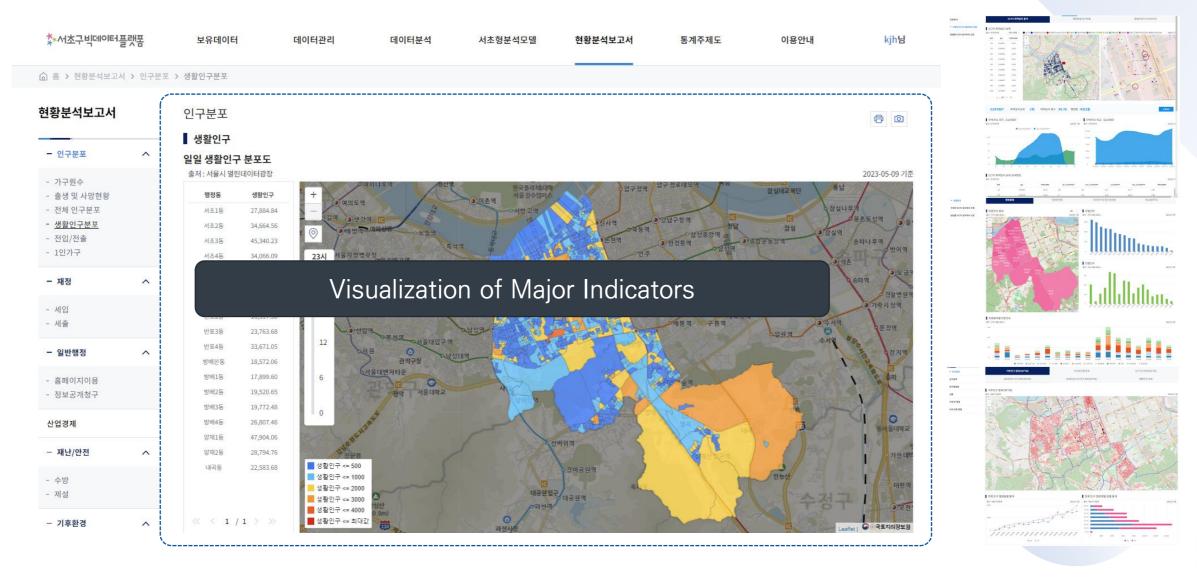




IRIS VDAP - Use Cases (display within a web page)

Implemented major statistics visualization services on the bigdata portal of Seocho-gu Office using IRIS Studio



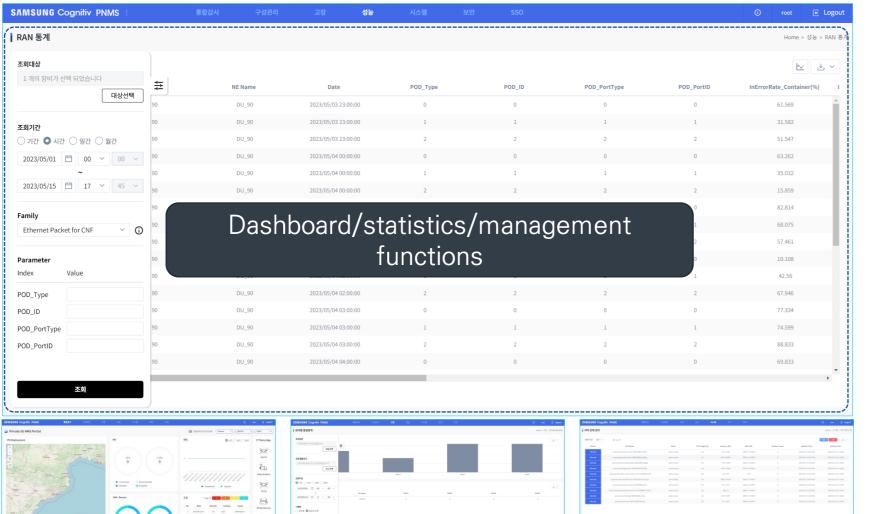




IRIS VDAP – Use Cases (Stand-alone deployment)

Implemented PNMS statistical inquiry and management functions for Samsung with IRIS Studio

Samsung's 5G PNMS screens









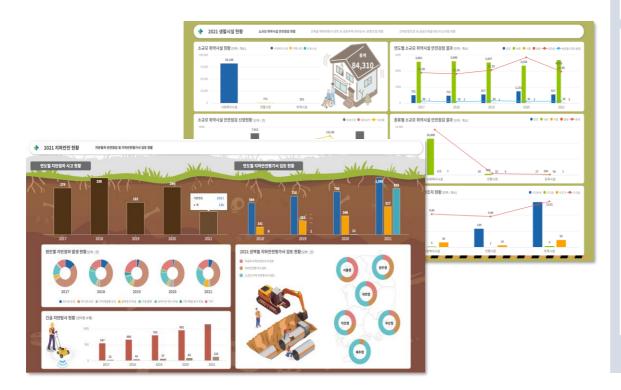




Korea Authority of Land & Infrastructure Safety, Big Data Open Portal for Land Safety

Statistical status services by field such as construction safety, facility safety, underground safety and living safety

https://bigtori.kalis.or.kr









Korea Authority of Land & Infrastructure Safety, **Keyword Analysis of Public Issues**

- Dashboard to see at a glance the it's policies and service-related public reputation
- Analyzes social data to visualize positive/negative analysis results and related keyword analysis results
- Utilizes social data analysis to evaluate and analyze the importance, urgency, and solution potential by policy or issue

https://bigtori.kalis.or.kr







Korea Authority of Land & Infrastructure Safety, Analysis Service for the Bridge Damage Factors

- Analyzes and visualizes Al-based bridge damage factors using real-time IoT data generated from Jindo Bridge
- Support for decision-making in maintenance of special bridges and strengthening preemptive prevention
- *loT data: seismometer, anemometer, cable accelerometer, dynamic strain gauge, etc.

Korea Authority of Land & Infrastructure Safety, Selection of Target for the Safety Inspection from Small Vulnerable Facilities

Al Analysis of small vulnerable facilities to identify safety inspection targets and derive priority management targets for improving work efficiency





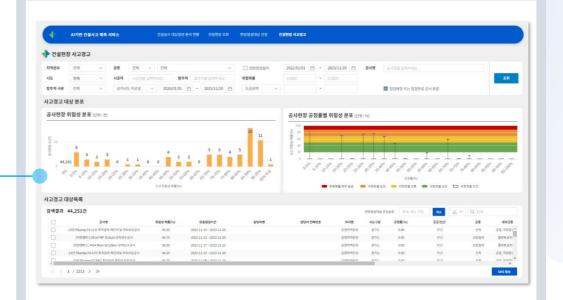


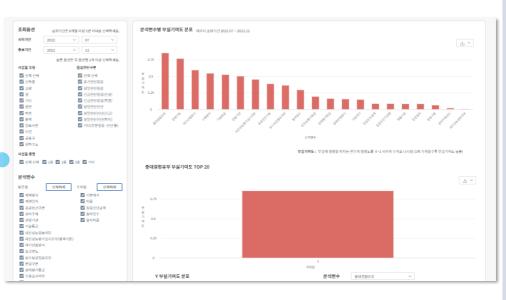
Korea Authority of Land & Infrastructure Safety, **Al-based Construction Accident Prediction Service**

- Support to select construction site inspection targets with high safety risk by analyzing construction site data
- Analyzes the accident time, occurrence frequency, and severity of accident of the risk factor profile
- Support for the preemptive accident prevention through the pre-accident warning notifications by automatically
 classify them according to the stage of construction at the construction site

Korea Authority of Land & Infrastructure Safety, Derivation of Factors Contributing to the Inappropriateness Rate of Inspection and Diagnostic Evaluation

- Provides a service that derives factors contributing to the inappropriate rate by utilizing inspection and diagnostic evaluation data
- Used as basis for correcting inadequacy rates and improving guidelines







Seocho-gu Office, Indicator Analysis by Field

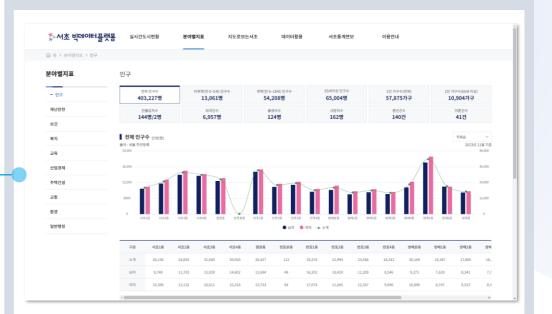
- Enable data-driven administration by making statistics easy to understand for the officers and citizens

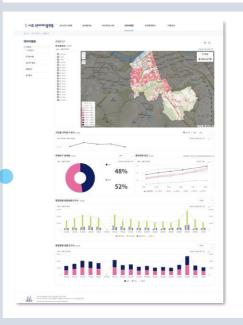
https://bigdata.seocho.go.kr

Seocho-gu Office, **Demographic Dashboard**

- Provides statistical data on the total population, household sizes, and distribution of single-person households through maps and various charts.

https://bigdata.seocho.go.kr



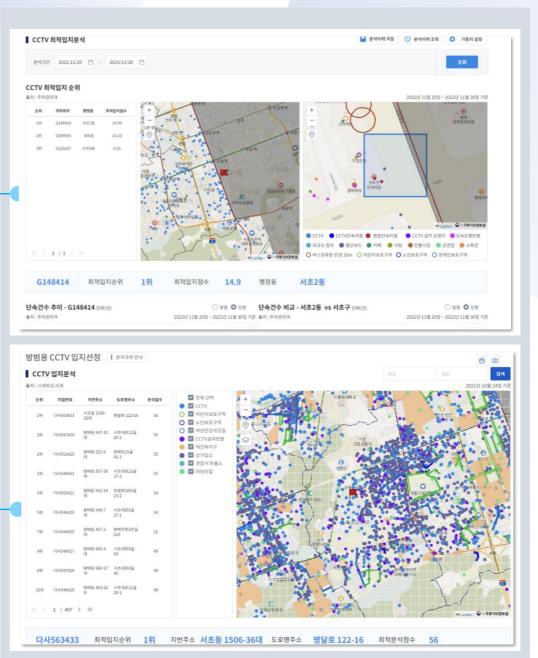






Seocho-gu Office,
CCTV Location optimization for Monitoring
Parking violations

Seocho-gu Office, CCTV Location optimization for Crime Prevention





Suwon City, **Analysis of the Policy Information Status at Bigdata Portal**

- Provides information that analyzes and visualizes various public data of Suwon City

https://data.suwon.go.kr

Suwon City, Analysis of Corona Vaccination Status & Visualization

- Display data in easy-to-understand visual formats like charts, graphs, and maps

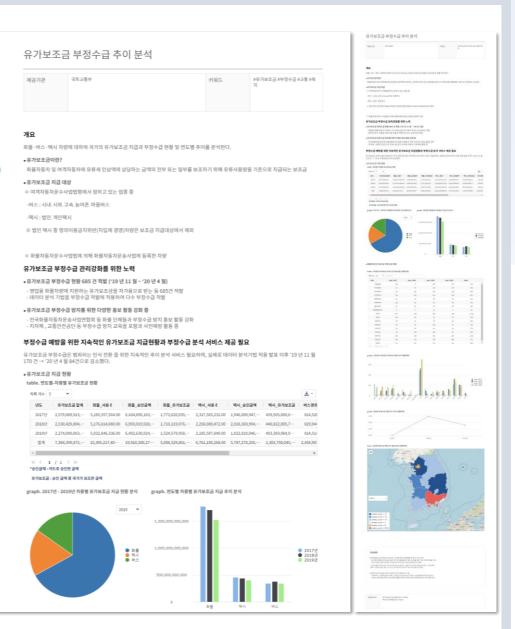






Ministry of Land, Infrastructure and Transport, Status Report on the Illegal Supply and Demand of Oil Subsidies

https://data.molit.go.kr





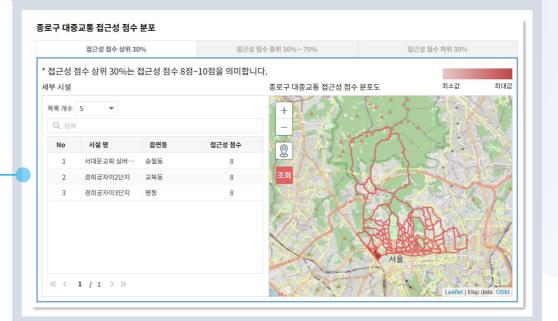
Ministry of Land, Infrastructure and Transport, Analysis of Accessibility to Senior Welfare Facilities

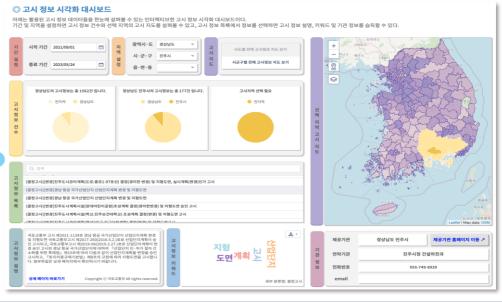
- Analyzing accessibility of senior living facilities via public transportation for people 65+ years old
- Data for planning the supply of senior recreational facilities and rerouting public transit https://data.molit.go.kr

Ministry of Land, Infrastructure and Transport, Analysis of Notification Information by Region

- See the number of notices and information on the map by searching by time periods and regions.

https://data.molit.go.kr







LH(Korea Land & Housing Corporation), External Variable Monitoring

Monitor changes in external variables such as currency volumes, interest rates, housing prices for business insights.

LH(Korea Land & Housing Corporation),
Defect Data Analysis Dashboard

Provide data on the duration between reporting and resolution of major defects in rented apartments.





LH(Korea Land & Housing Corporation), Reputation Analysis of Public Opinion

- Provide key trends and reputation information about LH in news, social medias, online communities.

LH(Korea Land & Housing Corporation), HR Status



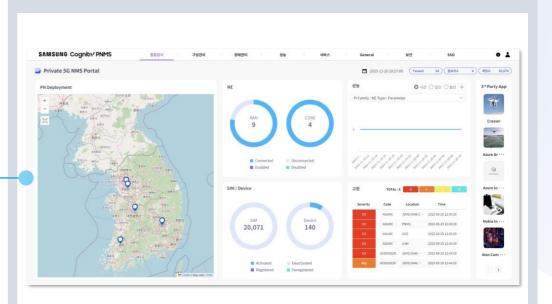


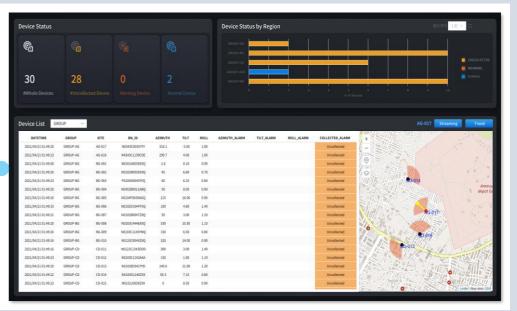


Samsung, Private 5G NMS Dashboard

Management and control dashboard for components of key network systems on Private 5G network

Mobile Communication Base Station Smart Antenna Control Service

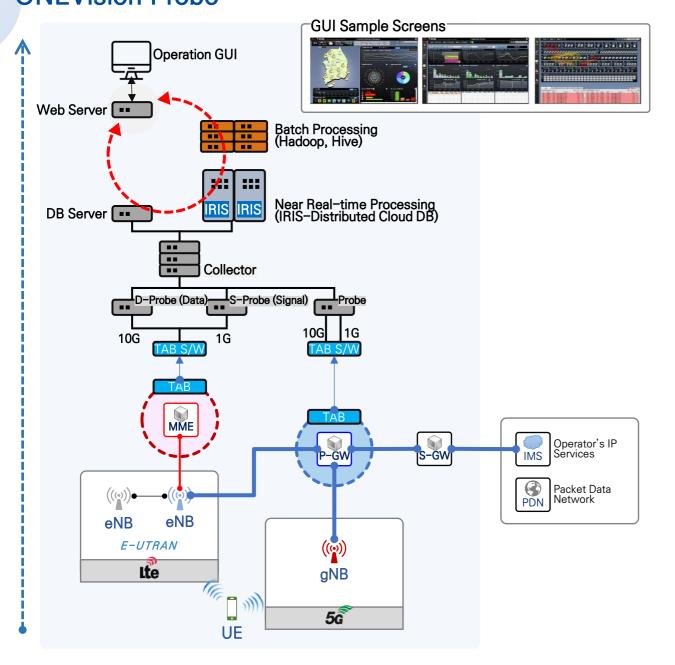






Product/Solution - ONEVision Probe

Good Data for AI, High-speed & high-capacity packet probe solution – ONEVision Probe



- 1. Applies operational know-how for more than 10 years from Korea's No.1 telecom carrier (SK Telecom)
- 2. Establishes a communication service operation system based on Customer–Experience Quality (CEI)
- 3. Protecting customers from cybercrime (Voice Phishing, …) by analyzing mobile usage patterns
- 4. Reduces substantial cost through deep analysis of traffic (Minimizes interconnection traffic, Reduces CSP cost, …)
- 5. Provides value-added sales data(e.g. commercial district analysis) and core data for Al-based operation automation
- 6. Korea's largest data processing and analysis (200 billion data/day)
- 7. Most Application Signatures in Korea



Customers

Mobigen works with leaders in various industries

























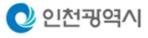














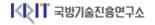




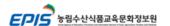


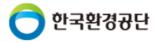






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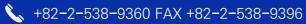




Thank You



🛱 37, Geumto-ro 80beon-gil, Sujeong-gu, Seongnam-si, Gyeonggi-do, Korea, 13453



www.mobigen.com/eng