SUPERMAP COMMUNICATIONS

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Exploring Latest Developments of Geospatial Intelligence with SuperMap 2024

SuperMap and Dassault Systèmes Achieve New Breakthrough in Digital Twin City

Zero Government Investment, Co-Construction of a New Multi-Dimensional Security Management Model

Who is SuperMap?

Founded in 1997, SuperMap is a platform software and application software manufacturer focusing on Geographic Information Software (generalized GIS) and Geospatial Intelligence (GI), and a key player in Information Technology Application Innovation Industry, Spatio-Temporal Big Data, Artificial Intelligence, and Virtual Reality. It consists of SuperMap Software (parent company, stock code: 300036), wholly-owned subsidiaries, and holding subsidiaries, as well as domestic branch offices and agencies. In 2022, the annual revenue reached 232 million USD (1.6 billion RMB).

1997
Founded

How has SuperMap performed so far?

Together with more than 3,000 Vendors and hundreds of thousands of developers, SuperMap empowers the informatization of governments and enterprises in nearly 100 industries. It has developed distributors and partners in over 50 countries and SuperMap GIS end users in over 100 countries. Now, SuperMap ranks 1st in the GIS software market in Asia and 2nd globally.

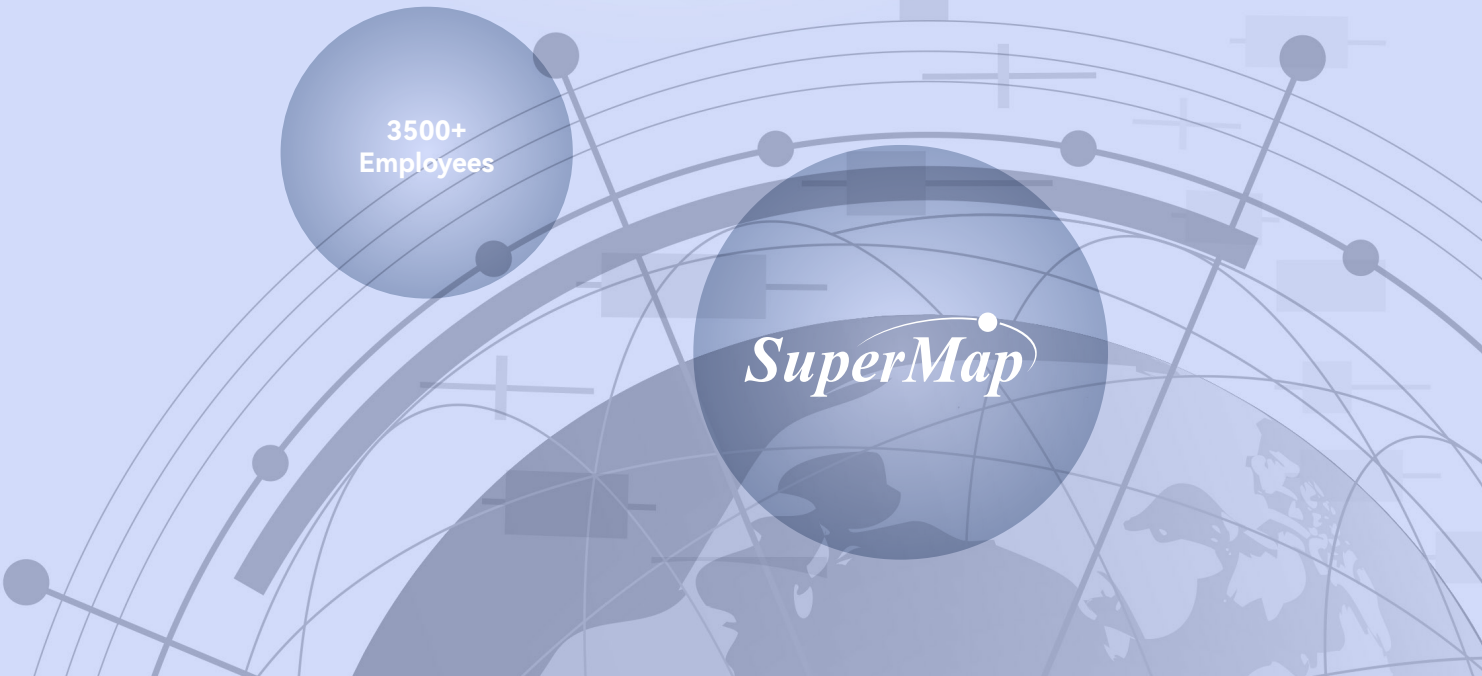
100+
Countries'
Users

What will SuperMap be?

With “Innovate Geospatial Intelligence, Elevate IT Value” as the mission and “Light up Every Corner of the World with Geospatial Intelligence” as the vision, SuperMap will keep providing advanced GIS technologies and products to more global users.

1000+
Partners

3500+
Employees



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SuperMap

Reach us here!

Building 107, A10 Jiuxianqiao

North Road,

Chaoyang, Beijing, 100015, China

Tel: +86-10-59896503

Fax: +86-10-59896666

Email: biz@supermap.com

www.supermap.com

https://www.linkedin.com/company/supermap/

https://www.facebook.com/SuperMap/

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UPDATES

TECHNOLOGY CORNER

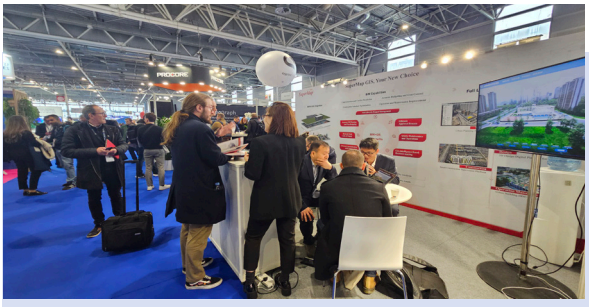
Exploring Latest Developments of Geospatial Intelligence with SuperMap 2024

The year 2024 just passed. As we enjoy the holidays and the time with our families, it is also a precious opportunity for us to review what we've done and achieved during the past year. In this special report, we represent you SuperMap's footprint around the world this year. Through these activities, SuperMap built strong connection with local communities and promoted Geospatial Intelligence and its value to various industries.

BIM World Paris 2024

Paris, France

BIM World Paris, one of the most influential global events in the BIM industry, took place at the Paris Porte de Versailles International Exhibition Center on April 3–4, 2024. SuperMap was once again a prominent participant, led by Wang Haitao, Vice President of SuperMap and President of SuperMap International. The delegation showcased SuperMap's cutting-edge capabilities in BIM+GIS integration and its new generation 3D GIS technology.



Mexican National Civil Defense Conference

La Paz, Mexico

On May 6-7, the Mexican National Civil Defense Conference with the theme of emergency rescue was held. The SuperMap Latino Team and the Mexican agent Soluciones SIG team jointly attended the conference as exhibitors. The team focused on SuperMap's technologies and solutions in hurricane disaster analysis and emergency rescue. During the conference, representatives from the civil defense departments of many Mexican states and cities came to the SuperMap booth, and learnt about SuperMap's related applications in hurricane and flood inundation analysis.

FIG Working Week 2024

Accra, Ghana

From May 19 to 24, FIG Working Week 2024 and the 47th FIG Congress were held in Accra, the capital of Ghana. Ghanaian President Nana Akufo-Addo attended the opening ceremony on the 19th and delivered a speech.

SuperMap's booth welcomed government representatives and corporate representatives from the land management, environmental protection, urban planning and other departments from Nigeria, Ghana, Kenya, Ethiopia, Senegal and other countries. FIG President Dr. Diane Dumashie and the organizers visited the SuperMap booth.

2024 Geospatial Intelligence Software Technology Conference (GISTC 2024)

Beijing, China

On June 25, GISTC 2024 commenced at the China National Convention Center in Beijing, China. With the theme “Geospatial Intelligence Driving Quality Development,” the two-day conference welcomed government leaders, academicians, experts, and business representatives worldwide. They exchanged ideas on breakthroughs in geospatial software technologies and explored future trends and applications. Dr. Diane Dumashie, President of the International Federation of Surveyors (FIG), delivered the opening remarks at the plenary session.

At the conference, SuperMap released its latest series of software product- SuperMap GIS 2024.

SuperMap Introduction Executive Lunch in Indonesia

Djakarta, Indonesia

SuperMap International and Blue Power Technology (BPT), a leading IT infrastructure solutions company in Indonesia, held a ceremony on September 5 to mark the formal establishment of the two parties' cooperation relationship.

The ceremony attracted more than 40 companies from GIS and other fields in Indonesia to participate. The event featured reports and technical discussion. At the end of the event, Sun Liping, General Manager of the Asia-Oceania center of SuperMap International, presented the distributor certificate to Mr. Erwin, CEO of BPT.

INTERGEO 2024

Stuttgart, Germany

INTERGEO 2024 attracted more than 500 companies and institutions and over 17,000 attendees from across the globe. SuperMap highlighted its latest technological innovations, application achievements, and digital transformation solutions across various industries including smart city, land and resources, water conservancy and meteorology, and energy.

SuperMap's showcase attracted visitors from over 30 countries.

SuperMap's First Overseas Tour in Europe

Belgrade, Serbia

On October 8, SuperMap, in collaboration with MapSoft, a leading geomatic information company in Serbia, hosted a seminar in Belgrade, Serbia's capital. The event marked SuperMap's first showcase in Europe.

The seminar attracted over 160 professionals from various national and educational institutions, including the Serbian National Forest Administration, the National Facilities Management Agency, the National Inland River Administration, the University of Belgrade, and urban planning departments from key Serbian cities such as Belgrade, Novi Sad, and Niš.

UN GEONOW 2024

Deqing, Zhejiang

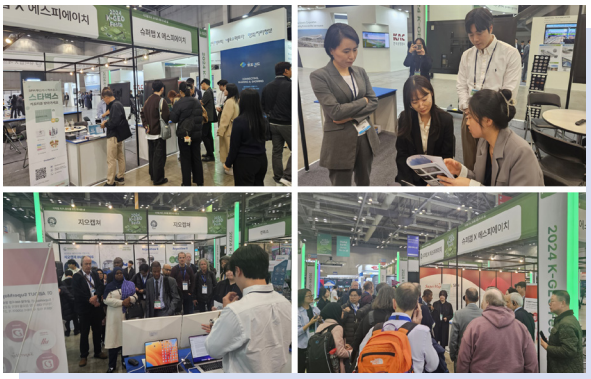
From October 21 to 24, the first "UN GEONOW" with the theme of "Geospatial Intelligence Benefits the World" was held in Deqing, Zhejiang. The conference attracted more than 700 participants from relevant institutions in more than 40 countries. Mohammed M. Kabir, Chairman of International Federation of Surveyors Africa Regional Network, Adamu Bala, representative of the Northern Surveyors Forum of Nigeria, Wang Zengning, Vice President and Secretary-General of China Association for Geospatial Industry and Sciences, Wang Yongmei, President of China Natural Resources News Agency, and other experts and leaders visited the SuperMap booth and had in-depth exchanges.

K-GEO FESTA 2024

Koyang, South Korea

From November 6th to 8th, SuperMap and its Korean agent SPH participated in the K-GEO FESTA exhibition in South Korea for the first time. K-Geo is the largest spatial information technology exchange expo in Asia with 142 companies and organizations from 25 countries participating and more than 13,000 visitors.

SuperMap and SPH jointly showcased the SuperMap GIS 2024, the latest series of software and application cases.



9th ISK Africa Regional Conference

Mombasa, Kenya

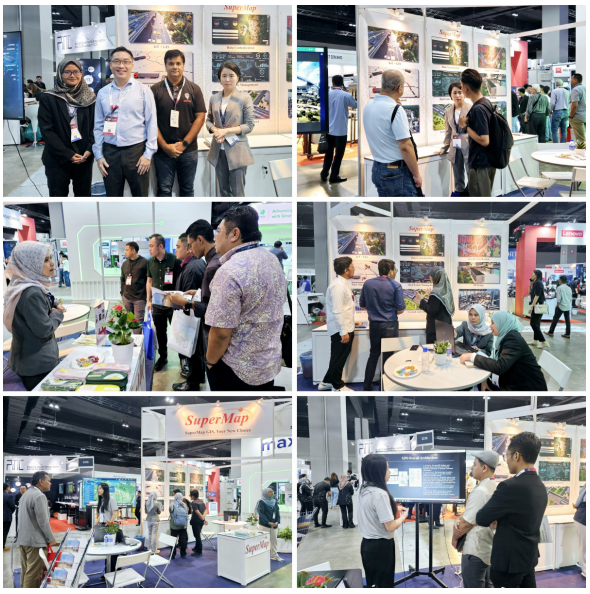
From November 7th to 8th, the 9th ISK Africa Regional Conference was held in Mombasa, Kenya's second largest city. With the theme "Adaptation, Prosperity and Sustainability", the conference discussed how land and built environment management can respond to changes and achieve sustainable development. More than 300 government officials and professionals from multiple African countries attended the conference. Hu Chenpu, General Manager of the SuperMap International Platform Software Solution Team, introduced the application of AI GIS and remote sensing technology in land change monitoring and urban construction management. The SuperMap delegation also had exchanges with many important persons at the booth.

SMART NATION EXPO 2024

Kuala Lumpur, Malaysia

From November 19th to 21st, the Smart Nation Expo was held in Kuala Lumpur, the capital of Malaysia. The event attracted more than 600 exhibitors from Southeast Asia and Europe and over 21,000 visitors.

In its debut in the Exhibition, SuperMap displayed BIM+IoT+GIS, GeoAI, and 3D GIS related technologies, as well as solutions in smart cities, smart transportation, and real estate management.



1st CNTIG User Conference

Abidjan, Côte d'Ivoire

On November 21, 2024, the first-ever CNTIG User Conference was held by CNTIG (Comité National de Télédétection et d'Information Géographique en Côte d'Ivoire) in Abidjan. The event brought together high-level political leaders, industry experts, and academic professionals to explore how cutting-edge geographic information technology can help address challenges in urban development and natural resource management.

As a key partner and GIS platform provider for the conference, SuperMap showcased its technological innovation and engaged in meaningful discussions through booth presentations, special reports, and interactive sessions.

SuperMap and Dassault Systèmes Achieve New Breakthrough in Digital Twin City

At present, digital twin cities are taking hold in the field of urban informatization, leading an unprecedented urban intelligent transformation.

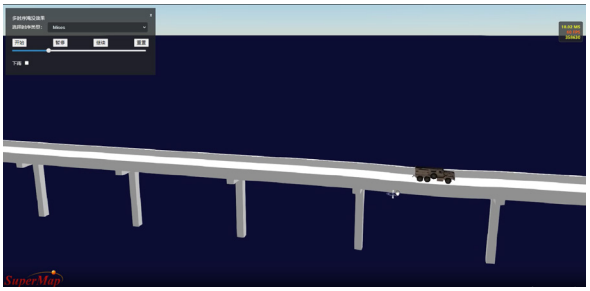
How can simulation technology play a more important role in "digital twin" cities? SuperMap works with Dassault Systèmes, and applies geospatial intelligence software technology to the development of smart cities. Through exploring how simulation technology can meet the needs for intelligence, the two parties have developed a more valuable overall solution for digital twin cities.

In this cooperation, a major breakthrough in technology has been achieved. The two parties have opened up the data link from the structural and fluid simulation results of Dassault Systèmes's SIMULIA simulation system to the SuperMap GIS platform, realizing the dynamic display of simulation results of fine models at a large scene scale.

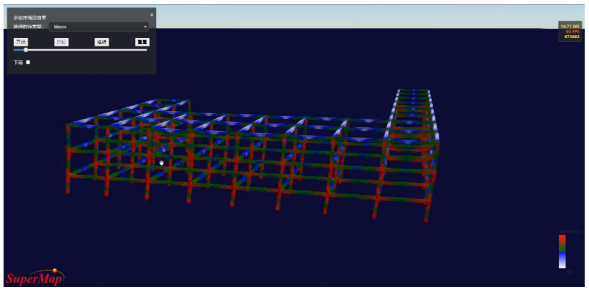
This will help express the internal operating status of urban infrastructure more intuitively, timely discover anomalies and potential risks, and issue early warnings, thus helping managers optimize the distribution and configuration of facilities.

The SuperMap Digital Twin Platform simulates the operating effects of facilities under different layout plans, selects the optimal plan, and helps managers formulate maintenance plans in advance, and reasonably arrange maintenance resources, so as to ensure the normal operation of facilities and extend their service life.

In terms of structural simulation, through the



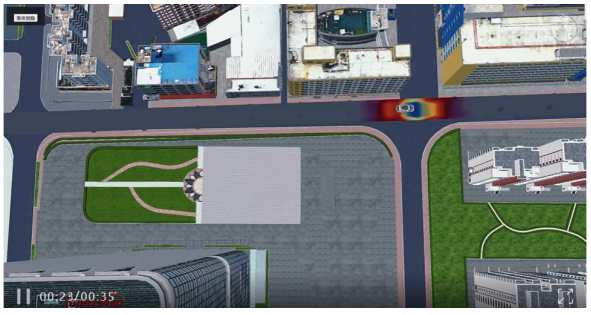
Deformation effect when vehicle driving on the elevated road



The deformation of the house during an earthquake

technical cooperation, the SuperMap Digital Twin Platform can load the model deformation process data of the finite element structural analysis software (Abaqus). By offsetting the model nodes according to the deformation value, the deformation process of the three-dimensional model is displayed, thereby realizing the fusion rendering of the simulation results and the spatial scene.

Abaqus can not only calculate the deformation of objects, but also accurately calculate the force distribution of geometric shapes. Through the cooperation, the two parties can dynamically integrate the change process of the force field in the operation of urban facilities with the model elements in the digital twin scenarios, so as to analyze the status of facilities more accurately and intuitively.



Analysis of the influence of vehicle driving on the stress of elevated road

In terms of fluid simulation, Dassault Systèmes' fluid simulation software technology can simulate the operation and change process of water flow in the real environment, dynamically display the change process of the fluid in the scene, and realize the integrated display of the impact field of the fluid on the facilities, which will provide a scientific basis for urban flood control and drainage, water conservancy system management, etc.

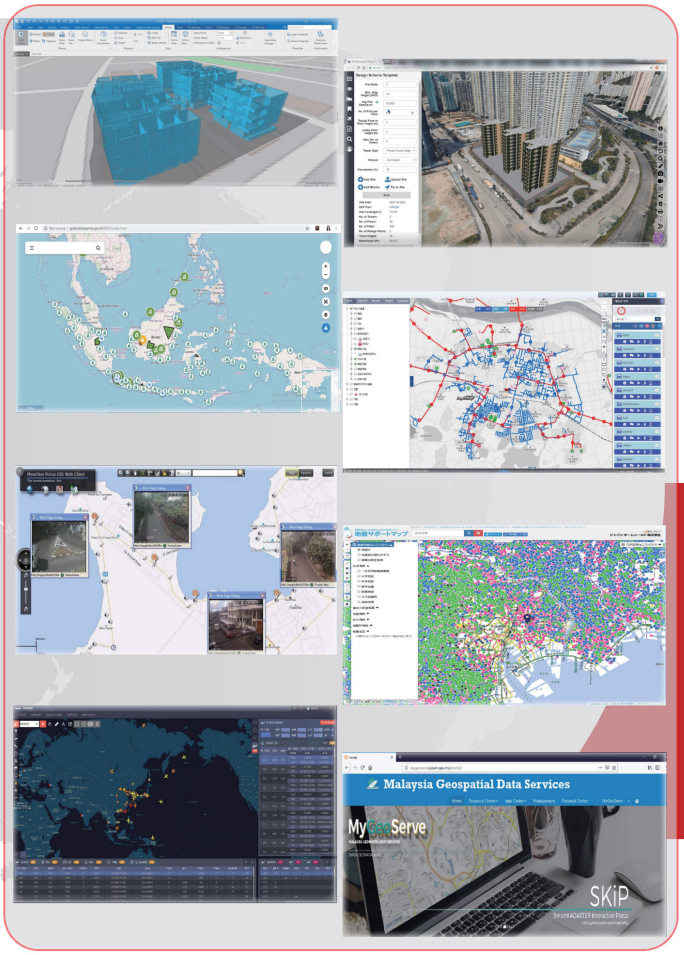
Simulation analysis of fluid flow, flow rate and impact force

In the future, the two parties will strengthen cooperation and further integrate the SuperMap GIS platform with Dassault Systèmes' simulation software to achieve real-time access to monitoring data, real-time calculation of simulation systems, and real-time display in the SuperMap Digital Twin Platform.

The two parties will seek more business scenarios in the fields of municipal transportation infrastructure, urban lifelines, urban flood control and waterlogging to create professional products, and jointly promote the research and development and application of digital twin + simulation technology.

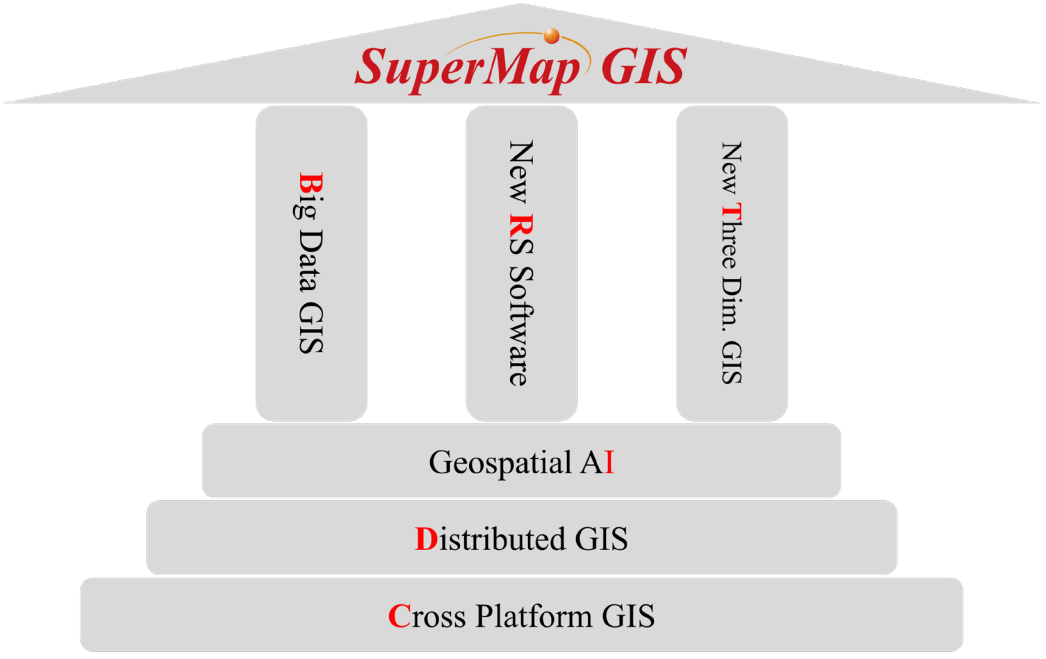
Application Cases

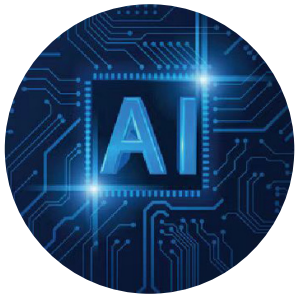
- *Municipality GIS for Nyköping, Sweden*
- *3D Underground Pipeline Management System, Germany*
- *3D Cadastral Project, Turkey*
- *Mobile AI Recognition of Water Meter, South Africa*
- *National Police GIS, Mauritius*
- *Land Property Management System, Egypt*
- *House Decision Support System, Malaysia*
- *Geospatial Data Services Portal, Malaysia*
- *Global IOT Management System of HITACHI, Japan*
- *One Map of Ground Strength of National Residence, Japan*
- *Mobile Mapping Solution for Foreclime, Indonesia*
- *Big Data Spatial for Secure BaseMap System in BSSN, Indonesia*
- *Nature Reservoirs Locating System, Thailand*
- *Smart Agriculture Real-time Soil Monitoring System, Thailand*
- *Pipeline Analysis Solution, South Korea*
- *Forest Disaster Management System, South Korea*
- *Flight Monitoring System for Asiana Airline, South Korea*
- *Mountain Development Support System, Cuba*
- *Epidemic Surveillance System, Laos*



Technologies

In SuperMap GIS 2024, a new remote sensing image processing server software product has been released, enhancing the capabilities of the cloud-edge-terminal GIS product series. This update further innovates the six major technologies system of GIS platform software (BRT-IDC), which include Big Data GIS, New Remote Sensing Software, New 3D GIS, Geospatial AI, Distributed GIS, and Cross Platform GIS technologies. These advancements enrich and revolutionize GIS theories and technologies, empowering digital transformation across various industries.



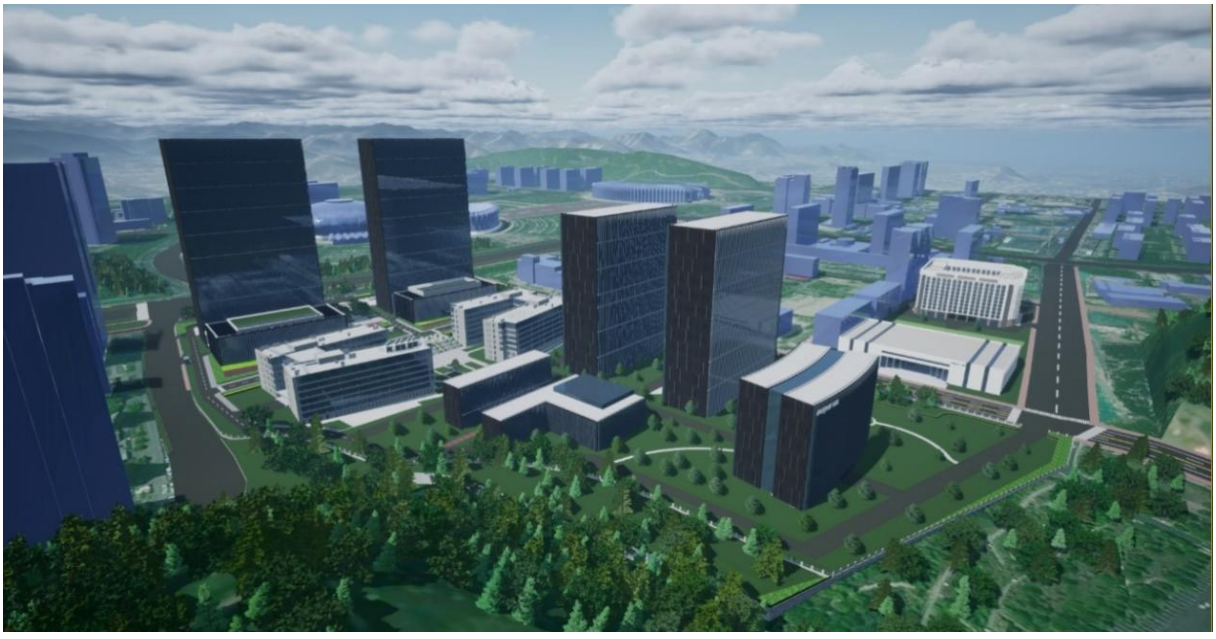


Zero Government Investment, Co-Construction of a New Multi-Dimensional Security Management Model

Inspur Software Technology Co., Ltd. (hereinafter referred to as Inspur) is a software product and solution provider for industry applications. Relying on its own advantages in big data, cloud computing, and the Internet of Things, Inspur has joined hands with SuperMap and formed an intelligent safety production supervision platform (hereinafter referred to as the "Platform") based on SuperMap iServer 10i, SuperMap Cloud GIS application server platform. The platform integrates security situation, emergency command, disaster prevention and mitigation, law enforcement summary, jurisdiction supervision, video surveillance and other functions.

The platform can provide sensing monitoring and early warning, remote dynamic inspection and supervision, and other capabilities. The data is fully connected and collected layer by layer to achieve "one network, one game" for safe production.

At the same time, Inspur pioneered a new model of "zero government investment and co-construction of digital security service center" to efficiently address government safety supervision and enterprise safety management, which will truly improve the inherent safety of enterprises, and consolidate the main responsibility of enterprises.



Digital twin enterprise

Clear enterprise information

In the process of management and operation, enterprises generate a large amount of data, such as basic geographic data, enterprise operation thematic data, dynamic monitoring perception data, risk hidden danger data, etc. They are scattered among the enterprises in the jurisdiction, and are collected and output in isolation from each other.

How to break the barriers between data and effectively connect these data to serve the operation of the park is a fundamental problem that the platform must solve.

In order to standardize and unify access data, the platform has established a set of standard specifications for data management, data update and data use based on BIM + GIS technology. By collecting new data and using existing data, basic geographic data, thematic data and IoT perception data are collected, and the data is governed and integrated to form a unified spatial data resource library.

Based on SuperMap's 2D and 3D GIS technology, various 3D data are integrated and displayed on the map. Various enterprise resources, including buildings, vehicles, equipment assets, events and other information, are integrated and displayed on the map to build a 3D map of enterprise safety supervision and achieve a "clear bottom line" for enterprise information.

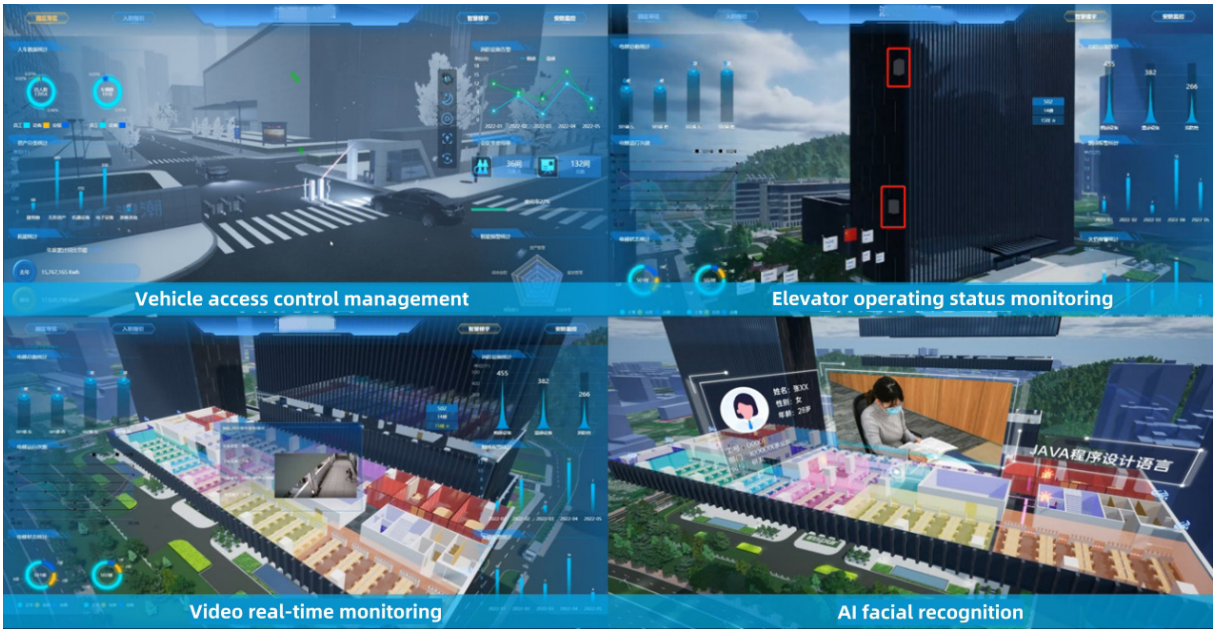
Classification of risks

To comprehensively identify and assess the safety risks of enterprises in the jurisdiction, the platform uses GIS technology to integrate information such as enterprise risks, public area risks and major hazards into a 3D visualization map of enterprise safety supervision, so as to achieve clear classification and presentation of safety risks of enterprises in the jurisdiction.

Deeply integrating BIM and IoT perception, the platform links the location and information of various intelligent devices in the enterprise, and marks the location and operating parameters of various sensor devices on the map in real-time, including the enterprise infrastructure situation, underground pipeline network status, access control card gates, personnel trajectory, video surveillance, pipe gallery pipelines and other key monitoring data, etc., to perceive the enterprise's security status in real-time.

The platform provides various two- and three-dimensional spatial analysis algorithms and capabilities, builds a digital twin enterprise, and provides resources and capability support for the construction of enterprise management-related applications.

Using video and 3D scene fusion technology, the platform projects the video streams of the company's outdoor and key indoor scenes' monitoring equipment into three-dimensional



Real-time indication of the location and operating parameters of various sensor devices

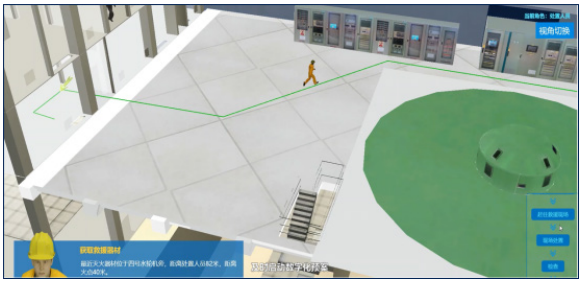
scenes. It will achieve full-time and spatial stereoscopic fusion of video data and three-dimensional scene data, and realize real-time global control of the overall situation of the monitoring area, thereby better supporting the company's safety, emergency, and routine management.

Quick incident response

The platform integrates emergency resources in the jurisdiction to form a map of emergency resources, realizing one-click allocation of emergency materials, and improving emergency response capabilities.

The deep integration of the park, BIM model construction and IoT perception is made to realize the visualization of the command and rescue business process under the emergency handling mode. The event task handling nodes are presented in a timeline, and the command and coordination efforts can be quickly made.

The handling system is based on the event handling process and time tasks, and mainly includes modules such as event reporting, analysis and judgment , activation of plans, command and dispatch, and time evaluation.



Emergency resources in one map

"Real-time communication" between government and enterprises

The platform realizes the drawer-style classification and archival management of the government's daily supervision work, and intuitively displays the implementation of the government's safety supervision responsibilities. The government platform and the enterprise platform realize data interconnection and work interaction, which facilitates the government to grasp the enterprise's safety situation in real-time and assist the government in enterprise safety production supervision.

Explore win-win cooperation to improve the capabilities of both government and enterprises

Through SaaS deployment, the platform solves the drawbacks of traditional information construction, such as large investment, long cycle and slow effect. Through lightweight application services, it avoids possible problems such as duplicate construction, waste of resources and demand changes.

The platform can integrate a variety of IoT devices, which can be self-built and accessed in a flexible way. Whether it is the original IoT sensing equipment that has been built or the new intelligent equipment planned in the future, it can be easily accessed through the standard interface to form scalable modular content.

At the same time, the platform's intelligent tool kit and customized intelligent tools can be used to solve basic work problems such as repeated reporting on multiple platforms of enterprises. Through the data collected and gathered during the enterprise's safe production process, the government supervision platform can quickly obtain the enterprise's safe production information and conveniently integrate it into various reporting platforms and dashboards.

On the other hand, a safety production information service team was also established during the platform construction. Through the online + offline dual-line service model, the problems of enterprises "not understanding" safety production management, "not knowing how to use" the platform, and "not willing to use" by personnel were solved.

Safety production digital experts were stationed in key service areas. Under the unified leadership and command of the local emergency management department, technical support was provided for the local digital supervision and the digital operation of enterprises. The multi-dimensional services for enterprises were refined through training, operation and maintenance, and support. The service of enterprises is truly taken as the core to improve the safety production management level of enterprises.

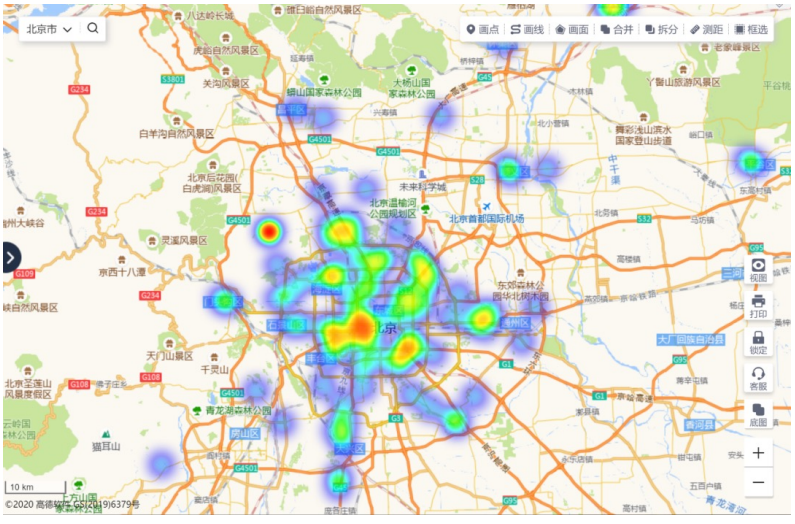
Fire Management is Upgraded to an Intelligent Level with Public Safety Further Guaranteed

Summer is the peak season for fire accidents. To eliminate fire safety hazards, firefighting agencies conduct fire safety hazard inspections in flammable and explosive places, especially the deployment and maintenance of firefighting facilities and equipment, high-risk areas, fire incident sites, firefighting agencies, and the implementation of fire safety responsibilities.

How to combine these investigation data to assist in intelligent decision-making for fire emergency response is a concern of the industry. Dituhui, a sub-brand of SuperMap, launched a fire map solution that visualizes fire information based on geographic big data, allowing "data to speak" and achieving scientific management and auxiliary decision-making for fire emergency response.

Firefighting information visualization

In the fire map solution, users can mark the locations of fire hydrants, water sources, valves, manhole covers, high-risk areas, fire incident sites, and fire agencies on the map, so that the information data and distribution are clear at a glance. At the same time, Dituhui also provides users with a custom icon function, where users can use intuitive icons instead of original icons, making all information clearer and management more intuitive.



Fire hydrant distribution heat map

Fire service area division

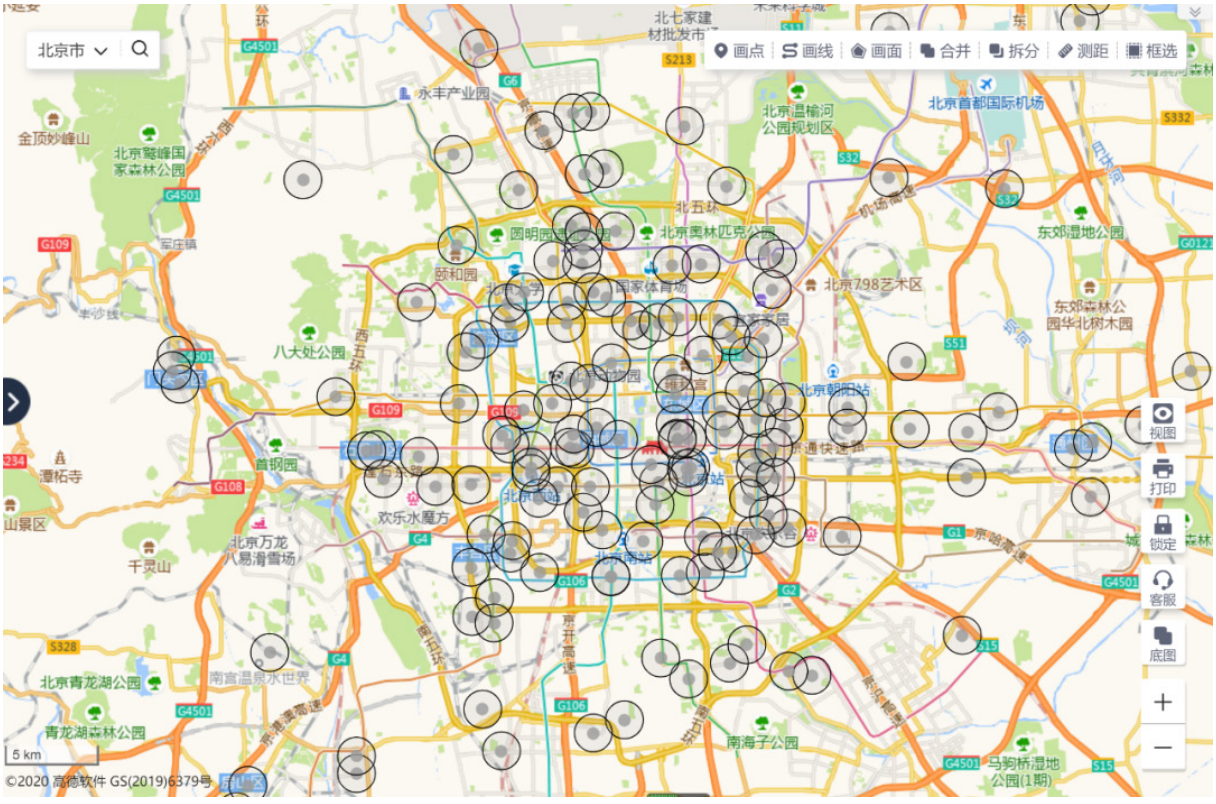
Every day, each firefighting organization, such as the fire brigade, fire squadron, and fire station, has its own service scope, which is not intuitive enough to describe with words. In the firefighting map solution, users can draw the areas that firefighting organizations are responsible for, and can see the scope of the places that each fire station is responsible for.

In addition, the fire map solution also provides the function of importing four-level administrative divisions. Units at the fire brigade level only need to import district and county boundaries with one click to quickly display their business scope.

Rapid screening of fire-fighting blank areas

If a city's firefighting equipment is reasonably laid out, the success rate of firefighting and rescue will be greatly improved. If there are firefighting blind spots, once an emergency fire is sent, it may cause serious consequences. How to find firefighting blind spots? We can use buffers to quickly find firefighting blank areas.

In the fire map solution, users can quickly find fire blank areas by setting buffers. For example, if the 1km coverage area around the valve point is automatically drawn, it is possible to quickly check



Valve 1km buffer zone

whether there are fire-blank areas around all valve layouts in the city. Areas with serious buffer overlap will be prompted not to be added to avoid wasting resources.

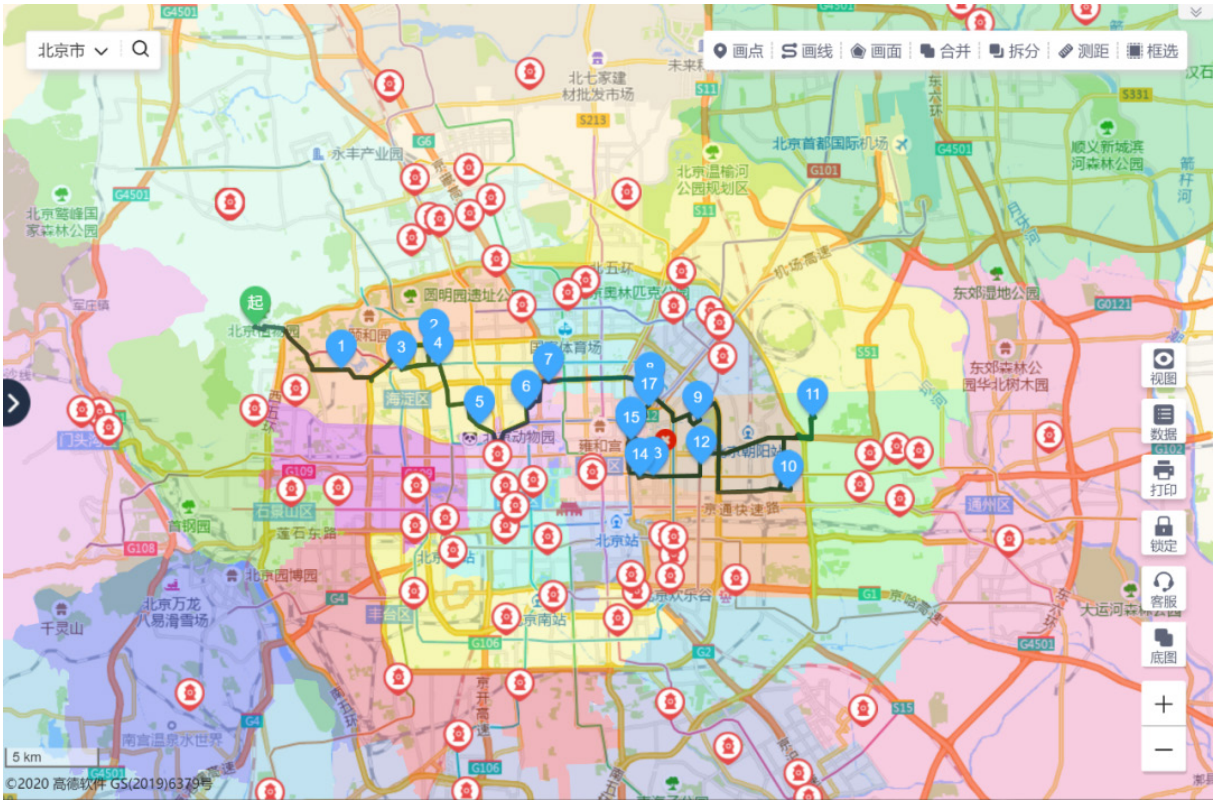
High-risk area inspection and early warning

The fire map solution can set an "alarm" for patrol warnings. When regularly inspecting high-risk locations, fire inspectors can set patrol warnings in advance on the map.

For example, if some high-risk areas need to be inspected on the 10th of each month, reminder conditions such as one day, three days, or even a week in advance can be set on the map. Each reminder condition can be set with a different flashing icon. When the reminder condition is triggered, a flashing warning will appear on the map, which is convenient for inspectors to handle in time and remind relevant responsible persons to conduct timely inspections.

Reasonable planning of inspection routes

Fire inspectors will inspect fire hydrants from time to time to check their status and whether there are any hidden dangers. Using the map's



Fire hydrant inspection route planning on the web

intelligent route planning function, you can set a reasonable and scientific inspection route: select the fire hydrants that need to be inspected, fill in the number of inspectors, and select the actual inspection transportation.

The system will call the background intelligent route planning algorithm and plan multiple optimal paths (one for each inspector) at the same time so that the overall inspection route is optimal and the time consumption is the shortest. Fire inspectors can use the mobile phone APP to navigate directly, greatly improving inspection efficiency. For high-risk locations with fixed routes that require regular inspections, the route planned along the road can be used to meet the needs.

Information collection in high-risk areas

During routine inspections, fire inspectors will discover some locations with potential safety hazards. At this time, they can use Dituhui App to collect data on such locations and quickly form a database of high-risk areas.

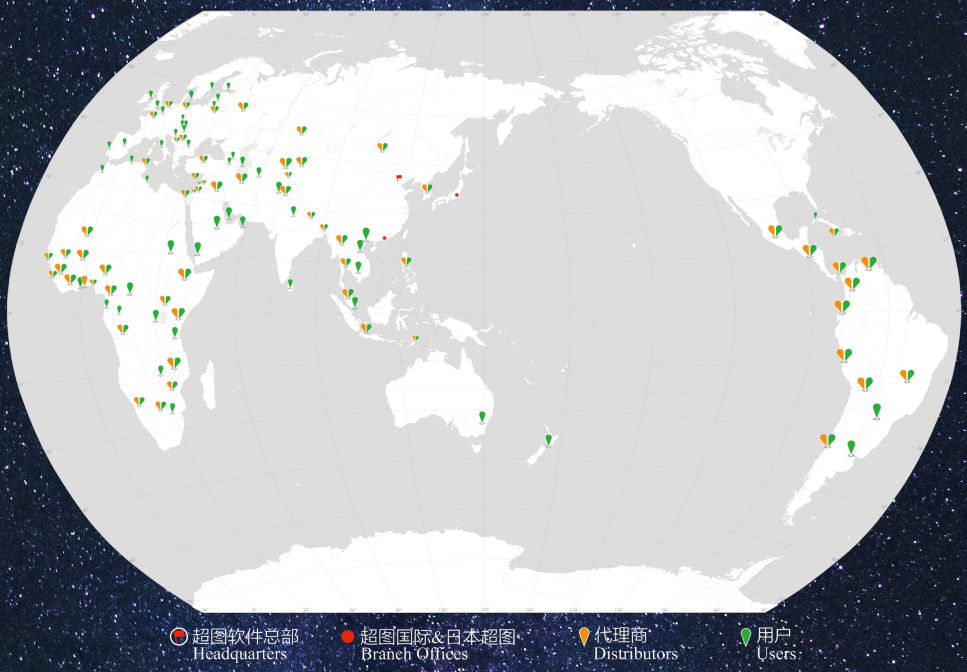
Through the business flow function of Dituhui, fire inspectors can set up the collection process in advance, such as from the initial data collection, initial inspection, re-inspection to registration completion, to finally determine whether it is a high-risk location and whether regular inspections are required.

For hidden dangers found during the inspection, fire inspectors who cannot make on-site rectifications can instruct them to make rectifications within a time limit and conduct regular inspections. At the same time, they will be educated on fire safety knowledge to enhance the fire safety awareness of enterprises and places and ensure the safety of life and production.

Summary

Over the years, DituHui has been deeply involved in the fire protection industry, deeply understood user needs, and provided map solutions for dozens of fire protection units and institutions across the country. Welcome to experience the DituHui platform and make your fire protection industry data come alive!

Global Distributors and Users



SuperMap has developed distributors and partners in more than 50 countries and SuperMap GIS end users in over 100 countries. We are looking for more partners from all over the world to build a global partner eco-system.