Esri ArcGIS and SAP HANA

Supporting High-Impact Location Intelligence for Any Business
Esri and SAP have partnered to offer a unique and powerful spatial solution that helps organizations gain more insight from their authoritative business data. Our technology delivers high-impact location intelligence that you can use to improve operational efficiencies, advance your decision-making capabilities, and meet key business objectives.

Together, Esri and SAP are helping organizations harness the spatial aspects of their business data to discover new insights and share location intelligence with everyone who needs it. By leveraging the capabilities of Esri ArcGIS and SAP HANA, you can visualize and analyze business data and transform it into actionable information. You can then deliver this information through rich user-friendly maps and apps accessible on any device, anywhere, anytime. You can also deliver Esri maps and spatial analytics directly within SAP business, mobile, and BI applications.

Integrating ArcGIS maps and SAP business data reveals powerful location intelligence needed to make more effective decisions and improve your business.

**Vision and Value**

No matter the industry, executives today are focused on achieving a set of key business objectives that deliver real value to their business. These objectives include:

- Increase revenue
- Decrease operating costs
- Reduce risk
- Optimize ROI
- Improve customer service
Most business decisions made to support these objectives rely on location data. For example, decision-makers need to know where assets and resources are located, their status, and how they can be used to respond to changes in the business environment. Unfortunately, many executives lack an accurate, real-time understanding of where their assets and resources are and how they are performing. This means decisions are made based on inaccurate or incomplete data, with poor business outcomes as a result.

Organizations already manage data about assets and resources within systems like SAP Business Suite and HANA, yet they are still challenged to maintain and share an understanding of what that data can do for the business. Esri and SAP can help you meet key business objectives by combining your business data with the power of accurate location intelligence. Location intelligence reveals the geographic context and insight necessary for organizations to achieve their goals and deliver ongoing value to their business.

Organizations can leverage the combined capabilities of Esri ArcGIS and SAP HANA, two systems that work seamlessly together to improve business awareness and workflows across multiple devices. Together they provide organizations with a powerful set of tools and capabilities that support:

- **Analytics**: Unlock new insights by analyzing and visualizing your SAP HANA spatial data on Esri maps, charts, and other infographics. You can also perform real-time big data analytics to discover trends and patterns. This can help you improve decision-making across the enterprise.

- **Field mobility**: Empower your mobile workforce to collect and access data in the field, so they can access the information they need and share new information back to the office. This lets decision-makers and stakeholders see what is happening in the environment in real time.

- **Decision support**: View dashboards to gauge metrics and performance, see where your resources are effective, and understand which decisions are best supported by the data. This helps you deliver a new level of operation awareness that enables information-driven decision-making.

- **Stakeholder engagement**: Communicate and collaborate with external stakeholders and partners. This lets you improve the feedback cycle, reduce turnaround times, and make your resources more productive.

- **Sharing and collaboration**: Empower everyone across the organization to easily access and share location intelligence no matter where they are. This helps reduce information silos and eliminate bottlenecks, so everyone can work faster and more effectively.

- **Monitoring**: Track, manage, and monitor assets and resources in real time so you can react, respond, and coordinate activities faster. By exploiting the location characteristics of sensor-based information, you can transform performance and improve decision readiness.

People will use location information and maps at work to support their workflows, because they are already using them in their own lives as consumers. In a large enterprise, it is critical to generate these
maps from authoritative information. Esri and SAP technology lets you deliver the location-based capabilities expected by your workforce using your own authoritative business data.

### Challenges

Today, if organizations are not leveraging the spatial aspects of their enterprise data, they will typically experience challenges in meeting their business objectives. They fail to meet the expectations of their workforce and key stakeholders, fail to harness location intelligence to support their workflows, and fail to deliver ongoing optimized value to the business.

Together, Esri ArcGIS and SAP HANA make it possible to overcome these challenges. With our integrated technology, you can meet your business objectives by empowering every employee and contractor in your organization to easily discover, use, make, and share location intelligence in the form of maps and apps—from any device, anywhere, anytime. And because this intelligence will be based on your authoritative data, you can deliver a consistent experience with powerful results.

This technology solution helps you overcome challenges related to:

#### Access

While many organizations have a rich amount of location-based data and information, finding and accessing it is a significant challenge. Typically, only a limited set of people can access this data. Giving people the ability to quickly find and access relevant and authoritative information—such as simple customer locations—is the first step in creating workforce efficiencies and improving decision-making.

Together, Esri ArcGIS and SAP HANA provide secure access to maps, apps, and information intelligence using a well-defined, secure sharing model. The system easily integrates with corporate identity management systems with no user limitations. The system is designed to align with your organization’s structure and workflows, allowing you to model the system to the business.

#### Discovery

Organizations struggle with helping people easily discover, use, and make maps and apps. This task is typically relegated to a small set of traditional subject matter experts (if at all), which creates a bottleneck and increases the amount of time it takes to find and use information. In many cases, this results in the loss of business opportunities, a decrease in workforce efficiency, less effective decision-making, and increased risk. By solving this problem, organizations can reduce the time to find authoritative spatial data and related location intelligence, and improve business performance and outcomes.

Esri ArcGIS and SAP HANA give you a centralized portal that lets people within your organization quickly and easily discover the location intelligence they need. This portal serves as a single destination where individuals can find or create maps, analyze business data, and access ready-to-use apps that support their workflows.
Analysis

One of the greatest challenges that organizations face is being data rich and information poor. This is because good, quality data—while important—does not solve problems by itself. Instead, you need the ability to derive and extract actionable information from your business data. Similarly, a lot of business data stored in enterprise business systems has a location component, but organizations do not know how to unlock the powerful business insights hidden within it. Data-driven decision-making is crucial, and the only way to achieve it is to harness the location aspects of your data to explore and gain new insights.

Esri and SAP bring geographic context to your organization’s business data through powerful spatial analytics. These analysis capabilities let you enrich your business data, understand complex relationships, and uncover actionable location intelligence. Location intelligence helps you achieve targeted business objectives by revealing patterns and trends that give you new business insights. For organizations that are not effectively leveraging the location aspects of their data, this delivers unprecedented business value.

Sharing and Collaboration

Your workforce expects the ability to share and collaborate inside their work environment. They expect to use location information and maps at work the same way they use them at home. Unfortunately, when location information and maps are not generated from your authoritative business information, the result is not insight, but confusion.

Organizations already understand the importance of quickly sharing accurate information with both internal resources and external stakeholders. Having the ability to share authoritative maps, apps, and location intelligence helps organizations increase operational efficiencies, reduce redundancy, improve awareness, and deliver information at the right time, at the right place, and in the right format. This lets the organization react to a changing business environment and take advantage of new opportunities.

Esri ArcGIS and SAP HANA improve productivity through effective information-sharing and collaboration across the organization. Using a well-defined sharing model, each user is provided with a unique identity, streamlining collaboration and allowing information to be quickly shared and accessed by users and workgroups. A suite of configurable apps and industry-focused business solutions also accelerates your ability to share and use location intelligence across the organization. This lets you quickly see changes that impact your organization, make better and faster decisions, and maximize ROI.

Integrated Enterprise Systems

While organizations are rich with location-based data, it is often managed within disparate business systems. Having the ability to aggregate spatial data from different business systems is a precursor to overcoming the challenges associated with access, discovery, analysis, sharing, and collaboration. By effectively pulling all this data together, organizations can establish one system of record that reduces redundancy, eliminates inefficiencies, and supports timely and informed decision-making.
Esri ArcGIS and SAP HANA provides the ability to aggregate data and information from multiple systems. This is a critical step in establishing one authoritative visualization and spatial analysis system that delivers location intelligence securely across your entire organization.

**Delivering the Vision**

Esri and SAP offer a complete mapping and location intelligence platform. Esri’s core ArcGIS offering integrates with SAP HANA to support data management, spatial analytics, field mobility, decision support, stakeholder engagement, and sharing and collaboration. We also offer optional packages for IoT monitoring and big data analytics. Our platform leverages an agile deployment methodology based on configurable, repeatable deployment patterns, helping you quickly demonstrate ROI.

Esri ArcGIS and SAP HANA let you:

- Configure first, then customize as required
- Take advantage of a rich suite of ready-to-use maps, apps, and data
- Choose between on-premises or cloud deployment options

Our technology platform is flexible and open. It integrates, displays, analyzes, and enriches information from many sources. It also includes a rich set of APIs and SDKs that allow you to extend apps, build your own, and connect to other systems. Supported by the full Esri and SAP ecosystem, this technology partnership provides customers with an active user community, joint partners, and ongoing services, training, and support.

Together with SAP HANA, Esri’s core software offering delivers high-impact location intelligence. This core offering includes:

**ArcGIS Pro**

ArcGIS Pro is Esri’s next-generation 64-bit desktop GIS. This powerful application provides professional 2D and 3D mapping in an intuitive interface. ArcGIS Pro advances capabilities in visualization, analytics, image processing, data integration, and data management. With ArcGIS Pro, you can visualize data on maps, identify patterns, make predictions, answer questions, and preserve data integrity and accuracy with a complete set of data editing and management tools.

**Insights for ArcGIS**

Insights for ArcGIS is a web-based, data analytics workbench that delivers powerful location-based business intelligence. You can use Insights to visually explore and discover spatial and non-spatial data, enrich your data with demographic and lifestyle content, perform advanced spatial analysis, and deliver new insights for better decision-making.
ArcGIS Enterprise
ArcGIS Enterprise lets you publish and share maps, apps, and other content with anyone in your organization. It provides a portal that serves as a single destination for your spatial content. It also allows users to collaborate with each other through a secure, identity-based system. ArcGIS Enterprise includes a suite of configurable web and mobile apps that you can use throughout your business, from the office to the field. These apps help you with operational awareness, data collection, navigation, and more.

IoT Option: ArcGIS GeoEvent Server
If you need to monitor data from IoT devices, you can also deploy ArcGIS GeoEvent Server to view assets, locations, and events on maps in real time. You can track dynamic assets that are constantly changing location—like vehicles, aircraft, and vessels—as well as live data streams from sensors, IoT devices, and other sources. By letting you monitor live information, GeoEvent Server helps you gain real-time situational awareness and respond more quickly to changing circumstances.

Big Data Option: ArcGIS GeoAnalytics Server
For organizations that need to analyze and make sense of big data, Esri offers ArcGIS GeoAnalytics Server, which can aggregate massive amounts of data and analyze it across space and time. GeoAnalytics Server significantly reduces the time it takes to make sense of large datasets with millions or even billions of records—including live data feeds from sensors, point-of-sale systems, and IoT devices. By doing so, you can answer important questions much faster—in hours or minutes instead of weeks or days.

Services and Support
As part of this technology, Esri offers consulting services to help you get up and running quickly. These services can include:

- **ArcGIS Enterprise Jumpstart**: This services package provides you with technical knowledge transfer and best practices for using ArcGIS Enterprise. It is designed to help you quickly become self-sufficient in installing, implementing, and managing the software.
- **Esri Professional Services**: Esri offers consulting services to help you plan and deploy integrated technology from Esri and SAP. Esri’s experts can advise and guide your enterprise strategy and implementation approach.
• **Web Launch Kit:** This collaborative services engagement empowers you with the knowledge and workflows to manage your organizational account, build high-quality content, and create focused maps and apps.

• **Online and instructor-led training:** Esri provides both self-paced and instructor-led training, to help your staff acquire, expand, and brush up on the skills they need to derive location intelligence and use those insights in their workflows.

**Next Steps**

Interested in further exploring and leveraging the power of location through Esri ArcGIS and SAP HANA? Contact your Esri or SAP account team today for more information about our solution options.

You can also learn more about the partnership between Esri and SAP at [esri.com/sap](http://esri.com/sap).
Esri, the global market leader in geographic information system (GIS) software, offers the most powerful mapping and spatial analytics technology available.

Since 1969, Esri has helped customers unlock the full potential of data to improve operational and business results. Today, Esri software is deployed in more than 350,000 organizations including the world's largest cities, most national governments, 75 percent of Fortune 500 companies, and more than 7,000 colleges and universities. Esri engineers the most advanced solutions for digital transformation, the Internet of Things (IoT), and location analytics to inform the most authoritative maps in the world.

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