

GIS NEWSLETTER



مجموعة مايكروسنتر
MICROCENTER GROUP

JUNE 2026



ESRI USER CONFERENCE

July 13–17, 2026 | San Diego, California

Top News

Esri User Conference July 13–17, 2026 | San Diego, California

Join **Jack Dangermond** to explore how AI-powered ArcGIS technology is transforming data into actionable intelligence. Learn how organizations are using location intelligence to drive smarter decisions and create real-world impact



esri

Official
Distributor

2026 Esri User Conference

Upcoming Event: Esri User Conference 2026

The Esri User Conference 2026 will be held from July 13–17, 2026, in San Diego, California, bringing together GIS professionals and industry leaders from around the world under the theme "Creating a More Intelligent World Together."

Attendees will explore the latest advancements in ArcGIS and Artificial Intelligence (AI), hear insights from Esri President Jack Dangermond, and discover how organizations are using location intelligence to drive smarter decisions and real-world impact. With over 700 technical sessions, presentations and training opportunities, the event offers an excellent platform for learning, networking and innovation in the geospatial.

Agenda at a Glance – Esri User Conference 2026

Pre-Conference Events (July 11–12)

- Education Summit
- Safety & Security Summit
- GIS Leadership Summit

Main Conference (July 13–17)

July 13 (Monday)

- Opening Plenary Session with Jack Dangermond
- Conference Kickoff
- Map Gallery and Networking Events

July 14 (Tuesday)

- Technical Workshops
- Special Interest Group (SIG) Meetings
- Industry-Focused Sessions

July 15 (Wednesday)

- Technical Sessions
- Expo Hall Opens
- Annual Map Gallery Reception

July 16 (Thursday)

- User Presentations
- Technical Sessions and Demonstrations
- UC Party and Networking Activities

July 17 (Friday)

- Final Technical Sessions
- Expert Panels and Discussions
- Conference Closing Events

The week-long program features hundreds of technical sessions, hands-on learning opportunities, AI and ArcGIS innovations, user success stories and networking with GIS professionals from around the world.

[Explore the Full Agenda:](#)

[Esri User Conference 2026 Agenda at a Glance](#)

Esri UC Plenary Session

Date: [Monday, Jul 13](#)

Location: [Hall FGH, Ground Level](#)

Jack Dangermond will open the plenary by sharing examples of incredible work from the GIS user community, his vision for the future and advancements in ArcGIS technology.

Throughout the day, conference attendees will see GIS technology in action through a variety of presentations and demonstrations showcasing new products and capabilities, ArcGIS updates and enhancements and the inspiring work of the global GIS community.

Esri UC Plenary Morning Session

Date: [Monday, Jul 13](#)

Time: [8:30 AM - 10:00 AM PDT \(6:30 PM - 8:00 PM GMT +03\)](#)

Location: [Hall FGH, Ground Level](#)

This session is the first part of a three-part full-day conference plenary.

Gain insights from global leaders shaping the future of sustainability, resilience, and innovation. Learn how geographic thinking is guiding strategy at the highest levels.

Esri UC Plenary Mid Morning Session

Date: [Monday, Jul 13](#)

Time: [10:30 AM - 12:00 PM PDT \(8:30 PM - 10:00 PM GMT +03\)](#)

Location: [Hall FGH, Ground Level](#)

This session is the second part of a three-part full-day conference plenary.

Experience live demonstrations that reveal how ArcGIS connects data, analytics, and AI into a shared operating picture, turning complexity into clarity and insight into action.

Esri UC Plenary Afternoon Session - Conclusion

Date: [Monday, Jul 13](#)

Time: [2:00 PM - 4:00 PM PDT \(Tuesday, Jul 14 12:00 AM - 2:00 AM GMT +03\)](#)

Location: [Hall FGH, Ground Level](#)

This session is the final part of a three-part full-day conference plenary.

Discover powerful examples of how organizations are using geospatial tools and location intelligence to address local and global challenges including government, energy, transportation, education and more.



Registration link

Please find the below link to register for the Free Plenary/Digital Session of Esri User Conference 2026.

[Plenary Session Registration link](#)

Registration details

In-Person Attendance

- Join thousands of GIS professionals in San Diego from July 13–17, 2026 for access to keynote presentations, technical sessions, training workshops, networking events and the Expo.

Digital Access

- Participate remotely through live-streamed sessions and on-demand content, allowing attendees worldwide to experience key conference highlights and technical presentations.

Learn More & Register:



Visit the Esri User Conference website for registration options, pricing, and event details.

Please find the below link to register for the Free Plenary/Digital Session of Esri User Conference 2026.

[Plenary Session Registration link](#)

Agentic GIS: How Esri Is Evolving from AI Assistants to Autonomous Geospatial Workflows



Introduction

Artificial Intelligence has rapidly become a strategic component of modern Geographic Information Systems (GIS). While early implementations focused primarily on machine learning, image classification, and predictive analytics, recent advancements in Large Language Models (LLMs) have introduced a new paradigm: Agentic AI.

Within the ArcGIS ecosystem, Esri is expanding beyond traditional AI-assisted workflows toward AI agents capable of understanding objectives, orchestrating geoprocessing tools, reasoning over spatial data, and executing multi-step analytical tasks. This evolution marks a significant milestone in the development of Geospatial AI and may fundamentally change how GIS professionals interact with spatial information.

Understanding Agentic GIS

Traditional GIS workflows require analysts to manually define analytical steps, select geoprocessing tools, manage data sources, and interpret outputs. AI assistants simplify this process by providing natural language interfaces and workflow recommendations.

Agentic GIS extends this concept further.

An AI agent can:

- Interpret a user's analytical objective.
- Identify relevant spatial and non-spatial datasets.
- Select appropriate ArcGIS geoprocessing tools.

- Execute multi-step workflows.
- Evaluate intermediate results.
- Generate maps, dashboards, and reports.

Rather than functioning as a conversational assistant, the agent becomes an active participant in the analytical process.

For example, a user may request:

"Identify all unauthorized excavations located within 100 meters of critical utility networks, assess potential impacts on water, electricity, and telecommunications infrastructure, prioritize inspection activities, and generate daily operational maps and work assignments."

The AI agent would:

- Query excavation permit records.
- Compare approved permits against field activities.
- Analyze proximity to utility assets.
- Assess risk levels.
- Create inspection routes and dashboards automatically.

Esri's Geospatial AI Architecture

Esri's Geospatial AI architecture integrates several key components:

Foundation Models

Foundation Models are large pre-trained AI models that learn generalized representations from vast amounts of data and can be adapted to multiple downstream tasks with minimal additional training. Within ArcGIS, foundation models include large language models (LLMs), vision-language models, remote sensing foundation models, and location-embedding models that support natural language understanding, geospatial reasoning, imagery analysis, feature extraction, classification, and AI-assisted workflows. These models can be hosted through cloud AI services or integrated with enterprise AI platforms

ArcGIS Knowledge Graph

Knowledge Graph technology enhances semantic understanding by connecting entities, relationships, locations, and events. This capability allows AI agents to reason across complex geospatial datasets rather than simply processing isolated feature classes.

Geoprocessing Services

ArcGIS geoprocessing tools serve as operational building blocks for agent execution. Buffer analysis, spatial joins, network analysis, suitability modeling, hotspot detection, and raster analytics can be dynamically invoked based on the agent's reasoning process.

ArcGIS Enterprise

ArcGIS Enterprise provides governance, security, user management, and service orchestration. This enables organizations to deploy AI agents within controlled environments while maintaining compliance with enterprise security requirements.

ArcGIS AI Assistants: The Foundation Layer

Esri has introduced AI assistants across multiple ArcGIS products, including:

- ArcGIS Pro
- ArcGIS Online
- ArcGIS StoryMaps
- ArcGIS Survey123
- ArcGIS Business Analyst
- ArcGIS Notebooks

These assistants support:

- Natural language querying
- Python code generation
- Workflow recommendations
- Documentation assistance
- Data exploration

Although highly capable, these assistants remain user-directed. The next stage of development introduces autonomous decision-making and workflow orchestration.

Agent Builder and Workflow Orchestration

One of Esri's most significant recent announcements is Agent Builder.

Agent Builder provides a framework for designing geospatial agents capable of:

- Accessing ArcGIS services
- Connecting to enterprise databases
- Invoking geoprocessing tools
- Executing sequential workflows
- Integrating with external APIs
- Producing analytical outputs

This capability shifts GIS automation from static scripting toward dynamic goal-driven execution. Unlike conventional automation scripts that follow predefined steps, agents can adapt workflows based on data conditions and analytical outcomes.

Agentic Mapping Applications

Agentic applications represent another emerging area within the ArcGIS platform.

These applications embed AI agents directly within web mapping environments. Typical agent roles include :

Data Exploration Agent

Assists users in discovering layers, datasets, and relevant attributes.

Spatial Analysis Agent

Executes geospatial analyses using natural language instructions.

Navigation Agent

Supports map interaction, feature discovery, and contextual interpretation.

These agents enable users with limited GIS expertise to perform sophisticated analyses without extensive technical training.

Technical Challenges

Despite its promise, Agentic GIS presents several challenges.

Spatial Reasoning Accuracy

Large Language Models excel at language processing but often struggle with rigorous spatial reasoning. Reliable integration with ArcGIS analytical engines remains essential.

Data Governance

Agents require controlled access to enterprise datasets. Organizations must implement strict governance policies regarding permissions, lineage tracking, and auditability.

Explainability

Analytical transparency remains critical for decision-making. GIS professionals must understand how conclusions were derived and which datasets and tools were utilized.

Computational Cost

Multi-agent workflows involving geoprocessing services, foundation models, and large datasets can introduce significant infrastructure requirements.

Future Outlook

The GIS industry is entering a transition period where AI evolves from an advisory capability into an operational component of geospatial systems.

- Future ArcGIS implementations may support:
- Autonomous spatial analysis agents
- Multi-agent collaboration frameworks
- Geospatial digital twin management
- Real-time decision-support systems
- Enterprise-scale geospatial reasoning

As organizations increasingly integrate AI into spatial workflows, GIS professionals will shift from executing individual analyses toward designing, supervising, and validating agent-driven systems.

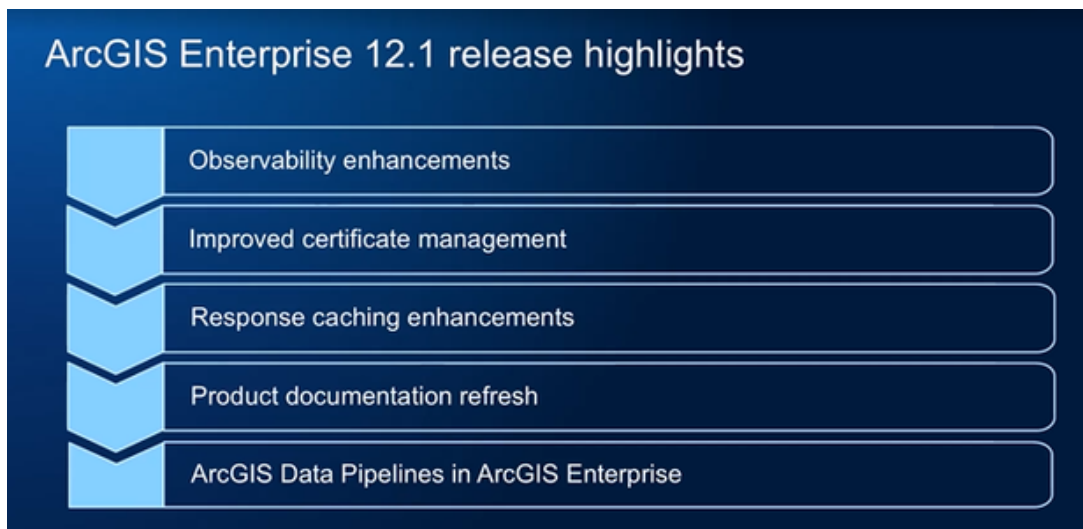
Conclusion

Agentic GIS represents the next phase of geospatial technology evolution. By combining Large Language Models, ArcGIS geoprocessing services, Knowledge Graphs, and enterprise data infrastructures, Esri is building a framework where AI agents can participate directly in analytical workflows.

For GIS professionals, the opportunity is not simply faster automation but a fundamental transformation in how spatial intelligence is generated, interpreted, and delivered. The emergence of agentic workflows may ultimately redefine the relationship between analysts, data, and decision-making within the ArcGIS platform.

ArcGIS Enterprise 12.1 Released

Esri has officially released ArcGIS Enterprise 12.1, the first Long-Term Support (LTS) release of the 12.x generation, providing organizations with a stable, secure and future-ready GIS platform supported for approximately four years. The release introduces significant enhancements for GIS administrators, analysts, developers, and IT teams, focusing on improved system performance, data management, security, and advanced analytics.



What's New?

ArcGIS Enterprise 12.1 is now available, bringing enhanced performance, security, and data management capabilities. Key updates include the general availability of ArcGIS Data Pipelines, improved system monitoring, streamlined certificate management and new tools for visualization, analysis, and enterprise GIS administration.

- **ArcGIS Data Pipelines Now Generally Available**

ArcGIS Data Pipelines is now available for production use in ArcGIS Enterprise 12.1. It simplifies data integration and preparation through a no-code, drag-and-drop interface.

- **Enhanced Monitoring with Enterprise Metrics API**

The Enterprise Metrics API provides improved visibility into system performance and usage. Administrators can monitor and analyze key operational metrics more effectively.

- **Certificate Updates Without System Downtime**

SSL/TLS certificates can now be updated without restarting services. This helps reduce downtime and simplifies security management.

- **Improved Performance Through Advanced Response Caching**

Enhanced response caching improves the speed and scalability of map and feature services. Users experience faster and more consistent application performance.

- **New 3D Visualization and Analysis Capabilities**

Scene Viewer introduces photorealistic 3D visualization and enhanced analytical capabilities. These tools help users better understand complex spatial environments.

- **Expanded Linux Platform Support**

More ArcGIS extensions are now supported on Linux deployments. This provides greater flexibility for organizations using Linux-based infrastructure.

- **.NET 10 Support for Developers**

ArcGIS Enterprise 12.1 now supports .NET 10 for the Enterprise SDK and Web Adaptor. This enables developers to build and maintain applications using the latest Microsoft technologies.

Read more: [On ArcGIS Enterprise 12.1](#)

ArcGIS Enterprise product lifecycle
For Windows & Linux

ArcGIS Enterprise 11.5 and earlier

	General Availability	Extended Support	Mature	Retirement
Long-Term Support (LTS)	2 years	2 years	2 years	After 6 years
Short-Term Support (STS)	1.5 years	-	1.5 years	After 3 years

Starting with ArcGIS Enterprise 12.0 (STS) and 12.1 (LTS)

	General Availability	Extended Support	Mature	Retirement
Long-Term Support (LTS)	Until next LTS release	3 years	-	After ~ 4 years
Short-Term Support (STS)	Until next release	6 months	-	After ~ 1 year

Announcements

ArcGIS Pro at Esri User Conference 2026

ArcGIS Pro will take center stage at Esri UC 2026, featuring the latest innovations in mapping, analysis, automation, 3D GIS, and geospatial AI. Attendees can explore expert-led sessions, live demonstrations, and hands-on learning opportunities designed to help users improve productivity and expand their GIS capabilities.

[Explore Further](#)

ArcGIS Data Reviewer at Esri User Conference 2026

ArcGIS Data Reviewer at Esri UC 2026 will showcase innovative approaches to automated quality control, data validation, and error management. Through technical sessions and live demonstrations, attendees will learn how organizations can improve data quality, streamline workflows, and leverage emerging AI-assisted capabilities across ArcGIS Pro and ArcGIS Enterprise.

[Explore Further](#)

Real-Time GIS at Esri User Conference 2026

Real-Time GIS will be a key focus at Esri UC 2026, highlighting advancements in streaming data, operational awareness, and real-time analytics. Attendees will learn how ArcGIS Velocity and ArcGIS GeoEvent Server support the ingestion, visualization, and analysis of live data for faster decision-making.

The event will feature technical sessions, live demonstrations, and expert discussions on IoT integration, digital twins, public safety, transportation, and infrastructure monitoring.

[Explore Further](#)

ArcGIS Utility Network at Esri User Conference 2026

Discover the latest ArcGIS Utility Network innovations at Esri UC 2026. Attendees will learn how utilities are modernizing network management, improving asset operations, and enhancing decision-making through technical sessions, live demonstrations, and real-world success stories.

[Explore Further](#)

BIM & CAD Integrations at Esri UC 2026

BIM and CAD integrations will be showcased at Esri UC 2026, demonstrating how ArcGIS connects design, engineering, and geospatial workflows. Attendees will explore the latest capabilities in ArcGIS GeoBIM, ArcGIS for AutoCAD, and ArcGIS for Autodesk Forma, and learn how GIS enhances project planning, collaboration, construction management, and digital twin initiatives.

[Explore Further](#)

Developer Sessions at UC

Developer Technologies at Esri UC 2026 will showcase the latest tools, APIs, SDKs, and frameworks for building innovative geospatial applications. Attendees can explore topics including ArcGIS Maps SDKs, ArcGIS API for Python, ArcGIS Location Platform, ArcGIS Experience Builder, and ArcGIS Pro SDK through technical sessions, demonstrations, and expert-led discussions.

[Explore Further](#)

ESRI Training Offerings

Upcoming Training Opportunities: Build your GIS skills with new courses covering Python for ArcGIS, effective map communication, and enterprise GIS best practices.

➔ Training Seminar
Python for ArcGIS: Take the Next Step
on September 17, 2026



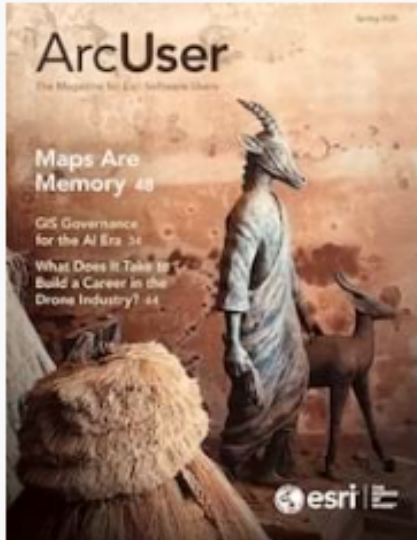
➔ MOOC
The Power of Where: Communicating with Maps
6 Weeks
(2-3 hours of study per week)
Publicly Available



➔ MOOC
Make an Impact with Enterprise GIS
6 Weeks
(2-3 hours of study per week)
Publicly Available



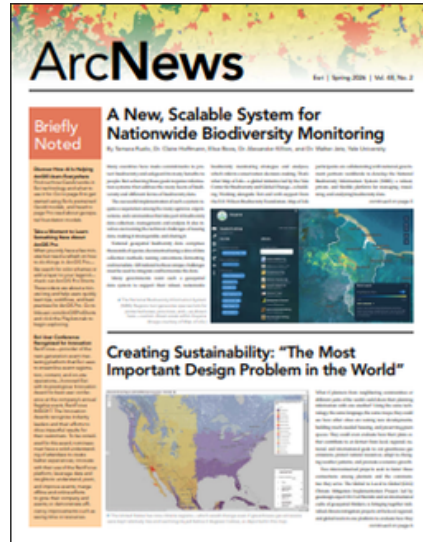
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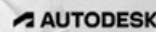
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