ARMY
GEOSPATIAL
ENTERPRISE
NODE

Enabling Geospatial Information Dominance

ERDC

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Educate
Collaborate
Evaluate
Innovate

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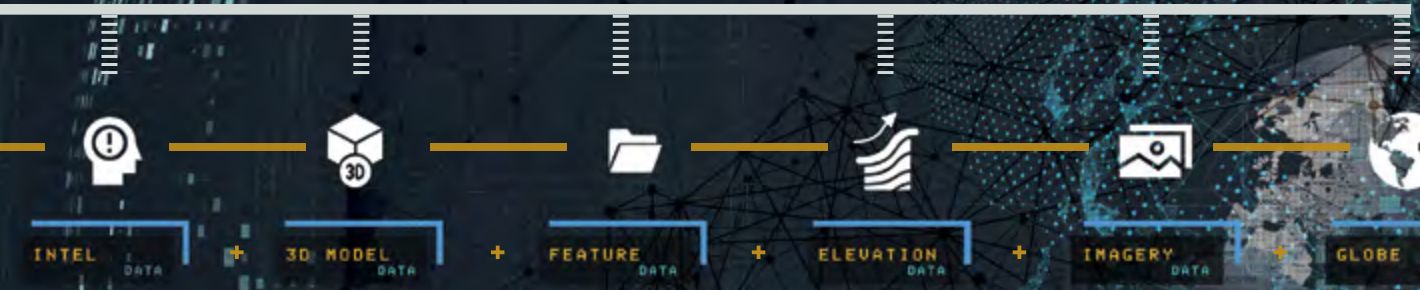
What is the AGE?

The Army Geospatial Enterprise (AGE) is an integrated system of technologies, standards, data, organizations and processes that deliver a Standard and Shareable Geospatial Foundation (SSGF) at all echelons.

The Army Geospatial Center (AGC) leads the implementation of the AGE, which enables a consistent, content-managed SSGF. An SSGF is a common set of imagery, maps, elevation and feature data that provides the base data for a Common Operating Picture (COP).

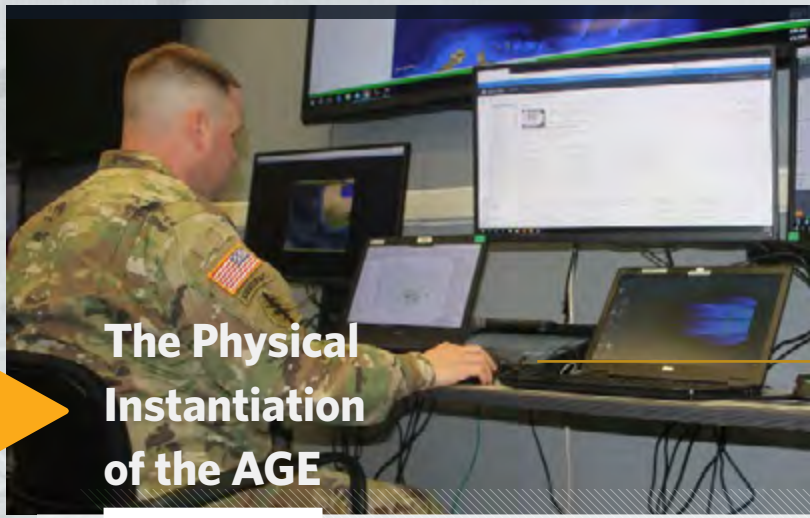
STANDARD AND SHAREABLE GEOSPATIAL FOUNDATION

Mission-specific data can be layered on top of the SSGF to support all warfighting functions.



ARMY GEOSPATIAL ENTERPRISE NODE

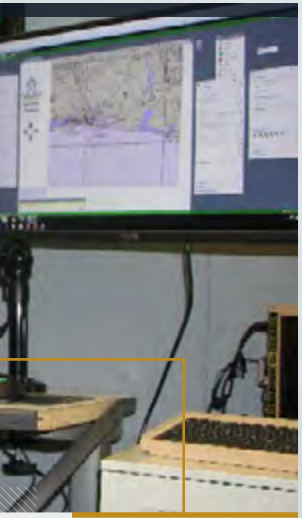
What is the AGE Node?



The Physical Instantiation of the AGE

LOCATED AT THE AGC, THE AGE NODE IS AN EVALUATION SPACE THAT CONTAINS CURRENT OR PLANNED VERSIONS OF THE ARMY'S KEY MISSION COMMAND AND INTEL SYSTEMS THAT PROVIDE OR UTILIZE GEOSPATIAL INFORMATION.

EVAL ENV. | CURRENT SYSTEMS | FUTURE SYSTEMS

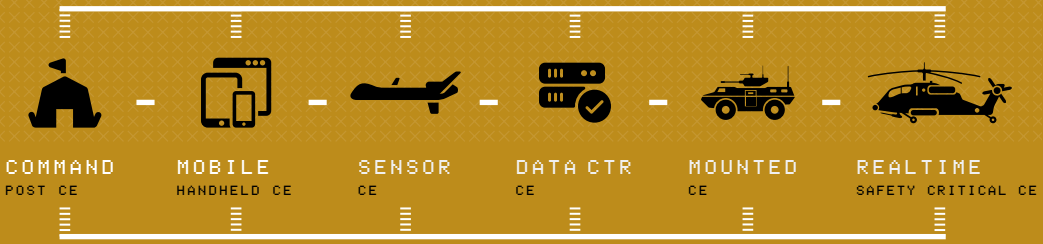


THE AGE NODE SIMULATES THE AGE WITHIN OPERATIONAL MISSION COMMAND SYSTEMS.

Benefits of Using the AGE Node

- Advance geospatial research and improve geospatial interoperability.
- Buy down risk for transition to and implementation of geospatial technologies and information.
- Evaluate geospatial standards, data formats and architectures against fielded systems to understand potential impacts and improvements to interoperability.
- Shape Department of Defense (DoD) and defense-industry products.

COMMON OPERATING ENVIRONMENT



Our Capa

THE VAST MAJORITY OF US ARMY SYSTEMS CANNOT CONSUME GEOSPATIAL WEB SERVICES DUE TO LACK OF NETWORK BANDWIDTH AND/OR STANDARDS COMPLIANCE.

Here's how researchers, engineers, scientists and soldiers use the AGE Node to solve this problem:

- Mimic the constraints of the operational environment, including limited network access, large file sizes, multiple data formats and standards, and competing software packages and versions.
- Evaluate technologies for exploitation, visualization, interoperability and their ability to meet the future needs of the warfighter.
- Utilize fielded and future US Army systems and applications, as well as emerging commercial, government and open source technologies in a simulated operational environment.
- Develop applications, assess capabilities and evaluate barriers to geospatial interoperability.

bilities

R+D

The AGE Node was designed and built to let researchers work with the fielded Army Mission Command systems so they can tailor their research to the operational environment as it relates to achieving an AGE.

With access to hardware, software and a robust virtualized environment, the AGE Node helps guide research against AGE gaps while buying down risk for US Army programs, enabling successful transition of basic and applied research and minimizing risk and lifecycle cost to the customer.

Enabling leading-edge experimentation

- TESTING OPTIMAL WORKFLOWS AND DATA FORMATS, LEADING TO THE SUCCESSFUL ADOPTION OF NEW INDUSTRY FORMATS (E.G., GEOPACKAGE).
- VALIDATING PERFORMANCE AND INTEROPERABILITY OF MATERIAL SOLUTIONS.
- UTILIZING USER JURIES FOR PROGRAMS OF RECORD.

Interoperability

The AGE involves hundreds of applications and Mission Command systems such as Spider, Enfire and Command Post. It also involves varying infrastructure, network capabilities and operational constraints. Systems and applications must integrate and function across these areas.

Here's how DoD and industry partners use the AGE Node to demonstrate and resolve interoperability challenges within the geospatial domain:

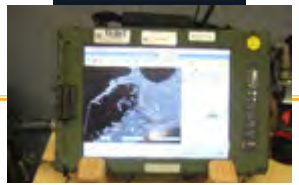
- **Integrate new R&D and resolve interoperability issues throughout the development lifecycle.**
- **Evaluate geospatial standards and implementations (e.g., Open Geospatial Consortium and National System for Geospatial Intelligence standards and profiles).**
- **Implement the correct standards and profiles early to ensure that they can receive the content-managed SSGF, enabling a COP.**
- **Reduce transition and fielding risk and, ultimately, implementation cost.**

COMMAND POST SYSTEMS

Advancing geospatial expertise

- DEVELOPING TEST AND EVALUATION PROCEDURES FOR GEOSPATIAL STANDARDS AND CAPABILITIES.
- FACILITATING DEVELOPMENT OF AGE CERTIFICATION.
- ENABLING A MORE COMPLIANT ENTERPRISE.

SPIDER



ENFIRE

CERTIFICATION

Geospatial interoperability is critical to providing situational awareness to the warfighter.

Interoperability is achieved through consistent implementations of standards profiles, data models and architectures. The Army Geospatial Information Officer is responsible for certifying geospatial interoperability in accordance with Army Regulation 115-11.

The AGE Node provides an environment where program managers can bring systems for evaluation and assessment of geospatial interoperability prior to Army Interoperability Certification (AIC).

Collaboration

Advancement of AGE applications and capabilities requires experimentation, collaboration and coordination with a variety of DoD entities, coalition mission partners, federal agencies, industry partners, academia and other technology providers. The AGE Node provides an ideal environment for collaboration.

Here's how our partners use the AGE Node to innovate and shape technologies:

- **Provide industry with insight into the unique limitations — technological, environmental or policy-oriented — of the AGE operational environment.**
- **Partner with industry to enhance commercial geospatial information and services technology.**
- **Identify and experiment with commercial or open-source technologies that fill gaps in AGE requirements.**
- **Support geospatial interoperability assessment and certification.**


FEDERAL AGENCIES
INDUSTRY PARTNERS
ACADEMIA & TECH

About Us

Delivering a Standard and Shareable Geospatial Foundation.

USACE

US Army Corps of Engineers (USACE) delivers vital public and military engineering services; partnering in peace and war to strengthen our nation's security, energize the economy and reduce risks from disasters.

ERDC

The Engineer Research and Development Center (ERDC) helps solve our nation's most challenging problems in civil and military engineering, geospatial sciences, water resources and environmental sciences for the Army, Department of Defense, civilian agencies and the public good.

ERDC

AGC

The Army Geospatial Center (AGC) provides timely, accurate and relevant geospatial information, capabilities and domain expertise for Army Geospatial Enterprise implementation in support of unified land operations.

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Are you interested in utilizing the AGE Node to tackle your geospatial challenges?

Call: 703-428-8126

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US ARMY GEOSPATIAL CENTER

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