

# IoT Data Fabric Removes Barriers to Transformative AI and Analytics

IAP is now the ANSI/CTA 709.10 standard



## Seamless Integration of Industrial Networks with Edge and Cloud

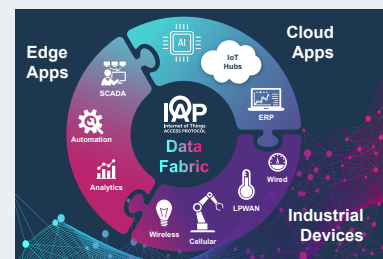
An emerging concept in the data networking world, ‘data fabric’ enables disparate systems to interact as one – extending the concept of interoperability from one protocol to many. Gartner included data fabric in its list of top strategic technology trends for 2022 noting, “IT leaders must identify deployment opportunities for this new approach to leverage existing infrastructure.” The concept holds tremendous promise when extended beyond IT to control networks and IoT applications.

### IoT Access Protocol™ (IAP) lays the foundation for an IoT data fabric

Industrial control networks today operate as silos of automation requiring complex and custom development to access from the outside. Owners often find it too costly to deeply integrate these networks with modern analytics and AI platforms, cellular and 5G networking and other innovative edge and cloud computing technologies.

To address these barriers, the Internet of Things (IoT) Access Protocol (IAP) defines a common information model and services that automatically bridge commercial and industrial networking protocols with each other, and with modern IT and web infrastructure and services. Ultimately, IAP holds the key to successful integration of legacy controls and automation systems with emerging analytics and AI applications. With IAP, companies can transform operations from a closed single-protocol loop to an intelligent multi-protocol system, while leveraging existing operational systems and investments.

IAP was developed to be open, interoperable, distributed and extensible. It is now approved by the American National Standards Institute (ANSI) and the Consumer Technology Association (CTA) as ANSI/CTA 709.10. This establishes IAP as the first open and extensible web services protocol for Industrial IoT networks.



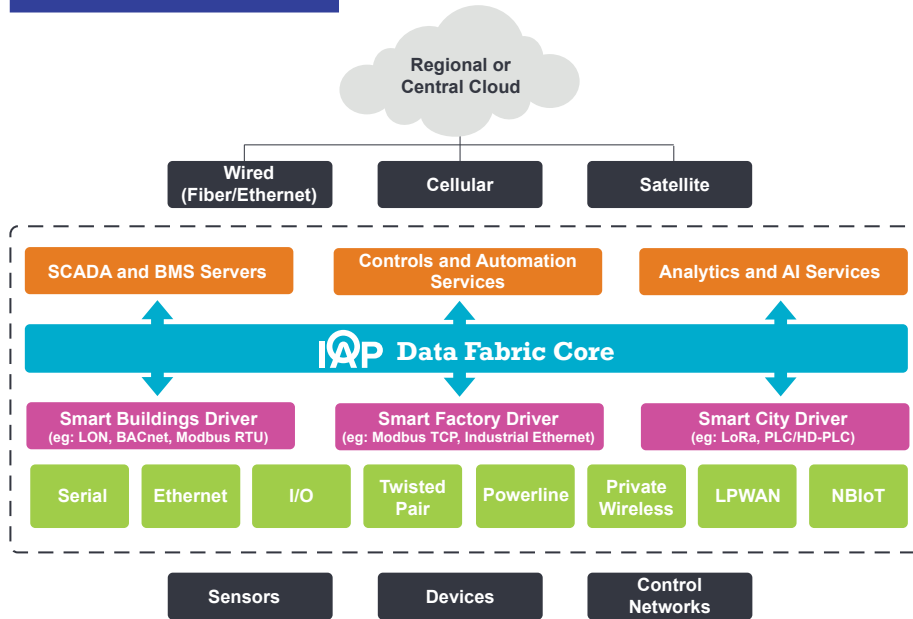
IAP-enabled data fabric can connect any industrial edge device to its peers, and to edge or cloud applications – paving the way for truly smart systems that can automate processes and predict outcomes.

### Principles of open data fabric for industrial IoT

- Seamlessly connects any end point, service or application
- Eliminates the need for coding custom point solutions
- Provides secure access from anywhere via APIs
- Facilitates sharing of workloads across industrial systems, edge and cloud
- Creates resilient, decentralized edge computing architecture
- Runs on controllers, gateways, edge servers and workstations

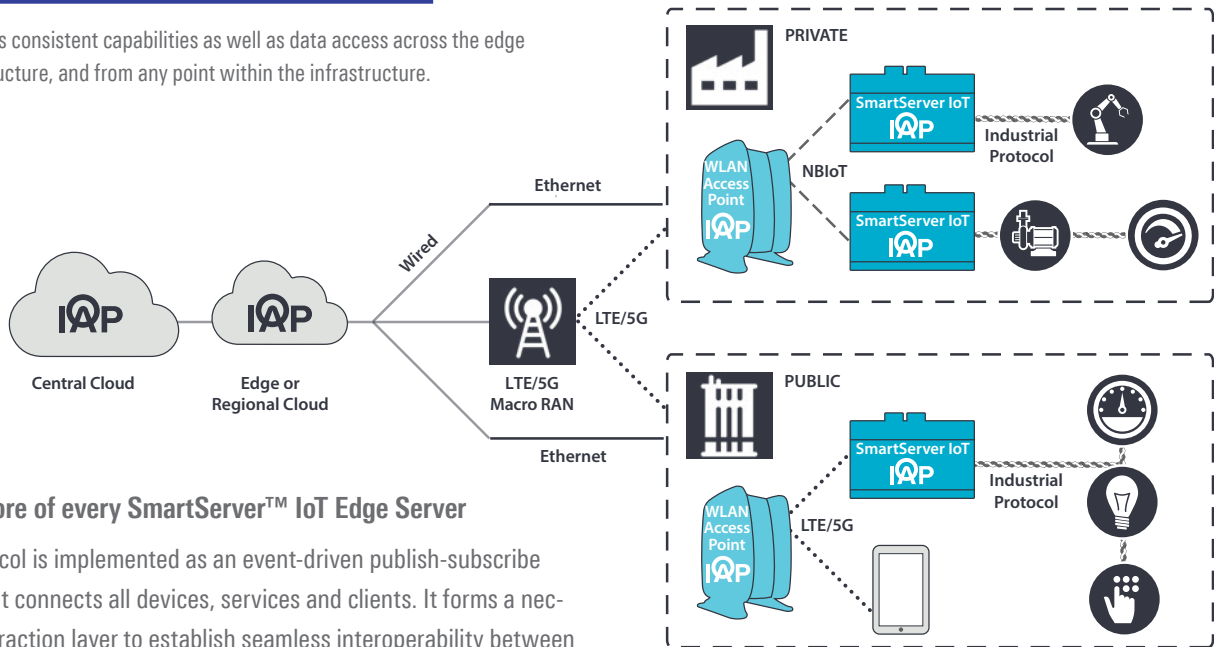
# IOT DATA FABRIC REMOVES BARRIERS TO TRANSFORMATIVE AI AND ANALYTICS

## IoT Data Fabric Architecture



## Data Fabric Across an Edge Computing Infrastructure

Data fabric provides consistent capabilities as well as data access across the edge computing infrastructure, and from any point within the infrastructure.



## IAP is at the core of every SmartServer™ IoT Edge Server

IoT Access Protocol is implemented as an event-driven publish-subscribe message bus that connects all devices, services and clients. It forms a necessary data abstraction layer to establish seamless interoperability between diverse systems, enabling transformative insights and applications.

Contact us to learn more: [edge.info@diasemi.com](mailto:edge.info@diasemi.com)

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1001 Murphy Ranch Road, Milpitas, CA 95035 | Phone: 1-888-468-3774

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