



Rapid, Predictable Modernization for Public Sector Clients

Solution Brief

Like private-sector organizations, government agencies are gradually modernizing legacy environments and applications. But application modernization and cloud migration can be a huge lift, even for organizations with extensive cloud experience. The use of private, air-gapped environments presents additional challenges for public-sector organizations that are considering application modernization and cloud migration. The need for security clearances often means that federal agencies are unable to bring in the professional support that could help them modernize more quickly and predictably.

Industry drivers

Cloud migration

A May 2021 [Executive Order on Improving the Nation's Cybersecurity](#) instructs the government to “accelerate movement to secure cloud services” as part of an effort to help modernize the government’s approach to cybersecurity.

Talent shortage

The historical reliance on relational databases and closed networks means that few agencies have developed the internal talent needed to use and support modern databases and cloud-native tools. Creating an internal pool of talent to drive modernization at scale will remain a challenge for public sector entities.

Need for security clearances

Technologists often lack the security clearances to support federal agencies on their cloud initiatives. With the current delays in the clearance process, it can take a minimum of several months, and often a year, to obtain these clearances.

Air-gapped networks

IT departments want to use modern data platforms, but like any users, government teams need support. Few support professionals have experience working in the closed, air-gapped networks common to federal agencies, in addition to in-depth experience using modern data platforms.

cATO (Continuous Authorization to Operate)

To achieve a continuous authorization to operate (ATO), government systems and technologies must maintain their capabilities in a visible, monitored, and cyber secure manner without interruption.



Modernization with Clarity Business Solutions and MongoDB

Together, Clarity and MongoDB offer public sector clients a proven, iterative approach to application modernization. Clarity and MongoDB help public sector clients increase efficiency, improve performance and scalability, and optimize maintenance as each monolithic application is modernized, rather than waiting years for an entire system to be replaced. With Clarity, this can be a rapid, low-risk migration.

Clarity has deep experience with the private, air-gapped environments common to government agencies. Clarity also has thorough knowledge of public sector application development cycles and processes. Clarity employees are U.S. citizens on U.S. soil and hold security clearances. That means they can work with public sector clients either remotely, over secure lines, or, if necessary, visit facilities and sit side-by-side with public sector clients.

How it works

- Clarity brings its functional knowledge and mission-oriented consulting expertise to help define ROI for modernization initiatives for government customers.
- Clarity and MongoDB leverage a strategic process for analyzing legacy applications and modernizing and migrating them iteratively, rather than trying to update an entire system in a high risk “big bang” project.
- This approach allows clients to modernize without downtime.
- Legacy and modernized systems can run in parallel for a period of time, enabling troubleshooting and increasing confidence.
- Clarity and MongoDB provide a unique offering, combining the power of the MongoDB data platform with Clarity’s extensive client domain knowledge. This allows teams to get the data platform operational quickly and then focus on the application feature development.

With Clarity and MongoDB, application modernization becomes predictable and repeatable, delivering short-term results and long-term preparedness.

Sample use cases

Legacy Audit Repository

Rearchitecture of a large Oracle database at resource capacity. Modernization of data platform while maintaining operations. MongoDB provides scalable and durable ingest queue.








ICAM Attribute Repository

Migration of Oracle attribute repository into a horizontally scalable enterprise model, using change streams for an event-driven architecture.

Monolith to Microservices

Integration of microservices architecture with an existing large legacy platform.

IT drivers

-  Data privacy
-  Cybersecurity
-  Cloud-native tooling
-  Reliability, availability, and security
-  Accelerate innovation
-  Horizontal scalability
-  Agility and flexibility

Talk to a MongoDB professional to find out what modernization could look like for you.