

# Nuclear Deterrence Lab Deploys MarkLogic to Manage Large, Complex Data Sets

AT A GLANCE



Lawrence Livermore National Laboratory (LLNL) helps secure the safety, security and effectiveness of the United States' nuclear deterrence programs. The laboratory implemented the Progress MarkLogic data platform to gain better insight into their data to conduct necessary testing to measure the effectiveness of their nuclear deterrence programs.

**COMPANY**

Lawrence Livermore National Laboratory

**INDUSTRY**

Public Sector

**PRODUCT**

Progress<sup>®</sup>MarkLogic<sup>®</sup>

**COUNTRY**

United States

## Challenge

LLNL has a mission to help secure the safety, security and effectiveness of the United States' nuclear deterrence programs. Doing that requires discovering, integrating and managing complex data sets that are large, unpredictable and highly variable.

**“MarkLogic has the ability to handle high variability, whether you want to store structured data that is indexed or have the metadata and the multi-terabyte file on Tier 2 storage. It's also flexible with its built-in search and retrieval functionality.”**

**Valerie Noble**

Deputy Chief Information Officer, LLNL

## Solution



Implement Progress MarkLogic with its capabilities to manage LLNL's large, unpredictable, non-heterogenous data sets.



Leverage the platform's ability to connect and manage complex data and create metadata to interpret data and contextualize it.



Take advantage of the platform's built-in search and retrieval capabilities to more effectively make informed decisions.

## Results



**Improved Discoverability:** Prior to MarkLogic, LLNL experienced severe difficulty with its data discovery efforts 6-12 months after it had been created.



**Established Traceability:** With the MarkLogic platform, LLNL can track data from design to production for the lifetime of the system.



**Achieved Flexibility and Extensibility:** According to the organization, MarkLogic stores relationships with far more extensibility and flexibility than a relational solution.



Use MarkLogic to better manage large, complex data sets and eliminate data silos.  
**Contact us today.**