

# The Department of Energy

**Industry:**

US Government Agency.

**Location:**

Washington, D.C.

**Organization Size:**

Over 100,000 employees and contractors.

**Systems:**

Over 4,000 unique software product and versions.

**Budget:**

Annual IT Operating Budget of greater than 500 million.

DOE's vision was to automate its IT Asset Management (ITAM) process, specifically, the way outdated software and hardware were identified. The goal was to mitigate the risk of cyber-attacks by reducing outdated IT assets and associated security vulnerabilities. The idea of connecting IT assets to Cybersecurity had never been accomplished on an enterprise level and DOE's innovation was years ahead of both government and commercial peers.

Traditionally, IT data call requests for information are periodically requested but the limitation with data calls is that they are not always timely or accurate. Manually maintaining complex data calls information was not feasible as the IT asset data is too dynamic and complex. The DOE team, led by Rick Lauderdale, Innovation Architect, with support from iVision Consulting, envisioned early in the process that automation was the only solution to this complex challenge as the IT asset landscape was just too dynamic. Inaccurate data or untimely information could have catastrophic security consequences thus the risk was deemed too significant for a manual process or data call.

Although DOE had a manual process in place to remove old and redundant software, it became apparent that result from the manually intensive process was inaccurate and incomplete rendering the results of the process ineffective from a cybersecurity perspective. A solution that was dynamic as well as accurate needed to be developed.

This innovative DOE team used ITAM processes tied to cybersecurity to enable business leaders to realize strategic IT decisions by answering questions like:

- What are the vulnerabilities associated with legacy IT technology?
- What is the business impact due to legacy technology?
- How many high-risk legacy systems are currently used?
- How many technologies are becoming obsolete in one year?
- What type of technologies exist in our network?

The goal was to automate the entire IT asset process and not rely on spreadsheets or data calls for strategic and accurate information.

### Business Challenge

One of the biggest challenges is identifying outdated IT software and hardware assets within the enterprise in a timely manner. The difficulty is with aggregating and normalizing IT asset raw data from different data sources to create a single version of accurate relevant information. There was no easy way to quickly and accurately identify IT assets nearing end-of-life thus presenting possible cybersecurity vulnerabilities that could result in greater risks, legal and financial liability.

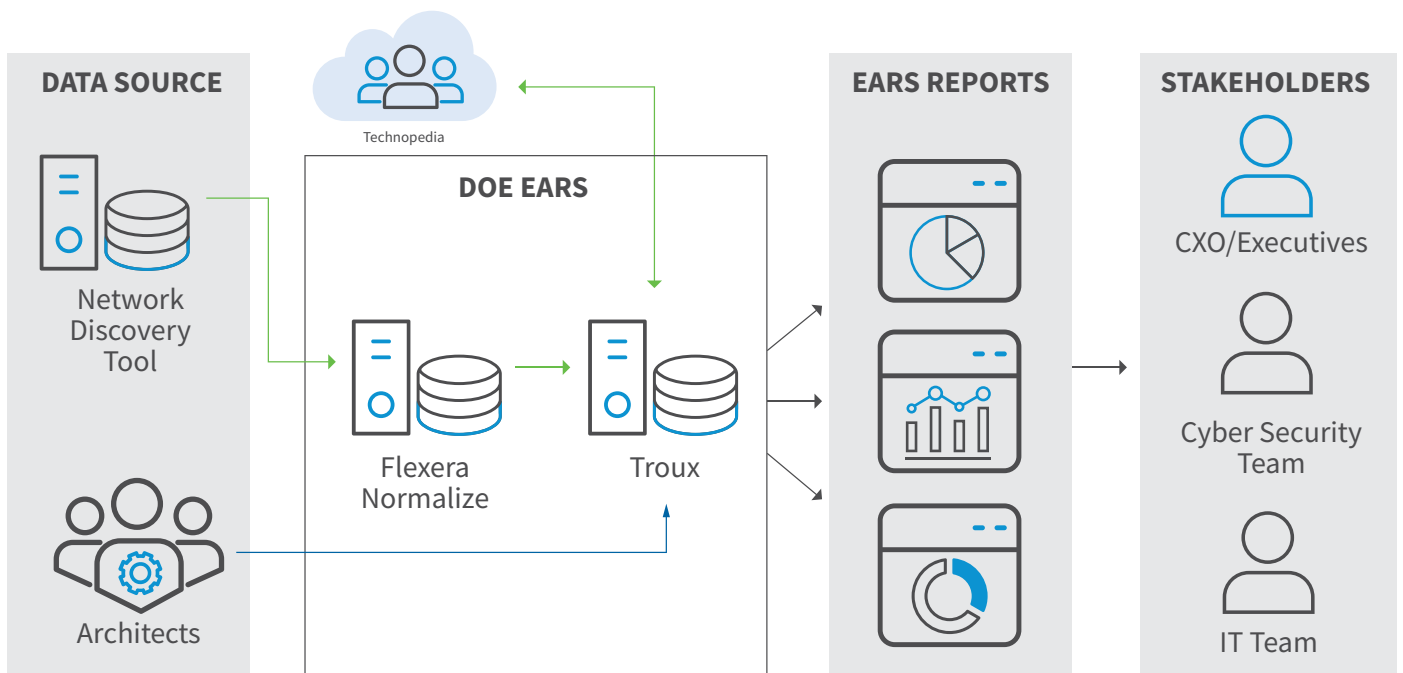
### Solution

#### Getting proactive on cybersecurity with ITAM.

DOE developed an automated solution by integrating Flexera’s Technopedia and Normalize technologies with the reporting and visualization capabilities from Planview’s Troux. This solution was recognized in 2017 by CorporateLiveWire, London, England, for Innovation and Excellence in Enterprise Architect.

This solution has significant advantages:

- Aggregate IT asset data across multiple tools
- Normalize IT asset data to a single taxonomy to build a consolidated and consistent view of all IT assets
- Solve the data quality issues by cleansing the data in an automated way
- Provide non-discoverable meta-data and dynamic market information
- Ensure IT data remains current with market changes
- Standardize IT data architecture across the organization
- Fits the model of a Shared Service Solution thus providing a service to the Enterprise



Flexera's Technopedia provided a single consistent IT data model for IT asset categorization and naming that instantly solved the problem of data model and asset class conflicts. Flexera Normalize® with built-in data extractors helped aggregate asset data across the various departments and normalize it to Technopedia. This helped standardize data across the various departments to build a foundation for ITAM with normalized data and kept them up-to-date on an ongoing basis. Technopedia also provided non-discoverable metadata necessary to perform day-to-day functions like identifying End-of-Life data and upgrade/downgrade paths for software releases. The solution kept the data current with latest product releases and minor version updates. With Technopedia's enablement of data collection and normalization process, this enterprise now had an effective IT asset data feed that became an important driver for the cybersecurity program.

With this solution, the innovation architect implemented five ITAM best practices to help combat cybersecurity:

1. Focus ITAM on the most immediate cybersecurity threats
2. Prioritize options that quickly provide tangible benefits to business owners
3. Prioritize ITAM implementations based on mission criticality
4. Identify asset costs and require accountability for ITAM
5. Anticipate and leverage the negative culture that exists for ITAM

## Results

The primary benefit for any business dealing with IT is the ability to allow stakeholders to be proactive and look forward by anticipating what's going to happen with the software and hardware in place and allow them to make decisions based on accurate risk assessments.

Flexera solutions helped this agency:

- Be proactive and not reactive to decisions related to IT assets
- Make decisions based on informed fact-based data
- Create transparency so stakeholders are aware of security priorities/risks
- Increase accountability across the agency
- Improve communications with timely responses

Flexera solutions enabled DOE to use normalized IT asset data to properly assess the vulnerability of existing software and hardware to significantly enhance the effectiveness in managing cybersecurity.

### NEXT STEP

Visit us to learn more about data normalization.

[Learn More](#)

### ABOUT FLEXERA

Flexera is reimagining the way software is bought, sold, managed and secured. We make the business of buying and selling software more transparent, secure, and effective.

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