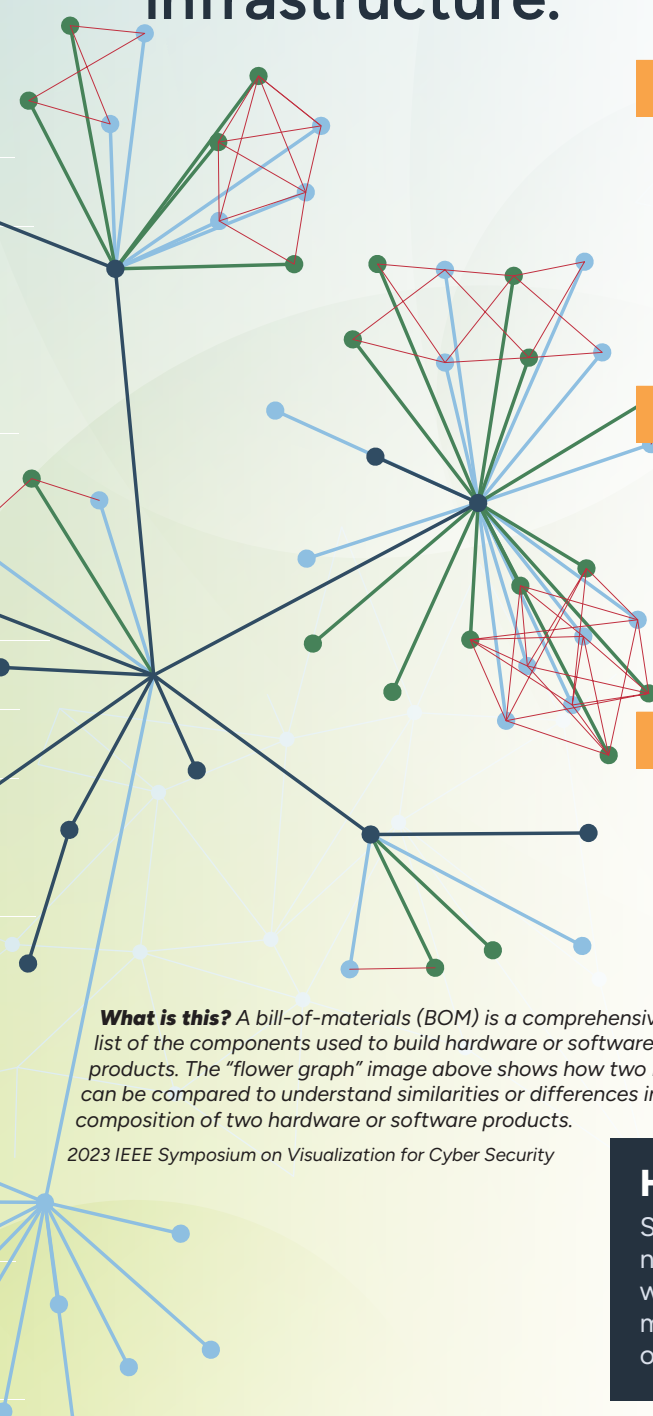


The CyTRICS™ program develops and evaluates methods to illuminate and secure the digital supply chains of critical energy infrastructure.



WHY

Supply chains are a “black box” with many interdependencies; therefore, vulnerabilities manifest in widespread and unanticipated ways.

CyTRICS is **advancing the practice of supply chain risk management**, leveraging the expertise of multiple National Laboratories.

WHAT

Energy systems are owned and operated by a complex network of public and private entities sourcing technologies from around the globe.

CyTRICS is a **core element** of the Energy Cyber Sense program, a national capability to enhance the cyber resilience of energy infrastructure.

HOW

CyTRICS **identifies and measures the risk** of critical components in energy infrastructure to prioritize further government and industry research.

CyTRICS **aids vendors and utilities in understanding and securing their supply chains** by dissecting key products, gathering information about the components within them, and performing security evaluations.

What is this? A bill-of-materials (BOM) is a comprehensive list of the components used to build hardware or software products. The “flower graph” image above shows how two BOMs can be compared to understand similarities or differences in the composition of two hardware or software products.

2023 IEEE Symposium on Visualization for Cyber Security

How to Get Involved

Securing energy infrastructure is a concerted national effort. CyTRICS partners directly with energy sector stakeholders, including manufacturers, asset owners/operators, and other government agencies.



Contact us to learn more:
cytrics@hq.doe.gov



Illuminating Cyber Risks in Energy Infrastructure

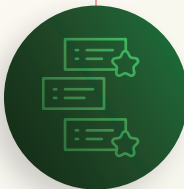
CyTRICS is a multi-laboratory supply chain risk management program partnering with industry to catalogue energy infrastructure and develop effective tools for securing critical components in the supply chain.

Advance the Practice of Supply Chain Risk Management



CyTRICS is researching and developing new methods for government and industry to illuminate the digital supply chain of critical energy infrastructure. Managing risk in complex hardware and software supply chains requires a fundamental shift in the way supply chain information is captured and shared. CyTRICS is dedicated to addressing the complex challenges of securing energy infrastructure through targeted, high-impact research efforts.

Identify, Prioritize & Assess Critical Components in the Supply Chain



CyTRICS captures the component-level composition of critical products in the energy sector. The program applies rigorous methods to understand the devices and software critical to the energy sector. By assessing these devices, CyTRICS identifies systemic threats and vulnerabilities in the energy sector and works with vendors to develop mitigations.

Partner with Energy Sector Stakeholders



Securing energy infrastructure is a concerted national effort. More than 80% of U.S. energy infrastructure is privately owned and operated, making industry the first line of defense against cyber threats for energy infrastructure. This is why CyTRICS partners directly with hardware and software manufacturers, as well as those responsible for the assembly, operation, and maintenance of energy systems.

Responsibly Disclose Threats & Vulnerabilities



CyTRICS ensures threats and vulnerabilities are disclosed in a timely, effective, and responsible manner. When CyTRICS identifies a novel vulnerability in energy infrastructure products or components, the program engages energy sector stakeholders in a coordinated vulnerability disclosure process. CyTRICS then delivers analytic reports that vendors and asset owners/operators can use to secure their networks against vulnerabilities or weaknesses in supply chains.

What is energy infrastructure?

Energy infrastructure is the network of systems, facilities, and technologies that enable the generation, transmission, distribution, and consumption of energy, including electricity, oil, nuclear power, and natural gas.

