Esri National Security Summit

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Cybersecurity: A Critical New Domain for GIS

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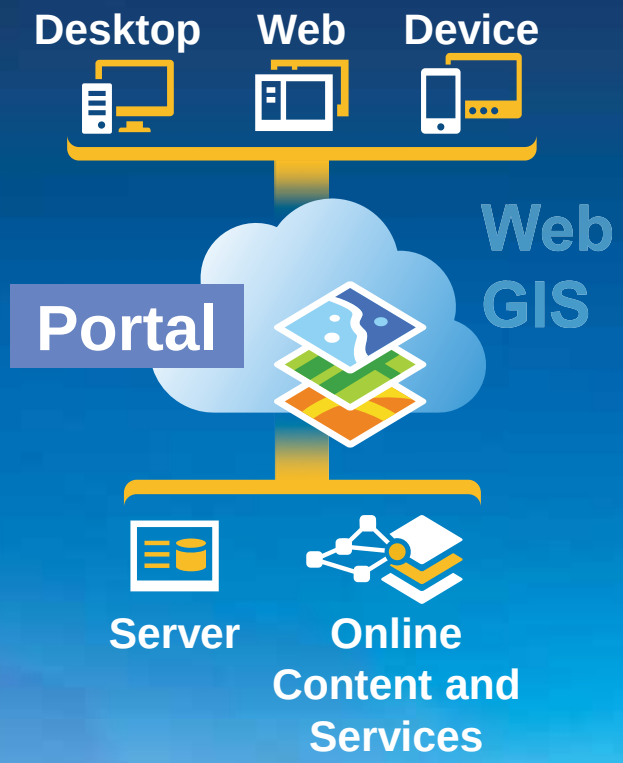
GIS Is a Platform

Enabling Web GIS Everywhere

- Simple
- Integrated
- Open



Available in the Cloud . . .
. . . and On-Premises

Cyberspace Re-Considered

It’s Mappable

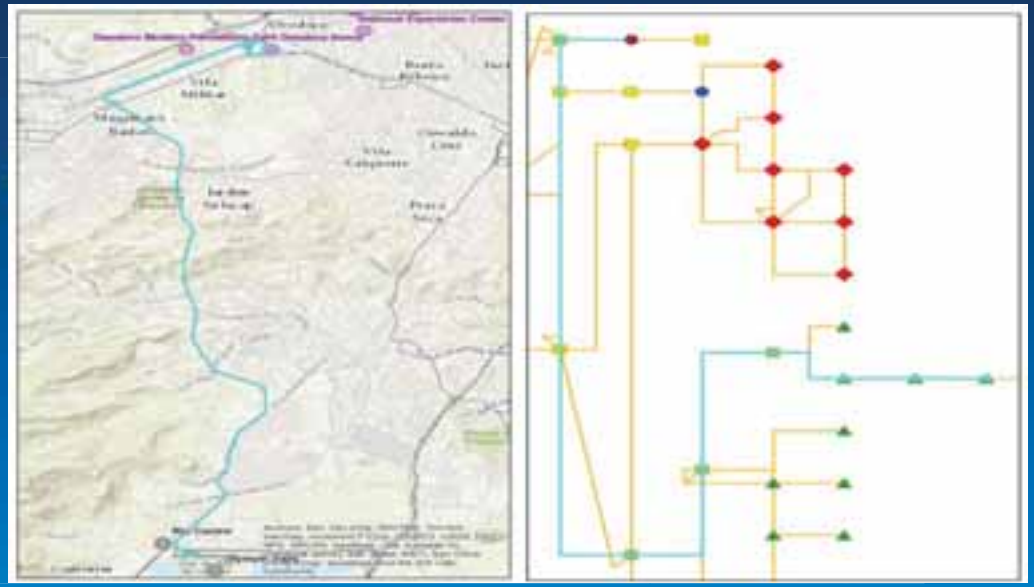
Social / Persona Layer

Device Layer

Logical Network Layer

Physical Network Layer

Geographic Layer



- **Each device in cyberspace is owned by someone (no ‘global commons’)**
- **Electro-mechanical devices exist in space-time and interact with physical events**
- **Geography is required to integrate and align cyberspace with other data**

Solution Strategy

Executives / Commanders
Enterprise - focused

IT Infrastructure
Device-Focused

Operations
Process-focused

Cyber Security
Event-focused

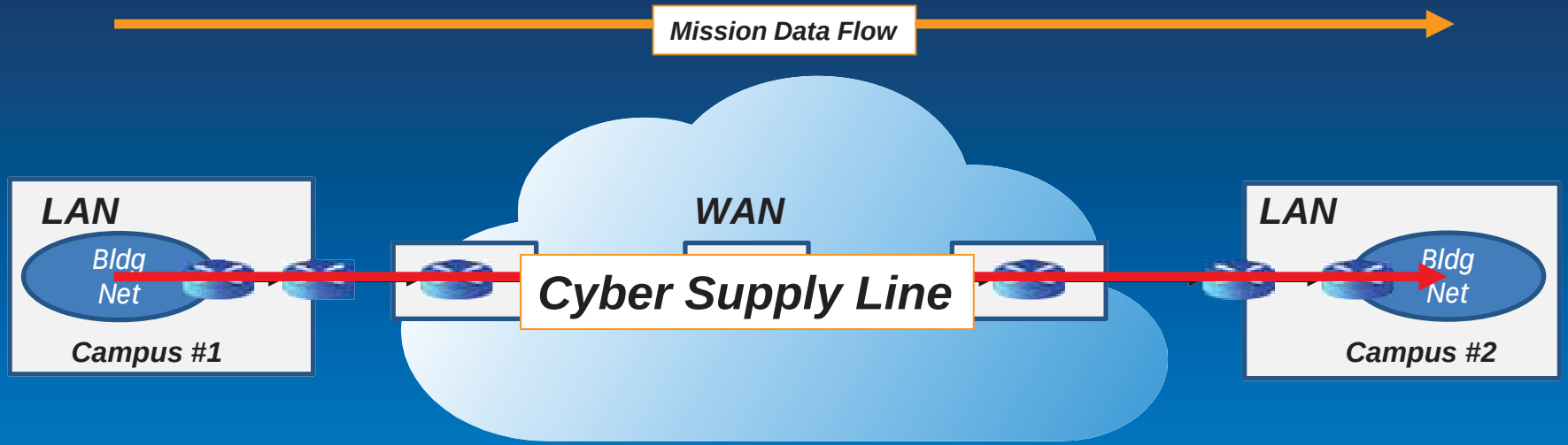
AREAS FOR IMPROVEMENT

Finding:
need for a Cyber Common Operational Picture (COP)

Executive Summary 1 National Exercise Program

The Cyber Supply Line

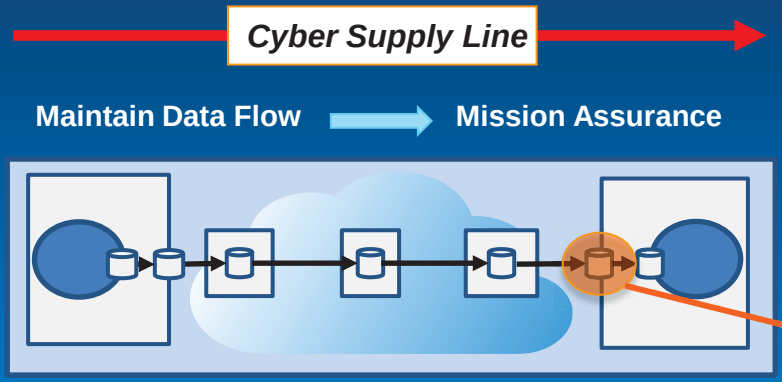
A vector of devices



- Cyber Supply Line (CSL) is a *consistent* path through the infrastructure
- CSL focuses resources on only the devices that are critical
- Managing data flows is similar to traffic routing; an Esri core competency

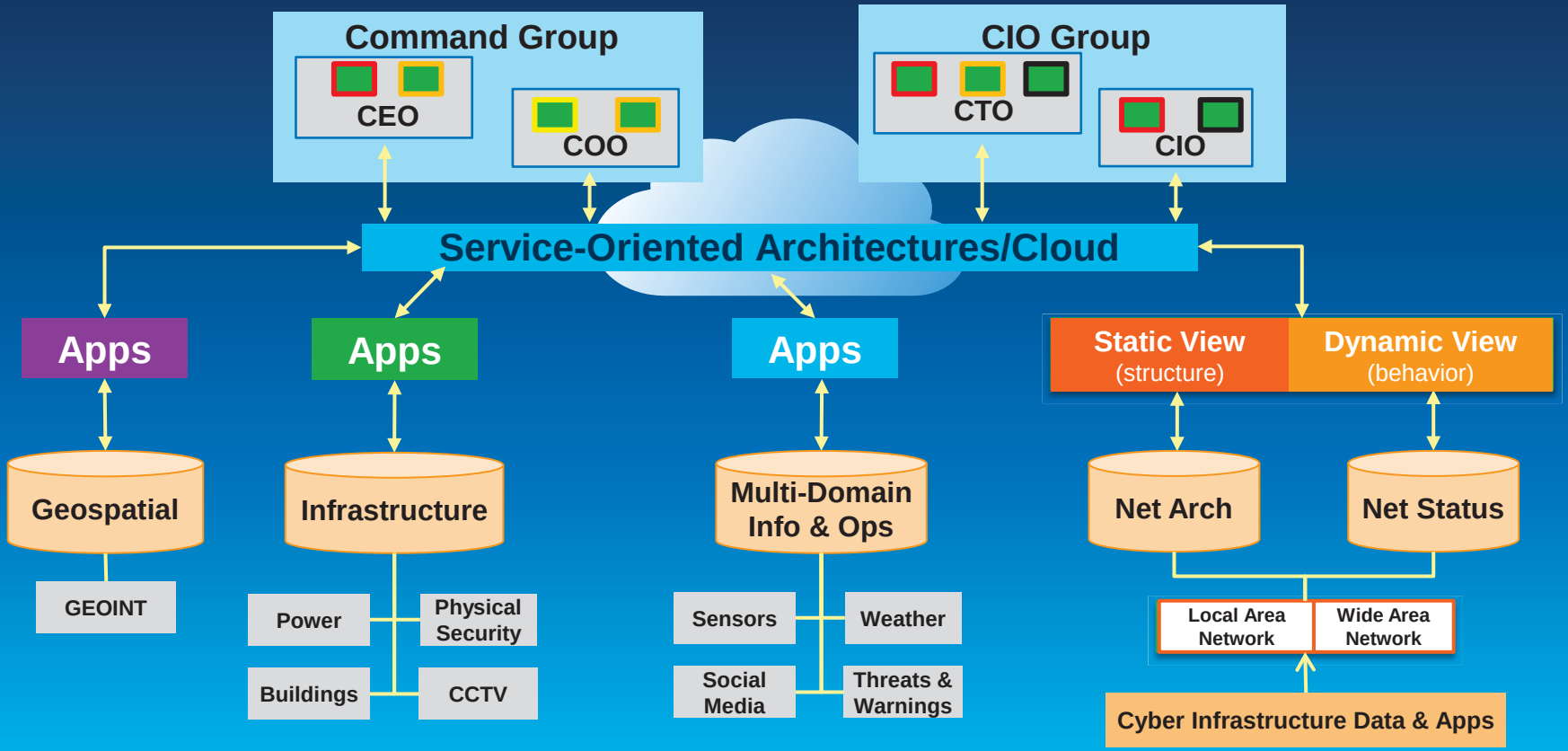
Effect Propagation

Multi-level Model of Data Flow



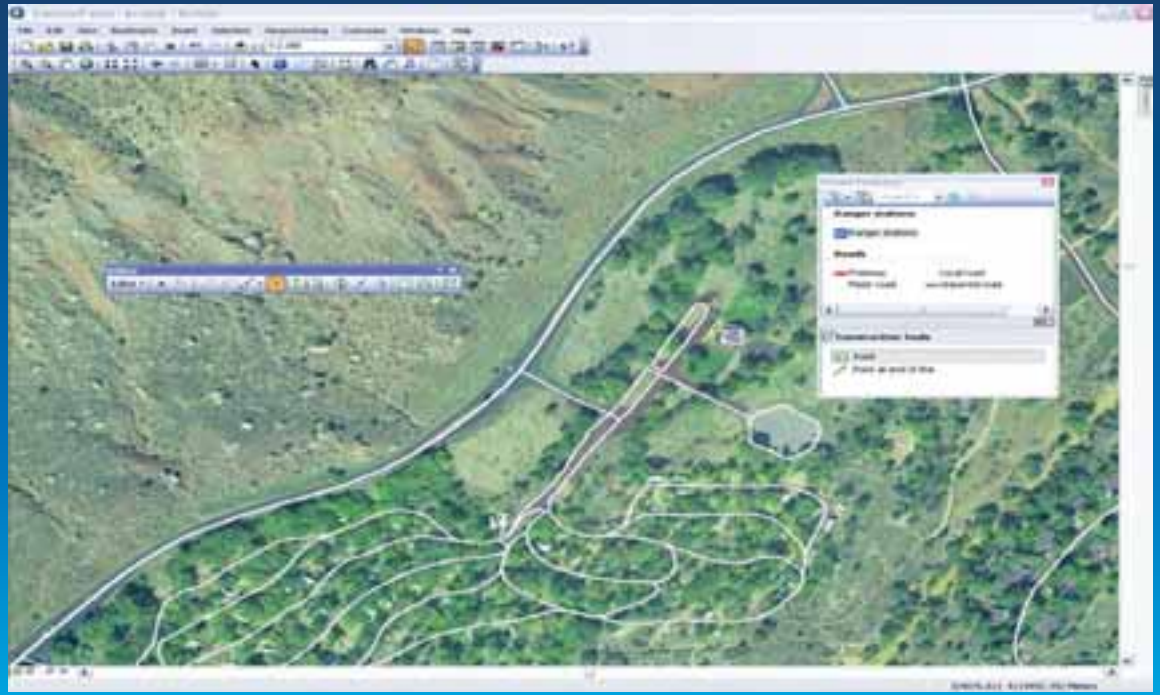
Solution Strategy

Integrate Cyber into existing Operational Pictures



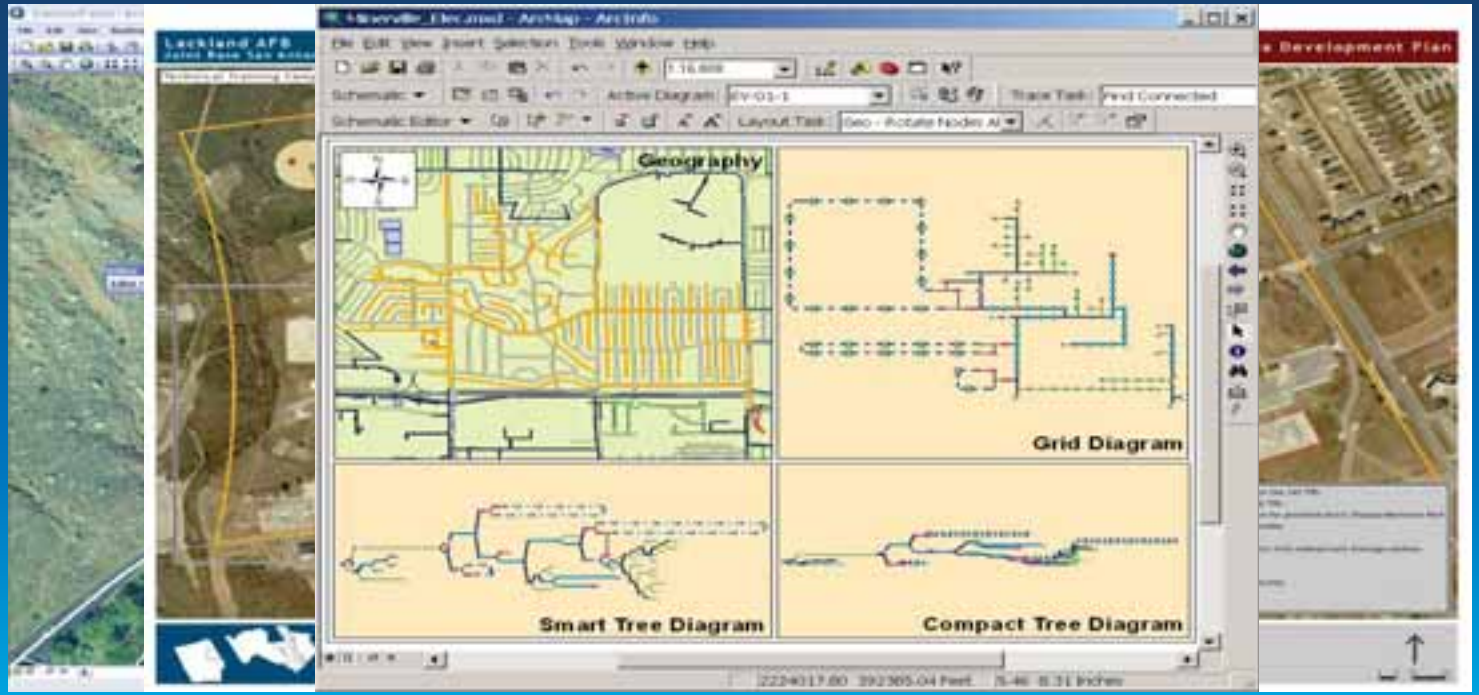
Cyber Demo

Cyber Summary

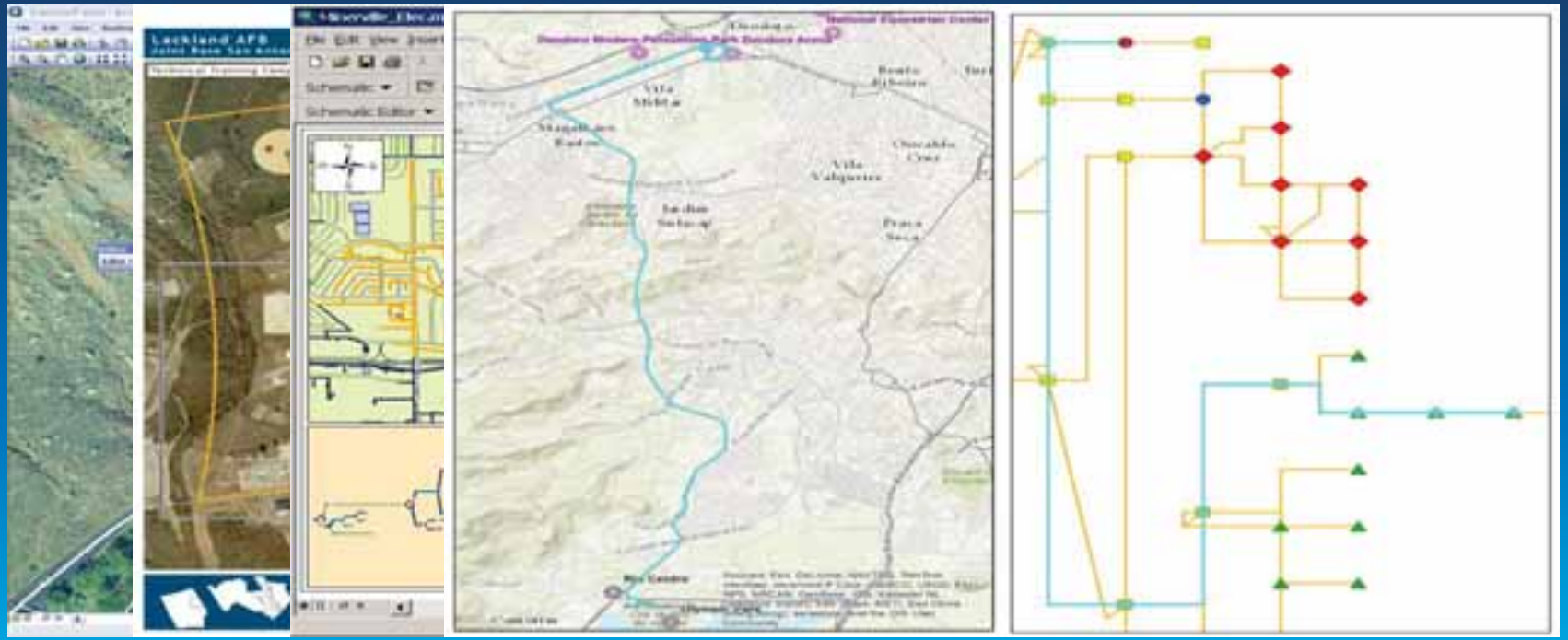


Cyber Summary

Cyber Summary



Cyber Summary



Cyber Summary

Questions?

Understanding our world.