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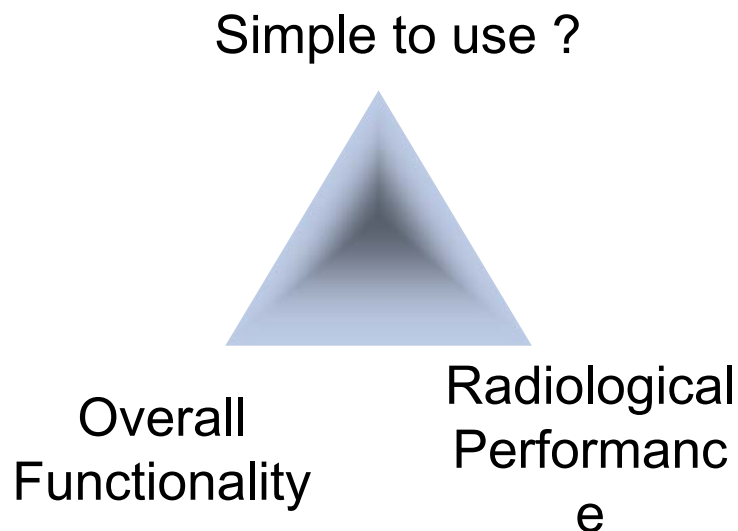
Radiation Monitors - Commodities of Tomorrow in an Integrated Network?

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Personal Thoughts...

Equipment for radiation monitoring provides more and more functionality

- Do we have time to use all functions ?
- Do we have time to analyze the data ?
- Who is sitting on the driver's seat ?

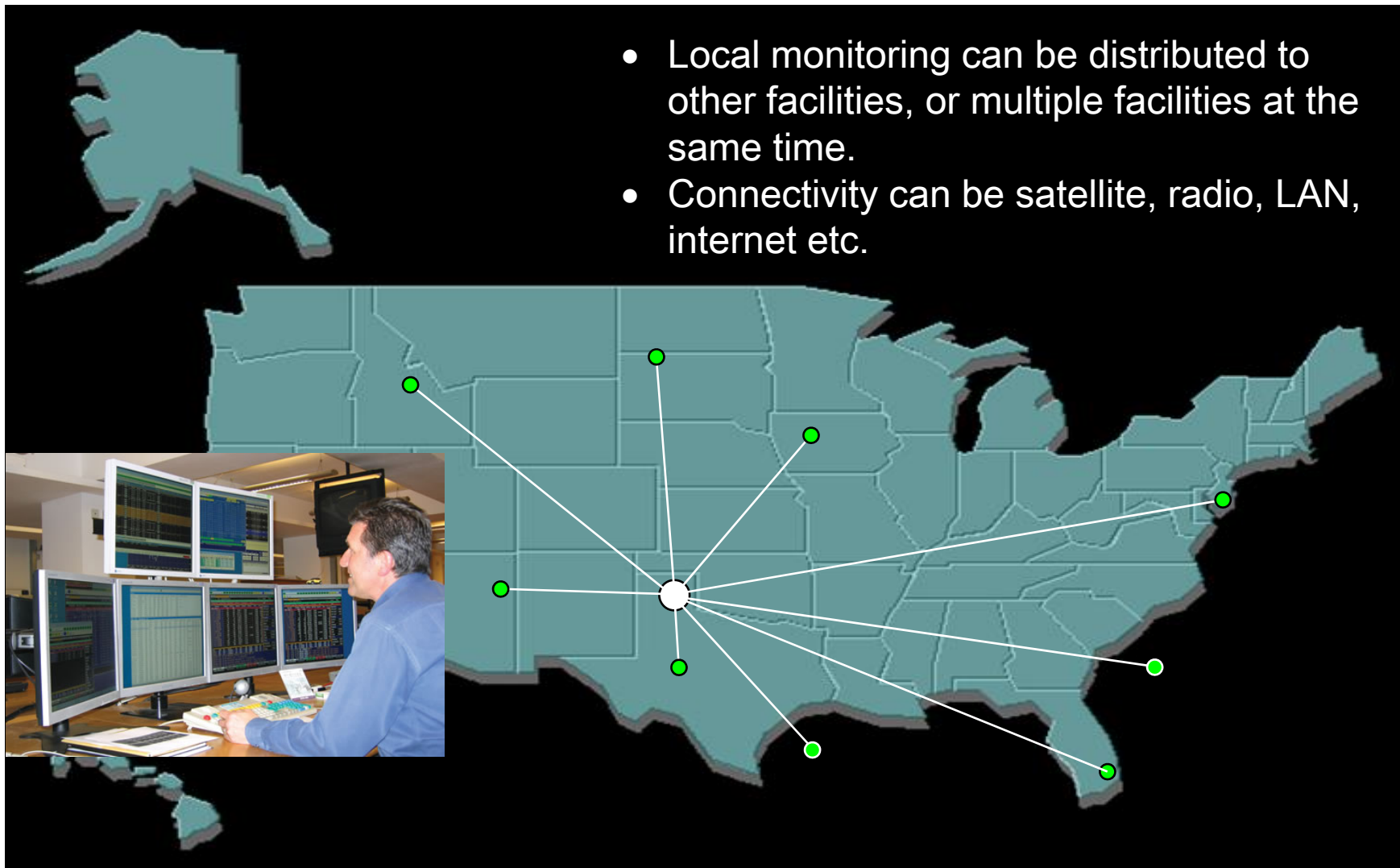


Head count dedicated to radiation protection is in decline. Possible reasons:

- Perception (RP – The necessary evil)
- Less Newbies

The Plan...

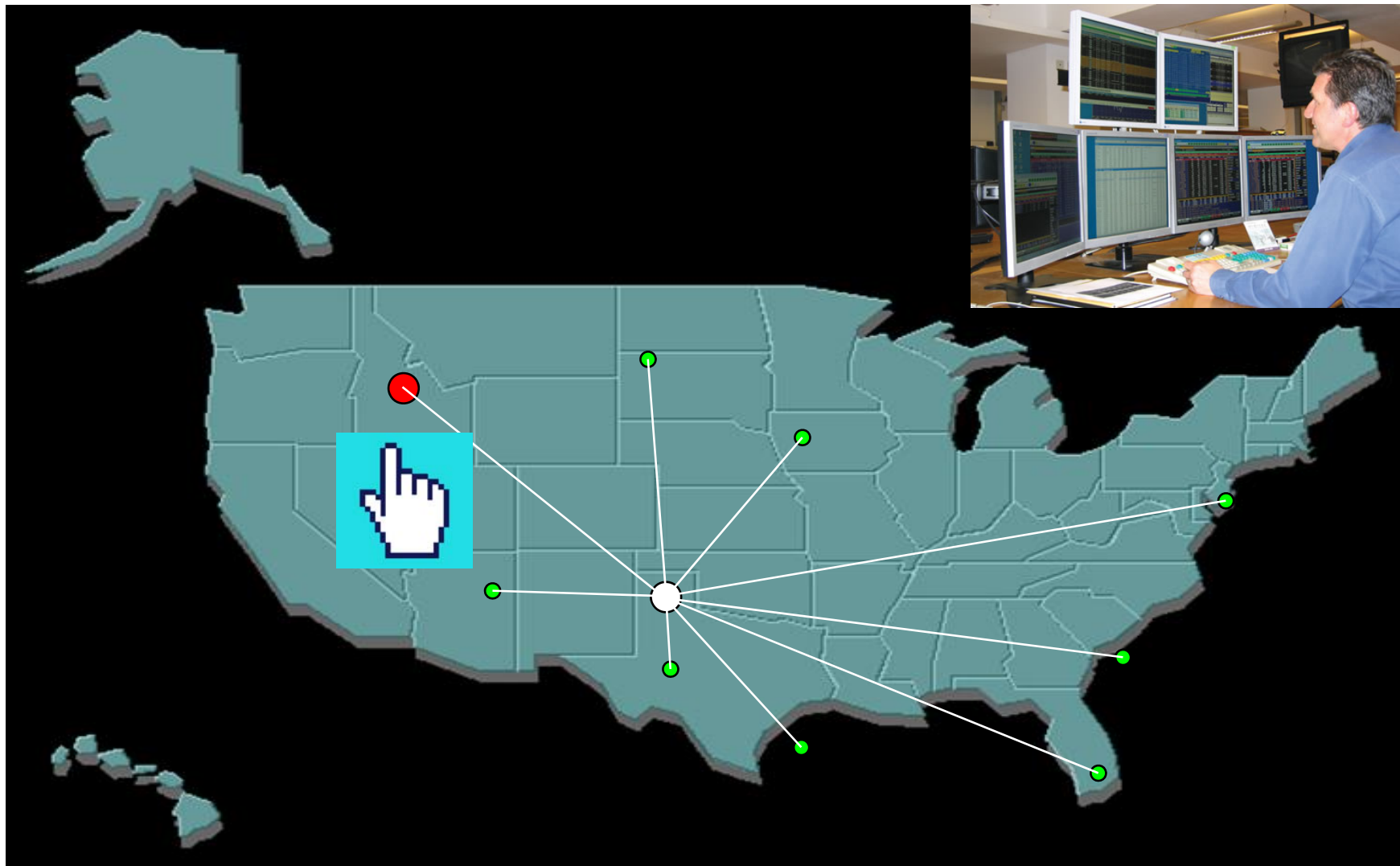
- Local monitoring can be distributed to other facilities, or multiple facilities at the same time.
- Connectivity can be satellite, radio, LAN, internet etc.

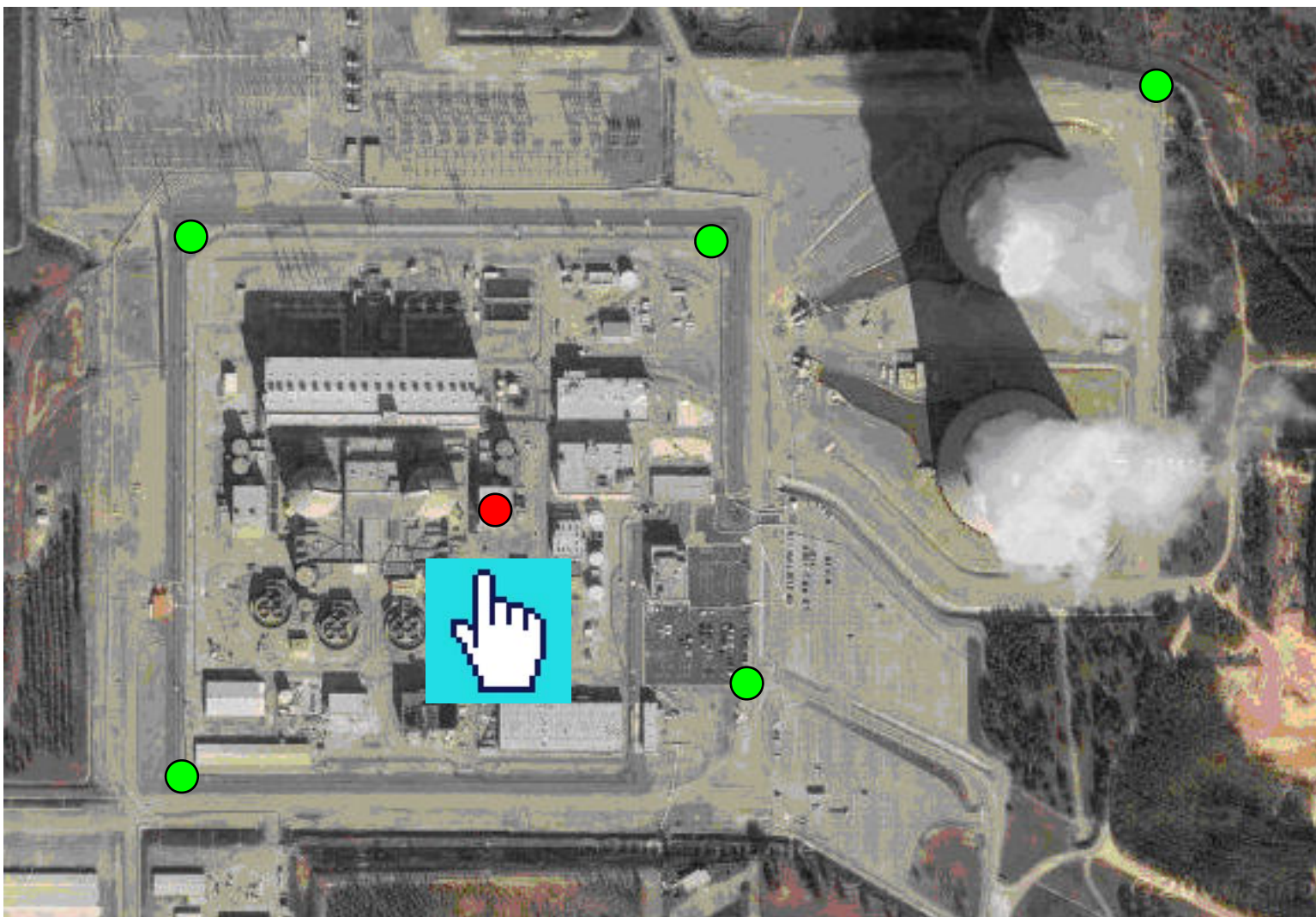


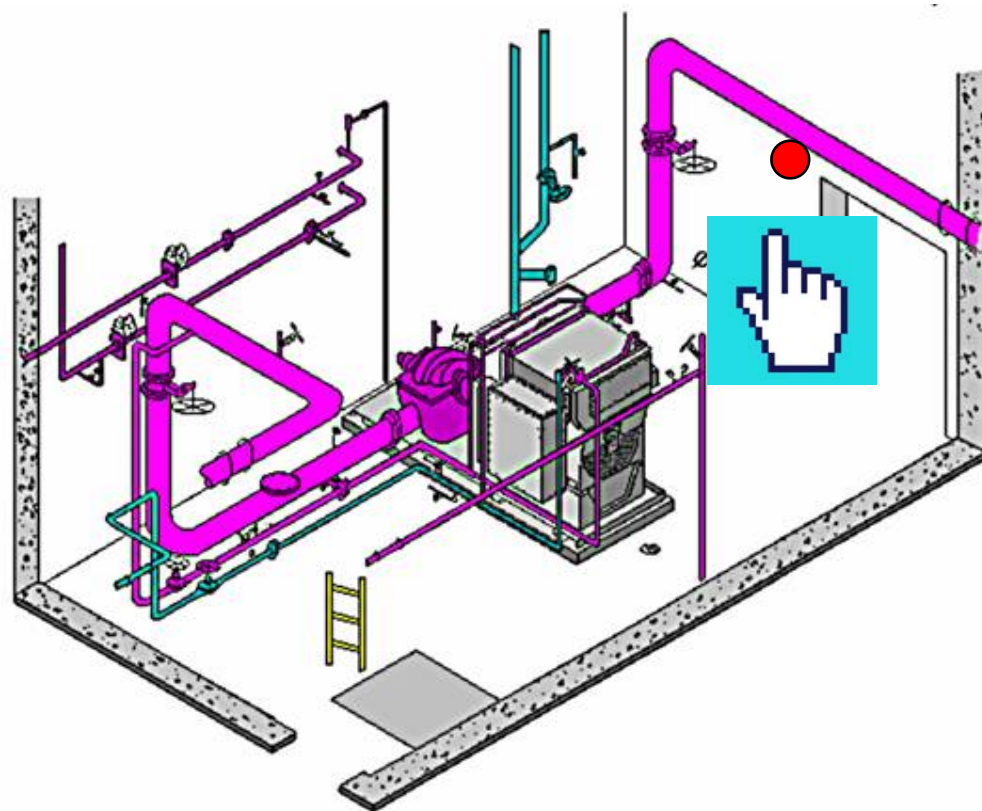
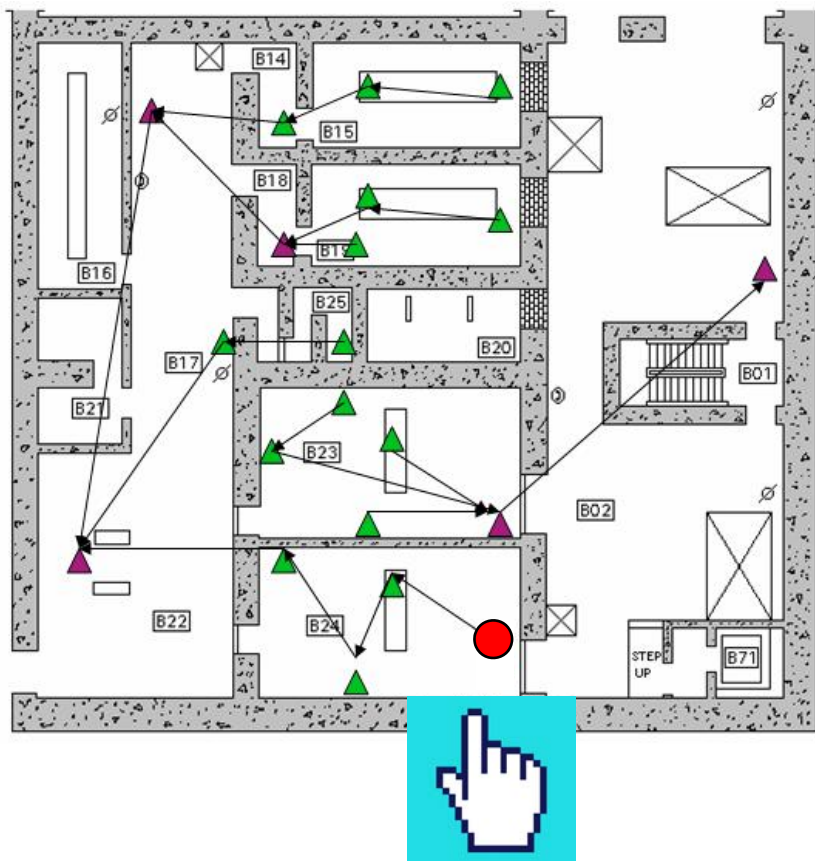
The Vision...

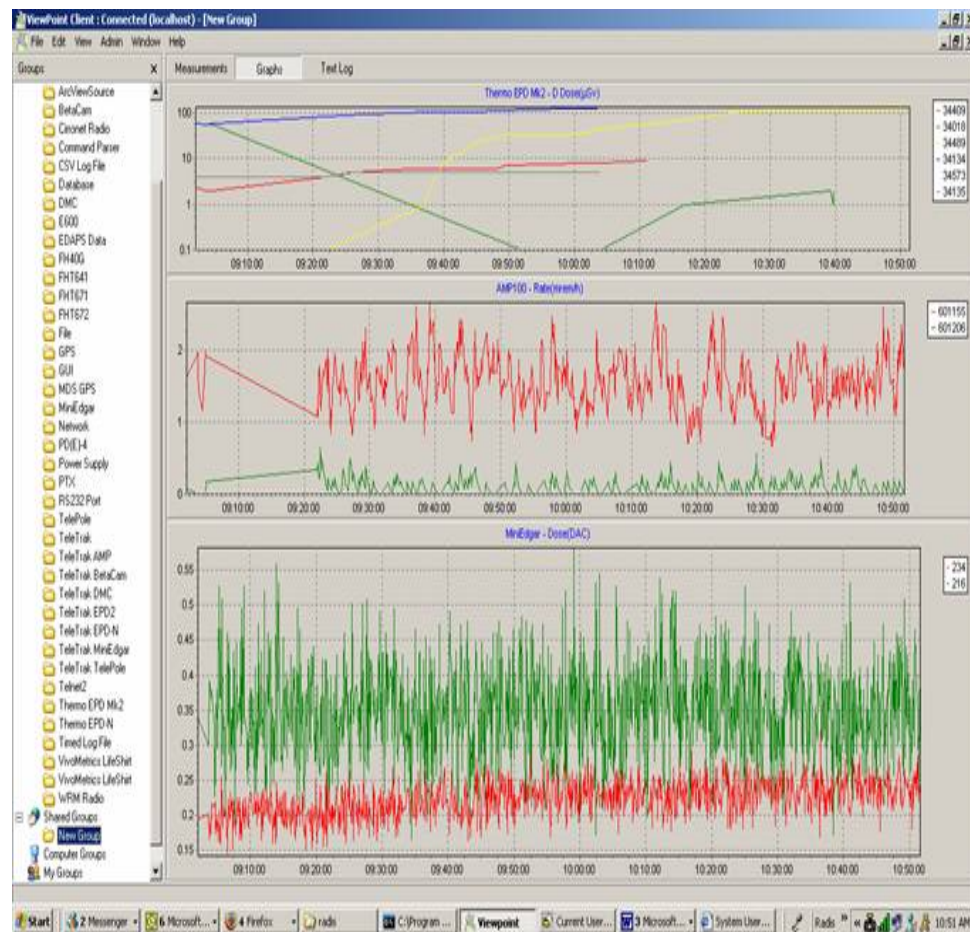


Stay Cool, Until...



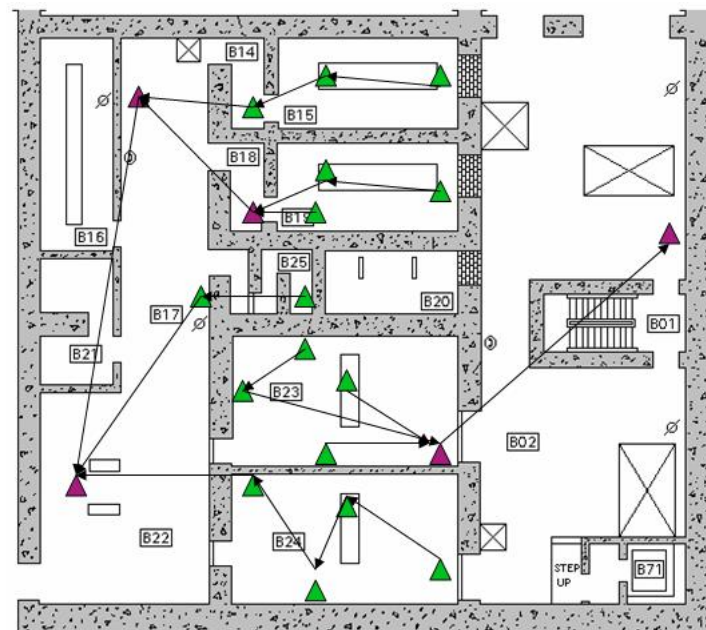






Thermo Scientific's Approach: ViewPoint

- Local communications through a self healing node network – if a single node fails, messages are automatically re-routed through alternate paths
- In an expanded system, each node (△, ▲) serves as a sensor transmitter as well as a repeater
- Some nodes (▲) act as a bridge to allow data to be put on another wireless or wired network to get the data to a host software system



- Multiple redundant communications paths – the more mesh radios the more redundancy
- Self-organizing with little or no wireless configuration.
- High service quality through permanent error checking

Thermo Scientific's Approach: ViewPoint

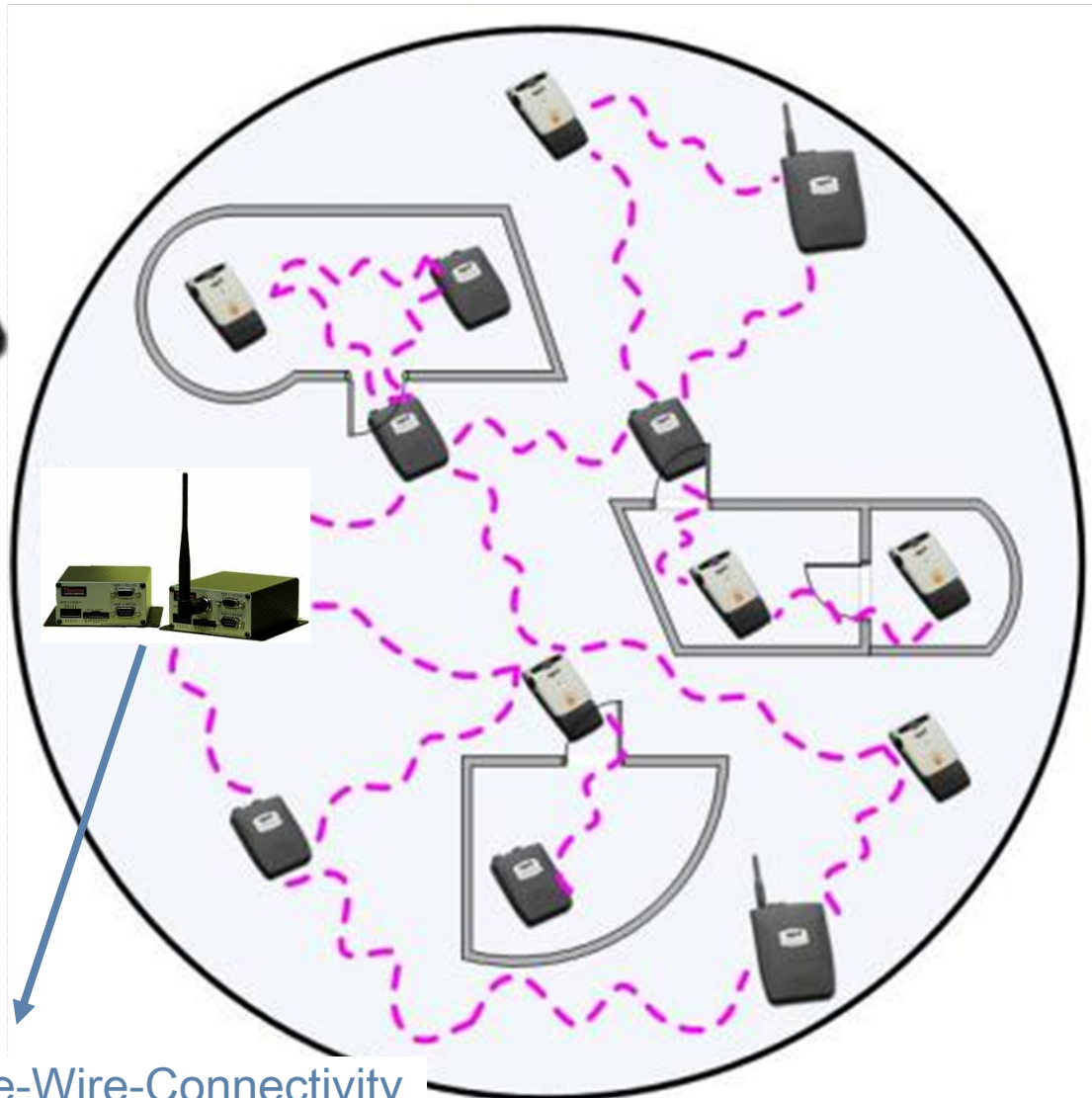
Thermo Fisher EPD
Transmitter
Repeater



Sensor Transmitter
Repeater



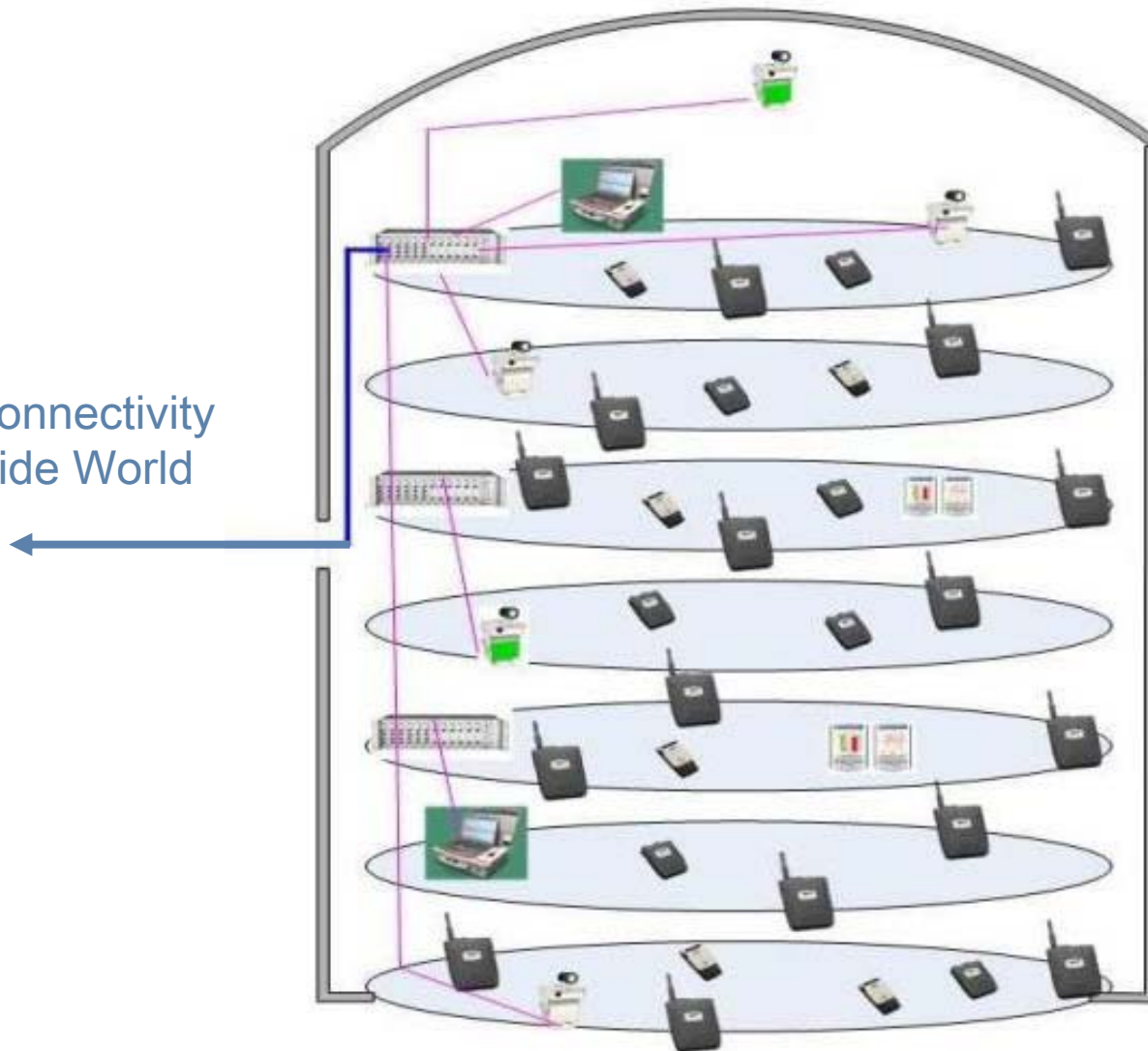
Sensor Transmitter
Repeater
Bridge



One-Wire-Connectivity
to the Outside World

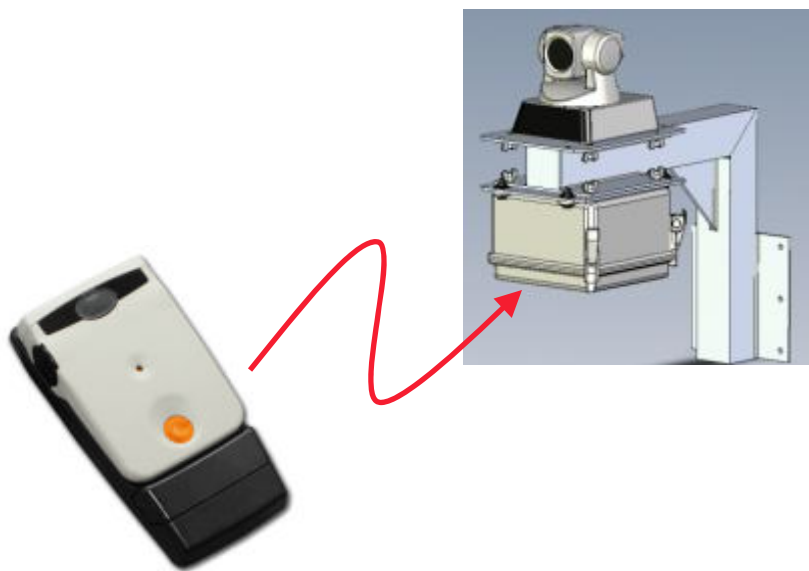
Thermo Scientific's Approach: ViewPoint

One-Wire-Connectivity
to the Outside World



Thermo Scientific's Approach: ViewPoint

- Increased Viewing Sensitivity
- Watch and Decide
- Video History
- ALARA History



Real Time Personnel Dosimetry & Data Management

- Thermo Fisher EPD Real Time Dosimeters
- Personal Telemetry System
- Web-based Dose Management System (webREMS)

Area Monitoring

- Comprehensive Radiation Detector Portfolio
- Fully Networkable & Wireless Compatible

Value for
YOU
through

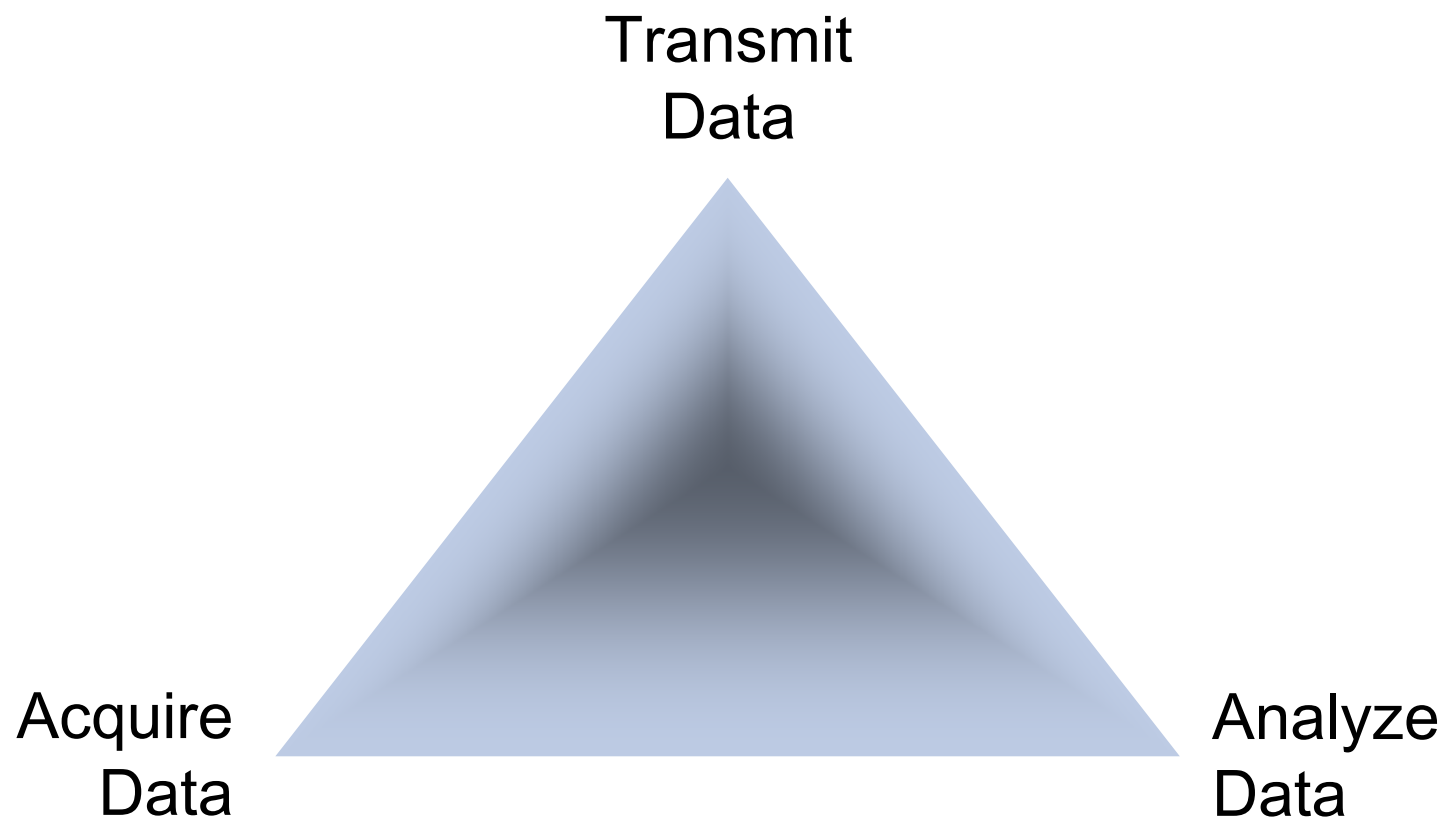
Collective Dose
Decline

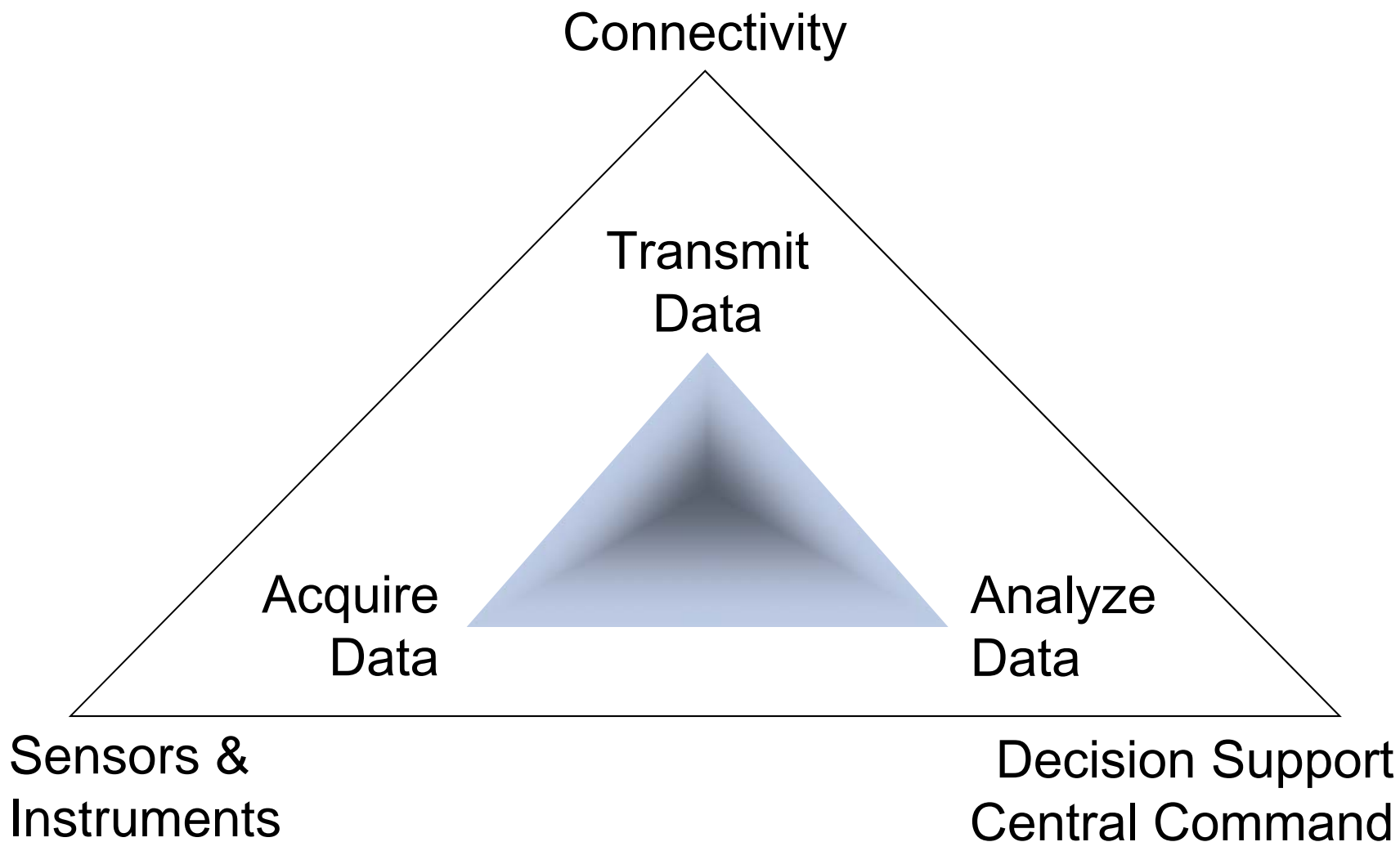
Integrated Remote Monitoring

- Centralization of Audio/Video & Radiation Monitoring Equipment
- Software System to link System together (ViewPoint)

Site Environmental & Perimeter Monitoring

- Environmental Sensor Monitors
- Real Time GPS and Mapping





ViewPoint @ NPP & DOE

ViewPoint Sensors & Instruments

Personal

- EPD-Mk2, EPD-N2
- DMC2000
- RadEye
- Physiological Data

Portable

- Interceptor (SPRD)
- IdentiFINDER (RIID)
- Matrix ESP
- Ludlum 2241, ADM 300
- 3rd Party System Interface

Fixed

- AMS-4, ABPM 302, iCAM
- Temperature, Humidity, Vibration, Pressure, Flow

Mobile / Vehicle-based

Connectivity

Communications

- Satellite
- Wireless
- Cellular (GSM, iDEN)

Networking

- LAN
- Serial RS232 / 485
- Hard Cable / Wired
- Access Points
- PBX, Fiber Modem

Decision Support Central Command

Server

- ViewPoint Server
- Plug-in (Protocol)
- Database
- Web Mapping

ViewPoint DS Viewing Stations

- ViewPoint Basic Client
- ViewPoint Alarm Client
- ViewPoint Data Logging Client
- ViewPoint PDA Client
- ViewPoint Access Client
- ViewPoint Instrument Management
- ViewPoint Survey Client
- ViewPoint Mapping Client

Why THIS Approach ?

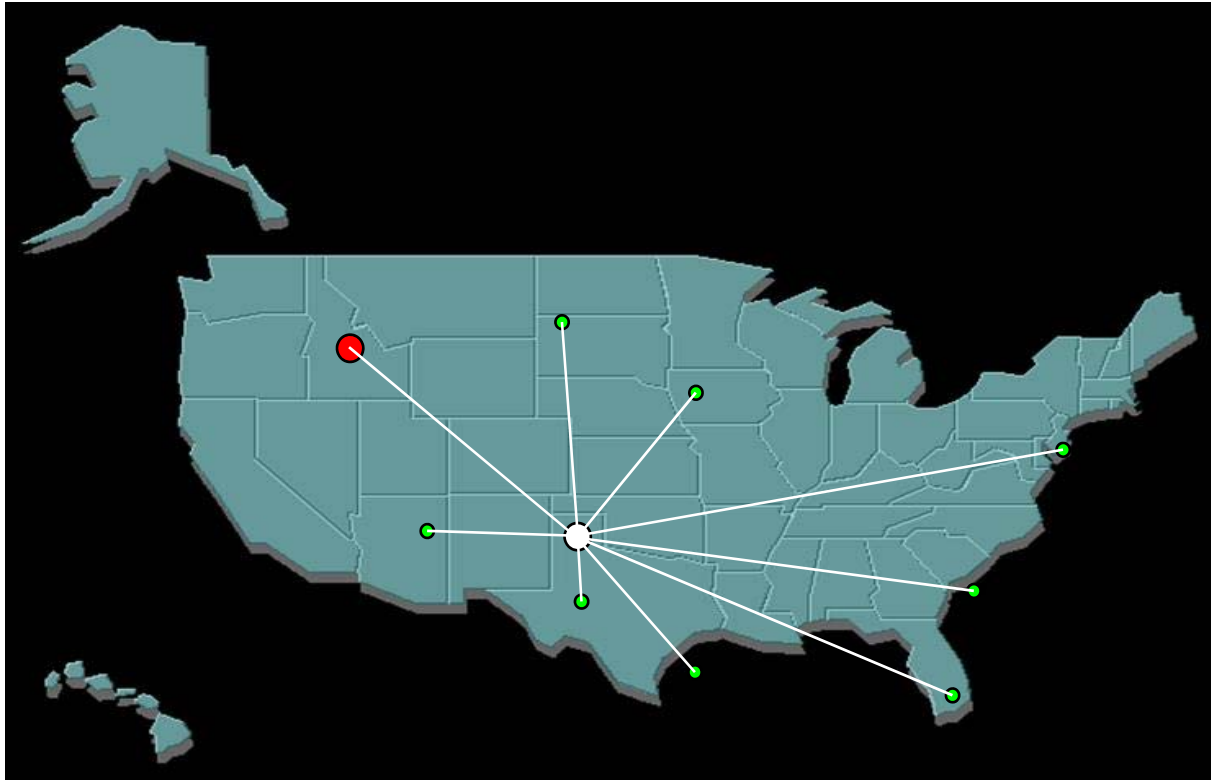
- Modular & Scalable Design:

Builds as YOU go & uses ONLY what you need: design a system for your needs today; expansion capabilities for the future

- Customers can utilize invested capital

USE WHAT YOU HAVE! Supplement existing inventory of equipment with new Thermo Fisher Scientific products and ViewPoint to achieve the desired functionality. Every sensor that talks can be implemented...if you teach us its mother tongue!

Valuable Byproducts



- Make use of your "Expertise Pool"
- "Real Time Training" through data replay

Summary

- ViewPoint is an affordable Personal & Environmental Monitoring Network that can provide unmatched performance:
 - Capable of collecting data from many types of equipment from any location
 - All in REAL-TIME
- ViewPoint is an expandable platform that Thermo Fisher Scientific is committed to provide for all present & future potential sensors, such as:
 - *Radiation*
 - *Chemical*
 - *Biological*
 - *Explosives*

Viewpoint Design Applications

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Danke!



Takk!



¡Gracias!



Toda!

Thanks!



Obrigado!



Merci!



Bedankt!

