GS2468-R: How to survive in multi-vendor GIS environment

Eric Vincent
Systems Analyst – Southern California Edison

Serguei Sokolov
Solution Architect – Autodesk

Roundtable class objectives

- Learn from peers' experience
- Generate new ideas and solutions
- Note lots of cool hints, ideas, and action items to be used later

Session format

Here is how we are planning this session:

- Describe Survey and Identify topics
- Describe SCE's challenges and solutions
- Discuss selected topics (~10min / topic)
  - Share experience
  - Generate ideas on how to address/solve
  - Try to reach a common understanding of the topic
- Summarize key "take aways" and conclusions

Rules of Engagement

Guidelines for good discussion:

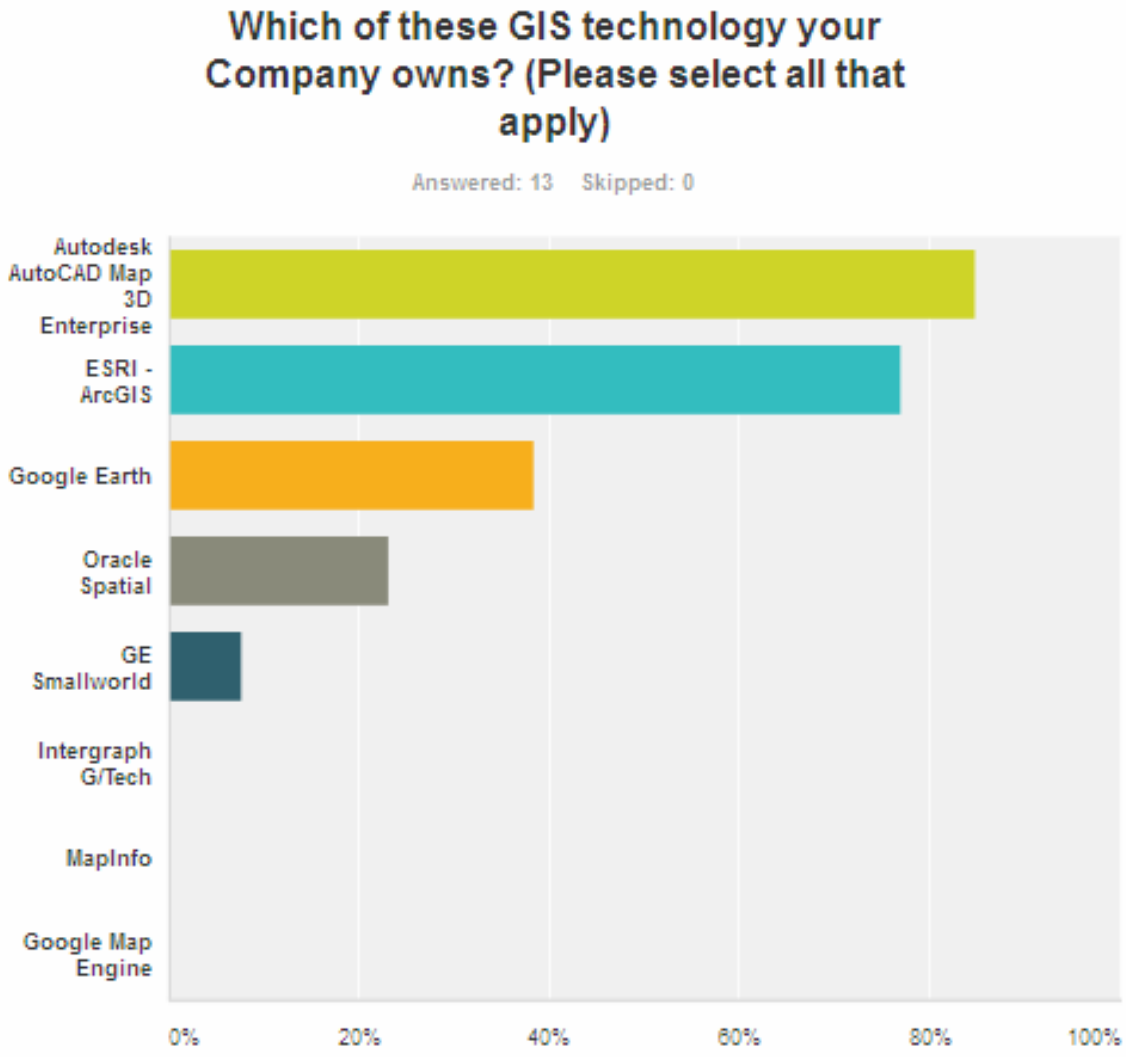
- When you comment make it snappy
- Share solutions not gripes
- Talk about what works for you
- … and No complaining about Autodesk ☺

Survey

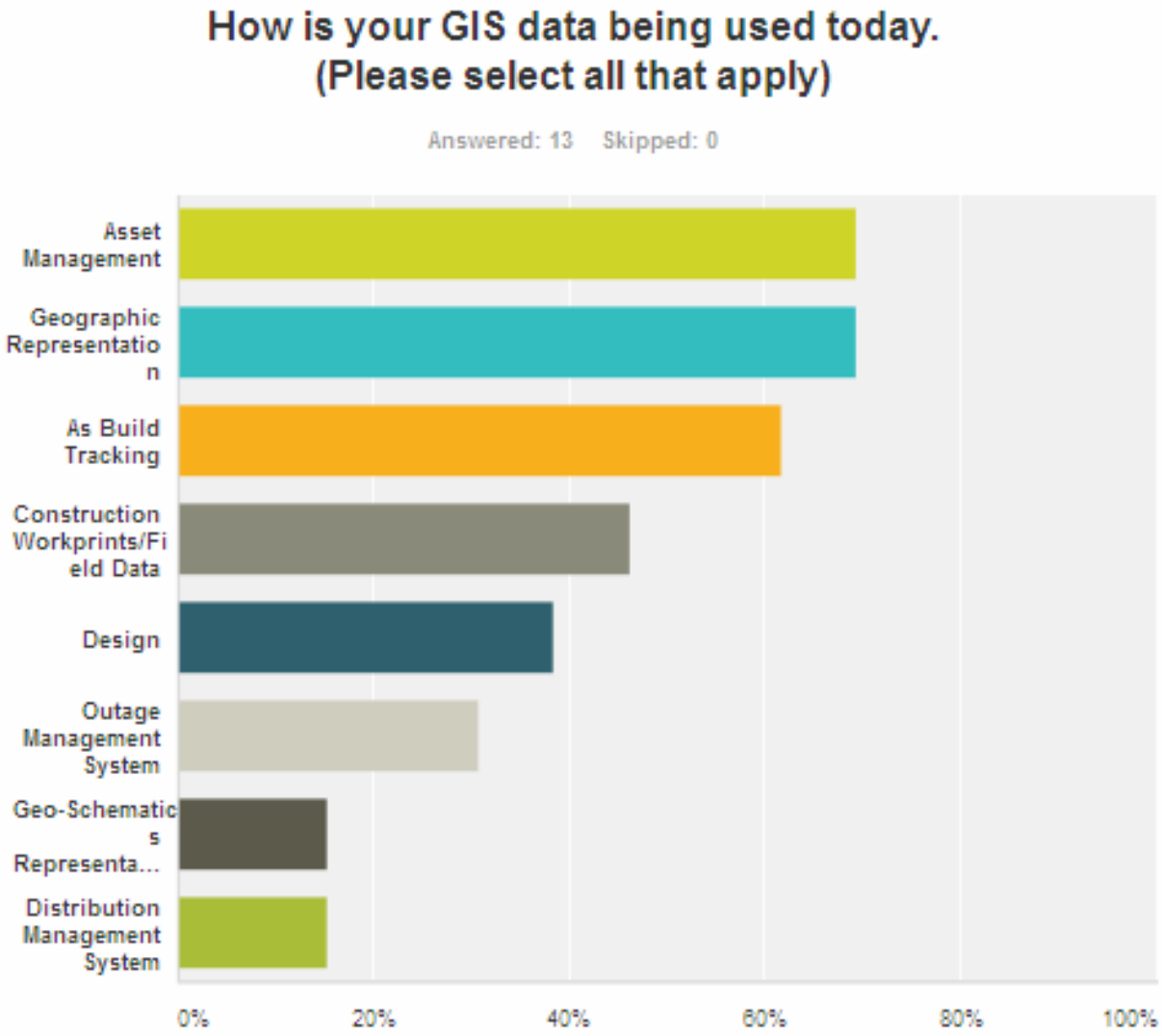
We asked you:

- Q1: Which of these GIS technology your Company owns?
- Q2: How is your GIS data being used today.
- Q3: What other Enterprise system should be integrated with GIS?
- Q4: Is it important for you to create a “single point of truth” for all records in your Organization?
- Q5: Is it important for you to maintain different graphic representations/views of the plant assets? (e.g. Design, Geographic, Geo-schematic, One-line diagram, etc...)

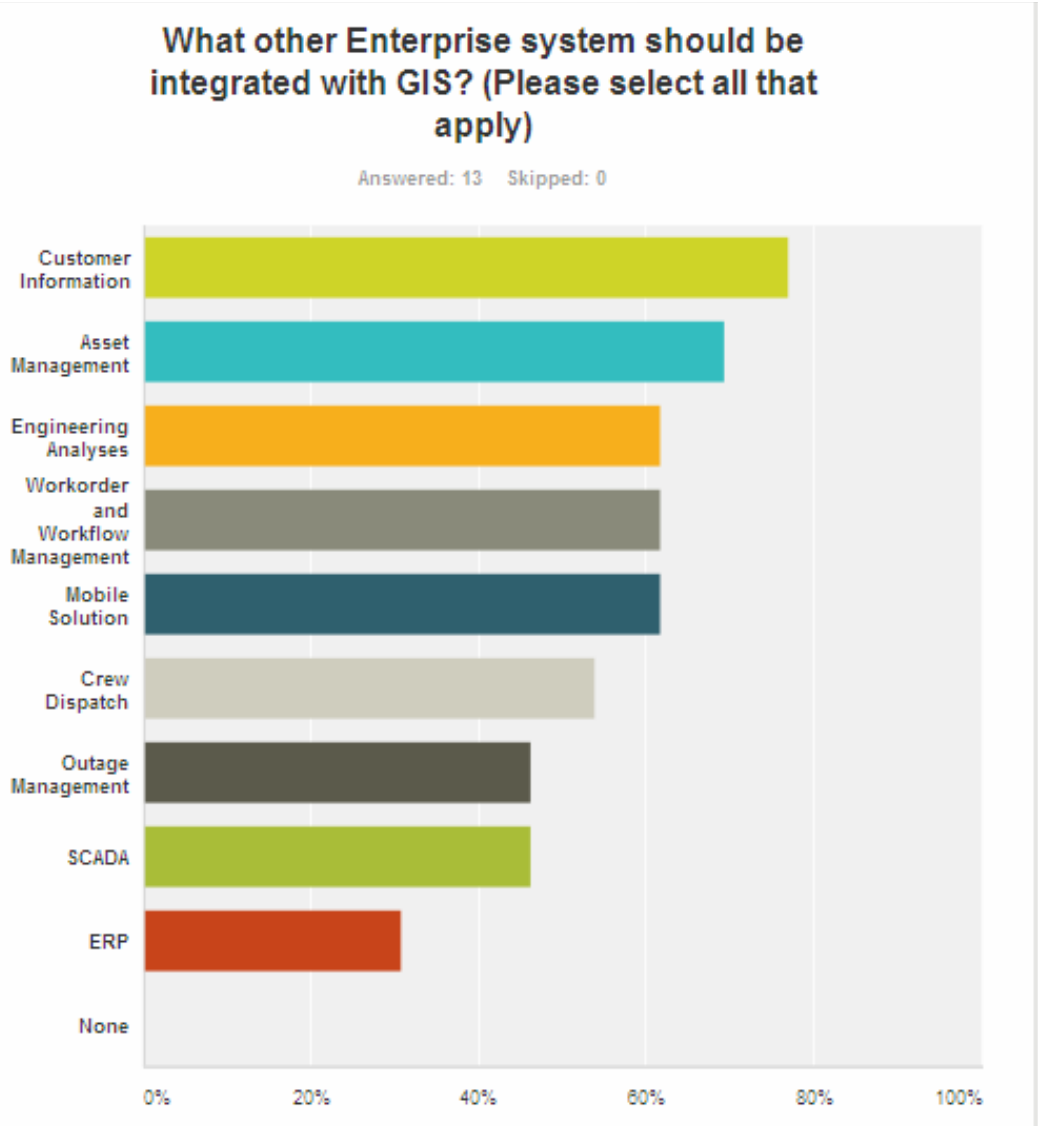
Survey – Q1


Which of these GIS technology your Company owns? (Please select all that apply)
Answered: 13 Skipped: 0
Autodesk AutoCAD Map 3D Enterprise
ESRI - ArcGIS
Google Earth
Oracle Spatial
GE Smallworld
Intergraph G/Tech
MapInfo
Google Map Engine
0%
20%
40%
60%
80%
100%

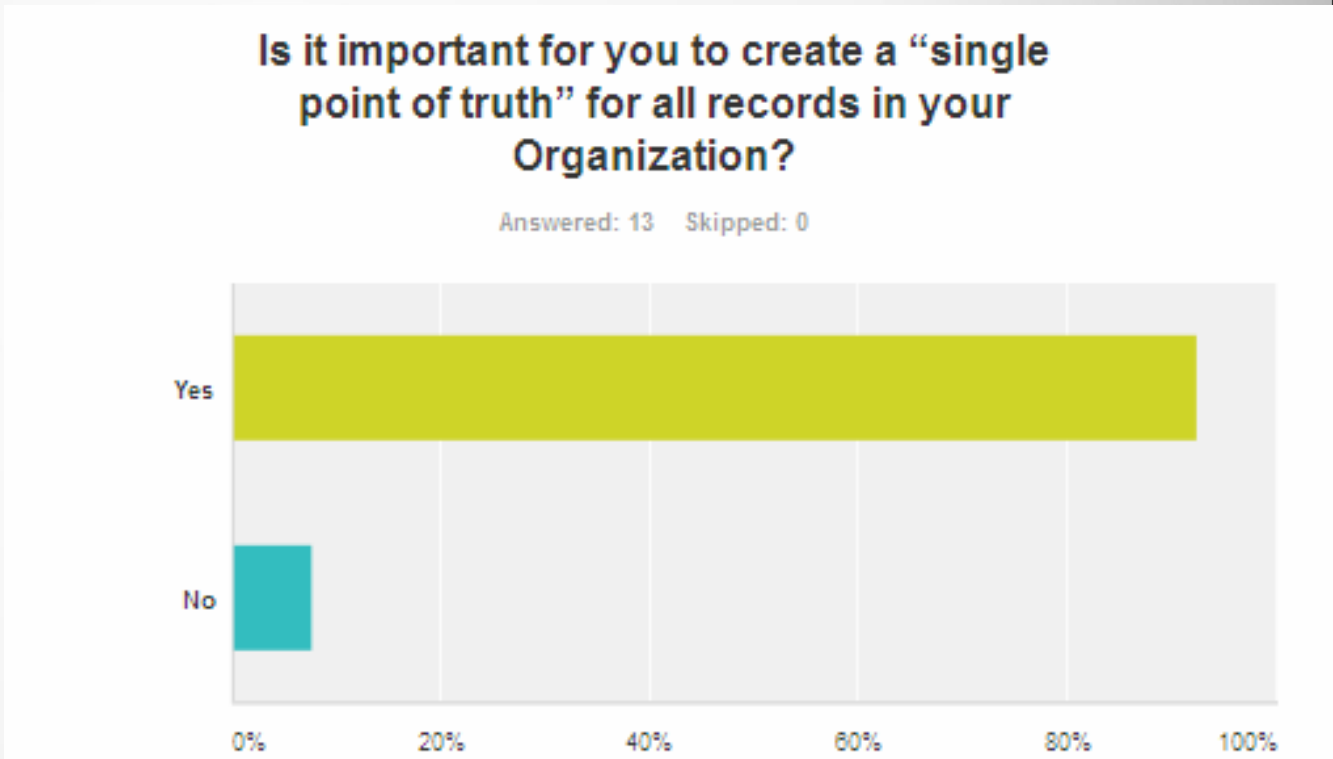
Survey – Q2


How is your GIS data being used today.
(Please select all that apply)
Answered: 13 Skipped: 0
Asset Management
Geographic Representation
As Build Tracking
Construction Workprints/Field Data
Design
Outage Management System
Geo-Schematics Representa...
Distribution Management System
0%
20%
40%
60%
80%
100%

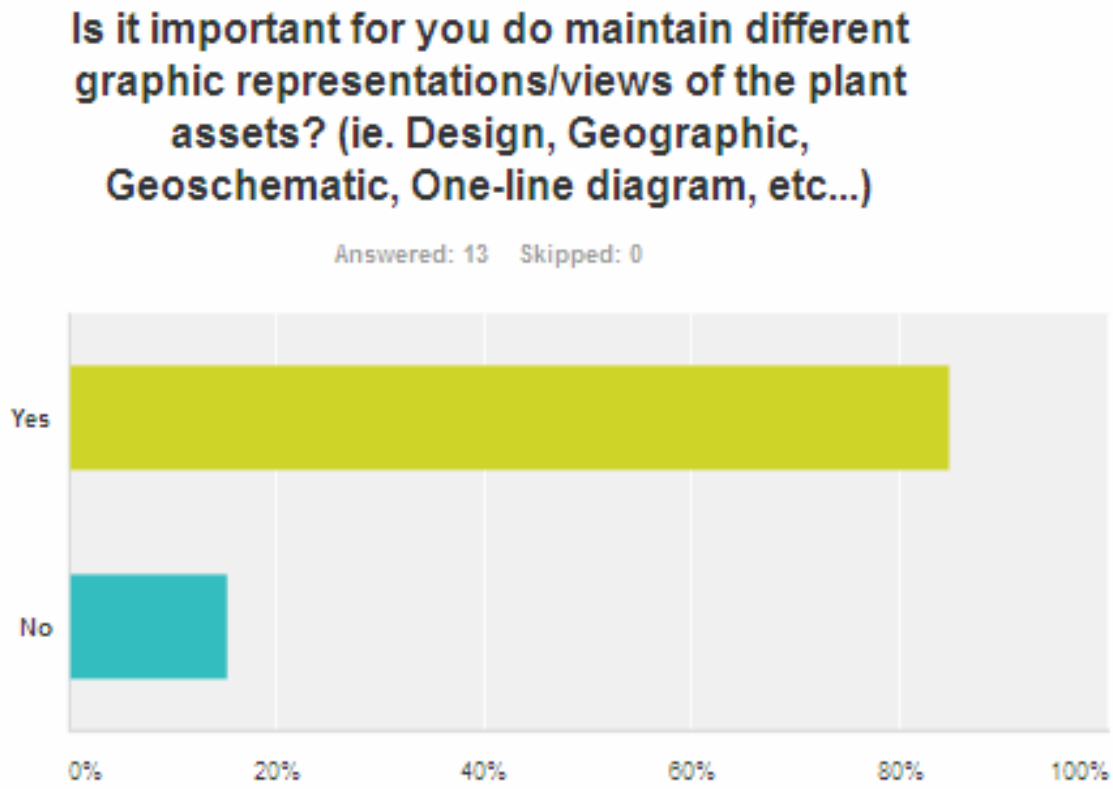
Survey – Q3


What other Enterprise system should be integrated with GIS? (Please select all that apply)
Answered: 13 Skipped: 0
Customer Information
Asset Management
Engineering Analyses
Workorder and Workflow Management
Mobile Solution
Crew Dispatch
Outage Management
SCADA
ERP
None
0%
20%
40%
60%
80%
100%

Survey – Q4


Is it important for you to create a "single point of truth" for all records in your Organization?
Answered: 13 Skipped: 0
Yes
No
0%
20%
40%
60%
80%
100%

Survey – Q5

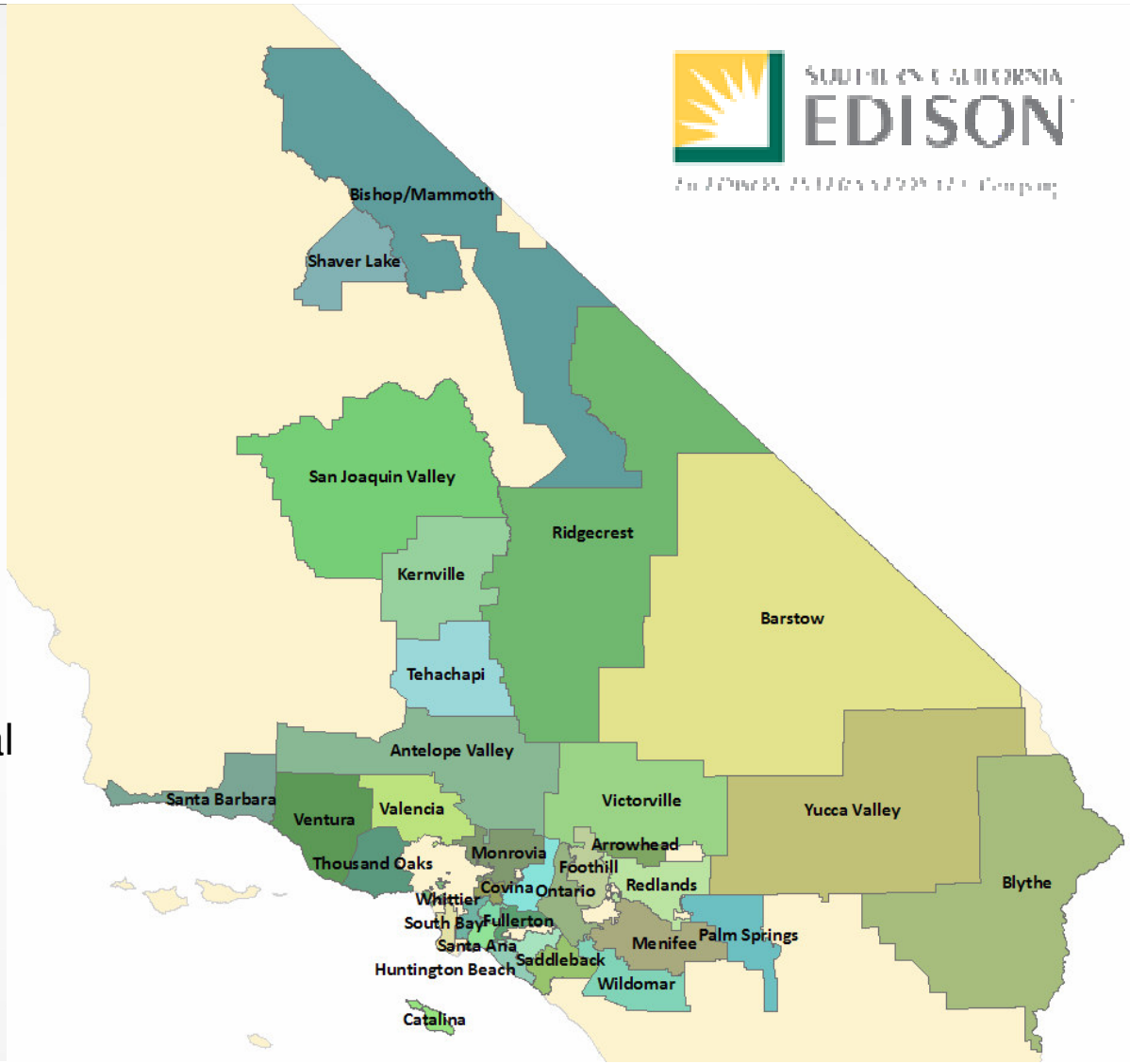

Is it important for you do maintain different graphic representations/views of the plant assets? (ie. Design, Geographic, Geoschematic, One-line diagram, etc...)
Answered: 13 Skipped: 0
Yes
No
0%
20%
40%
60%
80%
100%

Today's Topics

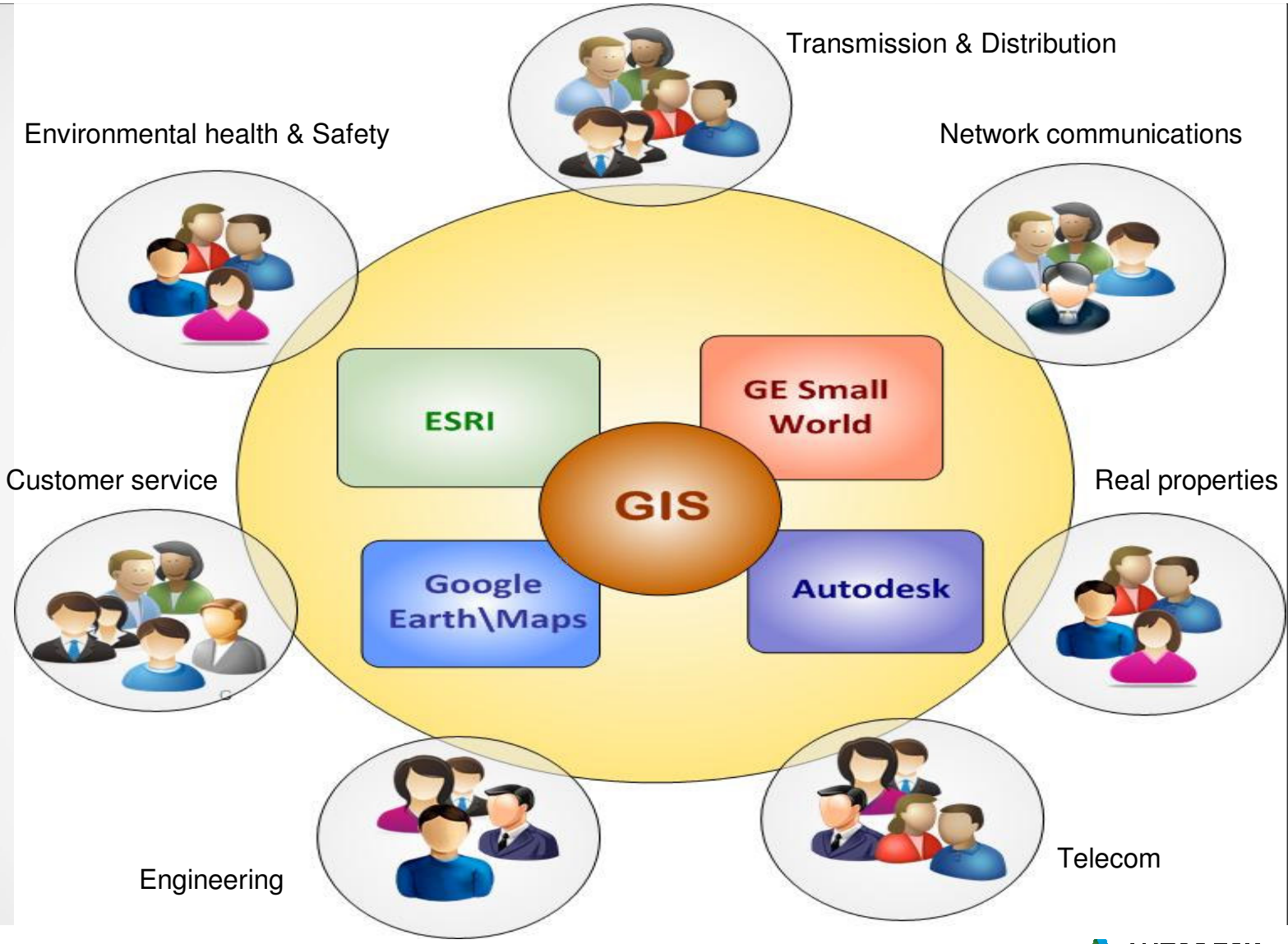
- Topic 1: Where is your geo-spatial data maintained?
- Topic 2: How do you merge/overlay geo-spatial data from source systems?
- Topic 3: Do you maintain different graphic representations/views of the plant assets (Geographic vs Geo-Schematic)?
- Topic 4: How do you integrate multi-vendor systems into one solution?
- Other?

About SCE

- Provide power to nearly 14 million people
- 50,000 square miles of service area
- 3.7 million Residential
- 5,000 Large Commercial/Industrial
- 280,000 Small Commercial/Industrial
- Governmental Agencies



GIS at SCE

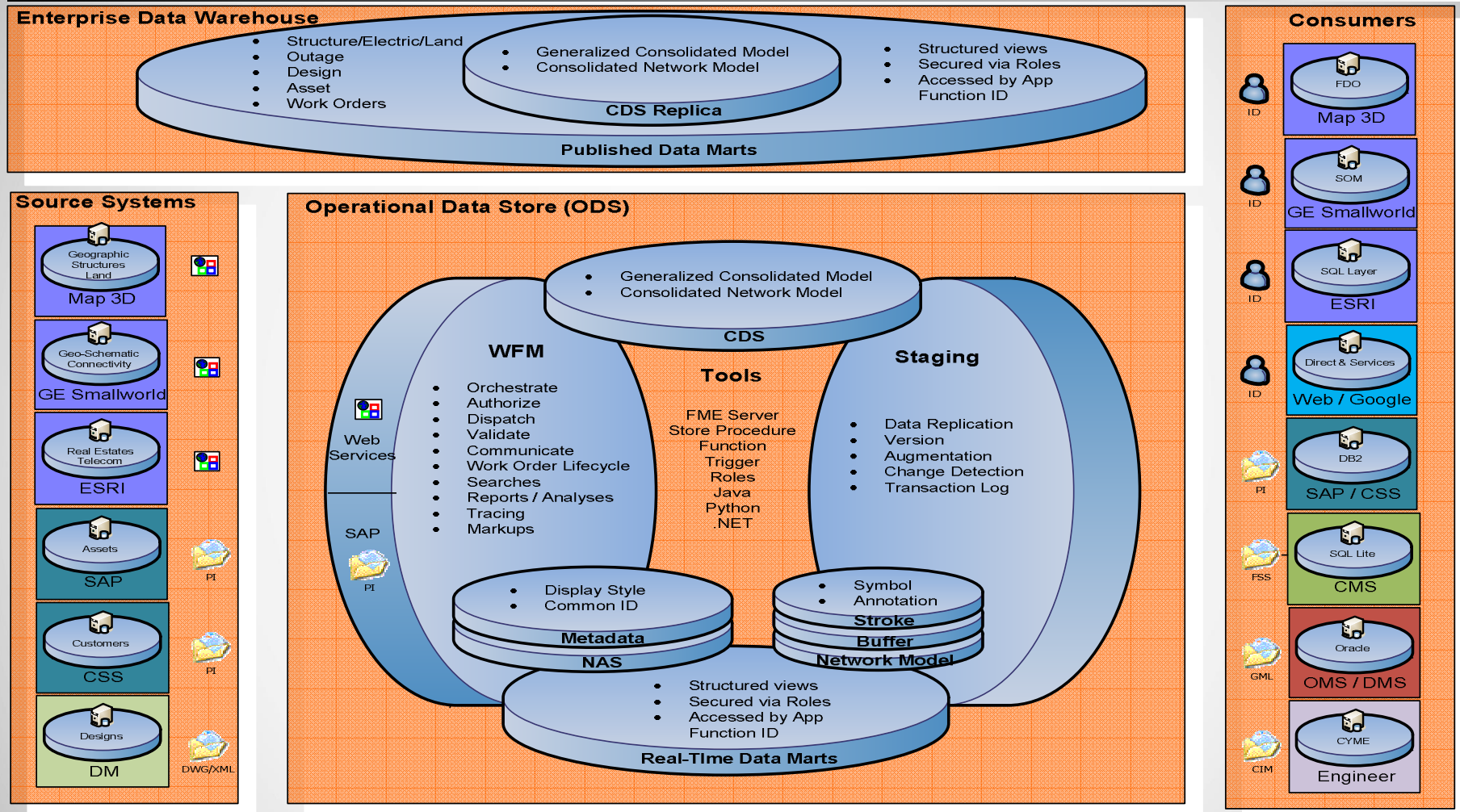

Transmission & Distribution
Environmental health & Safety
Network communications
ESRI
GE Small World
GIS
Customer service
Real properties
Google Earth\Maps
Autodesk
Engineering
Telecom

Multi-vendor GIS environment
The two options

- One vendor complete solution
  - Not everyone happy with functionality
  - Still need to sync data between different instances (ex. CMS, OMS)
  - Complete transformation – (OCM, work arounds, custom functionality, etc.)
  - Highly dependent on the vendor vision and direction of the suites.

- Multi-vendor complete solution
  - Use the tools that best suit your needs
  - Consolidate your data in a central location

Enterprise Data Manager



Roundtable Topic #1

Where is your geo-spatial data maintained?

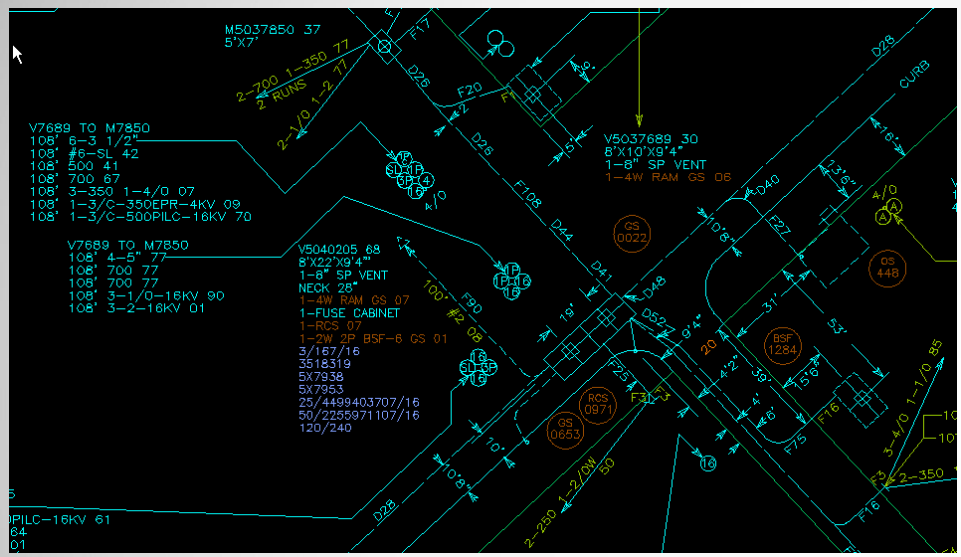
- What types of geo-spatial data do you maintain (design, geographic GPS locations, schematics, Plant maps, tiles or seamless)?
- Do you have silos of data?
- Why in your organization geo-spatial data is maintained in different systems?
- How do you know what value and in what systems is correct?
- How difficult is it for you to consolidate and report?
- Could one source of truth be more effective?

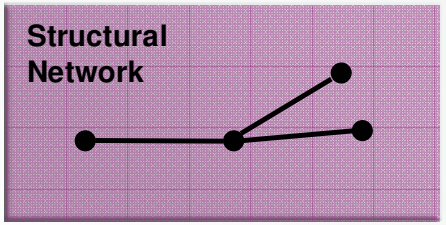
Roundtable Topic #2

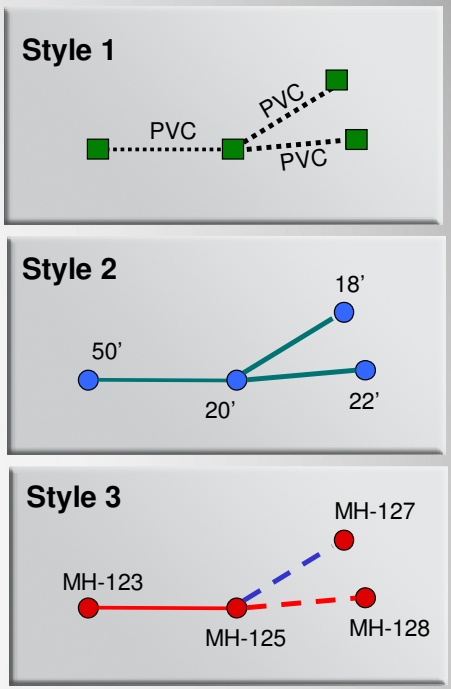
How do you merge/overlay geo-spatial data from source systems?

- What are the best practices you have established for the source vendor systems to simplify data merge/mashups (e.g. Common projection, domain values, common structural network as foundation for plant assets)?
- How do you control data access and maintenance (e.g. Enforcing data ownership, defining user profiles, separating data at class, attribute, domain levels)?
- What solutions for data integration have you tried (FME, Custom)? What worked for you?

The structural network







- Represent the real location in the ground of all assets
- Accurate distances
- Electrical relation to structure is key

Roundtable Topic #3

Do you maintain different graphic representations/views of the plant assets?

- What type of maps do you maintain? Design, Geographic location, Geo-Schematic, One-line diagrams?
- What type of maps are used in the office? In the field?
- Do you create your data with paper output in mind (e.g. Focused on white space, scale, title block) or for software solution to consume / display visualization?
- How do you maintain consistency in graphic presentation (maps) between Source systems?

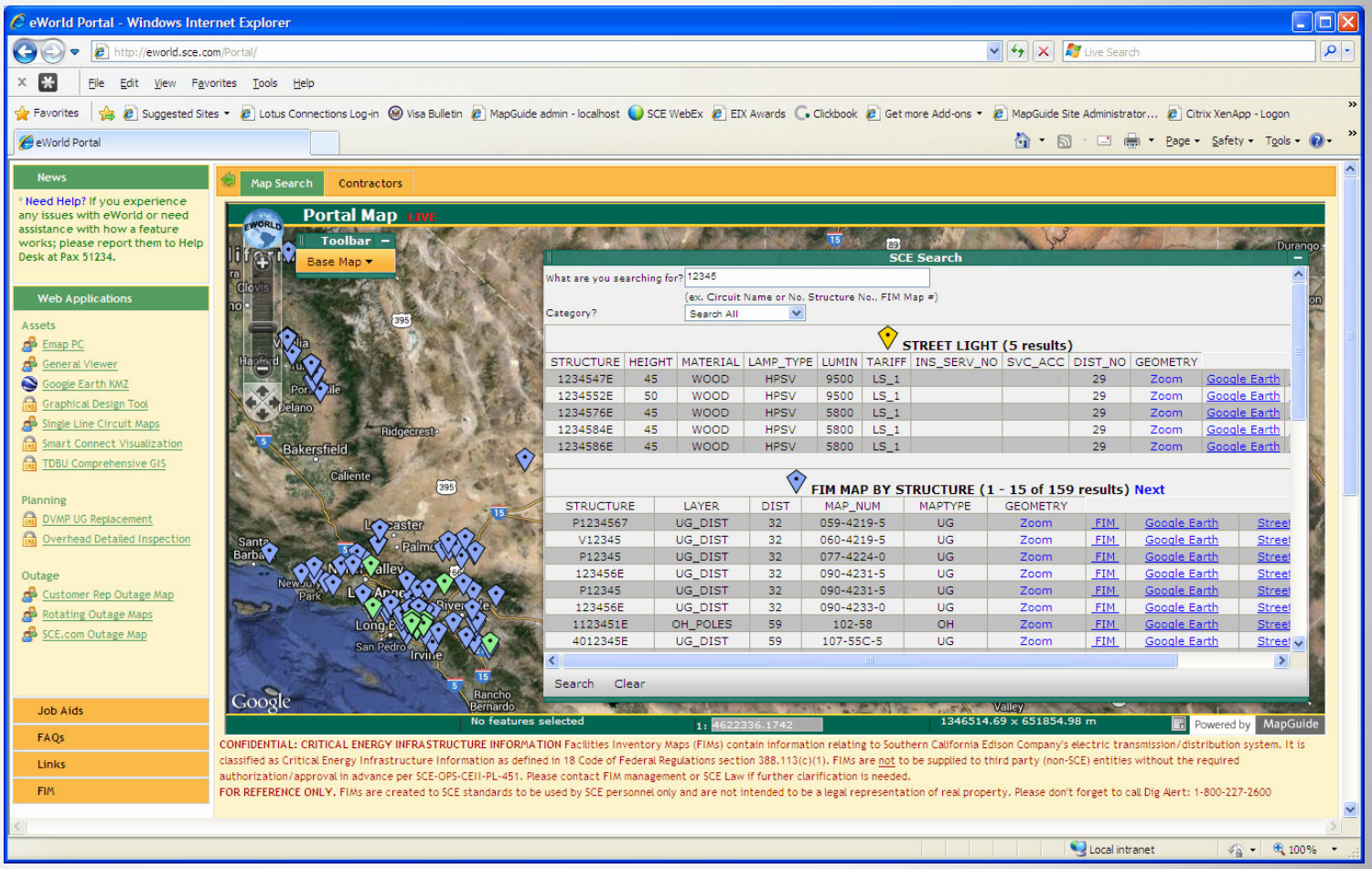
Roundtable Topic #4

How do you integrate systems into one solution?

- Why integration between systems is important for your Organization? What problems are you trying to solve?
- What integration technologies / frameworks you had tried and what actually worked for you?
- Have you employed any common model / metadata standards / Global ID? Do you believe there could be an Industry standard model or each Enterprise is unique?
- Do you need to synchronize data between source systems? How frequently?

Example – Data consolidation - Searches

- Access to complete data
- Google like searches



Topics we discussed

- Topic 1: Where is your geo-spatial data maintained?
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