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**Identifying Overloaded  
Transformers Using GIS and  
Meter Information**

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# Transformer Analysis Project



## n The Question: How to identify overloaded transformers?

- n Voltage complaints
- n Leaks
- n IR Camera
- n Smoke

.... Proactively?



# GIS Analysis Approach



- n Summarize CIS meter data to determine demand.
- n Associate demand to specific transformers.
- n Identify overloaded transformers where demand is greater than rated capacity.



# Analysis Project



n **IS GIS data is complete and accurate?**

n Transformer size

n Service location to transformer link

n **Can the CIS data support the analysis?**

n 75% of existing accounts are matched

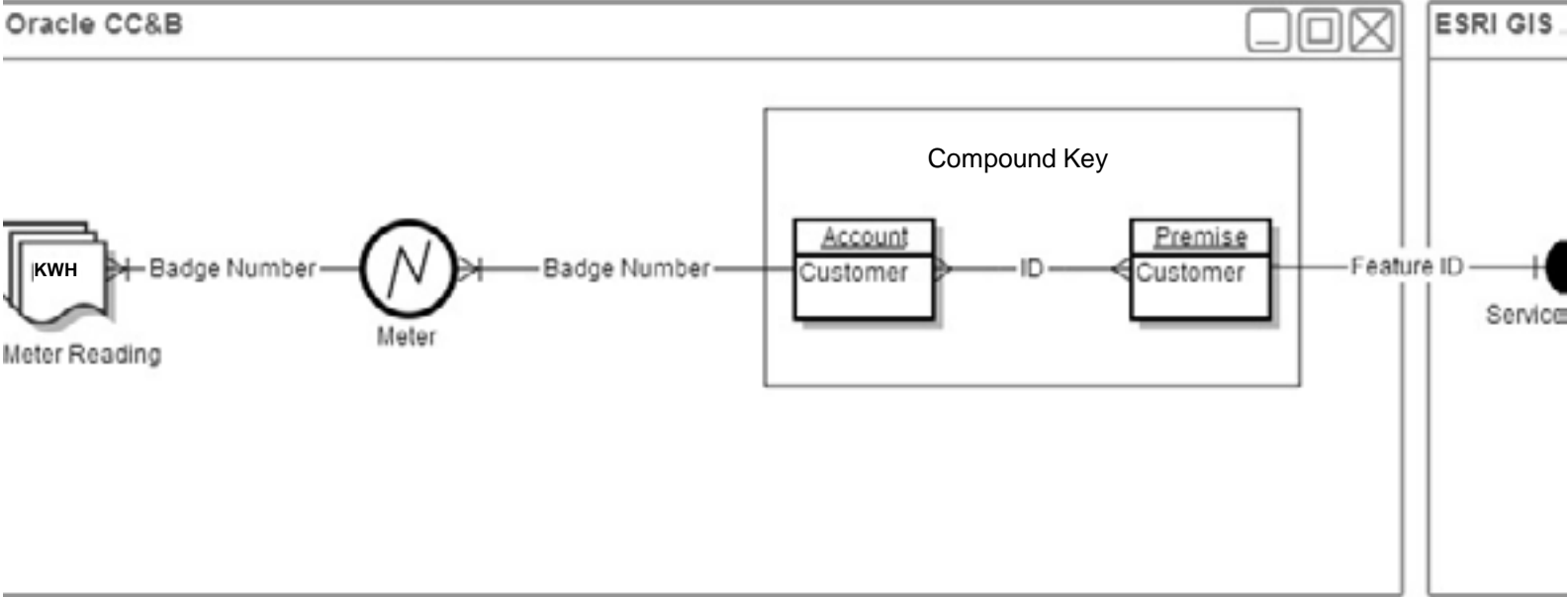
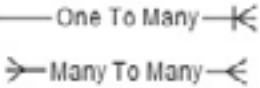
n Unmatched accounts are mostly commercial, lights

n 95% + match rate in residential areas

# Analysis Project



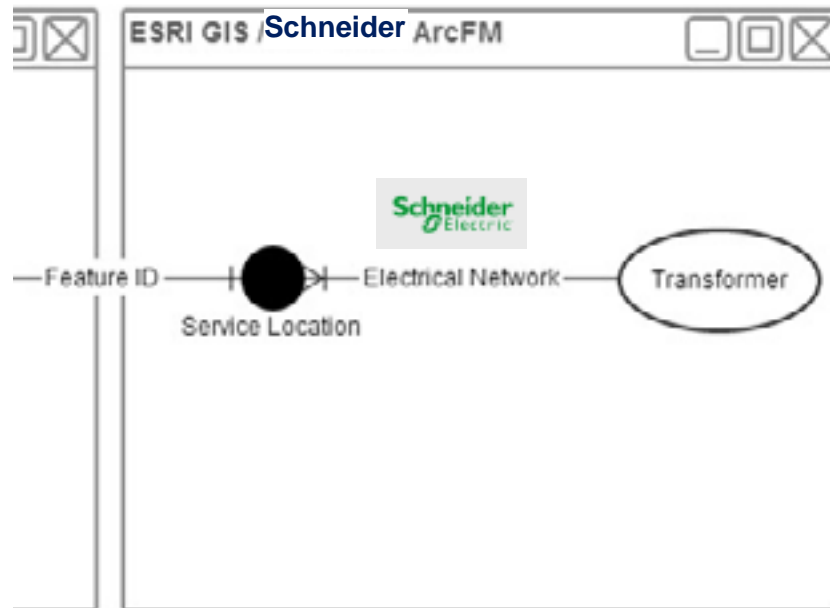
## n Where is the CIS data?



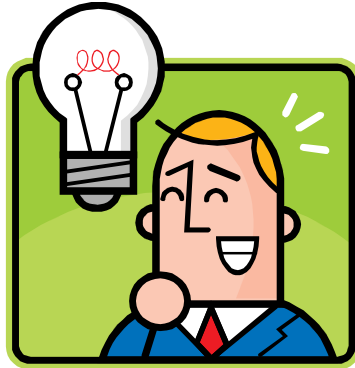
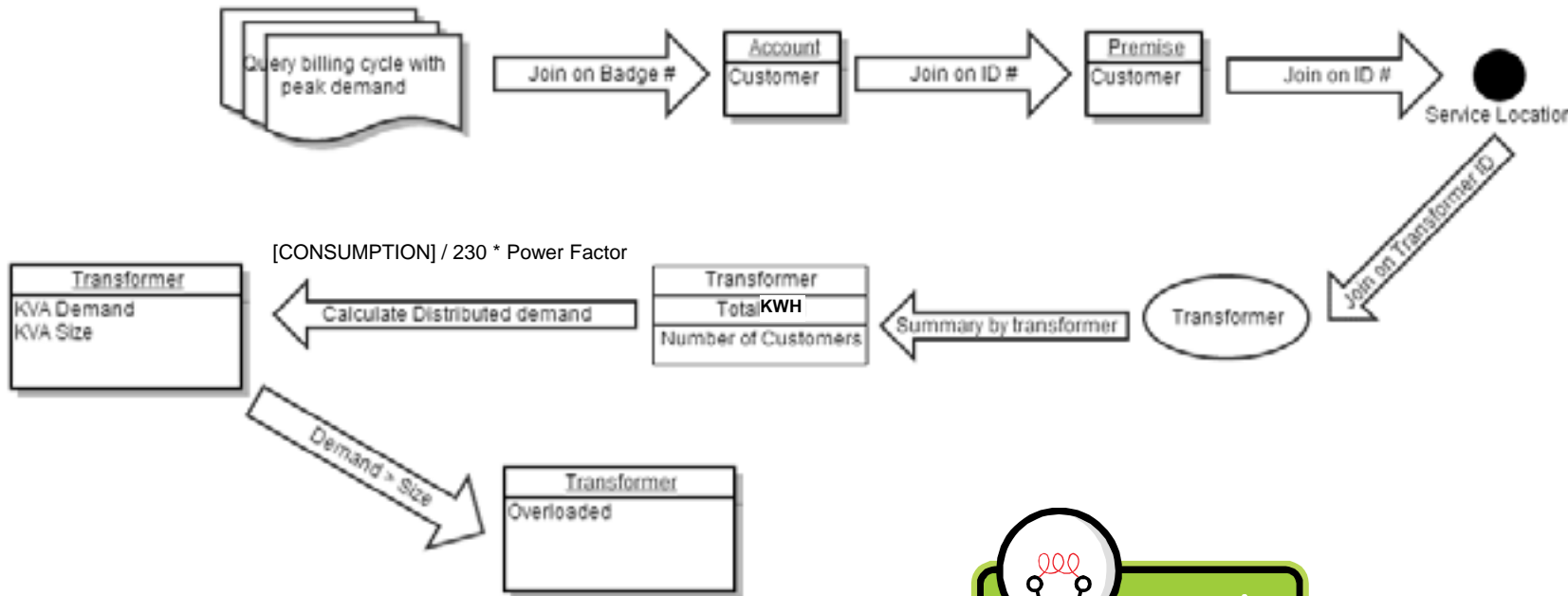
# Analysis Project



n Where is the GIS data?



# Analysis Model: OOTB ModelBuilder Functions



# Analysis Results

- n **Each identified transformer field verified**
  - n When all assumptions were valid, the analysis was 95% correct
  - n False positives were reported to the GIS





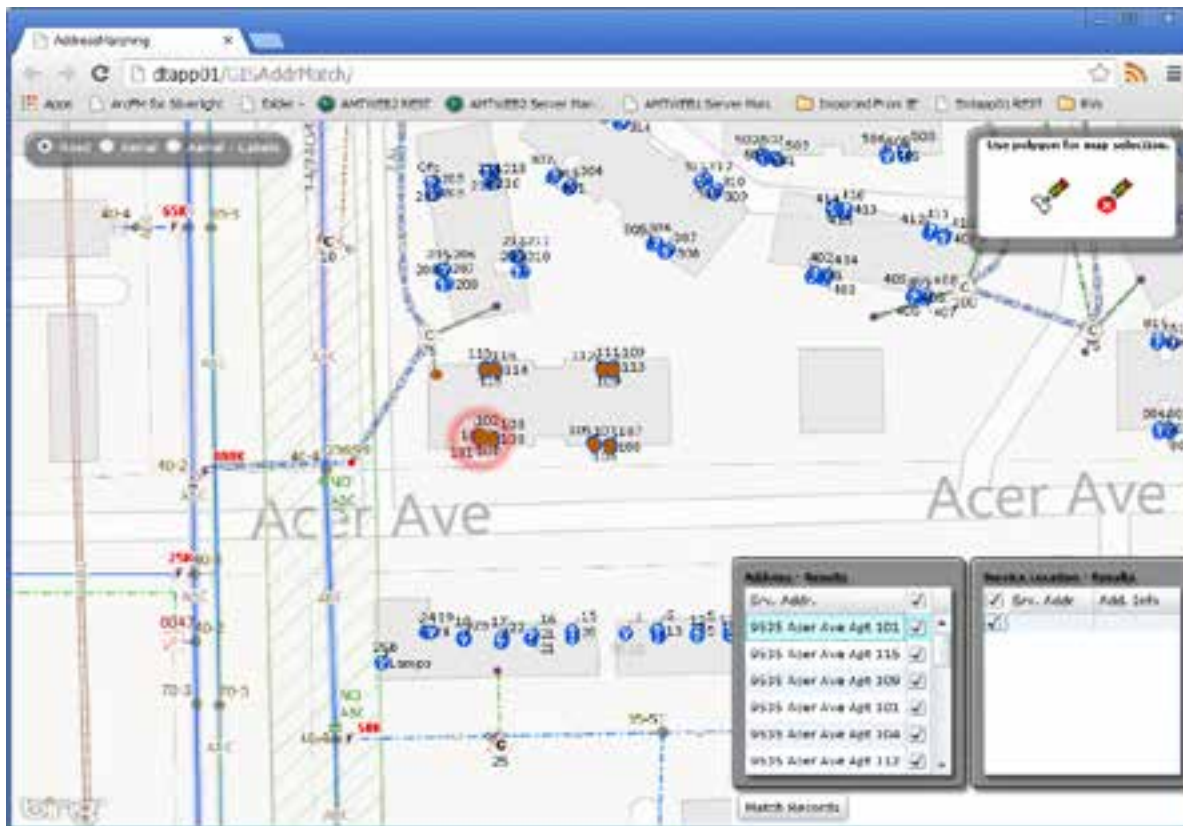


# Success Story

- n Exposure at the executive level increased support for GIS initiatives.
- n Users understand the need to maintain accurate data.
- n Follow-Up GIS Projects:
  - n underground project 2013
  - n Address matching (CC&B) app


# Success Story

- n OOTB ArcGIS Server functionality and Address matching application.



# Questions?

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