

# GCAM Compliance



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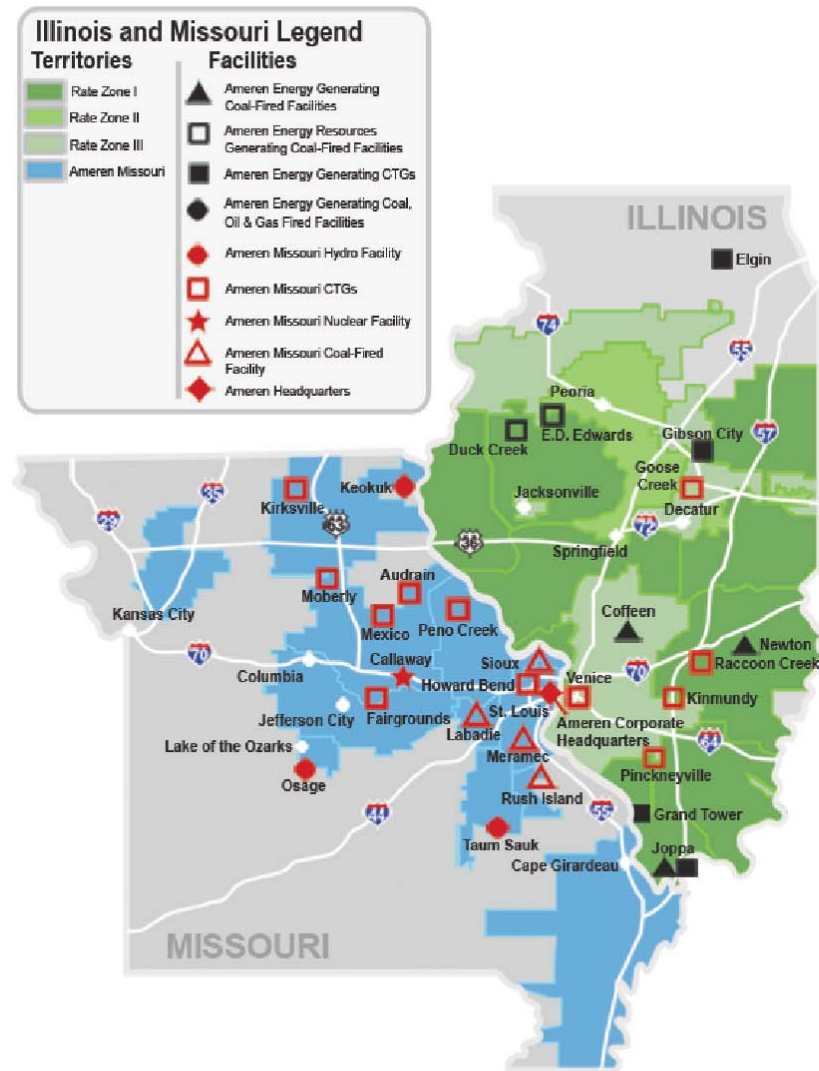


**Cohesive  
Information  
Solutions Inc.**

Bridging Business  
and Technology.

## Ameren Gas

- Spans 64,000 square mile over 2 states (IL & MO)
- 900,000 natural gas customers
- 1,290 communities
- 1,304 miles of transmission
- 19,900 miles of distribution
- 12 storage fields
- Combination of 4 legacy companies starting in 1853



# Project background...

- In 2011, Ameren set in motion a plan to implement a Distribution Integrity Management Program (DIMP).
- DIMP was to be accomplished in 3 phases:
  1. Conceptual Design & Risk Engine (DIMP)
  2. Current Compliance Assessment & Software Selection
  3. Design/Build/Implement Gas Compliance System
- Completion by 12/31/2014



## Phase 2 assessment identified insufficiencies

- No history of asset during lifecycle
- Current software (GCS) not integrated
- Obsolescence of current software
- No GIS capabilities
- Field work still completed on paper



## Phase 3 Goals

- Reduce regulatory audit risk
- Increase Ameren knowledge of Gas facilities
- Ability to respond quickly to regulatory change
- Improve the quality of Gas records (eliminate paper)
- Provide a strategic direction for Energy Delivery



## What we decided to do...

- Mobile solution with Click Software
- Asset management solution with IBM Maximo with Maximo Spatial
- Esri ArcGIS for backend and publishing

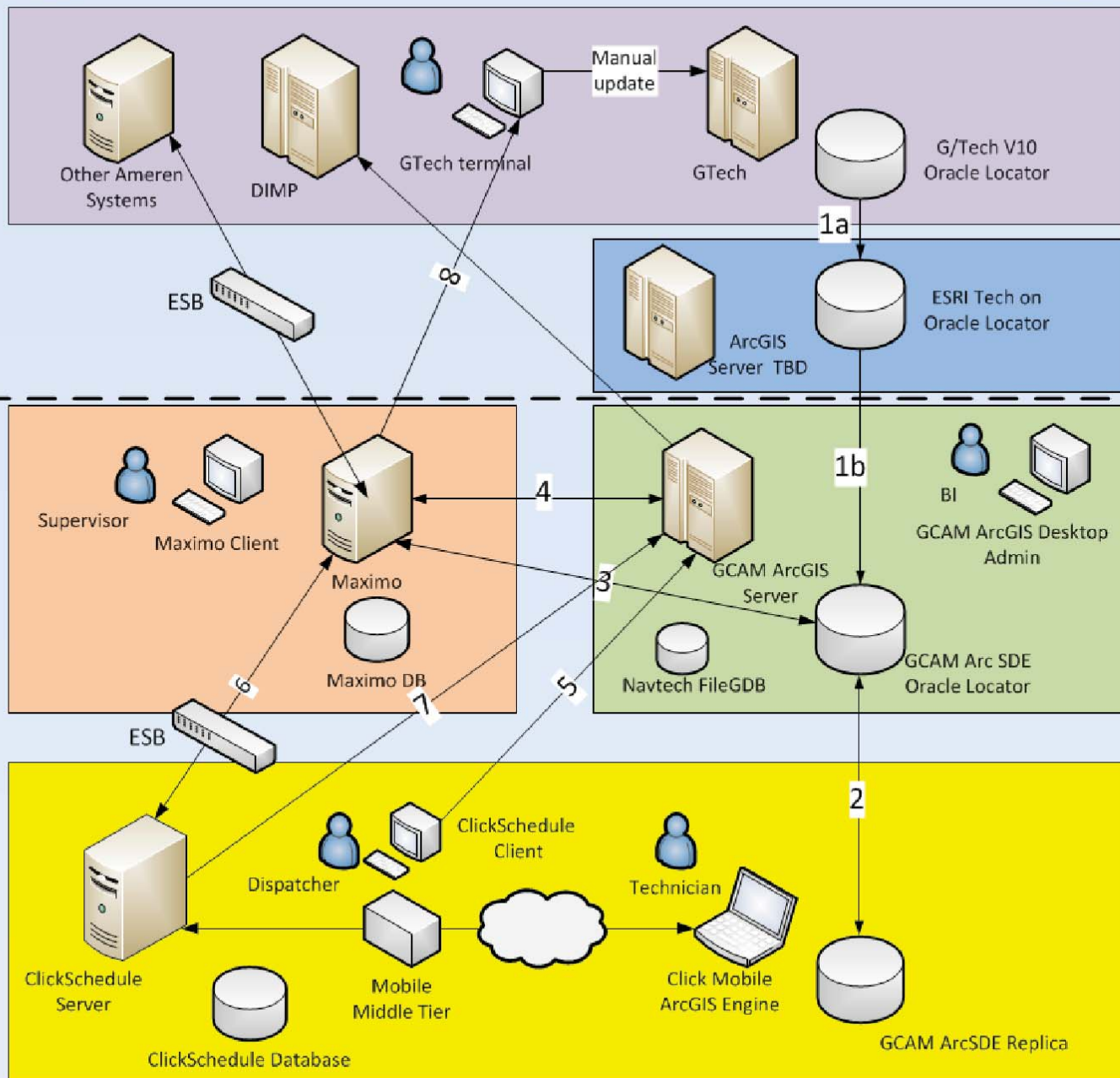


## A few challenges...

- Corporate GIS is Intergraph not Esri
- Must upgrade G/Tech from 9.4.2 to v10
- Must migrate to at least Oracle 11g Locator
- Must develop new interface (ETL?, full v delta?,...)
- All outside GCAM project scope



## Maximo / Click / GIS Integration



Assets originate in G/Tech GIS. (Mostly\*)

GIS records are converted from G/Tech to ArcGIS

Flag on GIS records tells Maximo to create a new Asset EAM record.

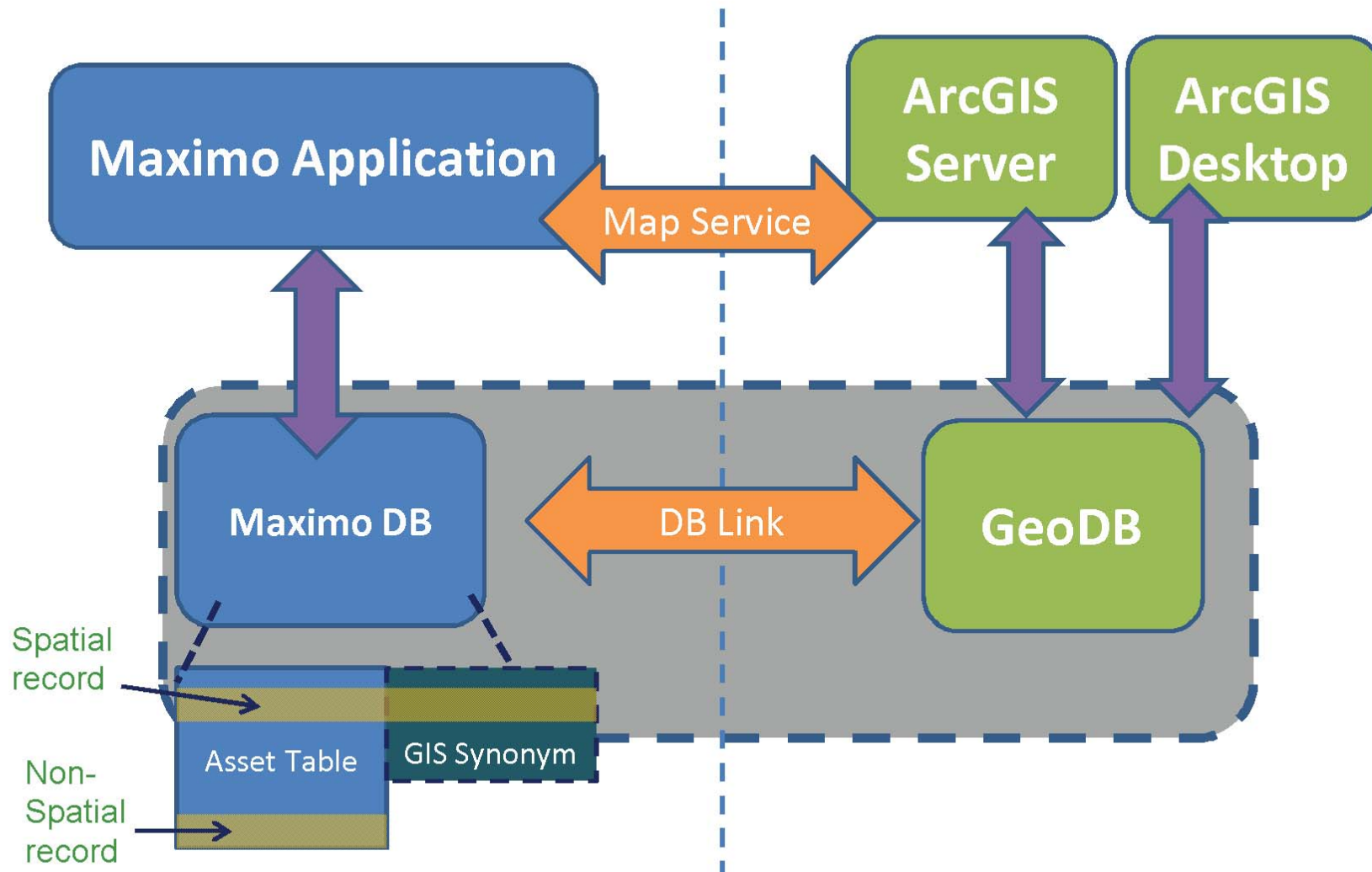
EAM and GIS records are joined.

Click Mobile Software replicates GeoDB and syncs EAM info.





# Spatial High Level Architecture



# Asset Lifecycle & Master Data Model

- Project goals included
  - One point of entry for data
  - Defined system of record
  - But allow appropriate data access from other systems.

**Maximo Asset Schema**

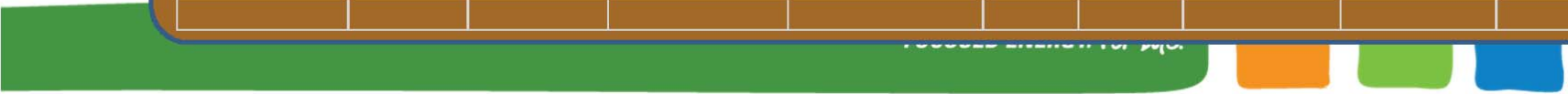
ASSETNUM	STATUS	YTD COST	SERIALNUM	INSTALLDATE

**GIS Gas Main Schema**

OBJID	SHAPE	DIAMETER	MATERIAL	OWNEDBY

**Unified Asset Schema**

ASSETNUM	STATUS	YTD COST	SERIALNUM	INSTALLDATE	OBJID	SHAPE	DIAMETER	MATERIAL	OWNEDBY



# Where are we Today?

- G/Tech upgrade vendor selected
- ESRI working on G/Tech to ESRI design
- Begin EAM & Mobile Build Phase
- Development Environments created (EAM, GIS, Mobile) and being populated with sample data.
- Mobile Device Selection



## Future state...

- More frequent GIS updates
- Emergency and Construction work for Gas
- Electric distribution will come on board
- Check back with us for updates and progress!





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**Questions?**



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