Spatial Asset Management

What can Maximo do for you?

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Today's Topics

- What is Maximo Spatial
  - High Level Architecture
- Using Spatial
- Configuration Capabilities
- Use Case
- Where can we go?

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What is Maximo Spatial?

Introduction

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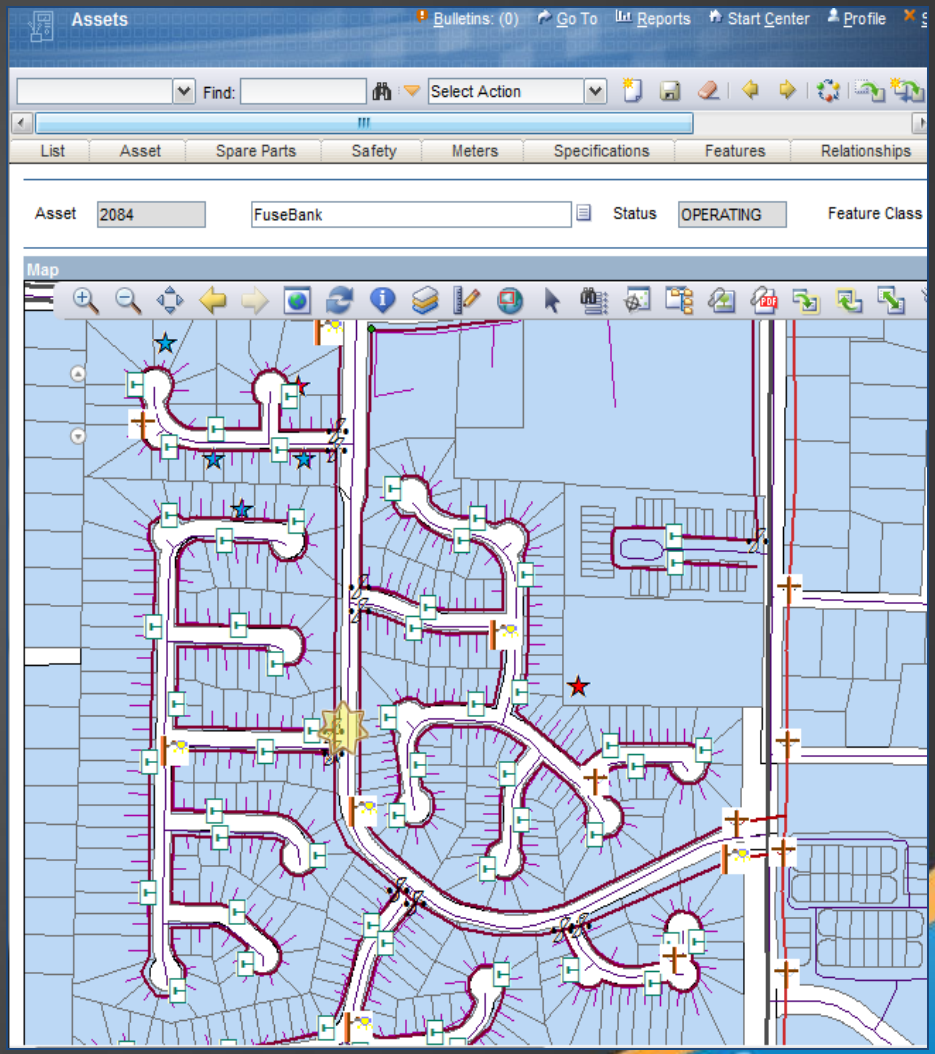
Spatial: Maximo Asset Management plus ESRI ArcGIS

- Spatial creates a **live** link between Maximo and ESRI GIS.
- Spatial serves organizations who's assets spread over large areas outside the four walls of a factory or plant.
- Maximo screens are enhanced with a **Map Tab** to allow Assets and Work to be plotted on interactive maps.



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OK. What's the big deal?

- Adding GIS maps to Maximo allows users to see where assets are and where work gets done.
- Spatial exposes attributes housed in GIS to Maximo for display, use, and editing. *(and vice versa…)*
- One strength of GIS is **analytics**. Now data in Maximo can be analyzed for geographic relationships and trends.
  - Ex. View failure codes by region.
- For GIS, Maximo adds the ability to archive and collect trending data that would be difficult for GIS to maintain.

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What *is* EAM!? *…Doesn't GIS "Manage Assets?"*

What's GIS? *… Is that like "Online Maps?"*

EAM Functions

- Purchasing
- Contracts
- Labor
- Scheduling
- Work Planning
- Inventory
- Safety
- Tools
- Failure Analysis
- Meters
- Spares
- Operational Costs

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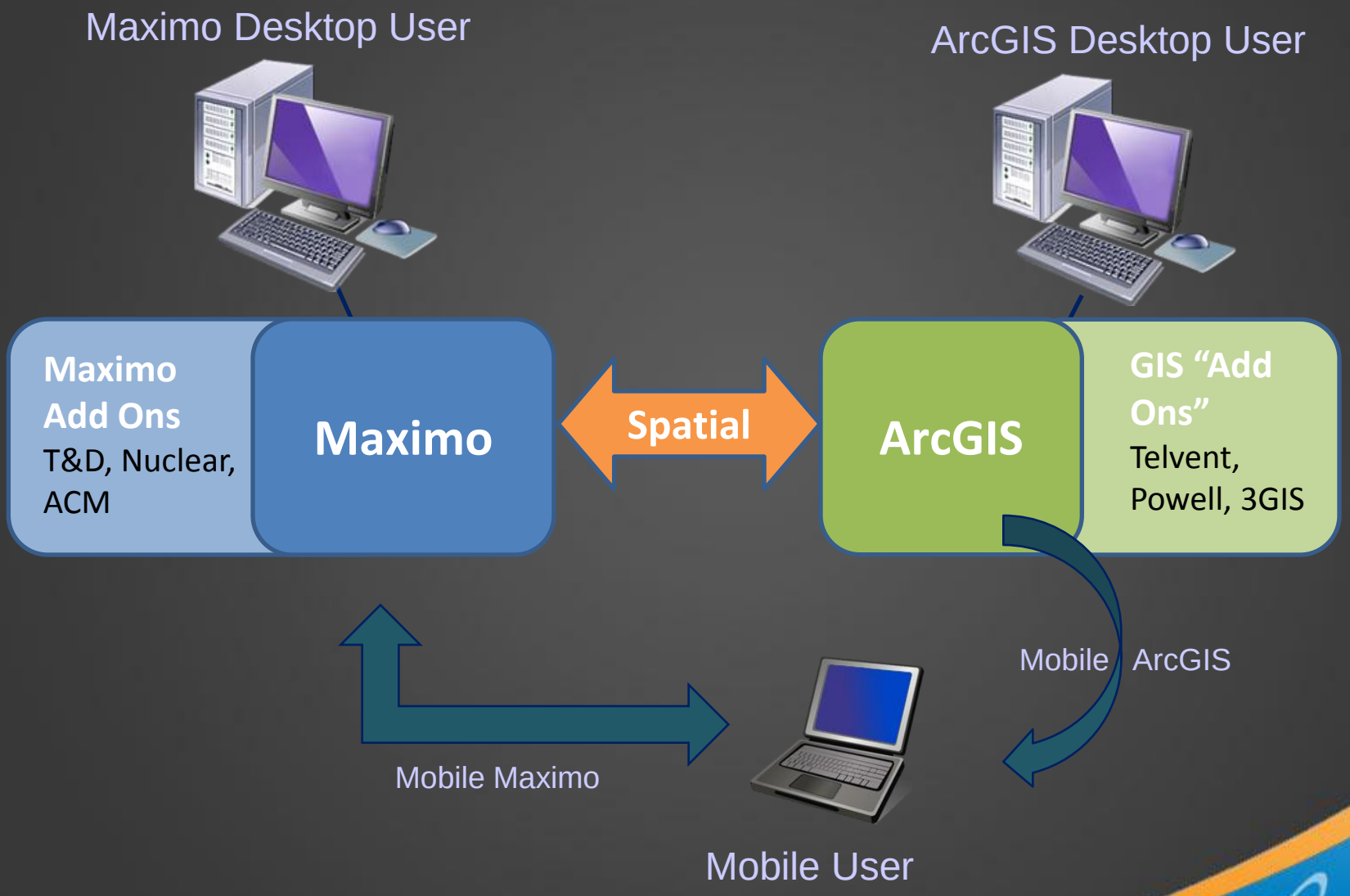
Where Does Spatial Fit?



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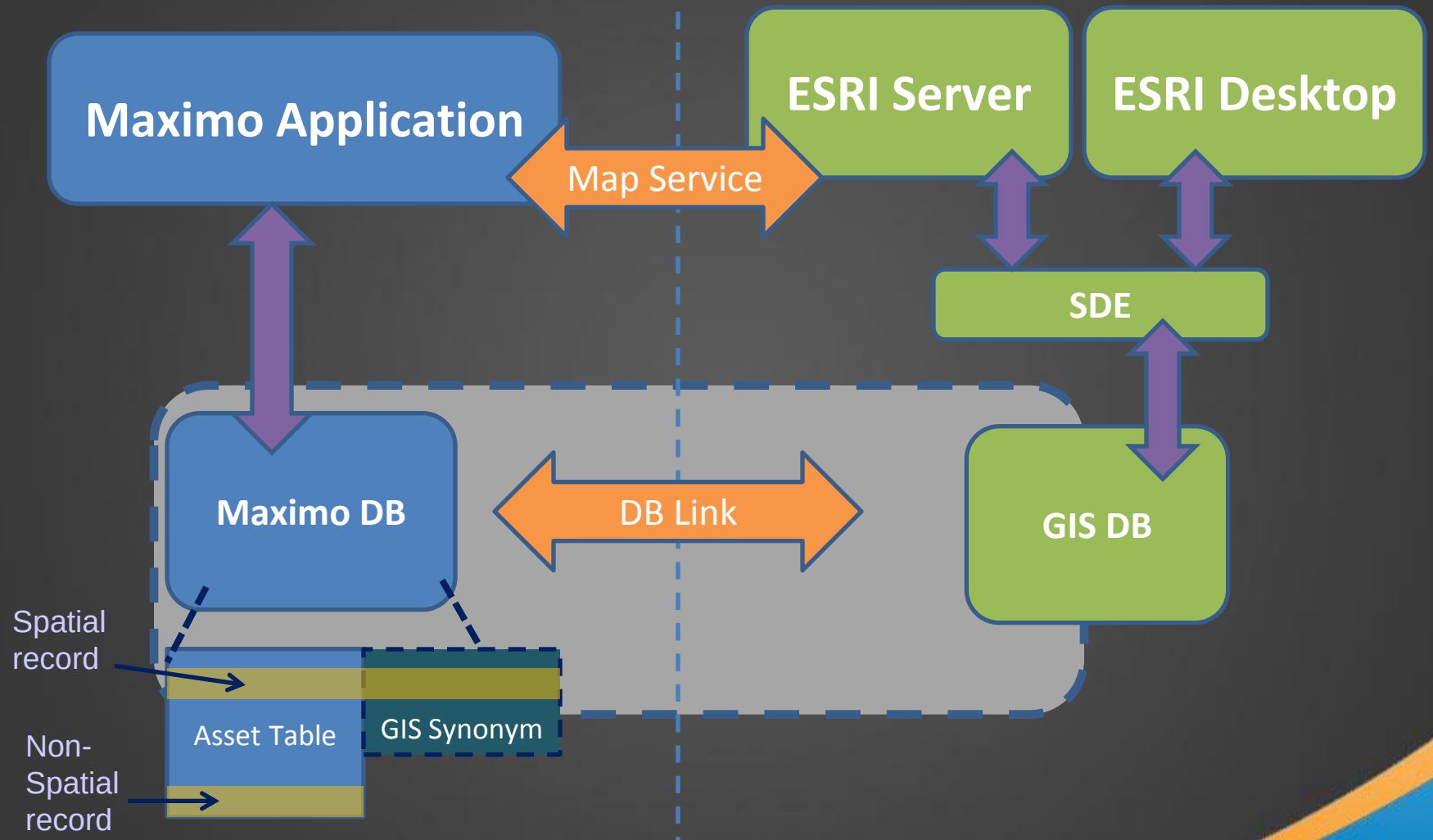
Spatial High Level Architecture



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Using Spatial

End User Overview

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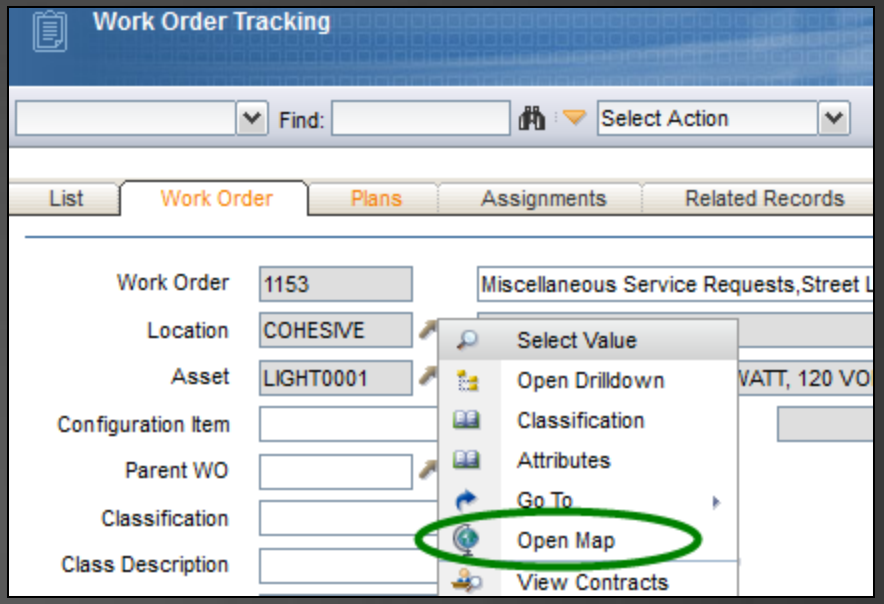
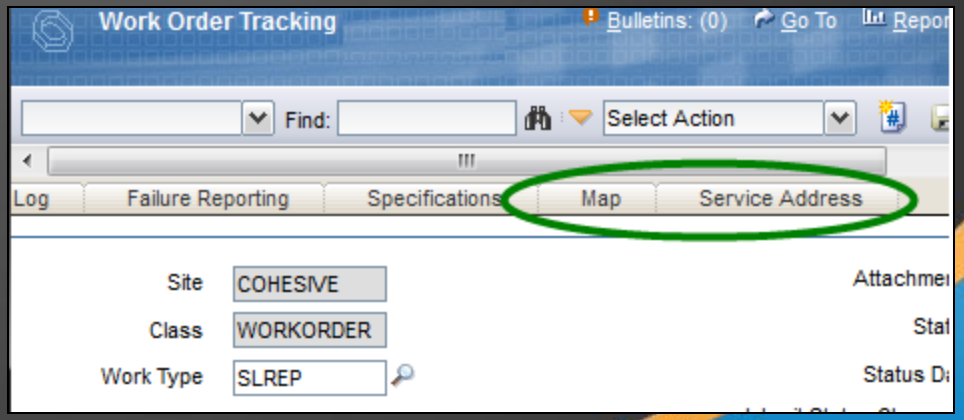
Where to Find Spatial in Maximo

- Contextual Menus allow users to select a value from a map.
- Some Apps have a Map Tab
  - WOTrack, SRs, Locations, and Assets OTB.
- The Service Address Tab is also bundled with Spatial





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Asset Demo

Overview of Map Functions

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Maximo Spatial

New Configuration Capabilities

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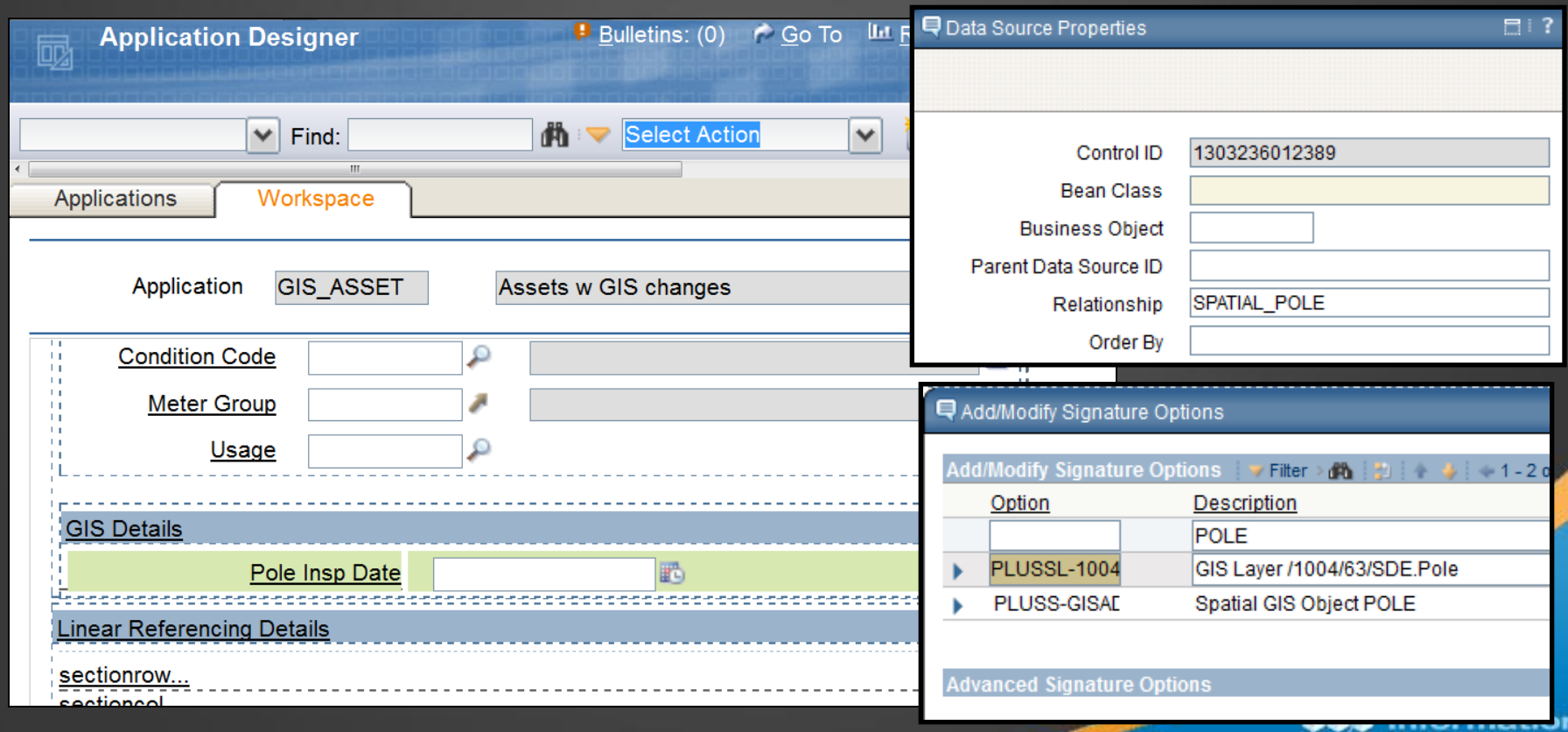
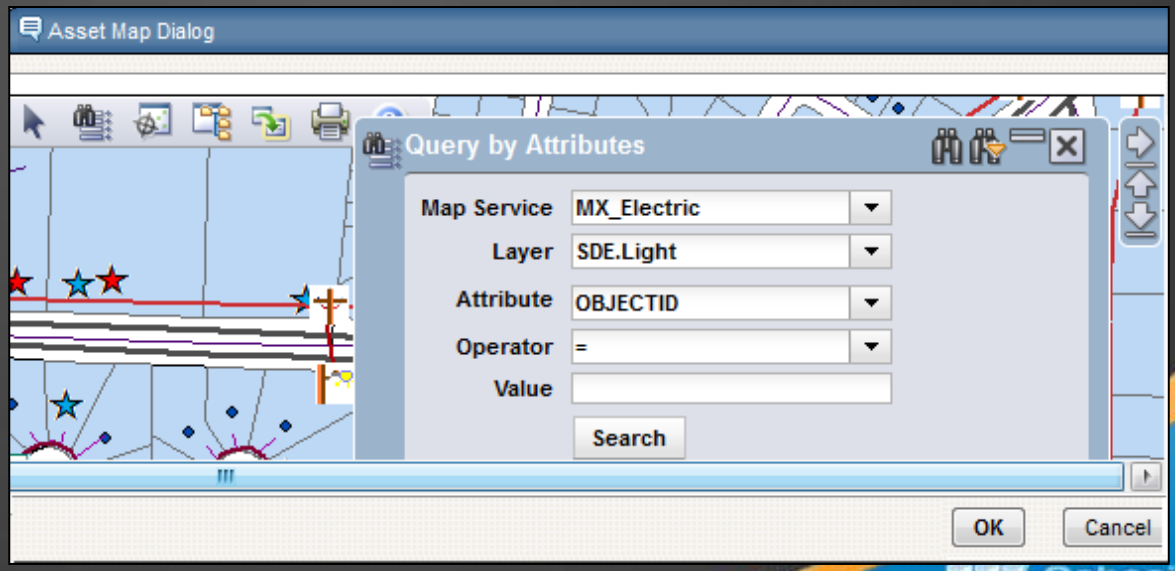
Spatial and the Conditional UI

- Maximo's Conditional UI allows administrators to add fields from GIS tables to a Maximo Screen.
- The fields can be Edited in Maximo or made Read Only.
- Field Security is controlled with Sig Options.



Spatial and Searches

- The Maximo List Tab and Advanced Search can be modified to allow search parameters from GIS tables.
- Advanced search comes with a field called "Is GIS" to filter records that are Spatial from core Maximo records.
- The Spatial Toolbar has a **Query By Attribute** function to select GIS features based on attribute values.
- The Spatial Toolbar lets you transfer search results To and From the **List Tab**.



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System Logs and Crons

- Spatial has a system log called **PLUSSGIS** that can be enabled.

- Spatial provides a Cron task, PlusSCreateFeatureLinkCronTask, to create Maximo Asset Records when a new GIS feature is created.
  - The Cron also automatically links the Maximo record to the GIS record.

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Use Case

- Service Request to point Work Order

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Where can we go?

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Possibilities

- Modify Assignment Manager to Filter Labor by Proximity to Work. (Spatial query, but no map)
- Allow view to Asset Meters on maps. Click on an asset and see if meters are in proper range. If not create WO.
- Geographic based KPIs.
- Use GIS to create Maximo Routes.
- Add Network Trace functions to Maximo.
- Analyze Failure Codes by region.
- Enhanced Disaster Preparedness / Planning / Response.

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Thank You!

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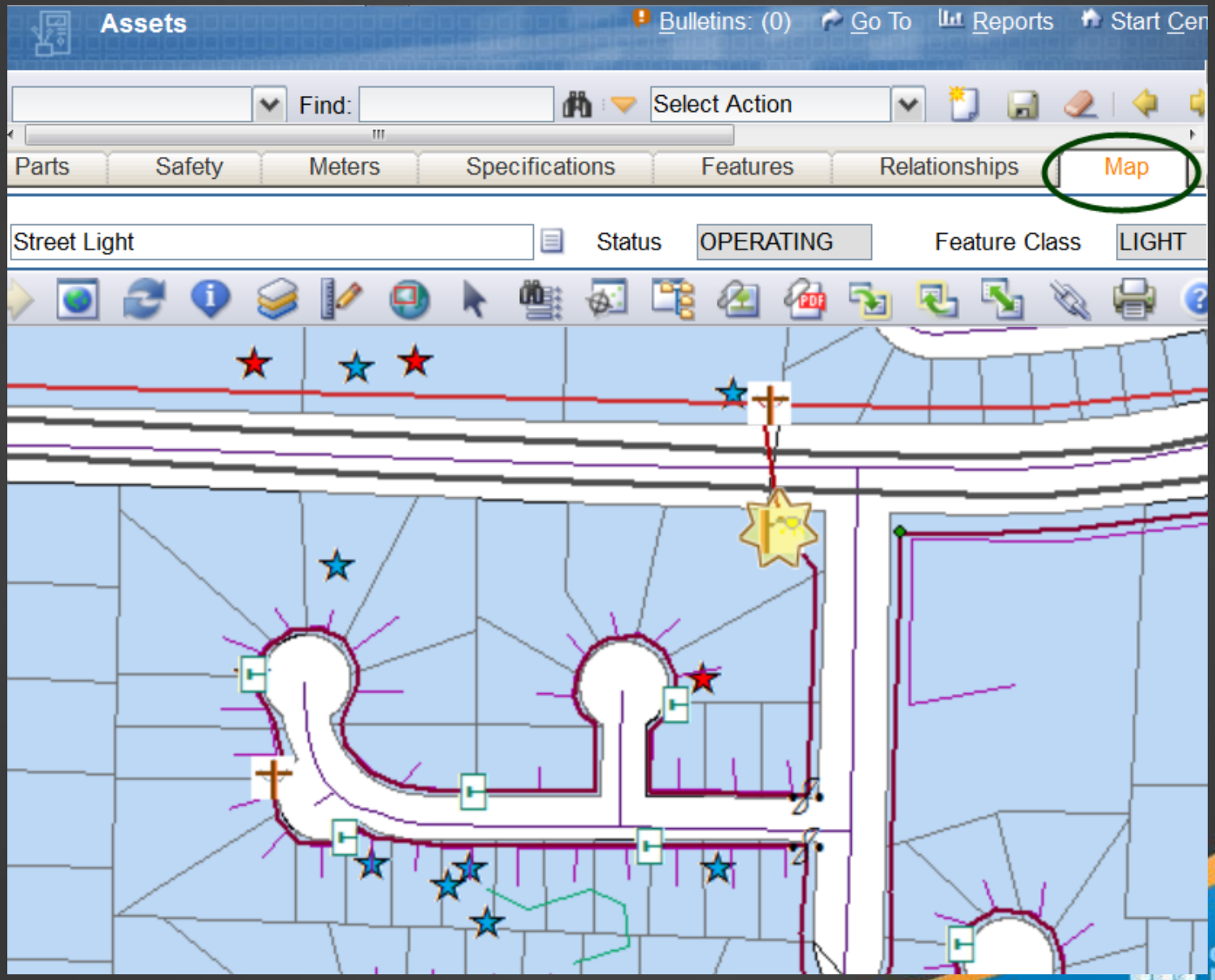
EXTRA SLIDES

ESRI ArcGIS plus MAXIMO Asset Management



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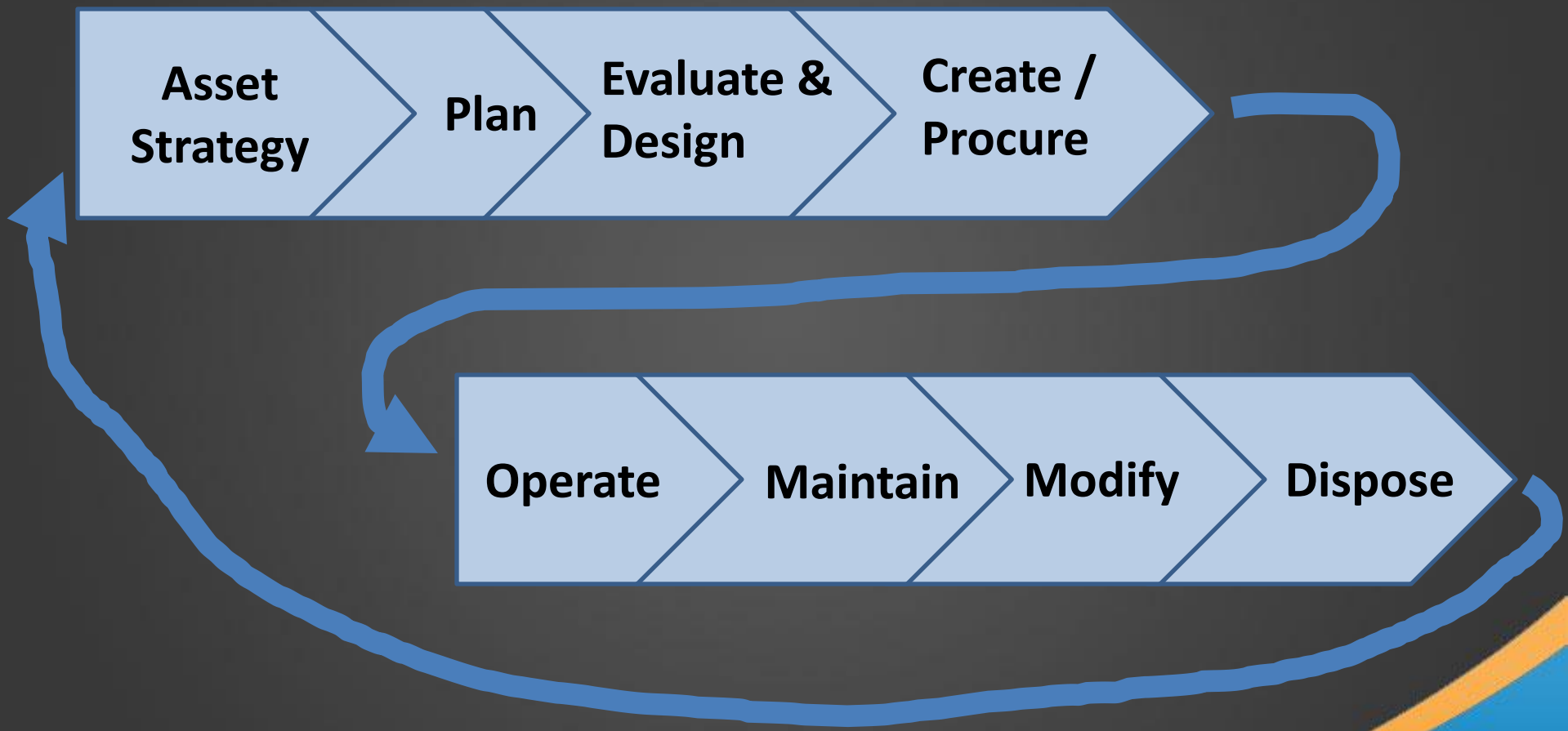
Asset Lifecycle



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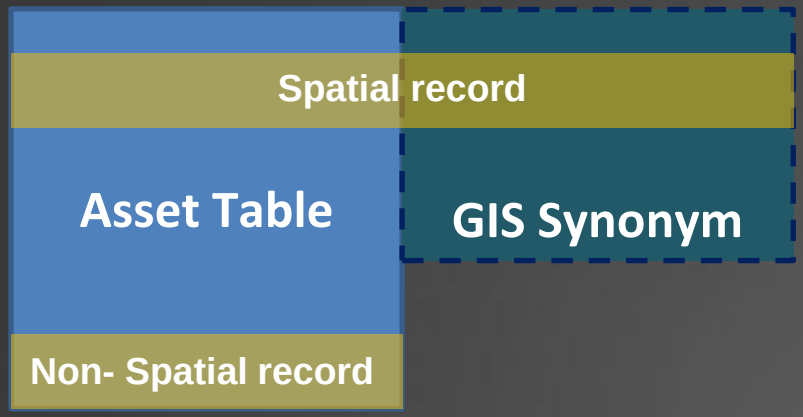
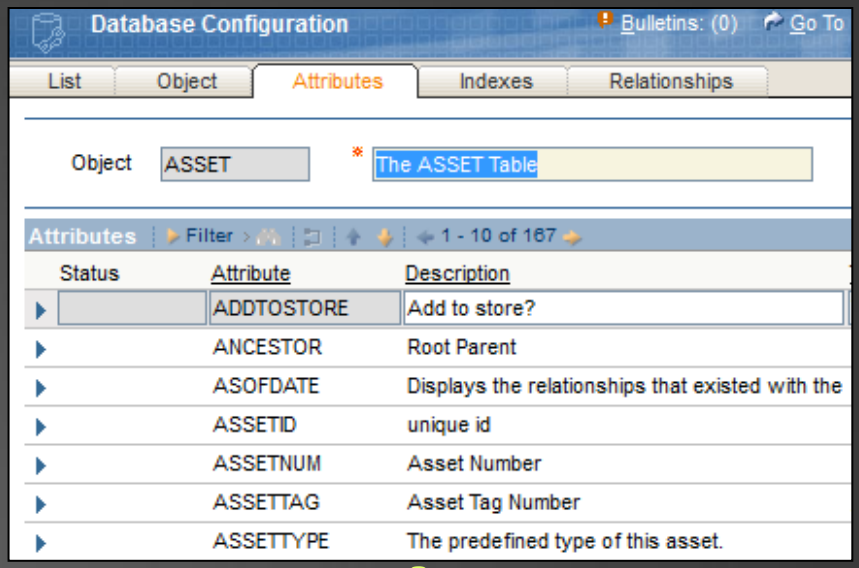
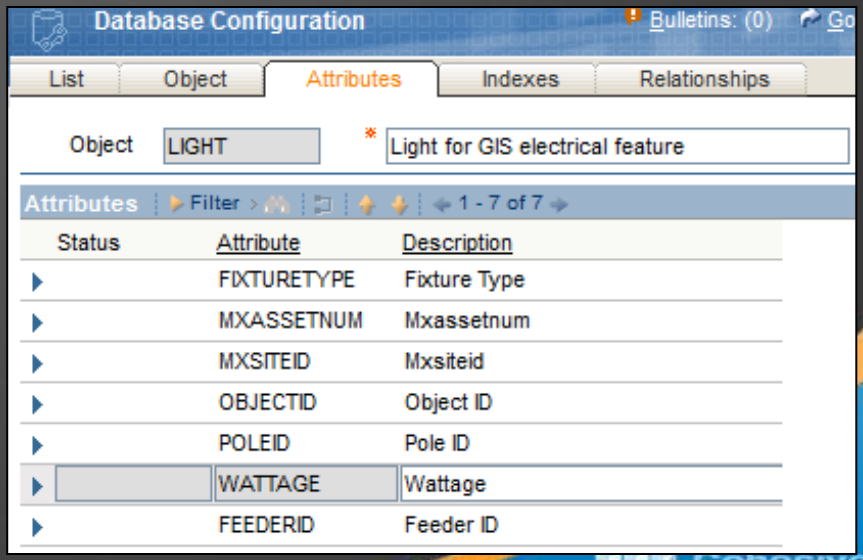
Spatial and DB Config



- Attributes from GIS tables are *virtually* appended to Maximo tables.
- The Maximo table points to a GIS record in a **REMOTE** database.





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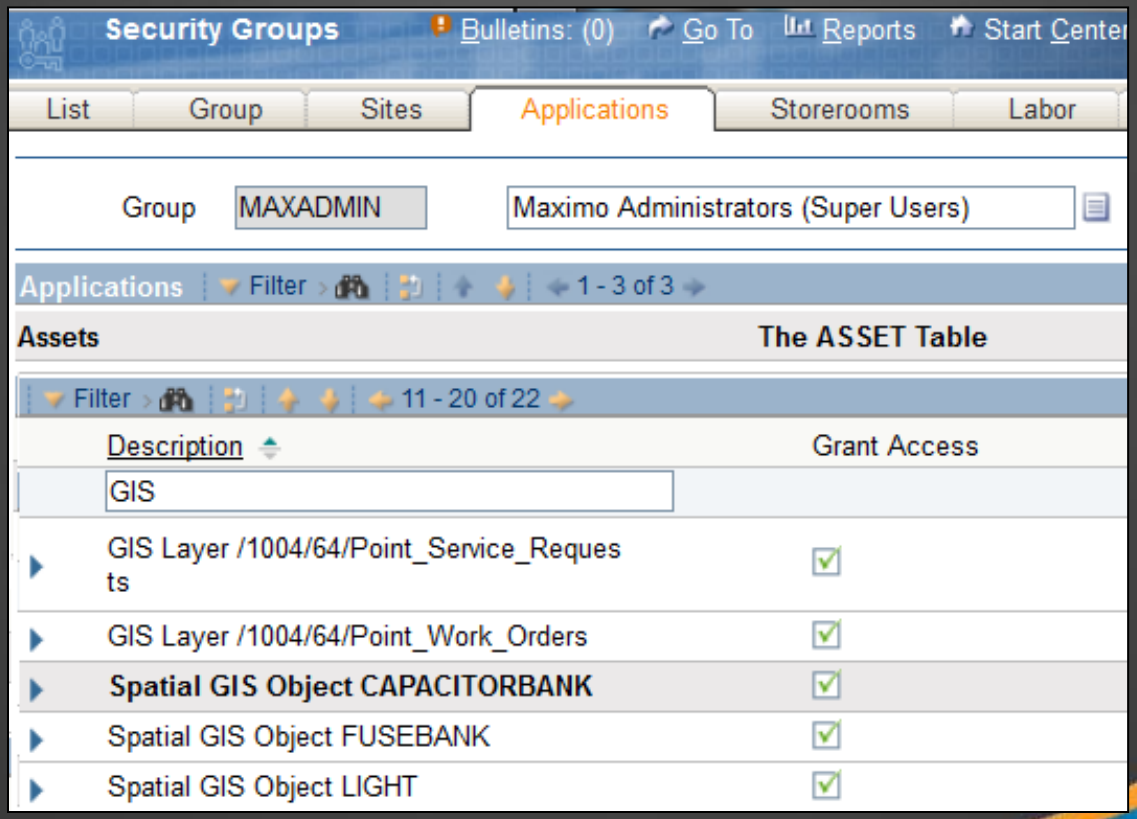
Spatial and Maximo Security

- Sig Options are created when a GIS Object is set up.
- Security controls who sees GIS layers and who can interact with GIS data.



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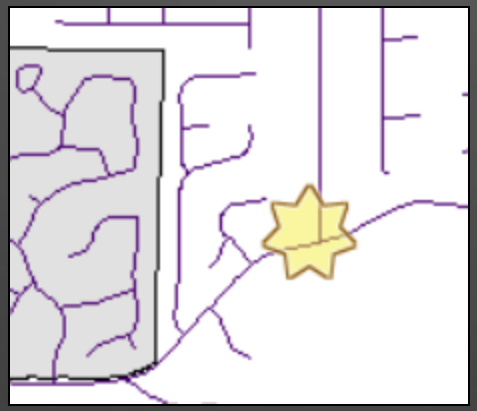
Spatial "*Customizations*"

- IBM has provided guidance to create custom tools for the Spatial Toolbar using dojo (Java).
- Map Tab symbology can also be customized.



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Spatial and Reports

- Spatial Attributes can be used in Maximo Reporting.

Similar to reports:

- Maps from Maximo Spatial's Map tab can be printed as PDFs or TIFFs and saved as Attachments on Maximo records.

- Spatial Maps can be marked up or redlined.

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Current Limitations

- Can’t add a Maximo domain to a GIS field.
- Can’t use Actions or Escalations on GIS fields.
- OTB Spatial does not filter Maximo authored data. EX. You see ALL WOs and SRs even completed and closed.
  - This can cause screen clutter.
  - WOs and SRs might be stacked. (Repair on different floor of building.)
- DB Configuration values to GIS Objects aren’t easily changed after initial setup.
- Not sure how Migration Manager will work with Spatial. Some rework expected from DEV to TEST to PROD.

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