What’s so Special about Maximo Spatial?

IBM Watson IoT

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# What is Maximo Spatial?

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<th>Better data visualization</th>
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IBM Maximo Spatial: Functionality

Feature services

Feature services allow integration to the ArcGIS Server by using the ArcGIS Server’s published URLs, Dblink between Maximo and GIS is no longer required.

Data synchronization

Enhanced data synchronization between Maximo and the ArcGIS feature services. Introduced a JSON Mapping application (xRef app).

ArcGIS on line / portal

Online, collaborative web GIS that allows users to use, create, and share maps, scenes, apps, layers, analytics, and data.

Linear assets

Display, identify, query, select, analysis using Maximo Linear data on the map. Usage of the existing Maximo Spatial map tools with Maximo Linear data.
IBM Maximo: LBS Offerings

Maximo

Easily and dynamically visualize linear and spatial detail of assets, roads, buildings, pipelines, and other mapped features around them.

Anywhere

Enhanced mapping capabilities for mobile devices leveraging GIS information. Supports online and offline maps.

Work Centers

GIS Centric Work Center that uses the map as the primary UI to access Maximo data and tools. Leverage other existing Work Centers to be used and opened from the Map. Ex: Manage Assets, Work Execution, Inspections.

Scheduler/Plus

Visually manage schedules, assign work and resources. Use location, time and skills to optimally map out deployment of resources and travel routes. Respond dynamically to changes based on location and skills out in the field.
Road Ahead
Spatial / Anywhere / Linear

Spatial
- End user tools enhancements
  - Enable all map tools from Map Manager
  - Show related records on map
  - Configurable actions from the Results & auto locate order with flexible hierarchy
- Map Manager usability
  - Simplify map manager UI
- Enhancements on the bidirectional synch tool
  - Data Analytics to detect relationship issues.
  - ArcGIS Online & Portal certification

Work Centers
- Configurable data – per user/per tasks/work center
- Maximo queries to display data on the map as a layer
- Configurable actions – contextual menu & actions according to what each user clicks on the map
- Cross Navigation between tasks and map - vice-versa.
- Map tools – Watson smart search, Layers, Identify, Selection
- ArcGIS Online & Portal
- Analytics – Heatmaps, Clustering, Tracking Assets
- App Deeplinks
- Online/Offline mobile maps

Anywhere
- Query work, assets, locs, PMs, labor/crews based on current device position
- Ability to create new work or a follow up work order via a map
- Ability to lasso a set of assets or work orders and apply defined actions against them
- Integrate Maximo Linear and Anywhere
- Enhance offline maps
- Map tools persistence and Offline labeling

Linear
- Enhancements to Maximo Linear via a Spatial map and Linear Visual Control
  - Create, Delete and Update
- Linear Merges and Splits
- Enhanced Linear layers symbology on the map – Grouping/Offset
Work Center

- GIS Centric application that uses the map as the primary UI to have access to Maximo data and tools.

- Leverage other existing Work Centers to be used and opened from the Map Work Center. Ex: Manage Assets, Work Execution etc.

- Configurable map layers and actions defined by configuration and automation scripts.
Work Center
Map @ Work Center
Location information is everywhere

“The need to use advanced location technology to collect, process and analyze IoT data for business and operations insights will only grow.”
"What if we could" highlight on the map a set of records that are geographically near and are presenting a common behavior? For example, a set of assets at the same area are failing due to a similar cause. We want to highlight that pattern on the map!

This is possible using a density cluster machine learning technique that combines both the location with Maximo information.
Adding Intelligence to Maximo – Tracking Moving Assets

"What if we could" learn from the historical location data and identify abnormal scenarios that the vehicle took an unexpected/unused route? This is possible using Machine Learning to monitor and look for novelties.

Manage Assets
- Connect processes, resources, and maintenance.

Geo Monitor
- Monitor asset location and attributes related to it
- Predict future location

Optimize and adjust model
- Recommend when novelties are found
- Detect novelties when the location goes outside the existing model and create alerts

Analyze existing location information and build a model for location information

Adjust existing model based on new location data created from the assets
MythBusters

Maximo Spatial has limited synchronization capabilities

MYTH

Maximo Spatial does not have offline capabilities

MYTH
Thank you

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