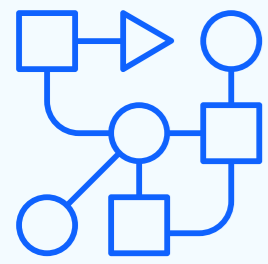


# Optimizing Asset Longevity with Maximo Health

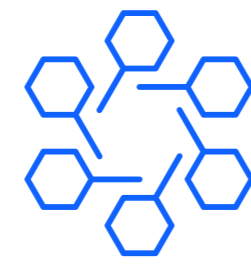
# The asset management challenge

How do we allocate resources such that we can minimize lifecycle costs while proactively managing risk and achieving our objectives?

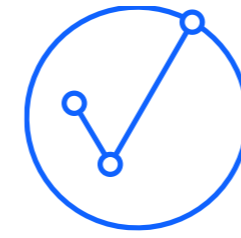
To answer this question, we need to think in terms of the complete asset lifecycle



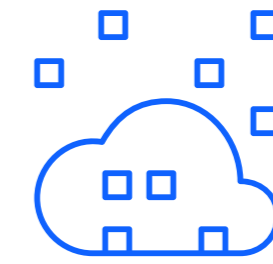
Establish a consistent methodology for assessing asset health and criticality



Optimize Preventative Maintenance schedules based on criticality and cost



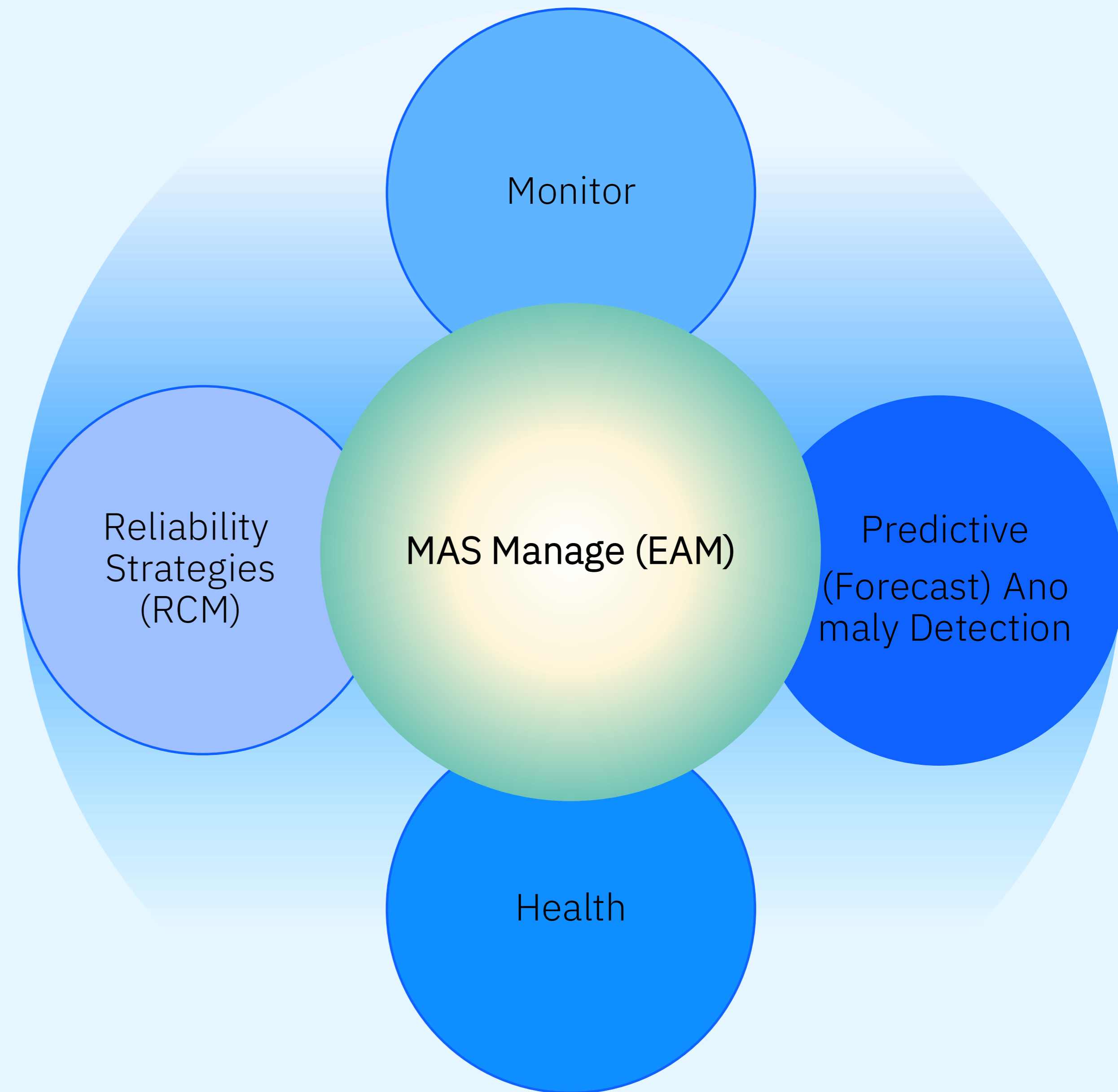
Proactively identify and remediate issues through inspections and monitoring



Optimize sustainment capital to minimize long-term TCO and risk

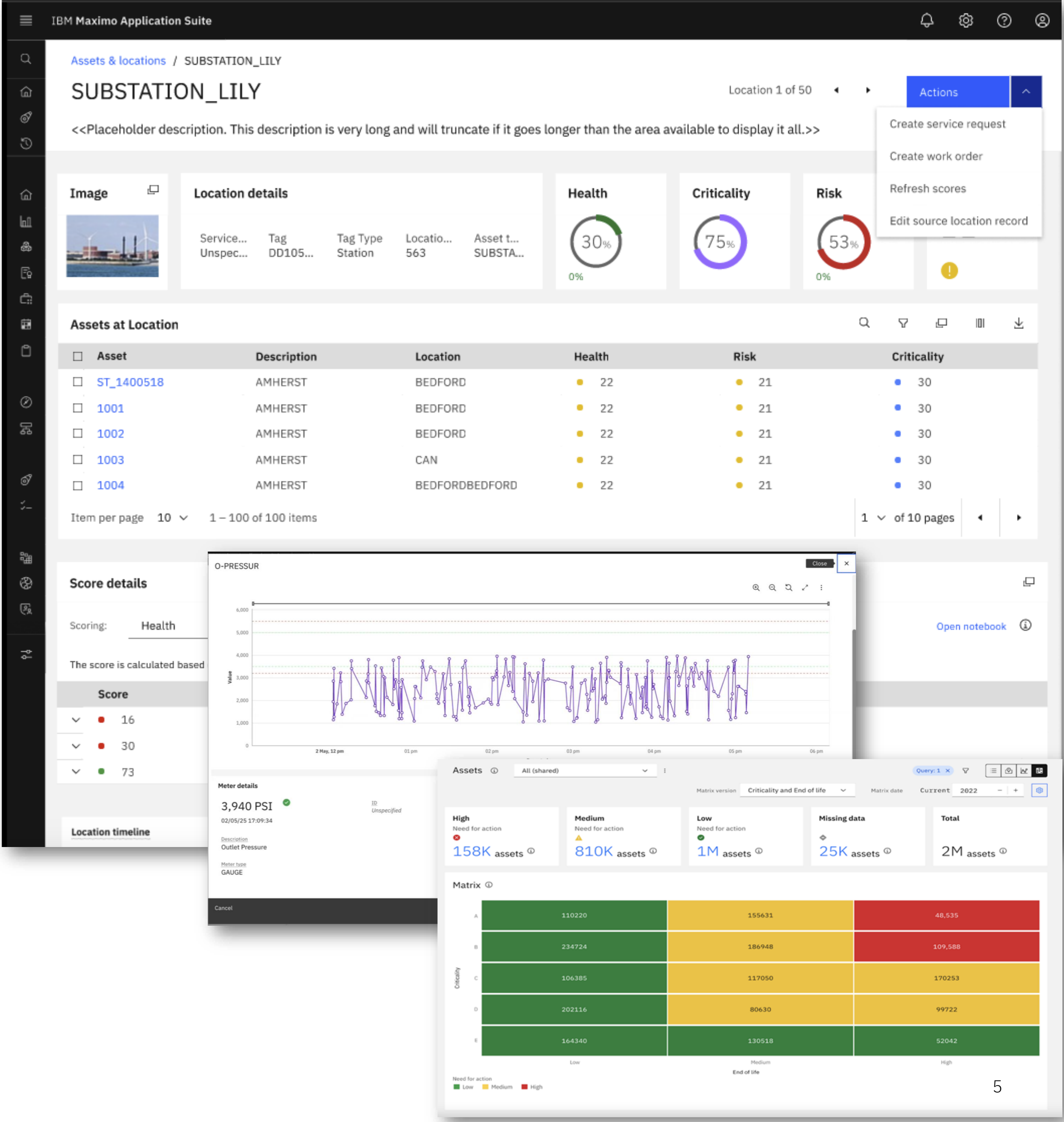
# MAS APM Capabilities

- **Health:** Analyze asset health and performance at scale, track performance targets, and take action
- **Reliability Strategies:** Align maintenance strategies with business objectives faster through pre-built RCM strategies
- **Monitor:** Visualize assets and investigate alarms in real time. Ingest and analyze asset data from multiple sources with 1600+ pre-configured device partners.
- **Predictive Anomaly detection:** analytical models to identify anomalies, forecast failures, and generate alerts and data-driven work orders.



# Unified Dashboard for Asset Performance

- New Asset & Location Dashboard**  
 Analyze your assets and take actions in the new unified dashboard in MAS for asset and location performance with matrix views, automated analysis, work history, and drill-down into sensor and inspection data.
- Condition Based Maintenance (CBM) with out-of-the-box integration between Manage, Monitor and Health:** Seamlessly share actionable time series data across MAS applications through Meters to enable intelligent and automated CBM.
- Integrated Analytics and Work Queues**  
 Automatically surface assets needing attention and correct missing or inconsistent data. Create Health Work Queues in the Work Queue Manager.



# Default Scores

Available Out of the Box with Activation  
Cover all assets

- **Health**
  - Number of open Service Requests
  - Number of open Corrective Work Orders
  - Remaining Useful Life
    - Chronological Age as proportion of Expected Life
- **Criticality**
  - Normalization of Priority value
- **Risk**
  - $((100 - \text{health}) / 100) * \text{criticality}$

The screenshot shows the 'Score settings' page for the 'Default\_scores' group in IBM Maximo Application Suite. The page includes a navigation sidebar, a breadcrumb trail, and a main content area. A blue information banner states: "'Default\_scores' is a system generated scoring group. To modify the score configurations, you must duplicate this group." Below this, the 'Group details' section shows the name 'Default\_scores', description 'All assets of the system with activated health, risk, and criticality scores.', and ID 'DEFAULT\_GROUP'. The 'Scores' section shows 'Results: 3' and a table with columns 'Type' and 'Description'. The table lists 'Health' (Overall condition) and 'Criticality' (Business process import:). At the bottom, three circular progress indicators show 'Health' at 50.2% (down 6%), 'Criticality' at 75%, and 'Risk' at 37.35% (up 6%).

IBM Maximo Application Suite | Health and Predict

Score settings /

## Default\_scores

**i** 'Default\_scores' is a system generated scoring group.  
To modify the score configurations, you must duplicate this group.

**Group details**

Name  
Default\_scores

Description  
All assets of the system with activated health, risk, and criticality scores.

ID  
DEFAULT\_GROUP

**Scores**

Results: 3

Type	Description
Health	Overall condition
Criticality	Business process import:

### Health

50.2%

▼ 6%

### Criticality

75%

### Risk

37.35%

▲ 6%

# Custom scores

Customizing scores through the *Score Settings* application requires Base-tier user

- **Internal Scores**
  - Leverage Maximo Formula Engine
  - Requires no additional footprint beyond Manage implementation
- **External Scores**
  - Enable more complex notebook-based models
  - Access to a library of industry proven models (17+ models available)
  - Requires additional installation (Watson Studio, CloudPak for Data)

The screenshot displays the IBM Maximo Application Suite interface for the 'Health and Predict' section. The main view shows details for an asset group named 'OEM and Non-OEM Pumps' (ID: 1001). The 'Scores' section shows a 'Results: 5' and a table of score types:

Type	Description	Active
Health	Overall condition	Y
Criticality	Business process importa	Y
Risk	Probability of high-impac	Y
End of life	Probability of imminent e	Y

Below this, a 'Data source' section is visible, showing parameters (C2H2: DGAR-C2H2, C2H4: DGAR-C2H4, CH4: DGAR-CH4) and a 'Notebook function' named 'Duval Triangle Score'. A 'Notebook name' field contains 'IBM Transformers Tap Changers DGA 9.0.0' with an 'Open notebook' button. A 'Contributors' section is also present with an information icon. A note at the bottom right states: 'Contributors can be updated only from the notebook. To retrieve notebook updates, delete and then re-create the group.'

# Meters

Track the condition and usage of assets and locations. Meter data can then be used to initiate maintenance activities and alerts, provide input to scores, etc...

Can be populated manually (eg: via inspection) or integrated with Monitor

- **Continuous:** Values increase cumulatively, for example, mileage or running hours. These meters are typically used to trigger preventive maintenance activities based on their usage
- **Gauge:** Records fluctuating numeric measurements like pressure, temperature, or vibration. Often used for condition monitoring, to set action and warning limits for triggering work orders.
- **Characteristic:** Record qualitative data or observations, like oil color or asset cleanliness. It is possible to define a list of acceptable values for characteristic meters.

The screenshot shows the IBM Maximo Application Suite interface for managing meters. The top navigation bar includes the IBM Maximo Application Suite logo and a 'Manage' tab. The main heading is 'Meters'. Below the heading, there is a search bar for navigation items and a dropdown for 'Available Queries'. The 'Common Actions' section includes 'New Meter', 'Create KPI', and 'Create Report'. The 'More Actions' section includes 'Unit of Measure and Conver...' and 'Run Reports'. The main content area displays a table of meters with columns for 'Meter' and 'Description'. The table lists several meters: FLTHRS (Flight Hours), TEMP-F (Temperature in Fahrenheit), TEMP-C (Temperature in Celsius), IN-PRESSUR (Inlet Pressure), and O-PRESSUR (Outlet Pressure). Below the table, there is a detailed view of a meter's status and readings. The table below shows the following data:

Status	Meter	Value	ID	Last reading
	OP_COND	ACCEPTABLE		4/15/26 8:39:36 am
	PRESSURE	65.148 PSI		4/22/26 4:18:07 am
	LOAD	142.101		4/22/26 4:18:07 am

At the bottom of the interface, there is a pagination control showing 'Items per page: 10' and '1-10 of 13 items'. There is also a '1 of 2 pages' indicator and a blue 'AI' button.

# Demo



# Condition Insights

## Instant actionable insights

No manual configuration or analytics expertise required.

This intelligent agent analyzes all available MAS asset data including work history, meters, KPIs, FMEAs, and alerts to deliver clear, contextual insights in seconds.

Asset Managers gain clarity faster, reduce cognitive effort, and make better decisions without needing weeks of effort by data science teams to build complex analytical models.

The screenshot displays the IBM Maximo Application Suite interface for asset 23972. The main view shows the asset details, including its name, specifications, and a health score of 67. A modal window titled 'Insights' is open, providing AI-generated insights for the asset condition. The insights are categorized into 'Needs attention' (pink) and 'Confidence: high' (green). The insights include a condition summary, a list of insights, and recommendations.

**Insights**

Review AI-generated insights for the asset condition.

**Needs attention** **Confidence: high** Generated on **08 December 2025 05:33 PM** [Regenerate](#)

**Condition summary**  
The motor is 16 years old, past its 15-year life, and has a fair health score of 67. 14 preventive tasks are overdue, which raises the risk of failure. Meter readings show no problems, but missing problem codes and wrong labels on overdue tasks make tracking hard. The motor needs overdue maintenance done quickly, better scheduling, and a check to see if replacement is needed.

**Insights**

- All 14 preventive work orders (WO43053, WO43054, WO41062, WO40060, WO41011, WO43047, WO43051, WO43052, WO42005, WO43050, WO43055, WO43048, WO43049, WO42003) are overdue, indicating missed scheduled maintenance.
- No corrective or failure work orders have been recorded for the motor.
- The motor is 16 years old, exceeding its expected service life of 15 years.
- The health score is Fair (67) despite the overdue maintenance, suggesting potential degradation.
- Meter data shows zero anomalies and changepoints, providing no indication of abnormal operation.
- No problem codes are assigned to any work orders, limiting root-cause analysis and trend tracking.
- Each work order is labeled with performance\_category 'On Time (Green)' yet they are overdue, indicating data inconsistency.

**Recommendations (Ordered by priority)**

- Prioritize completion of the 14 overdue preventive maintenance tasks to restore the maintenance schedule and reduce risk of unexpected failure.
- Conduct a root-cause analysis of why preventive work orders are overdue despite being marked 'On Time', and improve scheduling and tracking processes.

# Configurable Asset & Locations Dashboard

- Drag'n'Drop Configuration for a tailored experience by role or preference
- Redesigned and reorganized into functional views
- Asset-specific views with advanced APM cards tailored to specific asset types or industries
- Partners can create tailored APM views for customers, asset types, or use cases
- 10 - 20x faster score calculations

The screenshot displays the IBM Maximo Application Suite interface for asset PMPDEVICE003. The dashboard is organized into several functional views:

- Functional APM View templates:** A top navigation bar highlights this feature.
- Customize APM Scores and Cards:** A second top navigation bar highlights this feature.
- Build your own Personal Views:** A third top navigation bar highlights this feature.
- Graphite - Drag & Drop Edit or Remove Cards:** A fourth top navigation bar highlights this feature.

The main dashboard content includes:

- Asset Overview:** Shows the asset name (PMPDEVICE003), type (Field Pump 003), and status (Bad actor, Replace). It includes an 'Actions' menu and a '3 of 10' indicator.
- Health and Metrics:** Tabs for Health, CBM, Reliability, and Asset life. The CBM (Condition Based Monitoring) view is active, showing a 'Public' status and a 'Cancel Save' button.
- Priority Summary:** Four cards showing priority counts: 1 Urgent priority, 1 High priority, 1 Medium priority, and 0 Low priority.
- Alerts Table:** A table listing alerts with columns for Alert ID, Description, Priority, and Status. The table shows three alerts: 1175 (Pump Overheating, Priority 1), 1207 (Pump vibrations above limit, Priority 2), and 1208 (Pump leaks, Priority 3). All are marked as 'NEW'.
- Meters:** A section for monitoring meters, including Pressure, Runhours, and Temperature (TEMP-F).
- Card Gallery:** A sidebar on the right allows users to drag and drop various cards into the dashboard. Available cards include: KPI trend, KPI comparison, KPI value (25%), Value (25%), Favorites, Quick actions, Table, Work queues, External content, and Threshold tile.
- Graphite Chart:** A detailed view of a 'LOAD' history chart showing a fluctuating purple line over a period of one month. The chart includes a 'Reported on' date and a 'View details' link.
- Meter Details:** A pop-up window showing details for meter ID 5.603, including the date and time (2/18/26 3:26:11 pm) and a note that no condition monitoring rules are currently applied.

# Reliability and CBM data directly in the Asset & Locations dashboard

## Reliability Tab with Failure History card, Total maintenance cost card

- ❑ Failure history : Chronological record of asset or location failures and associated work orders.
- ❑ User click on count of work orders dialog shows work order details.
- ❑ Total maintenance cost : shows the cumulative maintenance expenses for an asset or location

## Alerts and Meters tab

- ❑ Real-time visibility of condition-based alerts
- ❑ The Dashboard includes the following key components:
  - Priority count cards
    - Displays 4 priority categories: Urgent, High, Medium, Low
    - Shows real-time alert count for each priority
  - Alerts table card

Asset Manager Public

**Urgent Priority**  
5 Alerts

**High Priority**  
0 Alert

**Medium Priority**  
1 Alert

**Alerts**

<input type="checkbox"/>	Alert	Summary	Reported P... ↑	Internal Pri...	Status	Owner	Reported
<input type="checkbox"/>	ALT49	Critical - Contr...	1	1	ASSIGNED		BPILLA
<input type="checkbox"/>	ALT45	Critical - Asset...	1	1	INPROG	ALVIN	REVIS
<input type="checkbox"/>	ALT29	Structural da...	1	1	ASSIGNED		BPILLA
<input type="checkbox"/>	ALT25	Emergency - G...	1	1	INPROG	CHLOE	REVIS

Items per page: 10 ▾ 1-10 of 28 items

**Pumps Currently Stopped** : Under target by 19.00  
1 ✓  
▲ 0.00% from last refresh

**Bad Actors - YTD Cost vs Budget** :  
! (Warning icon)

**Assets with Meters** : Under target by 9.00  
1 ✓  
▲ 0.00% from last refresh

**Selected KPI comparison** [Copy icon] [More icon] **Work queues**

# Failure curves based on historical work order data

## New Probability of Failure tab in the Score Settings application

- Fit Weibull parameters from historical data directly in Manage with out-of-the-box functionality
- Visual failure curves alongside actual failure data
- Define curves by scoring group

The screenshot displays the IBM Maximo Application Suite interface, divided into two main sections. The top section, titled "Health", is used for failure analysis. It includes a "Select a data source" dropdown with "Asset group failure data" selected, and a "Select a chart option" dropdown with "Probability density function" selected. The "Weibull parameters" section shows input fields for Lambda (1,246.863), Kappa (1.807), and Constant (--). A "Reanalyze graph" button is present. The "Failure characteristics" section has a "Problem code" dropdown. The right side features two charts: "Probability of failure by age" (a line graph showing a sharp peak at age 8) and "Failure incident count by age" (a scatter plot showing a single data point at age 30). The bottom section, titled "Score settings", shows a table of configured scores.

Name	Description	Lamb...	Kappa	Const...	Data source	Used in
Aging Assets POF	[Test] POF for old age assets	2,071.51	4.52		Asset Group Failure Data	-
Test pof	test	2,030.52	4.63		Asset Group Failure Data	Health

**IBM**