

Maximo Health

Unveiling the Efficiency and Power of Asset Management

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Today's Presenter

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Agenda



MAS COMPARISON

15 MINUTES



GET STARTED WITH HEALTH

35 MINUTES



QUESTIONS

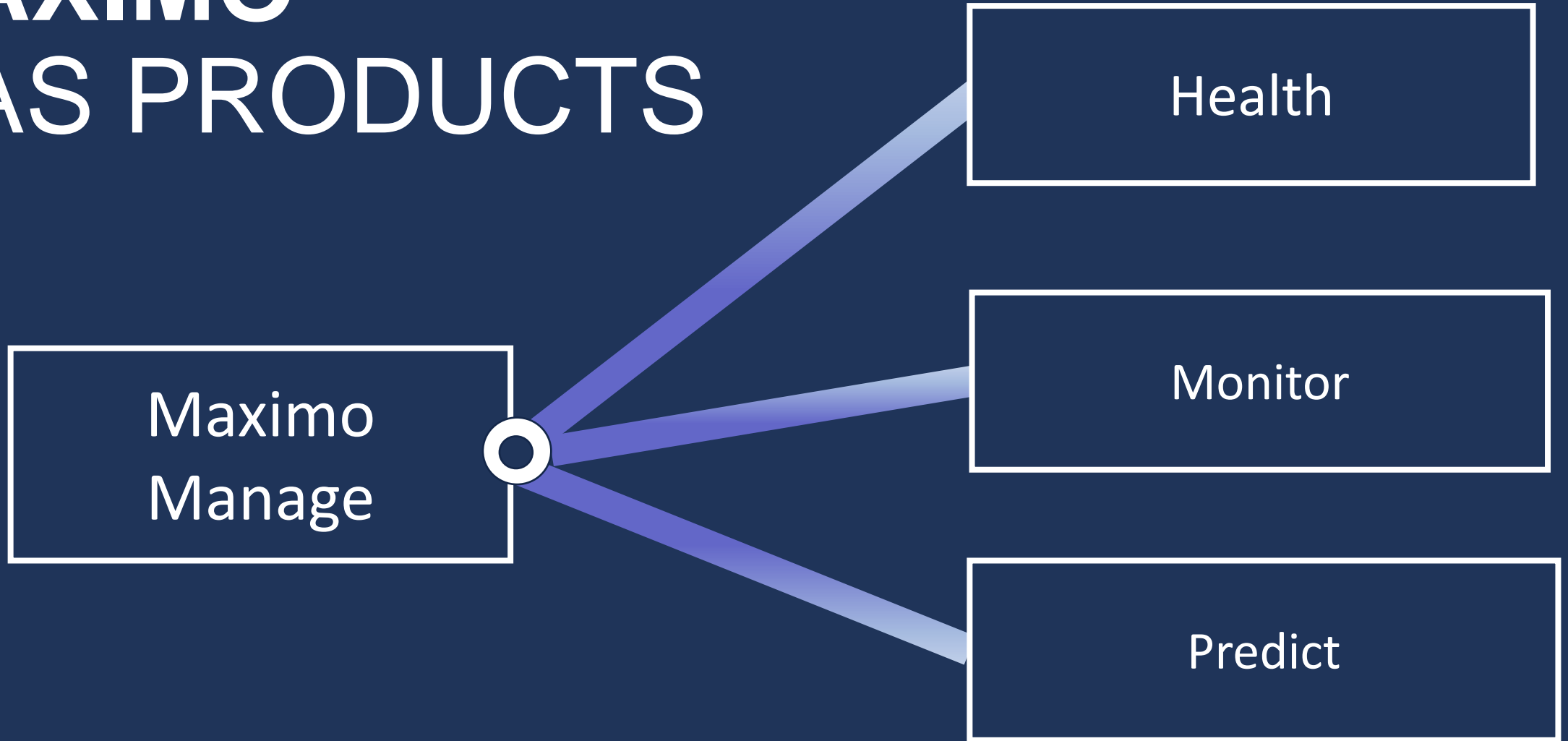
10 MINUTES



MAXIMO MAS PRODUCTS



MAXIMO MAS PRODUCTS





**what mas product
should we use?**



Product Comparison



Health



Monitor



Predict

**Uses Maximo
Features**



Product Comparison



Health

Monitor

Predict

Uses Maximo Features



Tight Integration to Maximo



Product Comparison



Health

Monitor

Predict

Uses Maximo Features



Tight Integration to Maximo



Advanced skill sets not required



Product Comparison



Health



Monitor



Predict

No Hardware Impact



Product Comparison



Health

Monitor

Predict

No Hardware Impact



Deployment Option Flexibility



Product Comparison



Health

Monitor

Predict

No Hardware Impact



Deployment Option Flexibility



Licensing



Health is the simplest product to extend into MAS



Product Comparison



Health



Monitor



Predict















Uses Maximo Features

Tight Integration to Maximo

Advanced skill sets not required



Product Comparison

	 Health	 Monitor	 Predict
No Hardware Impact			
Deployment Option Flexibility			
Licensing			



Agenda



MAS COMPARISON
15 MINUTES



GET STARTED WITH HEALTH
35 MINUTES



QUESTIONS
10 MINUTES



Steps to enable Health

1

Identify which assets
require attention.

2

Investigate problems
with your assets.

3

Take action.



Prep Work:

3 steps to identify which assets require attention

1A

Create Scoring Groups



1B

Define Score Types

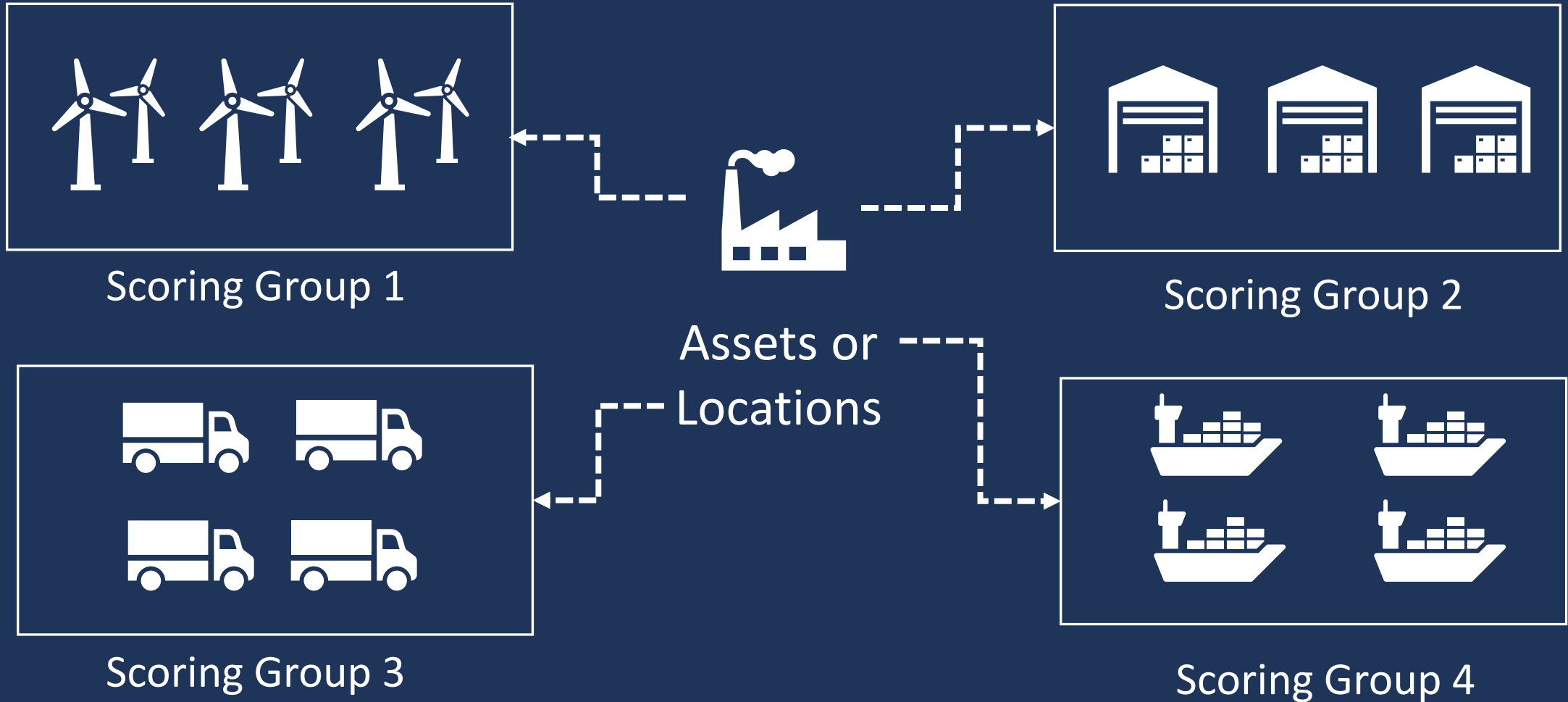


1C

Develop Contributors

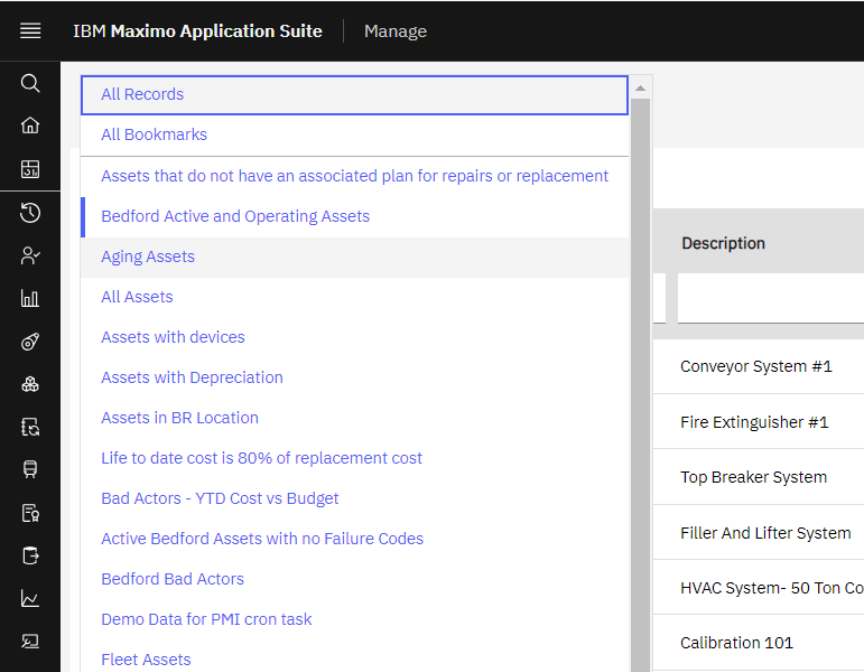


Create Scoring Groups

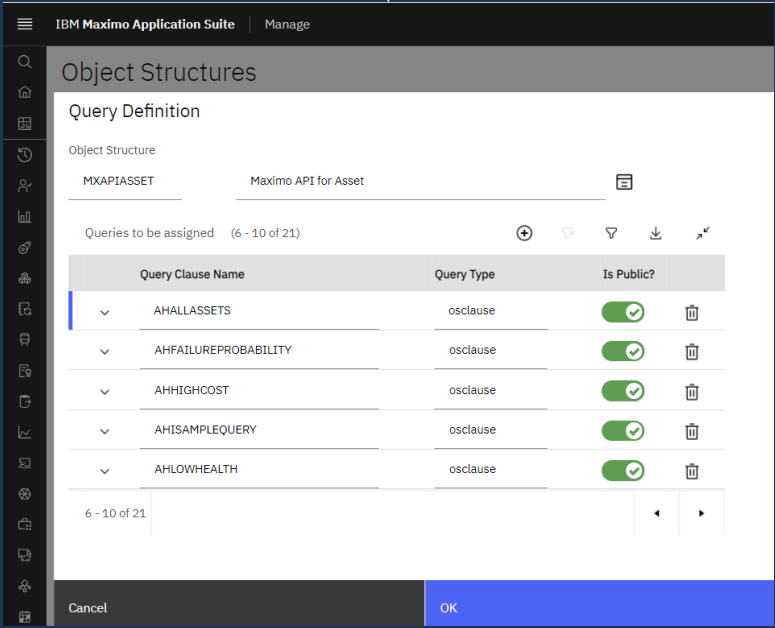


Create Scoring Groups

Scoring Groups



Asset or Location App Queries



Object Structure Queries (ex. MXAPIASSET, MXAPILOCATION)



Create Scoring Groups

Assign Score types (ex. Risk) along with Contributors and weights

IBM Maximo Application Suite | Health

Score settings / Bedford Active and Operating Assets

Group details

Name: Bedford Active and Operating Assets

Description: Maximo Manage Query - Bedford Active and Operating Assets

ID: 1005

Object: Asset

Scores

Results: 3

Type	Description
Health	Overall condition
End of life	Probability of imminent end of life ...
Risk	Probability of high-impact failure

Items per page: 10 | 1-3 of 3 items

Scored assets

Results: 126

Asset	Description	Failure class
13144	Carton Escapement Assembly #1	PKG
13143	Chain Wash Assembly	PKG
12600	Conveyor System #1	CONVEYOR

IBM Maximo Application Suite | Health

Score settings / Bedford Active and Operating Assets / Risk

Active Yes

Score details

Description: Probability of high-impact failure

Status		Score range
High	100.0 - >40.0	
Medium	40.0 - >10.0	
Low	10.0 - 0.0	

Contributors

Total weight: 100%

Name	Description	Type	Weight
FACYDBGTCOSTSAMPLE		Group	60%
FACMTBFSAMPLE		Group	40%

2 contributors determine risk score of this group of assets



Carefully plan and detail scoring groups
for meaningful and actionable content.



Prep Work:

3 steps to identify which assets require attention

1A

Create Scoring Groups



1B

Define Score Types

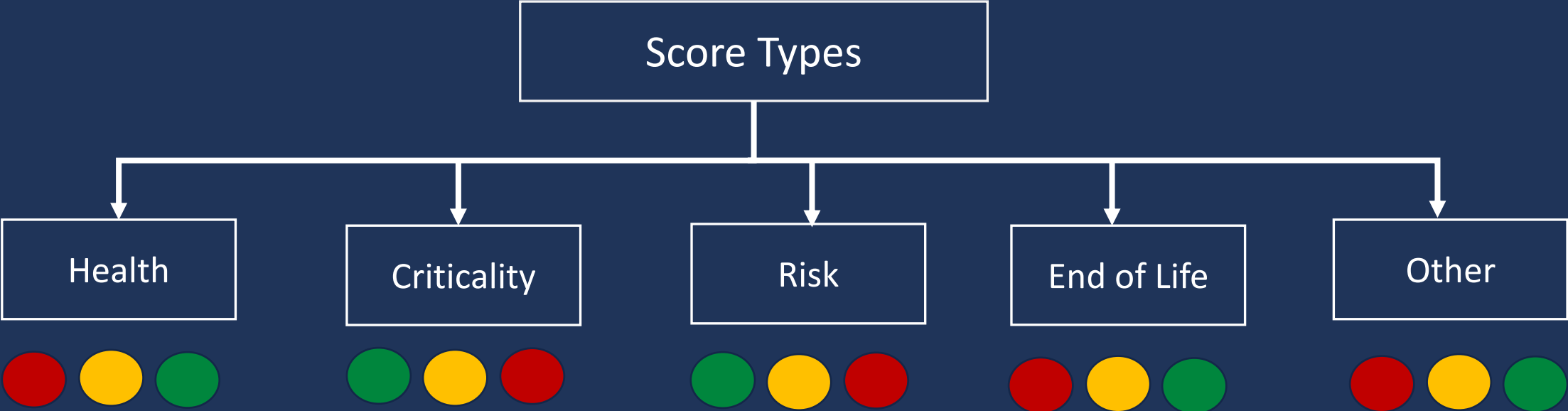


1C

Develop Contributors



Define Score Types



How you apply contributors to score types and ranges
requires detailed thought
to receive meaningful and actionable score results.



Prep Work:

3 steps to identify which assets require attention

1A

Create Scoring Groups



1B

Define Score Types

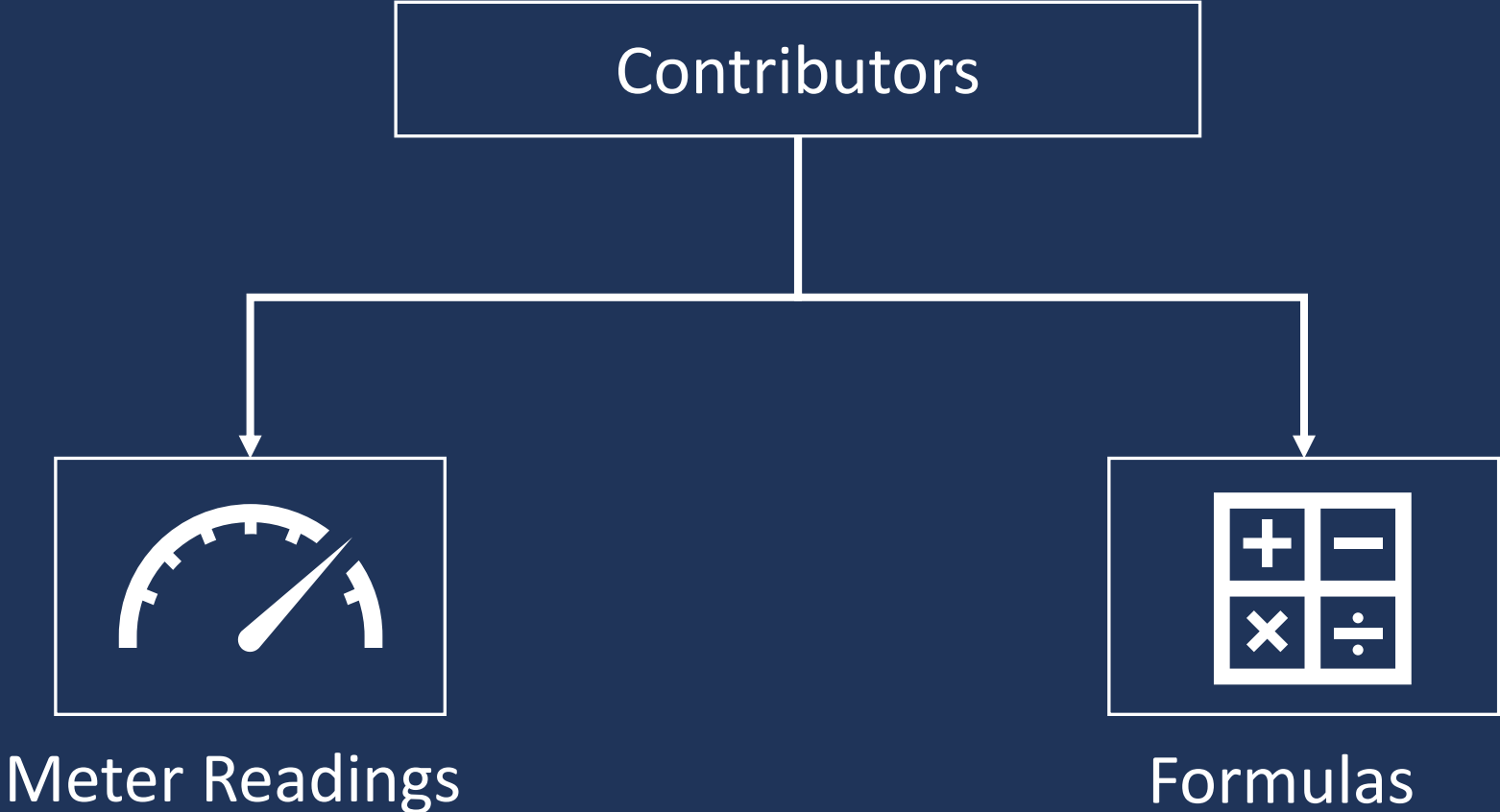


1C

Develop Contributors



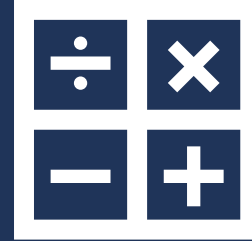
Create Contributors



Formulas . Use Maximo attributes or meters

1C

To calculate scores



Formulas

Simple -> Complex

ASSET.ISRUNNING

If Value = 1 (Asset is running) – Best Value
If Value = 0 (Asset not running) – Worst Value

MTBF("ALLWO",-
1,DURATION(2,0,0,0,0,0),"reportdate","actfinish")

MTBF in days based on Work orders in last 2 years (based on Report Date) with time between failure calculated by Actual Finish.



Steps to enable Health

1

Identify which assets
require attention

2

Investigate problems
with your assets.

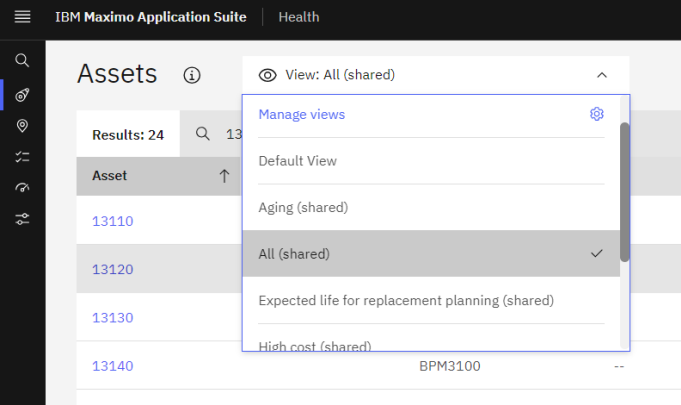
3

Take action.



First - Set up views for asset and location scores

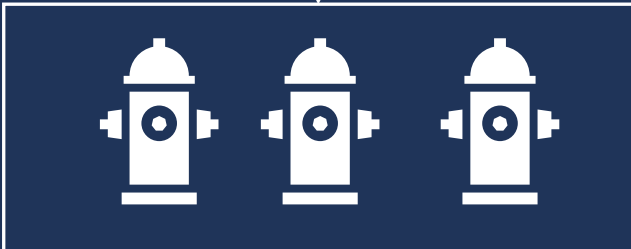
Using configurable queries and fields



Create Health Views



Apply Maximo Manage App Queries via **Filter Action**



Utilize Maximo Manage predefined OS Queries



View Asset Scores

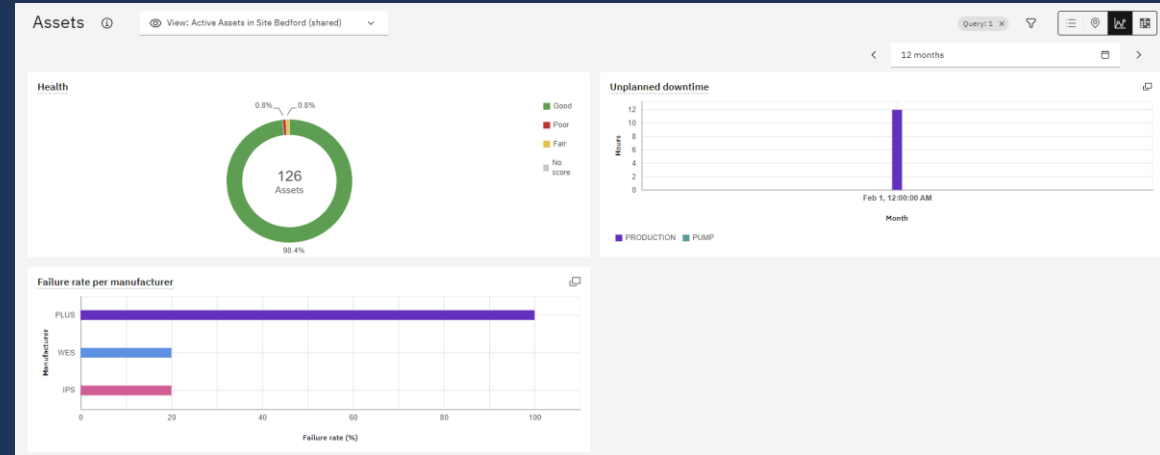
Table

Configurable listing of fields and values

Asset	Type	Location	Health	Risk	End of life	Installation Date	Age in Years	Total Cost	Priority
1001	FACILITIES	MOFLOOR1	98	---	---	3/28/01	22.9	0.00	3
1008		OFF301	100	---	---			0.00	
1009		OFF301	100	---	---			0.00	
11200	FACILITIES	BR200	70	73	---	6/2/98	25.7	13,505.95	4
11210	FACILITIES	BR210	98	40	---	5/31/94	29.7	0.00	4

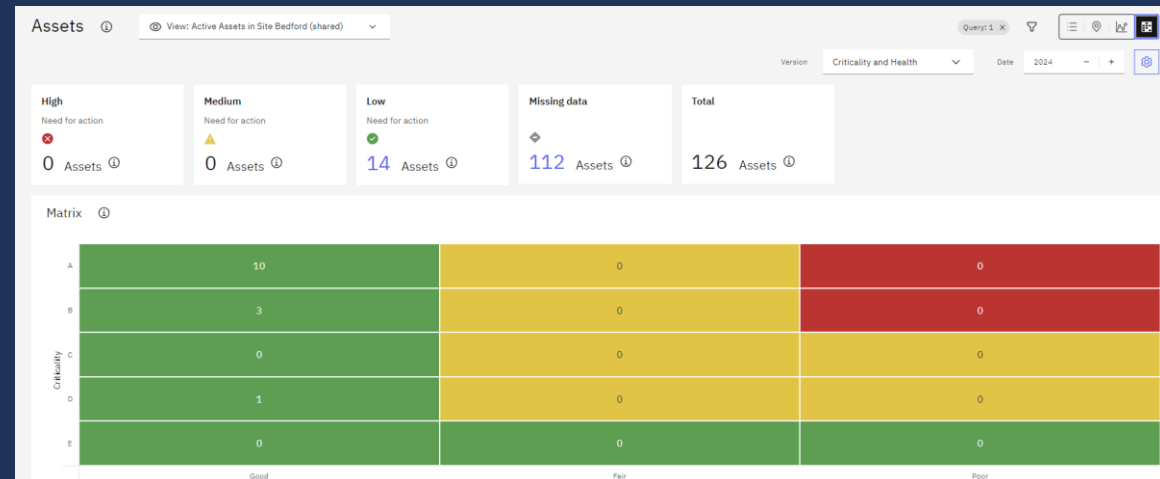
Chart

3 Default views of Asset Metrics



Matrix

Visual display of asset score distribution



*Map view also available

what's next?



Steps to enable Health

1

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require attention

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Take action.



Take actions . Work Queues

Group assets to quickly identify and resolve issues with asset health

5 Predefined Work Queues

Low Health

Missing expected Life

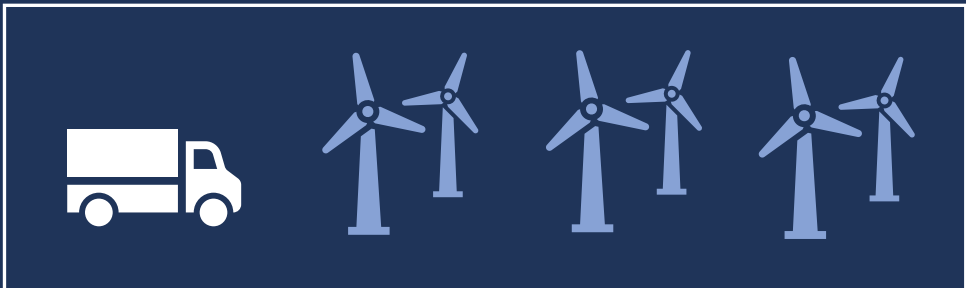
Missing criticality score

Missing installation date

Missing replacement cost



Missing expected life work queue



Missing installation date work queue



Predefined Health Work Queues

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Work queues

Queue	Queue priority ↑	Remaining assets	Go to
Low health	1	1	Open first asset
Missing expected life	2	1,085	Open first asset
Missing criticality score	2		
Missing installation date	2		
Missing replacement cost	2		

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Work queues /

Missing criticality score ⓘ

Results: 1129

Asset	Type	Location	Health	↑	Criticality	Installation Date	Expected life in years	Replacement Cost
11430	FACILITIES	BR430	● 0		--	4/7/95	30	23,000.00
11200	FACILITIES	BR200	● 70		--	6/2/98	30	150,000.00
49332		BR451	● 75		--	5/31/94		850.00
11450		BR450	● 78		--	5/26/96		6,200.00
12600	PRODUCTION	SHIPPING	● 82		--	9/16/98		19,000.00



Actions: Create Manage Action Records

Create Service Request

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[Work queues](#) / [Missing criticality score](#) / [Asset 11430](#) /

Create service request

* Required

*Summary

Summarize the work

Description

Describe the work in more detail

Priority

Unspecified

Create Work Order

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[Work queues](#) / [Missing criticality score](#) / [Asset 11430](#) /

Create work order

* Required

*Summary

Summarize the work

Description

Describe the work in more detail

Work type

Choose an option

*Priority

1 - +

Start no earlier than M/D/YY

Finish no later than M/D/YY

Inspection form

Choose an option



Actions . Create Health Plan

Builds Replacement Plan

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Assets / Asset 11400 /

Create plan

Plan details *Required

Asset number: 11400 | Asset description: Boiler- 50,000 Lb/Hr/ Gas Fired/ Water Tube

Summary: 90/100

Based on Asset Health Score and Criticality Rating - need to develop a refurbishment plan.

*Plan type: Refurbish

Schedule

Target start date: 6/3/24

Expected downtime in hours: 40

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Assets / 11400

Unspecified | Main Boiler- 50,000 Lb/Hr

Asset 9 of 126

Health: 85%

Criticality: [Warning]

Risk: 40%

End of life: [Warning]

RUL: [Warning]

Age: 29.7 years

Effective age: [Warning]

Next PM: [Warning]

MRR: Ratio is 53.3%

Asset information

Asset scores

Asset timeline

Operational status

Maintenance history

Replacement planning

Plan	Type	Target date
22	Refurbish	6/3/24

Plan 22

Plan details

Summary: Based on Asset Health Score and Criticality Rating - need to develop a refurbishment plan.

Type: Refurbish

Schedule

Target start date: 6/3/24

Expected downtime in hours: 40:00

Costs

Total estimated cost: 30,000.00

Estimated capital expense: 25,000.00 | Estimated operating expense: 5,000.00

Estimated failure cost: 75,000.00

Life

Adjusted end of life: 6/3/27



Value: Seamlessly integrate Health data in Manage

IBM Maximo Application Suite | Manage

Operational dashboard

Page last updated: 2/14/24 5:48:31 am

Refresh KPIs manually or schedule refreshes in KPI Manager.

KPI Name	Status	Value	Change
Overdue Emergency Work	Alert	25 work orders	0.00% from last refresh
Overdue PM Work	Alert	393 work orders	0.00% from last refresh
PM Performance	On target	56.75 %	0.00% from last refresh
Health of Assets for PM Work	Alert	87 %	0.00% from last refresh

Selected KPI Comparisons

KPI	Status	Value
EMWOOVER	Alert	~25
PMPERF	On target	~56.75
PMWOOVER	Alert	~393

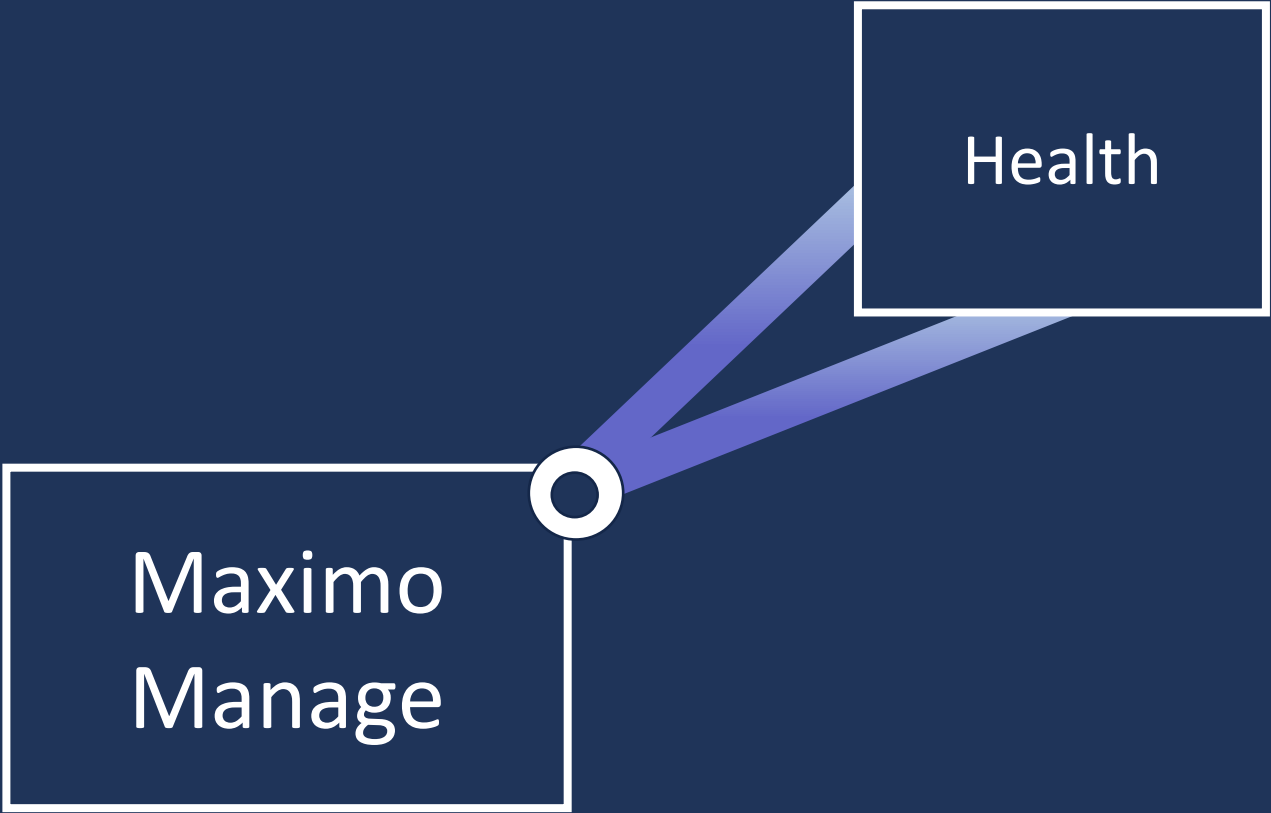
Selected KPI Trends

Date	EMWOOVER	PMWOOVER	PMPERF
Feb 7	~25	~393	~56.75
Feb 8	~25	~393	~56.75
Feb 9	~25	~393	~56.75
Feb 10	~25	~393	~56.75
Feb 11	~25	~393	~56.75
Feb 12	~25	~393	~56.75
Feb 13	~25	~393	~56.75
Feb 14	~25	~393	~56.75



MAXIMO

MANAGE AND HEALTH



Agenda



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15 MINUTES



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Maven Maximo Health Videos

Health video playlist

https://www.youtube.com/watch?v=RFAG0_ChoRE



Health Overview
https://www.youtube.com/watch?v=sCN_3jVA0sk

Health Scoring Groups
<https://www.youtube.com/watch?v=RRluPLEZBA4>

Health Meter Scoring Contributors
<https://www.youtube.com/watch?v=m69hfPb5ooE>

Health Formula Scoring Contributors
<https://www.youtube.com/watch?v=nA6gANGiXlo>

Health Dashboards and Actions
<https://www.youtube.com/watch?v=nA6gANGiXlo>



MAS Reference Links . Health



IBM Documentation

<https://www.ibm.com/docs/en/mas-cd/mhmpmh-and-p-u/continuous-delivery?topic=getting-started>



Maven tips on using Trial version of Maximo Manage and Health

<https://mavenasset.com/14-tips-for-exploring-the-14-day-trial/>



Maven video on using Trial version of Maximo Manage and Health

https://www.youtube.com/watch?v=RFAG0_ChoRE



Loading data into Maximo Health

<https://www.ibm.com/docs/en/mas-cd/mhmpmh-and-p-u/continuous-delivery?topic=data-loading-into-maximo-health>



Integrating Maximo Manage with IoT Monitoring Systems

<https://www.ibm.com/docs/en/mas-cd/maximo-manage/continuous-delivery?topic=applications-integrating-maximo-manage-iot-monitoring-systems>



Thank You!

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v: www.youtube.com/@mavenasset

