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Maximo Business
Administrator
SunCoke Energy

SWMUG
February 2026
Houston, Texas



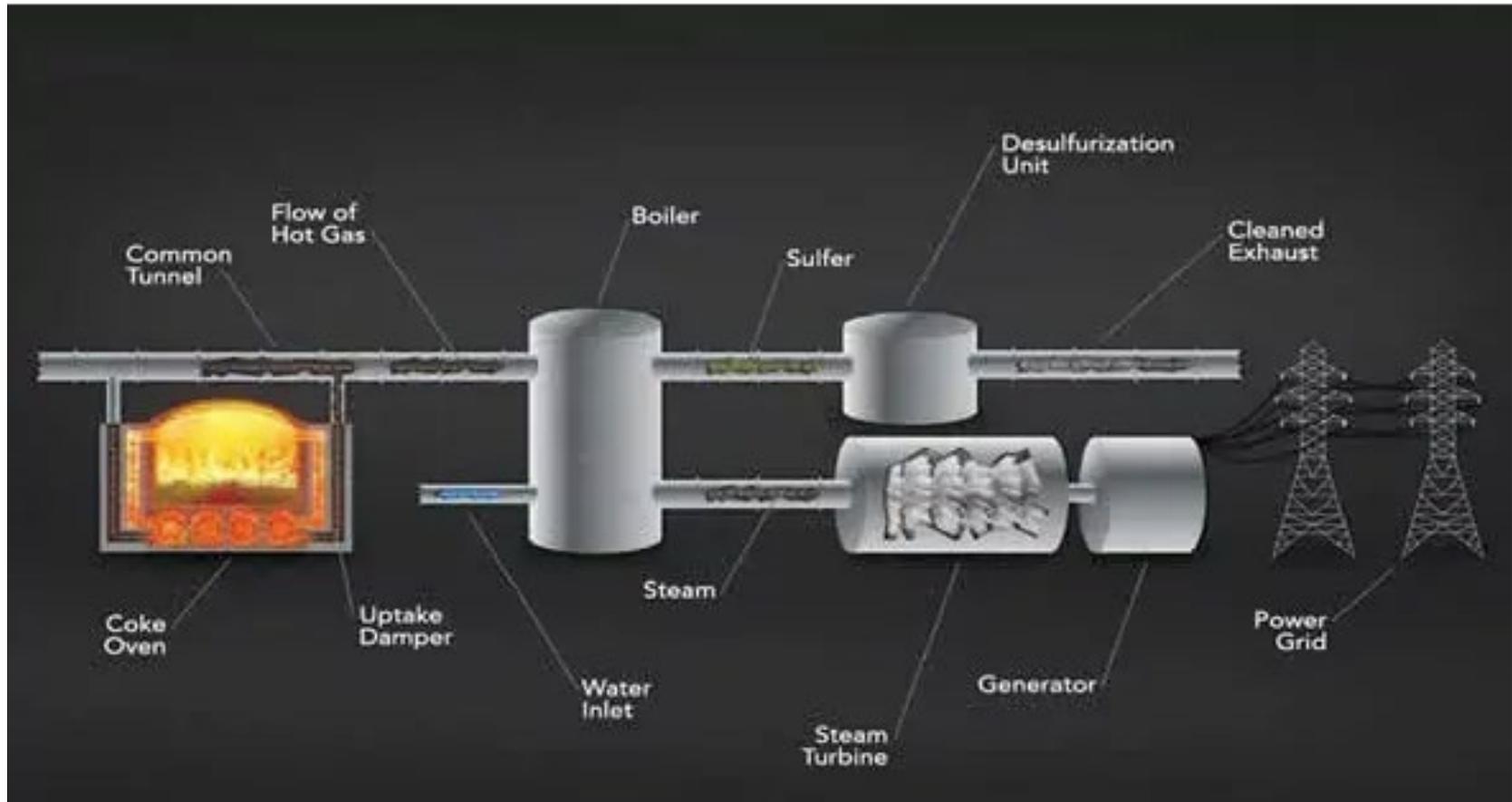
SunCoke Energy's Pathway to MAS



SunCoke Energy[®]

SunCoke Company Profile

SunCoke Energy's Heat-Recovery Technology



SunCoke Operations

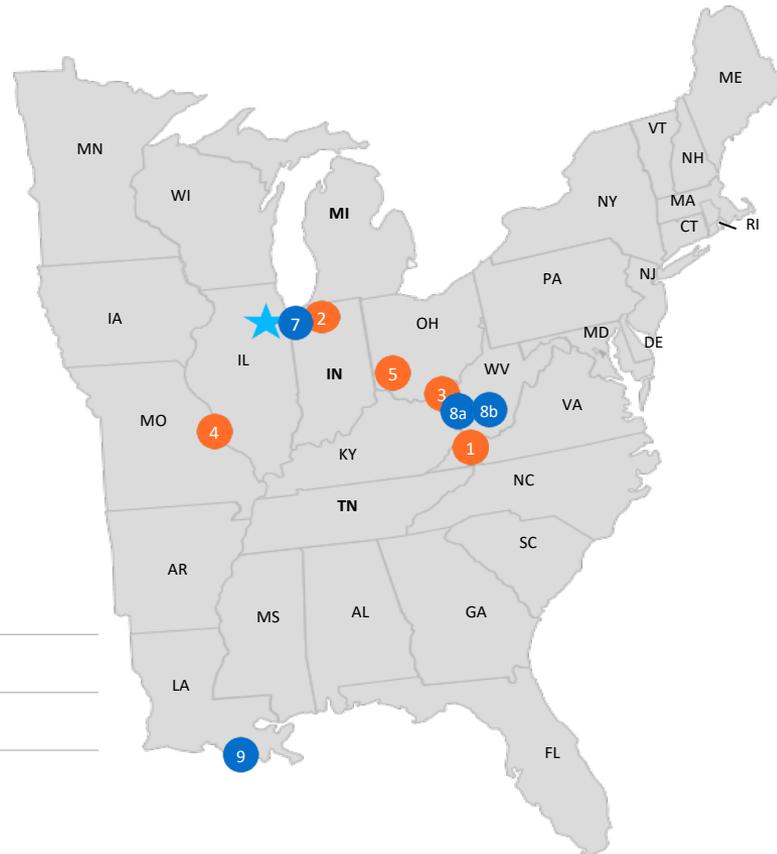
North American Operations

Legend

- 1 Jewell Coke
- 2 Indiana Harbor
- 3 Haverhill I & II
- 4 Granite City
- 5 Middletown
- 6 Vitória, Brazil
- 7 Lake Terminal
- 8a KRT Ceredo
- 8b KRT Quincy
- 9 Convent Marine Terminal

Not pictured

- Cokemaking
- Logistics
- ★ SunCoke Headquarters



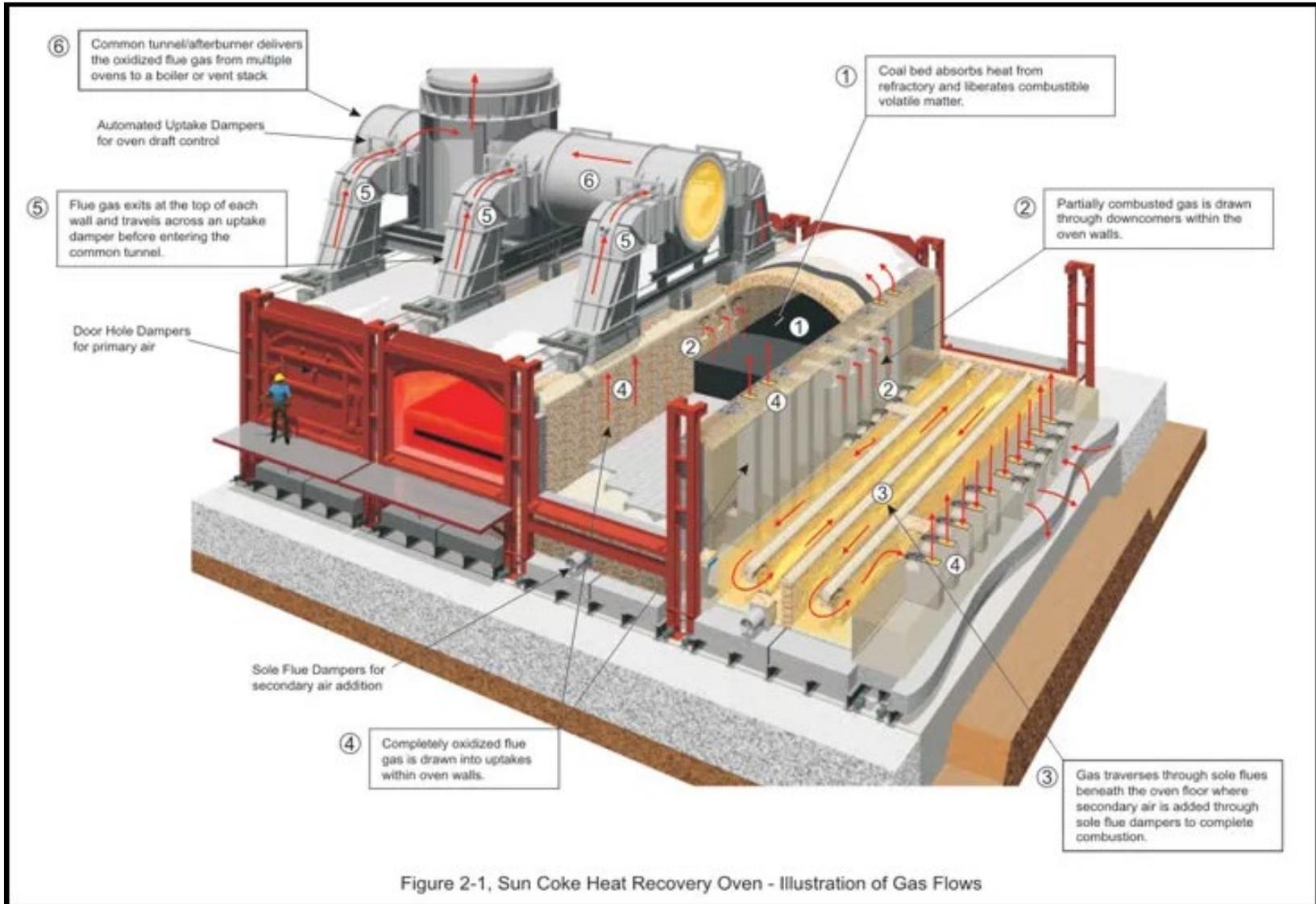
Cokemaking Advantages

- Domestic assets strategically located to serve domestic blast furnaces as well as export market
 - Three facilities co-located with customer BF and remaining two facilities benefit from advantaged rail logistics
 - Ready access to outbound coke logistics provide flexibility to serve multiple customers and export market
- Close proximity to met coal feedstock
- Foundry production logistically advantaged for majority of market demand

Logistics Advantages

- Only rail served bulk export facility on lower Mississippi River
- Uniquely positioned with dual-rail and barge in/out capability on Ohio River
- Locations on Ohio River system well positioned to serve coal miners, power companies and steelmakers

Coke Ovens



Maximo Milestones @ SunCoke

- May 2009 Maximo Project is approved
- October 2009 Implementation of v7.1.1.5 at first coke manufacturing plant.
- June 2010 Implementation at last coke manufacturing plant
- June 2012 Implementation for Mining
- April 2013 Upgrade to Maximo v7.5
- December 2013 Interface developed Maximo <> Pi
- January 2016 Upgrade to Maximo 7.6
- August 2018 Maximo Scheduler implementation
- March 2023 Upgrade to Maximo 7.6.1.3
- August 2023 Maximo Mobile 8.10.0
- May 2024 MAS Upgrade Project begins
- October 2025 Upgrade to MAS 9.0
- January 2026 Install Transportation and RS in DEV
- February 2026 Kickoff Logistics Implementation Plan

UPGRADE CONSIDERATIONS



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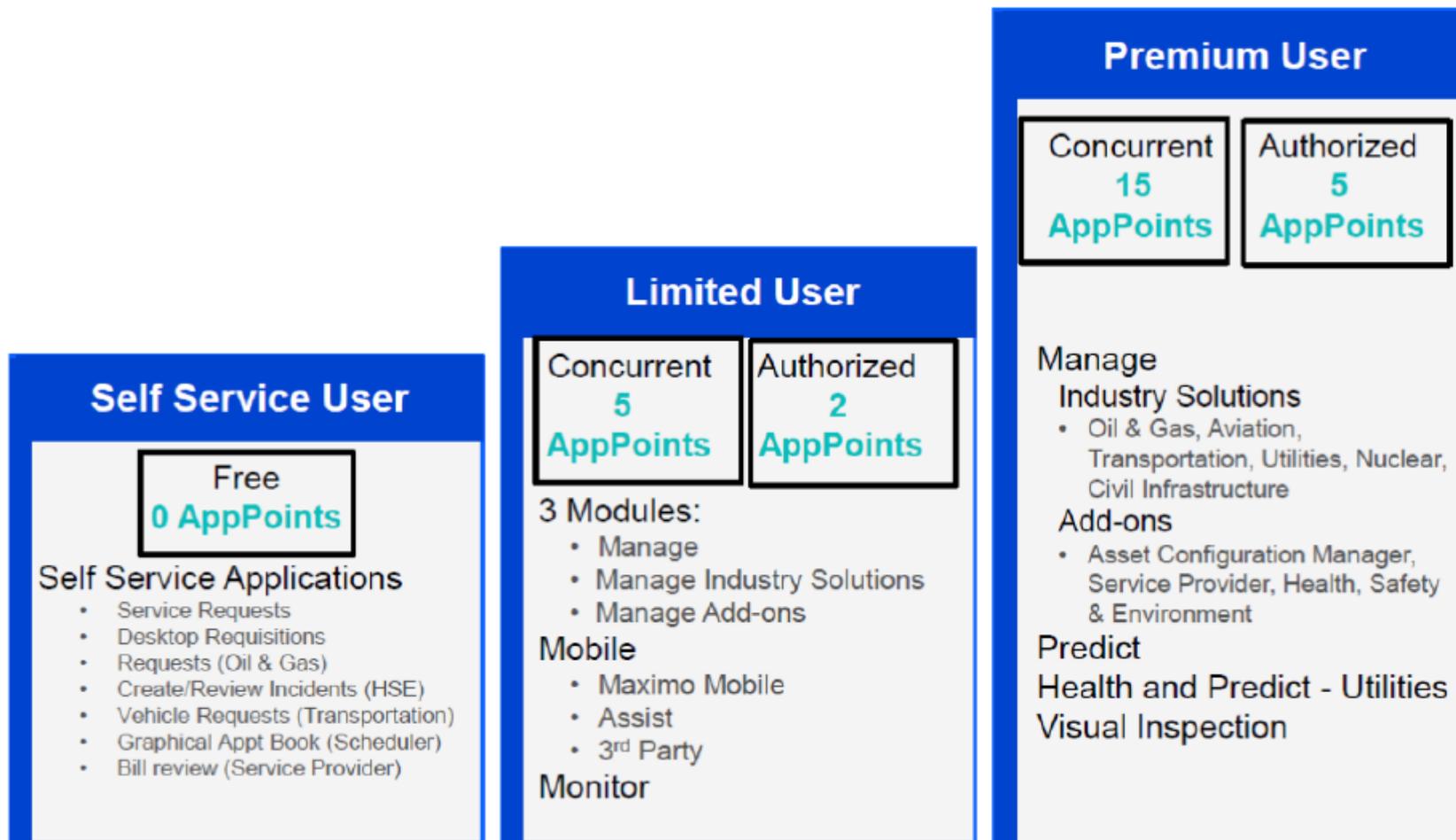
Project Outcomes for MAS Upgrade

- Realize the advantages of new enhancements to “core” product.
- Behind schedule for many iFixes (007 -> 030)
- Enhanced mobile platform
- Leverage AI to speed decision-making in resource challenged environments
- Target version in Spring 2024 → MAS 8.7

User Review before MAS

- Review the existing active users
- Deactivate users who had not logged into Maximo last six months
- This process not new for MAS upgrade but was key to getting accurate point estimates
- *'Magic Scripts'* left us surprised
- >90% were Premium Users

App Point Levels @ SunCoke



Security Review before MAS

- Review the existing security definition and access and perform any changes/ cleanup before MAS upgrade
- Many applications, mainly in Oil and Gas were not being regularly used but users had access
- GENUSER security group had wide access and majority of users were in this group.
- Users had more access than needed to perform their daily work
- Split up GENUSER group for Purchasing, Work Management and special functions like MOC & Investigations

Software Evaluation

- Evaluation 8.7 stood up late June 2024
- Same day it was functional, call made by IT to merge SunCoke data which eliminated the chance for any functional/business benefits
- Learning started for Technical side to troubleshoot deployment snags
- Business side on hold, exploration paused
- Decision made to wait until 2025 for 2nd attempt

New Technology readiness

- All our existing servers are Windows based
- Only looking for on-premise MAS, not Cloud based
- No general username/ password based access on Red Hat server
- SSH keys, OC terminal, Docker, Containers, Images, YAML, Mongo DB
- Created an image for existing Maximo 7.6 version on Docker desktop. Used this for getting container based knowledge, run and test terminal based commands.
- Installed Openshift for Development on Windows

Openshift Admin Server

Use the below environment as an admin server for
Openshift

- Windows server 2022
- Windows subsystem for Linux (WSL 2)
- Ubuntu 24
- Docker
- Separate Linux server not required

Openshift on Windows

- Install Openshift development version on Windows
- Familiarize with different components, navigation, Operators, PODS, YAML
- Create components using YAML files – Storage, PVC, Test PODS

New in MAS

User management

- Maximo Users managed in Mongo DB
- Upload/ Synchronize users using MASUSERSYNC Cron
- User needs to be synchronized before Maximo access



MAXADMIN

Last modified 02 April 2025 by

✓ Active

✓ Synchronized

Identity

User ID

maxadmin

Owner

Local ⓘ

IBM Maximo Application Suite



Suite administration

Overview

Catalog

Suite

Workspace

Configurations

Certificates

License consumption

Users

API keys

UAT & TRAINING MATERIALS



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Training Docs as UAT shortcut

Category : Training Documents (55)

- Training Documents  MXES-TR-01-01 Entering a Work Order
- Training Documents  MXES-TR-01-03 Creating a Work Plan
- Training Documents  MXES-TR-01-04 Direct Printing with Attachments
- Training Documents  MXES-TR-01-05 Creating a Time-Based PM
- Training Documents  MXES-TR-01-06 Generating PM Work Orders
- Training Documents  MXES-TR-01-08 Entering Labor Hours
- Training Documents  MXES-TR-01-09 Entering a Work Order via Service Request
- Training Documents  MXES-TR-01-10 Creating an Invoice for Contract Labor Hours
- Training Documents  MXES-TR-01-11 Requesting Inventory Items
- Training Documents  MXES-TR-01-12 Approving Contract Labor Hours
- Training Documents  MXES-TR-01-13 Run Direct Issue Reorder
- Training Documents  MXES-TR-01-15 Creating a multi day work plan

MXES Guide example

MXES-TR-01-08 Entering Labor Hours



Entering Actual Hours on Work Orders

The Maximo Work Order is the document that is used for requesting, planning and scheduling maintenance work. The planned materials and labor hours are all estimated and do not represent that *Actual* cost of completing the work.

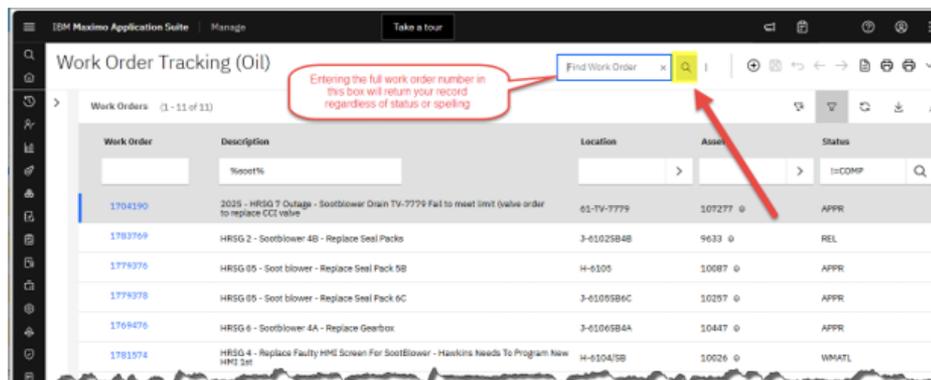
Within the context of Maximo, a Labor is a person performing work. Your labor record is typically your Maximo Username. There is a default Craft for every Labor record. The Craft is associated with the cost per hour.

This document details the method for reporting actual labor hours and work history information to the work order.

From the Maximo Menu Bar...

Select **WORK ORDERS>WORK ORDER TRACKING (Oil)**

This will open the Work Order Tracking "List" screen below



IBM Maximo Application Suite | Manage | Take a tour

Work Order Tracking (Oil) | Find Work Order x

Entering the full work order number in this box will return your record regardless of status or spelling

Work Order	Description	Location	Asset	Status
1704190	2025 - HRSG 7 Outage - Sootblower Drain TV-7779 Fail to meet limit (valve order to replace CCI valve	61-TV-7779	107277 @	APPR
1783769	HRSG 2 - Sootblower 4B - Replace Seal Packs	3-61025B4B	9633 @	REL
1779376	HRSG 05 - Soot blower - Replace Seal Pack 5B	H-6105	10087 @	APPR
1779378	HRSG 05 - Soot blower - Replace Seal Pack 6C	3-61055B4C	10257 @	APPR
1769476	HRSG 6 - Sootblower 4A - Replace Gearbox	3-61065B4A	10447 @	APPR
1781974	HRSG 4 - Replace Faulty HMI Screen For SootBlower - Hawkins Needs To Program new HMI Set	H-6104/5B	10026 @	WHATL

PRE GO-LIVE TRAINING



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Training Focus for GO LIVE

- Training focus included a quick review of basic work processes to reinforce business rules
- Side-by-Side worked very well coupled with live demo
- Available for 1 week at each location
- “Office Hours” via Teams to address those that missed and late questions

Navigational Differences

Current Maximo 7.6.1.3

- Start Center with text based left pane
- Start Center portlets with defined boundaries
- Start Center tabs, stacking depending on qty
- Similarities

HH Common Tunnel WO's  Filter >    

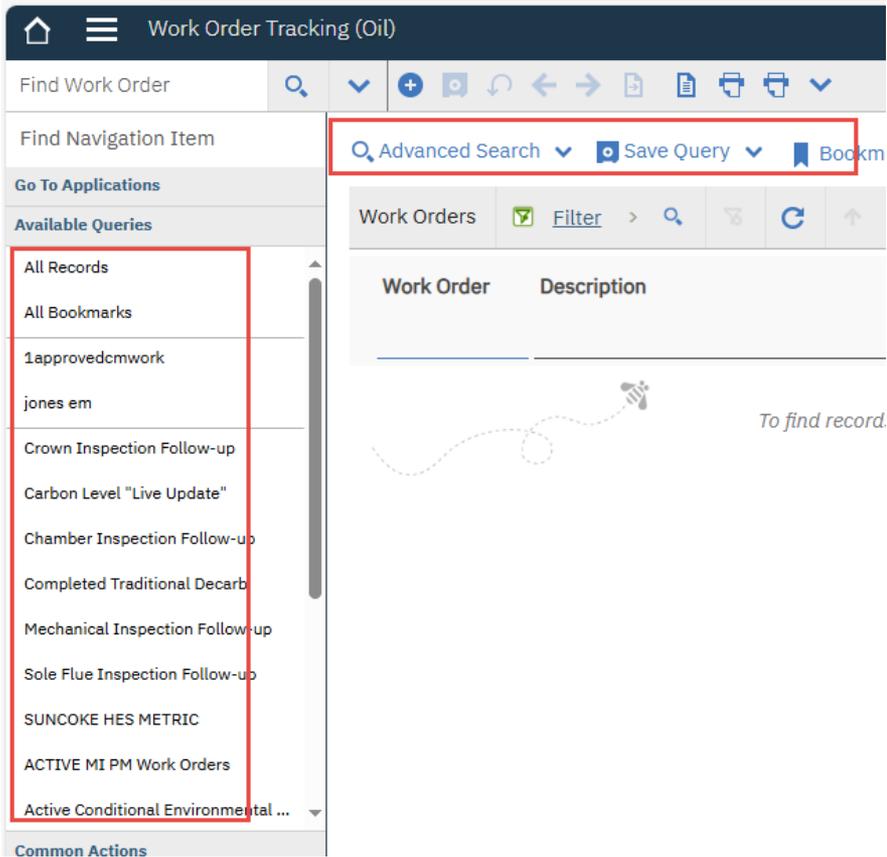
MAS 9.0

- Start Center with icon based left pane w/flyout
- Start Center portlets on a white background
- Tabs scroll across w/dropdown option

HH Common Tunnel WO's  Filter >    

Queries and Searching

7.6.1.3

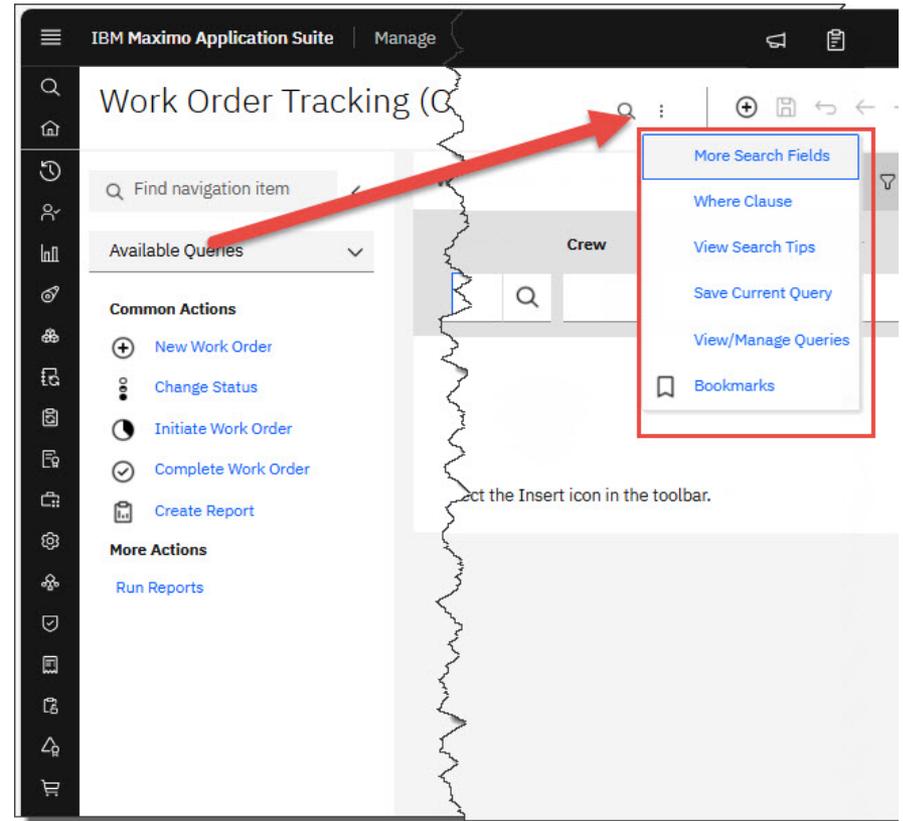


The screenshot shows the 'Work Order Tracking (Oil)' interface. At the top, there is a search bar labeled 'Find Work Order' and a navigation bar with icons for search, save, and print. Below the search bar, there is a 'Find Navigation Item' section with a search icon and a dropdown menu. The 'Available Queries' list is highlighted with a red box and includes the following items:

- All Records
- All Bookmarks
- 1approvedcmwork
- jones em
- Crown Inspection Follow-up
- Carbon Level "Live Update"
- Chamber Inspection Follow-up
- Completed Traditional Decarb
- Mechanical Inspection Follow-up
- Sole Flue Inspection Follow-up
- SUNCOKE HES METRIC
- ACTIVE MI PM Work Orders
- Active Conditional Environmental ...

The main content area shows a table with columns 'Work Order' and 'Description'. A red box highlights the search and navigation icons in the top right corner of the table area. A red arrow points from the search icon to the 'Advanced Search' dropdown menu. Below the table, there is a search icon and the text 'To find record.'

MAS 9.0

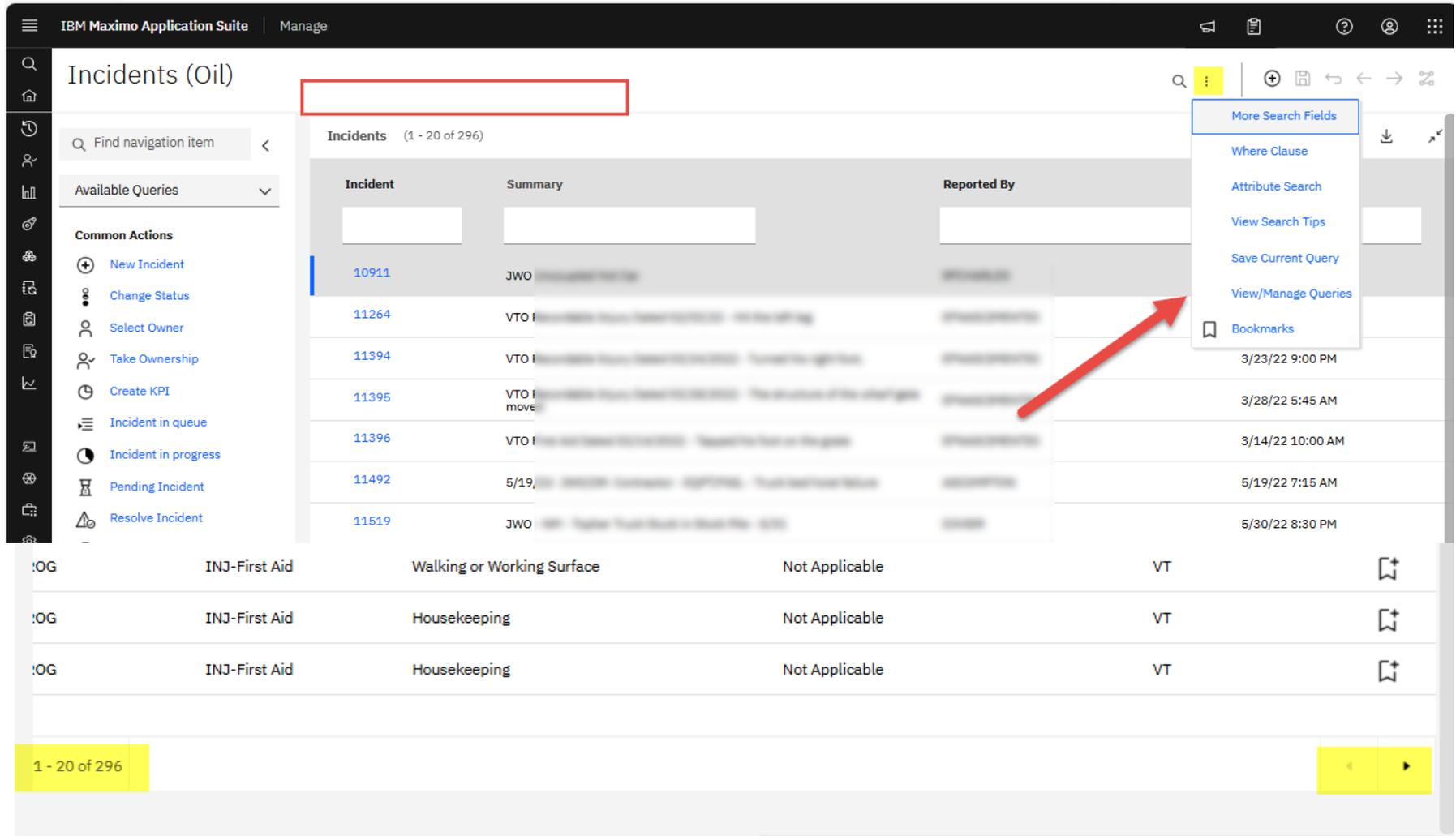


The screenshot shows the 'IBM Maximo Application Suite' interface. At the top, there is a search bar labeled 'Find navigation item' and a navigation bar with icons for search, save, and print. Below the search bar, there is a 'Find Navigation Item' section with a search icon and a dropdown menu. The 'Available Queries' list is highlighted with a red box and includes the following items:

- More Search Fields
- Where Clause
- View Search Tips
- Save Current Query
- View/Manage Queries
- Bookmarks

The main content area shows a table with columns 'Work Order' and 'Description'. A red box highlights the search and navigation icons in the top right corner of the table area. A red arrow points from the search icon to the 'More Search Fields' dropdown menu. Below the table, there is a search icon and the text 'To find record.'

3-dot / Quick Search & tiny arrows



The screenshot displays the IBM Maximo Application Suite interface for managing incidents. The main content area shows a table of incidents with columns for Incident ID, Summary, and Reported By. A search menu is open, showing options like 'More Search Fields', 'Where Clause', 'Attribute Search', 'View Search Tips', 'Save Current Query', 'View/Manage Queries', and 'Bookmarks'. A red arrow points to the search menu. A red box highlights the search icon in the top right corner. The bottom left shows '1 - 20 of 296' and the bottom right shows navigation arrows.

Incident	Summary	Reported By
10911	JWO	
11264	VTO	
11394	VTO	
11395	VTO	
11396	VTO	
11492	5/19	
11519	JWO	

- More Search Fields
- Where Clause
- Attribute Search
- View Search Tips
- Save Current Query
- View/Manage Queries
- Bookmarks

1 - 20 of 296

MAS IT Daily Support

- Verify Maximo is up and running
- Openshift CPU and Memory values in range
- JMS server is running and no backlog
- Reports are running
- Procurement and Inventory integration is working
- ERP and PI integrations are working

JMS Server/ Queues

Add/Modify Queues

Queues (1 - 5 of 9)

⊕ ⌵ ⌵ ⌵ ⌵

Queue JNDI Name	Sequential ?	Inbound?	User Defined?	Text?	Maximum Try Count	Message P	Actions
▼ jms/maximo/int/queues/cqin	🔍	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	View Queue Data Delete Queue Data
▼ jms/maximo/int/queues/cqinerr	🔍	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	🗑️
▼ jms/maximo/int/queues/cqout	🔍	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	🗑️
▼ jms/maximo/int/queues/cqouterr	🔍	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	🗑️
▼ jms/maximo/int/queues/notf	🔍	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	🗑️

1 - 5 of 9

Cancel OK

Procurement and Inventory Integration

Maximo PR's not in Interface table

Last Run: 2/13/26 4:57 PM

Maximo PR's not in Interface table

[Update](#)



Status	KPI	Actual	Target	Variance
—	Maximo PR's not in Interface table	0	0	0

Maximo Workorder Issues not in Interface table

Last Run: 2/13/26 4:58 PM

Maximo Workorder Issues not in Interface table



Maximo Labor Invoices not in Interface table

Last Run: 2/13/26 4:58 PM

Maximo Labor Invoices not in Interface table

[Update](#)



Status	KPI	Actual	Target	Variance
—	Maximo Labor Invoices not in Interface table	3	0	3

Maximo Inbound Interfaces having issues?

Last Run: 2/13/26 4:58 PM

Maximo Inbound Interfaces having issues?

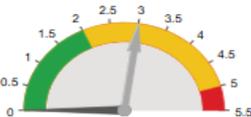


Cloud ERP Items not in Maximo

Last Run: 2/13/26 4:58 PM

Cloud ERP Items not in Maximo

[Update](#)

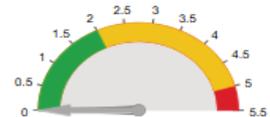


Status	KPI	Actual	Target	Variance
—	Cloud ERP Items not in Maximo	3	0	3

Cloud ERP Suppliers not in Maximo

Last Run: 2/13/26 4:58 PM

Cloud ERP Suppliers not in Maximo

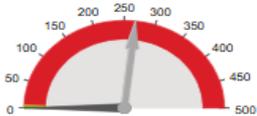


Cloud ERP PO's not in Maximo

Last Run: 2/13/26 4:58 PM

Cloud ERP PO's not in Maximo

[Update](#)



Status	KPI	Actual	Target	Variance
—	Cloud ERP PO's not in Maximo	268	0	268

Cloud ERP PO Receipts not in Maximo

Last Run: 2/13/26 4:58 PM

Cloud ERP PO Receipts not in Maximo



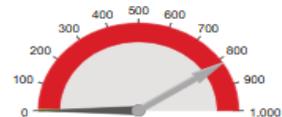
Cloud ERP Inventory Balance Adjustments not in Maximo

C

Cloud ERP Canceled PR's not in Maximo

Last Run: 2/13/26 4:58 PM

Cloud ERP PR's not in Maximo



Add-on's, Builds, Configs

Certificates

masprd-manageprd-cert-public-81 ✔

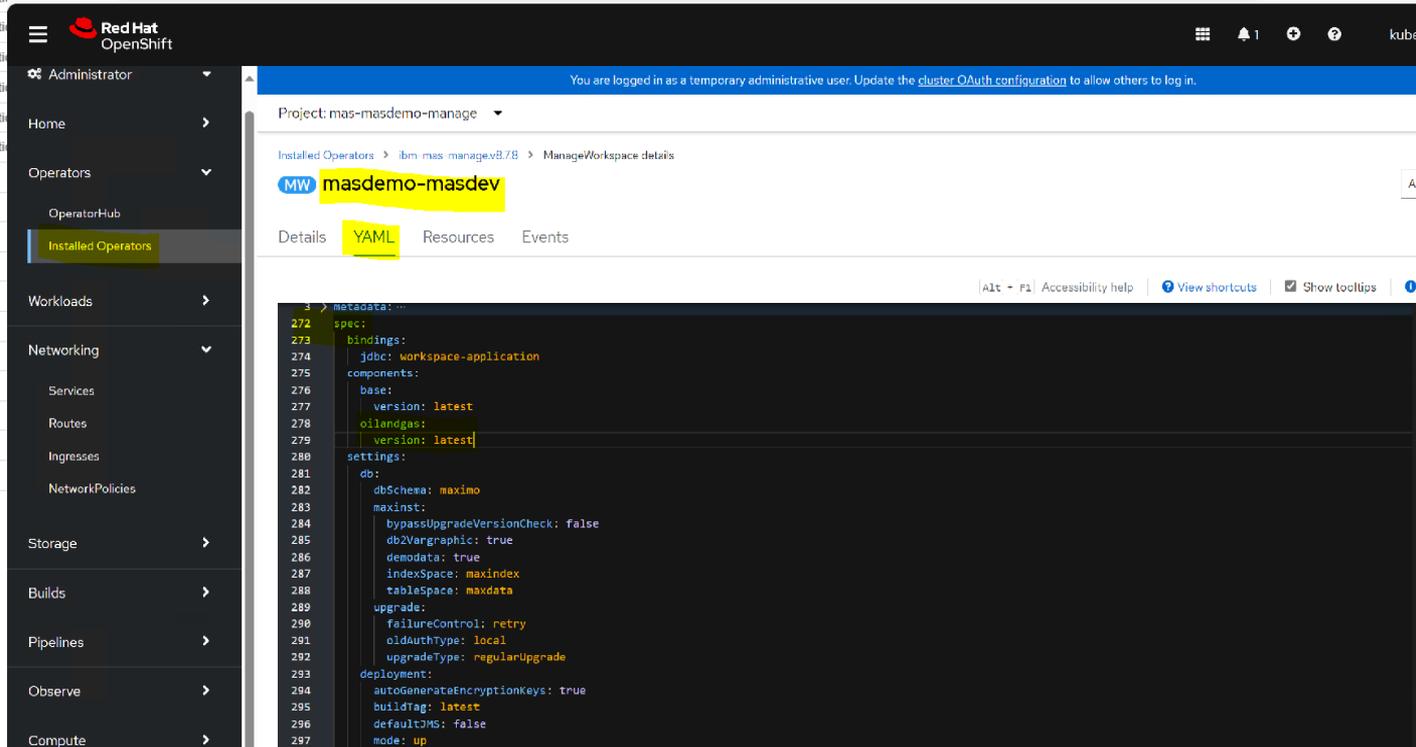
Upload the Manage certificate used to establish secure connections to the Maximo Application Suite.

[View](#)

Components [Learn more](#)

Name	Category	Current version	New version
<input checked="" type="checkbox"/> Manage Base	Application	-	latest - 9.0.84 ↓ i
<input type="checkbox"/> Health	Application	-	-
<input type="checkbox"/> Aviation	Industry solution	-	-
<input type="checkbox"/> Civil Infrastructure	Industry solution	-	-
<input type="checkbox"/> Nuclear	Industry solution	-	-
<input checked="" type="checkbox"/> Oil and Gas	Industry solution	-	-
<input checked="" type="checkbox"/> Transportation	Industry solution	-	-
<input type="checkbox"/> Utilities	Industry solution	-	-
<input type="checkbox"/> Asset Configuration Manager	Add-on	-	-
<input type="checkbox"/> Envizi Connector	Add-on	-	-
<input type="checkbox"/> Health, Safety and Environment	Add-on	-	-
<input type="checkbox"/> IT	Add-on	-	-
<input type="checkbox"/> Oracle Connector	Add-on	-	-
<input type="checkbox"/> SAP Connector	Add-on	-	-
<input type="checkbox"/> Service Provider	Add-on	-	-
<input type="checkbox"/> Spatial	Add-on	-	-
<input type="checkbox"/> Spatial for ESRI	Add-on	-	-
<input checked="" type="checkbox"/> Reliability Strategies	Add-on	-	-
<input type="checkbox"/> TRIRIGA Connector	Add-on	-	-
<input type="checkbox"/> Workday Connector	Add-on	-	-

Ease of functionality
addition – MAS
Console or OpenShift
YAML



The screenshot shows the Red Hat OpenShift console interface. On the left is a navigation sidebar with categories like Administrator, Home, Operators, Workloads, Networking, Services, Routes, Ingresses, NetworkPolicies, Storage, Builds, Pipelines, Observe, and Compute. The 'Installed Operators' section is highlighted. The main content area shows the details for the 'masdemo-masdev' operator, including tabs for Details, YAML, Resources, and Events. The 'YAML' tab is active, displaying the following configuration:

```
3 > metadata:
272 spec:
273   bindings:
274     jdbc: workspace-application
275   components:
276     base:
277       version: latest
278     ollandgas:
279       version: latest
280   settings:
281     db:
282       dbSchema: maximo
283       maxinst:
284         bypassUpgradeVersionCheck: false
285         db2Vargraphic: true
286         demodata: true
287         indexSpace: maxindex
288         tableSpace: maxdata
289     upgrade:
290       failureControl: retry
291       oldAuthType: local
292       upgradeType: regularUpgrade
293   deployment:
294     autoGenerateEncryptionKeys: true
295     buildTag: latest
296     defaultMS: false
297     mode: up
```

App Point Analysis

License consumption

Report Configuration

Overview

Entitled capacity

██████████ AppPoints

Average usage

AppPoints

Peak usage

██████████ AppPoints

Report updated

03 February 2026 21:02 UTC

Details

Compliance enforcement

Disabled [View](#)

Entitlements in license

AppPoints included in file: ██████████

[View license details](#)

Last month (January 2026)

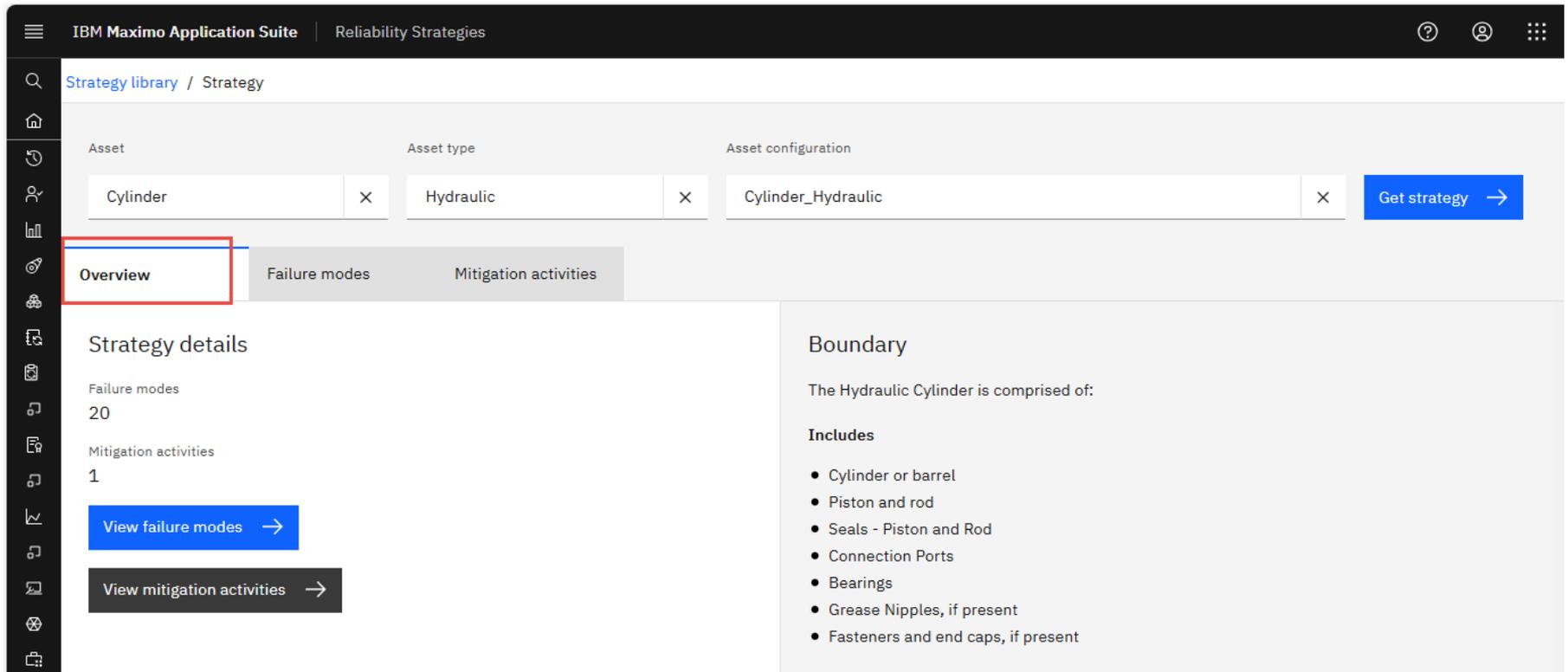


RELIABILITY STRATEGIES



SunCoke Energy[®]

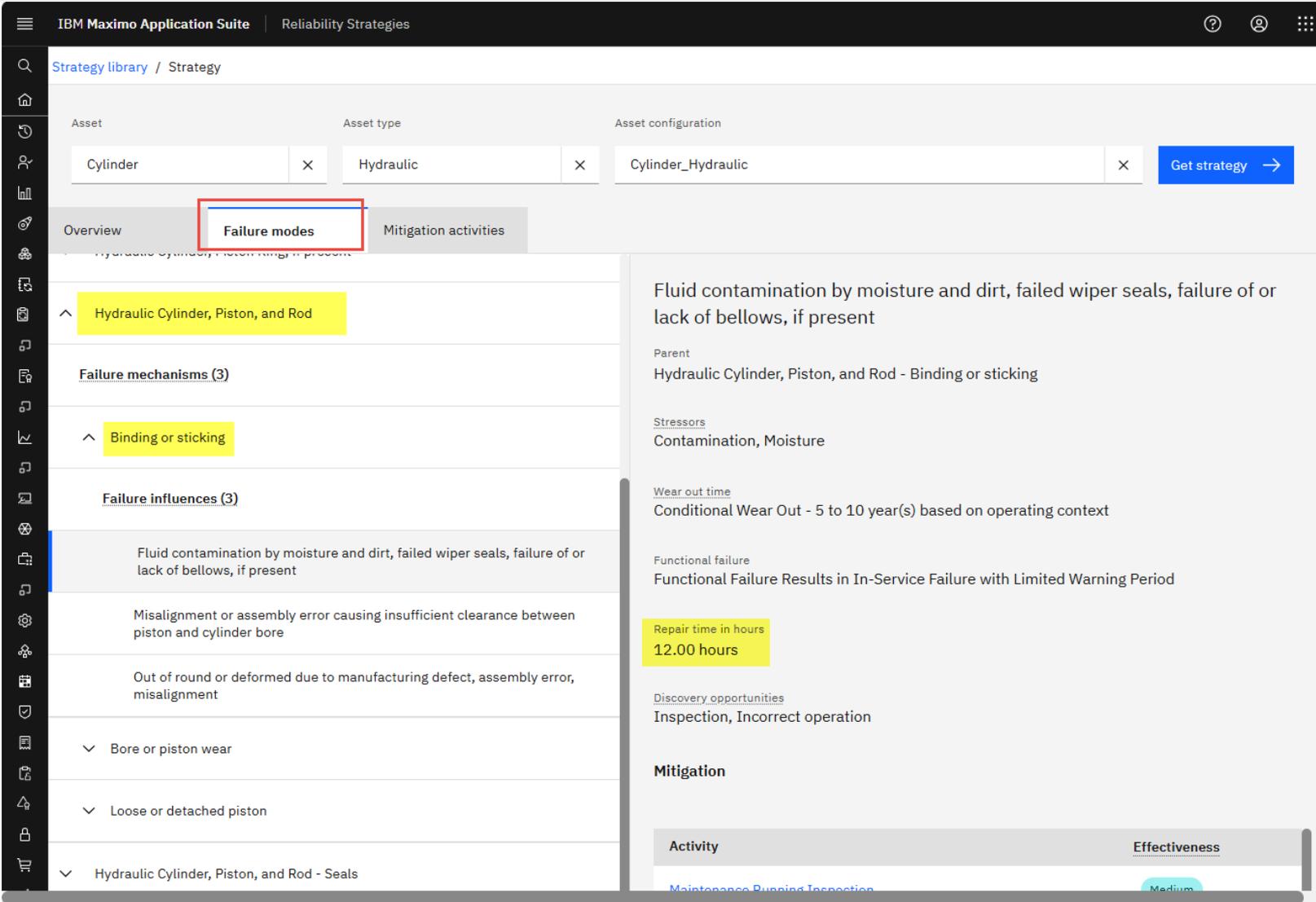
Strategy Library



The screenshot displays the IBM Maximo Application Suite interface for Reliability Strategies. The breadcrumb path is "Strategy library / Strategy". The search filters are set to "Asset: Cylinder", "Asset type: Hydraulic", and "Asset configuration: Cylinder_Hydraulic". A "Get strategy" button is visible on the right. The "Overview" tab is selected and highlighted with a red box. The "Strategy details" section shows 20 failure modes and 1 mitigation activity, with buttons to "View failure modes" and "View mitigation activities". The "Boundary" section states "The Hydraulic Cylinder is comprised of:" and lists the following components under "Includes":

- Cylinder or barrel
- Piston and rod
- Seals - Piston and Rod
- Connection Ports
- Bearings
- Grease Nipples, if present
- Fasteners and end caps, if present

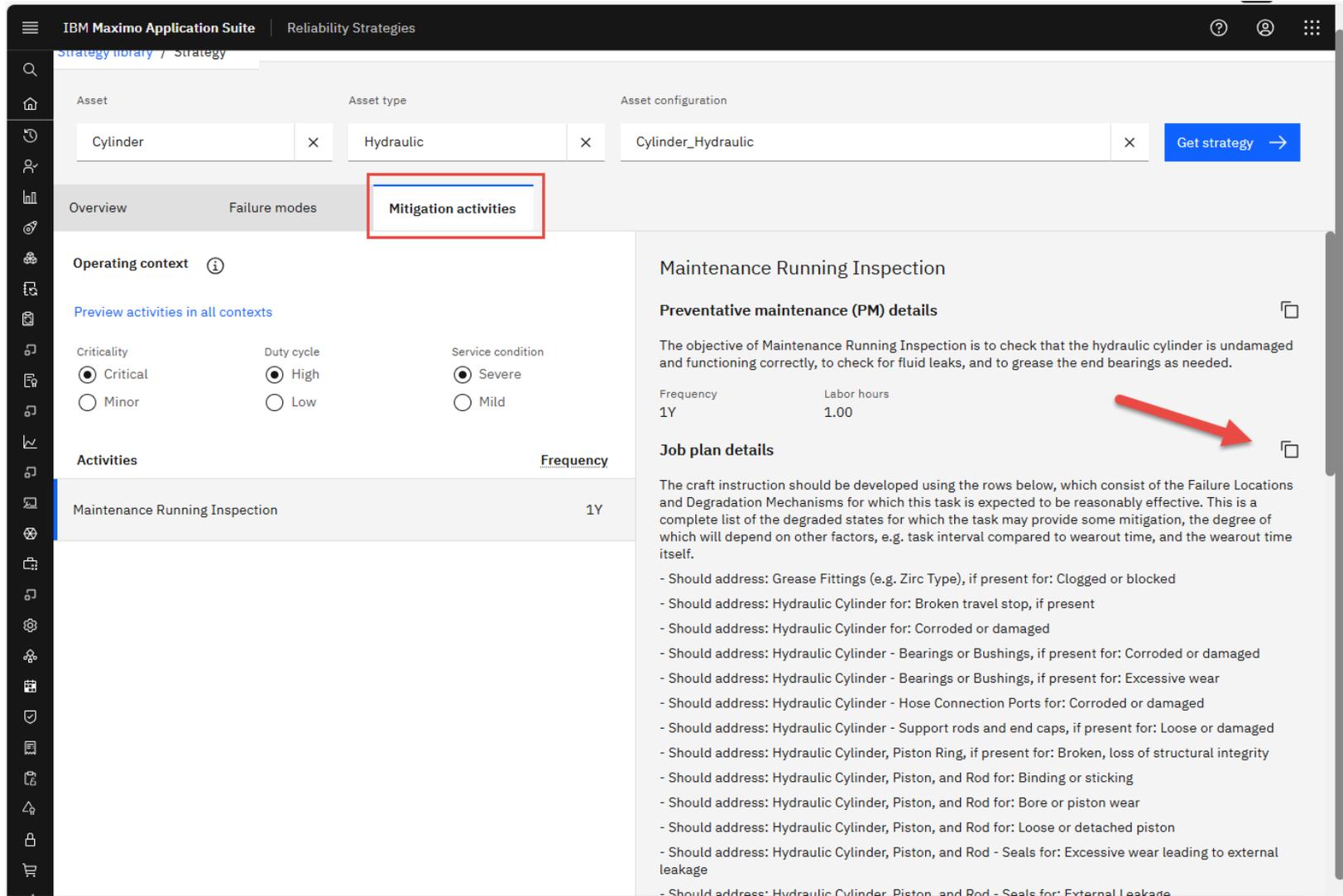
Included Failure Modes



The screenshot displays the IBM Maximo Application Suite interface for Reliability Strategies. The breadcrumb path is "Strategy library / Strategy". The search filters are set to "Asset: Cylinder", "Asset type: Hydraulic", and "Asset configuration: Cylinder_Hydraulic". The "Failure modes" tab is selected and highlighted with a red box. The left sidebar shows a tree view with "Hydraulic Cylinder, Piston, and Rod" selected. The main content area shows the failure mode details for "Fluid contamination by moisture and dirt, failed wiper seals, failure of or lack of bellows, if present".

Activity	Effectiveness
Maintenance, Running Inspection	Medium

Mitigation data



The screenshot displays the IBM Maximo Application Suite interface for Reliability Strategies. The breadcrumb path is Strategy library / Strategy. The asset configuration is set to Cylinder (Asset), Hydraulic (Asset type), and Cylinder_Hydraulic (Asset configuration). The 'Mitigation activities' tab is selected and highlighted with a red box. The 'Operating context' section shows Criticality set to Critical, Duty cycle to High, and Service condition to Severe. The 'Activities' table lists 'Maintenance Running Inspection' with a frequency of 1Y. The right-hand pane provides details for this activity, including its objective, frequency (1Y), labor hours (1.00), and a list of job plan details.

Asset: Cylinder X Asset type: Hydraulic X Asset configuration: Cylinder_Hydraulic X [Get strategy](#) →

Overview Failure modes **Mitigation activities**

Operating context ⓘ

[Preview activities in all contexts](#)

Criticality: Critical Minor
Duty cycle: High Low
Service condition: Severe Mild

Activities	Frequency
Maintenance Running Inspection	1Y

Maintenance Running Inspection

Preventative maintenance (PM) details

The objective of Maintenance Running Inspection is to check that the hydraulic cylinder is undamaged and functioning correctly, to check for fluid leaks, and to grease the end bearings as needed.

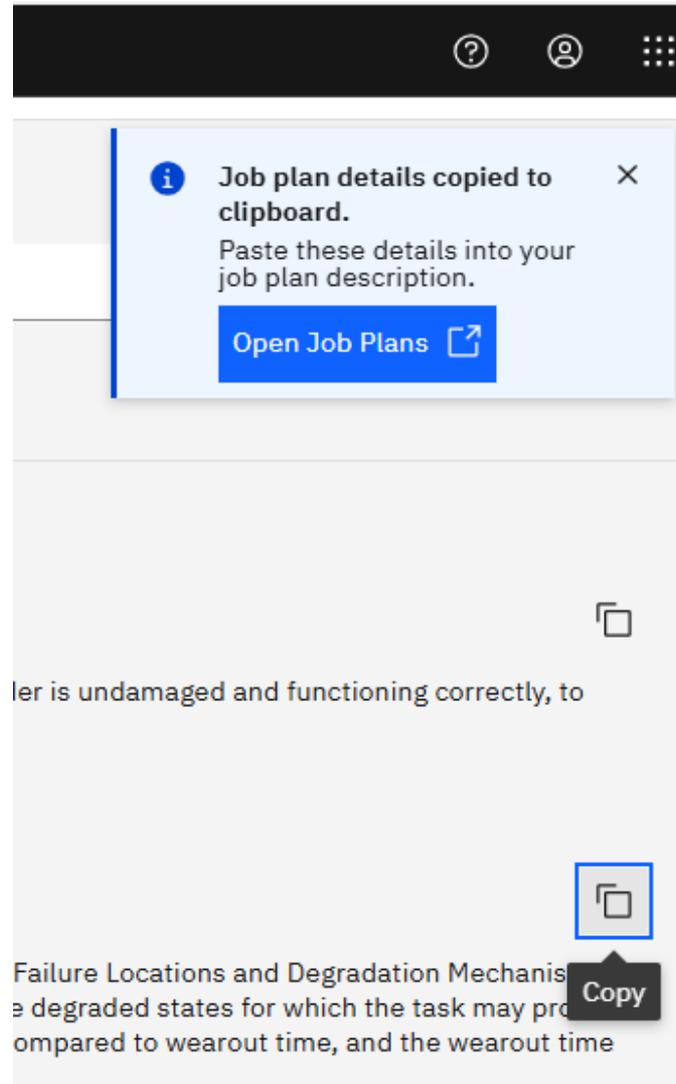
Frequency: 1Y Labor hours: 1.00

Job plan details

The craft instruction should be developed using the rows below, which consist of the Failure Locations and Degradation Mechanisms for which this task is expected to be reasonably effective. This is a complete list of the degraded states for which the task may provide some mitigation, the degree of which will depend on other factors, e.g. task interval compared to wearout time, and the wearout time itself.

- Should address: Grease Fittings (e.g. Zirc Type), if present for: Clogged or blocked
- Should address: Hydraulic Cylinder for: Broken travel stop, if present
- Should address: Hydraulic Cylinder for: Corroded or damaged
- Should address: Hydraulic Cylinder - Bearings or Bushings, if present for: Corroded or damaged
- Should address: Hydraulic Cylinder - Bearings or Bushings, if present for: Excessive wear
- Should address: Hydraulic Cylinder - Hose Connection Ports for: Corroded or damaged
- Should address: Hydraulic Cylinder - Support rods and end caps, if present for: Loose or damaged
- Should address: Hydraulic Cylinder, Piston Ring, if present for: Broken, loss of structural integrity
- Should address: Hydraulic Cylinder, Piston, and Rod for: Binding or sticking
- Should address: Hydraulic Cylinder, Piston, and Rod for: Bore or piston wear
- Should address: Hydraulic Cylinder, Piston, and Rod for: Loose or detached piston
- Should address: Hydraulic Cylinder, Piston, and Rod - Seals for: Excessive wear leading to external leakage
- Should address: Hydraulic Cylinder, Piston, and Rod - Seals for: External Leakage

Time Saver



DOWN THE ROAD...



SunCoke Energy[®]

Questions/ Contact

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Email – saschaurer@suncoke.com
630-824-1793

