

4 Must-Have Features to Plan & Schedule Effectively

Jonathan Addison

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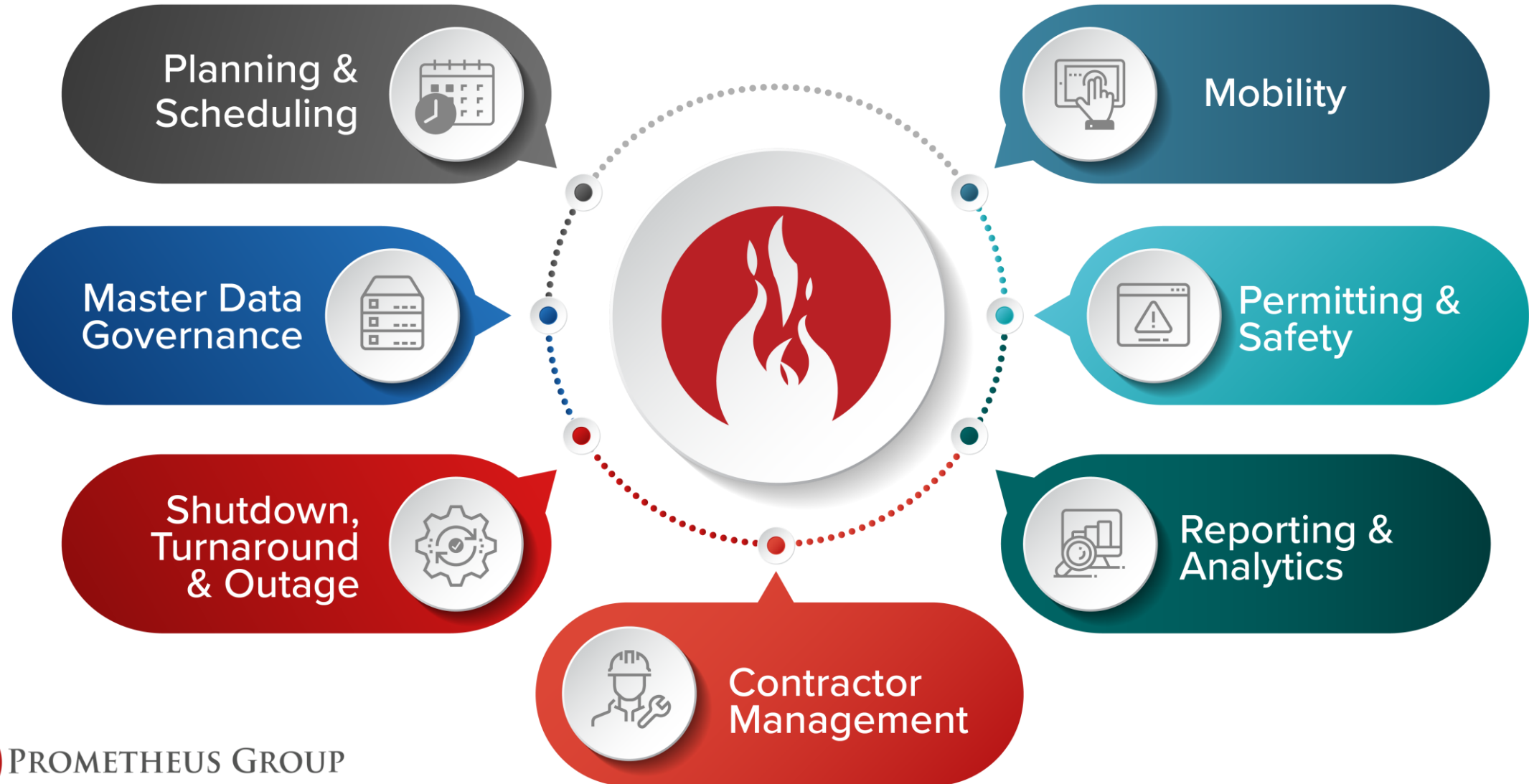
Agenda

- Introduction to Prometheus
- Issues and Challenges
- How Prometheus can help
- Empowering the end-user
- Live demonstration



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The Prometheus Platform

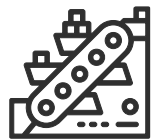


Prometheus Group

- Founded in 1998
- Headquartered in Raleigh, NC, USA
- 13 global offices
- Integrated and intuitive software
- Partnerships with industry leading companies



TOP 8
Oil & Gas



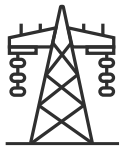
TOP 7
Mining & Metals



TOP 7
Pulp & Paper



TOP 6
Chemical



TOP 6
Utilities



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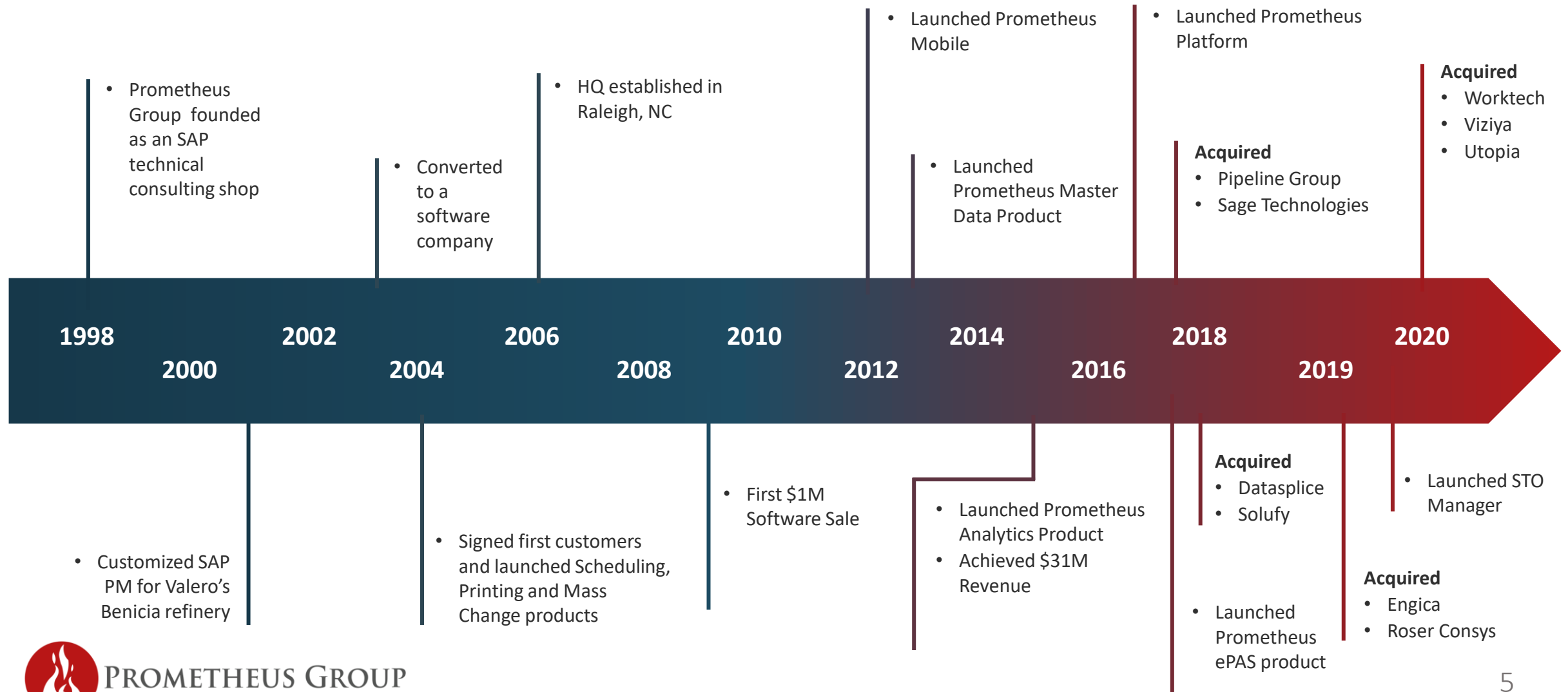
SAP® Certified
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The Prometheus Journey



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Key Customers



Scheduling Principles



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Why Planning/Scheduling is Necessary



Provide reliable plant capacity

- Minimize downtime
- Reduce Costs



Increase amount of work being done

- Catch-up on Backlog
- Free up Work force
- Resource utilization



Ensure work quality

- Done right the first time



Common Challenges

- Stuck in a reactive mindset
 - Fire-fighting
 - “This is the way it has always been done”
 - Endless cycle
- Maintenance Department has no standard process
 - No dedicated Planner/Scheduler
- Non-productive time is normal
 - Searching for parts/equipment
 - Seeking additional instruction



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Scheduling Principles from Doc Palmer

1. Job Plans with required number of people, craft skill level, work hours per skill, total duration are necessary
2. Weekly and daily schedules must be adhered to
3. Schedule based on hours available, priorities, and job plans
4. Assign work for every available work hour
5. Schedule is updated daily to reflect current job progress and new high priority work
6. Measure efficiency and process by wrench time

4 Must-Have Features



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1. Updating Dates Effectively

- When you update your schedule dates how is that relayed to the effected individuals ?
- How many different dates exist ?
- How easy it for a new employee to change ?
 - Can anyone change ?
 - Is it intuitive to make changes ?

Drag and Drop + Mass Change

- Prometheus Web Scheduler provides simple drag drop functionality to update the schedule
- Work Orders can be adjusted in mass across several fields including dates, status, supervisor etc.



Group	Description	Status	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			9/4/21	9/5/21	9/6/21	9/7/21	9/8/21	9/9/21	9/10/21	9/11/21	9/12/21	9/13/21	9/14/21	9/15/21	9/16/21	9/17/21	9/18/21	9/19/21
1750	Replace Electrical Pump Motor	APPR		9/6/21 2:00 am	10													
1748	Replace heating coil	APPR		9/6/21 2:00 am	6													
1829	Rebuild Rotary Pump	SCHEI				9/8/21 8:00 am		10 CENTRAL	◆									
1793	Sensor Calibrations	APPR			9/7/21 7:00 pm		12 BR200											
1773	Pump Repair	APPR			9/7/21 9:00 am		6 BR450											
1799	Replace Heat Exchanger	WAPP						9/10/21 1:00 pm		9 BR400								
1824	Boiler Overhaul	WAPP								9/13/21 11:00 am						72 THE LANDMARK		
2396	Sewer maintenance	WAPP					9/9/21 3:00 am		8									
1871	Centrifugal pump inspection	APPR				9/8/21 5:00 am		16 BR430										
T5120	Return to Service	APPR				9/8/21 4:00 am												
T5117	De-Energize	APPR				9/8/21 4:00 am												
T5118	Pump casing removal	APPR				9/8/21 4:00 am												
T5119	Repair	APPR				9/8/21 4:00 am												
1796	Extruder pin refurbishment	WAPP					9/9/21 1:00 am		24									
1830	Crane Inspection	WAPP					9/9/21 4:00 am		8 SHIPPING									

Group	Labor Name	Default Craft	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			9/4/21	9/5/21	9/6/21	9/7/21	9/8/21	9/9/21	9/10/21	9/11/21	9/12/21	9/13/21	9/14/21	9/15/21	9/16/21	9/17/21	9/18/21	9/19/21
> JA_CVIL					6 / 24	13 / 24	12 / 24	8 / 24	24 / 24			0 / 24	0 / 24	0 / 24	0 / 24	0 / 24		
> JA_ELEC					38 / 24	3 / 24	22 / 24	8 / 24	24 / 24			0 / 24	0 / 24	0 / 24	0 / 24	0 / 24		
> JA_INST					6 / 24	16 / 24	16 / 24	24 / 24	16 / 24			0 / 24	0 / 24	0 / 24	0 / 24	0 / 24		
> JA_MECH					21 / 32	16 / 32	16 / 24	2 / 32	32 / 34			0 / 32	0 / 32	0 / 32	0 / 32	0 / 32		
UNASSIGNED					12 / 0			32 / 0				114 / 0						

2. Accurate Resource Availability

- Vacation calendars are typically in separate spreadsheet
- Often difficult to reflect resource changes in schedule
- Resource availability is a common factor that is assumed to be known by the scheduler

Shift Updater

- Easily add working and non-working exceptions
- Adjust shifts temporarily or permanently
- Mass Change Available

Resources					Working Exception	Non-Working Exception	Remove Exception														
Default Craft	Crew Work Group	Labor	Site	Craft List	September 2021																
<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	Sa 04	Su 05	Mo 06	Tu 07	We 08	Th 09	Fr 10	Sa 11	Su 12	Mo 13	Tu 14	We 15	Th 16	Fr 17	Sa 18	Su 19	Mo 20
DK_MILL		ZSMITH	BEDFORD	DK_MILL			8		8	8	8			8	8	8	8	8			8
DK_CONST		HKEMP		DK_CONST			8		8	8	8			8	8		8	8			8
DK_ELEC		MEICHENB		DK_ELEC			8	8	8	8	8			8	8	8	8	8			8
DK_MECH		RBAXTER		DK_MECH			10	8	8	8	8				8		8	8			8
DK_PIPE		BMANN		DK_PIPE			10	8	8	8	8			8	8	8	8				8
DK_WELD		AKENNEDY		DK_WELD			10	8	8	8	8			8	8	8	8	8			8
DK_ELEC		CLEE		DK_ELEC			8	8		8	8			8	8	8	8	8			8
DK_MECH		IBOGAN		DK_MECH			8	8	8	8	8			8	8	8		8			8
DK_PIPE		JSLITHER		DK_PIPE			8	10	10	10	10			8		8	8	8			8
DK_WELD		MCANNON		DK_WELD			8		8	8	8			8		8	8	8			8
DK_MILL		NSHARP		DK_MILL			8	8	8	8	8										8
DK_ELEC		SKNIGHT		DK_ELEC																	
DK_MILL		MHARTER		DK_MILL																	
DK_CONST		MMARTIN		DK_CONST																	
DK_PIPE		WSTAMPS		DK_PIPE			8	8	8	8	8			8	8	8	8	8			8

3. Ease of Assignments

- Assignments can often mean simply handing a work order to the required technician
- Often use assignments tab or assignment manager in Maximo
- These methods are detached from the schedule

Drag and Drop Assignments

- Multiple ways to assign work
 - Drag and Drop
 - Work Plan Editor
 - Assignment center
- All contained within scheduler
- Easily level load based on availability



Group	Labor Name ↑	Default Craft	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday
<input type="text"/>	<input type="text"/>	<input type="text"/>	9/4/21	9/5/21	9/6/21	9/7/21	9/8/21	9/9/21	9/10/21	9/11/21	9/12/21	9/13/21
▼ JA_CVIL					6 / 24	13 / 24	12 / 24	8 / 24	24 / 24			
Benard Jones	Benard Jones	JA_CVIL			0 / 8	12 / 8	0 / 8	8 / 8	16 / 8			
Julie Jones	Julie Jones	JA_CVIL			0 / 8	1 / 8	12 / 8	0 / 8	0 / 8			
Melissa Booth	Melissa Booth	JA_CVIL			6 / 8	0 / 8	0 / 8	0 / 8	8 / 8			
> JA_ELEC					38 / 24	3 / 24	22 / 24	8 / 24	24 / 24			
> JA_INST					6 / 24	16 / 24	16 / 24	24 / 24	16 / 24			
> JA_MECH					21 / 32	16 / 32	16 / 24	2 / 32	32 / 34			

x

Assign Options

- ☒ Assign
 - ☐ Disregard Capacity
 - ☐ Is Once Per Work Order
 - ☐ Lead
 - ☐ Create Assignment
 - ☐ Override Craft
- ☐ Auto-Split

Cancel

Execute

4. Accurate Job Plans

- Job plans often handled by reliability analyst or engineer
- Adjusting job plans is quite often a daunting task
- Common feedback of inaccurate and rarely adjusted job plans

Job Plan Editor

- Exclusive functionality to Prometheus
- Adjust job plans in mass
- Revise and activate job plans
- See data from completed work orders to develop more accurate plans

Job Plans										Revise Job Plan	Activate Job Plan(s)	NEW
Template Type	Description	Duration	Status	WO Priority	Finish Constr...	Start Constr...	JP Number	IDDISPLAY	PARENT			
MAINTENANCE	18 INCH PUMP R...	10	ACTIVE	0	0	0	JP-6001	JP-6001				
MAINTENANCE	24 INCH PUMP R...	10	ACTIVE	0	0	0	JP-6002	JP-6002				
MAINTENANCE	SULLAIR WEEKLY...	4	ACTIVE	0	0	0	JP-6003	JP-6003				
MAINTENANCE	I-R WEEKLY INSP...	4	REVISED	0	0	0	JP-6004	JP-6004				
MAINTENANCE	FORD F-150 WEE...	4.5	REVISED	0	0	0	JP-6005	JP-6005				
MAINTENANCE	CHEVROLET C-1...	4.5	ACTIVE	0	0	0	JP-6006	JP-6006				
MAINTENANCE	DODGE 1500 WE...	4.5	ACTIVE	0	0	0	JP-6007	JP-6007				
MAINTENANCE	I-R WEEKLY INSP...	4	REVISED	0	0	0	JP-6004	JP-6004				
MAINTENANCE	18 INCH PUMP R...	10	REVISED	0	0	0	JP-6001	JP-6001				

Job Tasks										NEW	DELETE
Organization	Sequence	Duration	Site	Task	Description	FNCONOFFSET	STCONOFFSET	IDDISPLAY			
EAGLENA	0	1	TEXAS	10	LOCK OUT UNIT	0	0	10			
EAGLENA	0	0.5	TEXAS	20	CHECK OIL LEVEL	0	0	20			
EAGLENA	0	0.5	TEXAS	30	CHECK COOLANT LEVEL	0	0	30			
EAGLENA	0	0.5	TEXAS	40	INSPECT AIR FILTERS	0	0	40			
EAGLENA	0	0.5	TEXAS	50	DOCUMENT HOUR METER READINGS	0	0	50			
EAGLENA	0	1	TEXAS	60	REMOVE LOCKOUT	0	0	60			

Job Labor										NEW	DELETE
Hours	Organization	Quantity	Site	Vendor	Skill Level	Task	Craft	FNCONOFFSET	STCONOFFSET		
0.5	EAGLENA	1	TEXAS			10	MECH	0	0		
0.5	EAGLENA	1	TEXAS		FIRSTCLASS	10	ELECT	0	0		
0.5	EAGLENA	1	TEXAS			30	MECH	0	0		
0.5	EAGLENA	1	TEXAS			40	MECH	0	0		
0.5	EAGLENA	1	TEXAS			50	MECH	0	0		
0.5	EAGLENA	1	TEXAS			60	MECH	0	0		
0.5	EAGLENA	1	TEXAS	EMI	FIRSTCLASS	60	ELECT	0	0		

Job Plan												PLEASE SELECT QUERY			
Job Plans												Job Plan Labor Transactions			
Template Type	Description	Duration	Status	WO Priority	Finish Constr...	Start Constr...	Owner Group	JP Number	IDDISPLAY	PARENT	ROOTPARENT	Date Range: 01/01/2000 01/01/2030			
MAINTENANCE	18 INCH PUMP R...	10	ACTIVE	0	0	0		JP-6001	JP-6001		JP26727				
MAINTENANCE	24 INCH PUMP R...	10	ACTIVE	0	0	0		JP-6002	JP-6002		JP26728				
MAINTENANCE	SULLAIR WEEKLY...	4	ACTIVE	0	0	0		JP-6003	JP-6003		JP26729				
MAINTENANCE	I-R WEEKLY INSP...	4	REVISED	0	0	0		JP-6004	JP-6004		JP26730				
MAINTENANCE	FORD F-150 WEE...	4.5	REVISED	0	0	0		JP-6005	JP-6005		JP26731				
MAINTENANCE	CHEVROLET C-1...	4.5	ACTIVE	0	0	0		JP-6006	JP-6006		JP26732				
MAINTENANCE	DODGE 1500 WE...	4.5	ACTIVE	0	0	0		JP-6007	JP-6007		JP26733				
MAINTENANCE	I-R WEEKLY INSP...	4	REVISED	0	0	0		JP-6004	JP-6004		JP26748				
MAINTENANCE	18 INCH PUMP R...	10	PNDREV	0	0	0		JP-6001	JP-6001		JP26749				
MAINTENANCE	FORD F-150 WEE...	4.5	ACTIVE	0	0	0		JP-6005	JP-6005		JP26750				
Job Tasks															
Organization	Sequence	Owner	Duration	Site	Crew Work G...	Owner Group	Task	Description	FNCONOFFSET	STCONOFFSET	IDDISPLAY	PARENT			
EAGLENA	0		1	TEXAS			10	LOCK OUT UNIT	0	0	10	JP26729			
EAGLENA	0		0.5	TEXAS			20	CHECK OIL LEVEL	0	0	20	JP26729			
EAGLENA	0		0.5	TEXAS			30	CHECK COOLAN...	0	0	30	JP26729			
EAGLENA	0		0.5	TEXAS			40	INSPECT AIR FILT...	0	0	40	JP26729			
EAGLENA	0		0.5	TEXAS			50	DOCUMENT HO...	0	0	50	JP26729			
EAGLENA	0		1	TEXAS			60	REMOVE LOCKO...	0	0	60	JP26729			
Job Labor															
Hours	Organization	Quantity	Site	Vendor	Skill Level	Task	Craft	FNCONOFFSET	STCONOFFSET	IDDISPLAY	DESCRIPTION	PARENT			
0.5	EAGLENA	1	TEXAS			10	MECH	0	0	22799		JT108649			
0.5	EAGLENA	1	TEXAS		FIRSTCLASS	10	ELECT	0	0	22800		JT108649			
0.5	EAGLENA	1	TEXAS			30	MECH	0	0	22801		JT108651			
0.5	EAGLENA	1	TEXAS			40	MECH	0	0	22802		JT108652			
0.5	EAGLENA	1	TEXAS			50	MECH	0	0	22803		JT108653			
0.5	EAGLENA	1	TEXAS			60	MECH	0	0	22804		JT108654			
0.5	EAGLENA	1	TEXAS	EMI	FIRSTCLASS	60	ELECT	0	0	22805		JT108654			
												Average: 4.69			
												Count: 27			
												Sum: 126.5			

Questions?



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A background image showing two people shaking hands. The person on the left is wearing an orange safety vest, and the person on the right is wearing a dark blue button-down shirt. The image is overlaid with a semi-transparent blue filter.

Thank you



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