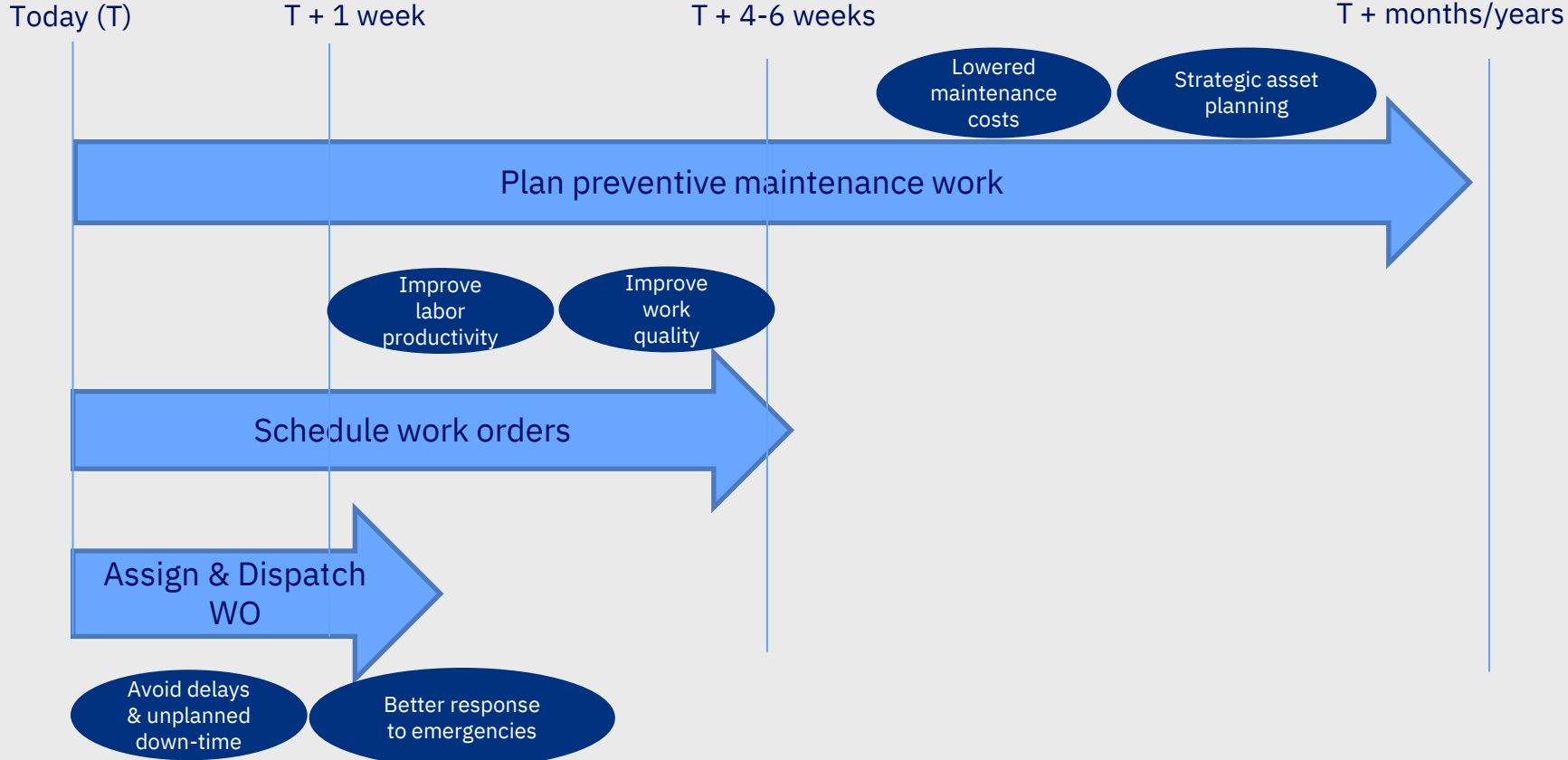# Maximo Asset Management Scheduler

Overview

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Topics

- Planning and Scheduling challenges in EAM

- Personas and Use-cases

- Architecture & Data Entities

- Capability Highlights

- Resources

- Demo

Planning and Scheduling in EAM

Target Personas

Ed
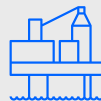
Maintenance Supervisor

"How do I keep my crew highly utilized as well as be prepared to for emergencies"

Energy & Utilities

Industrial

City/States

Transport

Oil & Gas

Brianna

Planning/Scheduling Analyst

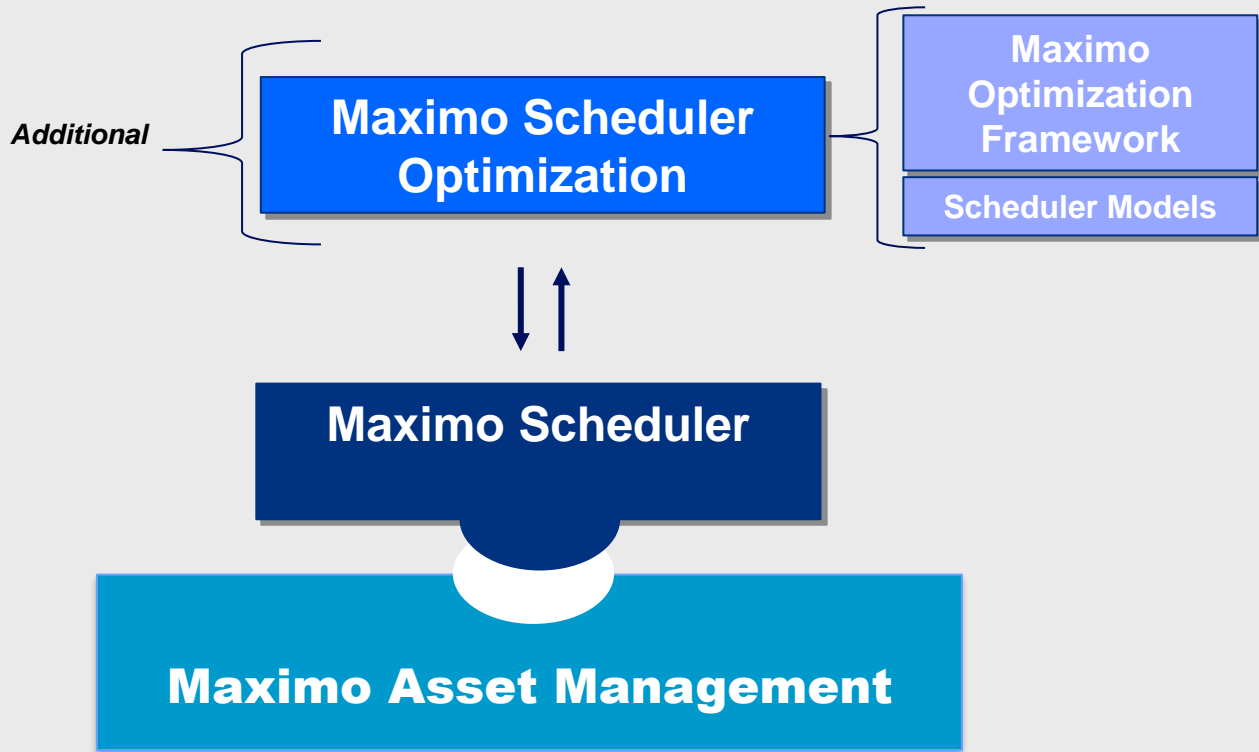*"Are our schedules in compliance with the KPIs for the quarter & year"*

Ben

Crew technician

"I would like to complete this job well, on-time, easily update the office and move on to the next job"

Role based Applications

Application	Roles
Graphical Scheduling	Planning/Scheduling Analyst
Graphical Scheduling – Large Projects	Planning/Scheduling Analyst
Graphical Work Week	Scheduling Analyst/Supervisors
Graphical Resource View	Scheduling Analyst/Supervisors
Graphical Assignment	Supervisors/Dispatchers
Graphical Assignment - Repair Facility	Repair Facility Supervisors
Graphical Crew Management	Supervisors
Everyplace Mobile Templates	Supervisors/Field Technicians
Graphical Appointment Book	Customer Service Representatives

Maximo Scheduler Architecture

Additional

Maximo Scheduler Optimization

Maximo Optimization Framework

Scheduler Models

Maximo Scheduler

Maximo Asset Management

Maximo Scheduler Optimization

- A new Optimization solution integrate with Maximo Scheduler 7.6.8
- Maximo Optimization Framework that supports Scheduler Models

Scheduler 7.6.8

- Add-on product to Maximo EAM, code embedded in core Maximo therefore a single install
- Requires a separate license purchase
- Includes integration to Maximo Optimization Framework

Maximo

- 7.6.1.2 fix pack level

Graphical Work Week

- Scheduling and assigning work in one application
  - Load and Availability at the craft and crew type level
  - Select one or more assignments and double click to assign to a labor/crew over one or more days
 - Select reason code and double click to adjust availability; color coded

Graphical Resource View

- Manage your whole team's working time in one calendar view

- Configurable exception codes and colors

- Quickly specify a person's vacation week; someone's overtime; or, book several people into training time together in a few clicks.
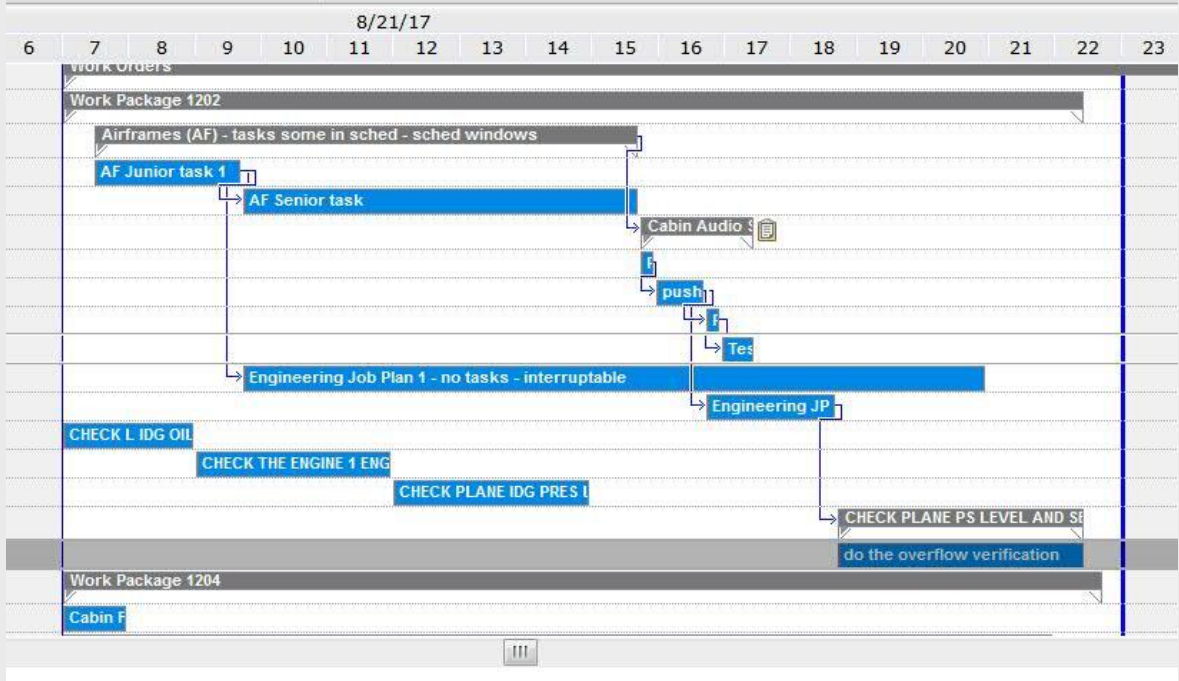
Graphical Scheduling

- Visualize work dependencies and it's impact on resource availability

- Drag and drop capability

- Filter by any field in work order or by planned resources

- Multiple column sorting

- Calculate cost for load and availability of resources
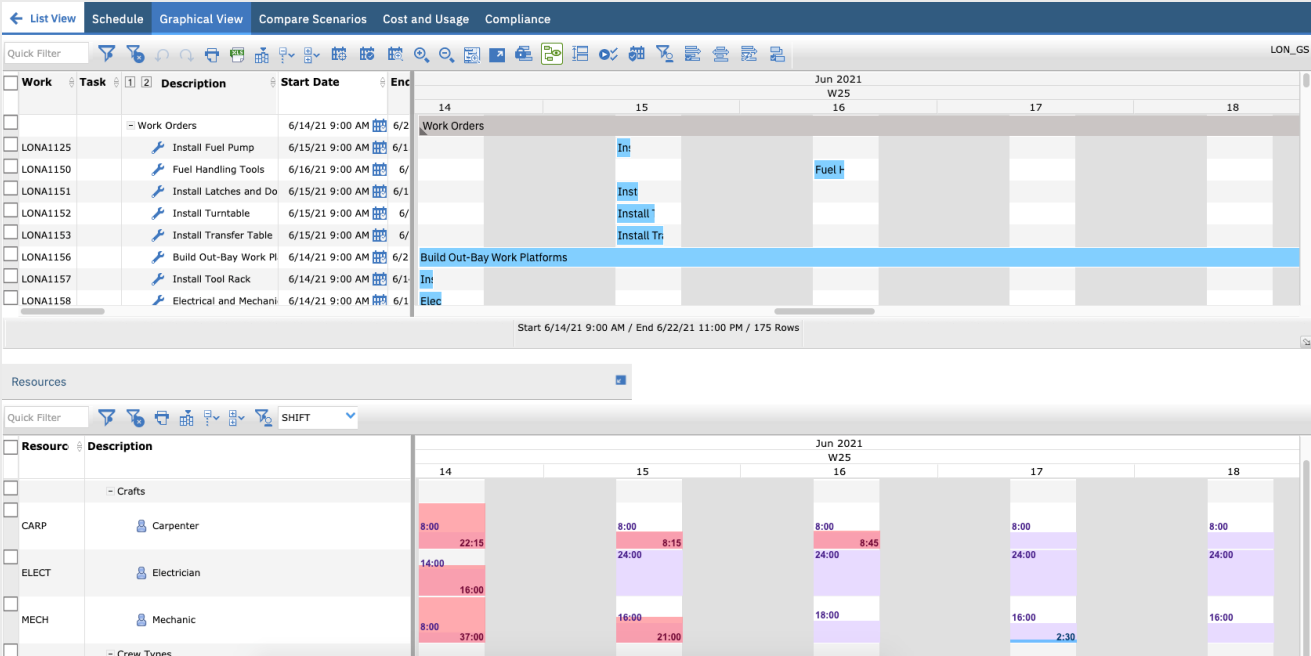
Managing Complex Network Dependencies

- Build linkages across work orders and tasks

- Minimize down time and maximize productivity by allowing work to be started as soon as its prerequisites are satisfied

Percent Complete

- Enter – calculate – summarize – and review the completion status of work

  - Enter the physical % complete directly into the activity table

  - Calculate the actual labor % complete

  - Calculate work order completion by tasks

- Summarize by time, or by the average of the % completion in the roll-up

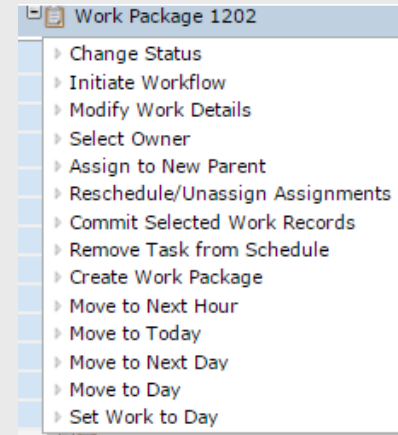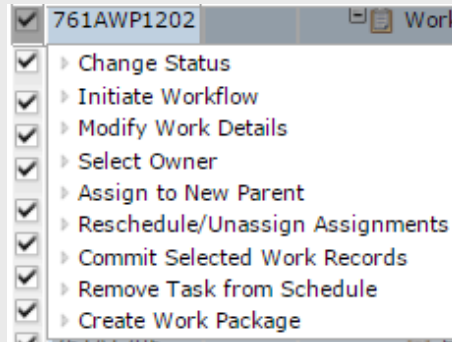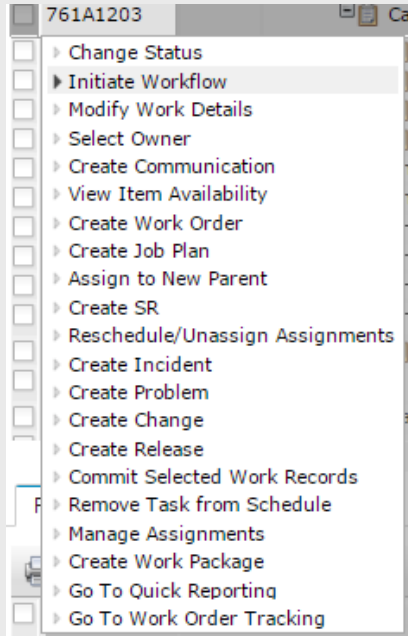- Visualize at a glance in the Gantt chart and activity table

Highlight Critical Path

- Backward pass calculates the late dates and float to determine the critical path, allowing users to focus on the important tasks that drive the schedule finish date

- Filter to just the critical path at the push of a toolbar icon
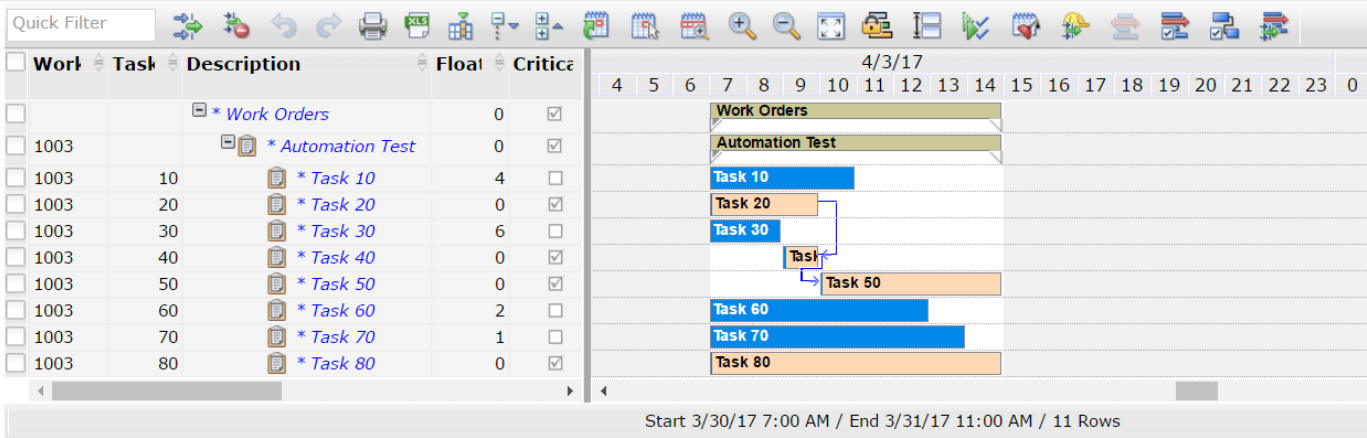
Graphical Scheduling – Power Users' Right Click Actions

761A1203 Ca

- Change Status
- Initiate Workflow
- Modify Work Details
- Select Owner
- Create Communication
- View Item Availability
- Create Work Order
- Create Job Plan
- Assign to New Parent
- Create SR
- Reschedule/Unassign Assignments
- Create Incident
- Create Problem
- Create Change
- Create Release
- Commit Selected Work Records
- Remove Task from Schedule
- Manage Assignments
- Create Work Package
- Go To Quick Reporting
- Go To Work Order Tracking

761AWP1202 Work

- Change Status
- Initiate Workflow
- Modify Work Details
- Select Owner
- Assign to New Parent
- Reschedule/Unassign Assignments
- Commit Selected Work Records
- Remove Task from Schedule
- Create Work Package

Work Package 1202

- Change Status
- Initiate Workflow
- Modify Work Details
- Select Owner
- Assign to New Parent
- Reschedule/Unassign Assignments
- Commit Selected Work Records
- Remove Task from Schedule
- Create Work Package
- Move to Next Hour
- Move to Today
- Move to Next Day
- Move to Day
- Set Work to Day

- Many of the actions within the Work Order Tracking application can be performed within the Gantt view

- Save time & clicks

Graphical Scheduling – Compliance Dashboard
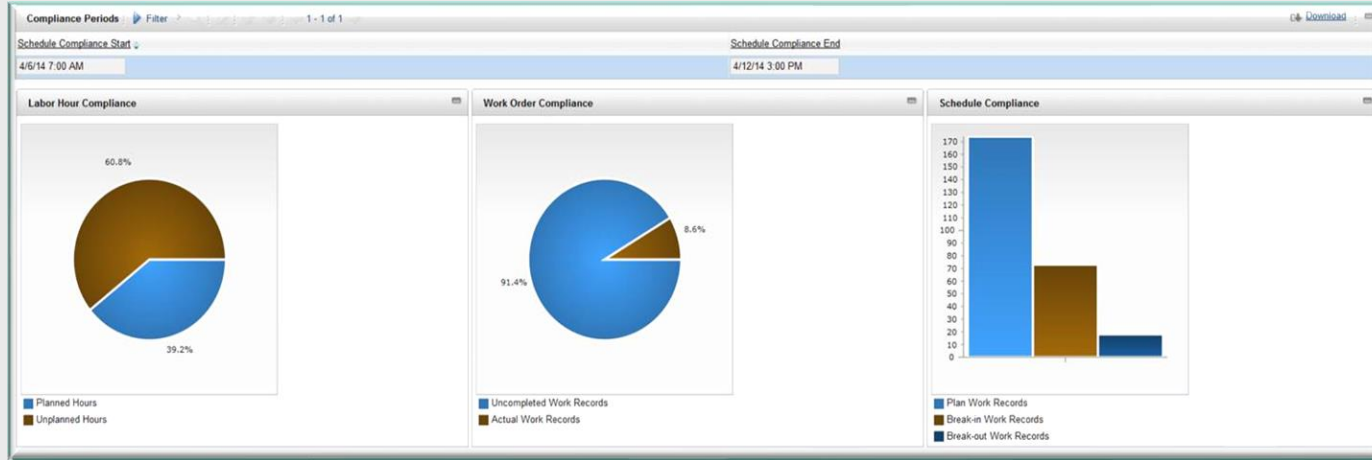
See how the schedule is performing against plan

- Compare planned vs unplanned hours

- Compare uncompleted to completed work records

- See break-in and break-out counts

Schedule Dashboard

- How are my projects doing?

  - Totals of all the Schedules the user has access to view

    - Cron to run calculations in off

- Quick Filter and Column Filtering

- Print

- Download to Excel

- User selected columns to display

Graphical Scheduling – PM Forecasting

- Visualize future work

- Adjust forecasted dates graphically

- Initiate PM reforecast actions

Graphical Scheduling – PM Forecast Cost

- Calculate the planned hours and costs for all the Forecasted PMs in the Schedule including Routes, Sequences and Nested Job Plans

# Graphical Scheduling – Planning Buckets (Resource Mode)
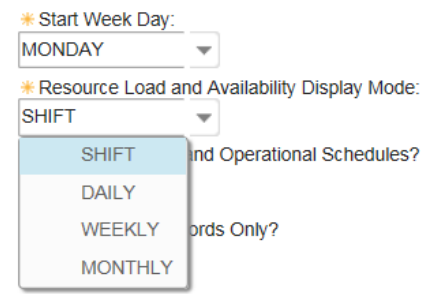
- Select on creation of schedule and change within the graphical resource view

- Longer range schedule – move work to the month, week needed and then in the shorter term schedule move work to specific day/shift
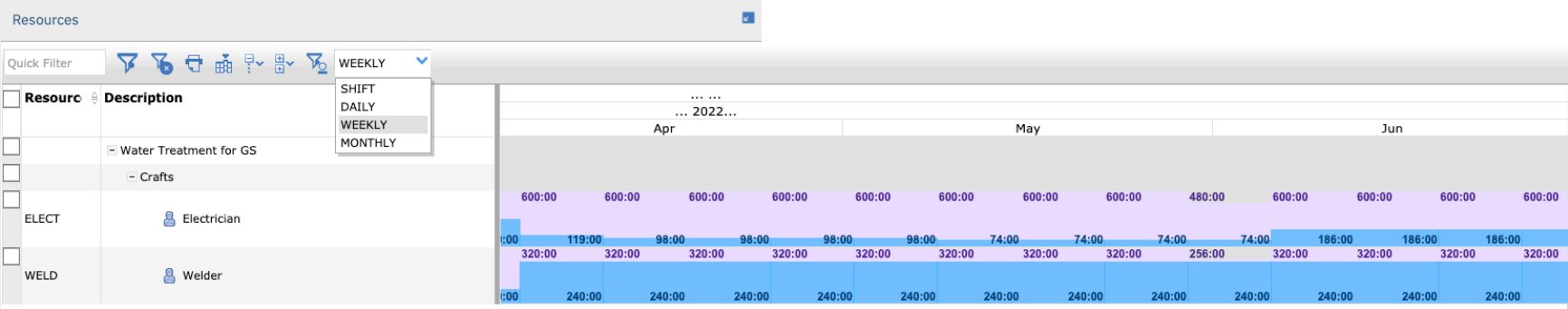
Graphical Scheduling – Interacting with Optimization

Use highly scalable, enterprise grade Maximo Scheduler Optimization to automate processes for manual & time-consuming work management tasks

- Resource leveling model schedules within availability

- Capacity Planning model returns a schedule to meet project deadlines that may require extra resources
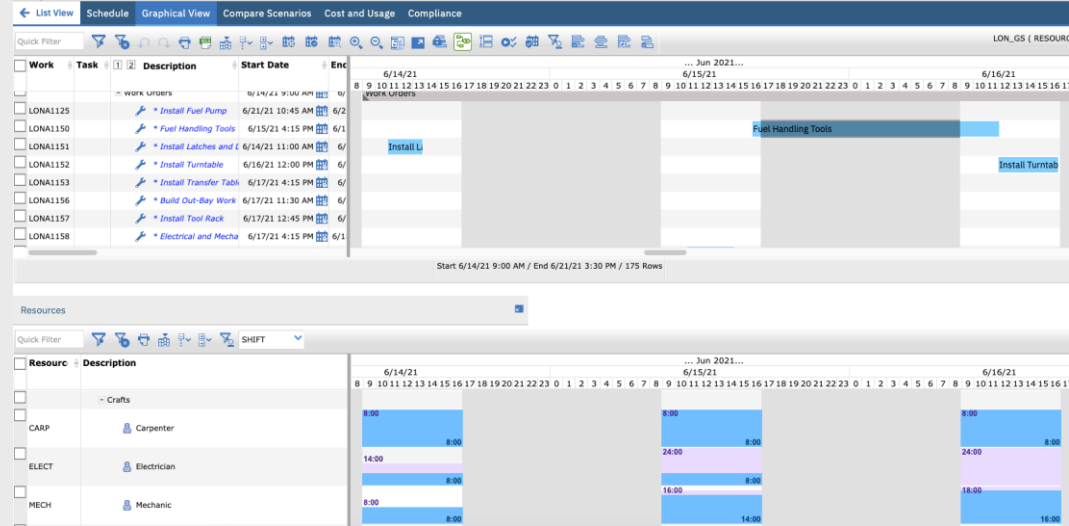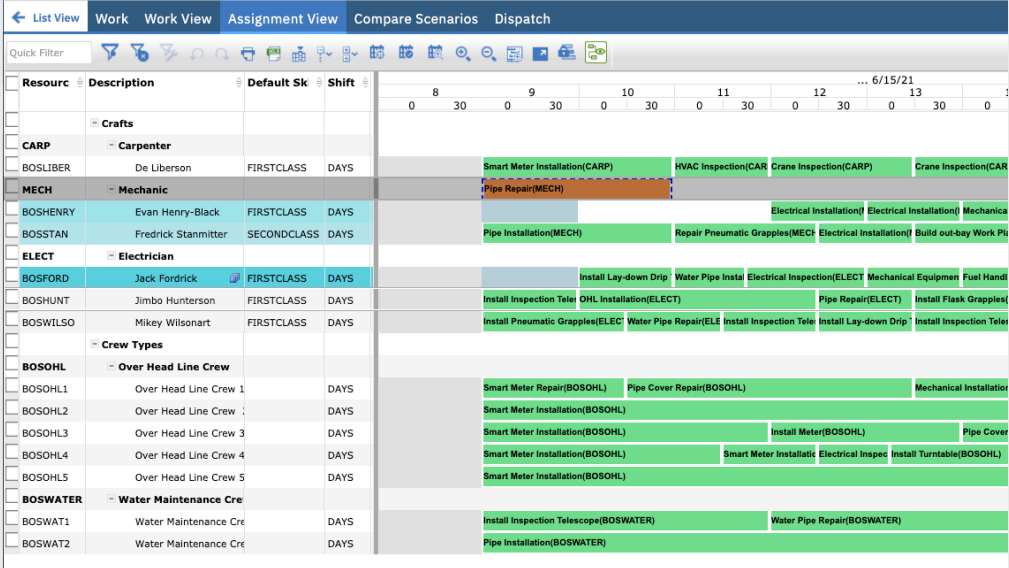
Graphical Assignment

Handle assignments over multiple weeks

- The Assignment View lists all the labor requirements as orange bars beside the craft/crew type to be assigned to available labor/crew

- Drag and drop to a labor/crew row; assigned is green, validations are yellow and red
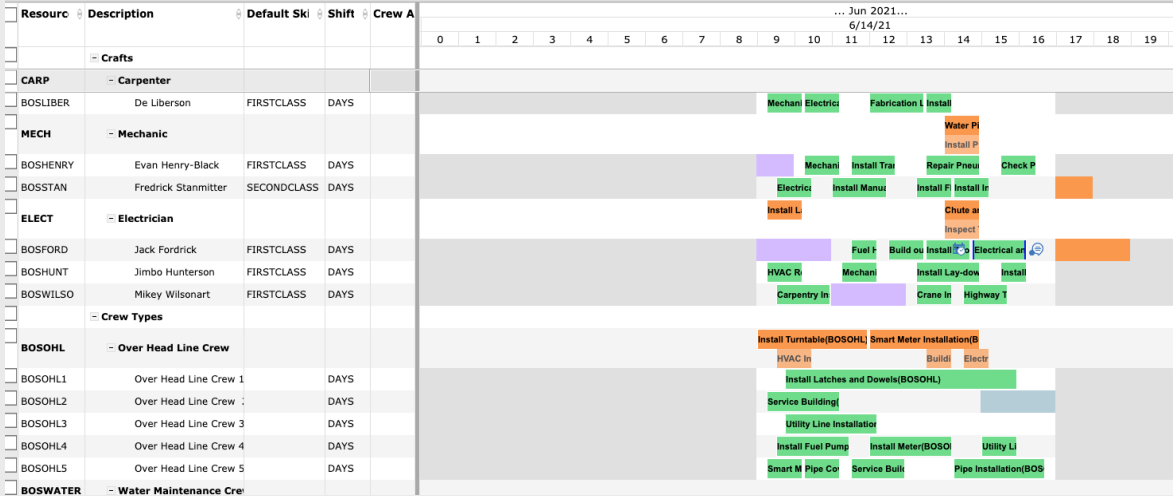
Graphical Assignment – Include Resources with Multiple Skills

- Select an assignment bar, and the best matched labor/crew is highlighted in dark blue. Possible acceptable matches (by skill level ranking) are a lighter shade.

- Resources with secondary craft skill that match work requirements will be brought into the work list under their default craft/skill even if that default craft skill is not required by the work

- Note the multi-skilled labor indicator beside the labor description

Graphical Assignment – Dispatching

Dispatcher monitors and responds to on-going work out in the field:

- View Work Order assignments in a calendar and map view to understand the dynamic workday

- Ability to match resources with incoming work orders, based on location and travel time. Create optimized street routes for the crews
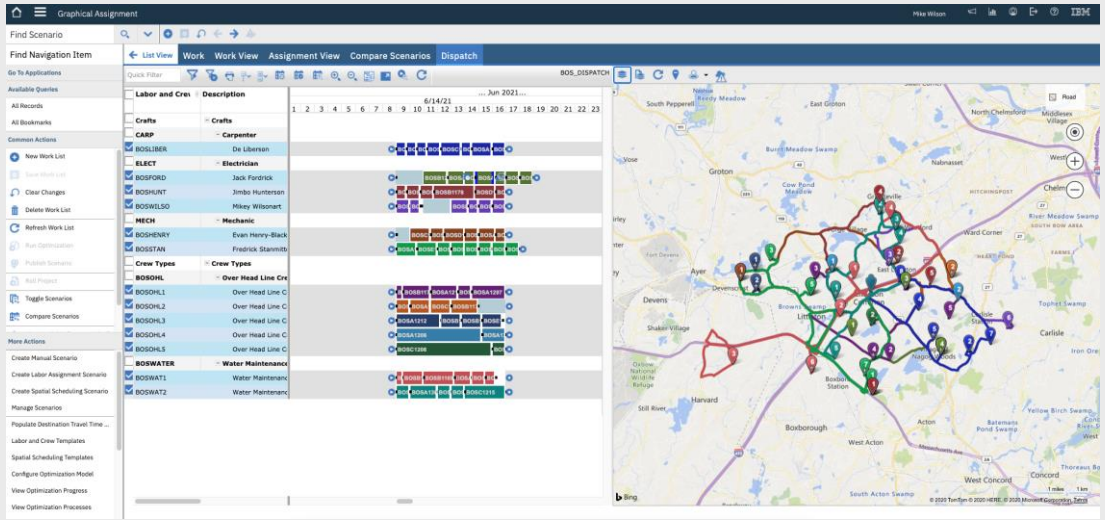
Graphical Assignment – Additional Info to aid the Dispatcher

Where are the field technicians and Crews

View the priority of the work orders

Change the map marker to indicate Status, Priority, Work type or Route

Map marker legend

Graphical Assignment – Technician Template

- Technicians can access all pertinent work details from a single view, on their mobile device

- Start and stop timers or enter actuals manually

Graphical Assignment – Technician Template

Field Technician's Street Level Route

Field Technician's Material Requirements

Field Technician's Tool Requirements

Dynamic Dispatching

- Automatically refresh the dispatch view to show the latest progress and work details as they are posted

- Re-optimize the in-progress work list to reflect ongoing changes to the plan for optimal crew routing

Graphical Scheduling – Large Projects

- Ability to bring in large numbers of records

- Introduces server-side paging, sorting, filtering etcetera in order to accommodate large projects with a high record volume

- Like Graphical Scheduling, but a few changes to accommodate the same functionality on the server-side
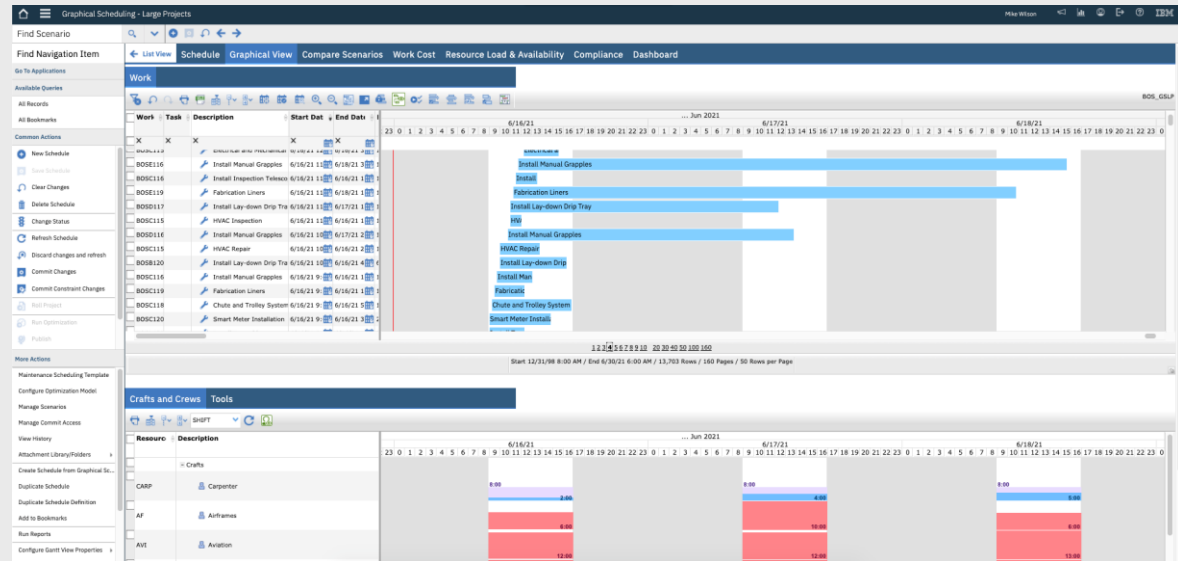
Scheduler Data Manager

- Perform validation checks to identify issues and easily fix data issues to improve data quality & governance

Resources

Maximo Scheduler Community: (join community to view all details)

https://community.ibm.com/community/user/communities/community-home?communitykey=60718772-c63c-4d74-bdad-56d8beac4ba3&tab=groupdetails
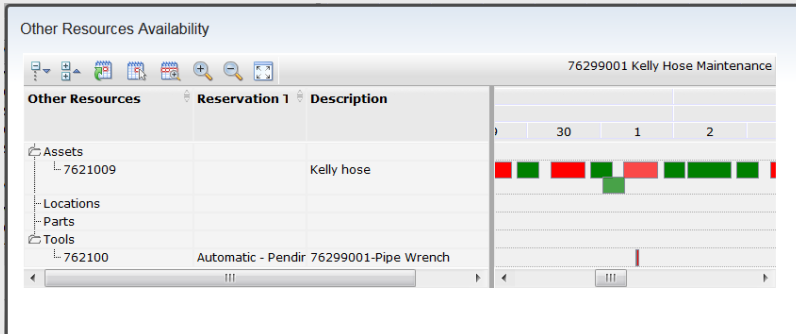
RFE Tool:

https://www.ibm.com/developerworks/rfe/?BRAND_ID=90
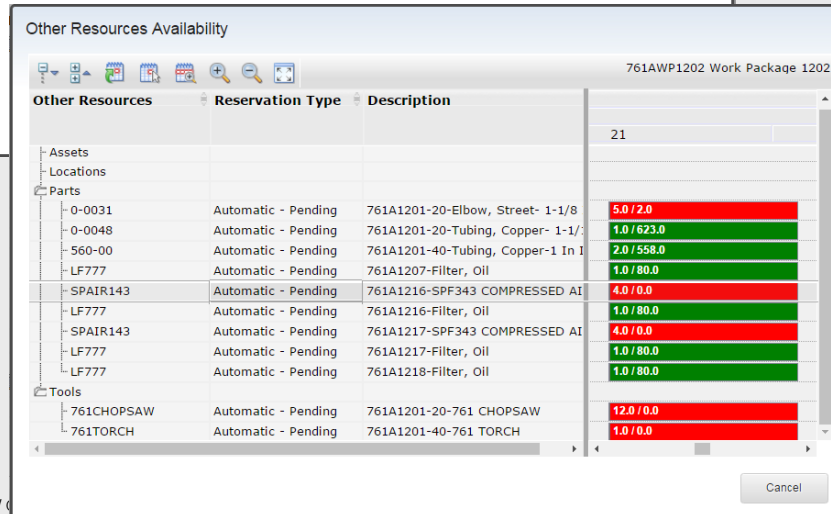
Thank you

Graphical Scheduling – View Other Constraining Resources

- Tie to the asset / location operational and maintenance schedules to ensure efficient resource utilization

- Graphically view required materials and tools and their availability for a single work order or for a parent work order to include all requirements in the hierarchy

Appointment Booking

- Book customer appointments within Maximo using a simple graphical interface

- Incorporate weather data for more efficient scheduling - minimize cancellations / reschedules

- Automatically notify customers of appointment, cancellation, reschedule and ETA

Weather Integration

- Planners can assure that work is completed on time without an adverse weather impact

- Pick what you want displayed in the tool tip (both front and back), from over 50 weather data points

- Similar integration available for the Graphical Assignment application
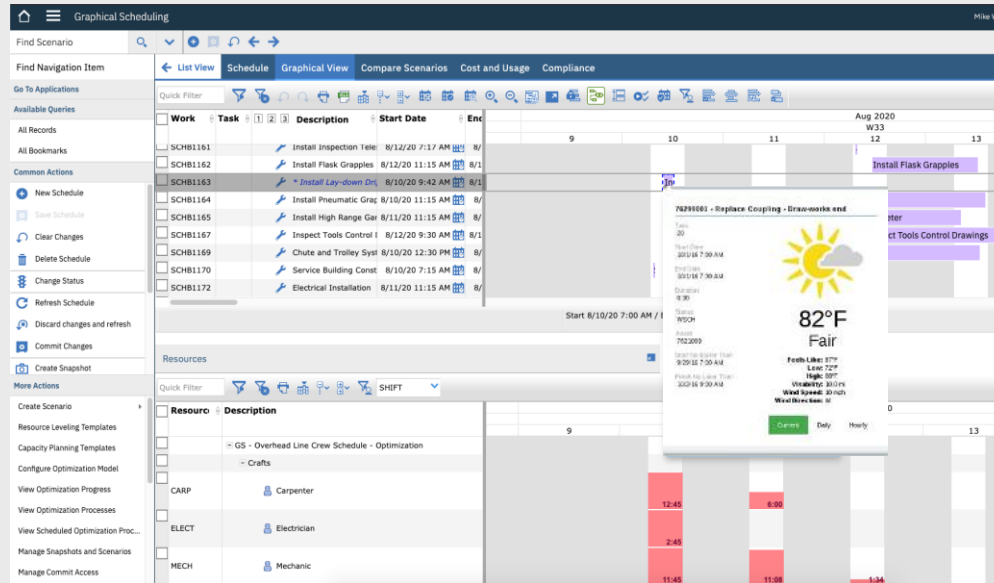
Weather Alerts

- See active weather perils on schedules, appointments, and maps

- Respond by adjusting the work schedule to ensure employee safety. Email notification to work owners and techs of weather events automatically
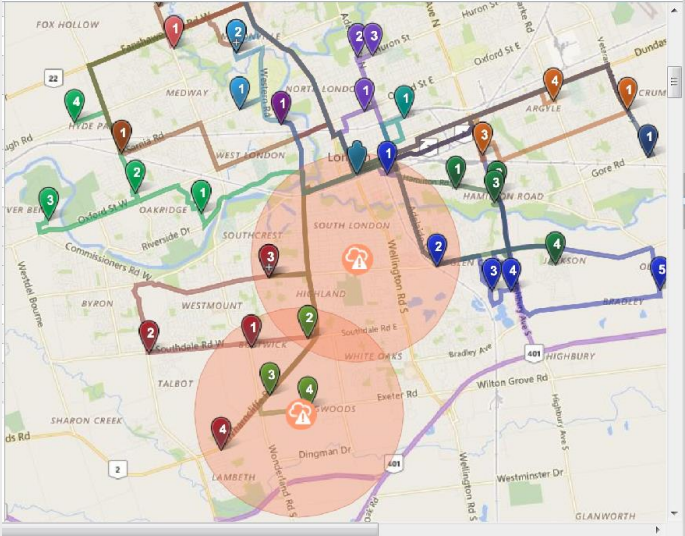
Work view:

Appointment Book:

Dispatching: