IMAC 2014

Maximo Asset Management Scheduler

A Revised Approach to Work Management

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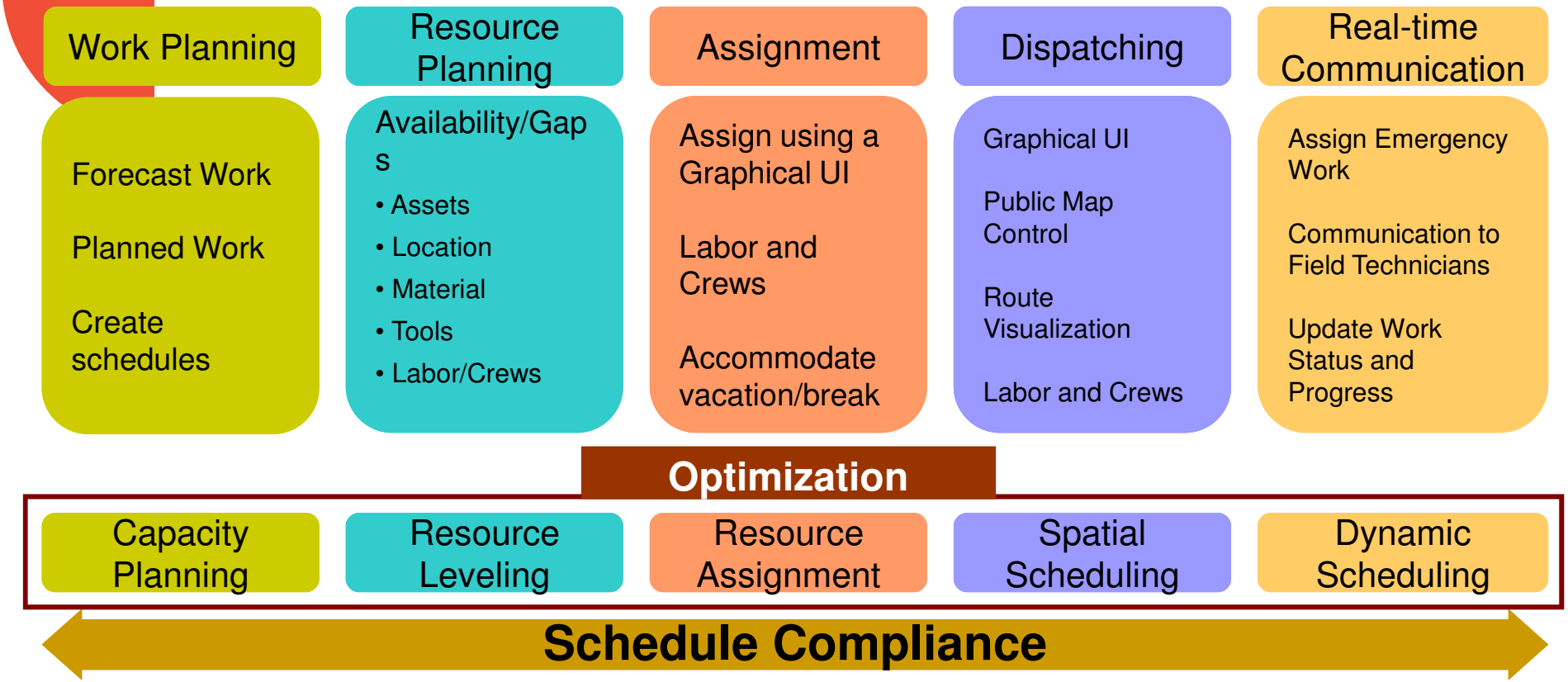
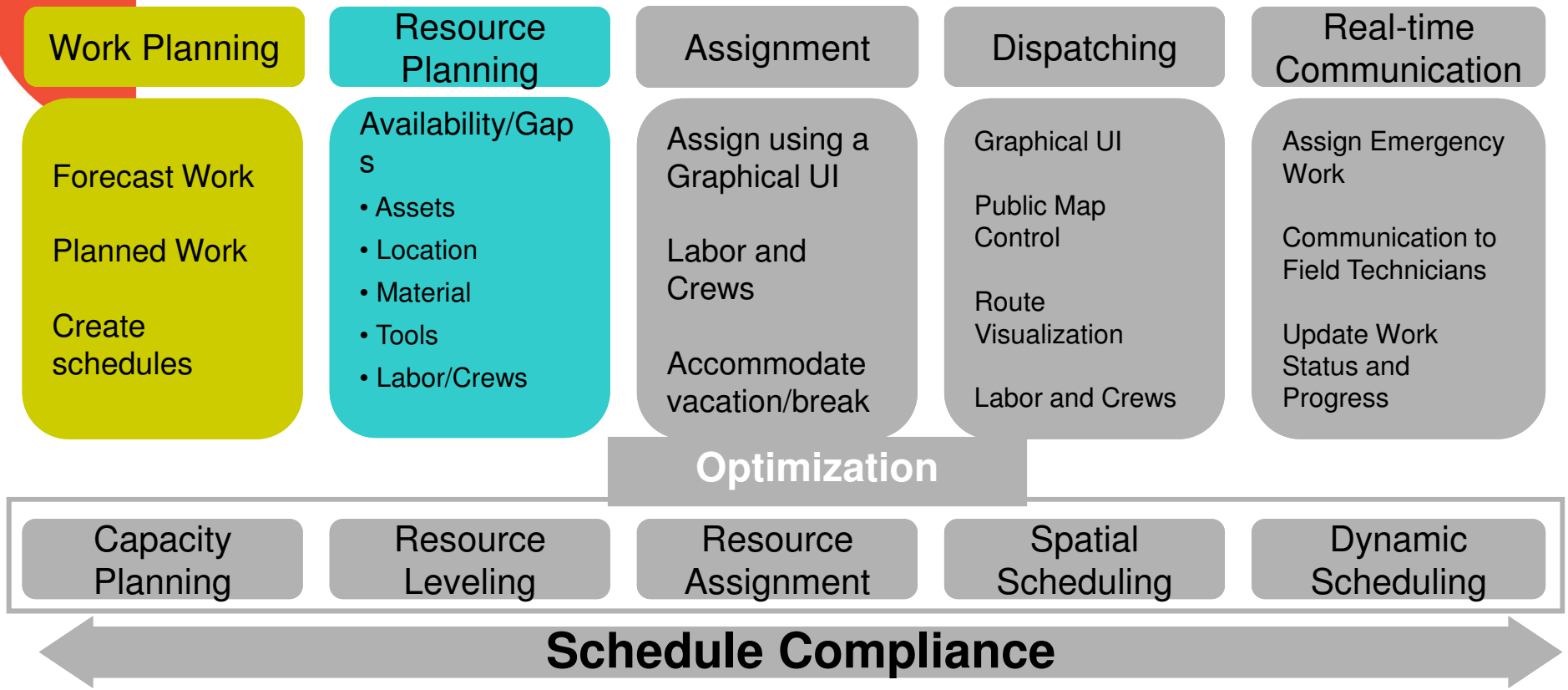
IBM

Our Work Management focus areas

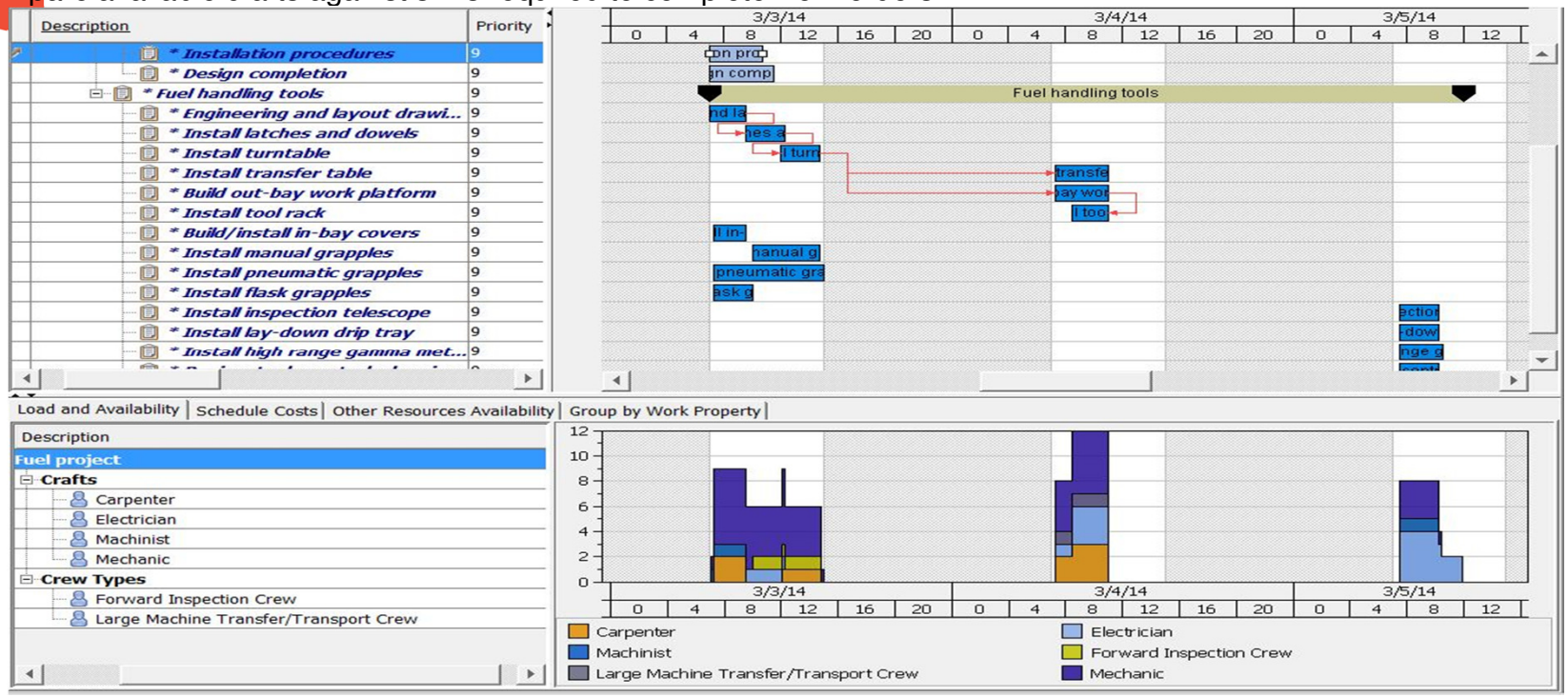


Scheduler focus areas



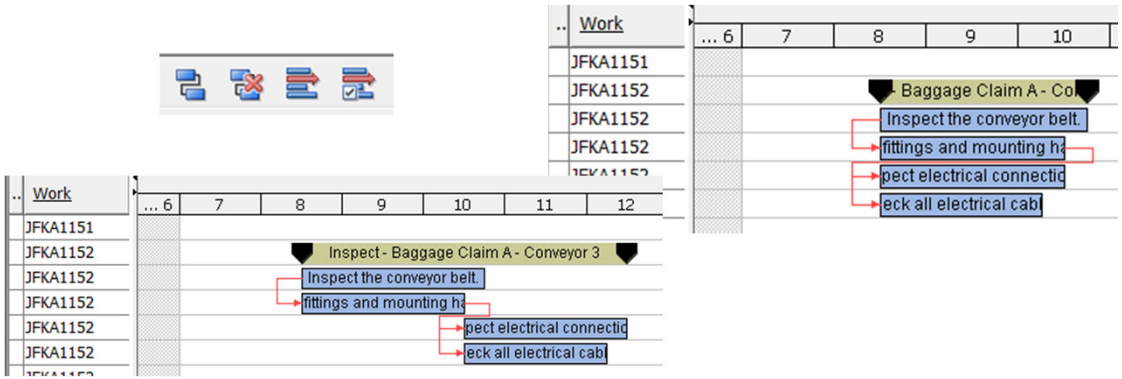
Gantt Chart Visualization

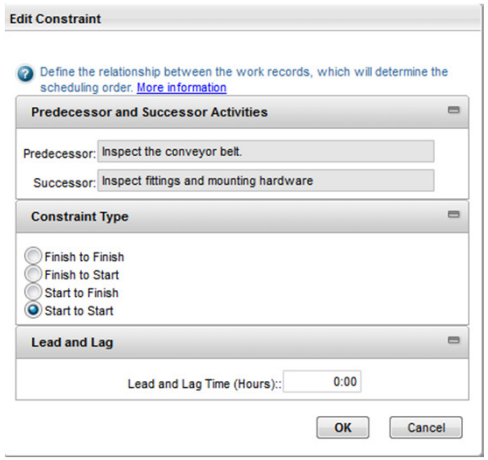
- Intuitive view of forecasted PMs along with planned work orders
- Drag and drop work orders as well as forecasted PMs
- Compare available crafts against skills required to complete work orders

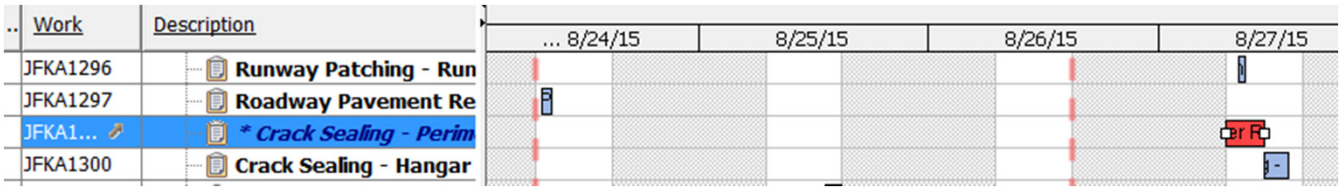


CPM and Schedule Windows

- Critical Path Method (CPM) compliance
- Schedule window violation indicated

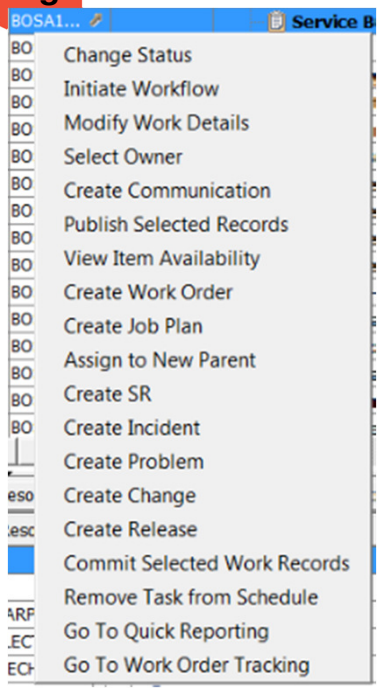




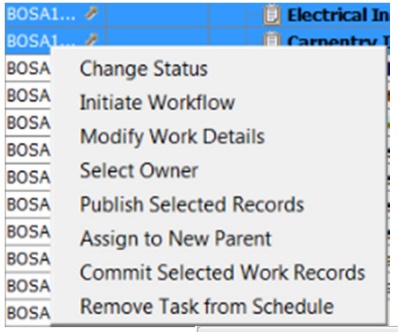


Interactive to Maximo applications

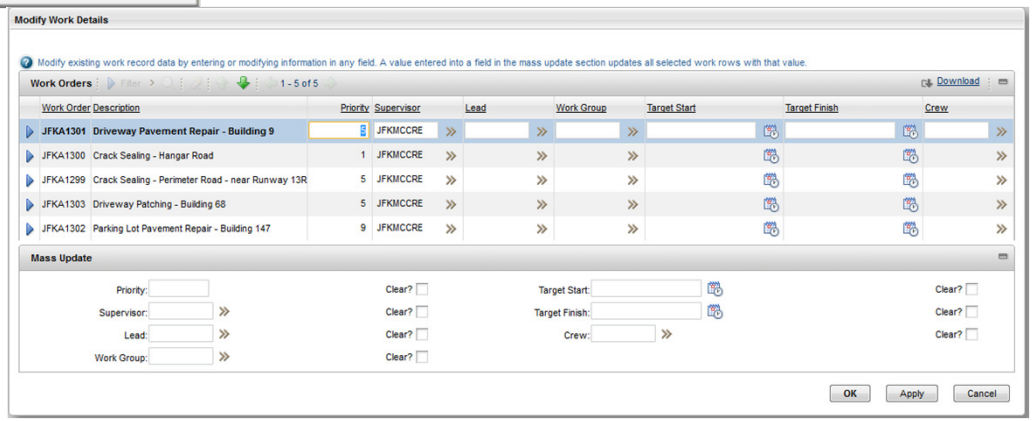
Single Work Order Actions



Multiple Work order actions



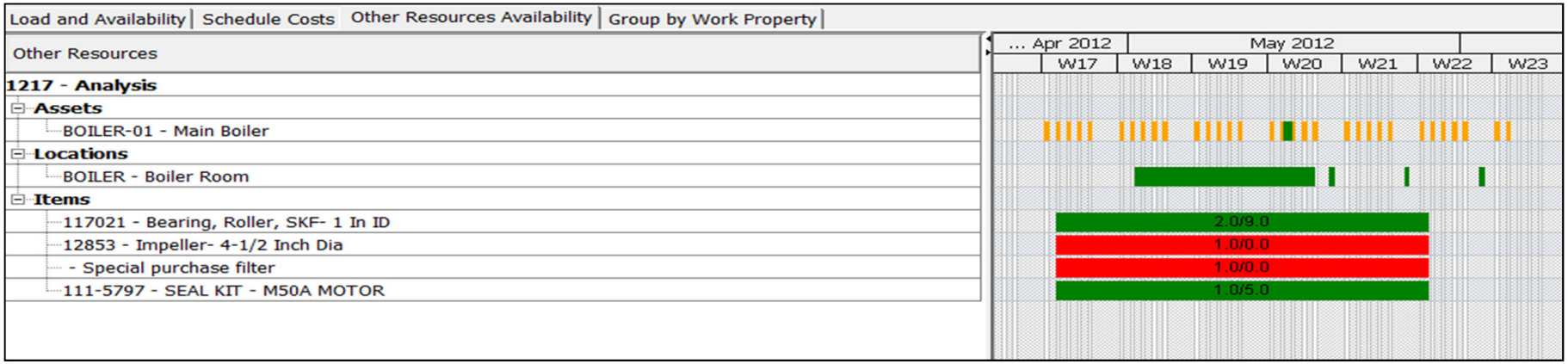
Modify Work Details



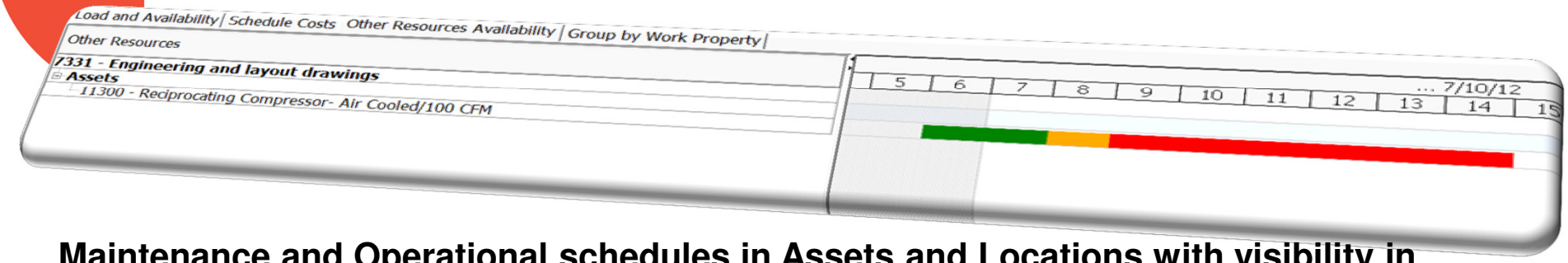
Material Availability

Other Resource Availability tab shows:

- Maintenance/Operational/Calendar availability of Asset and Location
- Material Availability for planned materials
  - Shows required quantity vs available quantity
  - Green bar shows materials are available, red bar shows materials are unavailable
- Planners & Schedulers know when not to schedule work based on material availability

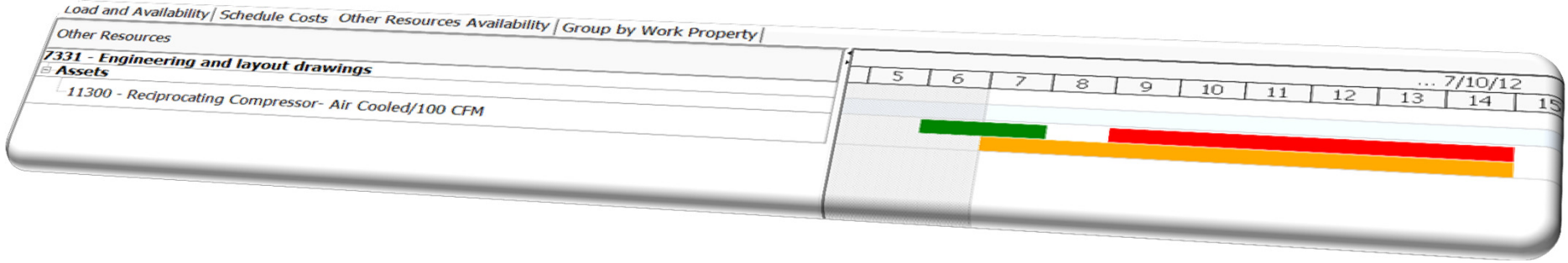


Asset and Location Availability



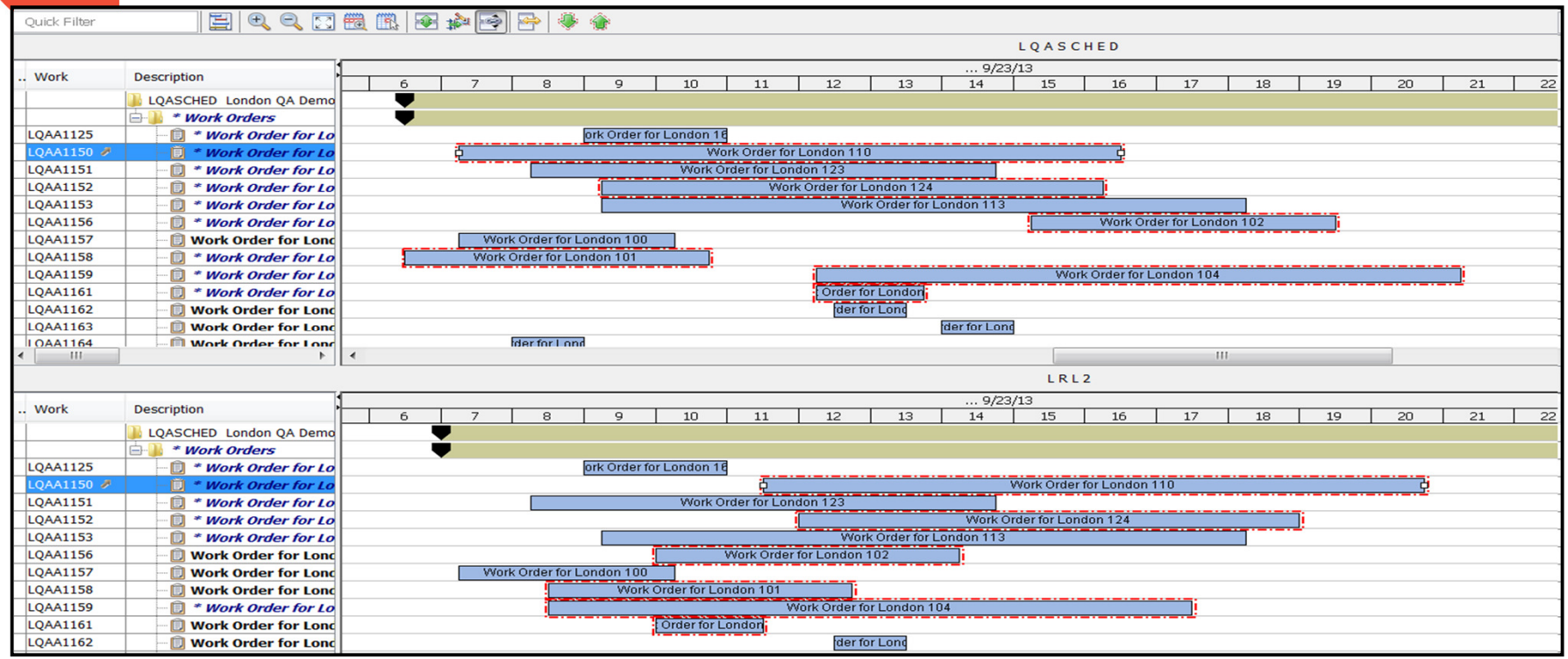
Maintenance and Operational schedules in Assets and Locations with visibility in Scheduler

This determines when work can be done on the Asset/Location

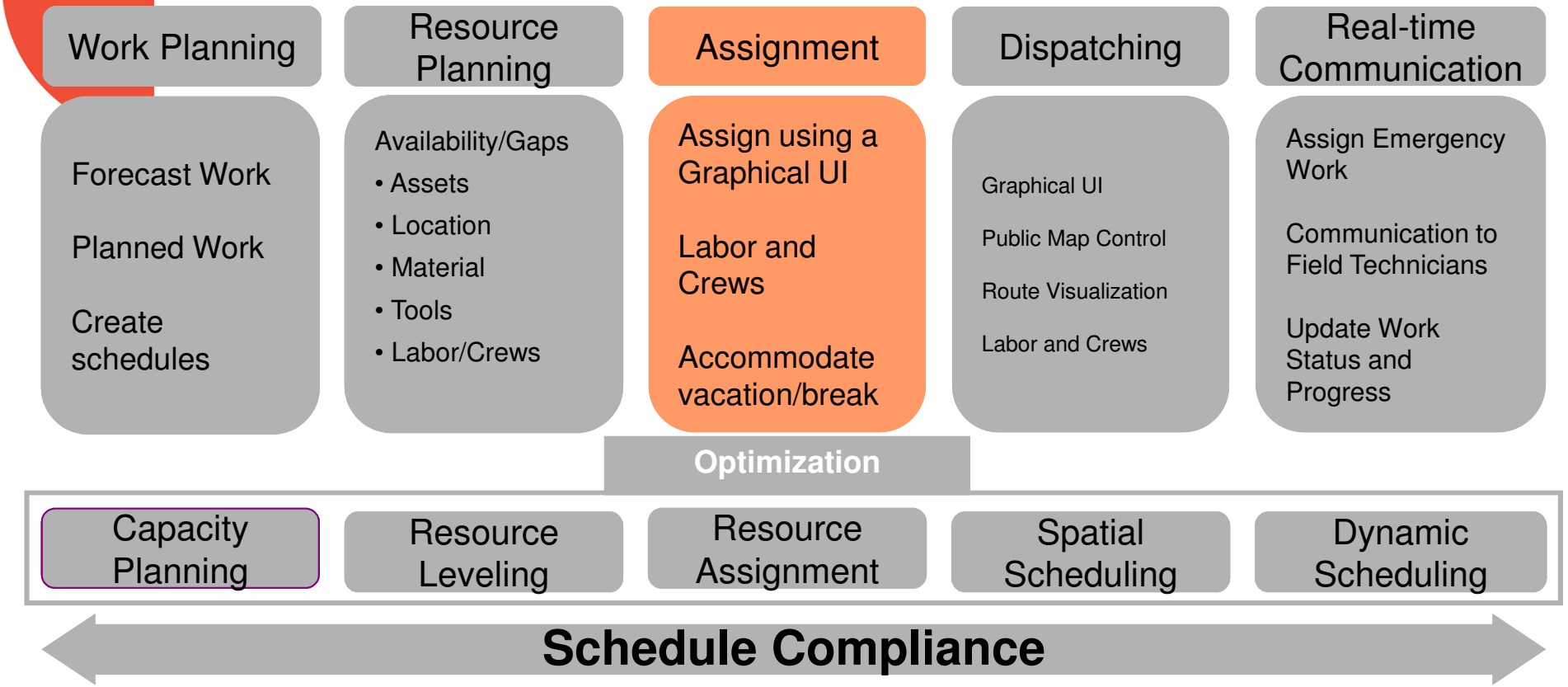


Snap Shots and Scenarios / Comparisons

- Ability to create multiple Snap Shots and Scenarios
- Ability to compare different scenarios before publishing the approved set of scheduled work orders



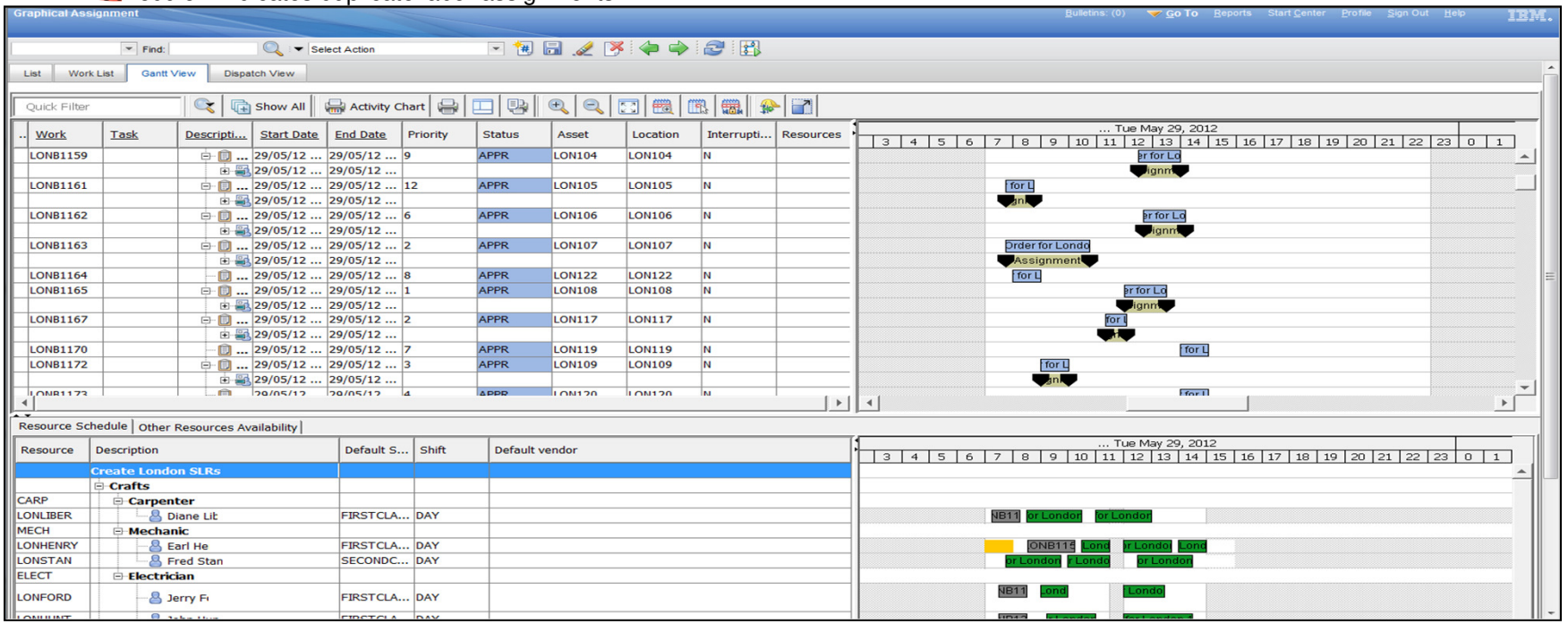
Assignment focus areas



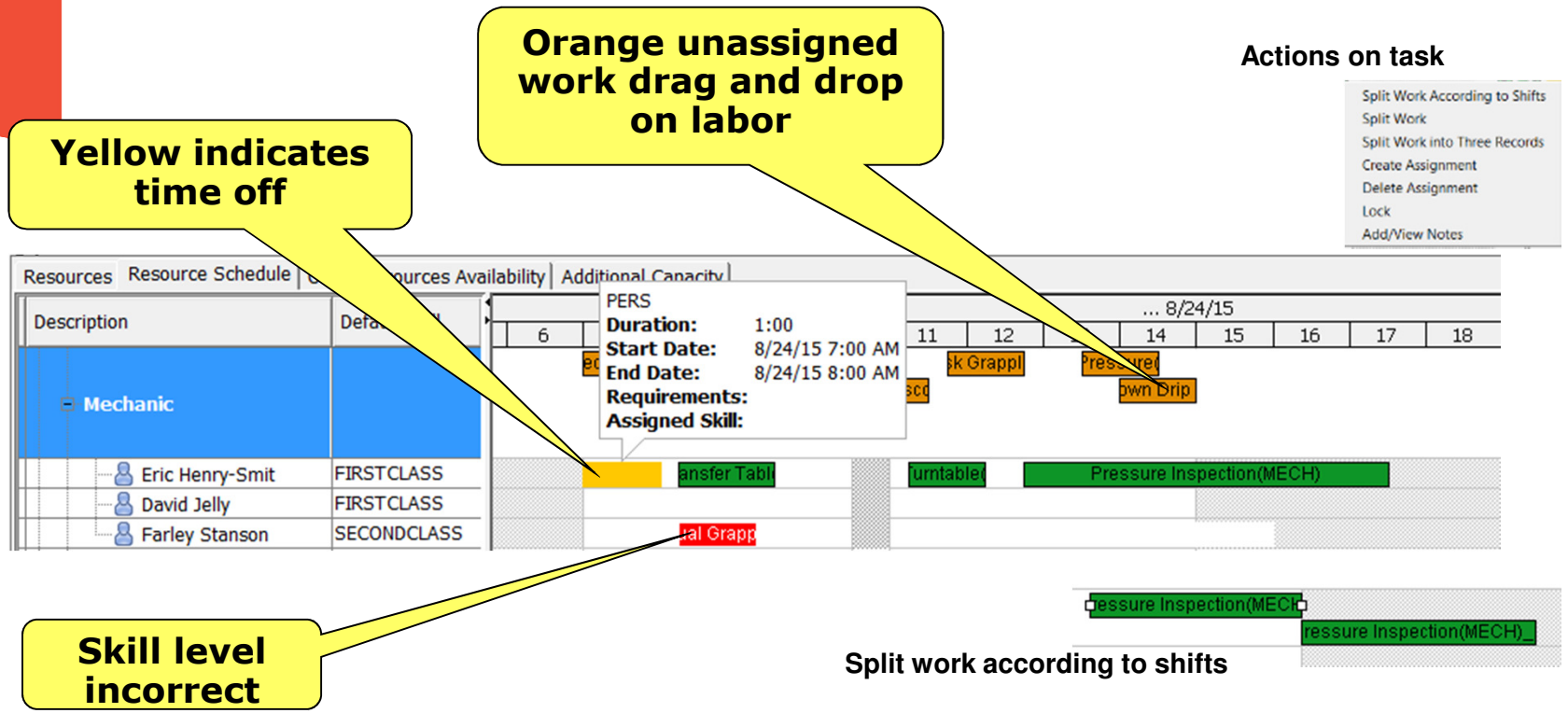
Graphical Assignment

Aimed at the process of assigning work to people

- Similar UI to Scheduler Gantt view for consistency
- Helps the Planner & Scheduler see non work time for a resource, as well as assignments made by other Foremen beyond the bounds of their schedule…indicates duplicate labor assignments

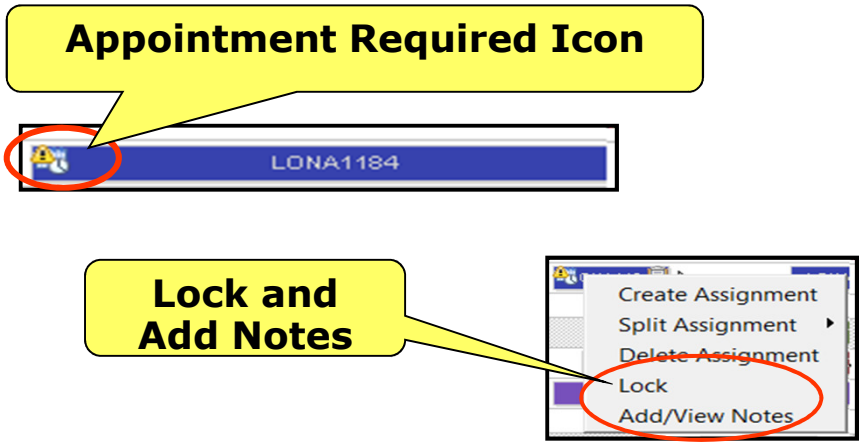


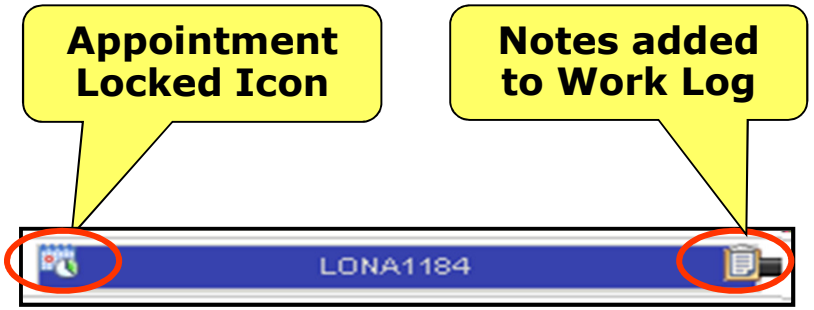
Assigning work



Fixed Appointments

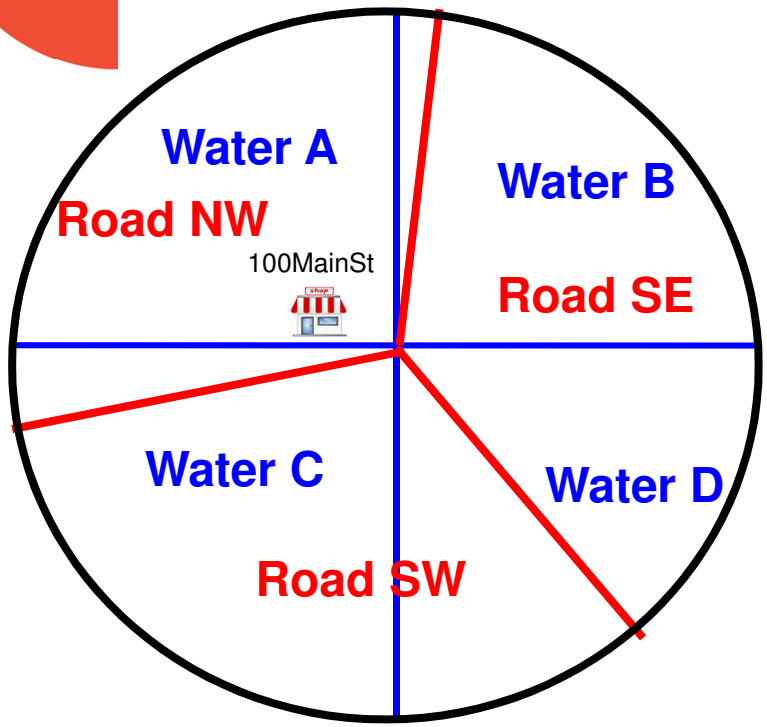
- The ability to 'Lock' an appointment at a specific date/time so that it cannot be moved horizontally to another time.
  - For example: A homeowner needs to be available to let a Utility worker in to repair a meter at a certain date/time.
- The ability to create notes for the appointment - saved to Work Order Log as APPT.
  - For example: The Utility worker needs a key to go through a homeowner's gate to do work and must retrieve the key from the next door neighbor.





Work Zone Application

- *What is a Work Zone*? - **A dedicated area where a Labor or a Crew works.**
- **New Work Zone Application @ Administration > Resources > Work Zones**



Location - 100MainSt

- **WZ – Water A**
- **WZ – Road NW**

Crew Type Water:

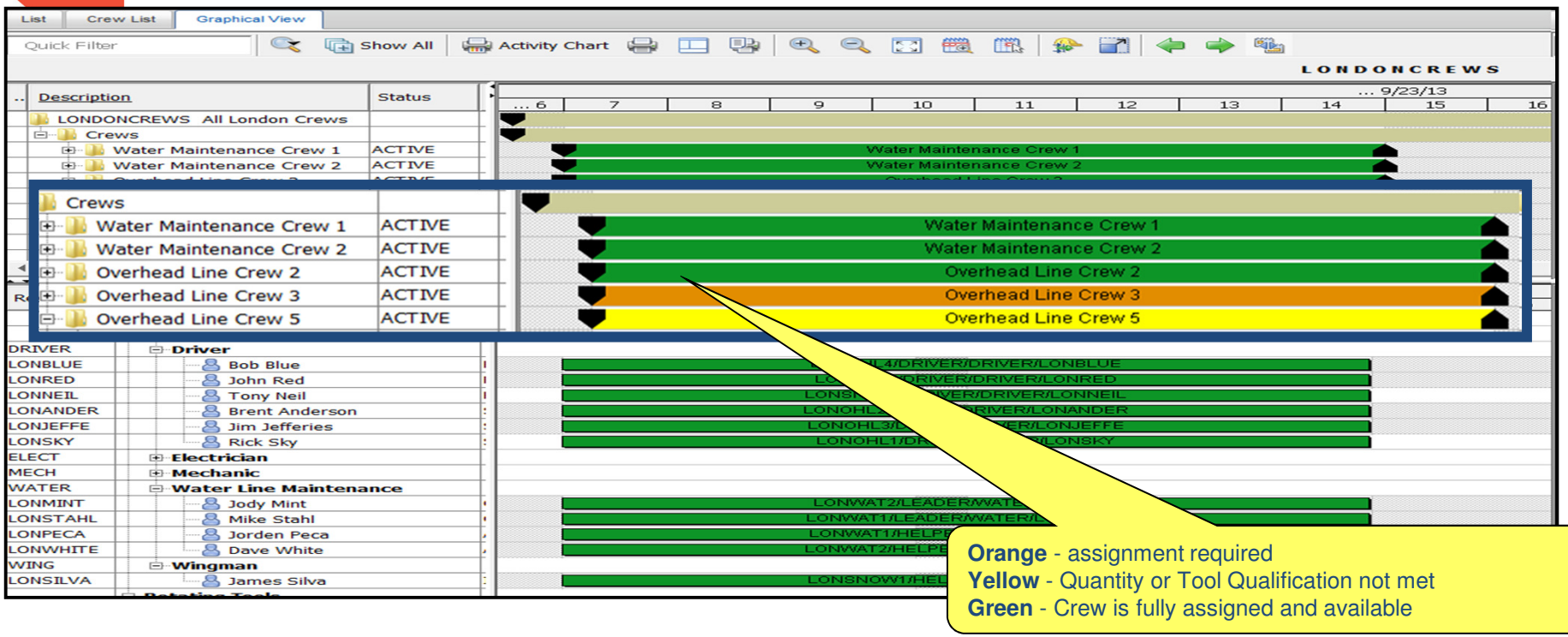
- **Crew2 – WZ - Water B**
- **Crew5 – WZ – Water D**

Crew Type Road:

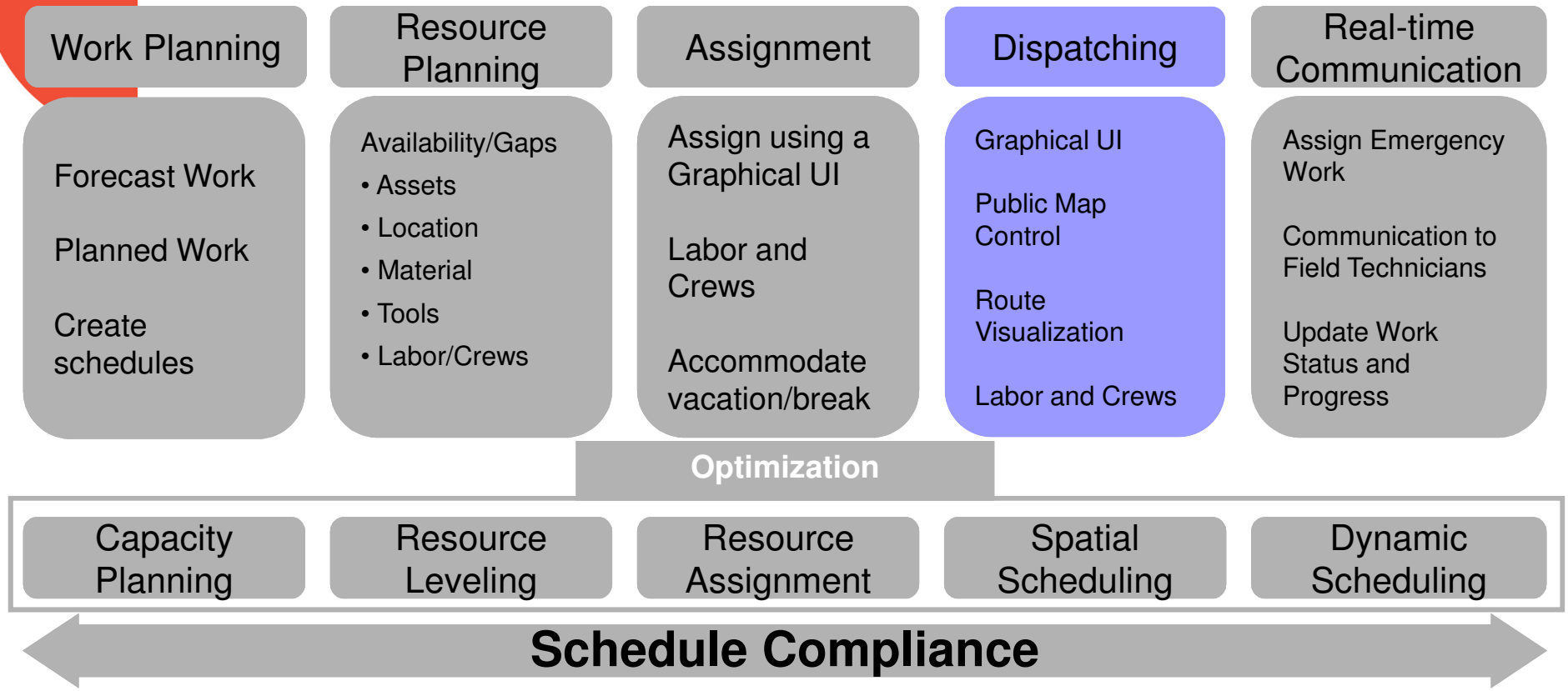
- **Crew4 – WZ – Road SE**
- **Crew7 – WZ – Road SW**

Graphical Crew Management

- **New Crew application to help with the Daily Morning shuffle of Crew Assignments**
  - Drag and drop labor and tools to make up a qualified crew



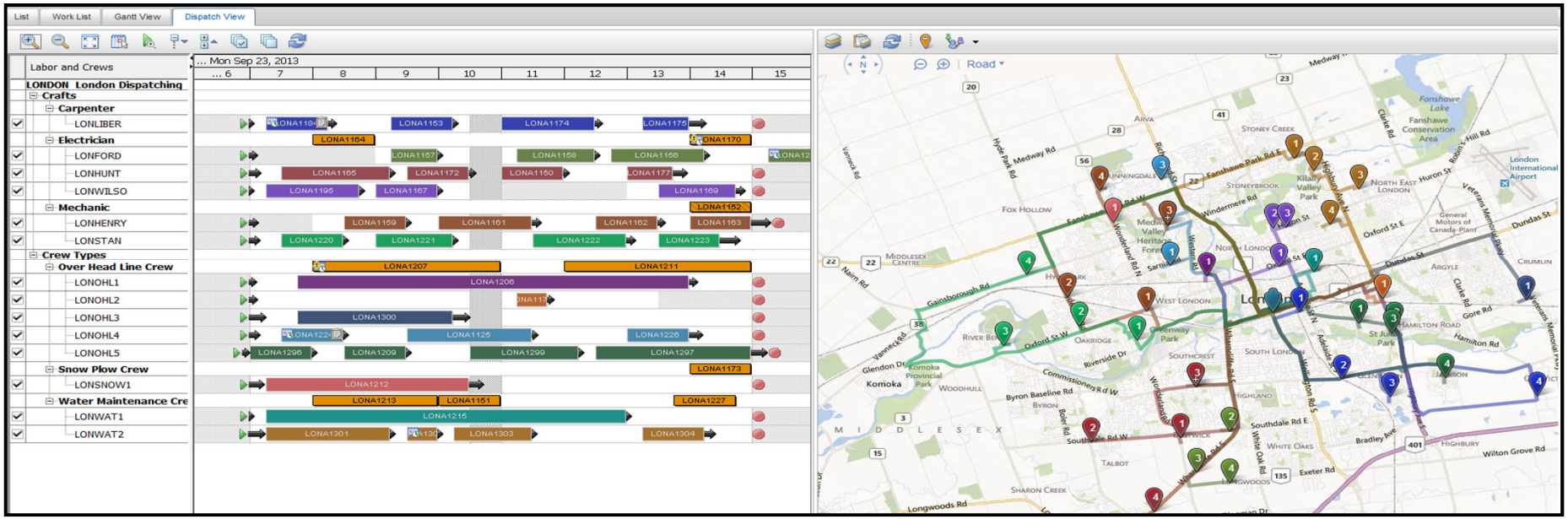
Dispatch focus areas



Dispatching

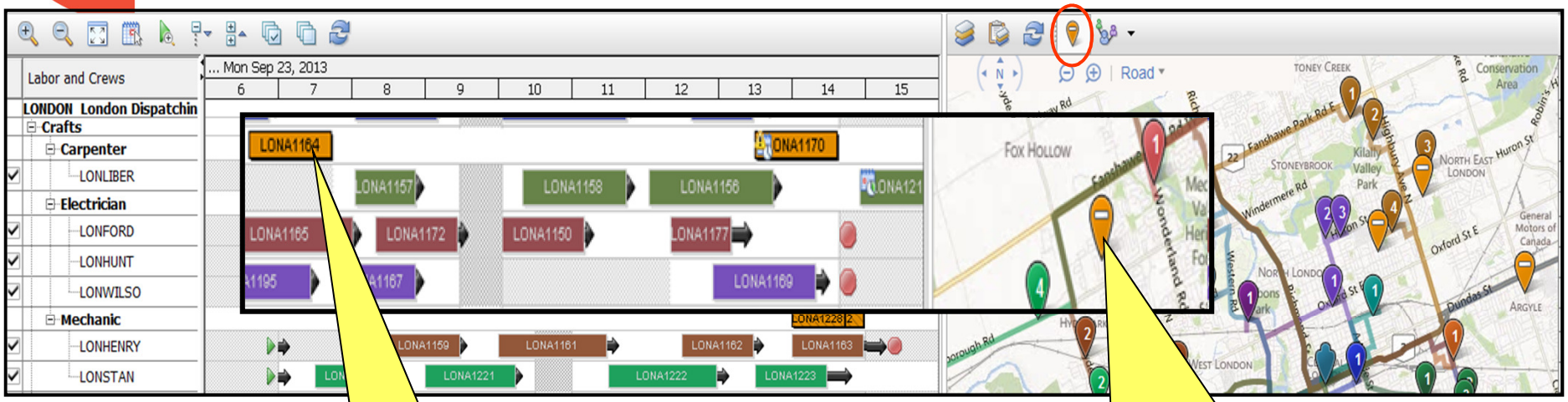
Dispatcher monitors and responds to on-going work out in the field :

- View Work Order assignments in a calendar and map view to spatially understand the dynamic work day
- View geo-location data from mobile devices and locate resources on a map to determine current location
- Ability to view spatially which resource can be rescheduled based on location and travel time when new unassigned work orders come in throughout the day



Unassigned WOs in Dispatch

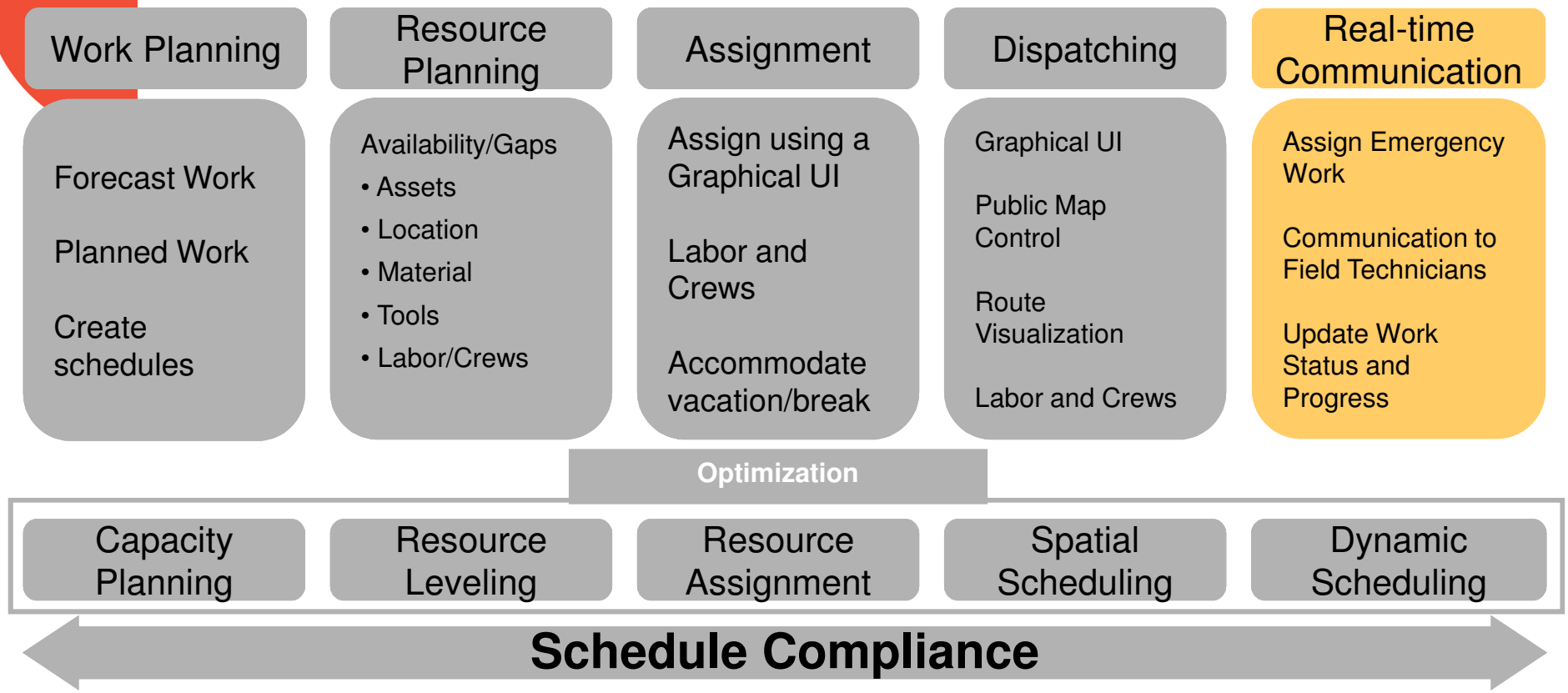
- **Unassigned WOs that are part of the work list query that have a craft/crew type defined will be displayed in both the calendar view and map view.**



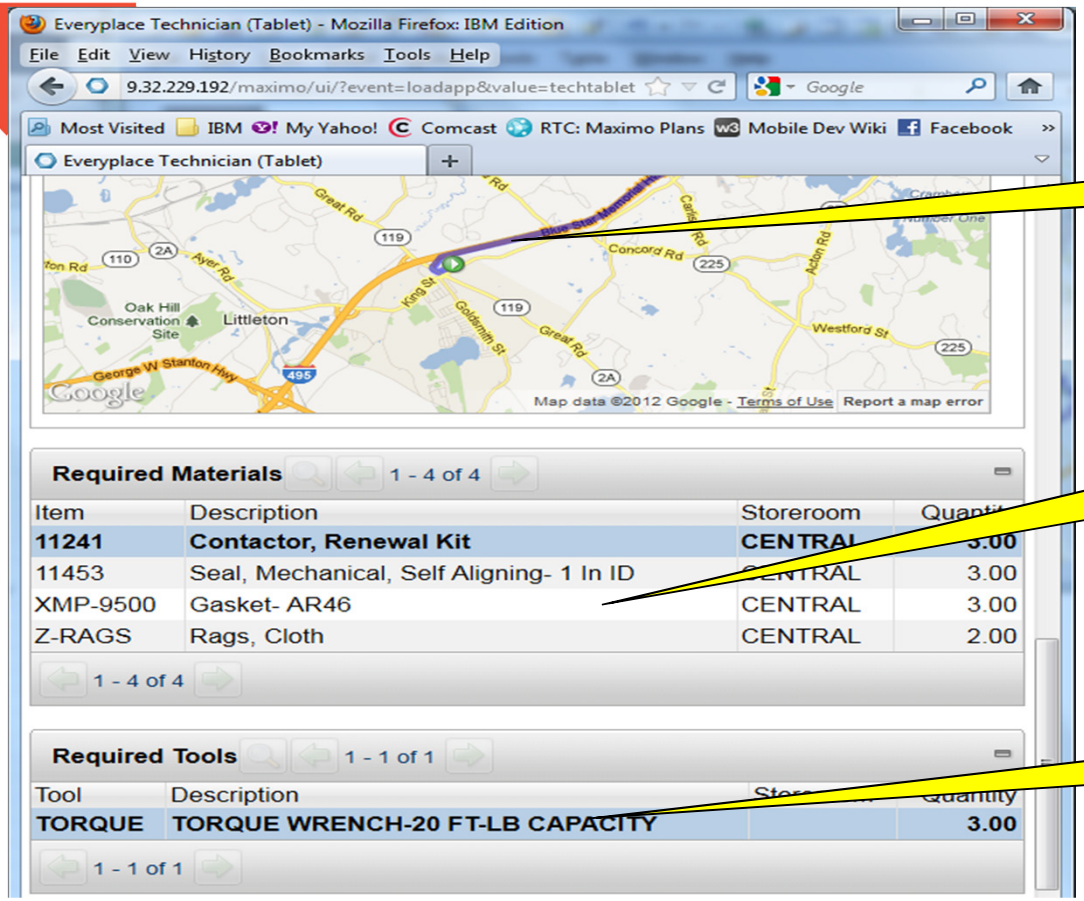
Unassigned WO requiring an Electrician

Corresponding Unassigned WOs when Unassigned WO query is enabled.

Field Technician focus areas



Field Technician - Everyplace



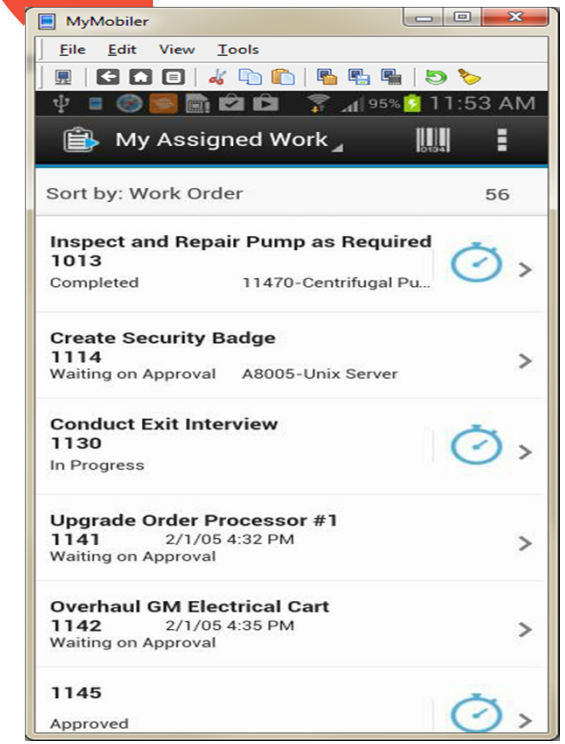
Field Technician's Street Level Route

Field Technician's Material Requirements

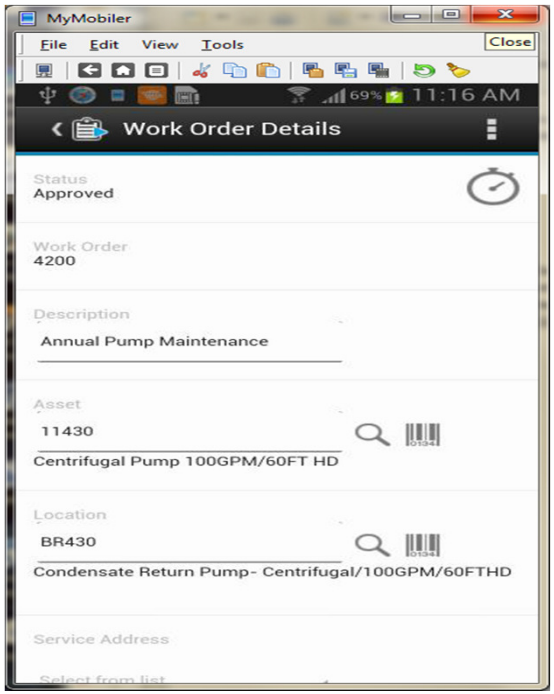
Field Technician's Tool Requirements

Field Technician - AnyWhere

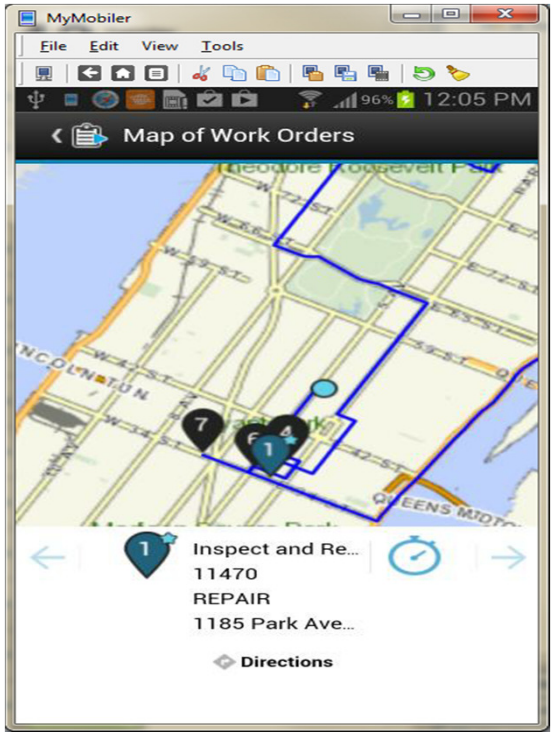
Work List



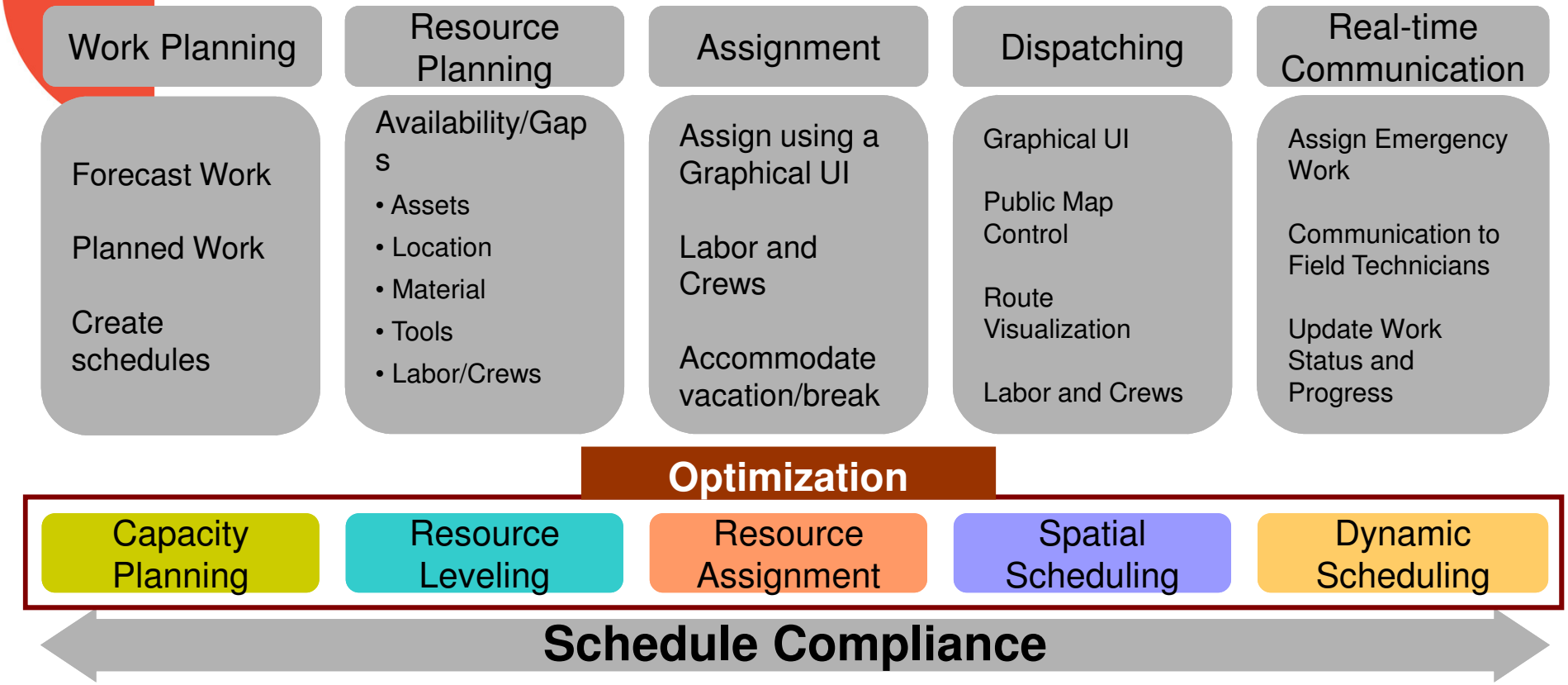
Work Details



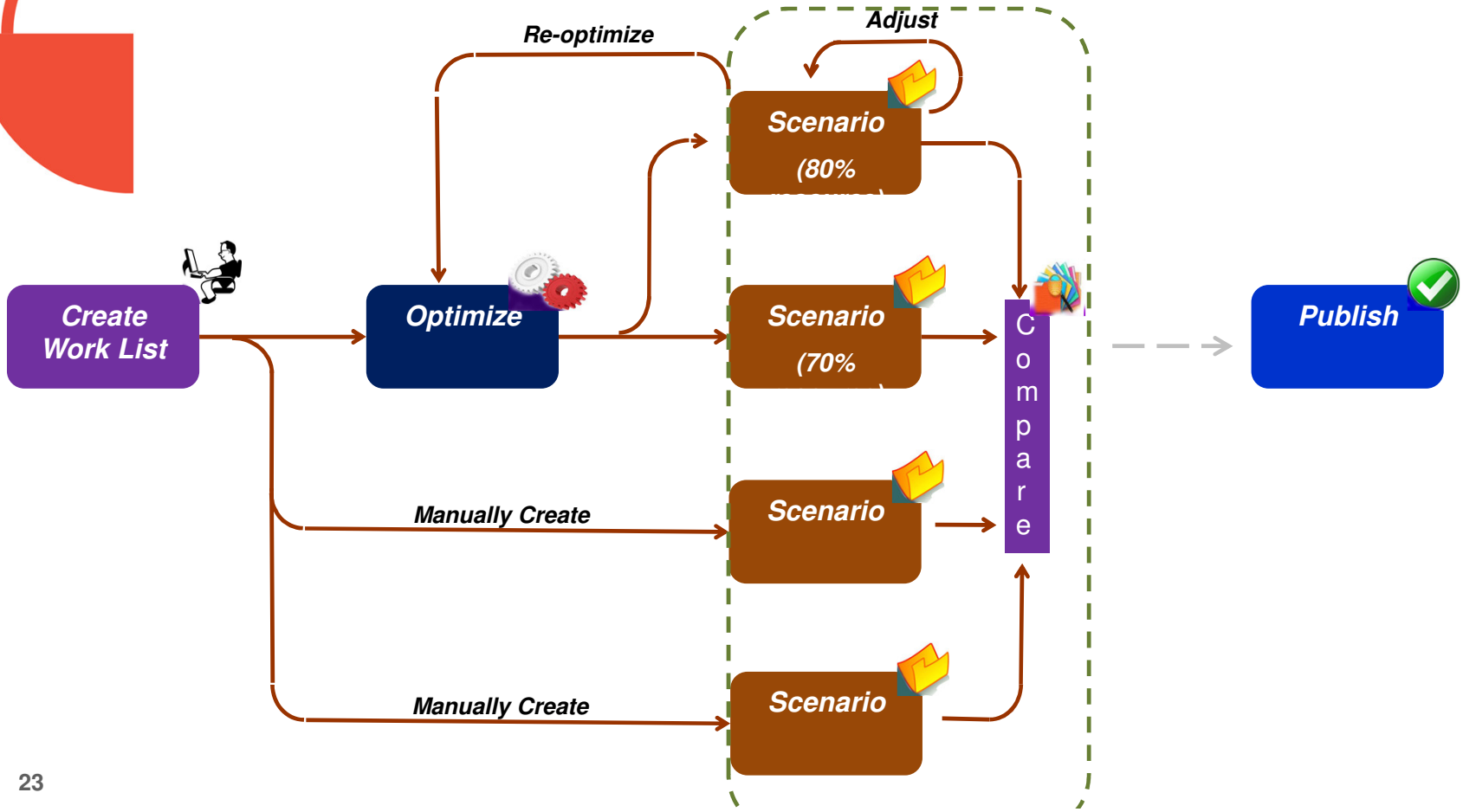
Offline Maps & Directions



Optimization

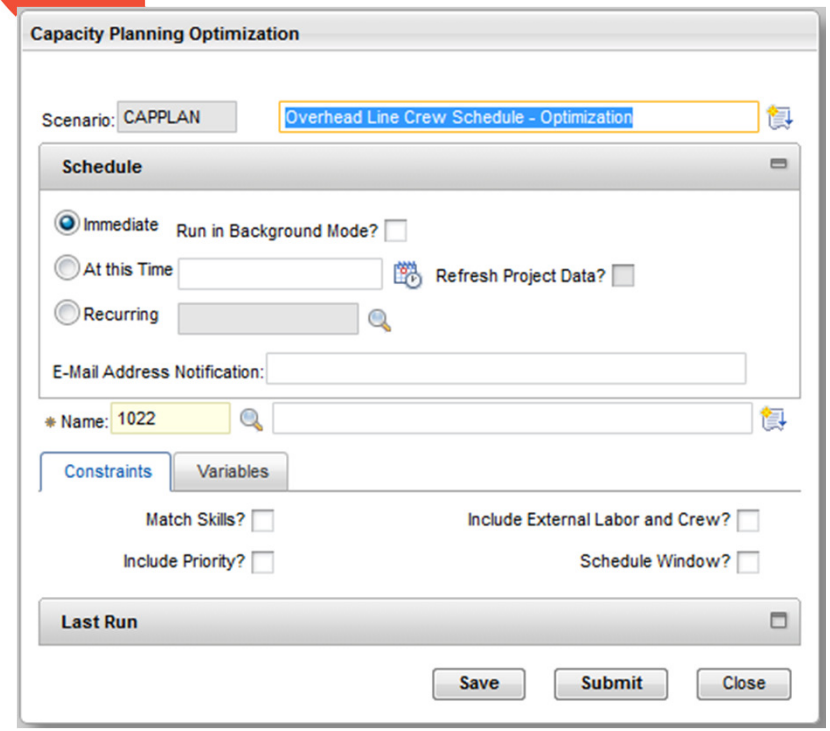


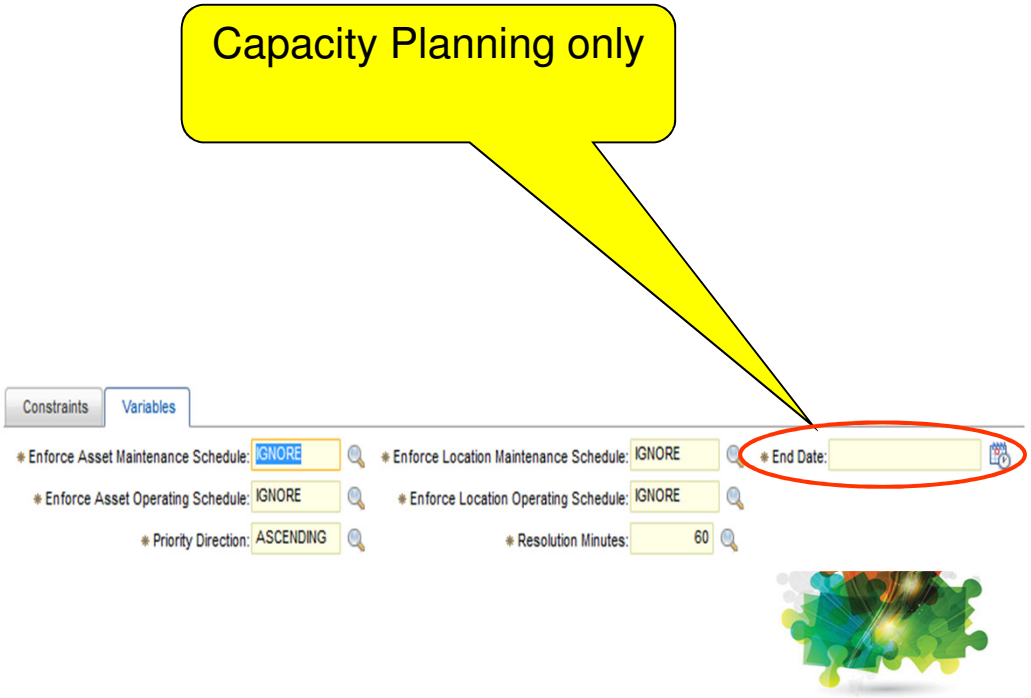
Scheduler Optimization Workflow



Scheduler Optimization Models

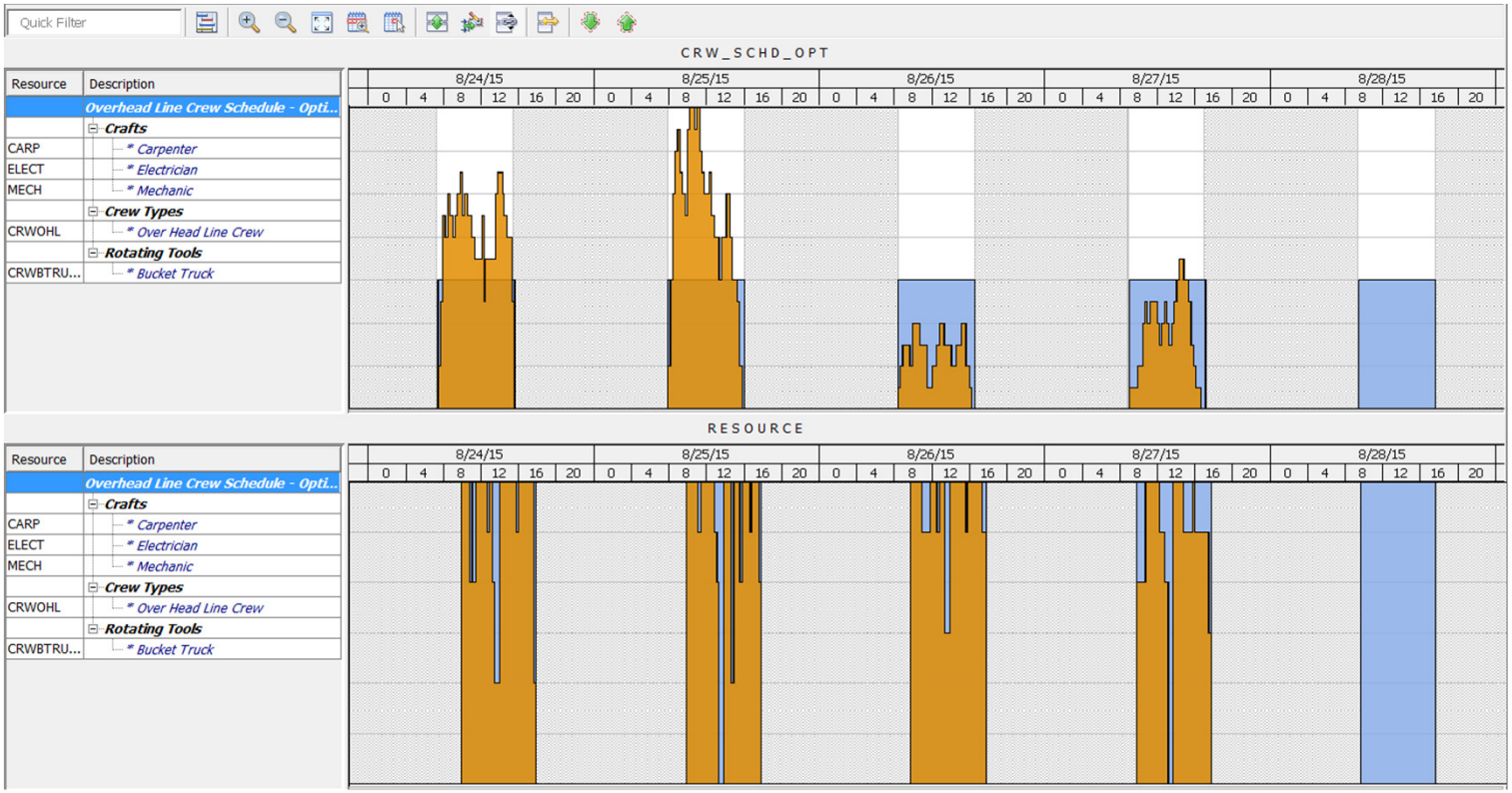
Capacity Planning and Resource Leveling



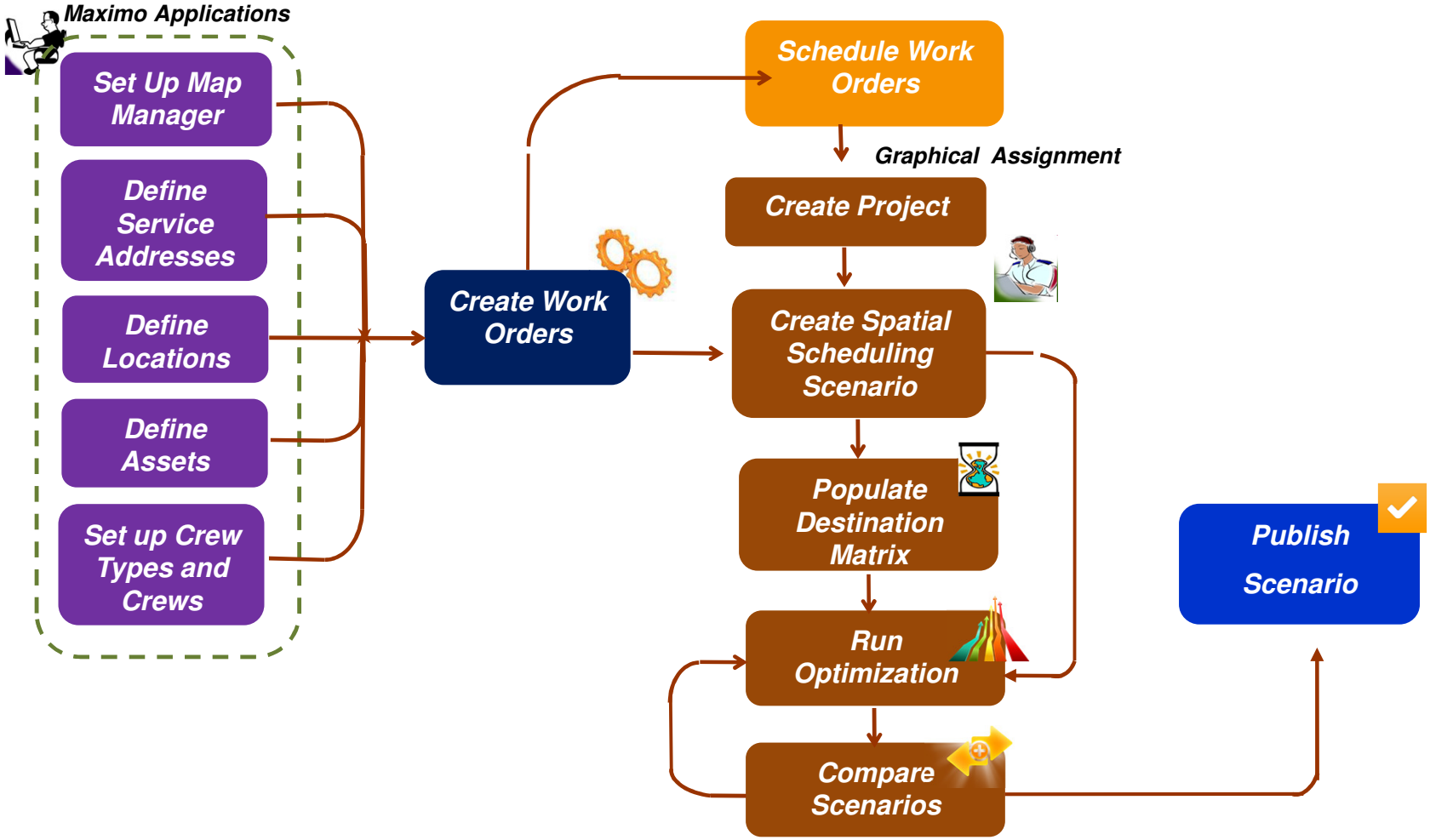


Compare Scheduler Scenarios

Before and after Resource Leveling

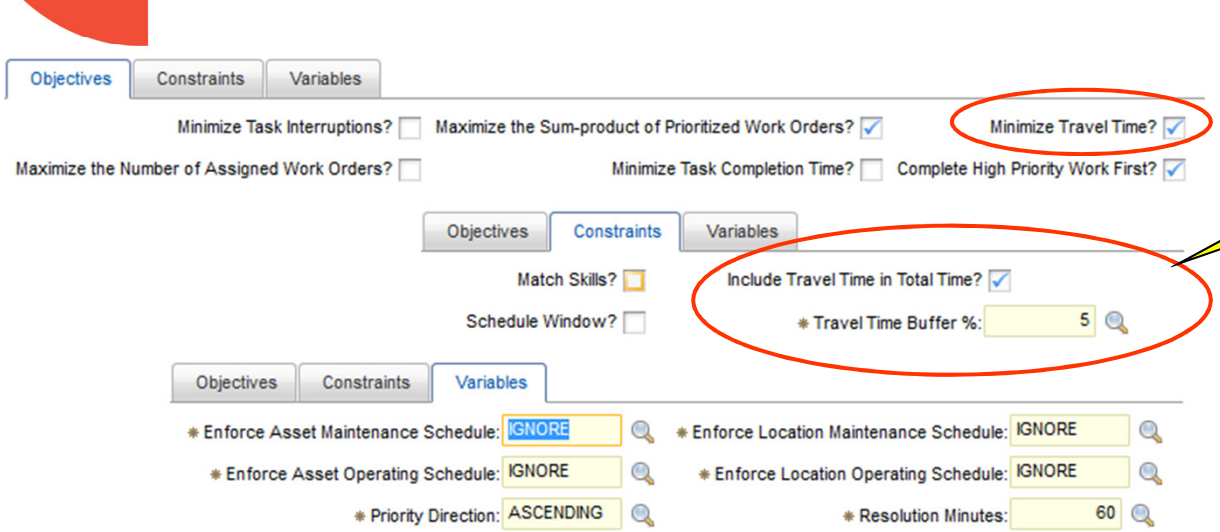


Spatial Scheduling Workflow



Assignment Optimization Models

Resource Assignment and Spatial Assignment

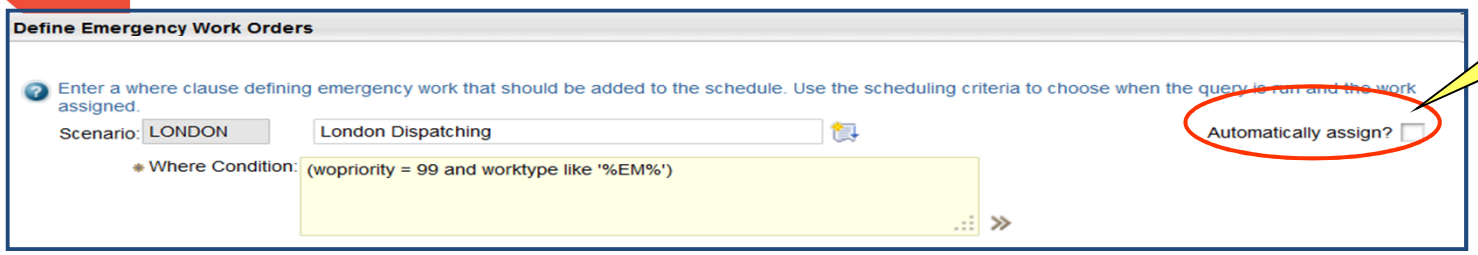


Spatial Assignment only

Compare Assignment Scenarios

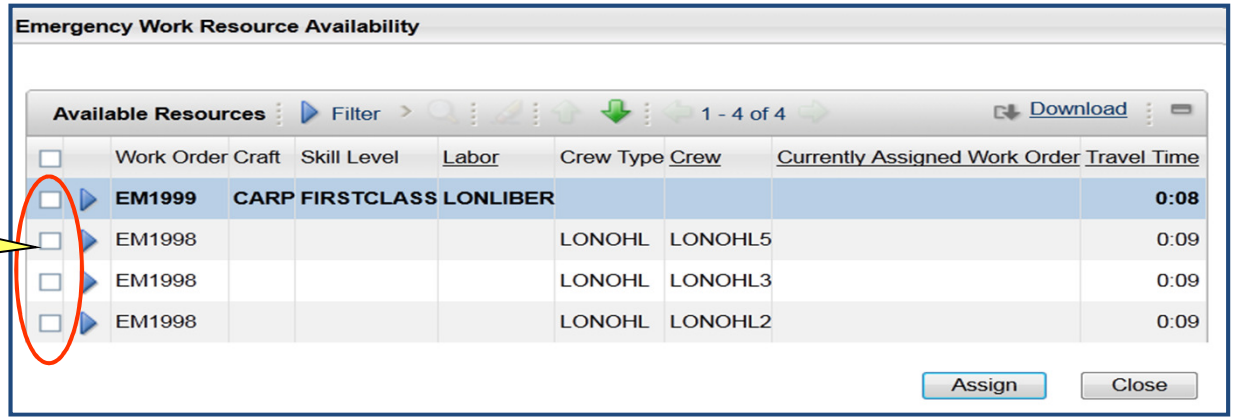
Dynamic Scheduling

- System can automatically assign Emergency work orders to a labor/crew OR users can manually decide who gets the emergency work order

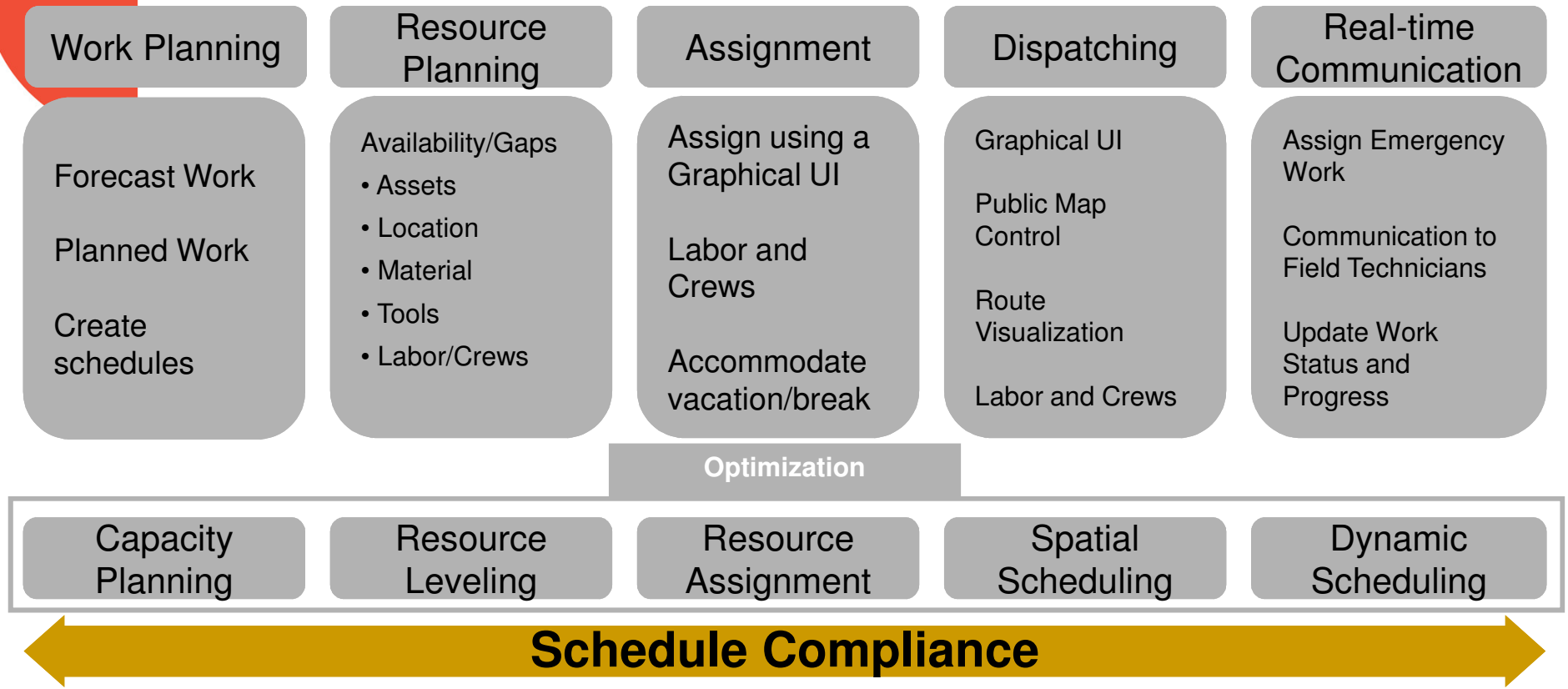


Auto Assign Resources.

Manually Select the Labor/Crew for the assignment



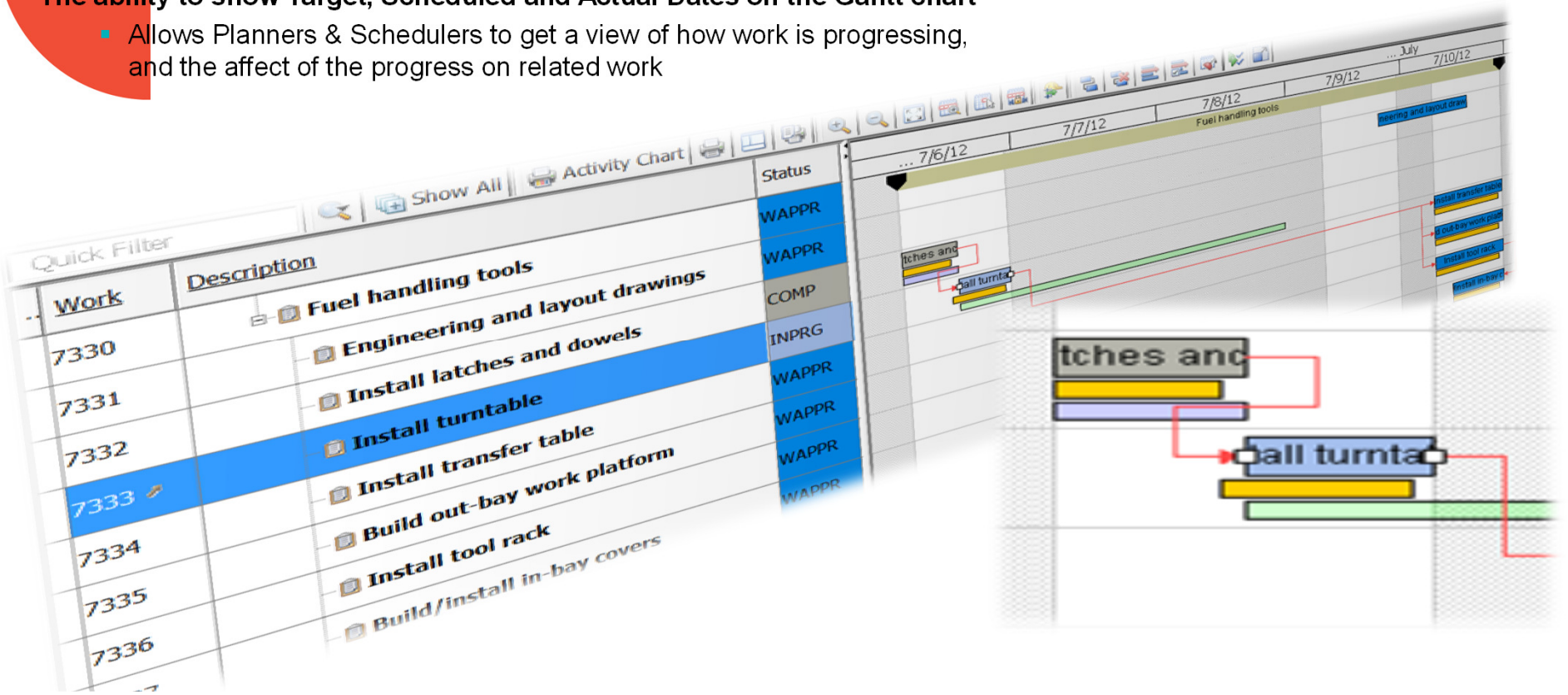
Compliance focus areas



Schedule Progress

The ability to show Target, Scheduled and Actual Dates on the Gantt chart

- Allows Planners & Schedulers to get a view of how work is progressing, and the affect of the progress on related work



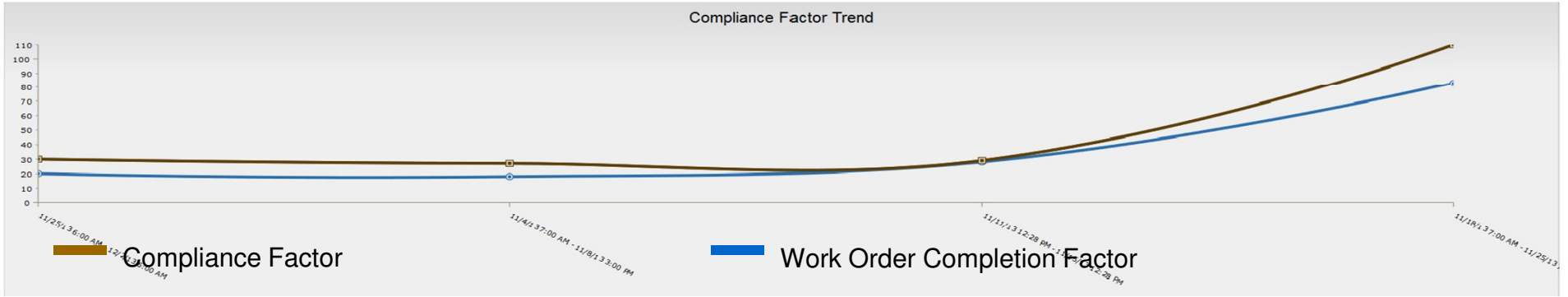
Compliance Dashboards

- Measure labor, work order and schedule compliance for any user defined work period

Compliance Factor and Work Order Completion Factor

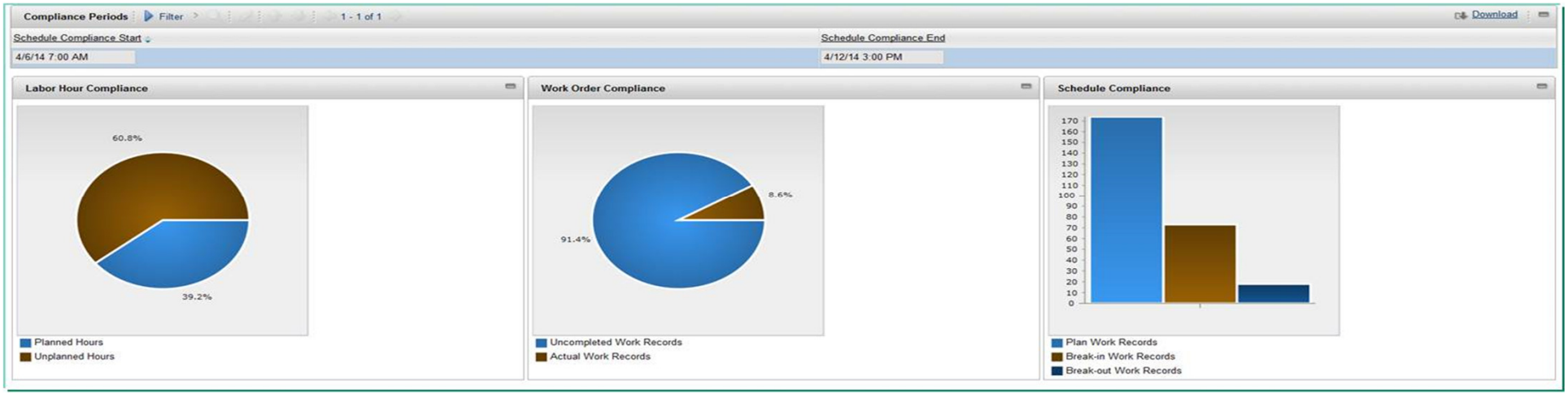
Schedule Compliance Factor | Filter | 1 - 4 of 4 | Download

Schedule Compliance Start	Schedule Compliance End	Plan Hours	Actual Hours	Compliance Factor	Plan Work Records	Actual Work Records	Workorder Compliance Factor	Break-in Work Records	Break-out Work Records
11/25/13 6:00 AM	12/2/13 6:00 AM	20:00	6:00	30	5	1	20	0	0
11/4/13 7:00 AM	11/8/13 3:00 PM	62:00	17:00	27	16	3	18	4	3
11/11/13 12:28 PM	11/15/13 12:28 PM	56:00	16:30	29	14	4	28	2	2
11/18/13 7:00 AM	11/25/13 7:00 AM	49:00	54:00	110	12	10	83	1	2

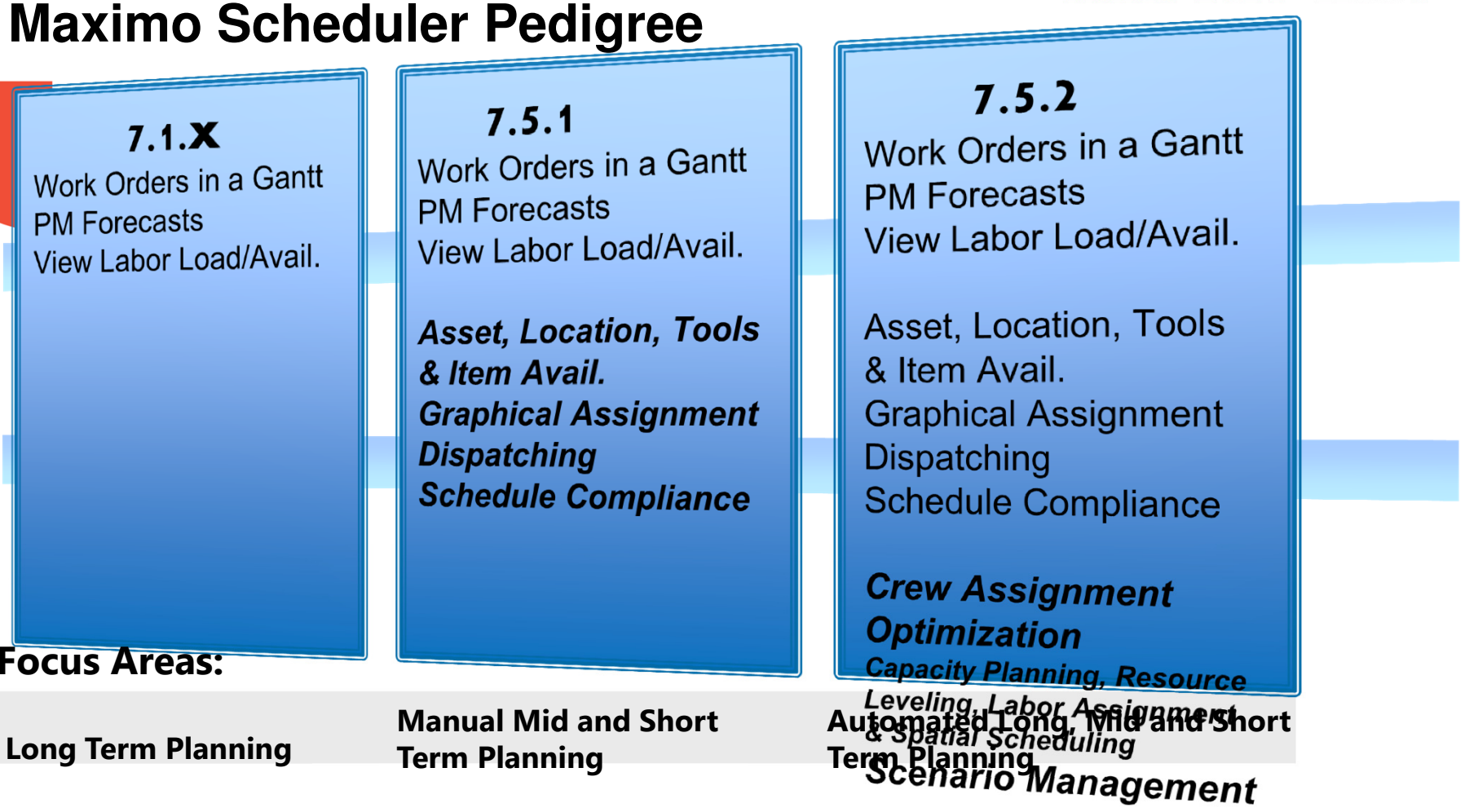


Compliance Dashboards

- Compare planned vs unplanned hours
- Visibility into completed Work Orders against total Work Orders planned
- Calculate break-in and break-out Work Orders



Maximo Scheduler Pedigree



Focus Areas:

Long Term Planning	Manual Mid and Short Term Planning	Automated Long, Mid and Short Term Planning

Roles We Accommodate

-Assigns work to Labor

-Assigns work to mobile Crew

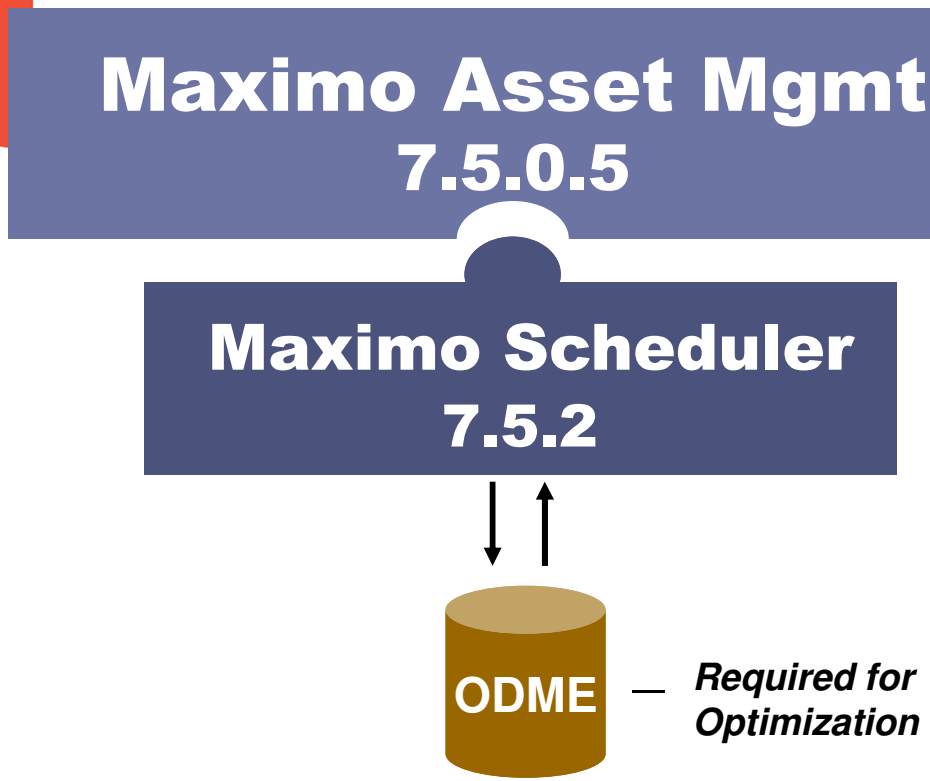
-Completes Work

- Identifies Skill
-Prepares weekly/ monthly schedule

- Prepares Work
- Sets Priority

- Work Request
- PM Schedules

Scheduler is part of Maximo Asset Management



Maximo

- 7.5.0.5 fix pack level

Scheduler 7.5.2

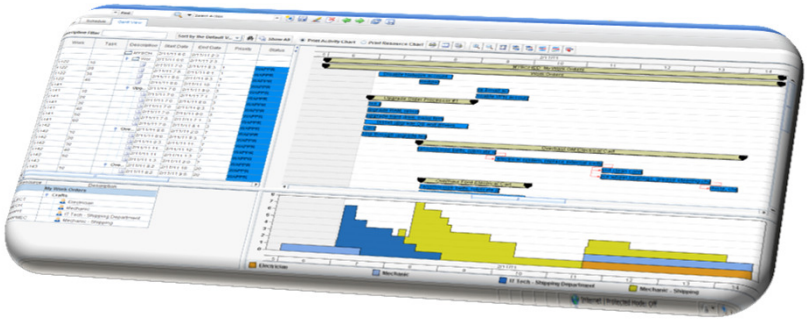
- Add-on product to Maximo EAM, installed when 7.5.0.5 is installed
- Scheduler 7.5.2 license required
- Includes integration adapter and optimization models

ODME Server

- Optional: clients may choose not to use the optimization capability and can skip the ODME installation during the install process

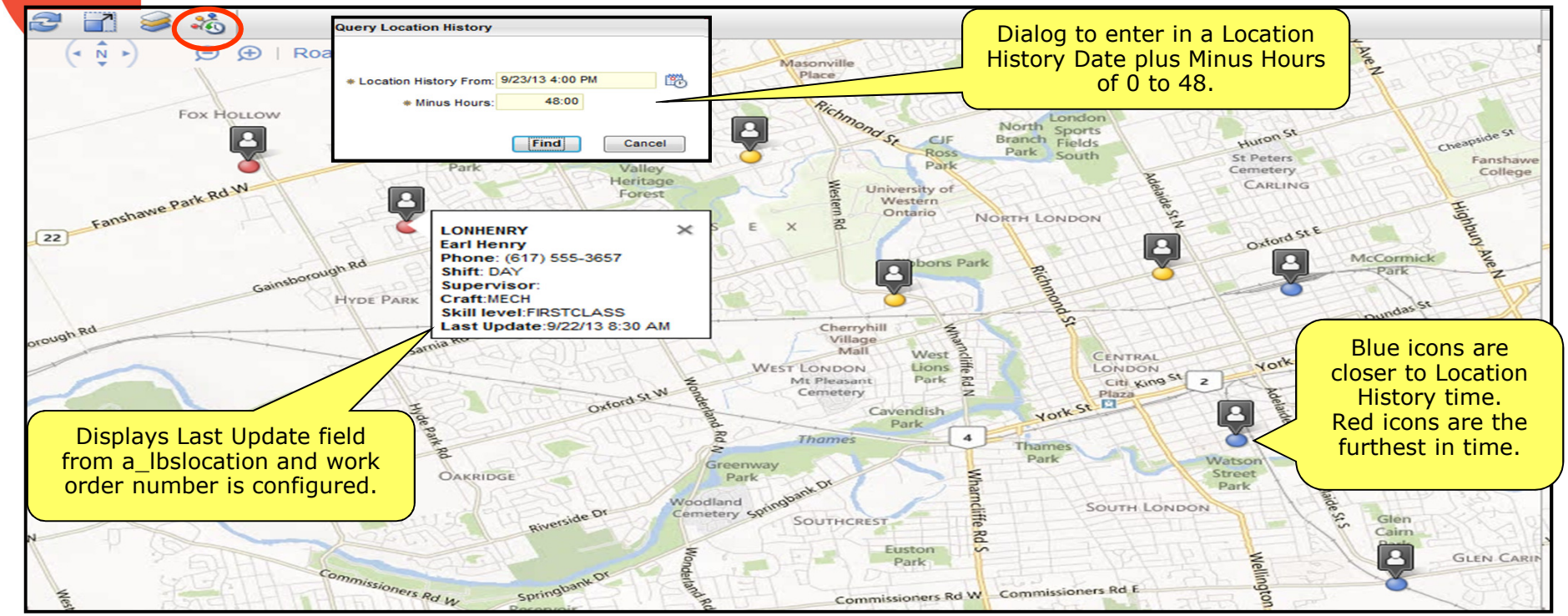
Why Maximo Scheduler?

- **Lower maintenance costs by gaining operational efficiencies**
  - Optimization models transform laborious, manual and time consuming work management tasks into faster, automated processes with meaningful results
  - Quick, easy to perform, and reliable labor assignments help save valuable time
  - Send/receive updates and constantly monitor work progress
  - Respond quickly to emergency situations
- **Improve resource utilization**
  - Know when Assets and/or Locations are unavailable for work to be performed before finalizing a schedule and dispatching resources
  - Dispatchers' awareness of resource location and field conditions translates to greater resource efficiencies when handling unplanned work
- **Embedded in Maximo**
  - Manage all your asset classes, schedule, and resources through leveraging an industry leading EAM system
  - No third party product integrations required

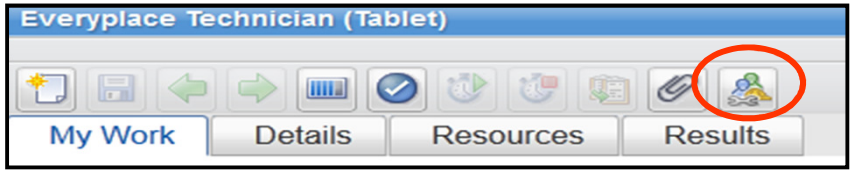


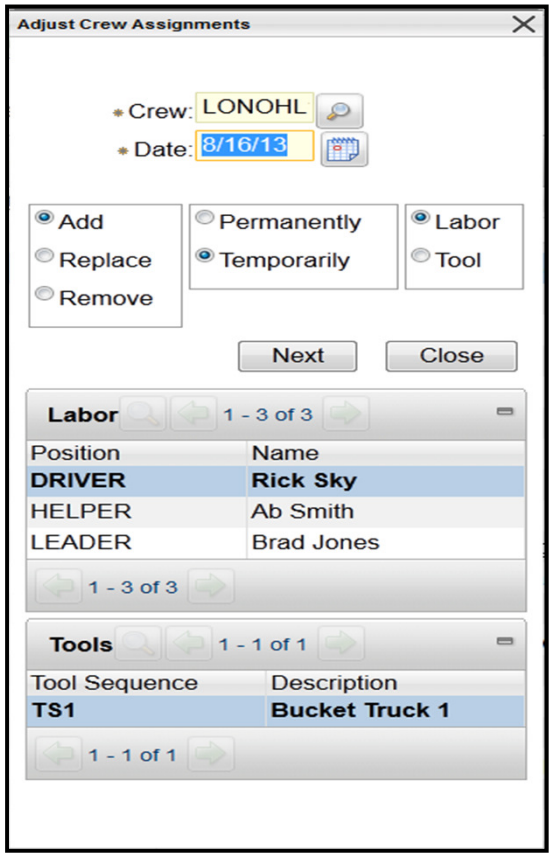
Location History for Labor/Crews

- **When audit table it enabled for LBSLocation then location history for the labor and crews can be displayed on the Map tab in the Labor and Crews applications.**



Adjust Crew Assignments





- New icon in the Everyplace Template
  - Also available in Graphical Crew Management
- Quick way to change assignments on a crew and have all conflicts resolved in the background.
- Builds on the New Unrestricted Row functionality available in Crews
- Replace and Remove added