VISUAL PLANNER
FUNCTIONALITY WALKTHRU

This document describes various features of Visual Planner 8.0 by walking through a planning session of a fictious manufacturing warehouse.

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Overview

This document describes various features of Visual Planner 8.0 by walking through a planning session of a fictious manufacturing warehouse. Warehouse name is MFG1 and can be accessed by switching to DEMO plant in the main VPi screen. Planning database for this is warehouse is in SQL Server format (available both as an .MDF file which you can mount on your SQL server instance and .BAK file which you can restore) or VISUALPLAN.mdb (you need 64 Bit MS office) in the Plants\DEMO folder of the VPi installation. **Please note: this document assumes you have already downloaded data from your ERP System XA (or LX if you LX ERP). Hence, we skip Download Data from XA and Put-back schedule data back to XA steps.**

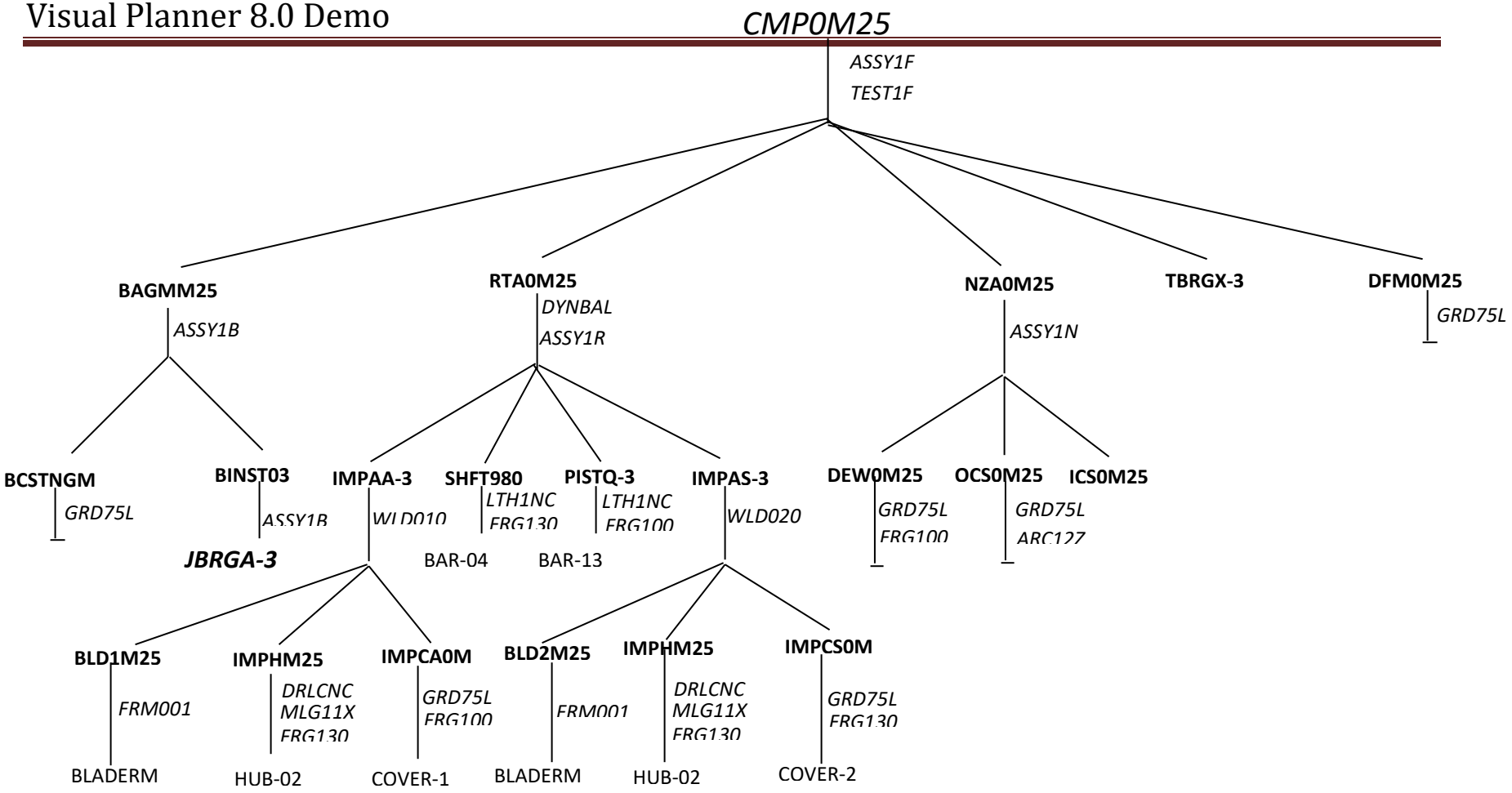
Setting up

Start the application by running the TPAdminUtil.exe from the install folder or through Start->Programs->TPAdminUtil (Please remember to Run as Administrator for setting up the ODBC connection to DEMO database).

Warehouse Data

The data represents the data for a compressor fabrication and assembly plant. There are up to 5 levels in the BOM. See below for product structure for a typical compressor product.

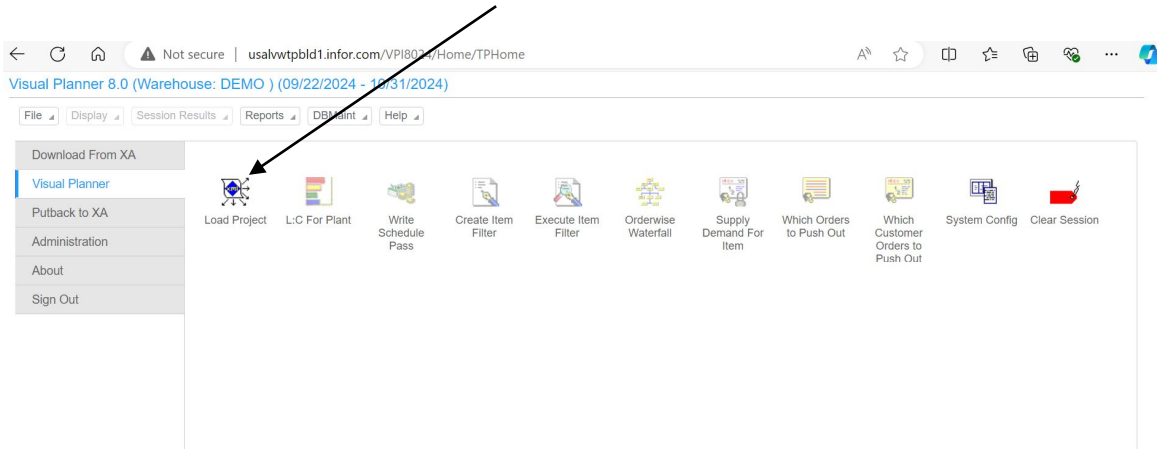
VPi Sample Product Structure



Bold is item numbers,
Italics are workcenters
Bold Italics are control items

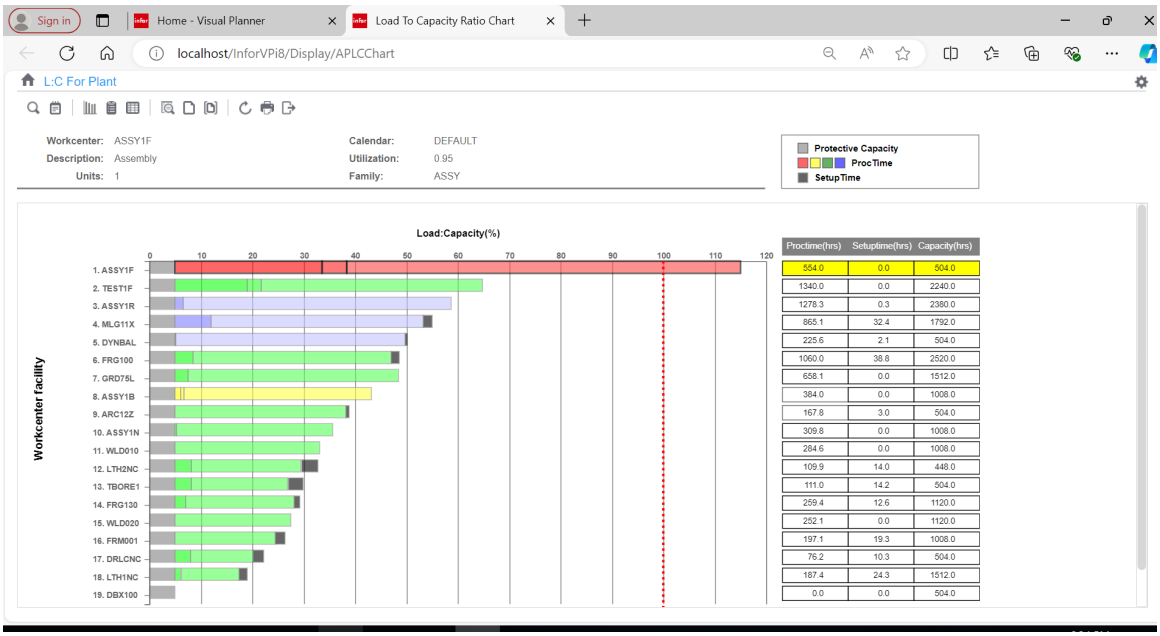
Explanation of VPI 8.0 demonstration

CURRENT_DATE for planning is 5/1/2024 and plan period ends on 6/9/2024 (40 day planning Horizon). You can check out the details by clicking on System Config image below. Visual Planner runs all planning logic in memory. First, we need to load planning input data into memory by clicking on the load project icon.



Once the project is loaded you will see an okay button in the dialog. Click on it and you should see the Load: Capacity Bar chart view as shown below.

Visual Planner Planning engine has done a backward scheduling of all requirements viz. Customer Sales orders, Forecasts and safety stocks and master plans from assembly items and determined workorder to be run on each day. Visual Planner makes use of actual routing processing time for all work orders and operations hours for the quantity and considers the multilevel Bill of Materials from final assembly to buy items.

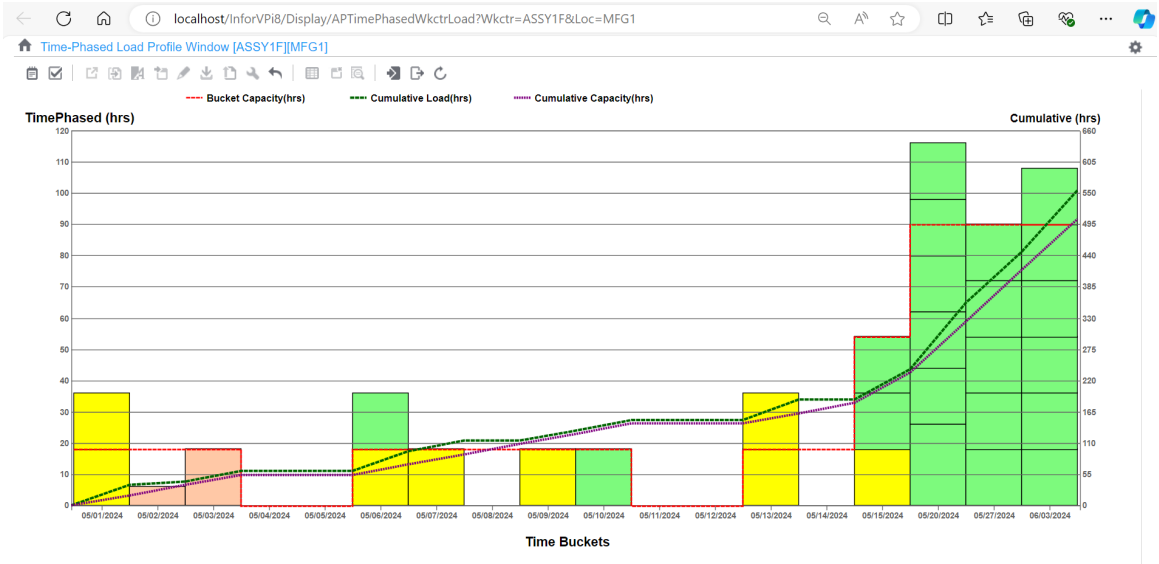


This chart presents the Load to Capacity picture for all work center facilities in the plant over the planning horizon. Depending upon the number of machines for each facility and working shift hours, Visual Planner computes capacity available from all machines for each facility. Then, load is computed based upon the work order routing that need to go thru each facility and its processing time for the job quantity. Then summarizes the over all ratio of load to capacity for the planning Horizon under consideration. The table on the right shows set up time, processing time and capacity for each work center facility. You will see one bar for each facility. You can see 100% red dotted Load-Capacity line to show which facility is overloaded and who is underloaded. As you click on each bar, it highlights the load-capacity information row on the table. A red bar indicates that the load is greater than capacity. Without offloading or outsourcing or delaying the order completion, we will not be able to balance load with capacity. A yellow indicates that while there is sufficient capacity over the planning horizon the facility will be overloaded up to some point during the planning horizon (to clear order backlog). A blue indicates that there may be one or more load spikes within the buckets but, this overload can be overcome by moving the load into one of the earlier buckets. A green indicates the in every bucket Load <= capacity in that bucket. A bucket a daily unit of time.

Please note that each of those colored bars are further light shaded to distinctly identify load from Released manufacturing orders, Firm Plan orders and Visual Plan suggested work orders. You can click on a bar row and hover over to see the break up Mfg Load, FirmPlan Load and Plan Loads in hours.

In the order of criticality, work center facility with red color bar comes first, followed by Yellow color, then blue color and finally green. Ideally, we want to all facilities to have green color indicating the entire shop is perfectly load balanced or under utilized and able to deliver the customer commitments and other requirements on time. Our goal of planning is to bring all red, yellow, blue colored bar to green color by taking suitable planning decisions such as offloading, outsourcing, level loading the jobs running thru the facility.

Let us focus on the most overloaded facility ASSY1F this is an assembly workcenter. As you can see from table this facility has 504 hours of total capacity from all machines during the plan period. But jobs that need to be done on this facility amount to a total 554 hours of load. This facility is clearly overloaded and we need to level load this facility to balance load to match its capacity. We need to remove excess load of 54 hours from the schedule to make it load balanced. You can click on ASSY1F facility bar and then right mouse click to check out what jobs make up the load and then if you can take planning decisions based upon options available for each job. We will see what jobs are scheduled in each time bucket.
From the Pop Up Menu, we will choose menu option **Time-phased Orders** for this facility. You will see the picture below.



Explain what is being shown.

- This is the time phased load on the work center facility ASSY1F
- Each block represents a task that needs to be performed. Visual Planner computed this by looking at work order routings, standard routings that go thru this facility. Size of the block indicates the load required for the task. You can hover over a block and you will see what is the item, work order and quantity and operation duration for the job.
- Depending upon type of job, the blocks are colored yellow (released workorder), Pink colored (Firm Plan) and light green colored (VPi suggested planwork order)
- The dates in the bottom define the buckets when the job needs to be scheduled on this facility to complete the work order on time. If multiple jobs needs to be scheduled on the same day, they will show up stacked on top of other.
- Talk about telescopic buckets – two weeks worth of daily buckets and weekly buckets beyond that. This notion is for viewing convenience. Bucket configurations can be changed by command in the pop up menu.
- RED dashed line indicates the capacity in each bucket. You can see this facility has 18 hours capacity (only one machine available)
- The load and capacity in each bucket are indicated on the left side scale
- The dotted Green line is the cumulative load line; dotted Blue line is cumulative capacity line. If the cumulative load is greater than cumulative capacity the bar chart is colored red in L: C plant chart.
- The scale and the right indicate the cumulative load and cumulative capacity
- When you move the mouse over a block a pop up window indicates the details of the supply.
- As you notice you will see, load exceeds capacity on dates 5/1,5/6,5/13 daily buckets and on 5/20 and 6/3 weekly buckets.
- We need to resolve this overload interactively by exercising suitable planning decisions.
- You can click on a block (when it turns red) and then right mouse click to see various planning options available for the job and modify its schedule.

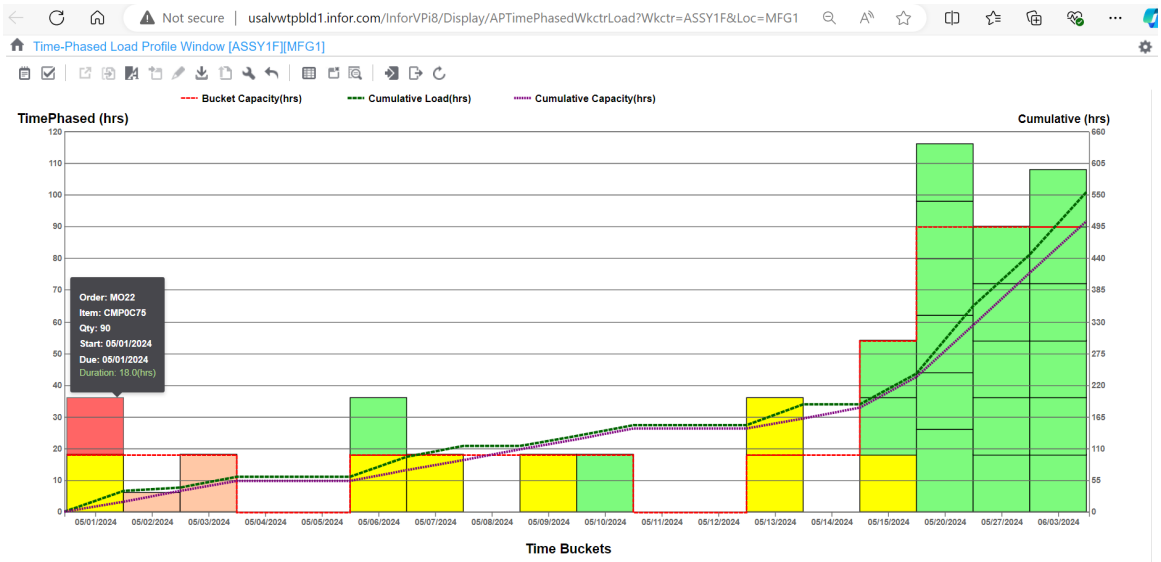
- You can also use the tool bar to execute any planning decisions on the job:

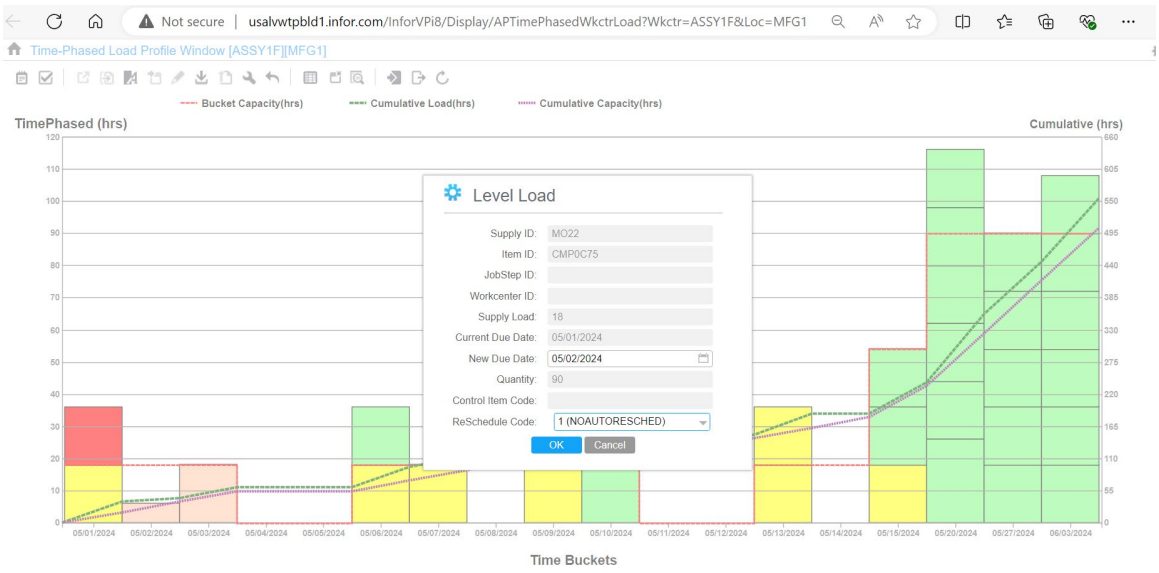
- Hover on each icon to see what that command will do.
- Depending upon whether the job is released job, firm work order or plan work order job, you will see Offload, Outsource decisions are enabled or disabled. During Offload, you can choose another work-center facility in your shop to run the job on. When you outsource, you will send it to outside supplier to get the job done. In both case, workload disappears from current facility and you will come closure to load capacity balance. If you are not satisfied with any of your decisions, you can always click Undo command from the menu or press icon

As you can take decisions on each job, you can refresh the screen and go back to L:C Chart to see the updated load capacity picture and verify if we are moving towards balancing load with capacity and if such decisions causing any other facilities get overloaded.

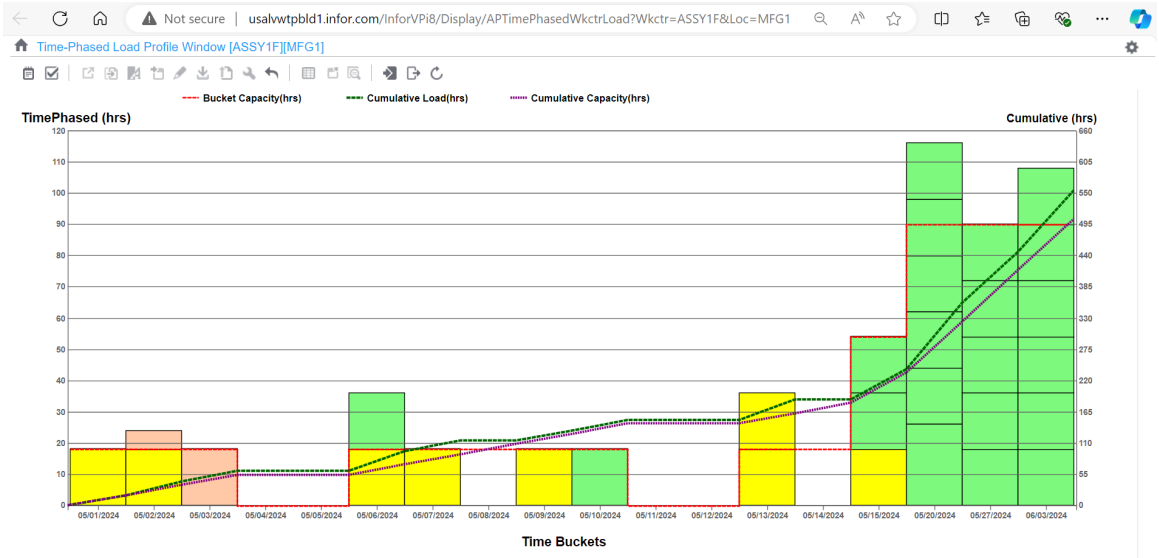
Let us start level loading this facility:

1. 5/1/2024 bucket is overloaded. Luckily we do have some spare capacity available on 5/2. Although, we will be a day late on schedule, at least we can make use of capacity available. We could offload this job to another facility, if we had another alternate work center facility in the shop floor. Let us highlight the task shown below by clicking left mouse button. Then click right mouse click to see the planning option available on this job. Since, this is a released work order job (MO22), we can execute command ‘Level load’ and change the start date to 5/2 and then change the reschedule code to 1 (to fix the schedule without scope for movement) and hit OK.



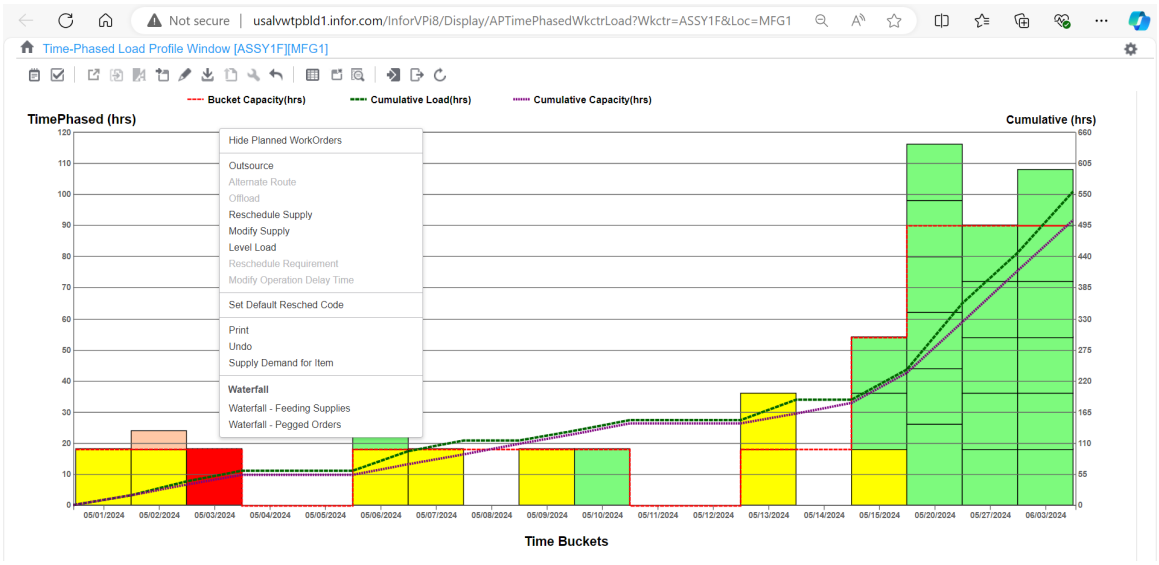


Resulting schedule looks like below and MO22 is now scheduled on 5/2 instead of 5/1.



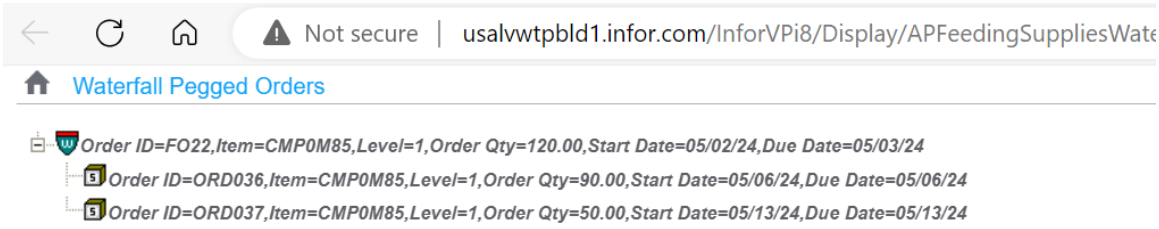
2. Although we level loaded 5/1 bucket, we overloaded 5/2 bucket and we need to remove extra load on 5/2 to balance the bucket. Click on the Pink block on 5/2 bucket. Note that this is a firm planned work order for FO22 that spans two days (quantity 30 on 5/2 and 90 on 5/3).

Let us see where this job is required. Click on the block (either on 5/2, or on 5/3 since both represent the same workorder job).



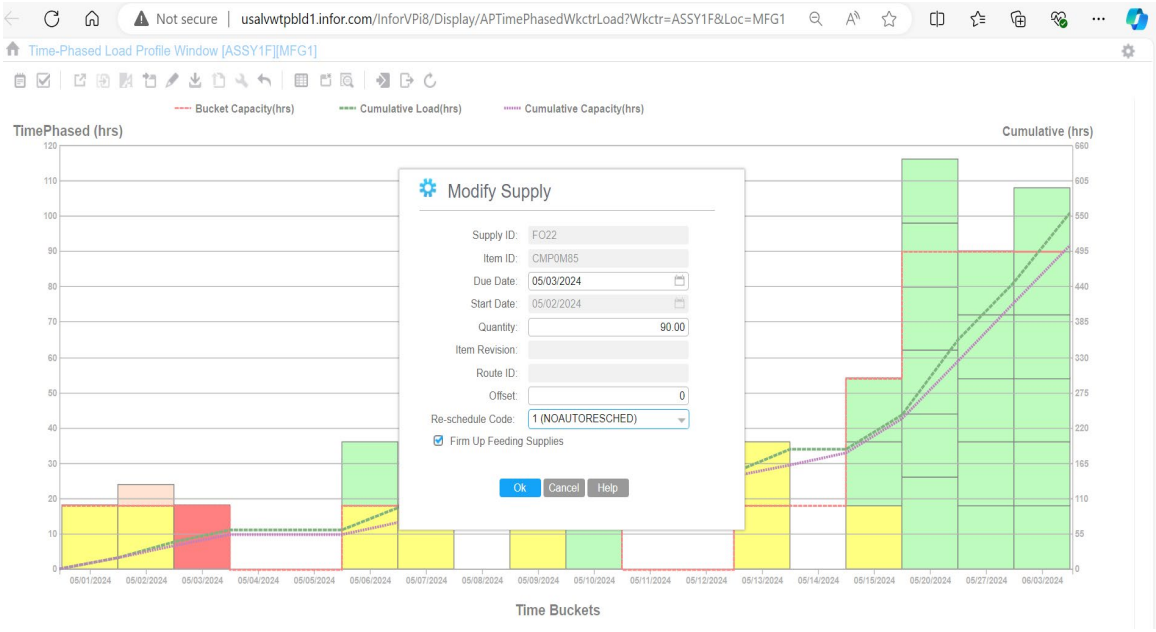
One great thing in Visual Planner is, you can see the multilevel BOM tracking facility from any work order job both upstream to raw materials requirements or downstream all the way to customer order. If you exercise the command Waterfall- Feeding Supplies, VPi will show all the components tracking all the way thru multilevel BOM until buy items. Similarly, Waterfall- Pegged orders will show where this subassembly will be consumed all the way to customer order(s).

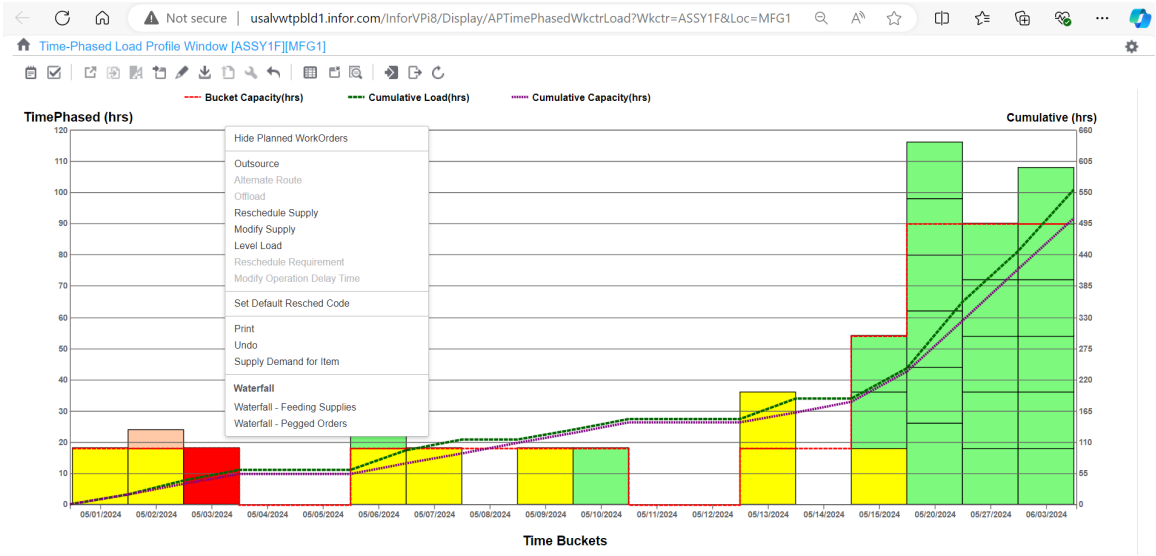
From the pop up menu above, select Waterfall-Pegged Orders command at the bottom of the menu. You will see the following screen showing all the assembly orders and customer orders(or forecast) showing the final destination where this component will be allocated/consumed.

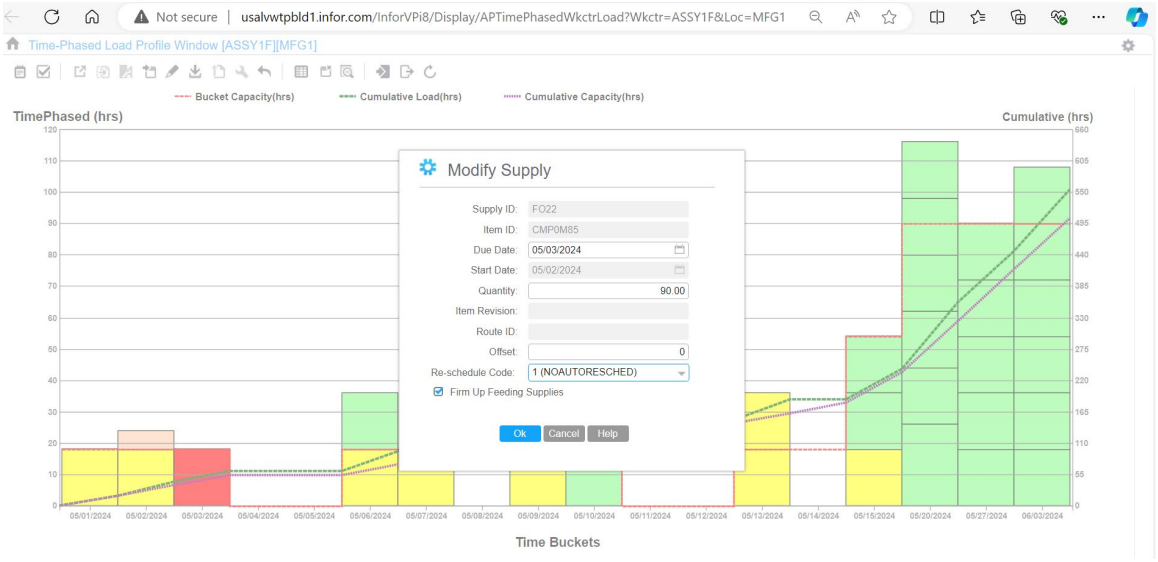


This screen is telling us that FO22 firm plan is being partially alloted to Customer Order ORD036 for quantity 90 for week of 5/1 and remaining 30 quantity is alloted to customer order 37 on week of 5/13. So if we modify this supply and reduce the workorder quantity to 90, VPi will schedule a planned work order for the purpose of ORD037 a week a later. That will also resolve the overload issue on 5/2.

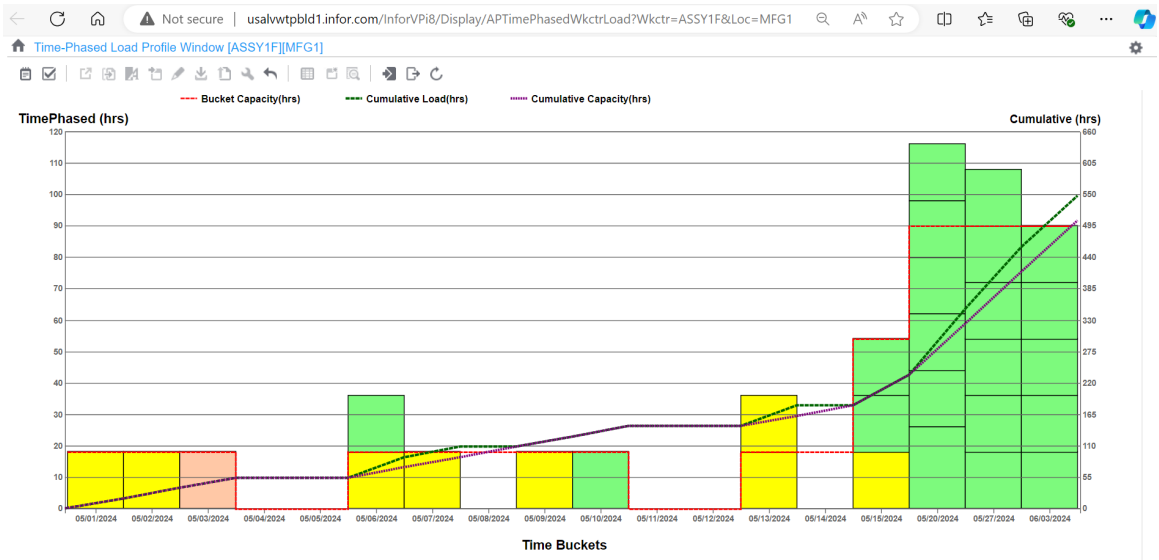
Let us execute ‘Modify Supply’ command as shown below:


Not secure | usalvwtpbld1.infor.com/InforVPi8/Display/APTimePhasedWkctrLoad?Wkctr=ASSY1F&Loc=MFG1
Time-Phased Load Profile Window [ASSY1F][MFG1]
Bucket Capacity(hrs)
Cumulative Load(hrs)
Cumulative Capacity(hrs)
TimePhased (hrs)
Cumulative (hrs)
Modify Supply
Supply ID: FO22
Item ID: CMP0M85
Due Date: 05/03/2024
Start Date: 05/02/2024
Quantity: 90.00
Item Revision:
Route ID:
Offset: 0
Re-schedule Code: 1 (NOAUTORESCHED)
Firm Up Feeding Supplies
Ok
Cancel
Help
Time Buckets

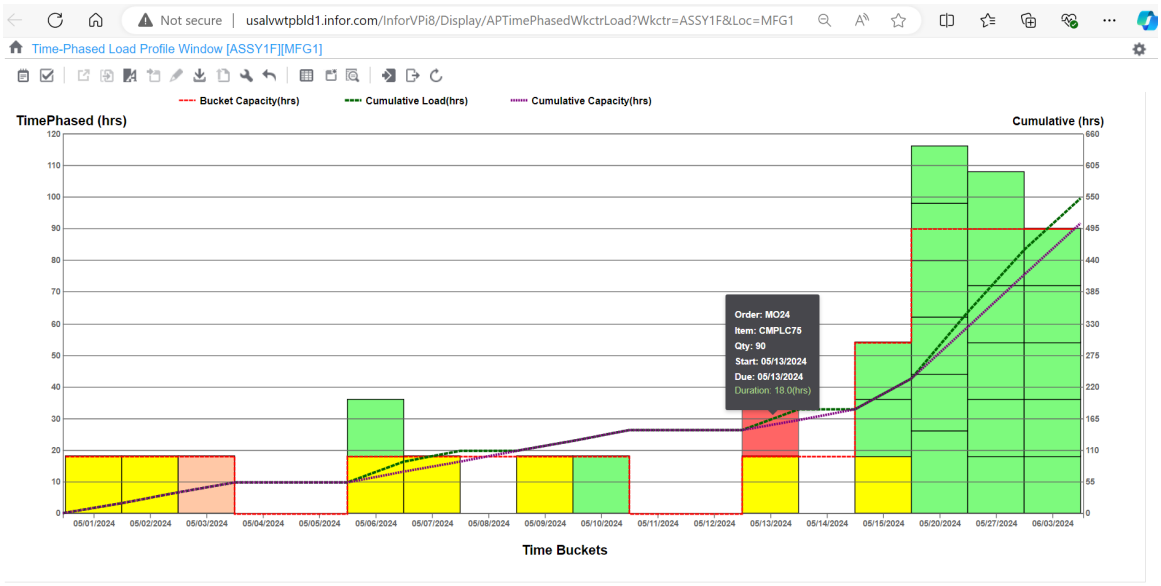

Not secure | usalvwtpbld1.infor.com/InforVPi8/Display/APTimePhasedWkctrLoad?Wkctr=ASSY1F&Loc=MFG1
Time-Phased Load Profile Window [ASSY1F][MFG1]
Bucket Capacity(hrs)
Cumulative Load(hrs)
Cumulative Capacity(hrs)
TimePhased (hrs)
Cumulative (hrs)
Hide Planned WorkOrders
Outsource
Alternate Route
Offload
Reschedule Supply
Modify Supply
Level Load
Reschedule Requirement
Modify Operation Delay Time
Set Default Resched Code
Print
Undo
Supply Demand for Item
Waterfall
Waterfall - Feeding Supplies
Waterfall - Pegged Orders
Time Buckets

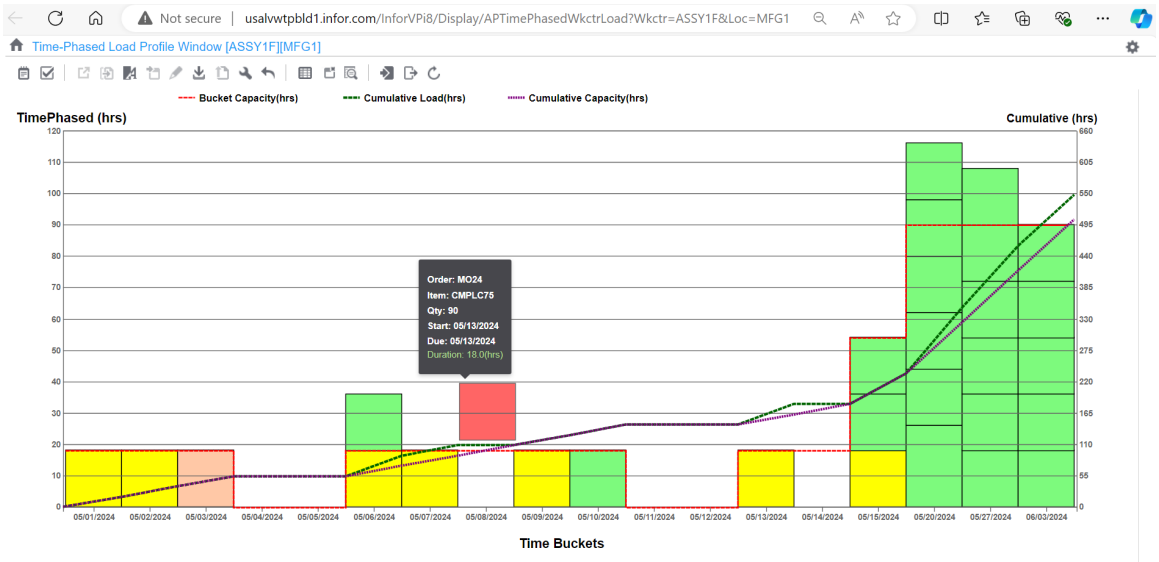


As we hit OK button, you will see the schedule start looking balanced as shown below:

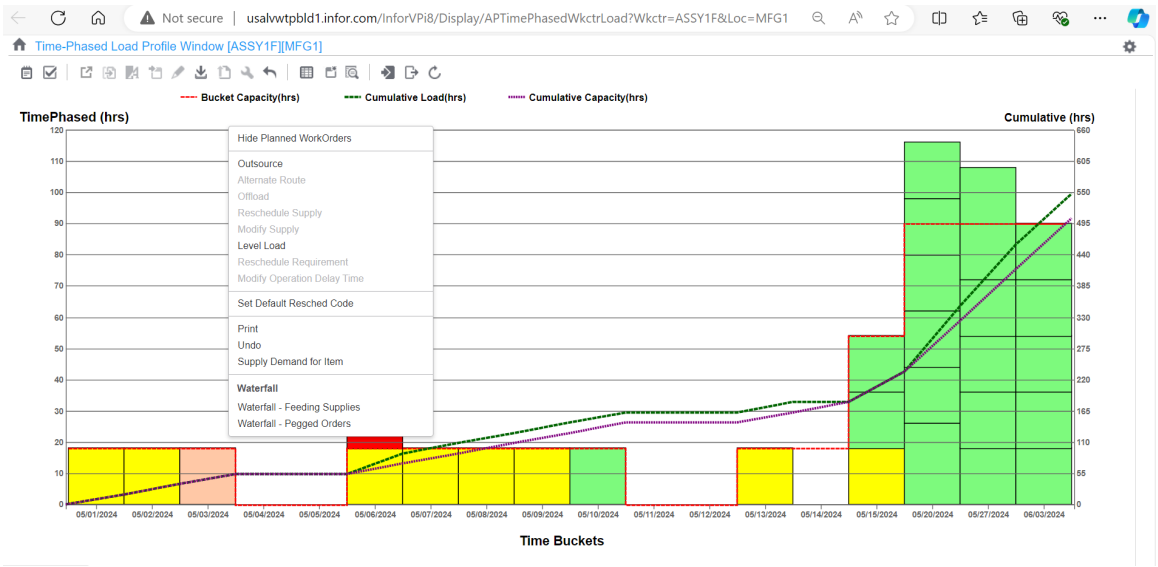


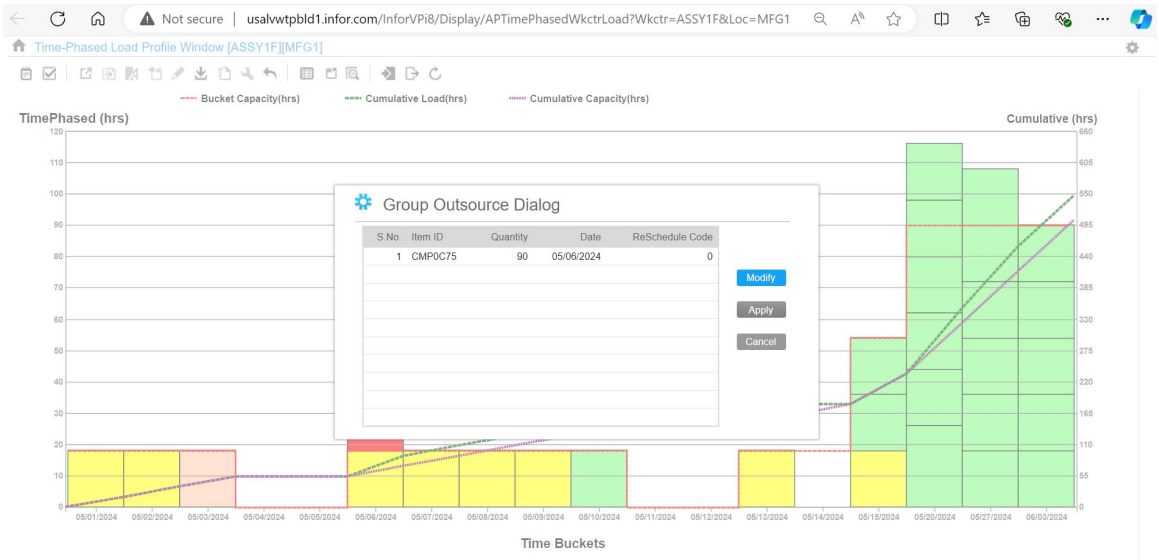
3. Similarly, we can bring MO24 starting 5/13 and drag and drop it on 5/8 bucket to utilize the spare capacity.



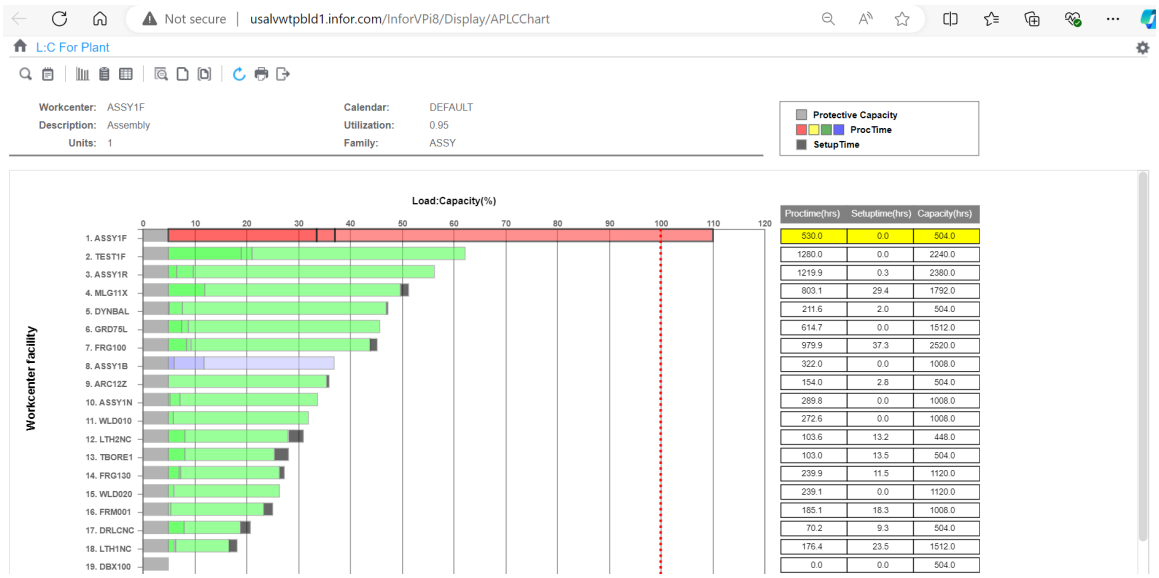


4. We still have overload on 5/6. Since we don't have any spare capacity available, we need to out source this job. If we have an laternate facility in the shop floor, we could offload. (if you want to do Offload, you first need to change the plan work order to Firm Plan by level load: fix the schedule using RESCHEDULE_CODE). For now, we will out source to outside party. We can right click on the pop up decision menu and execute Outsource as shown below:





Remember, because of the way BOM structure and routing operation, there are other workcenter facilities whose schedule might change with the changes we are making on this facilities. We can verify if we are causing issues on other facilities. Switch back to other tab to go to Load Capacity screen and click Refresh button on the tool bar to see the updated Load Capacity picture as shown below:



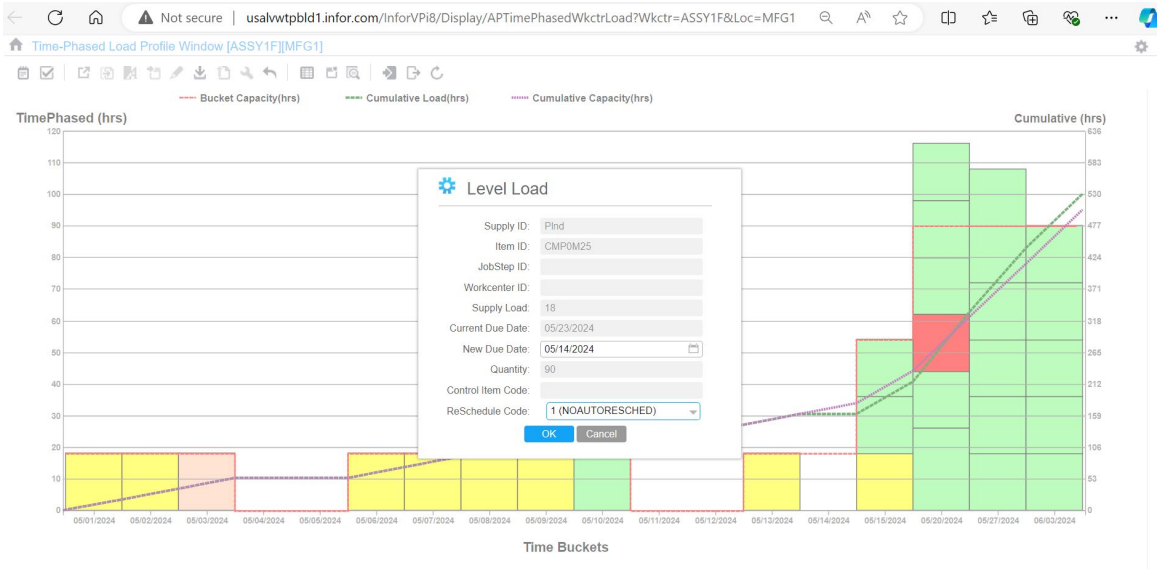
Quick observations:

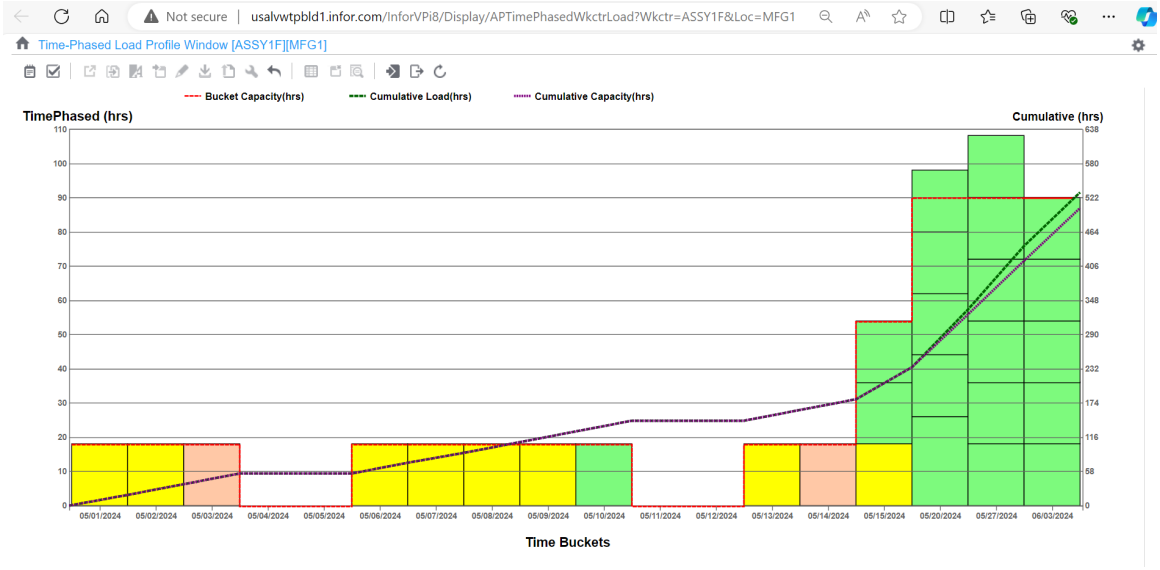
a. Load on ASSY1F reduced from 554 hours to 530 hours due to our decisions (Reducing FO22 Quantity 120 to 90, outsourcing work order on 5/6)

b. Combined with the above, changing the schedule on 5/1 and on 5/8, we also had a postive effect on other workcenters that were having load spikes and back logs. Those issues got resolved with our decisions. We still have ASSY1B having load spikes (blue color)

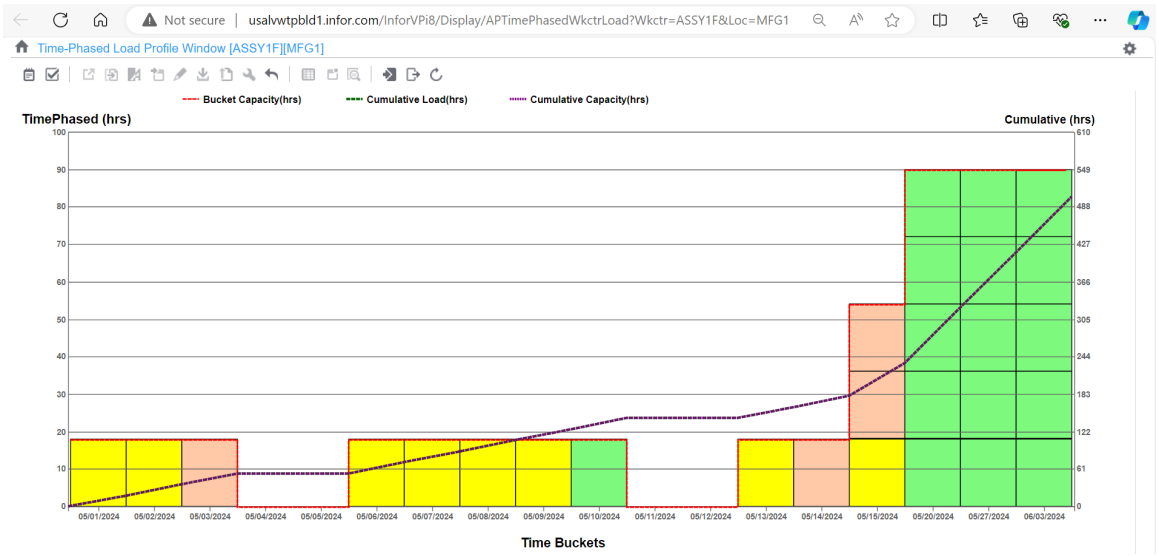
We can go back to Time Phased Orders window for ASSY1F and resolve the load imbalance on future buckets also one by one.

5. Overload on weekly bucket 5/20 (CMP0M25 planned order moved to 5/14)

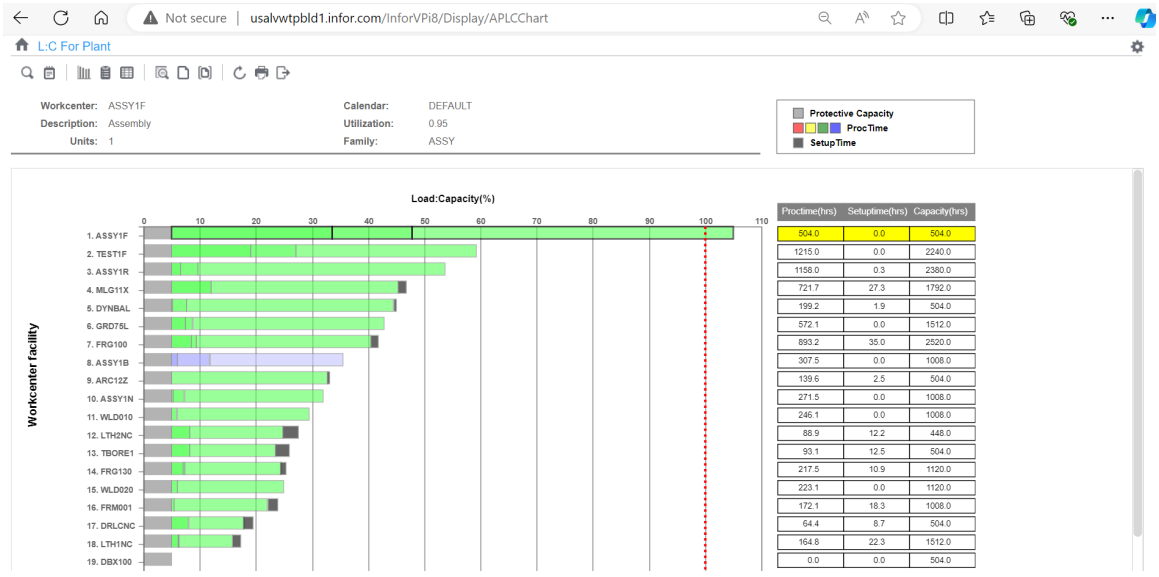




Firm Plan 5/15 planned work orders. Outsource 5/27 planned work orders. You should see following schedule for ASSY1F that is completely level loaded.



If you switch back to Load-Capacity Screen, you see Load now is 504 matching with capacity 504 hours for the planning period (40days)



At this point, ASSY1F is completely load Balanced and shows up with green bar as shown.

Note: after this step if we perform any other action to eliminate overload on this workcenter[ASSY1F] still it is showing in Blue color.

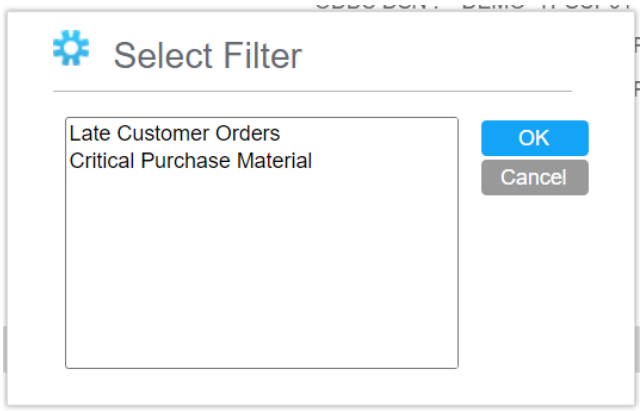
The L: C bar for ASSY1F is still blue indicating we have some resolved L: C issues for that facility. The one last thing we want to do on this facility is to firm up the planned order that was created to satisfy the new customer requirement. However, before we firm it up we would like to make sure that all its components and purchase material can be made available in time.

We do this through the waterfall chart. Right click on the tasks and select the Waterfall – Feeding Supplies option. You can click on the + sign in front of the order to expand one level at a time. Or you can right click on the supply order within the waterfall chart and ask it show everything. Showing everything at this time can be a bit overwhelming. Therefore, we will go one level at a time. When you click on the plus sign you should get the picture below.

Explain that this planned order has four sub components and we are showing the quantity that is short for each sub component. By clicking on the + sign in front of any item we can see how this shortage is satisfied. In the case of BAGMC75 we can see that there is planned order that is used to satisfy requirements for this item. As we are expanding through each level, we want to ensure that there is no start time in the past. Once you go through all the chains you will see that there are no components that cannot be made in the remaining time. Therefore, we can firm this order up.

When we firm up a supply, we can modify either the due date or qty or both.

Exceptions can be either caused by either lack of capacity or a supply demand mismatch. To catch supply demand mismatch, the user can setup filters for critical items and he will be alerted any time these mismatches exist. We have already setup two filters one to catch exceptions against critical purchase components and another to catch potential late delivery of customer orders. To display the list of items that have exceptions we will go to display -> Item List and then do a tile of the windows.



Item List [Total Records: 15]

Row#	Item	Item Type	Item Description	Control Item	Level	Worst Exception	Analyst/Buyer
1	BAR-14	BUY	STOCK BAR 14 INCH	Y	3	1448	BYR5
2	JBRGA-4	BUY	JOURNAL BEARING	Y	3	1448	BYR2
3	TBRGX-4	BUY	TITANIUM BEARING - 4	Y	3	1445	BYR7
4	ICS0M85	BUY	CONTROL SYSTEM M 85	Y	2	1444	BYR9
5	BAR-01	BUY	STOCK BAR 1 INCH	Y	3	1443	BYR5
6	BCSTNGL-RAW	BUY	STEEL SPRING - LIGHT	Y	3	1436	BYR3
7	ALUM-XS	BUY	LOW GRADE ALUM BAR	Y	4	1435	BYR2
8	HUB-02	BUY	SIZE 2 HUB	Y	4	1435	BYR3
9	COVER-1	BUY	GRADE 1 COVER	Y	4	1430	BYR7
10	BCSTNGM-RAW	BUY	STEEL SPRING - MEDIUM	Y	3	22	BYR7
11	BAR-04	BUY	STOCK BAR 4 INCH	Y	3	7	BYR4
12	BLADERM	BUY	STEEL BLADE	Y	4	0	BYR3
13	BAR-03	BUY	STOCK BAR 3 INCH			-4	BYR2
14	JBRGA-1	BUY	JOURNAL BEARING			-10	BYR9
15	JBRGA-2	BUY	JOURNAL BEARING			-12	BYR5

We will first focus on item JBRGA-4. Right click on that item and select orders for that item.

Orders Window [Part: JBRGA-4] [Total Records: 5]

Row#	Order T	Order ID	Item	Item Type	Item Description	Qty	tart Date	Due Date	Due Date	Source	Source It	Ana/Buye	Cust/Ven	Setup Fai	Load	Setup	Load Percent	Lateness
1	Pur	PO08	JBRGA-4	Control Pu	JOURNAL BEARING	120	11/18/2025	05/11/202	11/19/2025		BINST04	BYR2	BETHSTEI		0	0	0	0
2	Pur	PO24	JBRGA-4	Control Pu	JOURNAL BEARING	120	11/18/2025	05/04/202	11/19/2025		BINST04	BYR2	BETHSTEI		0	0	0	0
3	Pur	PO14	JBRGA-4	Control Pu	JOURNAL BEARING	120	11/18/2025	05/18/202	11/19/2025		BINST04	BYR2	BETHSTEI		0	0	0	0
4	Plnd		JBRGA-4	Control Pu	JOURNAL BEARING	531	11/07/2025	11/19/202	11/19/2025		BINST04	BYR2	DUPONT		0	0	0	0
5	Plnd		JBRGA-4	Control Pu	JOURNAL BEARING	360	11/10/2025	11/20/202	11/20/2025		BINST04	BYR2	DUPONT		0	0	0	0

Waterfall Pegged Orders

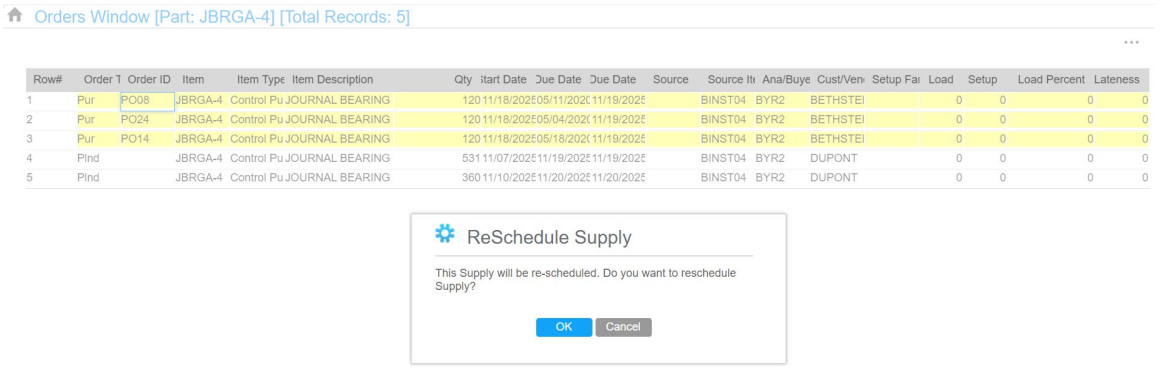
- Order ID=PO08,Item=JBRGA-4,Level=4,Pegged Qty=120.00,Order Qty=120.00,Start Date=11/18/25,Due Date=05/11/20
  - Order ID=PLANNED,Item=BINST04,Level=3,Pegged Qty=180.00,Order Qty=180.00,Start Date=11/20/25,Due Date=11/21/25
    - Order ID=PLANNED,Item=BAGMM85,Level=2,Pegged Qty=180.00,Order Qty=180.00,Start Date=11/24/25,Due Date=11/25/25
      - Order ID=PLANNED,Item=CMP0M85,Level=1,Pegged Qty=90.00,Order Qty=90.00,Start Date=11/26/25,Due Date=11/28/25
        - Order ID=ORD037,Line Number=102,Item=CMP0M85,Level=1,Pegged Qty=50.00,Order Qty=50.00,Start Date=05/15/20,Due Date=05/15/20
        - Order ID=ORD038,Line Number=103,Item=CMP0M85,Level=1,Pegged Qty=36.00,Order Qty=36.00,Start Date=05/20/20,Due Date=05/20/20
        - Order ID=ORD039,Line Number=104,Item=CMP0M85,Level=1,Pegged Qty=43.00,Order Qty=43.00,Start Date=05/22/20,Due Date=05/22/20
  - Order ID=PLANNED,Item=BINST04,Level=3,Pegged Qty=180.00,Order Qty=180.00,Start Date=11/20/25,Due Date=11/21/25
    - Order ID=PLANNED,Item=BAGMM85,Level=2,Pegged Qty=180.00,Order Qty=180.00,Start Date=11/24/25,Due Date=11/25/25
      - Order ID=PLANNED,Item=CMP0M85,Level=1,Pegged Qty=90.00,Order Qty=90.00,Start Date=11/26/25,Due Date=11/28/25
        - Order ID=ORD039,Line Number=104,Item=CMP0M85,Level=1,Pegged Qty=43.00,Order Qty=43.00,Start Date=05/22/20,Due Date=05/22/20
        - Order ID=ORD040,Line Number=105,Item=CMP0M85,Level=1,Pegged Qty=54.00,Order Qty=54.00,Start Date=05/28/20,Due Date=05/28/20

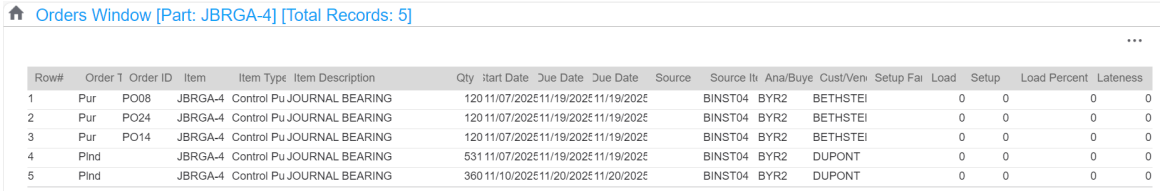
You will see yellow highlighted PO that needs to be expedited. We can use the waterfall – pegged orders option to see which customer orders will be affected by this PO. By right clicking on the supply you can select the show independent orders option to display the list of orders that are pegged to this PO. Point out

that this PO is at level 4 and sales orders are at level 1. In addition, we can see the complete level-by-level pegging by selecting the show everything option.

Let us that the vendor can deliver the PO a week early. We can no simulate that by re-scheduling supply for PO08, PO24 and PO14. We do this right clicking on the orders window and selecting the re-schedule supply option.

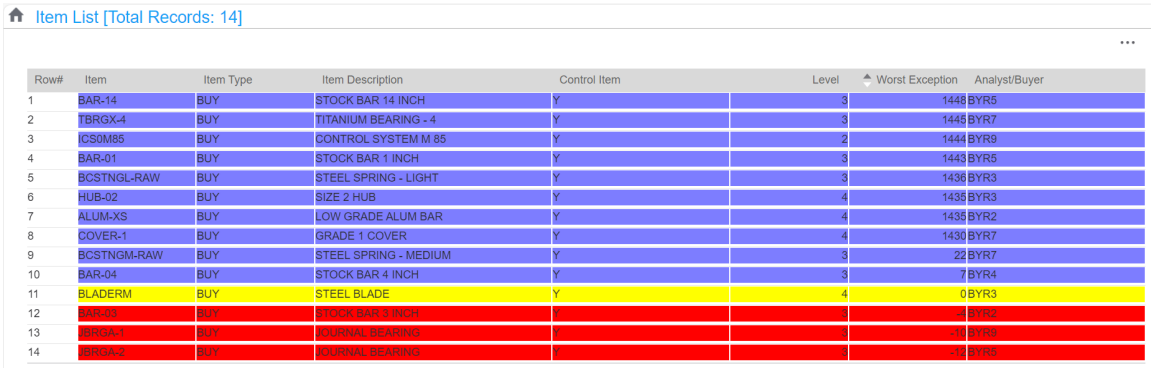
After you re-schedule supply you will see the screen below.





Row#	Order T	Order ID	Item	Item Type	Item Description	Qty	Start Date	Due Date	Due Date	Source	Source It	Ana/Buye	Cust/Ven	Setup Fai	Load	Setup	Load Percent	Lateness
1	Pur	PO08	JBRGA-4	Control Pu	JOURNAL BEARING	120	11/18/2025	05/11/202(	11/19/2025		BINST04	BYR2	BETHSTEI		0	0	0	0
2	Pur	PO24	JBRGA-4	Control Pu	JOURNAL BEARING	120	11/18/2025	05/04/202(	11/19/2025		BINST04	BYR2	BETHSTEI		0	0	0	0
3	Pur	PO14	JBRGA-4	Control Pu	JOURNAL BEARING	120	11/18/2025	05/18/202(	11/19/2025		BINST04	BYR2	BETHSTEI		0	0	0	0
4	Plnd		JBRGA-4	Control Pu	JOURNAL BEARING	531	11/07/2025	11/19/2025	11/19/2025		BINST04	BYR2	DUPONT		0	0	0	0
5	Plnd		JBRGA-4	Control Pu	JOURNAL BEARING	360	11/10/2025	11/20/2025	11/20/2025		BINST04	BYR2	DUPONT		0	0	0	0

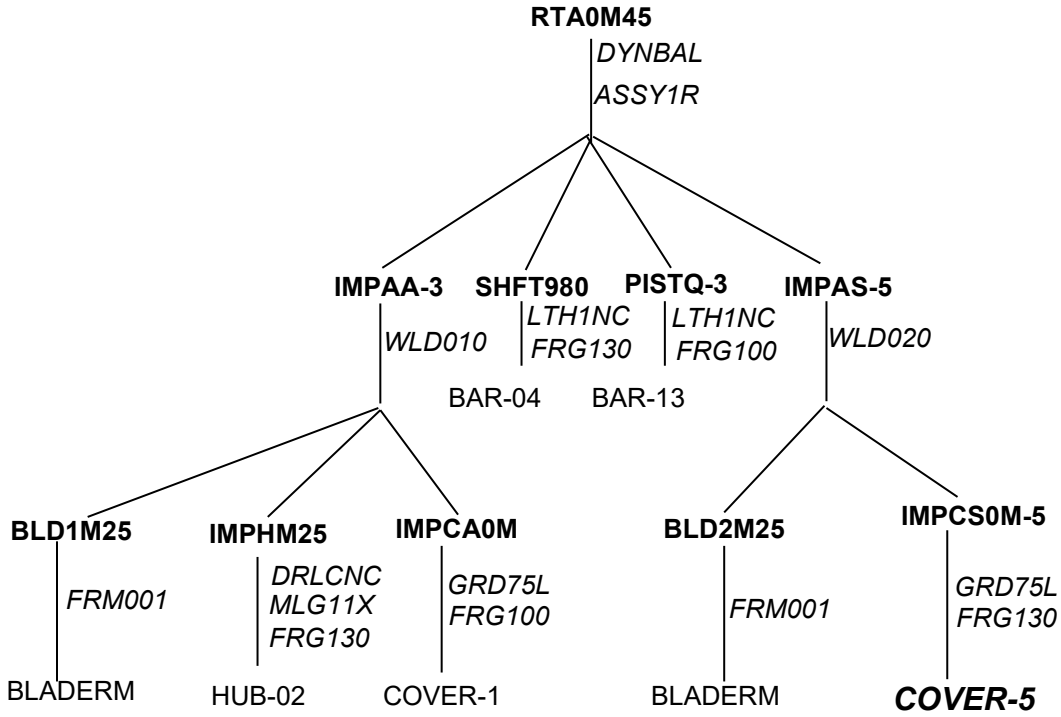
Point out that the PO exception resulting from item JBRGA-4 has been eliminated and none of the customer orders pegged to PO08, PO24 and PO14 are late. Close all the windows except for the critical purchase material and L: C window. You should see the screen below.



Row#	Item	Item Type	Item Description	Control Item	Level	Worst Exception	Analyst/Buyer
1	BAR-14	BUY	STOCK BAR 14 INCH	Y	3	1448	BYR5
2	TBRGX-4	BUY	TITANIUM BEARING - 4	Y	3	1445	BYR7
3	ICS0M85	BUY	CONTROL SYSTEM M 85	Y	2	1444	BYR8
4	BAR-01	BUY	STOCK BAR 1 INCH	Y	3	1443	BYR5
5	BCSTNGL-RAW	BUY	STEEL SPRING - LIGHT	Y	3	1436	BYR3
6	HUB-02	BUY	SIZE 2 HUB	Y	4	1435	BYR3
7	ALUM-XS	BUY	LOW GRADE ALUM BAR	Y	4	1435	BYR2
8	COVER-1	BUY	GRADE 1 COVER	Y	4	1430	BYR7
9	BCSTNGM-RAW	BUY	STEEL SPRING - MEDIUM	Y	3	22	BYR7
10	BAR-04	BUY	STOCK BAR 4 INCH	Y	3	7	BYR4
11	BLADERM	BUY	STEEL BLADE	Y	4	0	BYR3
12	BAR-03	BUY	STOCK BAR 3 INCH			-4	BYR2
13	JBRGA-1	BUY	JOURNAL BEARING			-10	BYR8
14	JBRGA-2	BUY	JOURNAL BEARING			-12	BYR5

Now we want to show the power of synchronization. Show the user the BOM below and explain the relationship between critical item COVER-1 and the workcenters that have exceptions. They are on different chains, however resolving the exception on the purchase part also resolves the exception on all the facilities that process the order.

VPi Sample Product Structure



Bold is item numbers,
Italics are workcenters
Bold Italics are control items

Further understanding the VPI 8.0 Demonstration

Go to the order window and waterfall chart for pegged orders and show independent orders. You will see the screen below. You can also explain the reason why this demand exception was not picked up by the previous (late customer orders) query because it focused only on customer orders.

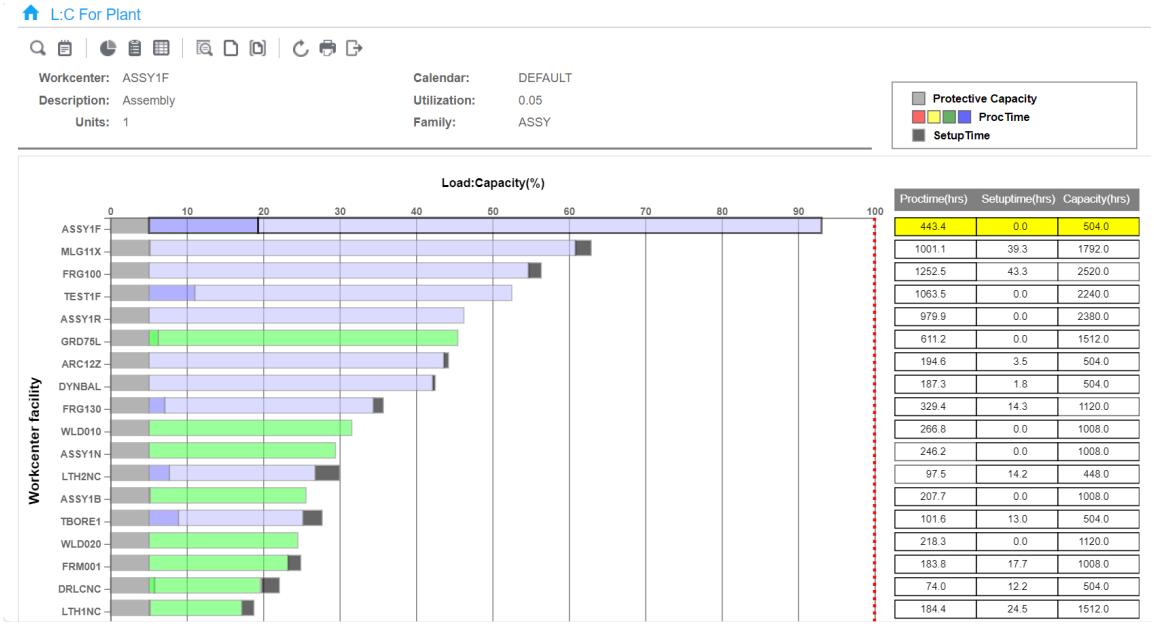
Item List [Total Records: 1]

Row#	Item	Item Type	Item Description	Control Item	Level	Worst Exception	Analyst/Buyer
1	CMP0M85	MAKE	COMPRESSOR-M85	Y	1	-16	AN4

Item List [Total Records: 14]

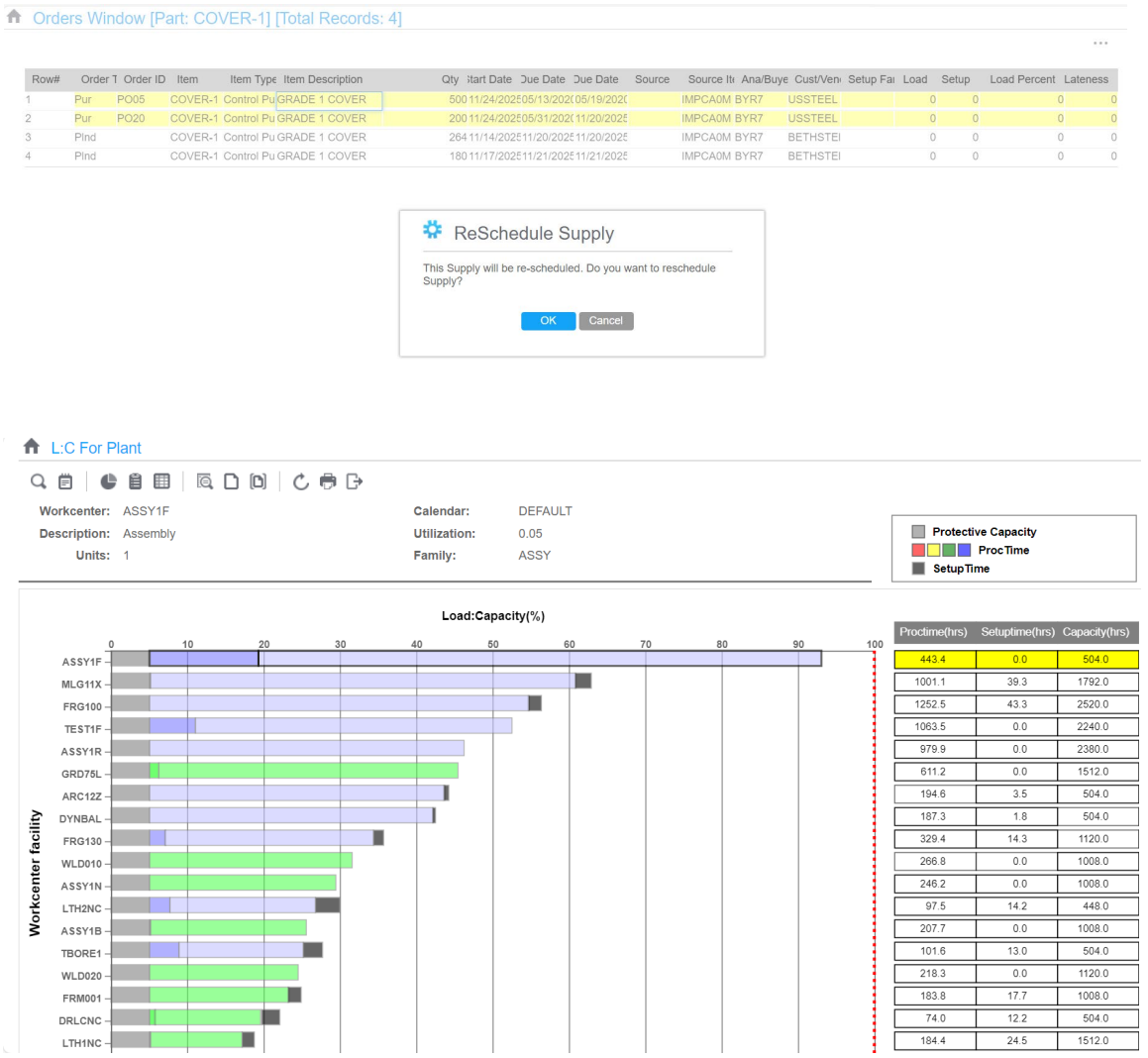
Row#	Item	Item Type	Item Description	Control Item	Level	Worst Exception	Analyst/Buyer
1	BAR-14	BUY	STOCK BAR 14 INCH	Y	3	1448	BYR5
2	TBRGX-4	BUY	TITANIUM BEARING - 4	Y	3	1445	BYR7
3	ICS0M85	BUY	CONTROL SYSTEM M 85	Y	2	1444	BYR9
4	BAR-01	BUY	STOCK BAR 1 INCH	Y	3	1443	BYR5
5	BCSTNGL-RAW	BUY	STEEL SPRING - LIGHT	Y	3	1436	BYR3
6	HUB-02	BUY	SIZE 2 HUB	Y	4	1435	BYR3
7	ALUM-XS	BUY	LOW GRADE ALUM BAR	Y	4	1435	BYR2
8	COVER-1	BUY	GRADE 1 COVER	Y	4	1430	BYR7
9	BCSTNGM-RAW	BUY	STEEL SPRING - MEDIUM	Y	3	22	BYR7
10	BAR-04	BUY	STOCK BAR 4 INCH	Y	3	7	BYR4
11	BLADERM	BUY	STEEL BLADE	Y	4	0	BYR3
12	BAR-03	BUY	STOCK BAR 3 INCH	Y	3	-4	BYR2
13	TBRGA-1	BUY	JOURNAL BEARING	Y	3	-11	BYR9
14	TBRGA-2	BUY	JOURNAL BEARING	Y	3	-12	BYR5

L:C For Plant

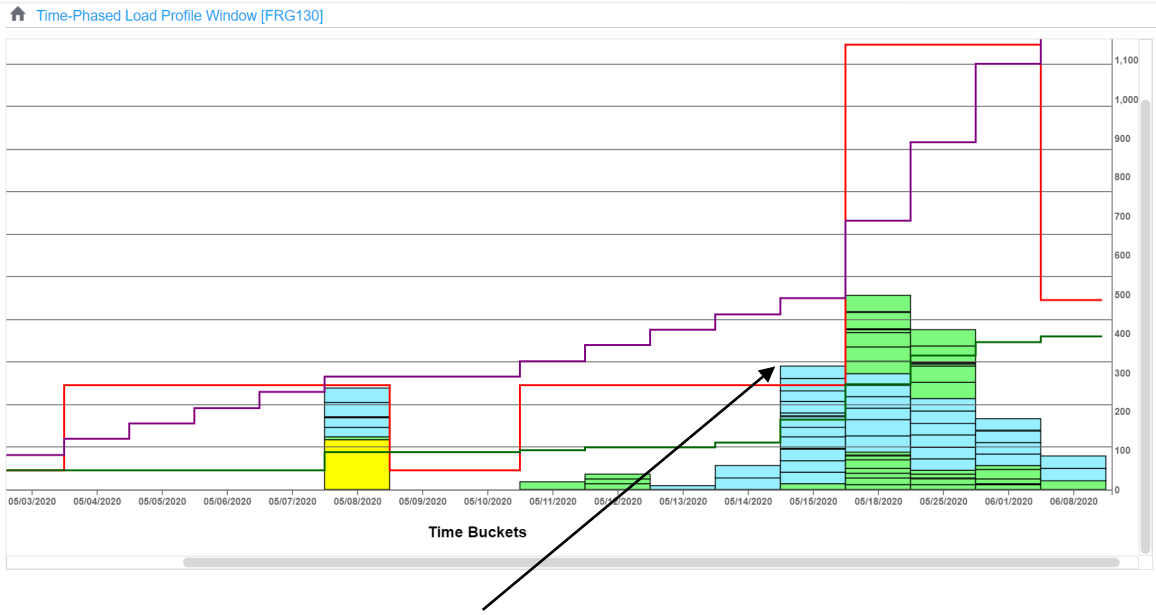


Proctime(hrs)	Setuptime(hrs)	Capacity(hrs)
443.4	0.0	504.0
1001.1	39.3	1792.0
1252.5	43.3	2520.0
1063.5	0.0	2240.0
979.9	0.0	2380.0
611.2	0.0	1512.0
194.6	3.5	504.0
187.3	1.8	504.0
329.4	14.3	1120.0
266.8	0.0	1008.0
246.2	0.0	1008.0
97.5	14.2	448.0
207.7	0.0	1008.0
101.6	13.0	504.0
218.3	0.0	1120.0
183.8	17.7	1008.0
74.0	12.2	504.0
184.4	24.5	1512.0

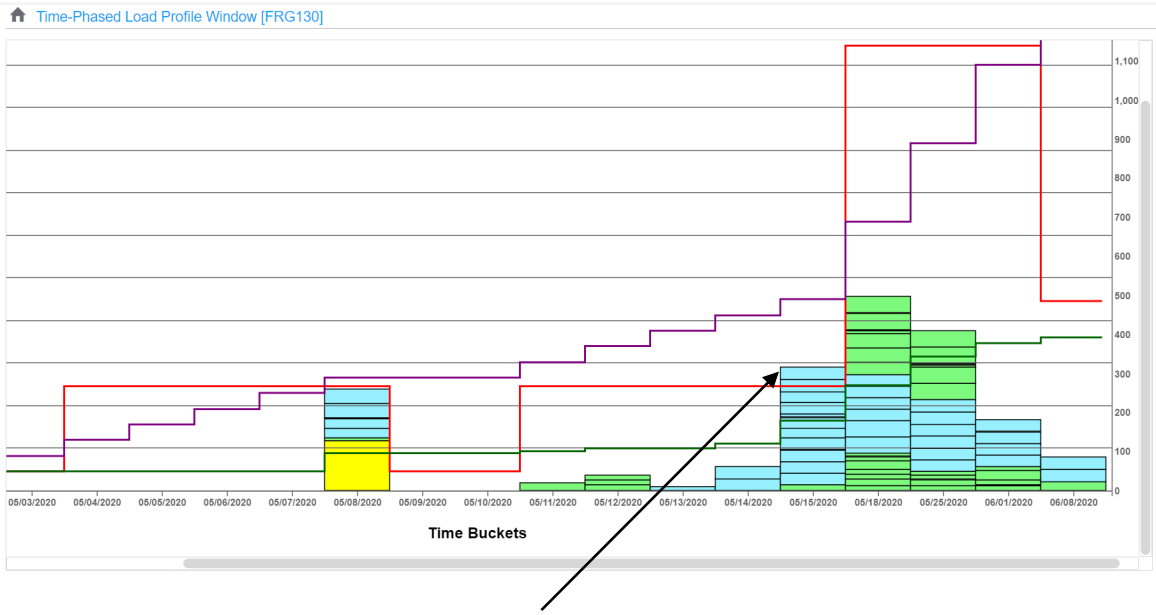
From the orders window for cover-1 select the re-schedule requirements option and you will end up with the following L: C picture.



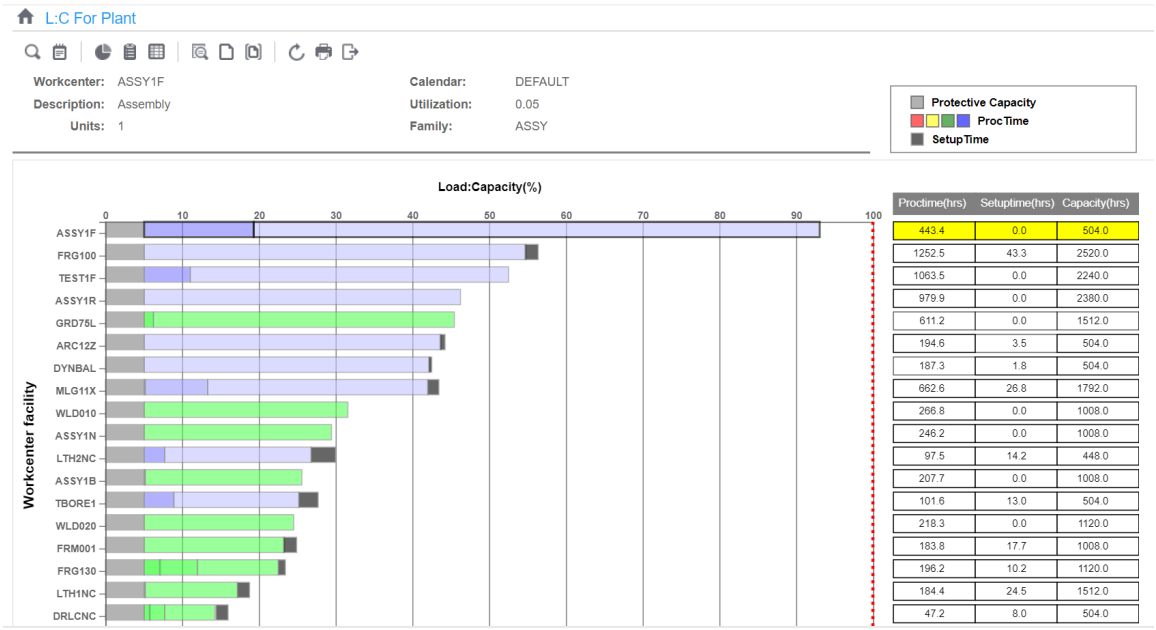
Now there are some overloaded facility. We will go to the time-phased orders window for that facility and tile the windows. You should see the screen below.

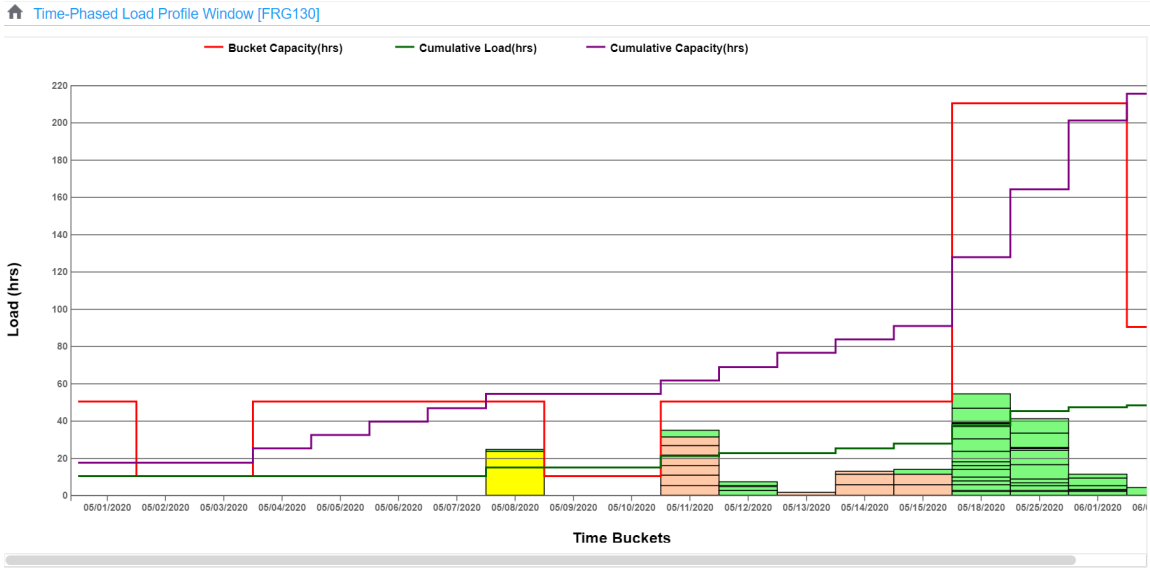


There is a overload in the 5/15/2020 bucket. At this point we will demo the ability of the software to highlight material conflicts caused by pulling in tasks earlier to balance out the capacity. We will balance capacity by pulling in the planned order for IMPHM75 in the 5/14 bucket. But before we do this you should have the critical purchase material screen open. You do this by execution "Item List" command from the Display menu. Close the window for late customer orders. You should see the screen below (before the manual move)

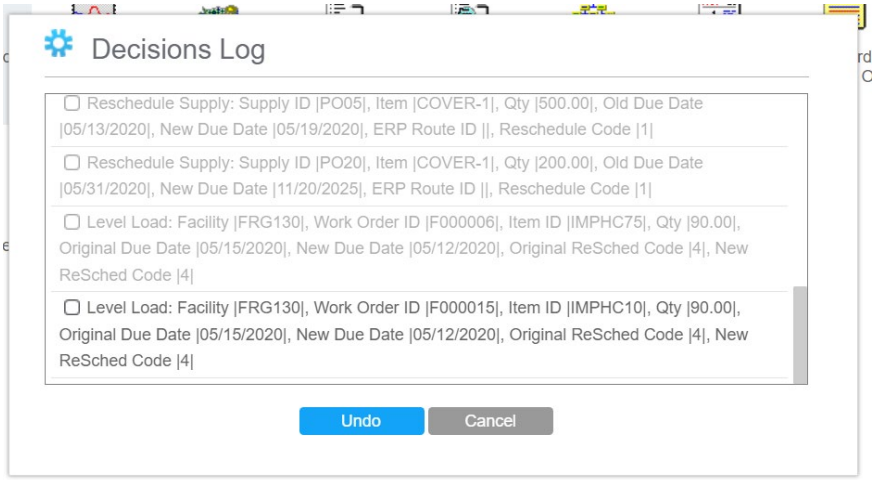


Offload this task (planned order for IMPHC75). Once you move this task and refresh the screen you should see the screen below.

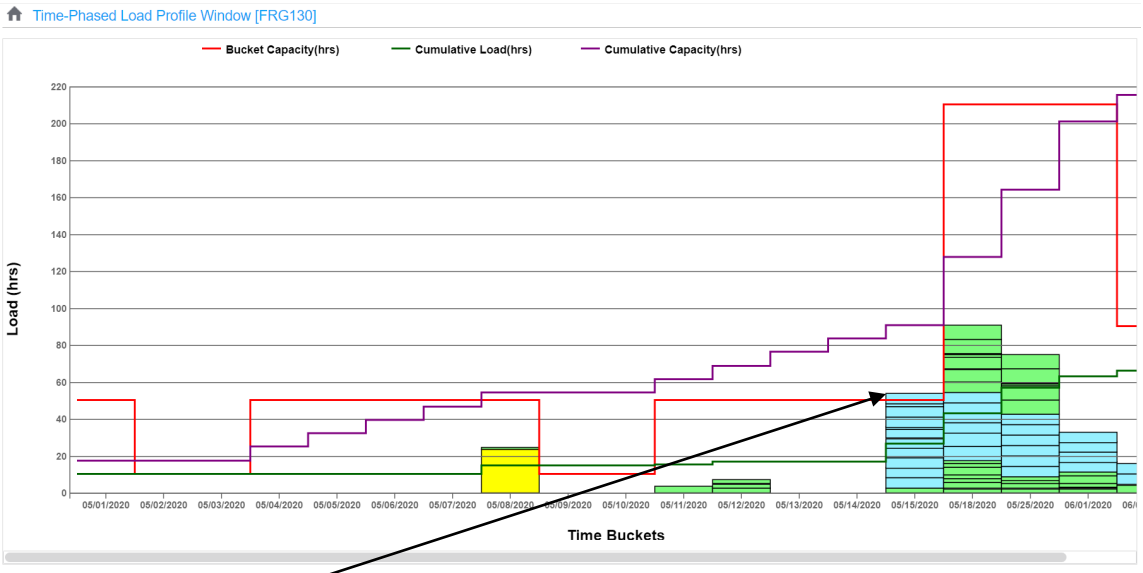




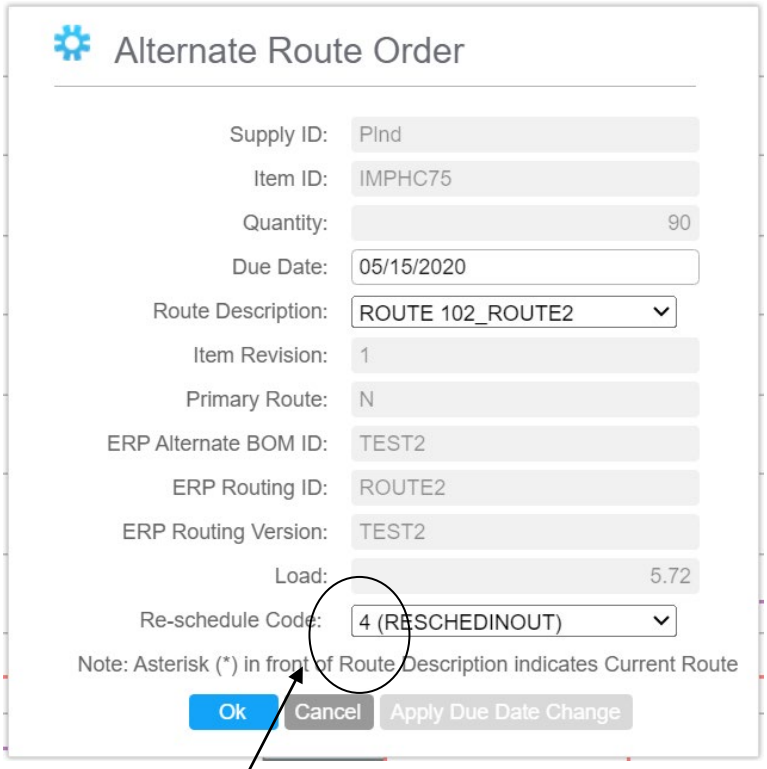
Now we have material exceptions. Although the capacity problem is solved we do not want to keep this decision. Now we can undo this decision. You do this by selecting the “Undo” command from the Display Menu.



Once you click on OK you will the charts revert back to their original condition.



We will resolve it by alternate routing this task; make sure you select the task for item IMPHC75. Alternate routing works with EPDM module and is available for those items that have alternate BOM and routing defined. When you select the alternate route command after right clicking on the task you will see the dialog box below.



When we alternate route an order the order is firmed up. Normally when we firm up an order it is pegged to earlier requirements before planned orders are generated. In this scenario when we make an alternate routing decision it is possible that this firm supply will be pegged to an earlier requirement and a planned order will be generated in its place. This will negate the purpose of our decision. To avoid this we will set the re-schedule code to 5. This allows the software to retain the firm planned order in the future while generating planned orders to satisfy earlier requirements.

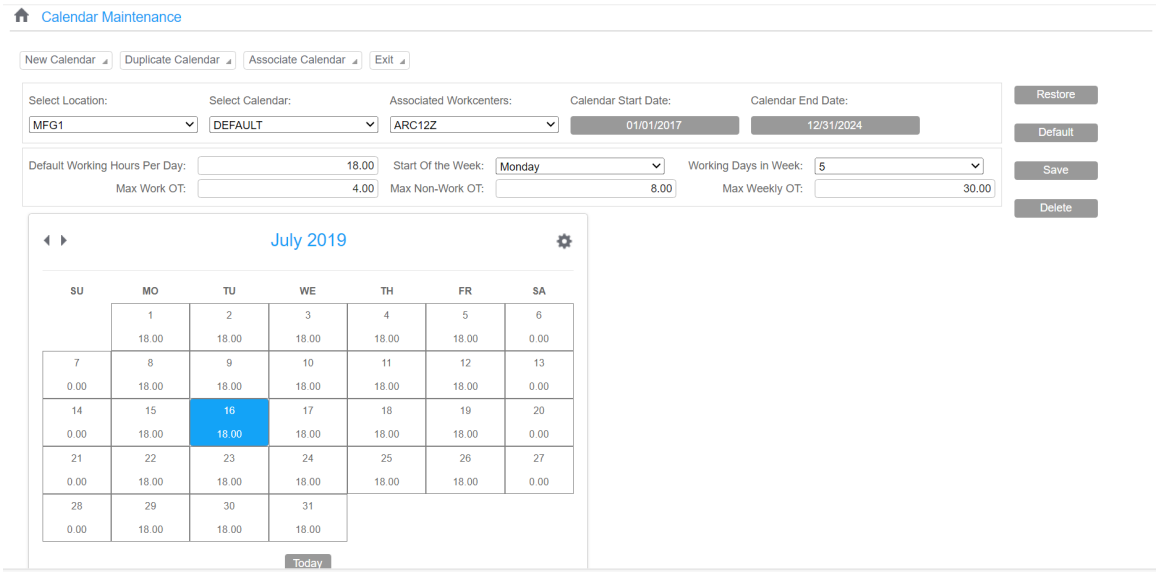
Once we make the alternate route decision FRG130 also comes under control. This is how we control workcenter facility overload. When we go back and re-execute the item list command under display you will get the screen below.

The L: C have some blue and green workcenters. After repeating above actions the L:C will under control and there will be no purchase or customer order exceptions. We have generated a good plan that we can execute.

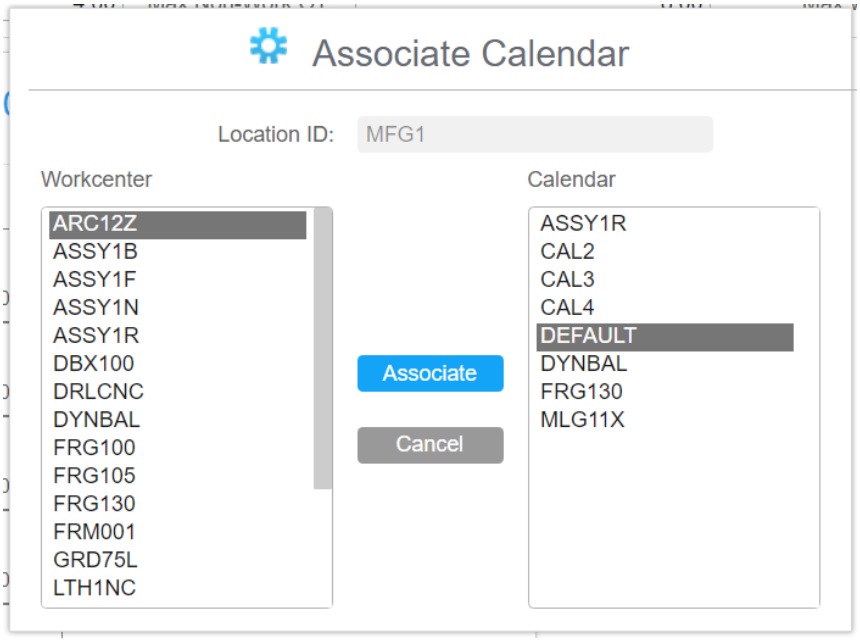
Other key features of VPI

- The user can create a separate calendar for each facility if he so chooses.

Select DbMaint->Calendar. You should see the screen below. One of the key functionalities for VPi users is the ability to create a separate calendar for each resource.

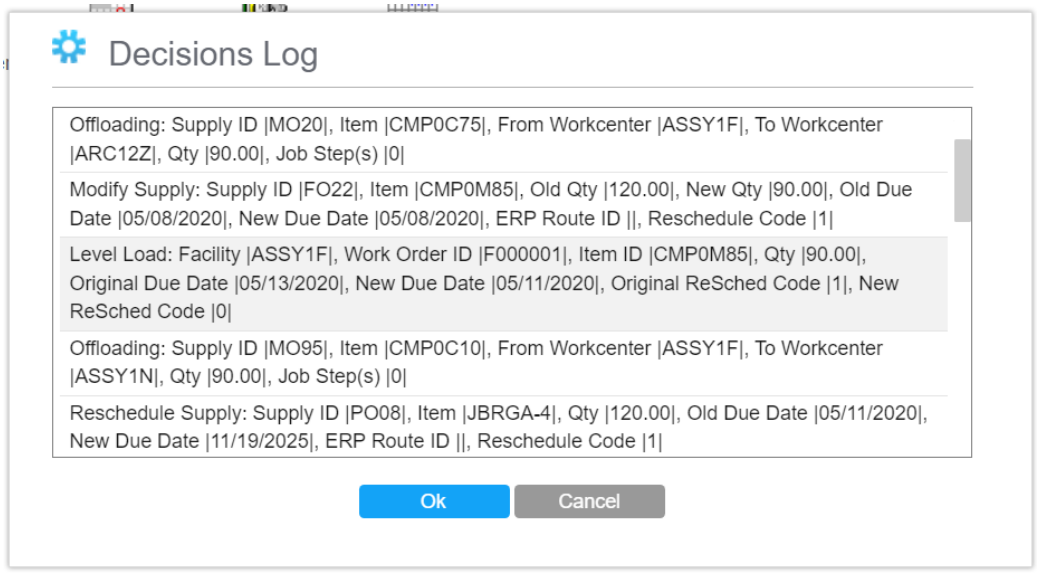


Show user how he can use the duplicate calendar functionality to create additional calendars. Show how he can associate facilities with calendars using the Associate menu.

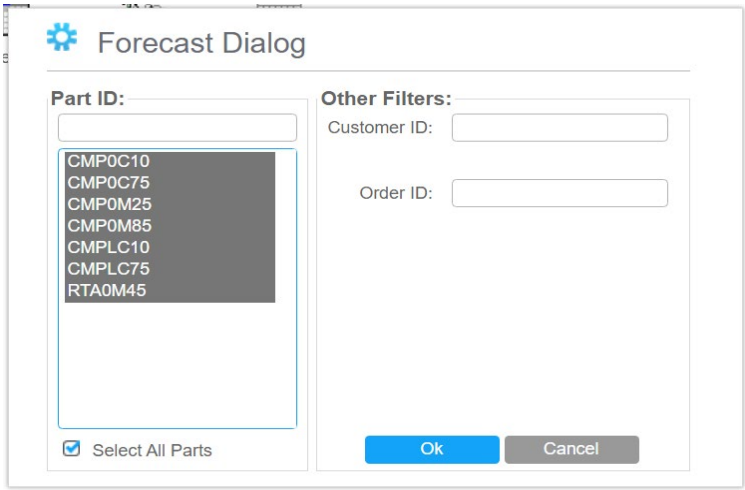


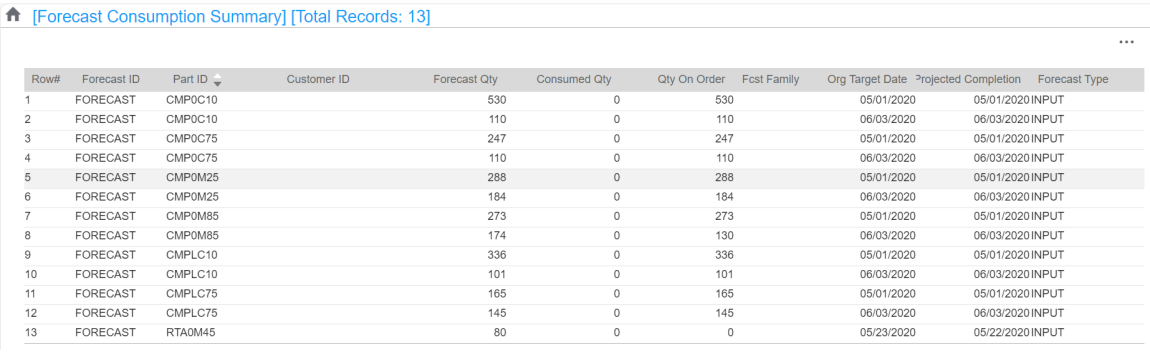
Exit calendar without saving the changes you have made, if any. Then load the project by clicking on the load project button.

- The user can review and print the list of decisions user has taken.



- VPi consumes forecast and max of forecast or customer orders is used to drive the system. In addition, VPi also allows forecast consumption for lower level items.




[Forecast Consumption Summary] [Total Records: 13]

Row#	Forecast ID	Part ID	Customer ID	Forecast Qty	Consumed Qty	Qty On Order	Fcst Family	Org Target Date	Projected Completion	Forecast Type
1	FORECAST	CMP0C10		530	0	530		05/01/2020	05/01/2020	INPUT
2	FORECAST	CMP0C10		110	0	110		06/03/2020	06/03/2020	INPUT
3	FORECAST	CMP0C75		247	0	247		05/01/2020	05/01/2020	INPUT
4	FORECAST	CMP0C75		110	0	110		06/03/2020	06/03/2020	INPUT
5	FORECAST	CMP0M25		288	0	288		05/01/2020	05/01/2020	INPUT
6	FORECAST	CMP0M25		184	0	184		06/03/2020	06/03/2020	INPUT
7	FORECAST	CMP0M85		273	0	273		05/01/2020	05/01/2020	INPUT
8	FORECAST	CMP0M85		174	0	130		06/03/2020	06/03/2020	INPUT
9	FORECAST	CMPLC10		336	0	336		05/01/2020	05/01/2020	INPUT
10	FORECAST	CMPLC10		101	0	101		06/03/2020	06/03/2020	INPUT
11	FORECAST	CMPLC75		165	0	165		05/01/2020	05/01/2020	INPUT
12	FORECAST	CMPLC75		145	0	145		06/03/2020	06/03/2020	INPUT
13	FORECAST	RTA0M45		80	0	0		05/23/2020	05/22/2020	INPUT

This concludes the script.