



Resource Scheduling for Capacity Planning With Rotating Days Off and Multiple Shifts

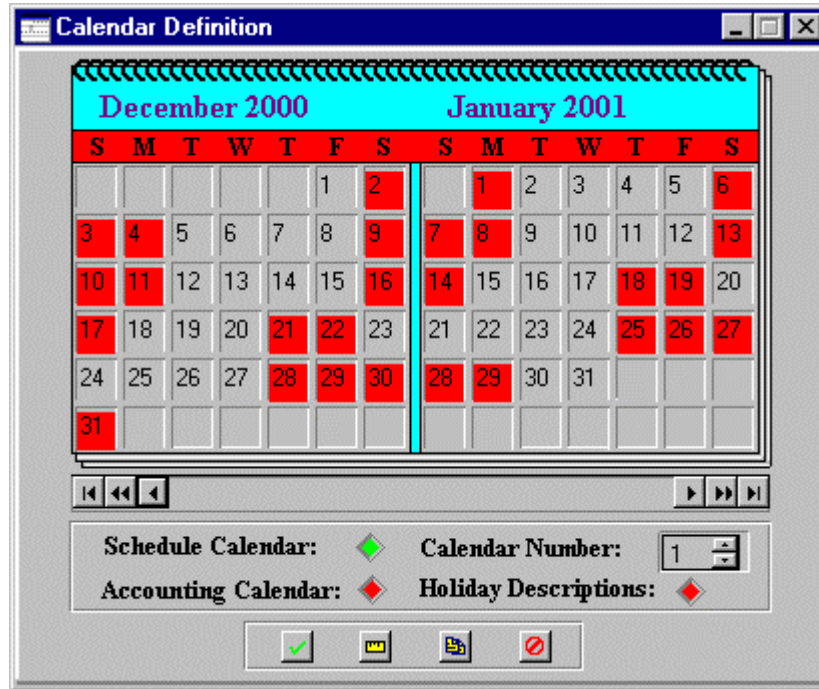
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Dekker, Ltd.

One of the most challenging resource scheduling exercises is to plan resources in a production or Maintenance Repair and Overhaul (MRO) environment. These environments commonly have rotating days off for skilled labor and multiple shifts in a day to run a 24/7 operation. The first objective is to set up a series of calendars to define the different workdays for the rotation schedules. The next step is to establish a resource ledger to define the skill types. This is followed by setting up an availability schedule for each resource by shift. With these features in place, you can assign resources to each scheduled shift.

Once these three steps have been completed, the demand for each resource by shift can be planned across the organization's activities. In addition, the plant's resource utilization and capacity can be determined. Many of the data elements for the demand and utilization of resources can be derived directly from the information established in Impresa.

RDO Calendar set up

When should an organization graduate to TRAKKER? If business analysts spend more time compiling project information than analyzing it, then the management team is ready for TRAKKER. Project Managers that spend hours searching through accounting reports to determine proper time charging, estimated actuals, booked actuals, and developing responsible status statements, Estimate-To-Complete and Estimates-At-Complete analysis should take a serious look at Project Accounting through TRAKKER



Resource Definition

For capacity planning, the Revenue/Expense Ledger is the table where you define the resources used by each shift. Each resource is identified by a specific labor skill type. The primary resource name definition is used to identify the skill. The secondary definition is for the shift identification. This resource name definition provides the flexibility to determine the demand and capacity by shift. As demand for resources by shift changes, availability can then be changed to meet that new demand.

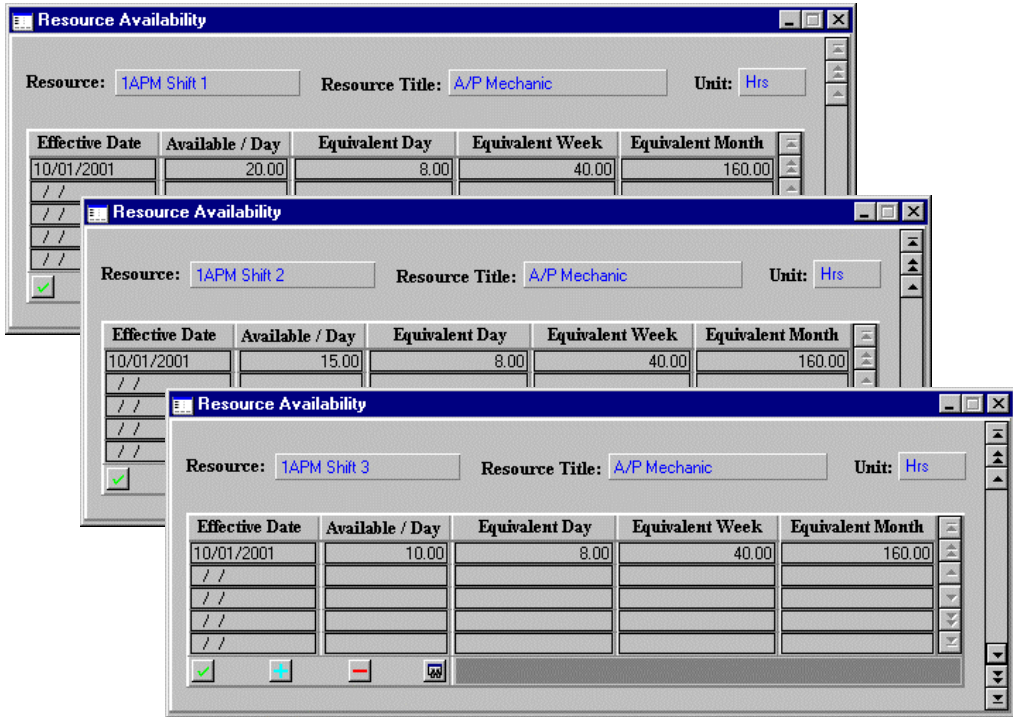
The resources defined provide for the assignment of Burden Pools or work centers. These in turn track the allocation of support costs, as your organization requires. Each resource can be associated with a user defined Cost Element for further summarization and reporting. All of the fields in the Revenue/Expense Ledger are open to query and can be sub-fielded as well.

In addition to planning resources by shift and determining capacity, this structure will provide a means of applying different hourly rates. The structured Revenue/Expense Ledger also accommodates any rate differential for different shifts that may exist.

Revenue/Expense Ledger						
Resource Name	Resource Title	Type..	Unit	Cost Element	Burden Pool	
1APM Shift 1	A/P Mechanic	L	Hrs	1st Shift Labor	Facilities	
1APM Shift 2	A/P Mechanic	L	Hrs	2nd Shift Labor	Facilities	
1APM Shift 3	A/P Mechanic	L	Hrs	3rd Shift Labor	Facilities	
1EEE Shift 1	Electrical Engineers	L	Hrs	1st Shift Labor	Engineering	
1EEE Shift 2	Electrical Engineers	L	Hrs	2nd Shift Labor	Engineering	
1EEE Shift 3	Electrical Engineers	L	Hrs	3rd Shift Labor	Engineering	
1PNT Shift 1	Painters	L	Hrs	1st Shift Labor	Facilities	
1PNT Shift 2	Painters	L	Hrs	2nd Shift Labor	Facilities	
1PNT Shift 3	Painters	L	Hrs	3rd Shift Labor	Facilities	
1SMM Shift 1	Sheet Metal Mechanic	L	Hrs	1st Shift Labor	Facilities	
1SMM Shift 2	Sheet Metal Mechanic	L	Hrs	2nd Shift Labor	Facilities	
1SMM Shift 3	Sheet Metal Mechanic	L	Hrs	3rd Shift Labor	Facilities	
2KIT	Kits - Hardware	M	\$\$\$	Material	Facilities	
3OT	Other Direct Costs	O	\$\$\$	ODC	Facilities	
4PM	Project Manager	L	Hrs	Labor	Administration	
5FLT	Flight Test	O	\$\$\$	ODC	Engineering	

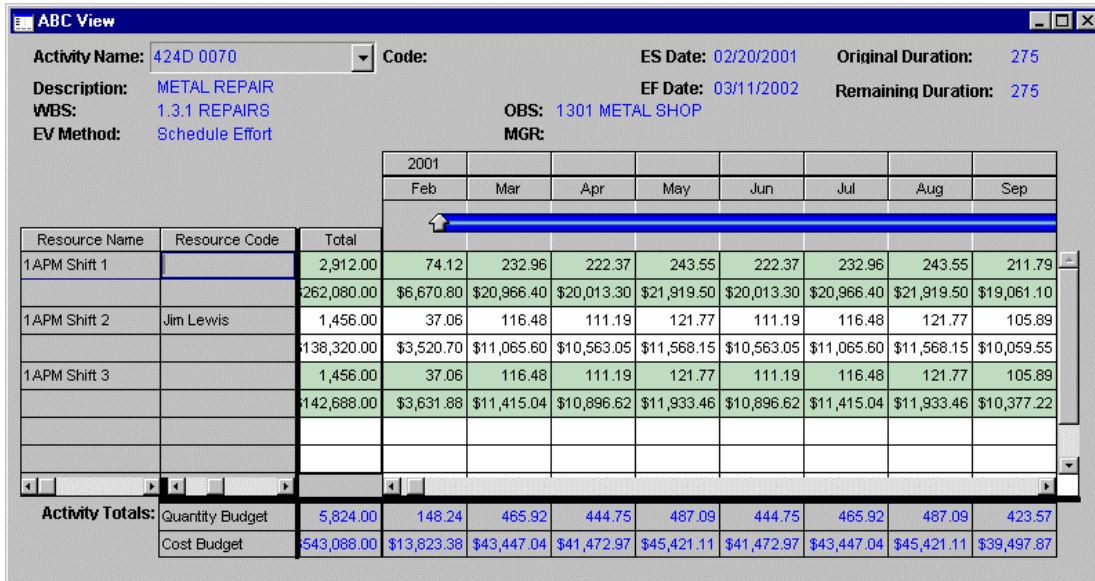
Resource Availability by Shift Assignment

Once the resources have been defined, the Resource Availability screen lets you ascribe the number of resources you actually have by shift. As the availability of a resource changes, you can enter the new availability with an effective date. In addition, it standardizes periods in terms of hours per day, week, or month for each resource by shift. The Resource Availability supports capacity planning by using the available headcount. TRAKKER will calculate budget data, based on the headcount equivalent for Day, Week or Month.



Assigning Resources to Activities by Shift

Now that resources have been defined and the availability of each has been established, the demand for resources can be assigned to each of the activities performed by the organization. This is accomplished on the ABC View. Resources are picked from the Revenue/Expense Ledger list by the number of "Equivalent Heads" required for the activity. Any of this information can be derived from Epicor's Impresa MRO system.



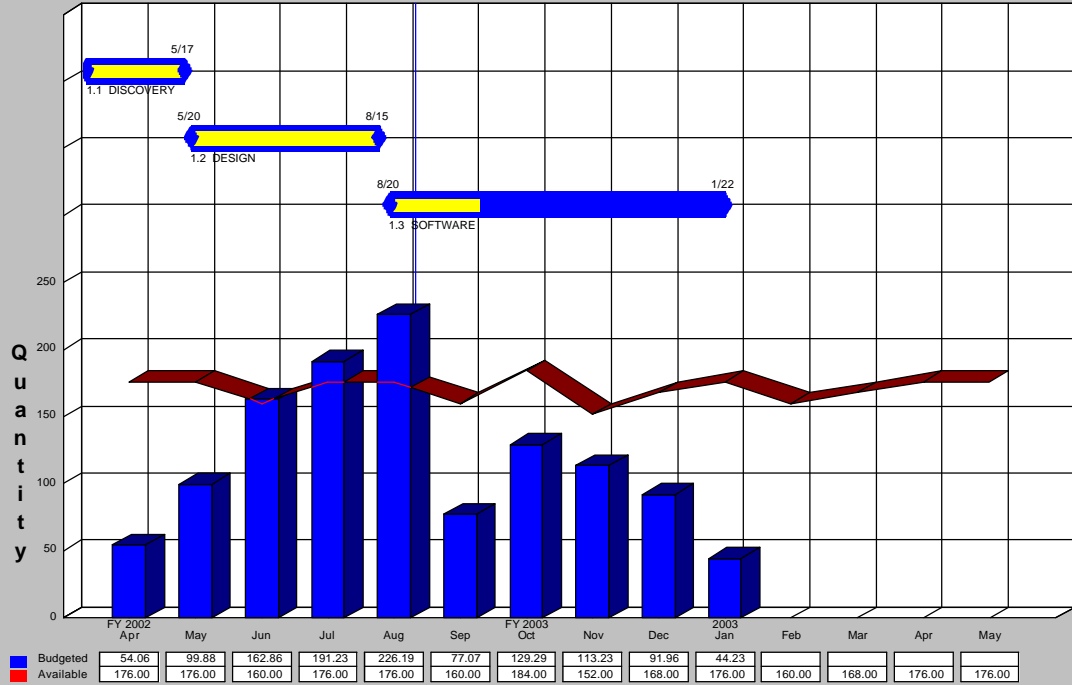
Resource Availability Capacity Planning Output

The Availability Graph process produces a separate graph (page) for each Resource by shift, if necessary. The result of this information is depicted in the graph shown below. The Gantt Bars represent Activities that are utilizing the Resource. The histograms represent the planned demand for each resource. The tape shows the resource's availability by month. The table shows the quantity values for the demand and availability.

Project Name: IMPA0204
Report Name: 00AVAIL
Planned By: David Lamont
Summary Key: 1LSDSWE
 Part 1 of 1

Resource Availability

Page: 6 of 8
Run Date: 09/04/2001
Run Time: 11:59
Status Date: 09/30/2002



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