Saturation

11.3

April 2026

DOCUMENT ACCESS

Public

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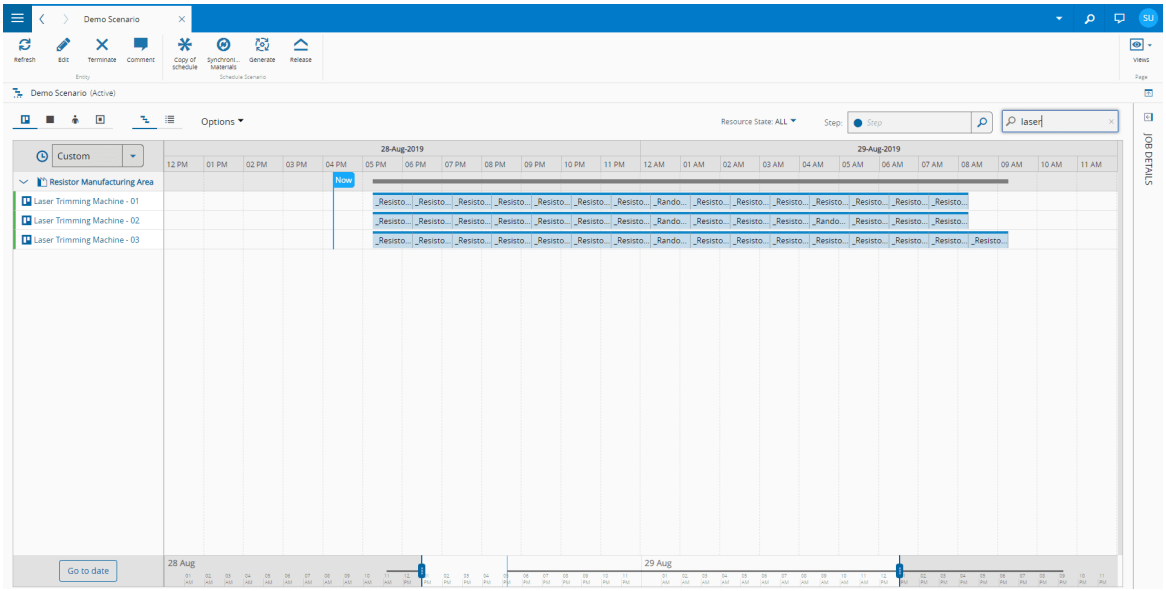
scheduling

Saturation

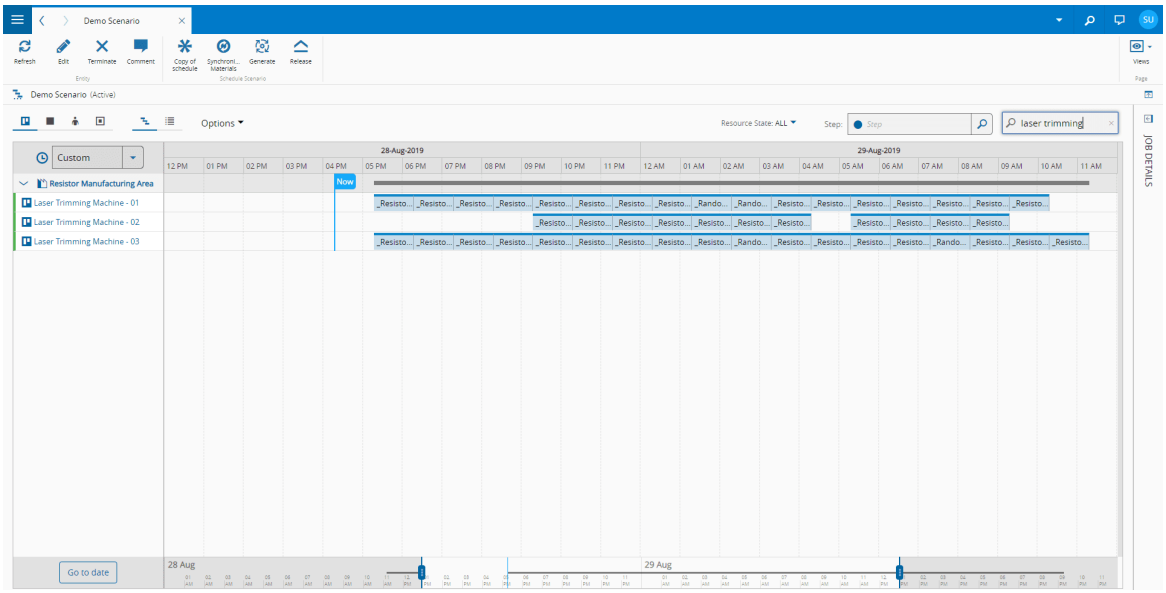
In certain situations, it may be desirable to attempt to either concentrate a larger portion of the load onto a certain Resource or, as a side effect of this action, shift load from another Resource if possible; however, this shift should not imply that production order and material due dates are unfulfilled. These cases include, for example, having a Resource with lower reliability, which would process a smaller portion of the work unless its substitutes are overloaded and due dates are in risk; alternatively, having a Resource with greater throughput, it may be desirable to limit its availability so as to safeguard against the arrival of high priority/hot Production Orders or Materials.

Saturation is activated using two Resource properties: Priority and Saturation. Scheduling will then, for each Resource, forecast the level of load that will be placed on it: if it exceeds the level defined in the Saturation property, the load will be distributed between it and other Resources with lower Priority. The level of Saturation can be defined between 0 (default, Resource is always considered Saturated and load will be evenly distributed) and 1 (Resource is never considered Saturated, and will accumulate all the load not taken by higher Priority Resources; in this case, their Saturation will be considered first). Any value between 0 and 1 represents the threshold of the Resource's available time, in decimal, after which it is considered saturated.

Below is shown a case where all the Resources are considered saturated (default case):



Here is another where a single Resource (Laser Trimming Machine - 01) has a Saturation level of 0.8:


Demo Scenario
Refresh
Edit
Terminate
Comment
Copy of schedule
Synchroni... Materials
Generate
Release
Views
Demo Scenario (Active)
Options
Resource State: ALL
Step:
laser trimming
JOB DETAILS
Custom
28-Aug-2019
29-Aug-2019
12 PM
01 PM
02 PM
03 PM
04 PM
05 PM
06 PM
07 PM
08 PM
09 PM
10 PM
11 PM
12 AM
01 AM
02 AM
03 AM
04 AM
05 AM
06 AM
07 AM
08 AM
09 AM
10 AM
11 AM
Now
Resistor Manufacturing Area
Laser Trimming Machine - 01
Laser Trimming Machine - 02
Laser Trimming Machine - 03
Go to date
28 Aug
29 Aug

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