SupplyVue

User Guide – How to use SupplyVue Network Planner

January 2024

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Section 1: Introduction to SupplyVue Network Planner

Supply chain planner for optimal end to end plan

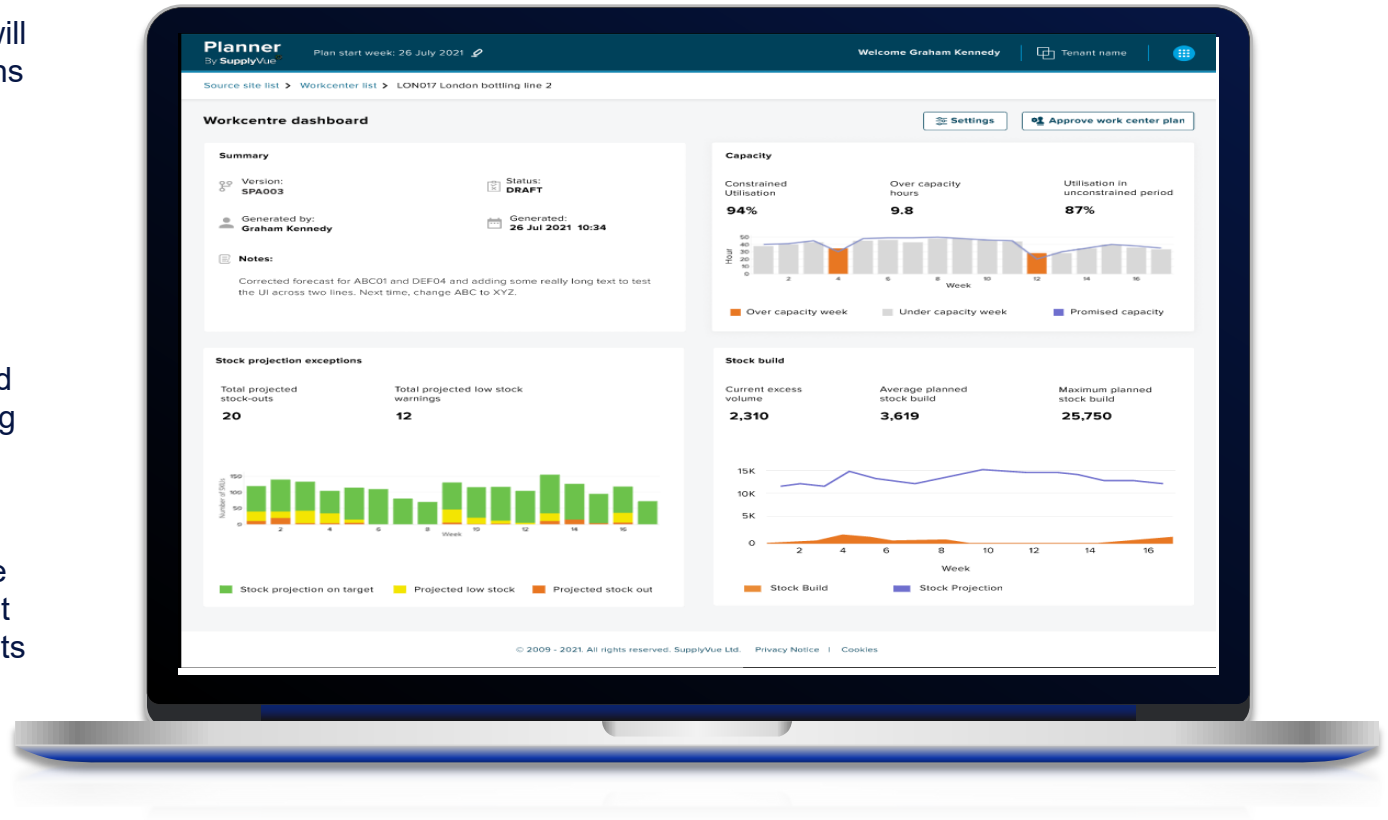
Network planner for holistic synchronisation

- ✓ **Optimising product flow and operations efficiency -** The template will be an ideal balance of maximising product flow and managing operations efficiency. This is achieved through following a plan that is the best sequence for manufacturing with the faster product wheel given manufacturing's capability. The template basis is a fixed order cycle planning approach using a runners/ repeaters/ strangers concept.

- ✓ **Stable plans enabling simpler material call-off and management -** Inventory management of both finished goods and inbound materials becomes significantly simplified as the products are being manufactured on according to a fixed schedule. The cycle time between manufacturing for all FOC products is fixed and so very predictable.

- ✓ **Creating stability and predictability even for Make to Order items -** Fixed order quantity products and make to order items. These items are slotted directly into the manufacturing schedule at the next available slot that will result in a low changeover. That is when its product family has its production turn in the planning template.

Planner summary outputs

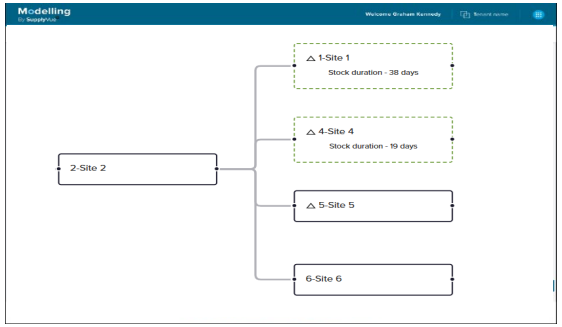


Delivering a self-managing, synchronised supply chain

Creating the unconstrained network plan - Manage your network, define the pull/push boundary, deal with co-packing and promotional packs and manage the demand onto the work centres based upon the defined plan template and stock policies

Unconstrained plan by workcentre

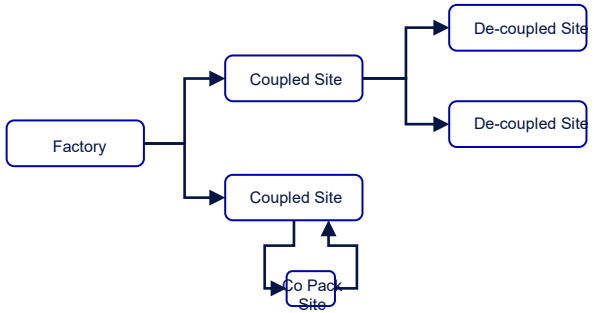
Demand propagation



SupplyVue Planner propagates demand through the network. Considering:

- Batch size and shipment lot sizes
- Lead-times
- Workcentre production wheel cycles

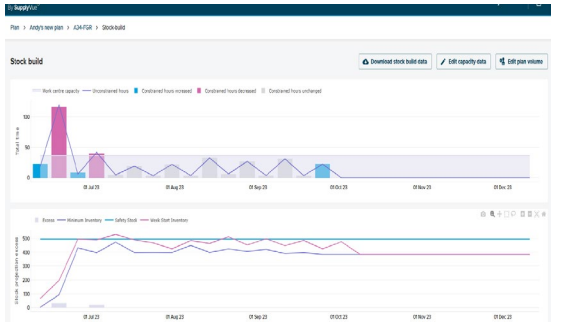
Decoupling and Co Packing



The demand propagation algorithm can manage:

- Decoupled supply points
- Co-packing of finished goods at warehouses
- Cross docking supply points

Unconstrained plan



The unconstrained plan at each workcentre considers

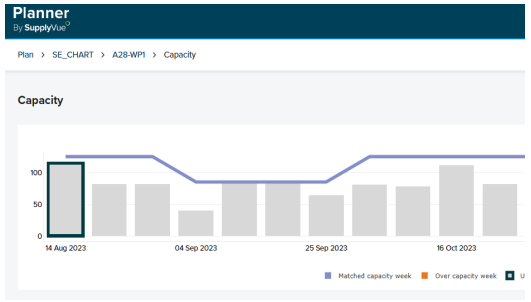
- Primary and secondary sources of supply
- Volume allocation capability for dual sourcing
- Production Plan Template (production wheel)

The user can set the parameters and rules by which demand propagates through the supply network

Constraining the supply plan – Constrain the planned volume to reflect work centre availability

Creating a constrained drumbeat replenishment plan

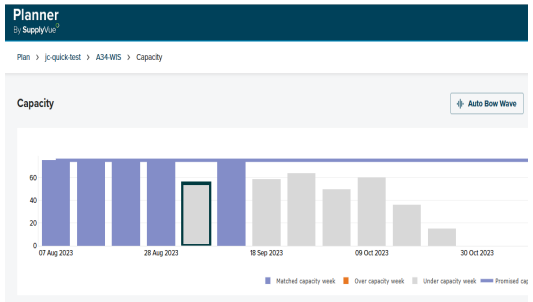
Interactive Planning



Three main plan resolution methods are provided by our interactive planner:

- Pulling forward production using rules to manage SKU prioritisation and number of weeks forwards
- Workcentre capacity management
- Alternative workcentre

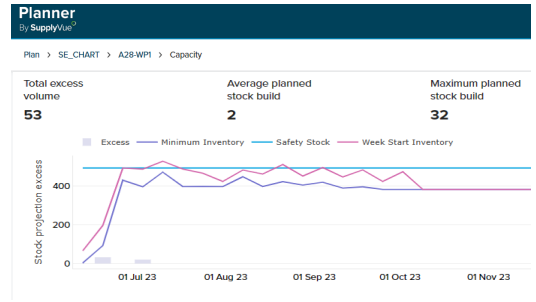
Automatic Bow Wave resolution



Solving the plan bow-wave:

- Manage safety stock use and batch size rules
- Algorithm adjusts volumes to eliminate the bow-wave
- Pushing production of safety stock build to later weeks based on the template and user managed settings

Network inventory projection



Inventory and service management using network inventory projections. Manually manage the final detail of the plan:

- Adjust final plan quantities
- Adjust shipping quantities to sites
- Resolve service issues

Interactive planning capability to manage how the plan is constrained and the planning issues resolved

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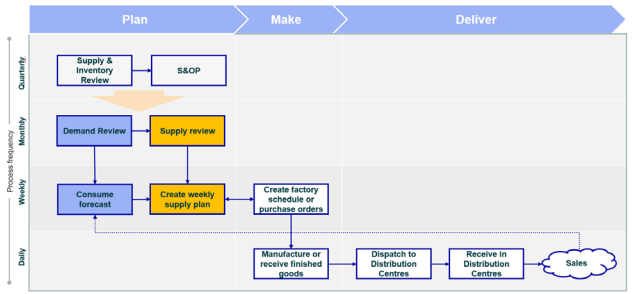
Section 2: Planner requirements

A good plan is dependent upon a well-managed process and accurate data input

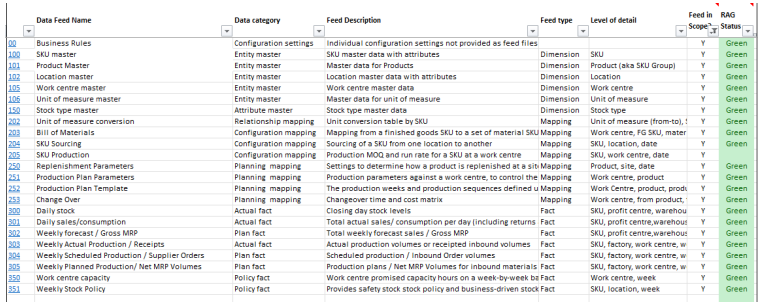
Planner Requirements

Regular planning activities



- Quarterly Review and Planning and Policy update
- Monthly demand and supply review
- Weekly Forecast Consumption
- Weekly Supply Plan Approval

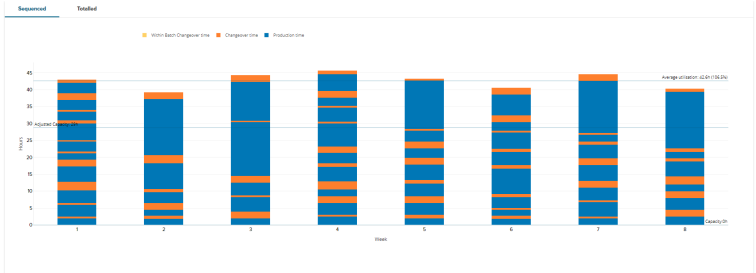
Transactional data inputs



	Data Feed Name	Data category	Feed Description	Feed type	Level of detail	Feed in Scope?	RAG Status
00	Business Rules	Configuration settings	Individual configuration settings not provided as feed files			Y	Green
100	SKU master	Entity master	SKU master data with attributes	Dimension	SKU	Y	Green
101	Product Master	Entity master	Master data for Products	Dimension	Product (aka SKU Group)	Y	Green
102	Location master	Entity master	Location master data with attributes	Dimension	Location	Y	Green
105	Work centre master	Entity master	Work centre master data	Dimension	Work centre	Y	Green
106	Unit of measure master	Entity master	Master data for unit of measure	Dimension	Unit of measure	Y	Green
150	Stock type master	Attribute master	Stock type master data	Dimension	Stock type	Y	Green
202	Unit of measure conversion	Relationship mapping	Unit conversion table by SKU	Mapping	Unit of measure (from-to),	Y	Green
203	Bill of Materials	Configuration mapping	Mapping from a finished goods SKU to a set of material SKU	Mapping	Work centre, FG SKU, mater	Y	Green
204	SKU Sourcing	Configuration mapping	Sourcing of a SKU from one location to another	Mapping	SKU, location, date	Y	Green
205	SKU Production	Configuration mapping	Production MOQ and run rate for a SKU at a work centre	Mapping	SKU, work centre, date	Y	
250	Replenishment Parameters	Planning mapping	Settings to determine how a product is replenished at a site	Mapping	Product, site, date	Y	Green
251	Production Plan Parameters	Planning mapping	Production parameters against a work centre, to control the	Mapping	Work centre, product	Y	Green
252	Production Plan Template	Planning mapping	The production weeks and production sequences defined u	Mapping	Work Centre, product, prod	Y	Green
253	Change Over	Planning mapping	Changeover time and cost matrix	Mapping	Work centre, from product,	Y	Green
300	Daily stock	Actual fact	Closing day stock levels	Fact	SKU, profit centre, warehou	Y	Green
301	Daily sales/consumption	Actual fact	Total actual sales/ consumption per day (including returns	Fact	SKU, profit centre,warehous	Y	Green
302	Weekly forecast / Gross MRP	Plan fact	Total weekly forecast sales / Gross MRP	Fact	SKU, profit centre,warehous	Y	Green
303	Weekly Actual Production / Receipts	Actual fact	Actual production volumes or receipted inbound volumes	Fact	SKU, factory, work centre, w	Y	Green
304	Weekly Scheduled Production / Supplier Orders	Plan fact	Scheduled production / inbound Order volumes	Fact	SKU, factory, work centre, w	Y	Green
305	Weekly Planned Production/ Net MRP Volumes	Plan fact	Production plans / Net MRP Volumes for inbound materials	Fact	SKU, factory, work centre, w	Y	Green
350	Work centre capacity	Policy fact	Work centre promised capacity hours on a week-by-week ba	Fact	Work centre, week	Y	Green
351	Weekly Stock Policy	Policy fact	Provides safety stock stock policy and business-driven stock	Fact	SKU, location, week	Y	Green

- Accurate start of week inventory for all SKU-Sites
- Weekly forecast by SKU-Site
- Stock in transit
- Firm planned orders
- Open sales orders
- Workcentre capacity

Planning master data inputs



- Production Plan Template (defines cycles, replenishment type and sequence for the workcentres)
- Safety Stock Policy
- Production and deployment lead times
- Change over matrices
- Run rates, Minimum order quantities etc

Process and data aligned with planning technology to drive improvement

Regular planning activities

- Major planning decisions should be taken as part of the quarterly Supply and Inventory Review
  - Template and safety stock policy updates
  - Product launch dates/ run in / run out considerations
- The monthly demand review should capture major changes to expected demand
  - The forecast period should cover the full planning horizon, plus any additional weeks to account for deployment lead time and sales rate calculations
- The monthly supply review should ensure sufficient capacity and stock in the network to manage service commitments
  - Rough Cut Capacity Planning / Workforce planning
  - Planned stock builds for promotions/ pipe fill
- The weekly planning process should be focussed on managing exceptions
  - Forecast consumption
  - Plan volume changes (including template violations) or ad-hoc capacity changes to manage service levels

Transactional data inputs

- The planner plans in weekly buckets, starting on a Monday
- A key input is the closing stock position on the Sunday evening/ opening stock position on Monday
  - This needs to be considered when defining the data extract timings to ensure that all weekend transactions are properly posted
- Forecasts should be reviewed weekly so that over/under consumptions are accounted for
  - especially in the case where a weekly forecast is generated by splitting a monthly forecast evenly across the weeks of the month
    - Modelled safety stock level will take account of forecast error arising from over/ under consumption but failing to have a good demand review and forecast consumption process will lead to larger safety stock levels than if a good process was in place
- Firm planned orders for the frozen period need to be updated via the plan and schedule
- Stock in transit arrival dates should be reviewed and updated to reflect any changes
- Any new SKUs / product phase in / phase out should be managed

Planning master data inputs

- The planning data should be refreshed quarterly as an output from the Supply and Inventory review process:
  - Updated templates (default work centre, cycles, replenishment types and sequences) to reflect the most up to data picture of demand and capability
  - Updated stock policies based upon most recent templates, forecast error, demand variability and deployment lead times
  - Updated work centre capacities – shift patterns and planned downtime updated to balance operational costs and working capital (stock builds)
  - Updated run rates, minimum production quantities and changeovers etc as required

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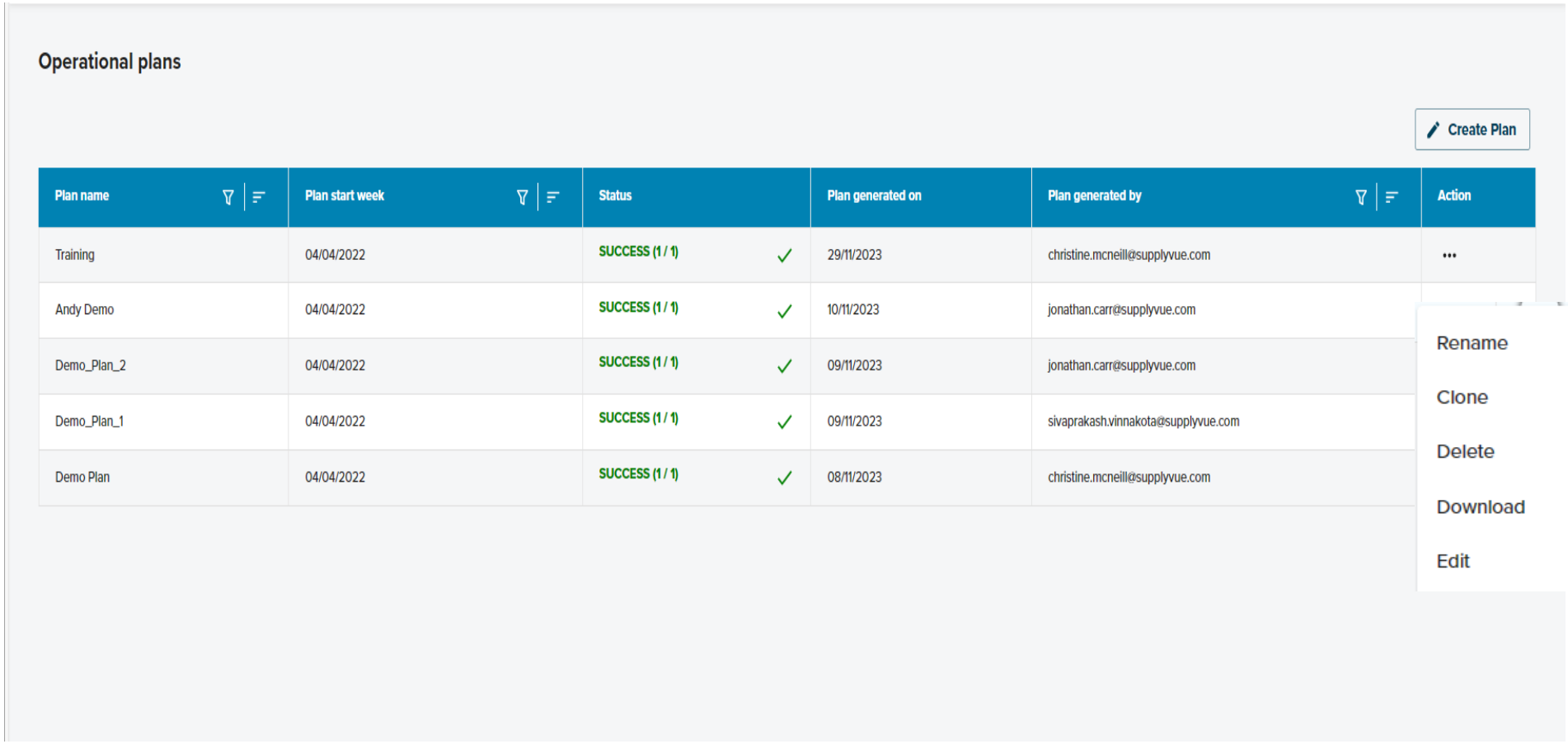
Section 3: How to generate a plan

Landing Page: Select a plan to review or Create a new plan



Landing Page

The landing page displays the Operational Plans that have been generated and are available for review.

For each plan, the table shows:

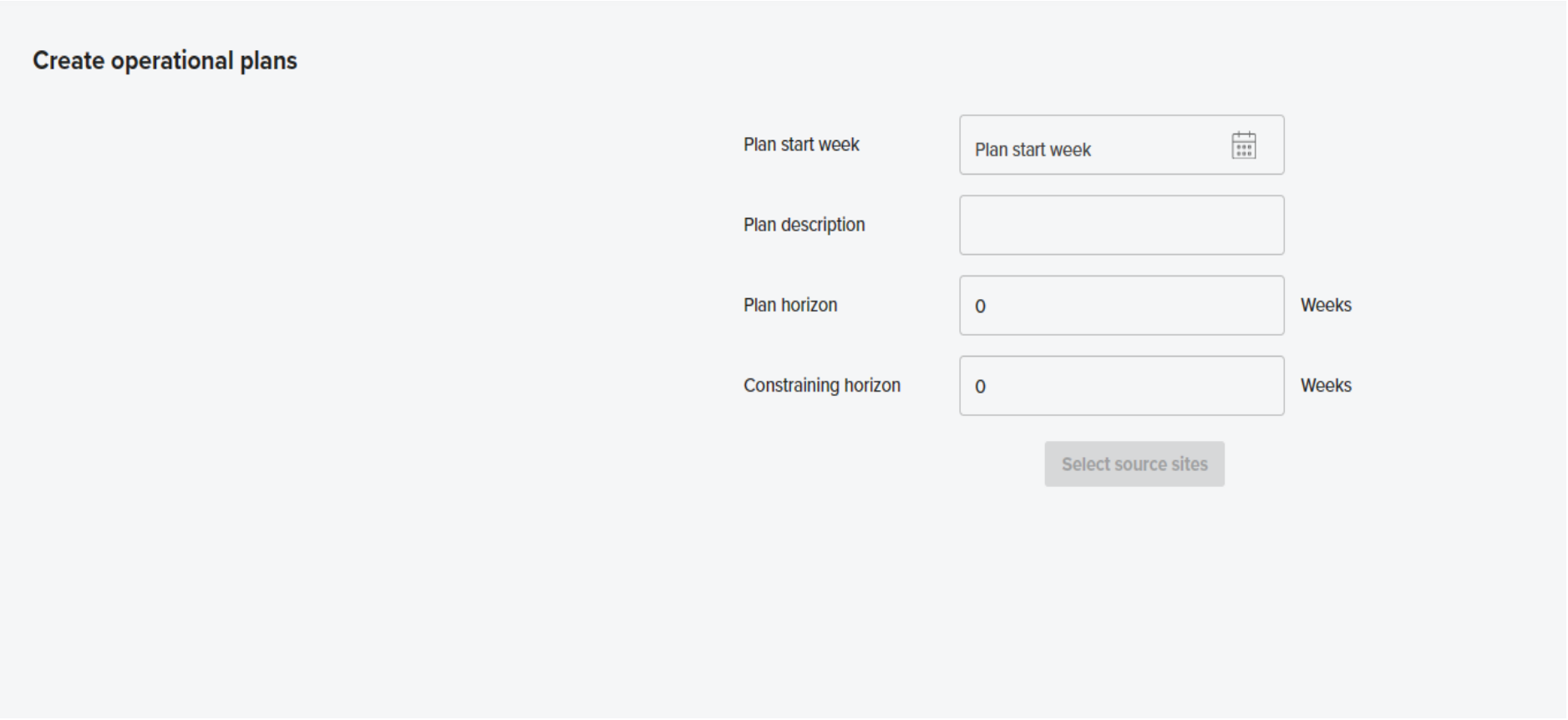
- Plan name
- Plan start week
- Status (how many workcentre plans were successfully run)
- Date the plan was generated
- Who generated the plan

There is also the **Create Plan** button to begin the process of creating a new plan.

Against each plan (row in the table) if you click the '**...**' action button. The actions you can take appear in a pop-up menu.

If you click on the row, then you will be taken to the WorkCentre Scorecard for the plan.

Create a new plan



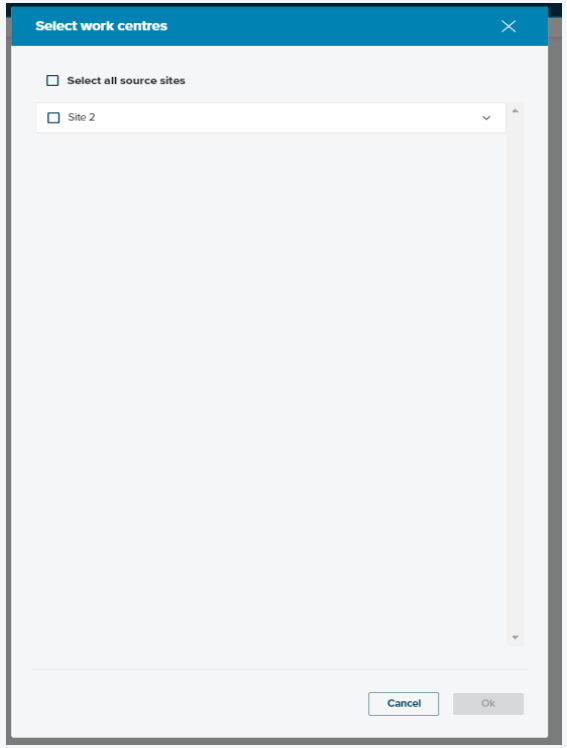
Create a new plan

To create a new plan the user must complete the basic information to identify and define the plan:

- **Plan start week** – always a Monday (planner works in weekly buckets of demand, frozen planned volume and stock in transit)
- **Plan description** – user choice
- **Plan horizon** – maximum future horizon that the plan will cover
- **Constraining horizon** – period of the plan that is constrained; demand in weeks after the constraining horizon will not be brought forward even if weeks do not have capacity

Then when they are complete define the business scope of the plan by clicking the '**Select Source Sites** button.

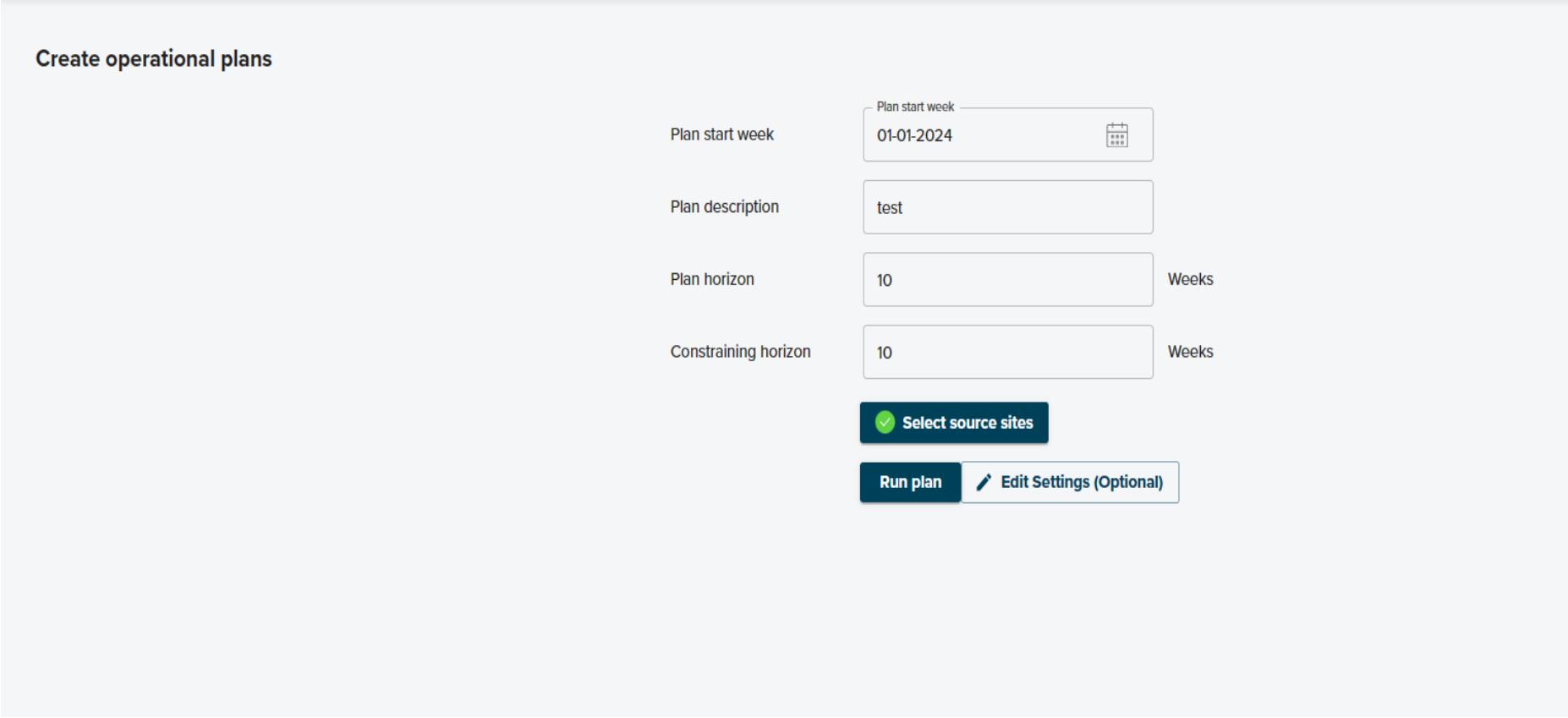
New plan scope: Select source sites and workcentres



Select Source sites and workcentres

The user sets the business scope of the plan by selecting the source sites in scope and then selecting the workcentres in scope at each of the selected sites.

Run plan or Edit the plan settings

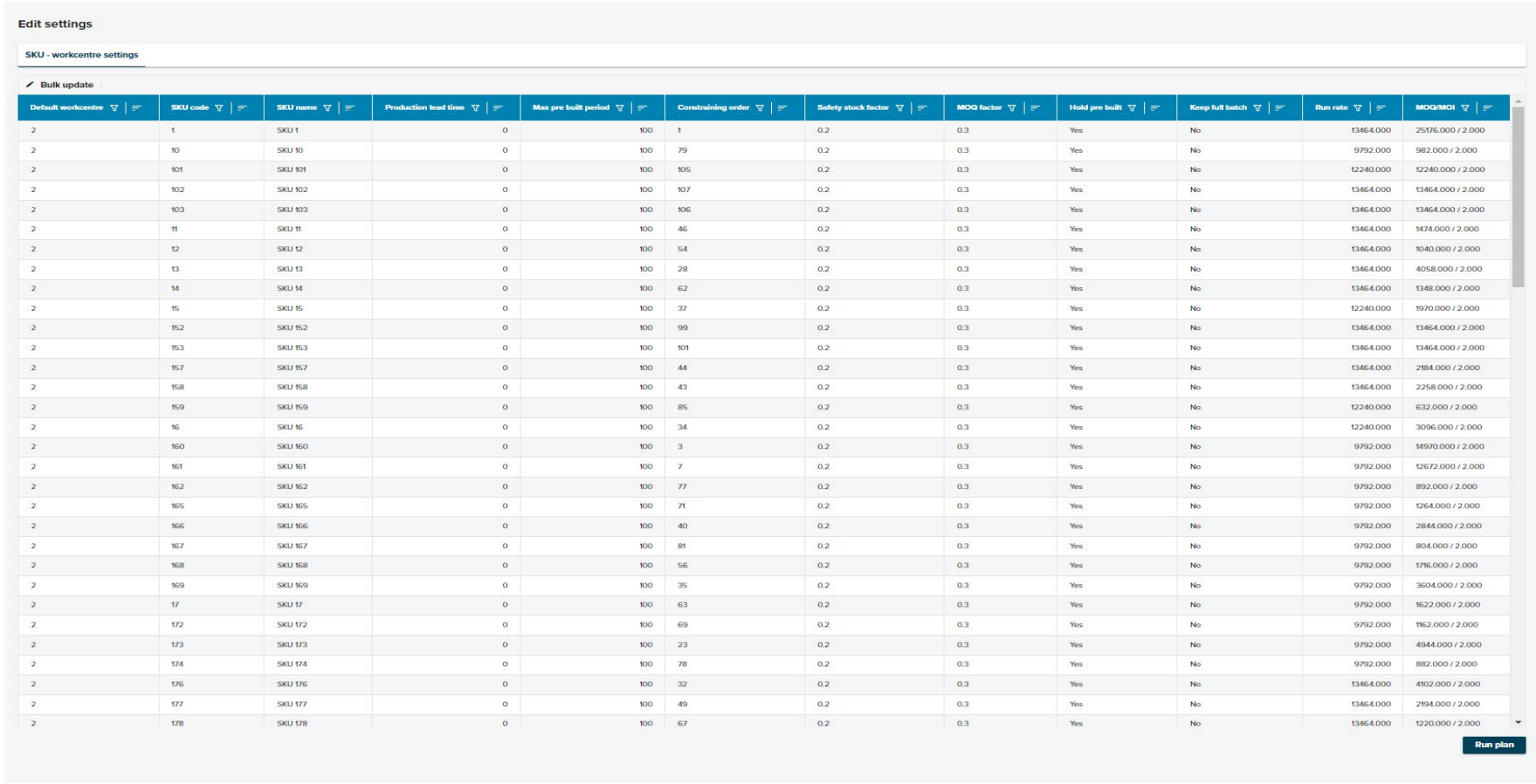


Edit settings

The user can:

- Run Plan (with pre-defined settings based on planning master data) or
- Edit Settings – allows the user to update the planning master data for the plan that is to be run (any changes are not persisted in the database)

Edit the plan settings



Default workcentre	SKU code	SKU name	Production lead time	Max pre built period	Constraining order	Safety stock factor	MOQ factor	Hold pre built	Keep full batch	Run rate	MOQ/MOI
2	1	SKU 1	0	100	1	0.2	0.3	Yes	No	13464.000	25176.000 / 2.000
2	10	SKU 10	0	100	79	0.2	0.3	Yes	No	9792.000	982.000 / 2.000
2	101	SKU 101	0	100	105	0.2	0.3	Yes	No	12240.000	12240.000 / 2.000
2	102	SKU 102	0	100	107	0.2	0.3	Yes	No	13464.000	13464.000 / 2.000
2	103	SKU 103	0	100	106	0.2	0.3	Yes	No	13464.000	13464.000 / 2.000
2	11	SKU 11	0	100	46	0.2	0.3	Yes	No	13464.000	1474.000 / 2.000
2	12	SKU 12	0	100	54	0.2	0.3	Yes	No	13464.000	1040.000 / 2.000
2	13	SKU 13	0	100	28	0.2	0.3	Yes	No	13464.000	4058.000 / 2.000
2	14	SKU 14	0	100	62	0.2	0.3	Yes	No	13464.000	1348.000 / 2.000
2	15	SKU 15	0	100	37	0.2	0.3	Yes	No	12240.000	1970.000 / 2.000
2	152	SKU 152	0	100	99	0.2	0.3	Yes	No	13464.000	13464.000 / 2.000
2	153	SKU 153	0	100	101	0.2	0.3	Yes	No	13464.000	13464.000 / 2.000
2	157	SKU 157	0	100	44	0.2	0.3	Yes	No	13464.000	2184.000 / 2.000
2	158	SKU 158	0	100	43	0.2	0.3	Yes	No	13464.000	2258.000 / 2.000
2	159	SKU 159	0	100	85	0.2	0.3	Yes	No	12240.000	632.000 / 2.000
2	16	SKU 16	0	100	34	0.2	0.3	Yes	No	12240.000	3096.000 / 2.000
2	160	SKU 160	0	100	3	0.2	0.3	Yes	No	9792.000	14970.000 / 2.000
2	161	SKU 161	0	100	7	0.2	0.3	Yes	No	9792.000	12672.000 / 2.000
2	162	SKU 162	0	100	77	0.2	0.3	Yes	No	9792.000	892.000 / 2.000
2	165	SKU 165	0	100	71	0.2	0.3	Yes	No	9792.000	1264.000 / 2.000
2	166	SKU 166	0	100	40	0.2	0.3	Yes	No	9792.000	2844.000 / 2.000
2	167	SKU 167	0	100	81	0.2	0.3	Yes	No	9792.000	804.000 / 2.000
2	168	SKU 168	0	100	56	0.2	0.3	Yes	No	9792.000	1716.000 / 2.000
2	169	SKU 169	0	100	35	0.2	0.3	Yes	No	9792.000	3604.000 / 2.000
2	17	SKU 17	0	100	63	0.2	0.3	Yes	No	9792.000	1622.000 / 2.000
2	172	SKU 172	0	100	69	0.2	0.3	Yes	No	9792.000	1162.000 / 2.000
2	173	SKU 173	0	100	23	0.2	0.3	Yes	No	9792.000	4944.000 / 2.000
2	174	SKU 174	0	100	78	0.2	0.3	Yes	No	9792.000	882.000 / 2.000
2	176	SKU 176	0	100	32	0.2	0.3	Yes	No	13464.000	4102.000 / 2.000
2	177	SKU 177	0	100	49	0.2	0.3	Yes	No	13464.000	2194.000 / 2.000
2	178	SKU 178	0	100	67	0.2	0.3	Yes	No	13464.000	1220.000 / 2.000

Edit settings

Edit Settings – can be edited in bulk, for individuals SKUs or a selection of SKUs; any changes are kept for this plan only.

Use the column filters to define the scope of SKUs which need to be edited.

Edit the plan settings

Production Lead Time
- Frozen period: SupplyVue plan horizon starts after this period. Scheduled and planned production volume must be provided as input data for the frozen period so that SupplyVue can roll-forward the opening position to the beginning of the planning horizon

Maximum pre-build period
- Maximum number of weeks an SKU will be brought forward when constraining the plan
- If the product is not to be used to constrain the plan then set as 0

Constraining order
- Order in which products are chosen when selecting product to constrain the plan

Safety stock factor and MOQ factor
- Allows projected inventory to be below safety stock if both SS and MOQ factor conditions are met
- EG. SS factor = 0.2 and MOQ factor = 0.3 will allow the stock projection to be 20% below safety stock if required quantity is less than 30% of an MOQ

Hold pre-build inventory
- For each SKU defines whether any prebuilt inventory is held at the production site or deployed to the network (deployment will based on any loaded deployment plan or pro-rated based on forecast demand at each site)

Keep full batch
- Defines if a product can be completely removed from a week when constraining the plan. (Can be useful to set as NO, if the SKU is a cleaning product that is run between other products

Run rate / MOQ / MOI
- Run rate, minimum production quantity and minimum production increment to use when creating the planned orders and calculating the production time required

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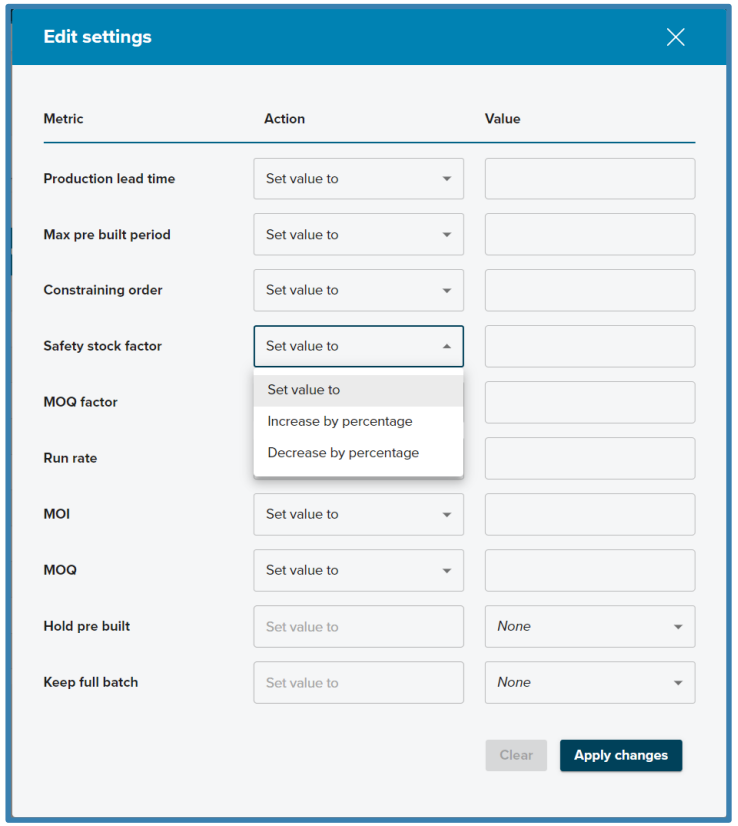
Edit the plan settings: Bulk update

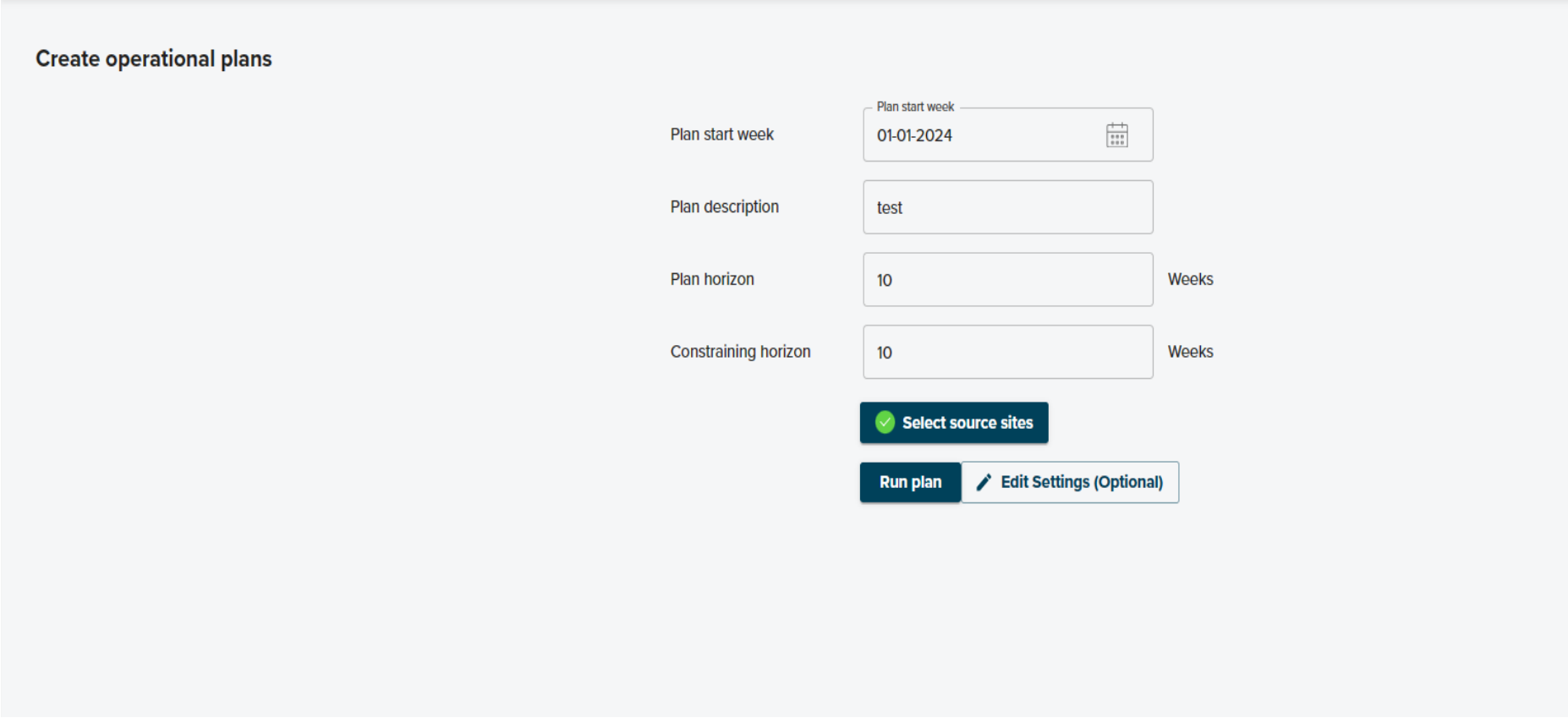


Edit settings: Bulk Update

Edit settings – once you have identified the SKUs and settings you wish to update click on “**Bulk update**” and update as required

- User can choose to set all values for the selected SKUs to a certain value or to an increase or decrease all values by the same percentage

Run plan



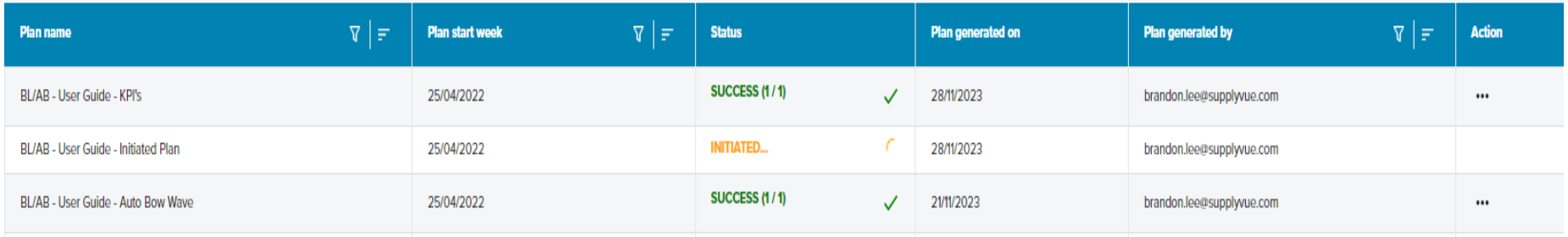
Run plan

Once the user is satisfied the settings for the plan are correct, generate the plan by clicking '**RUN PLAN**'.

The planner will create the unconstrained plan for the supply chain and each workcentre.

It will also generate the first pass constrained plan – attempting to solve the plan by bringing demand forward if a week is over capacity (while still respecting the template for each Workcentre).

Run plan



Plan name	Plan start week	Status	Plan generated on	Plan generated by	Action
BL/AB - User Guide - KPI's	25/04/2022	SUCCESS (1 / 1) ✓	28/11/2023	brandon.lee@supplyvue.com	•••
BL/AB - User Guide - Initiated Plan	25/04/2022	INITIATED...	28/11/2023	brandon.lee@supplyvue.com	
BL/AB - User Guide - Auto Bow Wave	25/04/2022	SUCCESS (1 / 1) ✓	21/11/2023	brandon.lee@supplyvue.com	•••

Run plan

Once the plan is run the user is returned to the home screen and the plan status is updated

- Initiated
- Running
- Success X/Y – as soon as the plan for once work centre is completed the status is updated so that that plan can be viewed while others are finished
- Failed

If the plan run was a success, the plan is ready for review

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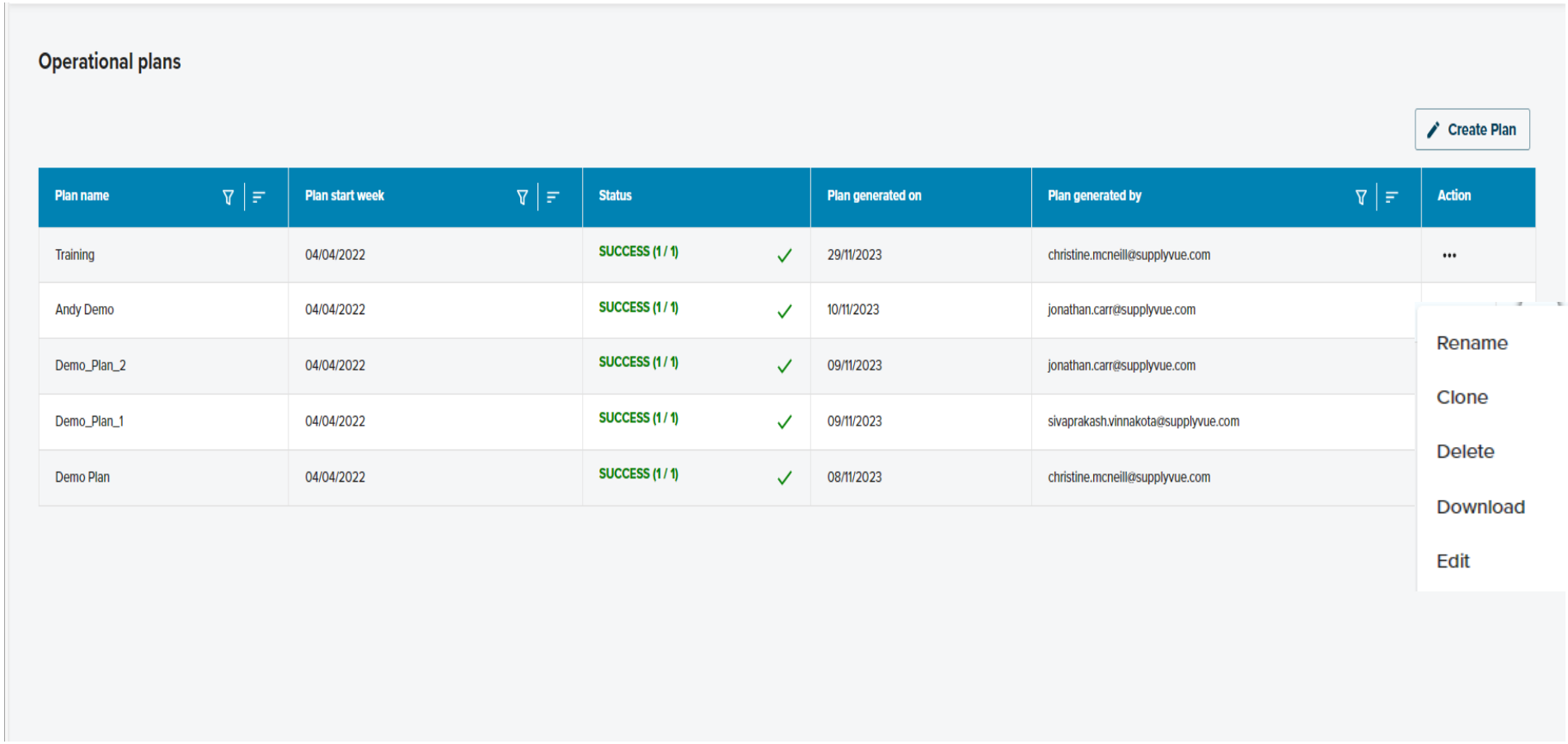
Section 3: Viewing results

User Guide: SupplyVue Network Planner

Select a plan to review



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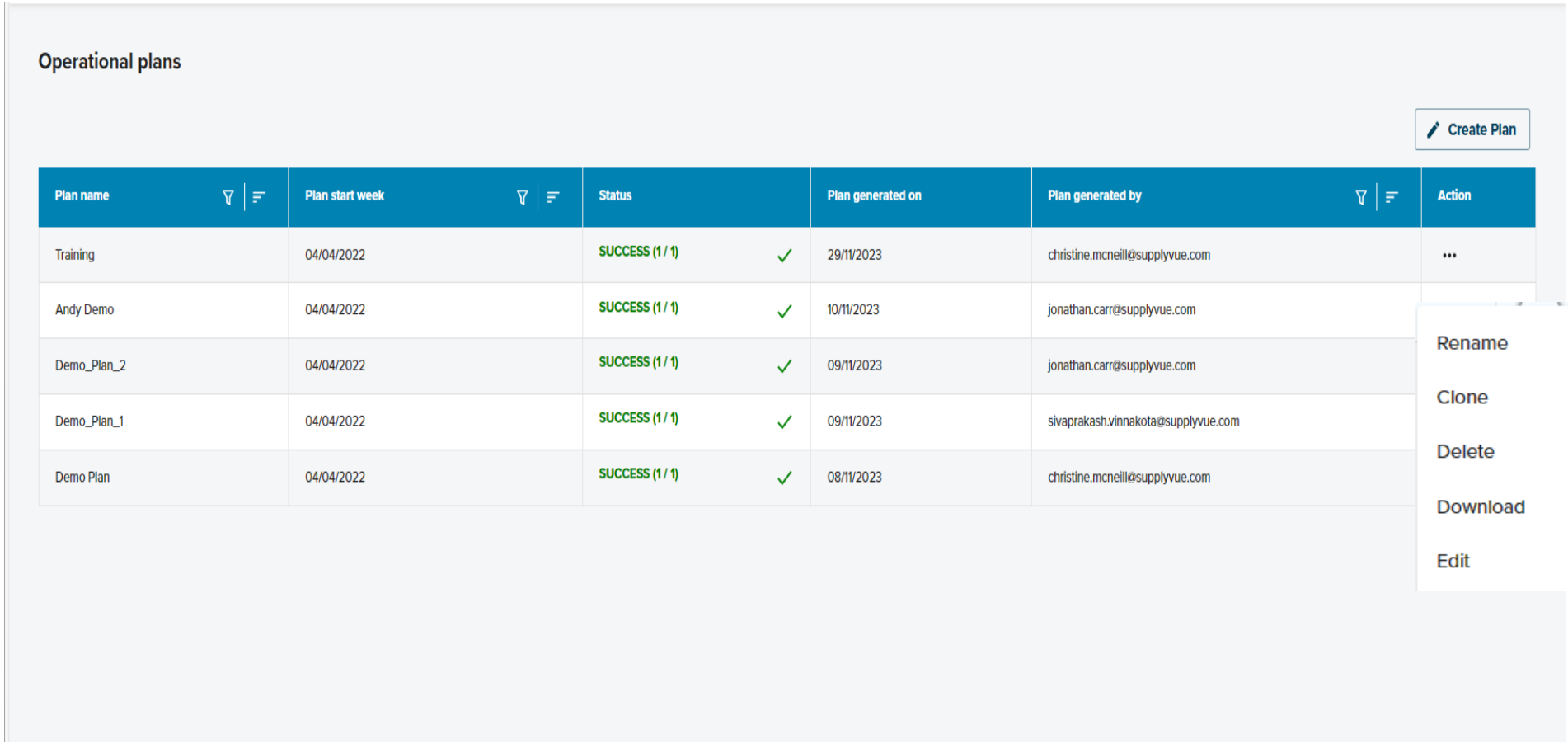
Plan Actions

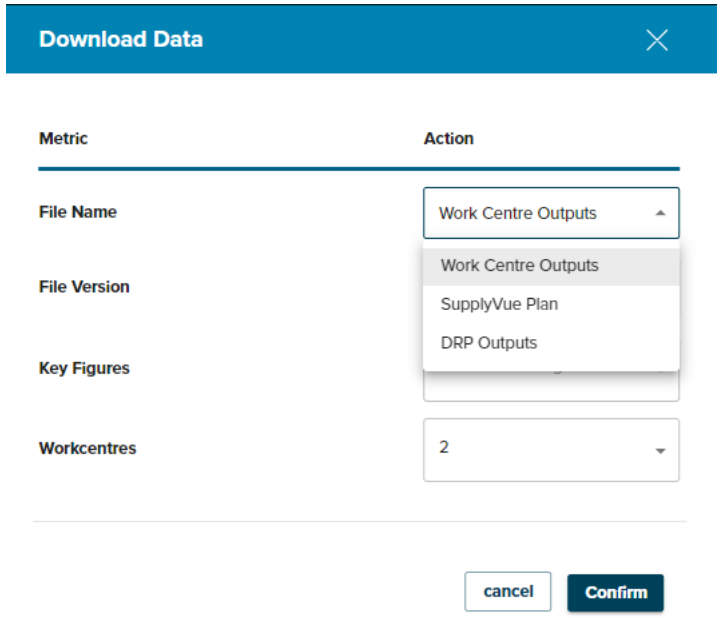


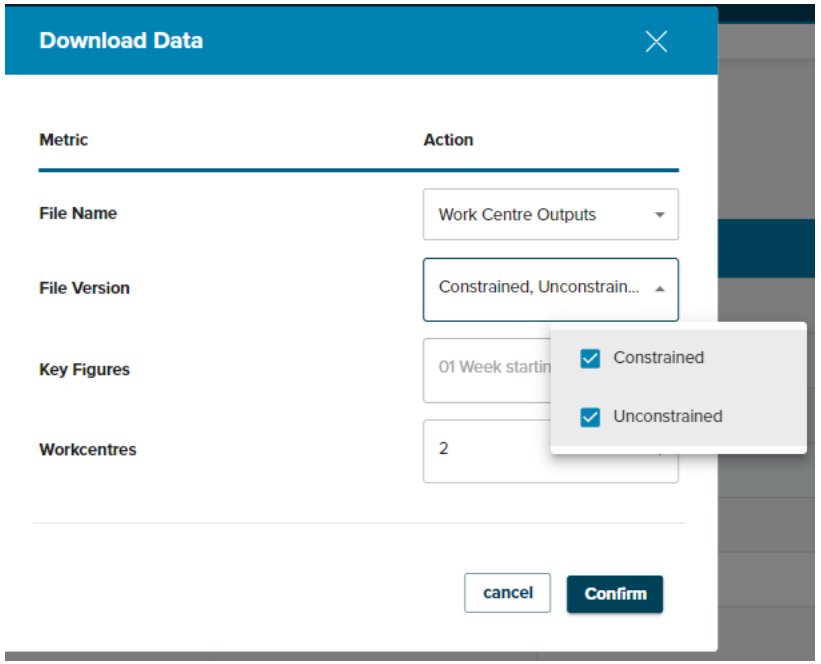
Plan Actions

Once the plan has completed – either successfully or unsuccessfully – clicking the three dots reveals the actions that can be taken:

- Rename
- Clone – while you are cloning a plan you will not be able to view it or edit it until the cloning is complete
- Cloning can be useful if you want to keep the original version of a plan and create a copy to edit
- Delete
- Download – allows user to download the plan for all work centres
- Edit – takes user back to the edit setting screen so that these can be updated, and the plan rerun

Plan download





Plan download

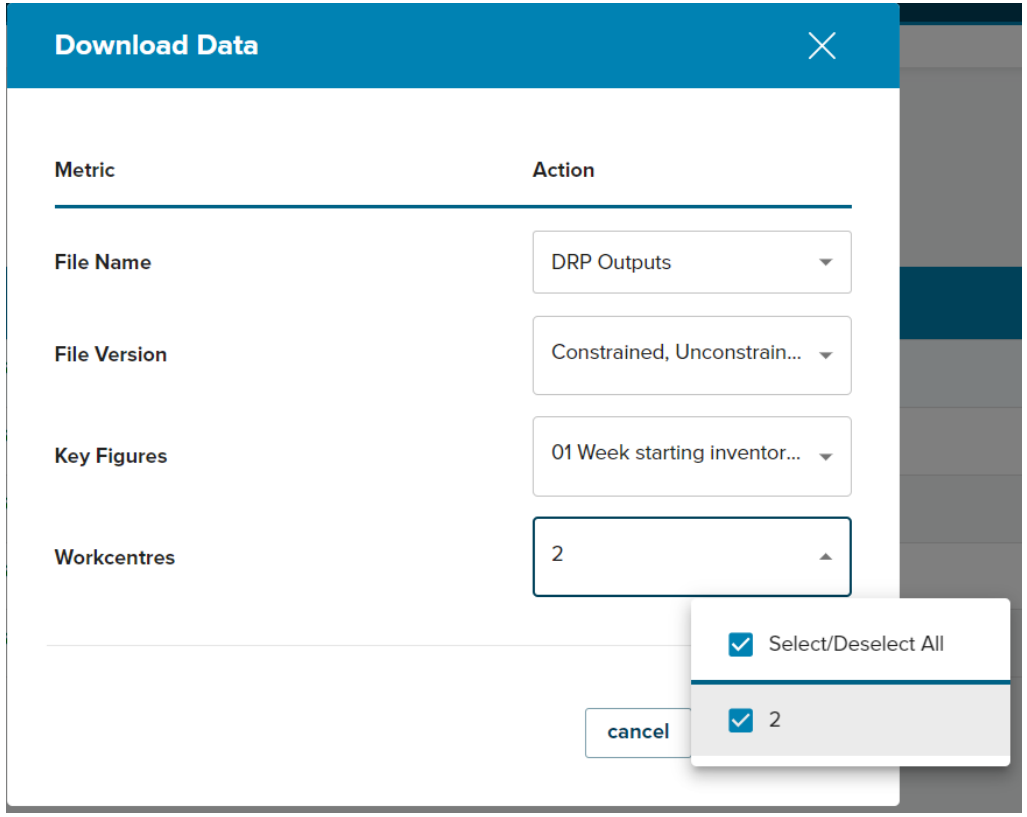
Once a plan is generated the user can review and validate the plans in detail by exporting the data.

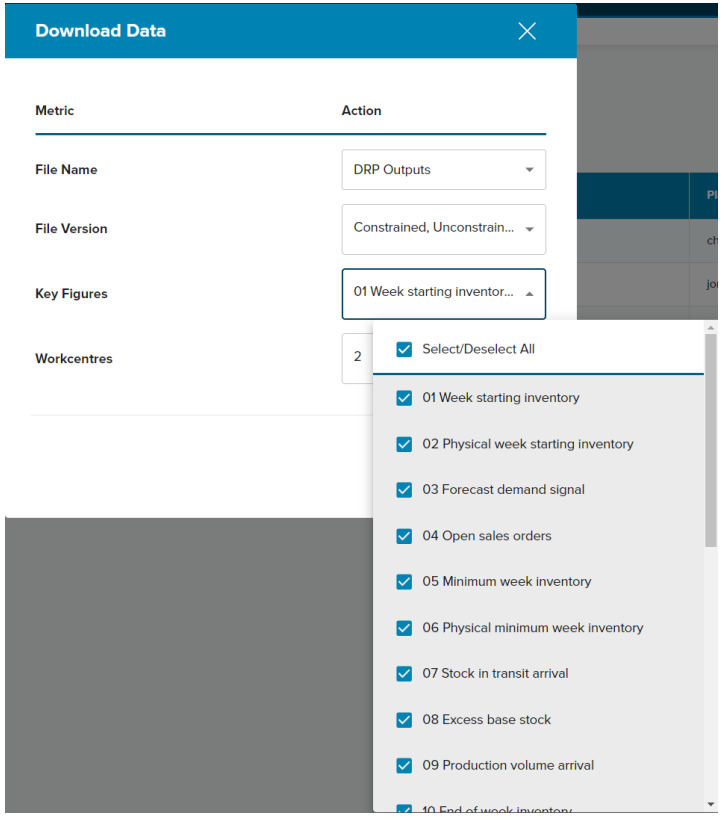
Constrained and Unconstrained plan details are available.

The user can select to download the following files:

- Workcentre Output: the production plan by week by work centre for all skus
- DRP Outputs: a full view of all measures for all Workcentre-SKU-DestinationSites for the plan horizon
- SupplyVue Plan: a plan in the format of the SupplyVue FeedSpec for uploading to SV for next weeks plan run, once the plan is finalised (if SupplyVue is the system of record for the schedule and firm planned orders)

Plan download





Plan download

All of the outputs can be downloaded for one, some or all of the workcentres.

When viewing the DRP outputs the user can select to export all or a selection of the key metrics.

Workcentre list

Workcentre list

For each workcentre in the scope of the plan, a table displays KPIs that measure the quality of the plan.

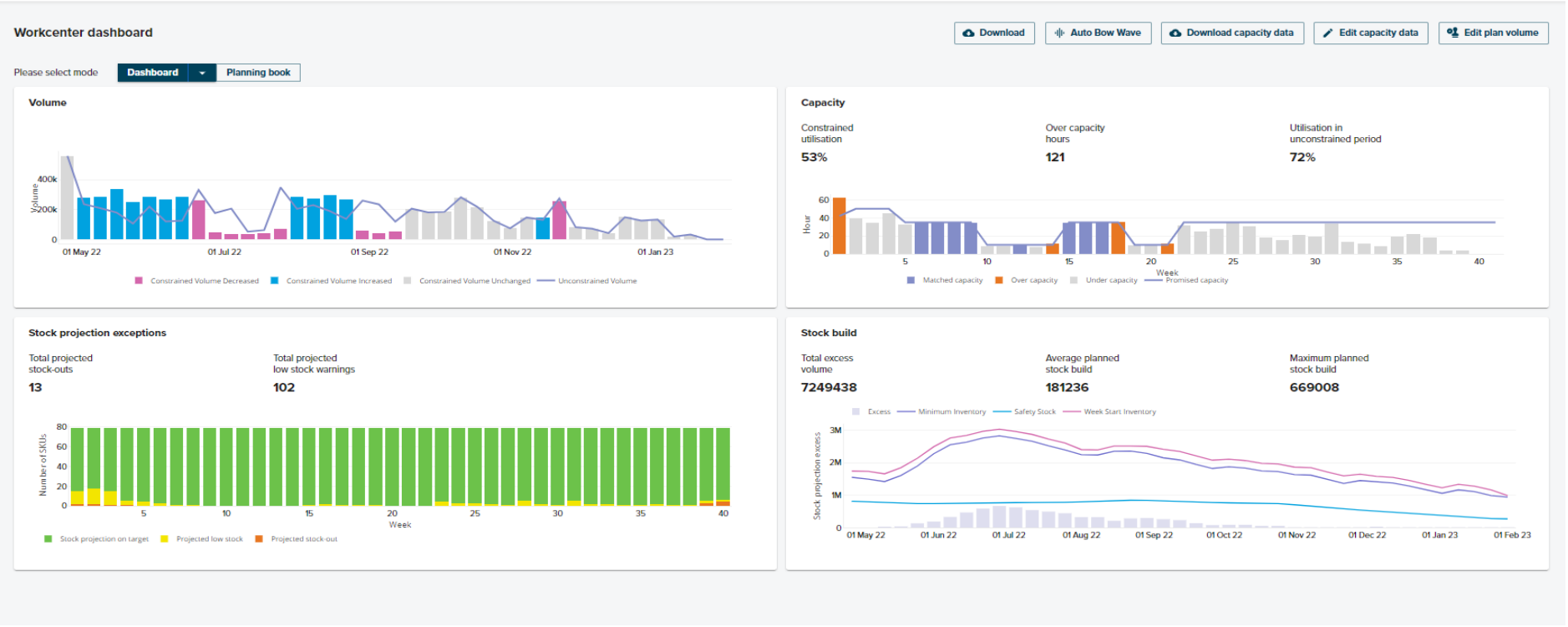
The KPIs should be used to identify which Workcentres need action prior to approval:

- Is the workcentre over capacity?
- Are there stock exceptions?
- Is there a stock build?

The user can increase the number of rows visible on the page.

Additional KPIs are available and the user can select the KPIs that are displayed by selecting '**COLUMNS**' and then selecting the columns (KPIs) that are to be included in the table.

WorkCentre dashboard

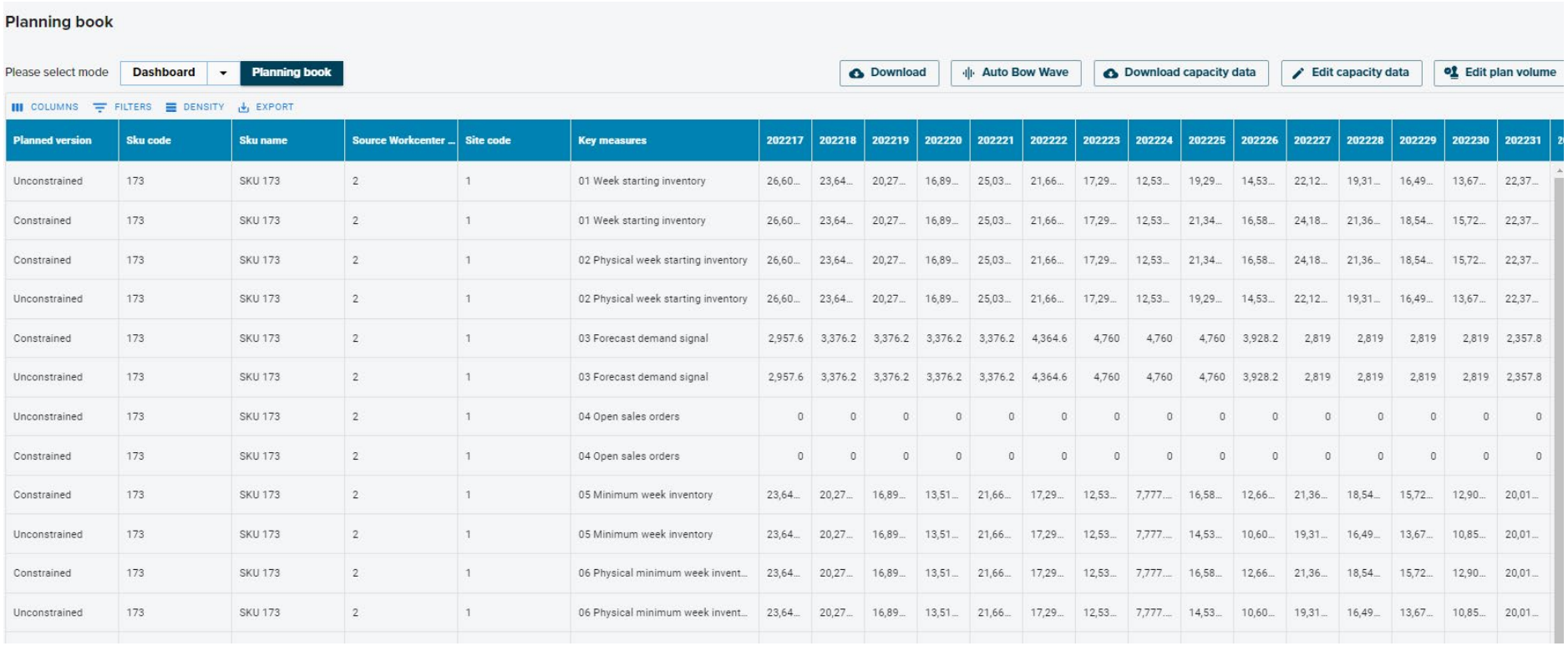


WorkCentre dashboard

You can view a summary of the plan for each workcentre on the WorkCentre dashboard page. The dashboard has the following charts:

- **Volume chart**: showing the constrained volume by week on the workcentre, compared with the unconstrained volume
- **Capacity chart:** showing the required hours by week on the workcentre compared to the available hours
- **Stock projection exceptions chart:** Showing the week-by-week SKU-site combination count of SKUs in which the stock projection is on target (Green), below safety level, but non-zero (amber) or projecting zero stock (red)
- **Stock build chart:** showing the inventory projection compared to safety stock and highlighting the weeks where there is a inventory stock build as a result of bringing volume forward to resolve over-capacity weeks

WorkCentre Planning book



Planned version	Sku code	Sku name	Source Workcenter ...	Site code	Key measures	202217	202218	202219	202220	202221	202222	202223	202224	202225	202226	202227	202228	202229	202230	202231
Unconstrained	173	SKU 173	2	1	01 Week starting inventory	26,60...	23,64...	20,27...	16,89...	25,03...	21,66...	17,29...	12,53...	19,29...	14,53...	22,12...	19,31...	16,49...	13,67...	22,37...
Constrained	173	SKU 173	2	1	01 Week starting inventory	26,60...	23,64...	20,27...	16,89...	25,03...	21,66...	17,29...	12,53...	21,34...	16,58...	24,18...	21,36...	18,54...	15,72...	22,37...
Constrained	173	SKU 173	2	1	02 Physical week starting inventory	26,60...	23,64...	20,27...	16,89...	25,03...	21,66...	17,29...	12,53...	21,34...	16,58...	24,18...	21,36...	18,54...	15,72...	22,37...
Unconstrained	173	SKU 173	2	1	02 Physical week starting inventory	26,60...	23,64...	20,27...	16,89...	25,03...	21,66...	17,29...	12,53...	19,29...	14,53...	22,12...	19,31...	16,49...	13,67...	22,37...
Constrained	173	SKU 173	2	1	03 Forecast demand signal	2,957.6	3,376.2	3,376.2	3,376.2	3,376.2	4,364.6	4,760	4,760	4,760	3,928.2	2,819	2,819	2,819	2,819	2,357.8
Unconstrained	173	SKU 173	2	1	03 Forecast demand signal	2,957.6	3,376.2	3,376.2	3,376.2	3,376.2	4,364.6	4,760	4,760	4,760	3,928.2	2,819	2,819	2,819	2,819	2,357.8
Unconstrained	173	SKU 173	2	1	04 Open sales orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Constrained	173	SKU 173	2	1	04 Open sales orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Constrained	173	SKU 173	2	1	05 Minimum week inventory	23,64...	20,27...	16,89...	13,51...	21,66...	17,29...	12,53...	7,777....	16,58...	12,66...	21,36...	18,54...	15,72...	12,90...	20,01...
Unconstrained	173	SKU 173	2	1	05 Minimum week inventory	23,64...	20,27...	16,89...	13,51...	21,66...	17,29...	12,53...	7,777....	14,53...	10,60...	19,31...	16,49...	13,67...	10,85...	20,01...
Constrained	173	SKU 173	2	1	06 Physical minimum week invent...	23,64...	20,27...	16,89...	13,51...	21,66...	17,29...	12,53...	7,777....	16,58...	12,66...	21,36...	18,54...	15,72...	12,90...	20,01...
Unconstrained	173	SKU 173	2	1	06 Physical minimum week invent...	23,64...	20,27...	16,89...	13,51...	21,66...	17,29...	12,53...	7,777....	14,53...	10,60...	19,31...	16,49...	13,67...	10,85...	20,01...

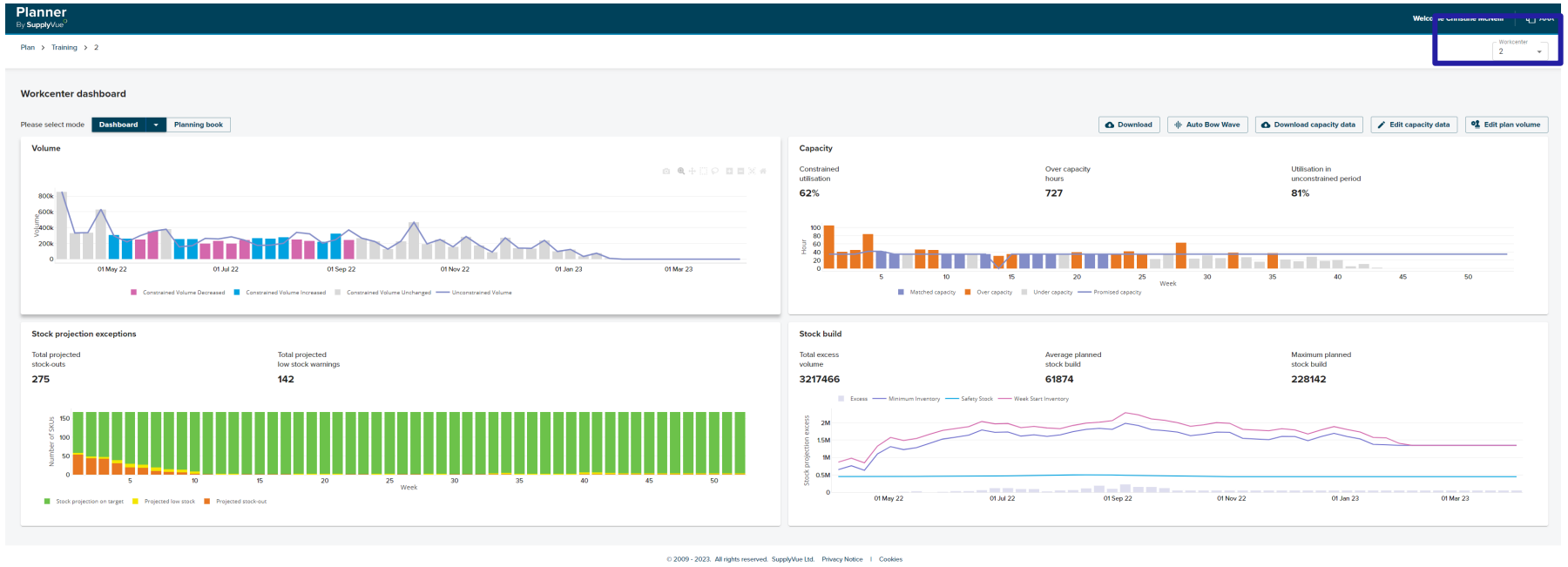
WorkCentre Planning book

The user can toggle between the Workcentre dashboard and the Planning book

The planning book shows all the key figures relating to Distribution Requirement Plan (DRP).

User Guide: SupplyVue Network Planner

WorkCentre selection



WorkCentre selection

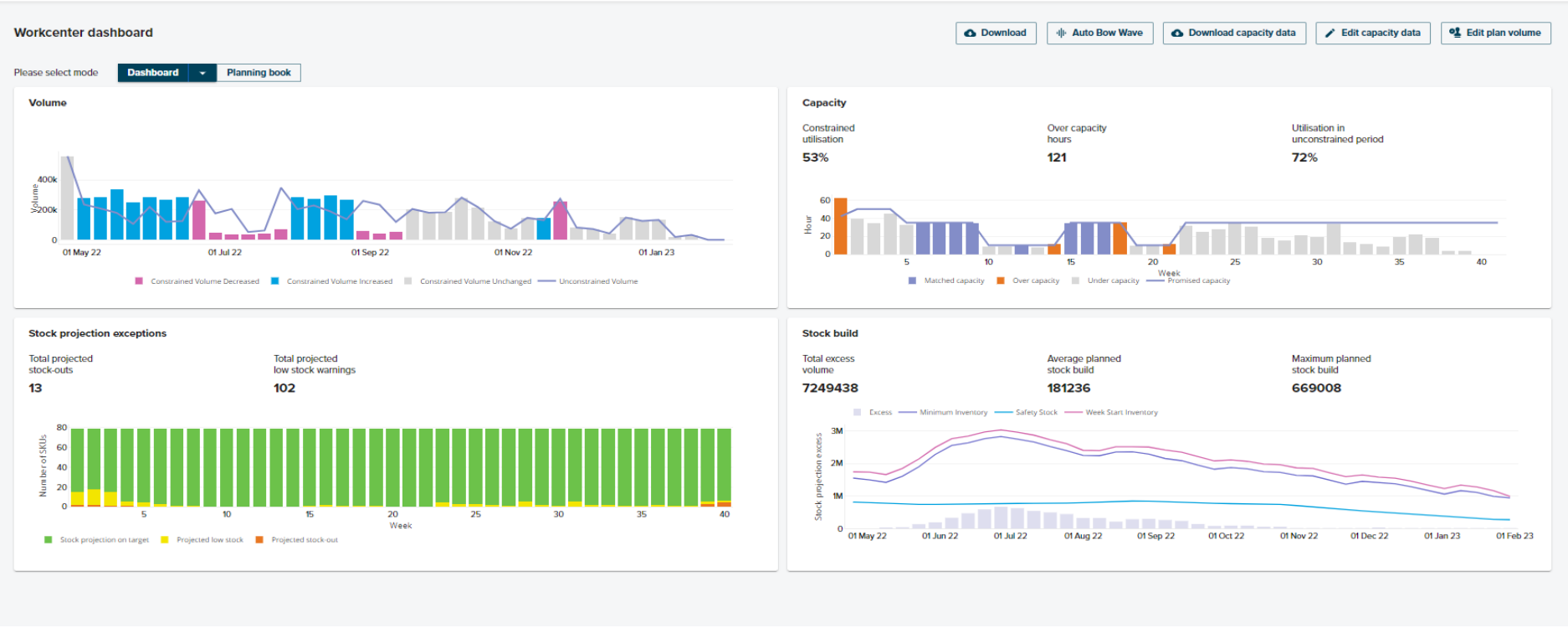
The user can use the selector on the RHS of the page to view other workcentres

SupplyVue

Section 4: Amending and finalising the plan

User Guide: SupplyVue Network Planner

WorkCentre Dashboard



WorkCentre Dashboard – Planner actions

Download - download data just for that work centre.

Auto-Bow wave - This action will try to resolve the plan by making only actual forecast demand or firm orders and delay any safety stock build requirement until capacity is available.

Download Capacity Data – download the weekly planned volumes and hours utilised for production and changeovers.

Edit Capacity Data – allows the user to adjust the hours available. This is useful if the level of stock pre-build is unacceptable, and hours can be adjusted.

Edit Plan Volume – allows user to adjust the planned volume up or down and move it to a different week. This can be useful to prevent low stock situations or capacity issues. Volume can be moved to any week irrespective of template or frozen periods.

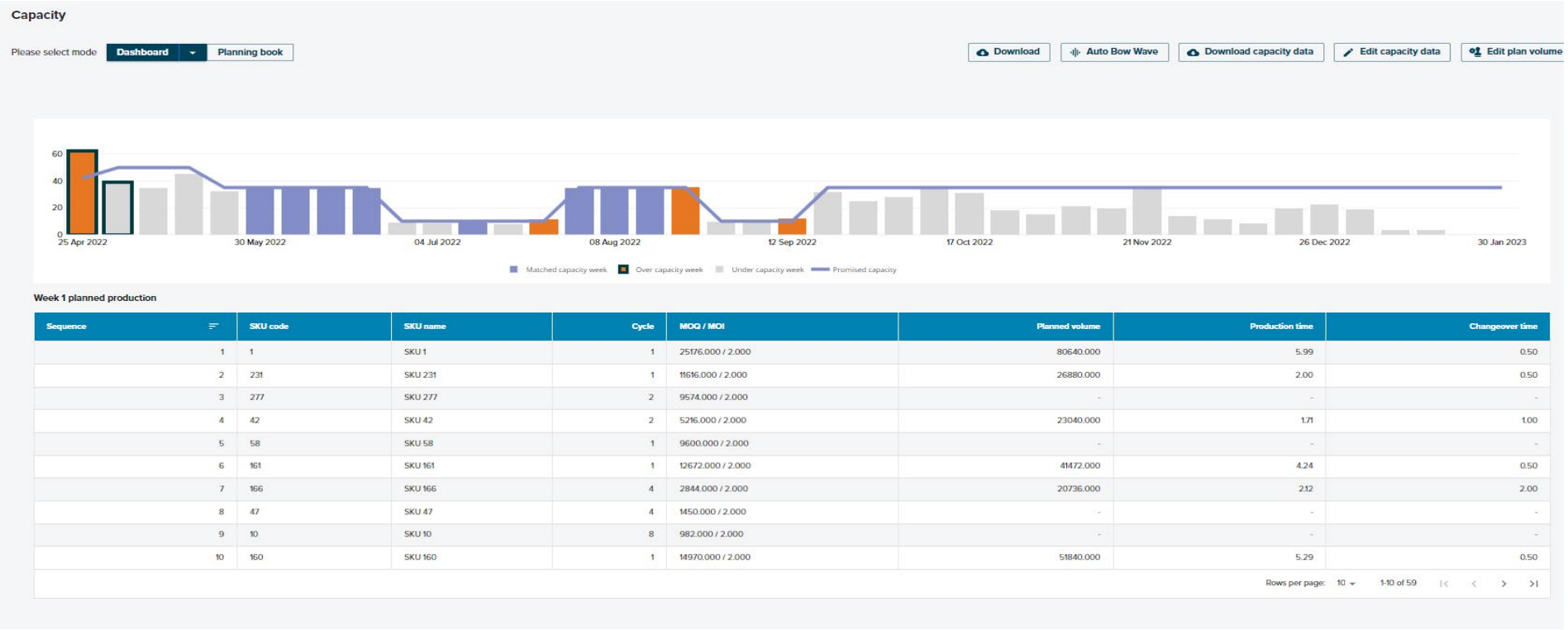
Clicking on any pane takes you to a detailed view of that aspect of the plan.

Bow-wave correction

Automatic bow wave correction

- Planning Bow Wave – on first review of the plan there may be a “bow wave” – this is created if there is a capacity constraint in the first few weeks of the plan and no space before to move volume into.
- This can be solved by pressing **‘Auto bow wave’** which will try to resolve the plan by making only actual forecast demand or firm orders and delay any safety stock build requirement until capacity is available
- Using Autobow wave may increase the number of low stock exceptions weeks – eg SKUs which are under safety stock at a particular site in a particular week or increase the depth of the low stock position

Capacity dashboard



Sequence	SKU code	SKU name	Cycle	MOQ / MOI	Planned volume	Production time	Changeover time
1	1	SKU 1	1	25176.000 / 2.000	80640.000	5.99	0.50
2	231	SKU 231	1	11616.000 / 2.000	26880.000	2.00	0.50
3	277	SKU 277	2	9574.000 / 2.000	-	-	-
4	42	SKU 42	2	5216.000 / 2.000	23040.000	1.71	1.00
5	58	SKU 58	1	9600.000 / 2.000	-	-	-
6	161	SKU 161	1	12672.000 / 2.000	41472.000	4.24	0.50
7	166	SKU 166	4	2844.000 / 2.000	20736.000	2.12	2.00
8	47	SKU 47	4	1450.000 / 2.000	-	-	-
9	10	SKU 10	8	982.000 / 2.000	-	-	-
10	160	SKU 160	1	14970.000 / 2.000	51840.000	5.29	0.50

Rows per page: 10 1-10 of 59

Capacity dashboard

The capacity chart shows the total required hours for each week on the workcentre versus the available hours.

By clicking the week column in the chart, the table below the chart will update to show products made in that week.

If the user wishes to amend the available hours to solve the plan then click the '**Edit Capacity data**' button.

User Guide: SupplyVue Network Planner

Stock build dashboard

Clicking on the Stock build pane takes you to a detailed view of the stock build

The user can see when SKUs are being stock built and by how much.

By clicking on the stock projection chart legend, the data series can be removed/ added to the chart to make it easier to see what is happening

If the level of stock build is considered unacceptable and additional hours are available the user can “**Edit capcity data’**

Or the planner can choose different SKUs to use for constraining (‘**Edit settings’** from the plan overview page) or ‘**Edit plan volume’** for specific SKUs.

Resolving capacity issues and managing stock builds

If there is flexibility to add in labour to resolve constraints or move labour between workcentres that can be managed in the edit capacity screen

Similarly if the level of a stock build is too large this can be mitigated by adding on overtime shifts prior to the demand peak

- This is a strategic decision to offset stock holding costs with operational costs and should ideally be taken as part of the S&OP or S&I meeting

Edit capacity data

Edit work centre capacity

SAVE DISCARD ALL CHANGES COLUMNS FILTERS DENSITY EXPORT

	Week	Contrained horizon	Unconstrained hours	Constrained hours	Constraining difference	Default capacity	Adjusted capacity	Capacity adjustment	Capacity utilisation	Spare capacity	Cumulative Utilisation
	Week 01 (2022-04-25)	true	72.5	72.5	0	42	42	0	1.73%	0	1.73%
	Week 02 (2022-05-02)	true	19.84	34.631	14.791	42	42	0	0.82%	7.369	1.28%
	Week 03 (2022-05-09)	true	27.45	35	7.55	35	35	0	1.00%	0	1.19%
	Week 04 (2022-05-16)	true	57.11	33.272	-23.838	35	35	0	0.95%	1.728	1.14%
	Week 05 (2022-05-23)	true	31.57	33.496	1.926	35	35	0	0.96%	1.504	1.11%
	Week 06 (2022-05-30)	true	13.62	13.62	0	35	35	0	0.39%	21.38	0.99%
	Week 07 (2022-06-06)	true	29.58	35	5.42	35	35	0	1.00%	0	0.99%
	Week 08 (2022-06-13)	true	25.22	28.469	3.249	35	35	0	0.81%	6.531	0.97%
	Week 09 (2022-06-20)	true	31.08	34.8	3.72	35	35	0	0.99%	0.2	0.98%
	Week 10 (2022-06-27)	true	23.91	35	11.09	35	35	0	1.00%	0	0.98%
	Week 11 (2022-07-04)	true	34.64	13.575	-21.065	0	0	0		0	1.01%
	Week 12 (2022-07-11)	true	29.19	29.19	0	35	35	0	0.83%	5.81	1.00%
	Week 13 (2022-07-18)	true	20.07	26.695	6.625	35	35	0	0.76%	8.305	0.98%
	Week 14 (2022-07-25)	true	27.78	35	7.22	35	35	0	1.00%	0	0.98%
	Week 15 (2022-08-01)	true	16.59	35	18.41	35	35	0	1.00%	0	0.98%
	Week 16 (2022-08-08)	true	19.86	35	15.14	35	35	0	1.00%	0	0.98%
	Week 17 (2022-08-15)	true	65.69	35.009	-30.681	35	35	0	1.00%	0	0.98%

Amending the available hours on a workcentre

For the selected workcentre the table has a row for each week.

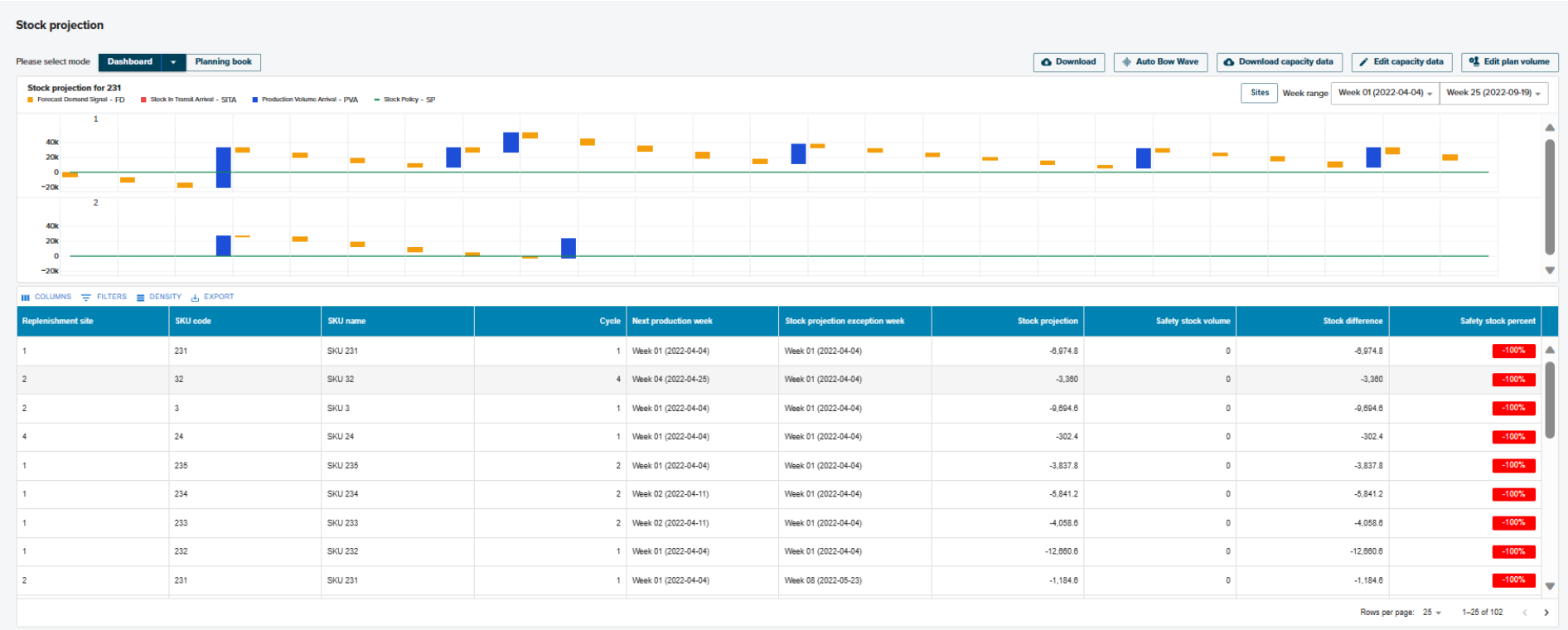
The table shows the required hours for both the unconstrained and constrained plans and the difference between the two plans.

It also shows the default capacity hours by week and allows the user to amend these hours by adding or subtracting hours from the default number in the “Capacity adjustment” column

The user can amend any number of weeks, then press the **SAVE’** button to save the amendments.

Once saved, the ‘**Update plan**’ button at the bottom right of the screen is enabled and the user can re-run the constrained plan for the adjusted available hours.

Stock projection dashboard



Replenishment site	SKU code	SKU name	Cycle	Next production week	Stock projection exception week	Stock projection	Safety stock volume	Stock difference	Safety stock percent
1	231	SKU 231	1	Week 01 (2022-04-04)	Week 01 (2022-04-04)	-6,974.8	0	-6,974.8	-100%
2	32	SKU 32	4	Week 04 (2022-04-25)	Week 01 (2022-04-04)	-3,360	0	-3,360	-100%
2	3	SKU 3	1	Week 01 (2022-04-04)	Week 01 (2022-04-04)	-9,694.6	0	-9,694.6	-100%
4	24	SKU 24	1	Week 01 (2022-04-04)	Week 01 (2022-04-04)	-302.4	0	-302.4	-100%
1	235	SKU 235	2	Week 01 (2022-04-04)	Week 01 (2022-04-04)	-3,837.8	0	-3,837.8	-100%
1	234	SKU 234	2	Week 02 (2022-04-11)	Week 01 (2022-04-04)	-5,841.2	0	-5,841.2	-100%
1	233	SKU 233	2	Week 02 (2022-04-11)	Week 01 (2022-04-04)	-4,058.6	0	-4,058.6	-100%
1	232	SKU 232	1	Week 01 (2022-04-04)	Week 01 (2022-04-04)	-12,660.6	0	-12,660.6	-100%
2	231	SKU 231	1	Week 01 (2022-04-04)	Week 08 (2022-05-23)	-1,184.6	0	-1,184.6	-100%

Stock projection dashboard

Before the plan is finalised inventory exceptions in the short-term horizon should be reviewed and resolved if possible.

The user can filter for the date range they are interested in. The table will list the SKU and Site combinations where there is a projected inventory policy violation within that date range.

The table can be filtered and sorted as required to identify the products most at risk.

Clicking on a row in the table updates the chart to show the stock projection for that SKU at all sites.

The user should identify all the SKUs with an inventory violation that they wish to correct and then use the '**Edit Plan Volume**' function to update the planned orders.

Resolving stock exceptions

In order to edit the planned volume to resolve stock projection exceptions it may be useful to open two windows

- Stock projection exception report
- Edit planned volume report

Alternatively, you can download the Stock projection exception report – just be sure to select all the rows in the table

Use the Stock Projection to identify the SKUs which are at risk

- Filter to show only the destination sites
- Filter to show only the stock exceptions in weeks that you can influence (beyond the DLT)
- Sort the chart by % of safety stock to highlight the SKUs most at risk
- Identify when stock of each SKU needs to arrive by to resolve the issue

Once you have a list of SKUs that you need to amend you can use the Edit Plan Volume chart and update the arrival quantities

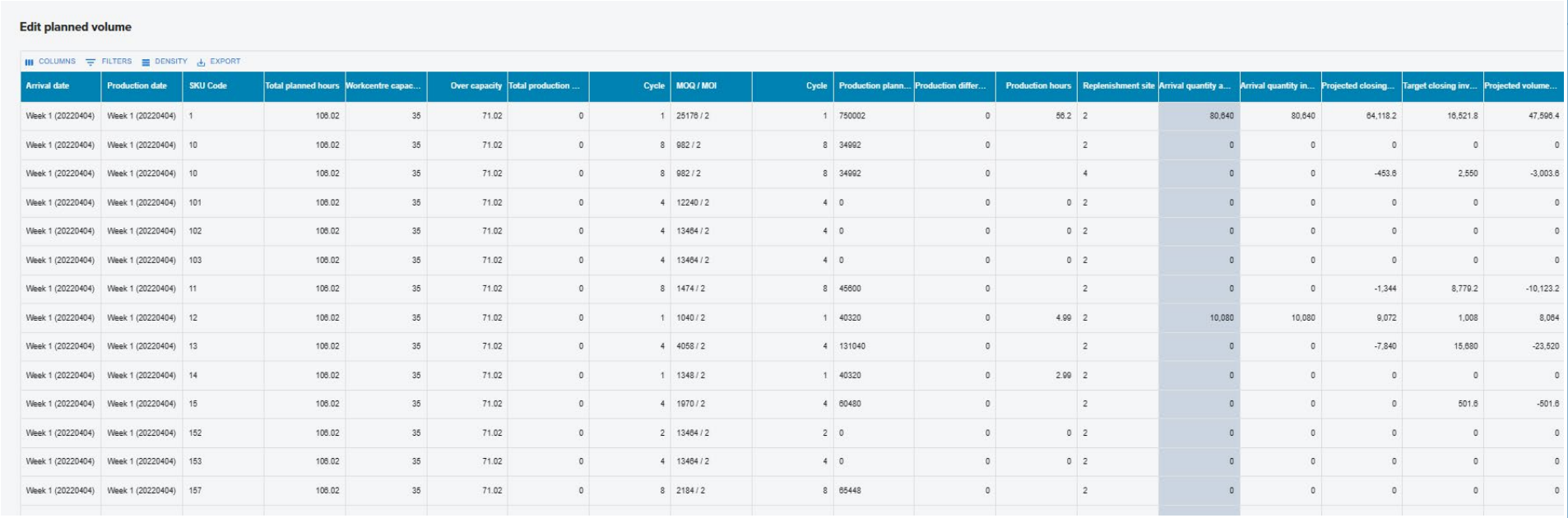
- Filter by SKU – remember if you are bringing product forward to an earlier week you should also reduce the quantity in the original planned arrival week

Resolving capacity exceptions

In order to edit the planned volume to resolve a capacity issue it may be useful to open four windows

- Capacity view to identify the overcapacity weeks
- Capacity data download to identify the SKUs which have excess stock, possibly driven by large MOQs
  - For the next plan run this can be managed using edit settings Safety Stock Factor or MOQ factor which will prevent SKUs being made if the safety stock is just dipped into and the required quantity is less than a certain factor of and MOQ
- Stock projection to review the current stock projection of the SKUs you are adjusting
- Edit planned volume report filtered by production week and SKUs to reduce the planned volumes
- Volumes can be reduced in the short term and increased in later weeks to balance the overall production

Edit planned volume



Arrival date	Production date	SKU Code	Total planned hours	Workcentre capac...	Over capacity	Total production ...	Cycle	MOQ / MOI	Cycle	Production plann...	Production differ...	Production hours	Replenishment site	Arrival quantity a...	Arrival quantity in...	Projected closing...	Target closing inv...	Projected volume...
Week 1 (20220404)	Week 1 (20220404)	1	106.02	35	71.02	0	1	25176 / 2	1	750002	0	56.2	2	80,640	80,640	64,118.2	16,521.8	47,596.4
Week 1 (20220404)	Week 1 (20220404)	10	106.02	35	71.02	0	8	982 / 2	8	34992	0		2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	10	106.02	35	71.02	0	8	982 / 2	8	34992	0		4	0	0	-453.6	2,550	-3,003.6
Week 1 (20220404)	Week 1 (20220404)	101	106.02	35	71.02	0	4	12240 / 2	4	0	0	0	2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	102	106.02	35	71.02	0	4	13464 / 2	4	0	0	0	2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	103	106.02	35	71.02	0	4	13464 / 2	4	0	0	0	2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	11	106.02	35	71.02	0	8	1474 / 2	8	45600	0		2	0	0	-1,344	8,779.2	-10,123.2
Week 1 (20220404)	Week 1 (20220404)	12	106.02	35	71.02	0	1	1040 / 2	1	40320	0	4.99	2	10,080	10,080	9,072	1,008	8,064
Week 1 (20220404)	Week 1 (20220404)	13	106.02	35	71.02	0	4	4058 / 2	4	131040	0		2	0	0	-7,840	15,680	-23,520
Week 1 (20220404)	Week 1 (20220404)	14	106.02	35	71.02	0	1	1348 / 2	1	40320	0	2.99	2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	15	106.02	35	71.02	0	4	1970 / 2	4	60480	0		2	0	0	0	501.6	-501.6
Week 1 (20220404)	Week 1 (20220404)	152	106.02	35	71.02	0	2	13464 / 2	2	0	0	0	2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	153	106.02	35	71.02	0	4	13464 / 2	4	0	0	0	2	0	0	0	0	0
Week 1 (20220404)	Week 1 (20220404)	157	106.02	35	71.02	0	8	2184 / 2	8	65448	0		2	0	0	0	0	0

Editing the planned volume

The Edit planned volume table enables the user to over-ride the calculated plan and edit the actual volume in the plan for each SKU in each week.

The user may be doing this to resolve a capacity issue in a near term week or resolving a projected inventory policy violation.

The user can manage which columns are shown in the table with the '**COLUMNS**' feature.

The table enables the user to edit the volume to be received at a site and will automatically adjust the corresponding production quantity.

When the editing is complete the user can either click:

- '**APPLY CHANGES**' which will re-run the entire plan treating any changed orders as additional frozen orders and re-constraining the plan around those .
- '**SAVE PLAN**' which will re-calculate the stock projection for any changed SKUs but leaving the rest of the plan unchanged.

SupplyVue

Glossary of Metrics

Glossary of Metrics (1)

Metric	Definition
SKU count	Distinct count of products
Production amount	Average weekly production amount
Capacity usage	Average weekly capacity usage in hours
Capacity supply	Average weekly available capacity supply in hours
Default capacity	Average weekly default available capacity supply in hours
Total capacity added	Total capacity adjustment in hours
Capacity adjustments	Number of weeks with capacity adjustments
Capacity utilisation	Overall work centre capacity utilisation
Total spare capacity	Total unused capacity hours versus capacity supply over plan horizon
Capacity exceptions	Number of weeks over capacity in plan horizon
Over capacity hours	Total over capacity hours in over capacity weeks
Constrained count	Number of products volume adjusted due to plan constraining

Glossary of Metrics (2)

Metric	Definition
Constraining difference	Average weekly difference between constrained and unconstrained volume
Stock build count	Number of products with planned stock builds
Planned stock build	Average weekly planned stock build
Short stock count	Number of products with planned stock reductions
Planned stock reduction	Average weekly planned stock reduction
Projected stock amount	Average projected stock volume over horizon
Safety stock amount	Average safety stock volume over horizon
Weekly sales rate	Average weekly sales rate over the plan horizon
Average stock duration	Average projected stock duration in days
Safety stock duration	Average safety stock duration in days
Projected stock outs	Number of product sites with projected stock outs
Low stock warnings	Number of product sites with projected low stock

Glossary of Metrics (3)

Metric	Definition
Plan ID	Unique plan version ID
Is constrained	States whether the plan is constrained or unconstrained
Production plan horizon	Number of weeks in the production plan horizon
Total production amount	Total production amount over plan horizon
Total production time	Total actual production hours over plan horizon
Production time	Average weekly actual production hours
Total change over time	Total change over time in hours over plan horizon
Change over time	Average weekly change over time in hours
Total capacity usage	Total capacity usage in hours over plan horizon
Percent change over	Proportion of capacity usage loss due to change overs
Total capacity supply	Total available capacity supply in hours over plan horizon
Total default capacity	Total default available capacity supply in hours over plan horizon

Glossary of Metrics (4)

Metric	Definition
Total constraining difference	Difference between constrained and unconstrained volume over plan horizon
Max constraining difference	Maximum weekly stock adjustment due to constraining over plan horizon
Total planned stock build	Total planned stock build over plan horizon
Max planned stock build	Maximum weekly planned stock build
Total planned stock reduction	Total planned stock reduction over plan horizon
Max planned stock reduction	Maximum weekly stock adjustment due to constraining over plan horizon
Template violations	Number of template violations
Replenishment plan horizon	Number of weeks in the replenishment plan horizon
Planned Volume	Planned Volume in Reporting UOM
Arrival Volume	Arriving volume in Reporting UOM