



Work instructions

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1. Creation of a Production Order

A Production Order can be created in two different ways:

- From the Planned Production Orders: these Production Orders are planned by the Master Planning and are created automatically by D365. They result from the S&OP outcome.
- From nothing (no purchase plan): this kind of Production Order is created when there is no plan for a demand (unexpected) which might pop up out of the S&OP cycle (upside, urgent PRO to raise ...).

1.1. Create a Production Order from the Planned Production Orders (S&OP outcome)

Pls follow the below path to reach your Planned Production Orders.

Finance and Operations

Master planning > Workspaces > Master planning

01CE

Copy plan Delete plan Supply schedule Firming history Unfinished planning processes Planned intercompany demand Options

Master planning

Master plan
O&F

Summary of the current plan

Planned orders

Master planning
Last run on
7/7/2020 10:35:07 AM
Run History

Calculated delays

Actions

Intercompany master planning

Planned orders

Urgent

Filter

Number	Reference
MRP-000004084	Planned purchase orders
MRP-000004085	Planned purchase orders
MRP-000004091	Planned purchase orders
MRP-000004092	Planned purchase orders
MRP-000004093	Planned purchase orders

See more

Be careful, the Plan should be O&F.

Planned orders

Filter

Plan
O&F

Number	Reference	Item number	Product name	Formulation
MRP-00000949	Planned production orders	111031100	SCelta NL 10X1L	cyflufenamid 100 g/L SC
MRP-000004083	Planned purchase orders	104044100	JET 5 UK 20L	peracetic acid+hydrogenperoxi...

Once in the Planned Orders, you can filter the Planned Production Orders through the "Reference" column.

Planned orders

Filter

Plan
O&F

Number	Reference	Item number	Product name	Formulation
MRP-00000949	↑ Sort first to last	031100	SCelta NL 10X1L	cyflufenamid 100 g/L SC
MRP-000004083	↓ Sort last to first	044100	JET 5 UK 20L	peracetic acid+hydrogenperoxi...
MRP-000004084		031123	OLIE-H NL 200L	
MRP-000004085		031123	OLIE-H NL 200L	
MRP-000004086	Reference is exactly	0311001	Copy item	cyflufenamid 100 g/L SC
MRP-000004087	planned production orders	0311001	Copy item	cyflufenamid 100 g/L SC
MRP-000004088		0311001	Copy item	cyflufenamid 100 g/L SC

Apply Clear

1.2. Check Planned Production Details

Open the planned production order and check the details are correct.

- BOM – the BOM field must be complete, if the correct BOM is not available please contact a key user
- Route – the Route field must be complete, if the correct Route is not available please contact a key user

Planned supply			
From warehouse	PLANNED PRODUCTION ORDERS	Time	BOM number
	Delivery date	10:00	PC1310
	16/07/2021	Requirement quantity	Route number
		20,000.00	RTE-000003

Action

- End date – check this is in line with the date you want to complete production. If it is later than the delivery date then this would suggest there is a bottleneck to delivering on time.

Planned orders | NEW RECORD

MRP-000344480: 109212100 ERADICOAT T 27% SL MA 4X5L SAOAS

General					
Number	Formulation	Style	GROUPS	REQUIREMENT	SCHEDULED
MRP-000344480	maltodextrin 283 g/l SL		Item group	Requirement date	Start date
Reference	Configuration	Directly derived requirement	FP-M-O	16/07/2021	25/06/2021
Planned production orders		<input type="radio"/> No	Buyer group	Delivery date	End date
Item number	Size	Supply forecast		16/07/2021	16/07/2021
109212100		<input type="radio"/> No	Vendor group	Time	
Product name	Color			10:00	
ERADICOAT T 27% SL MA 4X...					

1.2.1. Explode a Planned Production Order

The first thing to do before approving or firming a planned production order is to check if there is any bottleneck and, to do so you need to explode the BOM:

Finance and Operations

Edit New Delete Firm Firm all Approve Planned order View Options

Display

Related information

View

Requirements

Dimensions Capacity reservations Gantt chart Gantt Chart - Fast view Requirement profile

On-hand inventory Firming history Explosion

Supply schedule Multilevel pegging

Operation completed

Planned orders | NEW RECORD

MRP-000276153: 204000034 C00218 FLUFENACET 500G/L SC SUB ASSY 60 SAFAPAC

General

In the explosion view it can be useful to have dates showing in the BOM overview, go to the set up option and in the pop up screen turn on the dates and select 'OK'.

Finance and Operations

Save Transfer delay date Reread Update Setup Planned orders Explosion view Options

204000034 : MRP-000276153

Explosion

Order date
☒ Yes

Delayed to date
☒ Yes

Explosion

Planned production orders, number MRP-000276153, item 204000034, Site 01, Warehouse UK002

Overview Gantt Action Critical on-hand inventory Explanation

- C00218 FLUFENACET 500G/L SC SUB ASSY 60 SAFAPAC / 204000034 / UK002 / 4500.00 / 22/06/2021 / 13/07/2021 / MRP-000276153 / Planned production orders
- FORMULATION C00218 FLUFENACET 500g/l SC SUB ASSY 60 SAFAPAC / 701000214 / UK002 / 4500.00 / 13/07/2021 / 24/03/2021 / MRP-000278545 / Planned purchase orders (dynamic)
- CLEANING FIXED COSTS FLUFENACET 500 SC / 703044033 / UK002 / 1.00 / 13/07/2021 / 24/03/2021 / MRP-000278546 / Planned purchase orders (dynamic)
- IN PROXEL GXL DRUM 200KG / 202000034 / UK002 / 501.00 / -- / -- / -- / On-hand
- IN GLYCEROL BAG 25KG / 202000072 / UK002 / 25.00 / -- / -- / -- / On-hand
- IN TENSIOFIX 96DB08 DRUM 200KG / 202000073 / UK002 / 19.00 / -- / -- / -- / On-hand
- IN TENSIOFIX SC BAG 15KG / 202000074 / UK002 / 14.00 / -- / -- / -- / On-hand
- IN TENSIOFIX LO51 DRUM 180KG / 202000075 / UK002 / 180.00 / -- / -- / -- / On-hand
- IN TENSIOFIX 821 BAG 25KG / 202000076 / UK002 / 81.31 / -- / -- / -- / On-hand
- AI FLUFENACET 98.3% EUR BIG BAG ON CP3 650KG / 201000060 / UK002 / 18200.00 / 24/03/2021 / 22/06/2021 / MRP-000277178 / Planned purchase orders**
- IN GLYCEROL BAG 25KG / 202000072 / UK002 / 300.00 / 20/04/2021 / 05/05/2021 / MRP-000277230 / Planned purchase orders
- IN TENSIOFIX 96DB08 DRUM 200KG / 202000073 / UK002 / 200.00 / 21/05/2021 / 05/04/2021 / MRP-000277242 / Planned purchase orders
- IN TENSIOFIX SC BAG 15KG / 202000074 / UK002 / 105.00 / 21/05/2021 / 05/04/2021 / MRP-000277248 / Planned purchase orders

Explosion Update line Inquiries Inventory

L...	↑	Reference	Number	Requirement...	Requirement quant...	CW coverage...	Coverage pla...	Requirement date	Requested date	Delay (days)	Action	Item number
2		On-hand			14.00		14.00					202000074
2		On-hand			180.00		64.41					202000075
2		On-hand			81.31		81.31					202000076
2		Planned purchase orders	MRP-000277178		18,200.00		12,573.34	22/06/2021	07/06/2021	15	Advance	201000060
2		Planned purchase orders	MRP-000277230		300.00		300.00	01/06/2021			Postpone	202000072
2		Planned purchase orders	MRP-000277242		200.00		200.00	01/06/2021			Postpone	202000073
2		Planned purchase orders	MRP-000277248		105.00		105.00	01/06/2021			Postpone	202000074

If you do not yet have commitment and you only want to approve the production order, explained in the next step, keep in mind the order date of the materials in the explosion overview, if the order date is only a few days away then you should aim to firm your production in plenty of time and not leave it with the approved status otherwise you will face new bottlenecks.

If, for any reason, you cannot commit on production yet and don't want to go ahead in your Production Order authorization, you can just prepare it (checking if the quantity, date ... are correct) and approve it as follows:

Approving your Production Order will enable you to save all your data because; otherwise, since the master planning is running every night, your data will disappear the following day if the sales forecasts were adjusted in the meantime.

1.2.3. Firm a Production Order

As long as a PRO is not firmed, it remains a draft. So, on the other hand, if you can go ahead in the Production Order authorization, it can be firmed immediately and, in this case, no need to Approve the PRO.
The PRO should then be firmed:

The screenshot shows the SAP Master Planning interface. The breadcrumb navigation is 'Finance and Operations > Master planning > Workspaces > Master planning'. The top toolbar contains buttons for 'Edit', 'New', 'Delete', 'Firm', 'Firm all', 'Approve', 'Planned order', 'View', and 'Options'. The 'Firm all' button is highlighted with a red arrow. Below the toolbar, there are sections for 'Personalize', 'Page options', and 'Share'. The main content area displays 'Planned orders' for 'MRP-000000949: 111031100 SCelta NL 10X1L' at 'Site 01'. The 'General' tab is active, showing fields for 'Number', 'Reference', 'Item number', 'Product name', 'Color', 'Style', 'Requirement date', 'Delivery date', 'Time', 'Status', 'Planning formula', and 'PLAN'. The 'Requirement date' is 12/4/2020, 'Delivery date' is 12/4/2020, 'Time' is 10:00 AM, and 'Status' is 'Approved'.

The Production Orders can be firmed inside the PRO itself or from the main page of the Master Planning view. Several PROs can be firmed at the same time through the function "Firm all".

When a PRO is firmed, it is no longer visible in the "Planned Production Orders" list, the PRO reference (MRP...) changes and the PRO is moved to "All Production Orders".

It is also at this time that the service PO to the toller is automatically created (please refer to Work Instruction 8U61 for the service PO creation).

The screenshot shows the SAP 'All production orders' list. The breadcrumb navigation is 'Finance and Operations > Production control > Production orders > All production orders'. The top toolbar contains buttons for 'Delete', 'New production order', 'New batch order', 'Production order', 'Schedule', 'Warehouse', 'View', 'Manage costs', and 'Options'. The 'Production order' button is highlighted. Below the toolbar, there are sections for 'Maintain', 'Selection list', 'Process', 'Inventory', and 'Production details'. The main content area displays a table of production orders. The first row is highlighted with a red box.

✓	Production ↓	Item number	Product name	Formulation	CW quantity	CW unit	Quantity
	PR000143	111031100	SCelta NL 10X1L	cyflufenamid 100 g/L SC			150.00
	PR000142	104031102	JET 5 NL 20L	peracetic acid+hydrogenperoxi...			100,000.00
	PR000140	1110311001	Copy item	cyflufenamid 100 g/L SC			15,000.00
	PR000139	1110311001	Copy item	cyflufenamid 100 g/L SC			100,000.00
	PR000138	1110311001	Copy item	cyflufenamid 100 g/L SC			25.00

When generated from the Planned Production Orders, the PR is already estimated and scheduled. No need to release the PR, this intermediary status can be skipped.

Estimate PR = generates the estimated BOM consumption

The screenshot shows the SAP Finance and Operations interface. The top navigation bar includes 'Finance and Operations', 'Production control', 'Production orders', and 'All production orders'. The main menu has tabs for 'Edit', 'Delete', 'New production order', 'New batch order', 'Production order', 'Schedule', 'Warehouse', 'View', 'Manage costs', and 'Options'. The 'Production order' tab is active, showing a sub-menu with 'Estimate', 'Release', and 'Start' options. A red circle highlights the 'Estimate' option. Below the menu, the 'Production orders' section shows 'PR000143'. The 'General' tab is selected, displaying a table with identification, quantity, scheduling status, and date scheduled.

IDENTIFICATION		Quantity	Scheduling status	DATE SCHEDULED
Production	PR000143	150.00	Operations scheduled	Start date
Delivery	12/4/2020		Remain status	11/27/2020
Item number	111031100		Material consumption	End date
Time			Quality order status	12/4/2020

Please note the PR can also only be started when you know the production has started and only after the Label Coordinator reported as finished the Artwork Operation (otherwise, starting your PR will also start the artwork operation because all the route operations will be started on that occasion).

Updating your PR status (from scheduled to started for instance) will enable anyone from the team to check the PR status from the system instead of asking to the D&S Planner in charge of the production.

If the PR is updated (quantity, date ...) after it was firmed, then, it should be estimated again and the operations must be scheduled again following the below path.

Scheduling operations = scheduling the leadtime.

The screenshot shows the SAP Finance and Operations interface. The top navigation bar includes 'Finance and Operations', 'Production control', 'Production orders', and 'All production orders'. The main menu has tabs for 'Edit', 'Delete', 'New production order', 'New batch order', 'Production order', 'Schedule', 'Warehouse', 'View', 'Manage costs', and 'Options'. The 'Schedule' tab is active, showing a sub-menu with 'Schedule operations', 'Schedule jobs', and 'Locked for rescheduling'. A red arrow points from the 'Schedule' option to the 'Schedule operations' sub-menu. Below the menu, the 'Production orders' section shows 'PR000143'. The 'General' tab is selected, displaying a table with identification, quantity, scheduling status, and date scheduled.

IDENTIFICATION		Quantity	Scheduling status	DATE SCHEDULED
Production	PR000143	150.00	Operations scheduled	Start date
Delivery	12/4/2020		Remain status	11/27/2020
Item number	111031100		Material consumption	End date
Time			Quality order status	12/4/2020
Name	10:00 AM			Start time
SCelta NL 10X1L				10:00 AM

At this stage, the PR is created, and the service PO should have been confirmed and sent to the toller along with the PC Sheet. It means the production slot was confirmed by the toller and the next step will be the real start of the production.

1.3. Create a new Production Order from scratch (no purchase plan, out of the S&OP cycle)

When there is no planned production order a new order can be created by going to the planned order list. Please do not create a new production order from the production order screen anymore as this will indicate to the vendor schedulers that the order is firmed before the feasibility of delivery is checked.

The screenshot shows the 'Master planning' interface. The top navigation bar includes 'Finance and Operations', 'Master planning', 'Workspaces', and 'Master planning'. Below this, there are links for 'Copy plan', 'Delete plan', 'Supply schedule', 'Firming history', and 'Unfinished planning process'. The main content area is titled 'Master planning' and features a 'Master plan' dropdown set to 'O&F'. The 'Summary of the current plan' section contains three green buttons: 'Planned orders', 'Calculated delays', and 'Actions'. The 'Planned orders' section on the right has a 'Urgent' filter and a list of orders, with 'MRP-000344' highlighted. A red arrow points from the 'Planned orders' link in the left sidebar to the 'Planned orders' section in the main content area.

Select 'New'

The screenshot shows the 'Planned order' screen. The top navigation bar includes 'Finance and Operations', 'Master planning', 'Workspaces', and 'Master planning'. Below this, there are links for 'Edit', 'New', 'Delete', 'Firm', 'Firm all', 'Approve', 'Planned order', 'View', and 'Options'. The 'Planned order' section is highlighted. The 'View' section contains a table with columns: 'Display', 'Related information', 'View', and 'Requirements'. The 'Display' column has 'Dimensions'. The 'Related information' column has 'Capacity reservations'. The 'View' column has 'Gantt chart', 'On-hand inventory', and 'Supply schedule'. The 'Requirements' column has 'Requirement profile', 'Explosion', and 'Multilevel pegging'. A red arrow points from the 'New' button to the 'Planned order' section in the main content area.

A Production Order creation window pops up, you need to select 'production' as the planned order type.

The screenshot shows the 'New planned order' form. The 'PLANNED ORDERS' section has a 'Planned order type' dropdown set to 'Production' and a 'Plan' dropdown set to 'O&F'. The 'IDENTIFICATION' section has an 'Item number' dropdown set to '102044101' and a 'Product name' text box containing 'ZINZAN UK 4X5L'. The 'INVENTORY DIMENSIONS' section has a 'Site' dropdown set to '01' and a 'Warehouse' dropdown set to 'UK002'. The 'PLANNED ORDERS' section has a 'Requirement quantity' text box containing '4,800.00'. The 'BOM/ROUTE' section has a 'BOM number' dropdown set to 'PC1243' and a 'Route number' dropdown set to 'RTE-000003'. The 'BOM LEVEL RECALCULATION' section has a 'Recalculate BOM levels' checkbox set to 'No'. The 'EDI' section has an 'Origin' dropdown. A red arrow points from the 'Production' option in the 'Planned order type' dropdown to the 'Production' option in the 'Planned order type' dropdown.

Enter the following information:

- Item number
- Warehouse where production will take place
- Quantity you want to produce
- Delivery date – this should be the end date of your production
- BOM number should automatically populate but if not you need to choose the correct BOM
- Route number should automatically populate but if not you need to choose the correct route

Once completed select 'OK'

You will now have your new planned production order with the correct information in it.

Planned orders

MRP-000342975: 102044101 ZINZAN UK 4X5L

General

Number

MRP-000342975

Reference

Planned production orders

Item number

102044101

Product name

ZINZAN UK 4X5L

Formulation

sodium sulphosuccinate 70%...

Configuration

Size

Color

Style

Directly derived requirement

☐ No

Supply forecast

☐ No

GROUPS

Item group

FP-M-L

Buyer group

Vendor group

REQUIREMENT

Requirement date

24/09/2021

Delivery date

24/09/2021

Time

10:00

Pegging

Reference	Number	Requirement date	Requested date	Requirement...	Covered qua...	Changed by ...	Custom...
<div><div></div><div>We didn't find anything to show here.</div></div>							

Planned supply

From warehouse

PLANNED PRODUCTION ORDERS

Delivery date

24/09/2021

Time

10:00

Requirement quantity

10,000.00

BOM number

PC1243

Route number

RTE-000003

Requirement CW quantity

CW unit

Action

The order has been estimated and scheduled based on the information you entered. You can now follow the same process as if the system had generated this planned production order.

Go to step 1.2.1 and follow the same steps to check bottlenecks and approve or firm your production order.

If you do not approve or firm this production order it will not be visible after master planning runs again as this order was not generated by demand in the same way a system planned order is created.

1.4. Amending a Planned Production Order

If you need to change some data in your planned production order such as dates or quantity you will need to re-schedule it.

Make the changes you need either by changing the delivery date or the quantity.

Planned orders

MRP-000342975: 102044101 ZINZAN UK 4X5L

Site 01

General

Number

MRP-000342975

Reference

Planned production orders

Item number

102044101

Product name

ZINZAN UK 4X5L

Formulation

sodium sulphosuccinate 70%...

Configuration

Size

Color

Style

Directly derived requirement

☐ No

Supply forecast

☐ No

GROUPS

Item group

FP-M-L

Buyer group

Vendor group

REQUIREMENT

Requirement date

20/08/2021

Delivery date

20/08/2021

Time

10:00

SCHEDULED

Start date

30/07/2021

End date

20/08/2021

ORDER

Order date

30/07/2021

Order time

10:00

STATUS

Status

Unprocessed

Planning formula

PLAN

Name

Orders & Forecast

Plan

O&F

Type

Master plan

Pegging

Reference	Number	Requirement date	Requested date	Requirement...	Covered qua...	Changed by ...	Customer account	Customer group	Requirement...	Covered CW ...	Changed by ...
<div><div></div><div>We didn't find anything to show here.</div></div>											

Planned supply

From warehouse

PLANNED PRODUCTION ORDERS

Delivery date

20/08/2021

Time

10:00

Requirement quantity

4,800.00

BOM number

PC1243

Route number

RTE-000003

Requirement CW quantity

CW unit

STORAGE DIMENSIONS

Site

01

Warehouse

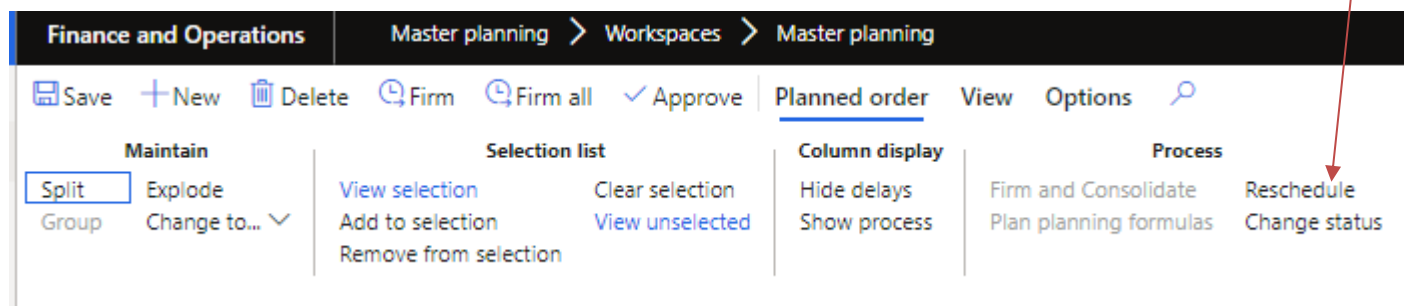
UK002

Location

Inventory status

Action

To re-schedule based on your updated information go to the planned order tab and select 'Reschedule'.



In the planned order scheduling you don't get the 'backward from delivery date option' so here it is advisable to select the direction as 'backward from scheduling date' and then enter the delivery date (desired end date of production) as the scheduling date.

Rescheduling

Parameters

RESCHEDULE CURRENT PLANNED ORDER.

Scheduling direction
Backward from scheduling date

Scheduling date
24/09/2021

Time
10:00

Method
Operations scheduling

LIMITATION

Finite capacity
☐ No

Finite material
☐ No

Finite property
☐ No

Keep production unit
☐ No

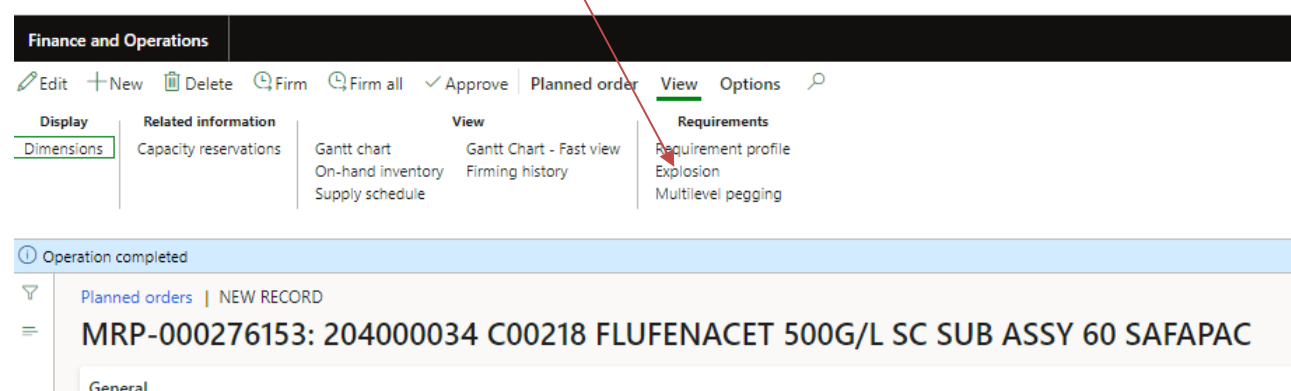
Keep warehouse from resource
☐ No

Primary resource selection
Duration

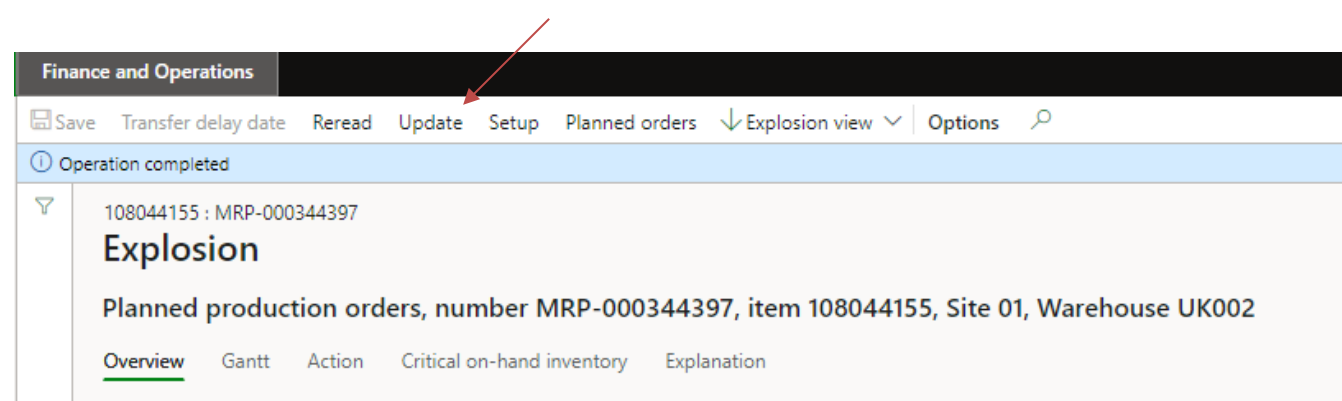
Explosion

Run in the background

Once rescheduled you can check the explosion screen for bottlenecks to production.



To ensure the new scheduling date is applied in the explosion view you need to select 'Update' and then following the process again from step 1.2.1



If you choose to approve but not firm this planned order, you must save it after approving.