

Parallel Routing Setting

Date: 2008-12-23

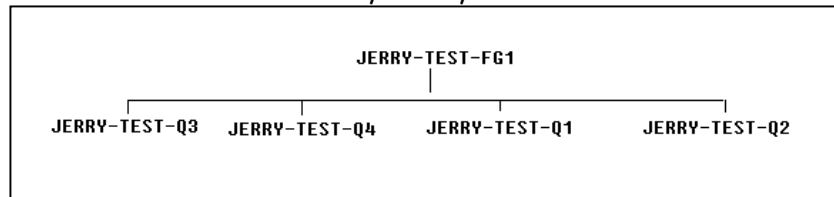
This documentation will illustrate how to set parallel routing operation in the Baan V

I Introduction

In the Baan V, the parallel routing operation can be carried out by adding phantom item into the BOM, please noted that you can only go this way to set the parallel routing operation in the Baan V which we call it as Network Routing Operation.

II How to setting Parallel Routing Operation

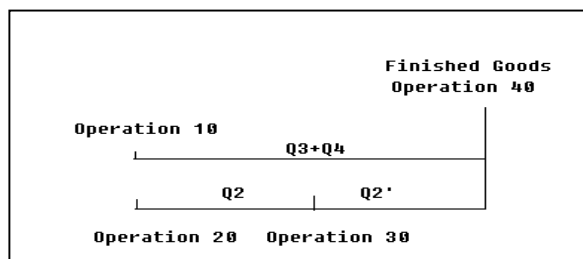
In order to understand this way clearly we will build a BOM as below for example:



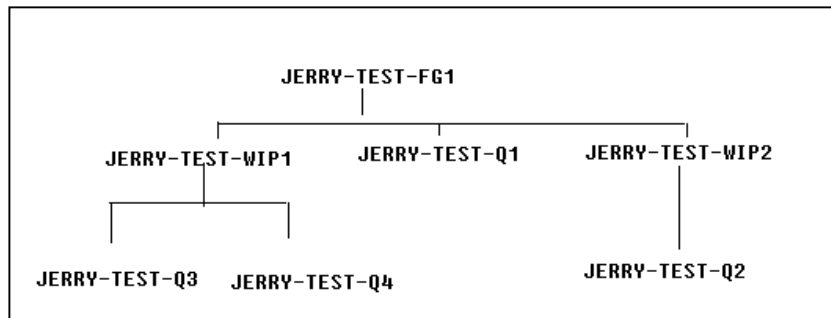
Item Code	Type	Phantom	UOM	
JERRY-TEST-FG1	M	N	1	
JERRY-TEST-Q3	P	N	1	
JERRY-TEST-Q4	P	N	1	
JERRY-TEST-Q1	P	N	1	
JERRY-TEST-Q2	P	N	1	

The routing operation as below:

Operation	Description	Production Rate(/hour)	Cycle Time (min)		Next Operation
Operation10	Pre-Assembly	1	60	Parallel	40
Operation20	Punching	3	20		30
Operation30	Bending	1.2	50		40
Operation40	Assembly	1	60		—



Actually this is a single level BOM if we did not consider the parallel routing operation 10 and 20, for set them as parallel processing, we need to create two phantom items to cut this single operation line as two different lines, so the BOM should be modified as below:



Item Code	Type	Phantom	UOM	
JERRY-TEST-FG1	M	N	1	
JERRY-TEST-WIP1	M	Y	1	
JERRY-TEST-WIP2	M	Y	1	
JERRY-TEST-Q1	P	N	1	
JERRY-TEST-Q2	P	N	1	
JERRY-TEST-Q3	P	N	1	

After build this BOM in the system, we also need to build the routing operation for this two phantom manufactured parts.

tirou1501m000 : Routing Codes by Item [User: shajeliu] [139]

File Edit View Group Workflow Tools Specific Window Help

Manufactured Item: JERRY-TEST-WIP1
Description: Front panel SERO-A

Routing	Standard Routing	Routing Unit	Up to Order Quantity	Inv. Unit	Week Bucket Planning
001 Assembly	<input checked="" type="checkbox"/>	006	1	99999999.0000 ea	<input type="checkbox"/>

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Manufactured Item: JERRY-TEST-WIP2
Description: Front panel SERO-A

Routing	Standard Routing	Routing Unit	Up to Order Quantity	Inv. Unit	Week Bucket Planning
001 Bending	<input checked="" type="checkbox"/>	002	1	99999999.0000 ea	<input type="checkbox"/>

Routing		002		bending		Routing Unit		1	
	Operation	Task	Description	Work Center	Mach.	Effect. Date	Expiry Date	Oper. Text	Task Text
	10 /	1 1000	PUNCHING	W13901		13-06-08		<input type="checkbox"/>	<input type="checkbox"/>
	20 /	1 1200	BENDING 220 TON	W13906		13-06-08		<input type="checkbox"/>	<input type="checkbox"/>

And for FG we have:

tirou1501m000 : Routing Codes by Item [User: shajeliu] [139]									
File Edit View Group Workflow Tools Specific Window Help									
Manufactured Item JERRY-TEST-FG1									
Description FRONT RP4-1slot(5+25)									
Routing	Standard Routing	Routing Unit	Up to Order Quantity	Inv. Unit	Week Bucket Planning				
001 Assembly	<input checked="" type="checkbox"/>	007	1	99999999.0000	ea	<input type="checkbox"/>			

Then we can create a production order for item JERRY-TEST-FG1:

tisfc0101s000 : Production Orders [User: shajeliu] [139]									
General Planning Quantities Costing Print Status									
Production Order		139N ▶ Normal Production Order						Close	
Order Status		Planned						Save	
Assembly Line								Revert	
Item		JERRY-TEST-FG1						Text	
Item Description		FRONT RP4-1slot(5+25)						Retr. Revision	
Revision		R1C ▶ CHN012744						Default Qty	
Qty Ordered [ea]		1.0000						Retrieve Routing	
Warehouse		139004 ▶ CHZ FG warehouse (FLEX)						Calc Order Date	
Routing		001 ▶ Assembly						Release	
Reference Date		23-12-08 14:12						Print + Release	
		<input type="checkbox"/> Rework Order						Help	
Update Method		Generate							
Planning		<div style="border: 2px solid red; padding: 5px;"> Planning Method: Forward Production Start Dt: 23-12-08 14:13 Requested Delivery Dt: 23122008 16:23 (Re)Planned Delivery Dt: 23-12-08 16:23 </div>						<input type="checkbox"/> Operations Blocked <input type="checkbox"/> Text <input type="checkbox"/> Insp. Orders present	

After calculated by system, the requested delivery date is at 16:23 on 23-12-08 based on the start date and the planning method.

You can calculate by yourself to check this result which should be read from the operation duration as 60min+(20min+50min) or you can see as 60+60+10, remember that we have a parallel operation happened at operation 10 and 20, so here will be different with the duration 60min+20min+50min+60min when single level BOM

So now, let us to check the Production Planning after we created this production order 139N00174.

The screenshot shows the Baan V Production Planning interface. At the top, the title bar reads 'tisfc1500m000 : Production Planning [User: shajeliu] [139]'. Below the title bar is a menu bar with 'File', 'Edit', 'View', 'Group', 'Workflow', 'Tools', 'Specific', 'Window', and 'Help'. A toolbar with various icons is located below the menu bar. The main area displays the following information:

- Production Order: 139N00174
- Planned
- Item: JERRY-TEST-FG1
- FRONT RP4-1slot(5+25)

Below this information is a table with the following columns: 'Opr.', 'Next Opr.', 'Task', 'Description', 'Work Center', 'Description', 'Subc. Oper.', 'Operation Status', and 'Late'. The table contains the following data:

Opr.	Next Opr.	Task	Description	Work Center	Description	Subc. Oper.	Operation Status	Late
10	0	7000	RBS ID	W13946	RBS ID		Planned	
200	10	6000	PRE-ASSEMBLY	W13945	PRE-ASSEMBLY		Planned	
210	220	1000	PUNCHING	W13901	Default Work Center		Planned	
220	10	1200	BENDING 220 TON	W13906	BENDING 220 TON		Planned	

In this screenshot, we can see that the field 'Next Operation' has been fulfilled by system automatically, noted that it's not created manually, that's why you can not get the parallel operation by the way you did.

The operation 210 and 220 is for item JERRT-TEST-Q2, the operation 220 is for the item JERRY-TEST-Q3 and JERRY-TEST-Q4, this two parts have the same next operation 10 where they are combined together to the finished goods.