

# Product Configurator

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Countries: US, CA

Setup and User Manual

For Microsoft Dynamics 365 Business Central

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## Description

SimCrest Product Configurator allows you use a rule-based configurator to generate sales, assembly and productions orders by filling out a questionnaire. This product allows you to assist your sales department in configuring the right solution for your clients.

## Microsoft Dynamics 365 Business Central Editions

Dynamics 365 Business Central comes in two editions: Essential and Premium. The Premium edition contains manufacturing and assembly functionality that is required for some parts of the Product Configurator. If the Premium edition is needed for functionality in this manual, it will be noted with *Premium Edition only*.

## Features

The Product Configurator has three major components:

### Sales Configurator

This will allow your sales people to configure products that don't need to be manufactured. The system will go through a questionnaire and at the end it will suggest the sales lines on the sales document. The system supports all sales documents (Sales Quotes, Sales Orders and Sales Invoices). If a sales order is created from a sales quote with a configuration, it will be transferred to the sales order.

The Sales Configurator will allow assignment of both items and resources.

The Sales Configurator can also be used to generate an MTO Production Project Order in the Manufacturing application area using the normal planning function (*Premium Edition only*).

### Assembly Configurator

*Premium Edition only.*

This is part of the Sales Configurator.

The sales person will enter a product from the item file on the sales document. After the item has been entered the Sales Configurator is launched. It will also go through a questionnaire but instead of creating sales lines it will create a new assembly sales line with the configured items including an assembly order. This means that the assembly bill of material would be individual for this sales line.

The system supports setting up configurations for as many assembled items as needed. The system will use pre-defined rules to determine the components needed on the customized assembly order. The use of variant codes is also supported.

### Production Configurator

*Premium Edition only.*

This will allow your sales people to enter a product from the item table on the sales document. After the item has been entered the Product Configurator is launched. It will go through a questionnaire like the sales configurator, but instead of creating sales lines it will create a customized production order with the configured item. This means that the production bill of material and routing would be individual for this sales document.

The system supports setting up configurations for as many manufactured items as needed. The system will use pre-defined rules to determine the components and routings needed on the customized production order. The use of Variant codes is also supported.

## Product Configurator License

The Product Configurator can be acquired as an App in the Extension Market Place inside Microsoft Dynamics 365 Business Central. Just click Free trial to install and try out the solution. The trial will last for 30 days.

A subscription can be purchased from SimCrest. There are three different subscriptions available:

1. Sales Configurator
2. Production Configurator
3. Both Sales and Production Configurator

See later section how to subscribe.

## Terminology

The Product Configurator is a rule-based Configurator that enables you to setup questionnaires for complex item combinations. The system will then be able to suggest the correct item combination for a sales order or production order.

### Sales Configurator

The Sales Configurator will guide the user through a questionnaire and allow the user to see the configuration during the entire process. Upon completion, the sales document is populated with lines making up the configuration.

*Premium Edition only.* An option within the Sales Configurator is to create a new Production or Assembly BOM based on the answers given. Depending on the settings, if an existing BOM and Item with the same configuration are found, then they may be used, or a new BOM and Item may be created. If a new Item is created, additional setup of the new item will need to be done.

### Production Configurator

*Premium Edition only.* The Production Configurator will create a production order from a line in the sales order. You will have several choices when creating the production order (planned, firm-planned or released). It is possible to create production orders from each line in the sales order. Assembly bill of materials using the Sales Configurator is also supported if a production order is not needed for certain configurations.

### Questionnaires

All Configurators are based on questionnaires. The questionnaires contain several questions included the potential answers for each question.

The questions also have different levels to determine in which order they should be asked. Questions can have unique or several answers.

## Triggers

A trigger determines if something should happen, based on answers already given. It is possible to set up complex triggers using Boolean (logical) expressions.

Triggers are built using two levels:

1. Trigger level - This level indicates the Boolean function between the underlying trigger lines.
2. Trigger Line level - This level identifies the conditions on which a question should be asked.

There are four kinds of triggers:

1. Question Triggers that will determine if a question should be asked.
2. Answer Triggers that will determine if a possible answer should be suggested.
3. Item Triggers that will determine the correct product combination depending on the answers already given.
4. Routing Trigger that will determine the correct routings needed depending on answers already given.

## Setup of the Product Configurator

There are a few steps needed to get the Product Configurator to work.

### Permissions

A permission set for the Product Configurator is created when the Extension is installed. It's called 'SIMC PROD CONFIG'.

PERMISSION SET LOOKUP

ROLE ID		NAME	EXTENSION NAME
SIMC PROD CONF SETUP	...	SimCrest Product Configurator	Product Configurator
SIMC PROD CONFIG		SimCrest Product Configurator	Product Configurator

Assign this permission set to all the users that should have access to the Product Configurator. The Setup permission set should be given to all other users with no access to the Product Configurator.

If users need access to the Premium features of the product, you need a Premium subscription from Microsoft and assign the Full Premium permission to all users that need access. You may also have to enable Premium features under Company Information (see later section how to enable).

### Configurator Setup

You will need to set up the Configurator and enter necessary information for the solution to work.

Search for Configurator Setup in the search bar:

TELL ME WHAT YOU WANT TO DO


config se

On current page (Sales Invoices)

- Release**  
Release the document to the next stage of processing. When a document is released, it wi...
- Post and Send...**  
Finalize and prepare to send the document according to the customer's sending profile, s...
- Send Approval Request**  
Request approval of the document.

---

Go to Pages and Tasks Show all (50)

- > **Configurator Setup**  Administration
- > Service Items Lists

Click Configurator Setup and the following page is shown:

### Configurator Setup

[Process](#) | [Actions](#) | [Less options](#)

Sales Production Subscription Import Data

---

#### General

Early Close Action ..... Prompt

---

#### Sales

Create BOM From Sales Config ..... No	Default Assembly Item No. ....
Default Item\BOM Nos ..... SIMC-CFITM	Sales Default Price ..... Question
Duplicate Item\BOM Option ..... Prompt	Create Assembly Orders ..... Prompt
Default Production Item No. ....	

---

#### Production

Save TEMP Production BOM ..... <input checked="" type="checkbox"/>	Production Default Price ..... Question
Save TEMP Production Routing ..... <input type="checkbox"/>	

---

#### License

Expiration Date ..... 5/3/2019	Licensed Company Name .....
Trial Period ..... <input type="checkbox"/>	Don't show subscription notifications ..... <input type="checkbox"/>

Here is a description of each field:

### General Tab

- **Early Close Option**  
Allows you to specify what kind of action the Configurator should take if you select to cancel a configuration early:
  - **Prompt** – prompts you if you want to save what has been answered so far.
  - **Always Save** – will not prompt you, it will automatically save what has been answered so far.
  - **Never Save** – will not prompt you, it will not save what has been answered.

## Sales Tab

- Create BOM from Sales Configuration
  - **No** – Original Sales Configurator. Will display each answer as an individual sales lines.
  - **Production BOM** – Will create a Production BOM and new Item No. based on each configuration. *Premium Edition only.*
  - **Assembly BOM** - Will create an Assembly BOM and new Item No. based on each configuration. *Premium Edition only.*
  - **Prompt** – Will ask you which configuration you would like to create.
- Default Item\BOM Nos  
Define a number series for the item/BOM and associate the number series code here.
- Duplicate Item\BOM Option
  - **Prompt** – Will ask you which, of the three options below should be in effect.
  - **Use Existing Item and Existing BOM** – this option checks if an existing item and BOM matches the answers given and uses that information to enter on the sales line.
  - **Create New Item with Existing BOM** - this option checks if an existing BOM matches the answers given and creates a new item but associates the existing BOM to the new item and enters the new item on the sales line. This will require additional setup to the new item.
  - **Create New Item and Create New BOM** - this option always creates a new item and a new BOM regardless if an existing BOM may match and associates the new BOM to the new item, and then enters the new item on the sales line. This will require additional setup to the new item and BOM.  
*BOM features, Premium Edition Only.*
- Default Production Item No. *Premium Edition Only.*  
This item will be used as the template for the new Production BOM based item. All the fields are copied over to the new item except for the **Description, Search Description, Unit Cost** and **Production BOM No.**
- Default Assembly Item No. *Premium Edition Only.*  
This item will be used as the template for the Assembly BOM based item. All the fields are copied over to the new item except for the **Unit Cost** and **Assembly BOM No.**
- Sales Default Price  
Sets where the unit price on the sales order populates from.
  - Question – will pull from the questionnaire
  - Item – will pull from the item card
- Create Assembly Orders. *Premium Edition Only.*
  - **Prompt** – Will ask you which, of the 2 below, options to do
  - **Always Create Assembly Orders** – Will always create the assembly order related to the sales line configuration
  - **Never Create Assembly Orders** - Will not create the assembly order related to the sales line configuration



## Production Tab

All Production setup are for *Premium Edition Only*.

- Save TEMP Production BOM  
This option saves the Temporary Production BOM created by the Production configurator. This allows for users to review the Production BOM that was created through the configurator.
- Save TEMP Production Routing  
This option saves the Temporary Production Routing created by the Production configurator. This allows for users to review the Production Routing that was created through the configurator.
- Production Default Price
  - Question – will pull from the questionnaire
  - Item – will pull from the item card

## Actions

The questionnaires are accessed from the Setup page:

### Sales

This accesses the sales questionnaires.

### Production

This accesses the production questionnaires.

## Import Demo Data

This will import a demo configurator into the product. This option is only available if the company is a demonstration company starting with 'CRONUS' (all capital letters). NEVER IMPORT DEMO DATA INTO A LIVE COMPANY! See below how to set up a company as a demo company for the configurator.

## Demo Data Setup

Please follow these instructions to set up a demo company and import the configurator demo data. This manual is using the demo data for all examples you will find going forward. You must create a new demo company because the existing demo company that comes standard with Dynamics 365 Business Central will NOT work! Instructions are given below.

### Create Demo Company

Search for companies:

COMPANIES

Search New Edit List Delete Process Page Act

Create New Company + New

Filter list by...

NAME
CAH TEST
CRONUS CAH
CRONUS CONFIG
CRONUS USA

CREATE NEW COMPANY

SPECIFY SOME BASIC INFORMATION

Enter a name for the company.

\* CRONUS USA Complete

Select the data and setup to get started.

Advanced Evaluation - Complete Sample Data

Advanced Experience / Cronus Company Sample Data / Setup Data

Create a company with the Advanced functionality scope containing everything you need to evaluate the product for companies with advanced processes. For example, sample items and customers allow you to start posting right away.

Back

Next

Finish

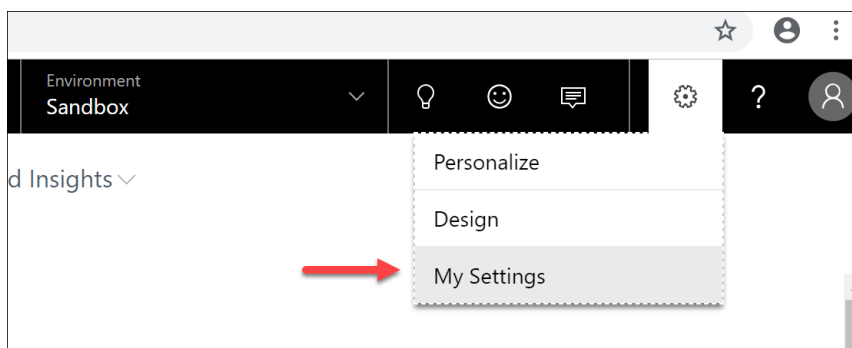
10 | Page

The process of creating the company can take up to 30 minutes. Wait until the Setup Process is completed:

VIEW - COMPANIES + New ☰ ☐ 🔍 ✕

NAME	DISPLAY NAME	EVALU... COMPA...	SETUP STATUS
CRONUS USA Complete	...	CRONUS USA, Inc.	<input type="checkbox"/> Completed
CRONUS USA, Inc.	CRONUS USA, Inc.	<input checked="" type="checkbox"/>	Completed
My Company		<input type="checkbox"/>	Completed

Change company to the new demo company you just created. Click My Settings:



Click the assist edit button on Company:

EDIT - MY SETTINGS ↗

Role Center	Business Manager	>
Company	CRONUS USA, Inc.	>
Work Date	4/9/2019	...
Region	English (United States)	>
Language	English (United States)	>

[Change when I receive notifications.](#)

OK Cancel

Pick the new company and click OK and it will change to the new Company.

## ALLOWED COMPANIES

NAME	EVALUATION COMPANY	SETUP STATUS
CRONUS USA, Inc.	...	Completed
CRONUS USA, Inc.	<input checked="" type="checkbox"/>	Completed
My Company	<input type="checkbox"/>	Completed

## Find your Item List:

Items: [All](#)

Search

+ New

Manage

Item

Inventory

Attributes

Page

Show all

NO.	DESCRIPTION	TYPE	QUANTITY ON HAND	SUB... EXIST	ASSE... BOM	BASE UNIT OF MEASURE	UNIT COST	UNIT PRICE	
1000	...	Bicycle	Inventory	0	No	No	PCS	350.595	4,000.00
1001		Touring Bicycle	Inventory	0	No	No	PCS	350.595	4,000.00
1100		Front Wheel	Inventory	0	No	No	PCS	129.671	1,000.00
1110		Rim	Inventory	0	No	No	PCS	1.05	0.00
1120		Spokes	Inventory	0	No	No	PCS	2.00	0.00
1150		Front Hub	Inventory	0	No	No	PCS	12.441	500.00
1151		Axle Front Wheel	Inventory	0	No	No	PCS	0.45	0.00
1155		Socket Front	Inventory	0	No	No	PCS	0.77	0.00
1160		Tire	Inventory	0	No	No	PCS	1.23	0.00

Notice the new items that are in the inventory master table. They should look like above.

When you create a new company, the standard setup is not created automatically. Go to Configurator Setup:

## Configurator Setup

[Process](#) | [Actions](#) | [Less options](#)

☒ Sales
 ☒ Production
 ☒ Subscription
 ☒ Import Data
 ☒ Create Standard Setup

### General

Early Close Action .....

Notice there is a Create Standard Setup action. It will only show for new companies without any setup. Click the action and follow the instructions.

## Turn Premium features on

Premium features should be available in any demo company. In your live company, you will need the Premium Edition of Dynamics 365 Business Central to access these features (cloud version only).

Find Company Information:

TELL ME WHAT YOU WANT TO DO

Company Info

On current page (Business Manager)

Company Settings

Enter the company name, address, and bank information that will be inserted on your bus...

Go to Pages and Tasks Show all (13)

> Company Information

Tasks

> Intercompany Inbox Transactions

Tasks

> Handled Intercompany Inbox Transactions

Lists

Expand the Tab “User Experience” (last tab):

User Experience

Experience

Essential

>

Select Premium and click OK

EXPERIENCE TIERS

EXPERIENCE TIER

Essential

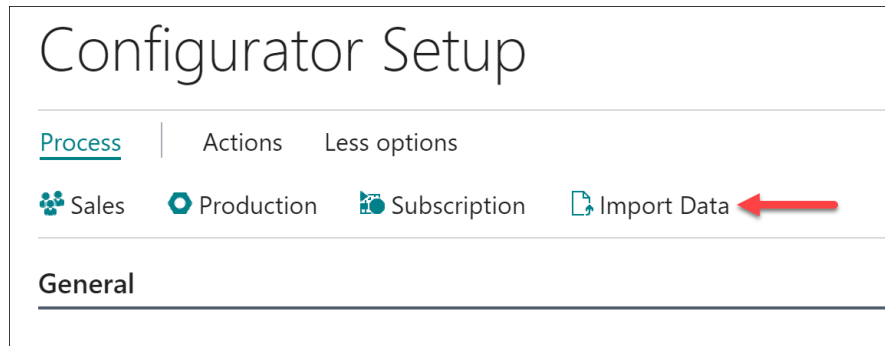
Premium

## Import Demo Data

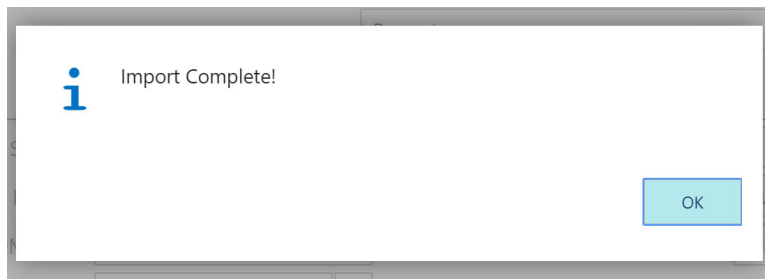
Now we should be able to import demo data. Download the file located here:

(<http://simcrest.com/BC/ProdConfig/SimConfigImportDemoData.txt>)

Go to Configurator Setup and Click Import Demo Data.



Pick the file you just downloaded and click OK.



Now your demo data is loaded for all the scenarios in this manual.

## Rule-Based Configurator

Both the sales and the production configurator follow rules that are setup in the exact same manner. There is therefore no difference in the way rules are setup between the two configurators. We will therefore explain the way rules are setup for the sales configurator.

## Sales Configurator

The sales configurator is used to create a custom sales order (quotes and invoices are also supported) based on a questionnaire. Let's start by running the sales configurator from start to finish so we can see how it's supposed to work.

## Create Sales Order

Create a sales order for The Cannon Group (10000):

SALES ORDER



# 1003 · The Cannon Group PLC

Process Report Release Posting Order Request Approval Actions Navigate ... ⓘ

### General

Show more

Customer Name	The Cannon Group PLC	Due Date	5/3/2019
Contact	Mr. Andy Teal	Requested Delivery D...	
Posting Date	4/3/2019	External Document No.	
Order Date	4/3/2019		

Lines | Manage Configurator Line Order Less options

 Sales  Production

TYPE	NO.	DESCRIPTION	LOCATION CODE	QUANTITY	RESERVED QUANTITY
Item	*	*			

Do not fill out any sales lines.

Click Configurator and Sales above the lines.

The Sales Configurator is launched. The Configurator is too big to be seen in the standard Navigation page. Click Maximize the Page to see the entire configurator:

CONFIGURATOR

QUESTION

Question

Select Cabinet

Answers

DESCRIPTION	PRICE	QUANTITY	SE...
Desktop Cabinet	0.00	0	<input type="checkbox"/>
Tower Cabinet	0.00	0	<input checked="" type="checkbox"/>

Total0.00

Result

Back

Next

Finish

The Configurator has four distinct sections: Question, Answers, Total, and Result.

CONFIGURATOR

QUESTION

Question

Select Cabinet

Answers

DESCRIPTION	PRICE	QUANTITY	SELECTED
Desktop Cabinet	0.00	0	<input type="checkbox"/>
Tower Cabinet	0.00	0	<input checked="" type="checkbox"/>

Total0.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
(There is nothing to show in this view)			

The Question section shows the question we are answering. The Answer section shows the different answer options for the question. The total section shows a running total of the configuration. The result section shows the resulting configuration (empty now since we just started).



We are configuring a computer. The Configurator has defaulted a check mark in Tower Cabinet. If we select the Desktop Cabinet, notice that the check mark is removed from the Tower Cabinet. The configurator knows there is a rule to make the answer unique so only one can be selected. We pick the Tower Cabinet and click Next. Notice how our selection moves to the Result area.

CONFIGURATOR

QUESTION

Question

Select Processor

Answers

DESCRIPTION	PRICE	QUANTITY	SELECTED
Pentium III 533 MHz	108.00	1	<input type="checkbox"/>
Pentium III 600 MHz	128.00	1	<input checked="" type="checkbox"/>
Pentium III 733 MHz	138.00	1	<input type="checkbox"/>
Pentium III 800 MHz	148.00	1	<input type="checkbox"/>
Pentium III 866 MHz	178.00	1	<input type="checkbox"/>

Total 0.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
Select Cabinet	Tower Cabinet	0	0.00

Now, we are asked to pick a processor. The Back button is also active, allowing us to go back to the last question. We select the 733 MHz Processor. Click Next.

CONFIGURATOR

QUESTION

Question

Select RAM

Answers

DESCRIPTION	PRICE	QUANTITY	SELECTED
128 MB RAM	185.00	1	<input type="checkbox"/>
256 MB RAM	47.30	1	<input checked="" type="checkbox"/>
384 MB RAM	195.00	1	<input type="checkbox"/>
512 MB RAM	315.00	1	<input type="checkbox"/>
64 MB RAM	85.00	1	<input type="checkbox"/>

Total 138.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
Select Processor	Pentium III 733 MHz	1	138.00
Select Cabinet	Tower Cabinet	0	0.00

Notice how the configuration so far is showing under Result. Now we must pick the RAM. In this case it's allowed to pick a qty up to 5 and several RAM modules at the same time.

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
128 MB RAM	...	185.00	1	<input type="checkbox"/>
256 MB RAM	...	47.30	5	<input checked="" type="checkbox"/>
384 MB RAM	...	195.00	5	<input checked="" type="checkbox"/>
512 MB RAM	...	315.00	1	<input type="checkbox"/>
64 MB RAM	...	85.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

Click Next. We now pick a Disk Controller.

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
IDE Controller	...	0.00	1	<input checked="" type="checkbox"/>
SCSI Controller	...	58.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

Pick IDE Controller and click Next. Notice we only have options between IDE disks now.

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
10.2 GB IDE Disk	...	115.00	1	<input type="checkbox"/>
20.4 GB IDE Disk	...	180.00	1	<input checked="" type="checkbox"/>
27 GB IDE Disk	...	215.00	1	<input type="checkbox"/>
40 GB IDE Disk	...	305.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

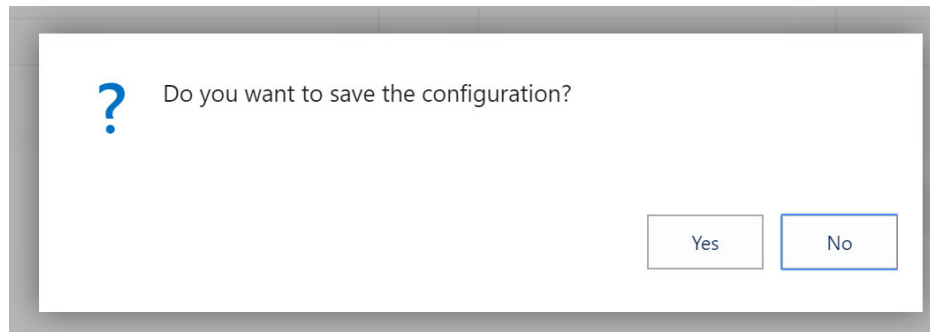
Click Back and change selection to SCSI Controller and click Next. Notice that the options have changed.

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
18 GB SCSI Disk	...	175.00	1	<input type="checkbox"/>
36 GB SCSI Disk	...	299.00	1	<input checked="" type="checkbox"/>
9 GB SCSI Disk	...	155.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

The Configurator knows how to ask the right questions based on how we answered previous questions.

If we try to exit the Configurator early, we are asked if we like to save the configuration (depends on Early Action set in Configurator Setup).



If we select Yes and launch the Configurator later, we will continue where we left off.

Click Next:

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
Normal Graphic Card	...	0.00	1	<input type="checkbox"/>
Hi resolution Graphics Card	...	390.00	1	<input checked="" type="checkbox"/>
Super Hi performance Graphics	...	58.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

Total 1,706.50

Result

Accept the default and click Next:

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
Flat Panel Monitor 15"	...	215.00	1	<input type="checkbox"/>
17" Monitor	...	295.00	1	<input checked="" type="checkbox"/>
19" Monitor	...	356.00	1	<input type="checkbox"/>
21" Monitor	...	412.00	1	<input type="checkbox"/>
24" Monitor	...	469.00	1	<input type="checkbox"/>
No Screen	...	0.00	0	<input type="checkbox"/>
				<input type="checkbox"/>

Total 2,096.50

Result

Continue to accept and Click Next:

Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
Network Connection	...	203.50	1	<input checked="" type="checkbox"/>
No Network Connection	...	0.00	0	<input type="checkbox"/>

Click Next:

## Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
Normal Keyboard	...	50.00	1	<input checked="" type="checkbox"/>
Performance Keyboard	...	85.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

## Click Next:

DESCRIPTION		PRICE	QUANTITY	SELECTED
No Zip Drive	...	0.00	0	<input type="checkbox"/>
250 MB Zip Drive	...	115.00	1	<input checked="" type="checkbox"/>
				<input type="checkbox"/>

## Click Next:

### CONFIGURATOR



### QUESTION

Question

Select ZIP Disk Packs

### Answers

DESCRIPTION		PRICE	QUANTITY	SELECTED
2 Pack Zip Disks	...	22.00	1	<input checked="" type="checkbox"/>
4 Pack Zip Disks	...	39.00	1	<input type="checkbox"/>
				<input type="checkbox"/>

## Click Next:

### QUESTION

Question

Name your computer

AnswerText

### Answers

Total

2,782.00

### Result

QUESTION	ANSWER	QUANTITY	PRICE
Select ZIP Disk Packs	2 Pack Zip Disks	1	22.00
Select ZIP Drive	250 MB Zip Drive	1	115.00
Select Keyboard	Normal Keyboard	1	50.00
Select Network Connection	Network Connection	1	203.50
Select Monitor	17" Monitor	1	295.00
Select Graphics Card	Hi resolution Graphics Card	1	390.00
Select SCSI Disk	36 GB SCSI Disk	1	299.00
Select Disk Controller	SCSI Controller	1	58.00

Now we need to input text to name the computer. This is a text answer only. No selection is possible.

Type a name:

CONFIGURATOR

QUESTION

Question

AnswerText

Answers

Name your computer

SimCrest Demo Computer

Total

2,782.00

Click Next:

Answers

Total

2,782.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
Name your computer	... SimCrest Demo Computer	0	0.00
Select ZIP Disk Packs	... 2 Pack Zip Disks	1	22.00
Select ZIP Drive	... 250 MB Zip Drive	1	115.00
Select Keyboard	... Normal Keyboard	1	50.00
Select Network Connection	... Network Connection	1	203.50
Select Monitor	... 17" Monitor	1	295.00
Select Graphics Card	... Hi resolution Graphics Card	1	390.00
Select SCSI Disk	... 36 GB SCSI Disk	1	299.00

We are now done with all the questions and we see the final configuration.

Click Finish and the sales order lines are populated with this result:

EDIT - SALES ORDER - 1001 - THE CANNON GROUP PLC

Customer Name

The Cannon Group PLC

Due Date

10/23/2018

Contact

Mr. Andy Teal

Requested Delivery Date

Posting Date

9/23/2018

External Document No.

Order Date

9/23/2018

Lines

TYPE	NO.	DESCRIPTION	LOCATION CODE	QUANTITY	RESERVED QUANTITY	UNIT OF MEASURE CODE	UNIT PRICE EXCL. TAX	TA
Comment	...	Tower cabinet			-			
Item	... 80003	Computer III 733 MHz	BLUE	1	-	PCS	138.00	M
Item	... 70000	Side Panel	BLUE	5	-	PCS	47.30	M
Item	... 80013	384 MB PC800 ECC	BLUE	5	-	PCS	195.00	M
Item	... 80204	Ultra 160/M SCSI Controller	BLUE	1	-	PCS	58.00	M
Item	... 80027	36GB Ultra 160/M SCSI	BLUE	1	-	PCS	299.00	M
Item	... 80202	Chip 32 MB	BLUE	1	-	PCS	45.00	M
Item	... 80209	20/48x IDE CD ROM	BLUE	2	-	PCS	150.00	M
Item	... 80202	Chip 32 MB	BLUE	1	-	PCS	45.00	M
Item	... 80102	17" M780 Monitor	BLUE	1	-	PCS	295.00	M
Item	... 80205	10MBit Ethernet	BLUE	1	-	PCS	34.00	M
Item	... 80216	Ethernet Cable	BLUE	1	-	PCS	3.50	M
Resource	... TIMOTHY	Timothy Sneath	BLUE	2	-	HOURL	83.00	L
Item	... 80211	Quietkey Keyboard	BLUE	1	-	PCS	50.00	M
Item	... 80213	Drive250	BLUE	1	-	PCS	115.00	M
Item	... 80214	250MB Disks/2pack	BLUE	1	-	PCS	22.00	M
Comment	...	SimCrest Demo Computer			-			

Notice how the entire process resulted in a sales order with items, comments and resources. Each answer we gave resulted in the selection of items and resources. This is how the Sales Configurator works without any integration to any of the features of the Premium Edition of Dynamics 365 Business Central and how the rule-based Configurator works overall.

## Sales Configurator Rules Setup

Let's check how the Sales Configurator has been setup. Go to Configurator Setup and Click the action Sales.

### Questions

QUESTION LIST						
<div> <span>Search</span> <span>+ New</span> <span>Edit List</span> <span>Delete</span> <span>Manage</span> <span>Process</span> <span>Page</span> <span>Actions</span> <span>...</span> <span>Filter</span> <span>Menu</span> </div>						
CODE		LEVEL	DESCRIPTION	DESCRIPTION 2	NO ANS... ALL...	UNI... ANS...
CABINET	:	0	Select Cabinet		<input type="checkbox"/>	<input checked="" type="checkbox"/>
PROC		1	Select Processor		<input type="checkbox"/>	<input checked="" type="checkbox"/>
RAM	:	2	Select RAM		<input type="checkbox"/>	<input type="checkbox"/>
DISK		3	Select Disk Controller		<input type="checkbox"/>	<input checked="" type="checkbox"/>
IDE		4	Select Harddisk		<input type="checkbox"/>	<input checked="" type="checkbox"/>
SCSI		4	Select SCSI Disk		<input type="checkbox"/>	<input checked="" type="checkbox"/>
GRAPH		5	Select Graphics Card		<input type="checkbox"/>	<input checked="" type="checkbox"/>
MONITOR		6	Select Monitor		<input type="checkbox"/>	<input checked="" type="checkbox"/>
NET		7	Select Network Connection		<input type="checkbox"/>	<input checked="" type="checkbox"/>
KEYB		8	Select Keyboard		<input type="checkbox"/>	<input checked="" type="checkbox"/>
ZIP		9	Select ZIP Drive		<input type="checkbox"/>	<input checked="" type="checkbox"/>
ZIPDISK		10	Select ZIP Disk Packs		<input checked="" type="checkbox"/>	<input type="checkbox"/>
COMPNAME		11	Name your computer		<input type="checkbox"/>	<input type="checkbox"/>

These are the questions we may be asked. The level is the sequence the questions are asked in. Triggers will determine if we are asked the questions. Notice level 4 that has two entries. Something will make the Configurator chose one or the other question. That's called a Question Trigger.

Let's look at question CODE=IDE (Select Harddisk). Click the Code or click the Card action.

# Sales · IDE

## General

Code	<input type="text" value="IDE"/>	Unique Answer	<input checked="" type="checkbox"/>
Description	<input type="text" value="Select Harddisk"/>	No answer allowed	<input type="checkbox"/>
Description 2	<input type="text"/>	Text Answer Only	<input type="checkbox"/>
Level	<input type="text" value="4"/>	Persist Question	<input type="checkbox"/>

## Answers

CODE	DE...	DATE	DESCRIPTION	DESCRIPTION 2	NO QU...	DEFAULT QTY	MIN QTY	MAX QTY	ROL EXIS
IDE10.2	...	<input type="checkbox"/>	10.2 GB IDE Disk		<input type="checkbox"/>	1	1	3	No
IDE20.4	...	<input checked="" type="checkbox"/>	20.4 GB IDE Disk		<input type="checkbox"/>	1	1	3	No
IDE27	...	<input type="checkbox"/>	27 GB IDE Disk		<input type="checkbox"/>	1	1	3	No
IDE40	...	<input type="checkbox"/>	40 GB IDE Disk		<input type="checkbox"/>	1	1	3	No

Here is an explanation of the fields:

- **Code**  
A unique code for the question. The Sales Configurator and the Production Configurator can use the same code without interference.
- **Description, Description 2**  
This is the question the system will ask the user. If both are filled out the combined text will be the question.
- **Level**  
The level is used to determine when the question should be asked and is an integer. Negative values are allowed. The question with lowest value will be asked first (usually 0).  
*Recommendation.* Use 2 or 3-digit numbers, to allow inserting additional levels in the future without having to renumber the existing levels. Example, if you setup question levels 1, 2, 3, and 4 and then need to add one between 1 and 2, you would first have to renumber 4 to 5, and 3 to 4, in order to add a level. However, if you use 10, 20, 30, 40, there are 9 places to insert between each in the future if needed.
- **Unique Answer**  
If checked, only one answer is allowed. If not checked multiple answers will be allowed.
- **No Answer Allowed**  
If checked, the question allows No Answer, or blank, to be selected. By checking this field, the system will uncheck Unique Answer (if checked).
- **Text Answer Only**  
If checked the system will ask for text that will be placed on the sales order line. Any possible answers and items will be ignored.
- **Persist Question**  
If checked, the configurator will not delete the question and answer when you click the Back button. Usually a question is deleted when Back is clicked because a trigger might cause this question to not be asked. Persist Question will make sure it stays as a question with the answer that was given. This can however cause issues that breaks the rules in the configurator. Use with caution.

The Answers section will have all the answers that potentially could be available. The availability is determined by an Answer trigger (explained later).

## Question Triggers

A question trigger determines if the question is being displayed to the user. Click Trigger action:

QUESTIONNAIRE

Sales · IDE

Process

Actions

Less options

Question List

Trigger

General

Code

IDE

Description

Select Harddisk

The triggers are shown:

TRIGGERS

Manage

Process

Actions

Less options

Trigger Lines

LINE NO.	OPERATION
10000	And

You have the choice of AND or OR. The AND operation requires that all attached trigger lines will be true. The OR operation will require that at least one trigger line must be true. The question triggers contain one or more Boolean operations (one for each line).

If you add several operations as question triggers the Boolean operation between those will be AND.

**IMPORTANT:** Please make sure that the AND or the OR is written to the record before going to Trigger Lines (the line number needs to be greater than 0).

Click Trigger Lines:



#### EDIT - TRIGGER LINES

PREVIOUS QUESTION CODE	QUESTION DESCRIPTION	DIFFER... FROM	PREVIOUS ANSWER CODE	ANSWER DESCRIPTION
DISK	Select Disk Controller	<input type="checkbox"/>	NORMAL	IDE Controller
		<input type="checkbox"/>		

This is how this Question Trigger works. The IDE Question will only be asked if the Answer to the “Select Disk Controller” is “IDE Controller”. If not, the question will not be asked.

## Answers

The Answers section shows the potential answers for the Question. Select the IDE40 answer and click the Card for the answer line.

Answers

Manage

Answer

Less options

Card

Item Combinations

Routing Combinations

Trigger

CODE	DEFA...	DATE	DESCRIPTION	DESCRIPTION 2
IDE10.2	<input type="checkbox"/>		10.2 GB IDE Disk	
IDE20.4	<input checked="" type="checkbox"/>		20.4 GB IDE Disk	
IDE27	<input type="checkbox"/>		27 GB IDE Disk	
IDE40	<input type="checkbox"/>		40 GB IDE Disk	
	<input type="checkbox"/>			

ANSWER CARD

Sales · IDE · IDE40

Process Actions Less options

Item Combinations Routing Combinations Trigger

General

Code ..... IDE40

Default Qty ..... 1

Date .....

Min Qty ..... 1

Description ..... 40 GB IDE Disk

Max Qty ..... 3

Description 2 .....

Here is a description of each field:

- **Code**  
This is the answer code. The code must be unique to the question. The list of options will be sorted by this code when presented to the users during the configuration.
- **Description, Description 2**  
This is the possible answer that the user will see in the questionnaire.





- **Default**  
A check mark in this field denotes this is the most common answer and when the question is asked this answer will have a check mark associated with it.
- **No Quantity**  
Quantity not available.
- **Default Quantity**  
This is the default quantity suggested in the questionnaire.
- **Min Qty**  
This is the minimum quantity allowed for this answer.
- **Max Qty**  
This is the maximum quantity allowed for this answer.

Quantities are only necessary when there are Answer Item Lines associated with the answer. The system will accept any quantity if both *Min Qty* and *Max Qty* are 0 (zero).

## Answer Trigger






An answer trigger determines if the Answer will be available to pick. Just like with the Question Trigger, it's based on how questions were answered previously.

Click the Trigger for the IDE40 answer:

ANSWER CARD    

Sales · IDE · IDE40


Process | Actions | Less options

 Item Combinations
  Routing Combinations
  Trigger 


General

Code ..... IDE40

Default Qty ..... 1

Date ..... 

Min Qty ..... 1


Description ..... 40 GB IDE Disk




Max Qty ..... 3

Description 2 .....

Here we specify and AND operation:



TRIGGERS 

Manage | Process | Actions | Less options 

 Trigger Lines 


LINE NO.	OPERATION
10000	And

Click Trigger Lines to see the conditions for this answer:

TRIGGER LINES 					
Manage 					
PREVIOUS QUESTION CODE		QUESTION DESCRIPTION	DIFF... FROM	PREVIOUS ANSWER CODE	ANSWER DESCRIPTION
CABINET	:	Select Cabinet	<input type="checkbox"/>	TOWER	Tower Cabinet
			<input type="checkbox"/>		

This means that the IDE40 answer will only be available to pick if we selected the “Tower Cabinet” in the “Select Cabinet” question.

Here is description for each field:

- **Previous Question Code**  
This is a question that should have been answered previously. You can pick from a list of previous questions.
- **Question Description**  
This is the question associated with the above code.
- **Different from**  
Indicates a negation (logical NOT). Used if the answer above should be something other than the answer code.
- **Answer Code**  
This is the answer code to the above question that should trigger the overall question.
- **Answer Description**  
This is the answer associated with the above answer code.


### Answer Item Combination








For each answer, several Item Combinations can be set up. An Item Combination is a combination of items that should be populated to the sales lines as a result of the configuration.




Several combinations can be entered and a trigger for each combination will determine which combination the Configurator will use.

For each combination a trigger should be set up to determine if the combination should be used. You should also enter the item combination for each code.

Click Item Combinations for IDE40 answer:

ANSWER COMBINATIONS 






 Search
  New
  Edit List
  Delete
 Process
  Edit In Excel
 |
 [Actions](#)



 Trigger
  Lines
 

TYPE ▼	CODE	DESCRIPTION
Item	1	Combination 1

Only one combination is available here. If there were more than one, you can use triggers to determine which one will be used to populate items into the sales line. There are no triggers for this item combination, so that means the items will always be picked if this answer is selected.

Click Lines to see the Item lines:

EDIT - ANSWER ITEM LINES  New    

TYPE	NO.	DESCRIPTION	VARIANT CODE	QUANTITY	UNIT PRICE
Item	80024	40GB ATA-66 IDE		1.00	305.00

Here is a description of each field:

- Type  
Here are the options:
  - Blank: The text will transfer to the order as a comment
  - Item: Select the item
  - Resource: Select the Resource
- No.  
This will be the No. of the Item or Resource.
- Description  
Description will default in from the item/resource card. If the type was blank enter in the comment you want shown.
- Variant Code  
Variant code for the Item.
- Quantity
- Unit Price

The resulting quantity on the sales order will be the above quantity multiplied by the answered quantity.

## More About Triggers

Triggers are used to determine, for instance, if a question should be asked or not. The Triggers make this determination based on the answers to previously answered questions. The same applies to answer triggers.

Let's have a look at an example of a trigger.

## AND trigger

### Sales · ZIP

General

Code	ZIP	Unique Answer	<input checked="" type="checkbox"/>
Description	Select ZIP Drive	No answer allowed	<input type="checkbox"/>

EDIT - TRIGGERS

LINE NO.	OPERATION
10000	...

EDIT - TRIGGER LINES

PREVIOUS QUESTION CODE	QUESTION DESCRIPTION	DIFFER... FROM	PREVIOUS ANSWER CODE	ANSWER DESCRIPTION
CABINET	...	<input type="checkbox"/>	TOWER	Tower Cabinet
DISK	...	<input type="checkbox"/>	SCSI	SCSI Controller

This trigger will ask to select a ZIP drive only if:

- We previously selected a Tower Cabinet AND
- We previously selected a SCSI controller

The Operation denotes an AND operation, so both conditions must be true.

## OR Trigger

In the next example we have just changed the Operation to OR so that just one of the previously asked questions must be selected.

### Sales · ZIP

General

Code	ZIP	Unique Answer	<input checked="" type="checkbox"/>
Description	Select ZIP Drive	No answer allowed	<input type="checkbox"/>

EDIT - TRIGGERS

LINE NO.	OPERATION
10000	...

EDIT - TRIGGER LINES

PREVIOUS QUESTION CODE	QUESTION DESCRIPTION	DIFFER... FROM	PREVIOUS ANSWER CODE	ANSWER DESCRIPTION
CABINET	...	<input type="checkbox"/>	TOWER	Tower Cabinet
DISK	...	<input type="checkbox"/>	SCSI	SCSI Controller

## OR and AND Triggers combined

You can add additional Operations and attach trigger lines to those operations also. The logical operator between two or more operations is always AND.

In the last example there are two operations, one OR and one AND.

## Sales · ZIP

### General

Code	ZIP	Unique Answer	<input checked="" type="checkbox"/>
Description	Select ZIP Drive	No answer allowed	<input type="checkbox"/>

LINE NO.	OPERATION
10000	...
20000	...

#### EDIT - TRIGGER LINES

PREVIOUS QUESTION CODE	QUESTION DESCRIPTION	DIFFER... FROM	PREVIOUS ANSWER CODE	ANSWER DESCRIPTION
RAM	Select RAM	<input type="checkbox"/>	RAM512	512 MB RAM

#### EDIT - TRIGGER LINES

PREVIOUS QUESTION CODE	QUESTION DESCRIPTION	DIFFER... FROM	PREVIOUS ANSWER CODE	ANSWER DESCRIPTION
CABINET	Select Cabinet	<input type="checkbox"/>	TOWER	Tower Cabinet
DISK	Select Disk Controller	<input type="checkbox"/>	SCSI	SCSI Controller

The trigger will evaluate to the following logical expression:

(RAM=512MB) AND ((Cabinet=Tower) OR (Disk=SCSI))

So, the question will be asked if RAM=512MB and either Cabinet=Tower or Disk=SCSI was selected.

There are also triggers to determine if an answer should be available and triggers for item combinations. They are set up in a similar fashion.

### A Note on Entering Triggers

When entering a trigger, you must enter an AND or OR operation. When doing so, make sure that the Line No. next to the operation is populated (different from zero). If not, the trigger will not be working correctly.

## Production Configurator

*Premium Edition only.*

The production configurator is used to create a custom production order from a sales order (quotes and invoices also supported) based on a questionnaire.

### Setting up for Scenarios

First, we need to make sure that the manufacturing module is setup correctly for the scenarios below. Search for Manufacturing Setup. If you can't find the Manufacturing Setup page, make sure you selected Premium User Experience under Company Information. Fill all fields out like below:

## Manufacturing Setup

### General

Normal Starting Time	<input type="text" value="8:00:00 AM"/>	Planning Warning	<input checked="" type="checkbox"/>
Normal Ending Time	<input type="text" value="11:00:00 PM"/>	Doc. No. Is Prod. Order No.	<input checked="" type="checkbox"/>
Preset Output Quantity	<input type="text" value="Expected Quantity"/>	Dynamic Low-Level Code	<input checked="" type="checkbox"/>
Show Capacity In	<input type="text" value="MINUTES"/>	Cost Incl. Setup	<input checked="" type="checkbox"/>

### Numbering

Simulated Order Nos.	<input type="text" value="M-QUO"/>	Work Center Nos.	<input type="text" value="WORKCTR"/>
Planned Order Nos.	<input type="text" value="M-PLAN"/>	Machine Center Nos.	<input type="text" value="MACHCTR"/>
Firm Planned Order Nos.	<input type="text" value="M-FIRMP"/>	Production BOM Nos.	<input type="text" value="PRODBOM"/>
Released Order Nos.	<input type="text" value="M-REL"/>	Routing Nos.	<input type="text" value="ROUTING"/>

### Planning

Current Production Forecast	<input type="text" value="2020"/>	Combined MPS/MRP Calculation	<input checked="" type="checkbox"/>
Use Forecast on Locations	<input type="checkbox"/>	Components at Location	<input type="text" value=""/>
Default Safety Lead Time	<input type="text" value="1D"/>	Default Dampener Period	<input type="text" value=""/>
Blank Overflow Level	<input type="text" value="Allow Default Calculation"/>	Default Dampener %	<input type="text" value="0.0"/>

We also want to calculate the shop calendar for the machine centers. Find Machine Centers.

←

MACHINE CENTERS

↗

🔍 Search

+ New

Manage

Process

Report

Page

Navigate

Report

...

🔍

☰

📊 Statistics

📅 Calendar

📋 Absence

📝 Task List

🔗

NO.	NAME	WORK CENTER NO.	CAPACITY	EFFICIENCY	SEARCH NAME
110	Mike Seamans	100	1	100	MIKE SEAMANS
120	Bryan Walton	100	1	100	BRYAN WALT...
130	Linda Mitchell	100	1	100	LINDA MITCH...
210	Packing table 1	200	1	100	PACKING TAB...
220	Packing table 2	200	1	100	PACKING TAB...

Click Calendar:

📅

+

🗑

## Machine Center Calendar

Process

Actions

Less options

📅 Show Matrix

◀ Previous Set

▶ Next Set

### Matrix Options

View by

Day

Column Set

04/05/19..05/06/19

Click Show Matrix:

Search Process Page <b>Actions</b> Navigate Less options					
Functions ▾					
Calculate...					
Recalculate...					
		04/05/19		04/06/19	
110	Mike Seamans	-	-		
120	Bryan Walton	-	-		
130	Linda Mitchell	-	-		
210	Packing table 1	-	-		

Click Calculate... (Pick current year)

EDIT - CALC. MACHINE CENTER CALENDAR

Options

Starting Date
1/1/2018

Ending Date
12/31/2018

Machine Center

Show results:

Where: No. is:

Schedule... OK Cancel

Click OK.

Check that all machine centers have capacity showing like this (you may have to refresh screen):

NO.	NAME	09/25/18	09/26/18	09/27/18	09/28/18	09/29/18
110	Mike Seamans	480.00	480.00	480.00	480.00	-
120	Bryan Walton	480.00	480.00	480.00	480.00	-
130	Linda Mitchell	480.00	480.00	480.00	480.00	-
210	Packing table 1	480.00	480.00	480.00	480.00	-



Do the same for Work Centers:

← WORK CENTERS

Search

+ New

Manage

Process

Report

Page

Actions

Navigate

...

Calculate Work Center Calendar

Statistics

Calendar

Absence

Task List

NO.	NAME	ALTERNATE WORK CENTER	WORK CENTER GROUP CODE	UNIT OF MEASURE CODE	CAPACITY
100	Assembly department		1	MINUTES	3
200	Packing department		1	MINUTES	1
300	Painting department		2	MINUTES	1
400	Machine department		2	MINUTES	1

✎

+

🗑

Work Center Calendar

Process

Actions

Less options

Show Matrix

◀ Previous Set

Next Set ▶

Matrix Options

View by

Day

Column Set

04/05/19..05/06/19

Search

Process

Page

Actions

Navigate

Less options

⚡ Functions

Calculate...

Recalculate...

NO.	NAME	04/05/19	04/06/19	04/07/19
100	Assembly department	—	—	—
200	Packing department	—	—	—
300	Painting department	—	—	—
400	Machine department	—	—	—

## Running the Production Configurator

Now we can run the production configurator from start to finish so we can see how it's supposed to work.

### Create Sales Order

Create a sales order for The Cannon Group (10000):

SALES ORDER

1003 · The Cannon Group PLC

Process Report Release Posting Order Request Approval Actions Navigate Report Less options

**General** Show more

Customer Name ..... The Cannon Group PLC

Contact ..... Mr. Andy Teal

Posting Date ..... 4/3/2019

Order Date ..... 4/3/2019

Due Date ..... 5/3/2019

Requested Delivery Date .....

External Document No. ....

Lines | [Manage](#) More options

[New Line](#) [Delete Line](#) [Select items...](#)

TYPE	NO.	DESCRIPTION	LOCATION CODE	QUANTITY	RESERVED QUANTITY	UNIT OF MEASURE CODE	UNIT PRICE EXCL. TAX	TAX GROUP CODE	LINE DISCOUNT %	LINE AMOUNT EXCL. TAX	AMOUNT INCLUDING TAX	QTY. T
Item	1000	Bicycle	BLUE	10	-	PCS	4,000.00	NONTAXABLE		40,000.00	40,000.00	

Subtotal Excl. Tax (USD) ..... 0.00 Total Excl. Tax (USD) ..... 32,300.00

We are configuring Item 1000, Bicycle. Fill out a sales line like above.

Click Configurator and Production above the lines.

Lines | [Manage](#) [Configurator](#) [Line](#) [Order](#) Less options

[Sales](#) [Production](#)

TYPE	NO.	DESCRIPTION	LOCATION CODE	QUANTITY
Item	1000	Bicycle	BLUE	10

The Production Configurator is launched. We must decide what type of Production Order is required. Let's do Firm Planned.

HOME

EDIT - CREATE SALES ORDER FROM SALES LINE - 1000 · BICYCLE

**General**

What type of Production Order? [Firm Planned](#)

[Close](#)

Click Close to continue.

The first question is loading the default BOM. This is a feature that allows you to load the BOM from the item you are configuring as the default BOM. This is used to load components that are used for all configurations of the item.

CONFIGURATOR

QUESTION

Question

DEFAULTTEXT

LoadDefault

Answers

Load Default BOM

Click Next to Load

Total

0.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
(There is nothing to show in this view)			

Click Next. Now we select the style.

CONFIGURATOR

QUESTION

Question

Answers

Select Style

DESCRIPTION	PRICE	QUANTITY	SELECTED
Black style	2,500.00	1	<input type="checkbox"/>
Red style	2,500.00	1	<input checked="" type="checkbox"/>
Silver style	2,500.00	1	<input type="checkbox"/>

Total

0.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
Load Default BOM	Loaded	1	0.00

Next, we select the wheel size.

## CONFIGURATOR

### QUESTION

Question

Select Wheel Size

### Answers

DESCRIPTION	PRICE	QUANTITY	SELECTED	
23" wheel	0.00	1	<input type="checkbox"/>	...
25" wheel	2,200.00	1	<input checked="" type="checkbox"/>	...
27" wheel	2,200.00	1	<input type="checkbox"/>	...
			<input type="checkbox"/>	

Total

2,500.00

### Result

QUESTION	ANSWER	QUANTITY	PRICE
Select Style	... Red style	1	2,500.00
Load Default BOM	... Loaded	1	0.00

Next, we pick the saddle.

## CONFIGURATOR

### QUESTION

Question

Select Saddle

### Answers

DESCRIPTION	PRICE	QUANTITY	SELECTED	
Normal saddle	0.00	1	<input checked="" type="checkbox"/>	...
Racing saddle	0.00	1	<input type="checkbox"/>	...
			<input type="checkbox"/>	

Total

4,700.00

### Result

QUESTION	ANSWER	QUANTITY	PRICE
Select Wheel Size	... 25" wheel	1	2,200.00
Select Style	... Red style	1	2,500.00
Load Default BOM	... Loaded	1	0.00

Select the Mudguards

CONFIGURATOR

QUESTION

Question

Select Mudguards

Answers

DESCRIPTION	PRICE	QUANTITY	SELECTED	
Back mudguard	0.00	1	<input checked="" type="checkbox"/>	...
Front mudguard	0.00	1	<input checked="" type="checkbox"/>	...
No mudguards	0.00	0	<input type="checkbox"/>	...
			<input type="checkbox"/>	

Total

4,700.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
Select Saddle	... Normal saddle	1	0.00
Select Wheel Size	... 25" wheel	1	2,200.00
Select Style	... Red style	1	2,500.00
Load Default BOM	... Loaded	1	0.00

Continue to pick the default settings for the next questions until done:

CONFIGURATOR



Answers

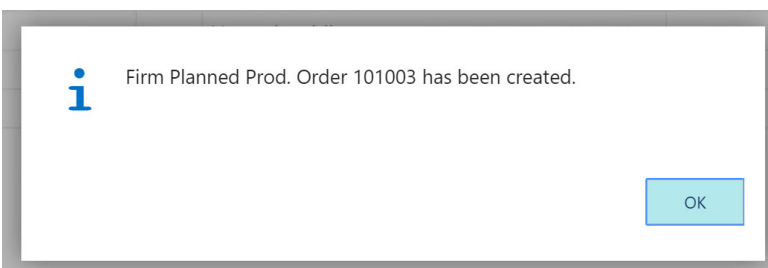
Total

4,705.00

Result

QUESTION	ANSWER	QUANTITY	PRICE
Select Handle Bars	... Handle Bars selected	1	0.00
Select Bell	... Bell selected	1	0.00
Select Lamp	... Lamp selected	1	5.00
Select Mudguards	... Front mudguard	1	0.00
Select Mudguards	... Back mudguard	1	0.00
Select Saddle	... Normal saddle	1	0.00
Select Wheel Size	... 25" wheel	1	2,200.00
Select Style	... Red style	1	2,500.00

Click Finish.



The Production Order is created and will be part of the production plan.

## Production Configurator Rules Setup

The Production Configurator is setup almost identical to the Sales Configurations. Triggers are setup the same way for questions, answers, and item combinations.

Let's look at some of the additional triggers that are available for the Production Configurator.

Here are the questions that were used:

VIEW - QUESTION LIST + New

CODE	LEVEL	DESCRIPTION	DESCRIPTION 2	NO ANSWER ALLOW...	UNIQUE ANSWER
<a href="#">LOAD</a>	...	0	Load Default BOM	<input type="checkbox"/>	<input type="checkbox"/>
<a href="#">STYLE</a>	0	Select Style		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<a href="#">WHEEL</a>	1	Select Wheel Size		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<a href="#">SADDLE</a>	2	Select Saddle		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<a href="#">MUDGUARDS</a>	3	Select Mudguards		<input type="checkbox"/>	<input type="checkbox"/>
<a href="#">LAMP</a>	4	Select Lamp		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<a href="#">BELL</a>	5	Select Bell		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<a href="#">HANDBARS</a>	6	Select Handle Bars		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Click on the LOAD code:

EDIT - QUESTIONNAIRE

### Manufacturing · LOAD

General

Code	<input type="text" value="LOAD"/>	Unique Answer	<input type="checkbox"/>
Description	<input type="text" value="Load Default BOM"/>	No answer allowed	<input type="checkbox"/>
Description 2	<input type="text"/>	Text Answer Only	<input type="checkbox"/>
Level	<input type="text" value="0"/>	Persist Question	<input type="checkbox"/>

**Production**

Schedule Direction	<input type="text" value="Backward"/>	Items Question Apply To	
Use Standard Routing	<input type="checkbox"/>		
Load Default BOM	<input checked="" type="checkbox"/>		

ITEM NO.		
1000		...
1001		...

The Production tab is new for this configurator. Here is the description of each field:

- **Schedule Direction**  
This refers to how you want the production order dates to be scheduled.
  - **Backward** – will schedule from the requested or document date backwards so that it will finish on the proper date.
  - **Forward** – will schedule forward from the requested or document date to finish when the routing times are completed.
- **Use Standard Routing**  
This is used to tell the system to use default routing associated with the item being configured. It only needs to be checked on the question with the lowest level (other levels are ignored). If

checked, default routing is loaded, and additional routes are added through the Answer Routing Lines and Triggers

- **Load Default BOM**  
This is used to load the Production BOM for the item. All items on the Production BOM will be loaded and priced. Usually this is done on the very first question, but it can be done anywhere during the question process. Any possible answers will be ignored.
- **Items Question Apply To**  
This lists what Item No.s this question should be asked for. This enables you to set up different questionnaires for different items.

For the LOAD question, the Load Default BOM was checked. This means that the configurator is loading the BOM on the Item that we are configuring. Make sure the BOM only contains the components needed for the configuration.

Notice the “Items Question Apply To” section has two items listed. These items are the only items that this question applies to. All other items will not be asked this question.

There is one additional trigger that is available for the Production Configurator and that is the Routing Trigger.

## Answer Routing Trigger

It’s possible to create custom routings for the production order. The Answer Routing Lines contain the exact same fields as a normal routing line. Refer to Dynamics 365 Business Central documentation for information on these fields.

Production >					
<div> <div>Answers</div> <div> <div>Manage</div> <div>Answer</div> <div>Less options</div> </div> </div>					
<div> <div>Card</div> <div>Item Combinations</div> <div>Routing Combinations</div> <div>Trigger</div> </div>					
CODE	DEFA...	DATE	DESCRIPTION		
23"	<input type="checkbox"/>		23" wheel		
25"	<input checked="" type="checkbox"/>		25" wheel		
27"	<input type="checkbox"/>		27" wheel		

The trigger works the same way the other triggers work.

## Sales Configurator Creating New Assembly BOM/Order

*Premium Edition only.*

The sales configurator can create an assembly order instead of populating the sales order with all the lines. To set that up we need to change Configurator Setup. Select Assembly BOM like below:

### Configurator Setup

#### General

Early Close Action

Prompt

#### Sales

Create BOM From Sales Config

Assembly BOM ▼

Default Item\BOM Nos

SIMC-CFITM ...

Duplicate Item\BOM Option

Prompt ▼

Default Production Item No.

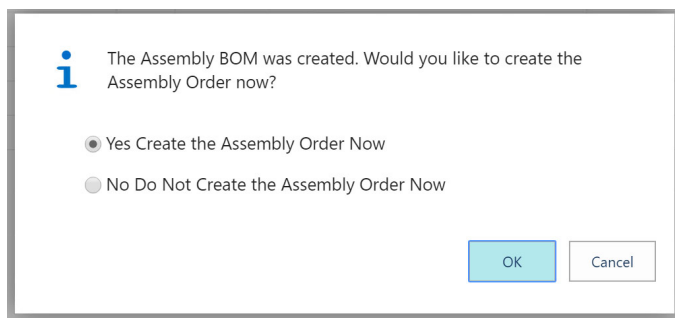
...

### Start Sales Configurator

Create a new order without any lines and launch the Sales Configurator.

Click Next until the configuration is done. Click Finished.

This is the result:



Select "Yes, Create the Assembly Order Now" and click OK.

Check the resulting Assembly Order (make sure you are on the new sales line that was just created):



SALES ORDER

1003 · The Cannon

Process Report Release Posting Order

Actions Navigate Report Less options

**General**

Customer Name ..... Th  
Contact ..... M  
Posting Date ..... 4/  
Order Date ..... 4/

Due Date ..... 5/3  
Requested Delivery Date .....  
External Document No. ....

Lines Manage Configurator Line

Functions Item Availability by Related Information

Reservation Entries  
Item Tracking Lines  
Select Item Substitution  
Dimensions  
Comments  
Item Charge Assignment  
Order Promising  
Attachments  
Assemble to Order  
Document Line Tracking  
Deferral Schedule

Assemble-to-Order Lines  
Roll Up Price...  
Roll Up Cost...

TYPE	NO.	DESCRIPTION	LOCATION CODE	QUANTITY	RESERVED QUANTITY	UNIT OF MEASURE CODE	UNIT PRICE EXCL. TAX	TAX GROUP CODE
Item	*	*						

Here is the resulting Assembly Order:

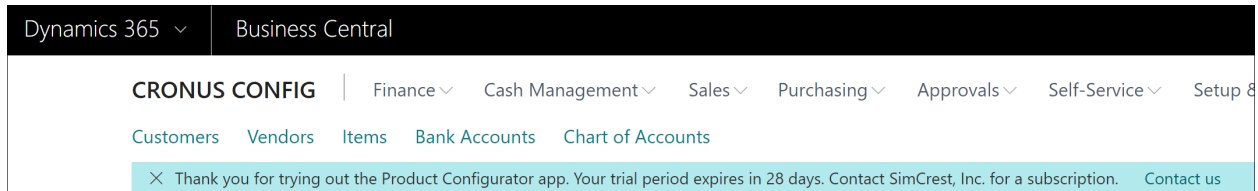
HOME		ACTIONS		NAVIGATE	
	Delete		Show Document		Reserve...
	Item Tracking Lines		Process		

EDIT - ASSEMBLE-TO-ORDER LINES - ITEM ITEM000002

AVAIL. WAR...	TYPE	NO.	DESCRIPTION	UNIT OF MEASURE CODE	QUANTITY PER	QUANTITY
...	...	...	Tower cabinet	...	0	0
Yes	Item	80002	Computer III 600 MHz	PCS	1	1
Yes	Item	70000	Side Panel	PCS	1	1
Yes	Item	80022	20.4 GB ATA-66 IDE	PCS	1	1
Yes	Item	80202	Chip 32 MB	PCS	1	1
Yes	Item	80209	20/48x IDE CD ROM	PCS	2	2
Yes	Item	80202	Chip 32 MB	PCS	1	1
Yes	Item	80102	17" M780 Monitor	PCS	1	1
Yes	Item	80205	10MBit Ethernet	PCS	1	1
Yes	Item	80216	Ethernet Cable	PCS	1	1
	Resource	TIMOTHY	Timothy Sneath	HOUR	2	2
Yes	Item	80211	Quietkey Keyboard	PCS	1	1
Yes	Item	80213	Drive250	PCS	1	1
Yes	Item	80215	250MB Disks/4pack	PCS	1	1
	...	...			0	0

## Trial Period and Activating/Renewing a Subscription

When you have installed the Product Configurator App, it will automatically run for a trial period of 30 days. During that time, you are free to evaluate the solution and there are no restrictions to the version running under the trial period. Each time anyone logs into Dynamics 365 Business Central they will see a trial period message in their Role Center.



Once the trial period has expired, the Product Configurator system will stop working. To avoid that, you need to subscribe to the Product Configurator. Contact SimCrest to purchase a subscription.

There are three subscriptions available:

1. Sales Configurator only
2. Production Configurator (requires premium edition of Dynamics 365 Business Central)
3. Both Sales and Production Configurator (requires premium edition of Dynamics 365 Business Central)

You can click the "Contact us" link in the message to send us a message (<http://simcrest.com/ContactUs>).

Each subscription of Product Configurator is licensed per company and is tied to the company name. You can see the company name by searching for "Companies":

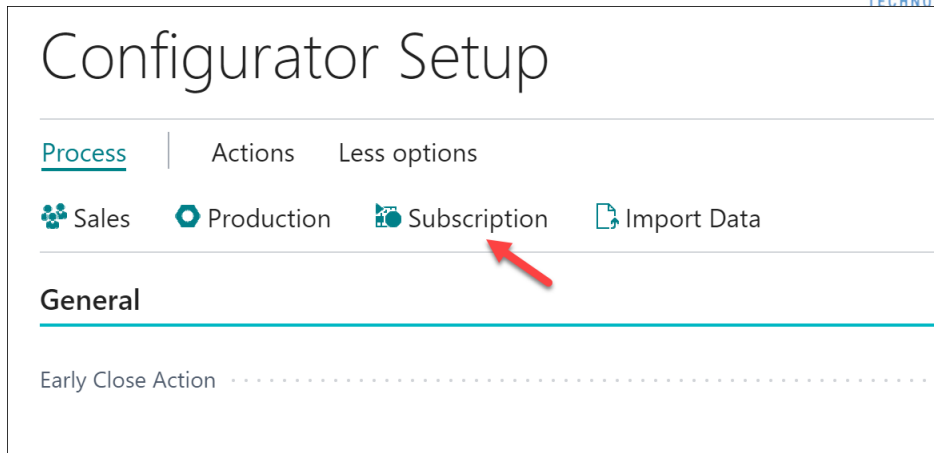
## Companies

Search		New	Edit List	Delete	Process	Edit In Excel
NAME	DISPLAY NAME					
CRONUS CAH	CRONUS CAH					
CRONUS Test new company	CRONUS Test new company					
Cronus USA 3 Full	CRONUS USA, Inc.					
CRONUS USA Configurator	CRONUS USA, Inc.					
My Company	My Company					

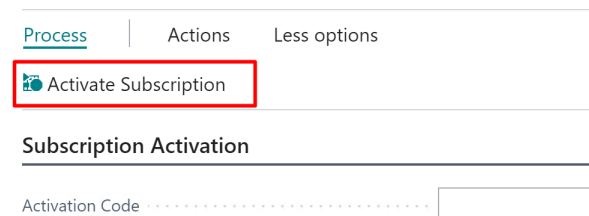
Pick the company name from the name column (not the Display Name) and send it to SimCrest together with the request for a subscription. Subscriptions usually run for 1 year at a time but can be customized to your specific needs.

Once purchased, SimCrest will issue you an activation code. Here is how to activate the subscription:

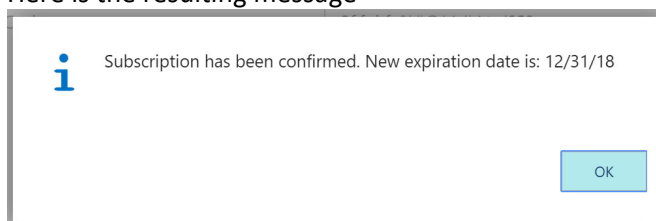
- Go to Product Configurator Setup and click Process, Subscription



- Paste the activation code into the field and click Activate Subscription



- Here is the resulting message



## Subscription Expiration

If the Product Configurator subscription expires the solution will no longer work. You also won't be able to access any of the Product Configurator features. We suggest you uninstall the extension if you are no longer using it.

## Customer Support and Request for new features

If you have questions how to use Product Configurator or have issues to report, we would love to hear from you. Please go to <http://simcrest.com/ContactUs> and send us a message. Use the same link if you like to request new features for Product Configurator.