x-config – PureFlex System Training v2

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Introduction

- The PureFlex solution is pre-defined and integrated, although minimal changes are allowed. As such, you have to be careful about what changes you make. It is highly suggested that you define your nodes during the initial node selections. If adding nodes after the initial node selections, be sure to validate the chassis power supply and fan selections.

- It is acceptable to make changes to the HDD, CPU and Memory of the nodes. For the switches, SFPs and cabling changes are not recommended.

- Any changes to the configuration that are made are subject to rules checking in the configurator, which are defined by the PureFlex solution definition.

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x-config - Starter Screen

On the x-config Starter screen, choose "PureFlex System" and click the "New configuration" button.
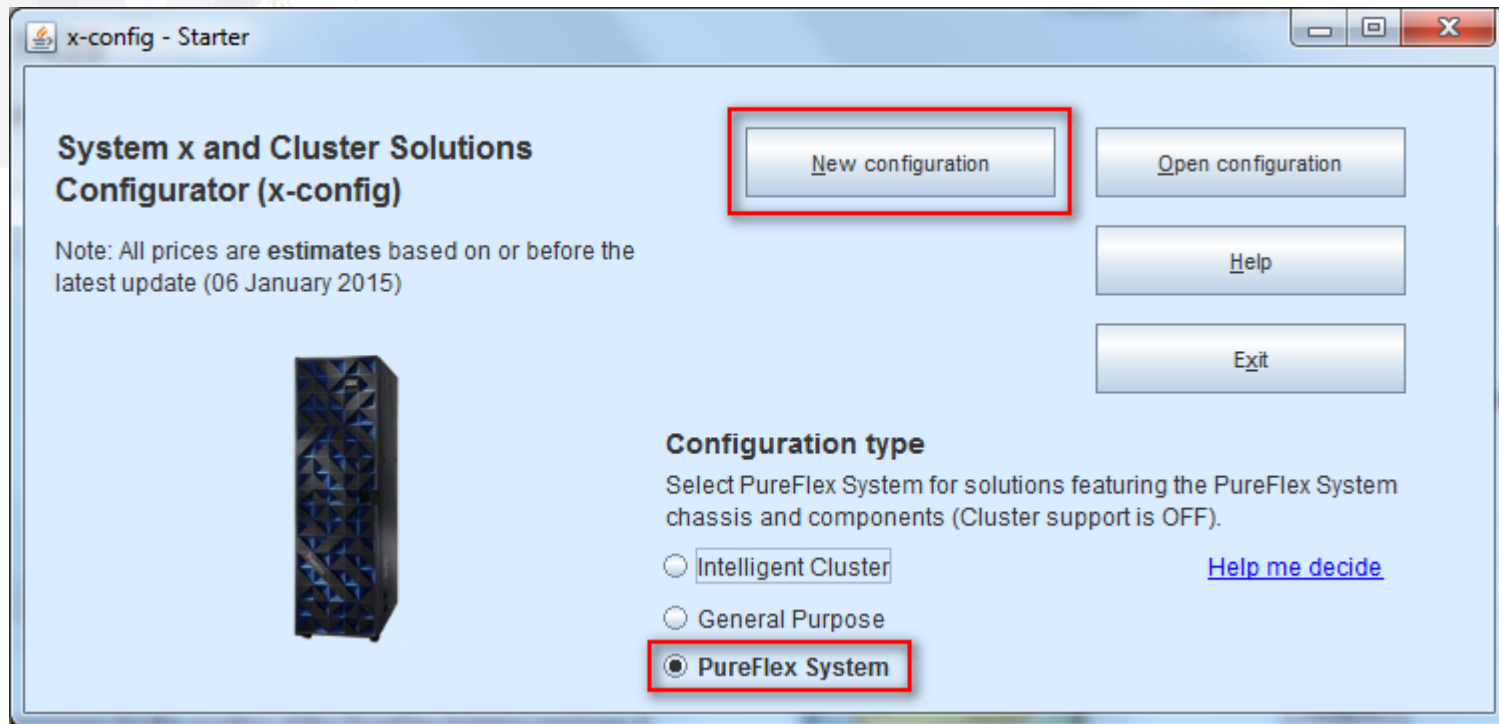
Note: *This presentation was validated on 13 January 2015. Images in this presentation may be slightly different from production as the configurator is continually updated to reflect new features and product selections.*

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Choose your country and the PureFlex System you would like to configure. In this training module we will configure the PureFlex System (single chassis) for the country selection of "United States".

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After previous screen closes, a pop-up of the template will display for building the base PureFlex System configuration. Start by choosing a Rack or no Rack ("None"). For this example I am selecting "PureFlex System 42U Rack".

Next choose your Rack power distribution. For this training module I am selecting "Three Phase". Note: The selection of the line cords into the rack PDUs and the line cords from each rack PDU to the components in the rack are automatically pre-selected and pre-configured for you.

Next choose your Chassis networking configuration. For this training module I am selecting "Converged Networking (FCoE)".
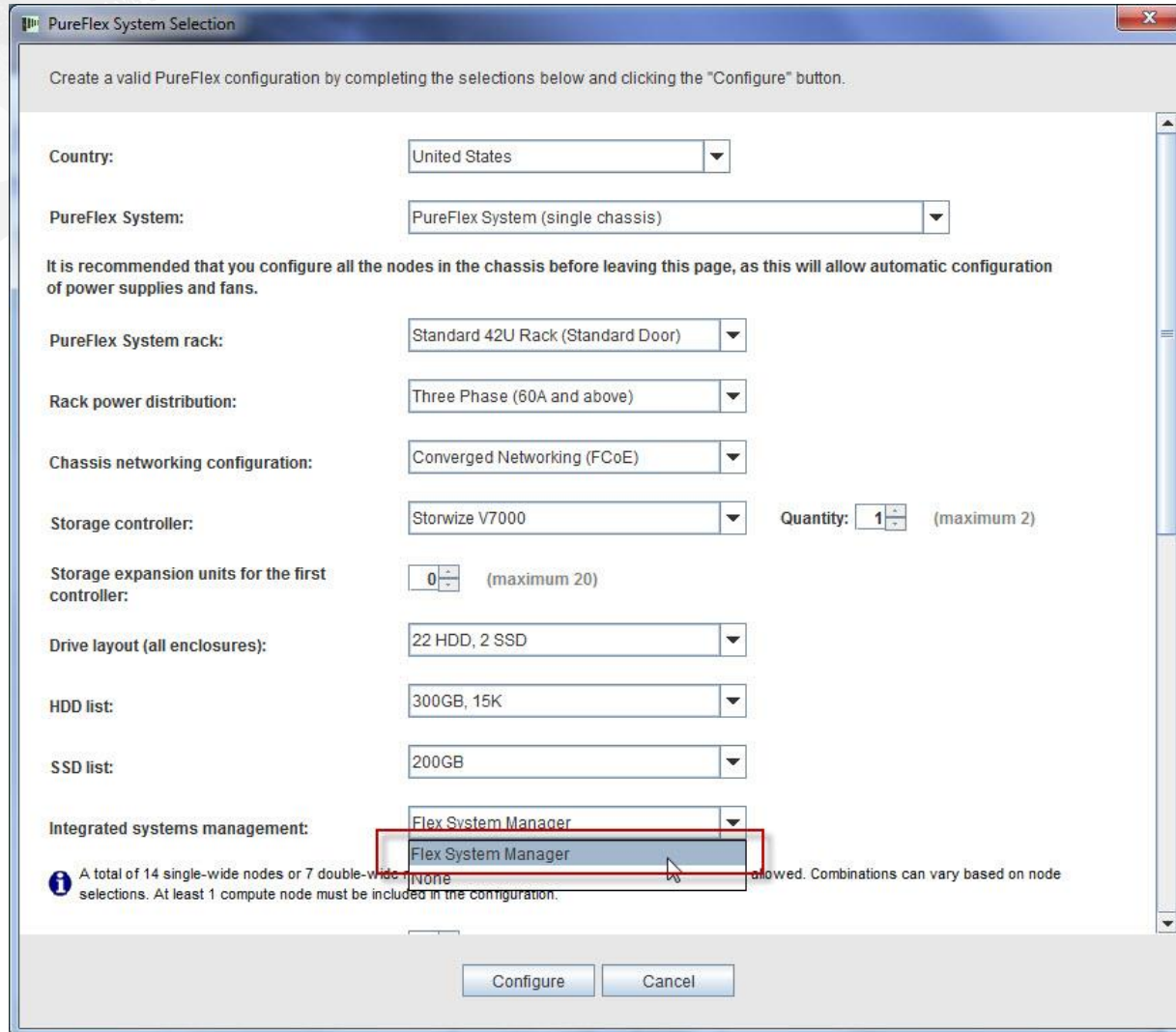
Next choose your Integrated systems management. By default the "Flex System Manager" will be selected, but you could select "None".

Next select the Flex System nodes needed for the solution. In this example I selected one x220, one x240 and one x440. It is recommended you select the correct number of nodes at this point in the configuration, so that the proper number of chassis PSUs and fans are automatically placed in the order. You can always change/add/remove nodes during the configuration process but you may manually have to add PSUs and fans. Click "Configure".

After clicking "Configure" on the previous screen, the main configuration window will display. Node configuration, excluding the adding of CPU, HDD and Memory, is set to a minimum and may need to be altered to fit specific workloads. In general, rack and chassis components like PSUs, fans, switches, SFPs, and cabling should not be modified. Doing so might cause warnings in your PureFlex configuration which must be manually be corrected. When node modifications are complete, then the configuration is ready for saving and exporting. For this training module we will make additions and modifications, see the following slides.

If you need to make changes, right-click on the chassis and several options will display, including "Add Node", "Edit Node", "Remove Node", and "Edit" (see below). For this example I will select "Edit Node' and choose the x240.

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Here I am making some changes to the x240 node. x-config is rules-based, so any changes may cause error messages to appear. If any red X error messages appear, you must clear them before saving and proceeding.
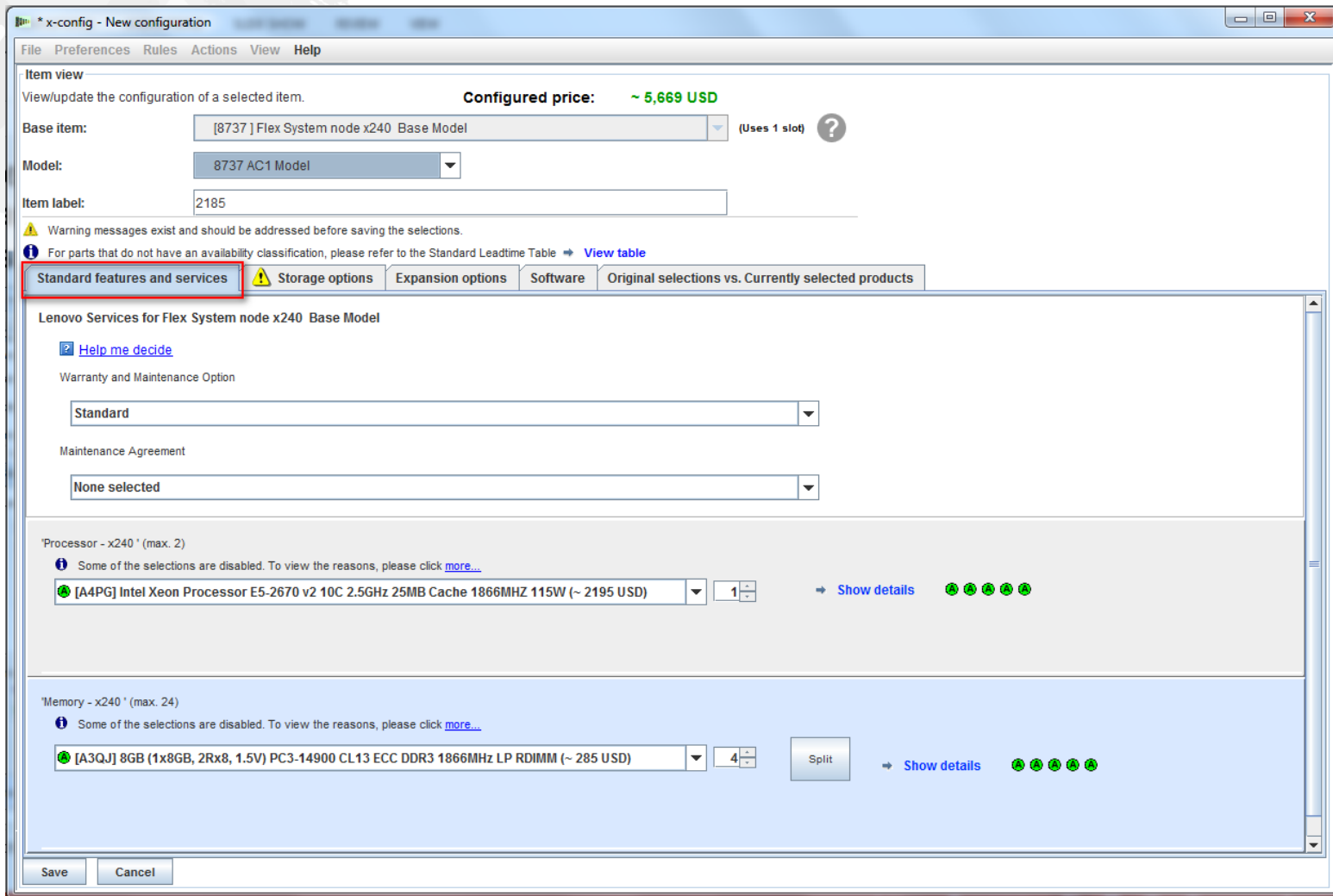
Now I will move to the "Storage options" tab for the x240. Here I added two IBM 1TB HDDs.
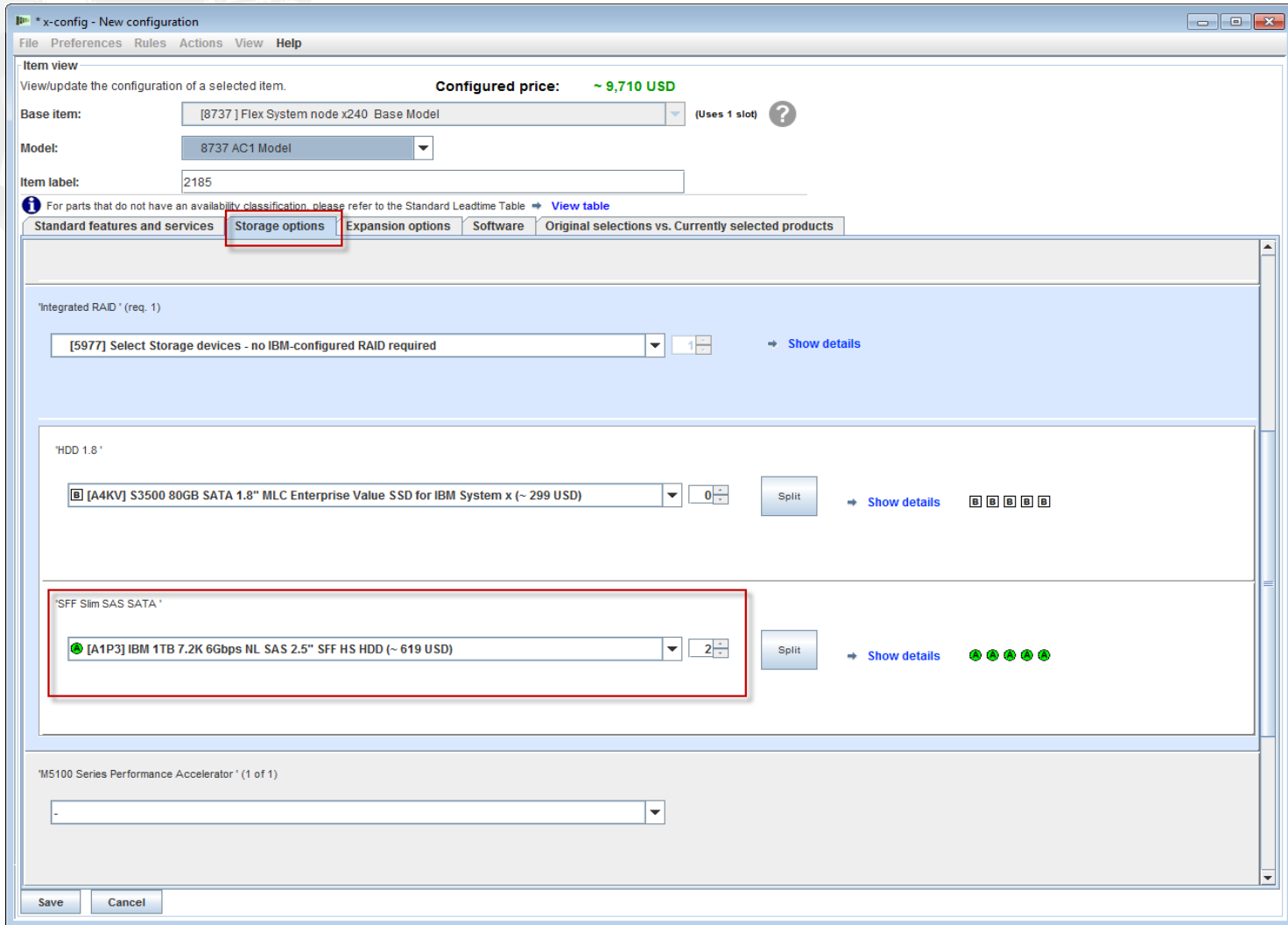
The last tab, "Original selections vs. Currently selected products", is a great way to track changes from iteration to iteration of the configuration for the x240. This tab and capability is available for all the components in this solution. Next, click "Save".

Clicking "Save" as indicated on the previous slide returns you to the main configuration window. Next I will add another node, see the following slides. Note: Not shown is the ability to copy nodes after configuring the 1st node. For example, if you need 10x nodes with the same CPU SKU, memory and storage then build the 1st and then duplicate the 1st node nine times. You should not copy Chassis, as this will invalidate the solution and cause multiple errors.

Right-click on the chassis to get the pop-up box shown below. From here I will select "Add Node", then select "New Node". I could add an already configured node, like the x220.

After selecting "Add a new node…", the screen below displays. Now you can select the node type you would like to add. In this example I selected the "Flex System node x240 Base Model".

Next go through the tabs to add the desired options and build the configuration as needed.

Here on the "Expansion options" tab you need to set the "IBM PureFlex System Indicator", see below. Since this is not the primary node, you will need to select "PureFlex Foundation Expansion Configuration"; for the US it will be FC A5R9. Then click "Save". Take note of the "Item Label" value of "6968". Note: Recommendation is to add all nodes during initial node selection.
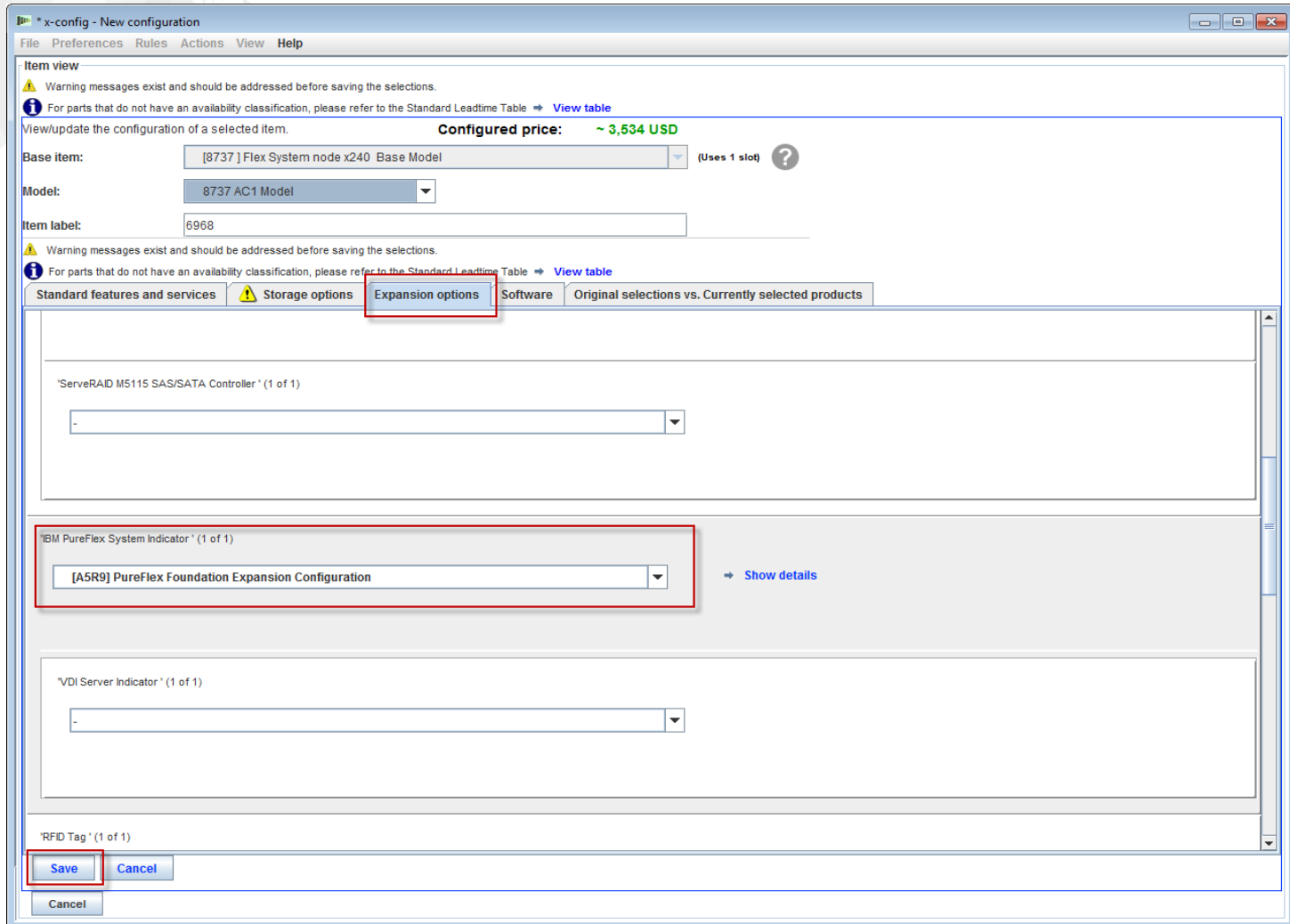
From the Chassis configuration window you need to select a Node Bay as a location for the new x240. In this example I placed the x240 in Node Bay 7, see below. If you want a node duplicated, then make sure to choose the x240 just configured in the previous slides. In this example it is "Node_6968".

After adding the "Node_6968 … x240" to Node Bay 7, click "Save". Note: Adding additional nodes will often require adding additional PSUs and fans to the chassis.
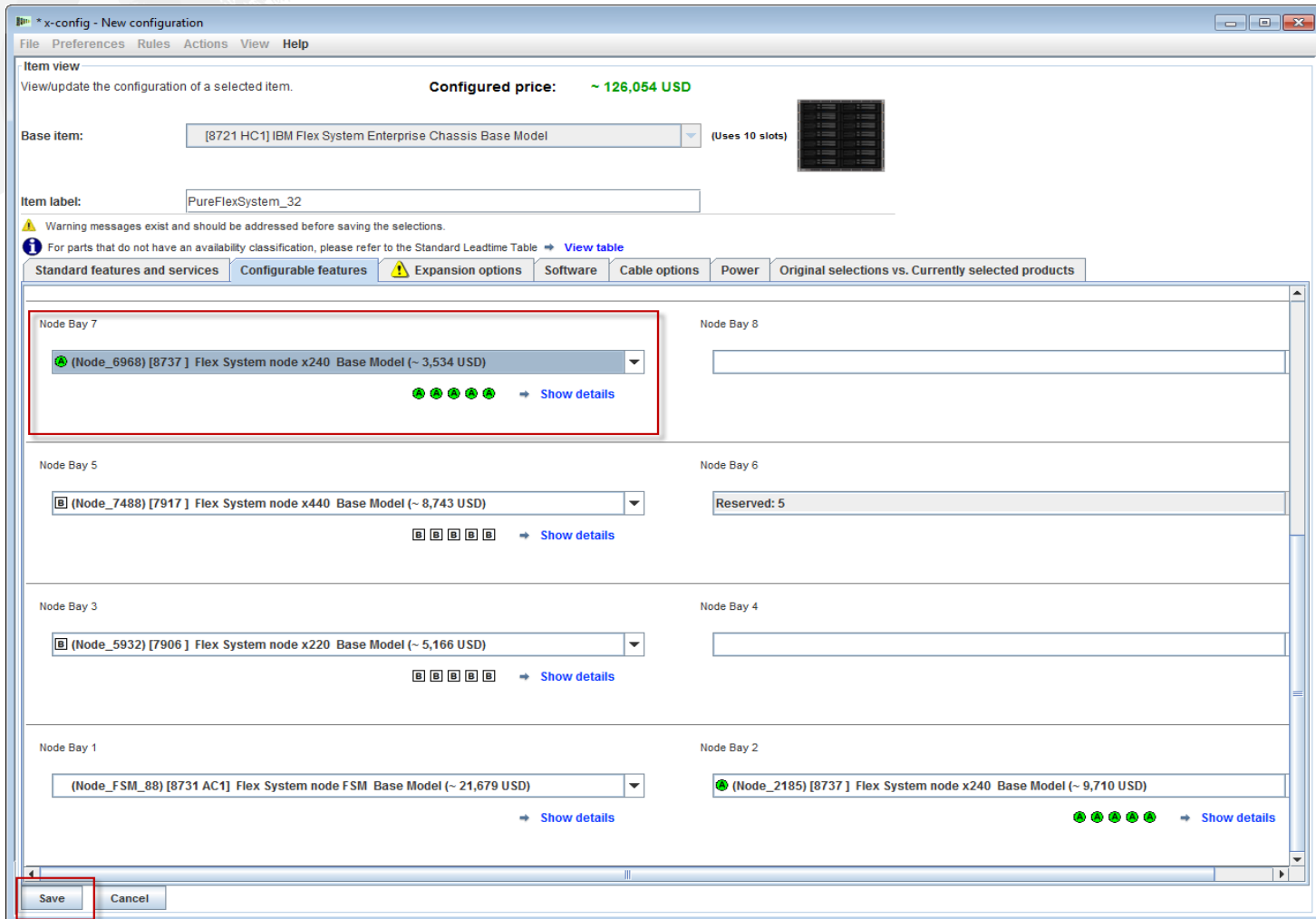
A pop-up window will display where you can select how to save the changes. For this example I chose "All copies of this item", but any one of the selections would work in this single node change. Click "OK".
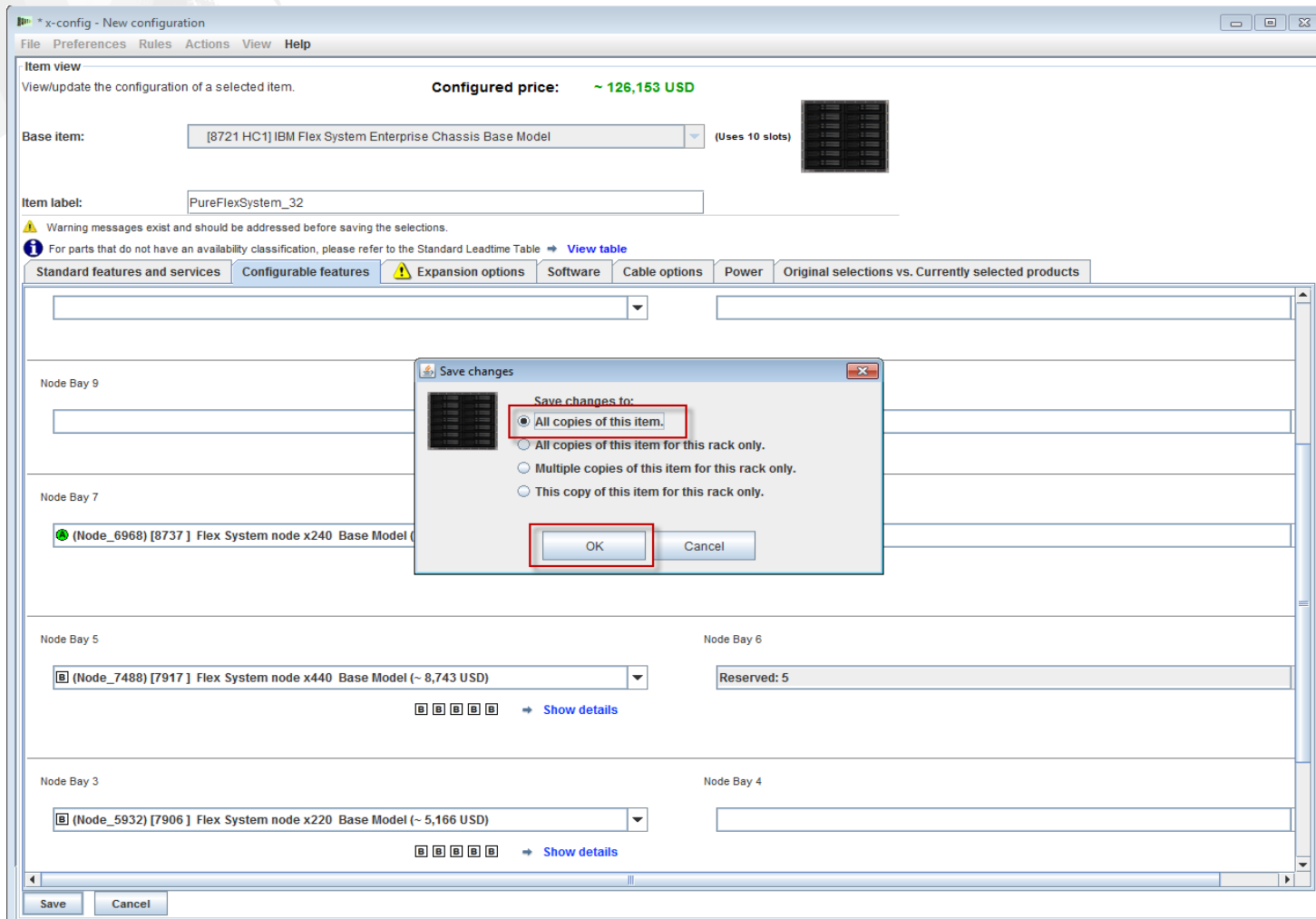
After modifying the existing nodes and adding new nodes, you need to save the configuration. Make sure there are no RED X stop messages in the "Messages" tab (there are none in the image below). YELLOW yield messages are acceptable to proceed. Note: Before saving you may want to verify the System x Enterprise Solution Services in the "Non-racked items" tab, and increment the days if needed.

When you click "Save" a pop-up box will display to select where to save the file and to give it a "File Name'. My preferences are set to save to my Desktop. Lastly, click "Save configuration file".

A pop-up window confirms that the save was successful. Click "OK".

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Next is to export the configuration. When you click "Export", a "Format selection" pop-up window displays. Choose "Integrated by Lenovo". Then click "Continue".
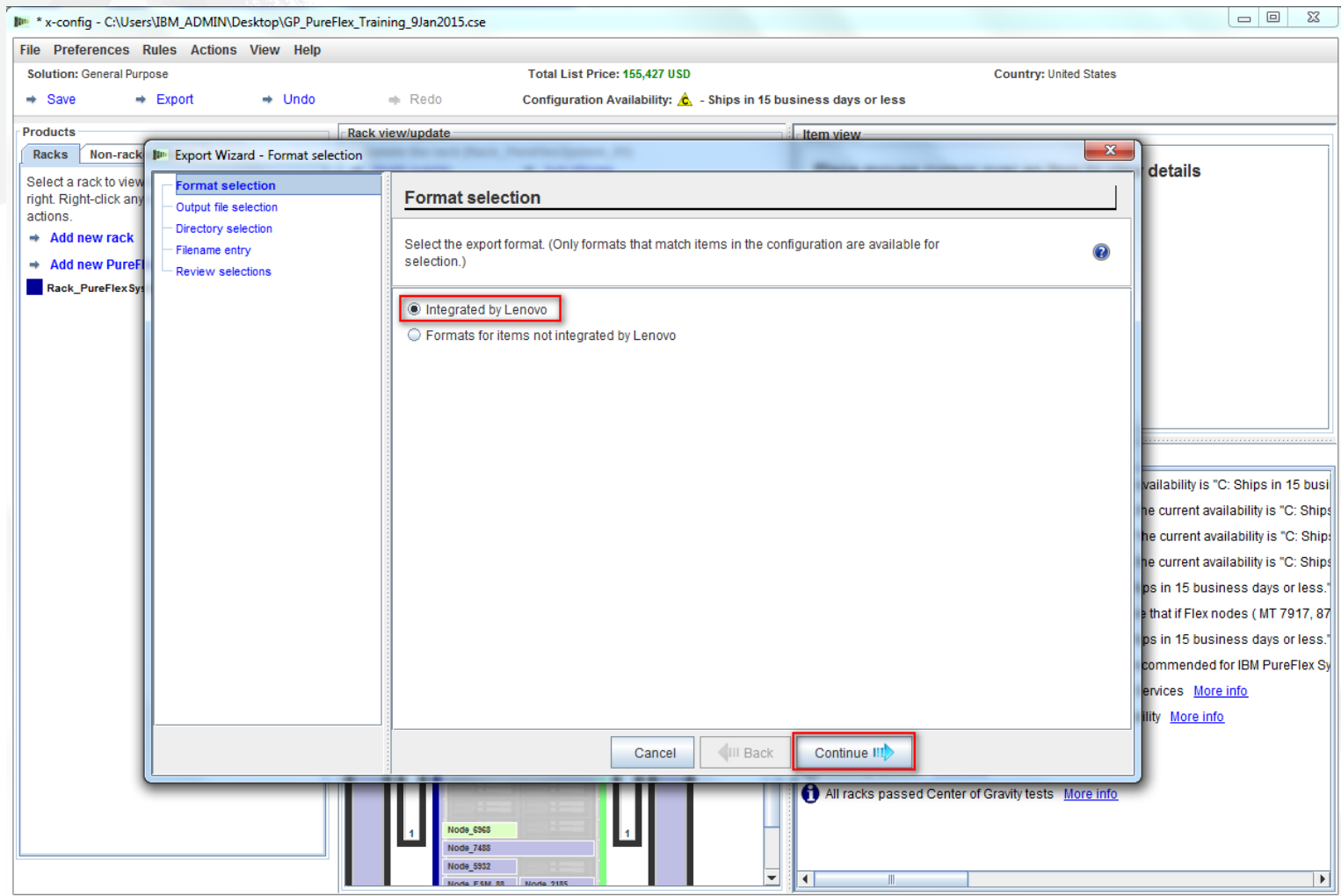
In the "Output file selection" pop-up window, choose the appropriate format(s) for your country. In this example for the US, the selection is "TMF/SEO + CFReport/Excel format"; this is checked along with the default option of "Validate with SOVA…". The SOVA selection will verify that the configuration can be built. Click "Continue".
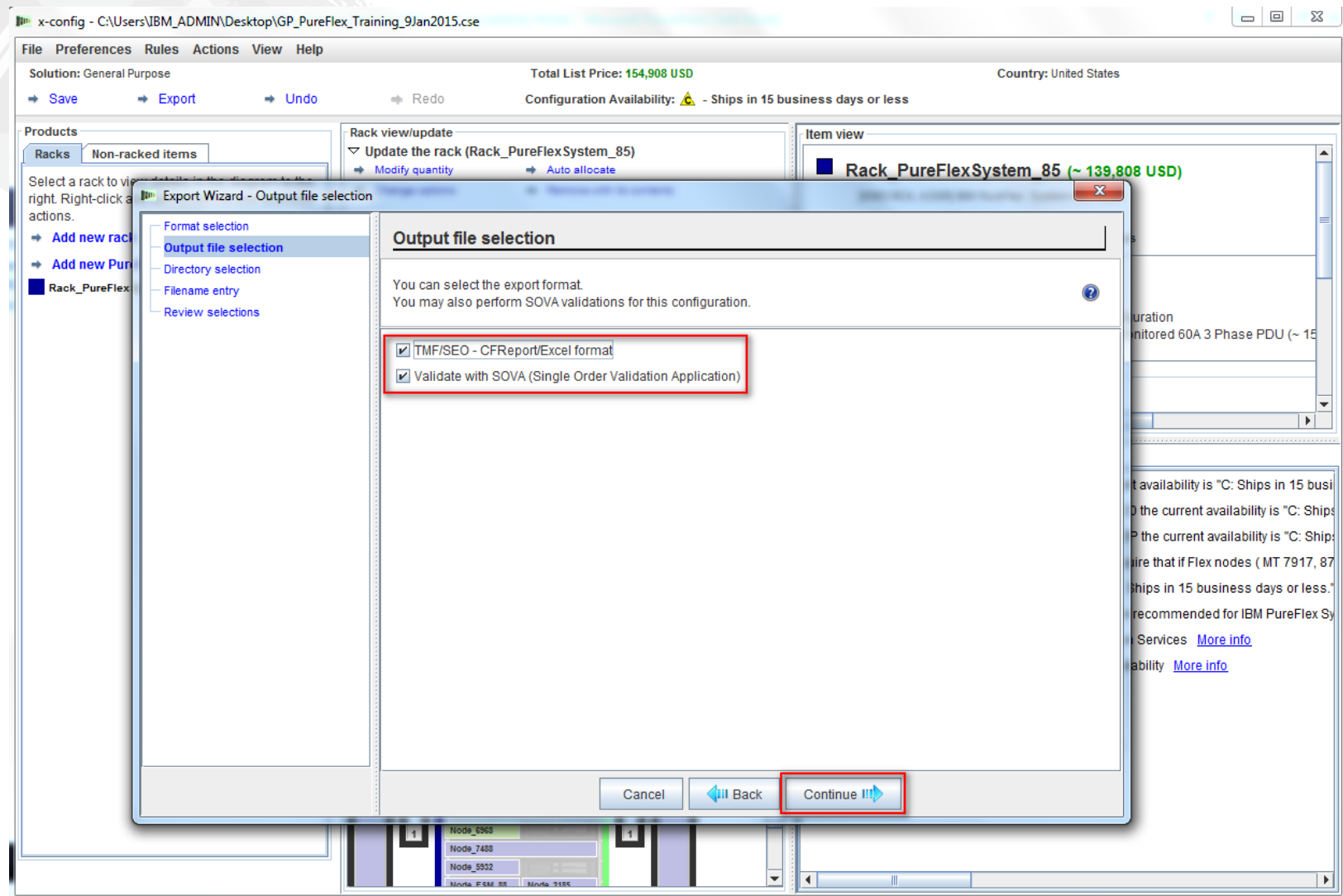
Next select the directory to export files. As shown below, my preference is set to export to the Desktop. Click "Continue".
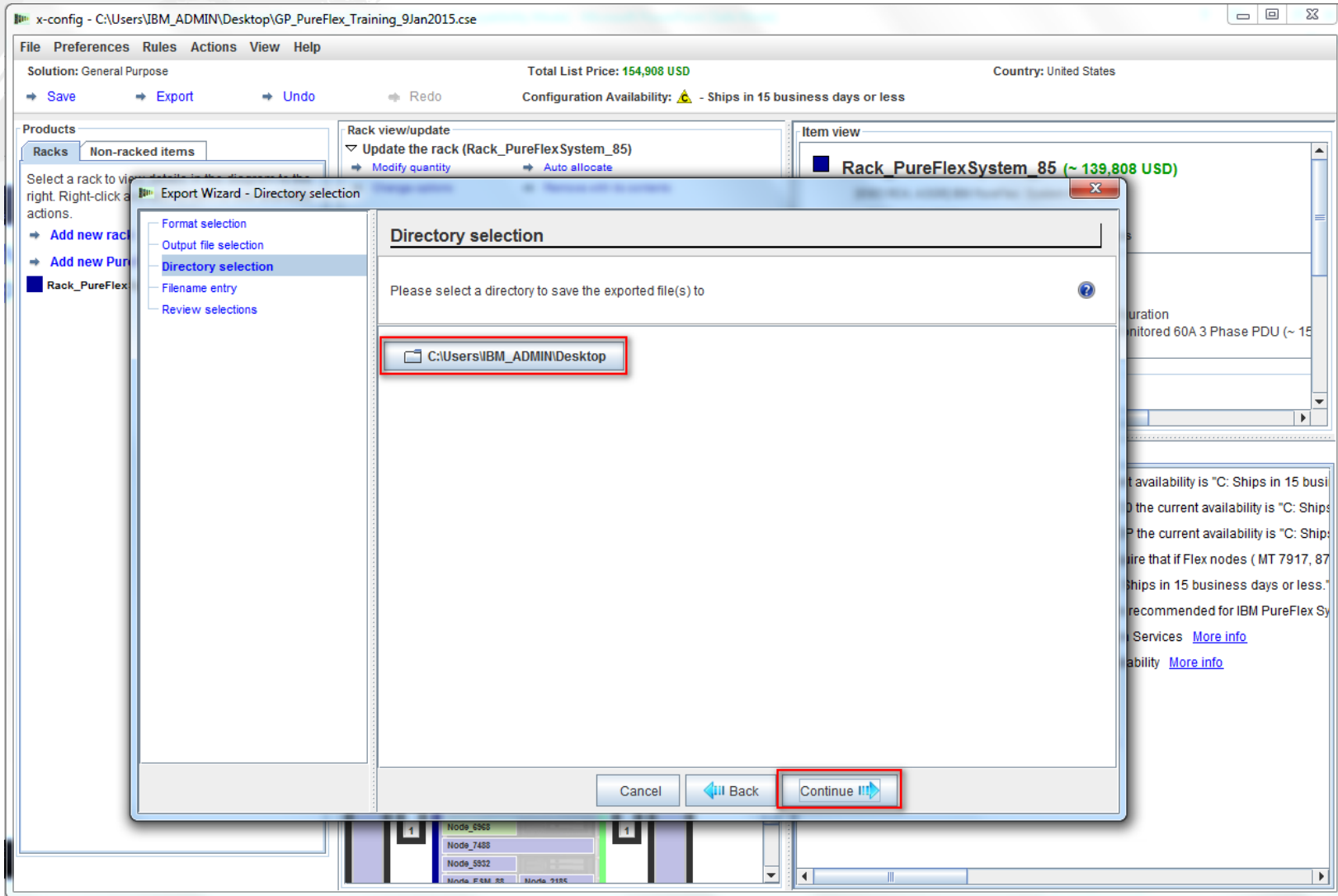
Next is "Filename entry". In this example since I to save the file first and provided the file name, the export file name will be the same (see below). You can change the filename if you want. Click "Continue".
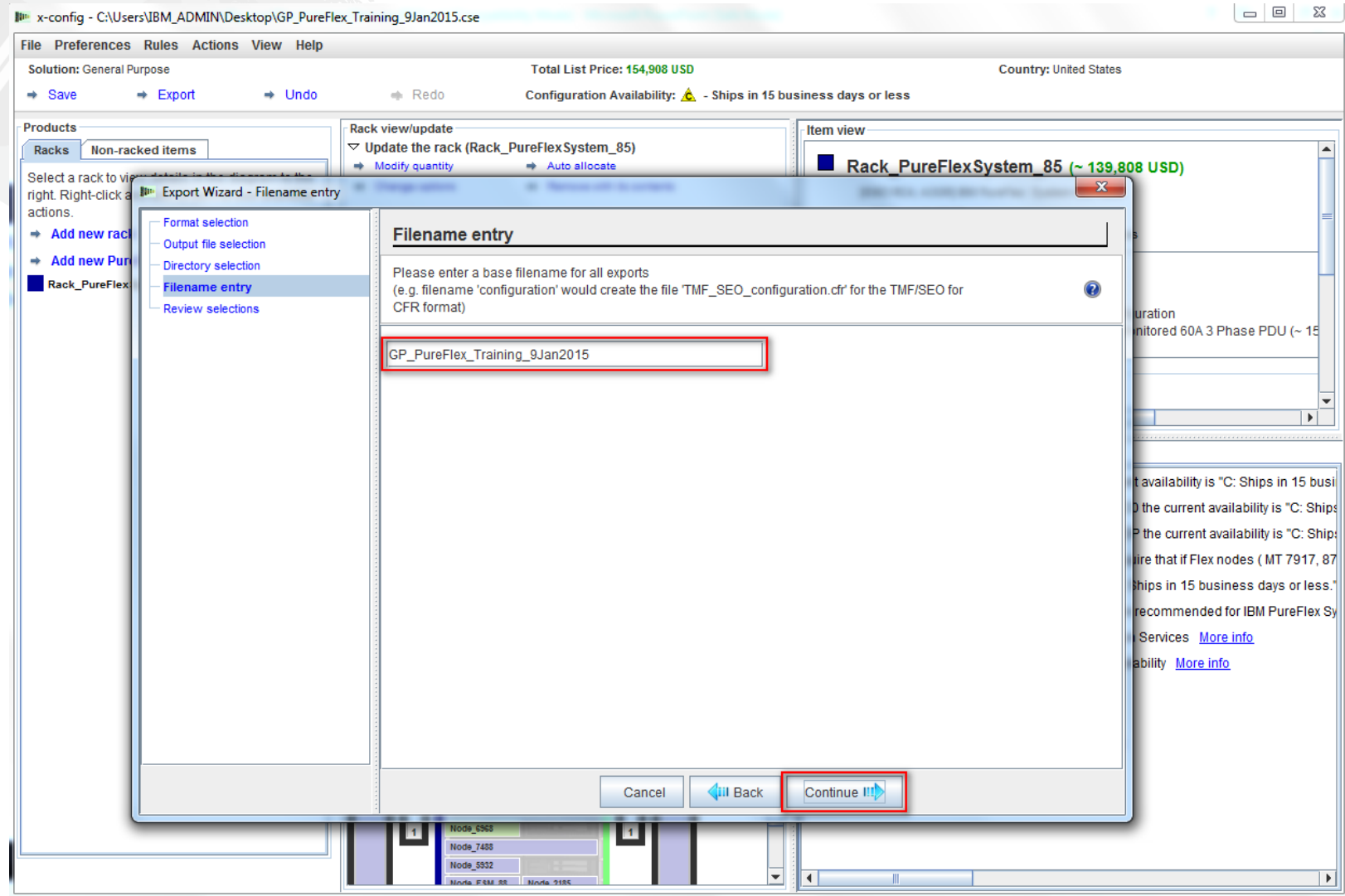
Finally, click "Finish" if you are satisfied with the selections displayed in the "Review selection" pop-up window. Otherwise, click "Back" and make any needed changes.
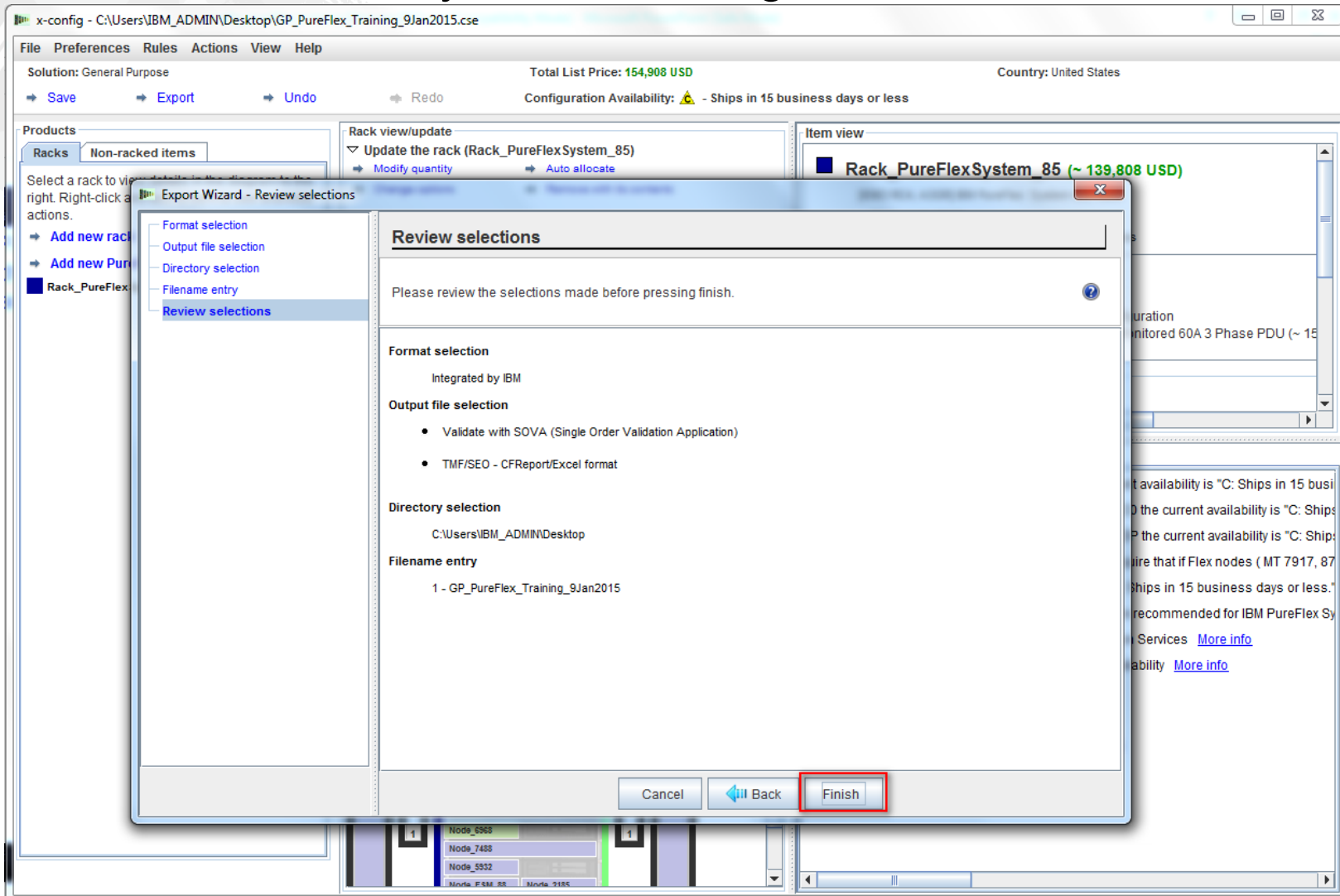
A "SOVA Validation results" pop-up window displays when finishing a configuration. In this example the configuration passed SOVA, which is a good indicator that manufacturing can build the solution without any issues. If SOVA failed, then you would click the "SOVA Validation details" link to fix the issues. There will be an email address to send a defect to the SOVA team. Otherwise send a defect request to erchelp@ca.ibm.com. Click "OK".
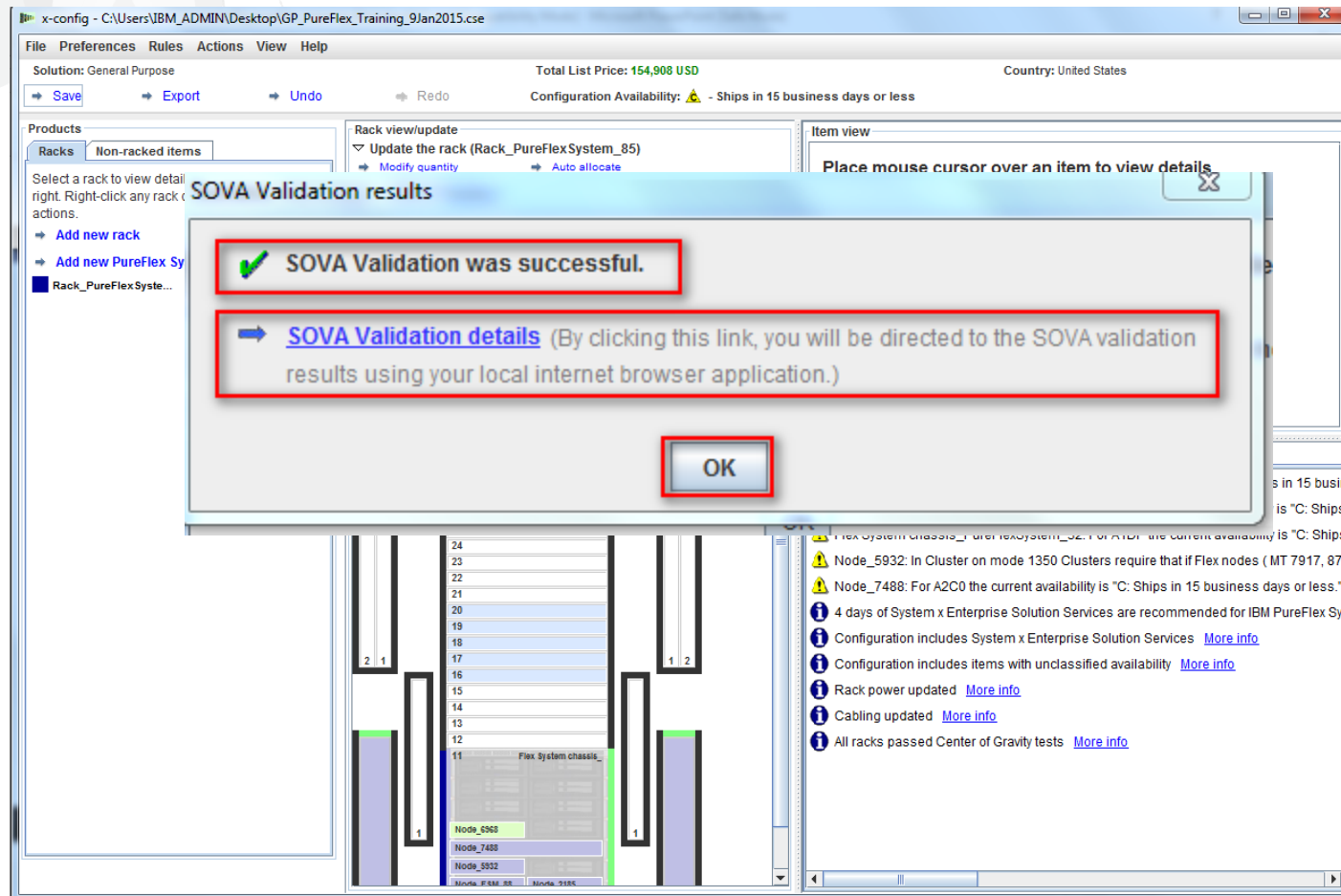
A pop-up window confirms "Cluster sheet created"; this is the XLS file. Click "OK".
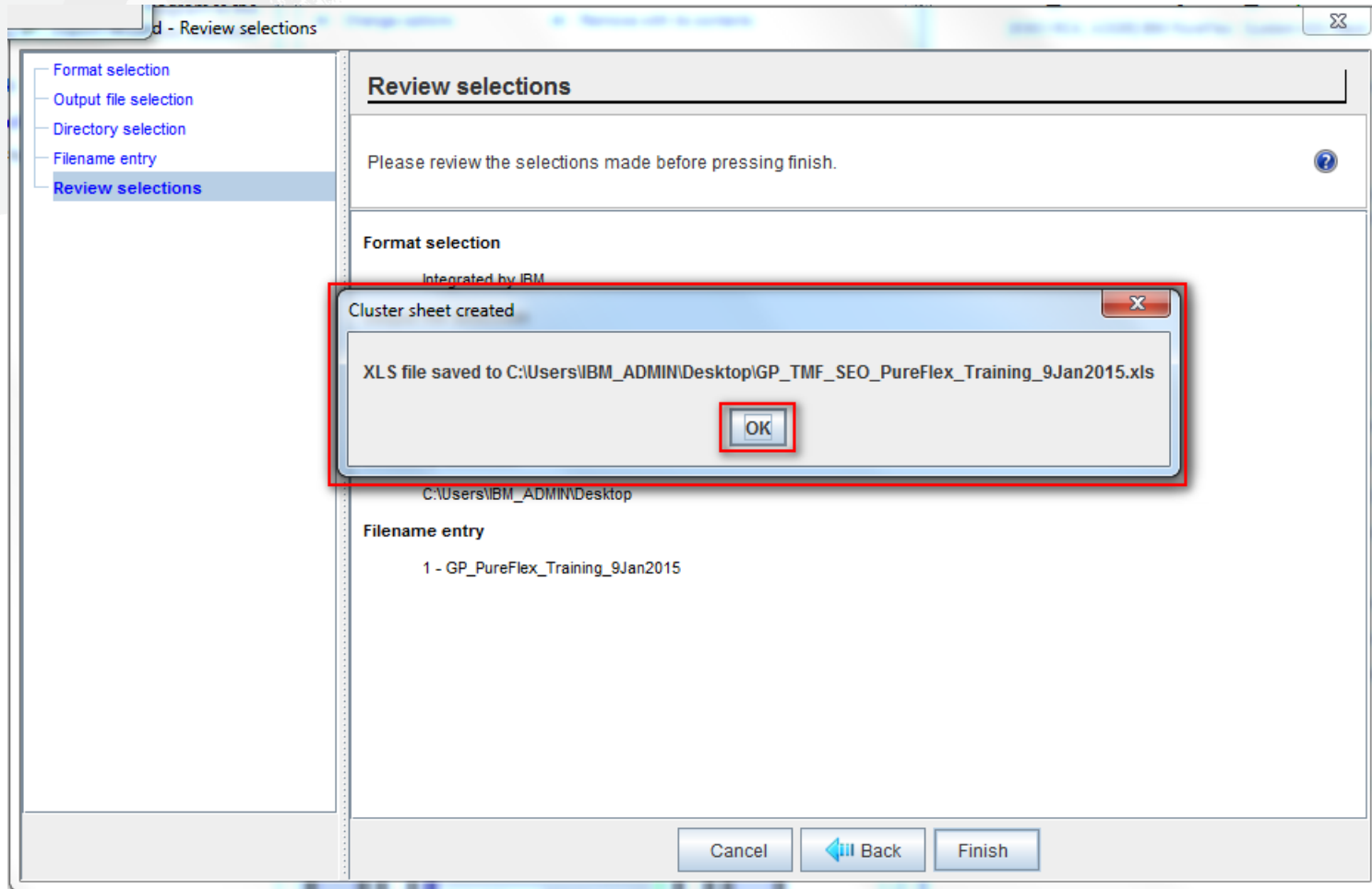
Next, a pop-up window confirms the creation of the CFReports at your selected directory. Click "OK".
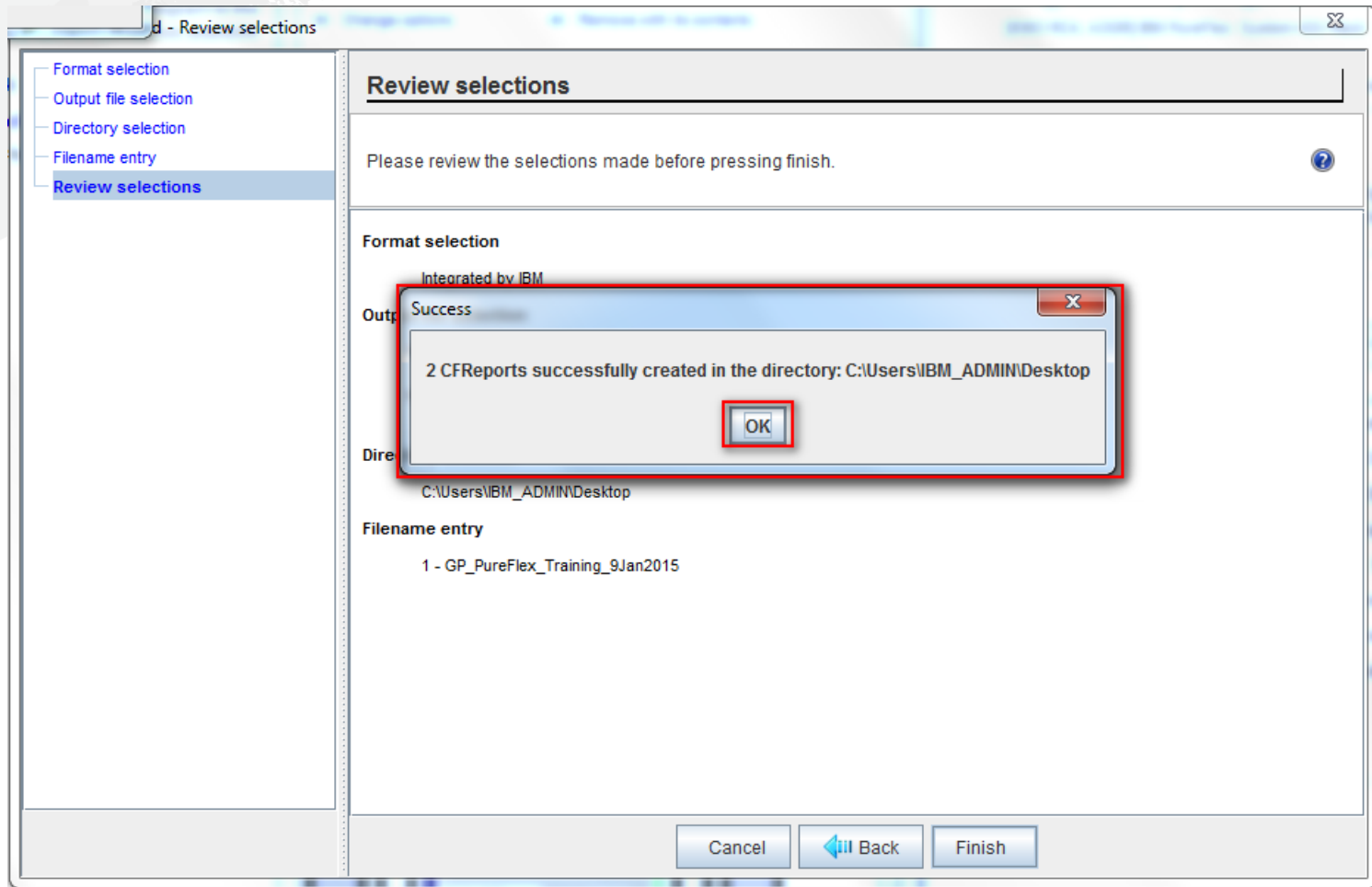
Next, a pop-up window shows that System x Enterprise Solution Services were included in the configuration, including the number of days. You can remove the System x Enterprise Solution Services during the configuration process. PureFlex configuration and deployment services are available as an integral way to help speed deployment of your PureFlex System and rapidly develop a skills base. These services are highly recommended and are available from Lenovo or your qualified Business Partner. A minimum of four Service units is recommended and additional units can be added based on your requirements.
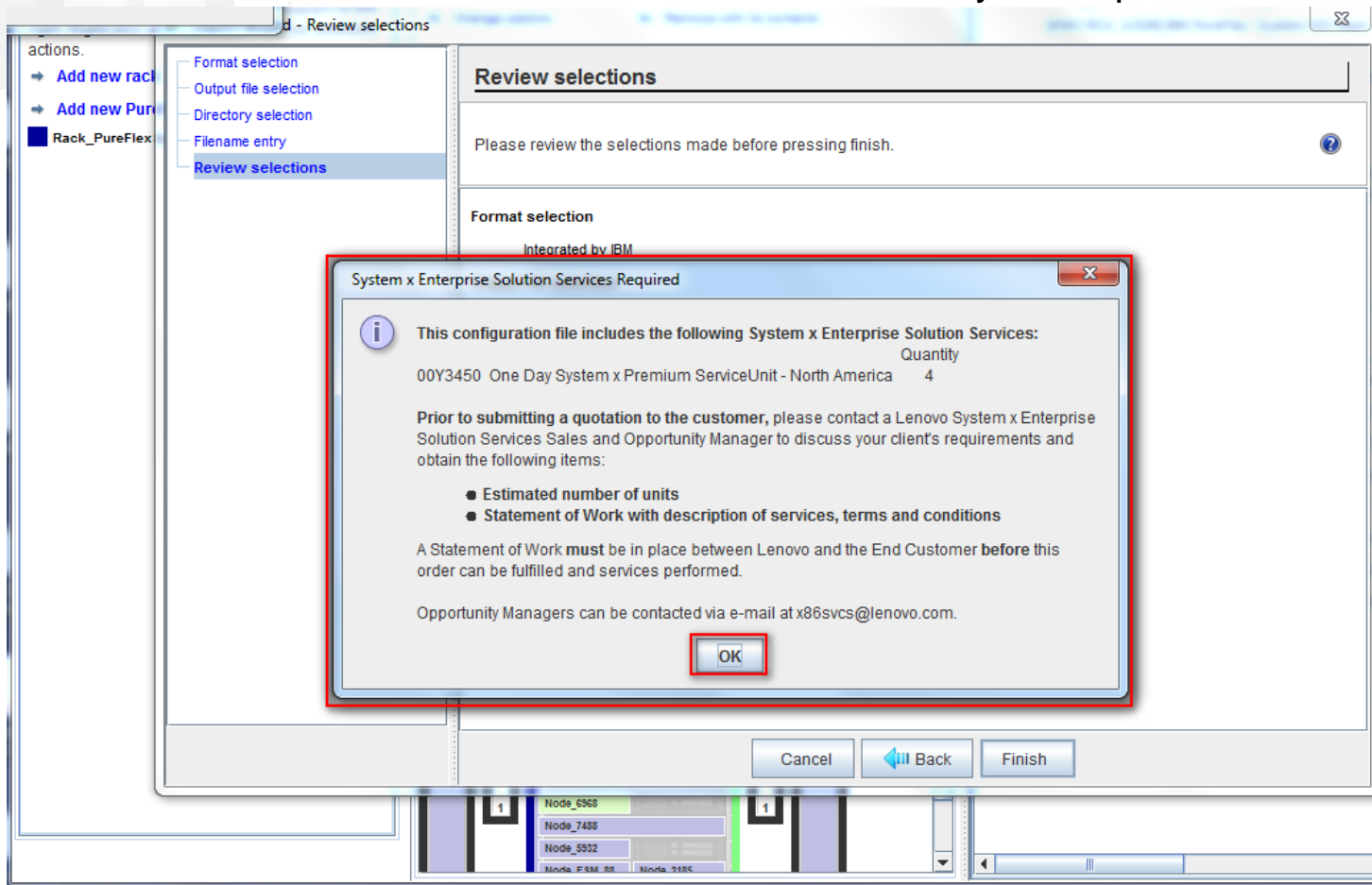
Next, a pop-up window shows "Success" for the saved files. Like many pop-up windows you can indicate "Do not show this dialog again" by checking the box. Click "OK".
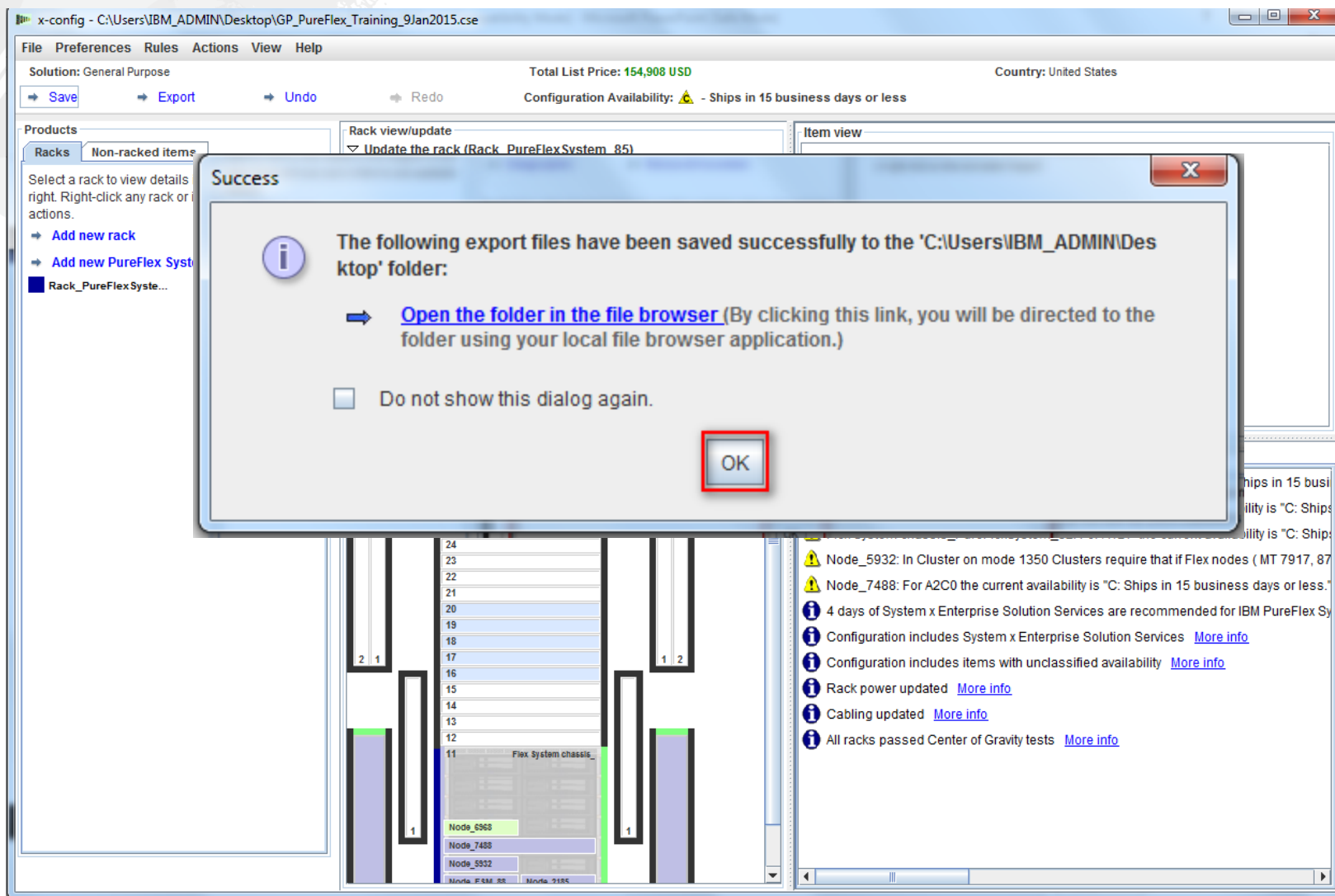
The configuration is now complete. It has been saved and exported, and it passed SOVA. There are no red X messages to fix. You can now exit x-config.

The "Reference" tab of the exported XLS spreadsheet lists the part number (PN), description, and prices for features included in the configuration. In Europe and Asia Pacific the XLS file is used for ordering and manufacturing, see the following slides.

The "CFR Review" tab of the exported XLS spreadsheet can be used to verify that all the parts needed for your solution are in the configuration. Manufacturing features are also included.

Below is a view of the "SAP Order Entry Robot" tab of the XLS spreadsheet for a configuration in the UK. This tab is used for order entry in Europe and Asia Pacific.

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Below is a view of the CSV spreadsheet for the UK. The ePricer CSV file is used for pricing in Europe and Asia Pacific. When you export the configuration for Europe and Asia Pacific countries, an "SAPePricer" folder is created in your selected directory. The CSV file is in the folder.

Thank you

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