5.5.2. Fine-tuning the Forecasting Models

Streamline enables fine-tuning the models generated by the application in order to make the forecasts best meet your needs. This fine-tuning can be carried out by changing the model type, model coefficients, or increasing/decreasing the model output.

Adjusting the Model Type

There are several types of forecasting models in Streamline:

- Seasonal & trend
- Linear trend
- Constant level
- Intermittent demand
- Preorder/inactive
- Auto & preorder intermittent
- Auto & Termination

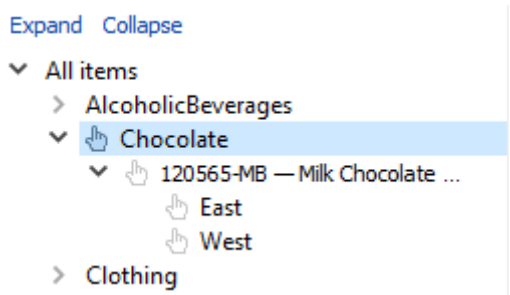
Each of them is intended to serve a particular purpose. Streamline automatically selects the most appropriate model type for each planning item when forecasting. However, the automatic selection can be overridden by choosing a specific type manually.

Model type can be changed at any level of the tree in the **Tree view**.

To change the model type:

1. Go to **Demand forecasting** tab.
2. Select the node in the **Tree view**.
3. Go to the **Properties** panel > **Forecasting** tab
4. Select the model type in the **Model** control.

When set manually, a little hand icon is added to the selected node and all of its children. In this way, all the children inherit the option automatically. A gray version of the icon before the node indicates inheritance of the option from its parent.



To update the forecasts based on the new model type, click the **Forecast** button.

Increasing or Decreasing the Model Output

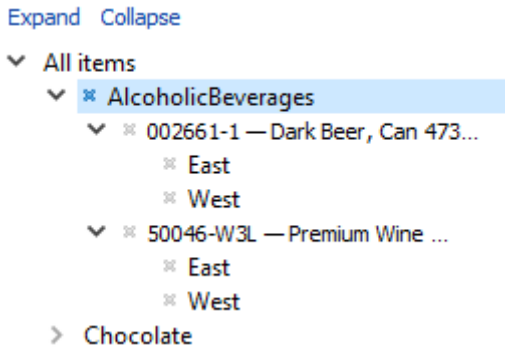
In Streamline, you can increase or decrease the output of the model. It is useful when you need to adjust all of the model predictions at once, for example, to increase the forecast by 5 percent. This can be done using the **Multiplier** option of the **Forecasting** tab.

The option can be set at any level of the tree in the **Tree view**.

To increase/decrease the model output:

1. Go to the **Demand forecasting** tab.
2. Select the node in the **Tree view**.
3. Go to the **Properties** panel > **Forecasting** tab.
4. Enter the multiplier in the **Multiplier** option.

As you change the **Multiplier** option, a little cross icon is added to the selected node and all its child nodes. This option is not propagated to the child nodes.



To put the changes into effect, click the **Forecast** button.

Adjusting Model Coefficients

There are two types of models used to generate forecasts in Streamline: time-series model and the intermittent demand model. They both have their own set of coefficients (or parameters) which can be changed manually. These changes allow performing model fine-tuning at the highest level of detail.



What are the model coefficients?
The models consist of components. Each component has its own weight that determines the component contribution to the model predictions. The model coefficients are those weighs.

Model coefficients can only be changed at the lowest level of the **Tree view**.

To change a model coefficient:

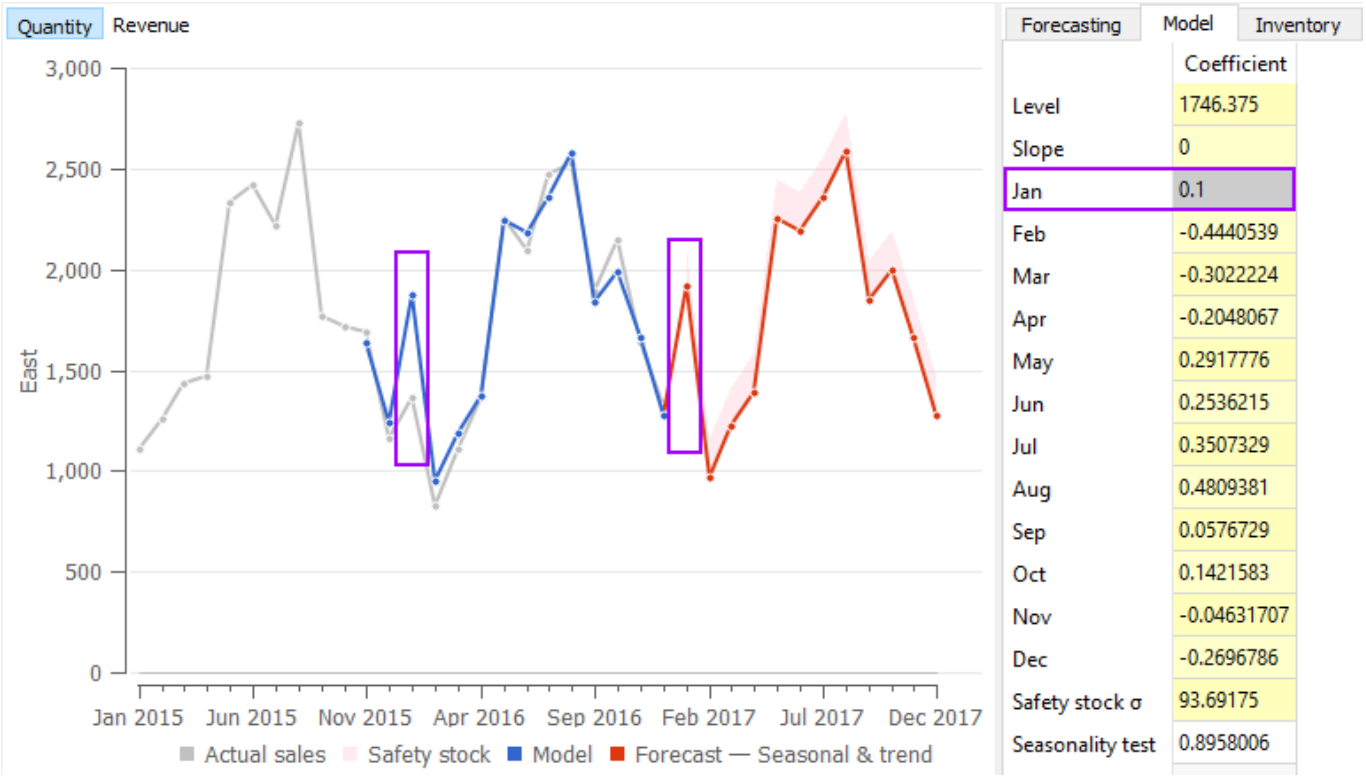
1. Go to the **Demand forecasting** tab.

2. Select the node in the **Tree view**.
3. Go to the **Properties** panel > **Model** tab.
4. Click the yellow cell of the **Coefficient** column corresponding to the component.
5. Enter a new value and press **Enter**.

To revert to the original value, just clear the adjustment.

Example

Consider the time-series model. It consists of the **Level** and **Slope** components, and the **Seasonal** components corresponding to the twelve months. Let's increase the coefficient of the January seasonal component from **-0.28** to **0.1**. The model output is updated immediately as the change is made. It is shown in the **Plot view**.



Next: What-if Revenue Analysis

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Last update: **2023/04/13 19:35**