

5.2. Generating and Viewing the Forecasts

Once you have [created a new project](#), Streamline automatically generates and shows the total forecast in the **Table** and **Plot** (see figure below). The forecasts are shown in red in the **Table** and **Plot**.

The **Tree view** on the left is used to browse through your data hierarchy and see the forecasts and other information at a particular level. As soon as you select a node in the tree, the **Table**, **Plot**, and **Panel** get updated immediately and show the corresponding information at that level.

The screenshot displays the Streamline software interface. On the left is a 'Tree View' sidebar with a navigation menu. The main area is divided into three sections:

- Table:** A data table showing sales and forecast data from May 2022 to August 2023. The 'Forecast' column is highlighted in red. The table includes rows for 'Actual sales', 'Statistical forecast', 'Final forecast overrides', 'Average sales price', 'Revenue', 'Gross profit', 'On hand', 'Stockout days', 'Projected inventory levels', 'Ordering plan', 'To receive', 'To ship', and 'Ignore actual sales'.
- Plot:** A line chart showing 'Direct sales' over time from Jan 2021 to Jul 2023. It includes data for 'Actual sales', 'Safety stock band', 'Projected Inventory', 'Confidence-limits', 'Model', and 'Forecast - Seasonal & trend'. The forecast is shown in red.
- Panel:** A configuration panel on the right with various settings such as 'Active', 'Forecast approach', 'Model type', 'Ignore trend before', 'Ignore zero sales', 'Ignore stockout days', 'Use price elasticity', 'Use holidays', 'Seasonality pattern', 'Use promotions', 'Use model from and adjust its level', 'Material procurement', 'Approval horizon', and 'Status'.

Below, we describe:

- [triggers](#) making Streamline regenerate forecasts;
- how to view [unit](#) and [revenue](#) forecasts at any level of your data hierarchy graphically and numerically;
- [how to view the forecasts in different data dimensions](#) (item, location, channel);
- [how you can change](#) and amend the automatically generated forecasts; and
- [forecast reports](#) generated by Streamline.

Generating the Forecasts

By default, Streamline continuously re-forecasts the project when you:

- [update your data](#);

- change the data source and fully reimport your project;
- change forecasting setting;
- unapprove forecasts;
- [change project settings](#) regarding forecasting;
- make product substitutions;
- override actual sales or stockout days;
- change order availability constraints.
- change the on hand history.

Viewing the Forecasts

Streamline shows unit and revenue forecast for the currently selected tree node in the **Table** and on the **Plot**.

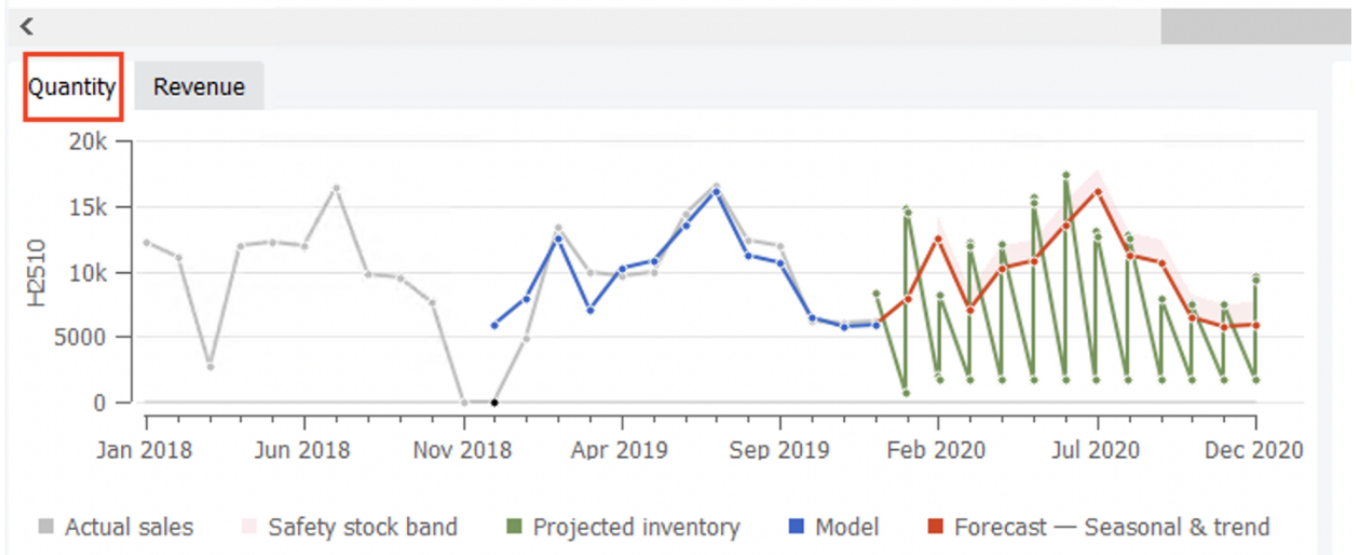
Unit Forecast

The unit forecast is presented by red numbers in the **Statistical forecast** row of the **Table** and by red points in the **Plot**.

The Bottom-up forecasting approach is used by default to build models for all nodes of the tree. It implies that forecasts on higher levels of the tree are calculated based on the forecast of lower levels as a simple sum, starting from tree leaves. Tree leaves are standalone models calculated based on imported sales history.

The **Statistical forecast** row of the **Table** shows values in blue and red colors at a leaf level (see figure below). Blue numbers are the model fit at the learning set (actual data), while the red ones are the forecasts.

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Actual sales	6,200	6,000	6,200				
Statistical forecast	6,462	5,710	5,888	7,899	12,545	7,026	10,240
Final forecast overrides							
Average sales price	10.59	10.59	10.59	10.59	10.59	10.59	10.59
Revenue	65,658	63,540	65,658	83,650.41	132,851.55	74,405.34	108,441.60
On hand			8,321				
Stockout days	0	0	0				
Projected inventory levels				14,522	1,977	11,951	12,111
Ordering plan				14,100	6,500	10,500	10,400
To ship							
Ignore actual sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				



Legend of the **Plot** also indicates the model type used to forecast the data. It is a [Seasonal & trend](#) model in the case in the figure.

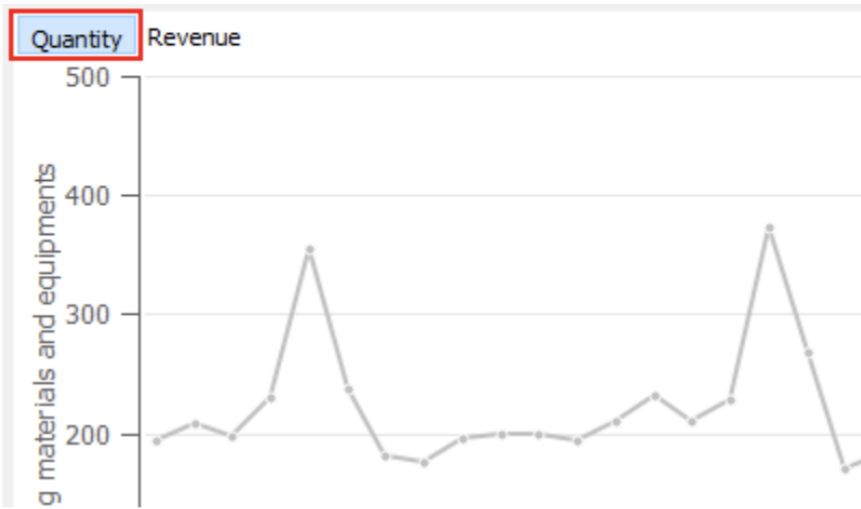
To view the forecasts in detail graphically, the **Plot** supports such manipulations as [zooming](#) a particular area and [panning](#) the plot in the zoomed scale.

Revenue Forecast

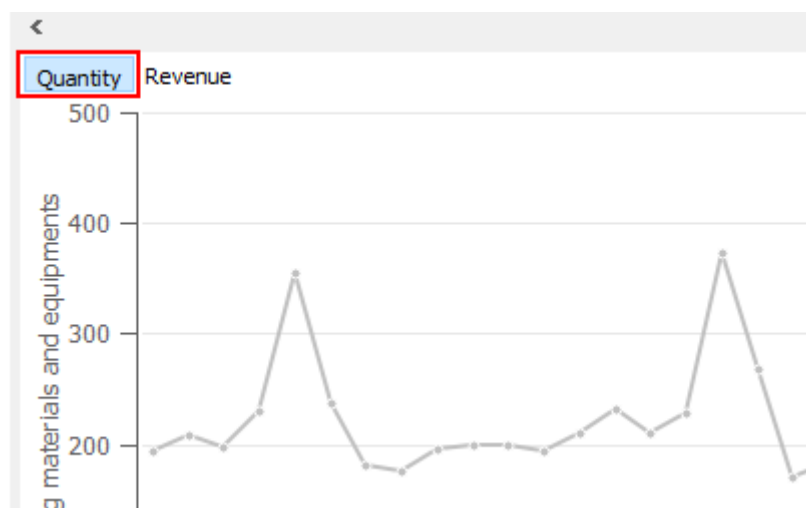
Streamline shows revenue forecast only if [current sales price](#) or [price of sales transactions](#) was imported. The **Revenue** row of the **Table** shows the numeric revenue forecast for the forecasted periods (see figure below).

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep
Actual sales	6,200	6,000	6,200									
Statistical forecast	6,462	5,710	5,888	7,899	12,545	7,026	10,240	10,720	13,588	16,166	11,253	10,700
Final forecast overrides												
Average sales price	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59
Revenue	65,658	63,540	65,658	83,650.41	132,851.55	74,405.34	108,441.60	113,524.80	143,896.92	171,197.94	119,169.27	113,300.00
On hand			8,321									
Stockout days	0	0	0									

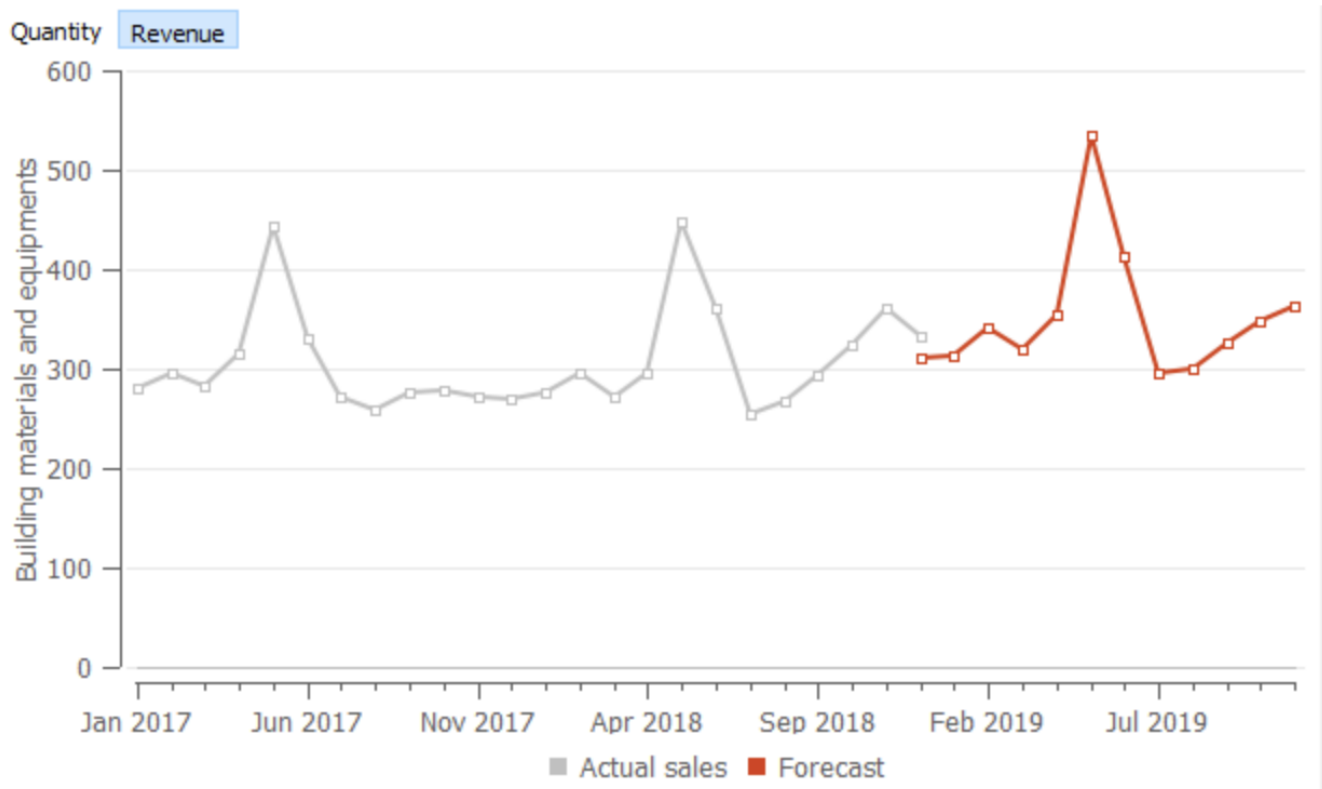
The **Plot** can display forecasts in quantities sold or in revenue gained. The default is **Quantity** (see figure below).



The **Plot** can display forecasts in quantities sold or in revenue gained. The default is **Quantity** (see figure below).



To switch to the revenue mode, click the **Revenue** button over the plot (see figure below).



Viewing Forecast in Different Dimensions

Streamline represents the data you have imported as a hierarchy tree in the **Tree view**. This hierarchy is composed of:

- data dimensions (item, location, channel);
- item categories;
- location categories;
- channel categories.

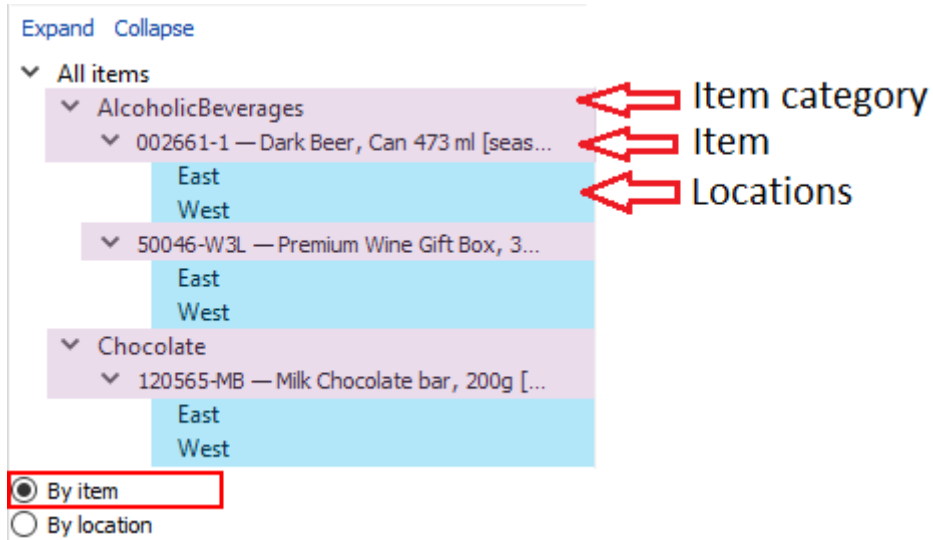
depending on the available data and its configuration. The options at the bottom of the **Tree View** help you to find out which data dimensions are available to view and choose the appropriate view.

If you import [locations](#) or [channels](#) additionally to items, the **Tree view** shows two viewing options:

- **By item** and **By location** - in case of imported locations;
- **By item** and **By channel** - if you import channels.

Here is a description for these options:

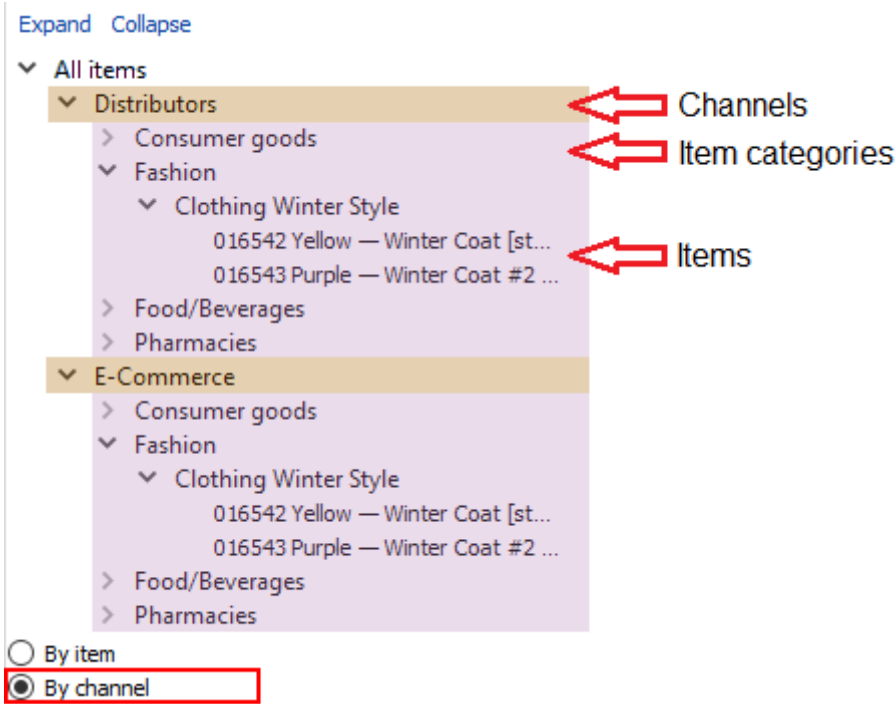
- **By item.** All the information (forecasts, historical data, inventory) is, first, aggregated by location and location categories, and then, by item and item categories. The tree shows items on top of locations (see figure below).



- **By location.** The information is, first, aggregated by item and item categories, and then, by location and location categories. So, the tree shows locations on top of items (see figure below).



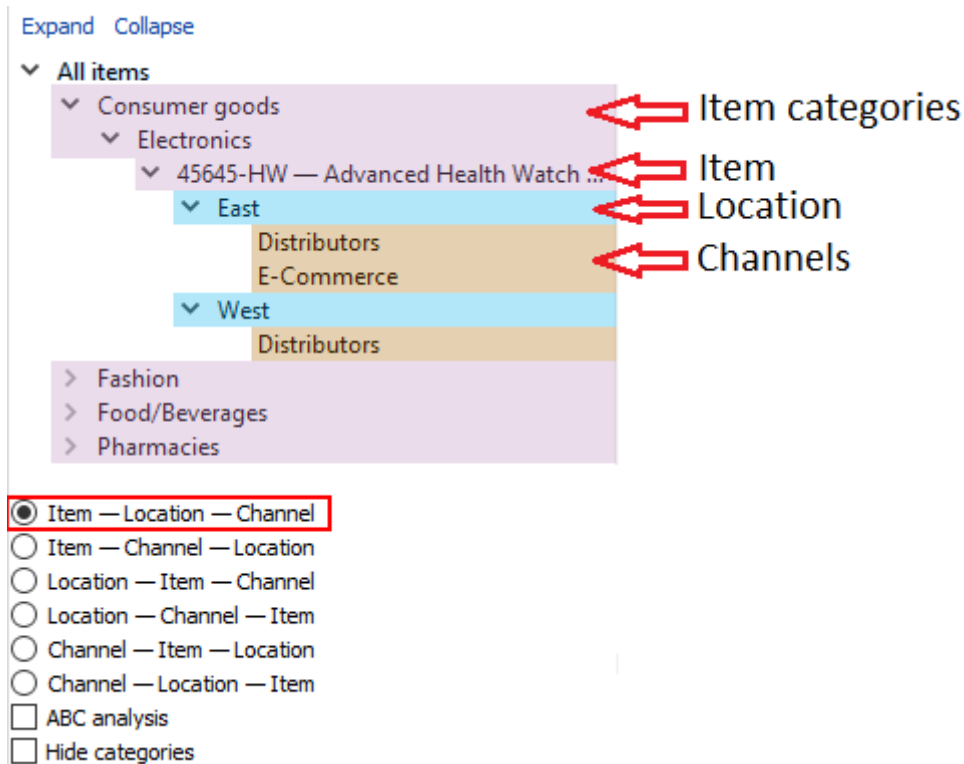
- **By channel.** The information is, first, aggregated by item and item categories, and then, by channel. The tree shows channels on top of items (see figure below).



2019/06/04 13:39 · admin

If you have all three types of data imported (item, location, and channel), Streamline displays six different viewing options that allow you to see your data using all available viewing combinations. These are:

- **Item — Location — Channel** option aggregates your data first by channel, then by location, and then, by item (see figure below).



- **Item — Channel — Location** option aggregates your data by location, channel, and then, by item.
- **Location — Item — Channel** option groups your data by channel, item, and then, by location.

- **Location — Channel — Item** option aggregates the data by item, channel, and then, by location.
- **Channel — Item — Location** option groups your data by location, item, and then, by channel.
- **Channel — Location — Item** option aggregates the data by item, location, and then, by channel.

2019/06/03 13:47 · admin

Changing the Forecasts

Streamline generates forecasts based on a set of given [settings](#). The forecasting model built using these settings is shown in the [Model](#) tab of the **Panel**. There are three ways to change the automatically generated forecasts:

- Change a forecasting parameter in the **Forecasting** tab of the **Panel**. That will, in turn, change the model and its forecast. [Below](#), we show which forecasting parameters are typically modified in particular situations.
- [Override](#) the generated forecasts manually using the **Forecast overrides** row of the **Table**.
- [Fine-tune the model](#) by changing its coefficients in the **Model** tab of the **Panel**.

Forecasting Settings

Streamline has a lot of forecasting settings. Each of them was specifically designed to be of help in a particular situation. All of the forecasting parameters are on the **Forecasting** tab (see figure below). They can be applied at any level of the **Tree view** tree.

	Forecasting	Model	Inventory	KPIs
Active		Inherit (Yes) <input type="button" value="v"/>		
Forecast approach		Inherit (Bottom-up) <input type="button" value="v"/>		
Model type		Inherit (Automatic selection) <input type="button" value="v"/>		
Ignore trend before		Inherit (Jan 2021) <input type="button" value="v"/>		
Ignore zero sales		Inherit (No) <input type="button" value="v"/>		
Ignore stockout days		Inherit (No) <input type="button" value="v"/>		
Use price elasticity		Inherit (No) <input type="button" value="v"/>		
Use holidays		Inherit (None) <input type="button" value="v"/>		
Seasonality pattern		<input type="button" value="v"/>	<input type="button" value="edit"/>	
Use promotions		Inherit (Yes) <input type="button" value="v"/>	<input type="button" value="info"/>	
Use model from		<input type="text"/>	<input type="button" value="v"/>	
and adjust its level		Inherit (No) <input type="button" value="v"/>		
Material procurement		<input type="button" value="shopping cart"/> Purchase <input type="button" value="v"/>		
Approval horizon		<input type="text" value="3"/>	<input type="button" value="up"/>	<input type="button" value="down"/>
Status		Undecided <input type="button" value="v"/>		

Most of them have the **Inherit** option set by default. It means that the option of its parent node will be applied to the currently selected node. Information in parentheses shows the option inherited from the parent.

The table below shows the cases, the forecasting parameters, and the options for these parameters.

Case	Parameter	Option
New product forecasting	Forecast approach	<input checked="" type="checkbox"/> Top-down
	Use model from	Item code of the borrowed model
	Seasonality pattern	Create a new pattern from scratch or create a pattern based on existing item code
Accounting for lost sales	Zeros are lost sales	<input checked="" type="checkbox"/> Yes
Accounting for calendar events	Holidays	Calendar of your country
Accounting for recent changes in the sales history level	Ignore data before	The data will be ignored prior to the selected Date
Adjusting the model type	Model	The model type
Material requirements planning	Bill of materials use	Use Purchase or Manufacture option depending on how you acquire your product(s)
Discount promos	Use promotions	Feature considers promotions imported from the data source. As for now, Streamline supports only percentage discount promos, and for the feature to work, you need to have at least one promotion in the past and one for the future period

Case	Parameter	Option
Lock the forecast	Approval Horizon	Feature considers promotions imported from the data source. As for now, Streamline supports only percentage discount promos, and for the feature to work, you need to have at least one promotion in the past and one for the future period
Price elasticity influence	Use price elasticity	Feature considers not only qty sold in the past to generate a forecast but also notices the connection between an increase or decrease in sales and price change

Forecast Reports

Streamline allows viewing forecasts for all the [planning items](#) at once by using the forecast reports. There are three forecast reports in Streamline: **Final forecast** report, **Forecasts adjustments** report, and the [Forecast accuracy report](#). To access the reports, go to the **Reports** tab. To select a report, use the **Select report** control.

Each report can be exported to **Excel** by clicking the **Export report** button. These can then be edited and saved in Excel and imported back into the application using the **Import changes** button.

Demand Forecast Report

This report may be represented as a 'Final forecast,' 'Statistical forecast,' or 'Forecast versions.'

The **Final forecast** depicts the statistical forecast and any overrides for all the planning items, while in the Statistical forecast, overrides are not displayed.

Approval	Status	Item category	Item code	Description	Location	Location description	Channel	Supplier	Model type
1	Unapproved	Pharmacies	05-T48	Cold & Flu Tablets [s...	WH-001	WH New Jersey	Direct sale	56892-P	Seasonal &...
2	Unapproved	Pharmacies	05-T48	Cold & Flu Tablets [s...	WH-001	WH New Jersey	Distributors	56892-P	Seasonal &...
3	Unapproved	Pharmacies	05-T48	Cold & Flu Tablets [s...	WH-002	WH San Francisco	Direct sale	56892-P	Seasonal &...
4	Unapproved	Pharmacies	05-T48	Cold & Flu Tablets [s...	WH-002	WH San Francisco	Distributors	56892-P	Seasonal &...
5	Unapproved	Pharmacies	05-T48	Cold & Flu Tablets [s...	WH-003	WH New York	Direct sale	56892-P	Seasonal &...
6	Unapproved	Pharmacies	05-T48	Cold & Flu Tablets [s...	WH-003	WH New York	Distributors	56892-P	Seasonal &...
7	Unapproved	Consumer g...	1866-MB	Desk (linear trend m...	WH-001	WH New Jersey	Direct sale	125689	Constant le...
8	Unapproved	Consumer g...	1866-MB	Desk (linear trend m...	WH-001	WH New Jersey	Distributors	125689	Constant le...

As the **Forecast versions** feature is designed to have the option to add more rows to the Table for your forecast calculations or alternative forecasts of your colleagues, the Forecast versions report allows you to see the report based on this data. The cells, color-coded in blue, represent the data taken from the Forecast version row in the Demand tab.

				Forecast version1													Total
Model type	Model quality	Slope	Forecast version1	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Total	
128	Constant le...	85.2%	0%	C 0.0412%	2,497	2,497	2,497	2,497	2,497	2,497	2,497	2,497	2,497	2,497	2,497	29,964	
129	Constant le...	85.2%	0%	C 0.122%	2,500	3,090	2,497	2,497	3,209	2,339	2,497	1,905	2,647	2,497	2,497	30,672	
130	Constant le...	85.2%	0%	C 0.122%	2,500	3,090	2,497	2,497	3,209	2,339	2,497	1,905	2,647	2,497	2,497	30,672	
131	Constant le...	85.2%	0%	C 0.122%	2,500	3,090	2,497	2,497	3,209	2,339	2,497	1,905	2,647	2,497	2,497	30,672	
132	Constant le...	85.2%	0%	C 0.122%	2,500	3,090	2,497	2,497	3,209	2,339	2,497	1,905	2,647	2,497	2,497	30,672	
133	Constant le...	85.2%	0%	C 0.122%	2,500	3,090	2,497	2,497	3,209	2,339	2,497	1,905	2,647	2,497	2,497	30,672	
134	Constant le...	85.2%	0%	C 0.122%	2,500	3,090	2,497	2,497	3,209	2,339	2,497	1,905	2,647	2,497	2,497	30,672	
135	Seasonal &...	74.9%	1.8%	C 0.0915%	5,121	8,261	4,701	6,970	7,200	8,718	10,848	7,573	7,239	4,427	2,393	2,475	75,926

Forecast Overrides Report

This report shows only the forecast adjustments made manually in the **Forecast overrides** row of the **Table view** on the **Demand forecasting** tab. It is useful when you need to ensure that all the adjustments you intended to do were done.

						Final forecast									
Item category	Item code	Description	Supplier	Model type		Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
1	Food/Bever...	056329 PU ...	Bottle water 500 ml ...	425687	Constant le...	21,073	22,714	191,163	19,446	24,061	1,478	26,476	210,002	1,609	29,496
2	Food/Bever...	056329 N PW	Bottle water #2 new ...	425687	Seasonal &...	42,388	75,177	359,971	54,296	69,405	5,163	115,109	636,860	4,665	52,296
3	Food/Bever...	500461	Milk Chocolate bar 2...	425687	Constant le...	21,073	22,714	191,163	19,446	24,061	1,478	26,476	210,002	1,609	29,496
4	Food/Bever...	MB-50046	Muesli box, 500 g	425687	Seasonal &...	33,333	57,057	268,945	39,873	51,650	4,022	85,706	473,199	3,447	38,167
5	Consumer g...	B05465-R	Basketball 29.5 (size ...	125689	Constant le...	21,073	22,714	191,163	19,446	24,061	1,478	26,476	210,002	1,609	29,496
6	Consumer g...	H2510	Nails [seasonal mod...	125689	Seasonal &...	33,333	57,057	268,945	39,873	51,650	4,022	85,706	473,199	3,447	38,167
7	Pharmacies	05-T48	Cold & Flu Tablets [s...	56892-P	Seasonal &...	42,388	75,177	359,971	54,296	69,405	5,163	115,109	636,860	4,665	52,296
8	Pharmacies	V82166 150	Vital Blue 150 g Vita...	56892-P	Seasonal &...	42,388	75,177	359,971	54,296	69,405	5,163	115,109	636,860	4,665	52,296

Next: Adjusting and Approving the Forecasts

Download PDF

From: <https://gmdhsoftware.com/documentation-sl/> - **GMDH Streamline Docs**

Permanent link: <https://gmdhsoftware.com/documentation-sl/generating-and-viewing-the-forecasts>

Last update: **2022/11/30 16:42**

