# 7.10.1. Historical reports

Historical reports display information in the past based on imported, overridden, and calculated data. These reports include:

1/5

- Forecast performance report
- Historical revenue report
- Historical stock on-hand report
- Historical stockout days report
- Historical turnover report

Below, we describe these reports in detail.

### **Forecast Performance Report**

The **Forecast performance report** helps you to evaluate the forecast using MAPE. This measure uses the difference between actual data and the forecast. Thus this report can be calculated only when the Period control is set to any option except the last period.

To demonstrate the report, we open the **Inventory Planning** by Month example and set the Period to Dec 2019 (see figure below).

Start	Ľ	Search	t s	ettings Report	port Forecast performance 🗸 Period Dec 2019 🗸 Aggregate by None 🗸 🗗 Export report 🔻 Show columns 🖕									-					
		v Item cod	Supplier	Model type	Model quality	Slope		Absolute percentage error											MAPE
~		,	e oupprei		ine dei quanty	Siepe	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	
emand	1	05-T48	56892-P	Seasonal &	75%	1.8%													
Ð	2	1866-MB	125689	Constant le	85.2%	0%													
ventory	3	004652	5612457	Seasonal &	74.9%	1.8%													
Ē	4	004662	5612457	Seasonal &	11.4%	1.8%													
E Reports	5	45645-RF	125689	Constant le	85.2%	0%													
L I.I.	6	46689-PC	125689	Seasonal &	87.6%	0%													
<b></b> Ishboard	7	56213-P	425687	Seasonal &	74.9%	1.8%													
		056220	435697	Seasonal &	75%	1 0%													

Now, we have an evaluation of the forecasts for the first three months. The rest of the periods were not evaluated because we don't have actual data for those months.

The report data are the Absolute Percentage Error (APE) calculated for a particular planning item/period. The formula for APE is the following:

$$APE = 100\% \times \left| \frac{F \cdot A}{A} \right|$$

where:

- F the forecast for a particular period; and
- A the actual demand in this period.

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The report data might have gaps or even empty rows. A gap occurs when there were no actual sales in the period. Streamline can't calculate APE in this case. An empty row arises if either the item is inactive or an intermittent model is used.

The last column of the report represents MAPE calculated across all of the periods for each planning item.

The **Overall MAPE**, shown in the toolbar, is MAPE weighted across all the items in the project. It is a price-weighted MAPE measure representing the overall revenue percentage error if item prices are imported. Otherwise, it is calculated based on the volume of sales. You can read more about WMAPE on Wikipedia.

You can also switch the forecast quality measure between *error* and *accuracy*. To do this, click the **Settings** button found on the toolbar and select the **Accuracy** option for the **Measure of forecast quality** (see figure below).

ABC analysis       appeared         Auto-approve new periods to keep the approval horizon         Inventory         DC         Forecast         Horizon, months         12         Model is seasonal when test 2         0,30         Use price elasticity when test 5         Use top-down forecast by default None         Confidence levels         Upper confidence level         Upper confidence level         2,5 %         Measures         Measure of forecast performance         Measure of forecast performance		Settings	
Inventory         DC         Forecast         Horizon, months         12         Model is seasonal when test ≥         0,30         Use price elasticity when test ≤         0,30         Use top-down forecast by default None         Confidence levels         Upper confidence level         97,5 %         Lower confidence level         2,5 %         Measures         Measure of forecast performance         Measure of forecast performance	Project	<ul> <li>Quick update (no history overlap)</li> <li>Keep model coefficients overrides after new period appeared</li> <li>Auto-approve new periods to keep the approval horizon</li> <li>Halt new orders that surpass</li> </ul>	ÿs
DC       Forecast         Horizon, months       12         Model is seasonal when test ≥       0,30         Use price elasticity when test ≤       -0,30         Use top-down forecast by default None       Inventory holding costs         Use top-down forecast by default None       Inventory holding costs         Upper confidence levels       97,5 %         Lower confidence level       2,5 %         Container grouping       Measures         Measure of forecast performance       Months of supply	Inventory	orders in transit by up to	,-
Use supplier code as container ID if not specified Default container capacity Volume 22	DC	Forecast         Horizon, months         12         Model is seasonal when test ≥         0.30         Use price elasticity when test ≤         -0,30         Use top-down forecast by default         None         Confidence levels         Upper confidence level         97,5 %         Lower confidence level         2,5 %         Use supplier code as container ID if not specified         Default container capacity	

Now, the report shows the percentage accuracy of the forecasts for each period in the **Accuracy** section and the average accuracy across the available evaluations in the **Accuracy** column.

The **Overall accuracy** shown in the toolbar equals to **100% - Overall MAPE** now.

### **Historical Revenue Report**

This report shows the revenue obtained during each historical period based on the sales price/unit or transaction revenue data imported from the data source.

	1	+ New filter	All items						_					
	Q	Search	Settings	Report Historica	al revenue $\sim$	Aggregate by	None 🗸 1	2	🖹 Export report	<ul> <li>Show columns</li> </ul>	s "			
Start		Approval	Status	Item category	Item category 2		None Item category Item category 2		Supplier	Item type	Model type	Model quality	Slope	ABC analysis
Demand	1	Unapproved	Undecided	Materials	Food/Beverages	500461	ABC		425687	Material	Constant le	85.2%	0%	C 7.34%
Û	2	Unapproved	Undecided	Finished	Food/Beverages	30213-P	Supplier	ar P	100256	Finished	Seasonal &	74.9%	1.8%	A 76.1%
Inventory	3	Unapproved	Undecided	Finished	Food/Beverages		Muesli box, 500 g	[s	100256	Finished	Seasonal &	74.9%	1.8%	B 16.5%
Ê	4	Unapproved	Undecided	Materials	Food/Beverages	1866-MB R	Raisins mix [mate	rial]	100256	Intermediate	Preorder			C 0%
E Reports	5	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-CW	Chopped walnuts	[m	100256	Material	Preorder			C 0%
L s.t	6	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-OB	Oat bran [materia	al]	100256	Material	Preorder			C 0%
Dashboard	7	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-R	Raisins black [ma	teri	100256	Material	Preorder			C 0%
	8	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-R	Raisins white [ma	teri	100256	Material	Preorder			C 0%
	9	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-RO	Rolled oats [mate	erial]	100256	Material	Preorder			C 0%
	10	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-T	Toasted wheat ge	erm	100256	Material	Preorder			C 0%
	11	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-W8	Wheat bran [mat	erial]	100256	Material	Preorder			C 0%

## **Historical Stock On Hand Report**

This report displays on-hand at the end of each past period including the current period as well (see figure below).

		🖡 New filter	All items											
	Q	Search	Settings	Report Historic	al stock on hand $$	Aggregate by	None ~	2	🖹 Export report	<ul> <li>Show columns</li> </ul>	· •			
Start		Approval	Status	Item category	Item category 2		None Item category Item category 2		Supplier	Item type	Model type	Model quality	Slope	ABC analysis
Demand	1	Unapproved	Undecided	Materials	Food/Beverages	500461	ABC		425687	Material	Constant le	85.2%	0%	C 7.34%
Ð	2	Unapproved	Undecided	Finished	Food/Beverages	30215-P	Supplier	ar P	100256	Finished	Seasonal &	74.9%	1.8%	A 76.1%
Inventory	3	Unapproved	Undecided	Finished	Food/Beverages		Muesli box, 500 g	[s	100256	Finished	Seasonal &	74.9%	1.8%	B 16.5%
Ê	4	Unapproved	Undecided	Materials	Food/Beverages	1866-MB R	Raisins mix [mate	rial]	100256	Intermediate	Preorder			C 0%
E Reports	5	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-CV	V Chopped walnuts	[m	100256	Material	Preorder			C 0%
1	6	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-OB	Oat bran [materia	al]	100256	Material	Preorder			C 0%
<b>LIII</b> Dashboard	7	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-R	Raisins black [ma	teri	100256	Material	Preorder			C 0%
Cushoouru	8	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-R	Raisins white [ma	teri	100256	Material	Preorder			C 0%
	9	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-RC	Rolled oats [mate	erial]	100256	Material	Preorder			C 0%
	10	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-T	Toasted wheat ge	rm	100256	Material	Preorder			C 0%
	11	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-W	B Wheat bran [mat	erial]	100256	Material	Preorder			C 0%

This report is calculated if you provide data to determine *On-hand history*, which is one of:

- Stock on hand history if you import data using the Aggregated spreadsheet connection.
- On hand change or On hand (as remaining) using the **Transactional spreadsheet** connection or **Database connection**.

The **Number of periods** control allows you to set up the number of the last periods to show in this report. As you see from the figure above, the report shows on-hand for the last eight months.

## **Historical Stockout Days Report**

The **Historical Stockout Days** Report shows the number of days you ran out of stock for each period in the past and is calculated when data for *On hand history* is provided. The report also includes the current period.

This report is calculated if you provide data for *On-hand history*. The Number of periods control allows you to set up the number of the last periods to show in this report.

	T	+ New filter	All items											
Start	Q	Search	🕸 Settings Report Historical stockout days 🗸 Aggregate by None 🗸 12 🗣 🖺 Export report 🔻 🖺 Import changes 🔻 Show columns 🖕											
		Item code	Description	Location	Location description	DC	Supplier	Model type	Model quality	Slope	ABC analysis	Jan 2019	Feb 201	
Demand	1	05-T48	Cold & Flu Tablets [s	WH-001	WH New Jersey	DC	56892-P	Seasonal &	75%	1.8%	C 0.143%	0	0	
Ð	2	05-T48	Cold & Flu Tablets [s	WH-002	WH San Francisco	DC	56892-P	Seasonal &	75%	1.8%	C 0.143%	0	0	
ventory	3	05-T48	Cold & Flu Tablets [s	WH-003	WH New York	DC	56892-P	Seasonal &	75%	1.8%	C 0.143%	0	0	
æ	4	05-T48	Cold & Flu Tablets [s	WH-004	WH Los Angeles	DC	56892-P	Seasonal &	75%	1.8%	C 0.143%	0	0	
DC	5	1866-MB	Desk [linear trend m	WH-001	WH New Jersey	DC	125689	Constant le	85.2%	0%	B 0.614%	0	0	
	6	1866-MB	Desk [linear trend m	WH-002	WH San Francisco	DC	125689	Constant le	85.2%	0%	C 0.614%	0	0	
eports	7	1866-MB	Desk [linear trend m	WH-003	WH New York	DC	125689	Constant le	85.2%	0%	C 0.614%	0	0	
	8	1866-MB	Desk [linear trend m	WH-004	WH Los Angeles	DC	125689	Constant le	85.2%	0%	C 0.614%	0	0	
<u>.lll</u>	9	004652 Blue	Swimwear [seasonal	WH-001	WH New Jersey	DC	5612457	Seasonal &	74.9%	1.8%	B 1.03%	0	0	
shboard	10	004652 Blue	Swimwear [seasonal	WH-002	WH San Francisco	DC	5612457	Seasonal &	74.9%	1.8%	B 1.03%	0	0	

In case you import inventory information in a way that doesn't allow calculating the Stockout Days automatically you can use the *export/import* scenario to add this data into the project file manually.

## **Historical Turnover Report**

This report shows the turnover of each planning item in each historical period (see figure below).

		T+ New filter	All items	15									
	Q	Q Search Settings		Report Historical turnover V		Turns V Aggregate by None V 12			Export report 💌				
Start		Approval	Status	Item category	Item category 2	Turns Days Rem code	Description	Supplier	Item type	Model type	Model quality	Slope	ABC analysis
Demand	1	Unapproved	Undecided	Materials	Food/Beverages	500461	Milk Chocolate bar 2	425687	Material	Constant le	85.2%	0%	C 7.34%
Ð	2	Unapproved	Undecided	Finished	Food/Beverages	56213-P	Milk Chocolate Bar P	100256	Finished	Seasonal &	74.9%	1.8%	A 76.1%
nventory	3	Unapproved	Undecided	Finished	Food/Beverages	MB-50046	Muesli box, 500 g [s	100256	Finished	Seasonal &	74.9%	1.8%	B 16.5%
Ê	4	Unapproved	Undecided	Materials	Food/Beverages	1866-MB R	Raisins mix [material]	100256	Intermediate	Preorder			C 0%
E Reports	5	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-CW	Chopped walnuts [m	100256	Material	Preorder			C 0%
1	6	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-OB	Oat bran [material]	100256	Material	Preorder			C 0%
<b></b> shboard	7	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-R	Raisins black [materi	100256	Material	Preorder			C 0%
	8	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-R	Raisins white [materi	100256	Material	Preorder			C 0%
	9	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-RO	Rolled oats [material]	100256	Material	Preorder			C 0%
	10	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-T	Toasted wheat germ	100256	Material	Preorder			C 0%
	11	Unapproved	Undecided	Materials	Food/Beverages	1866-MB-WB	Wheat bran [material]	100256	Material	Preorder			C 0%

A drop-down at the right of the **Report** control sets the representation units for this report. These are two options:

• **Turns** – shows how many times an item was purchased and then sold out during a period. This is the default option

• Days - indicates how many days it takes to make one turnover cycle.

Zero value in a period means that there were no sales during this period. An empty cell means that Streamline can't calculate turnover due to zero on-hand in that period. The **Number of periods** control sets the number of the last periods to show in this report.

Next: Projections Reports

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