

Workshop Training Guide Morningstar Direct



Using Dash Codes to
set up your Time
Periods



MORNINGSTAR Direct



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Using Dash Codes to set up your Time Periods

With Morningstar Direct, you can easily carry out monthly or quarterly peer analysis. But you also have the option to carry out weekly or daily reporting as well.

Overview

Using Performance Reporting specifically, you can set up your weekly time periods, as well as weekly frequency as calculation source.

In this exercise guide you will discover how to set up such a report using a combination of dash codes for more customisable time periods.

Action Save Calculate Edit Undo Locate Tools Export View Default							
	Name Report Currency: Euro	26/03/2021 - 27/03/2021 (latest-w0-d1 - latest-w0)		01/03/2021 - 29/03/2021 (latest-c1 - latest)		30/03/2020 - 29/03/2021 (latest-g1 - latest)	
		Return (Cumulative)	Peer group percentile	Return (Cumulative)	Peer group percentile	Return (Cumulative)	Peer group percentile
☐ 1	Report Search Criteria: Morningstar Category = Emerging Europe Equity And Country Available for Sale = France						
☐ 2	▼ EAA Fund Emerging Europe Equity						
☐ 3	Allianz Emerging Europe Eq W EUR Dis	0.62	79	3.03	64	32.39	69
☐ 4	Amundi Fds Em Eurp & Med Eq E2 EUR C	1.16	44	5.51	11	35.28	53
☐ 5	AS SICAV I Estn Eurp Eq S Acc EUR	0.91	66	6.37	1	45.68	27
☐ 6	Barings Eastern Europe I GBP Acc	0.07	87	2.44	74	36.32	48
☐ 7	BGF Emerging Europe D2	2.21	1	4.62	27	55.24	1
☐ 8	BNP Paribas Europe Emerging Eq C C	1.01	53	2.61	69	30.11	79
☐ 9	DNCA Emerging Europe Equity R/A USD	1.38	31	3.75	48	31.48	74
☐ 10	DWS Osteuropa	0.20	83	1.45	85	26.11	95
☐ 11	East Capital Eastern Europe A EUR	1.79	14	3.36	58	39.24	37
☐ 12	East Capital Osteuropa	1.89	9	3.96	43	39.52	32
☐ 13	JPM Emerging Europe Equity A (dist) EUR	2.16	5	4.76	22	34.53	58

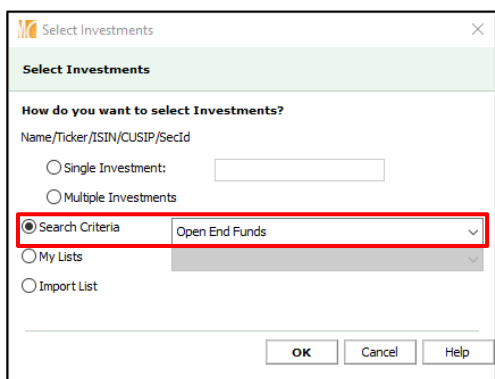
With Performance Reporting, you can run your peer analysis or extract monthly flows for managed investments and much more.

In this exercise guide, you will learn how to use Dash Codes to set up your time periods with more flexibility.

We want to run a weekly report for emerging European equity funds. With Performance Reporting, we can easily set up the report with the frequency of our choice and automate the update and export to Excel with the batching functionality.

To create such a report, do the following:

1. From the left navigation panel, click the **Performance Reporting** folder.
2. From the toolbar, click **New**. The **Select Investments** dialogue box opens.
3. Select the **Search Criteria** radio button.
4. Select **Open End Funds**.



Select **Search Criteria**

5. Click **OK**. The **Search** dialogue box opens.

Exercise 1: Creating a Search Criteria

6. Under the **Field Name** column, click row 1 and select **Morningstar Category**.
7. Under the **Value** column, click the cell facing Morningstar Category.
8. Expand the **Europe/Africa/Asia** section.
9. Select **Emerging Europe Equity**.
10. Under the **Field Name** column, click row 2 and expand the **Operations** section.
11. Select **Country Available for Sale**.
12. Under the **Value** column, click the cell facing **Country Available for Sale**.
13. Select **France** (or any other country of your choice).
14. Under the grid, select the **User Defined Primary Class Only** checkbox to select a unique representative share class per fund.

	Rel	(	Field Name	Operator	Value	)
☐ 1	---		Morningstar Category	=	Emerging Europe Equity	
☐ 2	And		Country Available for Sale	=	France	
☐ 3						
☐ 4						
☐ 5						
☐ 6						
☐ 7						
☐ 8						
☐ 9						
☐ 10						

View Field Name:
☒ By Category
☐ Alphabetically

Include:
☒ Only Surviving Investments
☒ User Defined Primary Class Only

Items Searched: 0 **Items Found:** - **Run Search**

Help **OK** **Cancel**

Select **User Defined Primary Class Only**

15. Click **OK**. The **Group Settings** dialogue box opens.

Under **Group Settings**, our funds are grouped by their Morningstar Category. Let's select the Morningstar Index as well as the Morningstar category average to display in the report.

Exercise 2: Selecting Benchmarks

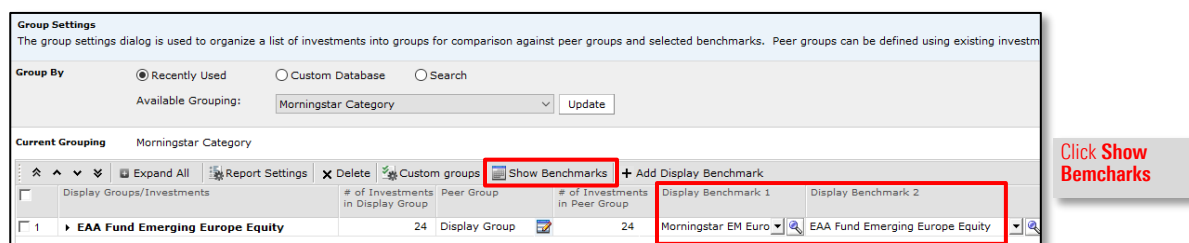
Do the following:

1. Under the **Display Benchmark 1** column, select **Morningstar Index** using the drop-down menu. This will display the benchmark assign to the Morningstar Category.
2. Under the **Display Benchmark 2** column, select **Morningstar Category Average** using the drop-down menu. This will display the average performance of all funds within this Morningstar Category.

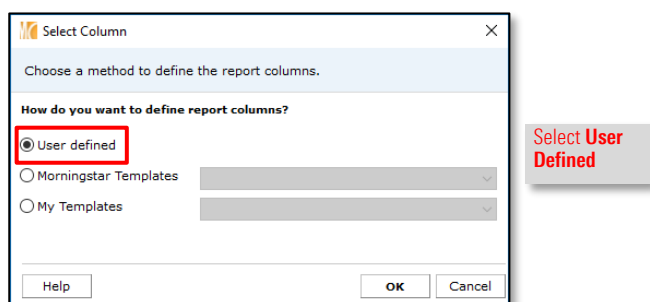
3. From the toolbar, click **Report Settings**. The **Report Settings** dialogue box opens.
4. Ensure the checkboxes for **Show display benchmark 1** and **Show display benchmark 2** are selected. The benchmark will then be displayed in the report.

Select to display benchmarks

5. Click **OK**.
6. From the toolbar, click **Show Benchmarks** to see the benchmark names.



7. Click **OK**. The **Select Column** dialogue box opens.
8. Select **User Defined** and click **OK**. The **Performance Column Setup** dialogue box opens.



Next, we want to work with weekly time periods and set up a weekly calculation source for our statistics, allowing the assessment of share classes with a shorter track record.

For example, when calculating standard deviation over a shorter period, weekly calculations offer more frequent observations that allow you to estimate the standard deviation more precisely. Using weekly calculation source is therefore very useful for shorter time periods.

For time periods greater than 3 years on the other hand, a smaller frequency is recommended, such as monthly.

Morningstar Direct offers some pre-set time periods from the Start Date and End Date menus. We want to set up trailing periods of 6 months and 1 year from the latest weekend. And to this purpose we are limited with our start date pre-set options.

We can however use the **Enter Dash Codes** function, which will provide us with all the flexibility we need.

How do dash codes work?

Exercise 3: Using Dash Codes to set up Time Periods

Dash code	Function	Example
-d(n)	Go back (n) working days	-d1 = one working day earlier
-w(n)	Go back (n) weekends	-w0 = most recent weekend
-m(n)	Go back (n) month ends	-m0 = most recent month end
-c(n)	Go back (n) calendar months	-c1 = same day in the previous month
-q(n)	Go back (n) quarter ends	-q0 = most recent quarter end
-s(n)	Go back (n) semester ends	-s0 = most recent semester end
-x(n)	Go back (n) year ends	-x0 = most recent year end
-y(n)	Go back (n) years (to monthly date)	-y1 = same as -m12
-g(n)	Go back (n) calendar years (to nearest working day)	-g1 = same day in the previous year

🔑 **Note:** All the above can be used with **+** instead of **-**, such as **+m6** instead of **-m6**

🔑 **Note:** Codes may be combined, such as **-m6-w2** (going back 6 months and 2 weeks) and are not case sensitive

You can specify end dates such as:

- ▶ Latest = the latest working day
- ▶ Latest-d1 = the last day minus 1 working day
- ▶ Latest-w0 = the latest weekend from the latest working day
- ▶ Latest-m0 = the latest month end from the latest working day
- ▶ Latest-q0 = the latest quarter end from the latest working day
- ▶ Latest-x0 = the latest year end from the latest working day

You can specify dates such as:

- ▶ Latest-d2 = 2 days from the latest working day
- ▶ Latest-w26 = 26 calendar weeks from the latest working day
- ▶ Latest-y3 = 3 years from the latest working day (to a monthly date)
- ▶ Latest-g3 = 3 years from the latest working day (to the nearest working day)

We want to add 3 months, 6 months and 1-year time periods from the latest weekend.

Do the following:

1. Using the **Start Date** drop-down menu, select **Enter Dash Codes**.
2. In the field, enter **latest-w13** to select 13 weeks ago.
3. Using the **End Date** drop-down menu, select **Enter Dash Codes**.
4. In the field, enter **latest-w0** to select the latest weekend.
5. Click **Add Columns**. The time period is added to the **Selected Time Periods** section.

Time Period

Start Date: Enter Dash Code (dropdown) latest-w13 (text field)

End Date: Enter Dash Code (dropdown) latest-w0 (text field)

Time Periods: ☒ Single period, ☐ Rolling window, ☐ Trailing periods, ☐ Regular periods from start, ☐ Forward extending periods, ☐ Regular periods from end

Window size: [dropdown]

Number of columns: 1 [Add Columns]

Selected Time Periods

18/12/2020 - 18/03/2021 (latest-w13 - latest-w0)

Select **Enter Dash Codes** and enter the codes

The time period is added here

6. To add 6 months, enter **latest-w26** in the **Start Date** field and click **Add Columns**.
7. To add 1 year, enter **latest-w52** in the **Start Date** field and click **Add Columns**.

Performance Column Setup

Time Period Setup

The time periods tab is used to add, edit, or remove time periods to the performance report.

Time Periods | Data Points | Ranks

Time Period

Start Date: Enter Dash Code (dropdown) latest-w52 (text field)

End Date: Enter Dash Code (dropdown) latest-w0 (text field)

Time Periods: ☒ Single period, ☐ Rolling window, ☐ Trailing periods, ☐ Regular periods from start, ☐ Forward extending periods, ☐ Regular periods from end

Window size: [dropdown]

Number of columns: 1 [Add Columns]

Selected Time Periods

18/12/2020 - 18/03/2021 (latest-w13 - latest-w0)

18/09/2020 - 18/03/2021 (latest-w26 - latest-w0)

20/03/2020 - 18/03/2021 (latest-w52 - latest-w0)

[Manage Columns] [Settings] [Remove] [Remove All]

☐ Order time period latest first

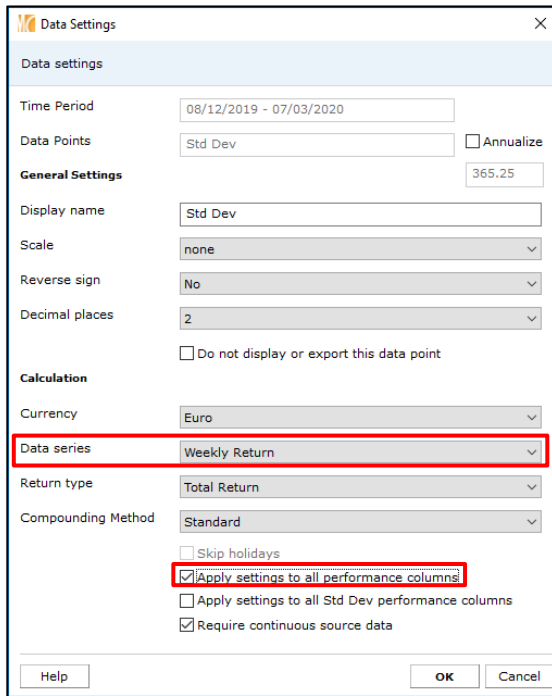
[Help] [OK] [Cancel]

We can now select weekly returns as our calculation source.

1. Click the **Data Points** tab. Return is already added to our selection.
2. From the **Data Points** section, select **Std Dev** and click **Add**.
3. From the **Selected Data Points** section, select **Std Dev** and click **Settings**.
4. Using the **Data Series** drop-down menu, select **Weekly Return**.
5. Select the **Apply settings to all performance columns** checkbox.

 **Note:** This will apply the weekly return to all statistics.

Exercise 5: Applying Weekly Return as Source of Calculation



The screenshot shows the 'Data Settings' dialog box with the following settings:

- Time Period:** 08/12/2019 - 07/03/2020
- Data Points:** Std Dev ☐ Annualize
- General Settings:** 365.25
- Display name:** Std Dev
- Scale:** none
- Reverse sign:** No
- Decimal places:** 2
- ☐ Do not display or export this data point
- Calculation:**
 - Currency:** Euro
 - Data series:** Weekly Return
 - Return type:** Total Return
 - Compounding Method:** Standard
 - ☐ Skip holidays
 - ☒ Apply settings to all performance columns
 - ☐ Apply settings to all Std Dev performance columns
 - ☒ Require continuous source data

Select **Weekly Return**

Select to apply to all statistics

6. Click **OK**.

Now that we selected our time periods and statistics, let's look at our ranking options.

Exercise 6: Applying Ranks

Do the following:

1. Click the **Ranks** tab.
2. In the **Selected Rank Columns** section, select **Peer group percentile** and click **Remove**.
3. In the **Available Rank Columns** section, select **Display Group Rank**, **Display Group Quartile**, **Morningstar Category Rank** and **Morningstar Category Quartile**.
4. Select **# investments ranked in Morningstar Category** and click **Remove**.

Performance Column Setup

Rank Columns Setup
This tab is used to add, edit, or remove rank columns to the performance report.

Time Periods | Data Points | **Ranks**

Data Points: Return

Available Rank Columns

- +/- Display Benchmark 1
- +/- Display Benchmark 2
- +/- Calculation Benchmark 1
- +/- Calculation Benchmark 2
- Peers Beaten
- % of Peer Group Beaten
- Peer group rank
- Peer group percentile

Add

Selected Rank Columns

- Display Group rank
- Display Group quartile
- Morningstar category rank
- Morningstar category quartile

Manage Columns | Settings | Remove

☒ Descending ranks ☐ Ascending ranks

☒ Apply add/remove to all time periods

Help OK Cancel

Select ranks as shown here

We now have the absolute ranks and quartile ranks of the funds against themselves, but also the absolute ranks and quartile ranks of the funds against the Morningstar Category.

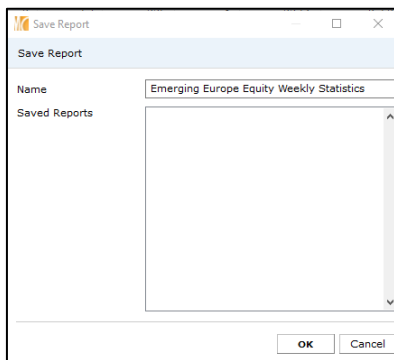
5. Click **OK**. The **Supplementary Columns** dialogue box opens.
6. Click **OK** to view the report.

We can now save our report and save it as a template. We will then calculate it to view the results.

Exercise 7: Saving a Report

To save the report, do the following:

1. From the toolbar, click **Save**. The **Save Report** window opens.
2. Name it "Emerging Europe Equity Weekly Statistics".
3. Click **OK**.



Saving a report as a template is useful when you want to recreate the same report with another list of investments.

Exercise 8: Saving as Template

To save the report as a template, do the following:

1. From the toolbar, click the caret next to **Save**.
2. Click **Save as Template**. The **Save Template** window opens.
3. Name it "Weekly Statistics template".
4. Click **OK**.

The report is still empty, and we need to calculate it in order to retrieve data.

To calculate the report, do the following:

1. From the toolbar, click **Calculate**.

You are returned to the main Performance Reporting window while the report calculates.

2. On the prompt, click **Yes** to open the report.

Exercise 9: Calculating a Report

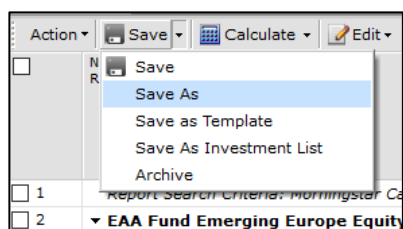
Action ▾ Save ▾ Calculate ▾ Edit ▾ Undo ▾ Locate ▾ Tools ▾ Export ▾ View Default ▾								
Name Report Currency: Euro		12/27/2020 - 3/27/2021 (latest-w13 - latest-w0)						
		Return (Annualized)	Display Group rank	Display Group quartile	Morningstar category rank	# of investments ranked in Morningstar	Morningstar category quartile	Std Dev (Annualized)
1	Report Search Criteria: Morningstar Category = Emerging Europe Equity And Country Available for Sale = France							
2	▼ EAA Fund Emerging Europe Equity							
3	Allianz Emerging Europe Eq W EUR Dis	26.08	12	2	120	235	2	24.87
4	Amundi Fds Em Eurp & Med Eq E2 EUR C	28.01	11	2	90	235	2	19.48
5	AS SICAV I Estn Eurp Eq S Acc EUR	43.28	5	1	43	235	1	23.53
6	Barings Eastern Europe I GBP Acc	24.52	15	3	154	235	3	24.10
7	BGF Emerging Europe D2	42.90	6	1	46	235	1	23.91
8	BNP Paribas Europe Emerging Eq C C	17.87	20	4	199	235	4	22.74
9	DNCA Emerging Europe Equity R/A USD	22.54	19	4	182	235	3	20.46
10	DWS Osteuropa	12.16	24	4	224	235	4	22.93
11	East Capital Eastern Europe A EUR	38.95	8	2	57	235	1	22.73
12	East Capital Osteuropa	36.87	9	2	64	235	1	23.85

We now want to run the same report, but with daily time periods, and we will add this to a batch for update automation. To save us some time, since we will be using the same fund selection and indices, we can save this report as a duplicate report and apply changes.

Exercise 10: Daily Dash Codes

To do so, do the following:

1. From the toolbar, click the caret next to **Save** (down arrow) and click **Save As**.



2. The **Save As** dialogue box opens. Name the new report "Emerging Europe Equity Weekly Statistics" and click **OK**.

You now have the same report with empty data. We will now work with the Performance window to remove the weekly time periods currently displayed in the report and replace them with other time periods using the daily dash code.

To do so, do the following:

1. Make sure you open the report you just saved.
2. From the toolbar, click **Edit > Performance**. The **Performance** window opens.
3. Below the **Selected Time Periods** section, click **Remove All**. All time periods are now deleted.
4. Using the **Start Date** and **End Date** drop-down menus, select **Enter Dash Code**.
5. Enter the following start and end dates.

Start Date	Meaning	End Date	Meaning
Latest-w0-d1	Starting 1 day before the last week end	Latest-w0	Ending on the last week end
Latest-c1	Starting 4 weeks before the last day	Latest	Ending on the latest day
Latest-g1	Starting 52 weeks before the last day	Latest	Ending on the latest day

You can use endless numbers of combinations to set up the desired time periods for your analysis.

6. From the toolbar, click **Calculate** to view the report.

Once your report is calculated, the date displayed at the top of the statistics shows that the data is calculated from the latest weekend, going back so many weeks as stipulated (13 weeks in the screenshot below).

Appendix A: Changing the Week End Day

08/12/2019 - 07/03/2020 (latest-w13 - latest-w0)					
Return	Display Group rank	Display Group quartile	Morningstar category rank	Morningstar category quartile	Std Dev
Emerging Europe Equity And Country Available for Sale = France					
(12.94)	12	2	114	3	4.78
(15.50)	24	4	212	4	4.69
(8.84)	3	1	30	1	4.39
(13.65)	15	3	136	3	4.70

The time period is shown here

Here the end date displayed is March 20th, 2021, a Saturday, displaying the Friday's data.

What if you wanted the calculate the data with a Wednesday defined as our weekend? Meaning we want 13 weeks going back from the latest Wednesday. How can we do this in Performance Reporting?

You could of course play with the dash codes, but there is a setting specifically designed for this purpose.

Do the following:

1. In the top-left corner of the Morningstar Direct window, click **File > Set User Preferences**.
2. Click the **Return Settings** tab.

At the bottom of the window, notice how Saturday is selected as the **Week Ends On** option. This means our weekly time periods run from Sunday until Saturday and displays the latest Friday's data.

Set User Preferences

General Portfolio Management Import Export **Return Settings** User Defined Primary

Default Return Type Mapping
When choosing the default return type for custom calculations, use the drop down options below to select the return type.

Open-End Fund	Total Return
Exchange-Traded Fund	Total Return
Closed-End Fund	Total Return
Separate Account	Gross Return
Stock	Market Return
VA Subaccount	Total Return
Insurance Product Fund	Total Return
Hedge Fund	Total Return
Index	Market Return

Reset

Date Setting

Week Ends On **Saturday**

To display weekly time periods with a week ending on a Wednesday, do the following:

1. Using the **Week Ends On** drop-down menu, select **Thursday**.
2. Recalculate the report.

Once generated, the report time periods end on the latest Thursday, displaying the data for Wednesday.

Name	18/12/2020 - 18/03/2021 (latest-w13 - latest-w0)						
Report Currency: Euro							
	Return (Annualized)	Display Group rank	Display Group quartile	Morningstar category rank	# of investments ranked in Morningstar	Morningstar category quartile	Std Dev (Annualized)
Report Search Criteria: Morningstar Category = Emerging Europe Equity And Country Available for Sale = France							
▼ EAA Fund Emerging Europe Equity							
Allianz Emerging Europe Eq W EUR Dis	29.14	18	3	163	235	3	24.92
Amundi Fds Em Eurp & Med Eq E2 EUR C	33.06	16	3	124	235	2	20.87
AS SICAV I Estn Eurp Eq S Acc EUR	42.16	9	2	63	235	1	23.97
Barings Eastern Europe I GBP Acc	36.12	14	3	92	235	2	24.54
BGF Emerging Europe D2	38.70	13	3	78	235	2	24.68
BNP Paribas Europe Emerging Eq C C	28.37	19	4	170	235	3	23.84
DNCA Emerging Europe Equity R/A USD	21.62	23	4	200	235	4	21.03
DWS Osteuropa	24.57	21	4	187	235	4	22.63
East Capital Eastern Europe A EUR	41.70	10	2	67	235	1	23.13
East Capital Osteuropa	42.60	8	2	58	235	1	24.52

☞ **Note:** when using this option, the calculation source switches to daily return.