

Automatic Chart Updates



Function Library

- Insert Function
- AutoSum
- Recently Used
- Financial
- Logical
- Text
- Date & Time
- Lookup & Reference
- Math & Trig
- More Functions
- Name Manager
- Define Name
- Use in Formula
- Create from Selection
- Trace Precedents
- Trace Dependents
- Remove Arrows
- Show Formulas
- Error Checking
- Evaluate Formula
- Watch Window
- Calculation Options

H11 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
		Number of Applications	Creating Dynamic Ranges in a Chart															
1	Date																	
2	4/1	28																
3	4/2	13																
4	4/3	18																
5	4/4	5																
6	4/5	20																
7	4/6	14																
8	4/7	6																
9	4/8	2																
10	4/9	18																
11	4/10	16																
12	4/11	15																
13	4/12	2																
14	4/13	26																
15	4/14	3																
16	4/15	21																
17	4/16	15																
18	4/17	5																
19	4/18	22																

Step 1: Click Formulas Tab, Define Name

The screenshot shows the Microsoft Excel interface. The 'Formulas' tab is selected and highlighted with a green box. Within the 'Formulas' ribbon, the 'Define Name' button is also highlighted with a green box, and a green arrow points to it from the left. The spreadsheet below shows a table with two columns: 'Date' and 'Number of Applications'. The title 'Creating Dynamic Ranges in a Chart' is centered in the background.

	A	B	
1	Date	Number of Applications	Creating Dynamic Ranges in a Chart
2	4/1	28	
3	4/2	13	
4	4/3	18	
5	4/4	5	
6	4/5	20	
7	4/6	14	
8	4/7	6	
9	4/8	2	
10	4/9	18	
11	4/10	16	
12	4/11	15	
13	4/12	2	
14	4/13	26	
15	4/14	3	
16	4/15	21	
17	4/16	15	
18	4/17	5	
19	4/18	22	

Step 2: Write Date, Select Workbook

The screenshot displays the Microsoft Excel interface with the 'Formulas' ribbon active. The 'Function Library' group includes 'Insert Function', 'AutoSum', 'Recently Used', 'Financial', 'Logical', 'Text', 'Date & Time', 'Lookup & Reference', 'Math & Trig', and 'More Functions'. The 'Defined Names' group includes 'Name Manager', 'Define Name', 'Use in Formula', and 'Create from Selection'. The 'Formula Auditing' group includes 'Trace Precedents', 'Trace Dependents', 'Remove Arrows', 'Show Formulas', 'Error Checking', and 'Evaluate Formula'. The 'Calculation' group includes 'Watch Window' and 'Calculation Options'. The active cell is A1, containing the formula '=Date'. The spreadsheet shows a table with dates in column A and 'Number of Applications' in column B. A 'New Name' dialog box is open, with 'Date' entered in the 'Name' field and 'Workbook' selected in the 'Scope' dropdown. A green arrow points from the 'Date' cell in the spreadsheet to the 'Date' text in the dialog box. The 'Refers to' field is empty. The 'OK' and 'Cancel' buttons are at the bottom of the dialog box.

	A	B
1	Date	Number of Applications
2	4/1	26
3	4/2	13
4	4/3	18
5	4/4	5
6	4/5	20
7	4/6	14
8	4/7	6
9	4/8	2
10	4/9	18
11	4/10	16
12	4/11	15
13	4/12	2
14	4/13	26
15	4/14	3
16	4/15	21
17	4/16	15
18	4/17	5
19	4/18	22

Step 3: Write "=OFFSET(", Select A2 Cell

The screenshot shows the Excel interface with the 'Formulas' tab selected. The 'New Name' dialog box is open, and the 'Refers to' field is being edited. The formula entered is `=OFFSET('Automatic Chart Updates'!A2`. A green arrow points to cell A2 in the spreadsheet, and another green arrow points to the 'Refers to' field in the dialog box. The spreadsheet has columns 'Date' and 'Number of Applications'.

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Formula:
=OFFSET('Automatic Chart Updates'!\$A\$2,0,0,COUNTA('Automatic Chart Updates'!\$A:\$A)-1,1)

Description:
Write =OFFSET function, Open Parenthesis, Starting Cell is going to be the first date (A2), Select Cell A2.

Step 4: Write 0,0,COUNTA(, Select Column A)

The screenshot shows the Excel interface with the 'Formulas' tab selected. A table with two columns, 'Date' and 'Number of Applications', is visible. A 'New Name' dialog box is open, and the formula `=OFFSET('Automatic Chart Updates'!A2,0,0,COUNTA('Automatic Chart Updates'!$A:$A))` is being entered into the 'Refers to:' field. A green arrow points from the 'Date' column header to the formula field.

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Formula:

=OFFSET('Automatic Chart Updates'!\$A\$2,0,0,COUNTA('Automatic Chart Updates'!\$A:\$A)-1,1)

Description:

We don't want to move up or down from starting point, so it is 0. We don't want to move left or write from starting point, so it is 0. We use COUNTA function, which counts all the cells within given range that contains some value. Open parenthesis, Select all Column A, and close parenthesis.

Step 5: Write -1,1), Press OK

The screenshot shows the Excel interface with the 'Formulas' tab active. A 'New Name' dialog box is open, showing the following details:

- Name: Date
- Scope: Workbook
- Refers to: =OFFSET('Automatic Chart Updates'!\$A\$2,0,0,COUNTA('Automatic Chart Updates'!\$A:\$A)-1,1)

The spreadsheet data is as follows:

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Formula:
=OFFSET('Automatic Chart Updates'!\$A\$2,0,0,COUNTA('Automatic Chart Updates'!\$A:\$A)-1,1)

Description:
We don't want to count the header, so we write -1. The width of resulting array is 1, so we write 1, because it is one column wide. Then we close parenthesis. We press OK.

Step 6: Click Formulas Tab, Define Name

The screenshot shows the Microsoft Excel interface. The 'Formulas' tab is selected and highlighted with a green box. Within the 'Formulas' ribbon, the 'Define Name' button is also highlighted with a green box, and a green arrow points to it from the left. The spreadsheet below shows a table with two columns: 'Date' and 'Number of Applications'. The title 'Creating Dynamic Ranges in a Chart' is centered in the background. The status bar at the bottom shows 'Automatic Chart Updates' is turned on.

	A	B	
1	Date	Number of Applications	Creating Dynamic Ranges in a Chart
2	4/1	28	
3	4/2	13	
4	4/3	18	
5	4/4	5	
6	4/5	20	
7	4/6	14	
8	4/7	6	
9	4/8	2	
10	4/9	18	
11	4/10	16	
12	4/11	15	
13	4/12	2	
14	4/13	26	
15	4/14	3	
16	4/15	21	
17	4/16	15	
18	4/17	5	
19	4/18	22	

Step 7: Write Number_of_Applications

The screenshot displays the Microsoft Excel interface. The 'Formulas' tab is active in the ribbon. The 'Name Manager' dialog box is open, showing the 'Name' field set to 'Number_of_Applications' and the 'Scope' set to 'Workbook'. A green box highlights the 'Number_of_Applications' cell in the spreadsheet, and a green arrow points from this cell to the 'Name' field in the dialog box. Another green box highlights the 'Number_of_Applications' text in the 'Name' field of the dialog box. The spreadsheet data is as follows:

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Step 8: Write "=OFFSET(", Select B2 Cell

The screenshot shows the Excel interface with the 'Formulas' tab active. The 'New Name' dialog box is open, and the 'Refers to' field is being edited. A green arrow points from the 'Refers to' field to cell B2 in the spreadsheet. The spreadsheet data is as follows:

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Formula:
=OFFSET('Automatic Chart Updates'!\$B\$2,0,0,COUNTA('Automatic Chart Updates'!\$B:\$B)-1,1)

Description:
Write =OFFSET function, Open Parenthesis, Starting Cell is going to be the first Number of Applications (B2), Select Cell B2.

Step 9: Write 0,0,COUNTA(, Select Column B)

File Home Insert Draw Page Layout **Formulas** Data Review View Help

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Defined Names, Trace Precedents, Trace Dependents, Remove Arrows, Formula

B1

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Date	Number of Applications											
2	4/1	28											
3	4/2	13											
4	4/3	18											
5	4/4	5											
6	4/5	20											
7	4/6	14											
8	4/7	6											
9	4/8	2											
10	4/9	18											
11	4/10	16											
12	4/11	15											
13	4/12	2											
14	4/13	26											
15	4/14	3											
16	4/15	21											
17	4/16	15											
18	4/17	5											
19	4/18	22											

New Name

Name: Number_of_Applications

Scope: Workbook

Comment:

Refers to: =OFFSET('Automatic Chart Updates'!\$B\$2,0,0,COUNTA('Automatic Chart Updates'!\$B:\$B)-1,1)

OK Cancel

Formula:

=OFFSET('Automatic Chart Updates'!\$B\$2,0,0,COUNTA('Automatic Chart Updates'!\$B:\$B)-1,1)

Description:

We don't want to move up or down from starting point, so it is 0. We don't want to move left or write from starting point, so it is 0. We use COUNTA function, which counts all the cells within given range that contains some value. Open parenthesis, Select all Column B, and close parenthesis.

Step 10: Write -1,1), Press OK

The screenshot shows the 'New Name' dialog box in Excel. The 'Name' field is 'Number_of_Applications', the 'Scope' is 'Workbook', and the 'Refers to:' field contains the formula: `=OFFSET('Automatic Chart Updates'!B2,0,0,COUNTA('Automatic Chart Updates'!$B:$B)-1,1)`. The 'OK' button is highlighted with a green box and an arrow. Another arrow points to the formula field.

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Formula:
`=OFFSET('Automatic Chart Updates'!B2,0,0,COUNTA('Automatic Chart Updates'!$B:$B)-1,1)`

Description:
We don't want to count the header, so we write -1. The width of resulting array is 1, so we write 1, because it is one column wide. Then we close parenthesis. We press OK.

Step 11: Click Chart Design, Select Data

The screenshot shows the Microsoft Excel interface with the Chart Design ribbon active. The 'Select Data' button is highlighted with a green box and an arrow. The chart area displays a line chart titled 'Creating Dynamic Ranges in a Chart' with the subtitle 'Number of Applications'. The chart data is as follows:

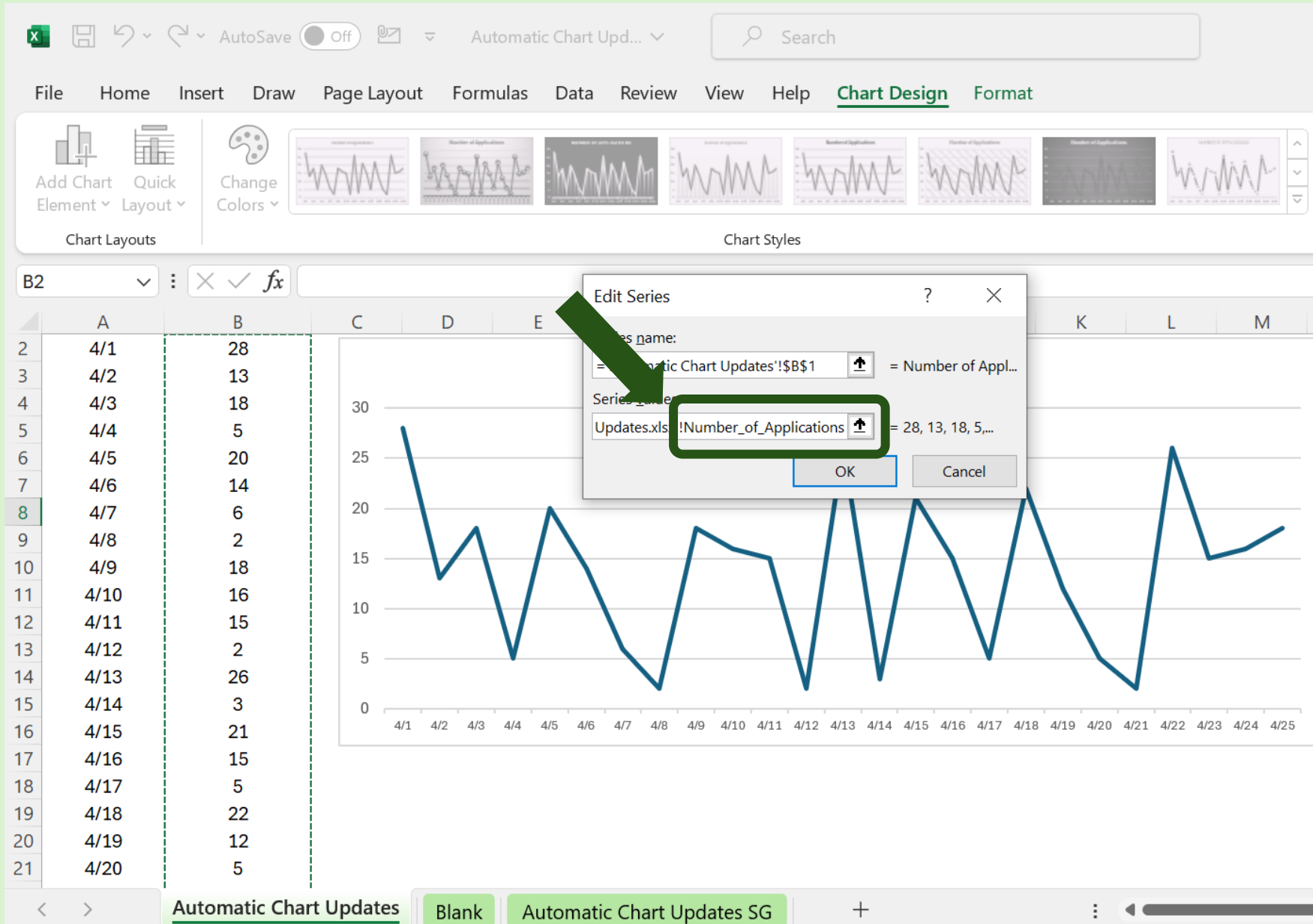
Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Step 12: Click Edit Vertical Axis

The screenshot shows the Microsoft Excel interface with the 'Select Data Source' dialog box open. The dialog box is titled 'Select Data Source' and has a 'Chart data range' field containing the formula `= 'Automatic Chart Updates'!A1:B26`. The 'Legend Entries (Series)' section is highlighted, and the 'Number of Applications' series is selected. The 'Edit' button for this series is circled in green, and a green arrow points to it. The background shows a line chart with data points for dates from 4/1 to 4/25. The chart is titled 'Automatic Chart Updates' and is located in the 'Automatic Chart Updates' workbook.

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22

Step 13: After !, Text "Number_of_Applications"



Formula:
='Automatic Chart Updates.xlsx'!**Number_of_Applications**

Description:
Just after the ='Automatic Chart Updates.xlsx'! We type Number_of_Applications which represents the Number of Applications range that we defined in the beginning. We press OK.

Step 14: Click Edit Horizontal Axis

The screenshot shows the Microsoft Excel interface with the 'Select Data Source' dialog box open. The dialog box is titled 'Select Data Source' and has a 'Chart data range' field containing the formula `'Automatic Chart Updates'!A1:B26`. Below this, there are two sections: 'Legend Entries (Series)' and 'Horizontal (Category) Axis Labels'. In the 'Horizontal (Category) Axis Labels' section, there is a list of dates from 4/1 to 4/5. A green arrow points to the 'Edit' button in this section. The background shows a line chart with data points for dates from 4/1 to 4/25. The y-axis ranges from 0 to 30. The data series is 'Number of Applications'.

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20
4/6	14
4/7	6
4/8	2
4/9	18
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22
4/19	12
4/20	5

Step 15: After !, Text "Date", Click OK

The screenshot shows the Excel interface with the 'Chart Design' tab active. A line chart is displayed on the worksheet. The 'Axis Labels' dialog box is open, and the 'Axis label range' field contains the formula `=Automatic Chart Updates.xlsx!Date`. A green arrow points to the formula, and a green box highlights the `Date` part of the formula. The 'OK' button is also highlighted. The worksheet data is as follows:

	A	B
2	4/1	28
3	4/2	13
4	4/3	18
5	4/4	5
6	4/5	20
7	4/6	14
8	4/7	6
9	4/8	2
10	4/9	18
11	4/10	16
12	4/11	15
13	4/12	2
14	4/13	26
15	4/14	3
16	4/15	21
17	4/16	15
18	4/17	5
19	4/18	22
20	4/19	12
21	4/20	5

Formula:
`=Automatic Chart Updates.xlsx!Date`

Description:
Just after the `=Automatic Chart Updates.xlsx!` We type `Date`, which represents the Date range that we defined in the beginning. We press `OK`.

Step 16: Click OK

The screenshot shows the Microsoft Excel interface with the 'Select Data Source' dialog box open. The dialog box is positioned over a line chart. The 'Chart data range' is set to '=Automatic Chart Updates!\$A\$1:\$B\$26'. The 'Legend Entries (Series)' list contains 'Number of Applications'. The 'Horizontal (Category) Axis Labels' list contains dates from 4/1 to 4/5. A green arrow points to the 'OK' button, which is highlighted with a green box.

Chart data range: '=Automatic Chart Updates!\$A\$1:\$B\$26'

Legend Entries (Series)

- Number of Applications

Horizontal (Category) Axis Labels

- 4/1
- 4/2
- 4/3
- 4/4
- 4/5

OK Cancel

Date	Number of Applications
4/1	28
4/2	13
4/3	18
4/4	5
4/5	20

Step 17: Add Date To Make Sure It Works

The screenshot displays the Microsoft Excel interface. The ribbon is set to 'Chart Design' and 'Format'. A line chart titled 'Number of Applications' is shown on the right, with the x-axis representing dates from 4/1 to 4/25 and the y-axis representing the number of applications (0 to 30). The data points are connected by a blue line. On the left, a data table is visible, with columns A and B. Column A contains dates from 4/10 to 4/25, and column B contains the corresponding number of applications. A green rounded rectangle highlights the date column (A), and a green arrow points to the bottom of this column. The status bar at the bottom shows 'Automatic Chart Updates' is checked, and the active sheet is 'Automatic Chart Updates SG'.

Date	Number of Applications
4/10	16
4/11	15
4/12	2
4/13	26
4/14	3
4/15	21
4/16	15
4/17	5
4/18	22
4/19	12
4/20	5
4/21	2
4/22	26
4/23	15
4/24	16
4/25	18

Step 18: The Result

