

DIView

Report

朱明杰 杨阳

2020/03/20



Outline

- Report overview
- Report usage
- Report template
- Report creation
- Report configuration settings

Purpose

In this chapter, you will learn

- ... Basic operation and management of reports
- ... Features supported by reports

Outline

- Report overview
- Report usage
- Report template
- Report creation
- Report configuration settings

➤ DIAView report function

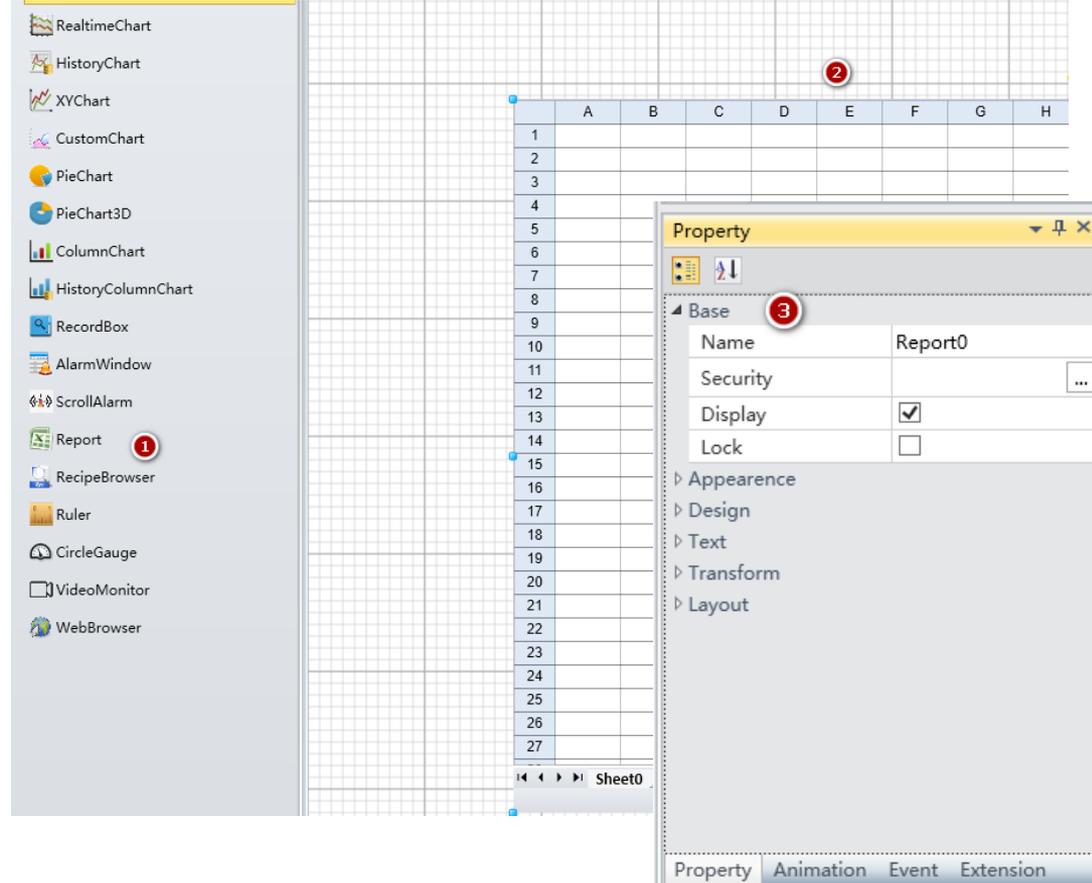
- Provides a reporting tool in the "excel-like" operation mode to produce common production reports (**daily reports, monthly reports, annual reports, etc.**), and can also flexibly produce reports in various complex formats to complete the query of real-time, historical and statistical data, Display, print and output.
- The report can not only display the data of the real-time historical database, but also can perform data access and query with typical relational databases such as **MySQL, SQL Server, Oracle, and Access.**



- Report overview
- **Report usage**
- Report template
- Report creation
- Report configuration settings

➤ Example for creating a report

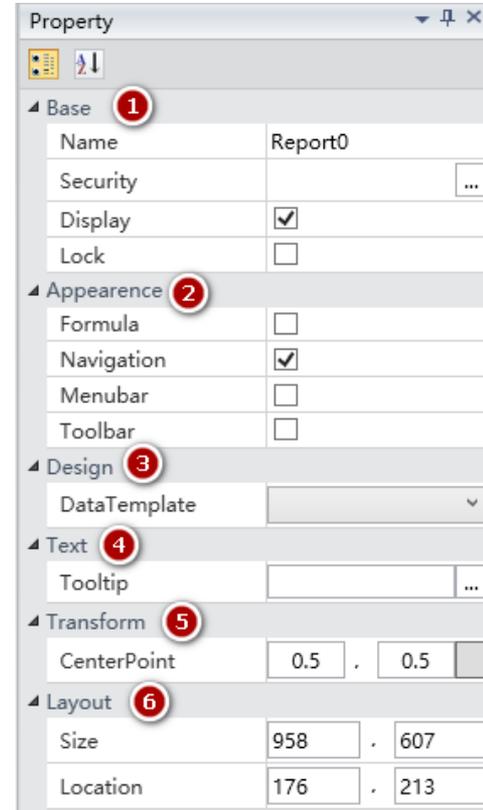
- ① Click the report in the toolbar
- ② Drag to the desired position on the canvas
- ③ Configure report properties



The screenshot illustrates the steps for creating a report in the Delta software. On the left, a toolbar lists various components, with the 'Report' icon (a green document with a white 'A') highlighted by a red circle labeled '1'. The central canvas is a grid with columns A-H and rows 1-27. A red circle labeled '2' is positioned at the intersection of column E and row 5. On the right, a 'Property' window is open, showing the 'Base' section expanded. The 'Name' field is set to 'Report0' and is highlighted by a red circle labeled '3'. Other fields in the 'Base' section include 'Security' (with a dropdown arrow), 'Display' (checked), and 'Lock' (unchecked). Below the 'Base' section are expandable sections for 'Appearance', 'Design', 'Text', 'Transform', and 'Layout'. At the bottom of the Property window, there are tabs for 'Property', 'Animation', 'Event', and 'Extension'.

➤ Report Properties:

- ① **Base:**
Basic properties, the same as other control graphics
- ② **Appearance :**
Appearance can choose whether display formula , navigation, menu bar and toolbar.
- ③ **Design:**
Design and set the report template to the report
- ④ **Text:**
Report prompt text information
- ⑤ **Transform:**
Contains the center point of the report
- ⑥ **Layout:**
The size and position of the report in the canvas can be adjusted by numerical values



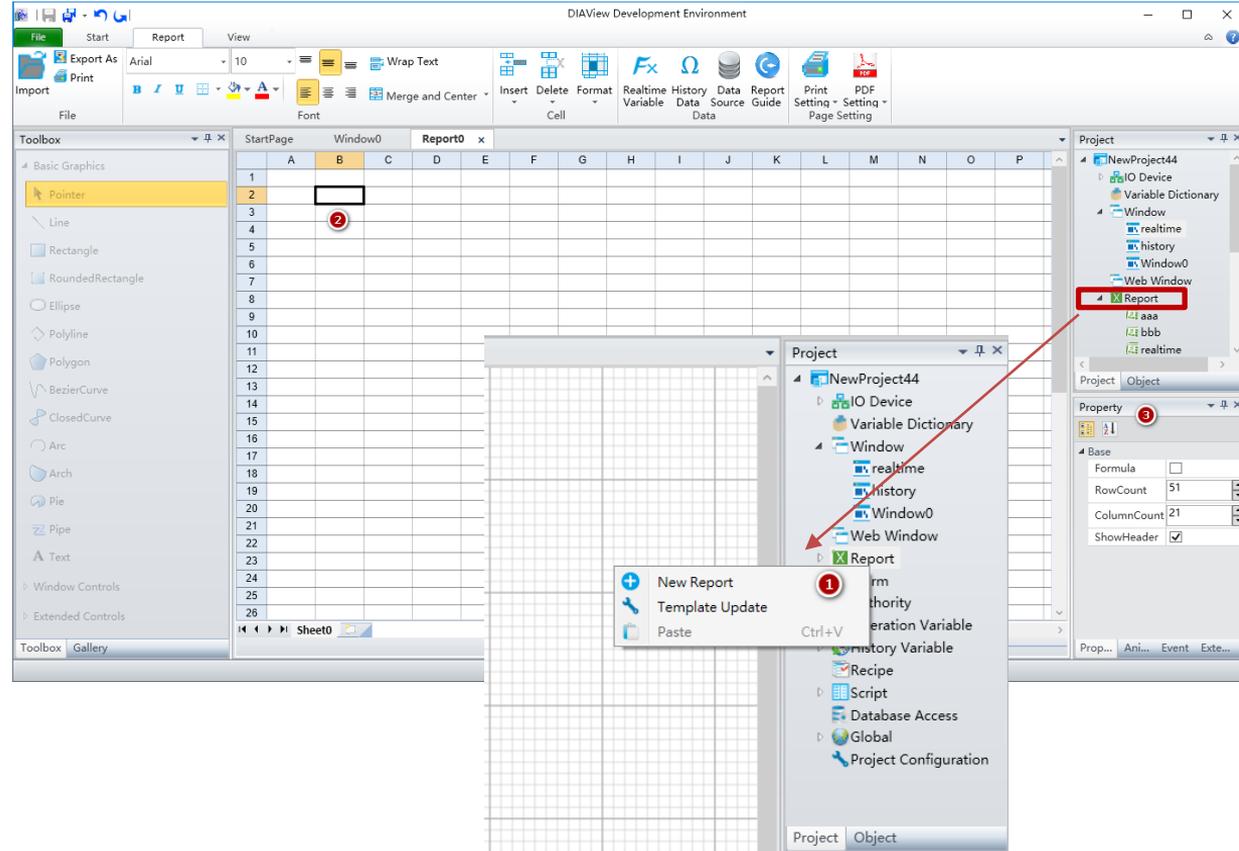
Property	
Base 1	
Name	Report0
Security	...
Display	<input checked="" type="checkbox"/>
Lock	<input type="checkbox"/>
Appearance 2	
Formula	<input type="checkbox"/>
Navigation	<input checked="" type="checkbox"/>
Menubar	<input type="checkbox"/>
Toolbar	<input type="checkbox"/>
Design 3	
DataTemplate	...
Text 4	
Tooltip	...
Transform 5	
CenterPoint	0.5 . 0.5
Layout 6	
Size	958 . 607
Location	176 . 213

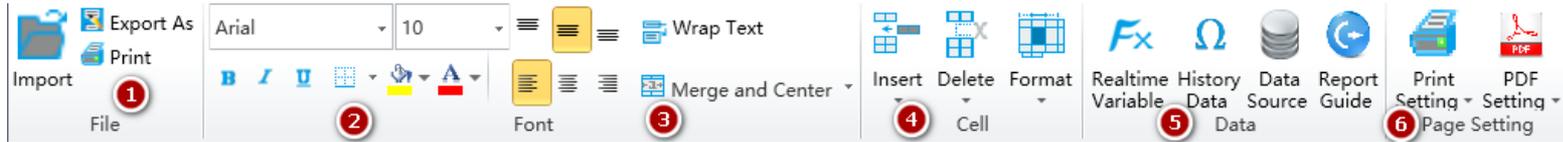
- Report overview
- Report usage
- **Report template**
- Report creation
- Report configuration settings

➤ Create a report template:

• Step 1

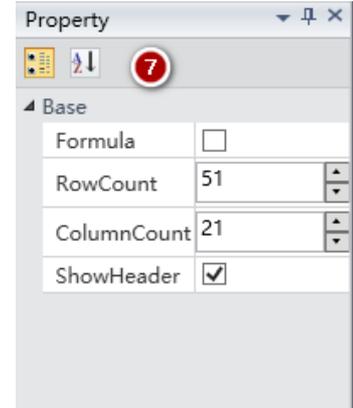
- ① Right-click the report in the project node
- ② Create a new report template
- ③ Configure report template properties





- **Step 2**

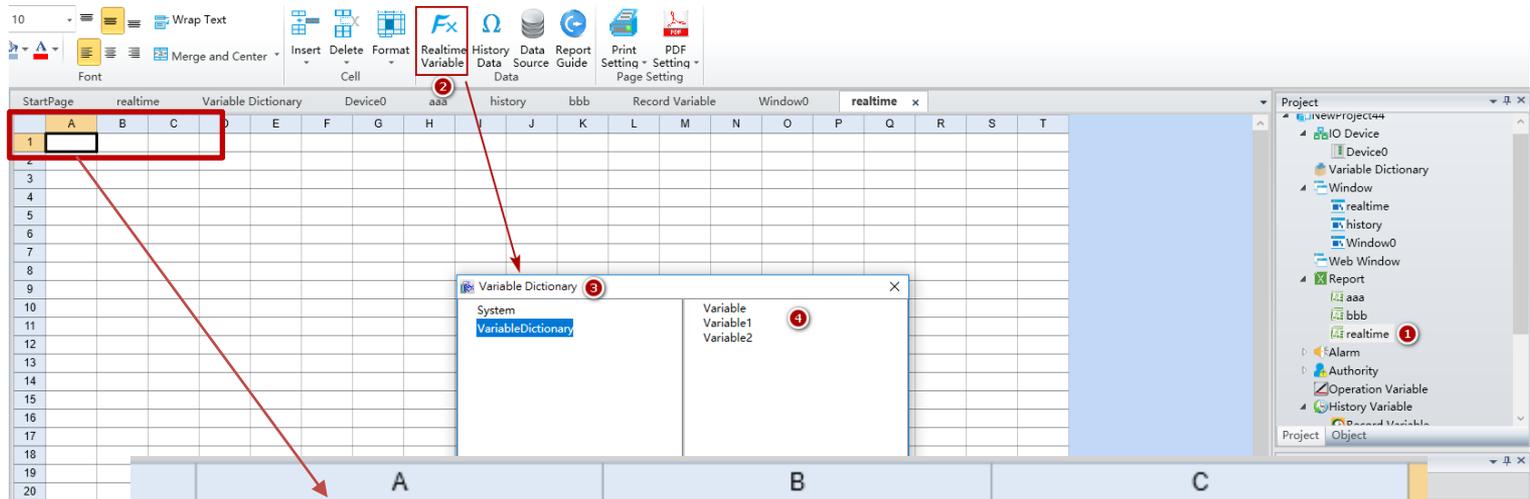
- ① Import and export printing function
- ② Set the text font in the table, you can change the size and fill color, etc.
- ③ Set the table format, you can set the alignment center and line break and merge
- ④ Format cells, EXCEL-like operations
- ⑤ Set data, you can bind real-time or historical variables, you can also add data sources and report wizards
- ⑥ Print settings and PDF settings
- ⑦ Basic properties of report templates, including whether to display the formula bar, number of rows and columns, and row and column headers



- Report overview
- Report usage
- Report template
- **Report creation**
- Report configuration settings

➤ Create the real-time report

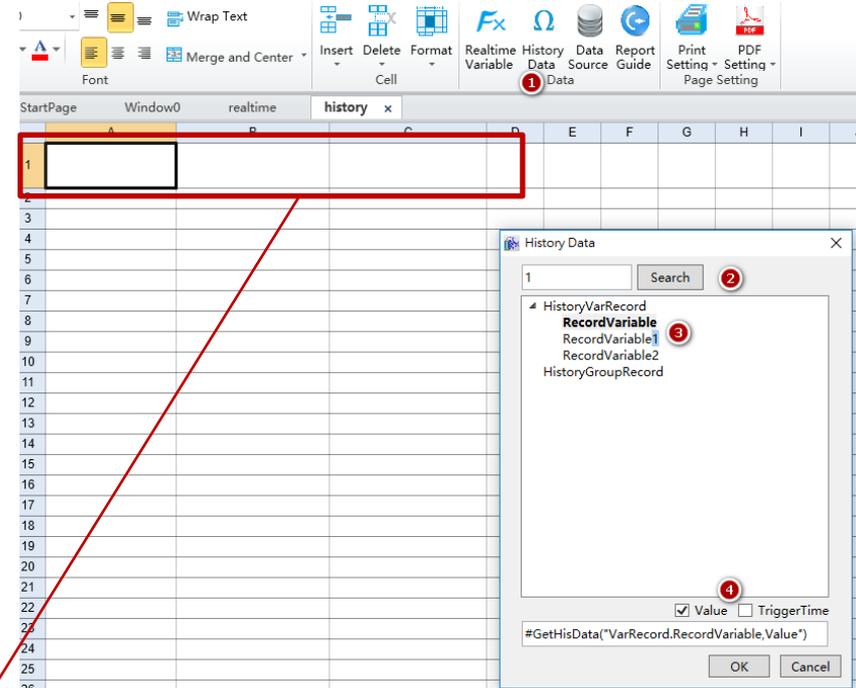
- ① Create a new report template
- ② Select the report template menu bar to bind real-time variables
- ③ Select the variable to be bound



	A	B	C
1	#GetNumValue("Var.Variable")	#GetNumValue("Var.Variable1")	#GetNumValue("Var.Variable2")

➤ Create the history report

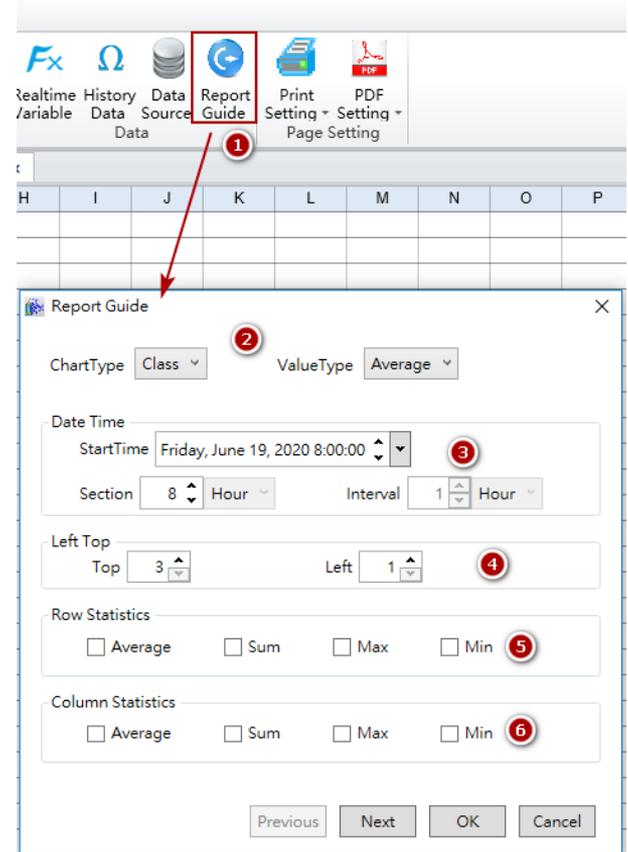
- ① Select the report template menu bar to bind historical variables
- ② Pick the required historical variables
- ③ Select the required historical variable
- ④ There are two forms of historical variables, **Value** and **Trigger time**



	A	B	C	D
1	#GetHisData("VarRecord.RecordVariable,Value")	#GetHisData("VarRecord.RecordVariable1,Value")	#GetHisData("VarRecord.RecordVariable2,Value")	#GetHisData("VarRecord.RecordVariable2,TriggerTime")

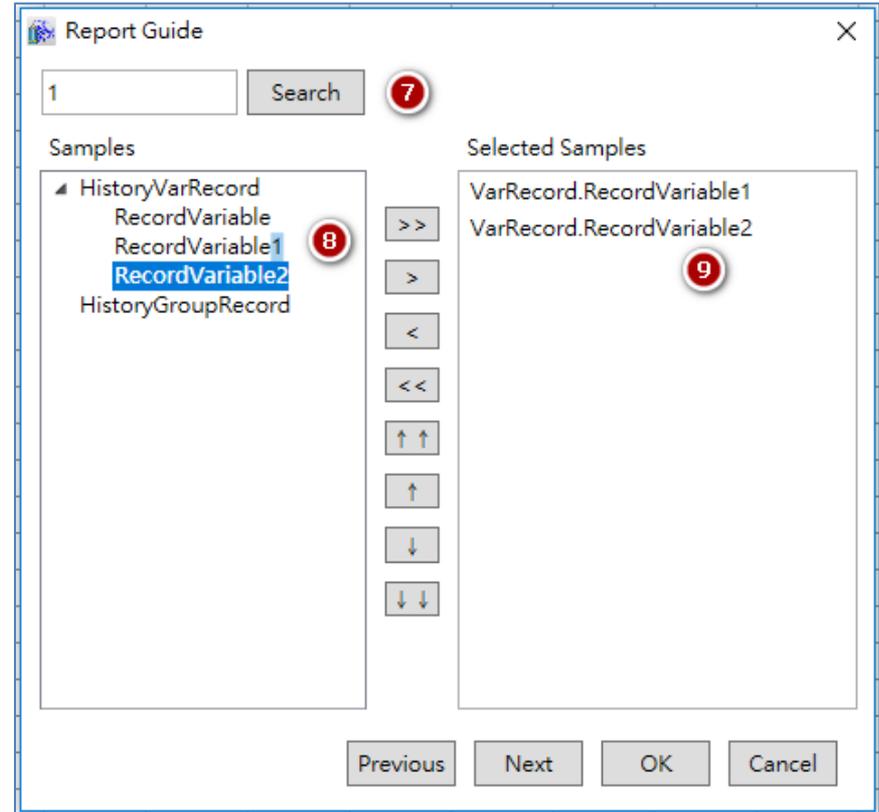
➤ Create the report guide

- ① Select **Report Wizard** on the menu bar of the report template.
- ② Select icon type and value type.
- ③ Select start time interval
- ④ Select the starting position of the icon
- ⑤ Set line statistics
- ⑥ Set column statistics



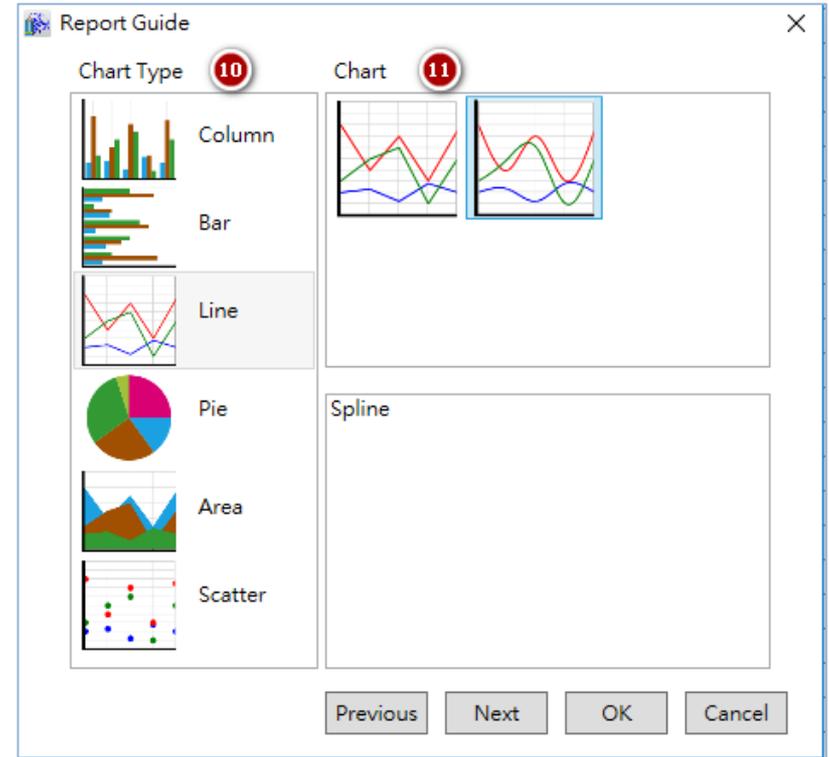
➤ Create the report guide

- ⑦ Quickly find the required variable
- ⑧ Select the required variable
- ⑨ Identify selected variables and make adjustments



➤ **Create the report guide**

- ⑩ Select the type of generated chart
- ⑪ Choose Generate Chart Style



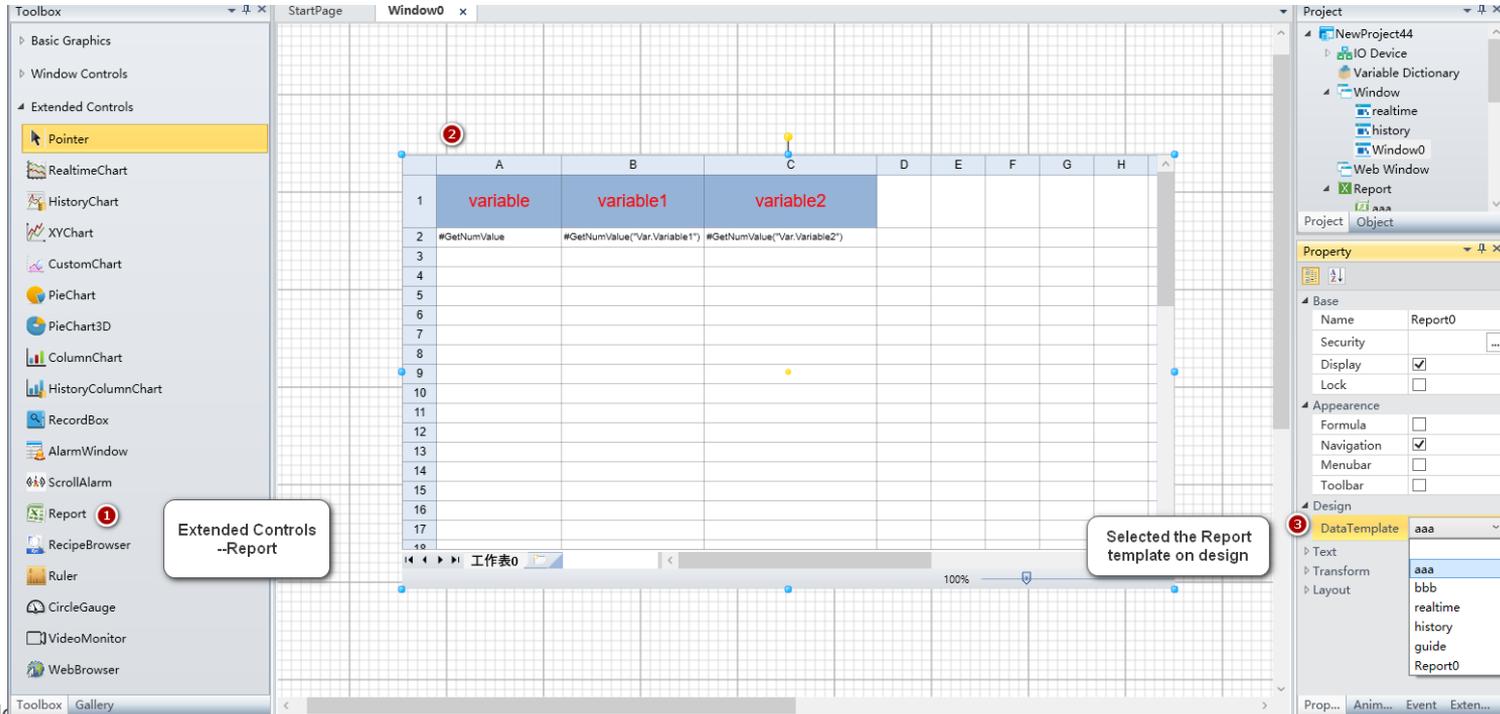
➤ **Create the report guide**

- ⑫ Change the title and XY axis content
- ⑬ Generate chart preview



➤ Report setting example

- Build the completed report template and report binding.



The screenshot shows a software interface for report creation. The main window displays a grid with columns A through H and rows 1 through 17. The grid contains the following data:

	A	B	C	D	E	F	G	H
1	variable	variable1	variable2					
2	#GetNumValue	#GetNumValue("Var.Variable1")	#GetNumValue("Var.Variable2")					
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								

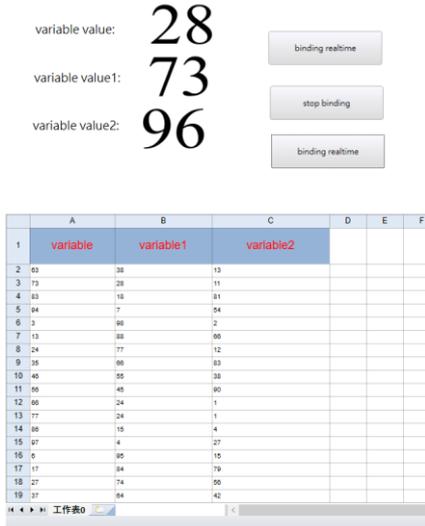
The interface includes a Toolbox on the left with 'Extended Controls --Report' selected. The Project pane on the right shows a 'Report' object named 'aaa'. The Property pane shows the 'DataTemplate' property set to 'aaa'. A callout box indicates 'Selected the Report template on design'.

- Report overview
- Report usage
- Report template
- Report creation
- **Report configuration settings**



➤ Report Guide test example

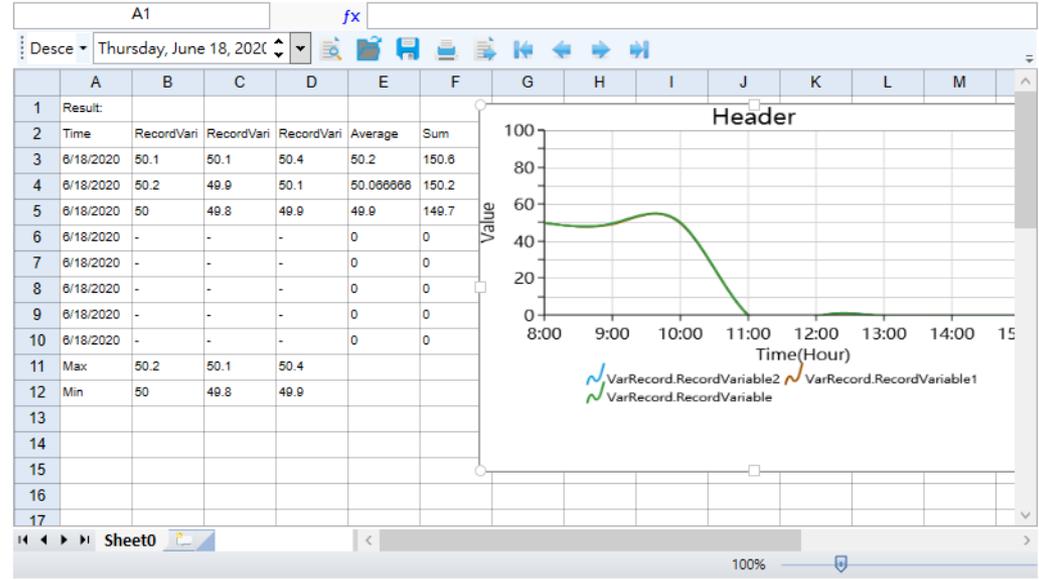
- Real-time report runtime screen
- Refresh data in real time after binding variables



Report configuration settings

➤ Report Guide at runtime

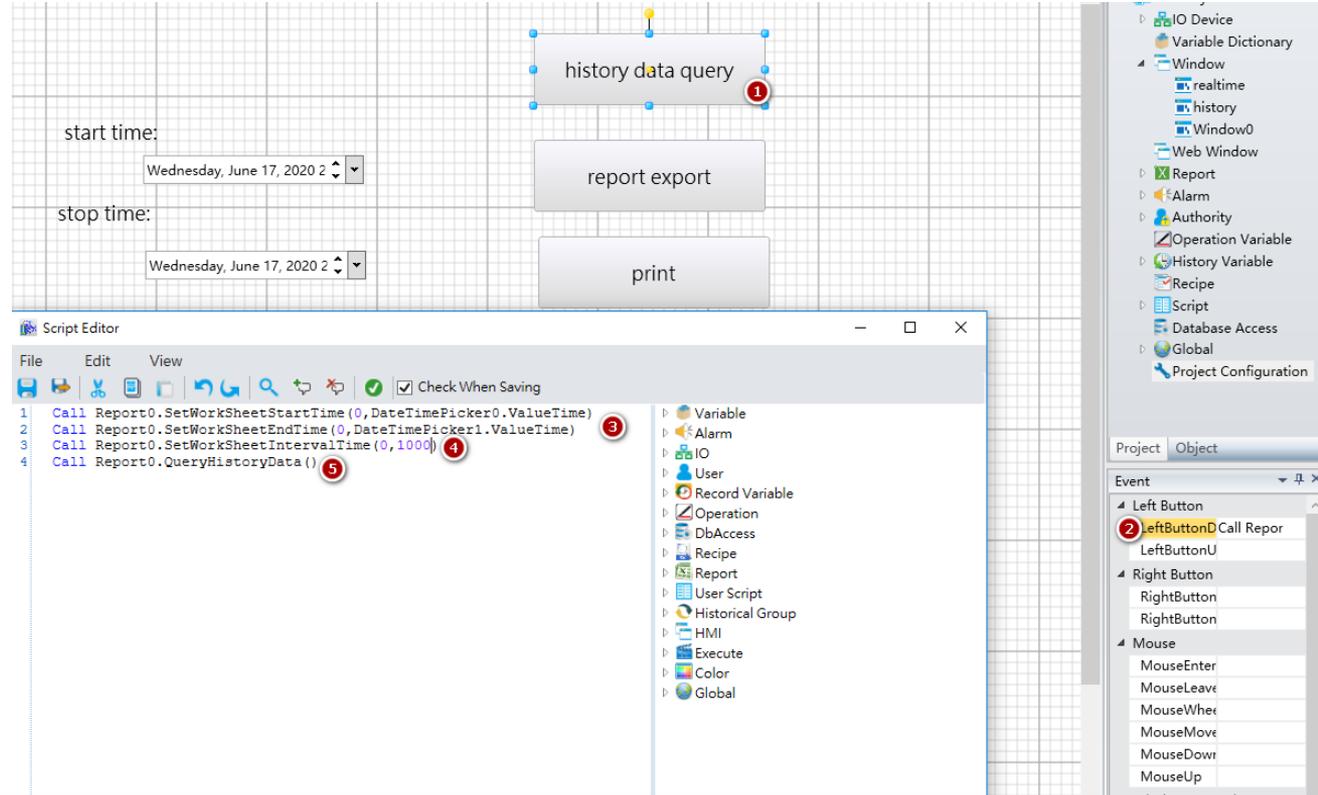
- The start query date is June 18, and the data for 8 hours is queried. The average, total, maximum and minimum statistics are configured, and the data statistics chart is generated.



Report Scripts Example

➤ In develop time

- ① Create a button.
- ② Configure the left button press script event.
- ③ Choose start time and end time
- ④ Set query interval
- ⑤ Query historical data



The screenshot displays a report editor interface. On the left, there is a form with two date pickers labeled "start time:" and "stop time:", both showing "Wednesday, June 17, 2020 2". To the right of the form are three buttons: "history data query" (with a red circle 1), "report export", and "print". Below the form is a "Script Editor" window. The script editor has a menu bar (File, Edit, View) and a toolbar. The script content is as follows:

```
1 Call Report0.SetWorkSheetStartTime (0,DateTimePicker0.ValueTime)
2 Call Report0.SetWorkSheetEndTime (0,DateTimePicker1.ValueTime)
3 Call Report0.SetWorkSheetIntervalTime (0,1000)
4 Call Report0.QueryHistoryData ()
```

The script editor also shows a tree view on the right with categories like Variable, Alarm, IO, User, Record Variable, Operation, DbAccess, Recipe, Report, User Script, Historical Group, HMI, Execute, Color, and Global. On the far right, there is a "Project" pane showing a tree structure with "IO Device", "Variable Dictionary", "Window", "realtime", "history", "Window0", "Web Window", "Report", "Alarm", "Authority", "Operation Variable", "History Variable", "Recipe", "Script", "Database Access", "Global", and "Project Configuration". Below the project pane is an "Event" pane showing a list of events: "Left Button", "LeftButtonD", "LeftButtonU", "Right Button", "RightButton", "Mouse", "MouseEnter", "MouseLeave", "MouseWheel", "MouseMove", "MouseDown", and "MouseUp". A red circle 2 is next to "LeftButtonD Call Repor".

✘ Report events involving other scripts can refer to the user manual 20.3.

Report Scripts Example

➤ In run time

- ① Choose start time and end time
- ② Click the Query Data button
- ③ The queried historical data appears in the table

variable value: 40
 variable value1: 61
 variable value2: 73

start time:

stop time:

② history data query

report export

print

	A	B	C	D	E	F	G	H	I	J	K
1	variable	variable1	variable2	time							
2	0	0	0	2020/06/17 14:50:21							
3	18	83	12	2020/06/17 14:50:22							
4	29	72	89	2020/06/17 14:50:23							
5	39	82	34	2020/06/17 14:50:24							
6	50	51	45	2020/06/17 14:50:25							
7	61	40	78	2020/06/17 14:50:26							
8	72	29	22	2020/06/17 14:50:28							
9	81	20	43	2020/06/17 14:50:29							
10	92	9	43	2020/06/17 14:50:30							
11	2	99	86	2020/06/17 14:50:31							
12	12	89	52	2020/06/17 14:50:32							
13	22	79	12	2020/06/17 14:50:33							
14	33	68	86	2020/06/17 14:50:34							
15	43	58	6	2020/06/17 14:50:35							
16	53	48	2	2020/06/17 14:50:36							
17	63	38	67	2020/06/17 14:50:37							

✘ Report events involving other scripts can refer to the user manual 20.3.

Smarter. Greener. Together.

To learn more about Delta, please visit www.deltaww.com.

