





# Dynamic graphs (HI)

Dynamic graph is a temporary object of *Graph* type (it expires by closing the graph) that displays the time flow of values or the progress of logged and evaluated parameters in time in form of graphic flows.


## Types of dynamic graphs:

1. **Single graphs** - shows the flow of one object. They can also show its [alternative flows](#).
2. **Multigraphs** - shows several flows of objects. They are added into graph one after another. When the graph is full (max. 20 flows), it will be closed and the new one will be opened. Only the flow of the selected object will be added into the window (i.e. without its alternative flows).


Dynamic graph is opened by:

- clicking the button  **Graph** (single graph) or  **Graph+** (multigraph) in the [information / control window](#) of an object,
- clicking the button  **Graph** (single graph) or  **Graph+** (multigraph) in the [Browser](#) in the process [D2000 HI](#),
- clicking a graph object, that contains the function **%ViewTrend** in its connect configuration.

## Properties of dynamic graphs are the following:

- Settings of dynamic graphs are defined by means of the parameters for D2000 Server - *dynamGraphMaxTime*, *dynamGraphShiftTime*, *dynamGraphLineType*, *dynamGraphDescTable*, *dynamGraphAllStatistics* a *dynamGraphPointer* or according to the sample graph by function *%HI\_SetDynamGraph*.
- Settings of dynamic multigraphs are defined by means of the parameter for D2000 Server - *dynamGraphMultiArch*.
- Controlling the dynamic graph windows is the same as [controlling the graph window](#), the only exception is the button  **Object configuration** that is disabled for dynamic axis.
- If the object is being archived several times the all its archive flows (maximum 20) can be shown in single dynamic graph. These flows are called **the alternative flows**.

Characteristics of alternative flows:

1. Parameters of display are set according the main - 1. flow, except for colors (they will be generated).
  2. All the flows use the common axis No. 1.
- Characteristics of multigraphs:
    1. The object will be drawn as line graph.
    2. An axis definition will be generated according to the value type of the point.
    3. Both the definition of point and axis will be added into graph if the graph do not contain these definitions yet. I.e., if the multigraph contains the axis suitable for the added object the new axis will not be add into graph but the first one will be used.
    4. The archive objects are opened in separate windows or together in one window. It depends on the settings of the parameters for D2000 Server - *dynamGraphMultiArch*.
  - A new settings can be saved to the D2000 System configuration in the dialog box [Graph display settings](#) (it opens by clicking on button ) by clicking on button **Save as**.