

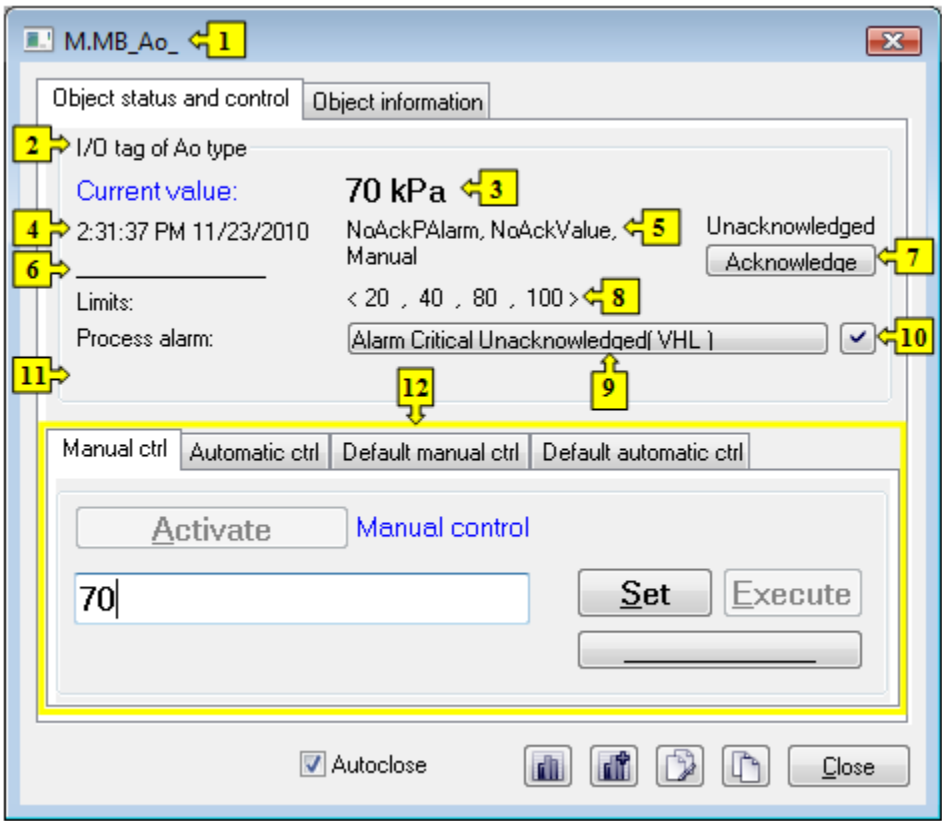
# Control the Analog and Integer Output I/O Tags (AO, CO) (D2000/Work with D2000 HI/Monitoring and Controlling of D2000 System Objects)

## Controlling analog and integer outputs (AO, CO)






Clicking a graphic object with an I/O Tag of AO (Analog output) or CO (Integer output) types connected to control (the user has sufficient access rights) opens the control window that consists of two tabs:

[Object status and control](#)  
[Object information](#)

### Object status and control



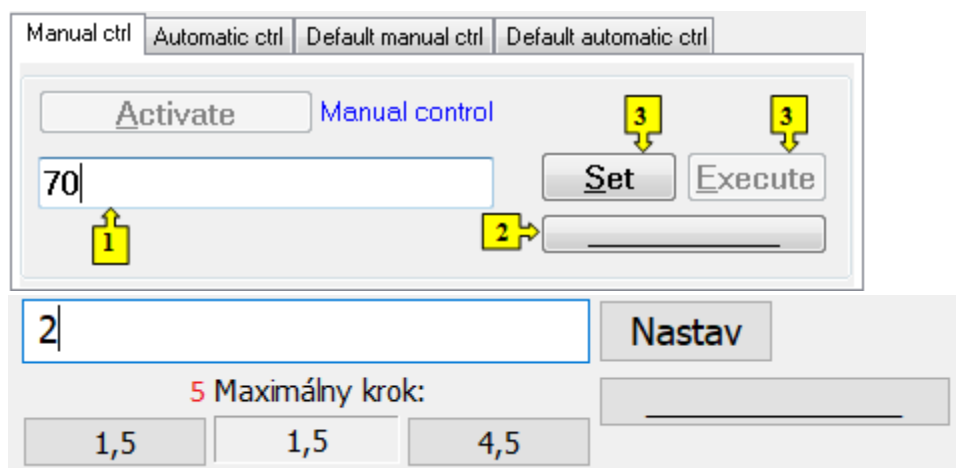
1	Object name.
2	Object description.
3	Current value and technical units of the object. <b>Note:</b> If the object is in the <i>Default value</i> state (see the tabs <a href="#">Default manual ctrl</a> or <a href="#">Default automatic ctrl</a> ), there is displayed the text <b>Default value</b> instead of <b>Current value</b> .
4	Value time.
5	<a href="#">Object states</a> .
6	Object value flags (user attributes). There are shown the flags, the value of which is TRUE.
7	Acknowledges the object value.

8	Limits defined for the object: <VLL, LL, HL, VHL>. VLL - Very Low Limit (the lowest limit) LL - Low Limit HL - High Limit VHL - Very High Limit (the highest limit)
9	Opens the <a href="#">dialog box to control the current process alarm</a> .
10	Acknowledges given process alarm.
11	Telemetric value of the object. <b>Note:</b> Value is shown if the object is in the <i>Default value</i> state (see the tabs <a href="#">Default manual ctrl</a> or <a href="#">Default automatic ctrl</a> ).
12	Part of the control window for <a href="#">controlling the output and default value</a> .
	Opens a <a href="#">dynamic graph</a> of the object.
	Opens a <a href="#">multigraph</a> of the object.
	Edit object. Only when process CNF is running.
	Inserts the object into the current page of the <a href="#">Browser</a> if opened. If is not opened, clicking the button opens it and inserts the object into the first page of the Browser.
	Copies the object name to Clipboard.

The bottom of the tab contains the tabs allowing to control the object output (the tabs [Manual ctrl](#) and [Automatic ctrl](#)) and default value of the object (the tabs [Default manual ctrl](#) and [Default automatic ctrl](#)).

## MANUAL CTRL

The tab allows to set manually a value of the object along with user attributes (flags). It contains the button **Activate**, current object value and value time. Clicking the button **Activate** opens the dialog box to confirm the activation of the *Manual control* status for the object. After clicking the buttons **Yes** and **Execute** in that dialog box, the tab **Manual ctrl** has the following appearance:



The screenshot shows the 'Manual ctrl' tab interface. At the top, there are four tabs: 'Manual ctrl', 'Automatic ctrl', 'Default manual ctrl', and 'Default automatic ctrl'. The 'Manual ctrl' tab is active. Inside the tab, there is an 'Activate' button and a 'Manual control' label. Below these, there is a text input field containing the value '70'. To the right of the input field are two buttons labeled 'Set' and 'Execute'. Below the 'Set' button is a small yellow box with the number '1' and an arrow pointing to the input field. To the right of the 'Execute' button is a small yellow box with the number '3' and an arrow pointing to the 'Execute' button. Below the 'Set' button is another small yellow box with the number '2' and an arrow pointing to a horizontal line. Below the input field, there is a larger text input field containing the value '2'. To the right of this field is a button labeled 'Nastav'. Below the 'Nastav' button, there is a heading '5 Maximálny krok:' followed by three buttons labeled '1,5', '1,5', and '4,5'.

1	Input edit box to type a value (text) of the output object.
2	Opens the dialog box to set flags of the output object value.

3	<p>Depending on the <b>Execute</b> button, the <b>SET</b> button is used as follows:</p> <ol style="list-style-type: none"> <li>1. If the <b>Execute</b> button is NOT in the control window, then clicking the <b>Set</b> button sets up given output object value along with value flags (attributes).</li> <li>2. If the <b>Execute</b> button IS in the control window, then clicking the <b>Set</b> button just "prepares" given output object value along with value flags (attributes) to set.</li> </ol>
4	<p>Clicking the button sets up the given output object value and value flags "prepared" to set by clicking the button <b>Set</b>.</p> <p><b>Note:</b> The button <b>Execute</b> is in the control window, if the option <b>Acknowledge</b> is checked in the object configuration in the process <a href="#">D2000 GrEditor</a>.</p>
5	<p>Maximum step - limit the maximum possible change of the entered parameter (step)</p> <ul style="list-style-type: none"> <li>• button to set the lower limit of possible change from the current value</li> <li>• value of the maximum possible change</li> <li>• button to set the upper limit of the possible change from the current value</li> </ul>

### AUTOMATIC CTRL

The tab allows to use a value of the control object as the output object value. It contains the button **Activate**, current object value and value time. Clicking the button **Activate** opens the dialog box to confirm the activation of the *Automatic control* status for the object. In the mode, the value of the output object copies the value and flags of the control object (the option **Control object** in the I/O tag configuration).

Manual ctrl
Automatic ctrl
Default manual ctrl
Default automatic ctrl

Activate
Automatic control

Control object value:

110
1

10:29:19 AM 11/23/2010
2
3

1	Value of the control object.
2	Time of the control object value.
3	Flags (user attributes) of the control object value.

### DEFAULT MANUAL CTRL

The tab allows to set manually a default value of the object along with user attributes (flags). It contains the button **Activate**, current object value and value time. Clicking the button **Activate** opens the dialog box to confirm the activation of the *Default value* status for the object. After clicking the buttons **Yes** and **Execute** in that dialog box, the tab **Default manual ctrl** has the following appearance:

Manual ctrl
Automatic ctrl
Default manual ctrl
Default automatic ctrl

Activate

Default manual control

41

1

2

3

4

Set

Execute

A

I

L

2

Nastav

5 Maximálny krok:

1,5

1,5

4,5

1	Input edit box to type a default value (text) of the object.
2	Opens the dialog box to set flags of the default value.
3	Depending on he button <b>Execute</b> in the control window, the button <b>Set</b> is used as follows: <ol style="list-style-type: none"> <li>1. If the button <b>Execute</b> is NOT in the control window, then clicking the button <b>Set</b> sets up the default value and value flags.</li> <li>2. If the button <b>Execute</b> IS in the control window, then clicking the button <b>Set</b> just "prepares" the default value and value flags to set.</li> </ol>
4	Clicking the button sets up the default value and value flags "prepared" to set by clicking the button <b>Set</b> . <p><b>Note:</b> The button <b>Execute</b> is in the control window, if the option <b>Acknowledge</b> is checked in the object configuration in the process <a href="#">D2000 GrEditor</a>.</p>
5	Maximum step - limit the maximum possible change of the entered parameter (step) <ul style="list-style-type: none"> <li>• button to set the lower limit of possible change from the current value</li> <li>• value of the maximum possible change</li> <li>• button to set the upper limit of the possible change from the current value</li> </ul>

## DEFAULT AUTOMATIC CTRL

The tab allows to use a value of the control object as the default value. In the mode, the value of the object copies the value of the control object (the option Control object in the I/O tag configuration). Clicking the button **Activate** opens the dialog box to confirm the activation of the *Default value* status for the object.

Manual ctrl
Automatic ctrl
Default manual ctrl
Default automatic ctrl

Activate

Default automatic control

Default control object value:

110

1

10:29:19 AM 11/23/2010

2

3

1	Value of the control object.
2	Time of the control object value.
3	Flags of the control object value.

