



# Domino

## **DFWEB** Tutorial







Domino DEWEB

#### Introduction

The current manual refers to the *BDGRaph R.8.0.4* or higher and DFWEB module equipped with firmware R.1.0 or higher.

#### **Resources assignment**

The current manual refers to the DFWEB virtual points and internal registers that are exclusively system variables (resources) and these ones do not allow the realization of logic combinations. These resources, at this moment, are reserved to the management of DFCK3 and DFCT modules, as will be explained later.

#### DFCK3 Resources: virtual points

Туроlоду	Virtual point	Note
Days of the week	V1984÷V1990	Mutually exclusive
Schedule Enable	V1993÷V1996	0=disable, 1=enable
Day Copy	V1997	$0 \rightarrow 1:$ increase the current day and activate the writing. At the end it returns to $0$
Read DFCK3	V1998	Pointed by R1023, zone R1022
Write DFCK3	V1999	Pointed by R1023, zone R1022
Automatic/Manual Control	V1991	0=Automatic, 1=manual
Manual ON/OFF	V1992	0=OFF, 1=ON
Read/write result	V1982	0=OK, 1=Error
Expecting command	V1983	Writing/reading/copy operation in progress

#### DFCK3 Resources: registers.

Туроlоду	Register	Note
First starting schedule	R1014	High Byte: HOUR; Low Byte: MIN
First ending schedule	R1015	High Byte: HOUR; Low Byte: MIN
Second starting schedule	R1016	High Byte: HOUR; Low Byte: MIN
Second ending schedule	R1017	High Byte: HOUR; Low Byte: MIN
Third starting schedule	R1018	High Byte: HOUR; Low Byte: MIN
Third ending schedule	R1019	High Byte: HOUR; Low Byte: MIN
Fourth starting schedule	R1020	High Byte: HOUR; Low Byte: MIN
Fourth ending schedule	R1021	High Byte: HOUR; Low Byte: MIN
Zone selection	R1022	The value contained in the register can range from 1 to 15
DFCKIII address	R1023	Force the zone to 1



#### DFCT Resources: virtual points.

Typology	Virtual point	Note
Week days	V1969÷V1975	Mutually exclusive (Mon÷Sun)
DFCT season	V1976	0=Winter; 1=Summer
Day сору	V1977	$0 \rightarrow$ 1:increase the current day and activate the writing (V1979). At the end V1977 return to 0.
DFCT reading	V1978	Pointed by R1009
DFCT writing	V1979	Pointed by R1009
Reading/writing result	V1967	0=OK, 1=Error
Command in progress	V1968	Reading/writing/copy operation in progress

#### Risorse DFCTq: Registri.

Туроlоду	Register	Note
Daily program set-point	R1003	From 00:00 to 04:00
Daily program set-point	R1004	From 04:00 to 08:00
Daily program set-point	R1005	From 08:00 to 12:00
Daily program set-point	R1006	From 12:00 to 16:00
Daily program set-point	R1007	From 16:00 to 20:00
Daily program set-point	R1008	From 20:00 to 24:00
DFCT address	R1009	Force the day to the current day

#### Generic resources: virtual points.

Typology	Virtual point Note	
Bad module	V2001	Only with DFWEB as master
Bad bus	V2002	Only with DFWEB as master



## DFWEB





DFWFR

#### Main pages setting

It is necessary to realize some preliminary maps before the realization of the maps for DFCT and DFCK3 modules management. The following figure shows an example of index.bdm map. From this map it is possible to recall the uindex.bdm map that allows to manage DFCT and DFCK3 modules.

#### Index page realization

The index page could contain two animations for recalling, respectively, the uindex page (that allows to access to DFCK3 and DFCT pages) and the logout page to end the connection with DFWEB module.



The door with green arrow refers to "Open Map" animation type, recalling the uindex page. The door with red arrow refers to the Open Map animation type recalling the logout page.



### **DFWEB + DFCK3 use**

#### Main page setting

Create a new uindex.bdm map with the desired dimensions and containing two animations that will be used to recall the DFCK3 (Irrigation (DFCK3)) and DFCT (Temperature (DFCT)) related pages. In the realized page, the information related to hour, date, bus and modules diagnostics has been inserted. The appearance of the page could be the following:



For the hour and the date of the system (read from DFCk3) the Specific Modules  $\rightarrow$  DFCK animation has been used, assigning the proper parameters as described in the BDGRaph manual (R.8.0.4 or higher).

Note the two diagnostic animations "**Modules OK**" and "**Bus Ok**", reporting the system status through the virtual points V2001 and V2002 respectively; these two animations can be realized by using "Virtual Points" animations type, to which the alternative commands for opening the map **webdiag.htm** has been associated.

NOTE: the Temperature (DFCT) animation will be described in details in the section DFWEB + DFCT Use.





Domino DFWEB

The configuration panel for the animation related to the modules diagnostic is the following:

Add Animation				
Generic Modules O Digital Inputs	Address and Point: 2001:1.1 Description: webdiag			
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes Show Images	0N/0PEN:	CLOSE:	Commands O None
O DFTP O DFTR O DFTR				<ul> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFDV O DFCT (Dig. Out) O DFCK O DFCC	Copia di Image from Library Remove Image	Copia di LightRed32.gif Image from Library Remove Image	Image from Library	Reset     Open     Close
DFCP / DFWEB Virtual Points Registers	Show Text	Text Attributes Bad Module		Stop Manual Open Manual Close
Miscellanea O Open Map Close current Execute Comm.	Ranges Minimum Value: Maximum Value:	0 Field O Field	d Minimum Value: 0   Maximum Value: 0	Preset to     Preset to     Preset to
O Text O Scene	No. of Digits: No. of Decimals:	0	Mask: FFFF	

The configuration panel for the animation related to bus diagnostic is the following:

Add Animation				×
Generic Modules O Digital Inputs	Address and Point: 2002 : 1 . 1 Description: webdiag			
Analog Inputs     Digital Outputs     Analog Outputs     Specific Modules	Attributes Show Images	ON/OPEN:	CLOSE:	Commands O None O Toggle
O DFTP O DFTR O DFDV				<ul> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out)	Copia di	Copia di LightRed32.gif		O Reset
O DFCC	Remove Image	Remove Image	Remove Image	O Close
DFCP / DFWEB	Show Text	Text Attributes	j	O Stop O Manual Open
<ul> <li>Virtual Points</li> <li>Registers</li> </ul>	Bus Ok	Bad Bus		O Manual Close
Miscellanea	Predefined			Decrease by
Open Map	- Ranges Minimum Value:	) Field	Minimum Value: 0	O Preset to
Execute Comm.	Maximum Value: 0	) Field	Maximum Value: 0	Preset to ??     Alt Command
O Text	No. of Digits:		Mask: FFFF	
U scene	No. of Decimals:			<u>O</u> k <u>C</u> ancel

Both animations, as said above, have an associated command for the opening of the diagnostic page of DFWEB module (webdiag.htm). The alternative command is configured as in the following figure.





Address and Point: 1:1.1 Module Digital Outputs Analog Outputs Virtual Points Open Map Ranges Ranges Minimum Value: 0 Field Minimum Value: 0 Field Maximum Value: 0 No. of Decimals: 0 Virtual Points No. of Decimals: 0 Virtual Points No. of Decimals: 0 Virtual Points Virtual Points Virtual Points Open Map	Commands None Toggle Temporary Pulse Set Reset Manual Open Manual Close Open Close Stop Increase by Preset to Preset to ??
---	--

The opening of map will open the page indicated in the description field of main animation (for more details refers to the manual BDGraph R.8.0.4 or higher). In the case of module failure or disconnected, the module failure signal will be activated; clicking on the same animation, the webdiag.htm page will be recalled, as shown in the following figure.



In the example of the previous scrren shot, the status of SD-card and the bus is OK, while there is a Failure Modules warning because of the disconnection from the bus of some input and output modules set in DFWEB module configuration but now is disconnected (for more details on DFWEB module configuration refers to Appendix B of manual of BDGraph R.8.0.4 or higher).

Now we will describe in details the pages related to the management of DFCK3 (schedule time) and DFCT (temperature regulation).





<u>Icon setting to recall the page related to DFCK3 module</u> Insert an animation of the type "Open Map" + "Execute Command" + "Preset to"; in the "Preset to" field enter the desired DFCK3 address (in this example 254). Inside the address field of the animation insert the value 1023 (R1023). The configuration window of the animation will have the following aspect:

Add Animation				
Generic Modules O Digital Inputs	Address and Point:	1023 : 1 . 1 Desc	ription: selezona	
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes			Commands O None
Specific Modules O DFTP O DFTR O DFDV		onvor En.	CLUSE.	<ul> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> <li>Reset</li> </ul>
<ul> <li>DFCT (Dig. Out)</li> <li>DFCK</li> <li>DFCC</li> </ul>	Imgazioneoaou.gir Image from Library Remove Image	Image from Library Remove Image	Image from Library Remove Image	O Open O Close
DFCP / DFWEB	Show Text	Text Attributes		<ul> <li>Stop</li> <li>Manual Open</li> <li>Manual Close</li> </ul>
Miscellanea	Predefined Ranges	)		O Increase by O Decrease by 254
Close current Execute Comm.	Minimum Value: Maximum Value: No. of Digits:	0 Field 255 Field	Minimum Value: 0 Maximum Value: 255 Maxk: EFEE	Preset to     Preset to ??     Alt. Command
O Scene	No. of Decimals:	0	MGSK. [111]	<u>O</u> k <u>C</u> ancel

The "Maximum Value" and the "Field Maximum Value" must be set to 255.

The map that will be opened by this icon is "selezona.bdm" described in the following paragraph.





#### Zone selection page setting

The animation "Irrigation (DFCK3)" previously inserted in the uindex page will recall the map for selection of the desired zone. In our example we will consider 3 zones (DFCK3 can manage up to 15 zones). The map for the zone selection has been called selezona.bdm and it allows to select 3 of the 15 available zones as said above.



The animations DFCK3 Zone 1, DFCK3 Zone 2 and DFCK3 Zone 3 have been set as follows:

Add Animation				
Generic Modules O Digital Inputs	Address and Point:	1022 : 1 . 1 Desc	ription: DFCK3_1	
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes			Commands O None
Specific Modules O DFTP O DFTR O DFDV O DFDV	Irrigazione0a80.gif	UNUDEN.	CLUSE.	<ul> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> <li>Reset</li> </ul>
O DFCK O DFCC	Image from Library Remove Image	Image from Library Remove Image	Image from Library Remove Image	O Open O Close
OFCP / DFWEB	Show Text	Text Attributes		<ul> <li>Stop</li> <li>Manual Open</li> <li>Manual Close</li> </ul>
<ul> <li>Registers</li> <li>Miscellanea</li> <li>Open Map</li> <li>Close current</li> <li>Execute Comm.</li> <li>Text</li> </ul>	Predefined Ranges Minimum Value: Maximum Value: No. of Digits:	1 Field 15 Field 0	Minimum Value: 1 Maximum Value: 15 Mask: FFFF	Increase by     Decrease by     Preset to     Preset to ??     Alt. Command
O Scene	No. of Decimals:	0		<u>O</u> k <u>C</u> ancel

As shown in the previous picture, the animation type is **Open map** & **Execute Command** with address and point equal to 1022 (corresponding to R1022, that must contain the zone number) and Preset to 1, since the interested zone is zone 1. The icons of the other zones of our example will be the same, but of course varying the text, and the "Preset to" related number, while the Description in our example is the same (in facts it is also possible to recall different maps depending on the preferences or needing).

A map named **DFCK3\_1.bdm** has thus to be created and the final appearance, in our example, will be following:







The icons of this page will be described in the following.

**1.** In the new map insert seven animations for the selection of the day of the week, the type is "Virtual Point" with address from V1984 to V1990 (MON – SUN) and with "Set" command, as follows:

Add Animation				×
Generic Modules O Digital Inputs	Address and Point: 1	984 : 1 . 1 Desc	ription: Monday	
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes	0N/0PEN <sup>.</sup>	CLOSE:	Commands O None
O DFTP O DFTR				O Toggle O Temporary O Pulse
O DFDV O DFCT (Dig. Out) O DFCK	Giorno00ff48.gif Image from Library	Giorno00n48.gif Image from Library	Image from Library	Set     Reset     Open
O DFCC     DFCP / DFWEB     O Virtual Points	Remove Image	Text Attributes	Remove Image	O Llose O Stop O Manual Open
O Registers Miscellanea	Predefined	) 		Manual Close     Increase by     Decrease by
Open Map Close current Execute Comm.	Minimum Value: Maximum Value:	0 Field 0 Field	Minimum Value: 0 Maximum Value: 0	Preset to     Preset to ??     Alt Command
O Text O Scene	No. of Digits: No. of Decimals:	0	Mask: FFFF	





**2.** An animation to set "Automatic/Manual" must be inserted: select an animation of "Virtual Point" type with address 1991 (V1991) and with command "Toggle". (0 = Auto, 1 = Man)

Add Animation				X
Generic Modules O Digital Inputs	Address and Point: 1991 : 1 . 1 Description: Auto/Man			
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes			Commands O None
Specific Modules			CLUJE.	<ul> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> </ul>
O DFDV O DFCT (Dig. Out)	Clock 48.gif	Manuale48.gif	Image from Library	O Set O Reset O Open
O DFCC	Remove Image	Remove Image	Remove Image	O Close
DFCP / DFWEB	Show Text	Text Attributes	)	O Stop
Virtual Points     Registers	Predefined			<ul> <li>Manual Close</li> <li>Increase by</li> </ul>
Open Map	Ranges Minimum Value:	) Field	Minimum Value: 0	Decrease by     D     Preset to
Execute Comm.	Maximum Value: 0 No. of Digits: 0	) Field	Maximum Value: 0 Mask: FFFF	Alt. Command
O Scene	No. of Decimals:	)		<u>Ok</u> <u>C</u> ancel

**3.** An animation of "Virtual Point" type must be inserted with address 1992 (V1992) with command "Toggle". This animation is related to the ON/OFF command for the Manual option

Add Animation				×
Generic Modules O Digital Inputs	Address and Point: 19	992 : 1 . 1 Desc	ription: Manual On-Off	
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes Show Images OFF:	ON/OPEN:	CLOSE:	Commands O None
O DFTP O DFTR O DFTR		٨		<ul> <li>I oggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out)	PowerOff48.gif	PowerOn48.gif		O Reset
O DFCK	Image from Library	Image from Library	Image from Library	O Open
O DFLC	Remove Image	Remove Image	Remove Image	O Stop
OFCP / DFWEB	Show Text	Text Attributes		O Manual Open
Registers				<ul> <li>Manual Close</li> </ul>
	Predefined			<ul> <li>Increase by</li> </ul>
	Ranges			O Decrease by 0
Close current	Minimum Value: 0	Field	Minimum Value: 0	Preset to     Preset to
Execute Comm.	Maximum Value: 0	Field	Maximum Value: 0	
O Text	No. of Digits:		Mask: FFFF	
⊖ Scene	No. of Decimals: 0			<u>Ok</u> <u>C</u> ancel



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### DFWEB

4. Insert four animations for the enable/disable function for each scheduled time; these animations are of the type "Virtual Point" with address from 1993 to 1996 (from the first schedule to the fourth schedule). Select as command the option "Toggle" (0: disable, 1: enable).

Add Animation				X
Generic Modules O Digital Inputs	Identification Address and Point: 19	393 : 1 . 1 Desc	ription: Enable First schedu	le
<ul> <li>Arraiog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes	ON/OPEN:	CLOSE:	Commands O None
Specific Modules O DFTP O DFTR				<ul> <li>I oggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFDV O DFCT (Dig. Out)	PowerOff48.gif	PowerOn48.gif		O Reset
O DFCK	Image from Library	Image from Library	Image from Library	O Open
O DFCC	Remove Image	Remove Image	Remove Image	Close
DFCP / DFWEB	Show Text	Text Attributes	)	O Manual Open
<ul> <li>Virtual Points</li> <li>Begisters</li> </ul>				O Manual Close
	Predefined			<ul> <li>Increase by</li> </ul>
Miscellanea	Ranges			O Decrease by 0
Close current	Minimum Value:	) Field	Minimum Value: 0	O Preset to
Execute Comm.	Maximum Value:	) Field	Maximum Value: 0	
O Text	No. of Digits:		Mask: FFFF	
◯ Scene	No. of Decimals:	)		<u>O</u> k <u>C</u> ancel

**5.** For the start of the first scheduled time (ON schedule), insert an animation of Register type with address 1014 and command "Preset to ??". Enter in the field text, below the images, the symbols "<>". Enter also as minimum value 00, as maximum value 23 (the hours of a day), both for displayed values and field values. Enter FF00 as mask (the byte related to minutes will be masked, so the low byte). Enter the value 2 as No Of Digits. The configured animation will be as shown in the following screenshot.

Add Animation				×
Generic Modules     Digital Inputs     Analog Inputs     Digital Outputs     Digital Outputs     Analon Outputs	Address and Point:	1014:1.1 Des	cription: First Schedule Hour	Commands
Specific Modules O DFTP O DFTR O DFDV O DFDV	OFF:	ON/OPEN:	CLOSE:	Toggle Temporary Pulse Set Beset
O DFCT (Dig. Out) O DFCK O DFCC	Image from Library Remove Image	Image from Library Remove Image	Image from Library Remove Image	O Open O Close
DFCP / DFWEB	Show Text	Text Attributes		Stop Manual Open Manual Close
Miscellanea O Open Map	Predefined Ranges Minimum Value:	) Field	Hinimum Value:	<ul> <li>Increase by</li> <li>Decrease by</li> <li>Preset to</li> </ul>
Close current Execute Comm.	Maximum Value: No. of Digits:	23 Field 2	Maximum Value: 23 Mask: FF00	Preset to ??     Alt. Command
◯ Scene	No. of Decimals:	0		<u>O</u> k <u>C</u> ancel





6. Insert an animation like the previous one, but with maximum value 59 and 00FF as mask; this is related to the minutes, then the high byte related to the hour has to be masked. As No Of Digits insert the value 2. The animation thus configured is shown in the following screen shot.

Add Animation				
Generic Modules Digital Inputs Analog Inputs	Identification Address and Point: 1	1014 : 1 . 1 Desc	ription: First Schedule Minut	e
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes			Commands O None
Specific Modules O DFTP O DFTR O DFDV	011.	onvoi en.	66032.	<ul> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> <li>Reset</li> </ul>
<ul> <li>DFCT (Dig. Out)</li> <li>DFCK</li> <li>DFCC</li> </ul>	Image from Library Remove Image	Image from Library Remove Image	Image from Library Remove Image	O Open O Close
OFCP / DFWEB	✓ Show Text	Text Attributes		<ul> <li>Stop</li> <li>Manual Open</li> <li>Manual Close</li> </ul>
Miscellanea	Predefined	)		Increase by     Decrease by
Close current	Minimum Value: Maximum Value: No. of Digits:	59 Field	Minimum Value: U Maximum Value: 59	Preset to ??     Alt. Command
O Scene	No. of Decimals:	0	MdsK.	<u>O</u> k <u>C</u> ancel

7. Repeat the previous two points but change the address with 1015: in this way we will set the end of the first scheduled time (OFF schedule).

**8.** The other three schedules have to be set as described at points 5, 6 and 7 (from the second to the fourth schedule), using the pair of address 1016-1017, 1018-1019, 1020-1021. These pairs of registers represent respectively the second, the third and the fourth schedule. Resuming, for the scheduler we will have the following assignment.

Schedule	ON time	OFF time	Min Value	Max Value	Field Min Value	Field Max Value	Mask
First schedule (hour)	1014	1015	0	23	0	23	FF00
First schedule (minute)	1014	1015	0	59	0	59	00FF
Second schedule (hour)	1016	1017	0	23	0	23	FF00
Second schedule (minute)	1016	1017	0	59	0	59	00FF
Third schedule (hour)	1018	1019	0	23	0	23	FF00
Third schedule (minute)	1018	1019	0	59	0	59	00FF
Fourth schedule (hour)	1020	1021	0	23	0	23	FF00
Fourth schedule (minute)	1020	1021	0	59	0	59	00FF



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#### Placing DFCK3 manage buttons

Add Animation				
Generic Modules O Digital Inputs	Address and Point: 1	998 : 1 . 1 Des	cription: Read	
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes	ON/OPEN:	CI OSE:	Commands O None
Specific Modules O DFTP O DFTR				<ul> <li>I oggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFDV O DFCT (Dig. Out) O DFCK O DFCC	Leggi48.gif Image from Library Bemove Image	Leggi48.gif Image from Library	Image from Library	Reset     Open     Close
DFCP / DFWEB	Show Text	Text Attributes	]	<ul> <li>Stop</li> <li>Manual Open</li> <li>Manual Close</li> </ul>
	Predefined			<ul> <li>Increase by</li> <li>Decrease by</li> </ul>
Close current	Minimum Value: 0 Maximum Value: 0	0 Field 0 Field	d Minimum Value: 0	
O Text O Scene	No. of Digits: 0 No. of Decimals: 1	0	Mask: FFFF	<u>Ok</u> <u>C</u> ancel

1.Insert the Read button. Set it as virtual point 1998 with the command SET.

2. Insert the button Write. Set it as virtual point 1999 with command SET.

Add Animation				×
Generic Modules O Digital Inputs	Address and Point: 1	999 : 1 . 1 Desc	cription: Write	
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes Show Images OFF:	ON/OPEN:	CLOSE:	Commands O None
O DFTP O DFTR				Temporary     Pulse     Set
O DFDV O DFCT (Dig. Out)	Scrivi48.gif	Scrivi48.gif	Image from Library	O Reset
O DFCC	Remove Image	Remove Image	Remove Image	Close
OFCP / DFWEB	Show Text	Text Attributes		O Manual Open
	Predefined			O Manual Close
Open Map	Ranges Minimum Value:	0 Field	l Minimum Value: 0	O Decrease by U O Preset to
C Text	Maximum Value: No. of Digits:	0 Field 0	Maximum Value: 0 Mask: FFFF	Alt. Command
O Scene	No. of Decimals:	0		<u>Ok</u> <u>C</u> ancel



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3. Insert the button Copy. Set it as virtual point 1997 with command SET.

Add Animation				×
Generic Modules Digital Inputs Analog Inputs	Address and Point: 19 Attributes	997 : 1 . 1 Desc	ription: Copy	Commands
O Analog Outputs O Specific Modules	Show Images OFF:	ON/OPEN:	CLOSE:	O None O Toggle
O DFTP O DFTR O DFDV	Z			<ul> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out) O DFCK	Scrivi48.gif Image from Library	Scrivi48.gif Image from Library	Image from Library	O Reset
O DFCC	Remove Image	Remove Image	Remove Image	O Close
OFCP / DFWEB     OVIrtual Points     Description	Show Text	Text Attributes		<ul> <li>Stop</li> <li>Manual Open</li> <li>Manual Close</li> </ul>
	Predefined			O Increase by O Decrease by O
Close current	Minimum Value: 0 Maximum Value: 0	) Field	Minimum Value: 0	Preset to Preset to ??
O Text O Scene	No. of Digits: 0 No. of Decimals: 0	)	Mask: FFFF	

4. Insert the Waiting animation. Set it as virtual point 1983 with command None.

Add Animation			×	
Generic Modules O Digital Inputs	Address and Point: 1983 : 1 . 1 Description:			
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes		Commands None	
Specific Modules O DFTP	orr.	UNVULEN. CLUSE.	<ul> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> </ul>	
O DETR O DEDV O DECT (Dig. Out)			O Set O Reset	
O DFCK O DFCC	Image from Library Remove Image	Image from Library Image from Library Remove Image Remove Image	Close	
Virtual Points     Registers	Show Text Waiting Command	Text Attributes Sendin Command	<ul> <li>Manual Open</li> <li>Manual Close</li> </ul>	
Miscellanea	Ranges		O Increase by Decrease by	
Close current	Minimum Value: ( Maximum Value: (	D Field Minimum Value: 0 Field Maximum Value: 0	Preset to     Preset to ??     Alt Command	
○ Text ○ Scene	No. of Digits: ( No. of Decimals: (	D Mask: FFFF		



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5. Insert the button Back. The button is set as Open Map and Description must be <<.

Add Animation				X
Generic Modules Digital Inputs Analog Inputs	Address and Point:	1:1.1 Desc	pription: <<	
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes Show Images OFF:	ON/OPEN:	CLOSE:	Oommands None Toggle
Specific Modules     O DFTP     O DFTR     O DFDV				<ul> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out) O DFCK O DFCC	Return48.gif Image from Library	Image from Library	Image from Library	<ul> <li>Reset</li> <li>Open</li> <li>Close</li> </ul>
DFCP / DFWEB	Show Text	Text Attributes		<ul> <li>Stop</li> <li>Manual Open</li> <li>Manual Close</li> </ul>
Miscellanea Open Map	Predefined Ranges Minimum Value:	) Field	Minimum Value: 0	<ul> <li>Increase by</li> <li>Decrease by</li> <li>Preset to</li> </ul>
Close current Execute Comm.	Maximum Value: No. of Digits: 0	) Field	Maximum Value: 0 Mask: FFFF	O Preset to ?? O Alt. Command
U Scene	No. of Decimals:	)		<u>O</u> k <u>C</u> ancel

The final appearance of the map, as said above, will be the following.





### Using DFWEB + DFCT

#### Main page setting

The uindex.bdm map, as seen before, also contains an animation for DFCT module management.



Thus, it will be necessary to insert an animation that set the Address value by means of an animation of the type **Open Map** with the option **Execute Command** enabled and with the address 1009 (R1009, DFCT address). The command "**Preset to**" has to be set to the value of the address assigned to DFCT (in this example the DFCT module has the address 202). Set the range with minimum value 1, maximum value 255 and Mask FFFF.

Add Animation				×	
Generic Modules					
O Digital Inputs	Address and Point:	1009 : 1 . 1 Desc	ription: Temperature		
Analog Inputs     Divide I Outputs	Attributes			Commands	
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Show Images		CL 0.955-	🔘 None	
Specific Modules	OFF.	UN/UFEN.	CLUSE.	<ul> <li>Toggle</li> </ul>	
O DETP	=			<ul> <li>Temporary</li> </ul>	
O DFTR				<ul> <li>Pulse</li> </ul>	
O DFDV				🔘 Set	
🔘 DFCT (Dig. Out)	ThermoOn80.gif			<ul> <li>Reset</li> </ul>	
🔘 DFCK	Image from Library	Image from Library	Image from Library	🔿 Open	
O DFCC	Remove Image	Remove Image	Remove Image	<ul> <li>Close</li> </ul>	
DFCP / DFWEB	Show Text	Text Attributes		O Stop	
Virtual Points		T CALACIDACCS		O Manual Open	
<ul> <li>Registers</li> </ul>	<u>Temperature (D</u>			<ul> <li>Manual Close</li> </ul>	
L	Predefined			Increase by	
	Ranges			O Decrease by 202	
	Minimum Value:	1 Field	Minimum Value: 1	Preset to	
Execute Comm	Maximum Value:	255 Field	Maximum Value: 255	O Preset to ??	
O Text	No. of Digits:	0	Mask: FFFF	O Alt. Command	
O Scene	No. of Decimals:	0		<u>D</u> k <u>C</u> ancel	

In the new map for the management of DFCT module (Temperatura.bdm) we will proceed as for DFCK3 case with the insertion of various animations; these animations will be described in the following. The map that will be created (Temperatura.bdm) is shown in the following picture.



Domino DFWEB



#### DFCT setting page

**1.** In the new map (Temperatura.bdm) insert seven animations of "Virtual Point" type with address from V1969 to V1975 (MON – SUN) with "Set" command.

Day of the Week	Animation Type	Address and Point	Command
Monday	Virtual Point	1969	SET
Tuesday	Virtual Point	1970	SET
Wednesday	Virtual Point	1971	SET
Thursday	Virtual Point	1972	SET
Friday	Virtual Point	1973	SET
Saturday	Virtual Point	1974	SET
Sunday	Virtual Point	1975	SET





Add Animation				X
Generic Modules Digital Inputs Analog Inputs	Address and Point: 1969:1.1 Description: Monday			
O Digital Outputs O Analog Outputs	Attributes Show Images OFF:	ON/OPEN:	CLOSE:	Commands O None O Toggle
O DFTP O DFTR O DFTR				<ul> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out)	Giorno00ff48.gif	Giorno00n48.gif		🔿 Reset
O DFCK	Image from Library	Image from Library	Image from Library	O Open
O DFCC	Remove Image	Remove Image	Remove Image	C Close
DFCP / DFWEB	🗹 Show Text	Text Attributes	]	O Stop
<ul> <li>Virtual Points</li> <li>Registere</li> </ul>	Mon	Mon		O Manual Close
	Predefined			<ul> <li>Increase by</li> </ul>
Miscellanea Open Map Close current Execute Comm. Text	Ranges Minimum Value: Maximum Value: No. of Digits:	D Field	Minimum Value: 0 Maximum Value: 0 Mask: FFFF	Decrease by     Preset to     Preset to ??     Alt. Command
Jocene	No. of Decimals:	J		<u>O</u> k <u>C</u> ancel

2. Insert 24 animations of "Register" type with address from 1003 to 1008 (see the following table for the complete meaning) with command "Preset to ??". Clicking on the "Predefined" button, set as BarGraph the 24 animations; approaching each one to the other each bargraph, a graphic representation of the scheduler program will be obtained, with a resolution of one hour. The 24 animations are "grouped" in 6 groups, as shown in the following table.

Hours (24 hour format)	Address	Minimal Value	Maximal Value	Field Minimum Value	Field Maximum Value	Mask
00	1003	0	3	0	3	3
01	1003	0	3	0	3	30
02	1003	0	3	0	3	300
03	1003	0	3	0	3	3000
04	1004	0	3	0	3	3
05	1004	0	3	0	3	30
06	1004	0	3	0	3	300
07	1004	0	3	0	3	3000
08	1005	0	3	0	3	3
09	1005	0	3	0	3	30
10	1005	0	3	0	3	300
11	1005	0	3	0	3	3000
12	1006	0	3	0	3	3
13	1006	0	3	0	3	30
14	1006	0	3	0	3	300
15	1006	0	3	0	3	3000
16	1007	0	3	0	3	3
17	1007	0	3	0	3	30
18	1007	0	3	0	3	300
19	1007	0	3	0	3	3000
20	1008	0	3	0	3	3
21	1008	0	3	0	3	30
22	1008	0	3	0	3	300
23	1008	0	3	0	3	3000





In practice, each register is divided in 4 groups of 4 bits each one (nibble); each group of 4 bits will have a value from 0 to 3 that corresponds at one of 4 setpoints of DFCT (OFF, SP1, SP2, SP3).

Add Animation				×
Generic Modules     Digital Inputs     Analog Inputs     Disital Contexts	Identification       Address and Point:       1003       1       Description:			
Analog Outputs	Show Images	ON/OPEN:	CLOSE:	O None
Specific Modules     DFTP     DFTR     DFDV     DFST ///: 0.1/2				C Temporary Pulse Set Beset
O DFCT (Dig. Out)	Image from Library	Image from Library	Image from Library	O Open
O DFCC	Remove Image	Remove Image	Remove Image	O Close
DFCP / DFWEB	Show Text	Text Attributes		O Manual Open
<ul> <li>Registers</li> </ul>	00			O Manual Close
Miscellanea	Predefined	Vertical bar graph		Increase by     Decrease by
Open Map	Minimum Value:	) Fie	ld Minimum Value: 0	O Preset to
Execute Comm.	Maximum Value:	3 Fiel	d Maximum Value: 3	Preset to ??
O Text	No. of Digits:	)	Mask: 3	
U Scene	No. of Decimals:	)		<u>O</u> k <u>C</u> ancel

The previous table allows to make easy the configuration of the 24 animations related to the 3 set points that can be set, for each hour, with DFCT module. Each BarGraph refers to a schedule of 1 hour, thus the 24 bargraphs allow to manage the 24 hours of a day. Each minimum vale, maximum and from field value ranges from 0 to 3; take in account that it is very **important** to configure correctly the mask (see the table).

**3.** Insert an animation for the Summer/Winter setting, with configuration as Virtual Point with address 1976 and with command Toggle (see the following screen-shot).

Add Animation				×
Generic Modules O Digital Inputs	Address and Point: 1976 : 1 . 1 Description: Winter/Summer			
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes	ON/OPEN:	CLOSE:	Commands O None
Specific Modules     O DFTP     O DFTR     O DFTR     O DFTR	鱳			<ul> <li>Toggie</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFDV O DFCT (Dig. Out)	Inverno48.gif	Estate48.gif		O Reset
	Image from Library	Image from Library	Image from Library	O Open
DFCP / DFWEB	Show Text	Text Attributes	Remove Image	O Stop
<ul> <li>Virtual Points</li> <li>Registers</li> </ul>	Winter	Summer		<ul> <li>Manual Open</li> <li>Manual Close</li> </ul>
Miscellanea	Predefined			<ul> <li>Increase by</li> <li>Decrease by</li> </ul>
Open Map     Open Close current     Evecute Comm	Minimum Value: 0 Maximum Value: 0	) Field	H Minimum Value: 0 Maximum Value: 0	Preset to     Preset to ??
	No. of Digits:		Mask: FFFF	O Alt. Command
	No. of Decimals:	,		<u>O</u> k <u>C</u> ancel



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#### Adding the buttons for the management of DFCT

Add Animation			×
Generic Modules O Digital Inputs	Address and Point: 19	978 : 1 . 1 Description: Read	
<ul> <li>Analog Inputs</li> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes Show Images OFF:	ON/OPEN: CLOSE: O Tarela	
O DFTP O DFTR		Toggie     Traggie     Temporary     Pulse     Set	
O DFDV O DFCT (Dig. Out) O DFCK	Leggi48.gif Image from Library	Leggi48.gif O Reset	
O DFCC DFCP / DFWEB O Virtual Points	Remove Image Show Text	Remove Image         Close           Text Attributes         Stop	
O Registers Miscellanea	Read Predefined	Manual Close     Oncrease by     Occrease by	
Open Map Close current Execute Comm.	Maniges Minimum Value: 0 Maximum Value: 0	0 Field Minimum Value: 0 O Preset to 0 Field Maximum Value: 0 O Preset to ??	_
O Text O Scene	No. of Digits: 0		el

1. Insert a button Read. It is configured as virtual point 1978 with SET command.

2. Insert a button Write. It is configured as virtual point 1979 with SET command.

Add Animation				
Generic Modules O Digital Inputs O Analog Inputs	Address and Point: 1979: 1.1 Description: Write			
Digital Outputs     Analog Outputs	Attributes Show Images OFF:	ON/OPEN:	CLOSE:	Commands O None
O DFTP O DFTR O DFTR				<ul> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out)	Scrivi48.gif	Scrivi48.gif		O Reset
O DFCK	Image from Library	Image from Library	Image from Library	O Open
	Remove Image	Remove Image	Remove Image	O Stop
Virtual Points	Show Text	Text Attributes		🔿 Manual Open
<ul> <li>Registers</li> </ul>	Write			🔿 Manual Close
Miscellanea	Predefined			O Increase by
Open Map	Ranges Minimum Value:	0 Field	Minimum Value: 0	Decrease by
Execute Comm.	Maximum Value:	D Field	Maximum Value: 0	Preset to ??     Alt Command
O Text	No. of Digits:	0	Mask: FFFF	
U Scene	No. of Decimals:	0		<u>Ok</u> <u>C</u> ancel



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3. Insert a button Copy. It is configured as virtual point 1977 with SET command.

Add Animation				X
Generic Modules O Digital Inputs	Address and Point: 1977:1.1 Description: Copy			
<ul> <li>Digital Outputs</li> <li>Analog Outputs</li> </ul>	Attributes Show Images OFF:	ON/OPEN:	CLOSE:	Commands O None
Specific Modules O DFTP O DFTR O DFDV	No.			<ul> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out)	Scrivi48.gif	Scrivi48.gif		O Reset
O DFCK	Image from Library Bemove Image	Image from Library Bemove Image	Image from Library Remove Image	O Close
DFCP / DFWEB Virtual Points Registers Miscellanea	Show Text	Text Attributes	]	O Stop
	Сору			<ul> <li>Manual Close</li> </ul>
	Predefined			O Increase by Decrease by 0
Open Map	Minimum Value:	0 Field	Minimum Value: 0	O Preset to
Execute Comm.	Maximum Value:	0 Field	Maximum Value: 0	O Preset to ??     O Alt. Command
O Text O Scene	No. of Digits: No. of Decimals:	0	Mask: FFFF	

**4.** Insert the Waiting animation. It is configured as virtual point 1983 with None command.

Add Animation		×
Generic Modules     Digital Inputs     Analog Inputs     Digital Outputs	Address and Point: 1968 : 1. Description:	Commands
Analog Outputs     Specific Modules     DFTP     DFTR     DEDV	OFF: ON/OPEN: CLOSE:	<ul> <li>None</li> <li>Toggle</li> <li>Temporary</li> <li>Pulse</li> <li>Set</li> </ul>
O DFCT (Dig. Out) O DFCK O DFCC	Image from Library         Image from Library         Image from Library           Remove Image         Remove Image         Remove Image	Reset     Open     Close     Stac
<ul> <li>DFCP / DFWEB</li> <li>Virtual Points</li> <li>Registers</li> </ul>	Show Text Text Attributes  Waiting Command Sending Command Predefined	Manual Open Manual Close Increase by
Miscellanea     Open Map     Close current     Execute Comm.     Text	Ranges     Minimum Value:     0     Field Minimum Value:     0       Maximum Value:     0     Field Maximum Value:     0       No. of Digits:     0     Mask:     FFFF	Decrease by 0     Preset to     Preset to ??     Alt. Command
O Scene	No. of Decimals:	<u>Ok</u> <u>Cancel</u>



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## Final appearance of DFCT map



The final appearance of the map related to the DFCT module management is the following.