OPEN PROTOCOL FOR ELECTRICAL NETWORKS

DRY CONTACT AND IR STATE FUNCTIONS

Brand	Item
Legrand	573996, 03553
	067513, 003573 573936, 573937 573938, 573939
BTicino	3477, F428
	3480, F482, IR 4610, 4611, 4640

Document History

Version	Date	Author
1.0.0	01/11/2010	My Open Staff
Updating description:	FIRST VERSION	

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DESCRIPTION

Dry Contact Interfaces and some IR Interfaces are able to provide the state of their contacts / IR.
The last version of My Home gateways are able to translate the state of these devices in Open Web Net messages.

This function is really useful to know the state of the system and to execute or condition scenarios.

The alarm devices are able to provide the state information in any case, when the burglar alarm system is engaged or not engaged.

For example, if a dry contact interface is used to detect an intrusion on a window, this device can be used to know the status of the windows: opened / closed.
This information can be used:
- to run a scenario: when the window is opened, heating off
- to monitor the window state from a remote application

OPEN WEB NET WHO = 25

DRY CONTACT

WHAT TABLE

VALUE	DESCRIPTION	CONNECTION [3]	
		ACTION	EVENT
31	ON / IR Detection	W / R	R
32	OFF / IR not/end Detection	W / R	R

PARAMETER	DESCRIPTION	CONNECTION [3]	
		ACTION	EVENT
0	State if requested	R	R
1	State if an event happens in the System	W / R	R

WHERE TABLE

VALUE		DESCRIPTION
3	[1-201]	For automation dry contact interface (3477 and F428, 573996 and 03553) WHERE is configured only using Virtual Configurator Software
3	[1-9][1-9]	For alarm dry contact interface and IR (3480, F482, IR 4610, 4611, 4640 067513, 003573, 573936, 573937,573938, 573939) WHERE is configured using Z and N with physical configurators

ACTION CONNECTION

Command messages

1.1 Virtual ON / IR Detection

Action Connection	Open Frame	Note
Client → Server	*25*31#1*WHERE##	
Client ← Server	*#*1##	
Event Connection	**Open Frame**	**Note**
Client ← Server	*25*31#1*WHERE##	

1.2 Virtual OFF / IR not/end Detection

Action Connection	Open Frame	Note
Client → Server	*25*32#1*WHERE##	
Client ← Server	*#*1##	
Event Connection	**Open Frame**	**Note**
Client ← Server	*25*32#1*WHERE##	

Request massage

1.3 Request of Contact / IR State

Action Connection	Open Frame	Note
Client → Server	*#25*WHERE##	
Client ← Server	*25*VALUE#0*WHERE##	VALUE 31 if ON / IR Detection 32 if OFF / IR no Detection
Client ← Server	*#*1##	
Event Connection	**Open Frame**	**Note**
Client ← Server	*25*VALUE#0*WHERE##	

EVENT CONNECTION

2.1 State ON / IR Detection after a system event

Event Connection	Open Frame	Note
Client ← Server	*25*31#1*WHERE##	

2.2 State ON / IR Detection after a state request

Event Connection	Open Frame	Note
Client ← Server	*25*31#0*WHERE##	

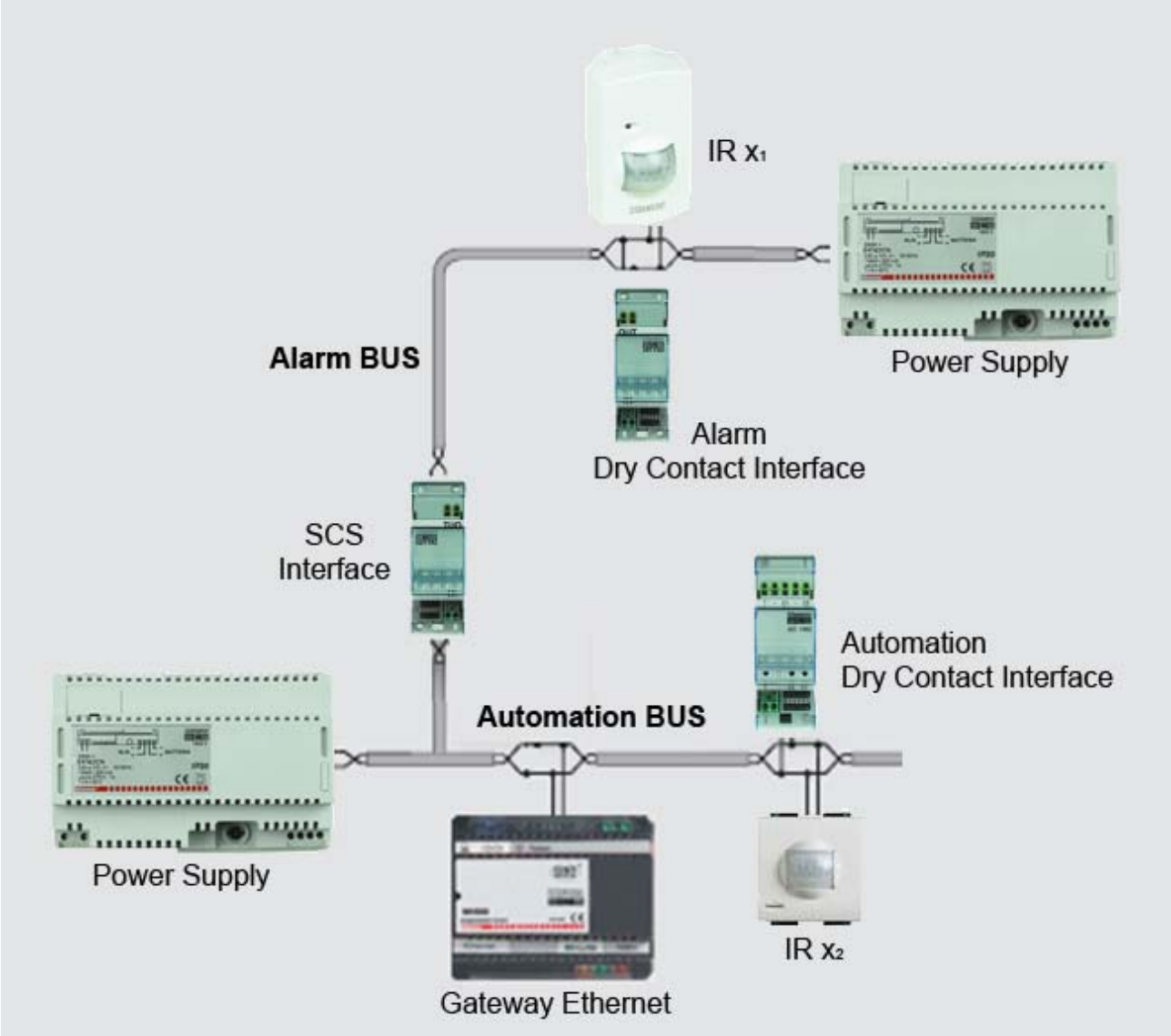
2.3 State OFF / IR end Detection after a system event

Event Connection	Open Frame	Note
Client ← Server	*25*32#1*WHERE##	

2.4 State OFF / IR not Detection after a state request

Event Connection	Open Frame	Note
Client ← Server	*25*32#0*WHERE##	

EXAMPLE



IR x_1 on Alarm BUS		IR x_2 on automation BUS	
Z	1	Z	9
N	1	N	9
MOD	Empty	MOD	AUX
AUX	AUX	AUX	AUX

Alarm Dry Contact Interface		Automation Dry Contact Interface	
Z_1	2	Channel 1	1
N_1	2	Channel 2	201
MOD_1	AUX		

IR x_1 detects presence, after 6 seconds it ends.

Event Connection	Time	OWN Frame	Event
Client ← Server	16:51:08:975	*25***31#1***311##	Presence detection
Client ← Server	16:51:14:861	*25***32#1***311##	Presence end

A Software requests the state of the IR x_1.

Action Connection	Time	OWN Frame	Action
Client → Server	16:45:11:990	*#25*311##	State request
Client ← Server	16:45:12:068	*25***31#0***311##*	State requested
Event Connection	**Time**	**OWN Frame**	**Event**
Client ← Server	16:45:12:068	*25***31#0***311##	State requested

IR x_2 detects presence, after 62 seconds it ends

Event Connection	Time	OWN Frame	Event
Client ← Server	17:02:49:788	*25***31#1***399##	Presence detection
Client ← Server	17:03:51:209	*25***32#1***399##	Presence end

A Software requests the state of IR x_2 during the presence detected.

Action Connection	Time	OWN Frame	Action
Client → Server	17:03:16:538	*#25*399##	State request
Client ← Server	17:03:16:631	*25***32#0***399##*	State requested
Event Connection	**Time**	**OWN Frame**	**Event**
Client ← Server	17:03:16:631	*25***32#0***399##	State requested

The Alarm Dry Contact Interface close the contact and then open it.

Event Connection	Time	OWN Frame	Event
Client ← Server	16:52:04:171	*25***31#1***322##	Contact closing
Client ← Server	16:53:01:110	*25***32#1***322##	Contact opening

A software request the state of the contact of the Alarm Dry Contact Interface.

Action Connection	Time	OWN Frame	Action
Client → Server	17:15:11:538	*#25*322##	State request
Client ← Server	17:15:11:616	*25***31#0***322##*	State requested
Event Connection	**Time**	**OWN Frame**	**Event**
Client ← Server	17:15:11:616	*25***31#0***322##	State requested

The Automation Dry Contact Interface – Channel 1, closes and opens the contact.

Event Connection	Time	OWN Frame	Event
Client ← Server	17:16:14:428	*25***31#1***31##	Contact closing
Client ← Server	17:46:17:459	*25***32#1***31##	Contact opening

A software requests the state of the contact – channel 1 while it's opened.

Action Connection	Time	OWN Frame	Action
Client → Server	17:17:19:178	*#25*31##	State request
Client ← Server	17:17:19:256	*25***32#0***31##*	State requested
Event Connection	**Time**	**OWN Frame**	**Event**
Client ← Server	17:17:19:256	*25***32#0***31##	State requested

The Automation Dry Contact Interface – Channel 2 closes and opens the contact.

Event Connection	Time	OWN Frame	Event
Client ← Server	17:16:14:428	*25***31#1***3201##	Contact closing
Client ← Server	17:46:17:459	*25***32#1***3201##	Contact opening

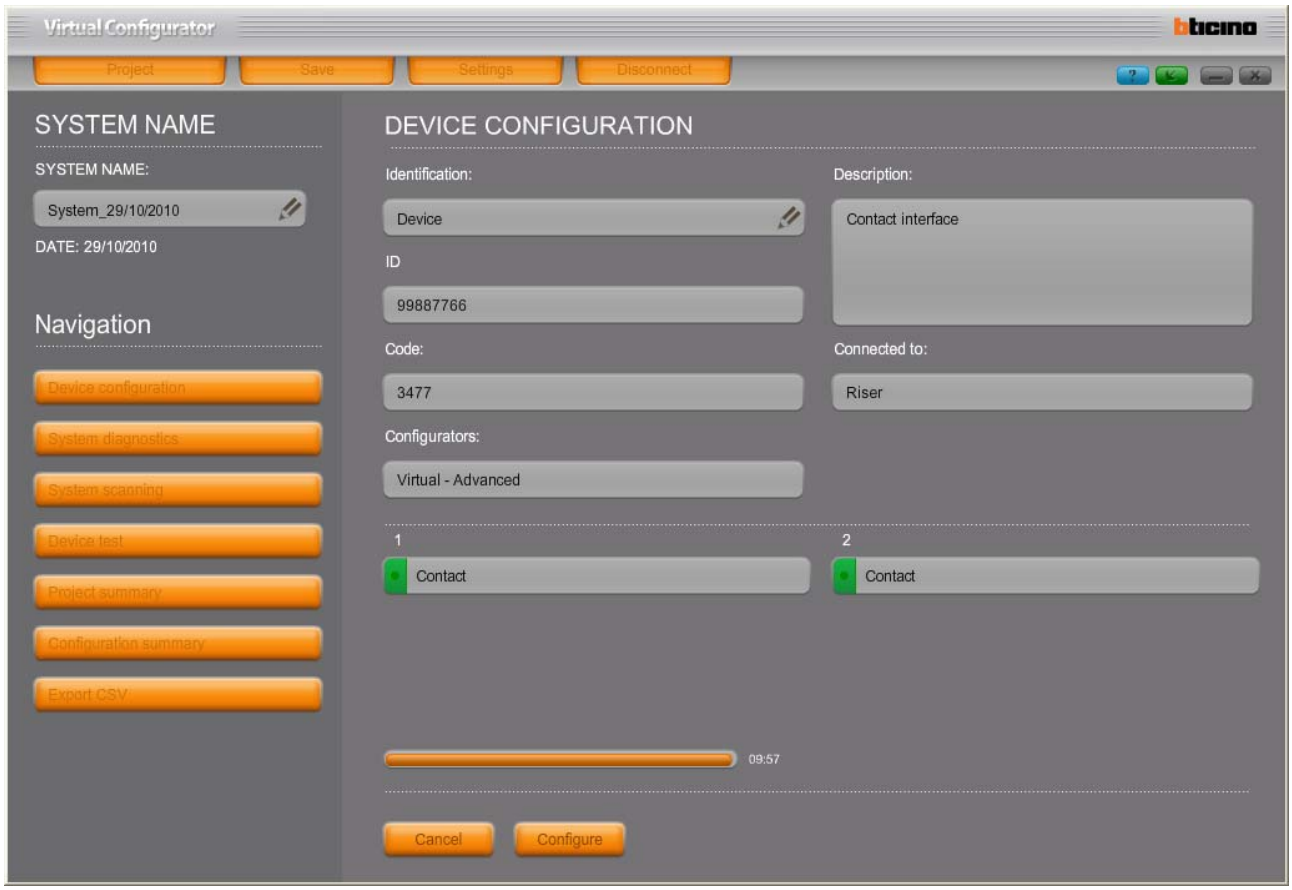
A software request the state of the Dry Contact – Channel 2 while it's closed.

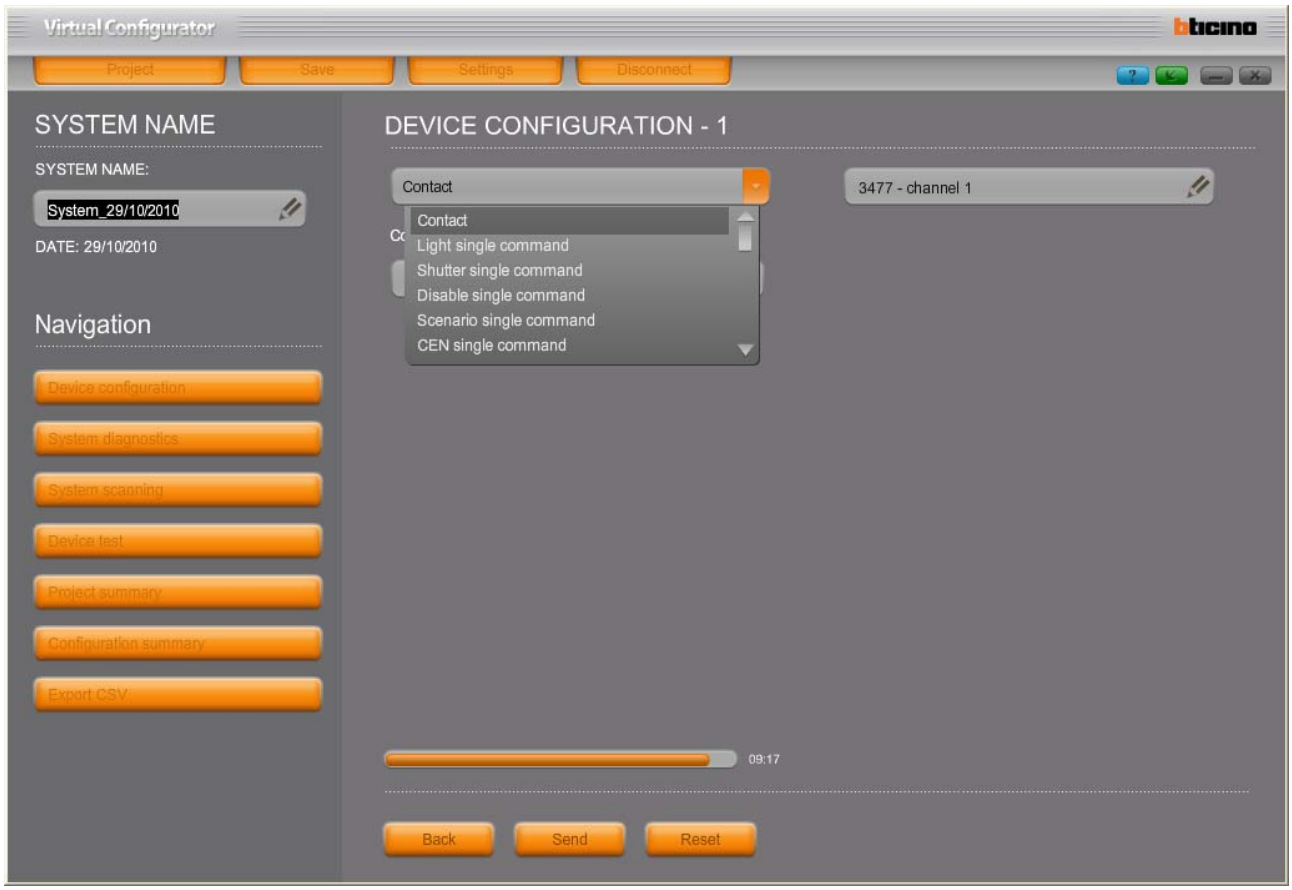
Action Connection	Time	OWN Frame	Action
Client → Server	17:17:19:178	*#25*31##	State request
Client ← Server	17:17:19:256	*25***31#0***3201##*	State requested
Event Connection	**Time**	**OWN Frame**	**Event**
Client ← Server	17:17:19:256	*25***31#0***3201##	State requested

General Information about devices configuration

The following configurations are required to use the state information coming from dry contact interfaces and IR devices.

AUTOMATION DRY CONTACTS CONFIGURATION




Virtual Configurator
bticino
Project
Save
Settings
Disconnect
SYSTEM NAME
SYSTEM NAME:
System_29/10/2010
DATE: 29/10/2010
Navigation
Device configuration
System diagnostics
System scanning
Device test
Project summary
Configuration summary
Export CSV
DEVICE CONFIGURATION - 1
Contact
Contact
Light single command
Shutter single command
Disable single command
Scenario single command
CEN single command
3477 - channel 1
09:17
Back
Send
Reset


Virtual Configurator
bticino
Project
Save
Settings
Disconnect
SYSTEM NAME
SYSTEM NAME:
System_29/10/2010
DATE: 29/10/2010
Navigation
Device configuration
System diagnostics
System scanning
Device test
Project summary
Configuration summary
Export CSV
DEVICE CONFIGURATION - 1
Contact
3477 - Channel 1
Contact number
201
06:21
Back
Send
Reset

ALARM DRY CONTACTS CONFIGURATION

Just contact function		Alarm plus contact function	
Z_x	1-9	Z_x	1-9
N_x	1-9	N_x	1-9
MOD_x	AUX	MOD_x	4-7

ALARM IR CONFIGURATION

Just contact function		Alarm plus contact function	
Z	1-9	Z	1-9
N	1-9	N	1-9
MOD	AUX	MOD	empty
AUX	AUX	AUX	AUX

Devices that allow the function

BTicino	Legrand	Data
3477	573996	10W14
F428	03553	10W14
3480	067513	All
F482	003573	All
H / L / N 4610 / AM5790	573936 / 573937	01W08
H / L / N 4611 / AM5791	573938 / 573939	01W08
N4640		01W08

How a Touch Screen manages the function

BTicino	Legrand	FW	Function Available
TS 3.5''	TS 3.5''	5.0.33	NO
TS 3.5''	TS 3.5''	6.0.7	YES
TS 10''	TS 10''	1.0.36	NO
TS 10''	TS 10''	2.0.x	YES

Gateways that allow the function

BTicino	Legrand	Function Available
MH200		**NO**
MH200N	03565	**YES**
F453AV (v1.0.19)		**NO**
F453AV (v2.1.7)	573992 (v2.1.7)	**YES**
F453		**YES**
F452V		**NO**
F452		**NO**