Bosch DICENTIS v1.0
SIMPL Window Module Application Guide

Description

This SIMPL Windows Module allows control and real time feedback of a Bosch DICENTIS server including vote state feedback, vote tallies, discussion list management, speaking list management, and agenda feedback. Seat modules include adding to active speakers, removing from the discussion list, seat feedback for names, voting feedback, discussion feedback, and mic feedback. See DICENTIS Licensing for more information about required licenses.

This Module uses a Module Instance License that can be obtained by using the activation key(described below) at store.controlworks.com. Each DICENTIS Server requires a separate engine module, and each Engine module requires a separate license in order to function. Licenses are tied to the processor and program slot(or Room ID for VC-4). See below for detailed instructions on ordering and activation.

The module license offers a complimentary automatic trial period of 7 days if no license has been purchased.

Supported Processors

Any 3-series or 4-series processor and 4 series servers running SIMPL Windows.

Compatibility				Processor Requirements	
4 SERIES CONTROL COMPATIBLE	3 COMPATIBLE		NOT COMPATIBLE SERIES	Ethernet REQUIRED	USB REMOVABLE MEDIA NOT REQUIRED

Bosch DICENTIS v1.0
Telephone: (+1)440-449-1100   support@controlworks.com

ControlWorks Consulting, LLC
http://www.controlworks.com

Contents

Overview

This Module requires a Module Instance License that can be purchased by entering the activation key from the module here: https://store.controlworks.com/products/Bosch-DICENTIS-License. Each DICENTIS Engine Module in a program slot requires a separate license in order to function. Licenses are tied to the Crestron processor **and** the program slot(or Room ID for VC-4).

License Changes

If a Crestron processor fails and is replaced the license will need to be updated. If the module moves program slots on a Crestron processor, or on a VC-4 server changes room ID's, the license will need updated. We offer one complimentary update of the license. Subsequent changes will be assessed a fee to change the license. We encourage the use of our trial period to allow for development and testing without purchasing licenses.

To change a license, please email us at support@controlworks.com and include the Activation Key, and your License Unique Identifier that can be located at https://store.controlworks.com/account/.

Steps for Purchasing a License

Licenses are tied to the Crestron Processor and program slot(appliance)/Room ID(VC-4). The steps below outline how to purchase a license and activate your module.

1. Ensure the Module has been added to your program.

2. Ensure the reboot_finished signal is being latched high after the program is started, not with a 1. Ensure the remaining signals under the System group are defined. You may comment them out if desired.

3. Ensure the processor or VC-4 instance can reach the internet.

    a. For an appliance processor

        i. Open Text Console in toolbox, connect to the processor.

        ii. Ensure the processor has DNS servers by using the command [LISTDNS].

```
AV3>listdns
TableStart: [DNS Servers]
Device ID  | IP              | Issued By |
-----------+-----------------+-----------+
Device 0   | 10.2.0.5        | DHCP      |
Device 1   | 10.255.1.2      | DHCP      |
```

        iii. If no DNS servers are present, add them by using [ADDDNS <DNS server>] or using the Ethernet Addressing dialog box.

```
AV3>adddns 8.8.8.8
Success:New DNS value set.

AV3>|
```

        iv. You can also test your DNS server by using the command [TESTDNS www.controlworks.com.

```
AV3>testdns www.controlworks.com
IPAddress = 173.236.4.201

AV3>|
```

4. Load your program to the processor.

5. After the program is running, and the reboot_finished signal has been latched high, open Crestron Debugger and locate the licensing signals on the module defined earlier in this process.

6. Locate the [activation_url_fb$]. This signal will contain a URL that will automatically enter the activation key into the website.

   a. Alternatively, you may also copy the activation key signal [activation_key_fb$] and enter it in at https://store.controlworks.com/products/Bosch-DICENTIS-License.

7. Enter the Activation Key and Quantity, and then proceed through the checkout process.

8. After the checkout process is completed, in Crestron Debugger, pulse the [reload_server_license-ucmd_retryauthserver] signal for the module to check the activation server for the updated license information.

   a. Alternatively, you may use the command UCMD:[program_slot] "RETRYAUTHSERVER" i.e. UCMD:1 "RETRYAUTHSERVER"

Once the module has been activated, its activation information is stored on the processor and will not need to reach the ControlWorks activation server to remain activated. Certain Crestron recovery procedures may clear the activation information and the module may need to reach out to check for activation. Should the Module require to reach out to the ControlWorks server, this process should occur automatically and be transparent as long as the processor has Internet access.

Trial Period

To aid testing your programming before deployment, we are offering a complimentary automatic trial period of 7 days; during this time the module is fully functional. This functionality only works for systems that have an active Internet connection and are able to reach ControlWorks' activation servers.

When the [reboot_finished] signal is held high, the module will attempt to retrieve a license from the activation server. If the processor has not been previously activated and a trial license will be automatically provided to the processor and the trial period will start. Once the trial period expires, you must contact us to extend the trial period. The total number of trial activations for any processor may be limited in ControlWorks sole discretion.

DICENTIS Licensing

This module requires the DICENTIS Server is licensed with the "Ultimate feature package". "Premium" and "Base" licenses are not supported. For more information about licensing, please visit: https://www.boschsecurity.com/us/en/solutions/conference-solutions/ip-based-conferencing/dicentis-software-licensing/#license

User Accounts

An account for Crestron must be created in the DICENTIS system. The Crestron user must be assigned to the Admin User Group. The Username, and Password for this account must be entered into the Engine Module for the module to communicate to the DICENTIS Server.

Seat ID's

Each Seat Module requires an ID to connect it to a physical seat in the DICENTIS system. To get the seat ID's, ensure the module is loaded and connected to the DICENTIS system. Open Crestron toolbox, and connect to the processor with a console. Pulse the [print_seat_ids] digital input on the engine module. From there, you can connect seat modules to physical seats, by copying the Seat ID into the Seat ID parameter on the Seat Module.

Signal and Parameter Descriptions
(Bosch_DICENTIS_Engine_V1.0_(ControlWorks))

Bracketed signals such as "[signal_name]" are optional signals

DIGITAL INPUTS

reboot_finished..Latch this signal high after reboot is complete. The drivers will attempt to activate their licenses when this signal goes high. Do not use a 1.

[print_seat_ids] ....After successful connection to the DICENTIS Server, pulse this input to print all known seats to the Crestron processor console.

[connect] ....Pulse to connect to the DICENTIS Server.

[disconnect] ....Pulse to disconnect from the DICENTIS Server.

[advance_list]..Pulse to advance the discussion list by one user in the list.

[add_discussion_list_member_x_to_speakers] ....Pulse to add the member in the corresponding slot, to the speaking list.

[clear_discussion_list] ....Pulse to clear the discussion list. Because there is no method to clear the list, the driver automatically puts each member in the speaking list, and then removes them from the speaking list.

[clear_speaking_list] ....Pulse to clear the speaking list.

ANALOG INPUTS

This module does not utilize any analog inputs.

SERIAL INPUTS

This module does not utilize any serial inputs.

DIGITAL OUTPUTS

[licensed_fb] ....High when the module has found a valid license from the activation server or cache file.

[trial_license_valid_fb] ....High when the module is authorized in trail mode.

[perpetual_license_valid_fb].....................................High when the module is authorized in perpetual mode.

[connected_fb] ....High when the module is connected to the Bosch DICENTIS server.

[disconnected_fb] ....High when the module is disconnected to the Bosh DICENTIS server.

[vote_state_closed/ready/opened/onHold/done/canceled/accepted/rejected_fb] High when the DICENTIS server indicates the vote state.

ANALOG OUTPUTS

[not_voted/yes/no/abstain/dnpv/for/against/present_fb]Indicates the total number of users that voted for each type.

[total_members_in_discussion_list_fb] .... Indicates the total number of users in the discussion list.

[total_members_in_speaking_list_fb] ....Indicates the total umber of users in the speaking list.

SERIAL OUTPUTS

[license_status_fb$] ....Indicates the modules license status.

[activation_key_fb$] ....Indicates the modules license key. This should be used for purchasing licenses.
[activation_url]...Indicates the URL for store.controlworks.com to purchase the license. The URL will contain the key, and when the url is used, will automatically enter the key into the website.
[discussion_list_member_x_fb$]................................Indicates the name of the member in the discussion list position.
[speaking_list_member_1_fb$]................................Indicates the name of the member in the speaking list position.
[current_subject_fb$]..Indicates the current agenda item subject.
[current_description_fb$]..Indicates the current agenda item description.

PARAMETERS

IP Address or Hostname...Enter the IP address or hostname of the DICENTIS Server.
Port...Enter the control port number. The default port is 31416d.
Username ....Enter the Username for Crestron control.
Password ....Enter the Password for Crestron control.
Instance ID ....Enter the instance of this DICENTIS Engine Module. Each Engine module must have a unique instance ID. This Instance ID is used for the Seats to talk to the main engine.

Signal and Parameter Descriptions
(Bosch_DICENTIS_Seat_V1.0_(ControlWorks))

Bracketed signals such as "[signal_name]" are optional signals

DIGITAL INPUTS

[add_to_active_speakers] ....Pulse to add this seat to the active speakers list.
[remove_from_discussion_list] ....Pulse to remove this seat from the active speakers list and discussion list.

ANALOG INPUTS

This module does not utilize any analog inputs.

SERIAL INPUTS

This module does not utilize any serial inputs.

DIGITAL OUTPUTS

[not_voted/yes/no/abstain/dnpv/for/against/present_fb .High when the seat has submitted the indicated vote.
[first_in_discussion_queue_fb] ....High when the seat is first in the speaker queue.
[is_active_speaker/speaker/priority/responder/important/request/response_request_fb]   High when the seat is indicated discussion type.
[microphone_off/on/mute_fb].....................................High when the microphone is off/on/or muted.

SERIAL OUTPUTS

[seat_name_fb$] ....String indicating the seat name.
[seat_screen_name$]...String indicating the seats screen name.

PARAMETERS

Seat ID ....Enter the Seat GUID as reported when pressing the [print_seat_ids] input on the engine module.

Engine Instance ID ....Enter the main Engine's Instance ID.

Support

This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email support@controlworks.com or call us at 440-449-1100. ControlWorks normal office hours are 9 AM to 5 PM Eastern, Monday through Friday, excluding holidays.

Before calling for support, please ensure that you have loaded and tested operation using the included demonstration program and touchpanel(s) to ensure that you understand the correct operation of the module. It may be difficult for ControlWorks to provide support until the demonstration program is loaded.

Updates, when available, are automatically distributed via email notification to the address entered when the module was purchased. In addition, updates may be obtained using your username and password at https://store.controlworks.com/account/login.aspx.

Distribution Package Contents

The distribution package for this module should include:

Distribution Contents	
Bosch_DICENTIS_Engine_v1.0_(ControlWorks).umc	Crestron User Module.
Bosch_DICENTIS_Seat_v1.0_(ControlWorks).umc	Crestron User Module.
Bosch_DICENTIS_Engine_v1.0_(ControlWorks).usp	SIMPL+ file used within the processor module.
Bosch_DICENTIS_Engine_v1.0_(ControlWorks).ush	SIMPL+ header file.
Bosch_DICENTIS_Seat_v1.0_(ControlWorks).usp	SIMPL+ file used within the processor module.
Bosch_DICENTIS_Seat_v1.0_(ControlWorks).ush	SIMPL+ header file.
BoschDicentis.clz	SIMPL# Library
Bosch_DICENTIS_Demo_v1.0_(ControlWorks).smw	Demo program for PRO3 processor

Revision History

V1.0 caleb@controlworks.com 2022.09.22
     -initial release

Development Environment

This Module and Driver version was developed on the following hardware and software. Different versions of hardware or software may or may not operate properly. If you have questions, please contact us.

Manufacturer Hardware	Software Version
Bosh DICENTIS	5.00.35160
Crestron Hardware	**Firmware Version**
Crestron PRO4 Processor	v2.7000.00031
Crestron CP3 Processor	v1.8000.4522.24170
Software	**Software Version**
SIMPL Windows	4.17 (build: 4.1700.03)
Vision Tools Pro-e	6.2.00
Smart Graphics Controls	2.15.04.01
Crestron Database	209.00 (build: 209.0000.002.00)
Device Database	200.130 (build: 200.13000.003.00)

ControlWorks Consulting, LLC Module Instance License Agreement

Definitions:
ControlWorks, *We*, and *Us* refer to ControlWorks Consulting, LLC, with headquarters located at 8228 Mayfield Road, Suite 6B Rear Chesterland, Ohio 44026. *You* and *Dealer* refer to the entity purchasing the module. *Client* and *End User* refer to the person or entity for whom the Crestron hardware is being installed and/or will utilize the installed system. *System* refers to all components described herein as well as other components, services, or utilities required to achieve the functionality described herein. Instance License refers to a module license that is granted to a specific combination of a Crestron Processor and a single Controlled Device (for example, based on the respective serial numbers or other uniquely identifying information); a separate Instance License must be purchased for each such combination. *Module* refers to files required to implement the functionality provided by the Module and may include source files with extensions such as UMC, USP, SMW and VTP. *Driver* refers to the files required to implement the functionality in the Crestron Home environment. *Demo Program* refers to a group of files used to demonstrate the capabilities of the Module, for example a SIMPL Windows program and VisionTools Touchpanel file(s) illustrating the use of the Module but not including the Module. *Software* refers to the Module and the Demo Program.

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Provision of Support
We provide limited levels of technical support only for the most recent version of the Module and Driver as determined by Us. We do not provide support for previous version of the Module or Driver, modifications to the Module or Driver not made by Us, to persons who have not purchased the Module, Driver, or corresponding license(s) from Us. In addition, we may decline to provide support if the Demo Program has not been utilized. We may withdraw a Module, Driver, or corresponding license(s) from sale and discontinue providing support at any time and for any reason, including, for example, if the equipment for which the Module or Driver is written is discontinued or substantially modified. The remainder of your rights and obligations pursuant to this license will not be affected should ControlWorks discontinue support for a Module or Driver.

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