[{{{description}}}] [{{{specs}}}]

JS Script driver

it is a driver created on the basis of the native AV & Custom Systems driver with the help of <u>iRidium DDK</u>. Scripts enable receiving data and communication with ANY equipment. Driver scripts can be created by the user for operation with any control protocol.

This section present an example of using Script Drivers using the driver for **XBMC Media Center 11.0 (Eden)**.

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For training you will need an **XBMC** platform device. If you don't have one you can download the version <u>XBMC Media Center 11.0 (Eden)</u> from the web site of the manufacturer and use it on your PC. .

Download the Project Example



Demo project for controlling XBMC Eden <u>Download >></u>

Creating New Projects in iRidium

When launching iRidium GUI Editor the first step is creation of a new project or opening of a

ready project. New projects can be created with the help of the button on Tool Box or through the menu **File > New Project**.



You can find detailed description of the project creation in the section <u><i>Creating the Graphic Part of iRidium Projects</u></u>

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Adding the Device Base

As an example download the base with the script driver for <u>XBMC Media Center 11.0 (Eden)</u>

Work with device bases is performed in **iRidium DataBase Editor**. To start work with **iRidium DataBase Editor** go to the **Device** tab and click on the **Edit Base** icon.

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Press on the Attach Base icon in the open window and select the downloaded base. Then

close iRidium DataBase Editor.



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Adding the Device Base to the Project

Go to the **Device** tab and select the base added by you in the drop-down list.

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To use the added base drag it to **Project Device Panel**.

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Setting up Connection to Equipment

When the driver is added it is required to select it in the device tree and go to the Properties tab containing settings of the tree components. Settings of connection to the equipment controlled with the help of the driver are indicated here.

In this case we use the driver working with the <u>TCP</u> protocol so we should indicate the **Host** and **Port** properties.



You can find detailed description of the setting up connection to the equipment in the section <u>Working with Equipment</u>

Each **script driver** in iRidium has the **Description** section. It is located under the **Properties** tab. This section usually contains short information on how to use the driver.



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Using Commands

After setting up the equipment it is required to set up connection between the graphic and driver parts of your iRidium project. The connection of these parts is performed by communication between commands, channels and graphic items of iRidium project.

Use the **Draw Item** tool on Tool Box to create a template of a graphic item. In our case the graphic item will be used for increasing the volume. To make the purpose of the item clear you can set the **Volume UP** text for it. In order to do that:

- Go to the tab **Object Properties > States**
- By default items have two states. Select **All States** in the drop-down list. You need to do that for the text you want to write on the item to appear on all item states.
- Find the Text field and write Volume UP in it.

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You can find detailed information about graphic items in the section <u>Graphic Items</u>

To assign a command or channel to the graphic item use the **Drag&Drop** method – drag the tree object to the project graphic item. At that the dialog window will open where you are required to indicate the way of communication between the item and the command. Settings of graphic items directly affect the way of data sending, receiving and displaying.

For example, when working with the **Custom (TCP)** driver you can only send data in the information field of the command (**Send Command**).

In our case the **Volume** command is dragged on the item.

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You can find detailed information about relation of commands with the graphic part of the project in the section <u>Relations between Commands</u>, <u>Channels and the Project Graphic Part</u>

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Sending Properties to Channels

All commands dragged on the item are displayed in the **Programming** tab.

Open the **Programming** tab. The **Volume** command was added in the **Press** event. The dragged command is macros. Editing of macros is performed in **Macros Editor**. Open **Macros Editor** for the **Press** event.



Now when pressing on the item the **Volume** command is activated. But the command does not know if it should increase or decrease the volume. That is why it is required to assign to the item the macros indicating what to do. There is the **Send Text** macros for this purposes which gives the property to the driver thus indicating to the command what it should do..

In the **Commands** column of the **Send To Token** section select **Send Text** and drag it in the **Macros** column.



Indicate the first property for the command, in our case - **Up**, in the **Text** field of the appeared window. In the **Token** field select the channel in the **Feedback - InputAction** section.

InputAction is used for inputting properties of the command.

In script drivers all channels (**Feedback**) with the **Input** prefix are used for inputting properties.



After adding the **Send Text** macros it is required to place it above the **Volume** command for its correct work. It is also necessary so the driver before the activation of the **Volume** command knew what the command will do. Use the **Move Up** button to move the **Send Text** macros up.

For moving macros use **Move Up / Move Down** buttons.



You can find detailed information about macros and working in **Macros Editor** in the section <u>Macros (Macros Editor)</u>

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Checking the Work of the Command

Emulator

is a part of iRidium package for Windows aims to check if GUIs work correctly before uploading them onto control devices. Emulator can work both with a license (with connection to the equipment) and without it (when only the project graphic part is functional).

Launch Emulator; Emulator window will open together with your project.



Turn on XBMC Media Center 11.0 (Eden). Click on the item. The volume will increase.



You can find detailed information about Emulation of project work in the section <u>Emulation</u> of <u>Project Work</u>

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Using Channels

Create one more graphic item using the **Draw Item** tool. This graphic item will be used for displaying the current volume level.



- Go to the tab **Object Properties > States**.
- By default items have two states. Select **All States** in the drop-down list. You need to do that for the text you want to write on the item to appear on all item states.
- Find the Text field and write \V in it.

\$V is one of the **templates** for processing and outputting values on graphic items. It is used for displaying the current value (**Value**) of the item.

You can find detailed information about using templates in the project in the section <u>Displaying Status of Variables on Items</u>



In order for the graphic item to display the current value of the volume drag the **Volume** channel on it using the **Drag&Drop** method. Select the **In Value** value in the appeared window. As a result when Emulator is working the **\$V** template will be replaced by the current channel value.



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Checking the Work of the Channel

Launch Emulator; Emulator window will open together with your project. Turn on **XBMC Media Center 11.0 (Eden)** if it is off. The current volume will be displayed.



