**ValueRemoteSource Extender**



**1. Application**

**ValueRemoteSource** is designed for forming text values on the [ValueServer](http://redmine.digispot.ru/projects/digispot/wiki/%D0%9F%D0%BB%D0%B0%D0%B3%D0%B8%D0%BD_ValueServer) side, extracted from contents in specified order. For example: text file or xml file. These files can be both stored on current machine and available via local network or http.

*For more detailed description, see ticket #20945*



**2. Configuration**

To configure ValueRemoteSource extender, select **Conponents > ValueRemoteSource configuration ...** from DJin main menu. In the dialog box that opens, you will see current ValueRemoteSource settings.





**2.1 Creation of data source (DataSource)**

The data source (DataSource) serves as the root node for this extender. It contains the following set of parameters:

* Name: source name displayed for the user (this field is mandatory)
* Source type: Web / File system
* Path to source:
* Document type: XML / Text
* Polling rate, sec
* Module: the module in the system of events (this field is mandatory)
* Host: value server host (address) in the system of events





**2.2 Creation (specification) of a variable (Variable)**

When creating a variable it is required to specify only one parameter – the Name. This means the name of a variable that on ValueServer side will have the value received from selector assigned to it.





**2.3 Creation of Selector**

Selector is an entity that performs parsing of Data Source based on **Type** and **Value**. Available parameters include:

* Name: selector name displayed for the user
* Type: XPath / RegExp
* Value: regular expression or xpath selector





**3. Example of Component Configuration: ValueRemoteSource, ValueSource, ValueXMLWritter**

Component documentation

* [ValueServer Plug-in](http://redmine.digispot.ru/projects/digispot/wiki/%D0%9F%D0%BB%D0%B0%D0%B3%D0%B8%D0%BD_ValueServer)
* [ValueXMLWriter Plug-in](http://redmine.digispot.ru/projects/digispot/wiki/%D0%9F%D0%BB%D0%B0%D0%B3%D0%B8%D0%BD_ValueXMLWriter)



**3.1 All components operate within a single application**

Let us configure **vid** config file first, initializing the needed components.

CREATE\_NET\_PLUGIN ValueServer ValueServer.dll Digispot.Plugins.ValueServer

CREATE\_NET\_WND\_PLUGIN ValueXMLWriter ValueXMLWriter.dll Digispot.Plugins.ValueXMLWriter

SET\_VIEW\_TAB\_OBJ VIEW\_T1 ValueXMLWriter "Value XML Writer"

SET\_OBJ\_BASE ValueServer log true

Here is an example of **ValueRemoteSource** configuration:



Here is an example of **ValueXMLWritter** configuration:





**3.2 Two applications ValueRemoteSource and ValueXMLWritter + ValueSource**

Let’s configure **vid** config file first, initializing the needed components. **The configuration is performed for application where ValueXMLWritter + ValueSource components are installed**.

CREATE\_NET\_PLUGIN ValueServer ValueServer.dll Digispot.Plugins.ValueServer

CREATE\_NET\_WND\_PLUGIN ValueXMLWriter ValueXMLWriter.dll Digispot.Plugins.ValueXMLWriter

SET\_VIEW\_TAB\_OBJ VIEW\_T1 ValueXMLWriter "Value XML Writer"

SET\_OBJ\_BASE ValueServer log true

Configuring system of events for application with **ValueRemoteSource** installed. Let us look at djin.xml:

<EVENT\_SERVER HOST="CLIENT">

 <CLIENTS>

 <TCP TYPE="CLIENT" IP="127.0.0.1" PORT="1000" />

</CLIENTS>

</EVENT\_SERVER>

Configuring system of events for application with **ValueXMLWriter** and **ValueServer** components installed. Let us look at djin.xml:

<EVENT\_SERVER HOST="VS">

 <CLIENTS>

 <TCP TYPE="SERVER" IP="127.0.0.1" PORT="1000" />

</CLIENTS>

</EVENT\_SERVER>

Here is an example of **ValueRemoteSource** configuration:



Here is an example of **ValueXMLWritter** configuration:





**4. Advanced**



**4.1 Using Xml Tree for generation of XPath expressions**

[Xml Tree](https://chrome.google.com/webstore/detail/xml-tree/gbammbheopgpmaagmckhpjbfgdfkpadb) is an extension for Google Chrome that provides a clear way to generate and debug XPath extensions.

To install this extension, just follow the link in parentheses: [(link)](https://chrome.google.com/webstore/detail/xml-tree/gbammbheopgpmaagmckhpjbfgdfkpadb)



Now open a random RSS feed and extract a number of news headers by clicking on the Title node. The results will be shown as follows:

/rss/channel/item/title



Now let us check the user XPath expression by receiving the first of a number of headers. This will result in the change of expression:

/rss/channel/item[1]/title

By clicking on **XPath/Render** on the line below, you will see the results:





**Build References**

The extender consists of 2 builds – ValueRemoteSource.Service.dll (WCF service) and ValueRemoteSource.Client.dll (WCF client – settings editor)

**Links from ValueRemoteSource.Service.dll build**:

* D3API.dll
* D3APICommon.dll
* Microsoft.Practices.Prism.dll
* Digispot.Practices.Prism.Extender.dll
* ValueRemoteSource.Client.dll

**Links from ValueRemoteSource.Client.dll build**:

* D3API.dll
* D3APICommon.dll
* ICSharpCode.TreeView
* Microsoft.Practices.Prism.dll
* Digispot.Practices.Prism.Extender.dll