

Overview

MultiString provides five string variables with custom names that are displayed on the device tile in Vera's user interface. The name and value of each variable may be set from the device's **Control** tab, using scene and PLEG actions or through **luup.variable_set(...)** calls. These parameters may also be accessed as PLEG *Device Properties* and with **luup.variable_get(...)** calls. Scene trigger events are provided for each variable. The events allow the conditions: *goes below*; *goes above* and *equals* the specified constant.

MultiString uses the same Device-type and ServiceID pioneered by the VariableContainer plugin.

UI7

MultiString will work with either UI5 or UI7. When run on UI7, some files have to be moved when the plugin is first initialized. This happens automatically but an additional **Reload Luup** and browser page refresh is required before the device UI is displayed correctly.

Actions

The following actions are provided for use by scenes and other plugins:

```
urn:upnp-org:serviceId:VContainer1 SetVariableName1 newVariableName1 = <string>
```

..

```
urn:upnp-org:serviceId:VContainer1 SetVariableName5 newVariableName5 = <string>
```

```
urn:upnp-org:serviceId:VContainer1 SetVariable1 newVariable1 = <string>
```

..

```
urn:upnp-org:serviceId:VContainer1 SetVariable5 newVariable5 = <string>
```

```
urn:upnp-org:serviceId:VContainer1 SetOptions newOptions = <option string>
```

String Lengths

To avoid overlap on the UI display, the *Set* actions will truncate long strings. On UI5, by default, names are truncated to 22 characters and values to 20. In addition, UI5 will only display a limited length on the device tile. On UI7 there is more space available so both the name and value are allowed to be 32 characters long. They cannot both be this long or they will not fit on the same line. Strings set using **luup.variable_set(...)** will not be truncated. The default truncation sizes may be changed using the **Options** variable.

Options

You may change some of MultiString's functionality by entering an option string into the **Options** variable. This may be set on the **Advanced** tab and will take effect after a **Save/Reload**. You may also use the action **SetOptions newOptions = <option string>** which will have immediate effect.

The options string is a comma-separated list of any of the following in any order. They may be entered in either upper or lower-case. Any spaces will be ignored. Absence of an option means that the default value or processing will be used. All options can be removed by entering an empty options string.

MNL=12	Set the <i>Maximum Name Length</i> permitted for <i>SetVariableName</i> actions. The value must be between 1 and 32. The default is 22 on UI5 or 32 on UI7. Long variable names can make the display unreadable.
MVL=12	Set the <i>Maximum Value Length</i> permitted for <i>SetVariable</i> actions. The value must be between 1 and 32. The default is 20 on UI5 or 32 on UI7. Long variable values can make the display unreadable.
RVn=d	<i>Round Value n</i> to <i>d</i> decimal places for <i>SetVariable</i> actions. <i>n</i> is the variable number (1-5). <i>d</i> is the number of decimal digits (0-9). The default is no rounding. Rounding happens before any truncation required for long strings. Rounding is only performed on completely numeric values.
CEn	<i>Convert Epoch</i> timestamp for <i>SetVariable</i> actions. <i>n</i> is the variable number (1-5). Converts an Epoch timestamp in variable <i>n</i> to a human-readable time and date form. Conversion happens before any string-length truncation.
CTn	<i>Convert Time</i> from Epoch timestamp for <i>SetVariable</i> actions. <i>n</i> is the variable number (1-5). Converts an Epoch timestamp in variable <i>n</i> to a human-readable time-of-day. Conversion happens before any string-length truncation.
CDn	<i>Convert Date</i> from Epoch timestamp for <i>SetVariable</i> actions. <i>n</i> is the variable number (1-5). Converts an Epoch timestamp in variable <i>n</i> to a human-readable date. Conversion happens before any string-length truncation.

E.g. `luup.call_action("urn:upnp-org:serviceId:VContainer1","SetOptions",
{newOptions="MNL=20,MVL=24,RV1=2,CE3,CT4,CD5"},123)`