

Nomad plugin creation summary

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1. Files description

File	Description
<i>type</i> Properties.xml	Describes driver or controller properties: name, type, format and conditions.
<i>type</i> Plugin.xml	Describes all the existing plugins for the controller or driver.
<i>type</i> .properties	Defines textual elements, such as status messages and GUI components labels (i18n).
<i>type</i> PlotDatas.xml	Defines plot datas for the controller or driver.
<i>type</i> View.xml	Describes the layout for the hardware (in case of a driver) or settings plugin (in case of a controller).
<i>type</i> CommandView.xml	Describes the layout for the command plugin (controller only).
<i>type</i> SpyView.xml	Describes the layout for the spy plugin (controller only).

type stands for controller or driver type.

2. Layout description

2.1 Containers

Tag	Description	Attributes (bold = mandatory)
composite	Creates a new container.	[alignment, border, key, margin, spacing, isVertical, spacing, grabHorizontal, visibleState] = ATT1
group	Creates a new group.	ATT1, title
table_composite	Creates a table container.	ATT1, nbColumns
switchable_composite	Creates a switchable container (visibility depends on a value) Caution: if the switchable composite is inside a dynamic composite, its switcher_key must strictly be equal to one of the dynamic properties.	ATT1, switcher_key , switch_values
form_composite	Creates a composite that allows for positionnable composites.	border
positionnable_composite	Creates a composite for which exact position and size can be given (its parent must be a form_composite).	ATT1, x, y, width, height
dynamic_composite	Creates a composite to display dynamic properties.	ATT1, role , properties , ignore
phase_composite	Only in command plugins. Visibility of a phase_composite depends on the execution state of the command box, among construction, finished, running and paused.	ATT1, phases

2.2 Widgets

Tag	Description	Attributes (bold = mandatory)
property_selector	Creates a button opening a popup to select a controller or a property.	[role, property, selector_type]
label	Creates a label widget linked to a property.	[role, property, prefix, suffix, key, font_size, font_style, horizontal_alignment*, horizontal_span, spaceBefore] = ATT2, valuesAndLabels
text	Creates a text widget linked to a property.	ATT2
radio	Creates a radio button widget linked to a property.	ATT2, isVertical, valuesAndLabels
combo	Creates a combo widget linked to a property.	ATT2, sortOnLabels
property_combo	Creates a combo widget linked to a property which gives possible values from another property.	ATT2, synchro
check	Creates a check box widget linked to a property.	ATT2, checkBoxValues
changing_color_label	Creates a label whose look and feel (foreground color, font style and size) depends on a property value.	ATT2, status_property, statusValuesAndStyles, statusValuesAndSizes
image_button	Creates a clickable image widget linked to a property.	ATT2, valuesAndImages , height
status	Creates a text widget linked to status property.	role, property, valuesImagesAndLabels , prefix, suffix, key, spaceBefore
button	Creates a button widget to execute a command.	role, command , key, prefix, suffix, spaceBefore
simple_label	Creates a label widget.	prefix , key, font_size, font_style, horizontal_alignment, spaceBefore
simple_image	Creates an image widget.	prefix , height, key, spaceBefore
file_text	Creates a text field and a button allowing to select a file by opening a file dialog.	ATT2, extensions
time	Displays the current time (format HH:MM)	font_size, font_style, horizontal_alignment, key, spaceBefore
day	Displays the current date (day in letters + DD)	font_size, font_style, horizontal_alignment, key, spaceBefore
controller_name	Displays the controller name.	role , font_size, font_style, key, spaceBefore
progress	Creates a progress bar.	role, property , size, manageAlert, displayProgression, isVertical, horizontal_alignment, key, spaceBefore

* Or: `hAlignment`

Tag	Description	Attributes (bold = mandatory)
plot	Creates a plot widget linked to one or several plot datas.	role , data , x_axis_title, y__axis_title, xAxisTitleProperty, yAxisTitleProperty, height, width, key
plot_launcher	Creates a button to open a plot.	role , data , x_axis_title, y__axis_title, xAxisTitleProperty, yAxisTitleProperty, height, width, spaceBefore, key
property_switcher	Creates a property switcher widget.	role , property , switcher_key , key, spaceBefore
graphical_switcher	Creates a graphical switcher widget.	switcher_key , switcher_type, prefix, height, initial_value, key, spaceBefore

2.3 Formatting

Formatting tags can be added only in *typeProperties.xml* file, within `<property>` tag.

Tag	Role	Attributes (bold = mandatory)
nb_decimal_places	Indicates the number of decimal places for the property. Its value can be a number or a property name.	nb_decimal_places or property_name
hexadecimal_format	Allows to limit the authorised character to [0..9] and ['A'..'F']	
unit_format	Allows to display some standard units with correct layout, for example “deg” will appear as “°”, “mu” as “μ”...	
scientific_format	Indicates that the property will be displayed using scientific format when its value is less than 0.001 or greater than 1000.	nb_decimal_places

2.4 Conditions

Tag	Role	Attributes (bold = mandatory)
greater_than	Indicates that the property value must be greater or equals to the given value.	value
lower_than	Indicates that the property value must be less or equals to the given value.	value
positive	Indicates that the property value must be positive.	
strictly_positive	Indicates that the property value must be strictly positive.	
range	Indicates that the property value must be between given values.	min_included, max_included
property_range	Indicates that the property value must be between given property values.	min_property, max_property
specific_values	Indicates that the property value must be among given values.	values