NJX:FIELDITEM NJX:FIELDITEM

# **NJX:FIELDITEM**

The NJX:FIELDITEM control is used to configure the individual fields in an NJX:FIELDLIST control in order to create a complex field list. The fields of a complex field list are mapped to a group array in the Natural application. For each field in the NJX:FIELDLIST control, one NJX:FIELDITEM control is needed. The NJX:FIELDITEM controls are used to configure the fields in the list independently.

The following topics are covered below:

- Example
- Adapter Interface
- Built-in Events
- Properties

### **Example**



The XML code for the example looks as follows:

```
<rowarea name="Complex Field List">
   <itr>
        <njx:fieldlist fieldlistprop="columns" fieldcount="5"
         hdist="60">
            <njx:fielditem valueprop="id" width="80"
             invisiblemode="cleared">
            </njx:fielditem>
        </njx:fieldlist>
   </itr>
    <itr>
        <njx:fieldlist fieldlistprop="columns" fieldcount="5"
         hdist="10">
            <njx:fielditem valueprop="last" width="130"
             invisiblemode="invisible">
            </njx:fielditem>
        </nix:fieldlist>
    </itr>
    <itr>
        <njx:fieldlist fieldlistprop="columns" fieldcount="5"
        hdist="40">
            <njx:fielditem valueprop="first" width="100"
             invisiblemode="invisible">
            </njx:fielditem>
        </njx:fieldlist>
   </itr>
</rowarea>
```

NJX:FIELDITEM Adapter Interface

## **Adapter Interface**

DEFINE DATA PARAMETER
1 COLUMNS (1:\*)
2 FIRST (A) DYNAMIC
2 ID (A) DYNAMIC
2 LAST (A) DYNAMIC
2 STATUS (A) DYNAMIC
END-DEFINE

For all NJX:FIELDLIST controls that are bound to the same value in fieldlistprop (here: columns), one common structure array is generated (here: COLUMNS).

For each NJX:FIELDITEM control, an element in the structure is generated according to the value bound in valueprop (here: FIRST, ID and LAST).

For each occurrence of the structure array, a parameter with the fixed name STATUS is generated. This parameter can be used to control the status of the elements in a similar way as it is done with the statusprop of the FIELD control.

#### **Built-in Events**

The fields in the NJX:FIELDLIST control (NJX:FIELDITEM controls or NJX:FIELDVALUE controls) behave like FIELD controls.

#### **Properties**

Basic			
valueprop	Name of the adapter parameter that provides the content of the control.	Obligatory	

width	Width of the control.	Sometimes	100
Widdi		obligatory	
	There are three possibilities to define the width:		120
	(A) You do not define a width at all. In this		140
	case the width of the control will either be a		160
	default width or - in case of container controls - it will follow the width that is occupied by		180
	its content.		200
	(B) Pixel sizing: just input a number value (e.g. "100").		50%
	(C) Percentage sizing: input a percantage value (e.g. "50%"). Pay attention: percentage sizing will only bring up correct results if the parent element of the control properly defines a width this control can reference. If you specify this control to have a width of 50% then the parent element (e.g. an ITR-row) may itself define a width of "100%". If the parent element does not specify a width then the rendering result may not represent what you expect.		100%
comment	Comment without any effect on rendering and behaviour. The comment is shown in the layout editor's tree view.	Optional	
Appearance	,	1	
width	(already explained above)		
length	Width of FIELD in amount of characters. WIDTH and LENGTH should not be used	Optional	5
	together. Note that the actual size of the control depends on the font definition if using		10
	the LENGTH property.		15
			20
			int-value
maxlength	Maximum number of characters that a user may enter into this FIELD. This property is	Optional	5
	not depending on the LENGTH property -		10
	please do not get confused by the similar naming. MAXLENGTH has nothing to do		15
	with the optical sizing of the control but only with the number of characters you may input.		20
			int-value
textalign	Alignment of text inside the control.	Optional	left
			center
			right

password	If set to "true", each entered character is displayed as a '*'.	Optional	true
displayonly	If set to true, the FIELD will not be accessible for input. It is just used as an output field.	Optional	true false
uppercase	If "true" then all input is automatically transferred to upper case characters.	Optional	true false
align	Horizontal alignment of control in its column.  Each control is "packaged" into a column. The column itself is part of a row (e.g. ITR or TR). Sometimes the size of the column is bigger than the size of the control itself. In this case the "align" property specifies the position of the control inside the column. In most cases you do not require the align control to be explicitly defined because the size of the column around the controls exactly is sized in the same way as the contained control.  If you want to directly control the alignment of text: in most text based controls there is an	Optional	left center right
valign	explicit property "textalign" in which you align the control's contained text.  Vertical alignment of control in its column.	Optional	top
	Each control is "packaged" into a column. The column itself is part of a row (e.g. ITR or TR). Sometimes the size of the column is bigger than the size of the control. In this case the "align" property specify the position of the control inside the column.		middle bottom
colspan	Column spanning of control.  If you use TR table rows then you may sometimes want to control the number of columns your control occupies. By default it is "1" - but you may want to define the control to span over more than one columns.  The property only makes sense in table rows that are snychronized within one container (i.e. TR, STR table rows). It does not make sense in ITR rows, because these rows are explicitly not synched.	Optional	1 2 3 4 5 5 50 int-value

rowspan	Row spanning of control.	Optional	1
	If you use TR table rows then you may sometimes want to control the number of rows		2
	your control occupies. By default it is "1" - but you may want to define the control two span		3
	over more than one columns.		4
	The property only makes sense in table rows that are snychronized within one container		50
	(i.e. TR, STR table rows). It does not make sense in ITR rows, because these rows are explicitly not synched.		int-value
fieldstyle	CSS style definition that is directly passed into this control.	Optional	background-color: #FF0000
	With the style you can individually influence		color: #0000FF
	the rendering of the control. You can specify any style sheet expressions. Examples are:		font-weight: bold
	border: 1px solid #FF0000		
	background-color: #808080		
	You can combine expressions by appending and separating them with a semicolon.		
	Sometimes it is useful to have a look into the generated HTML code in order to know where direct style definitions are applied. Press right mouse-button in your browser and select the "View source" or "View frame's source" function.		
noborder	Boolean value defining if the control has a border. Default is "false".	Optional	true
transparentbackground	Boolean value defining if the control is rendered with a transparent background.  Default is "false".	Optional	true
invisiblemode	If the visibility of the control is determined dynamically by an adapter property then there are two rendering modes if the visibility is "false":	Optional	invisible cleared
	(1) "invisible": the control is not visible.		
	(2) "disabled": the control is deactivated: it is "grayed" and does not show any roll over effects any more.		

tabindex	Index that defines the tab order of the control. Controls are selected in increasing index order	Optional	-1
	and in source order to resolve duplicates.		0
			1
			2
			5
			10
			32767
Binding			I
valueprop	(already explained above)		
flush	Flushing behaviour of the input control.	Optional	screen
	By default an input into the control is registered within the browser client - and communicated to the server adapter object when a user e.g. presses a button. By using the FLUSH property you can change this behaviour.  Setting FLUSH to "server" means that directly after changing the input a synchronization		server
	with the server adapter is triggered. As consequence you directly can react inside your adapter logic onto the change of the corresponding value Please be aware of that during the synchronization always all changed properties - also the ones that were changed before - are transferred to the adapter object, not only the one that triggered the synchonization.		
	Setting FLUSH to "screen" means that the changed value is populated inside the page. You use this option if you have redundant usage of the same property inside one page and if you want to pass one changed value to all its representaion directly after changing the value.		
flushmethod	When the data synchronization of the control is set to FLUSH="server" then you can specify an explicit event to be sent when the user updates the content of the control. By doing so you can distinguish on the server side from which control the flush of data was triggered.	Optional	

valuetextprop	Name of the adapter parameter that provides a "human understandable" description for the value: in some cases you enter an id into a FIELD but want to display the id and a description to the user. At runtime, the values provided by the VALUEPROP- and the VALUETEXTPROP-property are combined into one text (string) that is returned into the FIELD.	Optional	
textidmode	If using property "valuetextprop" then a field knows an id and a text for a certain value. There are three types of display: either both are shown together, separated by an "-" (e.g. "id - text"). Or only text is shown or only the id is shown. If not defined at all then the system's default text id-mode will be chosen. The default mode can be defined as part of the CIS session context.	Optional	
titleprop	Name of the adapter parameter that dynamically defines the title of the control. The title is displayed as tool tip when ther user moves the mouse onto the control.	Optional	
bgcolorprop	Name of the adapter parameter that provides the background color of the control.	Optional	
fgcolorprop	Name of the adapter parameter that passes back a color value (e.g. "#FF0000" for red color). The color value is used as text color in the control The background color is automatically chosen dependent from the text color: for light text colors the background color is black, for dark text colors the color is default. Use BGCOLORPROP to choose both - text and background color.	Optional	
autocallpopupmethod	Name of the adapter parameter that controls that the field's value help event is sent to the adapter with a certain offset (milliseconds) after last key down event.	Optional	true false
maxlengthprop	Name of the adapter parameter that provides the maximum number of characters that a user may enter into this FIELD. Consider to use MAXLENGTH to define this number in a static way.	Optional	
Validation			

datatype	By default, the FIELD control is managing its content as string. By explicitly setting a datatype you can define that the control	Optional	date float
	will check the user input if it reflects the		int
	datatype. E.g. if the user inputs "abc" into a field with datatype "int" then a corresponding		long
	error message will popup when the user leaves the field.		time
	will format the data coming from the server		timestamp
	or coming form the user input: if the field has datatype "date" and the user inputs "010304"		color
	then the input will be translated into "01.03.2004" (or other representation,		xs:decimal
	dependent on date format settings).		xs:double
	In addition valeu popups are offered for the user automatically for some datatypes: e.g.		xs:date
	when specifying datatype "date" the		xs:dateTime
	automatically the field provides a calendar input popup.		xs:time
	Please note: the datatype "float" is named a bit		
	misleading - it represents any decimal format number. The server side representation may be		N n.n
	a float value, but also can be a double or a BigDecimal property.		P n.n
			string n
			xs:byte
			xs:short
validationrules	Contains information used for Data Validation.	Optional	
	Use the Validation Rules Editor to make changes!		
validation	Regular expression against which the content of the field is checked on client side when the	Optional	[a-zA-Z0-9]
	user changes the field. If the validation fails		{1,}\\@[a-zA-Z0-9]
	then an error message popup up and informs the user about the wrong input.		{1,}\\.\\w{2,}\\d{5}
			[0-9 )(-/+]+
validationprop	Name of the adapter parameter that provides a regular expression for the validation of the field. Works the same way as VALIDATION but in a dynamic way.	Optional	

validationuserhint	If a client side validation fails due to wrong user input then an error popup is opened. If you define a hint inside this property then the hint is output to the user in order to tell in which way to input the value. The hint is not language dependent.	Optional	
validationuserhintprop	If using validation expressions (either property "validation" or "validationprop") then a popup comes up if the user inputs wrong values into a field. Inside this popup a certain text may be added in order to explain to the user what he/she did not correctly input. This text can be either statically defined or dynamically - by using this property.	Optional	
digits	Number that specifiies how many digits are to be displayed (ie digits before the comma). If	Optional	1
	using this feature then the DATATYPE property must be set to 'float'. See also		2
	DECIMALDIGITS.		3
			int-value
digitsprop	Name of the adapter parameter that provides information how many digits are to be displayed (i. e. digits before the decimal character). If this feature is used, the DATATYPE property must be set to 'float'.	Optional	
decimaldigits	Number that specifiies how many decimal digits are to be displayed. If using this feature then the DATATYPE property must be set to 'float'.	Optional	1 2 3
			int-value
decimaldigitsprop	Name of the adapter parameter that provides information how many decimal digits are to be displayed (i. e. digits before the decimal character). If this feature is used, the DATATYPE property must be set to 'float'.	Optional	
spinrangemin	An integer value which defines the lower bound of the value range.	Optional	
spinrangemax	An integer value which defines the upper bound of the value range.	Optional	
Valuehelp			
popupmethod	Name of the event that is sent to the adapter when the user requests value help by pressing F4 or F7 or by clicking into the FIELD with the right mouse button. See at chapter 'Popup Dialog Management' for more details. If the POPUPMETHOD is defined, a small icon is shown inside the field to indicate to the user that there is some value help available.	Optional	openIdValueCombo openIdValueHelp openIdValueComboOrPopup

plean property that control if a field with PUPMETHOD defined is still usable for board input. If "false" (= default) then the can input a value either directly via board or by using the popupmethod's help. Let to "true" then no keyboard input is sible - but only selection from the	Optional	true
up-method's help.		
ne of the adapter parameter that provides information whether a POPUPMETHOD vailable or not. This feature is used in narios in which a FIELD offers e.g. value or not, depending on business logic de the adapter.	Optional	
ue help in a field is triggered either by king with the mouse or by pressing a ain key inside the field. The "traditional" is are "cusrsor-down", "F7" or "F4". netimes you do not want to mix other rsor-down" behaviour (e.g. scrolling in a) with the value help behaviour. In this e switch this property to "true" - and the ne help will only come up anymore when cursor-down" is pressed.	Optional	true false
el width of the standard enIdValueCombo" popup dialog. Default eld width or at least 150 pixel.	Optional	1 2 3 int-value
L of image that is displayed inside the at corner of the field to indicate to the user there is some value help available Any ge type (.gif, .jpg,) that your browser is understand is valid.  The following options to specify the URL:  Define the URL relative to your page. It page is generated directly into your feet's folder. Specifying "images/xyz.gif" point into a directory parallel to your e. Specifying  HTMLBasedGUI/images/new.gif" will int to an image of a neighbour project.	Optional	gif jpg jpeg
L t t ges E I I I I I I I I I I I I I I I I I I	of image that is displayed inside the corner of the field to indicate to the user here is some value help available Any e type (.gif, .jpg,) that your browser understand is valid.  The following options to specify the URL:  Define the URL relative to your page.  page is generated directly into your ct's folder. Specifiying "images/xyz.gif" boint into a directory parallel to your Specifying	of image that is displayed inside the corner of the field to indicate to the user here is some value help available Any e type (.gif, .jpg,) that your browser understand is valid.  The following options to specify the URL:  Define the URL relative to your page. page is generated directly into your ct's folder. Specifiying "images/xyz.gif" boint into a directory parallel to your Specifying

touchpadinput	Boolean property that decides if touch pad support is offered for the FIELD control. The default is "false". If switched to "true" then you can input data into the field via a touch pad. As consequence you can use this control for making inputs through a touch terminal.	Optional	false
onlinehelp			
helpid	Help id that is passed to the online help management in case the user presses F1 on the control.	Optional	
title	Text that is shown as tooltip for the control.	Optional	
	Either specify the text "hard" by using this TITLE property - or use the TITLETEXTID in order to define a language dependent literal.		
titletextid	Text ID that is passed to the multi lanaguage management - representing the tooltip text that is used for the control.	Optional	
formula	Contains information used by the Formula Editor.	Optional	
	Use the Formula Editor to make changes!		
Hot Keys	,	1	
hotkeys	Comma separated list of hot keys. A hotkey consists of a list of keys and a method name. Separate the keys by "-" and the method name again with a comma	Optional	
	Example:		
	ctrl-alt-65;onCtrlAltA;13;onEnterdefines two hot keys. Method onCtrlAltA is invoked if the user presses Ctrl-Alt-A. Method "onEnter" is called if the user presses the ENTER key.  Use the popup help within the Layout Painter		
	to input hot keys.		
Natural			
njx:natname	If a Natural variable with a name not valid for Application Designer (for instance #FIELD1) shall be bound to the control, a different name (for instance HFIELD1) can be bound instead. If the original name (in this case #FIELD1) is then specified in this attribute, the original name is generated into the parameter data area of the Natural adapter and a mapping between the two names is generated into the PROCESS PAGE statement of the Natural adapter.	Optional	

njx:natcomment	The value of this attribute is generated as comment line into the parameter data area of the Natural adapter, before the field name. The Map Converter, for instance, uses this attributes to indicate for a generated statusprop variable to which field the statusprop belongs.	Optional	
Miscellaneous			
testtoolid	Use this attribute to assign a fixed control identifier that can be later on used within your test tool in order to do the object identification	Optional	