

# 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

Complex Field List				
11100102	11100105	11100106	11100107	11100108
Schindler	Schirm	Schmitt	Schmidt	Schneider
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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>
    </njx: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>
```

# 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			
<code>valueprop</code>	Name of the adapter parameter that provides the content of the control.	Obligatory	

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

password	If set to "true", each entered character is displayed as a '*'.  	Optional	true false
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 explicit property "textalign" in which you align the control's contained text.	Optional	left center right
valign	Vertical 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. In this case the "align" property specify the position of the control inside the column.	Optional	top 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 synchronized 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 50 int-value

rowspan	<p>Row spanning of control.</p> <p>If you use TR table rows then you may sometimes want to control the number of rows your control occupies. By default it is "1" - but you may want to define the control two span over more than one columns.</p> <p>The property only makes sense in table rows that are synchronized within one container (i.e. TR, STR table rows). It does not make sense in ITR rows, because these rows are explicitly not synched.</p>	Optional	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>50</p> <p>int-value</p>
fieldstyle	<p>CSS style definition that is directly passed into this control.</p> <p>With the style you can individually influence the rendering of the control. You can specify any style sheet expressions. Examples are:</p> <p>border: 1px solid #FF0000</p> <p>background-color: #808080</p> <p>You can combine expressions by appending and separating them with a semicolon.</p> <p>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.</p>	Optional	<p>background-color: #FF0000</p> <p>color: #0000FF</p> <p>font-weight: bold</p>
noborder	<p>Boolean value defining if the control has a border. Default is "false".</p>	Optional	<p>true</p> <p>false</p>
transparentbackground	<p>Boolean value defining if the control is rendered with a transparent background. Default is "false".</p>	Optional	<p>true</p> <p>false</p>
invisiblemode	<p>If the visibility of the control is determined dynamically by an adapter property then there are two rendering modes if the visibility is "false":</p> <p>(1) "invisible": the control is not visible.</p> <p>(2) "disabled": the control is deactivated: it is "grayed" and does not show any roll over effects any more.</p>	Optional	<p>invisible</p> <p>cleared</p>

tabindex	Index that defines the tab order of the control. Controls are selected in increasing index order and in source order to resolve duplicates.	Optional	-1 0 1 2 5 10 32767
Binding			
valueprop	(already explained above)		
flush	<p>Flushing behaviour of the input control.</p> <p>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.</p> <p>Setting FLUSH to "server" means that directly after changing the input a synchronization 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 synchronization.</p> <p>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.</p>	Optional	screen server
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 the 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			

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



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 specifies how many digits are to be displayed (ie digits before the comma). If using this feature then the DATATYPE property must be set to 'float'. See also DECIMALDIGITS.	Optional	1 2 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 specifies 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

popupinputonly	Boolean property that control if a field with POPUPMETHOD defined is still usable for keyboard input. If "false" (= default) then the user can input a value either directly via keyboard or by using the popupmethod's help. If set to "true" then no keyboard input is possible - but only selection from the popup-method's help.	Optional	true false
popupprop	Name of the adapter parameter that provides the information whether a POPUPMETHOD is available or not. This feature is used in scenarios in which a FIELD offers e.g. value help or not, depending on business logic inside the adapter.	Optional	
popuponalt40	Value help in a field is triggered either by clicking with the mouse or by pressing a certain key inside the field. The "traditional" keys are "cursor-down", "F7" or "F4". Sometimes you do not want to mix other "cursor-down" behaviour (e.g. scrolling in lists) with the value help behaviour. In this case switch this property to "true" - and the value help will only come up anymore when "alt-cursor-down" is pressed.	Optional	true false
popupcombowidth	Pixel width of the standard "openIdValueCombo" popup dialog. Default is field width or at least 150 pixel.	Optional	1 2 3 int-value
popupicon	URL of image that is displayed inside the right corner of the field to indicate to the user that there is some value help available.. Any image type (.gif, .jpg, ...) that your browser does understand is valid.  Use the following options to specify the URL:  (A) Define the URL relative to your page. Your page is generated directly into your project's folder. Specifying "images/xyz.gif" will point into a directory parallel to your page. Specifying "../HTMLBasedGUI/images/new.gif" will point to an image of a neighbour project.  (B) Define a complete URL, like "http://www.softwareag.com/images/logo.gif".	Optional	gif jpg jpeg

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	true 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.  Either specify the text "hard" by using this TITLE property - or use the TITLETEXTID in order to define a language dependent literal.	Optional	
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.  Use the Formula Editor to make changes!	Optional	
Hot Keys			
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  Example:  ctrl-alt-65;onCtrlAltA;13;onEnter ...defines 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.	Optional	
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	

<p>njx:natcomment</p>	<p>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.</p>	<p>Optional</p>	
<p>Miscellaneous</p>			
<p>testtoolid</p>	<p>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</p>	<p>Optional</p>	