## JavaServer<sup>™</sup> Pages Standard Tag Library (JSTL) syntax reference

version 1.0)



JSTL Expression La	nguage Definition					
Implicit Object pageScope	Contains variables which have the scope page.					
requestScope	variables which have the scope request					70
sessionScope applicationScope	variables which have the scope session. variables which have the scope of the a					Schulung "Servlets und JavaServer <sup>™</sup> Pages JSP"
pageContext cookie	JSP PageContext object Cookie values		Orientation in Weinheimer S		ts GmbH www.oio.de	1113.02.08, 2628.05.08, 1315.10.08, 0103.12.08
param header	Request parameters as strings. HTTP request headers as strings.		68309 Mannh		info@oio.de	
headerValues	HTTP request headers as a collection o	f strings	Schulung, Be	eratung	und	
initParam	Context initialization parameters		Entwicklung	mit Jav	a und XML	
JSTL Operators	== / eq, != / ne, < / lt, > / gt, <= / le, >=	t/ge				
Comparison operators: Logical operators:	&& / and,     / or, ! / not	-/ ge				
Arithmetic operators: Property access:	+, -, *, /, % / mod  Dot operator (.) can be used to retrieve	e a named property. To access numbered or named properties use the	bracket operator (	п)		
	Example: \${user.name}, \${row[0]} or	\${order.items.price}				
	Use the <b>empty operator</b> to determine v	whether a collection or string is empty or null Example: <c:if test="&lt;/th&gt;&lt;th&gt;s{empty pageScope&lt;/th&gt;&lt;th&gt;:users}"></c:if>				
Legend	All tags are case sensitive. A pair of sir plain text = required italics = us	ngle quotes is equivalent to a pair of double quotes. Spaces are not a er-defined <u>value</u> = default value <u>attribute</u> = using a bo				alue.
	{ } = required choice  = or	[ ] = optional = list of items		ex.= exp		sc. = scoped
Action	Description	Syntax	Attributes			
<pre><cout></cout></pre>	eneral Purpose Actions  Evaluates an expression and outputs the	e <c:out [escapexml="{true false}" ]<="" th="" value="value"><th>name value</th><th>dyn* true</th><th>type Object</th><th>description  Expression to be evaluated</th></c:out>	name value	dyn* true	type Object	description  Expression to be evaluated
	result to the current JspWriter object.	default ="defaultValue"  />	escapeXml	true	boolean	Determines whether <>,&,'," in the result should be converted to their corresponding character entit codes.
			default	true	Object	Default value if the resulting value is null.
<c:set></c:set>	Sets the value of a scoped variable or a property of a target object.	<pre><c:set <u="">value="value" var="varName" [scope="{page request session application}"]/&gt; or</c:set></pre>	value var	true false	Object String	Expression to be evaluated Scoped variable to hold the value specified in the action.
		<c:set <="" target="target" th="" value="value"><th>scope target</th><th>false true</th><th>String Object</th><th>Scope for var.  JavaBeans object with setter property, or to a java.util.Map object.</th></c:set>	scope target	false true	String Object	Scope for var.  JavaBeans object with setter property, or to a java.util.Map object.
		property="propertyName"/>	property	true	String	Name of the property to be set in the target object.
<c:remove></c:remove>	Removes a scoped variable.	<c:remove <br="" var="varName">[scope="{page request session application}"]/&gt;</c:remove>	var scope	false false	String String	Name of the scoped variable to be removed Scope for var.
<c:catch></c:catch>	Catches a java.lang.Throwable thrown	<c:catch [var="varName" ]=""></c:catch>	var	false	String	Variable to expose information about error
Core Tag Library - Co	by any of its nested actions.	nested actions	nama	dyn*	hine	description
<pre><cif></cif></pre>	Evaluates its body content if the	<c:if [var="varName" ]<="" test="testCondition" th=""><th>name test</th><th>true</th><th>boolean</th><th>Test condition that determines whether or not the body content should be processed</th></c:if>	name test	true	boolean	Test condition that determines whether or not the body content should be processed
	expression is true.	[scope="{page request session application}" > body content	var scope	false false	String String	Name of the exported scoped variable for the resulting test condition value. Scope for var.
			Constraints: If see			
<c:choose> <c:when></c:when></c:choose>	Provides the context for mutually exclusive conditional execution.	<c:choose> <c:when test="testCondition1">body content </c:when></c:choose>	test	true	boolean	Test condition - determines whether or not the body content should be processed
<c:otherwise></c:otherwise>		<pre><c:when test="testCondition2">body content </c:when> <c:otherwise>conditional block </c:otherwise></pre>	Constraints: The constr			v contain 1 or more <c:when> actions (must all appear before <c:otherwise>) and 0 or 1</c:otherwise></c:when>
					,	
Core Tag Library - Ite <c:foreach></c:foreach>		<c:foreach <="" [var="varName" ]="" items="collection" th=""><th><i>name</i> var</th><th>dyn* false</th><th>type String</th><th>description  Name of the exported scoped variable for the current item. Its type depends on the object of the</th></c:foreach>	<i>name</i> var	dyn* false	type String	description  Name of the exported scoped variable for the current item. Its type depends on the object of the
C.IOI Each	collection of objects, or repeats it a fixe	[varStatus="varStatusName"]			(see descr.)	underlying collection.
	number of times.	[begin="begin"][end="end"][step="step"]> body content	items varStatus	true false	String	Collection of items to iterate over <i>Types</i> can contain all supported types Name of the exported scoped variable for the status of the iteration.
			begin / end step	true	int int	Iteration begins / ends at the specified index (items) or at the specified value.  Iteration will only process every step items.
<c:fortokens></c:fortokens>	Itemates assessed to a second all books					l end must be specified.
C.101 TOKEHS	Iterates over tokens, separated by the supplied delimiters.	<pre><c:fortokens [var="varName" ]<="" ][varstatus="varStatusName" delims="delimiters" items="stringOfTokens" pre=""></c:fortokens></pre>	var items	false true	String String	Name of the exported scoped variable for the current item of the iteration String of tokens to iterate over.
		[begin="begin"] [end="end"] [step="step"]> body content	delims varStatus	true false	String String	The set of delimiters (the characters that separate the tokens in the string).  Name of the exported scoped variable for the status of the iteration.
			begin / end step	true true	int int	Iteration begins / ends at the token located at the specified index.  Iteration will only process every step tokens.
Core Tag Library - U			name	dyn*	type	description
<c:redirect></c:redirect>	Sends an HTTP redirect to the client.	<pre><c:redirect [context="context" ]="" url="value"></c:redirect> optional <c:param> subtags within the body</c:param></pre>	url	true true	String String	The URL of the resource to redirect to.  Context name when specifying a relative URL that belongs to a foreign context.
<c:param></c:param>	Adds request parameters to a URL.	<c:param name="name" value="value"></c:param>	name	true	String	Name of the query string parameter.
<c:import></c:import>	Imports the content of a URL-based	<pre><c:import [context="context" ]<="" ][var="varName" pre="" url="url"></c:import></pre>	value url	true true	String String	Value of the parameter. The URL of the resource to import.
	resource.	[scope="{page request session application}"]	context	true	String	Context name when specifying a relative URL that belongs to a foreign context.
		[varReader="varReaderName"] [charEncoding="charEncoding"]/>	var scope	false false	String String	Name of the exported scoped variable for the resource's content.  Scope for var.
		optional <c:param> subtags within the body</c:param>	charEncoding varReader	true false	String String	Character encoding of the content at the input resource.  Name of the exported scoped variable for the resource's content. (Type: Reader)
			Constraints: If va	rReader is	specified, var and	scope must not be specified.
<c:url></c:url>	Builds a URL with the proper rewriting rules applied.	<pre>c:url value="value" [context="context"][var="varName"] [scope="{page request session application}"] /&gt;</pre>	value context	true true	String String	URL to be processed.  Name of the ex. sc. variable for the resource's content.
		optional <c:param> subtags within the body</c:param>	var	false false	String	Name of the ex. sc. variable for the processed url.  Scope for var.
SQL Actions		opnomia C.parano suorago minim inc oody	scope name	dyn*	String type	description description
<sql:query></sql:query>	Queries a database.	<sql:query <u="">sql="sqlQuery" var="varName" [scope="{page request session application}"]</sql:query>	sql dataSource	true true	String String, javax.sql.	SQL query statement. JNDI Data source
		[dataSource="dataSource"]			DataSource	
		[maxRows="maxRows"] [startRow="startRow"]/>	maxRows startRow	true true	int int	The maximum number of rows to be included in the query result.  The returned Result object includes the rows starting at the specified index.
		optional <sql:param> actions within the body</sql:param>	var scope	false false	String String	Name of the exported scoped variable for the query result.  Scope for var.
<sql:update></sql:update>	Executes an SQL INSERT, UPDATE,	<sql:update <="" sql="sqlUpdate" th=""><th>sql</th><th>true</th><th>String</th><th>SQL update statement.</th></sql:update>	sql	true	String	SQL update statement.
	or DELETE statement. (and SQL statements that return nothing)	[dataSource="dataSource"] [var="varName"] [scope="{page request session application}"]/>	dataSource	true	String, javax.sql. DataSource	JNDI Data source
	, , , , , , , , , , , , , , , , , , ,	optional <sql:param> actions within the body</sql:param>	var	false false	String	Name of the exported scoped variable for the result of the database update.(Integer)
<sql:transaction></sql:transaction>	Establishes a transaction context for	<pre><sql:transaction [datasource="dataSource" ]<="" pre=""></sql:transaction></pre>	dataSource	true	String String, javax.sql.	Scope for var .  JNDI Data source
	<sql:query> and <sql:update> subtags.</sql:update></sql:query>	[isolation=isolationLevel]> <sql:query> and <sql:update> statements</sql:update></sql:query>	isolation	true	DataSource String	Max contain read_committed   read_uncommitted   repeatable_read   serializable.
			Constraints: Any i		l:query> and <sq< th=""><th>l:update&gt; actions must not specify a dataSource attribute.</th></sq<>	l:update> actions must not specify a dataSource attribute.
<sql:setdatasource></sql:setdatasource>	Exports a data source either as a scoped variable or as the data source	d <sql:setdatasource {datasource="dataSource"  <br="">[url="jdbcUrl"] [driver="driverClassName"]</sql:setdatasource>	dataSource	true	String, javax.sql. DataSource	JNDI Data source
	configuration variable	[user="userName"]	driver	true	String	Class name of the JDBC driver.
	(javax.servlet.jsp.jstl.sql.dataSource).	[password="password "]} [var="varName"]	url user	true	String String	JDBC database URL. JDBC database user
		[scope="{page request session application}"]/>	password var	true false	String String	JDBC user password  Name of the ex. sc. variable for the data source specified. Type: String / DataSource.
			scope	false	String	Scope for var.
<sql:param></sql:param>	Sets the values of parameter markers ("?") in a SQL statement.	<sql:param <u="">value="value"/&gt;</sql:param>	value	true	Object	Parameter value.
<sql:dateparam></sql:dateparam>	Like <sql:param> for values of type</sql:param>	<sql:dateparam type="timestampitime date " value="value"></sql:dateparam>	value	true	java.util.Date	Parameter value for DATE, TIME, or TIMESTAMP column.
	java.util.Date. Subtag of <sql:query> and <sql:update>.</sql:update></sql:query>	type=" <u> timestamp</u>  time date "/>	type	true	String	One of "date", "time" or "timestamp".
	_					

<sup>\*</sup> The "dyn" (dynamic) column title presents the rtexprvalue element defined in a TLD. It captures the dynamic behaviour of an attribute for both library versions.

 $\textit{The content is based on the JavaServer}^{\mathsf{TM}} \ \textit{Pages Standard Tag Library specification, version 1.0.(http://java.sun.com)}$ 



Action	Description	Syntax	Attributes			
KML Tag Library - XM	IL Core Actions		name	dyn*	type	description
<x:out></x:out>	Evaluates an XPath expression and outputs the result to the current JspWriter object.	<x:out <br="" select="XPathExpression">[escapeXml="{true false}"]/&gt;</x:out>	select escapeXml	false true	String boolean	XPath expression.  Determines whether <>,&,',' in the result should be converted to their corresponding character entity codes.
<x:parse></x:parse>		<x:parse <="" td="" xml="XMLDocument"><td>xml</td><td>true</td><td>String, Reader</td><td>Source XML document to be parsed</td></x:parse>	xml	true	String, Reader	Source XML document to be parsed
		{var="var" [scope={page request session application}]  varDom="var" [scopeDom="scope"]}	systemId	true	String	The system identifier (URI) for parsing the XML document.
		[systemId="systemId"]	filter	true	org.xml.sax.	Filter to be applied to the source document.
		[filter="filter"]/>	var	true	XMLFilter String	Name of the exported scoped variable for the parsed XML document.
			scope varDom	false false	String String	Scope for var.  See var. The type of the sc. variable is org.w3c.dom.Document.
			scopeDom	false	String	Scope for varDom.
<x:set></x:set>	Evaluates an XPath expression and stores the result into a scoped variable.	<x:set <="" select="XPathExpression" td="" var="varName"><td>select</td><td>false</td><td>String</td><td>XPath expression to be evaluated.  Name of the ex. sc. variable to hold the value specified in the action.</td></x:set>	select	false	String	XPath expression to be evaluated.  Name of the ex. sc. variable to hold the value specified in the action.
	stores the result into a scoped variable.	[scope="{page request session application}"]/>	var scope	false false	String String	Scope for var.
	IL Flow Control Actions		name	dyn*	type	description
<x:if></x:if>	Evaluates the XPath expression specified in the select attribute and	<pre><x:if [scope="{page request session application}" [var="varName" ]="" select="XPathExpression"></x:if></pre>	select var	false false	String String	The test condition that tells whether or not the body content should be processed.  Name of the ex. sc. variable for the resulting value of the condition. (Boolean
	renders its body content if the expression evaluates to true.	body content 	scope Constraints: If scop	false	String	Scope for var.
<x:when></x:when>	Provides the context for mutually	<x:choose></x:choose>	select	false	String	Test condition that determines whether or not the body content should be processed.
	exclusive conditional execution.	<pre><x:when select="XPathExpr">body content </x:when> <x:otherwise>conditional block </x:otherwise></pre>	Constraints: The bo			v contain: before <c:otherwise>)</c:otherwise>
		<	0 or 1 <x:otherwise< td=""><td></td><td></td><td></td></x:otherwise<>			
<x:foreach></x:foreach>	Evaluates the given XPath expression and repeats its nested body content over	<x:foreach [var="varName" ]="" select="XPathExpression"></x:foreach>	var select	false false	String	Name of the exported scoped variable for the current item of the iteration.
		sody content	select	laise	String	XPath expression to be evaluated.
	IL Transform Actions		name	dyn*	type	description
<x:transform></x:transform>	Applies an XSLT stylesheet transformation to an XML document.	<x:transform< p=""> xml="XMLDocument" xsit="XSLTStylesheet"</x:transform<>	xml	true	String, Reader, javax.xml.	Source XML document to be transformed.
		[xmlSystemId="XMLSystemId"]	xslt	true	transform.Source see above (xml)	Type also: org.w3c.dom.Document, or object exported by <x:parse>, <x:set>.  Transformation stylesheet as a String, Reader, or Source object.</x:set></x:parse>
		[xsltSystemId="XSLTSystemId"] [{var="varName"	xmlSystemId	true	String	The system identifier (URI) for parsing the XML document.
		[scope="{page request session application}"]  result="resultObject"} />	xsltSystemId var	true false	String String	The system identifier (URI) for parsing the XSLT stylesheet.  Name of the ex. sc. variable for the transformed XML document.(org.w3c.dom.Document)
			scope result	false true	String javax.xml.	Scope for var.  Object that captures or processes the transformation result.
		optional <x:param> subtags within the body</x:param>			transform.Result	
<x:param></x:param>	Set transformation parameters. Nested	<x:param <u="" name="name">value="value"/&gt;</x:param>	name value	true true	String Object	Name of the transformation parameter.  Value of the parameter.
18n-capable formatti	ing Tag Library - Internationaliz	ration (i18n) Actions	name	dyn*	type	description
<fmt:setlocale></fmt:setlocale>	Stores the specified locale in the javax.servlet.jsp.jstl.fmt.locale	<pre><fmt:setlocale [scope="{page}request session application}" [variant="variant" ]="" value="locale"></fmt:setlocale></pre>	value	true	String,	A String value is interpreted as the printable representation of a locale. Language and country codes must be separated by hyphen ('-') or underscore ('_').
	configuration variable.	scope (page) request session appneation	variant	true	String	Vendor- or browser-specific variant.
<fmt:bundle></fmt:bundle>	Creates on it in localization contact to	<fmt:bundle [prefix="prefix" ]="" basename="basename"></fmt:bundle>	scope basename	false	String String	Scope of the <i>locale</i> configuration variable.  Resource bundle base name. (fully-qualified)
<	be used by its body content.	body content	prefix	true	String	Prefix to be prepended to the value of the message key of any nested <fmt:message> action.</fmt:message>
<fmt:setbundle></fmt:setbundle>		<pre><fmt:setbundle [var="varName" ]<="" basename="basename" pre=""></fmt:setbundle></pre>	basename	true	String	Resource bundle base name. (fully-qualified)
	stores it in the scoped variable or the localizationContext.	[scope="{page request session application}"]/>	var	false	String	Name of the exported scoped variable which stores the i18n localization context.
✓fmt.massaga>	Table on a landing day on the control of		scope	false	String	Scope of var or the localization context configuration variable.
<fmt:message></fmt:message>	Looks up a localized message in a resource bundle.	<pre><fmt:message [bundle="resourceBundle" ]<="" ][var="varName" key="messageKey" pre=""></fmt:message></pre>	key bundle	true true	String Localization	Message key to be looked up  Localization context in whose resource bundle the message key is looked u
		[scope="{page request session application}"]/>	var	false	Context String	Name of the exported scoped variable
		option key and/or	scope Constraints: If scop	false	String fied var must also	Scope for var .
18n-capable formatti	  ing Tag Library - Internationalia	optional <fmt:param> within the body tation (i18n) Actions</fmt:param>	name	dvn*	type	description
<fmt:param></fmt:param>		<fmt:param_value="messageparameter"></fmt:param_value="messageparameter">	value	true	Object	Argument used for parametric replacement.
<fmt:requestencoding></fmt:requestencoding>		<pre><fmt:requestencoding [value="charsetName" ]=""></fmt:requestencoding></pre>	value	true	String	Name of character encoding to be applied when decoding request parameters.
	ing Tag Library - Formatting Ac		name	dyn*	type	description
<fmt:timezone></fmt:timezone>	Specifies the time zone in which time		value	true	String, java. util.TimeZone	The time zone. A String value is interpreted as a time zone ID.
	information is to be formatted or parsed in its body content.				utii. I iiiiezoiie	
<fmt:settimezone></fmt:settimezone>		<pre><fmt:settimezone <="" pre="" value="timeZone"></fmt:settimezone></pre>	value	true	String, java.	The time zone. A String value is interpreted as a time zone ID.
	scoped variable or the time zone configuration variable.	<pre>[var="varName"] [scope="{page request session application}"]/&gt;</pre>	var	false	util.TimeZone String	Name of the exported scoped variable which stores the time zone of type java.util.TimeZone.
	configuration variable.	[scope="{page request session application}"]/>	scope	false	String String	Scope of var or the time zone configuration variable.
<fmt:formatnumber></fmt:formatnumber>	configuration variable.  Formats a numeric value in a locale-	[scope="{page request session application}"]/> <pre><fmt:formatnumber_value="numericvalue"< pre=""></fmt:formatnumber_value="numericvalue"<></pre>	scope value		String String String, Number	Scope of var or the time zone configuration variable.  Numeric value to be formatted
<fmt:formatnumber></fmt:formatnumber>	configuration variable.	scope="(page request session application " />   scope="(pamber currency percent "    pattern="customPattern"	scope value type pattern	false true true true	String String String, Number String String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern.
<fmt:formatnumber></fmt:formatnumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a	scope="{ <u>mase</u>  request session application}" /> <fmt:formatnumber<u>value="numericValue" [type="<u>fnumber</u>eurrency[percent]"]</fmt:formatnumber<u>	value type pattern currencyCode currencySymbol	false true true true true true	String String, Number String String String String String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern.  ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis
<fmt:formatnumber></fmt:formatnumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a	[scope="(nace request session application)" />  -fmt:formatNumber_yalue="numericValue"  [type="(number surrency percent)"   [patter="custonPatters"]  [currencyCode="currencyCode"]  [currencySymbol="currencySymbol"]  [grouping [Seed-"[truffales]"]	scope value type pattern currencyCode	false true true true true	String String String, Number String String String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis
<fmt:formatnumber></fmt:formatnumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a	scope="(page request session application)" />   strit-formatNumber_value="numericValue"     type=" aumber currency percent "      pattern="customPattern"      currencyCode="(currencyCode"      currencySymbol="currencySymbol"      groupingUsed="(truefalse)"      maxIntegerDigits="maxIntegerDigits"     minIntegerDigits="minIntegerDigits"	scope value type pattern currencyCode currencySymbol groupingUsed maxIntegerDigits minIntegerDigits	false true true true true true true true tru	String String, Number String, String String String String boolean	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion
<fmt:formatnumber></fmt:formatnumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a	[scope"   nage  request   session  application) " />  -fint:formatNumber salue" "numeric Value" [type="[number]currency  percent]" [pattern="customPattern"] [currency Gode" ["legfales"] [currency Sombol "currency Symbol"] [grouping Used" "[trufales"]" [maxInteger Digits "maxInteger Digits"] [maxInteger Digits "maxInteger Digits"] [maxInteger Digits "maxInteger Digits"]	scope value type pattern currencyCode currencySymbol groupingUsed maxIntegerDigits minIntegerDigits minFractionDigits minFractionDigits	false true true true true true true true tru	String String String, Number String String String String String boolean int int int	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern.  ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portior Min. number of digits in the fractional portior Min. number of digits in the fractional portior
<fmt:formatnumber></fmt:formatnumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a	scope="(nage request session application)" />  -fmt:formatNumber_salue="numericValue"  type="(number currency percent)"   pattern="customPattern"   currency Code="currency Code"   currency Symbol="currency Symbol"   grouping Used="(trueflate)"   maxIntegerDigits="maxIntegerDigits"   minIntegerDigits="minIntegerDigits"   maxFractionDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"	scope value type pattern currencyCode currencySymbol groupingUsed maxIntegerDigits minIntegerDigits maxFractionDigits	true true true true true true true true	String String, Number String String String String String String boolean int int int	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion Max. number of digits in the integer portion
	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.	scope="(nage request session application)" />  -fmt:formatNumber_salue="numericValue"  type="[number]currency percent]"   pattern="customPattern"   currency Gode"   currency Gode"   currency Gode"   currency Gode"   grouping Used="(trupfalse)"   maxIntegerDigits="maxIntegerDigits"   minIntegerDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"   minFractionDigits="minIntegerDigits"   scope="(nage request session application)" />	scope value type pattern currencyCode currencySymbol groupingUsed maxIntegerDigits minIntegerDigits minFractionDigits var scope	false true true true true true true true tru	String String String, Number String String String String String boolean int int int String String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern.  ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the fractional portior Min. number of digits in the fractional portior Name of the exported scoped variable Scope of var.
<pre><fmt:formatnumber></fmt:formatnumber></pre> <pre><fmt:parsenumber></fmt:parsenumber></pre>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages	scope="(nage request session application)" />  smt:formatNumber_yalue="numericValue"    type="[number currency percent]"     pattern="customPattern"     currencyCode="currencyCode"     currencySymbol="currencySymbol"     grouping Usea"(*Irgaflase)"     maltategerDigits="mintagerDigits"     maltategerDigits="mintagerDigits"     maltractionDigits="minteractionDigits"     maltractionDigits="minteractionDigits"     var="varName"     scope="[nage request session application]" />  smt:parsNumber_yalue="numericValue"    type="[namber]currency percent]"	scope value type pattern currencyCode currencySymbol groupingUsed maxIntegerDigits minIntegerDigits minIrractionDigits var scope value type	false true true true true true true true tru	String String, Number String, Number String String String String String boolean int int int String String String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Man. number of digits in the fractional portior Min. number of digits in the fractional portior Name of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag
	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of	[scope" [nase] request [session application]"  />  -fint:formatNumber yalue" numeric Value" [type="[number]currency] percent]" [pattern="customPattern"] [currency Gode" [urrency Code"] [currency Sombol "currency Symbol"] [grouping [scode" [trueflate]"] [maxInteger Digits "maxInteger Digits"] [minInteger Digits "maxInteger Digits"] [minInteger Digits "minInteger Digits"] [minFraction Digits "minFraction Digits"] [scope" [inare] [scope" [scope" [inare] [scope"	scope value type pattern currencyCode currencySymbol groupingUsed maxIntegerDigits minIntegerDigits minFractionDigits var scope value	false true true true true true true true tru	String String String, Number String String String String String boolean int int int String String String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Slo 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the fractional portior Simme of the exported scoped variable Scope of var.  String to be parsed
	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive	scope="(nage request session application)" />  smt:formatNumber_value="numericValue"    type="[number]currency percent]"    pattern="customPattern"    currency Gode"      maxinteger Digits="maxInteger Digits"    minInteger Digits="minXInteger Digits"    minInteger Digits="minInteger Digits"    scope="[nage]crequest session application]"	scope value yipe pattern currencyCode currencySymbol groupingLised maxIntegerDigits minIntegerDigits minIntegerDigits mifiractionDigits var scope value type pattern	false true true true true true true true tru	String String String, Number String String String String String boolean int int int String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the fractional portion Min. number of digits in the fractional portion Name of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be usee' Specifies whose the just the integer portion of the given value should be parse
	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive	scope="(nase request session application)" />  scope="(namber surrency percent)"   patter="custonPatter"   patter="custonPatter"   currencyCode="(urrencyCode"   currencySymbol="currencySymbol"   grouping Used="(Irmafase]"   maxIntegerDigits="maxIntegerDigits"   maxIntegerDigits="mintegerDigits"   maxFractionDigits="mintegerDigits"   maxFractionDigits="mintegerDigits"   scope="(nage)request session application)" />  scope="(nage)request session application)" />  scope="(nage)request session application)" />  scope="(nage)request session application)" />  scope="(namber)requerency percent)"   pattern="customPattern"   pattern="customPattern"   parseLocales=" parseLocales"	scope value type pattern type pattern groupinglised maxhitegerDigits milntegerDigits milntegerDigits milntegerDigits milntegerOigits milntegerOigits var scope  value type pattern parseLocale integerOnly var scope	false true true true true true true true tru	String String String, Number String String String String String String boolean int int int String	Scope of war or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portior Max. number of digits in the fractional portior Min. number of digits in the fractional portior Min. mumber of digits in the fractional portior Min. member of digits in the fractional portior String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be usec Specifies whether list the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Specifies whether list the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.
<fmt:parsenumber></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.	[scope="[nase]request]session application]" />  -fint:formatNumber_salue="numericValue" [type="[number]currency]percent]" [pattern="customPattern"] [currency Gode"-[urrencyCode"] [currency Gode"-[urrencyCode"] [grouping Used="[trueflates]"] [maxIntegerDigits="maxIntegerDigits"] [minIntegerDigits="maxIntegerDigits"] [minIntegerDigits="maxIntegerDigits"] [minFractionDigits="maxFractionDigits"] [sur="varXme"] [scope="[nase]request]session application]" />  -fint:parseNumber_gurency[percent]"  [pattern="customPattern"] [pattern="customPattern"] [pattern="customPattern"] [pattern="customPattern"] [pattern="customPattern"] [scope="[nase]request]session application]" /> [var="varXme"] [scope="[nase]request]session application]" />	scope value type pattern type pattern currencySombol currencySymbol groupingLised maxInacjerDigits minIntegerDigits minIntegerDigits minIntegerDigits var scope  value type pattern parseLocale integerOnly var scope Constraints: If scope Constraints: If scope	true true true true true true true true	String String String, Number String String String String String String boolean int int int string	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the fractional portior Same of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  The specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  The specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.
	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized	scope="inace request session application)" />  striformatNumber_salue="numericValue"    type="[number]currency percent]"    pattern="customPattern"    currency Gode"      mastraction        mastraction            mastraction                mastraction                mastraction                  mastraction                    mintraction                      mintraction                        mintraction                          mintraction                          mintraction                              scope="[nace crequest session application]"      scope="[namericurency percent]"	scope value type pattern type pattern groupinglised maxIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntelonDigits var scope  value type pattern passel.ocale integerOnly var scope Constraints: If scop value	true true true true true true true true	String String String, Number String String String String String String boolean int int int String	Scope of war or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion Min. number of digits in the fractional portion Simple of the specified specified specified whether the specified specified specified specified specified.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  De specified.  Date and/or time to be formatted. Specifies whether the time, the date, or both are to be formatted.
<fmt:parsenumber></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time	scope="(nase request session application)" />  scope="(namber currency percent)"   pattern="customPattern"   pattern="customPattern"   currencyCode="(urrencyCode"   currencyCode="(urrencyCode"   currencySymbol="currencySymbol"   grouping Useo="(urrencySymbol"   grouping Useo="(urrencySymbol"   maltategerDigits="mintagerDigits"   scope="(namber]currency percent)"   scope="(namber]currency percent)"   pattern="customPattern"   parsel.cacles-"parsel.code"   integerOnly="itrue[false]"   var="varName"   scope="(namber]currency percent)=   scope="(namber]currency perce	scope value pattern type pattern currencySombol groupingUsed maxIrnegerDigits minIntegerDigits minIntegerDigits minIrractionDigits var scope  value type pattern parseLocale integerOnly var scope value type constraints: If scop value var	true true true true true true true true	String String, Number String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Max. number of digits in the integer portion Max. number of digits in the fractional portior Min. number of digits in the fractional portior Min. number of digits in the fractional portior String to the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  be specified.  Date and/or time to be formatted.
<fmt;parsenumber></fmt;parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized	scope=" nase request session application " />  scope=" nambereurrency percent "   pattern="customPattern"   currency Gode=" currency Gode"   currency Gode=" currency Gode"   currency Gode=" currency Gode"   currency Gode=" currency Gode"   maxIntegerDigits="maxIntegerDigits"   maxIntegerDigits="maxIntegerDigits"   maxIntegerDigits="maxIntegerDigits"   maxInacionDigits="maxIntentonDigits"   scope=" inaretionDigits="minFractionDigits"   scope=" inaretionPatterne"   scope=" inaretionPatterne"   scope=" inaretionPatterne"   pattern="customPattern"   pattern="customPattern"   scope=" inaretionPatterne"   scope=" inaretion	scope value urencySombol groupingUsed maxIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits var scope  value type pattern passeLocale integerOnly var scope Constraints: If scop value type dateStyle timeStyle pattern	false true true true true true true true tru	String String String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion Min. number of digits in the fractional portior Same of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  The specifies whether the time, the date, or both are to be formatted.  Predefined formatting style for dates.  Predefined formatting style for dates.  Predefined formatting style for times.
<fmt:parsenumber></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized	scope="(nage request session application)" />  smt:formatNumber_salue="numericValue"    type="(number currency percent)"     pattern="customPattern"     currency Code="(currency Code"     currency Code="(currency Code"     currency Symbol="currency Symbol"    grouping Used="(fungfalse)"     maxIntegerDigits="maxIntegerDigits"     minIntegerDigits="maxIntegerDigits"     minIntegerDigits="minIntegerDigits"    minIntegerDigits="minIntegerDigits"    minIntegerDigits="minIntegerDigits"    minIntegerDigits="minIntegerDigits"    minIntegerDigits="minIntegerDigits"    scope="[lagg request]session application]  />  smt:parseNumber_value="numericValue"    type="(numbercurrency percent"     pattern="customPattern"    parseLocale="parseLocale"     integerOnly="(rutefalse)"     scope="(lagg request session application)" />  scope="(lagg request session application)" />  scope="(lagg request session application)" />  dateStyle="(default short medium longfull "     dateStyle="(default short medium longfull "     pattern="customPattern"	scope value type pattern type pattern type pattern groupingLised maxIntegerDigits midnitegerDigits midnitegerDigits midnitegerDigits midnitegerDigits midnitegerDigits var scope  value type pattern passeLocale integerOnly var scope Constraints: If scop value type dateStyle timeStyle pattern timeZone	false true true true true true true true tru	String String, Number String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Iso 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion Min. number of digits in the fractional portion Name of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  be specified.  Date and/or time to be formatted. Specifies whether the time, the date, or both are to be formatted. Predefined formatting syle for dates. Predefined formatting syle for dates. Predefined formatting syle for dates. Time zone in which to represent the formatted time.
<fmt:parsenumber></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized	scope="(nangl-request session application)" />  smt:formatNumber_salue="numericValue"    type="[number currency percent]"     pattern="customPattern"     currencyCode="currencyCode"     currencyCode="currencySymbol"     grouping Used="(Irngfalse)"     maltegerDigits="maltagerDigits"     scope="[nagg request]     pattern="customPattern"     pared.cades-"pased.code"     integerOnly="maltegerDigits="maltagerDigits"     va="varName"     dateSyte="defaultshort medium long[ntll]"     pattern="customPattern"     pattern="customPattern"     pattern="customPattern"     pattern="customPattern"     pattern="customPattern"     pattern="customPattern"     timeSyte="defaultshort medium long[ntll]"     pattern="customPattern"     timeSyte="maltagerDigits="ma	scope value urencySombol groupingUsed maxIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits var scope  value type pattern passeLocale integerOnly var scope Constraints: If scop value type dateStyle timeStyle pattern	false true true true true true true true tru	String String, Number String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Sto 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Mix. number of digits in the integer portion Mix. number of digits in the fractional portior Min. number of digits in the fractional portior Min. number of digits in the fractional portior Min. number of digits in the fractional portior Same of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be usec Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  Des specified.  Date and/or time to be formatted. Specifies whether the time, the date, or both are to be formatted. Predefined formatting style for dates. Predefined formatting style for dates. Predefined formatting style for times. Customs formatting style for times.
<fmt:parsenumber></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized manner.	scope="(nage request session application)" />  sfmt:formatNumber_salue="numericValue"    type="[number]currency percent]"    pattern="customPattern"    currency Gode"      mastraction Digits="mast Integer Digits"    minInteger Digits="mast Integer Digits"    scope="[nage]crquest session application]" />  scope="[namericurrency percent]"    pattern="customPattern"    pattern="customPattern"    scope="[namericurtency percent]"    scope="[namer	scope value type pattern type pattern type pattern currencySombol groupingUsed maxIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits var scope  value type pattern parseLocale integerOnly var scope value type pattern parseLocale dateStyle timeStyle timeStyle timeZone  var	false true true true true true true true tru	String String String, Number String String String String String String boolean int int int int String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion Min. number of digits in the fractional portion Same of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  The specifies whether the time, the date, or both are to be formatted. Specifies whether the time, the date, or both are to be formatted. Predefined formatting style for dates. Predefined formatting style for times. Custom formatting style for dates. Predefined formatting style for
<fmt:parsenumber> <fmt:formatdate></fmt:formatdate></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized manner.	scope="(nangl-request session application)" />  sfmt:formatNumber_yalne="numericValue"    type="(number currency percent)"     pattern="customPattern"    currencyCode="currencyCode"     currencyCode="currencyCode"     currencyGode="currencyCode"     currencyGode="currencyCode"     grouping Used="fylingfalse" "    maltategerDigits="mantategerDigits"    maltategerDigits="mantategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    maltategerDigits="mintategerDigits"    scope="ligagirequest session application}" />  scope="ligagirequest session application " />	scope value urrencySombol groupingUsed maxIrnegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits minIntegerDigits var scope  value type pattern parseLocale integerOnly var scope value type dateStyle timeStyle timeStyle timeStyle timeZone  var scope	false true true true true true true true tru	String String, Number String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Max. number of digits in the integer portion Max. number of digits in the fractional portion Min. number of digits in the fractional port
<fmt:parsenumber> <fmt:formatdate></fmt:formatdate></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized manner.	scope="(nage request session application)" />  scope="(namber surrency percent)"   pater="custonPatent"   pater="custonPatent"   currencyCode="currencyCode"   currencySymbol="currencySymbol"   grouping Used="(Irmafase]"   maxIntegerDigits="maxIntegerDigits"   maxIntegerDigits="mintegerDigits"   maxIntegerDigits="mintegerDigits"   maxIntegerDigits="mintegerDigits"   maxIntegerDigits="mintegerDigits"   maxIntegerDigits="mintegerDigits"   maxIntegerDigits="mintegerDigits"   maxIntegerDigits="mintegerDigits"   mintegerDigits="mintegerDigits"   mintegerDigits="mintegerDigits"   var="varName"   scope="(nage request session application)" />  sent:parseNumber yutue="numericValue"   patent="custonPatent"   patent="custonPatent"   patent="custonPatent"   scope="(nage request session application)" />  sent:formatDate value="date"   yar="varName"   scope="(nage request session application)" />  sent:parseDate yalue="dateString"   yar="varName"   scope="(nage request session application)" />  sent:parseDate yalue="dateString"   yar="varName"   sent:parseDate yalue="dateString"   yee="(imedjates)thip"   dateStyte="(defaults)thort[medium long[full]"	scope value type pattern type pattern currencySymbol groupingUsed maxIrtagetDigits minIntegerDigits minIntegerDigits minIrtactionDigits var scope  value type pattern parseLocale integerOnly var scope value type dateStyle timeStyle timeZone  var scope value type dateStyle timeZone	false true true true true true true true tru	String String String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern Slo 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Max. number of digits in the integer portion Max. number of digits in the fractional portior Min. of the sported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be usec Name of the exported scoped variable which stores the parsed result (Number Scope of var.  be specified.  Date and/or time to be formatted.  Specifies whether the time, the date, or both are to be formatted.  Predefined formatting style for dates.  Predefined formatting style for dates.  Time zone in which to represent the formatted time.  Name of the exported scoped variable which stores the formatted result as a String.  Scope of var.  Date string to be parsed Specifies whether the value contains a time, date, or both Predefined formatting style for times.
<fmt:parsenumber> <fmt:formatdate></fmt:formatdate></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized manner.	scope="[nage request session application]" />  sfmt:formatNumber_salue="numericValue"  type="[number]currency percent]"   pattern="customPattern"   currencyCode"   currencyCode"   currencySymbol="currencySymbol"   grouping Used="[truefalse]"   maxIntegerDigits="maxIntegerDigits"   maxIntegerDigits="maxIntegerDigits"   minIntegerDigits="maxIntegerDigits"   minIntegerDigits="maxIntegerDigits"   minIntegerDigits="minIntegerDigits"   minIntegerDigits="minIntegerDigits"   minIntegerDigits="minIntegerDigits"   minIntegerDigits="minIntegerDigits"   scope="[nage request session application]" />	scope value type pattern type pattern type pattern groupingLised maxIntegerDigits midnitegerDigits midnitegerDigits midnitegerDigits midnitegerDigits midnitegerDigits midnitegerDigits var scope  value type type dateStyle timeStyle pattern timeZone  var scope value type dateStyle timeStyle pattern timeZone  var scope value type dateStyle timeStyle pattern timeZone  var scope value type var scope value type dateStyle timeStyle timeStyle pattern timeZone	false true true true true true true true tru	String	Scope of war or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Currency symbol. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the integer portion Min. number of digits in the fractional portion Name of the exported scoped variable Scope of war.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of war.  De specified.  Date and/or time to be formatted. Specifies whether the time, the date, or both are to be formatted. Predefined formatting syle for dates. Predefined formatting syle for dates. Predefined formatting syle for dates. Time zone in which to represent the formatted time.  Name of the exported scoped variable which stores the formatted result as a String. Scope of war.  Date string to be parsed Specifies whether the value contains a time,date,or botl Predefined formatting syle for dates. Predefined formatting syle for dates.
<fmt:parsenumber> <fmt:formatdate></fmt:formatdate></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized manner.	scope="(nangl-request session application)" />  smt:formatNumber_salue="numericValue"    type="(number currency percent)"     pattern="customPattern"     currencyCode="currencyCode"     currencyCode="currencyCode"     currencyCode="currencySymbol"     grouping Used="(Irngfalse)"     maltategerDigits="maltategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintategerDigits"     maltractionDigits="mintateconDigits"     sacp=""[nangl-request]session application]" />  smt:parseNumber_value="numericValue"    pattern="customPattern"     parsel.ocale="parsel.ocale"     integerOnly="itrue[false]"     var="varName"     scope="(nangl-request)session application]" />  smt:formatDate value="date"   (type="(timedate both)"     dateSyte="(default)short medium long[full]"     imeSyte="default)short medium long[full]"     pattern="customPattern"     scope="(nangl-request)session application]" />  smt:parseDate_value="dateSyting"    type="(timedate both)"     dateSyte="default short medium long[full]"     timeSyte="default short medium long[full]"     timeSyte="default short medium long[full]"     timeSyte="default short medium long[full]"     pattern="customPattern"     timeSyte="default short medium long[full]"     pattern="customPattern"     timeSyte="default short medium long[full]"     pattern="customPattern"     timeSyte="default short medium long full]"     pattern="customPattern"	scope value type pattern type pattern groupinglised maxintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits var scope  value type pattern tintegerOnly var scope Constraints: If scop value type dateStyle timeStyle pattern timeZone  var scope value type dateStyle timeStyle pattern timeZone  var scope value type dateStyle timeStyle pattern timeZone	false true true true true true true true tru	String String, Number String, Number String	Scope of war or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portior Max. number of digits in the integer portior Min. number of digits in the fractional portior Min. number of digits in the fractional portior Min. mumber of digits in the fractional portior Name of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be usec Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  Date and/or time to be formatted. Specifies whether the time, the date, or both are to be formatted. Predefined formatting sylve for dates. Predefined formatting sylve for dates. Predefined formatting sylve for dates. Time zone in which to represent the formatted time.  Name of the exported scoped variable which stores the formatted result as a String. Scope of var.  Date string to be parsed Specifies whether the value contains a time, date, or both Predefined formatting stylve for dates Predefined formatting stylve for times.
<fmt:parsenumber> <fmt:formatdate></fmt:formatdate></fmt:parsenumber>	configuration variable.  Formats a numeric value in a locale- sensitive or customized manner as a number, currency, or percentage.  Parses the string representation of numbers, currencies, and percentages that were formatted in a locale-sensitive or customized manner.  Allows the formatting of dates and time in a locale-sensitive or customized manner.	scope="inace request session application)" />  sfmt:formatNumber_salue="numericValue"    type="[number]currency percent]"    pattern="customPattern"    currency Gode"      currency Gode        maxFractionDigits="maxIntegerDigits"    maxFractionDigits="maxIntegerDigits"    maxFractionDigits="maxIntegerDigits"    minFractionDigits="minFractionDigits"    minFractionDigits="minFractionDigits"    var="naxAme"    scope="nasee request session application " />  sone="nasee request session application "    stimeXone="defaultishort medium long[full]"   pattern="customPattern"    timeZone="defaultishort medium long[full]"   timeStyle="defaultishort medium long[full]"   timeCone="functorn"	scope value type pattern type pattern type pattern groupinglised maxintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits minintegerDigits var scope value type pattern parset_ocale integerOnly var scope Constraints: If scop dateStyle timeStyle pattern timeZone value type dateStyle timeStyle timeStyle timeStyle timeStyle pattern timeZone	false true true true true true true true tru	String String, Number String, Number String	Scope of var or the time zone configuration variable.  Numeric value to be formatted Specifies whether the value is to be formatted as number, currency, or percentag Custom formatting pattern ISO 4217 currency code. Applied only when formatting currencies; ignored otherwis Specifies whether the formatted output will contain any grouping separator Max. number of digits in the integer portion Min. number of digits in the fractional portior Min. number of digits in the fractional portior Min. mumber of digits in the fractional portior Name of the exported scoped variable Scope of var.  String to be parsed Specifies whether the value attribute should be parsed as a number, currency, or percentag Custom formatting pattern Locale whose default formatting pattern is to be used Specifies whether just the integer portion of the given value should be parse Name of the exported scoped variable which stores the parsed result (Number Scope of var.  Date and/or time to be formatted. Specifies whether the time, the date, or both are to be formatted. Predefined formatting style for dates. Predefined formatting style for times. Custom formatting style for dates. Time zone in which to represent the formatted times. Time zone in which to represent the formatted time.  Name of the exported scoped variable which stores the formatted result as a String. Scope of var.  Date string to be parsed Specifies whether the value contains a time, date, or both Predefined formatting style for dates. Predefined formatting style for parsing the date string Time zone in which to interpret any time information Time zone in which to interpret any time information

<sup>\*</sup> The "dyn" (dynamic) column title presents the rtexprvalue element defined in a TLD. It captures the dynamic behaviour of an attribute for both library versions.

 $\textit{The content is based on the JavaServer}^{\text{TM}} \textit{ Pages Standard Tag Library specification, version 1.0.(http://java.sun.com)}$