

Location Paths [XPath §2]
Optional ‘/’, zero or more location steps, separated by ‘/’

Location Steps [XPath §2.1]
Axis specifier, node test, zero or more predicates

Axis Specifiers [XPath §2.2]

ancestor::	following-sibling::
ancestor-or-self::	namespace::
attribute::	parent::
child::	preceding::
descendant::	preceding-sibling::
descendant-or-self::	self::
following::	

Node Tests [XPath §2.3]

<i>name</i>	node()
<i>prefix:name</i>	text()
<i>*</i>	comment()
<i>prefix:*</i>	processing-instruction()
	processing-instruction(<i>literal</i>)

Abbreviated Syntax for Location Paths

(nothing)	child::
@	attribute::
//	/descendant-or-self::node()/
.	self::node()
..	parent::node()
/	Node tree root

Predicate [XPath §2.4]
[*expr*]

Variable Reference [XPath §3.7]
\$qname

Literal Result Elements [§7.1.1]
Any element not in the xsl: namespace and not an extension element

XSLT
<http://www.w3.org/TR/xslt>

XPath
<http://www.w3.org/TR/xpath>

XSL-List
<http://www.mulberrytech.com/xsl/xsl-list/>

XPath Operators

Parentheses may be used for grouping.

Node-sets [XPath §3.3]
| [*expr*] / //

Booleans [XPath §3.4]
<=, <, >=, > =, != and or

Numbers [XPath §3.5]
-expr *, div, mod +, -

XPath Core Function Library

Node Set Functions [XPath §4.1]

<i>number</i>	last()
<i>number</i>	position()
<i>number</i>	count(<i>node-set</i>)
<i>node-set</i>	id(<i>object</i>)
<i>string</i>	local-name(<i>node-set</i>)
<i>string</i>	namespace-uri(<i>node-set</i>)
<i>string</i>	name(<i>node-set</i>)

String Functions [XPath §4.2]

<i>string</i>	string(<i>object</i> ?)
<i>string</i>	concat(<i>string</i> , <i>string</i> , <i>string</i> *)
<i>boolean</i>	starts-with(<i>string</i> , <i>string</i>)
<i>boolean</i>	contains(<i>string</i> , <i>string</i>)
<i>string</i>	substring-before(<i>string</i> , <i>string</i>)
<i>string</i>	substring-after(<i>string</i> , <i>string</i>)
<i>string</i>	substring(<i>string</i> , <i>number</i> , <i>number</i> ?)
<i>number</i>	string-length(<i>string</i> ?)
<i>string</i>	normalize-space(<i>string</i> ?)
<i>string</i>	translate(<i>string</i> , <i>string</i> , <i>string</i>)

Boolean Functions [XPath §4.3]

<i>boolean</i>	boolean(<i>object</i>)
<i>boolean</i>	not(<i>object</i>)
<i>boolean</i>	true()
<i>boolean</i>	false()
<i>boolean</i>	lang(<i>string</i>)

Number Functions [XPath §4.4]

<i>number</i>	number(<i>object</i> ?)
<i>number</i>	sum(<i>node-set</i>)
<i>number</i>	floor(<i>number</i>)
<i>number</i>	ceiling(<i>number</i>)
<i>number</i>	round(<i>number</i>)

XSLT 1.0

&

XPath 1.0

Quick Reference

Mulberry Technologies, Inc.
17 West Jefferson Street, Suite 207
Rockville, MD 20850 USA
Phone: +1 301/315-9631
Fax: +1 301/315-8285
info@mulberrytech.com
<http://www.mulberrytech.com>



XSLT Functions [§12, §15]

<i>node-set</i>	document(<i>object</i> , <i>node-set</i> ?)
<i>node-set</i>	key(<i>string</i> , <i>object</i>)
<i>string</i>	format-number(<i>number</i> , <i>string</i> , <i>string</i> ?)
<i>node-set</i>	current()
<i>string</i>	unparsed-entity-uri(<i>string</i>)
<i>string</i>	generate-id(<i>node-set</i> ?)
<i>object</i>	system-property(<i>string</i>)
<i>boolean</i>	element-available(<i>string</i>)
<i>boolean</i>	function-available(<i>string</i>)

Node Types [XPath §5]

Root	Processing Instruction
Element	Comment
Attribute	Text
Namespace	

Object Types [§11.1, XPath §1]	
boolean	True or false
number	Floating-point number
string	UCS characters
node-set	Set of nodes selected by a path
Result tree fragment	XSLT only. Fragment of the result tree

Expression Context [§4, XPath §1]

Context node (a node)
Context position (a number)
Context size (a number)
Variable bindings in scope
Namespace declarations in scope
Function library

Built-in Template Rules [§5.8]

```
<xsl:template match="*/">
  <xsl:apply-templates/>
</xsl:template>

<xsl:template match="*/" mode="m">
  <xsl:apply-templates mode="m"/>
</xsl:template>

<xsl:template match="text()|@*">
  <xsl:value-of select="."/>
</xsl:template>

<xsl:template
  match="processing-instruction()|comment()"/>
```

Built-in template rule for namespaces is to do nothing

XSLT Elements

Stylesheet Element [§2.2]

```
<xsl:stylesheet version="1.0" id="id"
  extension-element-prefixes="tokens"
  exclude-result-prefixes="tokens"
  xmlns:xsl="http://www.w3.org/1999/XSL/
  Transform"> xsl:import*, top-level elements
</xsl:stylesheet>
```

xsl:transform is a synonym for xsl:stylesheet

Combining Stylesheets [§2.6]

```
<xsl:include href="uri-reference"/>
<xsl:import href="uri-reference"/>
```

Whitespace Stripping [§3.4]

```
<xsl:strip-space elements="tokens"/>
<xsl:preserve-space elements="tokens"/>
```

Defining Template Rules [§5.3]

```
<xsl:template match="pattern" name="qname"
  priority="number" mode="qname">
  xsl:param* followed by text, literal result elements
  and/or XSL elements </xsl:template>
```

Applying Template Rules [§5.4]

```
<xsl:apply-templates select="node-set-exp"
  mode="qname"/>
<xsl:apply-templates select="node-set-exp"
  mode="qname">
  (xsl:sort | xsl:with-param)* </xsl:apply-templates>
```

Overriding Template Rules [§5.6]

```
<xsl:apply-imports/>
```

Named Templates [§6]

```
<xsl:call-template name="qname"/>
<xsl:call-template name="qname">
  xsl:with-param* </xsl:call-template>
```

Namespace Alias [§7.1.1]

```
<xsl:namespace-alias result-
  prefix="prefix|#default"
  stylesheet-prefix="prefix|#default"/>
```

Creating Elements [§7.1.2]

```
<xsl:element name="{qname}"
  namespace="{uri-reference}"
  use-attribute-sets="qnames">...</xsl:element>
```

Creating Attributes [§7.1.3]

```
<xsl:attribute name="{qname}"
  namespace="{uri-reference}">...</xsl:attribute>
```

Named Attribute Sets [§7.1.4]

```
<xsl:attribute-set name="qname"
  use-attribute-sets="qnames">
  xsl:attribute* </xsl:attribute-set>
```

Creating Text [§7.2]

```
<xsl:text disable-output-escaping="yes|no">
  #PCDATA </xsl:text>
```

Processing Instructions [§7.3]

```
<xsl:processing-instruction name="{ncname}">
  ...</xsl:processing-instruction>
```

Creating Comments [§7.4]

```
<xsl:comment>...</xsl:comment>
```

Copying [§7.5]

```
<xsl:copy use-attribute-sets="qnames">
  ...</xsl:copy>
```

Generating Text [§7.6.1]

```
<xsl:value-of select="string-expr"
  disable-output-escaping="yes|no"/>
```

Attribute Value Templates [§7.6.2]

```
<element attribute="{expr}"/>
```

Numbering [§7.7]

```
<xsl:number level="single|multiple|any"
  count="pattern" from="pattern"
  value="number-expr" format="{string}"
  lang="{nmtoken}"
  letter-value="{alphabetic|traditional}"
  grouping-separator="{char}"
  grouping-size="{number}"/>
```

Repetition [§8]

```
<xsl:for-each select="node-set-exp">
  xsl:sort*, ...</xsl:for-each>
```

Conditional Processing [§9]

```
<xsl:if test="boolean-expr">...</xsl:if>
<xsl:choose>
  <xsl:when test="expr">...</xsl:when>+
  <xsl:otherwise>...</xsl:otherwise>?
</xsl:choose>
```

Sorting [§10]

```
<xsl:sort select="string-expr" lang="{nmtoken}"
  data-type="{text|number|qname-but-not-
  ncname}" order="{ascending|descending}"
  case-order="{upper-first|lower-first}"/>
```

Variables and Parameters [§11]

```
<xsl:variable name="qname" select="expr"/>
<xsl:variable name="qname">...</xsl:variable>
<xsl:param name="qname" select="expr"/>
<xsl:param name="qname">...</xsl:param>
```

Using Values [§11.3]

```
<xsl:copy-of select="expr"/>
```

Passing Parameters [§11.6]

```
<xsl:with-param name="expr" select="expr"/>
<xsl:with-param name="expr">...</xsl:with-
  param>
```

Keys [§12.2]

```
<xsl:key name="qname" match="pattern"
  use="expr"/>
```

Number Formatting [§12.3]

```
<xsl:decimal-format name="qname"
  decimal-separator="char"
  grouping-separator="char" infinity="string"
  minus-sign="char" NaN="string"
  percent="char" per-mille="char"
  zero-digit="char" digit="char"
  pattern-separator="char"/>
```

Messages [§13]

```
<xsl:message terminate="yes|no">
  ...</xsl:message>
```

Fallback [§15]

```
<xsl:fallback>...</xsl:fallback>
```

Output [§16]

```
<xsl:output
  method="xml|html|text|qname-but-not-ncname"
  version="nmtoken" encoding="string"
  omit-xml-declaration="yes|no"
  doctype-public="string" doctype-
  system="string" standalone="yes|no"
  indent="yes|no"
  cdata-section-elements="qnames"
  media-type="string"/>
```

Key

xsl:stylesheet	Element
version=	Required attribute
version=	Optional attribute
{expr}	Attribute value template. Text between any { and } is evaluated as an expression. Attribute value must evaluate to indicated attribute type.
...	Anything allowed in a template
	Separates alternative values
?	Zero or one occurrences
*	Zero or more occurrences
+	One or more occurrences
#PCDATA	Character data

Attribute Value Types

1.0	Literal value
boolean-expr	Expression returning boolean value
char	Single character
expr	Expression
id	XML name used as identifier
ncname	XML name not containing a colon (.)
node-set-expr	Expression returning a node set
number-expr	Expression returning a number
pattern	XSLT pattern
prefix	Namespace prefix
qname	Namespace-qualified XML name comprising local part and optional prefix
qname-but-not-ncname	Namespace-qualified name comprising local part and prefix
token	Meaning varies with context. See Rec.
uri-reference	Reference to Universal Resource Identifier

