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

Node Tests [XPath §2.3]

name
prefix:*name*
*
prefix:*
node()
text()
comment()
processing-instruction()
processing-instruction(*literal*)

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]

number **last**()
number **position**()
number **count**(*node-set*)
node-set **id**(*object*)
string **local-name**(*node-set*?)
string **namespace-uri**(*node-set*?)
string **name**(*node-set*?)

String Functions [XPath §4.2]

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

Boolean Functions [XPath §4.3]

boolean **boolean**(*object*)
boolean **not**(*object*)
boolean **true**()
boolean **false**()
boolean **lang**(*string*)

Number Functions [XPath §4.4]

number **number**(*object*?)
number **sum**(*node-set*)
number **floor**(*number*)
number **ceiling**(*number*)
number **round**(*number*)

XSLT and XPath 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

Mulberry Technologies, Inc.

XSLT Functions [§12, §15]

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

Node Types [XPath §5]

Root
Element
Attribute
Namespace
Processing Instruction
Comment
Text

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-expr*">
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

Mulberry Technologies, Inc.
© 2000 Mulberry Technologies, Inc.
Mulberry Technologies, Inc.
© 2000 Mulberry Technologies, Inc.