XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2007/FpML-4-4**
Version	$Revision: 2686 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-fx-4-4.xsd ○ fpml-ird-4-4.xsd ○ fpml-eqd-4-4.xsd ○ fpml-return-swaps-4-4.xsd ○ fpml-cd-4-4.xsd ○ fpml-bond-option-4-4.xsd ○ fpml-correlation-swaps-4-4.xsd ○ fpml-dividend-swaps-4-4.xsd ○ fpml-variance-swaps-4-4.xsd ○ fpml-pretrade-4-4.xsd ○ fpml-tradeexec-4-4.xsd ○ fpml-posttrade-negotiation-4-4.xsd ○ fpml-posttrade-execution-4-4.xsd ○ fpml-allocation-4-4.xsd ○ fpml-trade-notification-4-4.xsd ○ fpml-contract-notification-4-4.xsd ○ fpml-confirmation-4-4.xsd ○ fpml-posttrade-confirmation-4-4.xsd ○ fpml-credit-event-notification-4-4.xsd ○ fpml-reporting-4-4.xsd ○ fpml-reconciliation-4-4.xsd

	❍ fpml-matching-status-4-4.xsd
Documentation	products business process messaging pre-trade negotiation and execution notification confirmation reporting and settlement miscellaneous

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2007/FpML-4-4**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2007/FpML-4-4**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2007/FpML-4-4" version="$Revision: 2686 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-fx-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-ird-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-eqd-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-return-swaps-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-cd-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-bond-option-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-correlation-swaps-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-dividend-swaps-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-variance-swaps-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-pretrade-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-tradeexec-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-posttrade-negotiation-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-posttrade-execution-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-allocation-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-trade-notification-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-contract-notification-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-confirmation-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-posttrade-confirmation-4-4.xsd"/>
```

```
   <xsd:include schemaLocation="fpml-credit-event-notification-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-reporting-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-reconciliation-4-4.xsd"/>
   <xsd:include schemaLocation="fpml-matching-status-4-4.xsd"/>
   ...
</xsd:schema>
```

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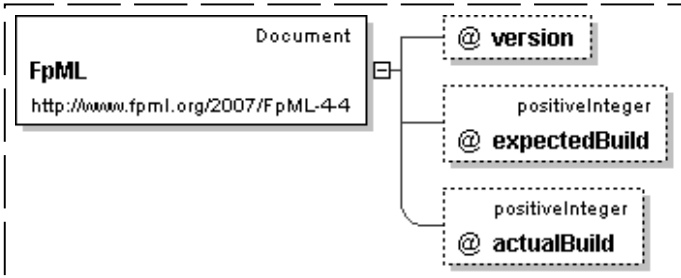
Global Declarations

Element: FpML

Name	FpML
Type	Document
Nillable	no
Abstract	no
Documentation	The FpML element forms the root for any conforming FpML instance document. The actual structure of the document is determined by setting the 'type' attribute to an appropriate derived subtype of the complex type Document.

Logical Diagram

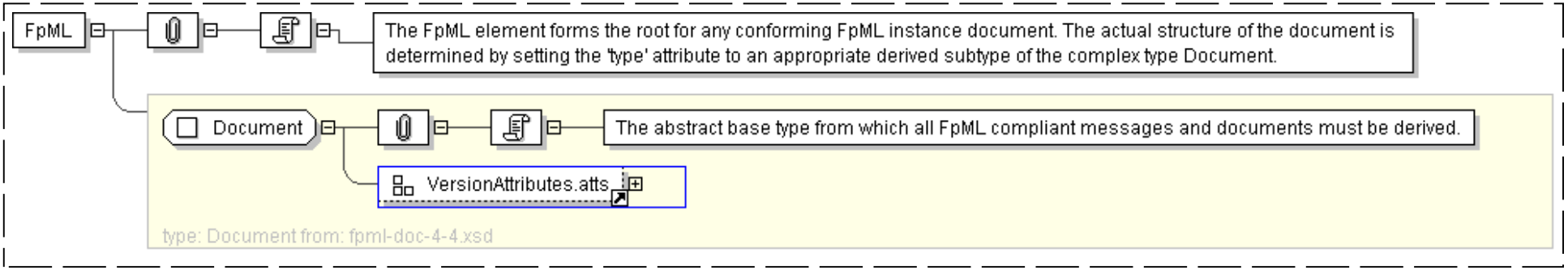


XML Instance Representation

```
<FpML
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="2 [0..1]
'The specific build number of this schema version. This attribute is not included in
```

```
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

"/>
```

Diagram



Schema Component Representation

```
<xsd:element name="FpML" type=" Document "/>
```

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Global Definitions

Complex Type: ValuationDocument

Super-types:	DataDocument < **ValuationDocument** (by extension)
Sub-types:	None

Name	ValuationDocument
Abstract	no
Documentation	A type defining a content model that includes valuation (pricing and risk) data without expressing any processing intention.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
```

expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"

actualBuild="**2** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">

<validation> Validation </validation> [0..*]

Start Choice [1]

<trade> Trade </trade> [0..*]

'The root element in an FpML trade document.'

<portfolio> Portfolio </portfolio> [0..*]

'An arbitary grouping of trade references (and possibly other portfolios).'

<event> ... </event> [1..*]

'A business event.'

End Choice

<party> Party </party> [0..*]

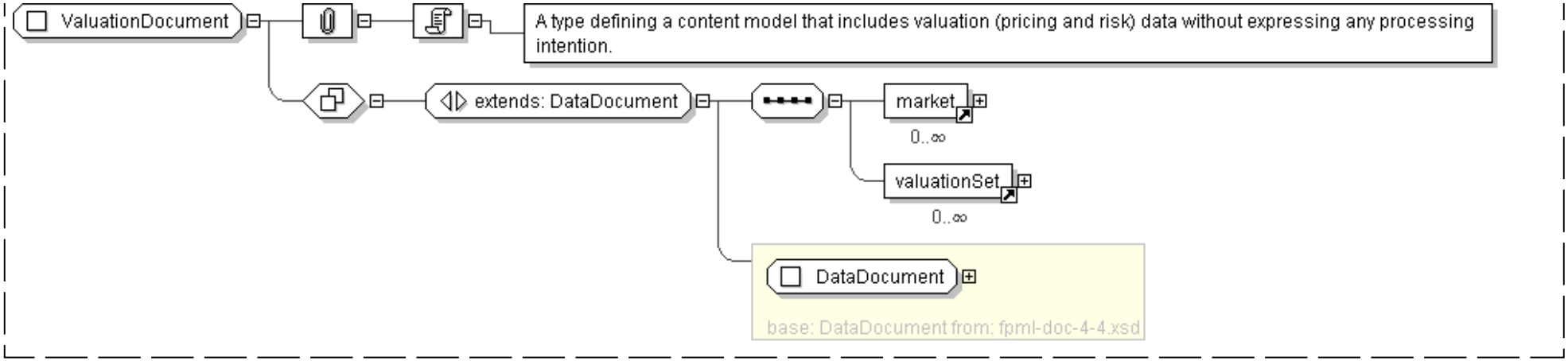
'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

<market> ... </market> [0..*]

<valuationSet> ... </valuationSet> [0..*]

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationDocument">
   <xsd:complexContent>
      <xsd:extension base=" DataDocument ">
         <xsd:sequence>
            <xsd:element ref=" market " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element ref=" valuationSet " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

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Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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Generated by <oXygen/> XML Editor using a modified version of xs3p that adds schema diagrams and chunking support.