All Fields marked with * are mandatory.

Change Request #:	**248**
Assigned OGC Document #:	**12-130**
Name:	*Paul Daisey
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Document Name/Version:	*Web Feature Service (WFS) Implementation Specification with XLinks / 1.1.0
OGC Project Document:	*04-094

If this is a revision of a previous submission and you have a Change Request Number, then check here: ☐

Enter the CR number here:

Enter the Revsion Number that you are revising here:

Title:	* [WFS/FES] Inconsistent Description of traverseXlinkDepth parameter
Source:	*Revision of WFS 1.1 Abstract Test Suite
Work item code:	
Category:	* F (Critical correction)

Reason for change:

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1.  Eliminate inconsistent traverseXlinkdDepth parameter values for
GetFeature and GetGMLObject requests

2.  Current practice and existing WFS 1.1 ATS and ETS allow
traverseXlinkDepth parameter value of 0(on GetFeatureRequests that
don't resolve XLinks), despite wfs.xsd allowing only positive integers
and *.

3.  Consistency with WFS 2.0 after application of
12-113_WFS_2.0_Incosistent_description_of_resolveDepth_parameter.pdf
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Summary of change:

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1.  Change wfs.xsd:
  a.  add
<xsd:simpleType name="TraverseXLinkDepthType">
  <xsd:union memberTypes="xsd:nonNegativeInteger
wfs:StarStringType"/>
</xsd:simpleType>
<xsd:simpleType name="StarStringType">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="*"/>
  </xsd:restriction>
</xsd:simpleType>
  b.  change type="xsd:string" to
type="wfs:TraverseXLinkDepthType" on 4 instances of
<xsd:attribute name="traverseXlinkDepth"
```

	2. Change 04-094 Clause 9.2 Request, replace entire paragraph on p.36 with the following: The optional traverseXlinkDepth attribute indicates the depth to which nested property XLink linking element locator attribute (href) XLinks in all properties of the selected feature(s) are traversed and resolved if possible. The absence of the optional traverseXLinkDetph attribute, or a traverseXLinkDepth attribute value of "0" indicates that a server shall not traverse or resolve any linking element locator attribute (href) XLinks. A value of "1" indicates that one linking element locator attribute (href) XLink will be traversed and the referenced element returned if possible, but nested property XLink linking element locator attribute (href) XLinks in the returned element are not traversed. 3. Change 04-094 Clause 10.2.2 Top Level, replace the last two sentences with the following: If the value of the traverseXlinkDepth attribute is â��0â��, the element with an identifier equal to the request ID shall be returned as specified in 10.4 Response. Otherwise, the element shall be processed as the current element as specified in 10.3.3 Nested, at nesting depth 1.
Consequences if not approved:	1. Inconsistency with current practice 2. Inconsistency with WFS 2.0 3. Existing implementations that pass current WFS 1.1 ETS will fail revised WFS 1.1 ETS
Clauses affected:	* 9.2 Request 10.2.2 Top Level
Additional Documents affected:	wfs.xsd
Supporting Documentation:	wfs-cr.xsd to become wfs.xsd if CR accepted
Comments:	Rereading 02-063.pdf 10 years later, it clearly should have had at least one more review / rewrite cycle. "Behave the same" was the intention, but the interpretation of level, i.e. when to start incrementing the the current "depth" is clearly different for GetGMLObject and GetFeature requests, as indicated by the following two sentences from "10.3.2 Top Level" in 02-063.pdf and "10.2.2 Top Level" in 04-094 Web Feature Service Implementation Specification V1.1: "If the value of the traverseXlinkDepth attribute is “1”, the element with an identifier equal to the request ID shall be returned as specified in 10.4 Response. Otherwise, the element shall be processed as the current element as specified in 10.3.3 Nested, at nesting depth 2."
Status:	Assigned
Assigned To:	WFS/FES SWG
Disposition:	Referred