

1 Agreed; the format of the securityDescriptor attribute is not well defined. Additionally, because the
 2 securityDescriptor can contain multiple values (describing multiple users) it should use standard XML
 3 conventions to separate these values. As such, we recommend clarifying and deprecating the existing
 4 securityDescriptor attribute on protectedRange (Part 4, §3.3.1.69) and introducing a new element as a child of
 5 protectedRange named securityDescriptor that each contains a single value.

6

7 **The following changes will be made to Part 4, §3.3.1.69, page 2,004, row for the attribute securityDescriptor,**
 8 **and this attribute will be moved to the deprecated Annex:**

Attributes	Description
securityDescriptor (Security Descriptor)	<p>Optional setting to specify the relative security descriptor. The security descriptor defines user accounts who may edit this range without providing a password to access the range.</p> <p>The format of a securityDescriptor is application defined; however, it is recommended that the following format be used for interoperability between implementations:</p> <ul style="list-style-type: none"> • —username@domain <p>If multiple user accounts are specified in the securityDescriptor attribute, each account shall be delimited by parentheses.</p> <p>[Example: This example demonstrates two user accounts in the security descriptor attribute:</p> <pre><protectedRanges> —<protectedRange sqref="A1:C5" name="Range1" securityDescriptor="(user1@iso.org)(user2@iso.org)"/> </protectedRanges></pre> <p>end-example]</p> <p>If an application is unable to resolve the meaning of the securityDescriptor, it shall treat the attribute as if it had been removed.</p> <p>The possible values for this attribute are defined by the XML Schema string datatype.</p>

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10 **We also will introduce the following securityDescriptor element as a child of protectedRange:**

11 [securityDescriptor \(Security Descriptor\)](#)

12 **Parent Element:** protectedRange

13 **Child Elements:** None

14 [Optional setting to specify the relative security descriptor. The security descriptor defines user accounts who](#)
 15 [may edit this range without providing a password to access the range.](#)

1 [\[Note: The format of a securityDescriptor is application defined; however, it is recommended that the following](#)
2 [format be used for interoperability between implementations: username@domain. This format follows the](#)
3 [form of addr-spec as defined in RFC 822, Standard for ARPA Internet Text Messages. end note\]](#)

4 [\[Example: This example demonstrates two user accounts in the security descriptor attribute:](#)

```
5 <protectedRanges>  
6 <protectedRange sqref="A1:C5" name="Range1">  
7 <securityDescriptor>user1@iso.org</securityDescriptor>  
8 <securityDescriptor>user2@iso.org</securityDescriptor>  
9 </protectedRange>  
10 </protectedRanges>
```

11 [end example\]](#)

12

13 **The schema for protectedRange will also be updated:**

14 The following XML Schema fragment defines the contents of this element:

```
15 <complexType name="CT_ProtectedRange">  
16 <attribute name="password" type="ST_UnsignedShortHex" use="optional"/>  
17 <attribute name="sqref" type="ST_Sqref" use="required"/>  
18 <attribute name="name" type="s:ST_Xstring" use="required"/>  
19 <attribute name="securityDescriptor" type="xsd:string" use="optional"/>  
20 <attribute name="algorithmName" type="s:ST_Xstring" use="optional"/>  
21 <attribute name="hashValue" type="xsd:base64Binary" use="optional"/>  
22 <attribute name="saltValue" type="xsd:base64Binary" use="optional"/>  
23 <attribute name="spinCount" type="xsd:unsignedInt" use="optional"/>  
24 <element name="securityDescriptor" type="xsd:string" minOccurs="0" maxOccurs="255"/>  
25 </complexType>
```

26

27 **We will add a normative reference to the following:**

28 [RFC 822, Standard for ARPA Internet Text Messages \(http://www.ietf.org/rfc/rfc0822.txt\)](http://www.ietf.org/rfc/rfc0822.txt)

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