### ST\_AlgClass (Cryptographic Algorithm Classes)

This simple [type](type.docx) specifies the possible classes of cryptographic algorithm used by protection. [Note: The initial version of this Office Open [XML](XML.docx) Standard only supports a single version - hash - but future versions may expand this as necessary. end note]

[Example: Consider a WordprocessingML document with the following information stored in one of its protection elements:

<w:… w:cryptAlgorithmClass="hash"   
 w:cryptAlgorithmType="typeAny"   
 w:cryptAlgorithmSid="1"  
 w:hash="9oN7nWkCAyEZib1RomSJTjmPpCY=" />

The cryptAlgorithmClass attribute value of hash specifies that the algorithm used for the password is a hashing algorithm. end example]

This simple type's contents are a restriction of the [XML](XML.docx) Schema string datatype.

The following are possible enumeration values for this type:

|  |  |
| --- | --- |
| Enumeration Value | Description |
| hash (Hashing) | Specifies that the algorithm is a hashing function, which creates a hash value for user-supplied input that is very difficult to reverse-engineer. |

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| Referenced By |
| documentProtection@cryptAlgorithmClass (§); writeProtection@cryptAlgorithmClass (§) |

The following [XML](XML.docx) Schema fragment defines the contents of this simple type:

<simpleType [name](name.docx)="ST\_AlgClass">

<restriction base="xsd:string">

<enumeration value="hash"/>

</restriction>

</simpleType>