



# **XML Examples for BASE-TDF**

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## **BASE-TDF-Examples**

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## **Chapter 1 - Introduction**

### **1.1 - Purpose**

This is an informative supplement for BASE-TDF. This document provides concrete examples of XML files implementing BASE-TDF elements and attributes.

Chapter 2 - Example Files

2.1 - BASE-TDF-example.xml

```
<?xml-model href="../../../Schematron/BASE-TDF/BASE-TDF_XML.sch" type="application/xml" schematypens="http://purl.oclc.org/dsdl/schematron" title="Main BASE-TDF Schematron File" ?><?xml-model
href="../../../Schematron/IC-SF/IC-SF_XML.sch" type="application/xml" schematypens="http://purl.oclc.org/dsdl/schematron"?><!-- This passing test has encryption and has both
ContentEncodedHashVerification and ContentDecodedHashVerification so should pass.--><tdf:TrustedDataObject xmlns="urn:us:gov:ic:tdf"
                                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                xmlns:tdf="urn:us:gov:ic:tdf"
                                xmlns:sf="urn:us:gov:ic:sf"
                                xmlns:sfhashv="urn:us:gov:ic:sf:hashverification"
                                xsi:schemaLocation="urn:us:gov:ic:tdf ../../Schema/BASE-TDF/BASE-TDF.xsd urn:us:gov:ic:sf:hashverification ../../Schema/IC-SF/HashVerification.xsd"
                                sf:DESVersion="202111"
                                tdf:version="202111">
  <tdf:Assertion tdf:id="myID" tdf:scope="TDO">
    <tdf:StatementMetadata>
      <anyOtherElement xmlns="urn:fake:record"/>
    </tdf:StatementMetadata>
    <tdf:EncryptionInformation>
      <tdf:KeyAccess>
        <tdf:AttachedKey>
          <tdf:KeyValue>abcdefghijklmnop</tdf:KeyValue>
        </tdf:AttachedKey>
      </tdf:KeyAccess>
      <tdf:EncryptionMethod tdf:algorithm="SHA-256"/>
    </tdf:EncryptionInformation>
    <tdf:ReferenceStatement tdf:uri="http://355.355.355.355/thing.txt" tdf:isEncrypted="true">
      <tdf:ReferenceValueBlock tdf:uri="http://355.355.355.355/thing.txt.p01" sfhashv:block="1"/>
      <tdf:ReferenceValueBlock tdf:uri="http://355.355.355.355/thing.txt.p02" sfhashv:block="2"/>
      <sfhashv:ContentEncodedHashVerification sfhashv:hashType="SHA-256">
        <sfhashv:TotalHash sfhashv:blockSize="134217728" sfhashv:totalBlocks="2">a8cd34e5e8472b6ac51c1ae1cab3fe06fad053beb8ebfd8977b010655bfdd3c3</sfhashv:TotalHash>
        <sfhashv:BlockHash sfhashv:block="1">e1232c608aa3e28350cebc98e47dfe784f966bd027ea376b7d4700fe6b07ea3d</sfhashv:BlockHash>
        <sfhashv:BlockHash sfhashv:block="2">f9fa8e46bd027ea376b7d47dc0758a48a4f96e68fe78e064700f700fe6b07ea3</sfhashv:BlockHash>
      </sfhashv:ContentEncodedHashVerification>
      <sfhashv:ContentDecodedHashVerification sfhashv:hashType="SHA-256">
        <sfhashv:TotalHash sfhashv:blockSize="134217728" sfhashv:totalBlocks="2">1e9e34e5e8472b6ac51c1ae1cab3fe06fad053beb8ebfd8977b010655bfdd3c3</sfhashv:TotalHash>
        <sfhashv:BlockHash sfhashv:block="1">4e5e608aa3e28350cebc98e47dfe784f966bd027ea376b7d4700fe6b07ea3d</sfhashv:BlockHash>
        <sfhashv:BlockHash sfhashv:block="2">2e3e8e46bd027ea376b7d47dc0758a48a4f96e68fe78e064700f700fe6b07ea3</sfhashv:BlockHash>
      </sfhashv:ContentDecodedHashVerification>
    </tdf:ReferenceStatement>
    <tdf:Binding>
      <tdf:Signer tdf:subject="*.example.com" tdf:issuer="DNAnexus CA"/>
      <tdf:SignatureValue tdf:signatureAlgorithm="SHA256withRSA"
                        tdf:normalizationMethod="http://www.w3.org/TR/xml-c14n11"
                        tdf:includesStatementMetadata="false">
9506118b839dde42bb20baca7b717854d8d0eaa2f22fd4ddcc33ac84c225226f3470de3bb4983eb608a04cb0349a4f2d83f62a43f1aa9e192d0c34bf33dee712c8860e884942ab5bee2dfb01ecc4597958b84e5693ee41adc7b5fe71c27e9a928
f6def8d4e6f4d74195d7f1d232d6050176e070980ea02de15578d9a87398328</tdf:SignatureValue>
      </tdf:Binding>
    </tdf:Assertion>
    <tdf:StringPayload>ad32s9a</tdf:StringPayload>
  </tdf:TrustedDataObject>
```