Guide to Schematron Rules and Patterns

ICO-NTK Schematron Guide

Version 1

6 September 2013

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Chapter 1 - Introduction

1.1 - Purpose

(U) The following documentation is informative. The actual Schematron files are the normative record. This documentation is generated from the Schematron files via XSLT it may be missing some file or pieces of a file but whatever is here other than titles came from the original file.

(U) It is envisioned that this will be a useful resource to search and read but for questions and debates the source files should be consulted.

(U) Rules identifiers are all of the format ICO-NTK-ID-XXXXX, with rule files named ICO-NTK_ID_XXXXX.sch. Any other heading indicates a supporting file that may strongly influence a rule but is not actually a numbered rule.

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Chapter 2 - Rules

All of the numbered Rules for ICO-NTK are listed in this section. These rules may depend strongly on patterns defined in the Abstract Patterns section or on variables defined in the Schematron Schema section.

2.1 - .//Rules/ICO-NTK_ID_00001.sch

Rule Description: ICO-NTK-ID-00001 [ICO-NTK-ID-00001][Error] The ICO-NTK Profile DES must be [guide://2020/ico-ntk.des.v1].

Code Description: For every ntk:ProfileDes element of an ntk:AccessProfile that has an ntk:AccessPolicy of [guide://2020/ico-ntk.aces], the ntk:ProfileDes must be [guide://2020/ico-ntk.des.v1].

Schematron Code:

```
<?ICEA pattern?><!-- Notices - Distribution Notice:
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       -->
<sch:pattern id="ICO-NTK-ID-00001">


                   <sch:rule
context="ntk:AccessProfile[ntk:AccessPolicy='guide://2020/ico-ntk.aces']">
                     <sch:assert test="ntk:ProfileDes='guide://2020/ico-
ntk.des.v1'">
             [ICO-NTK-ID-00001][Error] The ICO-NTK Profile DES must be
[guide://2020/ico-ntk.des.v1].
        </sch:assert>
                   </sch:rule>
                </sch:pattern>
```

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2.2 - .//Rules/ICO-NTK_ID_00002.sch

Rule Description: ICO-NTK-ID-00002 [ICO-NTK-ID-00002][Error] The ICO-NTK Profile should not contain any Access Profile Values.

Code Description: For every ntk:AccessProfile with an ntk:AccessPolicy of 'guide://2020/ico-ntk.des.v1', ensure that there are no ntk:AccessProfileValue elements.

Schematron Code:

```
<?ICEA pattern?><!-- Notices - Distribution Notice:
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      -->
<sch:pattern id="ICO-NTK-ID-00002">


                 <sch:rule
context="ntk:AccessProfile[ntk:ProfileDes='guide://2020/ico-ntk.des.v1']">
                    <sch:assert test="not(ntk:AccessProfileValue)">
          [ICO-NTK-ID-00002][Error] The ICO-NTK Profile should not contain
any
          Access Profile Values.
       </sch:assert>
                 </sch:rule>
              </sch:pattern>
```

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2.3 - .//Rules/ICO-NTK_ID_00003.sch

Rule Description: ICO-NTK-ID-00003 [ICO-NTK-ID-00003][Error] The ICO-NTK Access Policy must be [guide://2020/ico-ntk.aces].

Code Description: For every ntk:AccessPolicy element of an ntk:AccessProfile that has an ntk:ProfileDes of [guide://2020/ico-ntk.des.v1], the ntk:AccessPolicy must be [guide://2020/ico-ntk.aces].

Schematron Code:

```
<?ICEA pattern?><!-- Notices - Distribution Notice:
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      -->
<sch:pattern id="ICO-NTK-ID-00003">


                <sch:rule
context="ntk:AccessProfile[ntk:ProfileDes='guide://2020/ico-ntk.des.v1']">
                  <sch:assert test="ntk:AccessPolicy='guide://2020/ico-
ntk.aces'">
           [ICO-NTK-ID-00003][Error] The ICO-NTK Access Policy must be
[guide://2020/ico-ntk.aces].
      </sch:assert>
                </sch:rule>
              </sch:pattern>
```

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Chapter 3 - Abstract Patterns

There are no Abstract Patterns currently defined for ICO-NTK.

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Chapter 4 - Schematron Schema

The top level Schematron file for ICO-NTK is in this section. This file imports all of the others and also defines many global variables they are all dependent on.

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4.1 - .//ICO-NTK_XML.sch

Rule Description:

Code Description:

Schematron Code:

```xml
<?ICEA master?><!-- Notices - Distribution Notice:
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            any further distribution must be coordinated via the Intelligence
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            Officer, Mission Engagement Division at standardssupport@dni.gov--
>
<sch:schema queryBinding="xslt2">
                   <sch:ns uri="urn:us:gov:ic:cve" prefix="cve"/>
                   <sch:ns uri="http://www.w3.org/1999/xlink" prefix="xlink"/>
                   <sch:ns uri="urn:us:gov:ic:ism" prefix="ism"/>
                   <sch:ns uri="urn:us:gov:ic:ntk" prefix="ntk"/>
                   <sch:ns uri="http://www.w3.org/2001/XMLSchema" prefix="xs"/>

                   <!-- ************************************* -->
   <!-- * Abstract Rule and Pattern Includes * -->
   <!-- ************************************* -->
   <sch:include href="./../IC-ID/Lib/ICIdentifierRestrictions.sch"/>

                   <!--*****************************-->
<!-- (U) ICO-NTK ID Rules -->
<!--*****************************-->


<!--(U) -->
   <sch:include href="./Rules/ICO-NTK_ID_00001.sch"/>
                   <sch:include href="./Rules/ICO-NTK_ID_00002.sch"/>
                   <sch:include href="./Rules/ICO-NTK_ID_00003.sch"/>
                </sch:schema>
```

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Chapter 5 - Removed Rules

There are no rules that have been removed for ICO-NTK.

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