Perfil del dispositivo

Controlador DNP3 para la CIAA

Versión 0

Preparado por Amaury Jimenez

gridTICs

Noviembre de 2016

Historial de revisiones

Nombre	Fecha	Descripción de los cambios	Versión
Amaury Jimenez	29/11/16	Emisión inicial	0

```
<?xml version="1.0" encoding="utf-8"?>
<?xml-stylesheet type='text/xsl' href='DNP3DeviceProfileJuly2012.xslt' media='screen'?>
<!--DNP3 Device Profile-->
<DNP3DeviceProfileDocument schemaVersion="2.08.00"</pre>
xmlns="http://www.dnp3.org/DNP3/DeviceProfile/July2012">
  <!--Document Header-->
  <documentHeader>
    <documentName>CIAA profile</documentName>
    <documentDescription>Computadora Industrial Abierta Argentina</documentDescription>
    <!--Revision History-->
    <revisionHistory version="1">
      <date>2016-12-09</date>
      <author>M. Sebastián Tobar</author>
      <reason>Proyecto "Controlador DNP3 para la CIAA"</reason>
    </revisionHistory>
  </documentHeader>
  <!--Reference Device-->
  <referenceDevice>
    <!--1) DNP3 Configuration-->
    <configuration>
      <!--1.1) Device Configuration-->
      <deviceConfig>
        <!--1.1.1) Device Function-->
        <deviceFunction>
          <capabilities>
            <outstation />
          </capabilities>
          <currentValue>
            <outstation />
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </deviceFunction>
        <!--1.1.2) Vendor Name-->
        <vendorName>
          <currentValue>
           <value>Proyecto CIAA</value>
          </currentValue>
        </vendorName>
        <!--1.1.3) Device Name-->
        <deviceName>
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            <value>CIAA</value>
          </currentValue>
        </deviceName>
        <!--1.1.4) Hardware Version-->
        <hardwareVersion>
          <currentValue>
            <value>N/A</value>
          </currentValue>
        </hardwareVersion>
        <!--1.1.5) Software Version-->
        <softwareVersion>
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          </currentValue>
        </softwareVersion>
        <!--1.1.6) Document Version Number-->
        <documentVersionNumber>
          <currentValue>
            <value>0</value>
          </currentValue>
        </documentVersionNumber>
        <!--1.1.7) DNP Levels Supported For-->
        <dnpLevelSupported>
          <capabilities>
            <outStation>
              <none />
              <level1 />
           </outStation>
          </capabilities>
          <currentValue>
            <outStation />
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietarvFileViaOtherTransportMechanism />
          </methods>
```

```
</dnpLevelSupported>
  <!--1.1.8) Supported Function Blocks-->
  <supportedFunctionBlocks>
   <capabilities />
   <currentValue />
   <!--Configuration Methods-->
   <methods>
      proprietaryFileViaOtherTransportMechanism />
   </methods>
  </supportedFunctionBlocks>
  <!--1.1.9) Notable Additions-->
  <notableAdditions>
   <capabilities />
   <currentValue />
   <!--Configuration Methods-->
    <methods />
 </notableAdditions>
  <!--1.1.10) Methods To Set Configurable Parameters-->
  <configurationMethods>
   <capabilities>
     proprietaryFileViaOtherTransportMechanism />
      col />
   </capabilities>
   <currentValue>
     proprietaryFileViaOtherTransportMechanism />
      col />
   </currentValue>
   <!--Configuration Methods-->
    <methods />
  </configurationMethods>
  <!--1.1.11) DNP3 XML Files Available On-Line-->
  <onlineXmlFileNames>
   <capabilities />
   <currentValue />
   <!--Configuration Methods-->
   <methods />
  </onlineXmlFileNames>
  <!--1.1.12) DNP3 XML Files Available Off-Line-->
 <offlineXmlFileNames>
   <capabilities />
   <currentValue />
   <!--Configuration Methods-->
   <methods />
  </offlineXmlFileNames>
  <!--1.1.13) Connections Supported-->
  <connectionsSupported>
   <capabilities>
     <serial />
   </capabilities>
   <currentValue>
     <serial />
   </currentValue>
   <!--Configuration Methods-->
   <methods>
      proprietaryFileViaOtherTransportMechanism />
   </methods>
  </connectionsSupported>
</deviceConfig>
<!--1.2) Serial Connection Capabilities-->
<serialConfig>
 <!--1.2.1) Port Name-->
 <portName>
   <currentValue>
     <value>UART2</value>
   </currentValue>
  </portName>
  <!--1.2.2) Serial Connection Parameters-->
  <serialParameters>
   <capabilities>
      <note>Implemented in Target Layer</note>
      <asynchronous />
   </capabilities>
   <currentValue>
     <asynchronous />
   </currentValue>
   <!--Configuration Methods-->
    <methods />
  </serialParameters>
  <!--1.2.3) Baud Rate-->
```

```
<baudRate>
  <capabilities>
    <note>Implemented in Target Layer</note>
   <fixed>9600</fixed>
   <range>
     <minimum>1</minimum>
      <maximum>115200</maximum>
   </range>
 </capabilities>
 <currentValue>
    <value>9600</value>
 </currentValue>
 <!--Configuration Methods-->
 <methods />
</baudRate>
<!--1.2.4) Flow Control-->
<flowControl>
 <capabilities>
   <none />
   <rs2320ptions>
     <requiresCTSBeforeTx />
     <requiresDCDBeforeTx />
     <requiresDSRBeforeTx />
      <requiresRIBeforeTx />
     <requiresCTSBeforeRx />
     <requiresDCDBeforeRx />
     <requiresDSRBeforeRx />
     <requiresRIBeforeRx />
    </rs2320ptions>
   <rs4220ptions />
   <rs4850ptions />
   <other>
     <explanation>Sofware</explanation>
   </other>
 </capabilities>
 <currentValue>
    <none />
    <rs2320ptions>
     <other>
       <explanation />
     </other>
   </rs2320ptions>
   <rs422Options />
   <rs4850ptions>
     <other>
        <explanation />
     </other>
   </rs4850ptions>
 </currentValue>
 <!--Configuration Methods-->
 <methods />
</flowControl>
<!--1.2.5) Link Status Interval-->
<linkStatusInterval>
 <capabilities>
   <notSupported />
 </capabilities>
 <currentValue>
    <notSupported />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
   roprietaryFileViaOtherTransportMechanism />
  </methods>
</linkStatusInterval>
<!--1.2.6) Supports DNP3 Collision Avoidance-->
<supportsCollisionAvoidance>
 <capabilities>
   <no />
 </capabilities>
 <currentValue>
   <no />
 </currentValue>
 <!--Configuration Methods-->
 <methods />
</supportsCollisionAvoidance>
<!--1.2.7) Receiver Inter-character Timeout-->
<interCharacterTimeout>
 <capabilities>
```

```
<notChecked />
    </capabilities>
    <currentValue>
     <notChecked />
    </currentValue>
    <!--Configuration Methods-->
    <methods />
  </interCharacterTimeout>
  <!--1.2.8) Inter-character gaps in transmission-->
 <interCharacterGap>
    <capabilities>
     <none />
    </capabilities>
    <currentValue>
     <none />
    </currentValue>
   <!--Configuration Methods-->
    <methods />
  </interCharacterGap>
</serialConfig>
<!--1.4) Data Link Layer Capabilities-->
kConfig>
  <!--1.4.1) Data Link Address-->
  <dataLinkAddress>
   <capabilities>
     <fixed>0</fixed>
     <range>
        <minimum>0</minimum>
        <maximum>65519</maximum>
     </range>
    </capabilities>
    <currentValue>
      <value>4</value>
    </currentValue>
    <!--Configuration Methods-->
   <methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </dataLinkAddress>
  <!--1.4.2) DNP3 Source Address Validation-->
  <sourceAddressValidation>
   <capabilities>
     <never />
     <alwaysSingleAddress />
    </capabilities>
    <currentValue>
      <never />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     roprietaryFileViaOtherTransportMechanism />
    </methods>
  </sourceAddressValidation>
  <!--1.4.3) DNP3 Source Address Expected When Validation is Enabled-->
  <expectedSourceAddress>
   <capabilities>
     <range>
        <minimum>0</minimum>
        <maximum>65519</maximum>
      </range>
    </capabilities>
    <currentValue>
      <value>3</value>
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     proprietaryFileViaOtherTransportMechanism />
  </expectedSourceAddress>
  <!--1.4.4) Self Address Support Using Address 0xFFFC-->
  <selfAddressSupport>
    <capabilities>
     <yes />
      <no />
    </capabilities>
    <currentValue>
      <no />
    </currentValue>
    <!--Configuration Methods-->
```

```
<methods>
    cproprietaryFileViaOtherTransportMechanism />
  </methods>
</selfAddressSupport>
<!--1.4.5) Sends Confirmed User Data Frames-->
<sendsConfirmedUserDataFrames>
 <capabilities>
    <never />
   <always />
 </capabilities>
 <currentValue>
   <never />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
    proprietaryFileViaOtherTransportMechanism />
  </methods>
</sendsConfirmedUserDataFrames>
<!--1.4.6) Data Link Layer Confirmation Timeout-->
<linkLayerConfirmTimeout>
 <capabilities>
   <range>
     <minimum>0</minimum>
      <maximum>2147483647</maximum>
    </range>
 </capabilities>
 <currentValue>
    <value>2000</value>
 </currentValue>
 <!--Configuration Methods-->
 <methods>
   proprietaryFileViaOtherTransportMechanism />
 </methods>
</linkLayerConfirmTimeout>
<!--1.4.7) Maximum Data Link Retries-->
<maxDataLinkRetries>
 <capabilities>
   <range>
     <minimum>0</minimum>
     <maximum>255</maximum>
   </range>
 </capabilities>
 <currentValue>
    <value>3</value>
 </currentValue>
 <!--Configuration Methods-->
 <methods>
   proprietaryFileViaOtherTransportMechanism />
 </methods>
</maxDataLinkRetries>
<!--1.4.8) Max Number of Octets Transmitted in a Data Link Frame-->
<maxTransmittedFrameSize>
 <capabilities>
    <range>
      <minimum>28</minimum>
      <maximum>292</maximum>
   </range>
 </capabilities>
 <currentValue>
    <value>292</value>
 </currentValue>
 <!--Configuration Methods-->
 <methods>
   proprietaryFileViaOtherTransportMechanism />
 </methods>
</maxTransmittedFrameSize>
<!--1.4.9) Max Number of Octets that can be Received in a Data Link Frame-->
<maxReceivedFrameSize>
 <capabilities>
    <range>
     <minimum>28</minimum>
      <maximum>292</maximum>
    </range>
 </capabilities>
 <currentValue>
    <value>292</value>
  </currentValue>
  <!--Configuration Methods-->
 <methods>
```

```
proprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxReceivedFrameSize>
      </linkConfig>
      <!--1.5) Application Layer Capabilities-->
      <applConfig>
        <!--1.5.1) Maximum number of octets Transmitted In An Application Layer Fragment
other than File Transfer -->
        <maxTransmittedFragmentSize>
          <capabilities>
            <range>
              <minimum>256</minimum>
              <maximum>65535</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>2048</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxTransmittedFragmentSize>
        <!--1.5.2) Maximum number of octets Transmitted in an Application Layer Fragment
containing File Transfer-->
        <maxFileTransferTransmittedFragmentSize>
          <capabilities>
            <range>
              <minimum>256</minimum>
              <maximum>65535</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>2048</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxFileTransferTransmittedFragmentSize>
        <!--1.5.3) Maximum Number of Octets that can be Received in an Application Layer
Fragment-->
        <maxReceivedFragmentSize>
          <capabilities>
            <range>
              <minimum>256</minimum>
              <maximum>65535</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>2048</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxReceivedFragmentSize>
        <!--1.5.4) Timeout Waiting for Complete Application Layer Fragment (ms)-->
        <fragmentTimeout>
          <capabilities>
            <none />
          </capabilities>
          <currentValue>
            <none />
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </fragmentTimeout>
        <!--1.5.5) Maximum Number of Objects Allowed in a Single Control Request for CROB-->
        <maxObjectsInCROBControlRequest>
          <capabilities>
            <range>
              <minimum>1</minimum>
              <maximum>512</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>10</value>
          </currentValue>
```

```
<!--Configuration Methods-->
            cproprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxObjectsInCROBControlRequest>
        <!--1.5.6) Maximum Number of Objects Allowed in a Single Control Request for Analog
Outputs-->
        <maxObjectsInAnalogOutputControlReguest>
          <capabilities>
            <range>
              <minimum>1</minimum>
              <maximum>512</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>10</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            roprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxObjectsInAnalogOutputControlRequest>
        <!--1.5.7) Maximum Number of Objects Allowed in a Single Control Request for Data
Sets-->
        <maxObjectsInDataSetsControlRequest>
          <capabilities>
            <range>
              <minimum>1</minimum>
              <maximum>128</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>8</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            cproprietaryFileViaOtherTransportMechanism />
          </methods>
        </maxObjectsInDataSetsControlRequest>
        <!--1.5.8) Supports Mixing Object Groups (AOBs, CROBs, and Data Sets) in the Same
Control Request -->
        <supportsMixedObjectGroupsInControlRequest>
          <capabilities>
            <yes />
            <no />
          </capabilities>
          <currentValue>
            <ves />
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </supportsMixedObjectGroupsInControlRequest>
      </applConfig>
      <!--1.7) Outstation Configuration-->
      <outstationConfig>
        <!--1.7.1) Timeout Waiting for Application Confirm of Solicited Response Message
(ms)-->
        <applicationLayerConfirmTimeout>
          <capabilities>
            <range>
              <minimum>0</minimum>
              <maximum>2147483647</maximum>
            </range>
          </capabilities>
          <currentValue>
            <value>10000</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </applicationLayerConfirmTimeout>
        <!--1.7.2) How often is Time Synchronization Required from the Master-->
        <timeSyncRequired>
          <capabilities>
            <never />
            <periodicallyFixed>1800</periodicallyFixed>
```

```
</capabilities>
  <currentValue>
    <periodically>1800</periodically>
  </currentValue>
  <!--Configuration Methods-->
  <methods>
    proprietaryFileViaOtherTransportMechanism />
  </methods>
</timeSyncRequired>
<!--1.7.3) Device Trouble Bit IIN 1.6-->
<deviceTroubleBit>
  <capabilities>
    <neverUsed />
    <reasonForSetting>
      <explanation>application can decide</explanation>
    </reasonForSetting>
  </capabilities>
  <currentValue>
    <neverUsed />
  </currentValue>
  <!--Configuration Methods-->
  <methods>
    proprietaryFileViaOtherTransportMechanism />
  </methods>
</deviceTroubleBit>
<!--1.7.4) File Handle Timeout-->
<fileHandleTimeout>
  <capabilities>
    <range>
      <minimum>0</minimum>
      <maximum>2147483647</maximum>
    </range>
  </capabilities>
  <currentValue>
    <value>60000</value>
  </currentValue>
  <!--Configuration Methods-->
  <methods>
    proprietaryFileViaOtherTransportMechanism />
  </methods>
</fileHandleTimeout>
<!--1.7.5) Event Buffer Overflow Behavior-->
<eventBufferOverflowBehavior>
  <capabilities>
    <discardOldest />
    <discardNewest />
  </capabilities>
  <currentValue>
    <discardOldest />
  </currentValue>
  <!--Configuration Methods-->
  <methods>
    roprietaryFileViaOtherTransportMechanism />
  </methods>
</eventBufferOverflowBehavior>
<!--1.7.6) Event Buffer Organization-->
<eventBufferOrganization>
  <capabilities>per Object Group</capabilities>
  <currentValue>per Object Group</currentValue>
  <!--Configuration Methods-->
  <methods>
    proprietaryFileViaOtherTransportMechanism />
  </methods>
</eventBufferOrganization>
<!--1.7.7) Sends Multi-Fragment Responses-->
<sendsMultiFragmentResponses>
  <capabilities>
    <no />
    <yes />
  </capabilities>
  <currentValue>
    <yes />
  </currentValue>
  <!--Configuration Methods-->
  <methods>
    proprietaryFileViaOtherTransportMechanism />
  </methods>
</sendsMultiFragmentResponses>
<!--1.7.8) Last Fragment Confirmation-->
```

```
<requestsLastFragmentConfirmation>
    <capabilities>
      <sometimes>
        <explanation>Only when it contains events</explanation>
      </sometimes>
    </capabilities>
    <currentValue>
     <sometimes>
        <explanation>Only when it contains events</explanation>
     </sometimes>
    </currentValue>
    <!--Configuration Methods-->
    <methods />
  </requestsLastFragmentConfirmation>
  <!--1.7.9) DNP Command Settings Preserved Through a Device Restart-->
  <settingsPreservedThroughDeviceRestart>
    <capabilities>
      <assignClass />
      <analogDeadbands />
      <dataSetPrototypes />
     <dataSetDescriptors />
     <FC31ActivateConfiguration />
    </capabilities>
    <currentValue />
    <!--Configuration Methods-->
    <methods>
     proprietaryFileViaOtherTransportMechanism />
    </methods>
  </settingsPreservedThroughDeviceRestart>
</outstationConfig>
<!--1.8) Outstation Unsolicited Response Support-->
<unsolicitedConfig>
 <!--1.8.1) Supports Unsolicited Reporting-->
 <supportsUnsolicitedReporting>
    <capabilities>
     <notSupported />
    </capabilities>
    <currentValue />
    <!--Configuration Methods-->
    <methods>
     proprietaryFileViaOtherTransportMechanism />
    </methods>
  </supportsUnsolicitedReporting>
  <!--1.8.2) Master Data Link Address-->
  <masterDataLinkAddress>
   <capabilities>
     <range>
       <minimum>0</minimum>
        <maximum>65519</maximum>
     </range>
    </capabilities>
    <currentValue>
     <value>8</value>
    </currentValue>
    <!--Configuration Methods-->
   <methods>
     proprietaryFileViaOtherTransportMechanism />
    </methods>
  </masterDataLinkAddress>
  <!--1.8.3) Unsolicited Response Confirmation Timeout-->
  <unsolicitedResponseConfirmationTimeout>
    <capabilities />
    <currentValue>
     <value />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     roprietaryFileViaOtherTransportMechanism />
    </methods>
  </unsolicitedResponseConfirmationTimeout>
  <!--1.8.4) Number of Unsolicited Retries-->
  <maxUnsolicitedRetries>
    <capabilities>
     <none />
    </capabilities>
    <currentValue>
      <none />
    </currentValue>
    <!--Configuration Methods-->
```

```
<methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </maxUnsolicitedRetries>
</unsolicitedConfig>
<!--1.9) Outstation Unsolicited Response Trigger Conditions-->
<unsolicitedResponseTriggerConditions>
  <!--1.9.1) Number of Class 1 Events-->
 <numberOfClassOneEvents>
    <capabilities>
      <notUsedToTriggerEvents />
    </capabilities>
    <currentValue>
     <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
      cproprietaryFileViaOtherTransportMechanism />
    </methods>
  </numberOfClassOneEvents>
  <!--1.9.2) Number of Class 2 Events-->
  <numberOfClassTwoEvents>
    <capabilities>
      <notUsedToTriggerEvents />
    </capabilities>
    <currentValue>
     <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     proprietaryFileViaOtherTransportMechanism />
    </methods>
  </numberOfClassTwoEvents>
  <!--1.9.3) Number of Class 3 Events-->
  <numberOfClassThreeEvents>
    <capabilities>
      <notUsedToTriggerEvents />
    </capabilities>
    <currentValue>
     <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </numberOfClassThreeEvents>
  <!--1.9.4) Total Number of Events from Any Class-->
  <totalNumberOfClassEvents>
    <capabilities>
      <notUsedToTriggerEvents />
    </capabilities>
   <currentValue>
     <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods />
  </totalNumberOfClassEvents>
  <!--1.9.5) Hold Time After Class 1 Event (ms)-->
  <holdTimeAfterClassOneEvent>
    <capabilities>
     <notUsedToTriggerEvents />
    </capabilities>
    <currentValue>
     <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     roprietaryFileViaOtherTransportMechanism />
    </methods>
  </holdTimeAfterClassOneEvent>
  <!--1.9.6) Hold Time After Class 2 Event (ms)-->
  <holdTimeAfterClassTwoEvent>
    <capabilities>
     <notUsedToTriggerEvents />
    </capabilities>
    <currentValue>
      <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
```

```
<methods>
      cproprietaryFileViaOtherTransportMechanism />
    </methods>
  </holdTimeAfterClassTwoEvent>
  <!--1.9.7) Hold Time After Class 3 Event (ms)-->
  <holdTimeAfterClassThreeEvent>
   <capabilities>
      <notUsedToTriggerEvents />
    </capabilities>
   <currentValue>
      <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </holdTimeAfterClassThreeEvent>
  <!--1.9.8) Hold Time After Event Assigned to Any Class-->
  <holdTimeAfterAnyEvent>
   <capabilities>
     <notUsedToTriggerEvents />
    </capabilities>
    <currentValue>
      <notUsedToTriggerEvents />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </holdTimeAfterAnyEvent>
  <!--1.9.9) Retrigger Hold Timer-->
  <retriggerHoldTimer>
   <capabilities>
     <notRetriggeredForEachNewEvent />
    </capabilities>
    <currentValue>
      <notRetriggeredForEachNewEvent />
    </currentValue>
    <!--Configuration Methods-->
    <methods />
  </retriggerHoldTimer>
  <!--1.9.10) Other Unsolicited Response Trigger Conditions-->
  <otherTriggerConditions>
    <capabilities />
    <currentValue />
   <!--Configuration Methods-->
    <methods />
  </otherTriggerConditions>
</unsolicitedResponseTriggerConditions>
<!--1.10) Outstation Performance-->
<outstationPerformance>
 <!--1.10.1) Maximum Time Base Drift (milliseconds per minute)-->
  <maxTimeBaseDrift>
    <capabilities />
    <currentValue>
     <other>
        <description />
     </other>
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     proprietaryFileViaOtherTransportMechanism />
    </methods>
  </maxTimeBaseDrift>
  <!--1.10.2) When Does Outstation Set IIN 1.4-->
  <outstationSetsIIN14>
    <capabilities />
    <currentValue>
     <afterLastTimeSync>108000</afterLastTimeSync>
    </currentValue>
    <!--Configuration Methods-->
    <methods>
     proprietaryFileViaOtherTransportMechanism />
    </methods>
  </outstationSetsIIN14>
  <!--1.10.3) Maximum Internal Time Reference Error When set Via DNP (ms)-->
  <referenceErrorViaDNP>
    <capabilities />
    <currentValue>
```

```
<value>0</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </referenceErrorViaDNP>
        <!--1.10.4) Maximum Delay Measurement Error (ms)-->
        <delayMeasurementError>
          <capabilities />
          <currentValue>
            <value>0</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </delayMeasurementError>
        <!--1.10.5) Maximum Response Time (ms)-->
        <responseTime>
          <capabilities />
          <currentValue>
            <value>0</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </responseTime>
        <!--1.10.6) Maximum Time From Startup to IIN 1.4 Assertion (ms)-->
        <startupToIIN14>
          <capabilities />
          <currentValue>
            <value>0</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </startupToIIN14>
        <!--1.10.7) Maximum Event Time-tag Error for Local Binary and Double Bit I/O (ms)-->
        <binaryOrDoubleBitEventError>
          <capabilities />
          <currentValue>
            <value>0</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </brack/dinaryOrDoubleBitEventError>
        <!--1.10.8) Maximum Event Time-tag Error for Local I/O Other Than Binary and Double
Bit Data Types (ms) -->
        <nonBinaryOrDoubleBitEventError>
          <capabilities />
          <currentValue>
            <value>0</value>
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </nonBinaryOrDoubleBitEventError>
      </outstationPerformance>
      <!--1.11) Record Individual Field Outstation Parameters-->
      <fieldConfig>
        <!--1.11.1) User Assigned Location Name or Code String-->
        <outstationLocation>
          <currentValue />
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </outstationLocation>
        <!--1.11.2) User Assigned ID Code/Number String-->
        <outstationId>
          <currentValue />
          <!--Configuration Methods-->
          <methods>
            roprietaryFileViaOtherTransportMechanism />
          </methods>
        </outstationId>
        <!--1.11.3) User Assigned Name String for the Outstation-->
        <outstationName>
          <currentValue />
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </outstationName>
        <!--1.11.4) Device Serial Number String-->
```

```
<deviceSerialNumber>
    <currentValue />
    <!--Configuration Methods-->
    <methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </deviceSerialNumber>
</fieldConfig>
<!--1.12) Security Configuration-->
<securityConfig>
  <!--1.12.1) DNP3 device support for secure authentication-->
  <secureAuthenticationSupported>
    <capabilities>
      <notSupported />
      <version>
        <selectable>2</selectable>
        <selectable>5</selectable>
      </version>
    </capabilities>
    <currentValue>
      <notSupported />
    </currentValue>
    <!--Configuration Methods-->
      roprietaryFileViaOtherTransportMechanism />
    </methods>
  </secureAuthenticationSupported>
  <!--1.12.2) Maximum number of users-->
  <maxNumberUsers>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </maxNumberUsers>
  <!--1.12.3) Security message response timeout-->
  <securityResponseTimeout>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </securityResponseTimeout>
  <!--1.12.4) Aggressive mode of operation (receive)-->
  <acceptsAggressiveMode>
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </acceptsAggressiveMode>
  <!--1.12.5) Aggressive mode of operation (issuing)-->
  <issuesAggressiveMode>
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </issuesAggressiveMode>
  <!--1.12.6) Session key change interval-->
  <sessionKeyChangeInterval>
   <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </re></sessionKeyChangeInterval>
<!--1.12.7) Session key change message count-->
  <sessionKeyChangeMessageCount>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </sessionKeyChangeMessageCount>
  <!--1.12.8) Maximum error count-->
  <maxErrorCount>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </maxErrorCount>
  <!--1.12.9) MAC algorithm requested in a challenge exchange-->
  <macAlgorithmRequested>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
```

```
<methods />
  </macAlgorithmRequested>
  <!--1.12.10) Key wrap algorithm-->
 <keyWrapAlgorithm>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </keyWrapAlgorithm>
  <!--1.12.11) Cipher Suites used with DNP implementations using TLS-->
  <TLSCipherSuites>
   <capabilities />
    <currentValue />
   <!--Configuration Methods-->
    <methods />
  </TLSCipherSuites>
  <!--1.12.12) Change cipher request timeout-->
 <changeCipherRequestTimeout>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </changeCipherRequestTimeout>
  <!--1.12.13) Number of Certificate Authorities supported-->
 <numberCASupported>
    <currentValue />
   <!--Configuration Methods-->
    <methods />
  </numberCASupported>
  <!--1.12.14) Certificate Revocation check time-->
 <certificateRevocationCheckTime>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
    <methods />
  </certificateRevocationCheckTime>
  <!--1.12.15) Additional critical function codes-->
  <additionalCriticalFCs>
    <capabilities />
    <currentValue />
   <!--Configuration Methods-->
    <methods />
  </additionalCriticalFCs>
  <!--1.12.16) Other Critical Fragments-->
  <otherCriticalFragments>
   <capabilities />
    <currentValue />
   <!--Configuration Methods-->
    <methods />
  </otherCriticalFragments>
  <!--1.12.17) Support for remote update key changes-->
 <remoteUpdateKeyChangeSupported>
    <capabilities />
    <currentValue />
    <!--Configuration Methods-->
   <methods />
  </remoteUpdateKeyChangeSupported>
</securityConfig>
<!--1.13) Broadcast Configuration-->
<broadcastConfig>
 <broadcastFunctionalitySupported>
   <capabilities>
     <disabled />
    </capabilities>
   <currentValue>
     <disabled />
    </currentValue>
    <!--Configuration Methods-->
    <methods>
      proprietaryFileViaOtherTransportMechanism />
    </methods>
  </broadcastFunctionalitySupported>
  <!--1.13.2) Write functions (FC = 2) supported with broadcast requests-->
  <broadcastFunctionalityFC2Supported>
    <writeClock>
     <capabilities>
        <disabled />
      </capabilities>
      <currentValue>
```

```
<disabled />
    </currentValue>
    <!--Configuration Methods-->
   <methods>
     roprietaryFileViaOtherTransportMechanism />
    </methods>
 </writeClock>
 <writeLastRecordedTime>
   <capabilities>
     <disabled />
   </capabilities>
   <currentValue>
     <disabled />
   </currentValue>
   <!--Configuration Methods-->
   <methods>
     cproprietaryFileViaOtherTransportMechanism />
   </methods>
 </writeLastRecordedTime>
 <clearRestart>
   <capabilities>
     <disabled />
   </capabilities>
   <currentValue>
     <disabled />
   </currentValue>
   <!--Configuration Methods-->
   <methods>
      proprietaryFileViaOtherTransportMechanism />
   </methods>
 </clearRestart>
  <writeAnyOther>
   <capabilities>
     <disabled />
   </capabilities>
   <currentValue>
      <disabled />
    </currentValue>
   <!--Configuration Methods-->
   <methods>
     roprietaryFileViaOtherTransportMechanism />
    </methods>
 </writeAnyOther>
</broadcastFunctionalityFC2Supported>
<broadcastFunctionalityFC5Supported>
 <capabilities>
   <disabled />
 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
    proprietaryFileViaOtherTransportMechanism />
</broadcastFunctionalityFC5Supported>
<broadcastFunctionalityFC6Supported>
 <capabilities>
    <disabled />
 </capabilities>
 <current.Value>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
   proprietaryFileViaOtherTransportMechanism />
 </methods>
</broadcastFunctionalityFC6Supported>
<broadcastFunctionalityFC7Supported>
 <capabilities>
   <disabled />
 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
  <!--Configuration Methods-->
 <methods>
   proprietaryFileViaOtherTransportMechanism />
 </methods>
```

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</broadcastFunctionalityFC7Supported>
<broadcastFunctionalityFC8Supported>
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 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
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  </methods>
</broadcastFunctionalityFC8Supported>
<broadcastFunctionalityFC9Supported>
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    <disabled />
 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
    proprietaryFileViaOtherTransportMechanism />
</broadcastFunctionalityFC9Supported>
<broadcastFunctionalityFC10Supported>
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 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
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   proprietaryFileViaOtherTransportMechanism />
 </methods>
</broadcastFunctionalityFC10Supported>
<broadcastFunctionalityFC11Supported>
 <capabilities>
   <disabled />
 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods />
</broadcastFunctionalityFC11Supported>
<broadcastFunctionalityFC12Supported>
 <capabilities>
   <disabled />
 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods />
</broadcastFunctionalityFC12Supported>
<broadcastFunctionalityFC13Supported>
 <capabilities>
    <disabled />
 </capabilities>
 <currentValue>
   <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
   proprietaryFileViaOtherTransportMechanism />
</broadcastFunctionalityFC13Supported>
<broadcastFunctionalityFC14Supported>
  <capabilities>
    <disabled />
 </capabilities>
 <currentValue>
    <disabled />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
    proprietaryFileViaOtherTransportMechanism />
```

```
</methods>
        </broadcastFunctionalityFC14Supported>
        <broadcastFunctionalityFC15Supported>
          <capabilities>
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          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </broadcastFunctionalityFC15Supported>
        <broadcastFunctionalityFC16Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </broadcastFunctionalityFC16Supported>
        <broadcastFunctionalityFC17Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </broadcastFunctionalityFC17Supported>
        <broadcastFunctionalityFC18Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods />
        </broadcastFunctionalityFC18Supported>
        <broadcastFunctionalityFC19Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </broadcastFunctionalityFC19Supported>
        <!--1.13.18) Enable unsolicited functions (FC = 20) supported with broadcast
requests-->
        <broadcastFunctionalityFC20Supported>
          <br/>
<br/>byEventClass>
            <capabilities>
              <disabled />
            </capabilities>
            <currentValue>
              <disabled />
            </currentValue>
            <!--Configuration Methods-->
            <methods>
              proprietaryFileViaOtherTransportMechanism />
            </methods>
          </byEventClass>
          <br/>
<br/>
dyAnyOther>
            <capabilities>
              <disabled />
            </capabilities>
            <currentValue>
              <disabled />
            </currentValue>
            <!--Configuration Methods-->
            <methods />
          </byAnyOther>
```

```
</broadcastFunctionalityFC20Supported>
        <!--1.13.19) Disable unsolicited functions (FC = 21) supported with broadcast
requests-->
        <broadcastFunctionalityFC21Supported>
          <br/>
<br/>
byEventClass>
            <capabilities>
              <disabled />
            </capabilities>
            <currentValue>
              <disabled />
            </currentValue>
            <!--Configuration Methods-->
            <methods>
              proprietaryFileViaOtherTransportMechanism />
            </methods>
          </byEventClass>
          <br/>
<byAnyOther>
            <capabilities>
              <disabled />
            </capabilities>
            <currentValue>
              <disabled />
            </currentValue>
            <!--Configuration Methods-->
            <methods>
              proprietaryFileViaOtherTransportMechanism />
            </methods>
          </byAnyOther>
        </broadcastFunctionalityFC21Supported>
        <broadcastFunctionalityFC22Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            proprietaryFileViaOtherTransportMechanism />
          </methods>
        </broadcastFunctionalityFC22Supported>
        <broadcastFunctionalityFC24Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            roprietaryFileViaOtherTransportMechanism />
          </methods>
        </broadcastFunctionalityFC24Supported>
        <broadcastFunctionalityFC31Supported>
          <capabilities>
            <disabled />
          </capabilities>
          <currentValue>
            <disabled />
          </currentValue>
          <!--Configuration Methods-->
          <methods>
            roprietaryFileViaOtherTransportMechanism />
          </methods>
        </broadcastFunctionalityFC31Supported>
      </broadcastConfig>
    </configuration>
    <!--2) IEC61850 Object Mappings-->
    <iec61850DeviceMapping />
    <!--3) Database-->
    <database>
      <!--3.1) Binary Input Points-->
      <binaryInputGroup>
        <!--Configuration-->
        <configuration>
          <!--3.1.1) Static Variation Reported When Variation O Requested-->
          <defaultStaticVariation>
            <capabilities>
              <one />
```

```
<two />
        <basedOnPointIndex />
      </capabilities>
     <currentValue>
        <one />
      </currentValue>
      <!--Configuration Methods-->
     <methods>
       cproprietaryFileViaOtherTransportMechanism />
      </methods>
    </defaultStaticVariation>
    <!--3.1.2) Event Variation Reported When Variation 0 Requested-->
    <defaultEventVariation>
      <capabilities>
        <one />
        <two />
       <three />
        <basedOnPointIndex />
      </capabilities>
     <currentValue>
       <three />
     </currentValue>
     <!--Configuration Methods-->
       proprietaryFileViaOtherTransportMechanism />
      </methods>
    </defaultEventVariation>
    <!--3.1.3) Event Reporting Mode-->
    <eventReportingMode>
     <capabilities>
        <mostRecent />
        <allEvents />
     </capabilities>
     <currentValue>
       <allEvents />
     </currentValue>
      <!--Configuration Methods-->
      <methods>
        roprietaryFileViaOtherTransportMechanism />
     </methods>
    </eventReportingMode>
    <!--3.1.4) Binary Inputs Included In Class 0 Response-->
    <class0ResponseMode>
     <capabilities>
        <always />
        <never />
       <onlyWhenAssignedToClass123 />
        <basedOnPointIndex />
     </capabilities>
      <currentValue>
        <always />
     </currentValue>
      <!--Configuration Methods-->
      <methods>
        cproprietaryFileViaOtherTransportMechanism />
      </methods>
    </classOResponseMode>
  </configuration>
</binaryInputGroup>
<!--3.2) Double Bit Input Points not supported-->
<!--3.3) Binary Output Status/Control Relay Output Block Points-->
<binaryOutputGroup>
  <!--Configuration-->
  <configuration>
    <!--3.3.1) Minimum Pulse Time Allowed with Trip, Close, and Pulse On Commands-->
    <minimumPulseTime>
     <capabilities>
        <fixed>0</fixed>
        <basedOnPointIndex />
     </capabilities>
      <currentValue>
        <basedOnPointIndex />
      </currentValue>
     <!--Configuration Methods-->
     <methods>
        roprietaryFileViaOtherTransportMechanism />
      </methods>
    </minimumPulseTime>
    <!--3.3.2) Maximum Pulse Time Allowed with Trip, Close, and Pulse On Commands-->
```

```
<maximumPulseTime>
  <capabilities>
    -
<fixed>2147483647</fixed>
    <basedOnPointIndex />
  </capabilities>
  <currentValue>
    <basedOnPointIndex />
  </currentValue>
 <!--Configuration Methods-->
 <methods>
    proprietaryFileViaOtherTransportMechanism />
 </methods>
</maximumPulseTime>
<!--3.3.3) Binary Output Status Included In Class O Response-->
<class0ResponseMode>
 <capabilities>
   <always />
    <never />
    <onlyWhenAssignedToClass123 />
    <basedOnPointIndex />
  </capabilities>
  <currentValue>
    <always />
  </currentValue>
 <!--Configuration Methods-->
 <methods>
    roprietaryFileViaOtherTransportMechanism />
 </methods>
</classOResponseMode>
<!--3.3.4) Reports Output Command Event Objects-->
<outputCommandEventObjects>
 <capabilities>
    <onSuccess />
 </capabilities>
 <currentValue>
    <onSuccess />
  </currentValue>
  <!--Configuration Methods-->
 <methods>
    roprietaryFileViaOtherTransportMechanism />
  </methods>
</outputCommandEventObjects>
<!--3.3.5) Static Variation Reported When Variation 0 Requested-->
<defaultStaticVariation>
 <capabilities>
    <one />
 </capabilities>
 <currentValue>
    <one />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
    roprietaryFileViaOtherTransportMechanism />
 </methods>
</defaultStaticVariation>
<!--3.3.6) Event Variation Reported When Variation 0 Requested-->
<defaultEventVariation>
 <capabilities>
    <one />
 </capabilities>
 <currentValue>
    <one />
 </currentValue>
 <!--Configuration Methods-->
 <methods>
    roprietaryFileViaOtherTransportMechanism />
  </methods>
</defaultEventVariation>
<!--3.3.7) Command Event Variation Reported When Variation 0 Requested-->
<defaultCommandEventVariation>
 <capabilities>
    <one />
  </capabilities>
 <currentValue>
    <one />
  </currentValue>
  <!--Configuration Methods-->
  <methods>
    roprietaryFileViaOtherTransportMechanism />
```

```
</methods>
    </defaultCommandEventVariation>
    <!--3.3.8) Change Event Reporting Mode-->
    <changeEventReportingMode>
     <capabilities>
        <allEvents />
      </capabilities>
     <currentValue>
       <allEvents />
     </currentValue>
      <!--Configuration Methods-->
      <methods>
        proprietaryFileViaOtherTransportMechanism />
      </methods>
    </changeEventReportingMode>
    <!--3.3.9) Command Event Reporting Mode-->
    <commandEventReportingMode>
      <capabilities>
        <allEvents />
      </capabilities>
     <currentValue>
       <allEvents />
     </currentValue>
      <!--Configuration Methods-->
     <methods>
       proprietaryFileViaOtherTransportMechanism />
     </methods>
    </commandEventReportingMode>
    <!--3.3.10) Maximum Time Between Select and Operate-->
    <maxTimeBetweenSelectAndOperate>
     <capabilities>
        <fixed>5</fixed>
          <minimum>1</minimum>
          <maximum>2147483</maximum>
        </range>
      </capabilities>
      <currentValue>
        <value>5</value>
      </currentValue>
      <!--Configuration Methods-->
       proprietaryFileViaOtherTransportMechanism />
     </methods>
    </maxTimeBetweenSelectAndOperate>
  </configuration>
</binaryOutputGroup>
<!--3.4) Counters/Frozen Counters not supported-->
<!--3.5) Analog Input Points not supported-->
<!--3.6) Analog Output Status/Analog Output Control Block not supported-->
<!--3.7) Sequential File Transfer-->
<sequentialFileTransfer>
 <!--Configuration--
  <configuration>
    <!--3.7.1) File Transfer Supported-->
    <fileTransferSupported>
     <capabilities>
       <no />
        <yes />
     </capabilities>
     <currentValue>
        <yes />
      </currentValue>
     <!--Configuration Methods-->
      <methods>
        proprietaryFileViaOtherTransportMechanism />
      </methods>
    </fileTransferSupported>
    <!--3.7.2) File Authentication-->
    <fileAuthentication>
      <capabilities>
        <never />
        <always />
        <sometimes>
          <explanation />
        </sometimes>
      </capabilities>
      <currentValue>
        <sometimes>
```

```
<explanation />
        </sometimes>
      </currentValue>
     <!--Configuration Methods-->
     <methods>
        roprietaryFileViaOtherTransportMechanism />
      </methods>
    </fileAuthentication>
    <!--3.7.3) File Append Mode-->
    <fileAppendMode>
      <capabilities>
       <never />
        <always />
        <sometimes>
         <explanation />
        </sometimes>
     </capabilities>
     <currentValue>
        <always />
      </currentValue>
      <!--Configuration Methods-->
     <methods>
        proprietaryFileViaOtherTransportMechanism />
      </methods>
    </fileAppendMode>
    <!--3.7.4) Permissions Support-->
    <permissionsSupport>
      <capabilities>
        <ownerReadAllowed />
        <ownerWriteAllowed />
        <ownerExecuteAllowed />
        <groupReadAllowed />
        <groupWriteAllowed />
        <groupExecuteAllowed />
        <worldReadAllowed />
        <worldWriteAllowed />
        <worldExecuteAllowed />
      </capabilities>
      <currentValue>
        <ownerReadAllowed />
        <ownerWriteAllowed />
        <ownerExecuteAllowed />
        <groupReadAllowed />
        <groupWriteAllowed />
        <groupExecuteAllowed />
        <worldReadAllowed />
        <worldWriteAllowed />
        <worldExecuteAllowed />
      </currentValue>
      <!--Configuration Methods-->
      <methods>
       cproprietaryFileViaOtherTransportMechanism />
     </methods>
    </permissionsSupport>
    <!--3.7.5) Multiple Blocks in a Fragment-->
    <multipleBlocksInFragment>
     <capabilities>
       <no />
     </capabilities>
     <currentValue>
       <no />
     </currentValue>
     <!--Configuration Methods-->
      <methods />
    </multipleBlocksInFragment>
    <!--3.7.6) Max Number of Files Open at One Time-->
    <maxOpenFiles>
     <capabilities>
       <fixed>1</fixed>
     </capabilities>
     <currentValue>
        <value>1</value>
      </currentValue>
     <!--Configuration Methods-->
     <methods />
    </maxOpenFiles>
  </configuration>
</sequentialFileTransfer>
<!--3.8) Octet String Points not supported-->
```

```
<!--3.9) Virtual Terminal Points not supported-->
      <!--3.10) Dataset Prototypes-->
      <datasetPrototype />
      <!--3.11) Dataset Descriptor-->
      <datasetDescriptor />
    </database>
    <!--4) Implementation Table-->
    <implementationTable>
      <!--Table-->
      <supportedVariation>
          <objectGroup>1</objectGroup>
          <variation>2</variation>
          <description>Binary Input - Single-bit with flag</description>
            <functionCode>1</functionCode>
            <qualifierCode>0</qualifierCode>
            <qualifierCode>1</qualifierCode>
            <qualifierCode>6</qualifierCode>
            <qualifierCode>7</qualifierCode>
            <qualifierCode>8</qualifierCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>39</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </request>
          <response>
            <functionCode>129</functionCode>
            <qualifierCode>0</qualifierCode>
            <qualifierCode>1</qualifierCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </response>
        </supportedVariation>
        <supportedVariation>
          <objectGroup>10</objectGroup>
          <variation>0</variation>
          <description>Binary Output - any variation</description>
          <request>
            <functionCode>22</functionCode>
            <qualifierCode>0</qualifierCode>
            <qualifierCode>1</qualifierCode>
            <qualifierCode>6</qualifierCode>
            <qualifierCode>7</qualifierCode>
            <qualifierCode>8</qualifierCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>39</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </reguest>
        </supportedVariation>
               <supportedVariation>
          <objectGroup>10</objectGroup>
          <variation>2</variation>
          <description>Continuous Control - output status with flags</description>
          <request>
            <functionCode>1</functionCode>
            <qualifierCode>0</qualifierCode>
            <qualifierCode>1</qualifierCode>
            <qualifierCode>6</qualifierCode>
            <qualifierCode>7</qualifierCode>
            <qualifierCode>8</qualifierCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </request>
          <response>
            <functionCode>129</functionCode>
            <qualifierCode>0</qualifierCode>
            <qualifierCode>1</qualifierCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </response>
        </supportedVariation>
        <supportedVariation>
          <objectGroup>12</objectGroup>
          <variation>1</variation>
          <description>Binary Output Command (CROB) - control relay output
block</description>
          <request>
            <functionCode>3</functionCode>
            <qualifierCode>23</qualifierCode>
```

```
<qualifierCode>39</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </request>
          <response>
            <functionCode>129</functionCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>39</qualifierCode>
            <qualifierCode>40</qualifierCode>
          </response>
        </supportedVariation>
        <supportedVariation>
          <objectGroup>12</objectGroup>
          <variation>1</variation>
          <description>Binary Output Command (CROB) - control relay output
block</description>
          <request>
            <functionCode>4</functionCode>
            <qualifierCode>23</qualifierCode>
            <qualifierCode>39</qualifierCode>
            <qualifierCode>40</qualifierCode>
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