

PME2020 通过 OPC 获取断路器老化数据

问题描述:

通过 OPC 获取断路器老化数据

解决方案:

步骤如下:

1. 打开 Management Console–工具–系统–设备类型编辑器。
2. 设备类型编辑器 – Files – Open,选择需要通过 OPC 服务器发布的设备的.ion 文件。
3. 文件打开后点击 Tools – Expose OPC Measurements。
4. 在弹出的窗口中选择需要发布的测量量。
5. 点击保存 DefaultMeasurements_<device type>.xml 文件，其中<device type>为上述选择的设备的名称，路径为：
[C:\Program Files \(x86\)\Schneider Electric\Power Monitoring Expert\system\IONServices\DefaultMeasurementsExt](C:\Program Files (x86)\Schneider Electric\Power Monitoring Expert\system\IONServices\DefaultMeasurementsExt)
关闭设备类型编辑器。
6. 到如下路径备份 IONServicesConfiguration.xml 文件到其他目录，并将其从原路径删除。
[C:\Program Files \(x86\)\Schneider Electric\Power Monitoring Expert\config\IONServices](C:\Program Files (x86)\Schneider Electric\Power Monitoring Expert\config\IONServices)
7. 将 DefaultMeasurmentsExt.xml 文件从...\system\IONServices\目录拷贝到...\config\IONServices
目录。
8. 在 Management Console 中更新 OPC，工具 – 系统 – 更新 OPC 服务器会创建一个新的 IONServicesConfiguration.xml 文件。
9. 打开...\config\IONServices 目录下的 IONServicesConfiguration.xml 文件在<i:ION> ... </i:ION>之间添加如下内容：

```
<i:Src name="Breakers.BreakerAgingWearProvider" label="Breakers.BreakerAgingWearProvider">  
  
  <i:MTR ref="BreakerAgingAndWearProvider" />  
  
</i:Src>
```

保存并关闭文件。

10. 用 OPC Test Client 连接测试。

The image shows two windows. The left window is an XML editor displaying the 'IONServicesConfiguration.xml' file. The right window is the 'OPC Test Client' interface, showing the 'Address Space' tree. A red circle highlights the 'Breakers.BreakerAgingWearProvider' node in the tree, which corresponds to the XML configuration shown on the left.

IONServicesConfiguration.xml (relevant parts):

```

1 <?xml version="1.0"?>
2 <i:IONServicesConfiguration xmlns:i="http://rdcl.xmlinside.net/PowerMeasurement/configuration/IONServices/" xmlns="http://rdcl.xmlinside.net/PowerMeasurement/configuration/IONServices/Measurements">
3   <i:ION>
4     <i:Src name="Lab.Micrologix" label="Lab.Micrologix">
5       <i:MTR ref="MicrologixB" />
6     </i:Src>
7     <i:Src name="TEst.1" label="TEst.1">
8       <i:MTR ref="Full" />
9     </i:Src>
10    <i:Src name="Breakers.BreakerAgingWearProvider" label="Breakers.BreakerAgingWearProvider">
11      <i:MTR ref="BreakerAgingAndWearProvider" />
12    </i:Src>
13  </i:ION>
14  <MeasurementTemplates>
15    <MT name="Full">
16      <MT name="Instantaneous">
17        <Ctxt label="Volts Vll">
18          <M name="Voltage Phases AB" label="Vll ab" />
19          <M name="Voltage Phases BC" label="Vll bc" />
20          <M name="Voltage Phases CA" label="Vll ca" />
21          <M name="Average Voltage Line-to-Line" label="Vll avg" />
22          <M name="Voltage Unbalance" label="V unbal" />
23        </Ctxt>
24        <Ctxt label="Volts Vln">
25          <M name="Voltage Phases AN" label="Vln a" />
26          <M name="Voltage Phases BN" label="Vln b" />
27          <M name="Voltage Phases CN" label="Vln c" />
28          <M name="Average Voltage Line-to-Neutral" label="Vln av" />
29        </Ctxt>
30        <Ctxt label="Current">
31          <M name="Current Phase A" label="I a" />
32          <M name="Current Phase B" label="I b" />
33          <M name="Current Phase C" label="I c" />
34          <M name="Current Phase Average" label="I avg" />
35          <M name="Neutral Current" label="I 4" />
36          <M name="Current Unbalance" label="I unbal" />
37        </Ctxt>
38        <Ctxt label="Power">
39          <M name="Active Power Phase A" label="KW a" />
40          <M name="Active Power Phase B" label="KW b" />
41          <M name="Active Power Phase C" label="KW c" />
42          <M name="Active Power" label="KW tot" />
43          <M name="Reactive Power Phase A" label="KVAR a" />
44          <M name="Reactive Power Phase B" label="KVAR b" />
45          <M name="Reactive Power Phase C" label="KVAR c" />
46          <M name="Reactive Power" label="KVAR tot" />
47          <M name="Apparent Power Phase A" label="KVA a" />
48          <M name="Apparent Power Phase B" label="KVA b" />
49          <M name="Apparent Power Phase C" label="KVA c" />
50          <M name="Apparent Power" label="KVA tot" />
51        </Ctxt>
52        <Ctxt label="Power Factor">
53          <M name="Power Factor Signed Phase A" label="PF sign a" />
54        </Ctxt>
55      </MT>
56    </MT>
57  </MeasurementTemplates>
58 </i:IONServicesConfiguration>

```

OPC Test Client Address Space:

- ION.OpcDaServer
 - Lab.Micrologix
 - TEst.1
 - Breakers.BreakerAgingWearF
 - Aging And Wear Measure
 - Electrical Aging Meas
 - ElectricalAging@
 - Item Canonical
 - Item Value
 - Item Quality
 - Item Timestamp

The image shows two windows. The left window is the 'Schneider Electric' 'MSB21 详情 - 页面 1' (MSB21 Details - Page 1) web interface. The right window is the 'ION.OpcDaServer.1 - Takebishi OPC Client' interface, showing a table of data points.

MSB21 详情 - 页面 1:

MSB21.NSX52E

Item	Value	Unit
电气磨损:	0.0	%
断路器老化:	6.7	%
机械磨损:	0.0	%
环境老化:	0.1	%
控制单元老化:	6.7	%
热量老化:	6.7	%
腐蚀老化:	0.1	%

ION.OpcDaServer.1 - Takebishi OPC Client:

Tag	Value
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Electrical Aging Measurements/ElectricalAging@MSB2.NSX52E	6.7
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Breaker Electrical Wear Measurements/BreakerElectricalWear@MSB2.NSX52E	0
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Breaker Environmental Aging Measurements/BreakerEnvironmentalAging@MSB2.NSX52E	0.1
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Breaker Mechanical Wear Measurements/BreakerMechanicalWear@MSB2.NSX52E	0
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Control Unit Aging Measurements/ControlUnitAging@MSB2.NSX52E	6.7
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Control Unit Corrosion Aging Measurements/ControlUnitCorrosionAging@MSB2.NSX52E	0.1
Breakers.BreakerAgingWearProvider/Aging And Wear Measurements/Control Unit Thermal Aging Measurements/ControlUnitThermalAging@MSB2.NSX52E	6.7