

# RESTFUL TIME

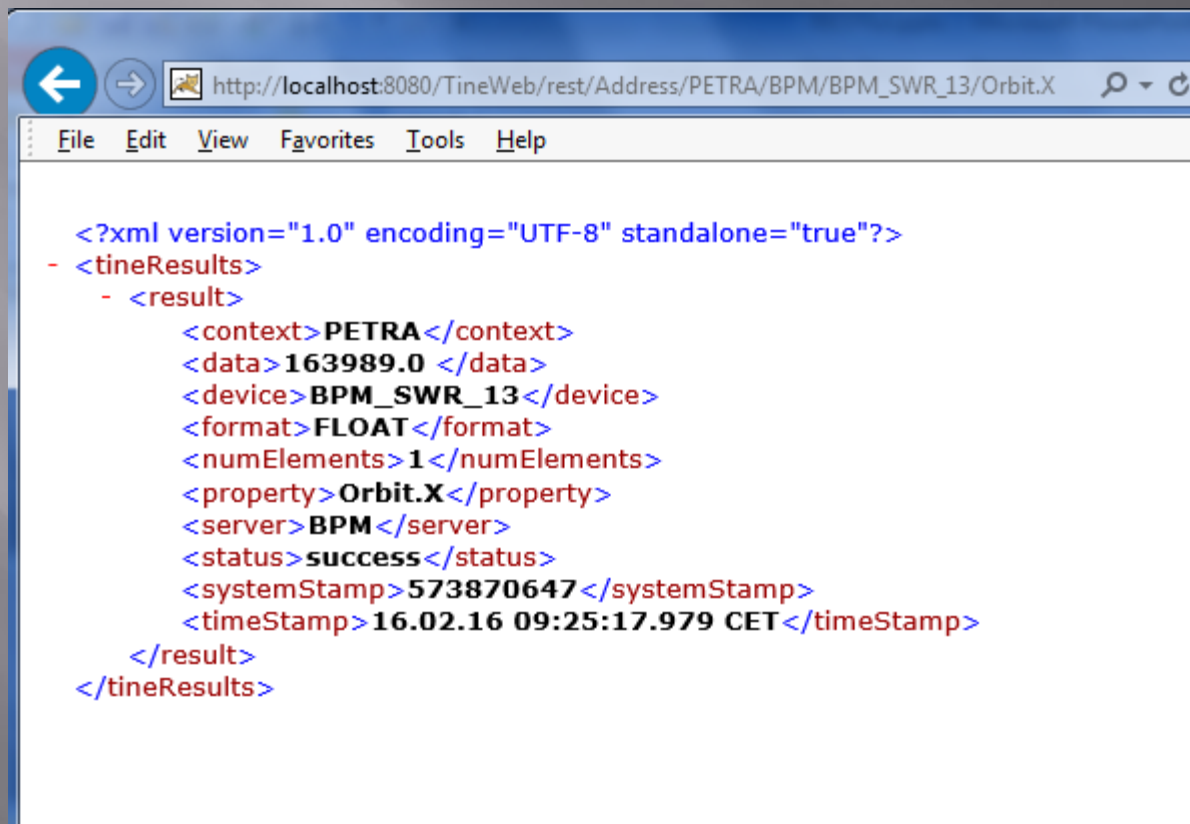
Feb. 17, 2016

# REST

- ▣ Representational State Transfer
  - Yet another WEB Service interface ...
  - WEB services use REST architecture -> interface via RESTful APIs
  - http based ...
  - REST service can return XML, JSON, et. al.

# RESTful TINE

- [http://.../PETRA/BPM/BPM\\_SWR\\_13/Orbit.X](http://.../PETRA/BPM/BPM_SWR_13/Orbit.X)



The screenshot shows a web browser window with the address bar containing the URL `http://localhost:8080/TineWeb/rest/Address/PETRA/BPM/BPM_SWR_13/Orbit.X`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The main content area displays an XML response with the following structure:

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
- <tineResults>
  - <result>
    <context>PETRA</context>
    <data>163989.0 </data>
    <device>BPM_SWR_13</device>
    <format>FLOAT</format>
    <numElements>1</numElements>
    <property>Orbit.X</property>
    <server>BPM</server>
    <status>success</status>
    <systemStamp>573870647</systemStamp>
    <timeStamp>16.02.16 09:25:17.979 CET</timeStamp>
  </result>
</tineResults>
```

# RESTful TINE

<http://.../PETRA/servers>

<http://.../PETRA/BPM/devices>

```
http://localhost:8080/TineWeb/rest/Address/PETRA/servers
File Edit View Favorites Tools Help
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
- <tineServers>
  - <server>
    <context>PETRA</context>
    <FEC>PEGLOBALSRV</FEC>
    <name>GLOBALS</name>
    <OS>UNIX</OS>
    <subsystem>SER</subsystem>
  </server>
  - <server>
    <context>PETRA</context>
    <FEC>PESTATESRV</FEC>
    <name>PETRASTATE</name>
    <OS>UNIX</OS>
    <subsystem>DIAG</subsystem>
  </server>
  - <server>
    <context>PETRA</context>
    <FEC>MHFHISTORY</FEC>
    <name>MHFHISTORY</name>
    <OS>UNIX</OS>
    <subsystem>HIST</subsystem>
  </server>
  - <server>
    <context>PETRA</context>
    <FEC>PECASFEC</FEC>
    <name>CAS.ARCHIVE</name>
    <OS>UNIX</OS>
    <subsystem>SER</subsystem>
  </server>
  - <server>
    <context>PETRA</context>
    <FEC>PECASFEC</FEC>
    <name>CAS</name>
    <OS>UNIX</OS>
    <subsystem>SER</subsystem>
  </server>
  - <server>
    <context>PETRA</context>
    <FEC>PEALMSTATE</FEC>
    <name>PEALARMSTATE</name>
    <OS>UNIX</OS>
```

```
http://localhost:8080/TineWeb/rest/Address/PETRA/BPM/devices
File Edit View Favorites Tools Help
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
- <tineDevices>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_13</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_31</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_46</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_61</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_75</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_90</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_104</name>
    <server>BPM</server>
  </device>
  - <device>
    <context>PETRA</context>
    <name>BPM_SWR_118</name>
    <server>BPM</server>
  </device>
  - <device>
```

# RESTful TINE

- ▣ Useful for 'reports' ?
- ▣ For control applications ... just use Web2c ...