



Common problems encountered when setting up TMVGate

Technical Note: TA2019001



Contents

1.0	Overview	2
2.0	Planning Analytics/TM1 REST API Port	2
3.0	TMVGate Configuration	4
4.0	TMVGate URL Generator	6



1.0 Overview

TMVGate has a dependency on the Planning Analytics/TM1 configuration, in specific, the REST API port. A number of our customers who encountered problems in their initial setup of TMVGate faced issues related to the TM1 REST API port.

This technical document will provide detailed steps on troubleshooting configuration issues.

2.0 Planning Analytics/TM1 REST API Port

Note that **TM1 10.2.2 FP5** or above is required for the stable functioning of the TM1 REST API. TM1 REST API is not enabled by default. You need to add a parameter in **TM1S.cfg**, which is located in the configuration file for your Planning Analytics/TM1 server instance.

In the TM1S.cfg, check these two parameters:

- UseSSL
- HTTPPortNumber

The first parameter "**UseSSL**", if set to "**T**", will ensure that all communication (including REST API calls) with the Planning Analytics/TM1 server is SSL enabled. The importance of the noting the "**UseSSL**" setting will be further discussed below.

The second parameter, "**HTTPPortnumber**" defines the TCP/IP Port number that will be used for REST API communication. By adding this parameter, you are enabling the REST API for the Planning Analytics/TM1 server. You can use any unassigned TCP/IP port number on the server. We normally assign port **8010** during our tests.

**Example:**

HTTPPortnumber = **8010**

You will need to restart the Planning Analytics/TM1 server instance after specifying this parameter.

To test whether REST API has been enabled, open a browser and enter this URL:

[https://server_name:8010/api/v1/\\$metadata](https://server_name:8010/api/v1/$metadata)

Note that if **UseSSL = T**, you will need to use **HTTPS**. Otherwise, use **HTTP**.

The Server name will be your Planning Analytics /TM1 physical server host name.

If the REST API is working, you will see results similar to the following on the browser:

This XML file does not appear to have any style information associated with it. The document tree is shown below:

```
▼<edmx:Edmx xmlns="http://docs.oasis-open.org/odata/ns/edmx" xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0"
  ▼<edmx:Reference Uri="http://docs.oasis-open.org/odata/odata/v4.0/os/vocabularies/Org.OData.Core.V1.xml">
    <edmx:Include Namespace="Org.OData.Core.V1"/>
  </edmx:Reference>
  ▼<edmx:Reference Uri="http://docs.oasis-open.org/odata/odata/v4.0/os/vocabularies/Org.OData.Capabilities.V1.xml">
    <edmx:Include Namespace="Org.OData.Capabilities.V1"/>
  </edmx:Reference>
  ▼<edmx:DataService>
    ▼<Schema Alias="tm1" Namespace="ibm.tm1.api.v1">
      ▼<ComplexType Name="Attributes" OpenType="true">
        <Property Name="Caption" Nullable="true" Type="Edm.String"/>
      </ComplexType>
      ▼<EntityType Name="LocalizedAttributes">
        ▼<Key>
          <PropertyRef Name="LocaleID"/>
        </Key>
        <Property Name="LocaleID" Nullable="false" Type="Edm.String"/>
        <Property Name="Attributes" Type="ibm.tm1.api.v1.Attributes"/>
      </EntityType>
      ▼<EnumType Name="AttributeType">
        <Member Name="Numeric"/>
        <Member Name="String"/>
        <Member Name="Alias"/>
      </EnumType>
    </Schema>
  </edmx:DataService>
</edmx:Edmx>
```

If you are getting an error or a blank screen, there are two possibilities:

- There is a firewall blocking the assigned REST API TCP/IP Port. You need to open this port through your firewall settings.
- The wrong TM1S.cfg has been used, or you didn't restart the Planning Analytics/TM1 server after changes.



You can further confirm if this is a firewall issue by opening up the browser on the server itself and issue the same URL. If it works in the server, this is a strong indicator that it is a firewall issue.

Once the validated REST API is working, proceed to the next section on the TMVGate settings configuration.

3.0 TMVGate Configuration

The TMVGate configuration file is updated during installation. The configuration file can be modified after installation by using any text editor such as NotePad.

The configuration file, **TMVGate.exe.config**, can be found in the folder where TMVGate was installed.

There are a few parameters that you should check and confirm.

1. LICKey

```
<add key="LICKey" value="RkJZV0ZoWVdGeFFMSHhZV0ZoWVdGaFIXRmc9PQ==" />
```

Make sure the license key is as provided for TMVGate App Config. Note that it is case sensitive.

2. BaseAddress

```
<add key="BaseAddress" value="http://+:50235" />
```

This is the TCP/IP Port number used by TMVGate when you issue the gateway URL to extract data from Planning Analytics/TM1. Make sure your firewall (if configured) allows incoming traffic on this port number. The default is **50235** but you can assign any un-used port number in your environment.



3. TM1APIServiceRootURL

```
<add key="TM1APIServiceRootURL" value="https://localhost:8010/api/v1/" />
```

Some of our customers encounter difficulties with this parameter. It specifies the REST API port to be used. If TMVGate is installed on the same server as Planning Analytics/TM1, you can leave it as localhost. Otherwise, you will need to change the localhost to the Planning Analytics/TM1 physical server host name accordingly. Note that both the **difference of HTTPS or HTTP** and the **REST API Port number** will impact the use of TMVGate. Hence, you will need to check that they correspond to what you tested while validating the REST API.

If you have made changes any of the above parameters, you will need to restart the TMVGate service.

To restart the service, look for the TMVGate Service from Windows services screen and restart this service to effect the change.



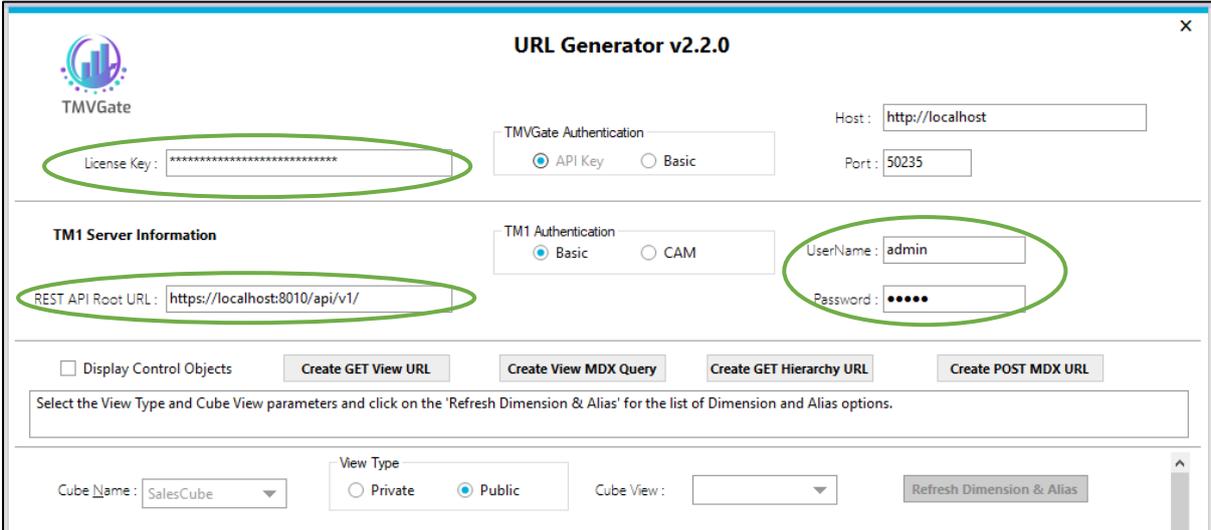
4.0 TMVGate URL Generator

Another common mistake that some customers make - Using the **wrong license key** for the URL generator. You are given two types of license keys:

The **first key**, which we discussed in previous section, refers to the **TMVGate App Config key**.

The **second key** is to be used in the **URL Generator**. The second key is used to generate the required APIKey in combination with your Planning Analytics/TM1 User ID and Password.

The following illustrates the use of the **URL license key**:



The screenshot shows the 'URL Generator v2.2.0' application window. It features a 'License Key' field with a green oval around it. Below this is the 'TMVGate Authentication' section with 'API Key' selected. To the right are 'Host' and 'Port' fields. The 'TM1 Server Information' section includes a 'REST API Root URL' field with a green oval around it. To its right is the 'TM1 Authentication' section with 'Basic' selected, and 'Username' and 'Password' fields, both with green ovals around them. At the bottom, there are buttons for 'Create GET View URL', 'Create View MDX Query', 'Create GET Hierarchy URL', and 'Create POST MDX URL'. Below these buttons is a section for selecting 'View Type' (Private or Public) and 'Cube View'.

Once you have specified all the required parameters, click on “Create GET View URL” or the relevant function you require to proceed and generate the required URL with the appropriate APIKey. A wrong license key or User ID, Password will result in an invalid APIKey, and you will not be able to extract data from Planning Analytics /TM1.



<http://localhost:50235/api/view?APIKey=f3F0UkdxEhsAVIUbf35kUURhcxsAVIUbYGR%2FcWBOf3FgTkVqYHRvQG5ORXVgZG9xYEEbGw==&pCube=SalesCube&pView=By%26country&pPrivate=False&pFormat=JSON&pAlias.....>

Lastly, do change the localhost to the server host name where TMVGate is installed. Unless you are testing the generated URL within the server (e.g. to isolate possible firewall issue as discussed previously).

<http://localhost:50235/api/view?APIKey=f3F0UkdxEhsAVIUbf35kUURhcxsAVIUbYGR%2FcWBOf3FgTkVqYHRvQG5ORXVgZG9xYEEbGw==&pCube=SalesCube&pView=By%26country&pPrivate=False&pFormat=JSON&pAlias.....>