Connecting to sandstorm.cs.ut.ee SQL Server Analysis Services databases

The databases on sandstorm.cs.ut.ee are accessible from within UT network. If you are not at a UT network computer, you need to establish an OpenVPN connection first: https://wiki.ut.ee/pages/viewpage.action?pageId=17105590. You can access the SQL Server Analysis Services (SSAS) databases using SQL Server Management Studio, Microsoft Excel, Microsoft Power BI or any other tool that supports making XMLA, MDX, or DAX queries over SQL Server native interfaces or over ODBC interface. SQL Server Management Studio (SSMS) is also installed on sandstorm.cs.ut.ee.

Running SSMS on sandstorm

1) Make sure you are connected to UT network.
2) Establish a remote desktop connection to sandstorm.cs.ut.ee.
   a. On Windows:
      i. Launch application called “Remote Desktop Client” (“Kaugtöölaaua ühendus”).
      ii. Type “sandstorm.cs.ut.ee” as the remote computer address.
      iii. If you are already logged into the domain (e.g. you are using a classroom computer), the username is pre-filled. Otherwise, type “DOMENIS” as the domain name, your UT username as username and UT password when prompted to. Note that if there is no separate prompt for domain, just prepend it to your username as “DOMENIS\” (see screenshot above).
      iv. Click “connect”. Unless you have installed the CA certificates for UT on your computer, Remote desktop notifies that the certificate cannot be verified – choose to continue nevertheless. You should be connected now.
   b. On Linux (and possibly on Mac):
      i. Launch a remote desktop client (e.g. “rdesktop” or “Remmina Remote Desktop Client”).
ii. Type “sandstorm.cs.ut.ee” as the remote computer address.

iii. Type “DOMENIS” as the domain name, your UT username as username and UT password when prompted to. Note that if there is no separate prompt for domain, just prepend it to your username as “DOMENIS\”. For visuals, using colour depth 32bpp True Color is preferred.

iv. Click “connect”. Unless you have installed the CA certificates for UT on your computer, you might get notified that the certificate cannot be verified – choose to continue nevertheless. You should be connected now.
3) Click on “Start” (lower left corner by default) and type “SQL Server Management Studio”. The menu should already suggest you the correct application.

4) Launch the application by clicking on it.

Running SQL Server Management Studio on a classroom computer (or sandstor or any other UT domain computer)
On classroom computers (and other computers where you have already logged in with your UT credentials) you can just start the SQL Server Management Studio normally.

Running SQL Server Management Studio on an extranet computer
1) Install SQL Server Management Studio (SSMS) if you have not done so. The latest version is available free from Microsoft Download Center, older versions are available on Microsoft Imagine.

2) As SQL Server uses your Active Directory credentials to authenticate you, you need to start SSMS using the domain account. This can be done using the runas command like that:
runas /user:DOMENIS\username /netonly Path_to_SSMS
3) SSMS can usually be found in your “Program Files” directory under “Microsoft SQL Server” subdirectory. The full path can be found by right-clicking “SQL Server Management Studio” in Start menu and choosing “Properties.

![SSMS Properties](image)

Connecting to the analysis services database using SSMS

1) Choose to connect to “Analysis Services” server. Server name should be “sandstorm.cs.ut.ee” but “SANDSTOR” might also work. “(local)” will work when connecting from sandstorm.cs.ut.ee itself.

2) Click “Connect”.

Connecting to the analysis services database from Excel

1) Start Excel with your domain credentials. The command to start Excel will look similar to this:

   `runas /user:DOMENIS\... /netonly "C:\Program Files (x86)\Microsoft Office\Office14\EXCEL.EXE"

   Note that the path to Excel might be different in your case.
2) Choose “Data”, “import from external connection”, “Analysis Services”.

3) Type “sandstorm.cs.ut.ee” as the server name. Use Windows authentication. Click “next >”. 
4) Choose the cube or perspective you are interested in.

5) Click “Finish”.

6) Choose where to import the data and click “OK”.

7) Use Pivot Table tools to explore the cube.
The same procedure as with Excel, applies when connecting with Power BI.