TARGIT

Data Service

Installation and Configuration Guide

TARGIT Decision Suite 2018 RTM

Contents

Introduction

TARGIT Data Service enables a TARGIT customer to instantly consume data from a wide range of data sources. The TARGIT Data Service is an in-memory engine designed to work with datasets < 2 million rows for standard edition, which can be expanded to unlimited data by acquiring the module. The product can be installed on the same server hosting the ANTserver component.

The goal with this guide is to provide you with tools and methods to install and utilize the TARGIT Data Service in your environment.

Please note that installation and configuration requires knowledge of Windows Server, IIS configuration.

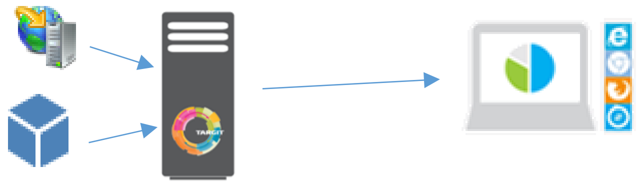
The user guide is available at online at http://doc.targit.com/data-service

Architecture

The TARGIT Data Service will require the ports 9095 (for the administrative interface) and 9090 (for database communications) to be available.

The TARGIT Data Service contains a full IP filter service where connections from other network entities can be limited additionally Windows Security can be applied to minimize access to the administrative interface.

TARGIT Data Service can in addition to the schematic below be installed on a separate server, please see the section "Installing the TARGIT Data Service (Separate server setup)" for further guidance.



Requirements

The following requirements must be present for successful installation of the TARGIT Data Service:

- TARGIT Decision Suite 2015 or newer
- A newer browser (IE10 and newer)
- A valid license that includes the Data Discovery-module
- .NET Framework 4.5 or newer
- Windows Server 2008 SP2 and newer
- Enabled Windows Features for:
  - WCF Activation over port and http
  - IIS ASP.NET 4.5

Installing the TARGIT Data Service (Single server setup)

1. A server running TARGIT ANTserver must be configured and running with a valid license for the “Data Discovery”-module.

2. Ensure you have upgraded the browser on the servers where you want to test/utilize Data Discovery (at least least IE10 and newer). Also for servers the secure browser mode must be turned off for the UI to be shown.

3. Ensure the following components (Windows Features) are installed
    a. WCF Activation over port and http
    b. IIS ASP.NET 4.5

4. Download the TARGIT Data Service installer from the TARGIT Download Center and execute the installer and fill out the prompts on the installer pages.

5. Specify the URL for which the clients should be able to access the Data Service interface. Please ensure that the firewall on the machine is open for the port tcp/9090 and tcp/9095. It is recommended not to change the ports.

6. Modify the proxy settings if they are required for the network environment. The installer tries to autodetect this and if it does find a proxy it will default to that option and suggest you fill out the fields for proxy address, user and password to connect through the proxy.

7. Choose the appropriate locales for your environment. If you primarily work with English files add English as the first option in the locale selection screen and add additional locales that you would meet, e.g. German. You can add as many as necessary and the parsing of dates etc. will be done according to the list.

8. Choose the installation option for local ANTserver.

9. Finish the installation

10. Start TARGIT Management, go to rights and give the current user permissions to be Data Discovery administrator

You should now be able to launch the TARGIT client and launch the Data Discovery tool from the ribbon

Installing the TARGIT Data Service (Separate server setup)

1. A server running TARGIT ANTserver must be configured and running with a valid license for the "Data Discovery"-module.

2. An accessible Windows Share must be created and be given full write permissions for the service account that ANTserver is running under, this share must point to the path for the TARGIT settings folder (default c:\ProgramData\TARGIT\ANTServer\)

3. Ensure you have upgraded the browser on the servers where you want to test/utilize Data Discovery (at least least IE10 and newer). Also for servers the secure browser mode must be turned off for the UI to be shown.

4. Ensure the following components (Windows Features) are installed
   a. WCF Activation over port and http
   b. IIS ASP.NET 4.5

5. Download the TARGIT Data Service installer from the TARGIT Download Center and execute the installer and fill out the prompts on the installer pages.

6. Specify the URL for which the clients should be able to access the Data Service interface. Please ensure that the firewall on the machine is open for the port tcp/9090 and tcp/9095. It is recommended not to change the ports.

7. Modify the proxy settings if they are required for the network environment. The installer tries to autodetect this and if it does find a proxy it will default to that option and suggest you fill out the fields for proxy address, user and password to connect through the proxy.

8. Choose the appropriate locales for your environment. If you primarily work with English files add English as the first option in the locale selection screen and add additional locales that you would meet, e.g. German. You can add as many as necessary and the parsing of dates etc. will be done according to the list.

9. Choose the installation option for remote ANTserver and specify the name including the port (default port is 1300) in the form of servername:portnumber e.g. myantserver:1300 as well as the path to the share created earlier in the form \\nameofanserver\TARGIT.

10. Start the Windows Services control panel and stop the service TARGIT Data Service. Change the service account credentials to an account with full permissions to modify the file share created earlier and restart the service

11. Finish the installation

12. Restart the ANTserver service account on the server where the service resides.

13. Start TARGIT Management, go to rights and give the current user permissions to be Data Discovery administrator

You should now be able to launch the TARGIT client and launch the Data Discovery tool from the ribbon

Configuring network level security

Securing the data

Data access for end users is configured through the TARGIT Management-application and does not differ from configuring security on other connection types. Please refer to the TARGIT Management User Guide.

Filtering browsing of files and folders

An administrator can limit browsing for files or folders in the Data Sources plugins by specifying a filter in the C:\Program Files\TARGIT\TARGIT Data Service\Targit.DataService.Exe.Config file.

These can be used ONCE within the browsing-section

<allow>*</allow>	Allows access to all resources
< deny >*</ deny >	Denies access to all resources

These can appear multiple times as necessary

<allow>c:\resource</allow>	Allows access to a resources
<deny>c:\resource</ deny >	Denies access to a resources

In the example below browsing in all folders are disabled by the <deny>*</deny> and browsing C:\DSTraining end up being allowed.

```
<DataService.FileBrowser>
   <browsing>
      <deny>*</deny>
      <allow>C:\DSTraining</allow>
  </browsing>
</DataService.FileBrowser>
```

Securing Communications

The TARGIT Data Service comes with a built in IP filtering functionality that can limit the request to the service. This can be configured by editing the file C:\Program Files\TARGIT\TARGIT Data Service\Targit.DataService.Exe.Config (make a backup before editing!)

By default the functionality is disabled but can be enabled by simply uncommented the entries in the configuration file.

➔ **Please note that help related to configuration of this is only provided as billable support**

By default the filter is set to the name "Default" and the corresponding filter with the same name, however the FilterName can be changed to any of the other filter examples, to only allow connections for both administrative and queries for the server the TARGIT Data Service is installed on the following settings must be changed:

1. Remove comments from the `<!-- <HttpModule FilterName="Default" /> -->` line (the <!-- and the -->)
2. Change `<HttpModule FilterName="Default" />` to `<HttpModule FilterName="LoopbackOnly" />`

3. Remove comments for the loopback section, leaving it like this

   ```
   <!--      A filter than only allows traffic from loopback -->
   <add Name="LoopbackOnly">
         <allow hosts="127.0.0.1/8" />
         <deny hosts="*" />
   </add>
   ```

4. Restart the TARGIT Data Service from the Windows Services.

Below are the individual sample configurations – also found in the default configuration file, please note that comments have been removed from all irrelevant places in the sample below:

```
<IPFilter>
  <HttpModule FilterName="Default" />
  <Filters>
    <add Name="Default" DefaultBehavior="Deny">
      <deny hosts="192.168.11.12,192.168.1.*" />
      <allow hosts="192.168.0.0/16" />
      <deny hosts="*" />
    </add>

    <!-- A filter than only allows traffic from local network -->
    <add Name="LocalOnly">
      <allow hosts="10.0.0.0/8,172.16.0.0/12,192.168.0.0/16,127.0.0.1/8" />
      <deny hosts="*" />
    </add>

    <!--  A filter than denies traffic from local network -->
    <add Name="DenyLocal">
      <deny hosts="10.0.0.0/8,172.16.0.0/12,192.168.0.0/16,127.0.0.1/8" />
      <allow hosts="*" />
    </add>-->

    <!--      A filter than only allows traffic from loopback -->
    <add Name="LoopbackOnly">
      <allow hosts="127.0.0.1/8" />
      <deny hosts="*" />
    </add>

    <!--     A filter than denies traffic from loopback -->
      <add Name="DenyLoopback">-->
        <deny hosts="127.0.0.1" />-->
      </add>-->
  </Filters>

</IPFilter>
```