



*TARGIT Enterprise Manager*

*User's guide*

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## **TARGIT Analysis Suite 2K5**

TARGIT Analysis Suite 2K5 is a complete Business Intelligence tool enabling you to increase sales, improve service and lower costs.

An increasing number of customers around the world enjoy the great user friendly competitive advantages that set TARGIT apart from competitors.

### **TARGIT Analysis**

TARGIT Analysis is the premier software tool that you need as a minimum in order to get started. One-click data mining, artificial intelligence, interactive globes and 3-D objects are among its many features. TARGIT Report has now been seamlessly integrated into the TARGIT Analysis application to fulfill the need for user friendly creative and flexible reporting tools.

### **TARGIT Analysis NET**

TARGIT Analysis NET offers a zero-client/zero-footprint web access that gives quick and easy access to all prepared analyses, and even to allow building and saving of new analyses, all in your web browser.

### **TARGIT Enterprise Manager**

TARGIT Enterprise Manager is a tool for management and monitoring of the TARGIT applications. The program will improve Total Cost of Ownership of the TARGIT Analysis Suite 2K5 by empowering the IT department to control the system centrally and thereby reducing the time from incident to solution.

### **TARGIT ANTServer**

The TARGIT ANTServer will ensure you optimal performance from the underlying systems. The program supports both OLTP and OLAP in the TARGIT Client/Server environment. It facilitates deployment of enterprise-wide applications so that the IT professionals only need to make updates and modifications in one place, TARGIT ANTServer will ensure the integrity throughout the organization.

### **TARGIT Excellerator**

TARGIT Excellerator is a Microsoft Excel Add-In product which makes it possible to use TARGIT Analysis advanced and easy-to-use data access and formatting capabilities to extract data from a Data Warehouse for presentation in Microsoft Excel table format. The "Intelligent Analysis" button also gives access to TARGIT Analysis' powerful Data Mining capabilities.



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# Introduction

## ***Preface***

This guide explains the use of the TARGIT Enterprise Manager. It explains which choices the user has to monitor and control the TARGIT applications. The guide assumes the user to have basic knowledge of using administrative tools.

## ***TARGIT Enterprise Manager***

The TARGIT Enterprise Manager is the management console used to configure the TARGIT ANTSERVER and TARGIT Analysis applications. TARGIT Enterprise Manager runs as part of the Microsoft Management Console.

## ***TARGIT ANTSERVER***

The TARGIT ANTSERVER is the server application. The ANTSERVER supports many database types and is deemed necessary for other TARGIT applications to run. The ANTSERVER simplifies installation and management of client applications by eliminating the need for installation of database engines on the client computers.

Time dependant activities such as Notifications and Report scheduling are also handled by the ANTSERVER.

## ***VFS***

The VFS (Virtual File System) is basically a directory containing all files used by the TARGIT applications, for example background images, language drivers etc. When a user connects to the ANTSERVER from a client workstation, the files in the VFS directory will be copied to the client computer. Each user can have his or her own languages, background images and so on. All of these files are placed on the ANTSERVER and copied to the user during connect.

## ***Dynamic Periods***

TARGIT ANTSERVER and the TARGIT Analysis application supports Dynamic Periods, the ability to compare data relative to a dynamic time setting as for instance: "Revenue, this year to date" compared

to "Revenue, last year, same period ". Each of these two statements are dynamic, meaning that the period and the data reflected will be according to the actual date.

In order to be able to use this powerful feature both in multidimensional and relational databases, the time dimensions of the Data Warehouse must be defined and configured properly. A detailed description of this may be obtained from the supplier.

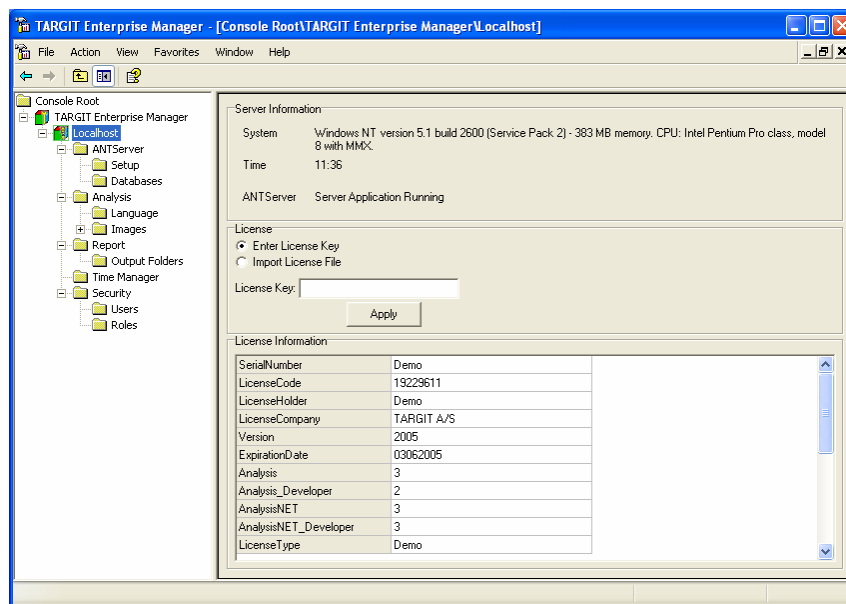
# The Basics

## Preface

The TARGIT Enterprise Manager is a configuration tool for the TARGIT environment. It can be used by a developer to set up servers, change time schedule for servers, manage users and more. This chapter will explain the use of the TARGIT Enterprise Manager.

## The main screen

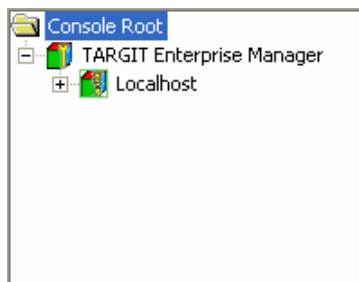
The TARGIT Enterprise Manager Main window is divided into two vertical sections. The left side of the window, also called the Server browser, contains a tree structure for browsing through the servers, server modules and server settings managed by TARGIT Enterprise Manager. The right side of the window is the work area, and contains the options for the server, server module or server setting for the entity currently selected in the tree structure browser.



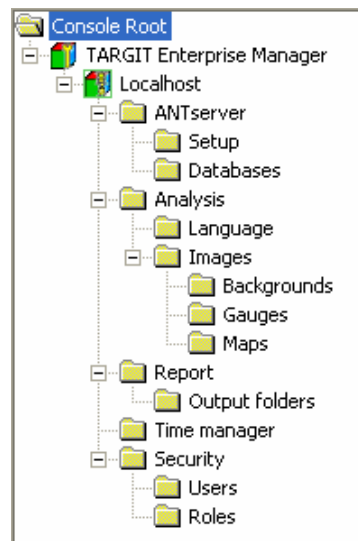
*The Enterprise Manager main window*

## The Server browser

The tree structure browser contains a list of available ANTServers, and their server modules. The plus and minus icons found in the browser are used to expand and collapse the tree, respectively.



*The Server browser*



*The Server browser expanded*

When successfully connected to a server, the tree can be expanded to show the modules of that server. Connecting to the server is done by expanding the tree using the plus sign by the server name.

Right clicking a server name will activate a context menu containing additional functions for the server.

### **Connecting and disconnecting**

Connecting to a server is done either by double clicking the server name, clicking the plus icon next to the servers name or using the right click menu.

When the connection is established, the user must be authenticated before access to the server modules can be obtained. The method of authentication is dependent of how the security model of the server – either Windows Security or Standard. Standard requires a username and password to be entered. If the

user name and/or password are unknown or incorrect or the user does not have sufficient user rights, the TARGIT Enterprise Manager will report the error and access to the server will be denied. If the TARGIT Enterprise Manager is not able to reach the remote computer, the remote ANTSERVER may not be running.

Disconnection from an ANTSERVER can be achieved using of the right click menu. Clicking the minus icon (and thereby contracting the tree) will not disconnect from the server.

When connected to an ANTSERVER, the server icon will have a green frame.

### ***Adding a server to the browser tree***

If the server to be connected to is not listed in the server browser tree, it may be added by clicking the Right mouse button on the TARGIT Enterprise Manager item placed directly beneath the Console Root item in the Server browser tree. Selecting **New Server** from the context menu brings up the Add server window.

The Add server window offers two ways of adding servers. If the ANTSERVER to be connected to and the computer running the TARGIT Enterprise Manager are connected via a local network, the server can be found in the tree structure in the Add server from tree frame. The first server in the tree will be **Localhost**, which is the machine running the TARGIT Enterprise Manager. The rest of the tree is for browsing through the local network to find other servers.

Another possibility is to add the server manually, which is done by using the edit field in the frame below the **Select a Server...** frame. Here, the IP address or network name of the required server can be entered.

The Windows Security section can be used to specify the security model of the server. This should match the setup of the actual server.

# Server modules

## ***Preface***

This chapter describes the server modules available in TARGIT Enterprise Manager.

## ***Server and license information***

When connected to an ANTServer and the server name is selected in the tree browser, server and License information will appear in Work Area in the right part of the window.

The upper part of the work area is the Server Information frame which displays information about the computer running the ANTServer and the current time and state of that server.

The bottom part of the work area is the License Information frame which displays the actual License Certificate. The license information may be altered by using one of the options in the middle frame, Enter License Key or Import License File. A License is supplied as a 16 character License Key which may be entered here and used to download the license data from the license portal. In case the PC running the TARGIT Enterprise Manager application does not have access to the Internet, it is possible to download the license information from the license portal as an XML file which may then be used with above Import License File option.

**Note:** Incorrect License information will disable the ANTServer, and all other Server modules and settings will be unavailable.

## ***ANTServer***

This server module displays a control panel, an ANTServer information frame and a Connected users frame for the selected server.

## **Control panel**



*TARGIT ANTServer Control panel*

Two buttons for starting and stopping the ANTSERVER are available on the Toolbar when an ANTSERVER module is selected. Starting and stopping the ANTSERVER can be necessary when changing server settings or when changes are made to the settings concerning the TARGIT Analysis clients.

## **ANTSERVER information**

The ANTSERVER information panel shows the current status and some aggregated statistics of the server.

Request processed shows the number of processed requests and beneath is the average response time in seconds for the requests.

## **Connected users**

The Connected users panel shows a list of all users currently connected to the ANTSERVER. The list shows the IP identification of the user's PC, the name of the user's application, and the user's name.

## ***TARGIT ANTSERVER Setup***

This module is used for setting up the ANTSERVER.

## **If the ANTSERVER stops...**

This first frame is for specifying that an automatic restart of the ANTSERVER should be tried if it stops – for example due to an error. If this option is selected, an option for automatic restart of Windows in case the ANTSERVER fails to restart, will be available. This feature works exactly like the Restart button in the Control panel making the restart unconditional.

## **Administrative alerts/Notifications**

The Administrative alerts/Notifications option is used to send E-mails when ANTSERVER errors occur. It is also used to specify the mail server to be used when scheduling notifications and Reports. It lets you specify the recipient of the mail as well as the mail server to be used for outgoing mails. An example of an error could be that the ANTSERVER could not process a request or that the given request is invalid. When using the Administrative alerts option, it becomes possible to set an option only to report fatal errors to the server administrator. Fatal errors are errors that cause the ANTSERVER to stop.

## Logging

The ANTSERVER logging option allows requests to be logged in the system database. The drop-list 'Keep data for' is used for specifying the number of months to keep the logged requests in the system database. If 0 (zero) is selected, the requests are kept until they are removed manually.

## Analysis Services

The option 'Include Calculated Members in Criteria Requests' makes it possible to specify if Calculated Members should be included in a request for possible Criteria values. Relevant only when the cube does not contain measures.

## Reporting Services

When Reporting Services is activated for the ANTSERVER, this frame makes it possible to change the URL's to the Reporting Services Web Service and the Reporting Services Web Interface.

## Performance

Maximum number of active threads determines the number of concurrent threads the ANTSERVER will use to serve the clients. Each client will use its own thread, but this setting can be used to limit the number of active threads. An active thread is defined as a thread currently processing a request. If the number of actual requests is higher than the number of available threads, the requests are queued. Performance can be increased by raising the number of concurrent threads, but at the cost of system resources (memory, CPU power, disk access, etc.). If this setting is 0 there is no upper limit to the number of concurrent active threads. Default is set to 8.

## Network Load Balancing

When multiple ANTSERVERS are configured in a Network Load Balancing (NLB) environment, this button may be used to open a dialog where the NLB parameters may be specified. The basic principle of operation is that requests may be rejected a maximum number of times, depending on the actual load of the ANTSERVER and below 'Maximum Rejections' setting.

The actual thresholds triggering rejections may be based on either a CPU load percentage over a certain time period, on the number of Active Queries or a combination hereof. If both thresholds are set, request rejection will take place if one of them is fulfilled.

### ***Enable Network Load Balancing***

Check this to activate NLB for this ANTServer. The setting 'Maximum Rejections' specifies the maximum number of times a request may be rejected by the ANTServer's. The default value is 1 (one).

### ***CPU Load***

Check this to activate the threshold and specify the CPU percentage and time period that the actual CPU load has to be higher than in order to initiate a request rejection. The default values are 95% over 10 seconds.

### ***Active Queries***

Check this to activate the threshold and specify the Maximum Queries that will trigger a request rejection. The default value is four times the number of CPU's on the PC running the ANTServer.

## **ANTServer dependencies**

This frame shows the installed services on the left, and the services that should be running before the ANTServer service is started on the right. Database servers used by ANTServer should always be in the dependency list as ANTServer cannot start or run without access to the Data Warehouse.

## ***ANTServer Databases***

This module is used to specify the System and Analysis databases, and other options related to databases used in the TARGIT Analysis environment.

### **Databases**

The work area of this module displays an entry for each of the databases connected to the ANTServer incl. the System database. Double clicking a database entry opens a Database setup dialog for setting up and editing database related properties. A right-click in the work area opens a context menu with options to create a New database entry.

The Database setup dialog has options either to enter the connection strings manually in an edit field, or to use the Build connection string button under the edit field in order to start a Windows Data Link Properties dialog. This dialog is used for selecting the Provider and Connection information for the databases. The Provider tab is for selecting the Database Connection Provider, e.g. Microsoft OLE DB Provider for ODBC Drivers. The Connection tab is used to select the actual database as well as initializing it. More information about using Data Links can be found in the Microsoft Windows documentation. It is recommended to use the Windows Data Link Properties dialog to setup databases.

In the bottom of the Database setup dialog it is possible to set Max active connections which determine the maximum number of concurrent connections made to the data warehouse database. If the setting is 0, there is no upper limit. The default is 0.

### **System database**

The System database is the place where ANTServer saves setup information, e.g. users, colors, map and globe locations, logs etc.

**Note:** Right after a new System database is created, it is important to click the **Create system tables** button, placed right under the Connection string edit field. This prepares the new System database for use in TARGIT Analysis.

### **Analysis databases**

Database setup dialogs for Analysis databases has the following options:

#### **Multidimensional / Relational database:**

Normally the ANTServer will automatically detect if the database is multidimensional (e.g. Microsoft Analysis Services), but if this detection fails, it may be overridden by setting this option.

**Note:** Be careful not to select this option if the database is SQL-based, it will cause the ANTServer to fail.

#### **Single Click Data Mining:**

Used to specify whether the data mining feature should be available in the clients or not when using this database.

#### **Impersonate users:** (Windows Security Impersonation / Delegation)

Used to specify that user's access to the database should be controlled by the cube security. This option is only active for Microsoft Analysis Services cubes, and when using Windows authentication. **Note:** If ANTServer and Analysis Services are on separate servers, they must be on the same domain and the ANTServer PC must have "delegate" rights. Also note that the TARGIT Analysis login option "Specify credentials" does not work in connection with "Impersonate users" if ANTServer and Analysis Services are on separate servers, so in this case the Client PC's must be on the same domain as the servers.

#### **DB2 Cube Views:** (Active only when data source is relational)

Used to tell ANTServer to fetch datamodel from DB2 Cube Views.

**Max active connections:**

Used to limit the number of active connections to the backend database server.

**Reconnect to database after XXX seconds of accumulated query time:**

In order to reduce Pivot Table Services memory requirements when accessing large databases, it is recommended to disconnect and reconnect from the database at certain intervals. The number of seconds of accumulated query time between each disconnect may be specified here. Default setting is 0 (zero) for no automatic disconnect / connect.

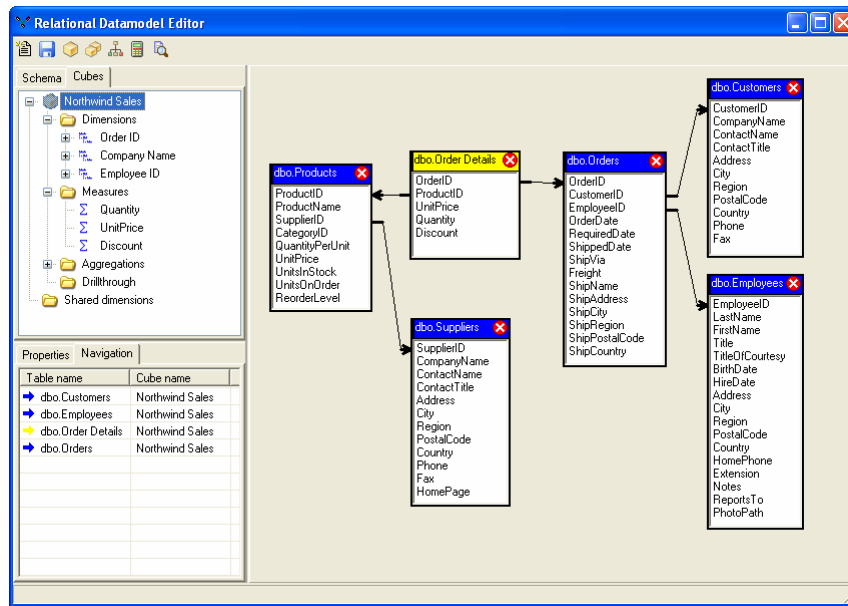
**Advanced button:** (Active only when data source is relational)

Activating this button opens an additional part of the database setup dialog making it possible to specify and modify various parameters concerning access of the chosen relational data source. At the top of the dialog is a drop-list where default values of the parameters in the bottom part, may be selected for supported data sources. When the advanced button is activated the first time, this droplist is automatically preset either to a data source type based on a set of predefined templates, or to 'Default' if no match was found. This automatic preset only takes place the first time the advanced button is selected. The 'Custom' option in the droplist may be selected if there is a requirement to individually specify or adjust parameters.

## Relational Datamodel Editor

TARGIT Analysis supports multidimensional as well as relational data sources. If the data source for the ANTServer database is a relational data source then it is possible to define a datamodel structure, cubes and aggregations using the Datamodel Editor. Open the Datamodel Editor by right-clicking the ANTServer database and select 'Edit datamodel'.

**Note:** This option is disabled for ANTServer databases that are based on non-relational data sources. Also, an Enterprise Edition license is required to be able to connect to a relational data source.



*The Relational Datamodel Editor*

### **Create new datamodel**

Clicking the 'Create new datamodel' button will delete any unsaved structure changes and clear the editor's working area in order to design a new global datamodel. One datamodel can be defined for each database connection.

In case the source of the relational data is an Oracle server, the Datamodel toolbar will display an extra button 'Import schema from Oracle'. If, and only if, the database server is an Oracle 9i Enterprise Edition, it will be possible to import the Oracle schema and use it as basis for building the TARGIT Analysis Datamodel.

**Note:** Creating a new datamodel requires the ANTserver to be restarted, but modifications to an existing datamodel does not require the ANTserver to be restarted.

### **Adding tables**

The Schema tab displays all the available fact and dimension tables. Add tables to the global datamodel simply by dragging the necessary tables from the 'Schema' pane and dropping them in the working area. Also double clicking a tablename in the 'Schema' pane will add the table to the workarea.

In the relational datamodel all tables needed for all the planned cubes are added to the same model. I.e. if multiple cubes, based on different fact tables, have been planned, then all the necessary fact tables (and dimension tables) must be included in the datamodel.

To remove a table from the datamodel, right-click the table header and select 'Delete table' from the context menu.

### **Adding joins**

Once tables have been placed in the working area, they must be related to each other by dragging the foreign key from one table and dropping it on a matching primary key in another table. The join is automatically validated when it is applied, and only valid joins, i.e. joins between fields of identical data types, are allowed.

To remove a join, click the join and press the DEL button on the keyboard.

**Note:** The direction of the joins is important when designing the cubes later on. Joins must be from the fact table(s) and to the dimension table(s) in a star schema. Furthermore joins can be from higher level dimension tables to lower level dimension tables in a snowflake schema.

### **Validata schema**

The datamodel can be validated by clicking the toolbar 'Validate schema' button.

### **Navigate schema**

If the working area is not big enough to show all tables at one time, the 'Navigation' tab in the lower left corner will have a list of all available tables. A click on a table in this list will scroll the working area and make the clicked table visible.

### **Save structure**

Clicking the 'Save structure' button will save the current schema and cube structure.

## **Creating cubes**

When the datamodel has been defined and saved it can be used to create cubes. Switch to the Cubes tab to start building cubes based on the global datamodel. Each cube is based on one fact table only and any number of dimension tables, and from these tables the measures and dimension are selected.

### **Selecting a fact table**

Click the 'New cube' button in the toolbar. A dialog box will query to select the fact table for the new cube. The fact table can be selected from a list of all of the available tables in the datamodel. Select the fact table and name the cube before clicking 'OK'.

Once the fact table has been selected it will be highlighted with a yellow table header in the datamodel editor and its related dimension table headers will be blue. Any other tables not related to the current fact table (as determined by the direction of the joins) will be deactivated (dimmed).

## **Defining measures**

Measures will always be located in the fact table. Right-click on any measure field in the fact table and select 'Insert as measure' from the context menu. The 'Cubes' pane of the Editor will immediately display the selected field in the 'Measures' folder of the current cube.

Alternatively, measure columns can be dragged from the table and dropped on the 'Measures' folder in the 'Cubes' pane.

To remove a measure, right-click the measure in the 'Measures' folder and select 'Delete measure' from the context menu.

### **Measure properties**

At the lower lefthand pane of the Editor, measure properties can be modified.

<b>Name</b>	Enter the preferred physical name of the measure.
<b>Column</b>	Defaults to the name of the selected column. May be edited into an arithmetic expression with one or more column names which together with the chosen aggregation type defines the measure.
<b>Data type</b>	Select a data type from the drop down list.
<b>Data size</b>	Enter the size of the field.
<b>Aggregation</b>	Select the aggregation type from the dropdown list.
<b>Format</b>	Different formatting options are available for formatting a measure. (See White Paper on Relational Data Sources.)

**Note:** An arithmetic expression entered in the 'Column' field will be combined with the chosen aggregation type to create an SQL 'Select' statement which will be submitted to the relational data provider. This means that only expressions which are acceptable to the data provider for the selected aggregation type should be entered. In case of using Microsoft SQL Server, the four basic arithmetic operators: add '+', subtract '-', multiply '\*' and divide '/' are valid, as is the use of parentheses to modify expression evaluation. It is highly advisable that the aggregation and expression is tested for validity in a manual SQL 'Select' statement against the data provider.

### ***Defining dimensions***

Dimensions may be located in fact tables as well as in dimension tables. Right-click on any dimension field in the table and select 'Insert as dimension' from the context menu. The lefthand pane of the Editor will immediately display the selected field in the 'Dimensions' folder of the current cube.

Hierarchical dimensions, i.e. dimensions with multiple levels, can be created by right-clicking on any dimension field in the table and select 'Insert as level' from the context menu. The new level will be inserted in the currently selected dimension in the 'Cubes' pane of the Editor.

Alternatively, dimensions may be dragged from a table and dropped on the 'Dimensions' folder in the 'Cubes' pane. Dimension levels may be created by dragging fields from the table and dropping them on an existing dimension in the 'Dimension' folder.

Member properties may be created by dragging fields from a table and dropping them on dimension levels in the 'Dimensions' folder. It is a requirement that the dimension level field and 'Member property' field are from the same table.

To remove a dimension, dimension level or member property, right-click the field in the 'Dimensions' folder and select 'Delete dimension', 'Delete level' or 'Delete member property' from the context menu.

### ***Defining shared dimensions***

Shared dimensions are created and removed as described above for normal dimensions. Select 'Insert as shared dimension' from the context menu when right-clicking a dimension field. The lefthand pane of the Editor will immediately display the selected field in the 'Shared dimensions' folder.

Shared dimensions may be added to any cube conditional to the relationship between the cube's fact table and the shared dimension's dimension table. I.e. the two tables must be joined in the datamodel. Right-click the 'Dimensions' folder in the 'Cubes' pane and select 'Add existing dimension' from the context menu. Select the desired dimensions from the list of available dimensions in the dialog box,

'Add Existing Dimension', and click 'OK'. The shared dimensions will now appear in the list of dimensions for the current cube with a different icon than the 'normal' dimensions.

### **Dimension properties**

At the lower lefthand pane of the Editor, dimension properties can be modified.

<b>Name</b>	Enter the preferred physical name of the dimension.
<b>Description</b>	Enter a description that will display as a mouse-over text in TARGIT Analysis.
<b>Type</b>	Blank or Time. A dimension containing date information must be defined as a 'Time' type in order to use the Forecasting functionality of TARGIT Analysis.

### **Dimension level properties**

At the lower lefthand pane of the Editor dimension level properties can be modified.

<b>Name</b>	Enter the preferred physical name of the dimension level.
<b>Table</b>	Fixed. Name of the table containing the dimension.
<b>Name column</b>	Select the column that contains the data to be displayed in TARGIT Analysis.
<b>Key column</b>	Select a column that may be used for an alternative sorting of the dimension values displayed via the Name column.
<b>Order by</b>	Name or Key. Determines whether the output should be sorted according to the Name column values or according to the Key column values.
<b>Unique</b>	False or True.

### ***Creating aggregations***

Aggregations are pre-summarized values of any potential combination of selected dimensions. The purpose of aggregations is to improve analysis performance by quering pre-summarized data rather than calculating the sums on the fly.

Click the 'Create new aggregation' button in the toolbar. The 'Create New Aggregation' dialog box contains four tabs: Tables, Columns, Measures and Name.

<b>Tables</b>	Select the tables that contain the dimensions that must be included in the aggregation.
<b>Columns</b>	Select the columns, from the selected tables, which should be included

	in the aggregation. Note that only the columns that actually have been used to define dimensions are available.
<b>Measures</b>	Select the measures that must be included in the aggregation.
<b>Name</b>	Name the aggregation properly by entering an Aggregation name in the 'Name' tab.

Multiple aggregations, with different combinations of dimensions and measures, may be added to a cube.

To delete or to modify an aggregation, simply right-click the aggregation in the 'Cubes' pane and select 'Delete aggregation' or 'Edit aggregation' respectively.

### ***Creating drill throughs***

Drill throughs can be enabled if it is necessary to know the detailed transactions that have been combined into a pre-summarized value. E.g. if a cross tabulation is showing revenue per day, the drill-through will display all the transactions for the selected day.

To enable drill throughs click the 'Create a new drill through' button in the toolbar and select at least one column from the list of available columns. The selected columns will determine the information to be displayed with the transactions in the drill through output.

### ***Creating virtual cubes***

Virtual cubes are used to combine selected data from one or more 'normal' cubes into one virtual cube. E.g. in order to compare two different measures from two different cubes, a virtual cube must be created to select those two measures (and at least one shared dimension) from the two cubes.

Click the 'New virtual cube' button in the toolbar. The 'Create Virtual Cube' dialog box contains four tabs: Cubes, Dimensions, Measures and Name.

<b>Cubes</b>	Select the cubes that contain the data to be included in the virtual cube.
<b>Dimensions</b>	Select the dimensions to be included in the virtual cube.
<b>Measures</b>	Select the measures to be included in the virtual cube.
<b>Name</b>	Name the virtual cube properly by entering a Virtual cube name in the 'Name' tab.

## ***Analysis***

This module is used to specify and modify general options concerning TARGIT Analysis.

## Analysis Language

The language editor is used for customizing business terms in relation to the TARGIT Analysis databases. The database terms, including names of database, measures, dimensions and dimension levels may be translated.

Each implemented language is represented by an entry in the work area. Double clicking a language entry opens a Language Properties dialog with options to edit database terms. A right-click context menu is also available for opening the Language Properties dialog for the selected language.

The left column of the Language Properties dialog displays a tree structure for the database, where nodes are preceded by plus or minus signs, which is used to expand or collapse the nodes. The tree may be browsed by using the arrows keys. The right column of the Language Properties dialog is used for translation of the database elements. After having selected an original element of the database tree in the left column, pressing the `Enter` key will prepare the corresponding edit field in the right column for entering the translation. Press the `Enter` key again to accept the translation.

To edit a translated element, press `Enter` and type in the translation. If the translation is the same as the original click the Copy button.

The Suggestion field will be filled in if an identical original with a different translation is found anywhere in the list. This can be used to make the translations consistent and the suggestion can be applied by clicking the Apply button.

## Analysis Images

This module is used to register the bitmaps and images to be used as backgrounds, gauges and maps.

### ***Backgrounds***

Background images can be used in TARGIT Analysis Objects. This list specifies which images are available. A new image is inserted by right clicking and choosing Add in the context menu. This will bring up a file dialog, where the desired image file can be selected. Supported formats are Bitmap (BMP) and JPEG (JPG).

### ***Gauges***

A Gauge is a special kind of TARGIT Analysis Object. Depending on the actual data values an arrow is drawn based on a user defined pattern. By placing an image underneath as background, the illusion of a gauge is produced. The system comes with a built-in gauge, but new types of gauges can be constructed

by adding images to this list. A new image is inserted by right clicking and choosing Add in the context menu. Supported formats are Bitmap (BMP) and JPEG (JPG).

## **Maps**

A Map is a type of TARGIT Analysis Objects. Maps are useful for displaying geographical information, but any kind of image can be used as background for a map Object. A new image is inserted by right clicking, choosing Add in the context menu and selecting an image. Supported formats are Bitmap (BMP) and JPEG (JPG).

## **Report**

This module is used to modify general options concerning TARGIT Report.

### **Report Output folders**

Reports can be scheduled from TARGIT Analysis and from TARGIT Enterprise Manager. The actual calculation and export of the report is done by the ANTSERVER. Both these applications need not to be run on the same machine as the ANTSERVER and this fact introduces a problem regarding the location of the exported report. The ANTSERVER need to have access to some path where the report can be exported to and this path might not be accessible from the schedule dialogs of TARGIT Analysis and TARGIT Enterprise Manager when they are run from another machine (which is often the case).

The solution is to let the administrator specify the allowed locations and this is done through this module. When the ANTSERVER is installed a default folder is created in the installation folder, e.g. C:\Program Files\TARGIT\ANTSERVER\Exported Reports\.

A new location can be created by right-clicking and choosing New Folder. Then a dialog is presented with two input fields.

- Name** Gives the location a name and this is the name that will be presented in the schedule dialogs in TARGIT Analysis and the Time manager module.
- Folder** Contains a path where the ANTSERVER has rights to create files. When the TARGIT Enterprise Manager is run on the same machine as the ANTSERVER, a browse option is available to select the path.

A Report Output folder can be edited by right-clicking it and choose Edit. It can be deleted by selecting Delete.

## ***Time manager***

The Time manager is used for setting up scheduled activities. With the Time manager it is possible to set up which scheduled activities are executed at what time. The Time manager handles the following scheduled activities, Run report, Send report and Process Cubes.

A new schedule is created by right-clicking and choosing New schedule in the context menu. This will open a dialog where the following options may be specified:

<b>Enabled</b>	Selects if the schedule should be run or not. Schedules can temporarily be disabled this way.
<b>Status</b>	Gives a message indicating the status of the schedule. An enabled schedule has the status Waiting and if not enabled, the status is Disabled. Other status messages are Failed and Running.
<b>Schedule type</b>	Determines the actual task to schedule. Depending on this selection, some of the other options on this dialog will change.
<b>Frequency</b>	Specifies the interval between executing the activity. The interval can be set to a whole number of days, weeks or months.
<b>Start time</b>	Defines the date and time of the first execution of the task.
<b>Status (frame)</b>	Shows information about the last time the task was run and the last time of a successful run.

The last frame is dependent on the type of schedule.

If the Schedule type is 'Run report':

<b>Owner</b>	Selects the user that should own the report. This is used for two purposes. One, because the report must be executed in some users context, which might influence the set of data available to the report. Two, because it determines which reports should be available for scheduling.
<b>Report name</b>	Used to select the report to export. Available are the global reports, group reports and the personal reports of the user selected in the Owner field.
<b>Format</b>	Selects the output format. The available formats are PDF, HTML and RTF.
<b>Dest. folder</b>	Determines where the report is exported to. The location must be created using the Report Output folders module. The Default location is a subfolder to the installation folder of the server called <code>Exported</code>

**Dest. filename** Reports\  
The filename of the exported report.

If the Schedule type is 'Send report':

**Owner** See above.  
**Report name** See above.  
**Format** See above.  
**Subject** Determines the subject of the e-mail sent. Defaults to the name of the report.  
**From** Specifies the e-mail address of the sender of the e-mail.  
**To** A comma-separated list of recipients of the e-mail.

If the Schedule type is 'Process Cubes':

Checkboxes will be available for selecting either all datamodels or one or more of the existing datamodels to be processed at the specified time and frequency.

Note: Datamodel cubes may also be processed selectively by selecting the Database context menu item 'Process Cubes' or by entering the Datamodel Editor and select toolbar button 'Process Cubes'.

## **Security**

This module is used to control the security model used to authenticate users in the TARGIT Analysis environment.

In the standard security model users are kept in the TARGIT Analysis system database and clients log on by providing a valid username/password combination. Windows security means that users have access to TARGIT Analysis based on their existing Windows account.

If Windows Security is selected the access rights to the individual clients should be specified. This is done by clicking the Access rights button. In this dialog Windows users and groups can be added and given proper access rights.

When Windows Security is selected the Security Package frame allows selection of the preferred security package: Negotiate, NTLM or Kerberos.

Normally the security model is specified during the initial installation of the server and is never changed. If the security model is changed at a later point in time all settings depending on the choice of

security model will be obsolete, e.g. Roles and Users. Furthermore it may be necessary to restart the ANTServer, leave the TARGIT Enterprise Manager and change the ANTServer registration when re-entering the TARGIT Enterprise Manager.

## **Users**

The Users Module is used to add or remove Users of the TARGIT applications when using the standard security model

Adding a new user is done by right-clicking and choosing New user in the context menu. A user can be edited or deleted by right-clicking on the desired user and choosing the appropriate menu item.

The password field holds the password used to authorize the user when logging in to the programs of the TARGIT Analysis Suite 2K5. Passwords are displayed on screen as a row of stars.

The Language field determines the language of the user. It will affect the programs to present text in the chosen language.

### ***Access rights***

Level selects the type of user and the access rights. There are three predefined levels and a custom level where the access rights can be composed manually.

#### **Developer level**

Gives full access to all features in all programs.

#### **Poweruser level**

Same as developer level, except no access to TARGIT Enterprise Manager.

#### **Normal level**

Gives restricted access to TARGIT Analysis and TARGIT Analysis NET and no access to TARGIT Report and TARGIT Enterprise Manager.

When defining custom access rights, the following options are available:

#### **Analysis**

None means no access.

Normal means limited access. No Advanced object functions and no saving in Shared Favorites.

Developer means full access to all features of TARGIT Analysis.

### **Analysis NET**

None means no access.

Viewer means open Analyses and Reports.

Normal means also creation of views possible, but not being able to save in Shared Favorites.

Developer means full access to all features of TARGIT Analysis NET.

### **Report**

None means no access.

Developer means full access to all features of TARGIT Report.

### **Enterprise Manager**

None means no access.

Developer means full access to all features of TARGIT Enterprise Manager.

**Note:** In order to create new users or to give existing users a higher level of access a valid license must be available.

### **Groups**

Used to organize users which need to be treated equally with regard to their access to data in the Data Warehouse. Groups works in connection with Roles and makes it easier to administer a large number of users in a complex environment. Pressing the '...' button to the right of the 'Groups' field opens a 'Groups properties' dialog where the user may be assigned as member of one or more groups. The dialog also allows creation of new and deletion of existing groups.

### **Roles**

The Roles module is used to allow or deny access to selected parts of the data in the TARGIT Analysis environment including Data Warehouse data and subfolders and their content in the 'Shared' folder.

Roles can be added, edited, copied and deleted by using the right-click context menu. Editing a role brings up the Role Properties dialog. Copying a Role makes it easy to create roles with slightly different properties than the source role.

**Note:** Give roles meaningful names. Often the name could reflect the title of the group of users the role is intended for, e.g. the name of a department.

### **Members**

The Members tab is used to select which users/groups that should belong to this role. Clicking the Add button will do one of two things depending on the security model of the server. In the case of standard

security a dialog will appear where the users/groups from the Users module can be selected as members of the role. In the case of Windows security a standard Windows dialog will appear where names of Windows users and groups can entered. A user may be member of more than one Role, but it should be noted that Deny in one Role element overrules Allow for that element in all other Roles.

### **Databases**

The Databases tab can be used to select which data should be visible to members of this role. Access can be granted on both cube level and measure/dimension level. This is done by checking the Allow checkbox to the right of the element in the tree. If the Inherit checkbox is checked for an element, all sub elements will automatically be given the same access rights. Checking the Deny checkbox clears the Inherit and Allow checkboxes for the element, and denies access to that element for the members of this Role.

### **Criteria**

In order to control which dimension values should be available to users, every dimension in a cube may be expanded to show the Criteria element which has its own Allow and Deny checkboxes. Clicking one of these opens an Edit Criteria dialog where individual dimension values may be checked to allow or deny availability of the dimension value, depending on which checkbox was clicked. Please observe that Deny overrules Allow.

**Note:** Dimension names with assigned criteria are highlighted in bold.

### **Folders**

The Folders tab can be used to select which folders of the Shared Favorites that should be visible to the members of this role. This can effectively be used to deny access to specific Analyses and Reports. The checkboxes Inherit, Allow and Deny works the same way as in the Database tab with the extension that each checkmark has three states, none, read (R) and write (W) to be able to allow or deny either read or write access to a given folder.

# Glossary

## ***Business Intelligence***

A computer based BI System is designed to generate information in a user-friendly way. This offers decision-makers with limited knowledge of computers the ability to specify their own analysis.

## ***Data Warehouse***

A Data Warehouse has been defined as a collection of data in support of management decision making processes. A Data Warehouse solution can ensure consistent and cleansed information at the corporate level to facilitate planning and to make everyday decisions for smooth functioning of an enterprise.

## ***Dimension***

Dimensions tell something about measures - like where, who, what, when etc.

## ***Measure***

Measures are the quantitative values in the database that can be analyzed. Typical measures are sales, cost and budget data. Measures are analyzed against the different dimension categories available.