my ABCM

Corporate Server

Cost, Profit and Performance Management Solutions

Simplified Installation and Configuration Manual

(Application Server & Calculation Engine Server installation only)

Version 11.0-REV001
Last updated: 04/03/2023

Table of Contents

Introduction

Welcome to **MyABCM Corporate Server**. This installation manual is meant to aid the user in installing **MyABCM Corporate Server (simplified setup)** and all other software necessary for the correct usage of this product. This is why this guide details all the necessary hardware and installation procedures for this product and its auxiliary applications.

Structure of the Installation Manual

This manual is divided into the following sections:

- Architecture and Installation Scenarios for MyABCM Corporate Server;
- Installation and Configuration for MyABCM Corporate Server (simplified setup);
- Registration and activation;
- Basic configurations;
- Advanced topics.

Architecture, Requirements and Scenario for MyABCM Corporate Server

Introduction

MyABCM Corporate Server is an application that should be installed and executed on the same server and it is accessed by Desktop application.

Architecture

MyABCM Corporate Server is a server application that is made up three components, but the simplified installation installs and configures only the following two components:

- **MyABCM Corporate Application Server**

  This component is responsible for all of the application's logic, that is, all the commands executed by the Corporate are sent to the MyABCM Corporate Application Server, which executes them, accesses the database, and returns any results to the MyABCM Corporate.

- **MyABCM Corporate Calculation Engine (CalcEngine) Server**

  This component is responsible for all of the internal operations that need to be scheduled or that cannot be executed in real time. Even though the MyABCM Corporate Application Server is responsible for the execution of the application logic, when a more lengthy operation such as a calculation, import, or running the entire model is needed, this operation is sent to the MyABCM Corporate Calculation Engine Server to be executed in the background.

Additional note on the simplified installation

The simplified installation was designed to install only the Corporate Application Server and Corporate Calculation Engine Server components without installing the third Corporate WEB Server component.

This setup was created to make the installation process easier for users that are not going to use Corporate WEB Server for technical or licensing reasons.

Installation Scenario

The two components of MyABCM Corporate Server installed by this simplified setup are executed on the same server and are installed at the same time.

Corporate Desktop and Corporate SysAdmin Desktop (System User or Administrator)

MyABCM Corporate Application Server
MyABCM Corporate Calculation Engine Server

Database Server

Note about scalability

All the MyABCM Corporate Server components are pure 64-bit and have been designed to support vertical scalability, but the simplified installation limits the CPU usage to 4 logical cores in the Calculation Engine Server component.

Requirements

Corporate Desktop & Corporate SysAdmin Desktop

- Windows 10 (64-bits)
- Microsoft .Net Framework 4.8
- Processor 2.0GHz x64
- 4 GB of RAM memory*
- 1 GB of free disk space

MyABCM Corporate Server (Application & Calculation Engine components)

- Windows Server 2016,2019 or 2022
- Microsoft Internet Information Services 10.0 or above
- Net Framework 4.8 (shipped with the installation material)
- 16 GB of RAM memory*
- 2 GB of free disk space
- Processor 2.0GHz x64 quad core

Database server

Any of the following databases:

- SQL Server Standard 2012 or newer

Warning: *Besides the core database component of SQL Server, Analysis Services component is required for OLAP analysis using large costing models.*

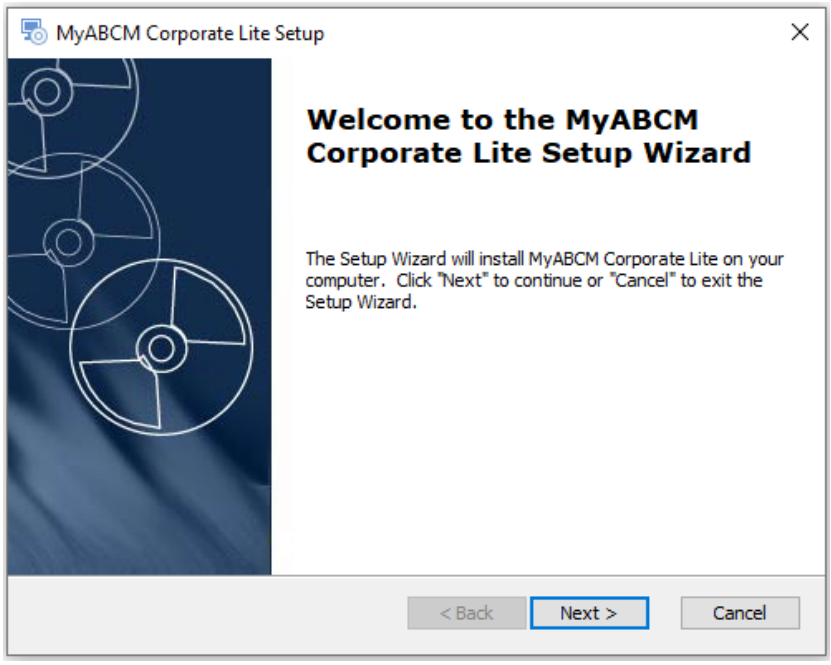
(*) The quantity of CPU memory required may vary according to the number of users and the size of the model being processed.

1. Installing MyABCM Corporate Server (simplified setup)

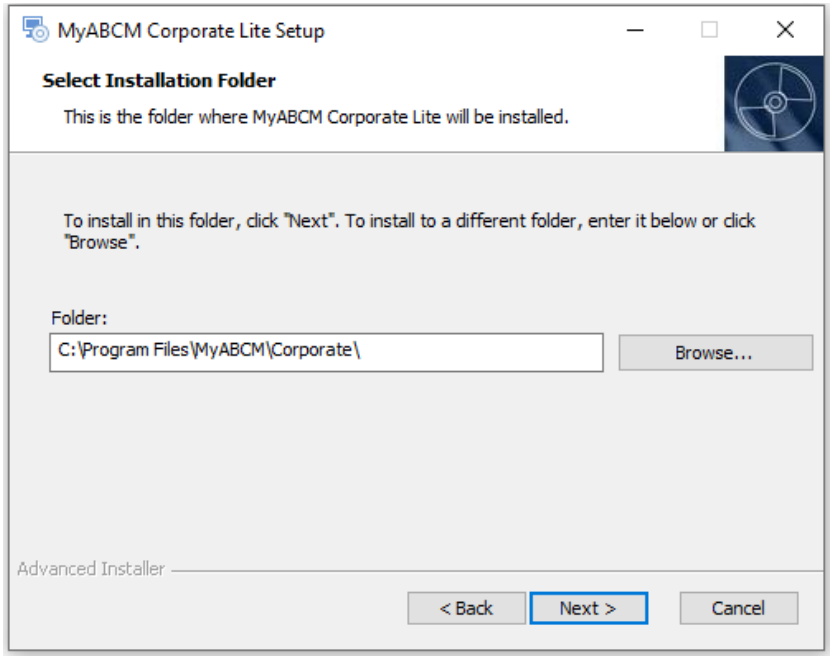
1.1. Installing MyABCM Corporate Server (simplified setup)

1. Begin installing MyABCM Corporate Server (simplified setup) by double-clicking on the installer. If you have not installed .NET Framework 4.8, a dialog box will appear asking for your confirmation and you just have to click the install button to begin the installation process.

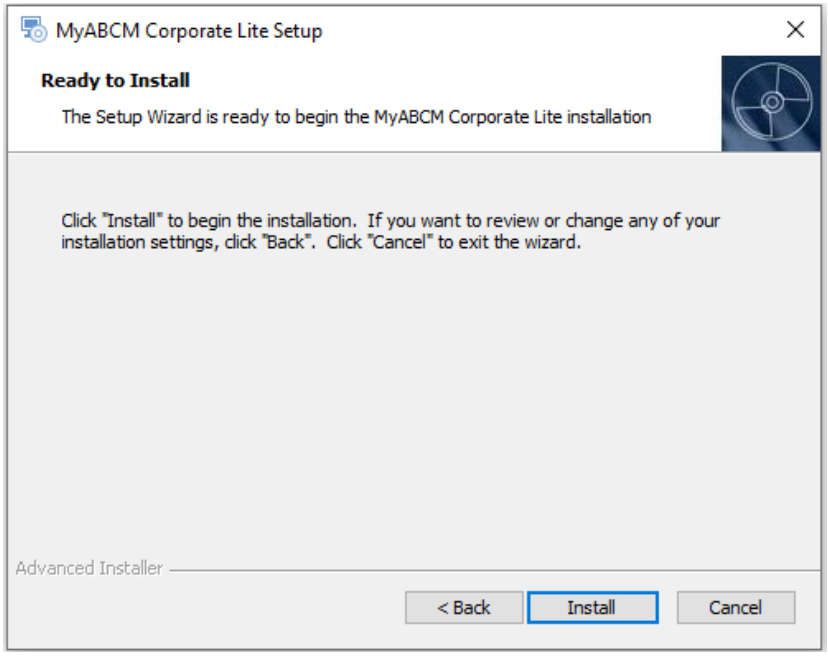
2. Click the **Next>** button.



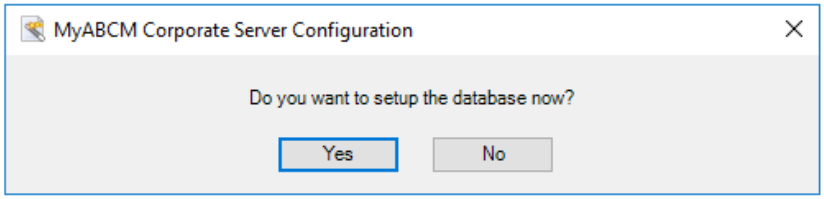
3. Select the destination folder and click the **Next>** button.



4. Click the **Install** button to begin the installation.



5. When the dialog box opens asking if you want to setup the database for the MyABCM Corporate Server Configuration, click **Yes** to begin the database creation process.



*For this step, you will need to give a user account that has the right to create a SQL Server database on the server. If you do not know the password for such a user account or if the DBA prefers to do this manually, you can click **No** and create the database manually after the installation has finished.*

6. Fill in the data necessary for the creation of the database according the instructions below:

   Type: Choose the database to be used.

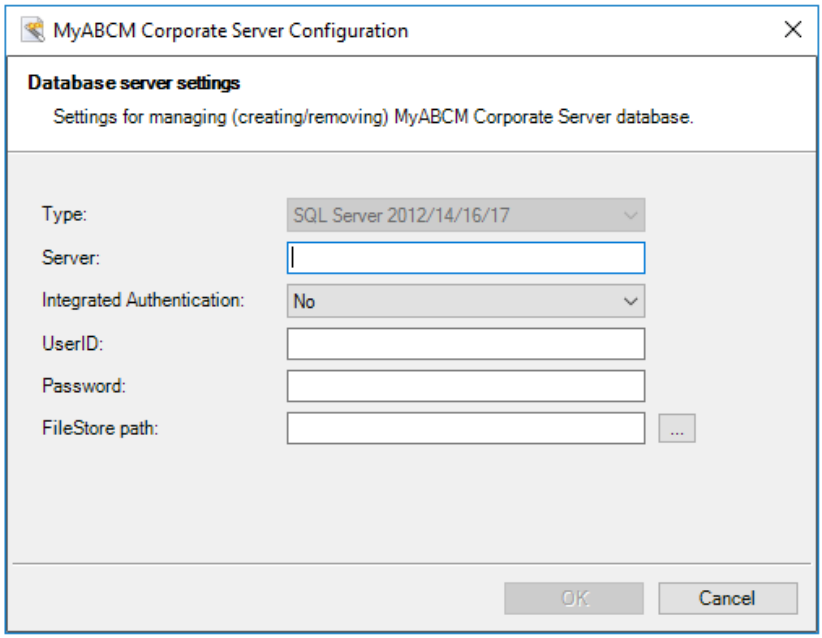
   Server: Provide the name of the database server.

   Integrated Authentication: Choose Yes or No for Integrated Authentication.

   UserID*: Provide the login to be used to connect to the database server.

   Password: Provide the associated password.

File Store path:** Provide the path of the folder in which you want MyABCM Corporate Server to store files sent to the server by users.



***(*) It is important to remember** that this user will be used **just** for creating the database. During the database creation, the user **MYABCM_CLOUD_USER** is also created and is thereafter used for all the connections to the database. In summary, this user with database creation rights is used just for the setup and not for the use of the product itself.*

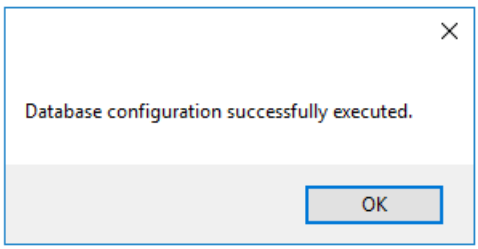
***(**) It is important to remember** that this locale should be accessible to the MyABCM Corporate Application Server Component as well as the MyABCM Corporate Calculation Engine Server.*

*Also remember that moving the initialization account for MyABCM Corporate Application Server Component and MyABCM Corporate CalcEngine Server services from "LocalSystem" to any other user which permits shared access means that you'll have to modify the access rights to the port used by MyABCM Corporate Application Server Component using the **NETSH** command.*

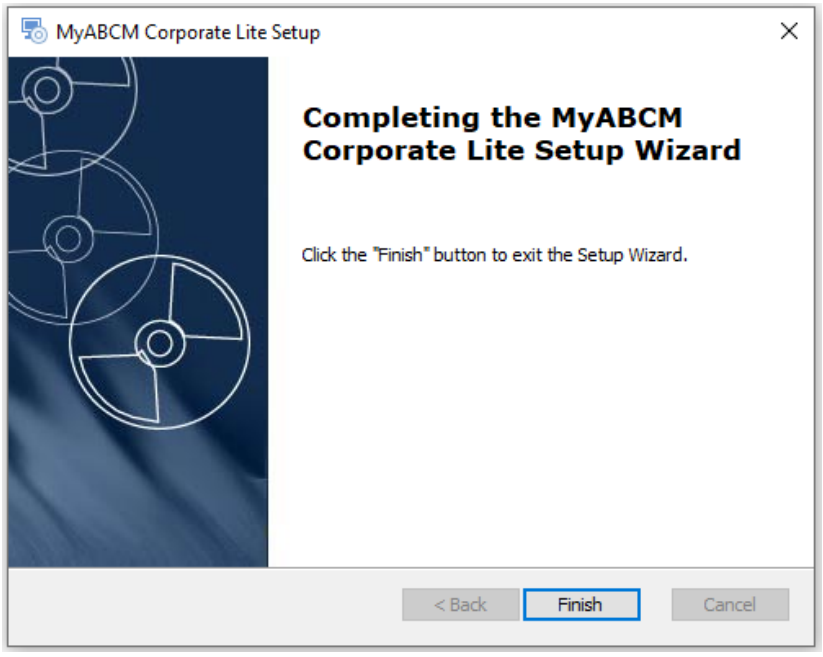
*Here's an example of how to add rights for the user "JohnDoe" to the port: **netsh.exe** http add **urlacl url=http://+:2208/ user=MYORGANIZATION1\JohnDoe***

*If you need to undo this operation, here's how you'd undo it for "JohnDoe": **netsh.exe** http delete **urlacl url=http://+:2208/***

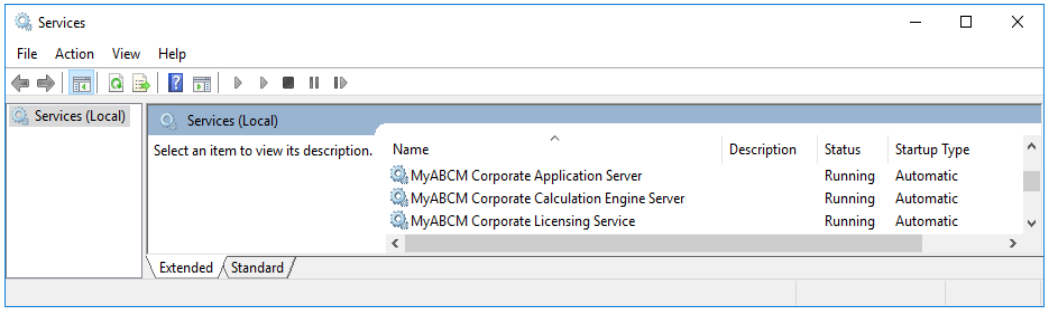
7. Click on the **OK** button to proceed.



8. Click the **Finish** button to complete the installation.



After the installation has finished, you will note that there are now 3 new services in the Windows local service list as shown in the example below:



*After installing and configuring each of the 2 components (Application Server and Calculation Engine Server), execute the automatic update application following the instructions in **Chapter 4** of this manual.*

***Important Note:** The MyABCM Corporate Licensing Service should always be executed using the "Local System" account.*

***Important notice** on exporting/importing from Microsoft Access*
In order for MyABCM Corporate Application Server Component to export and import data from Access data sources, server needs to have the 64-bit Access OLE DB drivers available. If it is not already present, those drivers are available directly from Microsoft website:
***Link:** https://www.microsoft.com/en-us/download/details.aspx?id=13255*
***File:** AccessDatabaseEngine_X64.exe*

***Microsoft Access Database Engine Redistributable version 2010 is highly recommended** as version 2016 has several known problems that limits its usage with MyABCM Corporate.*

1.2. Registering MyABCM Corporate Server

After installing MyABCM Corporate Server and before you begin to really use it, you need to register the application with MyABCM. It is important to remember that you cannot use MyABCM Corporate Server services before the product has been registered.

You can register the MyABCM Corporate Application Server directly using the system administrator Desktop application or by using **Abm.Server.Shell.exe** at the command prompt.

The following steps detail how to register the application by using the command prompt.

1. Open the **Command Prompt** with administrator rights.

2. Change the directory to the installation directory for the MyABCM Corporate Application Server Component.

   This directory is usually **C:\Program Files\MyABCM\Corporate\AppServer**

3. Execute the following command:

   Abm.Server.Shell GET_MACHINE_ID

   After executing this command, the console should show you the **Machine ID** which is a sequence of 20 letters and numbers.

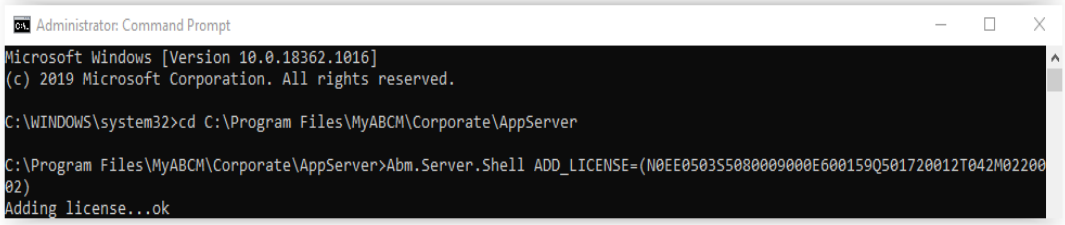
4. Send this **Machine ID** together with the name of your organization in an email to **reg@myabcm.com**

   The MyABCM software activation department should respond promptly and provide you with an activation code.

5. With this code in hand, execute the following command:

   Abm.Server.Shell ADD_LICENSE=(<type the activation code here>**)**

   After you execute this command, you should see a message advising you that the product has been successfully activated.



1.3. Configuring MyABCM Corporate Server (Application Server Component)

All the configuration of MyABCM Corporate Application Server Component is done using **Abm.Server.Shell.exe** at the command prompt (**with administrator permission**). The following parameters should be revised and eventually modified soon after the product has been installed:

- **Host name, port and protocol**

  Using the **APPHOST** parameter, it is possible to define the host name, port and protocol to be used. As an example, if the product is installed on server SERVER_XYZ, and it is using port TCP 3000 and protocol HTTPS, the following command should be used:

  Abm.Server.Shell.exe APPHOST=(SERVER_XYZ,3000,HTTPS)

The product is pre-configured to use port 2208 and protocol HTTP. As MyABCM Corporate Server (simplified setup) is installed on the same server, it is not mandatory/necessary to modify these parameters.

- **Database**

  Using the **DATABASE** parameter, it is possible to define the name, type and server name for the database to be used, as well as the type of authentication and access credentials. Just as an example, if the database CORPORATE_DB, located on the SQL Server named DB_SERVER_01 is going to be used and accessed by SQL Server userid user_abc with password pw1234, the following command would be used:

  Abm.Server.Shell.exe
  DATABASE=(SQLSERVER,DB_SERVER_01,CORPORATE_DB,false,user_abc,pw1234)

If the database is created by the installer, this parameter should already be correct. If it is not, it will be necessary to configure the database with these parameters.

- **OLAP Server**

  Using the **OLAP** parameter, we can define which OLAP server will be used and the access credentials that will be utilized. In this case, it is important to note that besides the OLAP configurations given, it's possible that other configurations will be necessary depending on the OLAP server being used and its configurations.

  In the specific case of Microsoft Analysis Server, if HTTP access is not configured, MyABCM Corporate Application Server Component will try to access it directly and this will require Windows integrated authentication. In this case, it will be necessary to have the credentials being used for MyABCM Corporate Calculation Engine Server registered in the Analysis Server so that the system will function correctly. More details can be obtained in the Analysis Server documentation.

  Just as an example, if the server name is OLAP_SVR1 and HTTP access is activated and the access credentials are user_abc with password pw1234, the following command would be used:

  Abm.Server.Shell.exe OLAP=(SQLSERVER,MULTIDIMENSIONAL,OLAP_SVR1,false,user_abc,pw1234)

- **Mail Server (email)**

  MyABCM Corporate Application Server Component depends on a mail server to send messages to administrators and users about important events like the completion of processing or even internal system errors. This is why it's important that the system be informed of these parameters soon after the installation by using the **MAIL** parameter.

  Just as an example, if the SMTP mail server's name is MSERVER01 and it is using port 1025, and the access credentials are adm_corporate with password pw1234, and the originating email address is adm_corporate@myabcm.com, and the administrator's email address is johndoe@myabcm.com and a second administrator's email address is markz@myabcm.com, the following command would be used:

  Syntax:
  Abm.Server.Shell.exe
  MAIL=(my_smtp_server.net,1025,user1,psw_user1,send_from@sample.com,send_to@sample.com,send_cc@sample.com,true)

  Example:
  Abm.Server.Shell.exe
  MAIL=(MSERVER01,1025,adm_corporate,pw1234,adm_corporate@myabcm.com,johndoe@myabcm.com,markz@myabcm.com,true)

  Abm.Server.Shell.exe SEND_TEST_MAIL=(send_to@sample.com)
  Tests the configuration of the email by sending a test email.

- **Configuring LDAP Authentication**

  MyABCM Corporate Application Server Component can use its own mechanism to generate user credentials or use an LDAP server like Microsoft Active Directory to authenticate users.

  Just as an example, if you want to use an LDAP server named AD_SERVER1, with domain empresaxyz.com using encrypted communication (LDAPS), the following command would be used:

  Abm.Server.Shell.exe LDAP=(AD_SERVER1,empresaxyz.com,yes)

MyABCM Corporate Application Server Component comes pre-configured to use its own mechanism to generate credentials and the use of an LDAP server is optional.

- **Default Language**

  MyABCM Corporate Application Server Component is an application that supports multiple languages simultaneously, for the application interface as well as the cost model. The user always makes the choice of language after logging onto the system, however in the case of a few internal routines that depend directly on the user that is logged on, it will be necessary to define the language to be used.

  There are a few cases such as the recording of messages for the Windows event log and other situations where it will be necessary to define the specific language. Just as an example, if you wish to use "Brazilian Portuguese", the following command would be used:

  Abm.Server.Shell.exe CULT=pt-BR

*Since MyABCM Corporate Application Server Component already comes pre-configured to use US English (**en-Us**) internally, this configuration does not need to be altered unless you wish to change languages.*

- **File Store Directory**

  Whenever users upload a file to the MyABCM Corporate Application Server Component, this information will be registered in the database and the files will be stored in the directory that has been defined by the FILE_STORE_PATH parameter. Just as an example, if you wish to use the directory C:\FSTORE as your file store directory, you would use the following command:

  Abm.Server.Shell.exe FILE_STORE_PATH="C:\FSTORE"

If the database is created by the installer, this parameter already should be correct. If not, you will have to configure this parameter. In addition, this should point to the same directory as the FILE_STORE_PATH for MyABCM Corporate Calculation Engine Server Component, because the files saved in this location by MyABCM Corporate Application Server are normally accessed by MyABCM Corporate Calculation Engine Server.

- **Export Templates**

  MyABCM Corporate comes with a predefined set of export templates that are stored inside the database. If the end user wants to add a new template, you need to activate the user interface for template manipulation first.

  You can configure the product, so that users can manipulate the export templates either by the administration or end user interfaces (Desktop).

  In order to activate the template manipulation via the administrator's interface, use the following command:

  Abm.Server.Shell.exe SHOW_EXPORT_TEMPLATES_TO_ADMIN_USERS=true

  In order to activate the template manipulation via the end user's interface, use the following command:

  Abm.Server.Shell.exe SHOW_EXPORT_TEMPLATES_TO_REGULAR_USERS=true

  If you want to disable template manipulation, just run the commands using "false" as parameter.

The rights for direct export template manipulation must be configured carefully because those templates can give full access to all database contents regardless of access rights in use.

Along with the parameters that we have already discussed, **Abm.Server.Shell** also supports the following additional parameters:

- **ADD_OPERATION_OWNER**

  Registers a new server for the MyABCM Corporate Application Server with the system.

- **UPDATE_OPERATION_OWNER**

  Registers the configurations of the current server for the MyABCM Corporate Application Server.

- **REMOVE_OPERATION_OWNER**

  Removes the registration of the current server for the MyABCM Corporate Application Server.

- **GET_OPERATION_OWNERS**

  Obtains the system's list of registered servers for MyABCM Corporate Application Server.

- **DATABASE_OPERATION_TIMEOUT**

  Defines how long the system will wait before timing out and cancelling a database operation.

- **DATABASE_LOG_OPERATION_TIMEOUT**

  Defines how long the system will wait before timing out and cancelling a database operation for operations that are known to take a long time like copying models.

- **DISPLAY_DELETED_MODELS**

  Defines whether models deleted by the administrator are displayed in the model list or not.

- **DISPLAY_DELETED_USERS=true**

  Change the configuration to display the users who have been deleted by the System Administrator.

- **LIST_PARAMETERS**

  Lists all the parameters that are currently in use in the shell.

- **SERVER_MODE_DB**

  The Server Mode DB parameter makes it possible to input the credential of an alternative database to be used in "Server Mode." This is important, because in "Server Mode" the Server connects directly to the database without using stored procedures and the original database credential doesn't permit this. As an example, to add a credential with this command, execute:

  SERVER_MODE_DB=(false,JOHN_DOE,123)

- **OLAP_DB_PREFIX=MYABCM_CLOUD_DW**

  Change OLAP database prefix, used to warehouse data from the OLAP database.

- **SURVEY_TEMPLATE_PASSWORD=myabcm**

  Define the password to be used for Excel Survey files

- **ENABLE_STRONG_PASSWORD_VALIDATION=true**

  Activate the strong password validation.
  Minimum of 8 characters, with at least 3 of them having to be:
  - Capital letter
  - Number
  - Special character (! @ # $ % ^ & * ? _ ~- ,)

- **ENFORCE_UNIQUE_PASSWORD_INTERVAL=365**

  In changing the password, force the use of a different password within an interval of X days, or in other words, the same password that has been used before will cease to be used in less than X days.

- **PROVIDER_MSOLAP_QUERY_TIMEOUT**

  Change the provider query time in seconds.

- **USE_IMPORT_TRANSACTIONS_IN_SCRIPTS**

  Change script import transactions.

- **GET_LICENSE_DETAILS**

  Obtain license details.

- **GET_EXPIRED_NAMED_LICENSES**

  Obtain named licenses that have expired.

- **REMOVE_LICENSE**

  Remove license.

- **BACKUP_CONFIG="C:\Backup.xml"**

  Configuration of the backup to an XML file.

- **RESTORE_CONFIG="C:\Backup.xml"**

  Restoration of the configuration of the XML file.

- **LIST_INSTALLED_VERSIONS**

  List installed versions.

- **LIST_SYS_ADMINS**

  List system administrators.

- **REACTIVATE_ADMIN=(user1,50)**

  Reactivate system administrator.

- **USE_PRIVATE_LICSTORE**

  Use Lisctore private license.

- **RESET_LICSTORE**

  Reset Licstore License.

- **SYS_INFO**

  Obtain System Information.

1.4. Configuring MyABCM Corporate Server (Calculation Engine Server Component)

Change to the installation directory for MyABCM Corporate Calculation Engine Server Component.
This directory is usually **C:\Program Files\MyABCM\Corporate\CalcEngine.**

All the configuration of MyABCM Corporate Calculation Engine Server component is done using the **Abm.Server.CalcEngineShell.exe** command. The following parameters should be revised and eventually modified soon after the product has been installed:

- **Database**

  Using the **DATABASE** parameter, it is possible to define the name, type and server name for the database to be used, as well as the type of authentication and access credentials. Just as an example, if the database CORPORATE_DB, located on a SQL Server named DB_SERVER_01 is going to be used and accessed by SQL Server userid user_abc with password pw1234, the following command would be used:

  Abm.Server.CalcEngine.Shell.exe
  DATABASE=(SQLSERVER,DB_SERVER_01,CORPORATE_DB,false,user_abc,pw1234)

This information should already have been provided during the installation process and should already be correct. It will be necessary to configure the database if this information was not provided during the installation or if you wish to make modifications.

- **OLAP Server**

  Using the **OLAP** parameter we can define which OLAP server will be used and the access credentials that will be utilized. In this case, it is important to note that besides the OLAP configurations given, it is possible that other configurations will be necessary depending on the OLAP server being used and its configurations.

  In the specific case of Microsoft Analysis Server, if HTTP access is not configured, MyABCM Corporate Calculation Engine Server will try to access it directly and this will require Windows integrated authentication. In this case, it will be necessary to have the credentials being used for MyABCM Corporate Calculation Engine Server registered in the Analysis Server so that the system will function correctly. More details can be obtained in the Analysis Server documentation.

  Just as an example, if the server name is OLAP_SVR1 and HTTP access is activated and the access credentials are user_abc with password pw1234, the following command would be used:

  Abm.Server.CalcEngine.Shell.exe
  OLAP=(SQLSERVER,MULTIDIMENSIONAL,OLAP_SVR1,false,user_abc,pw1234)

  OLAP_DB=(false,user_abc,pw1234)
  Change OLAP database configuration.

OLAP_DB_PREFIX=MYABCM_CLOUD_DW
Change OLAP database prefix, used to warehouse data from the OLAP database.

OLAP_TIMEOUTS=(180,180)
Change the time limit to access the OLAP database (in seconds).

- **Mail Server (email)**

MyABCM Corporate Calculation Engine Server depends on a mail server to send messages to administrators ad users about important events like the completion of processing or even internal system errors. This is why it is important that the system be informed of these parameters soon after the installation by using the **MAIL** parameter.

Just as an example, if the SMTP mail server's name is MSERVER01 and it is using port 1025, and the access credentials are adm_corporate with password pw1234, and the originating email address is adm_corporate@myabcm.com, and the administrator's email address is johndoe@myabcm.com and a second administrator's email address is markz@myabcm.com, the following command would be used:

Syntax:
Abm.Server.CalcEngine.Shell.exe MAIL=(my_smtp_server.net,1025,user1,psw_user1,send_from@sample.com,send_to@sample.com,send_cc@sample.com,true)

Example:
Abm.Server.CalcEngine.Shell.exe MAIL=(MSERVER01,1025,adm_corporate,pw1234, adm_corporate@myabcm.com, johndoe@myabcm.com, markz@myabcm.com,true)

Abm.Server.CalcEngine.Shell.exe SEND_TEST_MAIL=(send_to@sample.com)
Tests the configuration of the email by sending a test email.

- **Default Language**

MyABCM Corporate Calculation Engine Server is an application that supports multiple languages simultaneously for the application interface as well as the cost model. The user always makes the choice of language after logging onto the system, however in the case of a few internal routines that depend directly on the user that is logged on, it will be necessary to define the language to be used.

There are a few cases such as the recording of messages for the Windows event log and other situations where it will be necessary to define the specific language. Just as an example, if you wish to use "Brazilian Portuguese", the following command would be used:

Abm.Server.CalcEngine.Shell.exe CULT=pt-BR

Since MyABCM Corporate Application Server already comes pre-configured to use US English (en-US) internally, this configuration doesn't need to be altered unless you wish to change languages.

- **File Store Directory**

  Whenever users upload a file to the MyABCM Corporate Calculation Engine Server, this information will be registered in the database and the files will be stored in the directory that has been defined by the FILE_STORE_PATH parameter. Just as an example, if you wish to use the directory C:\FSTORE as your file store directory, you would use the following command:

  Abm.Server.CalcEngine.Shell.exe FILE_STORE_PATH="C:\FSTORE"

If the database is created by the installer, this parameter already should be correct. If it is not, you will have to configure this parameter. In addition, this should point to the same directory as the FILE_STORE_PATH for MyABCM Corporate Application Server, because the files saved in this location by MyABCM Corporate Calculation Engine Server are normally accessed by MyABCM Corporate Application Server.

Along with the parameters that we have already discussed, **Abm.Server.CalcEngine.Shell** also supports the following additional parameters:

- **HOST_UNIQUE_NAME**

  Define the unique name for the host where the instance of MyABCM Corporate Calculation Engine Server is being configured. This is particularly important when there is more than one instance of MyABCM Corporate Calculation Engine Server on the network.

- **MAX_WAIT_BEFORE_DEACTIVATE_HOST**

  Define the number of tries that MyABCM Corporate Calculation Engine Server should make before deactivating another instance on the network that's delaying a pending operation.

- **MAX_IMPORT_ERRORS=200**

  Maximum number of errors permitted in the import before it is cancelled.

- **DATABASE_CONNECTION_RETRY_TIME=60000**

  Wait time before trying to connect to the database again.

- **MAIN_THREAD_SLEEP_eTIME=2000**

  Wait time for the initialization of each operation.

- **SURVEYS_NOTIFICATION=(1,120000)**

  Wait time in milliseconds.

- **ADD_OPERATION_OWNER**

  Registers a new server for the MyABCM Corporate Calculation Engine Server with the system.

- **UPDATE_OPERATION_OWNER**

  Registers the configurations of the current server for the MyABCM Corporate Calculation Engine Server.

- **REMOVE_OPERATION_OWNER**

  Removes the registration of the current server for the MyABCM Corporate Calculation Engine Server.

- **GET_OPERATION_OWNERS**

  Obtains the system's list of registered servers for MyABCM Corporate Calculation Engine Server.

- **DATABASE_OPERATION_TIMEOUT**

  Defines how long the system will wait before timing out and cancelling a database operation.

- **DATABASE_LOG_OPERATION_TIMEOUT**

  Defines how long the system will wait before timing out and cancelling a database operation for operations that are known to take a long time like copying models.

- **LIST_PARAMETERS**

  Lists all the parameters that are currently in use in the shell.

- **CACHE_MEMBERS_BEFORE_IMPORTING=0**

  Cache the structural members before importing periodic data.

- **MAX_ROWS_IN_IMPORT_TRANSACTION=100**

  Number of rows to be stored in cache before importing each transaction.

- **MAX_ROWS_IN_ETL_PACKAGE_LOG=10000**

  Number of errors rows registered before the execution of the ETL is cancelled.

- **ENABLE_STRONG_PASSWORD_VALIDATION=true**

  Minimum of 8 characters, with at least 3 of them having to be:
  - Capital letters
  - Numbers
  - Special characters (! @ # $ % ^ & * ? _ ~- ,)

- **BLOCK_USER_AFTER_DAYS_WITHOUT_USE=60**

  Blocks user rights.

- **REVOKE_USER_RIGHTS_AFTER_DAYS_WITHOUT_USE=180**

  After the stipulated days without use, the user's access rights are blocked even if the final Active date has already been stipulated.

- **ENFORCE_UNIQUE_PASSWORD_INTERVAL=365**

  Repeating a password within a period of 365 days is not allowed (in accordance with the example above).

- **PURGE_LOGS_INTERVAL=365**

  Stipulated time to erase old logs – For example: logs older than 365 days will be eliminated.

- **GET_LICENSE_DETAILS**

  Obtain license details.

- **GET_EXPIRED_NAMED_LICENSES**

  Obtain named licenses that have expired.

- **REMOVE_LICENSE**

  Remove license.

- **BACKUP_CONFIG="C:\Backup.xml"**

  Configuration of the backup to an XML file.

- **RESTORE_CONFIG="C:\Backup.xml"**

  Restoration of an XML file configuration.

- **LIST_INSTALLED_VERSIONS**

  List installed versions.

- **ETL_CONFIG=(domain,user,psw)**

  Credential to be used to execute ETL packages.

- **ALLOW_IMPOR_OF_MANUALLY_MODIFIED_FACT_XML**

  Allow import of manually modified xml fact.

- **CPU_FACT_PERFORMANCE_LOG**

  Change the performance of the Log on the CPU.

- **LDAP_SYNC**

  Set LDAP synchronization parameters.

- **NUM_PROCS**

  Change the number of cores to use when processing facts.

- **ODBC_PERFORMANCE_LOG**

  Allow to change Log performance when using ODBC.

- **ADONET_PERFORMANCE_LOG**

  Allow you to change the performance of the Log when used ADO.NET.

- **OLAP_DOMAIN**

  Allows you to change the domain to use for external cube access rights.

- **OLAP_ENGINE**

  Lets you change the mechanism of how OLAP is generated.

- **OLAP_OPTIMIZED_SELECT_INSERT**

  Changes the optimization of SELECT and Insert queries (Tabular mode only).

- **TEST_LDAP_CONFIGURATION**

  Tests the LDAP settings that are configured.

- **USE_PRIVATE_LICSTORE**

  Use private license.

- **RESET_LICSTORE**

  Resets the license repository.

- **SYS_INFO**

  Get System Information.

- **LIST_DM_CONNECTORS**

  Updated list of installed connectors for the DataMap.

- **ADD_DM_CONNECTOR**

  Adds DataMap connector to the system.

- **REMOVE_DM_CONNECTOR**

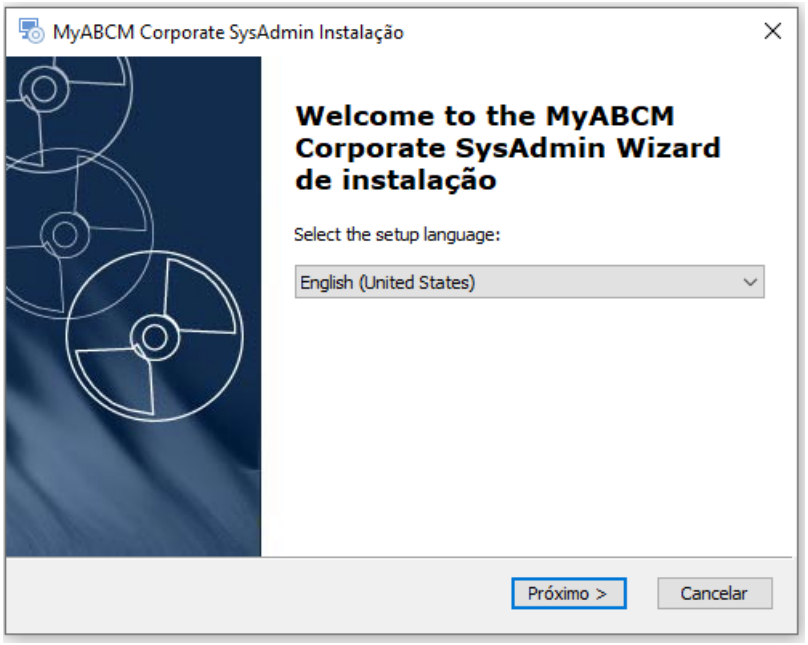
  Removes DataMap connector from the system.

2. Installing MyABCM Corporate SysAdmin Desktop

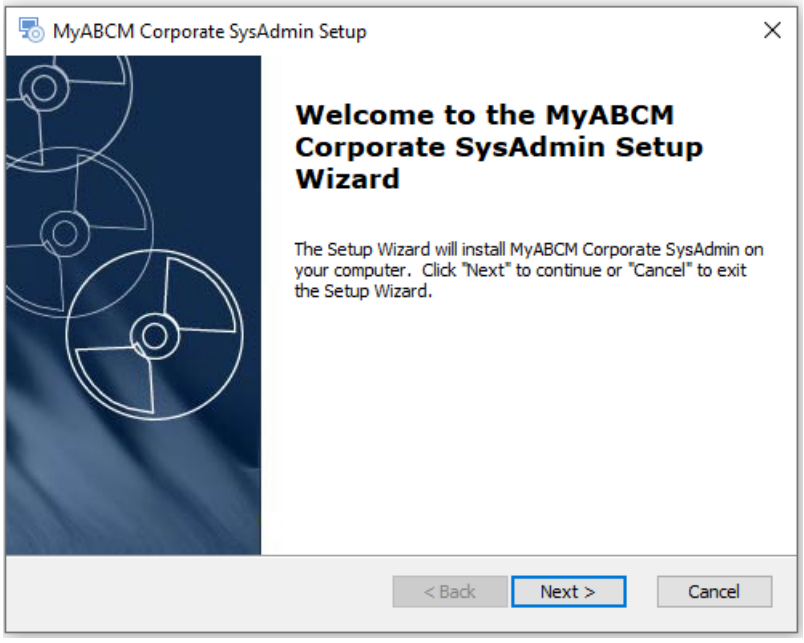
2.1. Installing MyABCM Corporate SysAdmin Desktop

1. Begin installing MyABCM Corporate SysAdmin Desktop by double-clicking on the installer.

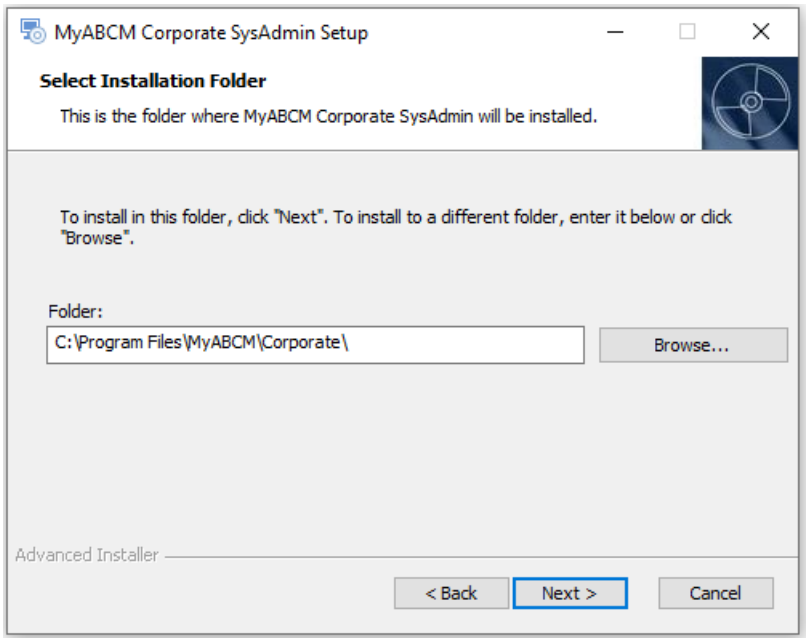
2. Click the **Next>** button.



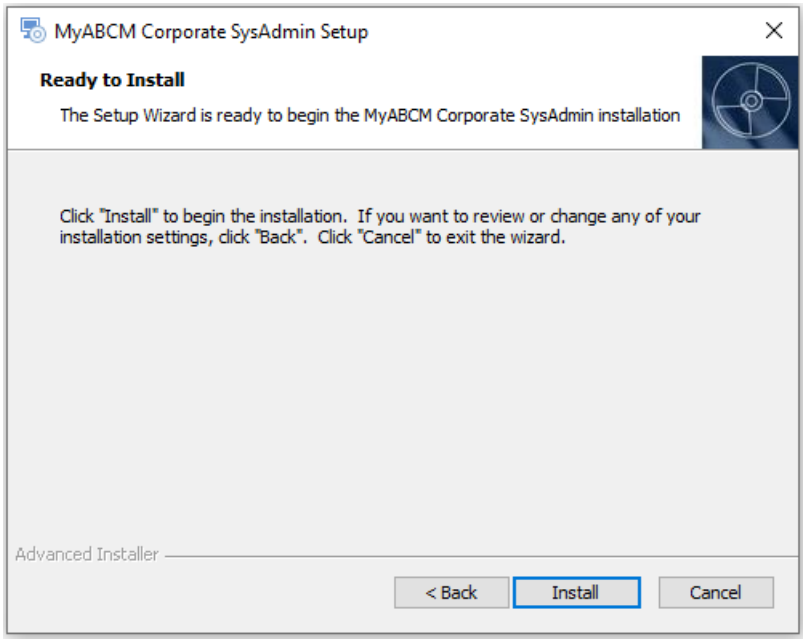
3. Click the **Next>** button again.



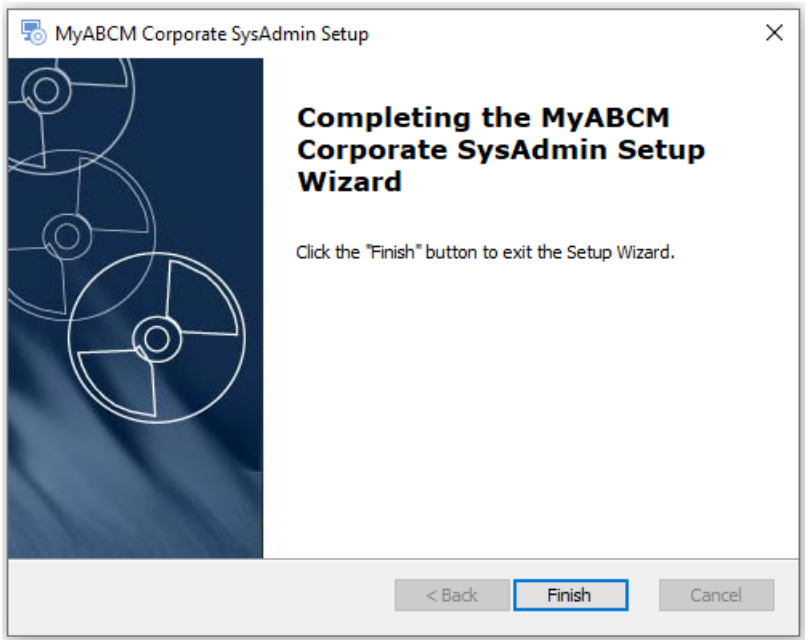
4. Select the destination folder and click the **Next>** button.



5. Click the **Install** button to begin the installation.

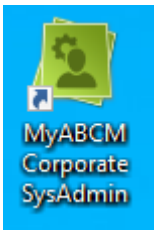


6. Click the **Finish** button to complete the installation.



3. How to Use the Administrative Module to Create Users and Models

Soon after you complete the installation and configuration of MyABCM Corporate Server (simplified setup) and MyABCM Corporate SysAdmin Desktop, you should have the following icon for access to the administrative application:

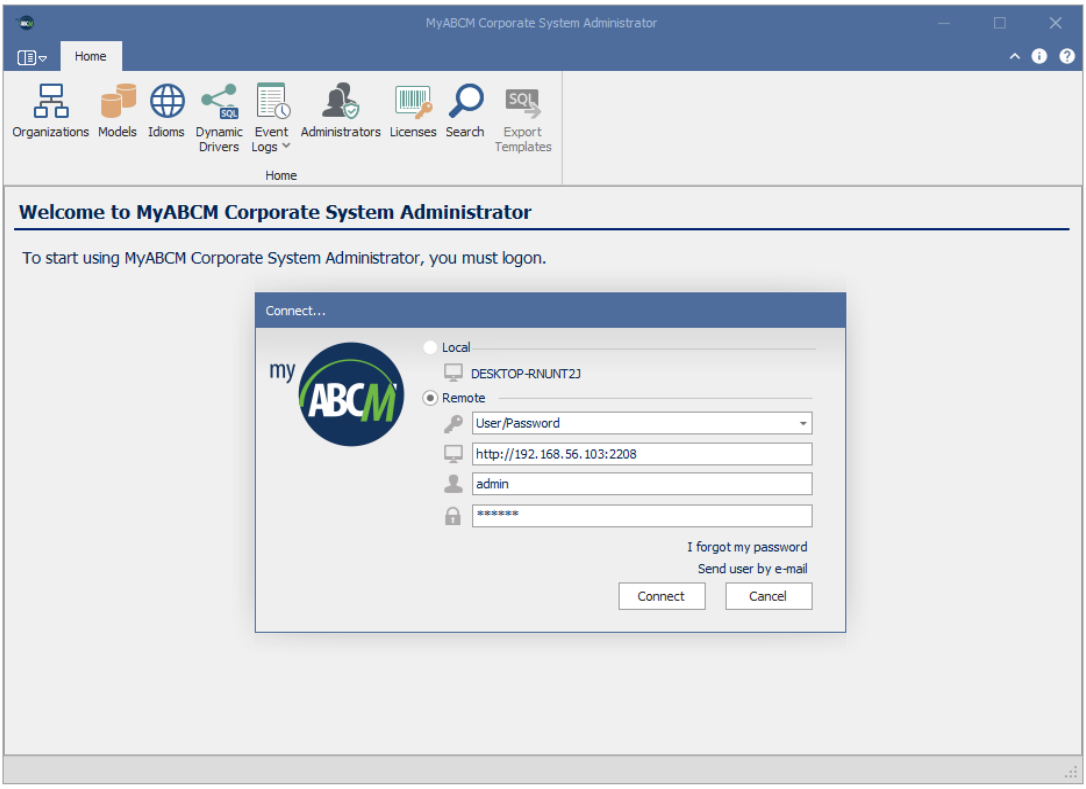


3.1. General Overview of MyABCM Corporate SysAdmin Desktop

The first step after installing MyABCM Corporate Server and MyABCM Corporate SysAdmin Desktop is to create organizations, users and groups. Using MyABCM Corporate SysAdmin, you can create users and groups as well as perform a series of administrative tasks. Before navigating through this Desktop application and just after logging in, it is important that the default administrator password be modified.

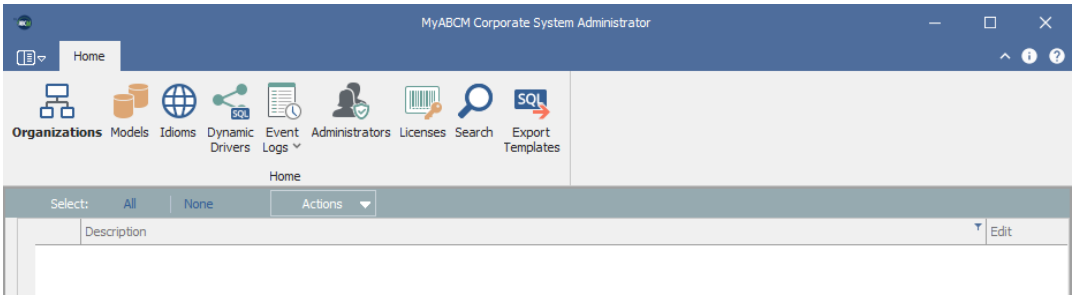
1. Double-click on the **MyABCM Corporate SysAdmin** icon to open the **MyABCM Corporate System Administrator** desktop.

   At this point, the following window should be open:



2. Use the **Server** according to your installation, the default is usually http://localhost:2208.
   Use the user name **admin** and the password **myabcm** to enter the system for the first time.

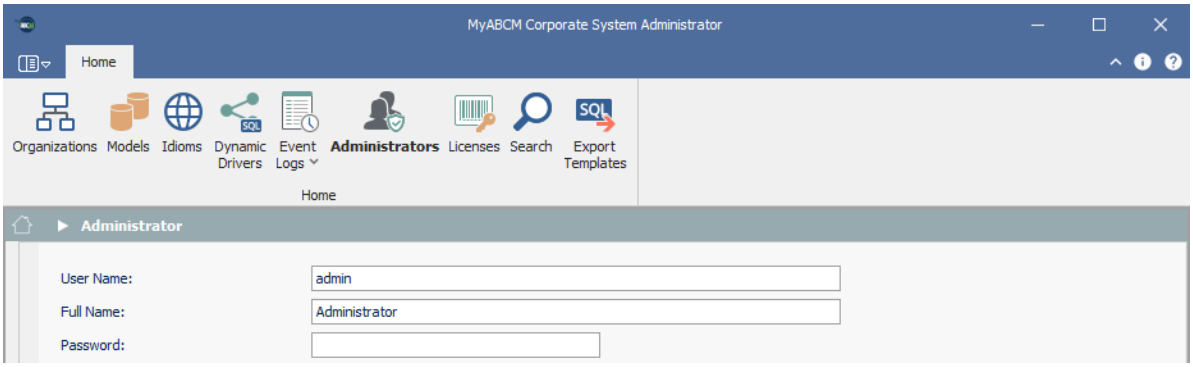
   Just after you login, the initial Administrator window should be open like the example below:



The first and most important step is to modify the default password of the administrator's userid.

3. Click on the **Administrators** tab to open the user details window.

The user details allows you to modify many details relating to the administrator userid and the first thing that has to be done is modify the admin password to preserve the security of the product.

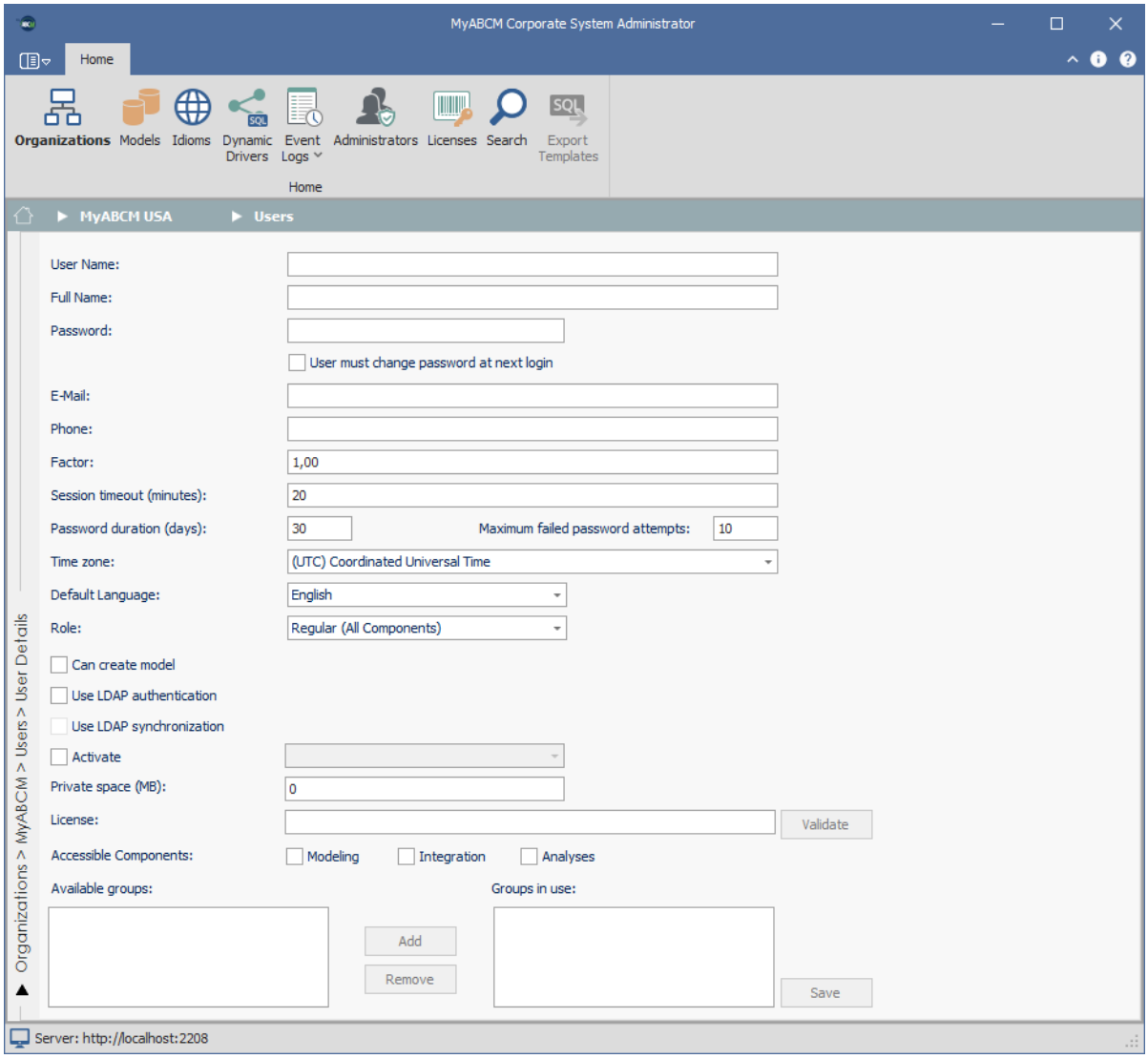


4. Modify the **password**, provide an **e-mail** address and modify any other parameters that you like before clicking the **Save** button to save your changes.

The functions of the MyABCM Corporate SysAdmin are organized into the following functional groups:

Organizations: Administration of users and groups

The first step that you will take in the Administrator application is usually the creation of organizations and after users. When you create a user, the following details can be filled in:



User Name: The name that the user will use on the logon page.

Full Name: The user's complete name.

Password: The password that the user will use (note that the user can change this password at any time).

E-Mail: The user's email address.

Phone: The user's telephone number.

Factor: The user's salary factor (if provided, this information is used in the weighted drivers used in Surveys). This configuration doesn't need to be altered in MyABCM Corporate Server when simplified setup because it doesn't have WEB access.

Session timeout (minutes): Maximum amount of time that a session can be inactive before the session expires.

Password duration (days): How long the password remains valid (in days).

Maximum failed password attempts: Number of times in a row that the system will accept someone trying to use the wrong password before the user is blocked.

Time zone: User's time zone.

Default Language: Default language to be used by the user (note that the user can choose another language after logging on).

Role: User profile. The possible values are **Regular** for a normal user, **Complete** for system administrators, and **Limited** for analysis administrators.

Can create model: Defines whether the user can create models.

Use LDAP authentication: Defines whether the system should use external LDAP authentication or internal authentication. If this option is selected, the system will ignore all parameters related to the password and will use the LDAP server to authenticate the user's password.

Use LDAP synchronization: Configure the product so that users are synchronized with a Microsoft Active Directory (LDAP) server.

Activate: Enables or disables the user. All users, when enabled, need to have an end date after which the user will be disabled automatically.

Private space (MB): This is the maximum amount of space that the user will have available to make uploads to the server or to export files.

The private space field should be filled in, because otherwise the user won't be able to upload files, imports or exports.

License: License associated with a specific user. Usage licenses for MyABCM Corporate Server are normally associated directly with the server and type of server, but it is possible to associate a license with a specific user. In this case, the user will always have access to the system no matter how many total licenses are available on the server.

Important note: The license listed in this field must have a name in order to function.

Accessible Components: Features that will be available for the user.

At least one component should be selected so that the user has access to the system's functionality.

Available Groups: List of groups available to the organization you created.

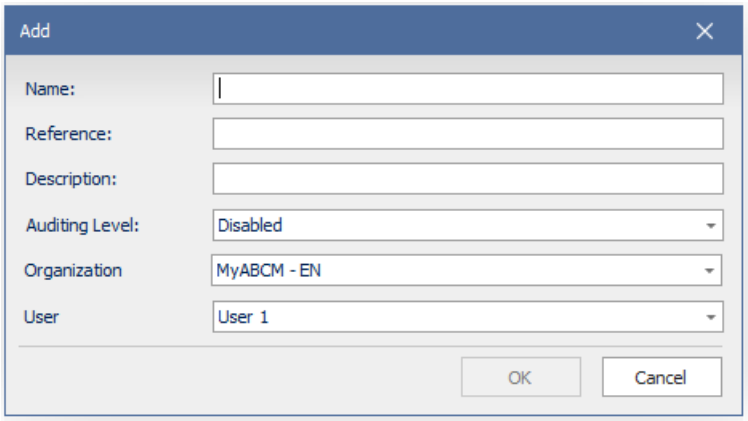
Groups in Use: List of groups that the user belongs to

Besides creating users, you can create groups and associate these groups to existing users. The use of groups makes defining access rights simpler, because these rights can be associated with users or groups.

- **Models**: Administration of models.

  The function of model administration is to enable the system administrator to create or remove models. Note that even though the administrator can create and remove models, the administrator does not have access to the models' content.

  In this model creation window, the following information needs to be provided:



  Name: Model name.

  Reference: Reference code.

  Description: Model description.

  Audit Level: The audit level to be used with this model. The levels are:

  - **Disabled:** No auditing;
  - **Basic:** Register just logon/logoff operations;
  - **Intermediate:** Register logon/logoff operations and asynchronous/scheduled operations like calculations, running the entire model, imports and exports;
  - **Complete:** Register all executed operations.

  Organization: Organization assigned to the model.

  User: Define which user will be considered the model's owner. This is very important, because the model's owner is the only user with unrestricted access to the model.

- **Idioms**: Administration of languages to be used in the models.

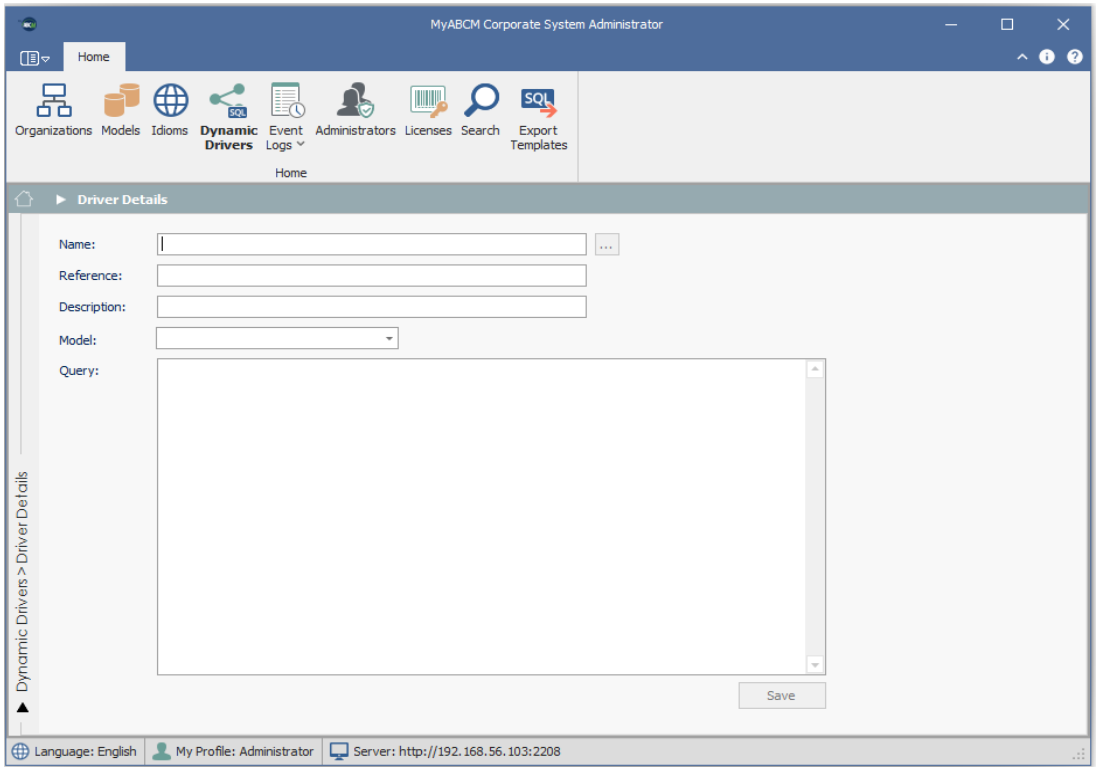
  The function of language administration allows the user to define which languages will be used when the model is created. The system comes with English, Spanish, French and Portuguese as standard options.

If the model is just going to be used in English, it is important that the languages "Spanish", "French" and "Portuguese" be immediately removed to avoid any type of confusion on the part of the users.

- **Dynamic Drivers**: Administration of custom cost drivers

  MyABCM Corporate Server supports the use of different types of cost drivers, however in some cases the user may want to create a very specific driver that is not found among the drivers provided by the system. In this case, the system administrator can define a custom driver.

  The window where dynamic drivers are defined has the following fields:



  Name: Custom driver name.

  Reference: Reference code. This field is extremely important because the user should use this reference when using custom drivers in the model.

  Description: Custom driver description.

  Model: Associated model, because custom drivers are always created for individual models.

  Query: The SQL statement that will be used to retrieve the driver quantity. This statement must use the following mandatory parameters:

  @SRC_MEMBER_ID : the source member ID.
  @SRC_ASSOCIATION_ID: the source association ID.
  @DST_MEMBER_ID: the destination member ID.
  @DST_ASSOCIATION_ID: the destination association ID.

  In addition, this query should return just one column and one row with the quantity of the related driver.

If for any reason, including for questions of performance, it is preferable to use a stored procedure for a custom driver, one option is to create a stored procedure in the database with the same parameters and return results and give the user the procedure name directly. This is possible, because if MyABCM Corporate Server cannot find the custom driver mentioned by the user in the calculated driver formula, it will look for a stored procedure with the same name.

- **Event Logs:**

  Sessions: To view the system's audit logs.

  MyABCM Corporate Server registers all system user activity according to the definition created by the administrator when the model is created. You can view the different types of logs on this page.

  Operations: List of all scheduled, in progress of finished operations in the system.

- **Administrators:** To view and edit the list of administrators in the system.

- **Licenses**: To view the details of the user license.

  On the license window, you can update license data as well as view it.

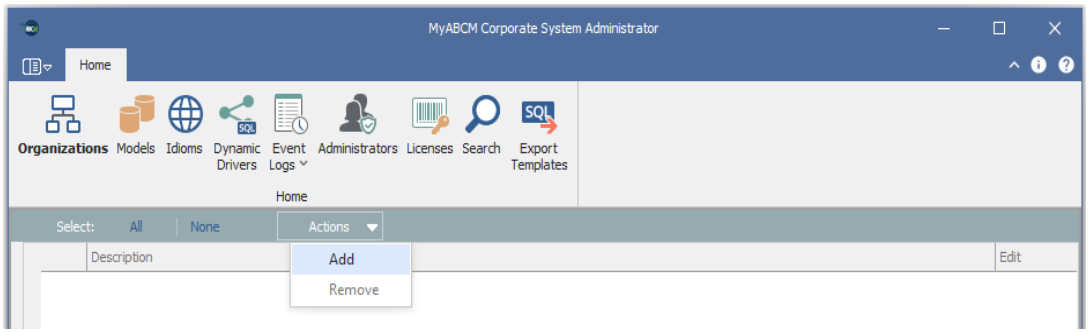
- **Search**: Search for users, groups and models.

  When the system has more than a few dozen users, the search window makes it easier to locate users. This search can also be used to locate groups and models.

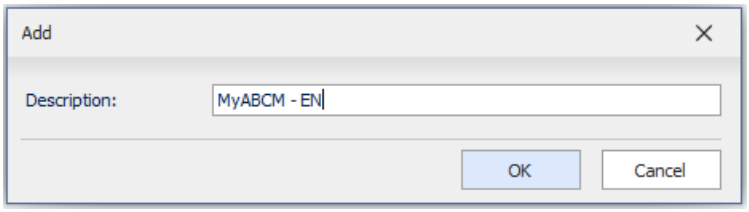
3.2. Creating Organizations, Users and Groups

3.2.1. Creating Organizations

1. Click **Organizations** and then click **Actions > Add**.

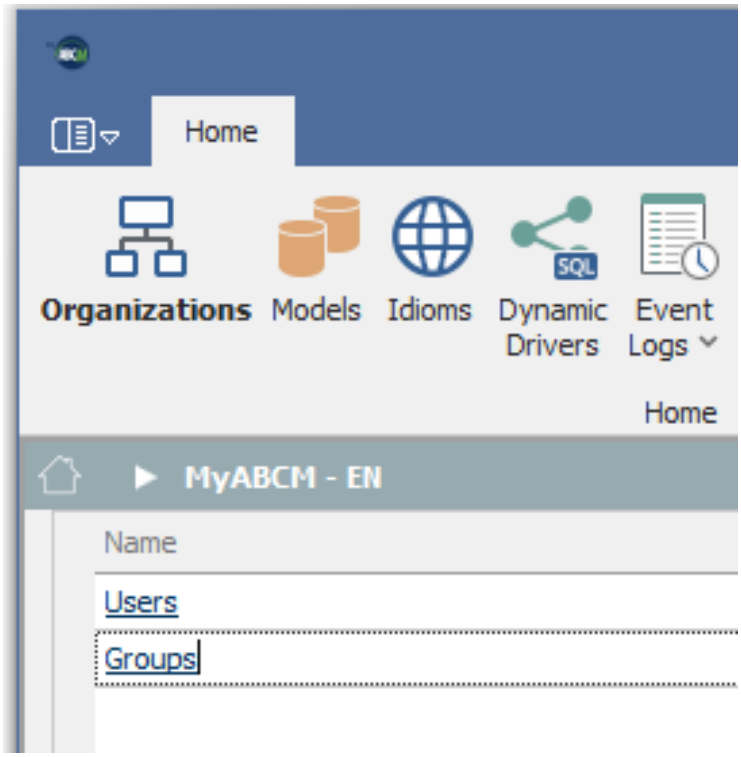


2. In the **Add** dialog box, fill in the name of the group that you are creating and click the **OK** button.

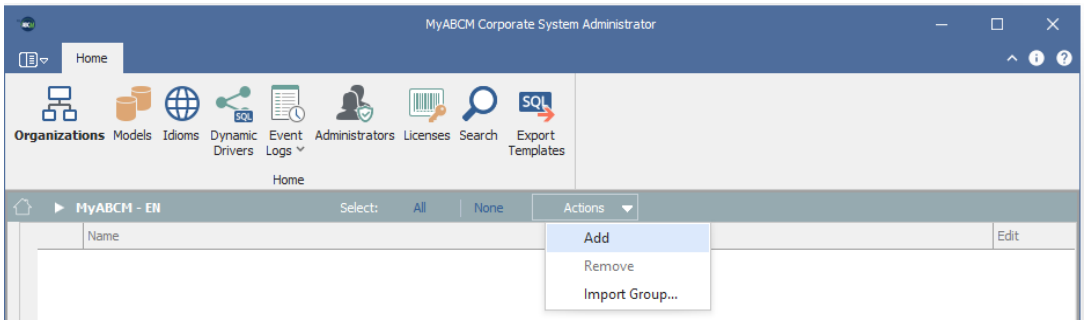


3.2.2. Creating a New Group

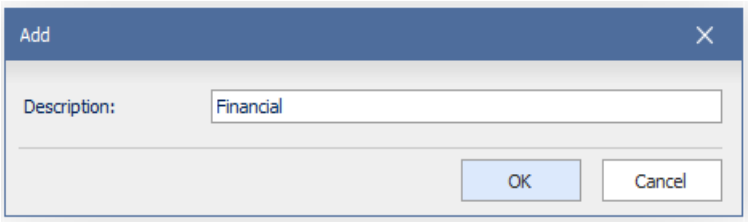
1. Click **Organizations**, choose the desired organization and then click **Groups.**



2. Click the **Actions** button and select **Add.**

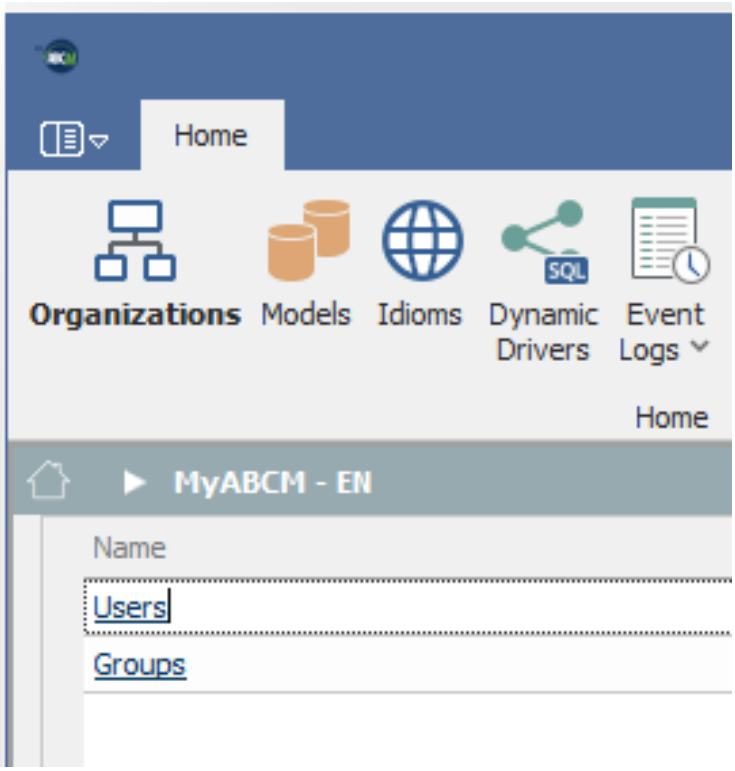


3. In the **Add** dialog box, fill in the name of the group that you are creating and click the **OK** button**.**

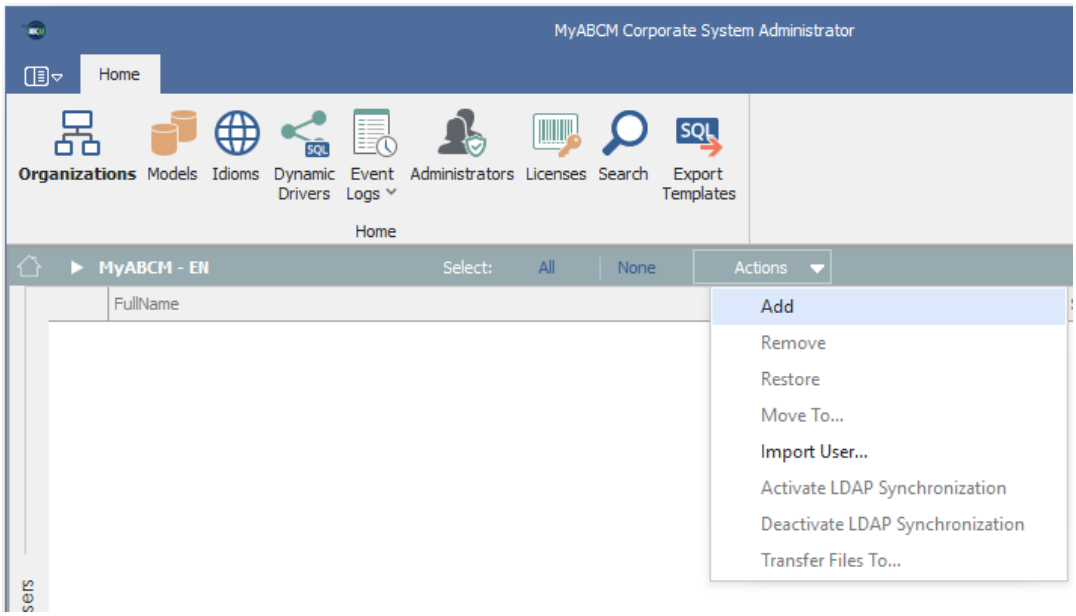


3.2.3. Creating a New User

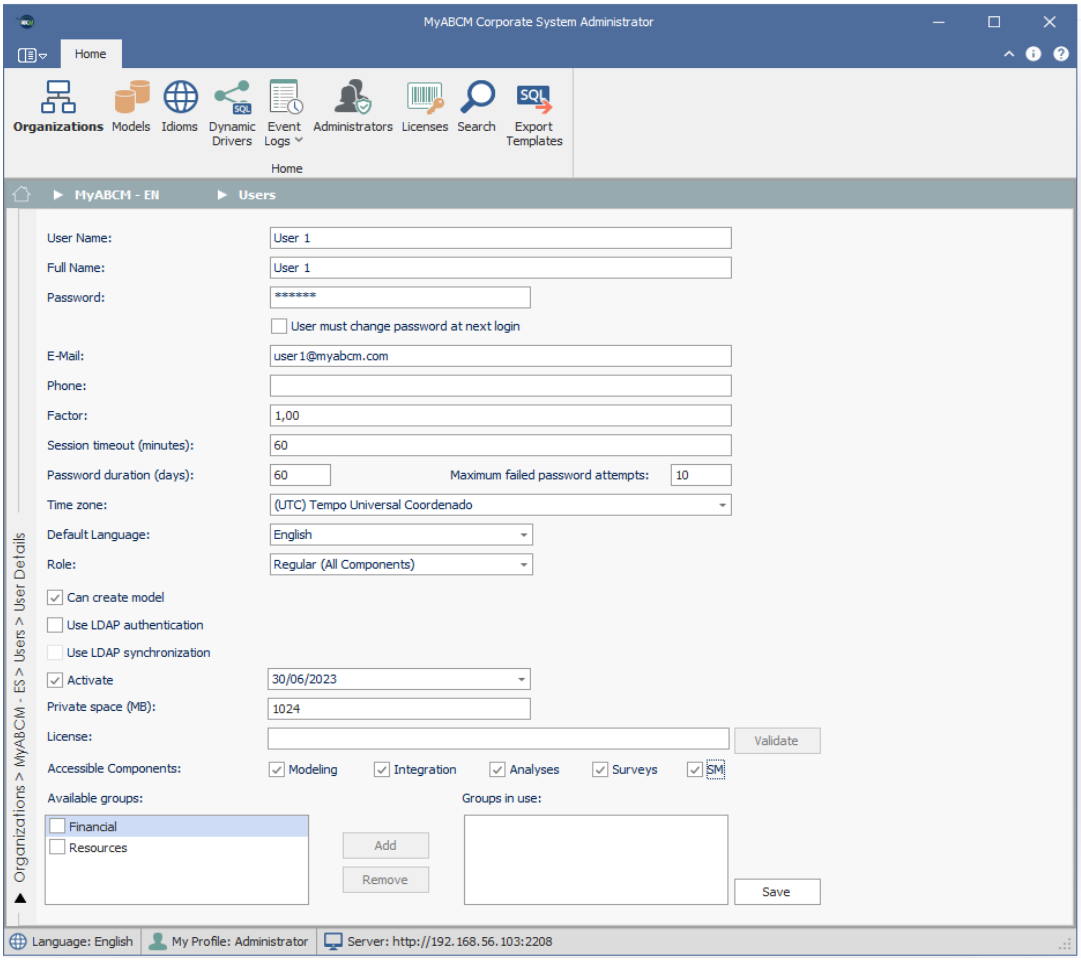
1. Click **Organizations**, choose the desired organization and then click **Users**.



2. Click the **Actions** button and the select **Add.**



On the user details window, fill in at least the following fields:



User Name: The name used for logging onto the system.

Full Name: The user's complete name.

Password: The user's password (this password can be changed by the user at any time).

E-Mail: The user's email. This information is essential because for various lengthy operations, the user will have the option of asking the system to notify him or her by email when the operation has finished.

Phone: The user's telephone number.

Factor: The user's salary factor (if provided, this information is used in the weighted drivers used in Surveys).

Session timeout (minutes): Maximum time of inactivity allowed before the system logs out the user.

Password duration (days): Maximum number of days using the same password before the system forces the user to change the password.

Maximum failed password attempts: Maximum times the user can enter a wrong password in sequence before the system disabled the user.

Time zone: The user's time zone. This is also very important because the scheduling of all operations depends on the user's correct local time.

Default Language: Idiom that is selected just after the logon (this can be changed any time after the logon).

Role: User's role in the system. Every user can be "Regular", "Complete" or "Limited". Regular users can use all software components, Complete is the user management whereas Limited users can only access analysis window.

Can create model: Defines whether the user has the right to create new models or just use existing models.

Use LDAP authentication: If an LDAP server was provided during the setup and this option is selected, the system will ignore all parameters related to the password and will use the LDAP server to authenticate the user's password.

Use LDAP synchronization: Configure the product so that users are synchronized with a Microsoft Active Directory (LDAP) server.

Activate: For the user to be able to effectively logon to the system, this option must be selected, and an end date must be defined after which the user will be disabled automatically.

Private Space (MB): This is the maximum amount of space that the user will have available to make uploads to the server or to export files.

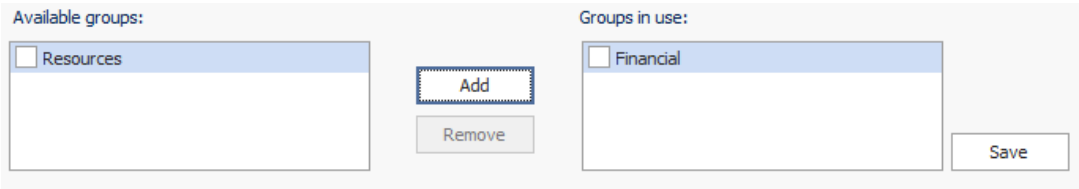
License: License associated with a specific user. Usage licenses for MyABCM Corporate Application Server are normally associated directly with the server and type of server, but it is possible to associate a license with a specific user. In this case, the user will always have access to the system no matter how many total licenses are available on the server.

Accessible Components: Features that will be available for the user.

Groups: List of groups that the user belongs to.

Besides creating users, you can create groups and associate these groups to existing users. The use of groups makes defining access rights simpler, because these rights can be associated with users or groups.

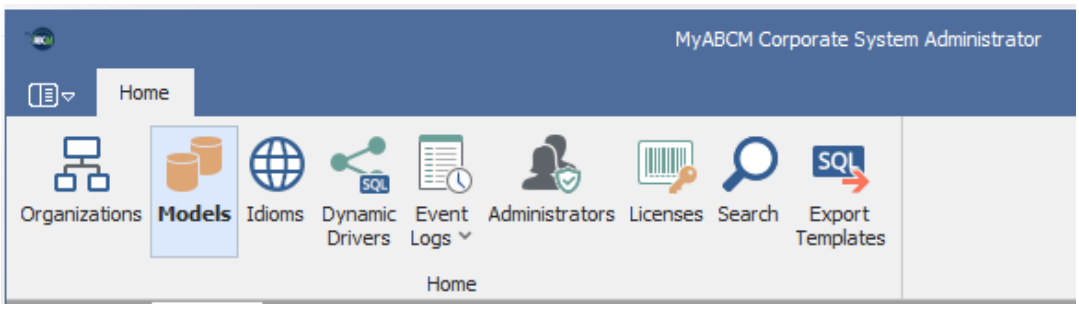
3. Click the **Save** button to save the information that you have provided.



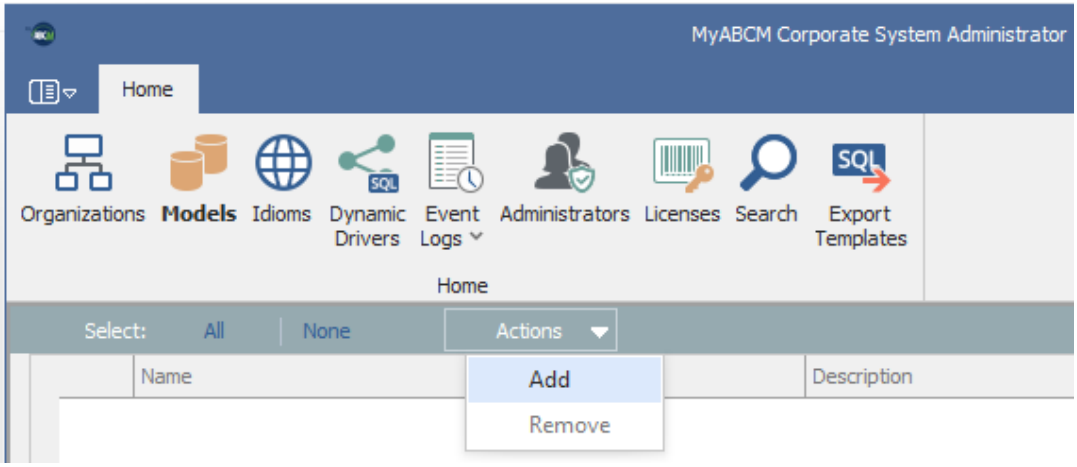
3.3. Creating Models

To create a model, follow these steps:

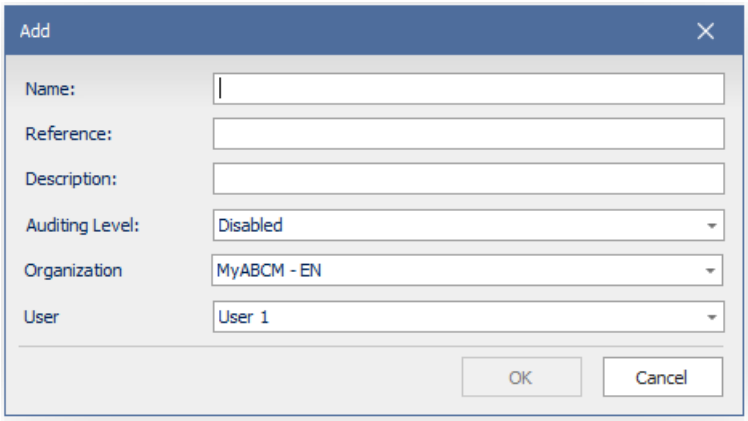
1. Click on **Models.**



2. Click on the **Actions** button and then select **Add.**



3. In the **Add** dialog box, fill in the following fields:



Name: Name of the model that you are creating.

Reference: Reference code.

Description: Model description.

Audit Level: The audit level to be used with this model. More information about these levels may be obtained in section 3.1.

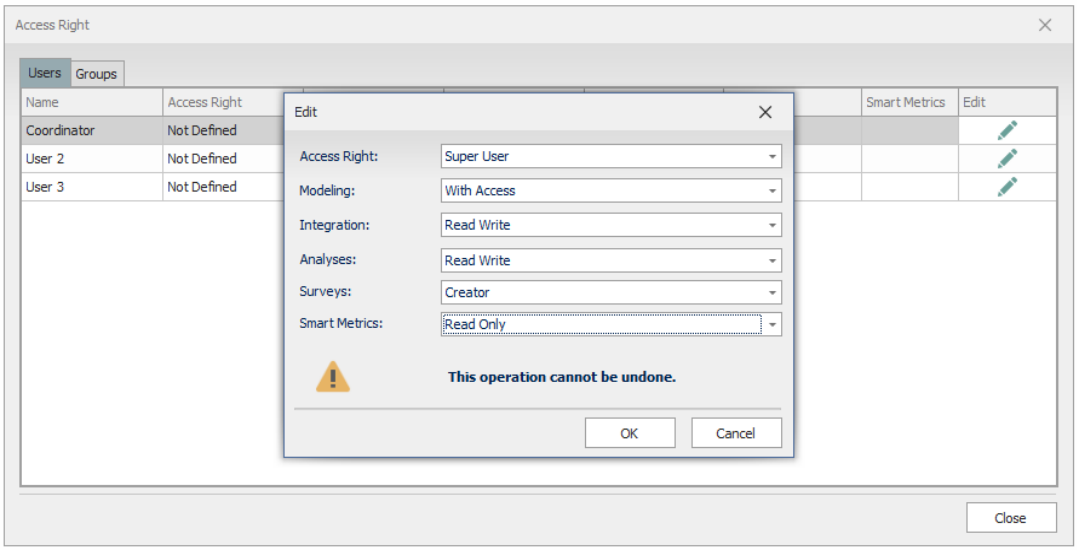
Organization: Defines in which organization the model will be created.

User: Define which user will be considered the model's owner. This is very important, because the model's owner is the only user with unrestricted access to the model.

4. Click on the **OK** button to create the model.

5. After creating the model, click on the **Access Rights** icon.

6. In the **Access Rights** dialog box, define the access rights to the model and click the **OK** button to save them.



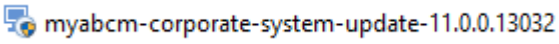
4. Updating the MyABCM Corporate Installation

The automatic update system should be executed just one time on the server that has **MyABCM Corporate Server** components installed. That is, the 2 components (Application Server and the Calculation Engine Server) that are on a single server, the automatic update of the system will only be executed once.

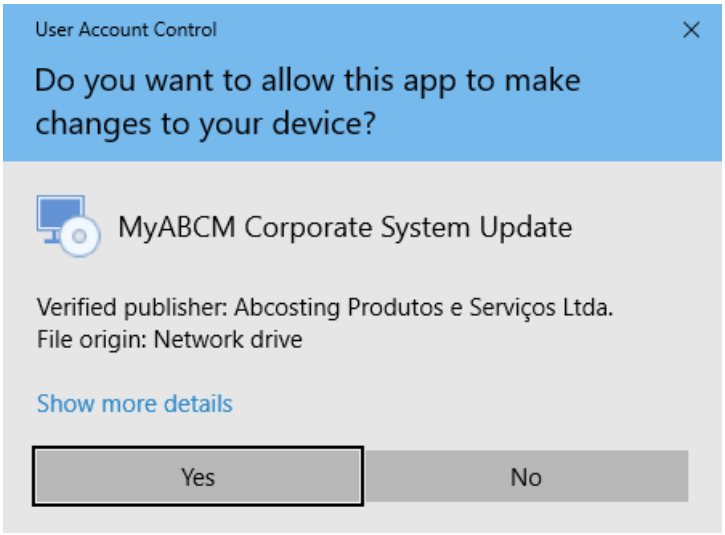
4.1. Installing the automatic update system

The installation of **MyABCM Corporate System Update** is done using the executable which comes in the installation package for **MyABCM Corporate Server**.

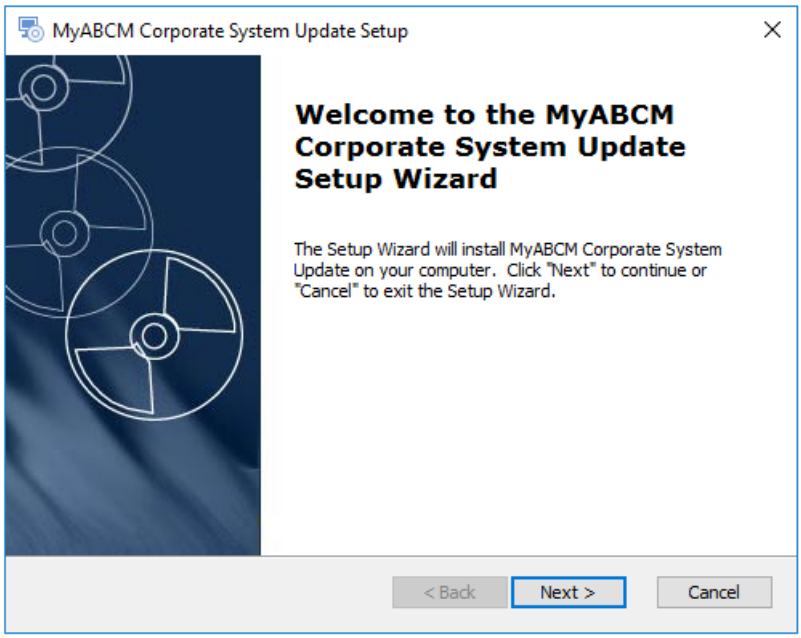
1. Double click on the application.



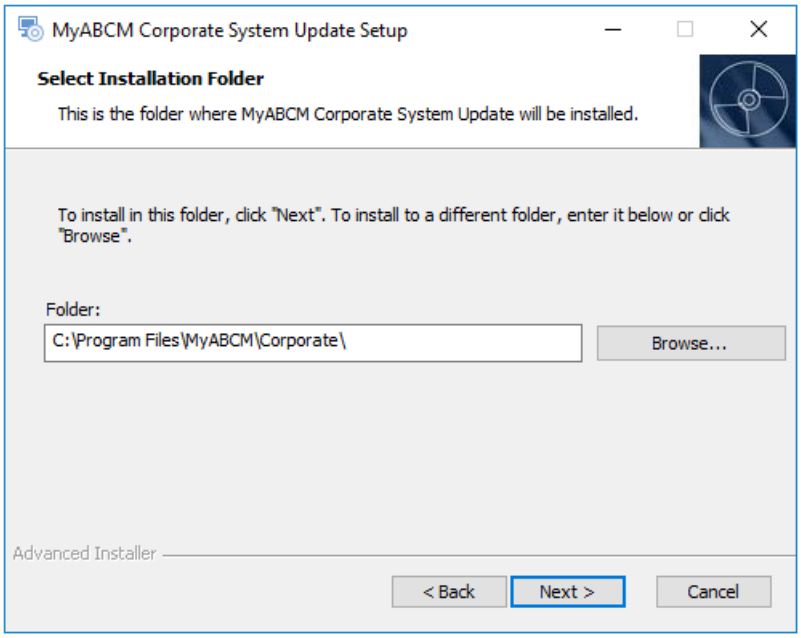
2. If a pop-up window appears asking you to confirm that you want to execute this program, click **Yes**.



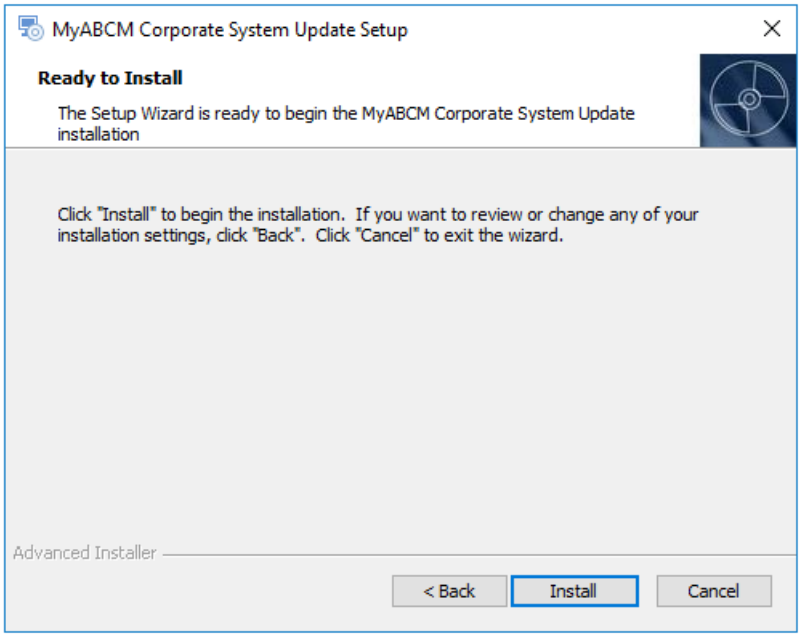
3. Click **Next >**.



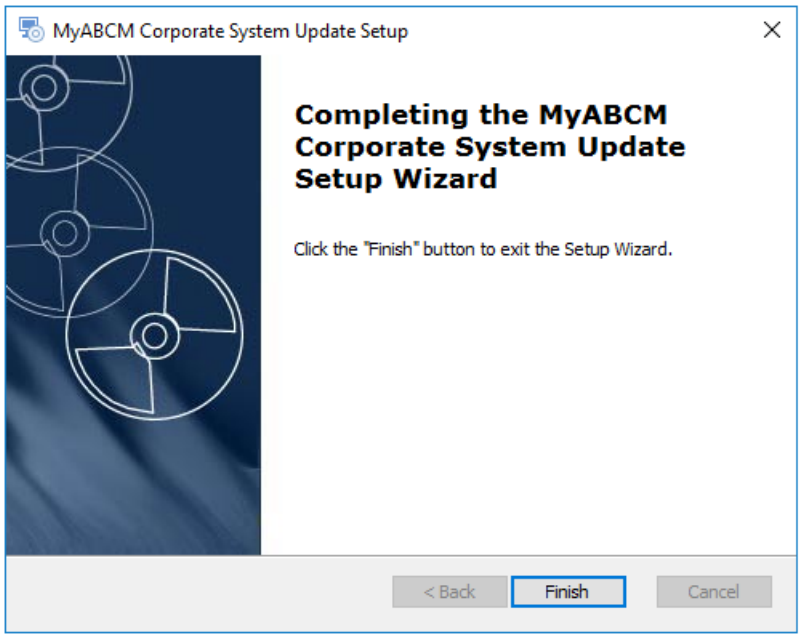
4. Select the installation folder and then click **Next >**.



5. Begin the installation by clicking **Install**.



6. When the process has been completed click **Finish**.



4.2. Executing the automatic update system

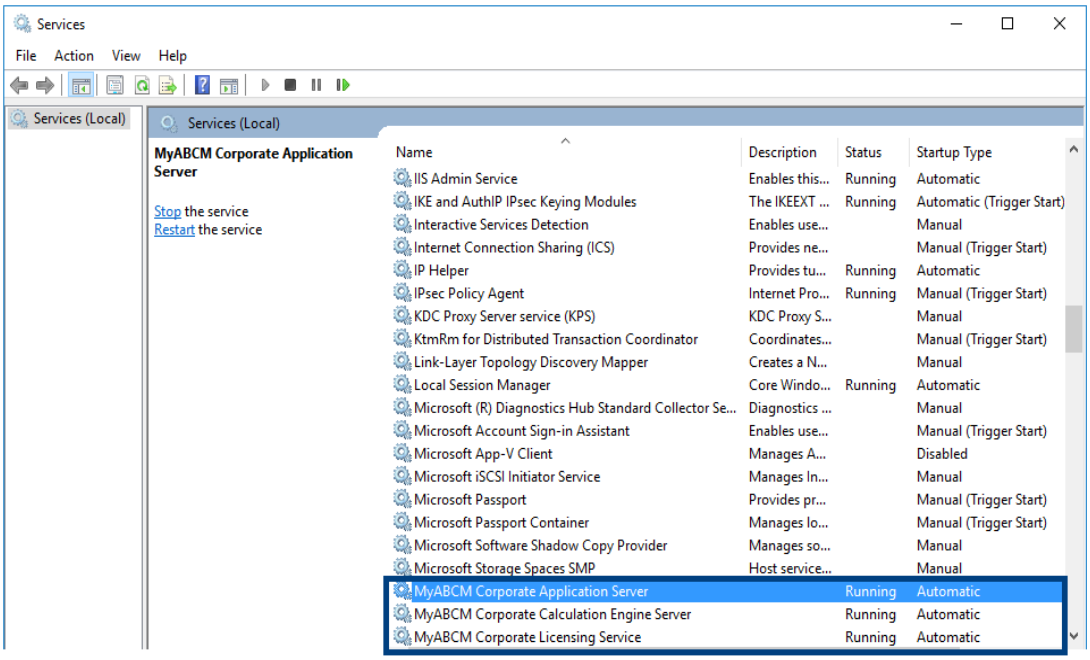
Updating the installation of any of the MyABCM Corporate Server components is very simple to do using the automatic update system, but some care needs to be taken to make sure it is successful. Even though the automatic update system is designed to stop the services MyABCM Corporate Calculation Engine, MyABCM Corporate Application Server and the MyABCM Corporate Licensing Service, it's recommended that you stop these services manually before you begin your MyABCM Corporate System Update. In addition to stopping any MyABCM Corporate services that are running, we recommend that the Desktop application of the MyABCM Corporate Server be stopped as well.

4.2.1. Stopping the Windows and Application Services

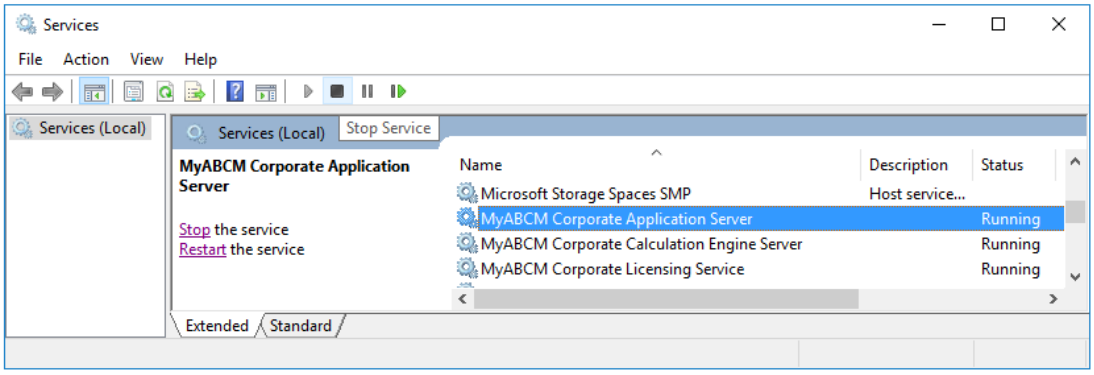
The following services can potentially be installed:

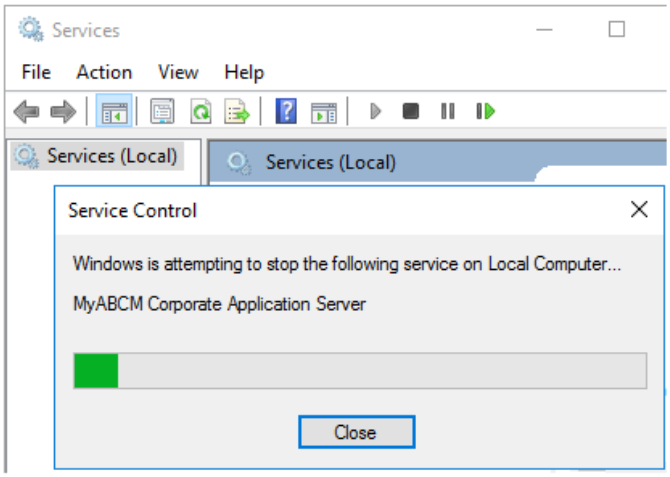
- MyABCM Corporate Application Server
- MyABCM Corporate Licensing Service
- MyABCM Corporate Calculation Engine

1. Using the Windows search, type **Services** and find the above mentioned services:



2. Click on **MyABCM Corporate Application Server**, and then click **Stop**.



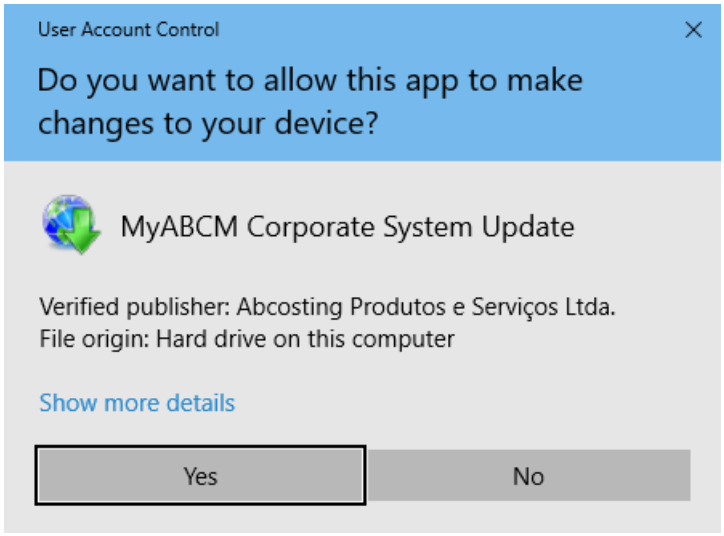


3. Repeat the same procedure for the other services (when applicable - MyABCM Corporate Licensing Service and MyABCM Corporate Calculation Engine).

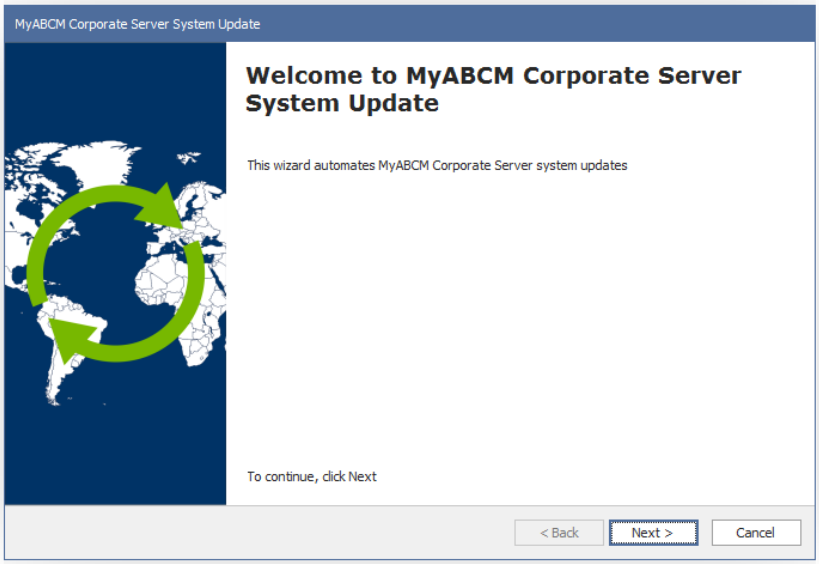
4.2.2. Executing the MyABCM Corporate System Update

1. Double click the **MyABCM Corporate System Update** icon.

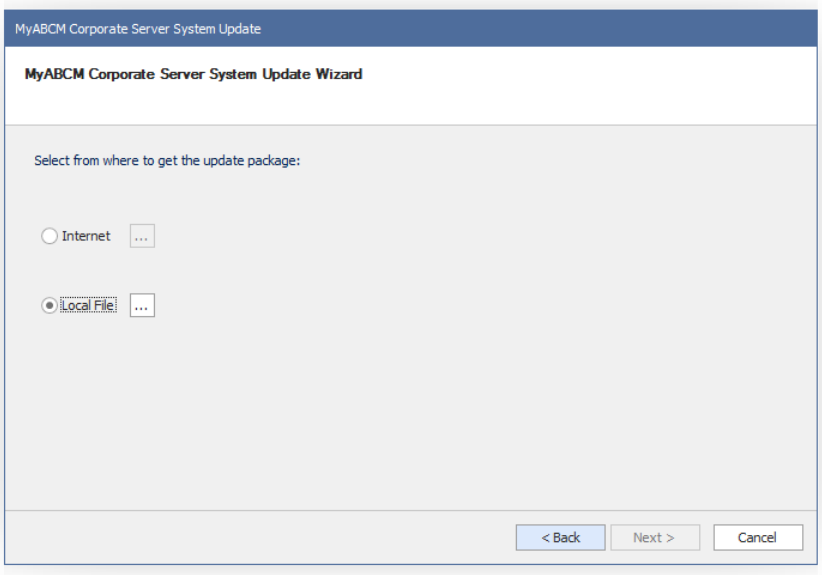
2. If a pop-up window appears asking you to confirm that you want to execute this program, click **Yes**.



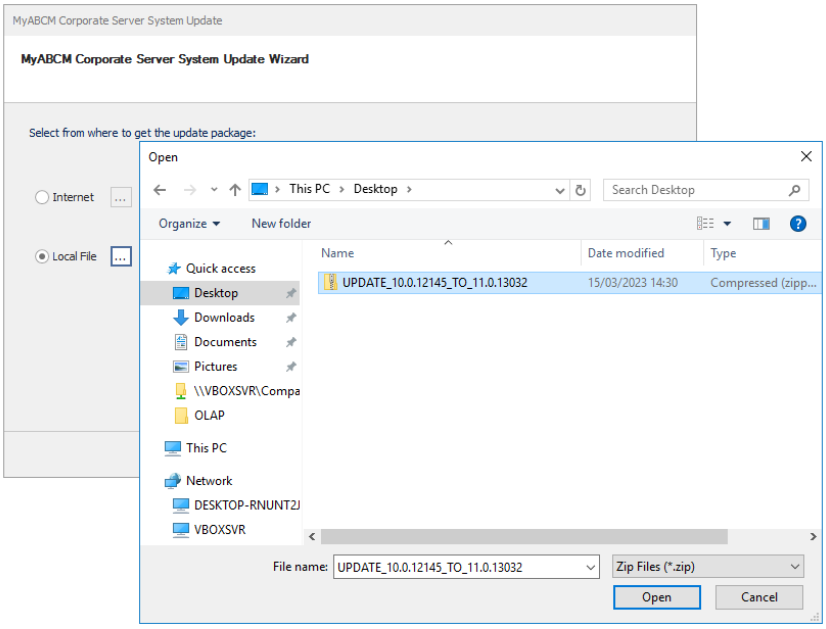
3. Click the **Next** button to advance.



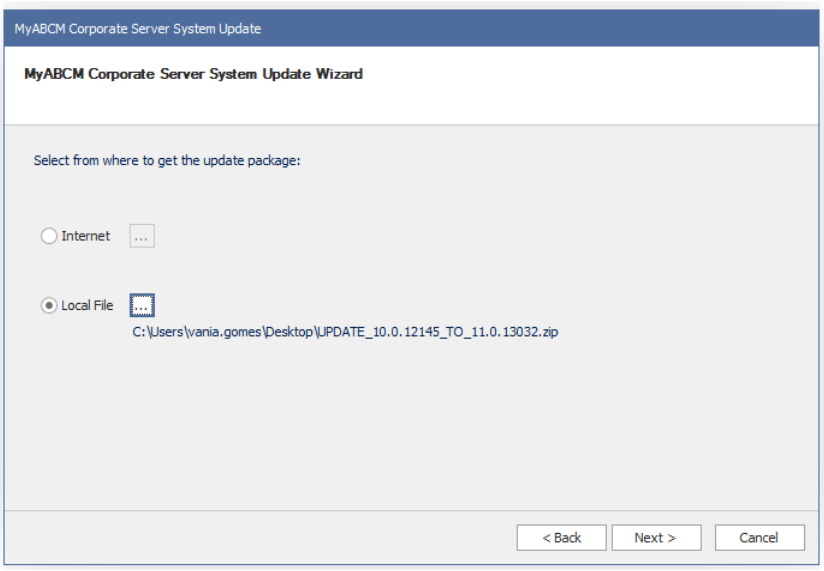
4. Leave **Internet** selected to obtain direct updates from the MyABCM servers or select **Local File** to activate the off-line update option (based on a file). If you select the **Local File** option, then click on the **[...]** button to find and select the update file.



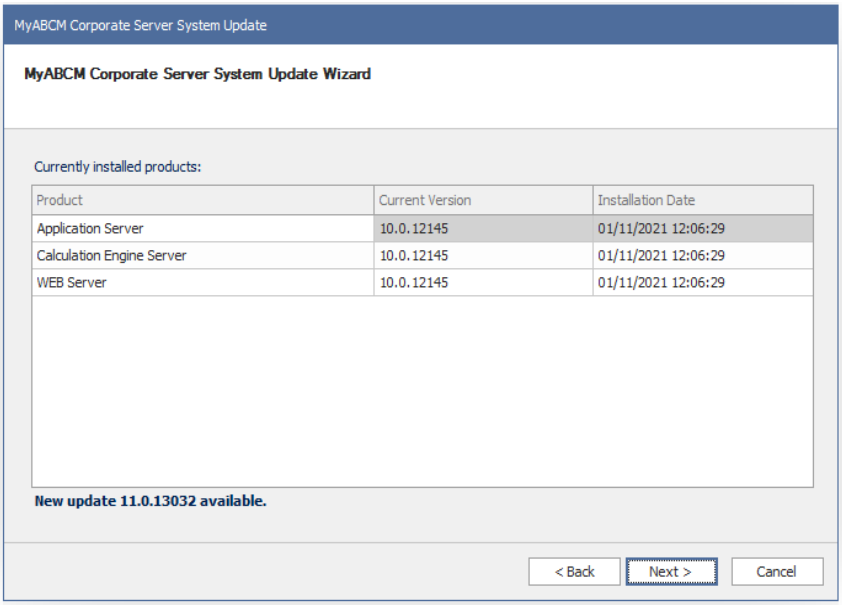
5. After selecting the file, click on the **Open** button.



6. Click the **Next >** button to proceed.

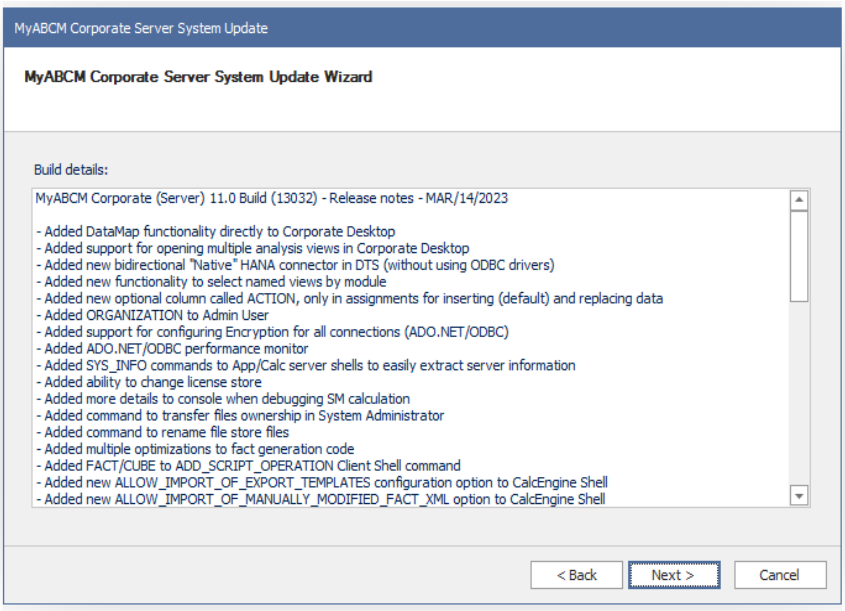


7. Then click the **Next >** button and a window will appear with a list of installed products, their version numbers, and installation dates and the number of the Update that's available, and then click **Next >** to proceed.

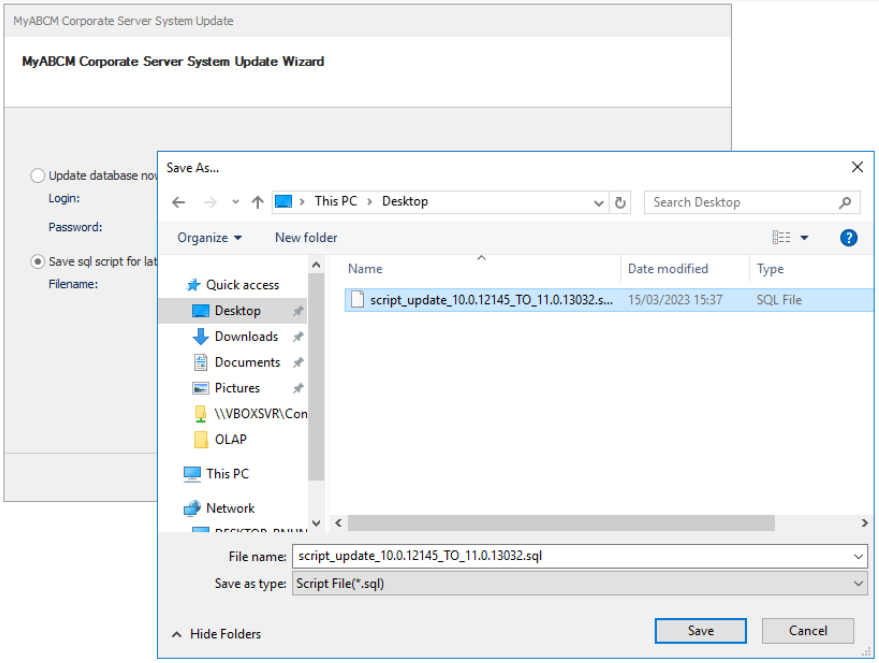


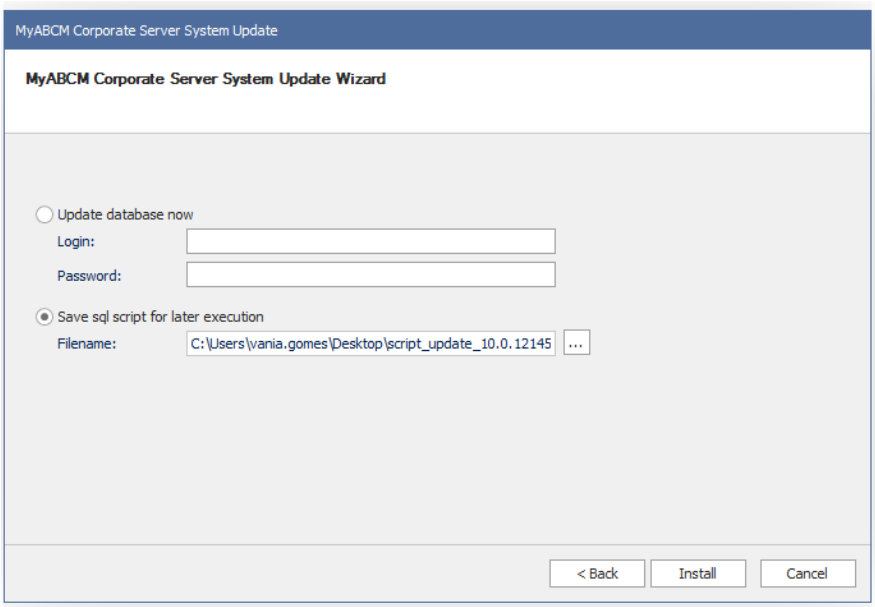
Remember that, the example above is based on the principle that all of the components are installed on a single server. If it was installed on different computers, only the installed product will appear on this screen. Therefore, it will be necessary to repeat all these procedures for each component.

8. A list of modifications will appear. Now click on the **Next >** button.



9. If the update package being installed contains database modifications, the database user will need to provide his or her username and password (for users with permission to create objects in the database), or select the option **Save sql script for later execution**, and then click on the **[...]** button to select a folder and save the script with the commands there for later execution by the DBA, and then click **Install**.



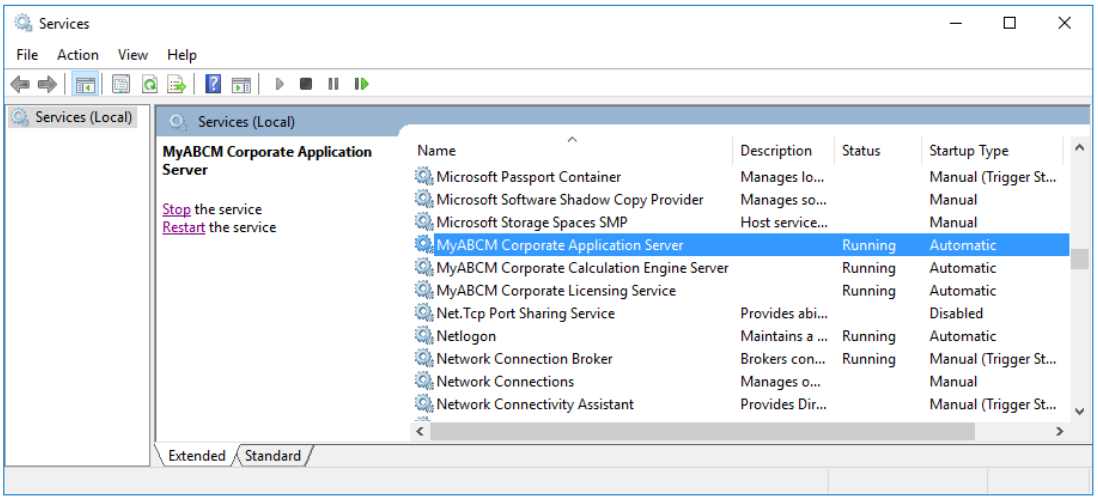


10. After the Update has been completed successfully, click the **Close** button.

4.2.3. Restarting the Windows and Desktop Application Services

The services should restart automatically, but it's important to check this manually.

1. Open the Windows services window and verify that the **MyABCM Corporate** services are active and running.



5. Advanced Topics

The previous topics of this guide explain in details how to install and configure MyABCM Corporate Server, but due to the desired architecture and security policies required by the organization using the product, further configurations like for the use of HTTPS might be necessary.

The several following sessions explain the most common additional configurations and how to apply them. Use each session independently for helping you when configuring the product.

5.1. Configuring a Database Manually

If the database for MyABCM Corporate Server has not been created by the installer, it is possible to create it manually. The following steps will explain how to do.

All the SQL scripts mentioned in this section are located within the installation directory of MyABCM Corporate Application Server Component in a subdirectory named **sql**. The complete path is usually **c:\program files\myabcm\Corporate\appserver\sql**.

In addition, there are versions of the scripts there for both SQL Server:

Description	SQL Server
Database creation scripts	**SQL Server (2008/2012):** db_createdb_sqlserver.sql
User Creation Scripts for MyABCM Corporate Server	**SQL Server (2008/2012):** db_createuser_sqlserver.sql
Table Diagram Creation Scripts	**SQL Server (2008/2012):** db_diagram_sqlserver.sql
Trigger Creation Scripts	**SQL Server 2008:** db_triggers_sqlserver_2005_2008.sql **SQL Server 2012:** db_triggers_sqlserver_2012.sql
Function Creation Scripts	**SQL Server (2008/2012):** db_functions_sqlserver.sql
Stored Procedure Creation Scripts	**SQL Server (2008/2012):** db_sp_sqlserver_common.sql **SQL Server 2008:** db_sp_sqlserver_2005_2008.sql **SQL Server 2012:** db_sp_sqlserver_2012.sql
Scripts to Initialize Specific Data Tables	**SQL Server (2008/2012):** db_initialsetup_sqlserver.sql **SQL Server (2008/2012):** db_export_templates_sqlserver.sql

If the database to be used is Microsoft SQL Server, the Analysis Services component should be present in order to make all of the OLAP functionality of MyABCM available.

5.1.1. Configuring a SQL Server 2008 Database

1. Using Microsoft SQL Server Management Studio, execute the following SQL scripts in order:

   db_createdb_sqlserver.sql
   db_diagram_sqlserver.sql
   db_triggers_sqlserver_2005_2008.sql
   db_functions_sqlserver.sql
   db_sp_sqlserver_common.sql
   db_sp_sqlserver_2005_2008.sql
   db_export_templates_sqlserver.sql
   db_initialsetup_sqlserver.sql
   db_createuser_sqlserver.sql
   These SQL scripts should create a new SQL Server database and all objects associated with it.

   The script **db_sysmessages_sqlserver_2005_2008.sql** is optional and serves to register the list of possible database access errors generated by MyABCM Corporate in the SQL Server 2005/2008 message table. The execution of this script will provide the user with more precise error codes.

2. After the proper creation of all the database objects, use Abm.Server.Shell.exe and Abm.Server.CalcEngine.Shell.exe to configure MyABCM Corporate Application Server and MyABCM Corporate Calculation Engine Server for proper access to the database you have created.

   More details about configuration can be obtained in the previous sections of this manual.

5.1.2. Configuring a SQL Server 2012 Database

1. Using Microsoft SQL Server Management Studio, execute the following SQL scripts in order:

   db_createdb_sqlserver.sql
   db_diagram_sqlserver.sql
   db_triggers_sqlserver_2012.sql
   db_functions_sqlserver.sql
   db_sp_sqlserver_common.sql
   db_sp_sqlserver_2012.sql
   db_export_templates_sqlserver.sql
   db_initialsetup_sqlserver.sql
   db_createuser_sqlserver.sql

   These SQL scripts should create a new SQL database and all the objects associated with it.

2. After the proper creation of all the database objects, use Abm.Server.Shell.exe and Abm.Server.CalcEngine.Shell.exe to configure MyABCM Corporate Application Server Component and MyABCM Corporate Calculation Engine Server for proper access to the database you have created.

   More details about configuration can be obtained in the previous sections of this manual.

5.2. Configuring Access to Microsoft Analysis Services

Even though access to Microsoft Analysis Services (MSAS) is already available via HTTP/HTTPS using the MSMDPUMP.DLL together with IIS, MyABCM Corporate Server Component requires additional manual adjustments to correctly access MSAS. This is necessary because direct access to MSAS normally requires that the userid that is accessing MSAS be part of the same domain as MSAS and that it be a registered user with access rights to MSAS.

MyABCM Corporate Calculation Engine Server require direct access to MSAS and need to be executed with a userid in the same domain where MSAS is registered.

In the case of **MyABCM Corporate Server**, which is an application that runs within IIS, it is pre-configured to use the ID **ApplicationPoolIdentity** which is the identity defined for the **MyABCMApplicationPool**. Since this identity should not have access to MSAS, it is necessary to substitute it manually for another ID that is registered with MSAS.

To modify this IIS ID, follow these steps:

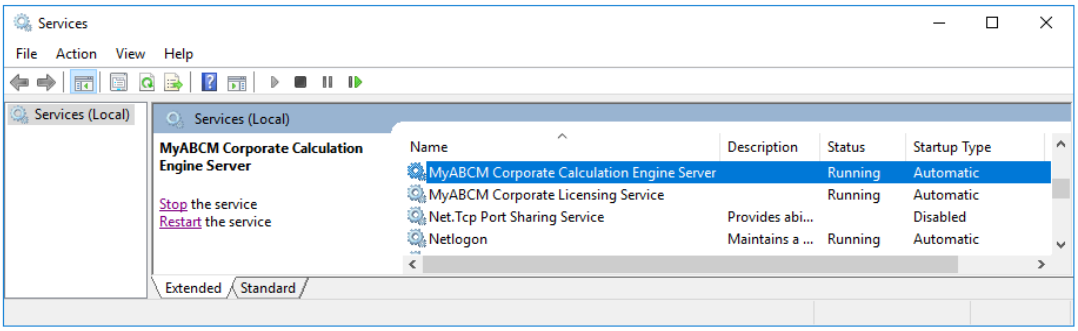
1. Open **Internet Information Services (IIS) Manager.**
2. Select **Application Pools.**
3. Select the Application Pool called **MyABCMApplicationPool** and then click on **Advanced Settings...**
4. In the **Advanced Settings** dialog box, select **Identity.**
5. Click on the icon next to **ApplicationPoolIdentity.**

6. Select an appropriate ID that has access rights to MSAS and the installation directory for MyABCM Corporate Server and then click the **OK** button**.**
7. In the **Advanced Options** window, click the **OK** button to save your changes.

Besides modifying the IIS, you need to modify the logon account for the MyABCM Corporate Calculation Engine Server service. Follow these steps to make this modification on the computer where the MyABCM Corporate Calculation Engine Server was installed:

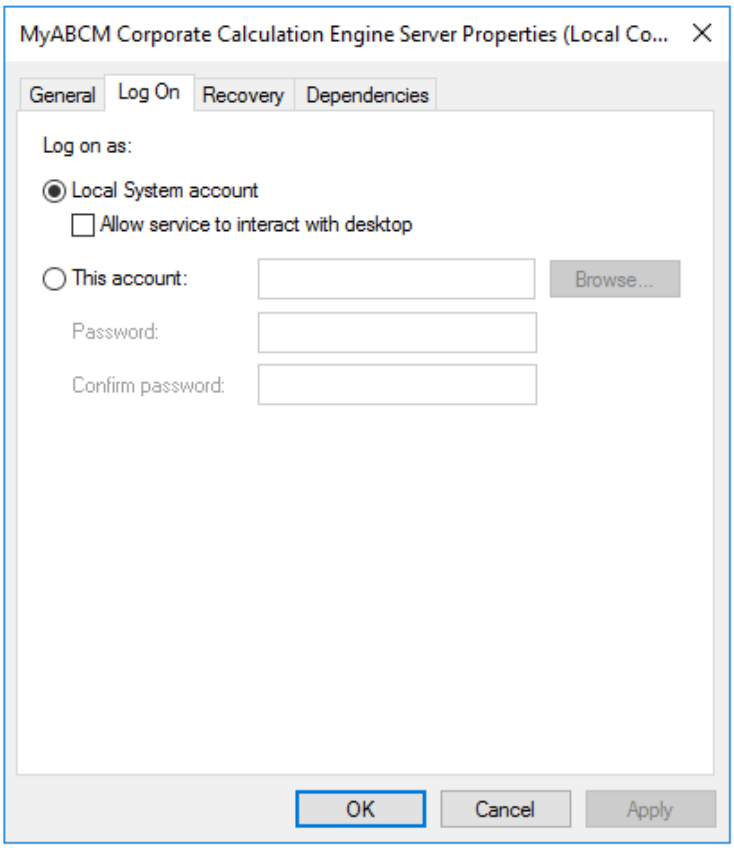
1. Using the Windows Control Panel, select Administrative Tools and then Services.

   A window like the example below should appear:



2. Find and double-click on the **MyABCM Corporate Calculation Engine** service**.**

3. In the popup window called **MyABCM Corporate Calculation Engine Properties**, click on the Log On tab.



4. Change the logon from the **Local System Account** to **This account** and select a valid ID that has local rights and is registered in MSAS.

5. Click the **OK** button to complete the operation.

After these configurations, MyABCM Corporate Calculation Engine Server should be able to access MSAS without any difficulties.

5.3. Executing MyABCM Corporate Application Server component within IIS

MyABCM Corporate Application Server component comes pre-configured to be executed as a Windows service; however, it also can executed within IIS. This is particularly useful in case there is a need to expand MyABCM Corporate Application Server's processing capacity through the use of multiple servers.

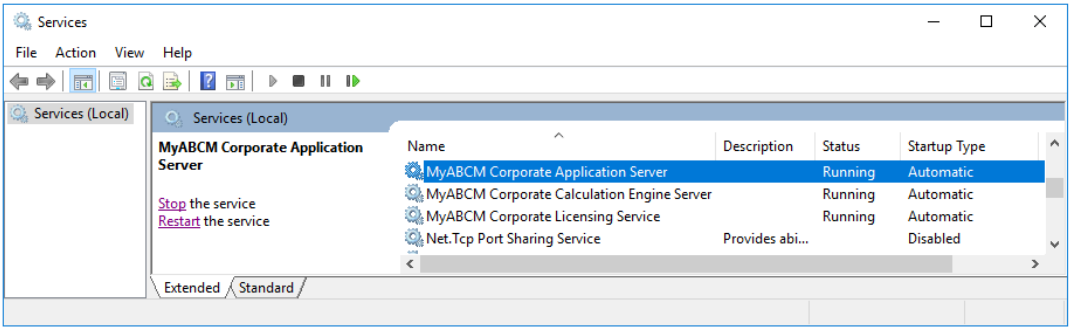
MyABCM Corporate Application Server Component is capable of being executed as a group of services within IIS and supports its execution in environments like a "Server Farm" using Windows Server's Network Load Balancing (NLB) component together with IIS.

The only tasks that should be executed in this case are the disabling of the MyABCM Corporate Application Server Component local service and the subsequent configuration of equivalent services in IIS.

Follow these steps to disable the MyABCM Corporate Application Server service:

1. Using the Windows Control Panel, select Administrative Tools and then Services.

   A window like the one below should appear:



2. Find and double-click on the **MyABCM Corporate Application Server** service**.**

3. In the **MyABCM Corporate Application Server Properties** window, click the **Stop** button to disable the service.

4. Change the **Startup Type** from **Automatic** to **Disabled.**

5. Click the **OK** button to complete the operation.

After disabling the service, you need to configure WEB services within IIS. To do this, follow these steps:

1. Open Internet Information Services (IIS) Manager.

2. Click the right mouse button on Sites and then on **Add Web Site…**

3. For **Site Name**, type: **MyABCMCorporateApplicationServer**

4. For **Application Pool**, type **DefaultAppPool**

5. For **Physical Path**, select the installation directory for MyABCM Corporate Application Server

   This directory usually is **c:\program files\myabcm\Corporate\appserver**

6. For **Binding**, type: **2208**

7. Click the **OK** button to add the new web site.

With your web site created, the last step is to make sure that the ID used by the pool (**DefaultAppPool**) has access rights to the installation directory of MyABCM Corporate Application Server. To do this, follow these steps:

1. Open Windows Explorer and find the installation directory for MyABCM Corporate Application Server Component.

2. Click the right mouse button on it and select **Properties.**

3. Click the **Security** tab and then **Edit...**

4. In the dialog box **Permissions for AppServer**, click on the **Add...** button**.**

5. In the dialog box **Select Users or Groups**, type: **IIS AppPool\DefaultAppPool**

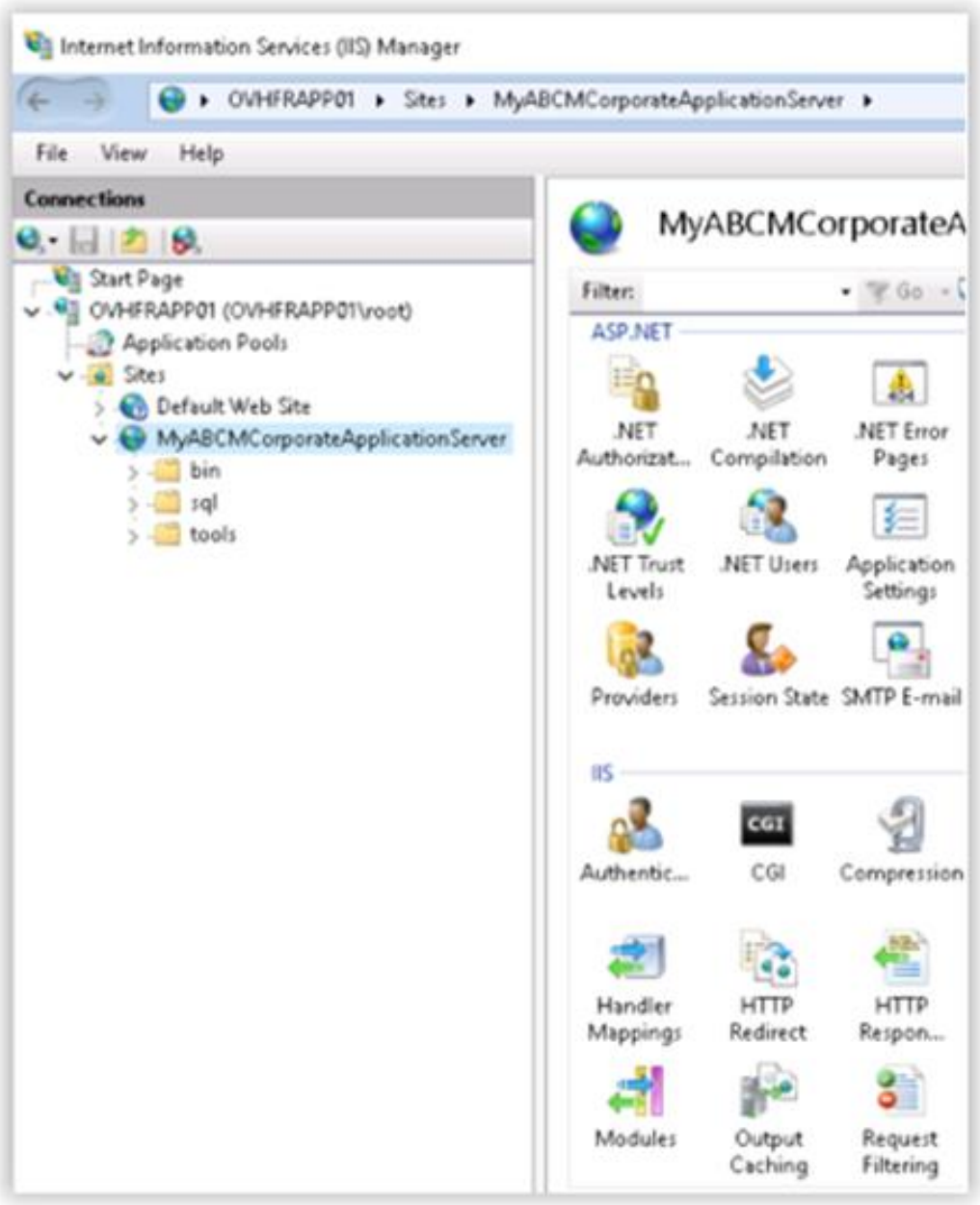
6. Click the **OK** button on all the dialog boxes that you've opened to save your changes.

*Note that it's not necessary to use **DefaultAppPool** for questions of security, and that it's probably better to create a new Application Pool for the new Web Site. In any event, this is a decision that should be made by the customer's IT area, because it may be related to its internal use of IIS policy.*

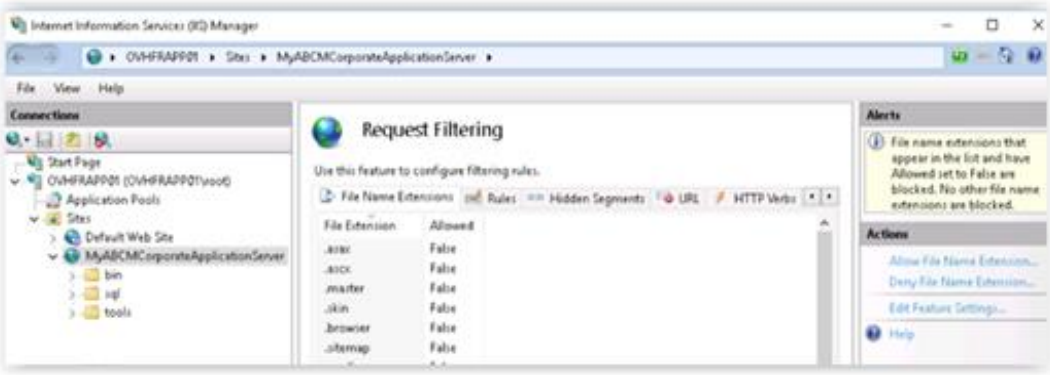
If MyABCM Corporate Application Server REST API is going to be used to upload files, it might be necessary to increase the **Maximum allowed content length** in IIS/Request Filtering for IIS to let larger files to be uploaded and downloaded via REST API.
In order to increase this setting:

1. Select the **MyABCM CorporateApplicationServer** application on IIS.

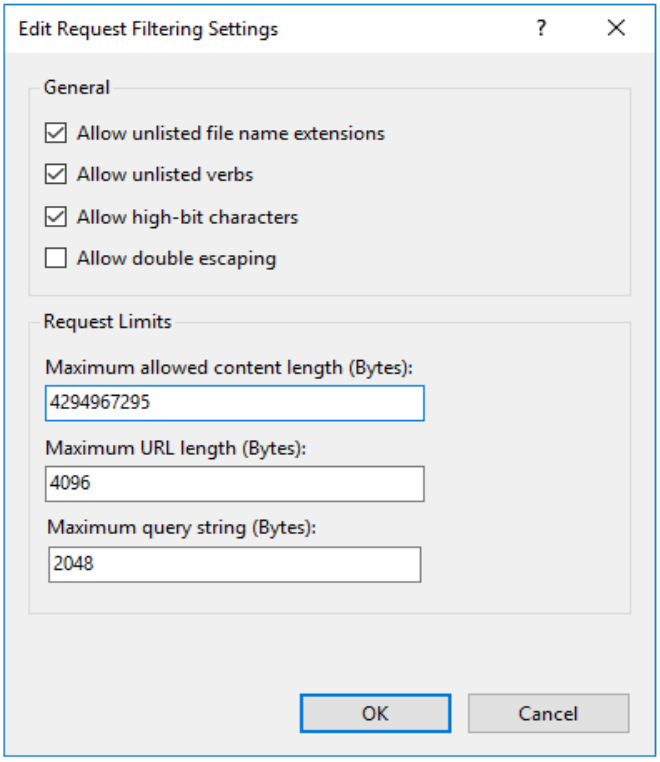
2. Double click IIS / **Request Filtering.**



3. In the Request Filtering page, select the hyper link **Edit Feature Settings…**



4. In the Edit Request Filtering Settings dialog box, change the **Maximum allowed content length (Bytes)** to you desired value.



This value will represent the size of the largest allowed files to be uploaded or downloaded via the REST API.

5. Click **OK** to confirm the update**.**

5.4. Using HTTPS protocol

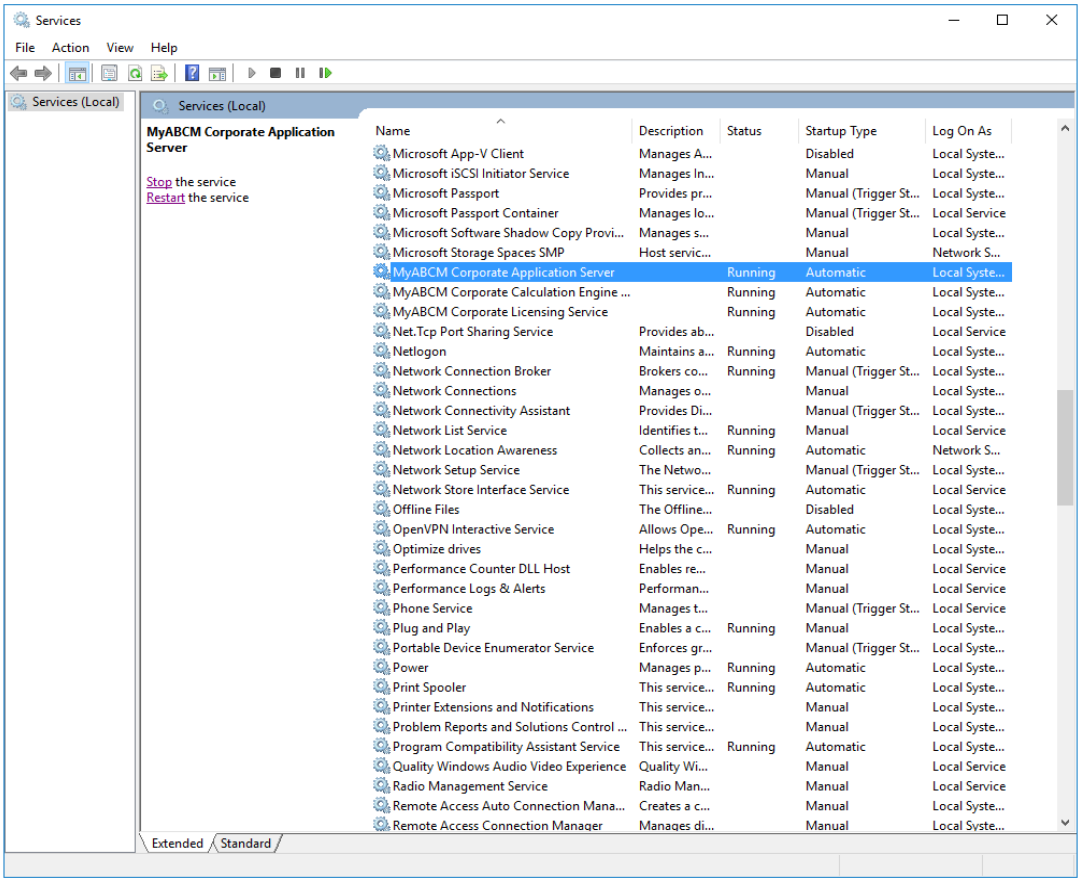
MyABCM Corporate Server uses HTTP protocol out of the box, but this can be easily changed so that HTTPS is used instead for all communication between the end users and MyABCM Corporate Application Server Component.

5.4.1. Stopping and disabling the MyABCM Corporate Application Server (Component) service

MyABCM Corporate Application Server Component runs as a Windows Service out of the box, but in order for it to use SSL, it must be executed inside IIS instead.

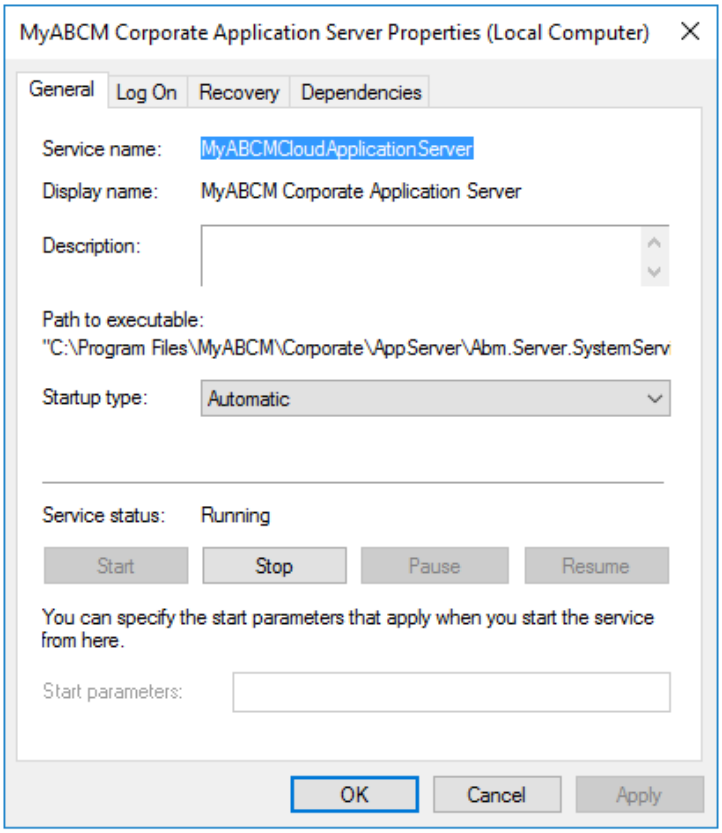
1. Open the Windows Local Services window.

2. Locate and select the **MyABCM Corporate Application Server** service.

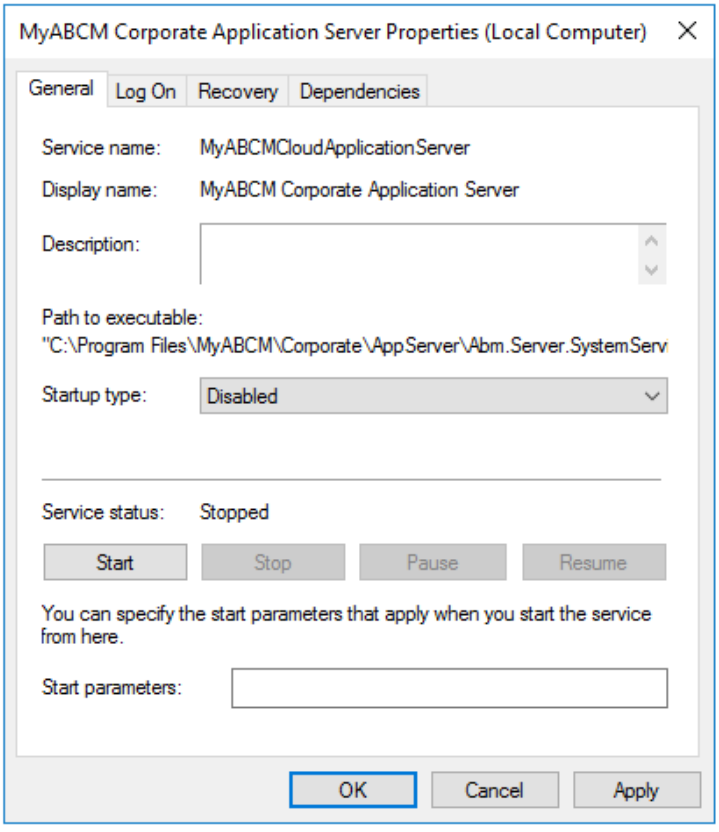


3. Double click the **MyABCM Corporate Application Server** service.

4. Click the **Stop** button to stop the service.



5. Change the **Startup Type** to **Disabled**.

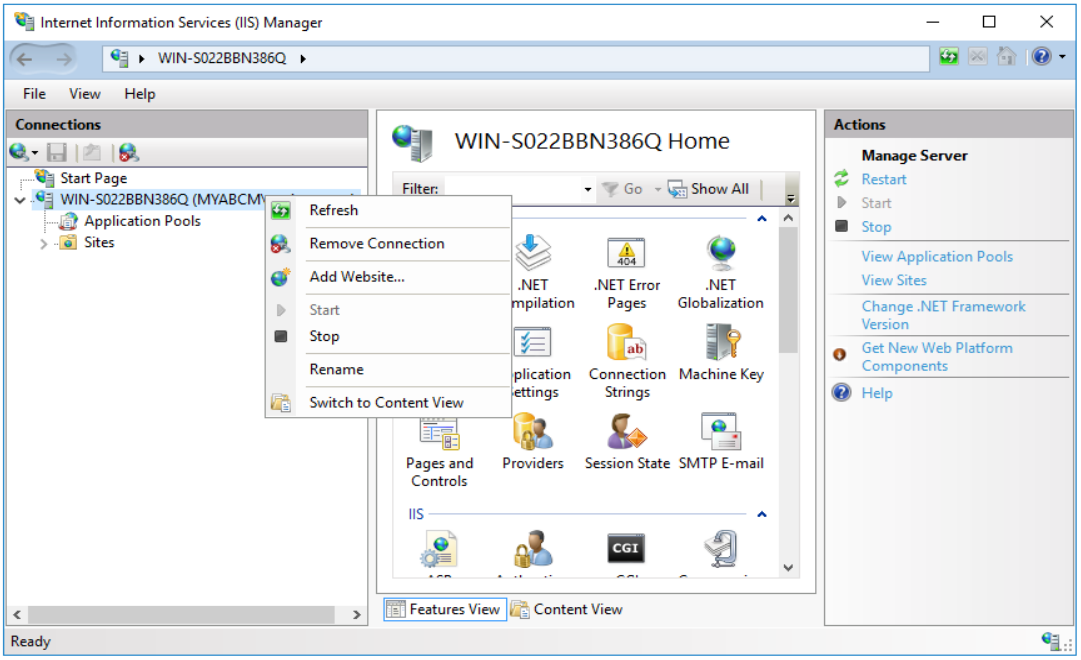


6. Click the **OK** button to confirm the change.

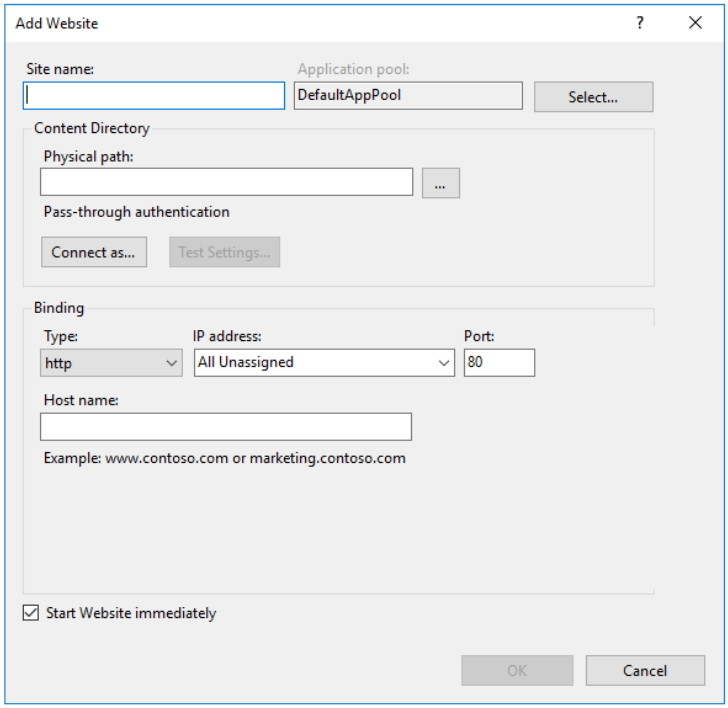
5.4.2. Creating a new application MyABCM Corporate Application Server

1. Open **Internet Information Services (IIS) Manager**.

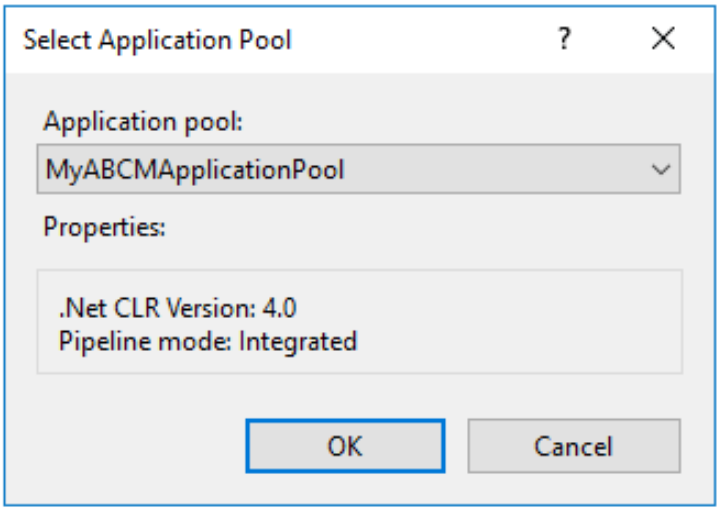
2. Right click over the server and select **Add WEB Site** .



3. Type **MyABCMCorporateAppServer** in **Site name**.



4. Click the **Select...** button, change **Application Pool** to **MyABCMApplicationPool** and click the **OK** button.



5. For **Physical Path**, select the installation directory for MyABCM Corporate Application Server

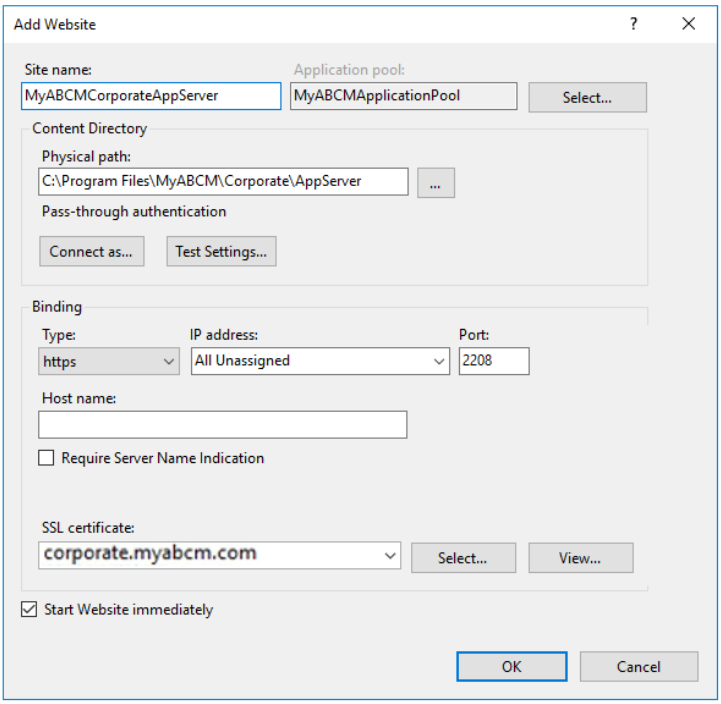
   This directory usually is **c:\program files\myabcm\Corporate\appserver**

6. Change **type** to **HTTPS**.

7. Change the port to **2208**.

8. Select your **SSL certificate** certificate.

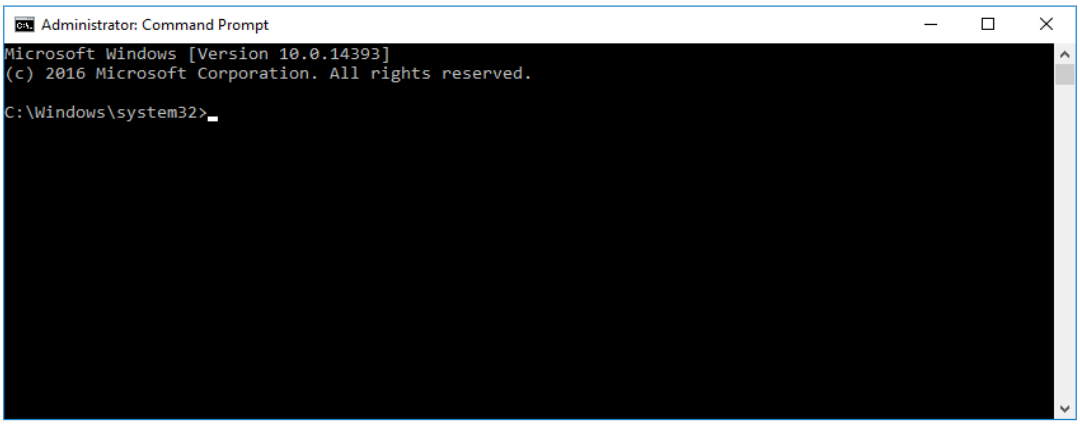
9. Click the **OK** button to create the new site.



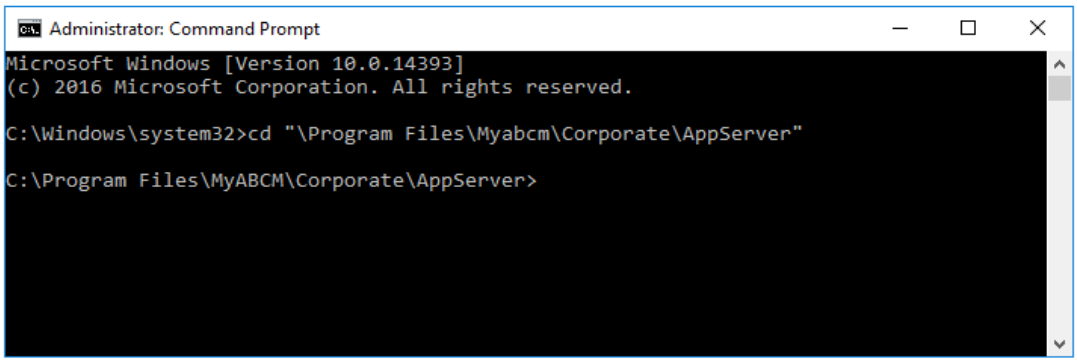
5.4.3. Updating the configuration files

The last step in order to use **SSL** is updating the configuration files for MyABCM Corporate Application Server Component.

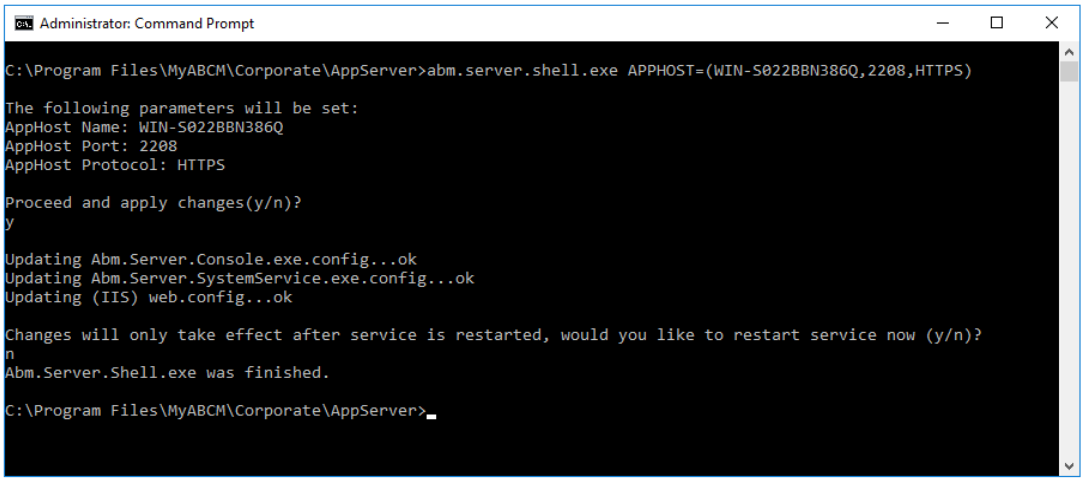
1. Start the **command prompt** with administrator rights.



2. Select the **MyABCM Corporate Application Server** directory:
(usully C:\Program Files\MyABCM\Corporate\AppServer)



3. Execute the following command:
Abm.Server.Shell.exe APPHOST=(<nome da máquina>, 2208, HTTPS)
Replace <machine name> with your server name



5.5. Creating OLAP cubes with languages different from those defined during the product installation

MyABCM Corporate is pre-configured to use the languages Portuguese, English, Spanish and French for the OLAP cube creation process, which means that when the cube is created, all of the common words that can appear on the interface such as “Cost”, “Revenue”, and “Quantity,” etc. are added to the cube for the 4 languages mentioned above. If the user utilizes another modeling language that is not one of these 4, English will be defined as the language for the installation and for displaying these common words.

If the user wishes to redefine these common words so that they appear in another language, this may be accomplished by altering the configuration file **olapconfig.xml** which is located within the **MyABCM Corporate Calculation Engine Server** installation directory.

In the example below, we’re going to add **German – Germany** (**de-DE**):

1. Access the installation folder for CalcEngine, which normally is:
   C:\Program Files\MyABCM\Corporate\CalcEngine\bin

2. Find it and double-click on it to open the file **OlapConfig.xml**

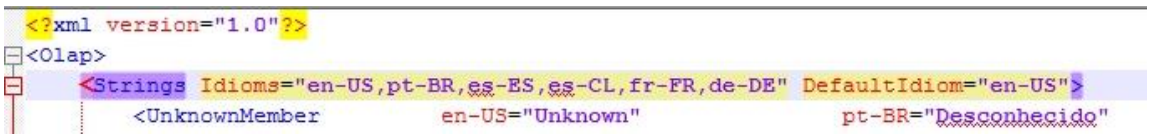
The file structure follows this scheme:

```
<?xml version="1.0"?>
<Olap>
 <Strings Idioms="en-US,pt-BR,es-ES,es-CL,fr-FR" DefaultIdiom="en-US">
<UnknownMember  en-US="Unknown"  pt-BR="Desconhecido"  es-ES="Desconocido"  es-CL="Desconocido"  fr-FR="Inconnu"  de-DE="Unbekannt"/>
.
.
.
</Strings>
 <Parameters ConnectionTimeout="180" CommandTimeout="180" />
</Olap>
```

3. The file can be edited using Notepad. Add a column with the translation of the terms for German.

```
de-DE = "Unbekannt"
de-DE = "Quellendimension"
de-DE = "Zieldimension"
de-DE = "Kosten"
de-DE = "Kosten (in)"
de-DE = "Kosten (aus)"
de-DE = "Primärkosten"
de-DE = "Umsatz"
de-DE = "Berechneter TDQ"
de-DE = "Verwendete Menge"
de-DE = "Ausgabemenge"
de-DE = "Maßnahmen"
de-DE = "Gewinn"
de-DE = "Name"
de-DE = "Referenz"
de-DE = "Beschreibung"
de-DE = "Periode"
de-DE = "Szenario"
```

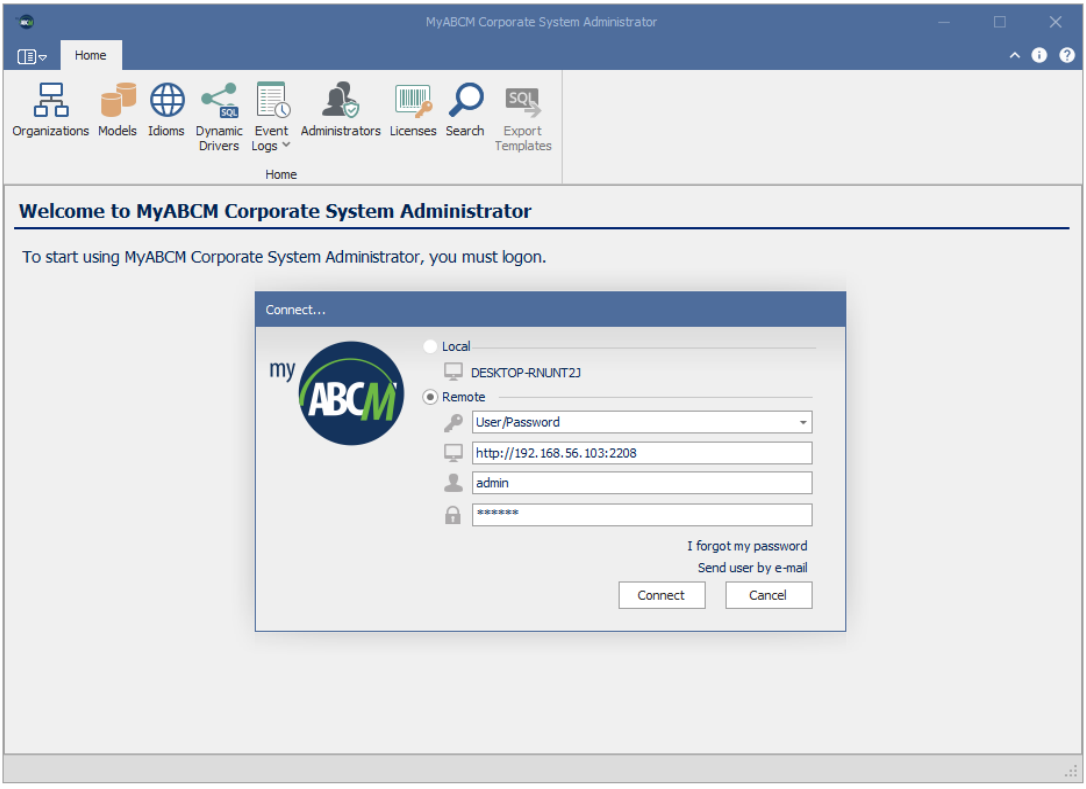
4. On the line: <Strings Idioms="en-US,pt-BR,es-ES,es-CL,fr-FR" DefaultIdiom="en-US"> add **de-DE**:



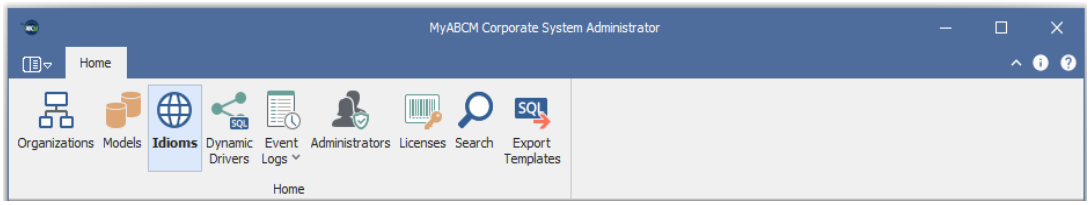
5. Save the file.

*If necessary, search for “language code Microsoft” to find the correct language code that you wish to add. See:
https://msdn.microsoft.com/en-us/library/ee825488%28v=cs.20%29.aspx?f=255&MSPPError=-2147217396

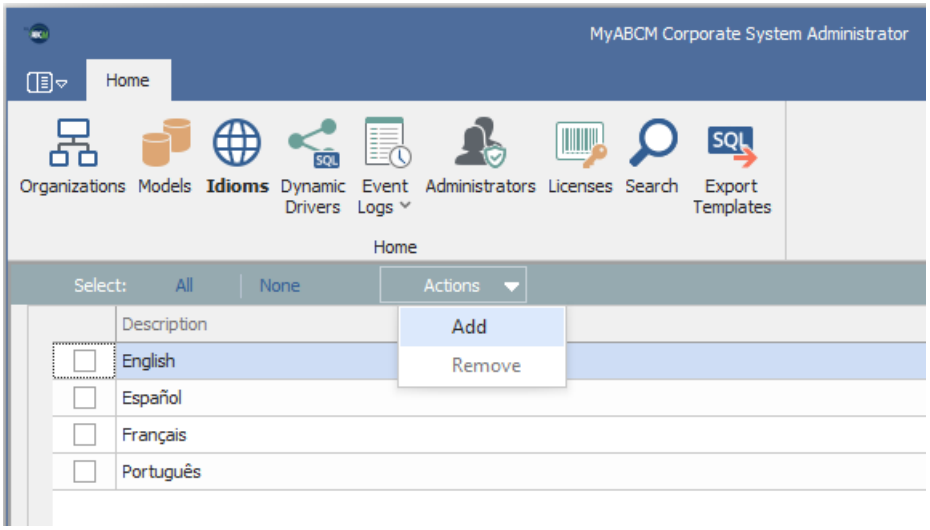
6. Double-click on the icon to access **MyABCM Corporate SysAdmin**, and then type in the server, user name, password and click the **Connect** button.



7. Click on **Idioms** on the tool bar.

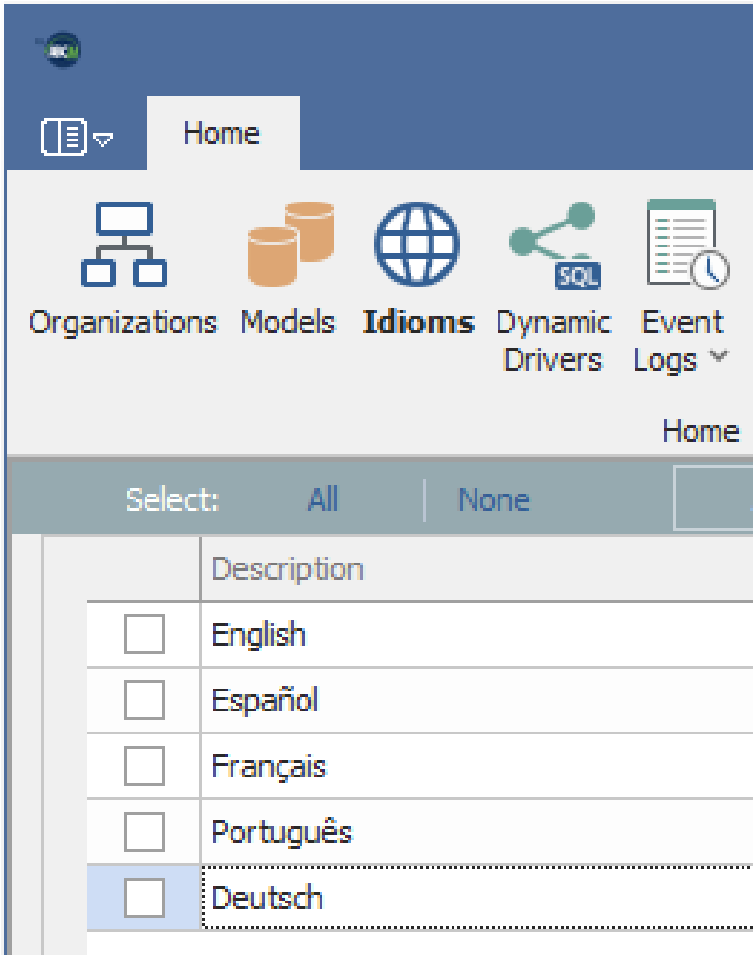


8. Click on **Actions > Add**.

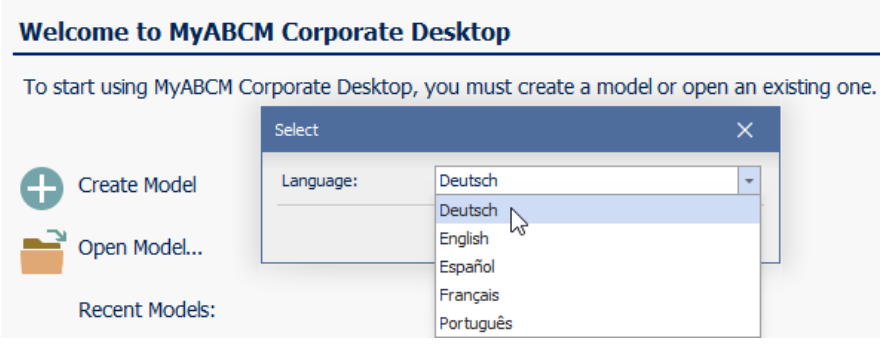


9. Select the language which was added to the **OlapConfig.xml** file and then click **OK**. In this case it would be **German – Germany**.

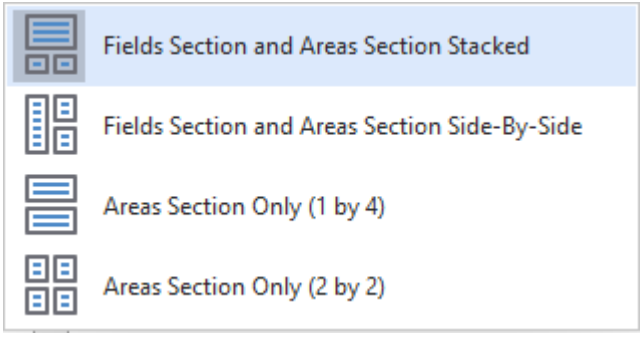
10. Check that the language has been added correctly.



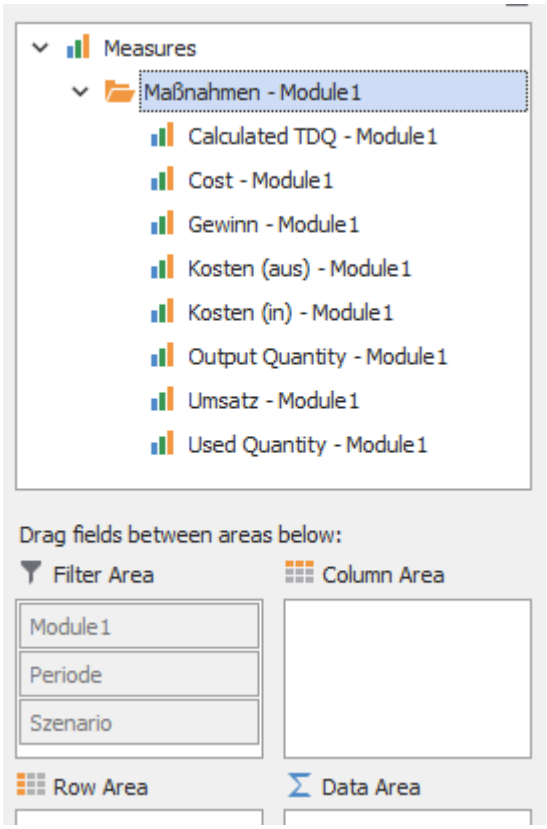
11. Access **MyABCM Corporate Desktop**, select the model and then click on the **Analyses > Views > OLAP View** tab. If the tool language isn't selected, click on the arrow and then select **Deutsch** as the language.



12. Click on **Fields Section and Area Section Stacked**.



13. Check that the hidden fields have the recently added language.



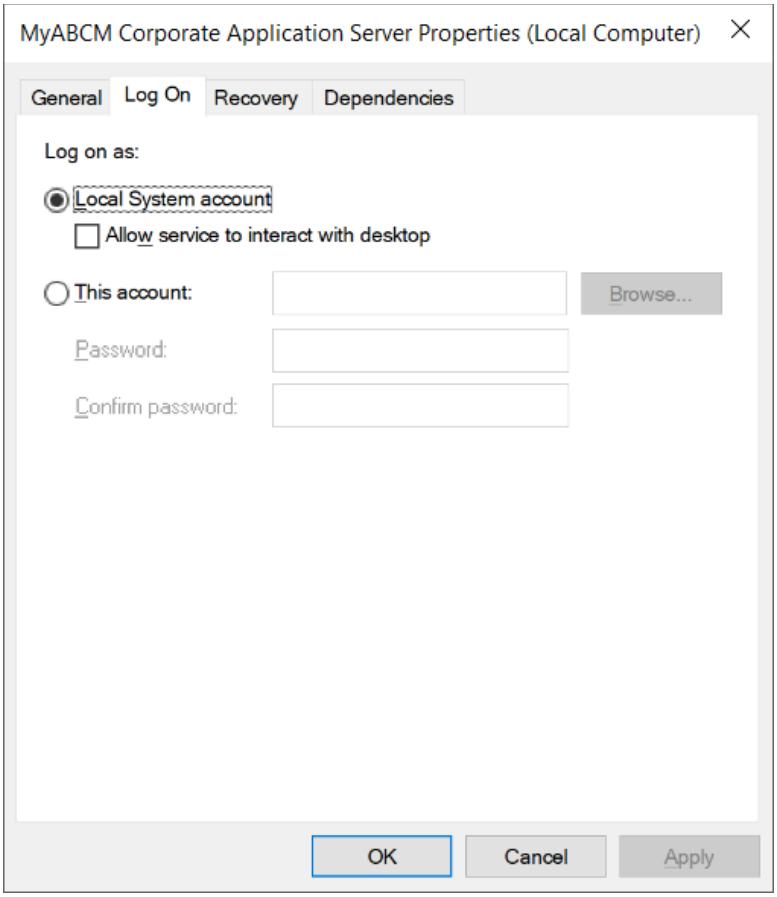
5.6. Using Integrated Authentication in MyABCM Corporate Server (SQL Server)

The standard installation of MyABCM Corporate uses an access credential for the SQL Server's own database, but it's also possible to use an integrated authentication account.

To use an integrated authentication account, you'll need to modify the configurations of MyABCM Corporate, as well as make modifications to the database and Windows service.

Configuring MyABCM Corporate Application Server Component

1. Open the **Services** page on the Windows control panel.
2. Locate and double-click on the service **MyABCM Corporate Application Server.**
3. Click on the **Log On** tab**.**



4. Select **This account** and input the integrated authentication account to be used.
5. Clique **OK** to complete the alteration of the service.

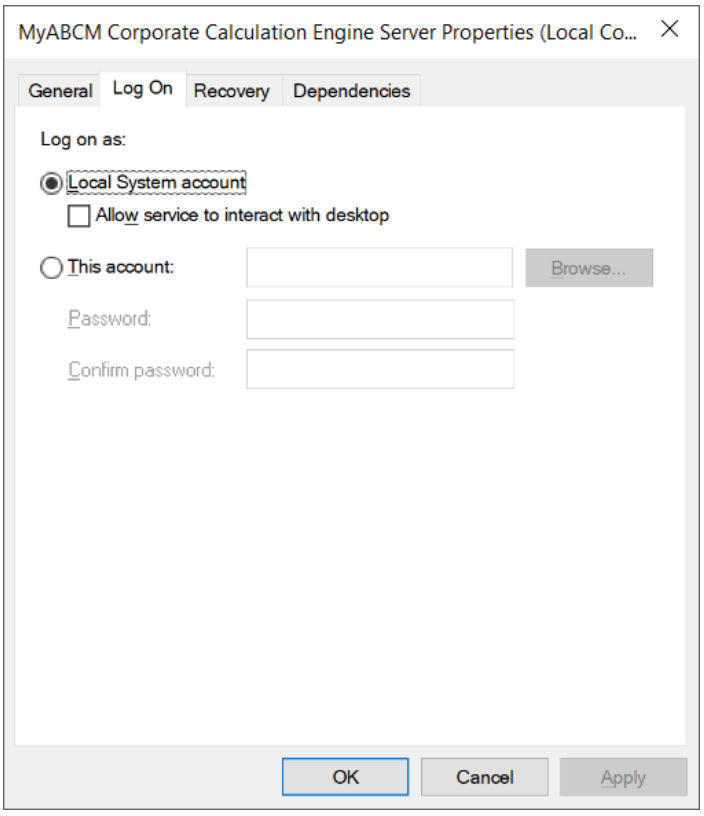
6. Using the command prompt, go to the directory where the Application Server was installed and type in the following command (substituting SERVER NAME and MYABCM_CLOUD with your server name and the database name of MyABCM Corporate):

   Abm.Server.Shell.exe DATABASE=(SQLSERVER,<SERVER_NAME>,<MYABCM_CLOUD>,true,,)

   This command should alter the configurations of the MyABCM Corporate Application Server so that it uses integrated authentication instead of a SQL Server account.

Configuring MyABCM Corporate Calculation Engine Server Component

1. Open the **Services** page on the Windows control panel.
2. Locate and double-click on the service **MyABCM Corporate Application Server.**
3. Click on the **Log On** tab**.**



4. Select **This account** and input the integrated authentication account to be used.

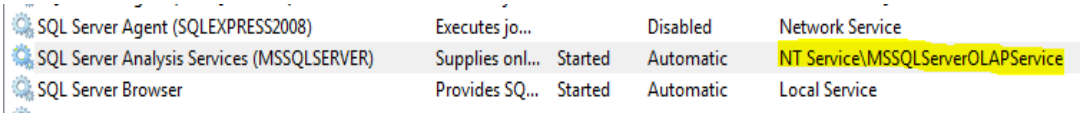
5. Click **OK** to complete the alteration of the service.

   At the command prompt, go to the directory where the Calculation Engine Server was installed and type in the following command (substituting the SERVER_NAME and MYABCM_CLOUD with the name of your server and the MyABCM Corporate database name respectively):

   Abm.Server.CalcEngine.Shell.exe DATABASE=(SQLSERVER, <SERVER_NAME>,<MYABCM_CLOUD>,true,,)
   Abm.Server.CalcEngine.Shell.exe OLAP=(<SERVER_NAME>,true,,)
   Abm.Server.CalcEngine.Shell.exe OLAP_DB=(true,,)

This command should alter the configurations of the MyABCM Corporate Calculation Engine Server to that it uses integrated authentication instead of a SQL Server account.

*In this case, the default user that initializes the Analysis Services is the **NT Service\MSSQLServerOLAPService**, as in the image below:*



Configure the SQL Server database

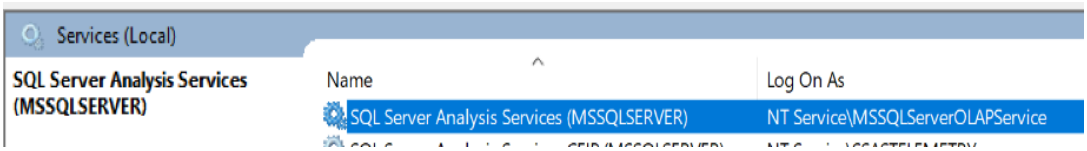
Besides configuring the Windows services, the IIS application pool and the MyABCM Corporate configuration files themselves, you also need to give the proper rights to the database objects so that the user can use integrated authentication to gain access to procedures, functions and database tables.

In addition, the user used to initiate SQL Server Analysis Services should also have access to the same database objects that the user with integrated authentication has.

1. On the database server, open the **Services** page on the Windows control panel.

2. Locate the **SQL Server Analysis Services (MSSQLSERVER)** service and note the name of the account used to logon.

   In the example below it is **NT Service\MSSQLServerOLAPService**:



3. Close the Windows **Services** page.

4. Locate and open the script **db_create_user_sqlserver.sql** which is usually in the AppServer\sql\sqlserver directory of the MyABCM Corporate Application Server.

   This is the standard script to create a user in MyABCM Corporate. Besides creating the user this script contains various lines that **GRANT** privileges that the user needs to access the SQL Server database.

5. Save this file under any other name in your work area.

6. Remove all the lines that don't begin with **GRANT** (this should be roughly the first 30 lines of the file).

7. Reuse all of the lines beginning with **GRANT**, removing the users after the word **TO** and substituting them with your integrated authentication user and the Microsoft Analysis Services user.

   The result should be something like this:

```
GRANT EXECUTE TO myabcm\john.doe;
GRANT SELECT ON dbo.FUNC_DIMENSIONS TO [myabcm\john.doe], [NT Service\MSSQLServerOLAPService];
…
…
GRANT SELECT ON dbo.TB_ATTRIBUTE_FIXED_INSTANCES TO [myabcm\john.doe], [NT Service\MSSQLServerOLAPService]
```

8. Save the script.

9. Using the SQL Server Management Studio, select the MyABCM Corporate database and execute this script to give the proper permission to the new user with integrated authentication.

After configuring the 2 components of MyABCM Corporate and SQL Server, it's recommended that you restart the services of MyABCM Corporate Application Server Component and MyABCM Corporate Calculation Engine Server as well as the IIS application pool.

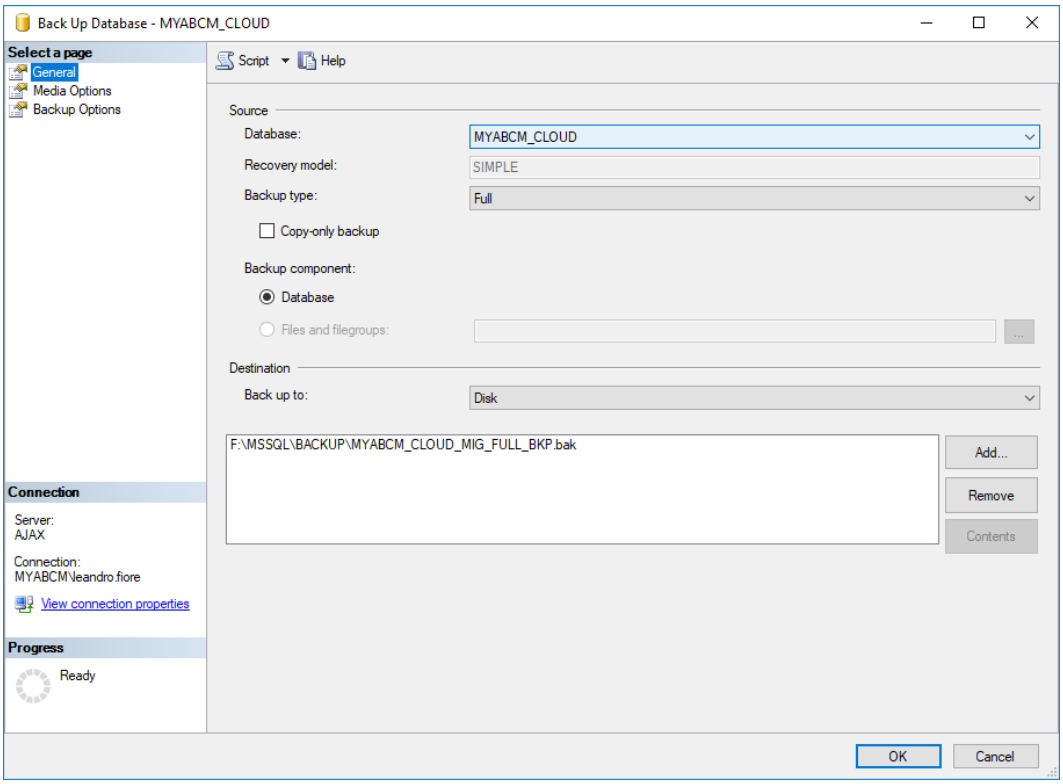
5.7. A Practical Guide to Backup/Restore for a MYABCM_CLOUD Database

The backup and restore processes for the SQL Server databases used by MyABCM are simple, but certain items require attention to ensure that the database restoration process is completed successfully.

Restoring from a backup can be done in the same environment as the original installation, as well as a new environment if the product is being transferred to another group of machines.

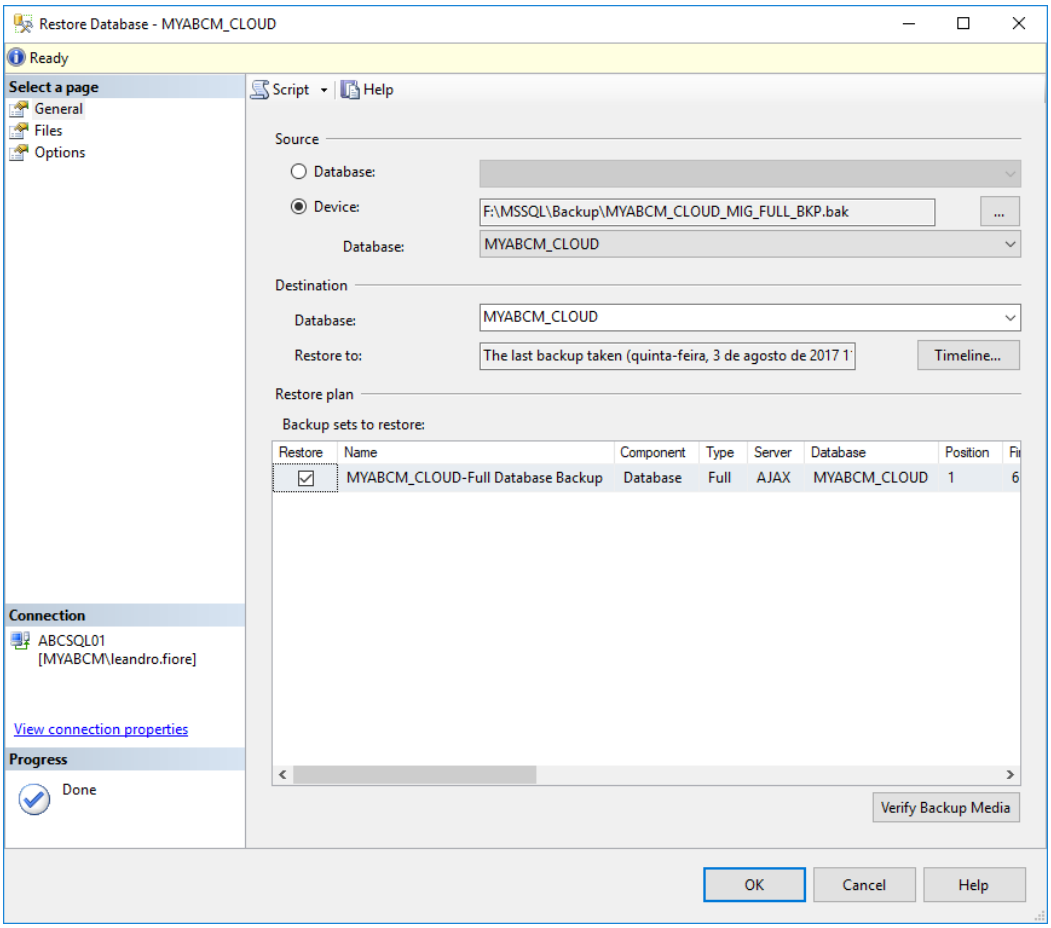
Performing a Backup and Restore of a database

1. Perform the MYABCM_CLOUD database backup by listing correctly the backup location and using the BAK extension. To migrate a database server, choose within the Recovery Model the option **Simple**, and for Backup Type choose the option **Full**.

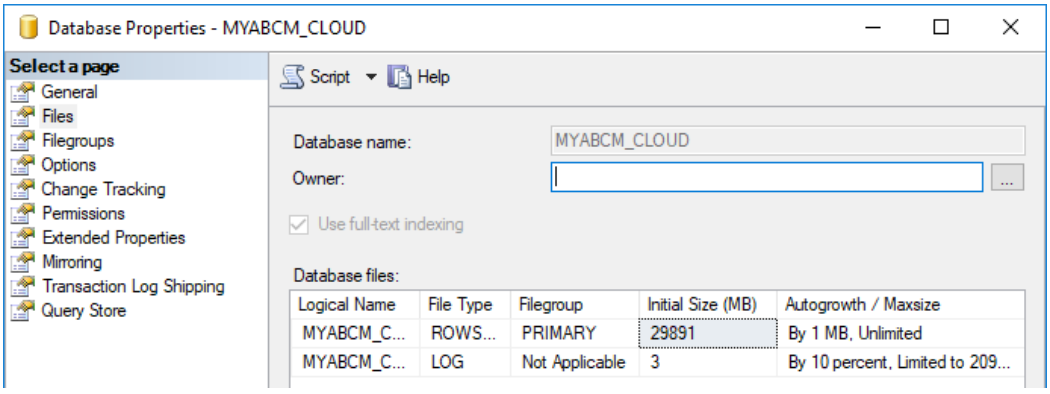


2. Copy the backup to the destination server.

3. On the destination server, in the Restore window, determine the location of the backup copy. Confirm the restore by clicking the **OK** button.



*After restoring the backup, access the database properties and check that the owner information is filled in. If the **Owner** field is blank, choose the database owner. This is required for certain **MyABCM Corporate** transactions.*



4. When migrating from one server to another, the users SQL MYABCM_CLOUD_USER and MYABCM_OLAP_USER probably won't exist. In this case, delete the users that exist in the database (they came together with the backup) and execute the script db_createuser_sqlserver.sql in the context of the MASTER database to create the users and apply the permissions correctly.

If the database restore has been performed going from SQL Server 2008 to a more recent version of SQL Server (2012 or newer), you'll also need to execute the scripts creating procedures and functions listed below:

db_functions_sqlserver.sql
db_sp_sqlserver_common.sql
db_sp_sqlserver_2012.sql

Adjusting the configurations of the application after restoring the database

For backing up and restoring in the exact same environment, you don't have to reconfigure the application because the environment is exactly the same. If the restoring has been done in an environment different from the original such as when the database is restored in a new installation on different servers, it is important that all of the application and calculation server configurations be revised according to the instructions below.

To execute Shell configuration commands in the new environment, the software first needs to be activated, otherwise the Shell commands will fail.

1. Configure the server using the appropriate Shell configuration commands.

2. Configure the application server using the appropriate Shell configuration commands. Pay special attention to the parameters for the DATABASE and OLAP databases.

3. Configure the calculation server using the appropriate Shell commands. Pay special attention to the parameters for the DATABASE and OLAP databases.

4. After applying these configurations, proceed to activate the product following the steps described in section **1.2. Registering MyABCM Corporate Server.**

5. Use the MyABCM Corporate Calculation Engine Server Shell command following the example below to obtain a list of the "OPERATION OWNERS."

```
C:\Program Files\MyABCM\Corporate\CalcEngine>Abm.Server.CalcEngine.Shell.exe GET_OPERATION_OWNERS
--------    ----------                  ----------------    ------------
OWNER_ID    OWNER_NAME                   COMPUTING_POWER    HOST_STATUS
--------    ----------                  ----------------    ------------
5           PRD2                         1                  Active
4           AJAX                         1                  Active


C:\Program Files\MyABCM\Corporate\CalcEngine>_
```

For installations in different environments, it's very like that 2 operation owners will appear, one with the name of the calculation server in the original environment and the other with the name of the calculation server in the new environment.

6. Execute the following command to stop the MyABCM Corporate Calculation Engine service:

   net stop MyABCMCloudCalculationEngine

7. Remove the "OPERATION OWNER" of the calculation server in the new environment using the following command example:
   Abm.Server.CalcEngine.Shell.exe REMOVE_OPERATION_OWNER=(ID DO NOVO OPERATION OWNER)

8. Rename the old OPERATION OWNER with the new name (which is exactly the name which was removed in the previous step). To do this use the following command example:

   Abm.Server.CalcEngine.Shell.exe
   UPDATE_OPERATION_OWNER=(ID_ANTIGO,NOME_DO_SERVIDOR_novo,COMPUTING_POWER,HOST_STATUS)

```
C:\Program Files\MyABCM\Corporate\CalcEngine>Abm.Server.CalcEngine.Shell.exe UPDATE_OPERATION_OWNER=(6,PRD2,1,1)
```

9. Execute the following command to restart the MyABCM Corporate Calculation Engine server:

   net start MyABCMCloudCalculationEngine

   The final result should leave just 1 OPERATION OWNER with the name of the current calculation server as in the example below:

```
C:\Program Files\MyABCM\Corporate\CalcEngine>Abm.Server.CalcEngine.Shell.exe GET_OPERATION_OWNERS
--------    ----------                  ---------------   ------------
OWNER_ID    OWNER_NAME                   COMPUTING_POWER    HOST_STATUS
--------    ----------                  ---------------   ------------
6           PRD2                         1                 Active

C:\Program Files\MyABCM\Corporate\CalcEngine>_
```

   Make the necessary tests by accessing the MyABCM Corporate application and executing a calculation operation.

5.8. Integrating third party DTS products

MyABCM Corporate can work along and control any external DTS product that supplies a command line interface. This way, it is possible to configure Corporate Application Server Component and Corporate Calculation Engine to recognize and use an external ETLX.

Example:

1. Copy the text below and add to the **EtlConfig.xml**, from **CalcEngine > Bin** and from **ApplicationServer > Bin** directories:

```
<Executable
    Id="3"
    Name="Integration Services Package"
    Type="File"
    Extension="etlx"
    CommandLine="c:\Program Files (x86)\Microsoft SQL Server\140\DTS\Bin\DTExec.exe"
    SuccessExitCode="0" >
</Executable>
```

Your file will look like this:

EtlConfig.xml

```
<?xml version="1.0"?>
<Etl>
  <Executable
    Id="1"
    Name="MyABCM Corporate ETL Studio Package"
    Type="File"
    Extension="etlx,etlsql"
    CommandLine="C:\Program Files\MyABCM\Corporate\ETL\Abm.ETL.Console.exe"
    SuccessExitCode="0">
    <Parameters>
      <Param en-US="Macro"     pt-BR="Macro"     es-ES="Macro"     fr-FR="Macro" />
      <Param en-US="Variables" pt-BR="Variáveis" es-ES="Variables" fr-FR="Variables" />
    </Parameters>
  </Executable>
  <Executable
    Id="2"
    Name="MyABCM Corporate ETL Studio Package"
    Type="Database"
    Extension=""
    CommandLine="C:\Program Files\MyABCM\Corporate\ETL\Abm.ETL.Console.exe"
    SuccessExitCode="0">
    <Parameters>
      <Param en-US="Macro"     pt-BR="Macro"     es-ES="Macro"     fr-FR="Macro" />
      <Param en-US="Variables" pt-BR="Variáveis" es-ES="Variables" fr-FR="Variables" />
    </Parameters>
  </Executable>
<Executable
    Id="3"
    Name="Integration Services Package"
    Type="File"
    Extension="etlx"
    CommandLine="c:\Program Files (x86)\Microsoft SQL Server\140\DTS\Bin\DTExec.exe"
    SuccessExitCode="0" >
</Executable>

</Etl>
```

2. After this configuration, it will be possible to upload the ".etlx" file and also the DTS integration in MyABCM Corporate Desktop.

5.9. Additional notes on uninstalling MyABCM Corporate

If the automatic update system has been used to update the installation, it's possible that some of the files were not automatically removed in the deinstallation of the product and will have to be removed manually by removing the installation folder using Windows Explorer.

5.10. LDAP Synchronization

MyABCM Corporate Server users are traditionally managed directly by the Corporate System Administrator (Desktop interface), however, it is also possible to configure the product so that users are synchronized with a Microsoft Active Directory (LDAP) server.

If synchronization is enabled, users created in a certain group within Active Directory are automatically created in Corporate. In addition, users modified or removed in Active Directory are also modified/disabled in Corporate.

5.10.1. Enabling Synchronization

To enable synchronization, run the CalcEngine shell using the example below:

Abm.Server.CalcEngine.Shell.exe LDAP_SYNC=(
<Synchronization status>,
<Synchronization interval>
<Corporate organization name>,
<LDAP server address>,
<LDAP group name>,
<Default parameters used when creating users>)

Description of LDAP_SYNC command parameters:

1. Synchronization status: TRUE (enabled) or FALSE (disabled).

2. Interval between synchronizations (in minutes), that is: how often the Corporate must perform the synchronization. The value, in this case, will depend on what the admin considers reasonable.

3. Name of the Corporate organization where users must be created/updated.

4. LDAP server address.

5. AD GROUP name from which users should be read. The simple group name should work if it is in the default groups folder, but the name can be used with the full LDAP syntax, that is: **'cn=MyABCMCorporateUsers,or=MyABCM Groups,dc=myabcm,dc=com'.** This means: MyABCMCorporateUsers Group within MyABCM Groups, within the myabcm.com domain.

6. Default values for creating users. When a new user is identified in LDAP/AD the Corporate creates the user using the values defined in this list. Below is explained each of them:

    - **SessionTimeOut=20:** Session timeout (minutes)
    - **UserRole=0:** is the User Profile (Role), which can be: **[0]** Regular (All Components), **[1]** Complete (User Management) and **[2]:** Limited (Analysis/Surveys/SM)
    - **IsExternal=false:** Use LDAP authentication
    - **IdiomCode=en-US:** Default Language
    - **TimeZone=UTC-0:** Time zone
    - **CanCreateModel=true:** Can create model
    - **PrivateSpace=2000000:** Private space (MB)
    - **CaModeling=true:** Modeling accessible
    - **CaIntegration=true:** Integration accessible
    - **CaAnalysis=true:** Analyses accessible
    - **CaSurveys=true:** Surveys accessible
    - **CaSmartMetrics=true:** SM accessible
    - **Groups=Grupo1;Grupo2:** Available groups

Command example:

Abm.Server.CalcEngine.Shell.exe "LDAP_SYNC=(TRUE,60,MyABCMHQ,'LDAP://DC=myabcm,DC=com','cn=MyABCMCorporateUsers,ou=MyABCM Groups,dc=myabcm,dc=com','SessionTimeOut=20,UserRole=0,IsExternal=false,IdiomCode=en-US,TimeZone=UTC-0,CanCreateModel=true,PrivateSpace=2000000,CaModeling=true,CaIntegration=true,CaAnalysis=true,CaSurveys=true,CaSmartMetrics=true,Groups= ')"

5.10.2. Deactivating the synchronization

To DISABLE LDAP synchronization the following command must be run:

Abm.Server.CalcEngine.Shell.exe "LDAP_SYNC=(FALSE,,,,,)"

The above command simply passes false on the first parameter leaving the other parameters empty.

5.10.3. Testing and tuning synchronization issues

When the synchronization is executed, any eventual error is automatically registered in the Windows Event Log, however to facilitate the LDAP configuration, the TEST_LDAP_SYNC command from the CalcEngine shell can be used to check the access to the LDAP server.

To test your LDAP configuration, use the following command:

Abm.Server.CalcEngine.Shell.exe TEST_LDAP_SYNC

If the configuration is correct, a list of users found in the defined group of the LDAP server should be presented.

5.10.4. Default synchronization behavior

When synchronizing Corporate users with the LDAP server, MyABCM Corporate follows the following rules:

1. If the existing user in LDAP/AD does **not exist** within the Corporate:
   It is **AUTOMATICALLY** created.

2. If the existing user in LDAP/AD **already exists** within the Corporate:
   ONLY the following fields in Corporate are updated: Fullname, Email and Activate.

   IMPORTANT: the **Activate** field in Corporate follows the **Enabled** field in AD, that is, if the Administrator disables the user in AD, it is disabled and it loses access to Corporate.
   Additionally, the expiry date field is always kept 30 days after the last sync. This is important because if synchronization is disabled, all users managed by AD are disabled 30 days later.

3. If the existing user in LDAP/AD **has already existed** within the Corporate in the past and has been deleted:

   User synchronization will fail as Corporate is programmed to NOT restore a user that has been automatically deleted. In this case, the administrator has to physically remove the user from the database or restore it.

   To physically remove the user from the Corporate it is necessary to enable the option of "Show deleted users" using the Shell so that they are visible in the Corporate Admin and then can be removed.

4. If the **existing user in Corporate** does not exist on the LDAP server within the configured Group:
   The user is disabled in Corporate, that is, the **Activate** field is disabled.