CPR BROKER

Installation and setup

MAGENTA aps

© Copyright 2011

TABLE OF CONTENTS

1 Introduction.....3

2 System Requirements.....4

3 Before installing CPR Broker.....5

4 Installing CPR Broker.....6

4.1 Extra step for event broker.....8

5 Configuring CPR Broker.....11

5.1 Applications.....11

5.2 Data Providers.....12

6 Setting up logging.....14

7 Uninstalling CPR Broker.....15

1 INTRODUCTION

This document will describe how to install Cpr Broker and Event Broker.

The installation process is pretty much the same. There are some few differences that will be mentioned within the text.

2 SYSTEM REQUIREMENTS

Windows 2003 or Windows 2008 with IIS installed. Windows XP/Vista/7 with IIS installed will work for demonstration purposes but not for production due to the 10 concurrent connections limit these operating system impose.

For Windows 2008 you need to make sure that you have the *IIS 6 Management Compatibility* Role Service for *Web Server (IIS)* Role installed, as well as - of course - the *Web Server (IIS)* Role itself.

SQL Server 2005 (or SQL Server 2008).

.NET Framework version 3.5 SP1.

Any computer capable of running the above software will also be capable of running CPR Broker.

3 BEFORE INSTALLING CPR BROKER

First make sure that the computer on which you want to install CPR Broker fulfills the System Requirements.

You need to have administrative access to SQL Server and the machine you are installing on.

If you are installing CPR Broker on Windows 2008 you must first install the *.NET 3.5.1* Feature via *Server Manager*. Then you should install the *Web Server (IIS)* Role together with the *IIS 6 Management Compatibility* Role Service.

CPR Broker can be installed as a root site (on Windows 2003 and 2008 only) or as a so called virtual directory to an existing root site.

If you want to install CPR Broker as a root site (which is what is recommended) you must prepare a DNS-record to point to the web server before beginning the installation. The installation program does not create this DNS-record for you.

If you want the web site to use *Windows Authentication* to connect to the SQL Server (this is not recommended, though) you also need to configure a special user domain account, which is used by CPR Broker's notification service. When done with the installation this account should be given access to the database created by the installation program.

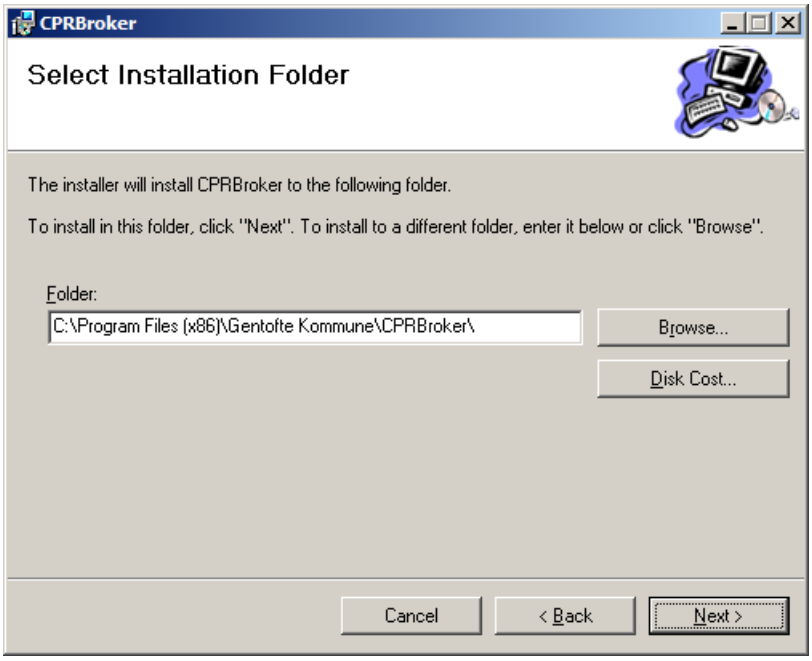
Now you are ready to install CPR Broker. See the chapter *Installing CPR Broker* for details.

After the installation finishes, some configuration steps are necessary. See the chapter *Configuring CPR Broker* for details.

4 INSTALLING CPR BROKER

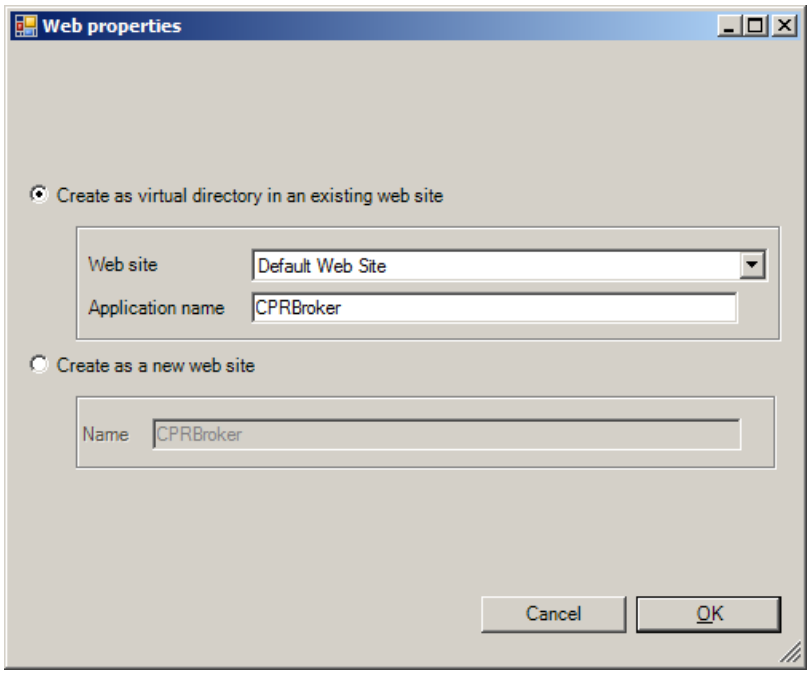
Copy the installer zip package to the computer with *IIS* installed. Unzip the package. Double-click setup.exe to launch and click *Next*.

Please note: On a computer with *User Account Control (Vista/2008/ 7)* please right click and select '*Run As Administrator'*



Choose where to install the files for CPR Broker (Event Broker). The default selection will most likely be a perfect fit. Click *Next* twice.

The installer now needs information on the CPR Broker (Event Broker) web site should be installed



If you are installing on e.g. Windows XP you only have the option of installing as a virtual directory to the Default Web Site. The *CPRBroker* (EventBroker) application name will be okay for most purposes.

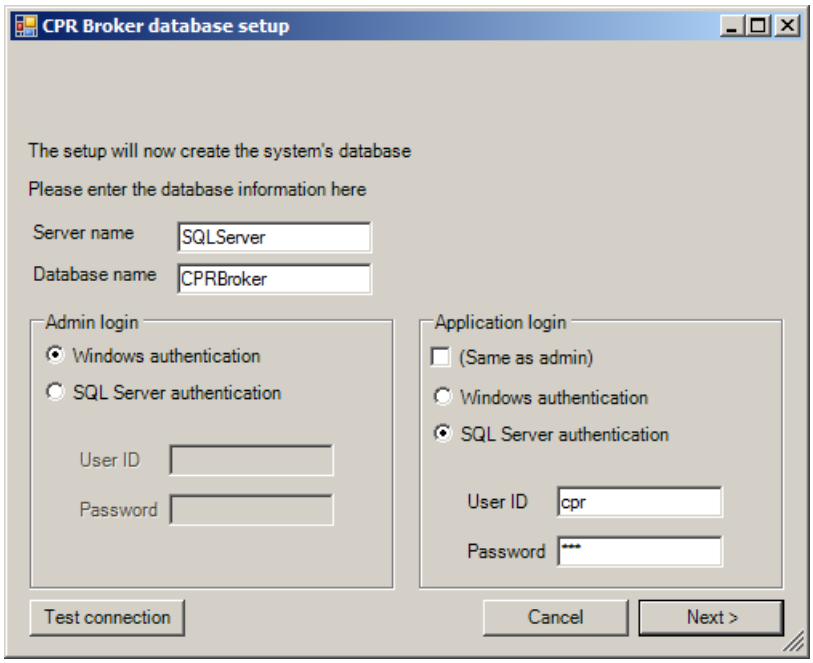
If your IIS can have multiple sites (on e.g. Windows 2003 and 2008), choose which one in which to install CPR Broker (Event Broker). If you do not know what ”multiple sites” is, just let it go with the default selection.

You may also create a new website. Please note that this usually also demands that you make changes/additions to whatever DNS-solution your network uses.

Click *OK*.

The installer will now copy the files that make up the CPR Broker web site and services.

Next the installer needs information necessary to create the database in which it stores copies of CPR -information.



The *Server name* is the name or IP-address of the computer on which the SQL Server resides. It could be *localhost* if the SQL Server resides on the same computer as the web site.

Database name is the name of the database. *CPRBroker(EventBroker)* would be a well chosen default name. If the database already exists, you will be given a warning message. If you accept it, the database will be used as it is. Please note that you will have to re configure the data providers because of encryption issues. Refer to the section “Data Providers” for details on how to do that.

Admin login is used for logging into the SQL Server and creating the database with the necessary tables etc. Whether you should use *Windows authentication* or *SQL Server authentication* depends very much on your setup. If the SQL Server is on the same computer as the web site you should most likely use *Windows authentication*.

Click *Test connection* to test whether the *Admin login* works.

Application login is used by the web site and services to connect with the database. The credentials needed for this purpose do not need to have as many privileges as the *Admin login*. Again it depends on your setup what kind of authentication you should use. If you use *SQL Server authentication* the installer will create the given *User ID* if it does not already exist.

When you are satisfied with your settings, click *OK*. The installer now creates the database and sets the connection string for the web site.

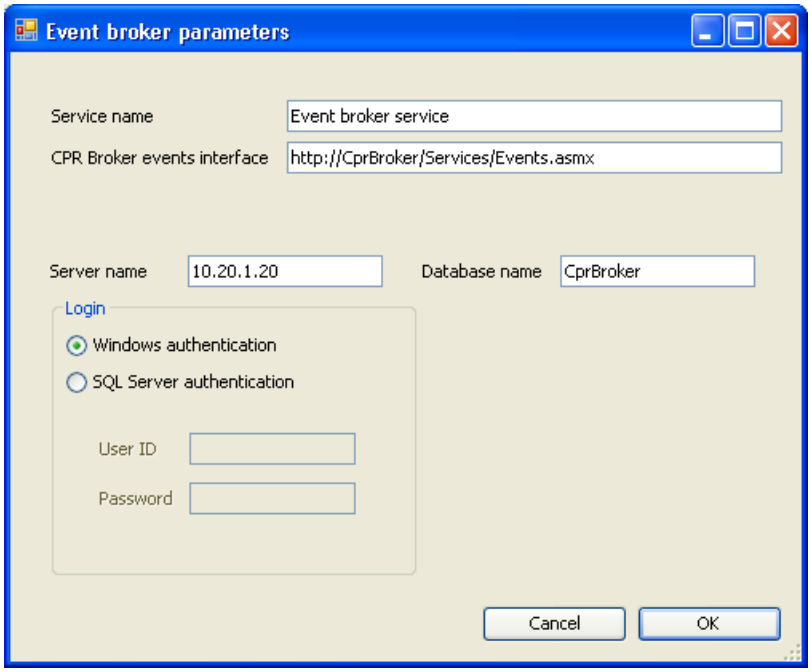
Click *Next* to create the database.

4.1 Extra step for event broker

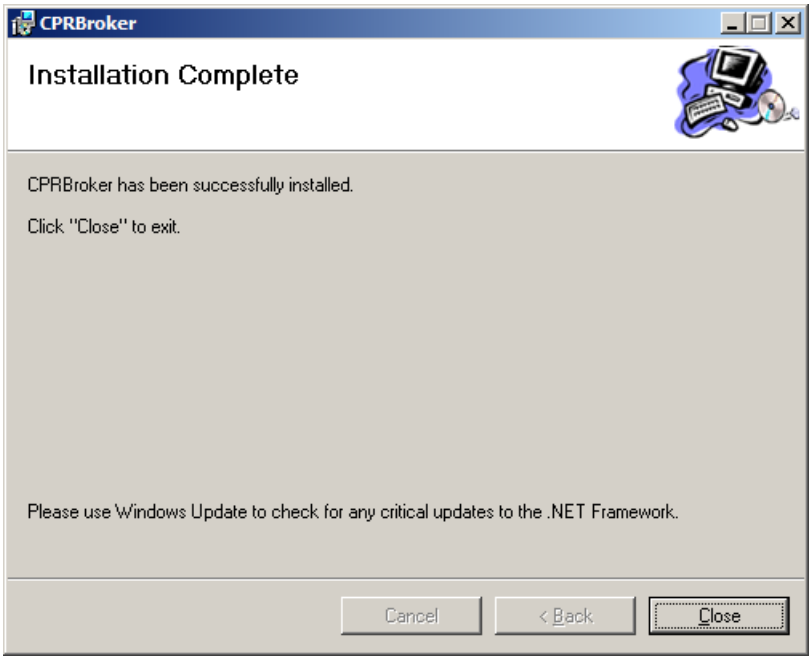
The event broker needs to connect to CPR broker. This happens through 2 things

- A direct database connection used for logging
- A web service in CPR broker that is used to get the data needed by event broker to raise events.

This is configured in the following screen



Event Broker comes with a so called Backend Service, which handles notification messages to subscribers. This service needs access to the same SQL Server as above. If you select to use *Windows Authentication* here, but you have selected *SQL server authentication* when you have installed Cpr Broker, then you have to manually allow the user 'NT AUTHORITY\NETWORK SERVICE' to access the database.

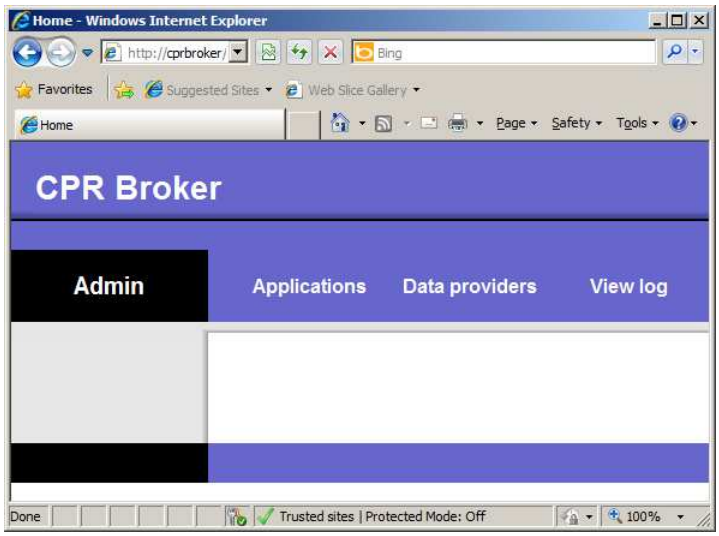


Click *Close* to exit the installer.

5 CONFIGURING CPR BROKER

This step only applies to *CPR broker* but not to the *Event Broker*

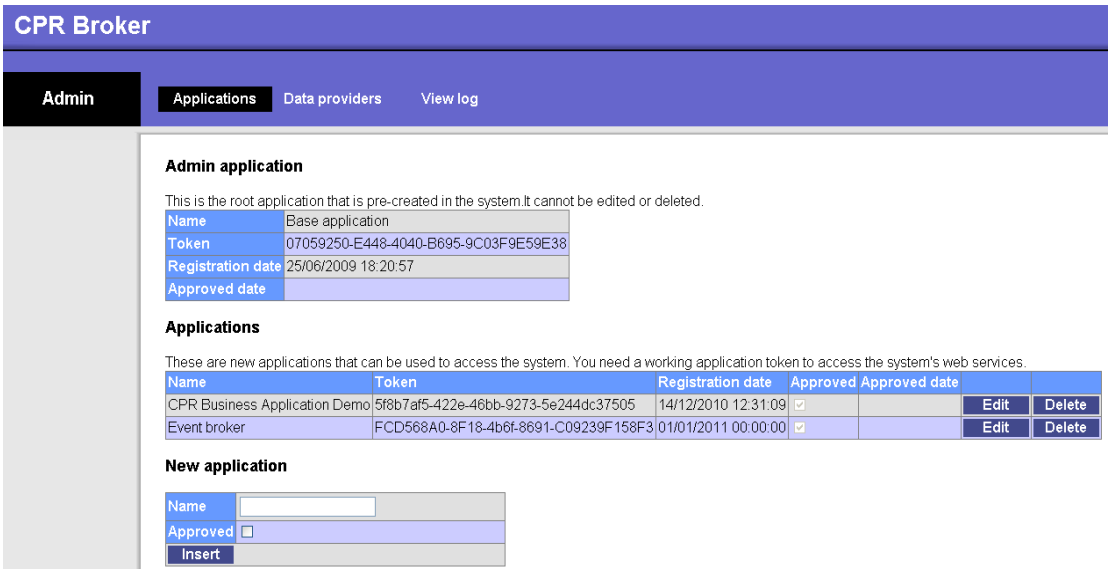
Open up a browser and point it to ***http://localhost/CPRBroker/Pages/default.aspx*** (or whereever you chose to install it) to see whether your installation was successful



This is a basic interface but it does get the job done.

5.1 Applications

Now click *Applications*:



For a client application to be able to use the broker, it needs to use an application token that uniquely identifies the application. This is modeled by the concept of *Application* in the broker.

An application has a unique name and a unique token. The name is a user friendly string that can be seen in with the log entries identifying relevant log entries. The token is a unique key sent with all web service requests to tell the broker which application is making the call. The token is an auto generated Guid(Globally Unique IDentifier) by default, but it can be changed to be any string that uniquely identifies the application. The application needs to be approved before it can be used.

Applications can be created through the Applications page and also through web services. Name and token can be changed through the user interface (only), but they still have to be unique.

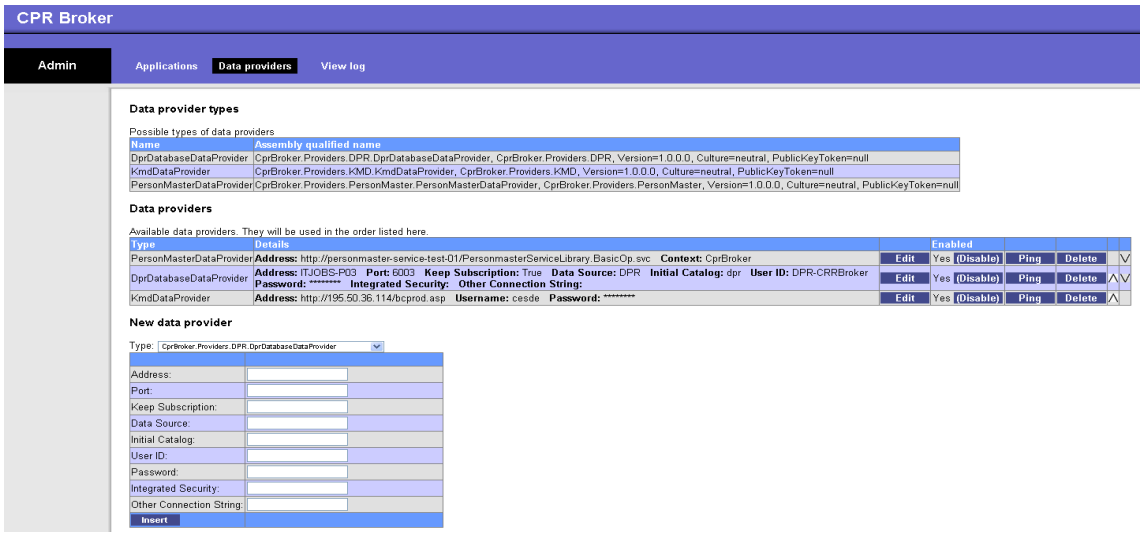
The system comes with three pre approved applications. The *Admin application* is a built-in name for an application that is allowed to work with the administrative parts of the CPR Broker. The other two applications are the event broker and the demo application. Please leave these two applications untouched.

To approve an application, simply click *Edit* for the application in question and check the *Approved* check box. Then click *Update* (only shown after *Edit*).

To create an application, simply give it a *Name* and whether it should be initially approved (it probably should). Then click *Insert*. The application is now listed under *Applications*.

5.2 Data Providers

Now click *Data Providers*:



A *Data Provider* is a connector that provides the broker with information. Currently there are two groups of data providers

- Person master data providers: Used to assign UUID's to Cpr Numbers

- CPR data providers: KMD and CPR.

To setup any of these connections you need an account and connection information from the provider. Then choose the appropriate provider type, enter the information and click *Insert*. You now have a Data Provider.

Please note! CPR Broker is unusable without data providers! You need at least one provider from each of the above groups.

6 SETTING UP LOGGING

CPR Broker can log to file, Windows Event Log, to the Database and to email.

There place to setup logging: In the *loggingConfiguration.config* file for CPR Broker web service. The default position for this is *C:\Program Files\ITST\CPR Broker(Event Broker)\Web\Config*

Additional location for Event Broker: in *the CprBroker.EventBroker.Backend.exe.config* file for the Backend service. The default position for this is *C:\Program Files\ITST\Event Broker\Web\bin*.

The procedure is the same for both files. Locate the `< loggingConfiguration>` tag in the specific config file. Under the `<listeners>` tag you will find four `<add` tags. The `"CprDatabase"` as well as the `"EventLog"` should be left untouched in all cases.

In `"FlatFile"` you should look for the `fileName` attribute. This should be set to the full path and name of the where to put the log file.

In `name="Email"` there are more settings. The ones most likely to be adjusted are: `toAddress`, `fromAddress`, `smtpServer` and perhaps `smtpPort`.

Please note: In the last 3 cases, you need to make sure that the 'NT AUTHORITY\NETWORK SERVICE' account has sufficient access rights to the destination.

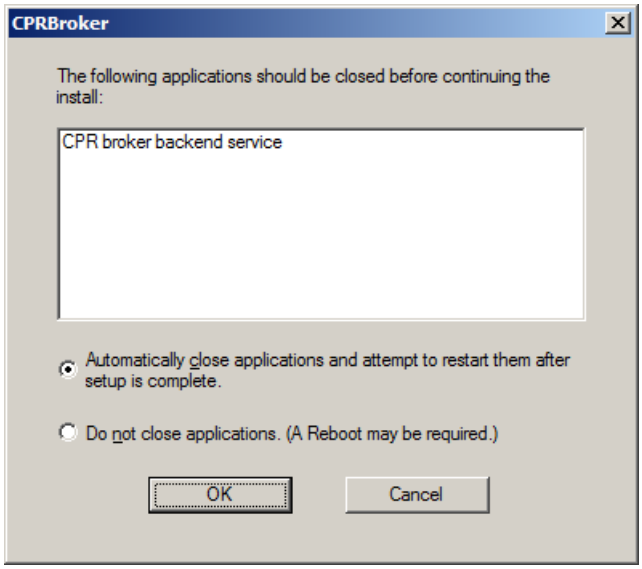
You have now adjusted the settings for each type of logging, but you have yet to set what types of logging are *active*. You now look for the `<specialSources>/ <allEvents>` tag. In this you will another `<listeners>` tag. Per default `"CprDatabase"` is active, which can be seen from the fact that it is not commented out like e.g. `<!--add name="EventLog" /-->` is.

To enable a specific listener simply remove the `<!--` and `-->` characters from the line. And to disable a listener simply put them back in.

7 UNINSTALLING CPR BROKER

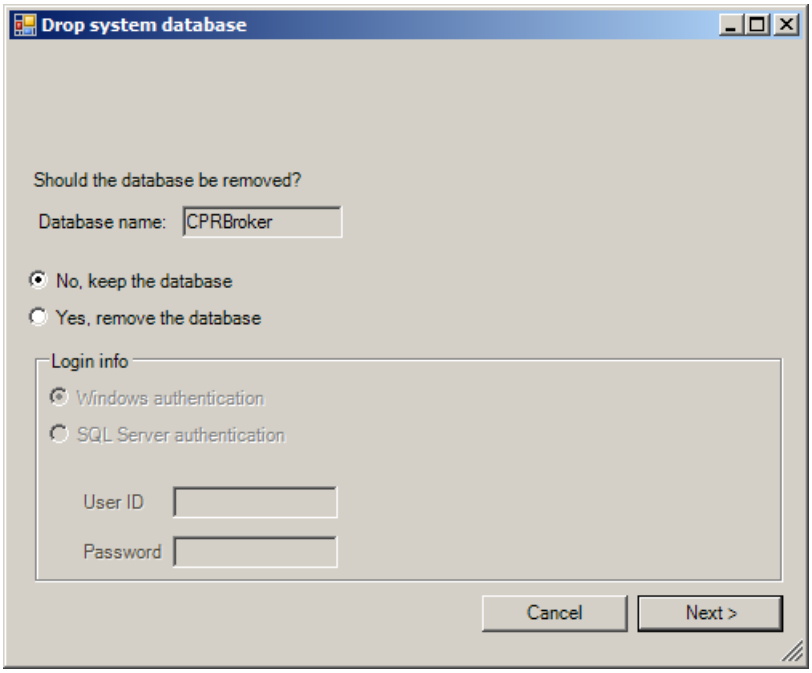
If you want to uninstall CPR Broker please open the Add/Remove Programs in the Control Panel. Click *Remove*.

You may be asked:



You can safely answer *OK* to this.

During the removal of CPR Broker you will be asked whether to delete the database:



You may need to provide a specific username and password which have rights to delete the database from the SQL Server used.

Click *OK* and CPR Broker will be removed from the computer.

MAGENTA aps

adresse
Studiestræde 14, 1.
1455 København K

email
info@magenta-aps.dk

telefon
(+45) 33 36 96 96