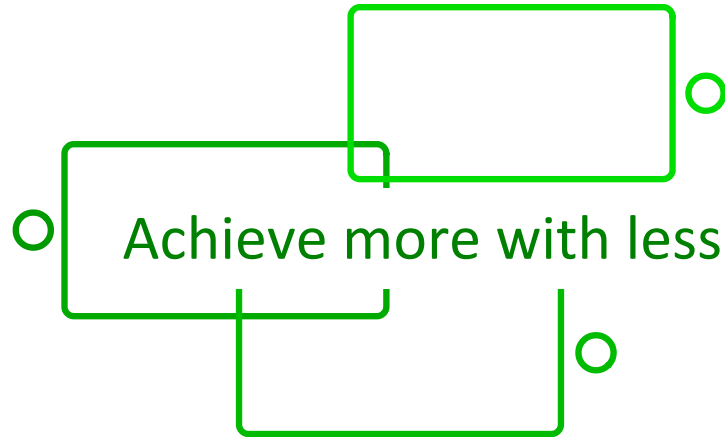


# Visendo Fax SDK

Version 1.1.0 Review 18.03.2011



Visendo Fax SDK

Visendo Fax SDK

## Content

---

**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

I Preface.....	2
II Quick start .....	3
III Installation .....	6
Prerequisites.....	6
1. Unpack the .zip-file.....	6
2. Create the database (if necessary) .....	6
3. WCF web service .....	6
3.1 Installation .....	6
3.2 Configuration.....	11
IV Samples .....	13
4.1 VisendoFaxWebClient.....	13
Web.config .....	13
4.2 VisendoFaxWebServiceClient .....	15
VisendoFaxWebServiceClient.exe.config .....	16
V Fax Web service classes and methods .....	17
VI Troubleshooting .....	20
About Visendo.....	21

## I Preface

The Visendo Fax SDK provides a WCF web service with methods to send documents as faxes via the Visendo FaxServer and to query the Visendo Fax Server database for sent and received faxes.

The SDK package includes the web service and a couple of sample client applications. In your development environment, it is not necessary to have a Visendo Fax Server available. Instead, you can work with a dummy database and use a dummy folder as the Visendo Fax Server job queue folder.

## II Quick start

This quick walkthrough shows you how to install the web service and how to use the sample web client to query a sample Access database via the web service.

For more detailed step-by-step instructions, see the following chapters of this document.

0. Make sure that .Net Framework 3.5 and IIS are installed on your machine, and that the .Net framework is registered with IIS.

1. Host the web service (folder VisendoFaxWebServiceHost) in IIS

2. a) For 64-Bit systems: Make sure Microsoft.ACE.OLEDB.12.0 provider is installed

b) For 32-Bit systems: Make sure Microsoft.Jet.OLEDB.4.0 provider is installed (it is part of the standard Windows installation)

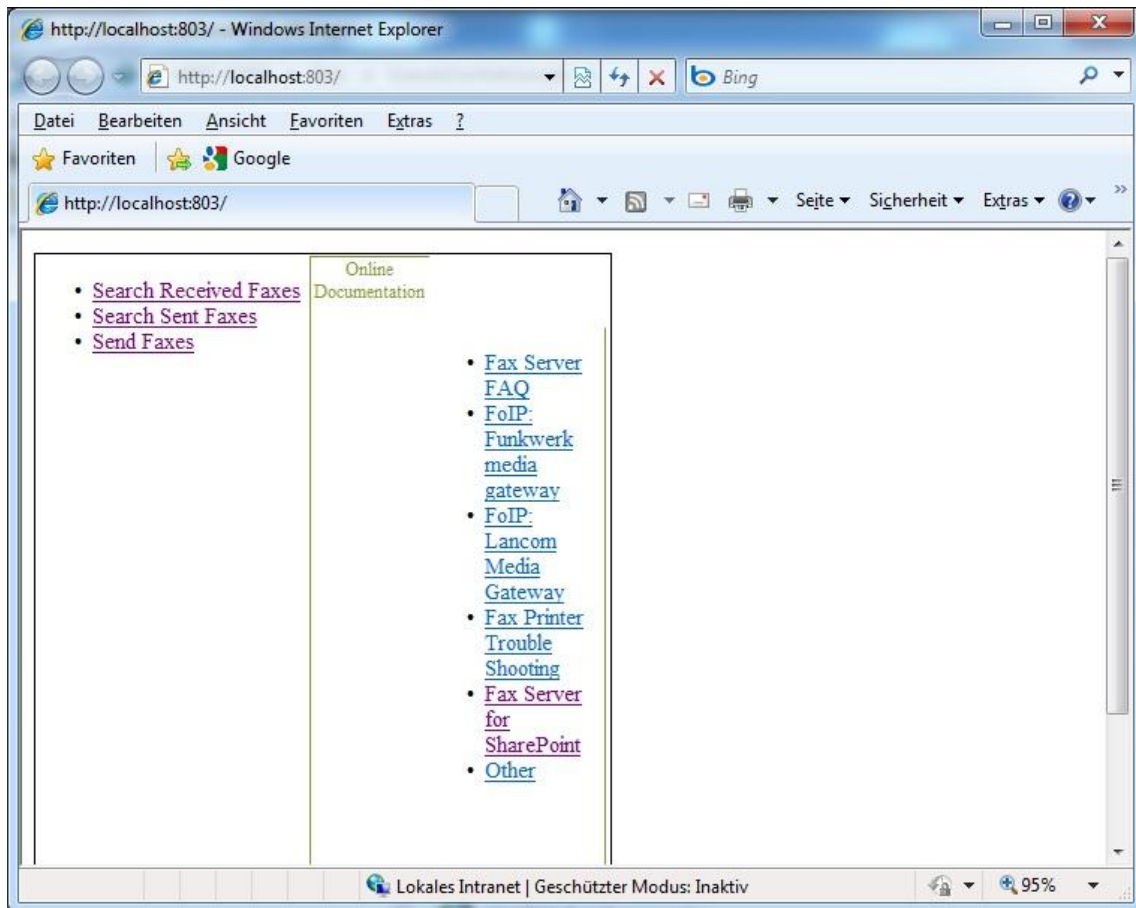
3. Use the batch file Copy\_faxinfo\_mdb.bat to copy the sample Access database to the standard location (C:\Program Files\ppev\Visendo Fax Server).

4. For 64-Bit systems: Open the file FaxServer.config (in the VisendoFaxServiceHost folder). Navigate to the xml-node configuration/FaxServerSettings/Configuration/setting with name "DBType" and change the value from "Access" to "Access\_x64".

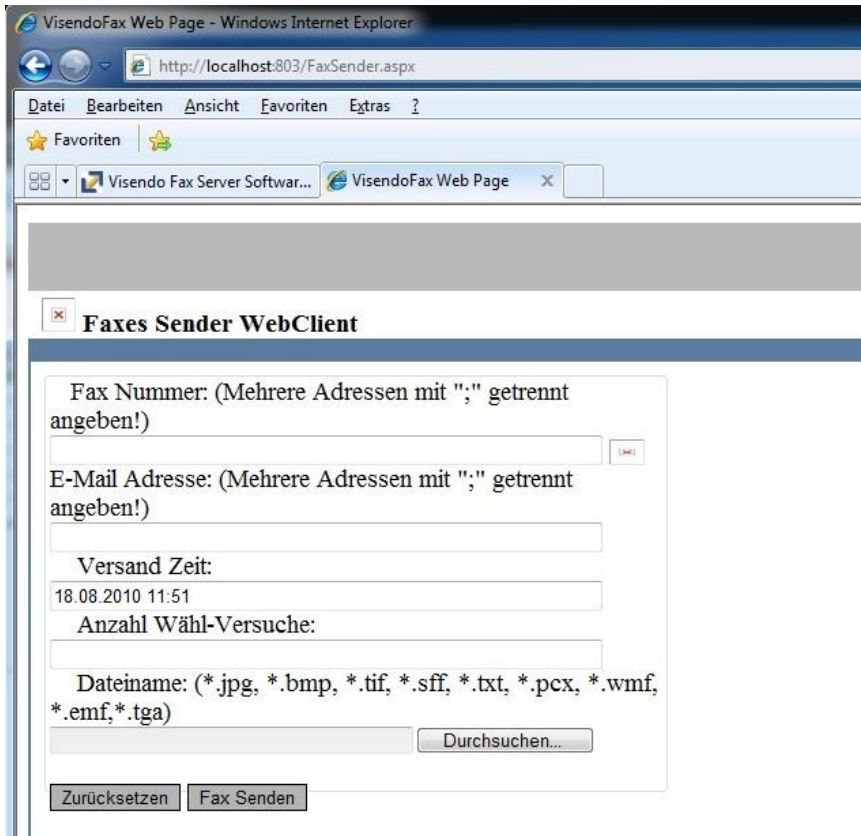
```
<setting name="DBType" serializeAs="String">  
  <value>Access_x64</value>  
</setting>
```

5. Host the sample client web site (Samples/VisendoFaxWebClient) in IIS.

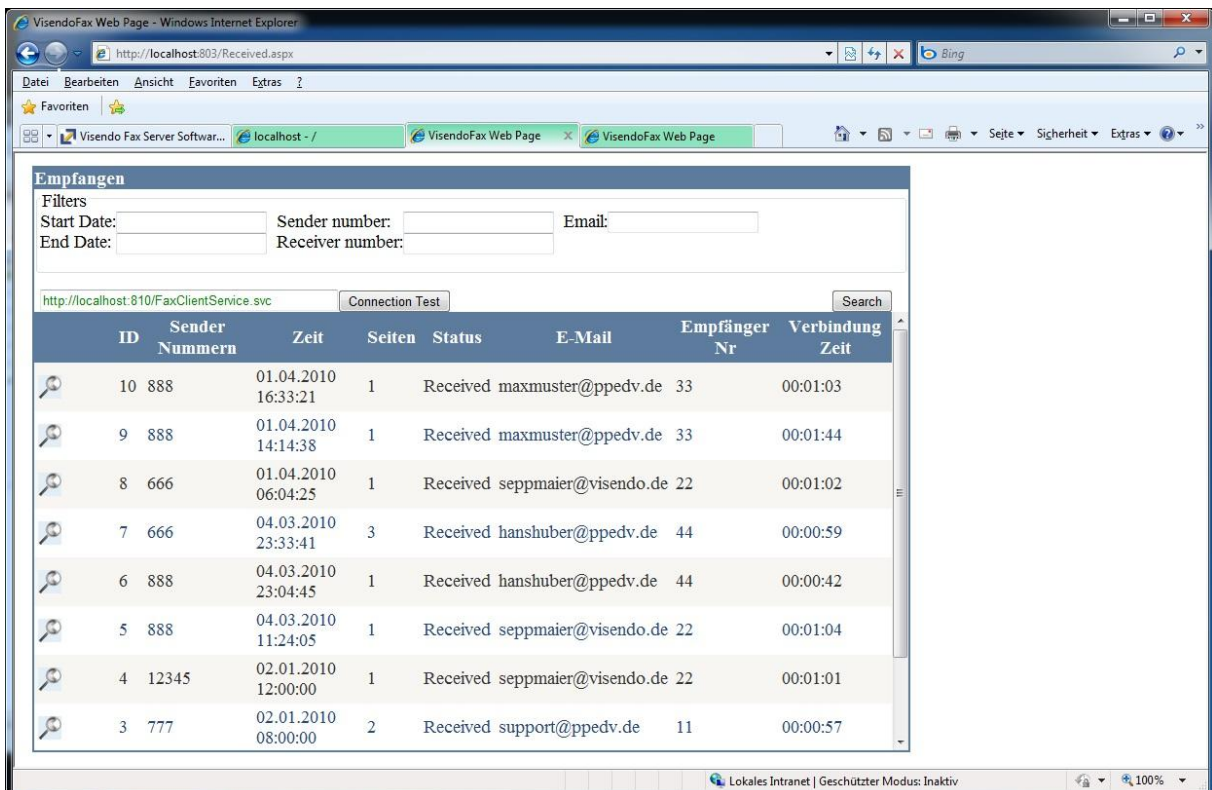
Open the web site in a browser.



Now you can try to create a fax job from a document. If successful, the job file will be created in the standard Visendo Fax Server job folder (C:\ProgramData\ppedv\Visendo Fax Server\Jobs, this directory will be created if it doesn't exist already). See chapter [configuration](#) on how to change this path.



You can also query the database for sent and received faxes.



**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

## III Installation

### Prerequisites

Before you start, make sure you have **.NET Framework Version 3.5** and **IIS** installed, and that the .NET framework is registered with IIS.

In case you want to use the ACCESS-database:

- Microsoft.Jet.OLEDB.4.0 provider (for 32-Bit systems)
- Microsoft.ACE.OLEDB.12.0 provider (for 64-Bit systems)

Step by step:

#### 1. Unpack the .zip-file

#### 2. Create the database (if necessary)

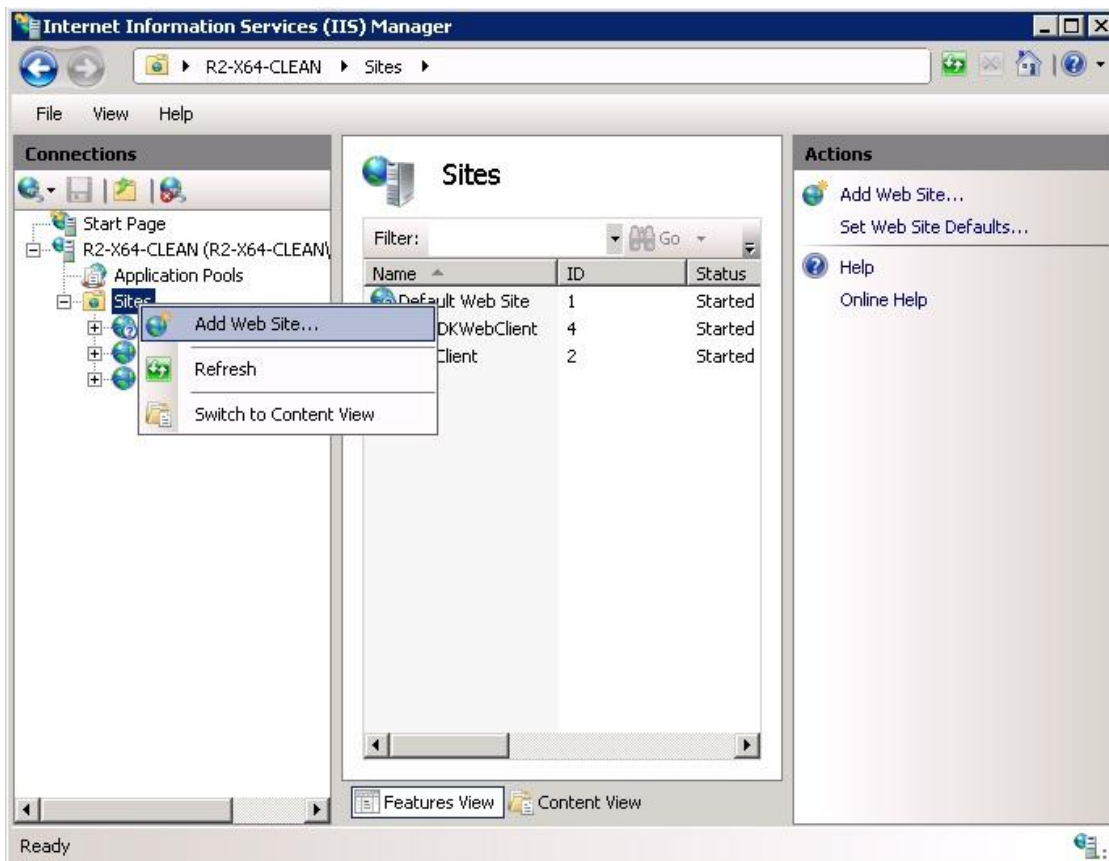
Use the SQL scripts included in the SDK to generate a database with the required schema for your preferred database system (Microsoft SQL Server, MySQL, Oracle). You also find an Access database named faxinfo.mdb with some sample entries in the SDK folder.

The appropriate connection string for the database will be entered in the configuration file of the web service (see below).

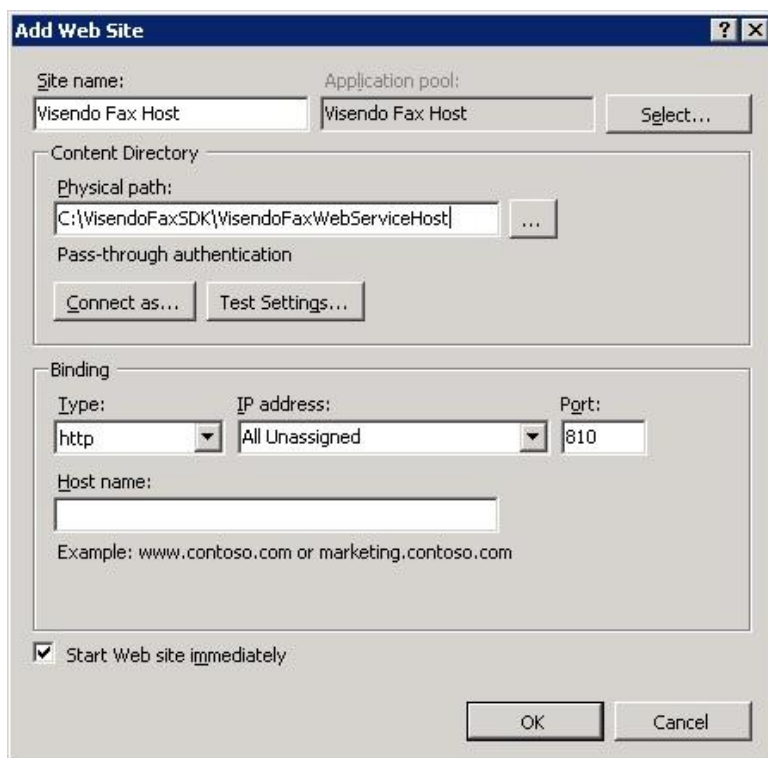
#### 3. WCF web service

##### **3.1 Installation**

The files for the WCF web service are in the folder VisedoFaxWebServiceHost. Host it as a web site in IIS.



In the default settings, the samples expect the web service to run on the local host at port 810, so use this port if you don't want to change the configuration.

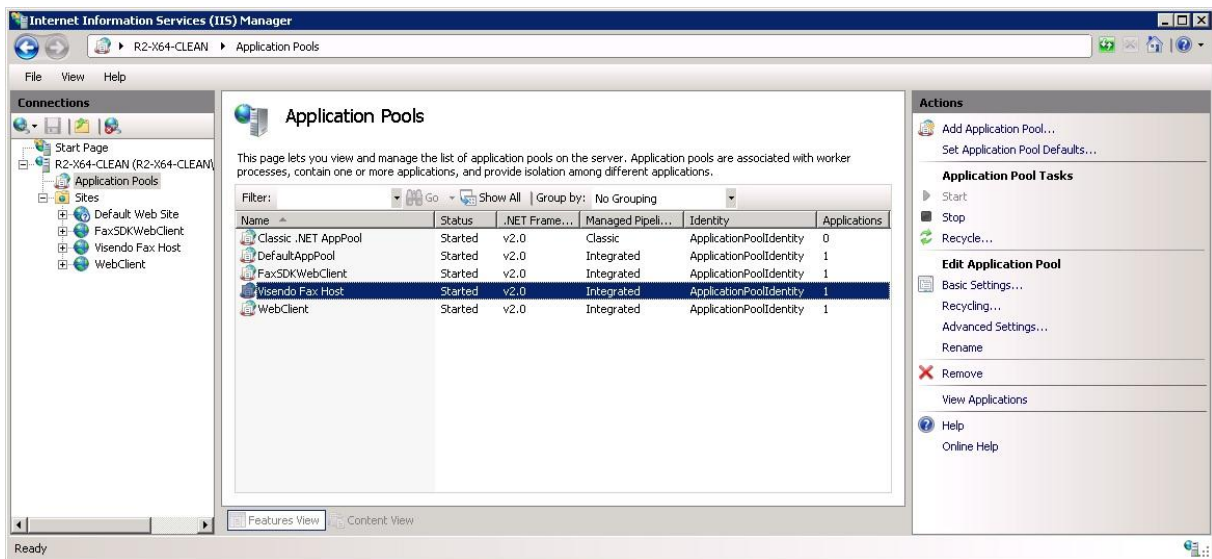


**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

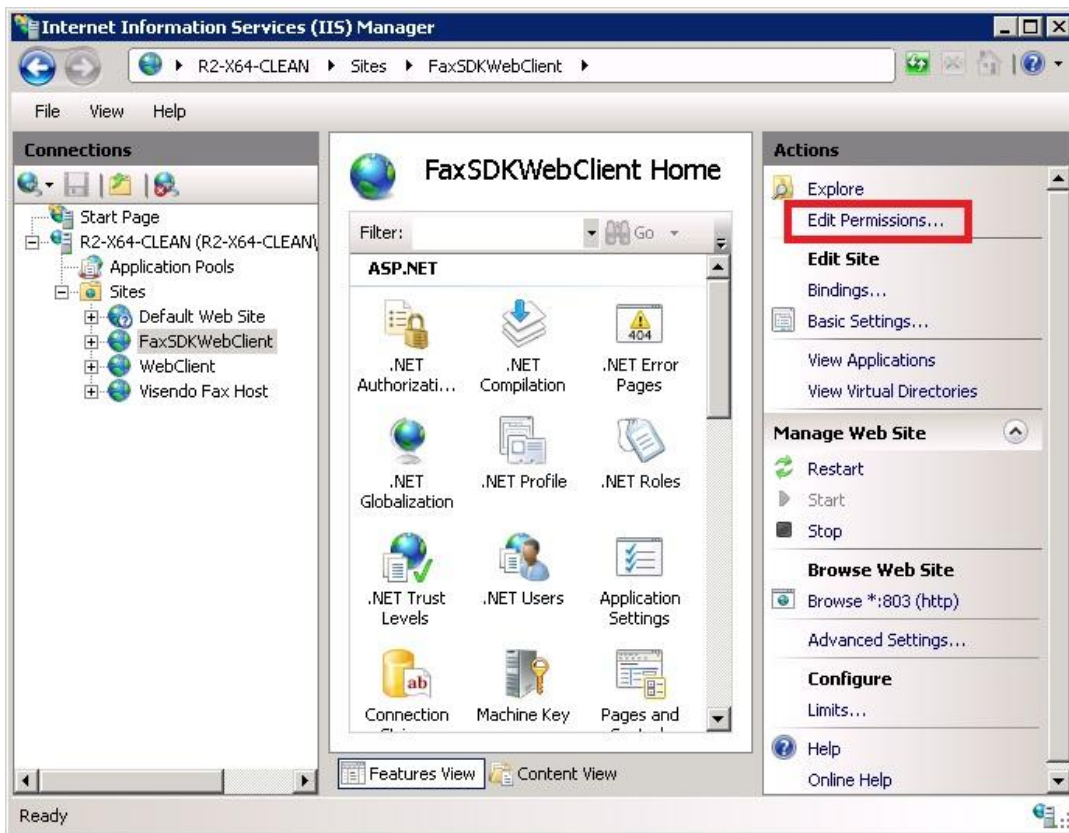
Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

Check under which identity your Application pool is running.

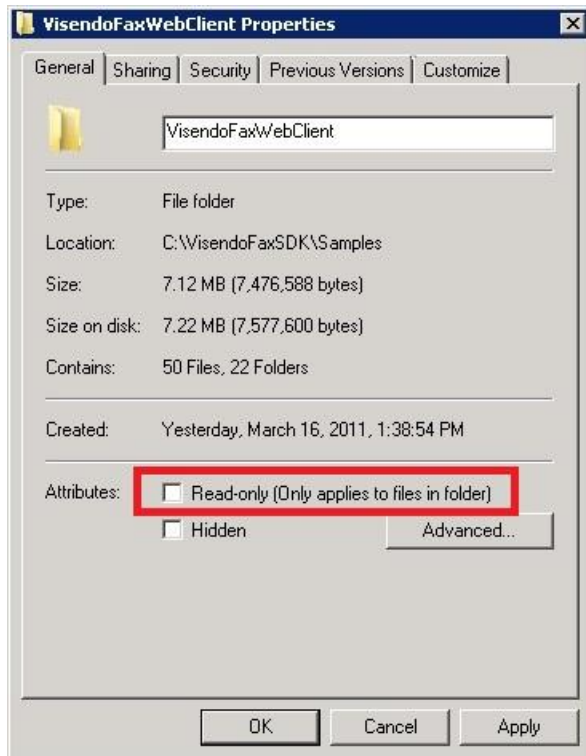


In this case (the standard settings), the application pool is run with identity “ApplicationPoolIdentity”, which corresponds to the built-in user IUSR.

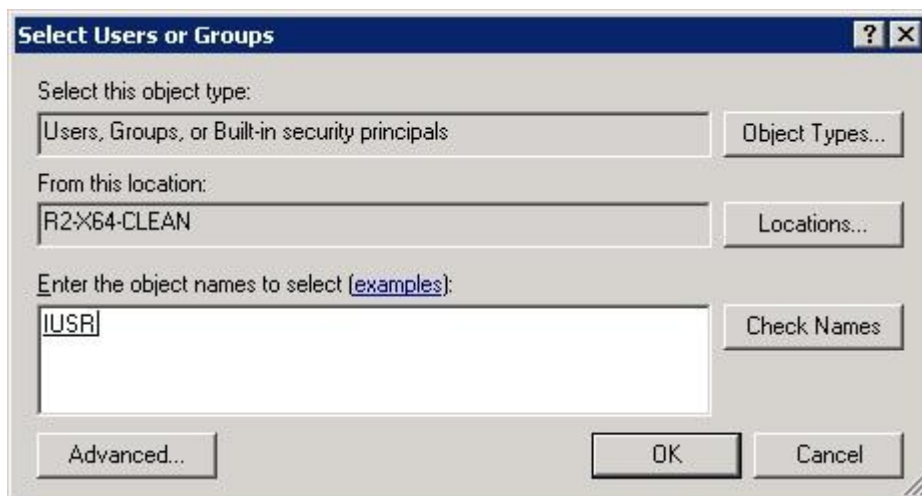
Now set the permissions for the content folder:

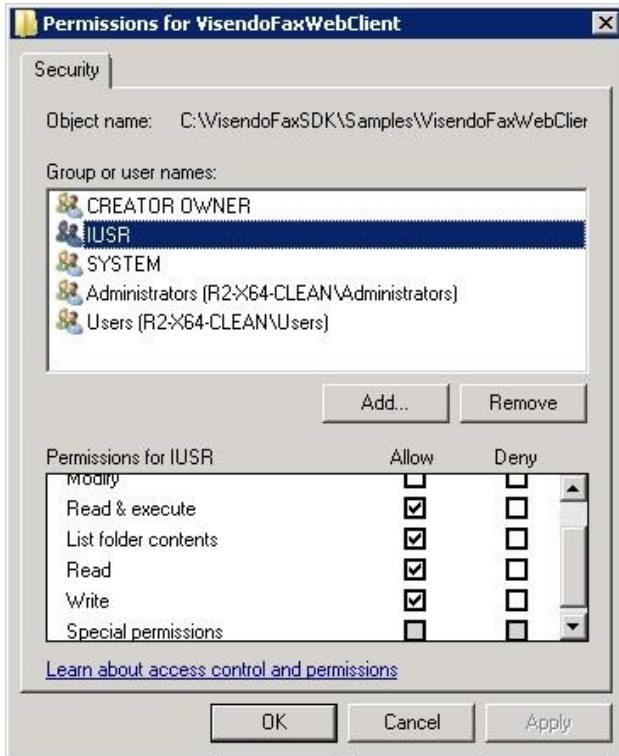


First, make sure that the files aren't set “Read-only”.

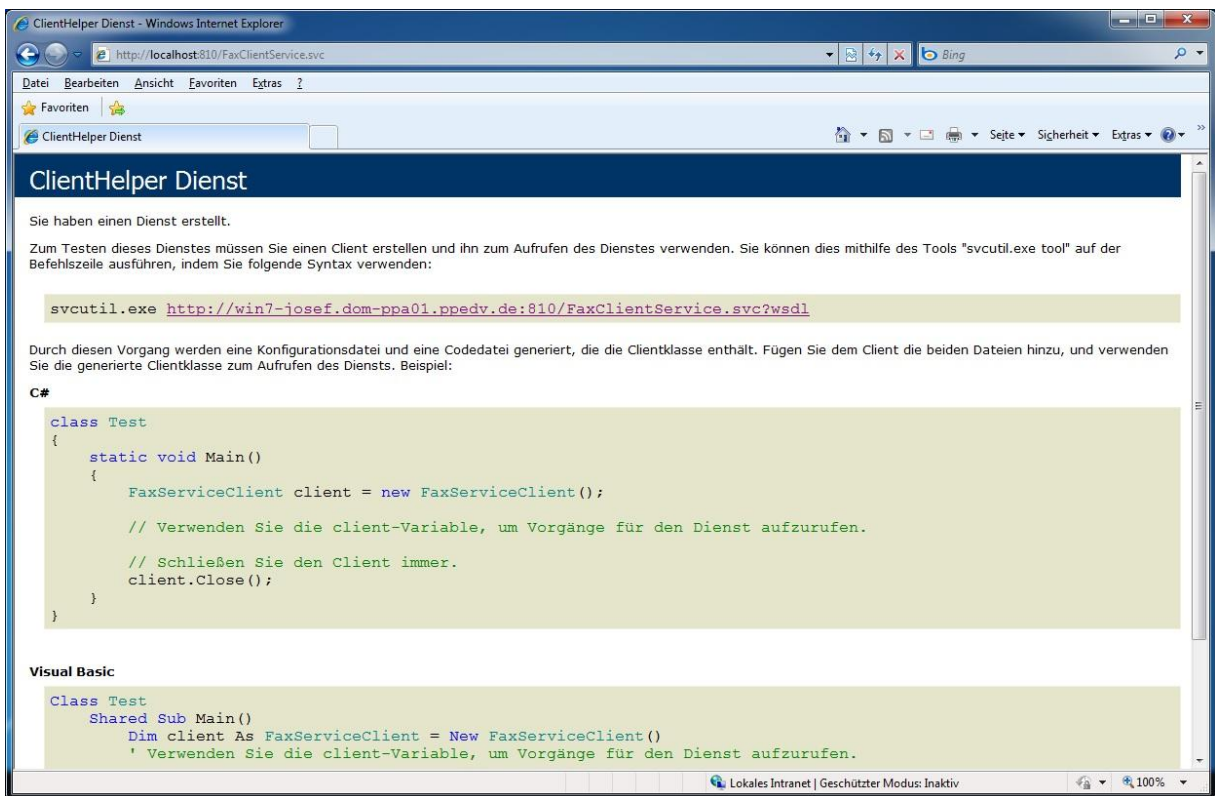


Then grant the identity running your application pool (see above) the necessary rights (i.e. execute, list, read and write permission) on the folder. If necessary, add the user first.





If the installation was successful, you should be able to see following page at <http://localhost:810/FaxClientService.svc> (change port number if necessary). This means that the web service is up and running, and clients can now access the WSDL for the service.



**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

## 3.2 Configuration

You can configure the web service by manually altering the xml-config-files. There are two configuration files for the web service:

### 1. *FaxServer.config*

Here you can set the database type and enter the path to the VisendoFaxServer settings directory. This is also the place where the Jobs folder containing the .job-files for the FaxServer is located (or will be created).

XML-Path: configuration/FaxServerSettings/Configuration/setting, attribute "name":

#### *a) database type:*

name="DBType":

node "value": Valid entries:

SQL	SQL database
Access	Access database x86 (uses Jet OLEDB provider 4.0)
Access_x64	Access database x64 (uses Access Database Engine)
MySQL	MySQL database
Oracle	Oracle database

#### *b) Path to the VisendoFaxServer settings directory:*

This is where the FaxServer configuration files are located and where the "Jobs"-folder and the .job-documents for sending faxes will be created. Per default, this is C:\ProgramData\ppedv\Visendo Fax Server.

name="ConfigPath":

node "value": full path to the folder without closing "\".

## 2. web.config

### *a) Database connection strings*

In section connectionStrings enter the full connection string. Templates:

```
MySQL:"Driver={MySQL ODBC 5.1
Driver};Server={0};Database={1};Option=3;PLSQLRSet=true;"
```

```
SQL: "Data Source={0};Database={1};Uid={2};Pwd={3};"
```

```
Access: "Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\Program Files\ppedv\Visendo
Fax Server\faxinfo.mdb"
```

```
Access_x64: "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\Program
Files\ppedv\Visendo Fax Server\faxinfo.mdb"
```

Change these templates accordingly.

### *b) WCF web service settings*

The web service is configured with a BasicHttpBinding where the default WCT settings have been raised to 50Mb:

```
<basicHttpBinding>
  <binding name="basicBind" sendTimeout="00:10:00" maxBufferSize="52428800"
    maxBufferPoolSize="52428800" maxReceivedMessageSize="52428800">
    <readerQuotas maxArrayLength="52428800" maxBytesPerRead="52428800"
      maxNameTableCharCount="52428800" maxStringContentLength="52428800"/>
  </binding>
</basicHttpBinding>
```

---

**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

...

</basicHttpBinding>

Please note that the web service will return an error when you try to send files larger than that.

Feel free to change the configuration according to your needs (different binding, larger maximum file size...). After changing the server side configuration (web.config), the easiest way to assure a compatible client side configuration is to simply delete the client configuration file (Web.config resp. VisendoFaxNetClient.exe.config/app.config) and let it be automatically regenerated by refreshing the service reference.

## IV Samples

The Samples folder contains a few sample programs to illustrate the use of the FaxServer SDK.

### 4.1 VisendoFaxWebClient

A web site that uses the web service to send faxes and to search for sent and received faxes.

Host the VisendoFaxWebServiceClient as a web site in IIS. Enter the URL of the web service (see step 3) in the appSettings-section of the Web.config. (For more details, see II Configuration).

Configuration file:

#### **Web.config**

Enter the webservice URL at the endpoint node in the client section under "address". (**Note: This has been changed from the previous SDK version!**)

Make sure that the endpoint name is "ClientHelperEndpoint". Do not change this name (it is used in the webservice proxy constructor). You can, however, change binding and binding configuration.

---

**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

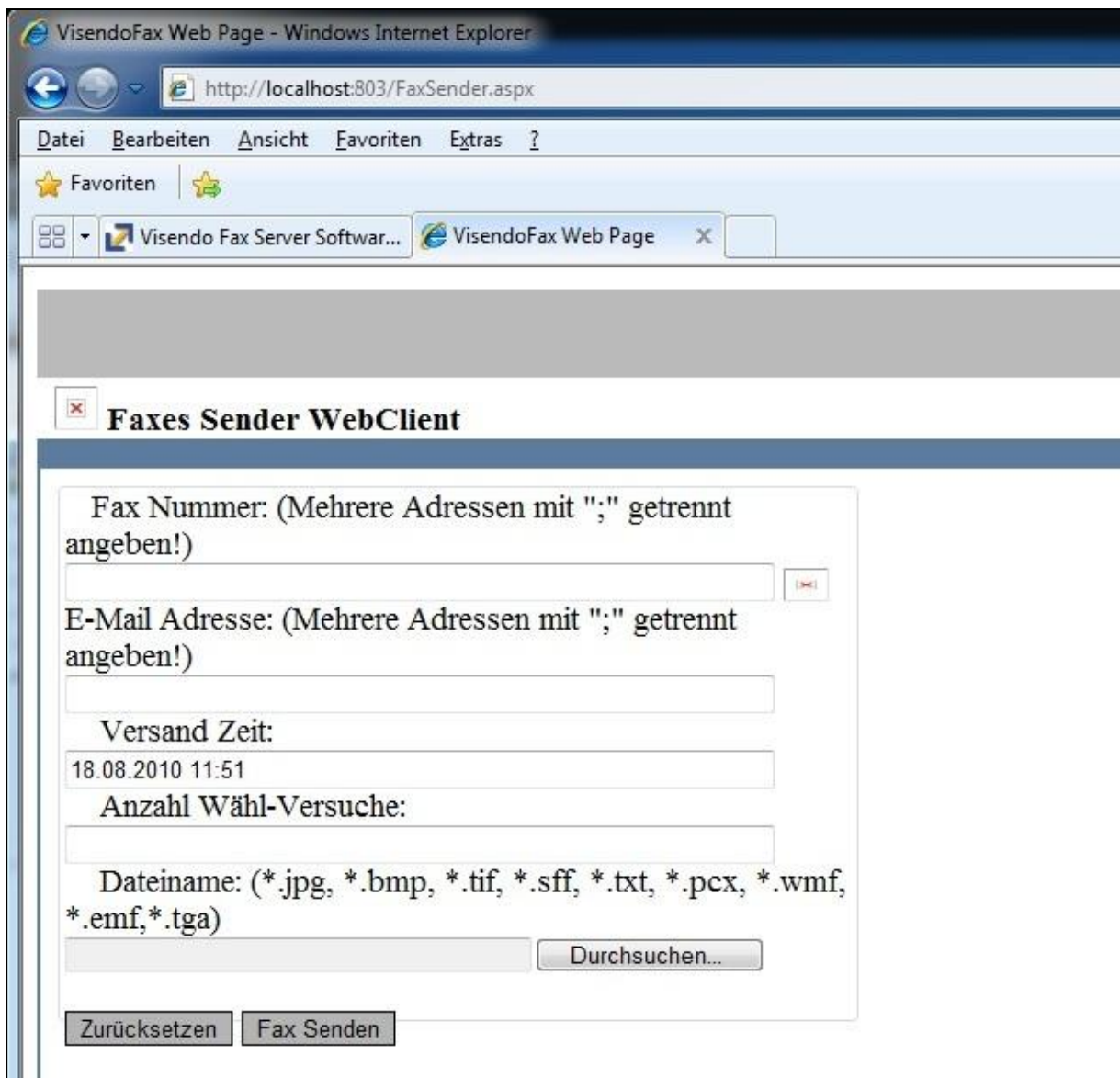
<client>

<endpoint

binding="basicHttpBinding" bindingConfiguration="ClientHelperEndpoint" address="http://[servename]:[Port]/FaxClientService.svc "

contract="FaxServiceClient.IFaxService" name="ClientHelperEndpoint" />

</client>



VisendoFAX Web Page - Windows Internet Explorer

http://localhost:803/Received.aspx

Empfangen

Filters  
 Start Date:  Sender number:  Email:   
 End Date:  Receiver number:

http://localhost:810/FaxClientService.svc Connection Test Search

ID	Sender Nummern	Zeit	Seiten	Status	E-Mail	Empfänger Nr	Verbindung Zeit
10	888	01.04.2010 16:33:21	1	Received	maxmuster@ppedv.de	33	00:01:03
9	888	01.04.2010 14:14:38	1	Received	maxmuster@ppedv.de	33	00:01:44
8	666	01.04.2010 06:04:25	1	Received	seppmaier@visendo.de	22	00:01:02
7	666	04.03.2010 23:33:41	3	Received	hanshuber@ppedv.de	44	00:00:59
6	888	04.03.2010 23:04:45	1	Received	hanshuber@ppedv.de	44	00:00:42
5	888	04.03.2010 11:24:05	1	Received	seppmaier@visendo.de	22	00:01:04
4	12345	02.01.2010 12:00:00	1	Received	seppmaier@visendo.de	22	00:01:01
3	777	02.01.2010 08:00:00	2	Received	support@ppedv.de	11	00:00:57

Lokales Intranet | Geschützter Modus: Inaktiv

VisendoFAX Web Page - Windows Internet Explorer

http://localhost:803/Send.aspx

Gesendet

Filters  
 Gesendet  PollFax  BadFaxes  Queue

Start Date:  Receiver number:  Email:  UserID: maxmuster   
 End Date:

Search

ID	Benutzer	E-Mail	Empfänger Nr	Gesendet	Versuche	Status	Seiten	Verbindung Zeit
30	maxmuster	maxmuster@ppedv.de	888	01.04.2010 16:33:21	2	FaxOK	1	00:01:03
29	maxmuster	maxmuster@ppedv.de	888	01.04.2010 14:14:38	1	FaxOK	1	00:01:44

Lokales Intranet | Geschützter Modus: Inaktiv

## 4.2 VisendoFAXWebServiceClient

ppedv AG - HQ – Burghausen, Germany

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

A WinForm application that uses the web service to send faxes and to search for faxes.

Configuration file:

### VisendoFaxWebServiceClient.exe.config

Enter the webservice URL at the endpoint node in the client section under "address". **(Note: This has been changed from the previous SDK version!)**

Make sure that the endpoint name is "ClientHelperEndpoint". Do not change this name (it is used in the webservice proxy constructor). You can, however, change binding and binding configuration.

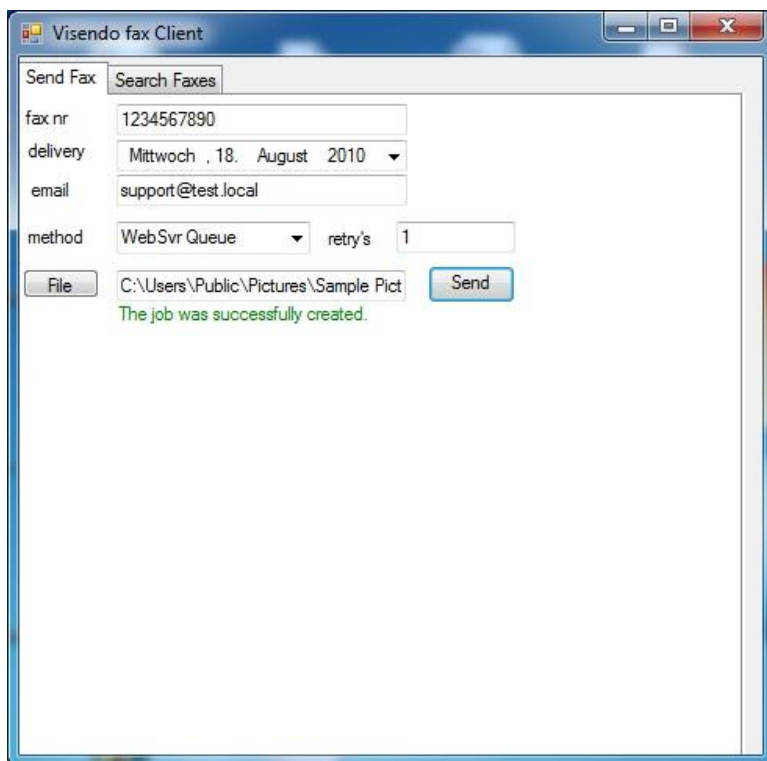
```
<client>
```

```
  <endpoint
```

```
    binding="basicHttpBinding" bindingConfiguration="ClientHelperEndpoint" address="http://[servername]:[Port]/FaxClientService.svc "
```

```
    contract="FaxServiceClient.IFaxService" name="ClientHelperEndpoint" />
```

```
</client>
```

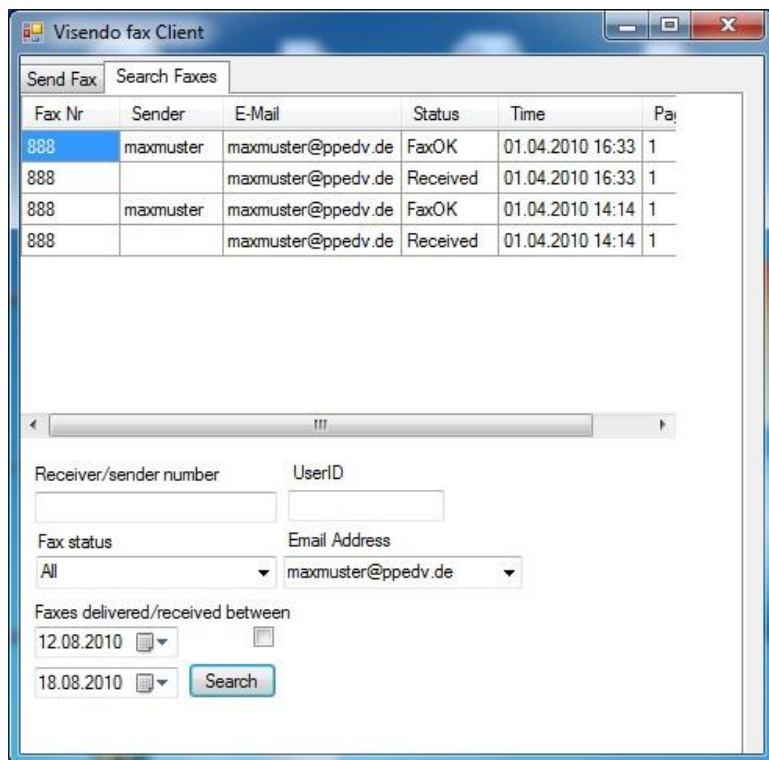


---

ppedv AG - HQ – Burghausen, Germany

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>



Enter the URL of the web service (see step 3) in the appSettings-section of the app.config resp. the VisendoFaxWinFormServiceClient.exe.config.

## V Fax Web service classes and methods

Class `Visendo.FaxObjects.DBFilter` Filter to specify which faxes to retrieve from the database.

Members	
string columnName	The database column to filter against.
object Value	Value of the filter.
string Operation	For the time being only used for DateTime columns. Possible values: >0,<0,>=0,<=0,=0. For all other (non-DateTime) columns, this value is ignored (use e.g. string.Empty).
DbType dbType	The TSQL-type of the filter value.

**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

<b>Constructors</b>	
DBFilter()	Standard constructor
DBFilter(ReceivedFaxesTableFields column, string _operation, string _value, DbType _type)	A DBFilter for the specified column of table ReceivedFaxes
DBFilter(SentFaxesTableFields column, string _operation, string _value, DbType _type)	A DBFilter for the specified column of table SentFaxes

### Examples:

Filter for all faxes received after 31.12.2009:

```
new DBFilter(ReceivedFaxesTableFields.ReceivingTime, ">=0", (new
DateTime(2009,12,31)).ToString(), DbType.DateTime));
```

Filter for all faxes sent by user with id johndoe:

```
new DBFilter(SentFaxesTableFields.UserID, string.Empty, "johndoe", DbType.String);
```

<b>Web service methods</b>	
List<FaxObject> GetSentFaxes(List<DBFilter> filters)	Retrieves the faxes that comply with the specified filters from the database
List<FaxObject> GetReceivedFaxes(List<DBFilter> filters)	
List<FaxObject> GetSentFaxesWithPaging(List<DBFilter> filters, int startRowIndex, int maximumRows)	Retrieves only the specified range of faxes from the result set
List<FaxObject> GetReceivedFaxesWithPaging(List<DBFilter> filters, int startRowIndex, int maximumRows)	
List<FaxObject>	Gets the faxes from the MailQueue

**ppedv AG - HQ – Burghausen, Germany**

Tel: +49-8677-9889-110 Fax: +49-8677-9889-44

Info: [support@ppedv.de](mailto:support@ppedv.de) sales: [sales@ppedv.de](mailto:sales@ppedv.de) <http://www.visendo.com>

GetReceivedFaxesWithPaging(List<DBFilter> filters, int startRowIndex, int maximumRows)	folder of the fax server
Byte[] GetFaxContent(string path)	Retrieves the content of the specified fax file
string FaxWebServiceCheck()	A dummy method to test the web service connection. Returns simply the string "Test"
FaxQueueStatus SendFax(byte[] faxfile, string fileType, FaxObject pfax, SendingMethod meth)	Send a fax
FaxQueueStatus SendFaxAuth(byte[] faxfile, string fileType, string AuthUser, string AuthPass, FaxObject pfax, SendingMethod meth)	Send a fax with authentication information
FaxQueueStatus SendFaxEx(byte[] file, string fileType, string AuthUser, string AuthPass, FaxObject pfax, SendingMethod meth, WindowsIdentity CurrentUserId)	Send a fax with authentication information and user id
FaxQueueStatus RequeueFax( FaxObject pfax)	Requeue a fax
public FaxQueueStatus RequeueFaxEx(FaxObject pfax, WindowsIdentity CurrentUserId)	Requeue a fax with user id

## VI Troubleshooting

In general, you might find the Microsoft WCF Troubleshooting Quickstart guide useful:  
<http://msdn.microsoft.com/en-us/library/aa702636.aspx>.

Here a few specific problems and solutions:

Problem:

When trying to send a file, the message "The remote server returned an error: (400) Bad Request. " is displayed.

Solution:

The default maximum message size is set to 50 Mb. When you try to send a file bigger than that, the server rejects the request. Try to set the thresholds in the web service configuration file to higher values (see section II 2 b).

Problem:

Server Error: The 'Microsoft.Jet.OLEDB.4.0' provider is not registered on the local machine.

Solution:

Make sure that the Microsoft.Jet.OLEDB.4.0 provider is installed. Be aware that the Jet.OLEDB-driver is only available for 32-Bit environments.

In order to use the ACCESS-database in 64-Bit environments, enter "Access\_x64" as database type in the FaxServer.config (then the Microsoft.ACE.OLEDB.12.0 provider is used).

Problem:

Server Error: The 'Microsoft.ACE.OLEDB.12.0' provider is not registered on the local machine.

Solution:

Make sure that the Microsoft.ACE.OLEDB.12.0 provider is installed. Be aware that the Jet.OLEDB-driver is only for 64-Bit environments.

In order to use the ACCESS-database in 32-Bit environments, enter "Access" as database type in the FaxServer.config (then the Microsoft.Jet.OLEDB.4.0 provider is used).

## About Visendo

We are an Independent Software Vendor (ISV) specialized in **internet systems integration** on Microsoft technologies. We have always been one of the top 3 companies in the markets we entered. We were one of the first three Microsoft gold partners in e-commerce on the German market: this is the highest level for a Microsoft partner. Hence you, as a potential customer, will benefit from our experience and quality of service that guarantees your investment.

**For further information, please visit us on:**

website: <http://www.visendo.com>, [Product downloads](#)

Blog: <http://www.blog.visendo.com>

[Linkedin](#), [Twitter](#) , [Facebook](#)

Did you find this paper useful? [Give us feedback NOW!](#)