



**ORF**  
FUSION

# ORF EXTERNAL DATABASE GUIDE

for Microsoft SQL Server 2005

For ORF users

Revision 1.3 (for ORF version 5.0)  
Date October 3, 2011

# INTRODUCTION

## What is this guide about?

This guide provides step-by-step instructions for setting up Microsoft SQL Server 2005 to provide database services for ORF. This guide presumes you already have SQL Server 2005 installed on your system. If you do not, visit the link below for installation instructions:

<http://support.microsoft.com/kb/303747>

Please consider that this guide cannot cover the complex topic of administering a database server. We strongly recommend to consult the documentation of the database product on securing and administering the database product of your choice.

## CREATING THE DATABASE & TABLES

Once SQL Server 2005 is installed, we can proceed with creating a database for ORF, which will store the **Auto Sender Whitelist**, **Greylisting**, **Honeypot** and **Directory Harvest Attack (DHA)** databases. To ease things, we provide an SQL script shipped with this guide (*sql-orf.sql*), which will create the database (called “*ORF*”) along with a database owner user (called “*orfuser*”) with a default password (“*ChangeThisPwd#1*”).

NOTE: if you already have some of the tables created, please run the individual SQL scripts for creating tables for the new features only. Features and scripts:

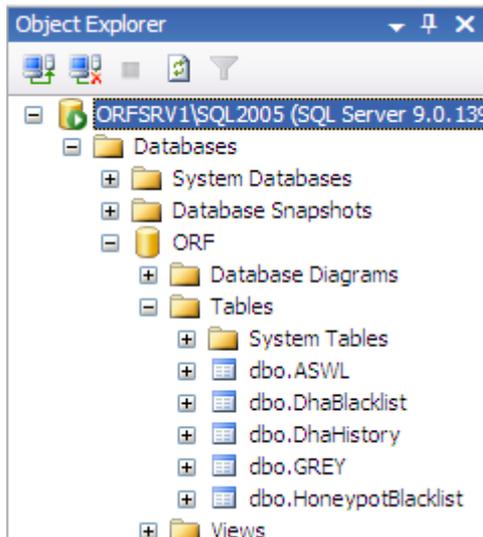
- Auto Sender Whitelist: *sql-aswl.sql*
- DHA Protection Test: *sql-dha.sql*
- Greylisting: *sql-grey.sql*
- Honeypot Test: *sql-honeypot.sql*

If the database is already set up, you can skip the instructions for creating a user, changing the password, etc.

1. Start the **SQL Server Management Studio** tool.
2. Connect to the SQL Server instance.
3. Open the SQL script file for the ORF database (*sql-orf.sql*)  
(*File | Open | File...* in the main menu or *Ctrl+O*)
4. Select the SQL instance object in the *Object Explorer* on the left.

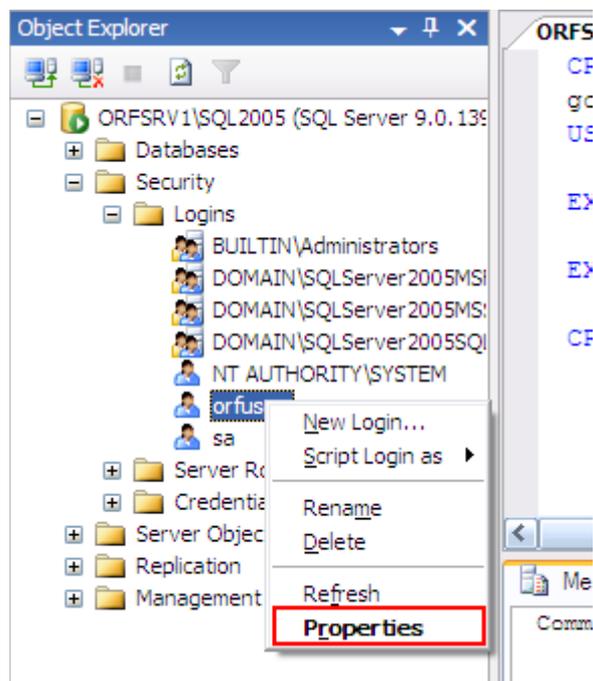
- Right click anywhere in the script and choose **Execute**. You should get a “*Command(s) completed successfully.*” message.

The tables should be indicated now in “**Tables**” on the left—if not, try to *Refresh* the view.



## CHANGING THE PASSWORD

- Right click *orfuser* in *Security \ Logins* and select *Properties*

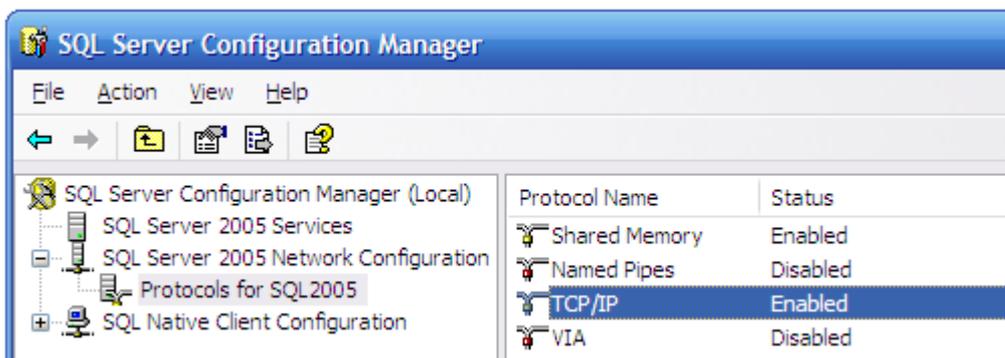


1. Change the password
2. Click OK

## ADDITIONAL SETTINGS

Follow the steps below to enable and configure the network protocol required for the connection.

1. Start the **SQL Configuration Manager** from the "Microsoft SQL Server 2005" Program menu.
2. Select the "**Protocols for SQL2005**" node. Make sure that TCP/IP is enabled. If not, right click on "TCP/IP" and click **Enable**.



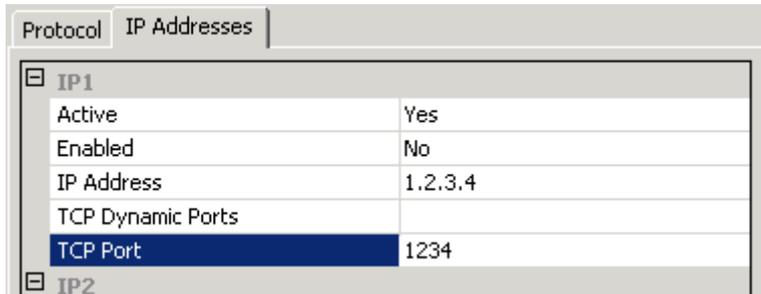
3. Restart the **SQL Service**

### Configuring the SQL server port

Follow the steps below to configure the SQL Server to listen on a fixed port.

1. Start the **SQL Configuration Manager** from the "Microsoft SQL Server" Program menu.
2. Select the "**Protocols for SQL2005**" node.
3. Right click on "TCP/IP" and select **Properties**.
4. Select the "**IP Addresses**" tab.

5. Delete “0” from “TCP Dynamic Ports” for the network interface you use to connect to the database (if it is blank, dynamic ports will be disabled).



6. Enter a port number to use in “TCP Port” (in this example, we will use 1234). Also make sure that the network interface you will use to connect is in “Enabled” state.
7. Enable the network interface (you want to connect to) by setting Enabled to Yes.
8. Click Apply and OK.
9. Restart the SQL Service.

Note that setting a fixed port is not strictly required. You can also use the default dynamic port settings. In that case, the SQL Server Browser Service must be running and the port number must be left out from the connection string.

## CONNECTING ORF TO THE DATABASES

ORF connects to the database using a *connection string* that specifies the connection parameters for ORF.

### Connecting the Auto sender whitelist database

1. Start the ORF Administration Tool.
2. In *Whitelists / Auto Sender Whitelist* click the **Database** button.
3. Select the **External SQL Server** radio button.



4. Click the **Configure** button.
5. Enter the connection string as described below:

```
Provider=SQLNCLI;  
Data Source=<SERVERIP>,<PORT>;  
Database=<DBNAME>;  
User Id=<USERNAME>;  
Password=<PASSWORD>;  
DataTypeCompatibility=80;
```

**NOTES:** If you are connecting to a local SQL instance (i.e. ORF and SQL run on the same server) or from the same domain, you can use “*Server=<SERVERNAME>\<INSTANCENAME>;*” instead of “*Data Source=<SERVERIP>,<PORT>;*”. For remote connections, the latter will probably work better.

According to the instance name and port we used in this example, the connection string looks like this (connecting to a local instance):

```
Provider=SQLNCLI;  
Server=ORFSRV\SQL2005;1234;  
Database=ORF;  
User Id=orfuser;  
Password= NewPassword;  
DataTypeCompatibility=80;
```

6. Finally, test the connection string by clicking the *Test Connection* button. You should get a message: “*Connection test was successful*”.

## Connecting the Greylisting database

1. Start the ORF Administration Tool.
2. Select *Blacklists / Greylisting* and click the **Database** button.

Continue as in the case of the Auto Sender Whitelist setup steps 3-6.

## Connecting the DHA database

1. Start the **ORF Administration Tool**.
2. In *Blacklists / DHA Protection Test* click on the **Database** button.

Continue as in the case of the Auto Sender Whitelist setup steps 3-6.

## Connecting the Honeypot database

1. Start the **ORF Administration Tool**.
2. *Blacklists / Honeypot Test* click on the **Database** button.

Continue as in the case of the Auto Sender Whitelist setup steps 3-6.

## CONNECTING ORF TO A REMOTE DATABASE

In case your SQL Server is installed on a separate server or you would like to configure multiple ORF instances to share the Auto Sender Whitelist and Greylisting databases, you should install the **Microsoft SQL Server Native Client** tool in order to connect to the remote database server. You can download this tool from [here](#). (For **64-bit versions** of this tool, please visit [this site](#).) The connection method is the same for the remote connections as described above.

## TROUBLESHOOTING

**PROBLEM:** SQL Server fails to start after the installation.

**SOLUTION:** If you are in a workgroup instead of a domain, please make sure you installed SQL as “**Local System**” instead of “**Network Service**” or “**Local Service**” (thru the “**Advanced options**” check-box).

**PROBLEM:** I cannot connect to the database remotely.

**SOLUTION:**

1. Make sure that the SQL Service is running.
2. Make sure that TCP/IP is enabled for the network interface you try to connect with.
3. Make sure that your firewall does not block the connection.
4. Try with “Named pipes” enabled (in the “Protocols for SQLExpress” node).
5. Connect to the database server locally using sqlcmd (from command line, e.g. **sqlcmd -s <server>\SQLEXPRESS**) and run the following sequence of commands to allow remote connections:

```
sp_configure 'remote admin connections',1  
go  
reconfigure  
go
```

## TECHNICAL SUPPORT

Please find our technical support contact options on our website at:

<http://vamssoft.com/r?o-support>