



# Installation and Configuration

**Documentation Version 1.3a, 12/12/2010**

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# Introduction

MegaLog consists of three windows services, one web application and use one SQL database.

Please read the document "System Requirements MegaLog.doc" to prepare your environment for these parts.

Additionally we documented information to prepare your

- IIS Service
- SQL Server

on the following chapters. Please go thru it, it will perhaps save your time during installation.

At the end of this document we summarized several common problems. In general this are not MegaLog issues, but you have to resolve it in your operating system before everything fits together,



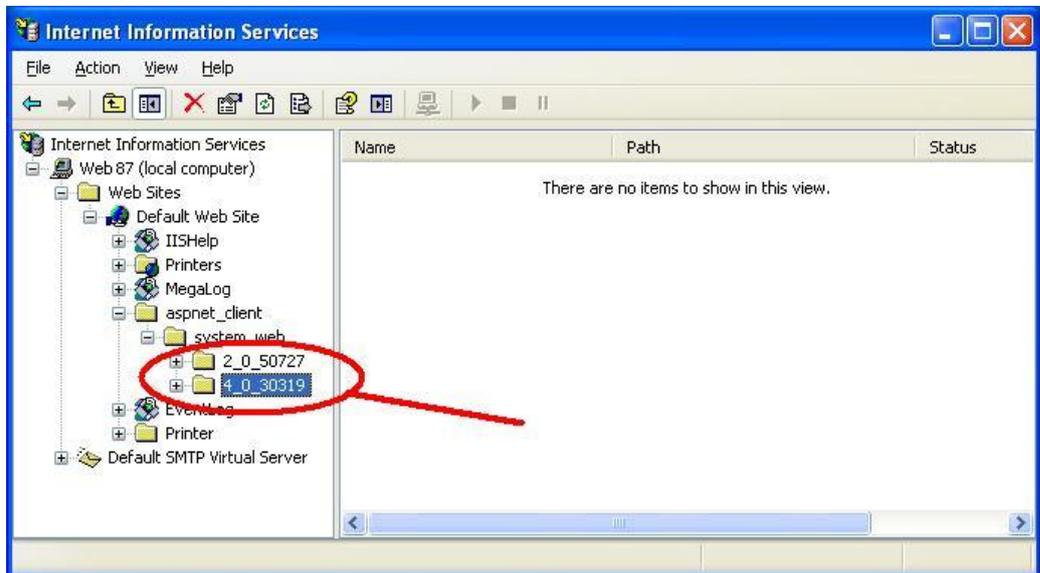
# IIS Preparation

## Windows XP/ Windows Server 2003

- If you did install IIS after the .Net framework you have to prepare your IIS installation for "aspnet\_clients" manually. Microsoft provides the "aspnet\_regiis.exe" to do this:

```
%WINDIR%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -i
```

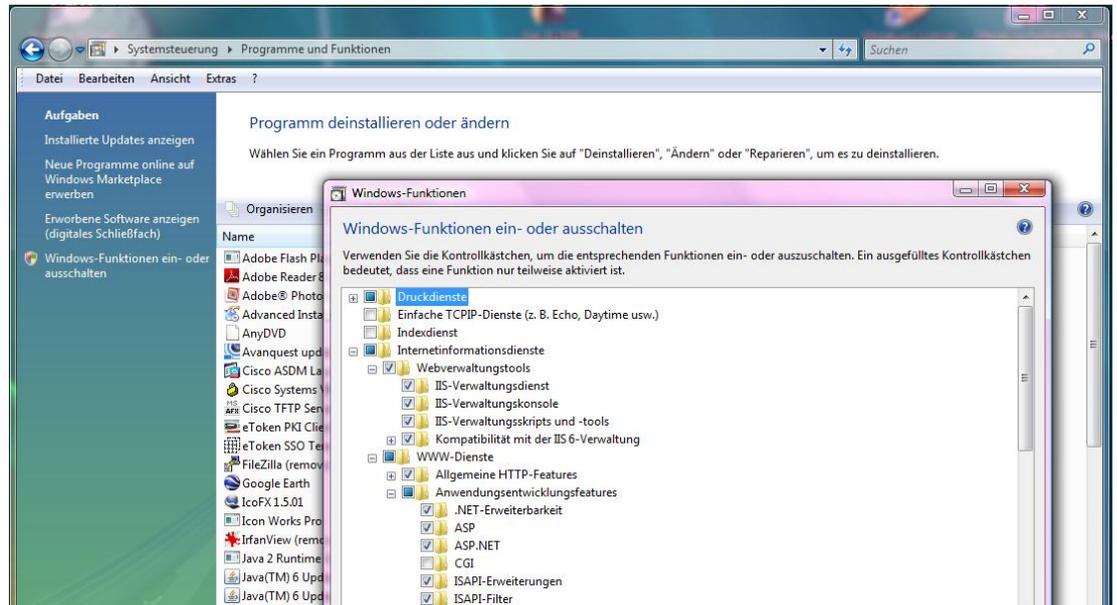
When you have prepared your IIS correctly your configuration should look like in this picture:





## Windows Vista / Windows 7

Prepare your IIS installation for "aspnet\_clients". Open "Control Panel" / "Software" and then "Windows Components". Install all components of .NET, ASP and ASP.NET under the section WWW-Services.

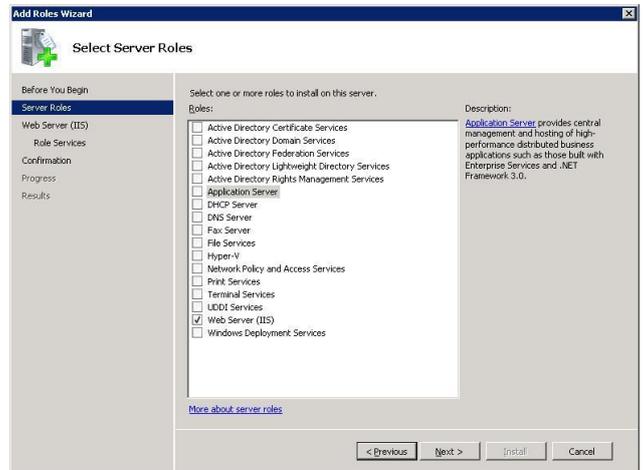




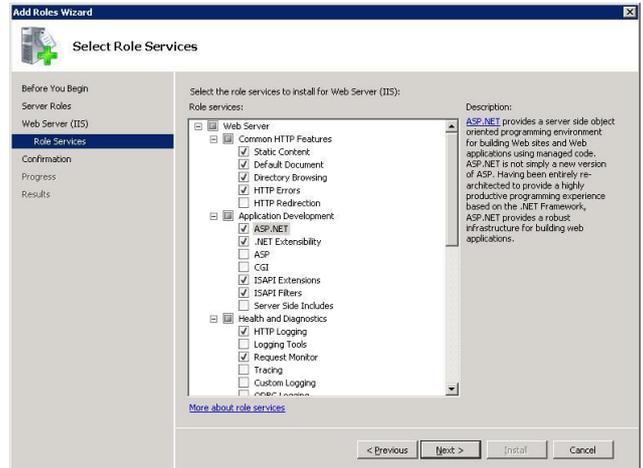
### Windows Server 2008

Start the server manager and start the wizard to add a server role.

Choose "Web Server (IIS) role and press "Next".



Select ASP.NET and "IIS Management Compatibility". This is vital for the installer process only.

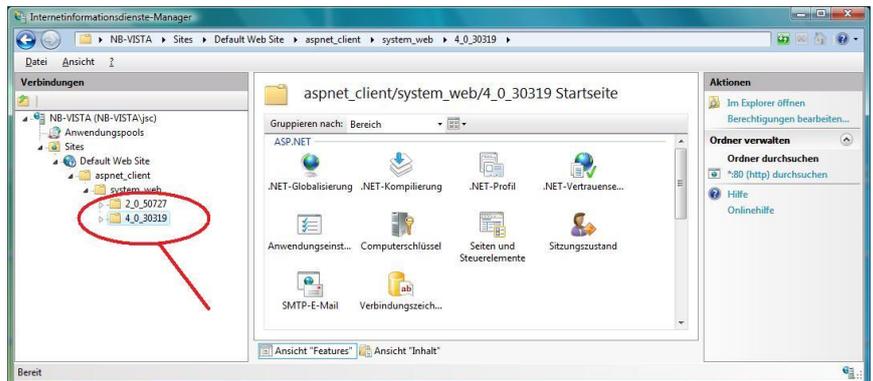


press "Next".

After the wizard has finished its starts the IIS-Manager.

If you cannot see the 4\_0\_30319 entry you have to prepare your IIS installation for "aspnet\_clients" manually. Microsoft

provides the "aspnet\_regiis.exe" to do this:

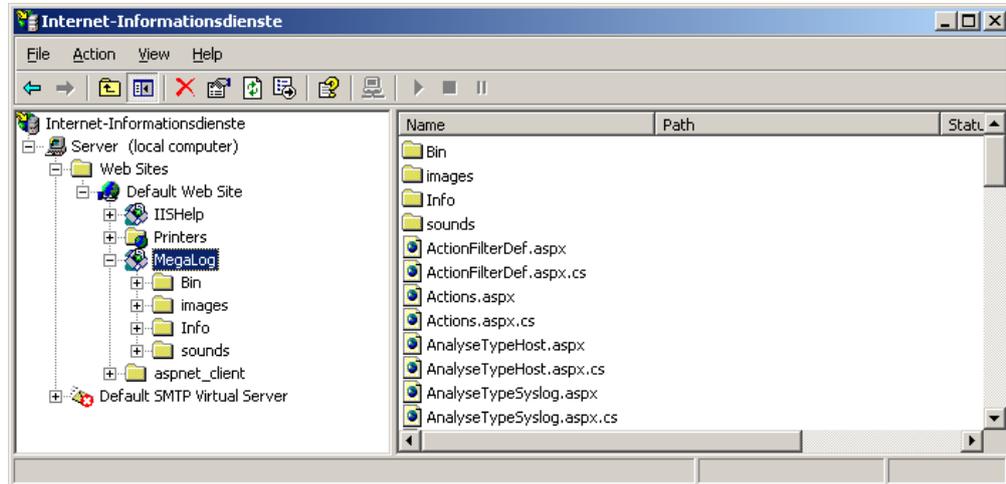


```
%WINDIR%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -i
```

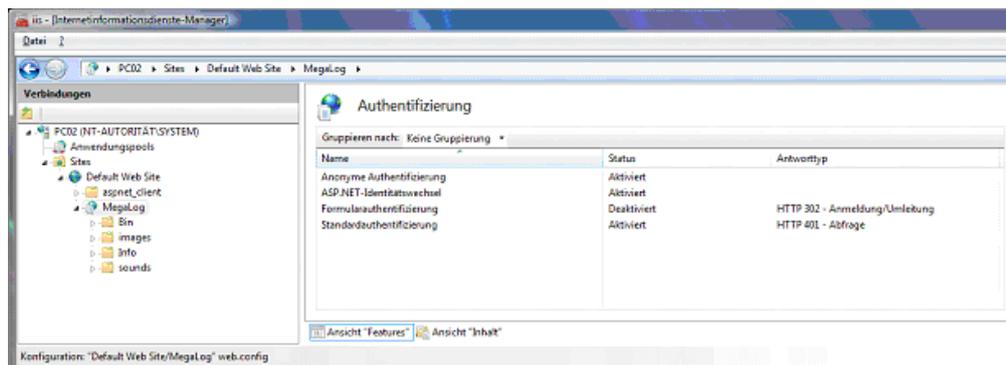


## Check settings after MegaLog TP installation

Open "Internet Information Service Manager" and search for MegaLog web application.



Windows XP / Windows Server 2003



Windows Vista / Windows 7

- Check if the MegaLog application's properties .Net 4.x is selected
- Check if the MegaLog application's authentication is set as expected
- Check if the MegaLog application's default page is "Default.aspx"



# SQL Database Preparation

## Short Description

MegaLog Database needs to be installed on a SQL service. You can choose between MSSQL ([Express] 2003/2008) and MySQL (newer than V 5.1).

Additionally install a SQL management tool e.g. "Microsoft SQL Server Management Studio Express" or "MySQL Workbench 5.2 CE".

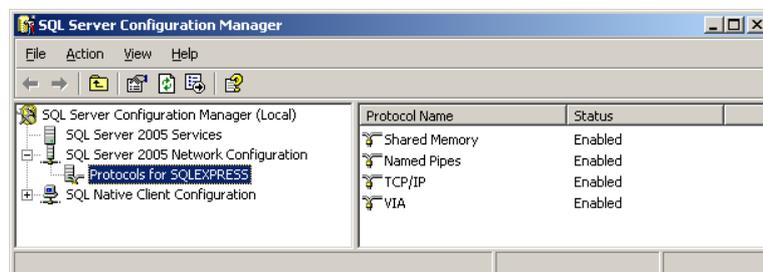
## System Requirements

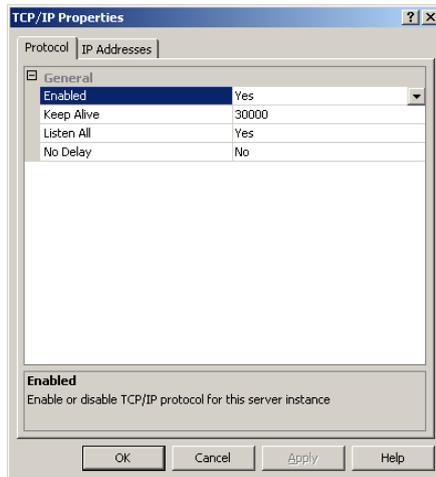
The system requirements for MegaLog Database is described in "System Requirements MegaLog.pdf"

## MS SQL [Express] Server 2005/2008

If you decided to use the free MS SQL Express 2005/2008 Server, then you have to check if the server service is listening on TCP port 1433. Per default SQL Express 2005/2008 uses only "Shared Memory" to communicate.

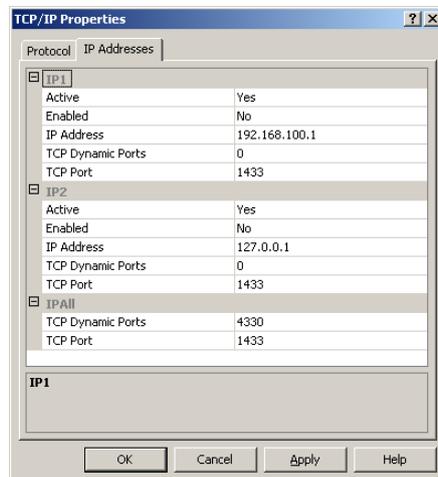
First open the "SQL Server Configuration manager". This application will be installed during the MS SQL Express installation. Then navigate to "SQL Server 2005/2008 Network Configuration" / "Protocols for SQLEXPRESS".





There change the settings for "Named Pipes", "TCP/IP" and "VIA" to "Enabled" and open the properties for the TCP/IP settings.

It should look like on the picture on the left side.



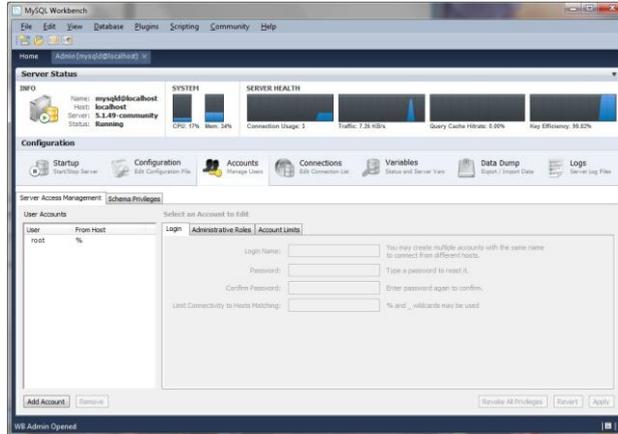
Important: Please have a look as well under "IP Addresses". Insert there for all wanted IP addresses the TCP port 1433.

After applying the setting you have to restart the SQL server service.



## MySQL

If you decided to use the free MySQL server, then you have to check if the server service is listening on TCP port 3306. If the MegaLog installation is not on the same server as the MySQL service you have to allow the user "root" to be connected from other workstations. At least one user with sufficient rights to create a database is needed.



Open the "MySQL Workbench 5.2 CE" navigate to user accounts and double-check user root if "from host" is set to "%".

To finish the MySQL database preparation you have to install the "mysql-connector-net-6.3.6.zip". This is needed on the server were TM, TP or DBM will be installed.



# MegaLog Installation

## Short Description

MegaLog Syslog Suite needs three Windows services, a SQL database and a IIS. The installation can be split into steps:

- [SQL Server Preparation](#)
- Database Maintenance Service (DBM)
- Main Service (TM)
- Web Frontend (TP) (see [IIS Preparation](#))
- Syslog Agent Service (TLPP)
- Syslog Tools (optional)
- MegaLog Documentation (optional)

## System Requirements

The system requirements for MegaLog are described in "System Requirements MegaLog.pdf"

In short words:

- running MS SQL Server ([SQL Server Preparation](#))
- .NET 4.0
- IIS ([IIS Preparation](#))

## Before You Begin

1. You need administrative rights to install these services.
2. IIS needs to be installed (In case of Windows Vista/7 and 2008: "IIS Management Compatibility modules" are needed for the install process!).
3. SQL server must be up and running
  - a) listening on TCP port 1433 in case of MSSQL
  - b) listening on TCP port 3306 in case of MySQL



## Start MegaLog Installation

First please decide between MySQL or MSSQL and the installation procedure you need.

### Easy Installer:

Please download the installer "MegaLogSuite.msi" from <http://www.secureip.de>, store it on a temporary folder and start it.

The "**Easy Installer**" expect to install all services and modules to a single machine. The SQL database can be on the same or on another server.

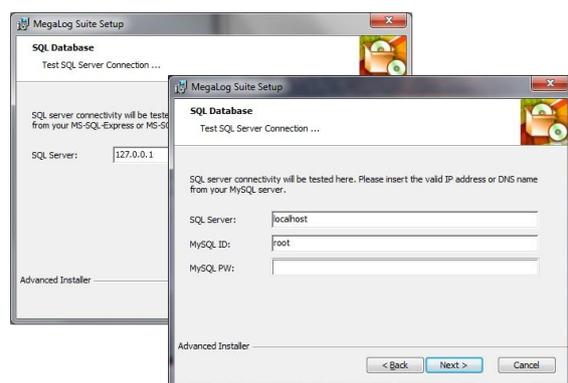
### Easy Installer Installation Process

After starting the Easy Installer we will welcome you.



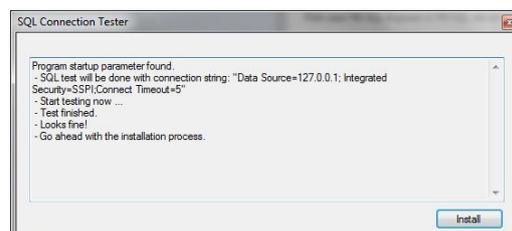
Please insert here the IP address or DNS name of your SQL server. In case of MySQL provide a valid SQL user id/pw with sufficient rights to install a database.

After pressing "Next" this the installer tries to contact the SQL database.



In case the SQL connection test was successful you will see this message.

By pressing "Install" you can go ahead with the installation.



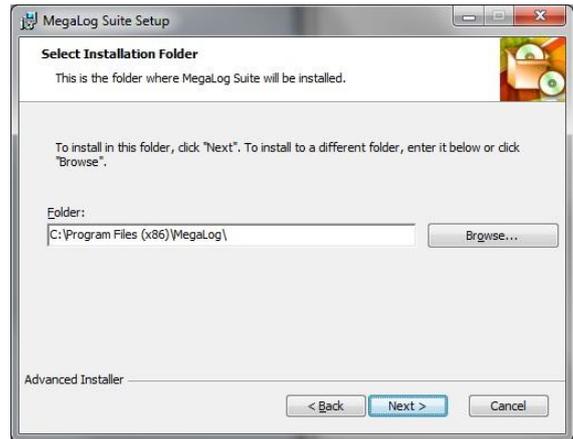


In case the SQL connection test fails you will see this message (or similar).

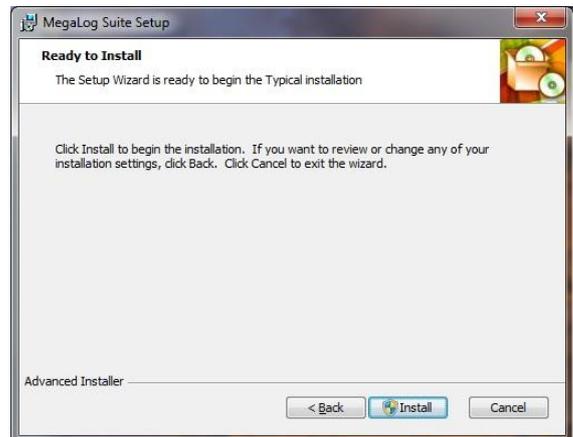


The installer process needs to be cancelled and restarted again.

Here you can insert the installation directory, then press "Next".



The installer is now ready to install all three services, documentation, tools and the presentation module. The database will be created automatically after the first start of service DBMaintenance (~ after one minute).

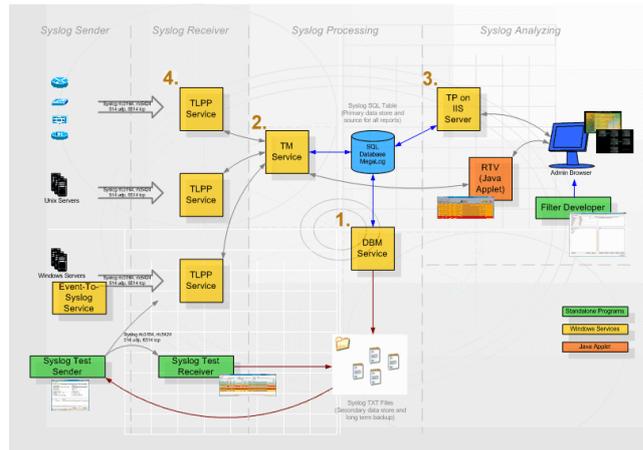




### Expert Installer:

Please download the installer "MegaLogExpertInstaller.exe" from <http://www.secureip.de>, store it on a temporary folder and start it.

The ZIP archive will unpack all installers and starts "**Install.hta**". The following "MegaLog Installer" should start:



With the "**Expert Installer**" you can install every single module separately. You should have some experience with the MegaLog configuration files and the concept behind. You can choose your own installation order, but the best practice installation order is show.

Click on the module(s) to start the installer process(es).

### Expert Installer Installation Process

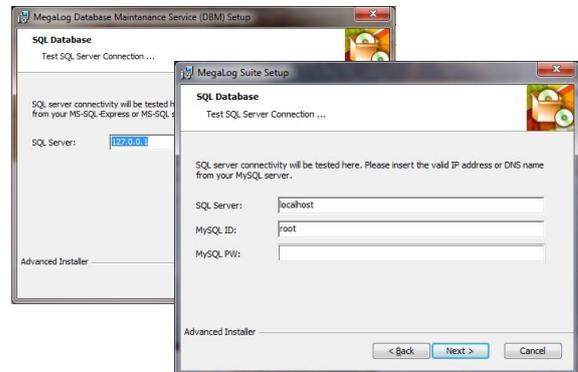
After starting one of the Expert Installer modules we will welcome you.



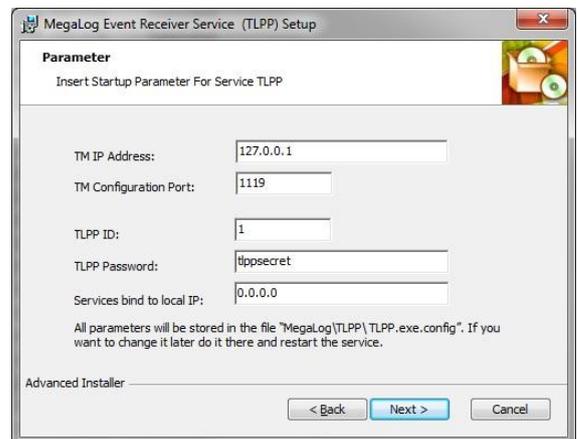


Please insert here the IP address or DNS name of your SQL server. In case of MySQL provide a valid SQL user id/pw with sufficient rights to install a database.

After pressing "Next" this the installer tries to contact the SQL database



In case of the service TLPP you have to insert several parameters more:

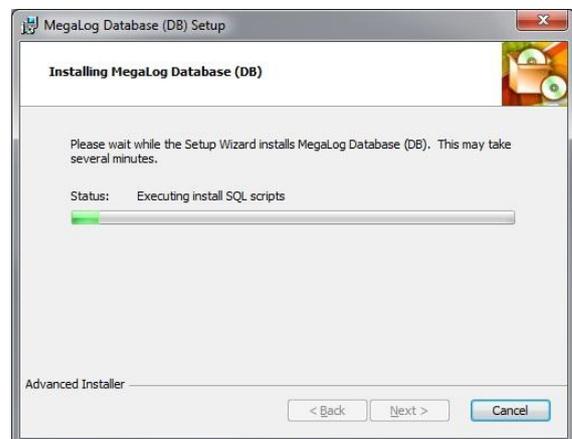


For all installation modules you have then to decide the installation directories.

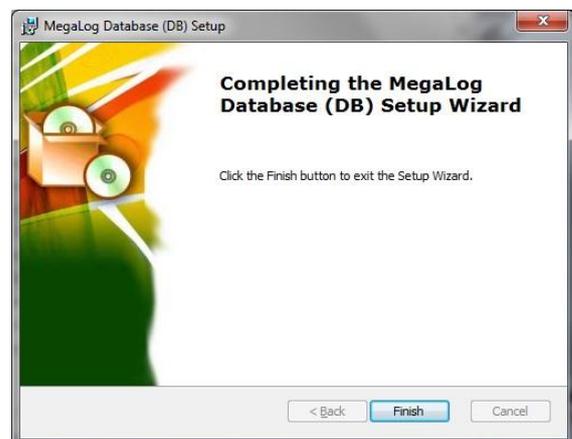




Here press "Install" to start with the installation of a single module.



Here you can close the single installation process and start a other one from the "Expert Installer".





# Manual Configuration (optional)

## MegaLog Main (TM)

The MegaLog TM configuration file contains only two parameters and is stored in the file "TMService.exe.config". This configuration file is in XML format and needs to be in the same directory as the service executable "TMService.exe".

All other configuration of this service will be done with the web service MegaLog TP (Presentation) in your favourite browser (Menu "Config", Icon "TM-Config"):

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="MegaLogConnectionString" value="Data Source=127.0.0.1; Integrated Security=true;Initial Catalog=MegaLog;Connect Timeout=150"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```

**Table 1:** Example shows configuration for service TM with MSSQL database on the same machine. Database and network services trust each other using Microsoft integrated security feature.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="MegaLogConnectionString" value="Data Source192.168.199.199; Integrated Security=false;User ID=mgu:tm;Password=sqlsecrettm;Initial Catalog=MegaLog;Connect Timeout=150"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```

**Table 2:** Example shows configuration for service TM with MSSQL database on different machines. TM uses a database-user-id and password to authenticate to the MegaLog database.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="MegaLogConnectionString" value="Server=192.168.199.199;Database=MegaLog;Uid=mgu_tm; Pwd=sqlsecrettm;Connect Timeout=150"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```

**Table 3:** Example shows configuration for service TM with MySQL database on different machines. TM uses a database-user-id and password to authenticate to the MegaLog database.



If you change the configuration xml-file you have to restart the service to apply the new settings.

## **Registry Settings**

The MegaLog TM service needs "zero" registry settings to run! Of course there are service depended registry settings for Windows maintaining the service thru control panel.

If you enabled debug mode, you will find under HKLM\Software\MegaLog\TM several registry entries for troubleshooting. These entries are only copies from the configuration stored in the MegaLog DB - SQL database.

## **Parameter key=" MegaLogConnectionString"**

The connection string is the most important configuration part. The service MegaLog TM needs a connection to MegaLog DB.

The MegaLog modules TM, TP and DBM needs identical connection strings (Except user id and password).

## **Parameter key="Debug"**

The debug parameter are descript for all services in the Appendix 1 in this document.



### MegaLog Presentation (TP)

The configuration is stored in the root of the MegaLog TP directory in the file "Web.Config". Search for the parameter "connectionStrings" and change it to your connection string.

The MegaLog modules TM, TP and DBM needs identical connection strings (Except user id and password).

```
...
<connectionStrings>
  <add name="MegaLogDB" connectionString="Server=127.0.0.1;Database=MegaLog;Uid=mgu_TP;
    Pwd=sqlsecrettp;Connect Timeout=150;" providerName="MySQL.Data.MySqlClient" />
</connectionStrings>

<system.web>
  <compilation debug="false" defaultLanguage="c#" targetFramework="4.0">
  ...
```

**Table 4:** Example shows configuration for TM with MySQL database on the same machines. TP uses a database-user-id and password to authenticate to the MegaLog database.

```
...
<connectionStrings>
  <add name="MegaLogDB" connectionString="Data Source=127.0.0.1;Initial Catalog=MegaLog;Integrated
    Security=false;User ID=mgu_TP;Password=sqlsecrettp;Connect Timeout=150"
    providerName="System.Data.SqlClient"/>
</connectionStrings>

<system.web>
  <compilation debug="false" defaultLanguage="c#" targetFramework="4.0">
  ...
```

**Table 5:** Example shows configuration for TM with MSSQL database on the same machines. TP uses a database-user-id and password to authenticate to the MegaLog database.

You can reach the web application (TP) of MegaLog with the URL <http://localhost/MegaLog> .



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## MegaLog Event Receiver (TLPP)

The MegaLog TLPP configuration file contains 6 parameters and is stored in the file "TLPPService.exe.config". This configuration file is in XML format and needs to be in the same directory as the service executable "TLPPService.exe". The service needs no access to the database, it communicates only with the service module TM.

All other configuration of this service will be done with the web service MegaLog TP (Presentation) in your favourite browser (Menu "Config", Icon "TLPP-Agent"):

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="TMDestinationIP" value="127.0.0.1"/>
    <add key="TMConfigPort" value="1119"/>
    <add key="TLPPId" value="1"/>
    <add key="TLPPCommunicationPassword" value="tlppsecret"/>
    <add key="InterfaceBindTo" value="0.0.0.0"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```

**Table 6:** Example shows configuration for TLPP No.1.

If you change the configuration xml-file you have to restart the service to apply the new settings.



### **Registry Settings**

The MegaLog TLPP service needs "zero" registry settings to run! Of course there are service depended registry settings for Windows maintaining the service thru control panel.

If you enabled debug mode, you will find under HKLM\Software\MegaLog\TLPP several registry entries for troubleshooting. These entries are only copies from the configuration stored in the MegaLog DB - SQL database.

### **Parameter key="TMDestinationIP"**

Please insert here the IP address where the MegaLog TM module is listening for requests. If MegaLog TLPP and MegaLog TM run on the same machine insert "127.0.0.1" there.

### **Parameter key="TMConfigPort"**

Per default MegaLog TM config port is 1119, tcp. If you did not change it insert here "1119".

### **Parameter key="TLPPId"**

Every MegaLog TLPP needs its unique number. The number "1" is already preconfigured (listening to interfaces (see InterfaceBindTo) at port 514 (syslog), protocol udp).

If you want to add more TLPPs, insert it first in MegaLog TP, Menu "Config", Icon "Agents" and then in the config file.

### **Parameter key="TLPPCommunicationPassword"**

The module MegaLog TLPP needs this password to connect to MegaLog TM module and retrieves its configuration. The default password is "tlppsecret" and can be changed in MegaLog TP, Menu "Config", Icon "Agents".

When you change the password in MegaLog TM you have to change it as well here in the configuration file. Please don't forget to restart the service immediately.

### **Parameter key="InterfaceBindTo"**

With this parameter you can set where MegaLog TLPP starts to listen. The default value is "0.0.0.0" then the service is listening to all local IP addresses.

If you plan to in run several TLPPs (listening on the same port e.g. 514, udp) on one machine then add more IP addresses to this machine and distinguish exactly what TLPP should listen where.



### Parameter key="Debug"

The debug parameter are descript for all services in the Appendix 1 in this document.

## MegaLog DB Maintenance (DBM)

The MegaLog DBM configuration file contains only two parameters and is stored in the file "DBMaintenance.exe.config". This configuration file is in XML format and needs to be in the same directory as the service executable "DBMService.exe".

All other configuration of this service will be done with the web service MegaLog TP (Presentation) in your favourite browser (Menu "Config", Icon "DB-Config"):

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="MegaLogConnectionString" value="Data Source=127.0.0.1; Integrated Security=true;Initial Catalog=MegaLog"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```

**Table 7:** Example shows configuration for service DBM with MSSQL database on the same machine. Database and network services trust each other using Microsoft integrated security feature.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="MegaLogConnectionString" value="Data Source192.168.199.199; Integrated Security=false;User ID=mgu_dbm;Password=sqlsecretdbm;Initial Catalog=MegaLog"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```

**Table 8:** Example shows configuration for service DBM with MSSQL database on different machines. DBM uses a database-user-id and password to authenticate to the MegaLog database.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<configuration>
  <appSettings>
    <add key="MegaLogConnectionString" value=" Server=192.168.199.199;Database=MegaLog;Uid=mgu_dbm; Pwd=sqlsecrettm;Connect Timeout=150"/>
    <add key="Debug" value="45"/>
  </appSettings>
</configuration>
```



---

**Table 9:** Example shows configuration for service DBM with MySQL database on different machines. DBM uses a database-user-id and password to authenticate to the MegaLog database.

If you change the configuration xml-file you have to restart the service to apply the new settings.

### **Registry Settings**

The MegaLog DBM service needs "zero" registry settings to run! Of course there are service depended registry settings for Windows maintaining the service thru control panel.

If you enabled debug mode, you will find under HKLM\Software\MegaLog\DBMaintenance several registry entries for troubleshooting. These entries are only copies from the configuration stored in the MegaLog DB - sql database.

### **Parameter key=" MegaLogConnectionString"**

The connection string is the most important configuration part. The service MegaLog DBM needs a connection to MegaLog DB.

The MegaLog modules TM, TP and DBM should have identical connection strings. If you want to have enhanced security you can define several SQL users with minimum access rights. For help to set the correct access rights please read "User Manual MegaLog / Access Security / SQL Database".

### **Parameter key=" Debug"**

The debug parameter are descript for all services in the Appendix 1 in this document.

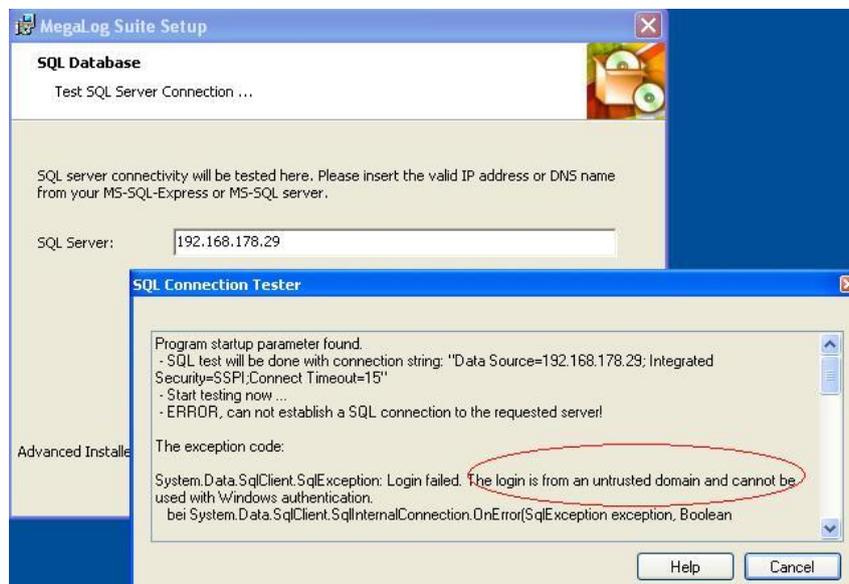


# Common Installation Problems

## Server not member of same domain

If the installation of MegaLog should be on one server/workstation and the MSSQL is on another server, then both server/workstation needs to be in one domain. The approach to solve this installation problem is to add the designated MegaLog server to the domain and restart the installation.

In case this is not a option, install first MegaLog with a local MSSQL database. After the basic installation is finished to can change the settings in TP, DBM and TM to point to the new MSSQL server. Please change the connection strings from "Integrated Security = SSPI" to "Integrated Security = false" and add a valid user ID and password for the MSSQL server.



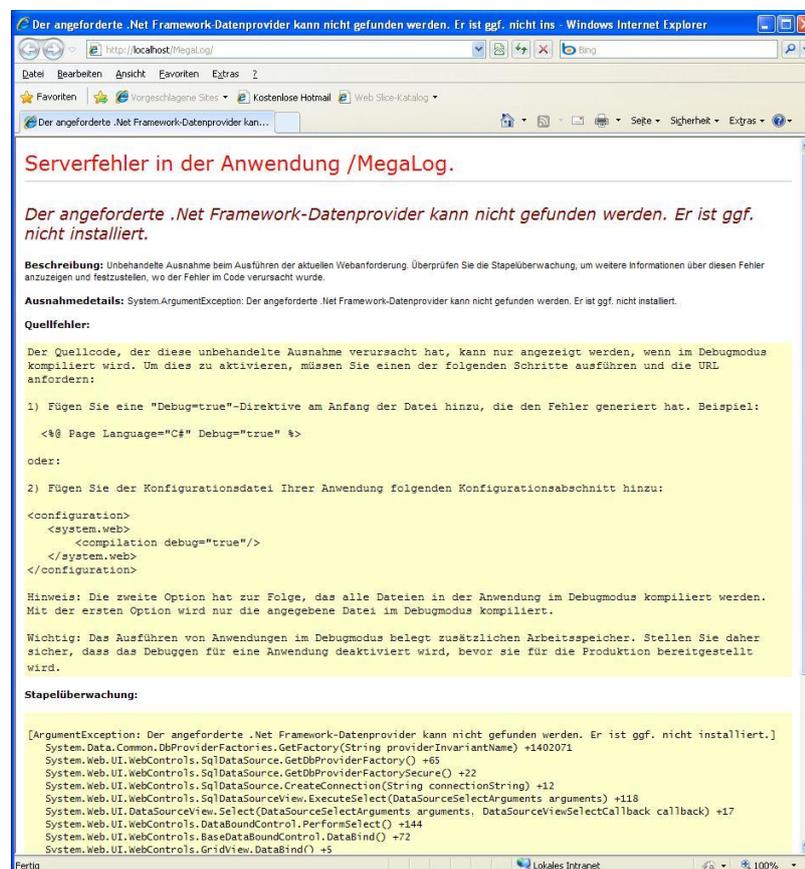


## MySQL Provider not installed or wrong version

After you finished a MegaLog installation running together with a MySQL server and you forgot to install the .Net database connector for MySQL "mysql-connector-net-6.3.6", most likely you will see an error after trying to open the MegaLog web-page TP (see picture below).

To solve this download and install the .Net database connector "mysql-connector-net-6.3.6" on the server/workstation where TP, TM and DBM is installed.

Please **do not** install a other version then 6.3.4 of the connector! In the services TM and DBM has compiler references to this dedicated MySQL connector type. In case you cannot use the requested version please get in contact with our support.

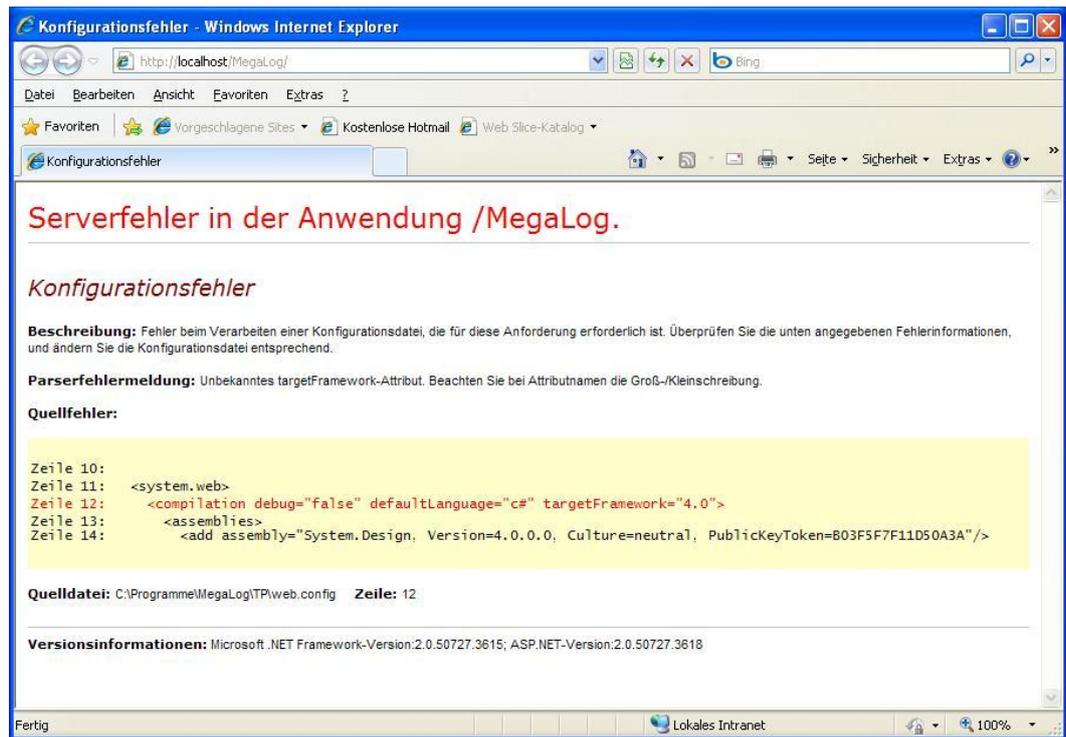




## .NET not register in IIS

In many cases Microsoft .Net 4.0 don't register themselves in IIS. Most likely you will see then an error after trying to open the MegaLog web-page TP (see picture below).

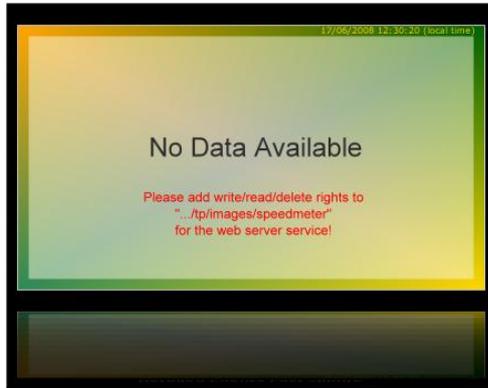
To solve this please open a administrative CMD windows, navigate to %WINDOR%\ Microsoft.NET\Framework\v4.0.30319 and start the program " aspnet\_regiis.exe". This will do the needed registration.





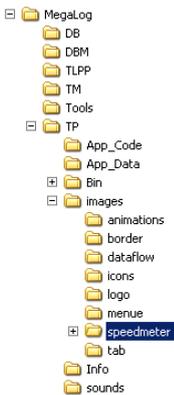
### Directory access rights for service IIS service user

After the msi-installation you have to grant access rights to the directory .../TP/images/speedmeter for the service user of your local IIS. If not you will see the statistics like this:



**Background:** Some graphics on the MegaLog TP web pages are dynamically created during runtime. The IIS service needs write access to store the graphics into this directory. Because windows use for every language and version different user names as service user for IIS, it is not possible to script this installation step into the installer process.

Add full access (read / write / delete) for the service user of IIS to the directory .../MegaLog/TP/images/speedmeter.



Here some examples for the IIS service user:

- Windows XP IUSR\_”pcname”
- Windows Vista IUSR
- Windows 7 IUSR
- Windows 2003 Server nt\_authority\Network Service
- Windows 2008 Server nt\_authority\Network Service

**Hint 1:** If you cannot find the correct user, add first Group “Everyone” to this directory (and all subdirectories), then create some statistics on the web page in TP. After this you are able to see the owner of this file. Last add this user only and remove “Everyone”.

**Hint 2:** Try first to connect to the new installed MegaLog TP web page on the local host (<http://localhost/MegaLog>). After this try it from another workstation. If this doesn’t work please have a look to your firewall settings on the machine were you installed MegaLog TP.



# Appendix

## Appendix 1: Debug Value

The debug parameter contains two parameter in one number. This is used in the services TM, TLPP and DBM.

### A. logging to the local event log file: **bits 0..3**

- 0 - 1 represents event log severity "Information"
- 2 - 3 represents event log severity "Warning"
- 4 - 7 represents event log severity "Error"

### B. logging to the MegaLog error database: **bits 3..5**

- 7 represents log severity "Debug"
- 6 represents log severity "Info"
- 5 represents log severity "Notice"
- 4 represents log severity "Warning"
- 3 represents log severity "Error"
- 2 represents log severity "Critical"
- 1 represents log severity "Alert"
- 0 represents log severity "Emergency"

The default value is 45.

### Examples:

- 0 = 00 000 000 = no logging at all
- 45 = 00 101 101 = up to warning will be sent to (A) and (B)
- 63 = 00 111 111 = up to debug will be sent to (A) and (B)
- 7 = 00 000 111 = up to debug will be sent to (A) only
- 56 = 00 111 000 = up to debug will be sent to (B) only