

WcfStormHost User Guide

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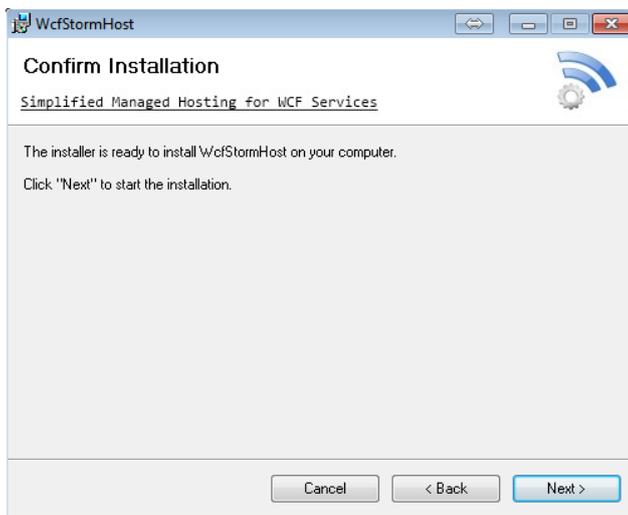
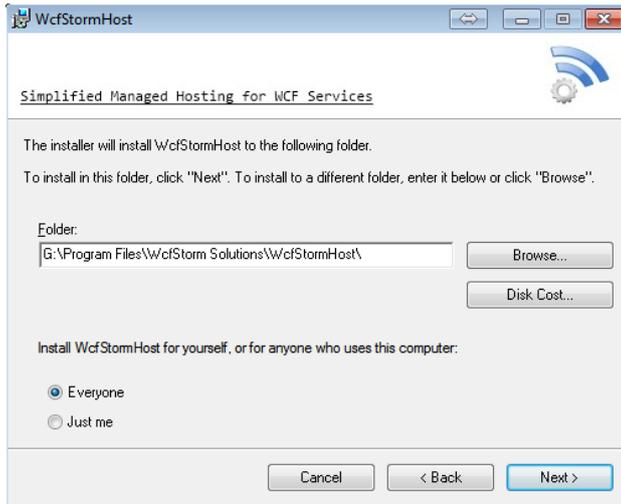
1 Installation Steps

1. Download the latest release from <http://www.wcfstorm.com>
2. Extract the zip file. It will contain 2 folders, x86 and x64. X86 is for 32-bit platforms, while x64 is for 64-bit platforms. Each folder contains the installers for its targeted platform.

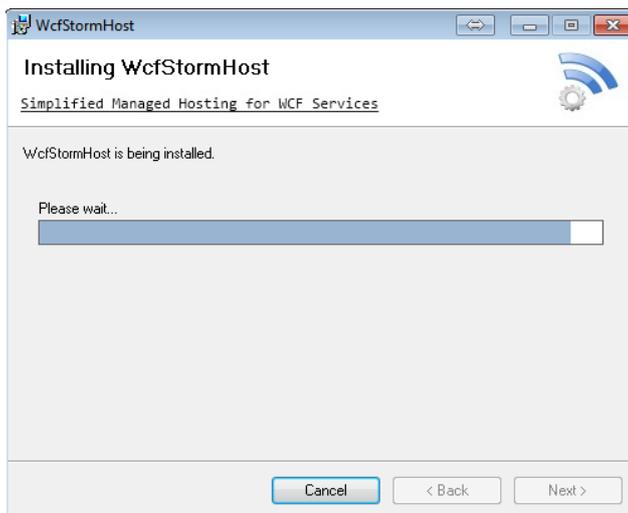
Choose the one appropriate for your system.

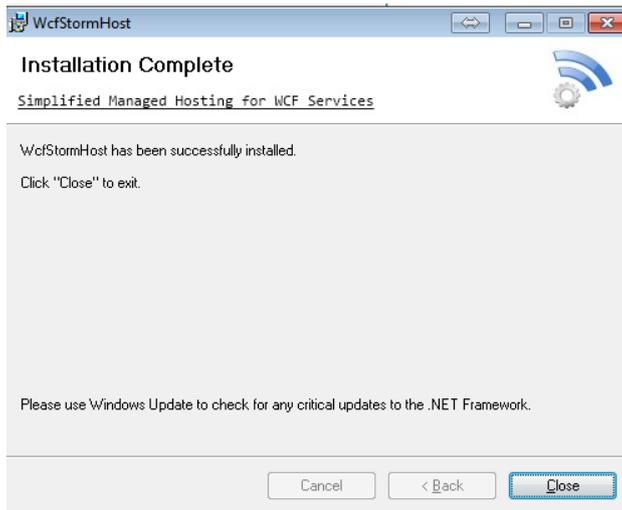
3. If you have .NET 3.5 SP1 (or higher) installed, run *WcfStormHostSetup.msi*. If you're unsure, run *setup.exe*. Setup.exe will need a working internet connection to download any prerequisites.
4. Follow the installation wizard until completion



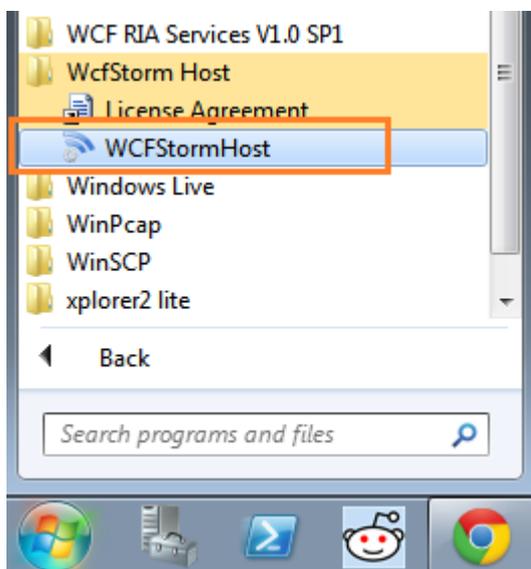


Note : On Windows Vista, Windows 7, Windows Server 2008 (and R2), Click "Yes" on the UAC prompt to continue the installation.





5. Click Start → WcfStorm Host → WcfStormHost to run the application



2 Quick Start

2.1 Hosting a WCF Service

Before Starting:

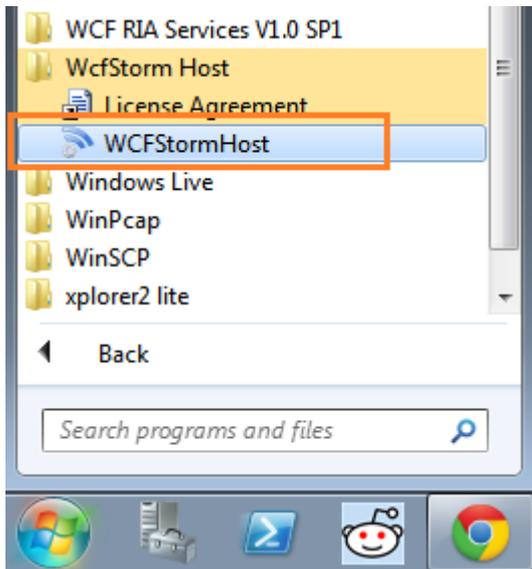
Before you can host a service, you must first have the WCF service assemblies to host. This link (<http://msdn.microsoft.com/en-us/library/bb386386.aspx>) describes the steps to create a WCF Service using Visual Studio.

In this guide, we'll be hosting 2 WCF Services (*MyTestSvc and MyTestSvc2*)

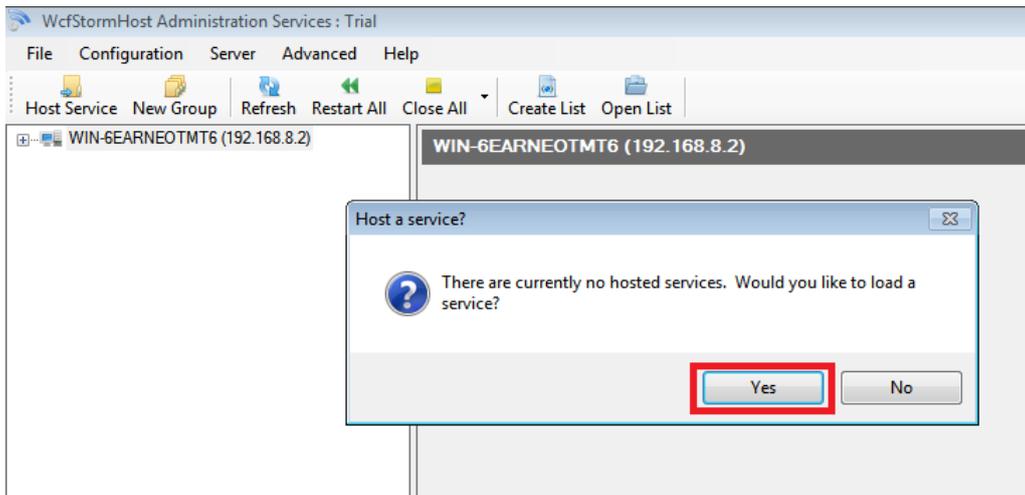
```
namespace WcfService
{
    [ServiceContract]
    public interface ITestSvc...
    [ServiceContract]
    public interface ITestSvc2...
    public class MyTestSvc2 : ITestSvc2...
    public class MyTestSvc : ITestSvc...
```

2.1.1 Steps to host a service

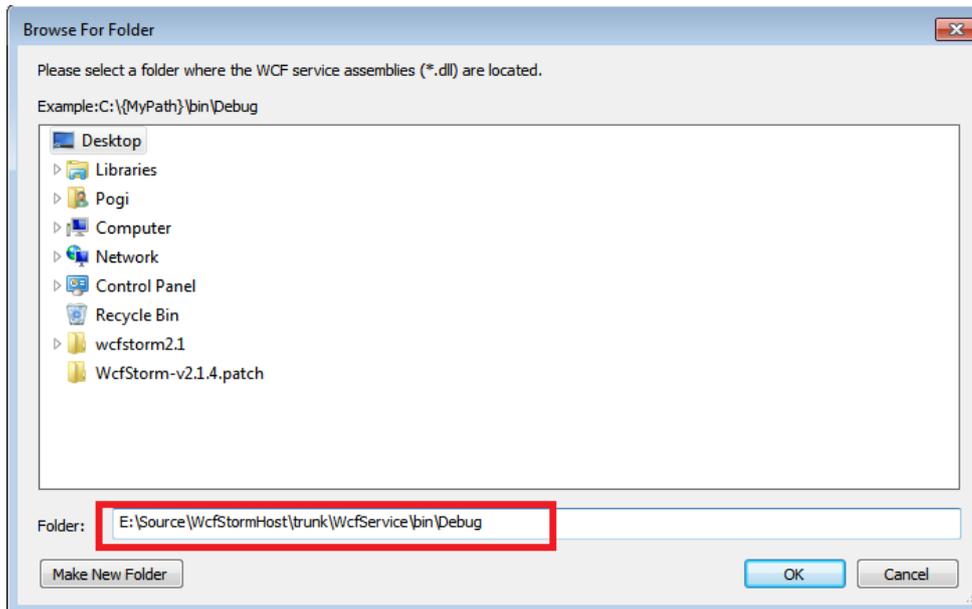
1. Open WCFStormHost Administration Service (Start → WCFStorm Host → WCFStormHost)



2. The 1st time, WcfstormHost is used, the license agreement window will be shown. Click **“Agree”** if you agree on license terms.
3. The main window will be shown. In the message box, click **Yes** to select the folder where the wcf assemblies are located.

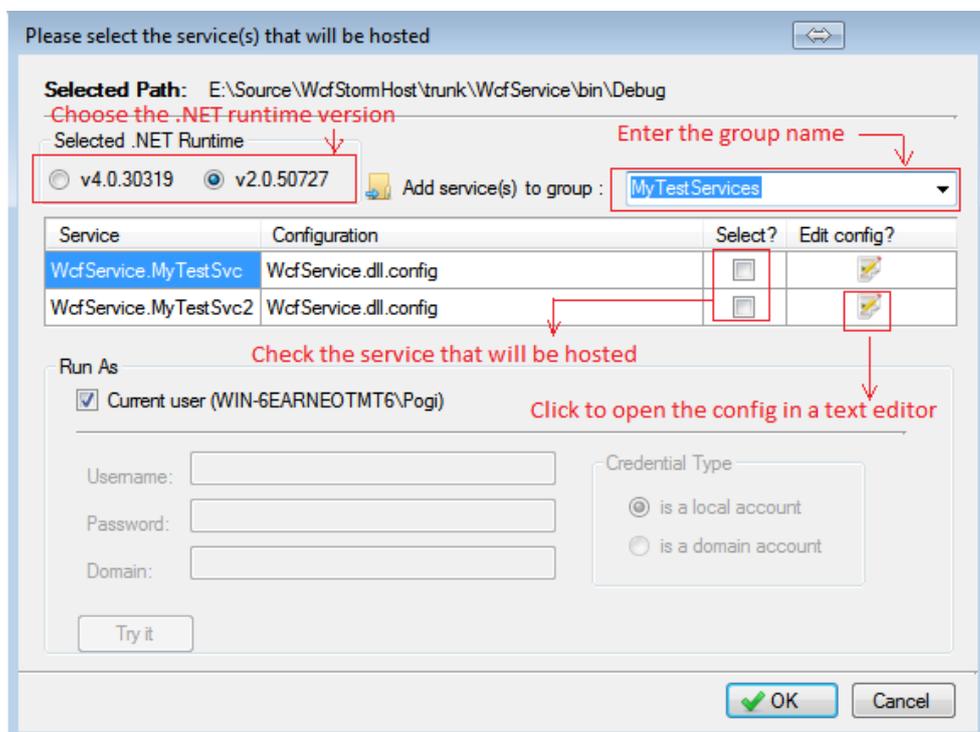


4. Enter the path to folder where the WCF Service assemblies are located. Click OK to have WCFStormHost scan the folder for WCF assemblies and config files.

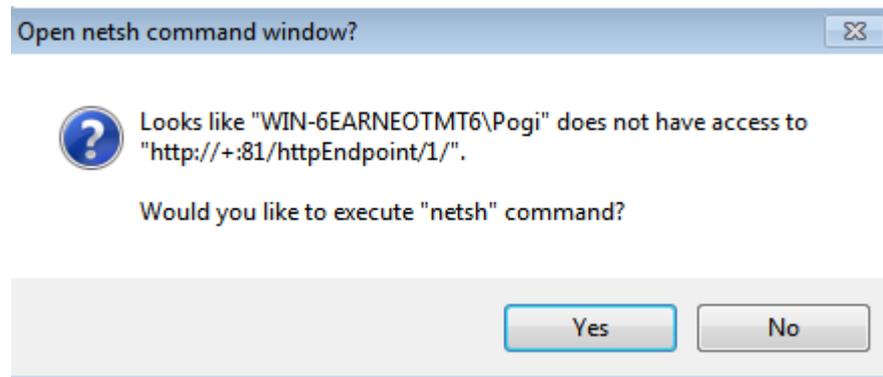


5. Configure the WCF Service. Click OK.

Note: The option to select the .NET 4.0 runtime (v4.0.30319) is available only if the runtime is installed on the server and if the WCF assemblies were built to target either .NET 3.5 or 4.0



- If the WCF Service being hosted is using an “http” endpoint and the “Current User” (selected in step #5 above) does not have access to it, the message box below will be shown.



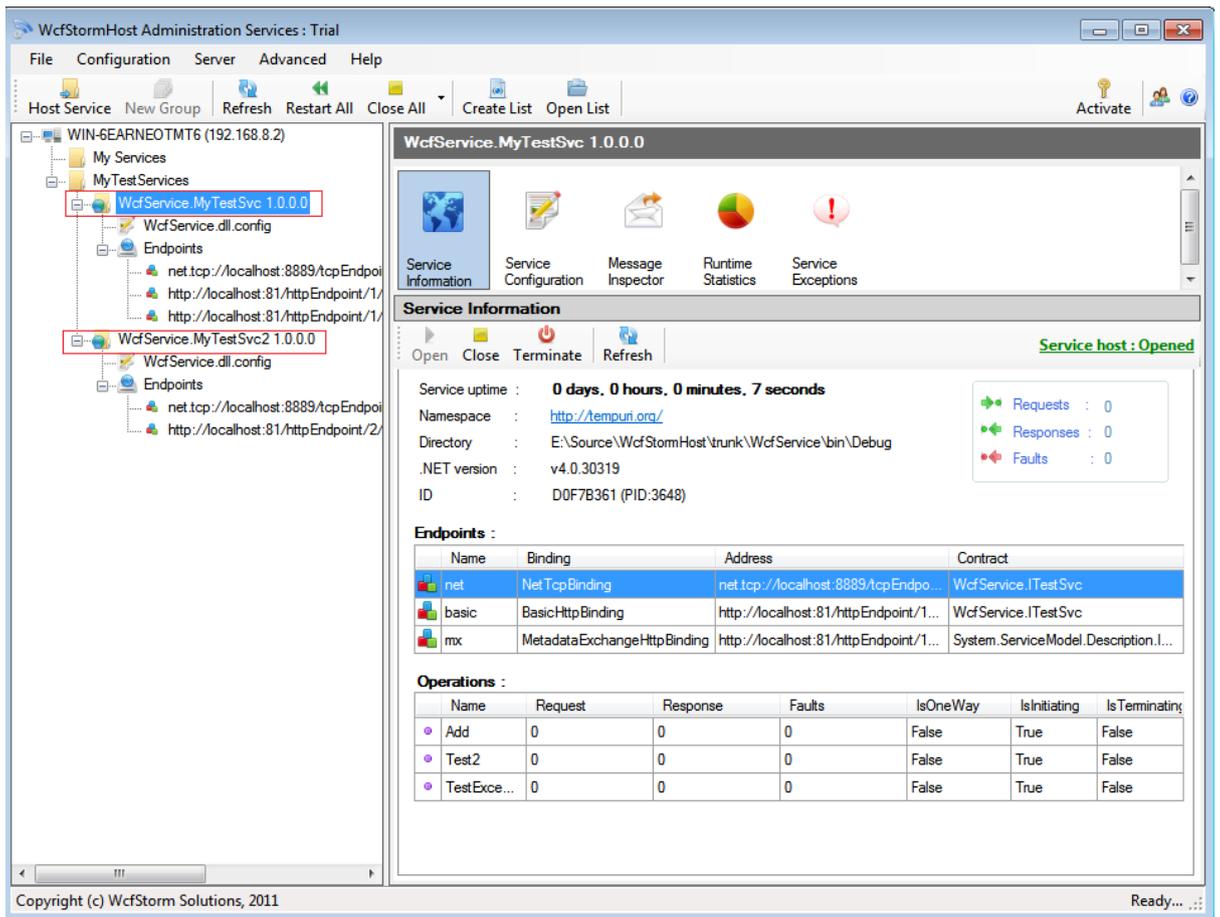
Click Yes to open the **netsh** command window and give the Current User (In this case, **WIN-6EARNEOTMT6\Pogi**) access to the url **http://+:81/httpEndpoint/1**



Click OK.

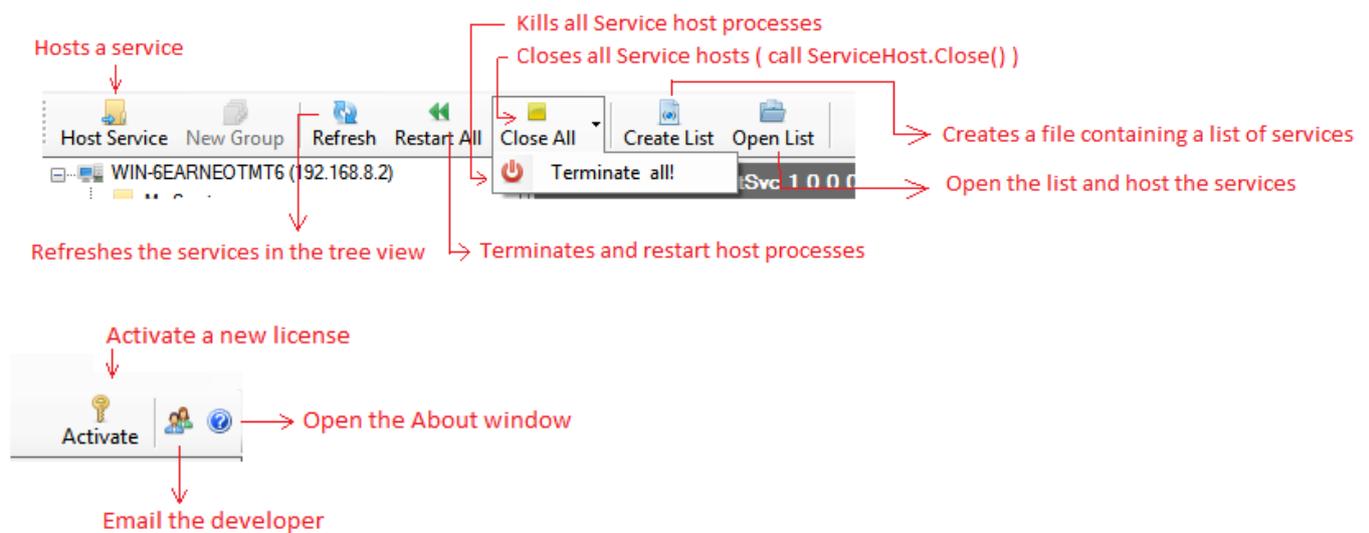
Go back to Step #4 to reload the service again.

6. If the services are hosted correctly, it will be shown the tree view.



3 Getting to Know the Menus

3.1 Main Menu Strip

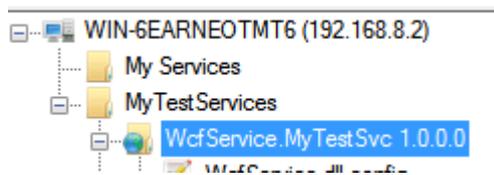


- Host Service
- New Group

- Refresh
- Restart All
- Close All
- Terminate All
- Create List
- Open List
- Activate

3.2 WCF Service Host Menus

To bring up the Service Host menus, select the service in the server tree view.



3.2.1 Service Information

- Displays information regarding service
- **Open** (call ServiceHost.Open()) the host
- **Close** (call ServiceHost.Close()) the host
- **Terminate** the host i.e. Kill the host processes
- **Refresh** the displayed information

The screenshot shows the 'Service Information' window for 'WcfService.MyTestSvc 1.0.0.0'. The window has a toolbar with icons for Service Information, Service Configuration, Message Inspector, Runtime Statistics, and Service Exceptions. Below the toolbar, there are buttons for 'Open', 'Close', 'Terminate', and 'Refresh'. The status bar indicates 'Service host : Opened'.

Service uptime : **0 days, 0 hours, 0 minutes, 7 seconds**

Namespace : <http://tempuri.org/>

Directory : E:\Source\WcfStomHost\trunk\WcfService\bin\Debug

.NET version : v4.0.30319

ID : D0F7B361 (PID:3648)

Requests : 0
Responses : 0
Faults : 0

Endpoints :

Name	Binding	Address	Contract
net	NetTcpBinding	net.tcp://localhost:8889/tcpEndpoint/1/net	WcfService.ITestSvc
basic	BasicHttpBinding	http://localhost:81/httpEndpoint/1/basic	WcfService.ITestSvc
mex	MetadataExchangeHttpBinding	http://localhost:81/httpEndpoint/1/mex	System.ServiceModel.Description.IMetadataExchange

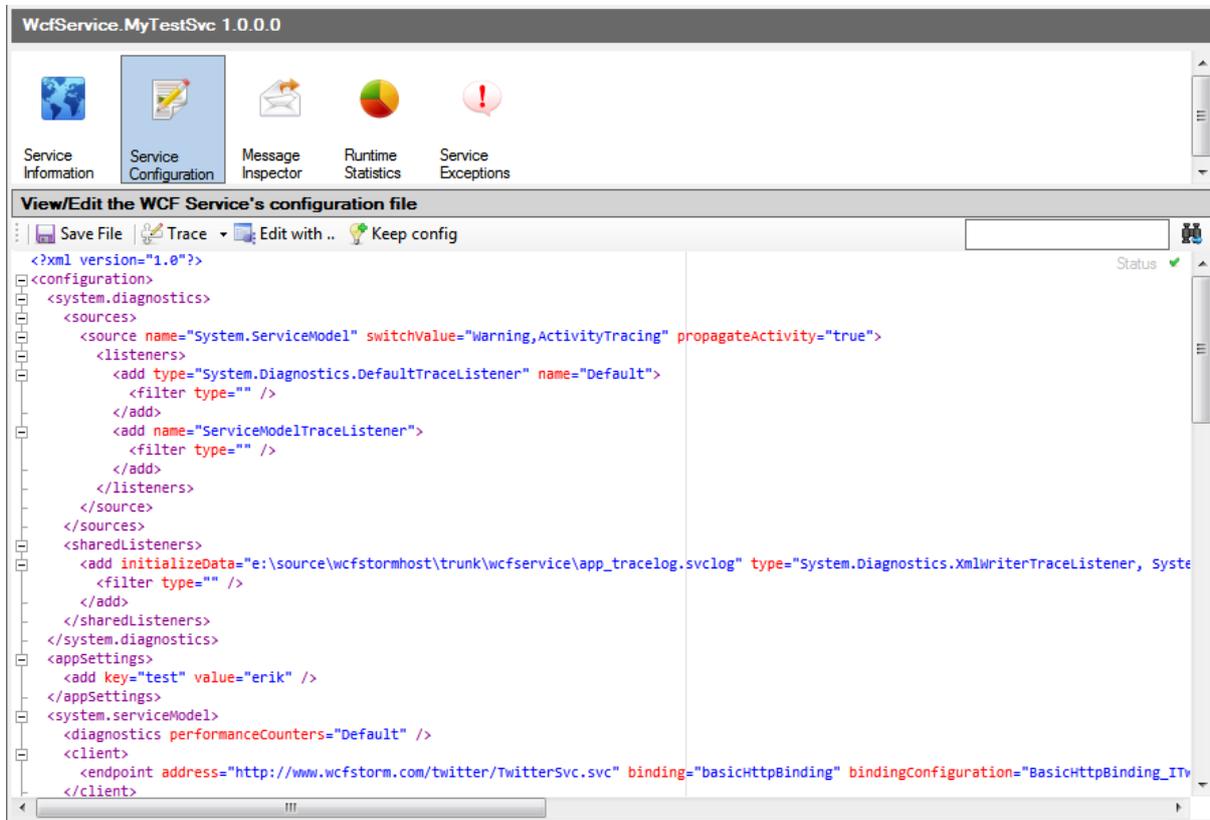
Operations :

Name	Request	Response	Faults	IsOneWay	IsInitiating	IsTerminating
Add	0	0	0	False	True	False
Test2	0	0	0	False	True	False
TestException	0	0	0	False	True	False

3.2.2 Service Configuration

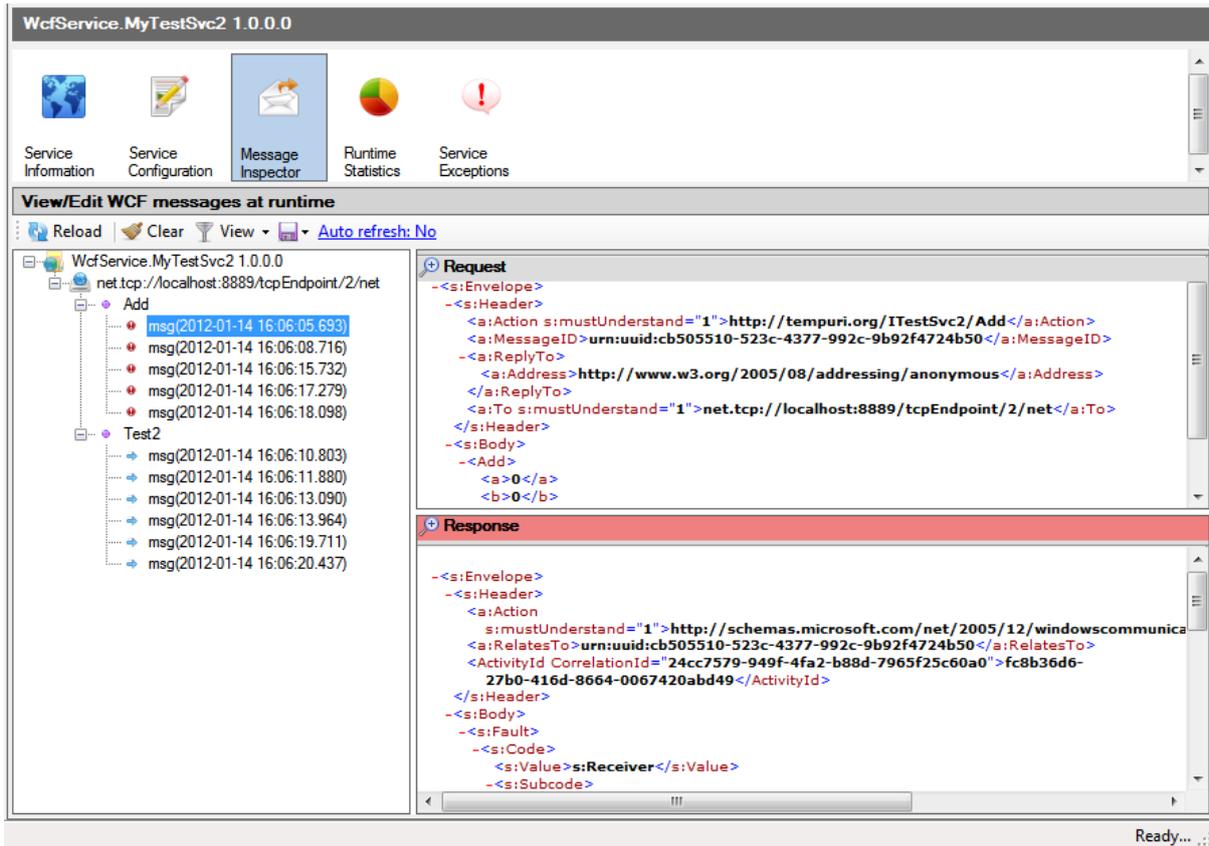
- View/Edit the configuration file with a text editor having syntax highlighting

- **“Keep Config”** stores the config file in the internal wcfstormhost database.
- **“Trace”** adds the System.ServiceModel tracing configuration entries to the config file. Tracing uses WcfStormHost’s custom RollingXmlZip trace listener.
- **“Edit With”** opens the configuration file using the SvcConfigEditor.exe (part of the .NET SDK)



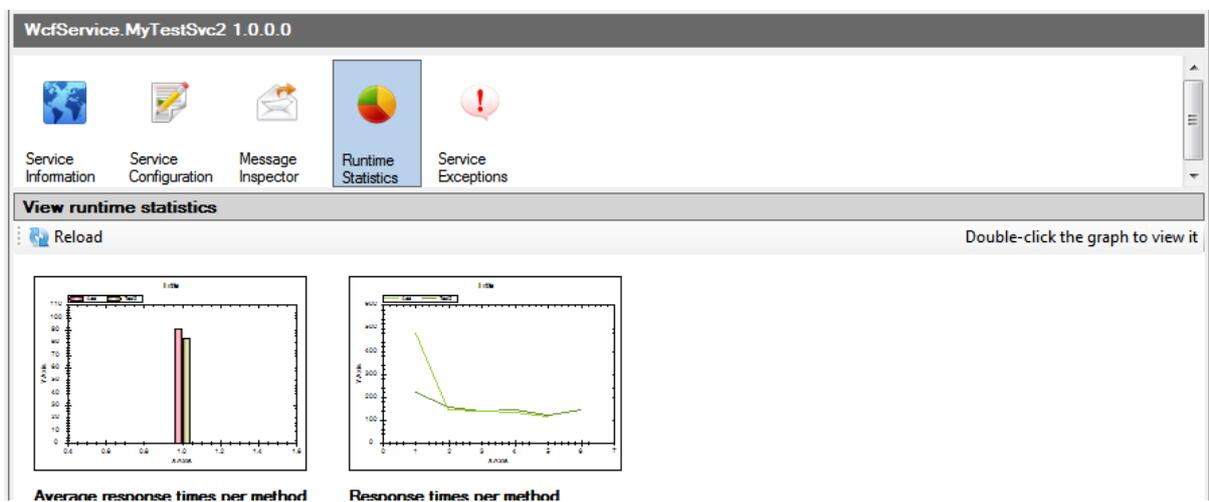
3.2.3 Message Inspector

- View all messages sent and received to the WCF Service grouped per Method (). Exceptions/Faults are displayed with the red icon ().
- **“Reload”** refreshes the list of messages.
- **“Clear”** permanently deletes all messages
- **“View”** filters the displayed messages
-  **saves** the selected request/response messages



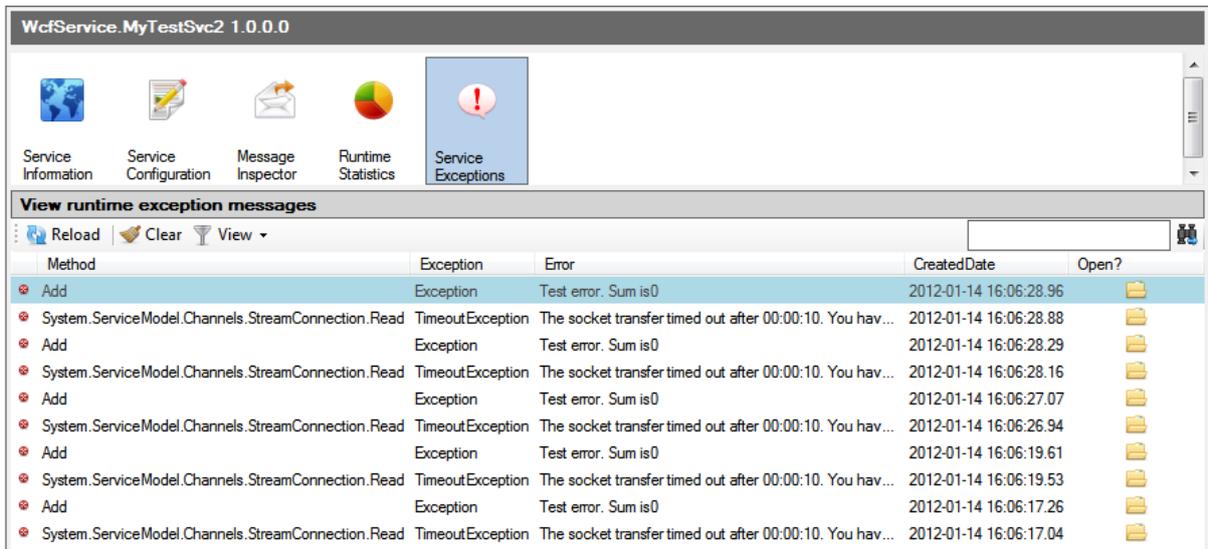
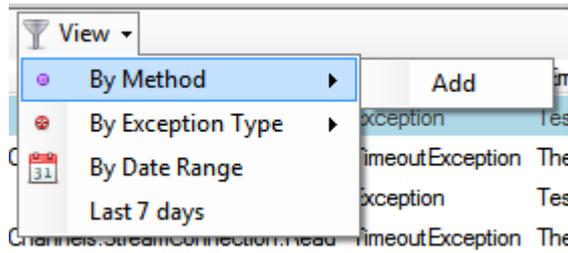
3.2.4 Runtime Statistics

Display graphs of the runtime behaviour of the hosted WCF service.



3.2.5 Service Exceptions

- View all faults and exceptions.
- **“Reload”** refreshes the list exceptions
- **“Clear”** permanently deletes all exceptions
- **“View”** filters exceptions per method, date range or exception types.

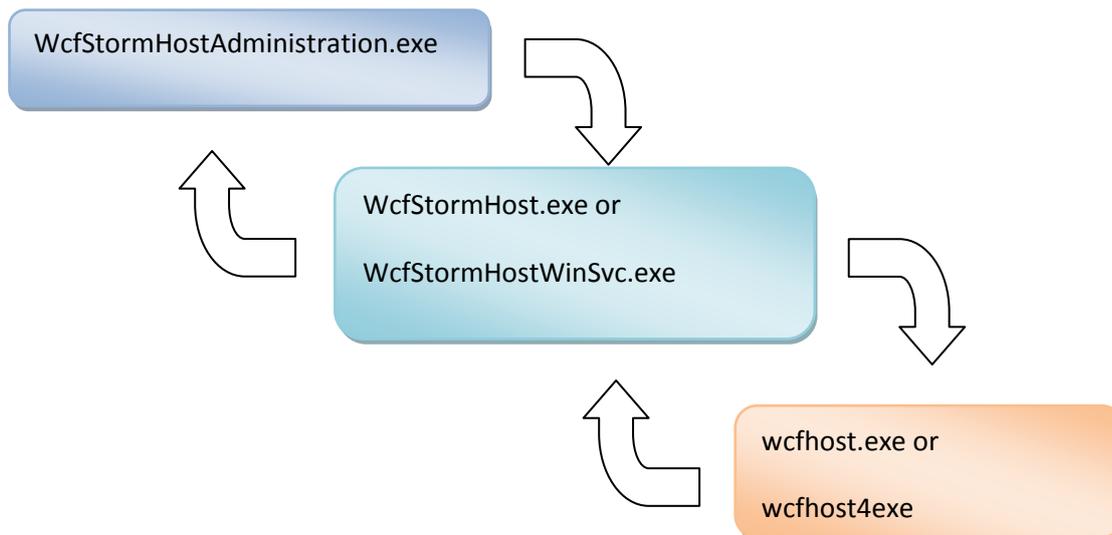


4 So how does it work?

The WcfStormHost “application” follows a client-server architecture and it is made up of 4 components (listed below).

1. WcfStormHostAdministration.exe
 - The GUI “client” where the service host processes can be managed.
2. WcfStormHost.exe
 - The “server” process where commands (such as Open, Close, Terminate etc.) are sent to manage the service hosts.
 - This server host process is **used in “Standard” mode**
3. WcfStormHostWinSvc.exe
 - The “server” process where commands (such as Open, Close, Terminate etc.) are sent to manage the service hosts.
 - This server host process is **used in “Server” mode**
4. Wcfhost.exe
 - The process that hosts the WCF or REST Service into the .NET 2.0 runtime.
5. Wcfhost4.exe
 - The process that hosts the WCF or REST Service into the .NET 4.0 runtime.

WcfStormHost creates 1 wcfhost.exe (or wcfhost4.exe) process per configuration file.



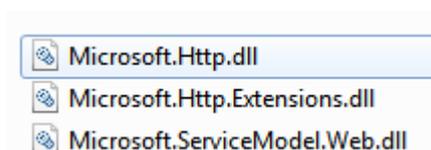
5 Hosting a REST Service

5.1 Hosting using `WebServiceHost`

To host a REST Service, follow the same steps as hosting a WCF service ([section 2.1](#)). `WcfStormHost` will automatically detect that the REST service type.

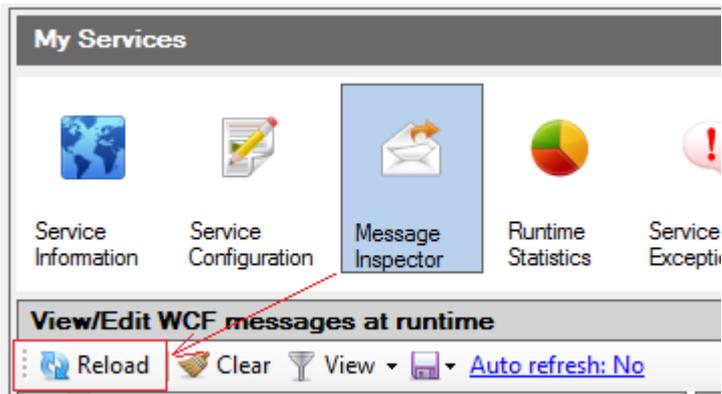
5.2 Using REST Starter Kit (Using `WebServiceHost2`)

To use the host (**`WebServiceHost2`**) provided by the Rest Starter Kit, copy the following assemblies into the installation folder of `WcfStormHost`. (For example, copy it to `C:\Program Files\WcfStorm Solutions\WcfStormHost`)



6 Viewing runtime messages

1. [Host a Service](#) (See section 2.1)
2. Invoke any method of the service using [WcfStorm](#) (or other WCF clients)
3. Select the service from the TreeView
4. Select "[Message Inspector](#)" from the Service menu. (See section 3.2.3)
5. Click on **Reload**

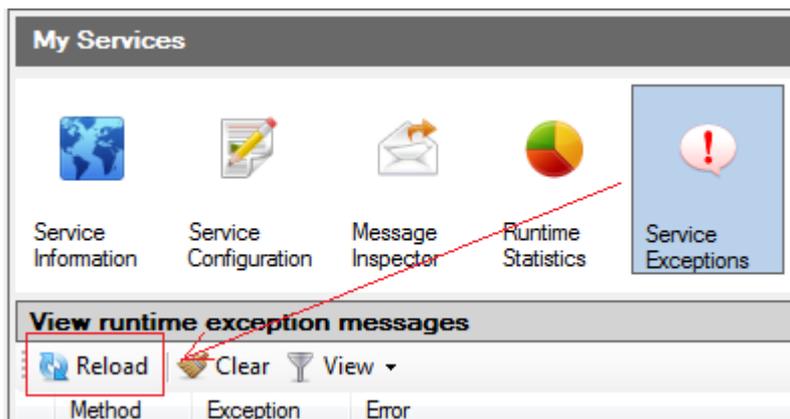


To open a message on a larger window, select the magnifier icon

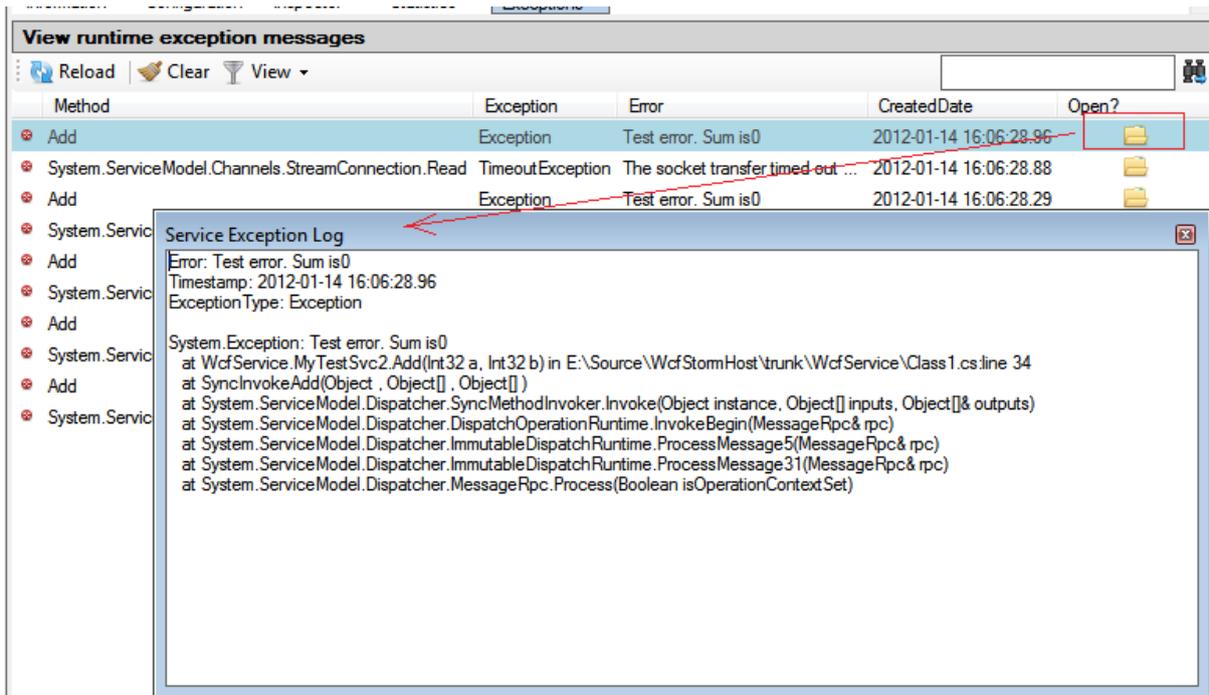


7 Viewing runtime service exceptions

1. [Host a Service](#) (See section 2.1)
2. Invoke any method of the service using [WcfStorm](#) (or other WCF clients). Ensure that the method fails with an exception.
3. Select the service from the TreeView
4. Select "[Service Exceptions](#)" from the Service menu. (See section 3.2.5)
5. Click on **Reload**



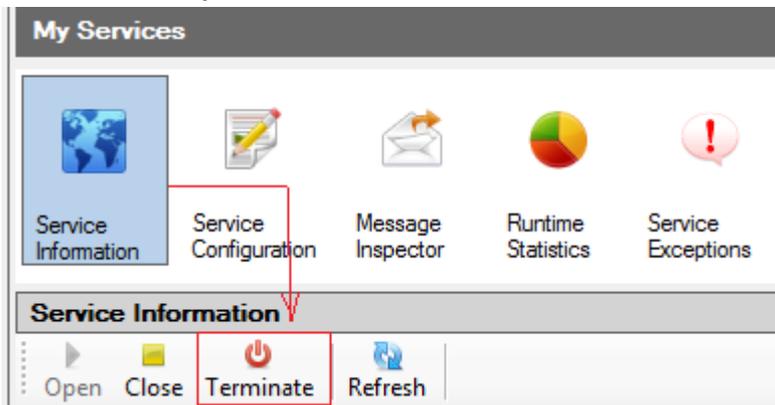
To open an exception on a larger window, select the folder icon or double-click on the row



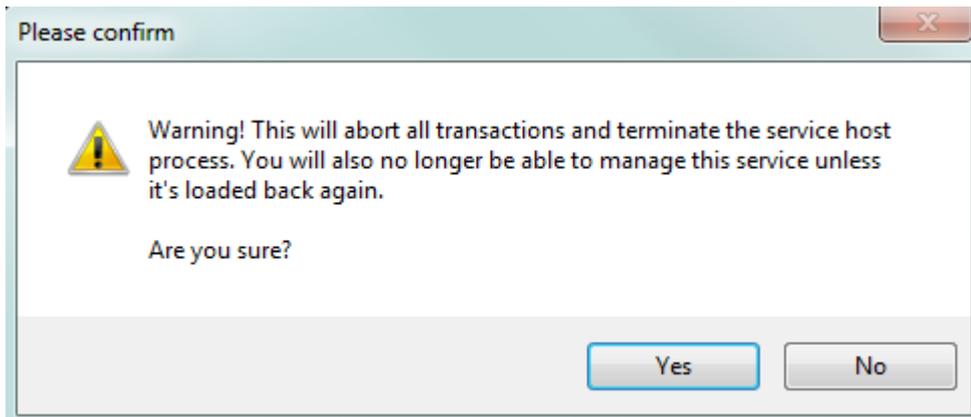
8 Terminating Service Host Processes

8.1 Terminate a Single Service Host Process

1. Select the service from the Tree View
2. Select **"Service Information"** from the service menu. Click on **Terminate**.

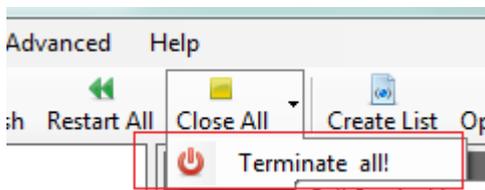


3. Click Yes, to terminate the host process

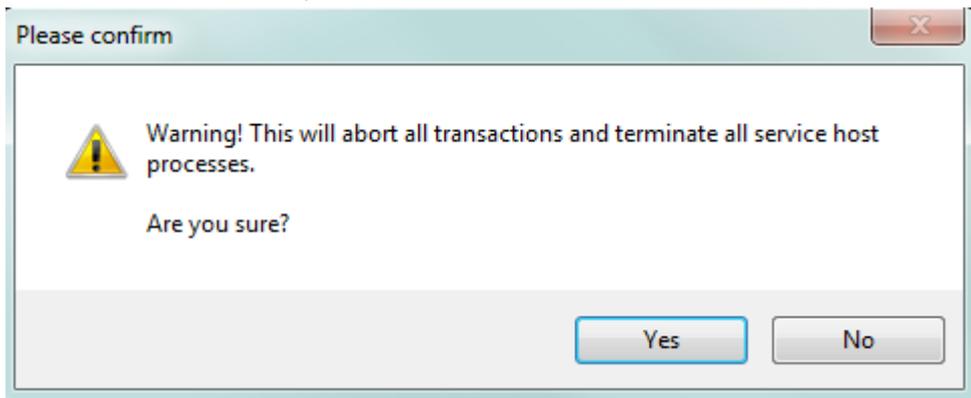


8.2 Terminate All Service Host Processes

1. From the main menu strip, click on **Close All** dropdown → **Terminate All**.



2. Click Yes to terminate all processes.



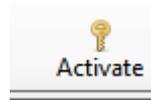
9 Running WCFStormHost in Server Mode

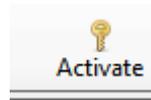
The default installation of WCFStormHost runs it in **Standard mode**. In this mode, a user is required to be logged-in to the machine in order for the service hosts to continue operating. Once the user has logged out, the service processes will be shutdown.

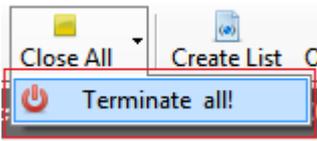
In **Server mode**, the service host processes continue to operate even after the user has logged out.

To enable *Server Mode*, follow the steps below.

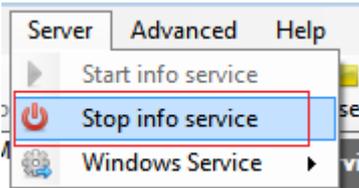
1. Install WCFStormHost (See section 1) on a machine running **Windows Server 2003**, **Windows Server 2008** or **Windows Server 2008 R2**.



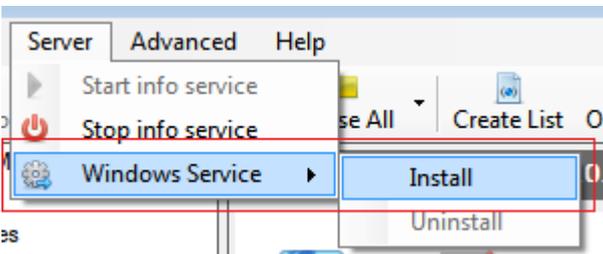
2. Activate a **Server, Trial or Tester** license. Click on the  icon to load the appropriate license file.
3. Terminate all Service hosts.



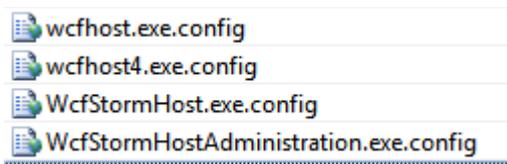
4. Stop the info service host. Click *Server* → *Stop Info Service*



5. Install the info service host as a Windows Service. Click *Server* → *Windows Service* → *Install*



6. **(This step is optional but recommended)** Configure WcfStormHost to use a SQL Server database.
 - a. Using SQL Server Management Studio, create a database(For example, WcfStormHostDB)
 - b. In the newly created database, create a user with permission to create tables and run Insert/Update/Delete /Select sql statements.
 - c. Navigate to the WCFStormHost installation folder and open the following config files in any text editor



- d. For each file, modify the connection string to match the database and username created in steps 6.a and 6.b above.

```

<connectionStrings>
  <clear/>
  <!-- used when appSettings/dbProvider == System.Data.SqlClient -->
  <add name="WCFStormHostDB" providerName="System.Data.SqlClient"
        connectionString="Data Source=P0GI-VAIO\SQLR2;Initial Catalog=WcfStormHostDB;Password=Zaq12wsx;User ID=sa;Persist Security
  </connectionStrings>
  
```

↓ Database name
↓ Password
↓ User

SQL Server Instance

- e. For each file, modify the dbProvider settings to System.Data.SqlClient.

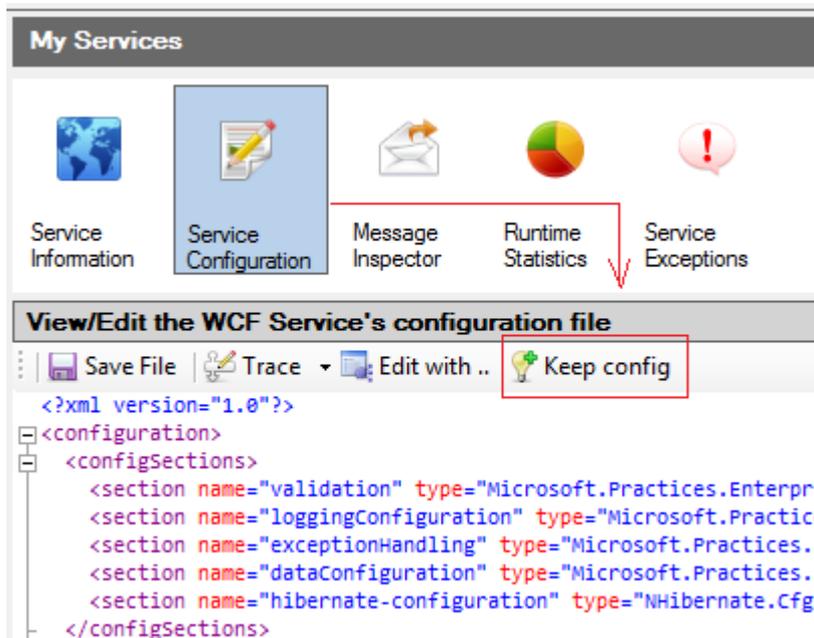
```
<appSettings>
  <add key="dbProvider" value="System.Data.SqlClient" />
</appSettings>
```

7. Close and re-open WcfStormHostAdministration window.

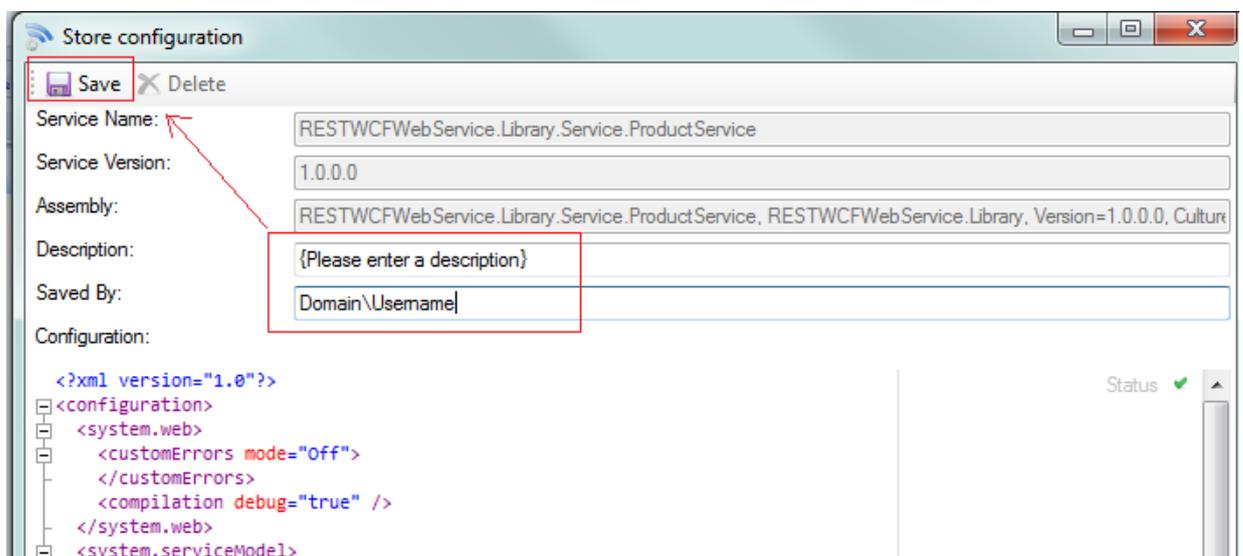
10 Storing Service Configuration Files

This can be used to store service configuration into WCFStormHosts internal database.

1. [Host a Service](#) (See section 2.1)
2. Select the service from the TreeView
3. Click on **Service Configuration**. Click on **Keep Config**

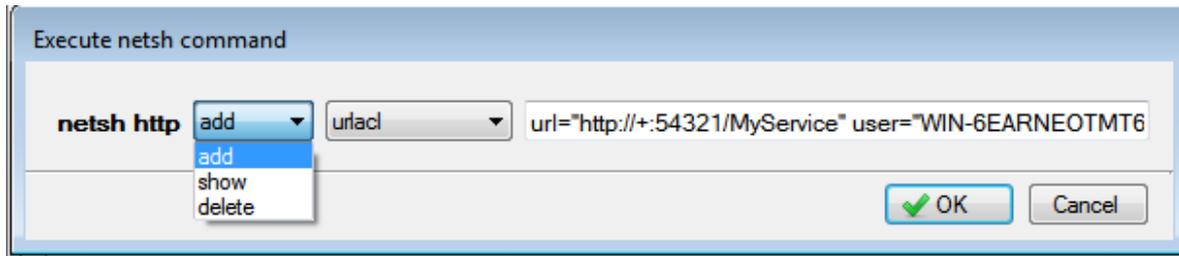


4. Enter the Description and username then Click **Save**.



11 Executing “netsh”

WCFStormHost can execute **netsh http** commands to add/delete/show urlacl permissions.



To open the netsh command window, click on **Advanced** → **Execute netsh**

