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## Introduction

Blurb… Blurb…

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## Pre-requisites

### Hardware

|  |  |
| --- | --- |
| **Client** |  |
| **Server** |  |

### Software

|  |  |
| --- | --- |
| **Client** | 1. [Install the Publisher](#_Install_the_Publisher) 2. [Microsoft Message Queueing needs setting up](#_Microsoft_Message_Queueing) 3. [Microsoft .NET Framework 4 needs installing (prompted by installer)](#_Microsoft_.NET_Framework) 4. [Open the Network Access for Distributed Services](#_How_To_Open) |
| **Server** | 1. [Microsoft Message Queueing needs setting up](#_Microsoft_Message_Queueing) |

## 

## Install the Publisher

This is the component that deals with the message trafficking.

## Microsoft Message Queueing needs setting up

From <http://msdn.microsoft.com/en-us/library/aa967729.aspx>

**To install Message Queueing 4.0 on Windows Server 2008 or Windows Server 2008 R2**

1. In Server Manager, click **Features**.
2. In the right-hand pane under **Features Summary**, click **Add Features**.
3. In the resulting window, expand **Message Queueing**.
4. Expand **Message Queueing Services**.
5. Click **Directory Services Integration** (for computers joined to a Domain), then click **HTTP Support**.
6. Click **Next**,then click **Install**.

**To install Message Queueing 4.0 on Windows 7 or Windows Vista**

1. Open **Control Panel**.
2. Click **Programs** and then, under **Programs and Features**, click **Turn Windows Features on and off**.
3. Expand Microsoft Message Queue (MSMQ) Server, expand Microsoft Message Queue (MSMQ) Server Core, and then select the check boxes for the following Message Queueing features to install:
   * MSMQ Active Directory Domain Services Integration (for computers joined to a Domain).
   * MSMQ HTTP Support.
4. Click **OK**.
5. If you are prompted to restart the computer, click **OK** to complete the installation.

## Microsoft .NET Framework 4 needs installing (prompted by installer)

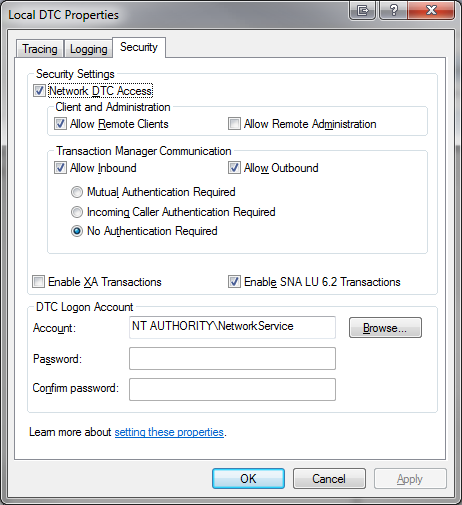
## How To Open the Network Access for Distributed Services

<http://www.bunkerhollow.com/blogs/matt/archive/2009/10/26/network-access-for-distributed-transaction-manager-msdtc-has-been-disabled.aspx>

**Modify your Local DTC Properties**

1. Open Component Services.
2. Computers -> My Computer -> Distributed Transaction Coordinator -> Local DTC -> Properties.
3. Security Tab -> **Enable Network DTC Access, Allow Remote Clients, Allow Inbound, Allow Outbound, No Authentication Required.**

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## Firewalls?

* Starting the service (done automatically?). This will make it hidden from the user.

**OR**

If you want to see the console window then try one of the following options.

1. Open Command Prompt
   * Go to installation folder (c:\program files\advanced\publisher)
   * this path could be different in future.
   * Nservicebus.host.exe /install /servicename:”OpenHR Fusion Publisher”
2. To get a lite version with more diagnostic information use this command at prompt
   * NServicebus.host.exe nservicebus.lite

### Log Service

This will be supplied by the core Fusion team, but for the moment we have our own built in to the OpenHR connector package.

This can be installed on any machine – however the default install assumes it is on the same as the connector.

Install OpenHR Fusion Connector.msi

Open Command Prompt (run as an administrator – you will get errors if you don’t!)

Go to installation folder (c:\program files\advanced\OpenHR Fusion Connecter)

Type Nservicebus.host.exe /install /DisplayName:”Fusion Log Service” fusion.core.production /endpointname:fusion.logservice /servicename:fusion.logservice

(This should install 3 queues into the Message Queuing Service)

error, and fusion.logservice, fusion.logservice.subscriptions

The service may or may not start automatically – go to service to attempt to start.

### (Re)-Publisher

This will be supplied by the core Fusion team, but for the moment we have our own built in to the OpenHR connector package.

This can be installed on any machine – however the default install assumes it is on the same as the connector.

Install OpenHR Fusion Connector.msi

Open Command Prompt (run as an administrator – you will get errors if you don’t!)

Go to installation folder (c:\program files\advanced\OpenHR Fusion Connecter)

Type Nservicebus.host.exe /install /displayName:”Fusion Republisher (Social Care)” fusion.core.production /endpointname:Fusion.Publisher.SocialCare.StaffPublisher /servicename:fusion.publisher.socialcare.staff

(This should install 2 queues into the Message Queuing Service)

fusion.publisher.socialcare.staff, fusion.publisher.socialcare.staff.subscriptions

The service may or may not start automatically – go to service to attempt to start.

### Test Harness

This will be supplied by the core Fusion team, but for the moment we have our own built in to the OpenHR connector package.

This can be installed on any machine – however the default install assumes it is on the same as the connector.

Install OpenHR Fusion Connector.msi

Open Command Prompt (run as an administrator – you will get errors if you don’t!)

Go to installation folder (c:\program files\advanced\OpenHR Fusion Connecter)

Type Nservicebus.host.exe /install /serviceName:”Fusion Test Harness (Social Care)” fusion.core.production /endpointname:Fusion.Test.SocialCare

(This should install 2 queues into the Message Queuing Service)

fusion.test.socialcare, fusion.test.socialcare

Use notepad to load the following configuration file

Notepad fusion.testendpoint.dll.config

Amend the computer name in YOURFUSIONREPUBLISHERCOMPUTERNAME to where your republisher sits

This does not run as a service needs running manually

Type Nservicebus.host.exe fusion.testendpoint.dll

### OpenHR Connector

This ideally is installed on the HR Pro server. Discuss?

Install OpenHR Fusion Connector.msi

The service will attempt to install automatically, but will not start until some configuration has been made.

(This should install 2 queues into the Message Queuing Service)

fusion.connector.openhr, fusion.connector.openhr.subscriptions

Go to (c:\program files\advanced\OpenHR Fusion Connector)

Use notepad to edit connector.dll.config

Change the following to point to you OpenHR database.

<connectionStrings>

<!--This will be replaced by an encoded string in a later version-->

<add name="db" connectionString="Data Source=YOURSERVER;Initial Catalog=YOURDATABASE;User ID=SAUSERNAME;Password=SAPASSWORD"

providerName="System.Data.SqlClient" />

</connectionStrings>

And

<UnicastBusConfig DistributorControlAddress="" DistributorDataAddress="" ForwardReceivedMessagesTo="">

<MessageEndpointMappings>

<add Messages="Fusion.Messages.HR" Endpoint="fusionpublisherinputqueue@YOURFUSIONPUBLISHER" />

</MessageEndpointMappings>

</UnicastBusConfig>

To point to your fusion publisher, or test harness.

Goto services and start the service.

### OpenHR Database

Run the following two scripts on your database

01-FusionSetup.sql

And then

02-Bespoke\_RLO.sql

## Finally (temporary)

Copy the .cfg files from the RLO folder into the installed folder.

Restart the services

Appendices

* + **Enable CLR**EXEC sp\_configure 'clr enabled' , '1'  
    GO  
    RECONFIGURE;  
    GO

**Set Trustworthy On**

ALTER DATABASE <DBname>SET TRUSTWORTHY ON;

**Re-associate DB with SA user**

exec sp\_changedbowner sa

**Set Up Service Broker on Database**

NB some times when running these commands en-bloc will cause the DB to hang. Before trying anything else run the second command first by itself then the first one. Don’t know why this works but it sometimes does.

ALTER DATABASE <DBname> SET NEW\_BROKER

ALTER DATABASE <DBname> SET ENABLE\_BROKER WITH ROLLBACK IMMEDIATE

## Debugging

If components on different machine.

Connector -> Open HR Database

Test that both machines can ping each other via their NetBIOS name. If this does not work the machines will not be able to participate in a distributed transaction

If machines are in different domains sometime it may be necessary to edit the \windows\system32\drivers\etc\hosts file

In the bin folder try typing nservicebus.host.exe /installinfrastructure. This will reinstall the message queuing and any dependences. You will almost certainly require a reboot.

## Diagnosis

The message queues.

Check that the message queues on the publishing machine have been created successfully.

Load Computer management

