

On any 64 bit environment the user will need to turn on Microsoft Message Queuing in order for CARWare to work properly. If it is not turned on, then users will encounter the following error:

```
Source: jProgBusiness - Message Queuing has not been installed on this computer.
  at System.Messaging.Interop.SafeNativeMethods.MQPathNameToFormatName(String path-
  Name, StringBuilder formatName, Int32& count)
  at System.Messaging.MessageQueue.ResolveFormatNameFromQueuePath(String
  queuePath, Boolean throwException)
  at System.Messaging.MessageQueue.Exists(String path)
  at jProgBusiness.jBusiness.jURNEncryption.GetEURN(String urn)
  at jProgBusiness.jBusiness.jURNEncryption.EncryptURN(String URN)
  at jProgBusiness.jBusiness.jBusinessClient.ClientAdd(String GUIDToken, jClientAdd NewCli-
  entAdd, jBusinessShared BusinessShared, Boolean
  ignoreURN, String importHL7ProviderPK, Boolean skipClientPresearch)
  at jProgBusiness.jBusiness.jBusinessClient.ClientAdd(String GUIDToken, jClientAdd NewCli-
  entAdd, Boolean skipClientPresearch, String
  domainToImportTo)
  at jProgBusiness.jBusiness.jBusinessRemote.CLN_Client_Add(String SessionToken, jClien-
  tAdd NewClientAdd, Boolean skipClientPresearch,
  String domainToImportToPK)
An error occured while adding a new client to the central database. You will not be able to add a
client to the central database at this time.
```

To install Message Queuing on Windows Server 2012 or 2016

1. Open *Server Manager*.
2. Click *Add Roles and Features*.
3. Click *Installation Type*.
4. Click *Role-based or feature-based installation*.
5. Click *Next*.
6. Click *Features*.
7. Expand *Message Queuing*.
8. Click *Message Queuing Server*.
9. Click *Directory Service Integration*.
10. Click *HTTP Support*.
11. Click *Next*.
12. Click *Install*.

To install Message Queuing 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 Queuing.
4. Expand Message Queuing 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 Queuing 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 Queuing 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

Message Queuing can also be enabled using Powershell by following these steps:

1. Type *Powershell* in the search field.
2. Right click *Powershell*.
3. Click *Run as Administrator*.

To list the Message Queuing Features:

1. Paste this command: `Get-WindowsOptionalFeature -Online | ? FeatureName -match "msmq" | select FeatureName`
2. Press *Enter*.

To enable Message Queuing Feature:

1. Paste this command: `Enable-WindowsOptionalFeature -Online -FeatureName MSMQ-Container -All`
2. Press *Enter*.
3. Paste this command: `Enable-WindowsOptionalFeature -Online -FeatureName MSMQ-Server -All`
4. Press *Enter*.
5. Paste this command: `Enable-WindowsOptionalFeature -Online -FeatureName "MSMQ-HTTP" -All`
6. Press *Enter*.
7. Paste this command: `Enable-WindowsOptionalFeature -Online -FeatureName MSMQ-ADIntegration -All`
8. Press *Enter*.

```
Administrator: Windows PowerShell
PS C:\Windows\system32> Get-WindowsOptionalFeature -Online | ? FeatureName -match "msmq"

FeatureName
-----
MSMQ-Container
MSMQ-Server
MSMQ-Triggers
MSMQ-HTTP
MSMQ-Multicast
MSMQ-DCOMProxy
WCF-MSMQ-Activation45

PS C:\Windows\system32> Enable-WindowsOptionalFeature -Online -FeatureName MSMQ-Container -

Path          :
Online        : True
RestartNeeded : False

PS C:\Windows\system32> Enable-WindowsOptionalFeature -Online -FeatureName MSMQ-Server -All

Path          :
Online        : True
RestartNeeded : False

PS C:\Windows\system32> Enable-WindowsOptionalFeature -Online -FeatureName "MSMQ-HTTP" -All

Path          :
Online        : True
RestartNeeded : False

PS C:\Windows\system32> Enable-WindowsOptionalFeature -Online -FeatureName MSMQ-ADIntegrati
```

* A [restart of the business tier service](#) must be completed after completing any of the above steps in order for CAREWare to recognize the new changes made to the PC/Server.