EMAIL MANAGER 3.7 HIGH AVAILABILITY CONFIGURATION

Rev. 1.0

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1   INTRODUCTION

This document describes how to configure Email Manager to support failover using Microsoft Cluster Server and Veritas Cluster Server. The document also describes configuring Email Manager in a symmetrical server setup to maximize resource usage when creating an active/passive cluster.

Email Manager does not support load balancing or server farming. Email Manager only supports and active/passive cluster configuration.

This document does not contain instructions for installing and configuring either Microsoft or Veritas Cluster Server software. Consult the vendor documentation for details on installing those products.

2 ACTIVE/PASSIVE CLUSTER CONFIGURATION

Assumptions:

- The cluster server software has been installed and configured.

- Two servers are being used

- An active/passive cluster is being configured. Email Manager does not support an active/active. To maximize resource usage of a passive machine, a symmetrical configuration of Email Manager may be utilized. See the section **Symmetrical Server Configuration** in this document for details.

2.1 Microsoft Cluster Server Configuration

To configure Microsoft Cluster Server, do the following:

1. Install Email Manager on both servers. Ensure the configuration of the machines is identical. It is suggested that both instances of Email Manager utilize the same Email Manager database. Do not enable the Email Manager services on both servers at the same time. This will result in erratic behavior of the system.

2. Launch the Windows Cluster Administrator from Start > Programs > Administrative Tools > Cluster Administrator

3. Create a new group by selecting File > New Group.

   a. Enter **"Group0"** in the name field and a description and click Next.
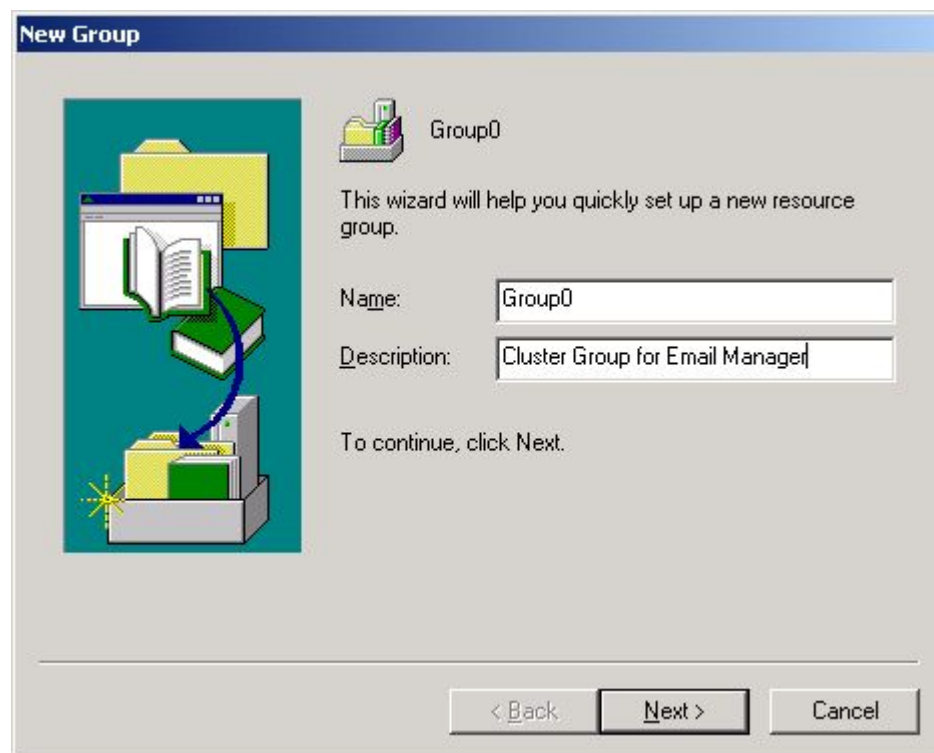
b. Select the node in the cluster that the Email Manager should use at its preferred node and click Finish.
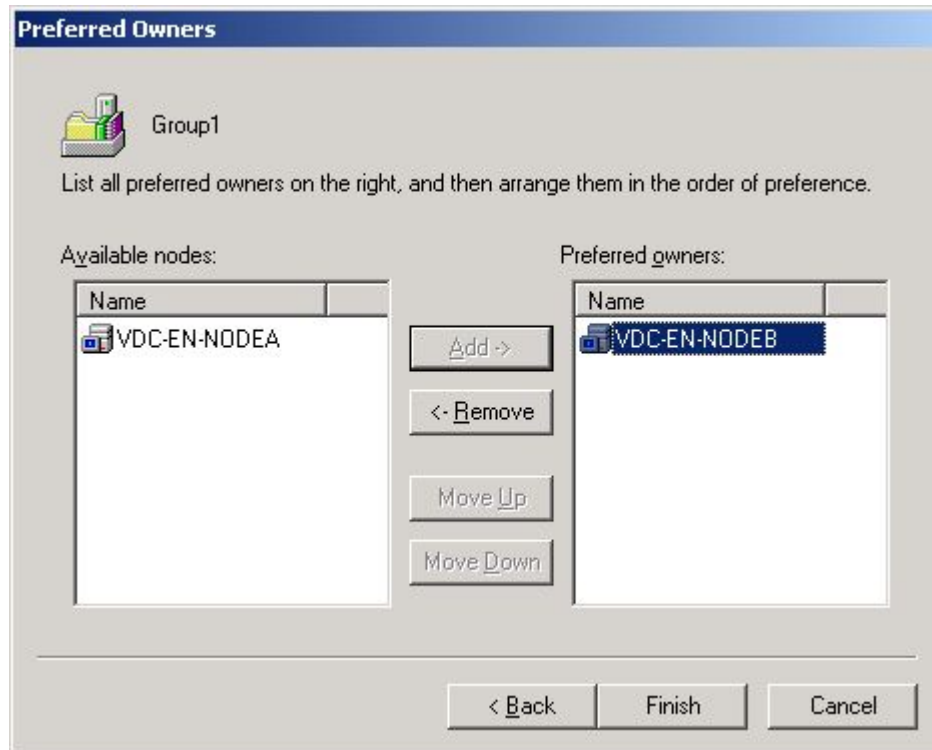
4. To create a new resource, right click on Group0 and select New Resource.

    a. In the New Resource screen:

        i. Enter "UFIService" in the Name field

        ii. Enter "UFIService" in the Description field

        iii. Select "Generic Service" in the Resource Type field.

        iv. Select "Group0" in the Group field.
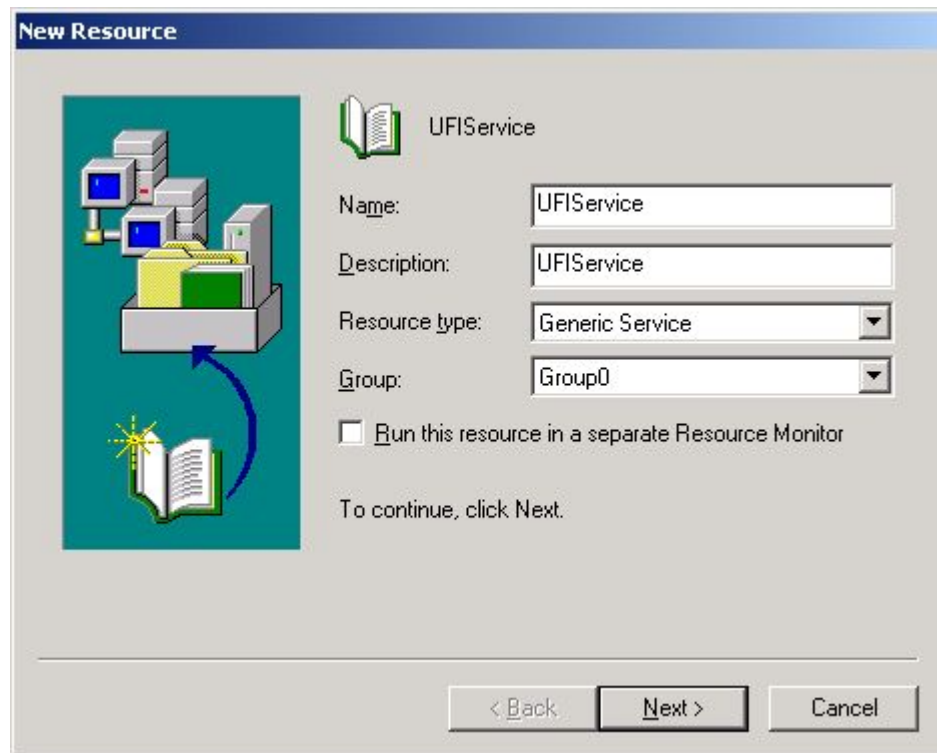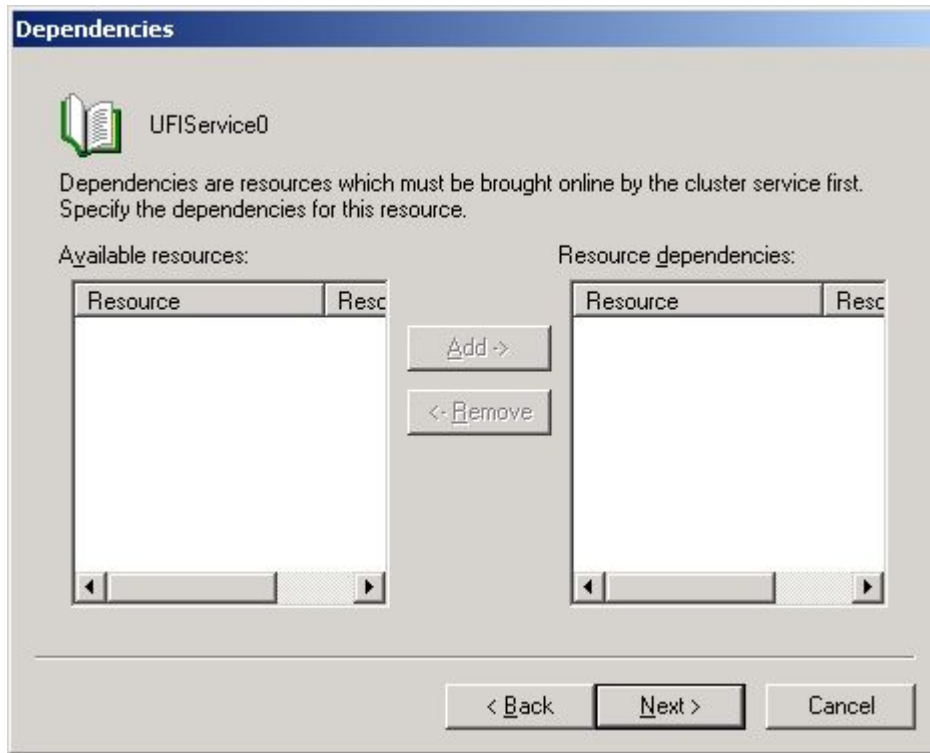
v. Click Next.

b. In the Possible Owners screen, select the nodes that will be in the cluster and click Next.
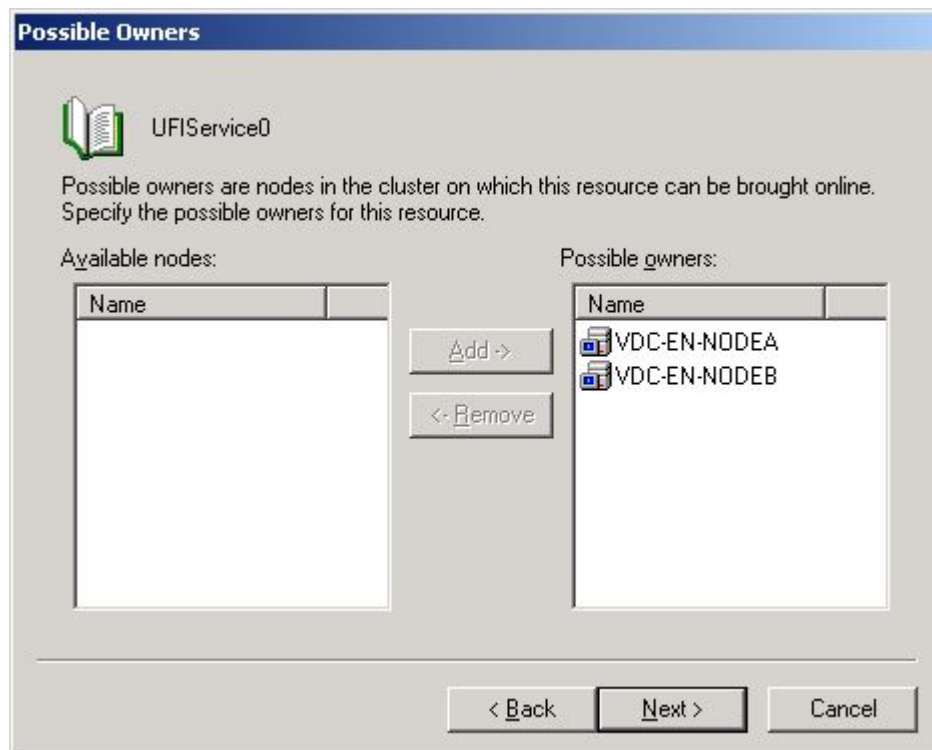
c. In the Dependencies screen, click Next.

d. In the Generic Service Parameters screen:

    i. Enter "UFIService" in the Service name field.

    ii. In the Start parameters field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "default.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

-cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\default.emgr"
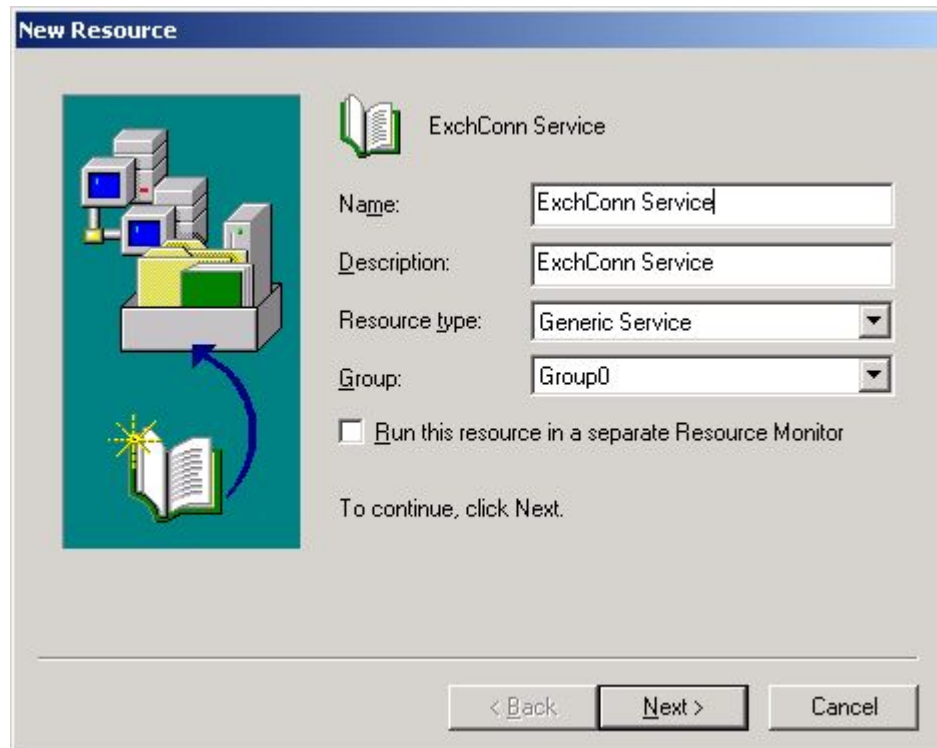
iii. Click Next
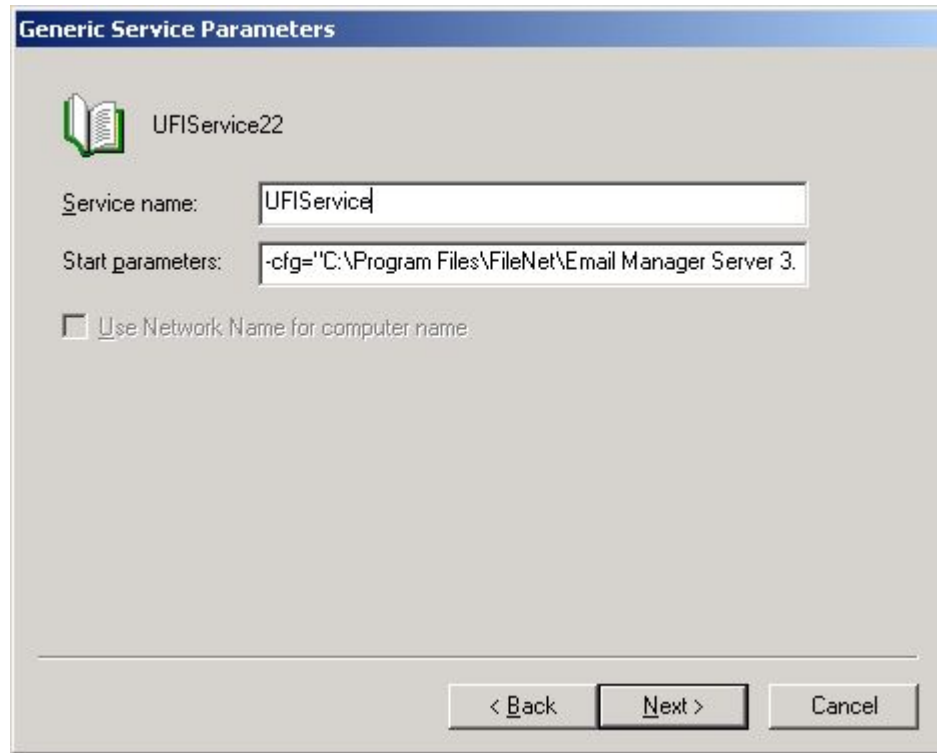
iv. In the Registry Replication screen, click Finish.
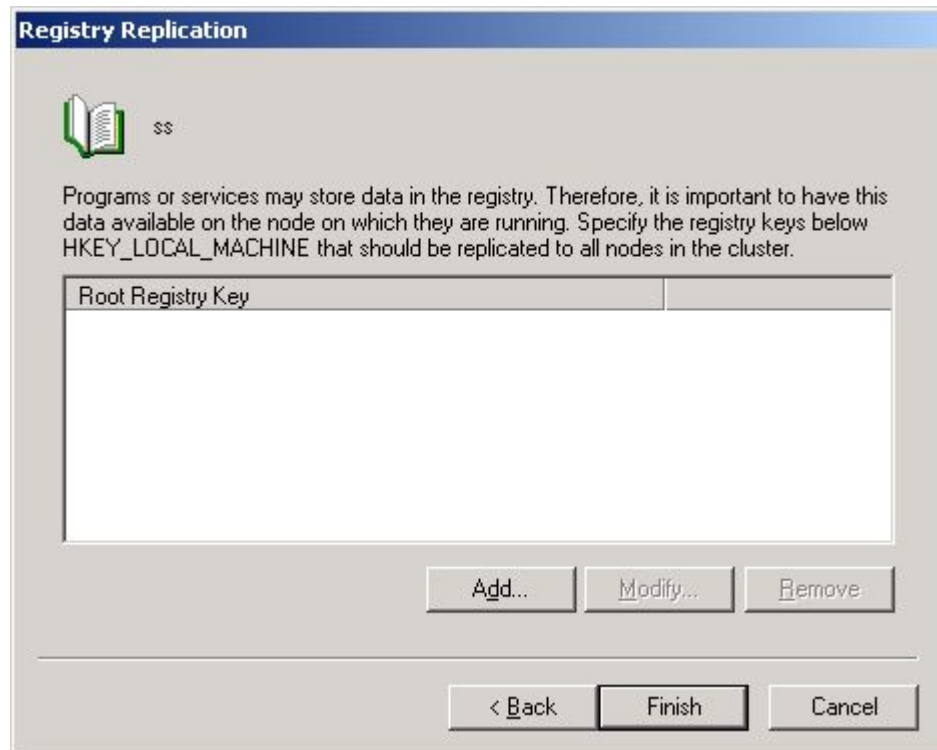
5. In Cluster Administrator, find Group0 in the Active Groups of one of the nodes. Right Click on Group0 and select New > Resource to open the New Resource Screen.
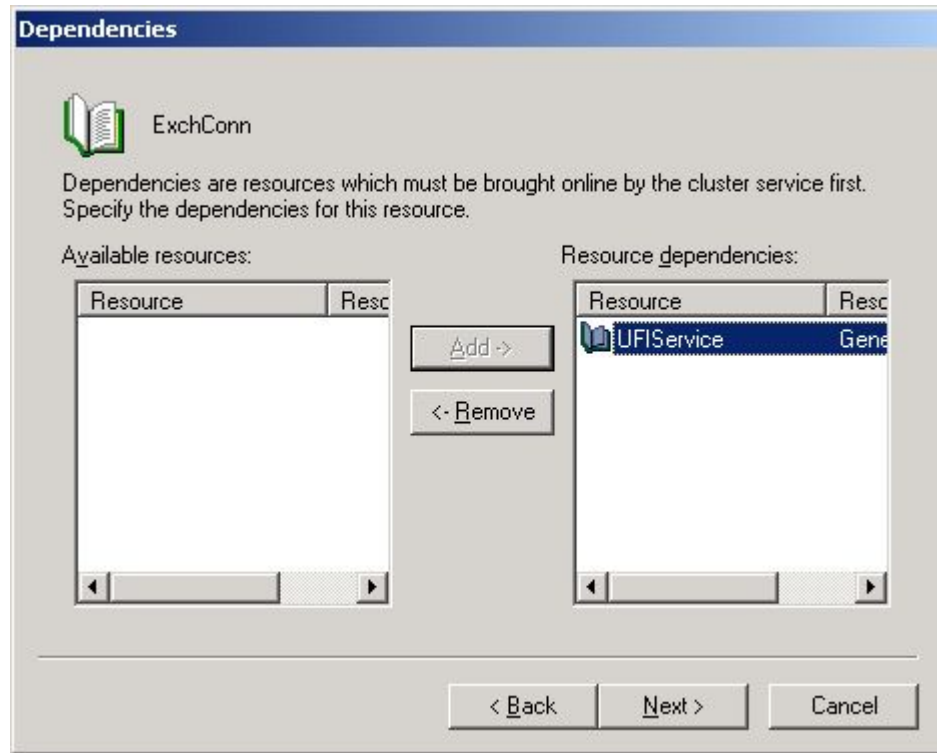
a. In the New Resource screen:
  i. If Email Manager for Exchange is being used:
    1. Enter "ExchConn" in name field
    2. Enter "ExchConn Service" in description field
  ii. If Email Manager for Lotus Domino is being used:
    1. Enter "LotusConn" in name field
    2. Enter "LotusConn Service" in description field
  iii. If Email Manager for PST files is being used:
    1. Enter "PSTConnector" in name field
    2. Enter "PSTConnector Service" in description field
  iv. Select "Generic Service" in resource type field.
 v. Select "Group0" in group field.
  vi. Click Next.

b. In the Dependencies screen:
 i. Select UFIService and click Add to add it to the Resource Dependencies list.

ii. Click Next.

c. In the Generic Service Parameters screen:

    i. If Email Manager for Exchange is being used:

        1. Enter "ExchConn" in the Service name field

    ii. If Email Manager for Lotus Domino is being used:

        1. Enter "LotusConn" in the Service name field

    iii. If Email Manager for PST files is being used:

        1. Enter "PSTConnector" in the Service name field

    iv. In the Start parameters field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "default.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

-cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\default.emgr"

v. Click Next.
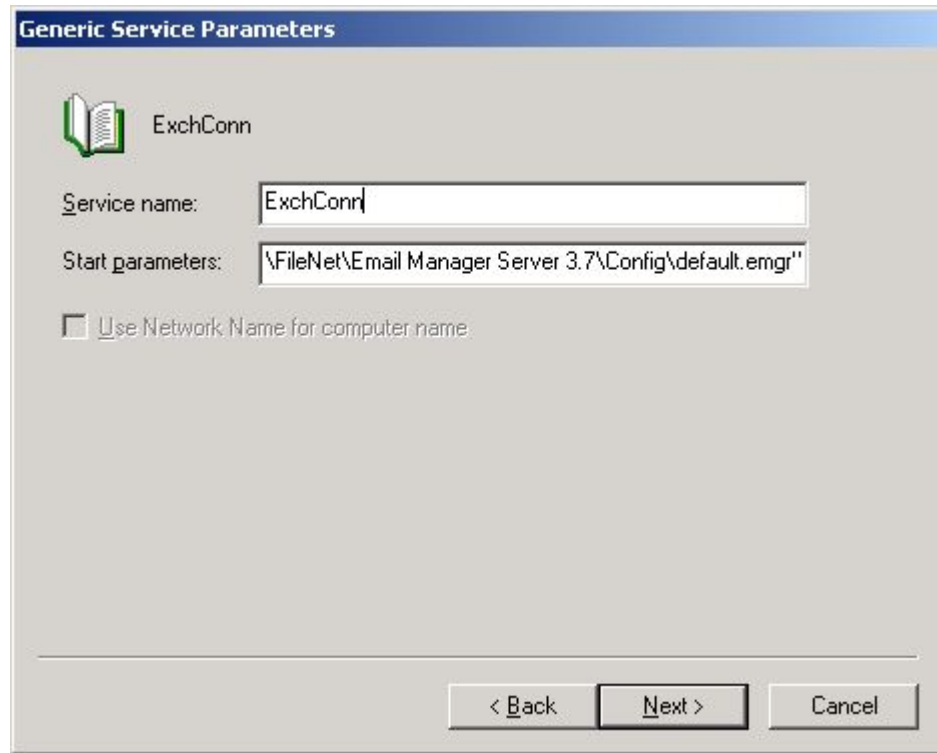
d. In the Registry Replication screen, click Finish.
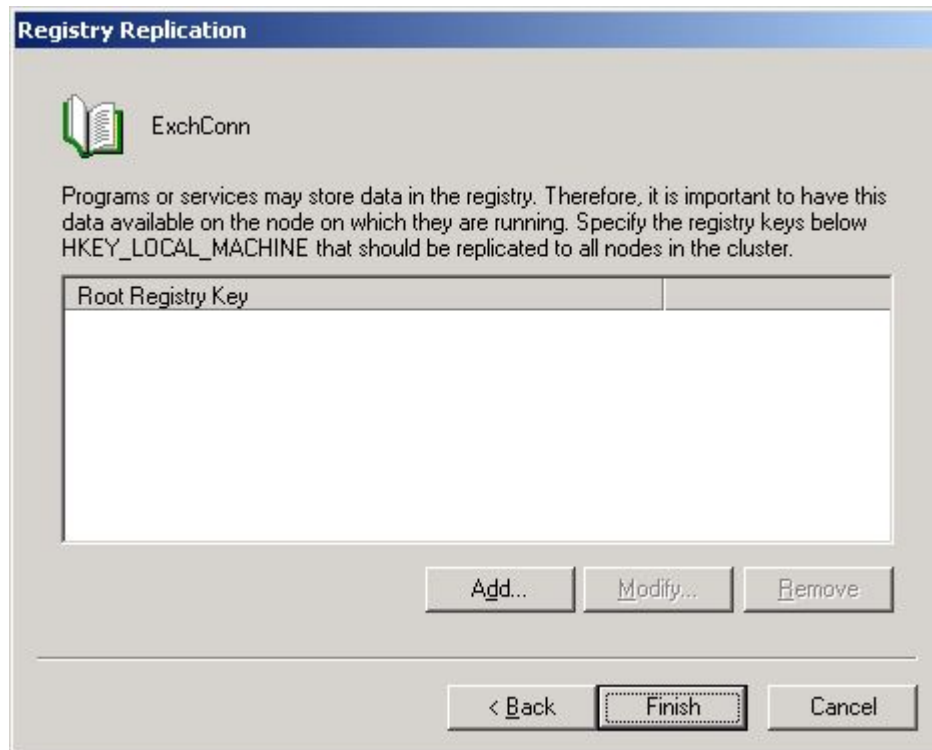
6. To enable the cluster for of Email Manager, right click on Group0 and select Bring Online.

2.2 Veritas Cluster Server Configuration

To configure Veritas Cluster Server, do the following:

1. Install Email Manager on both servers. Ensure the configuration of the machines is identical. It is suggested that both instances of Email Manager utilize the same Email Manager database. Do not enable the Email Manager services on both servers at the same time. This will result in erratic behavior of the system.

2. Click Start>Programs>Veritas>Vertias Cluster Manager – Java Console to run the Veritas console.

3. Right click on the cluster name and select Add Service Group.
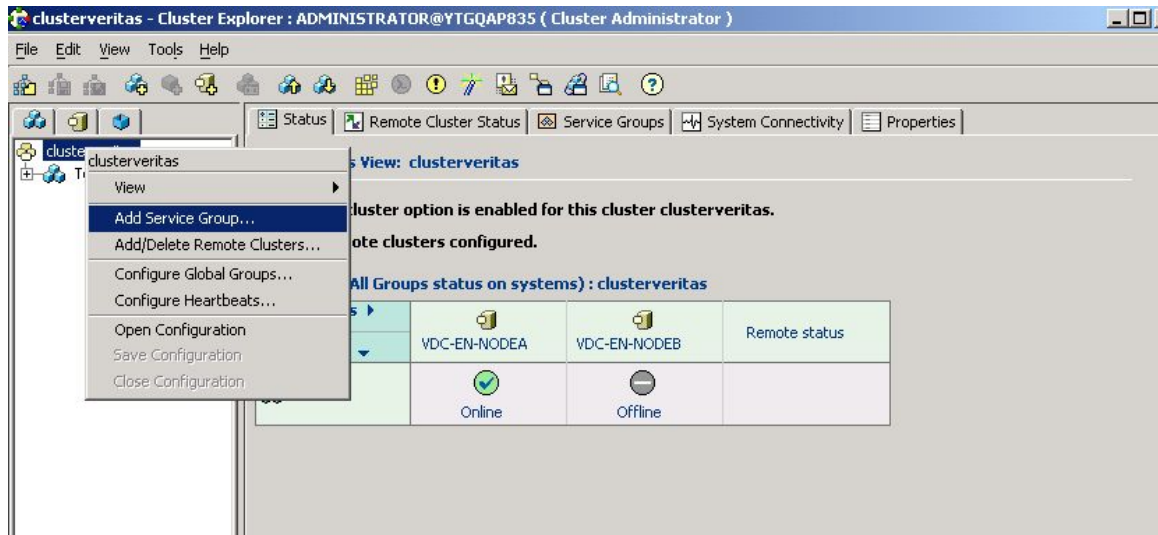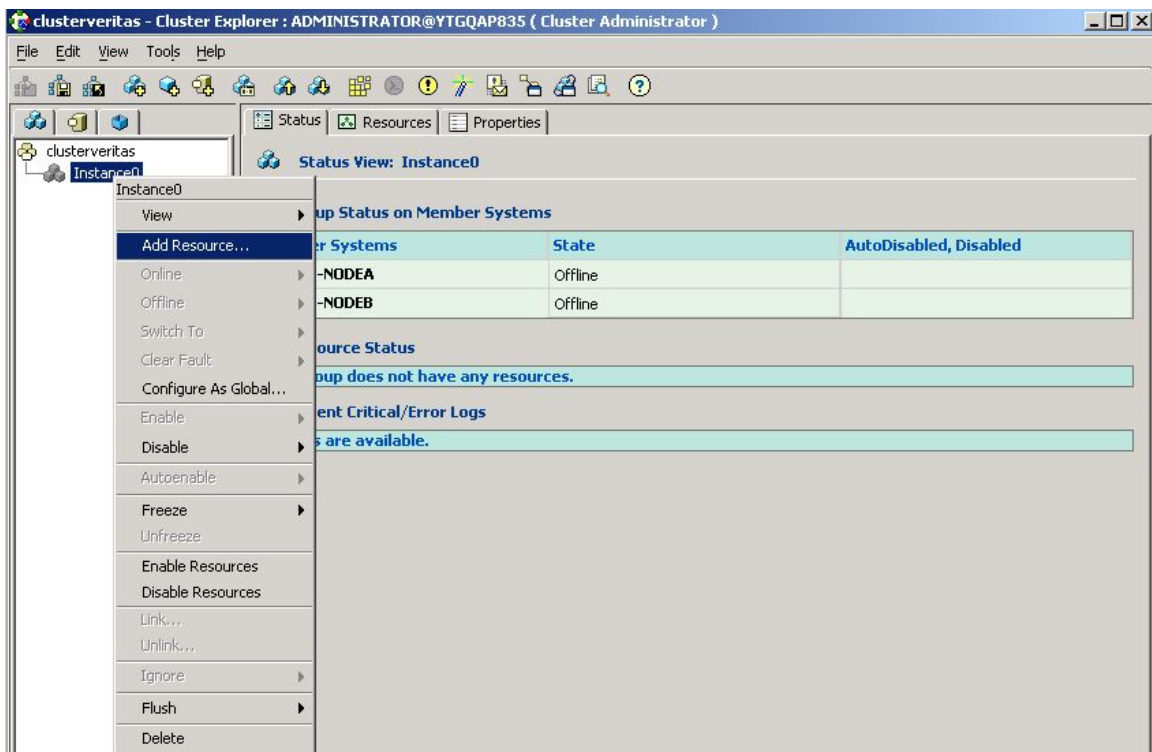

4. In the Add Service Group dialogue box:

   a. Enter "Instance0" as the Service Group Name.

   b. Under the Available Systems box, add both nodes in the cluster to Systems for Service Group.

c. Click Ok.

5. Right Click the Instance0 just created and select Add Resource.

6. In the Add Resource dialogue box:,

   a. Enter "UFIService" in the Resource Name box.
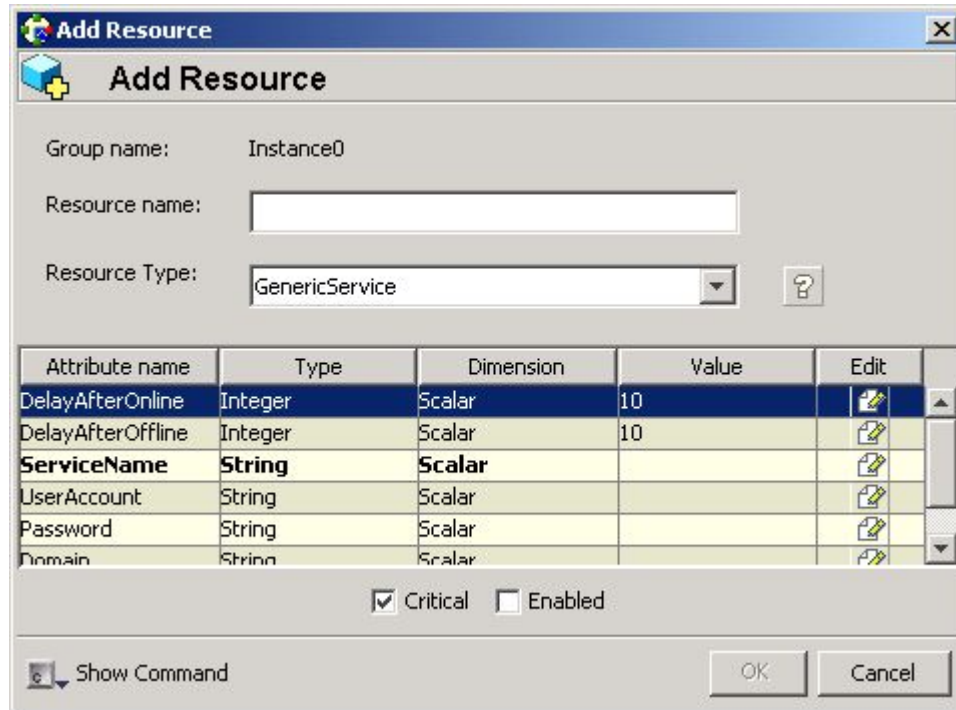
b. Select GenericService in the resource type box.

c. Click Ok.

7. Click the icon in the edit column for the Service Name attribute to open the Edit Attribute screen:

   a. Enter "UFIService" in the Scaler Value box.

   b. Click Ok.

8. Click the icon in the edit column for the UserAccount attribute.

a. Enter the administrative account name used in the cluster setup in the Scaler Value Box.
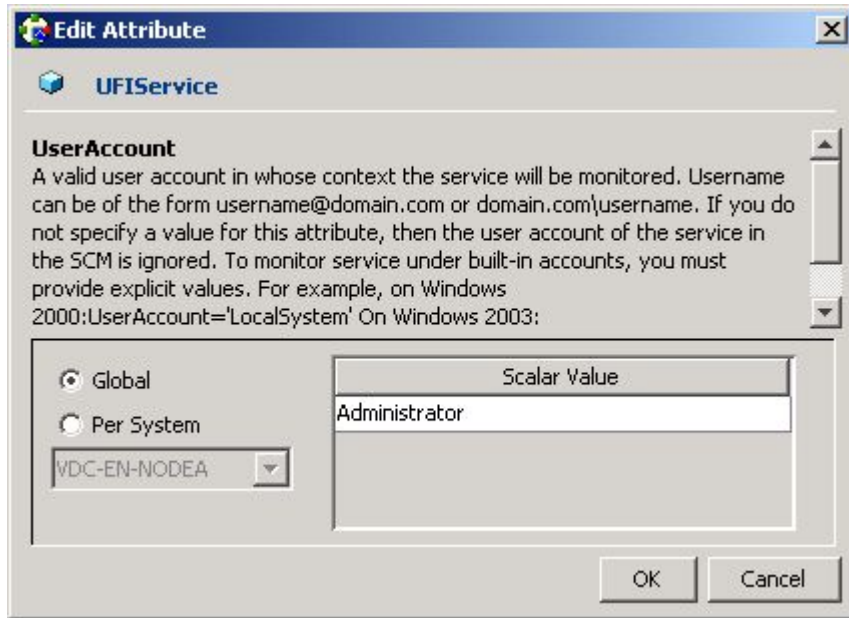
b. Click Ok.

9. Click the icon in the edit column for the Password attribute.
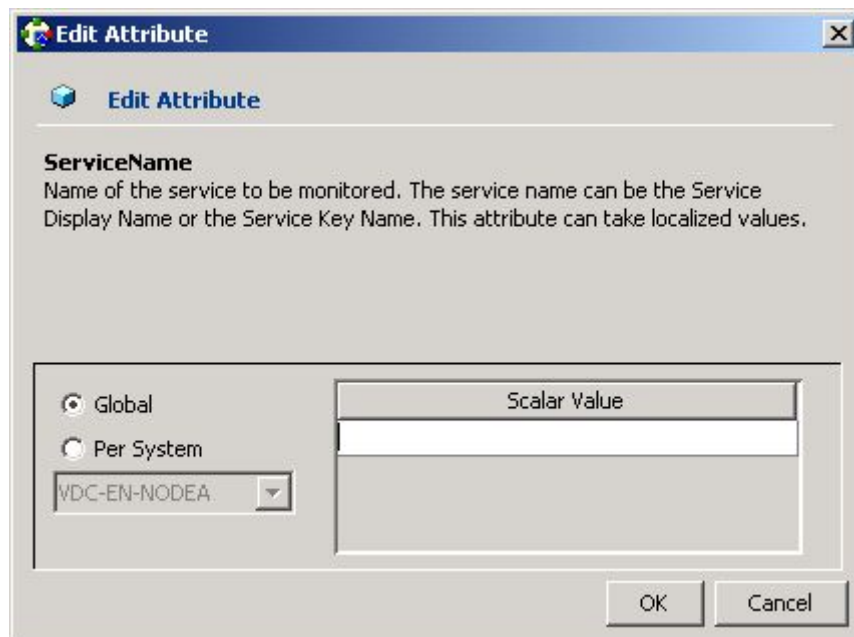
a. Enter administrative account password used in cluster setup in the Scaler Value box.

b. Click Ok.

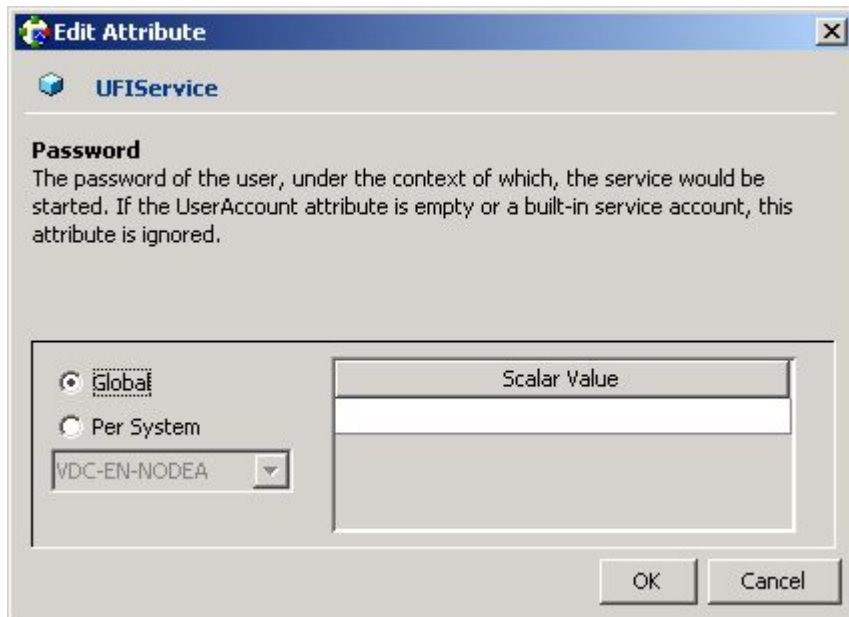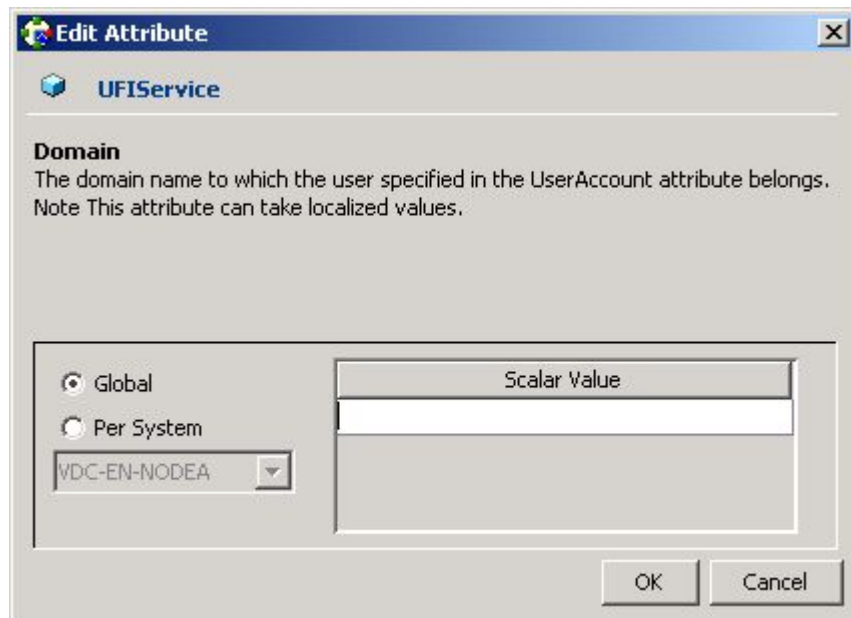10. Click the icon in the edit column for the Domain attribute.

a. Enter the Domain information used in cluster setup in the Scaler Value box.

b. Click Ok.

11. Click the icon in the edit column for the Service Arguments attribute.

    a. In the Vector Values field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "default.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

       -cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\default.emgr"

b. Click Ok.

12. In Cluster Manager, right click on the UFIService and then click Enabled.
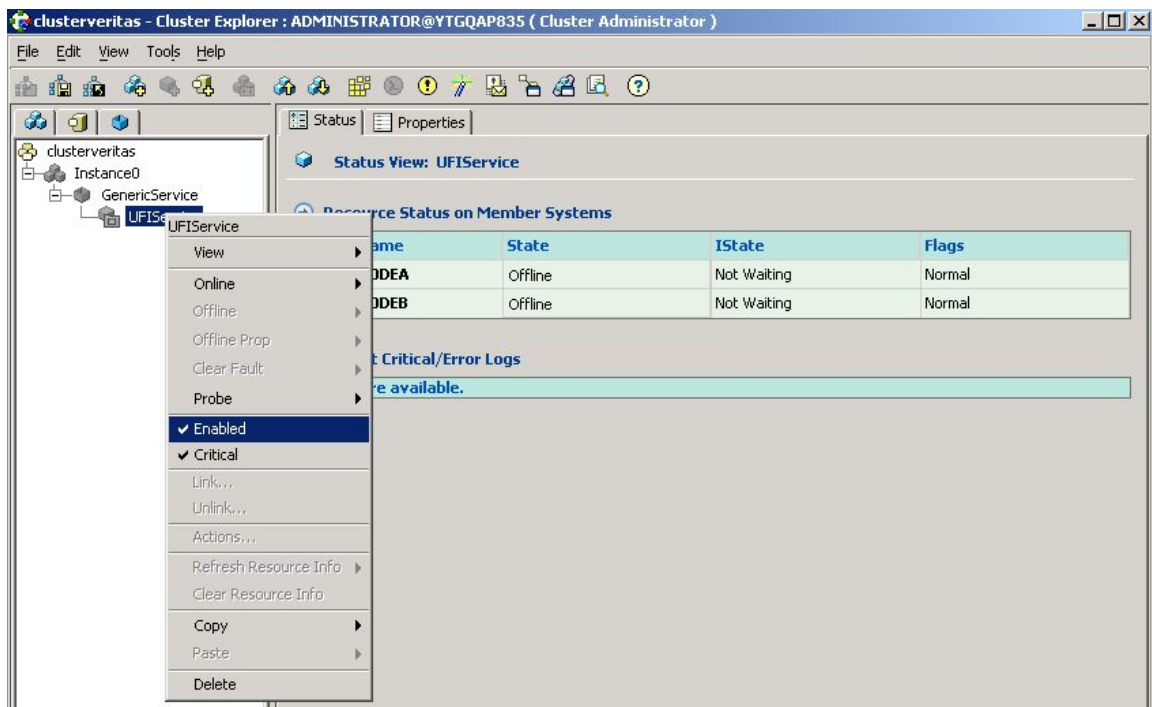
13. In Cluster Manager, right click UFIService and select Online for the appropriate node.

14. Select Yes when prompted.

15. In Cluster Manager, right click Instance0 and select Add Resource.

16. In the Add Resource dialogue box:

    a. Enter "ExchConn" in the resource name box.
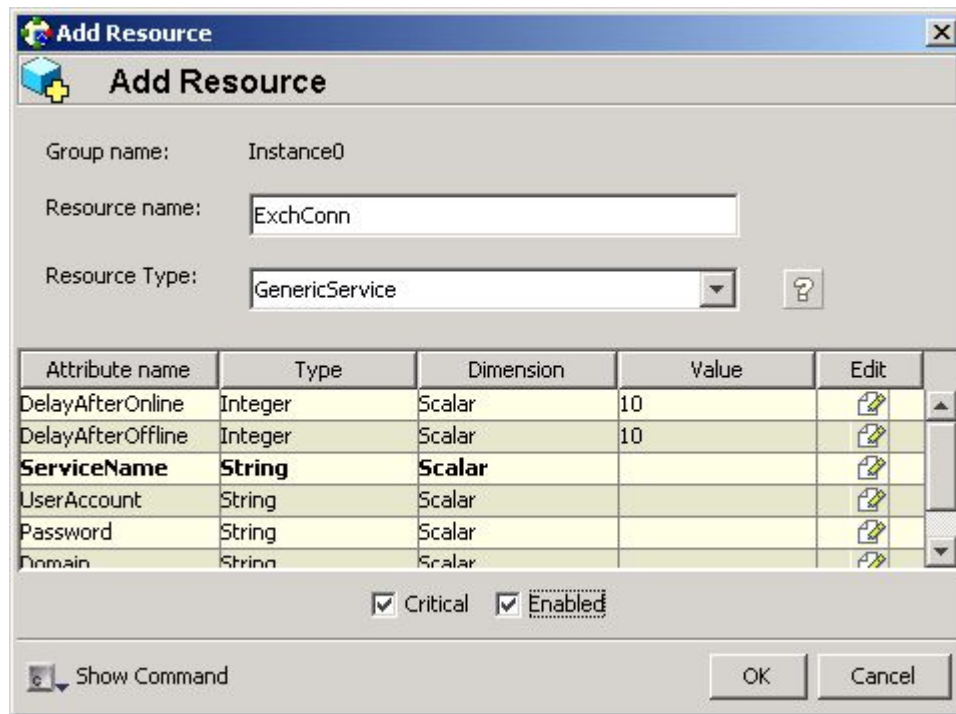
    b. Click Ok

17. Click the icon in the edit column for the ServiceName attribute.

    a. Enter "ExchConn" in the Scaler Value box.
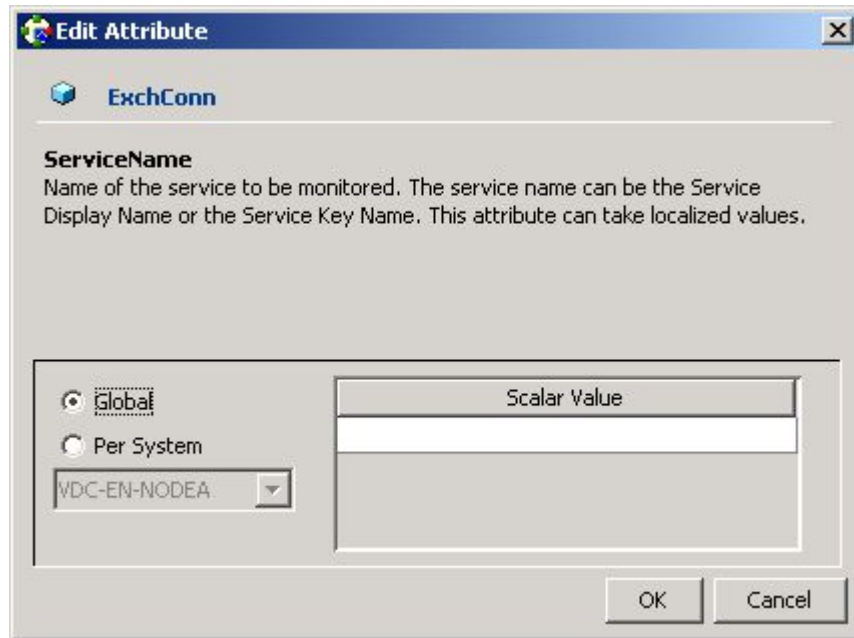
b. Click Ok.

18. Click the icon in the edit column for the UserAccount attribute.

    a. Enter the administrative account name used in the cluster setup in the Scaler Value box.
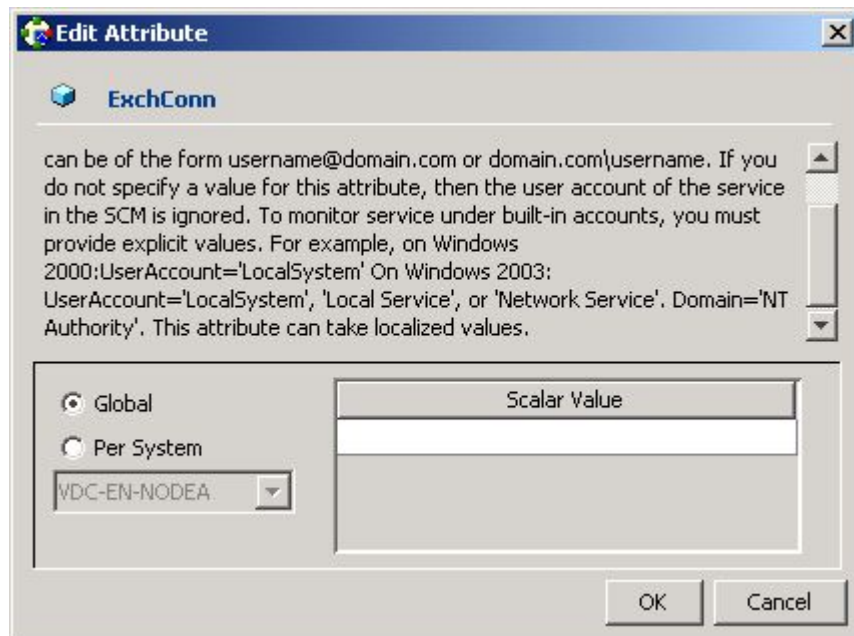
    b. Click Ok.

19. Click the icon in the edit column for the Password attribute.

    a. Enter the administrative account password used in cluster setup in the Scaler Value box.
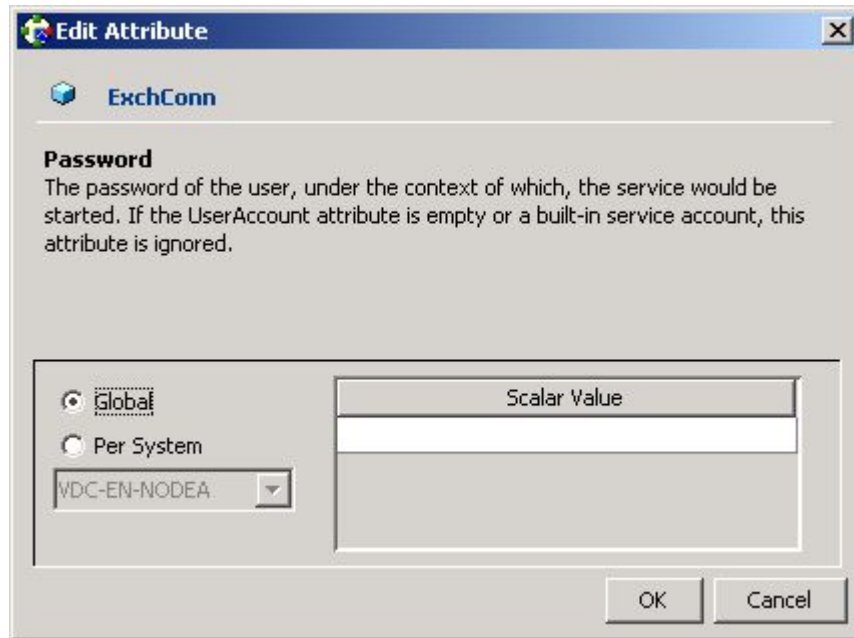
b. Click Ok

20. Click the icon in the edit column for the Domain attribute.

    a. Enter the Domain information used in cluster setup in the Scaler Value box.

    b. Click Ok.

21. Click the icon in the edit column for the Service Arguments attribute.

    a. In the Vector Values field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "default.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in

the Services screen, select "eMgr Universal File Importer", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

-cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\default.emgr"

    b.   Click Ok.
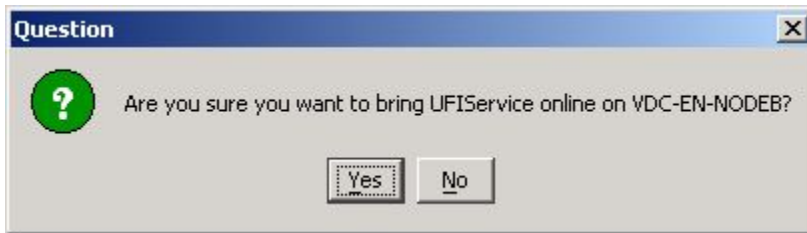
22. In Cluster Manager, right click ExchConn and select Link.
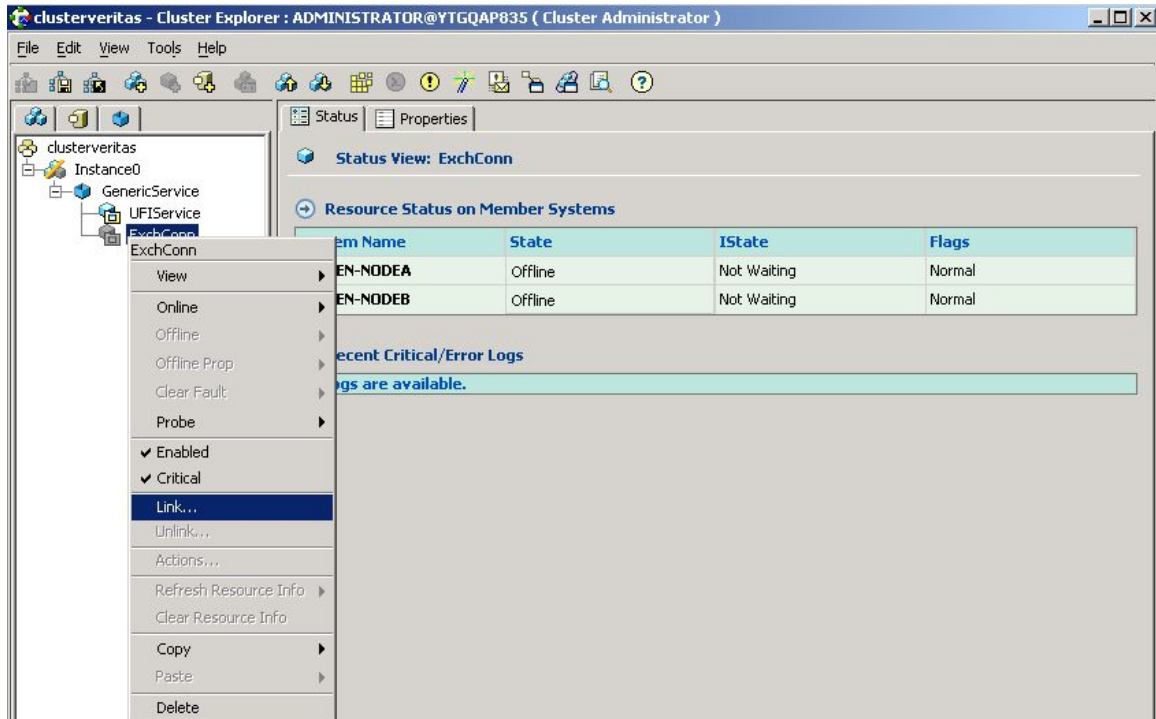
23. In the Link Resources dialogue box:

    a.   Select UFIService.

    b.   Click Ok.
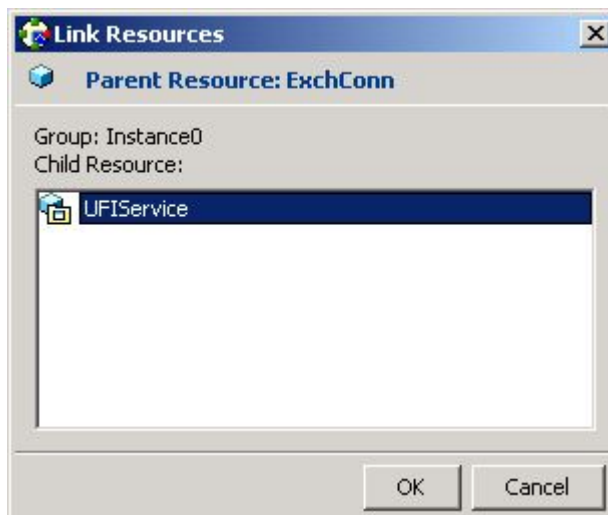
24. In Cluster Manager, right click ExchConn and select Online for the appropriate node.
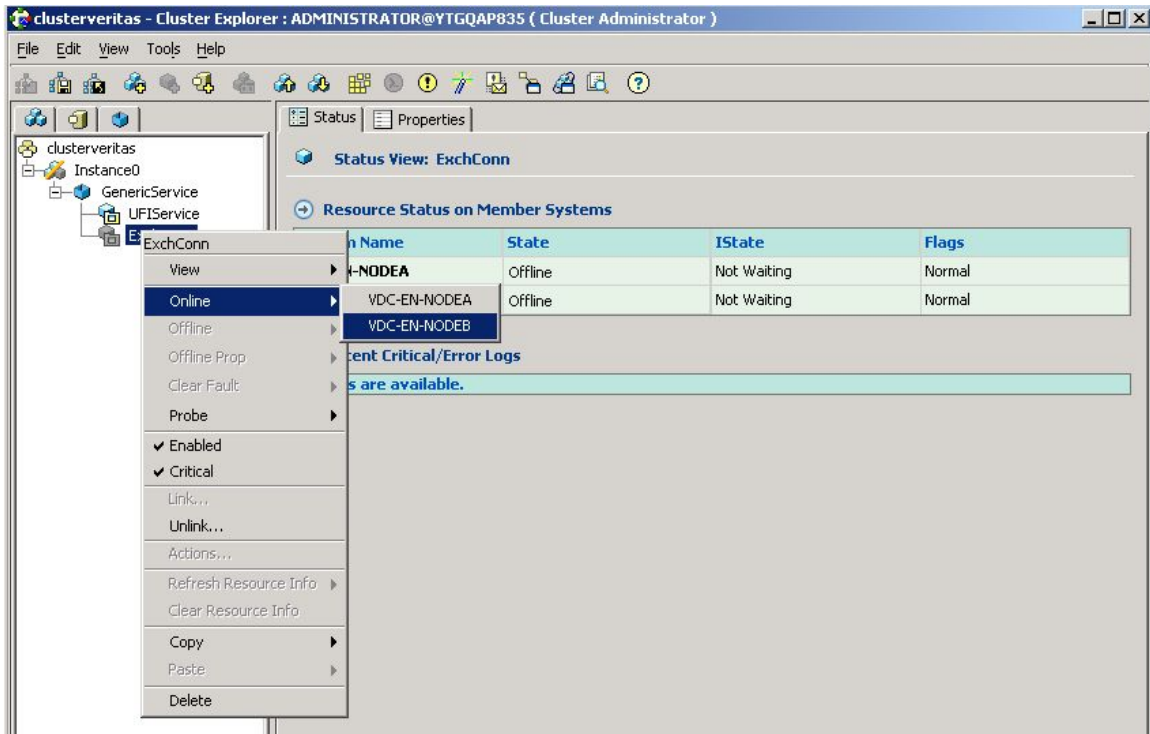
25. Select Yes when prompted.
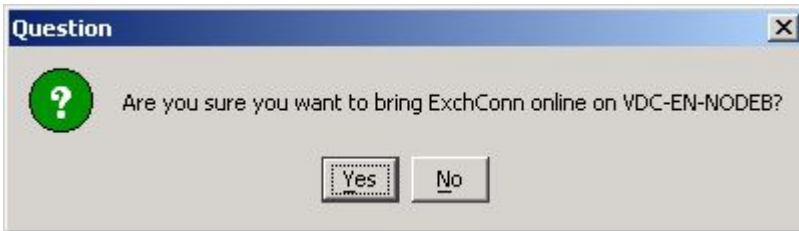
3 SYMMETRICAL SERVER CONFIGURATION

To maximize resource usage when deploying an active/passive cluster, two or more completely separate instances of Email Manager may be run on each node in the cluster. At any given time, a node in the cluster will be running one active instance of Email Manager, and have other instances in a passive state – providing failover for the other nodes in the cluster. The email folders to be monitored must be split between two different Email Manager servers. Each server will provide failover support for the other – if one email manager server goes down, the other will start doing double duty.

Note: When running two instances of Email Manager concurrently, ensure that the Monitored Locations that each instance of Email Manager is configured to monitor do not overlap. Overlap of Monitored Locations may result in unexpected behaviour of the system.

3.1 Email Manager Installation

To install two instances of Email Manager on a single machine, do the following:

1. Start the Email Manager Server installer.

2. Step through the installation wizard as described in the Email Manager Setup Guide until the Setup Type screen is reached. In this screen, choose "Custom"
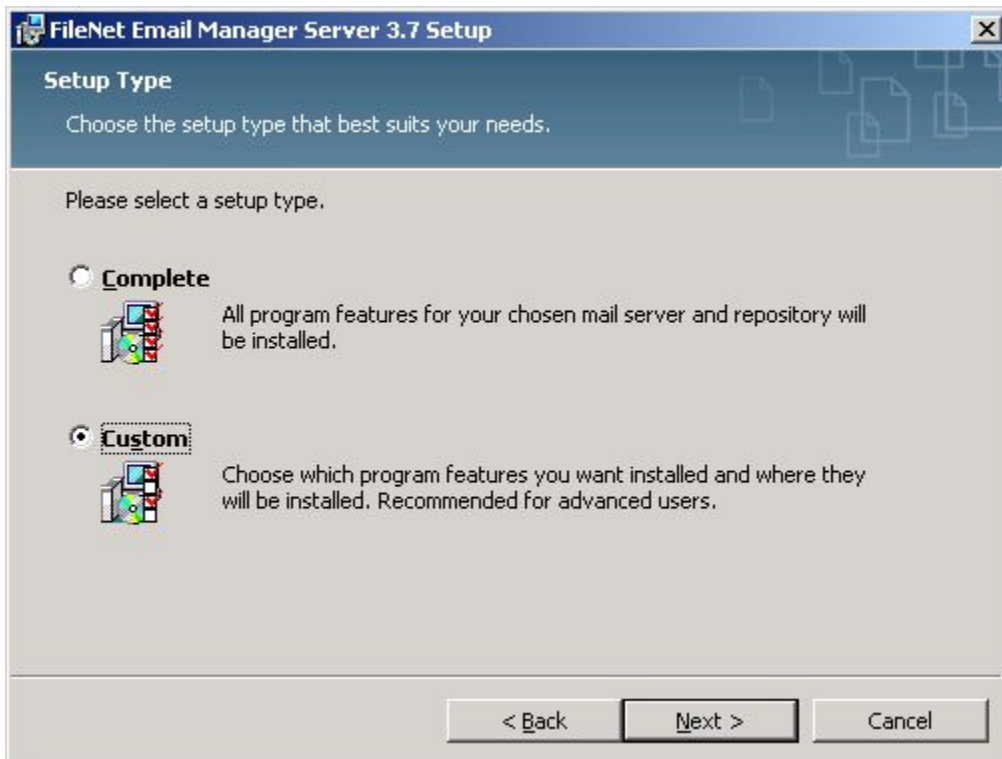
3. In the Custom Setup screen, under the node "Install second instance of eMgr services, select the source connector being used. And click Next.
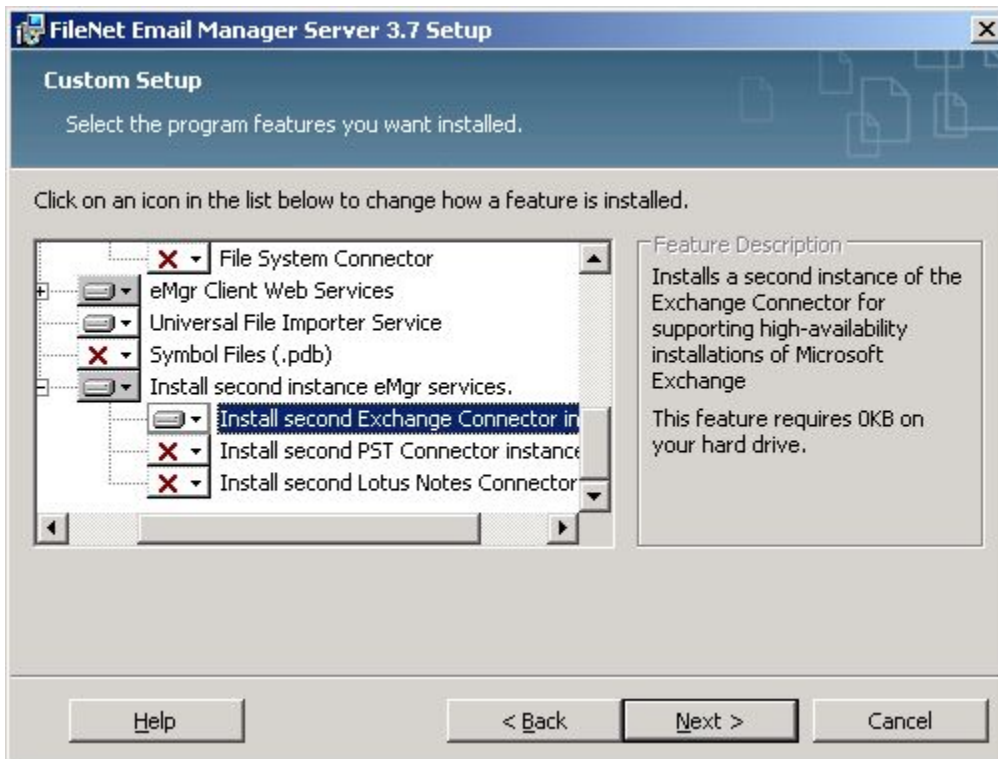
4. In the Ready to Install the Program screen, click Install to complete the installation.

5. Click Finish to close the installer.

Configure the first instance of Email Manager as follows:

1. Launch the Configuration Manger be selecting Start > FileNet Email Manager 3.7 > Server > Configuration Manager.

2. Enter the database connection information for the database that will store the configuration settings for the first instance of Email Manager.
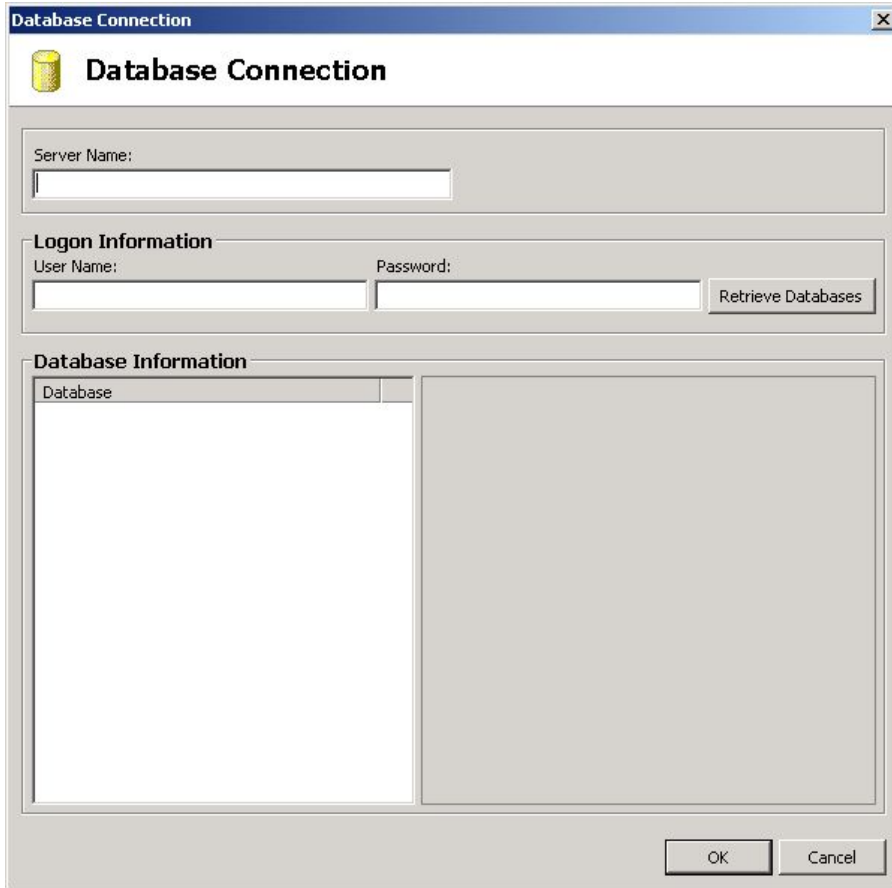
3. Configure the first instance of Email Manager (create Rules, Index Templates and Profiles as required).

Configure the second instance of Email Manager as follows:

1. Launch the Configuration Manger be selecting Start > FileNet Email Manager 3.7 > Server > Configuration Manager 1.

2. Enter the database connection information for the database that will store the configuration settings for the second instance of Email Manager. Ensure that the second instance is connecting to a different database than the first instance.

3. Ensure the file folders and communication ports used by the second instance do not conflict with the first instance. To do this, open the Configuration Options screen by clicking on the Configuration Options node and right clicking and selecting Edit

   a. Change the Temporary File Folder and Log File Locations values to be different than the values entered for the first instance of Email Manager.

   b. In the UFI Remote Interface section, change the value of port number by incrementing or decrementing the default value by one.

   c. Click Ok to save the updates.

4. Complete the rest of the configuration of the second instance of Email Manager (create Rules, Index Template and Profiles as required). Ensure that Monitored Locations in any Profiles created do not overlap with Monitored Locations used in Profiles in the first instance of Email Manager.

Repeat the above installation and configuration steps for Email Manager on the second node in the cluster. Note that the database user by instance one on the second node should match the database used by instance one on first node. As well, the database user by instance two on the second node should match the database used by instance two on first node.

3.2   Microsoft Cluster Server Configuration

After installing the two instances of Email Manager on each node in the cluster, configure each instance of Email Manager.

Configure the first instance of Email Manager according to the instructions in the section **2.1 Microsoft Cluster Server Configuration.**

Configure the second instance of Email Manager as follows:

1. Launch the Windows Cluster Administrator from Start > Programs > Administrative Tools > Cluster Administrator

2. Create a new group by selecting File > New Group.

   a. Enter **"Group1"** in the name field and a description and click Next**.**

   b. Select the node in the cluster that the second instance of Email Manager should use at its preferred node and click Finish**.** It is suggested a node other than the node that was selected as the preferred node for the first instance of email manager be used.

3. To create a new resource, right click on Group1 and select New Resource.

   a. In the New Resource screen:

      i.   Enter "UFIService1" in the Name field

      ii. Enter "UFIService1" in the Description field

      iii. Select "Generic Service" in the Resource Type field.

      iv. Select "Group1" in the Group field.

      v.   Click Next.

   b. In the Possible Owners screen, select the nodes that will be in the cluster and click Next.

   c. In the Dependencies screen, click Next.

   d. In the Generic Service Parameters screen:

      i.   Enter "UFIService1" in the Service name field.

      ii. In the Start parameters field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "instance1.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer-1", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

           -cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\instance1.emgr"

      iii. Click Next

        iv.   In the Registry Replication screen, click Finish.

4. In Cluster Administrator, find Group1 in the Active Groups of one of the nodes. Right Click on Group1 and select New > Resource to open the New Resource Screen.

    a.   In the New Resource screen:

        i.   If Email Manager for Exchange is being used:

            1.   Enter "ExchConn1" in name field

            2.   Enter "ExchConn Service1" in description field

        ii.   If Email Manager for Lotus Domino is being used:

            3.   Enter "LotusConn1" in name field

            4.   Enter "LotusConn Service1" in description field

        iii.   If Email Manager for PST files is being used:

            5.   Enter "PSTConnector1" in name field

            6.   Enter "PSTConnector Service1" in description field

        iv.   Select "Generic Service" in resource type field.

        v.   Select "Group1" in group field.

        vi.   Click Next.

    b.   In the Dependencies screen:

        i.   Select UFIService1 and click Add to add it to the Resource Dependencies list.

        ii.   Click Next.

    c.   In the Generic Service Parameters screen:

        i.   If Email Manager for Exchange is being used:

            7.   Enter "ExchConn1" in the Service name field

        ii.   If Email Manager for Lotus Domino is being used:

            8.   Enter "LotusConn1" in the Service name field

        iii.   If Email Manager for PST files is being used:

            9.   Enter "PSTConnector1" in the Service name field

        iv.   In the Start parameters field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "instance1.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer-1", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

            -cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\instance1.emgr"

        v.   Click Next.

    d.   In the Registry Replication screen, click Finish.

e. To enable the cluster for the second instance of Email Manager, right click on Group1 and select Bring Online.

3.3   Veritas Cluster Server Configuration

After installing the two instances of Email Manager on each node in the cluster, configure each instance of Email Manager.

Configure the first instance of Email Manager according to the instructions in the section **2.2 Veritas Cluster Server Configuration.**

Configure the second instance of Email Manager as follows:

1. Click Start>Programs>Veritas>Vertias Cluster Manager – Java Console to run the Veritas console.

2. Right click on the cluster name and select Add Service Group.

3. In the Add Service Group dialogue box:

   a. Enter "Instance1" as the Service Group Name.

   b. Under the Available Systems box, add both nodes in the cluster to Systems for Service Group.

   c. Click Ok.

4. Right Click the Instance1 just created and select Add Resource.

5. In the Add Resource dialogue box:,

   a. Enter "UFIService1" in the Resource Name box.

   b. Select GenericService in the resource type box.

   c. Click Ok.

6. Click the icon in the edit column for the Service Name attribute to open the Edit Attribute screen:

   a. Enter "UFIService1" in the Scaler Value box.

   b. Click Ok.

7. Click the icon in the edit column for the UserAccount attribute.

   a. Enter the administrative account name used in the cluster setup in the Scaler Value Box.

   b. Click Ok.

8. Click the icon in the edit column for the Password attribute.

   a. Enter administrative account password used in cluster setup in the Scaler Value box.

   b. Click Ok.

9. Click the icon in the edit column for the Domain attribute.

   a. Enter the Domain information used in cluster setup in the Scaler Value box.

   b. Click Ok.

10. Click the icon in the edit column for the Service Arguments attribute.

   a. In the Vector Values field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation

folder in the sub folder "Config" and is named "instance1.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer-1", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

--cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\instance1.emgr"

    b.   Click Ok.

11. In Cluster Manager, right click on the UFIService1 and then click Enabled**.**

12. In Cluster Manager, right click UFIService1 and select Online for the appropriate node.

13. Select Yes when prompted.

14. In Cluster Manager, right click Instance1 and select Add Resource.

15. In the Add Resource dialogue box:

    a.   Enter "ExchConn1" in the resource name box.

    b.   Click Ok

16. Click the icon in the edit column for the ServiceName attribute.

    a.   Enter "ExchConn1" in the Scaler Value box.

    b.   Click Ok.

17. Click the icon in the edit column for the UserAccount attribute.

    a.   Enter the administrative account name used in the cluster setup in the Scaler Value box.

    b.   Click Ok.

18. Click the icon in the edit column for the Password attribute.

    a.   Enter the administrative account password used in cluster setup in the Scaler Value box.

    b.   Click Ok

19. Click the icon in the edit column for the Domain attribute.

    c.   Enter the Domain information used in cluster setup in the Scaler Value box.

    d.   Click Ok.

20. Click the icon in the edit column for the Service Arguments attribute.

    e.   In the Vector Values field, enter the path to the Email Manager configuration file prefixed with the text "-cfg=". The configuration file is located in the Email Manager installation folder in the sub folder "Config" and is named "instance1.emgr" by default. The full path should be used and the path should be enclosed in quotation marks. To verify the path, in the Services screen, select "eMgr Universal File Importer-1", right click and select and select Properties. The Path to executable field will contain a reference to the location of the configuration file used by Email Manager. The following is the default value:

--cfg="C:\Program Files\FileNet\Email Manager Server 3.7\Config\instance1.emgr"

    f.   Click Ok.

21. In Cluster Manager, right click ExchConn1 and select Link.

22. In the Link Resources dialogue box:

    g.   Select UFIService1.

       h.   Click Ok.

23. In Cluster Manager, right click ExchConn1 and select Online for the appropriate node.

24. Select Yes when prompted.