

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.
- 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.

New Group	GroupO This wizard will help you quickly set up a new resource group. Name: GroupO Description: Cluster Group for Email Manager To continue, click Next.
· · · · · · · · · · · · · · · · · · ·	< Back Next > Cancel

b. Select the node in the cluster that the Email Manager should use at its preferred node and click Finish.

vailable nodes:	Preferred owners:
Name	Name
TVDC-EN-NODEA	Add ->
	<- <u>R</u> emove
	Move Up
	Move Down

- 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.

UFIServ Name: Description: Resource type: Group:	UFIService UFIService Generic Service Group0	
To continue, click	irce in a separate Resource f Next. <u>Back <u>N</u>ext ></u>	4onitor Cancel

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

vailable nodes:	ners for this resource.	Possible <u>o</u> wners	:
Name	<u>A</u> dd 	VDC-EN-N	

c. In the Dependencies screen, click Next.

Resc	Resource	Res
1.1.1		
Add	⇒	
<- <u>B</u> er	nove	
	<u> </u>	<- <u>R</u> emove

- 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

UFIServio	ce22
<u>S</u> ervice name:	UFIService
Start <u>p</u> arameters:	-cfg="C:\Program Files\FileNet\Email Manager Server 3.

iv. In the Registry Replication screen, click Finish.

Programs or services may sl	tore data in the registry. Therefore, it is important to have thi
data available on the node HKEY_LOCAL_MACHINE t	on which they are running. Specify the registry keys below that should be replicated to all nodes in the cluster.
Root Registry Key	
	Add <u>M</u> odify <u>R</u> emove

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.

New Resource	Na <u>m</u> e: Description: Resource type: <u>G</u> roup:	nn Service ExchConn Service ExchConn Service Generic Service Group0 urce in a separate Resource Monitor
	<u></u> <	Back Next > Cancel

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

ii. Click Next.

ependencies are resol pecify the dependenci	urces which must be es for this resource.	brought online by the cluster	service first.
vailable resources:		Resource <u>d</u> epender	icies:
Resource	Resc	Resource	Res
		emove	Ger
1	•	-1	1

- 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.

<u>S</u> ervice name:	ExchConn
Start parameters:	FileNet\Email Manager Server 3.7\Config\default.emgr"
Use Network N	ame for computer name
Use Network N	lame for computer name
Use Network N	lame for computer name
□ Use Network N	lame for computer name
☐ Use Network N	lame for computer name

d. In the Registry Replication screen, click Finish.

jistry Replication			
Programs or services may sto data available on the node of HKEY_LOCAL_MACHINE th	n which they are running	Specify the registr	y keys below
Root Registry Key		2	
		1	
	<u>Ad</u> d	<u>M</u> odify	<u>R</u> emove
	< <u>B</u> ack	(Finish	Cancel

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.

🔞 clusterve	eritas - Cluster Explorer : ADM	INISTRA	FOR@YTGQAP835 (Cluster Administrate	ar)		
<u>File Edit</u>	<u>View Tools H</u> elp						
é i i	a 🗞 🔍 🕄 📥 🖓 🖉	₩ () 🕐 🎁 🔛 🍃	a 🔏 🖪 🧿			
3	😒 📄 🔛 Status	🚹 Remo	ote Cluster Status 🛛 🐼	Service Groups 😽	5ystem Connectivity 📔 Pr	operties	
	usterveritas	View:	clusterveritas				
	View						
	Add Service Group	luster	option is enabled f	or this cluster cluster	rveritas.		
	Add/Delete Remote Clusters	ote clu	isters configured.				
	Configure Global Groups Configure Heartbeats		ups status on syste	ems) : clusterveritas			
	Open Configuration Save Configuration	-5 + 	VDC-EN-NODEA	VDC-EN-NODEB	Remote status		
	Close Configuration			0			
			Online	Offline			

- 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.

rvice Group name:			
Available Systems VDC-EN-NODEA VDC-EN-NODEB	Systems for Service (System name	Sroup Startup	Priority
ervice Group Type: 📀 Failov	ver C Parallel C Hybrid		Templates

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

🤠 clusterverita	as - Cluster Explore	r : AD	MINISTRATOR@YTGQ	AP835 (Cluster Administrator)		_ 🗆 ×
<u>File E</u> dit <u>V</u> iew	Tools <u>H</u> elp					
in in in 🤹 🤇	🇞 🗞 🕵 🖓	% (& 🛱 🖲 🖲 🌟	🖁 🔓 🔏 🖳 💿		
300		Statu	s 🖾 Resources 🗐 F	Properties		
😞 clusterverita	<u> </u>		atus View: Instance0			
	n 🛰 Instance0	ø 50	atus view: Instanceu			
	View	•	up Status on Member	Systems		
	Add Resource		r Systems	State	AutoDisabled, Disabled	
	Online		-NODEA	Offline		
	Offline	Þ	-NODEB	Offline		
	Switch To		ource Status			
	Clear Fault		pup does not have an	V PECOLIFCES		
	Configure As Global.	9				
	Enable	- F	ent Critical/Error Log	5		
	Disable	•	s are available.			
	Autoenable	•				
	Freeze	•				
	Unfreeze					
	Enable Resources					
	Disable Resources					
	Link					
	Unlink	0.040				
	Ignore	Þ				
_	Flush	•				
	Delete					

- 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.

🏟 Add Resource	2			×
😽 🛛 Add R	esource			
Group name:	Instance0			
Resource name:				
Resource Type:	GenericServio	ce	•	?
Attribute name	Туре	Dimension	Value	Edit
DelayAfterOnline	Integer	Scalar	10	
DelayAfterOffline	Integer	Scalar	10	
ServiceName	String	Scalar		2
UserAccount	String	Scalar		2
Password	String	Scalar		
Domain	String	Scalar		<i>P</i>
	ſ	🗸 Critical 🔲 Enable	ed	
Show Comma	nd		OK	Cancel

- 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.

🕏 Edit Attribute		×
😟 Edit Attri	ite	
	to be monitored. The service name can be the Service Service Key Name. This attribute can take localized values.	
Global O Per System VDC-EN-NODEA	Scalar Value	
		:

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.

🕏 Edit Attribute		×
UFIService		
can be of the form usernaminot specify a value for this a		•
Global Per System VDC-EN-NODEA	Scalar Value Administrator	
1	OK Cancel	

- 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.

UFIService	
ssword e password of the user junder th	ne context of which, the service would be
rted. If the UserAccount attribu	te is empty or a built-in service account, this
ribute is ignored.	
⊙ Global	Scalar Value
Global Per System	Scalar Value
	Scalar Value

- 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.

Edit <u>V</u> iew To	ools Help				
	S 🕄 🍈 🖓 🖉	# D 🕐	1 3 7 4 6 (?)	
100		s Propert			
clusterveritas	1	atus View: L			
- GenericS	UFIService	orrce Statu	s on Member Systems		
	View	, ame	State	IState	Flags
	Online	DDEA	Offline	Not Waiting	Normal
	Offline	DDEB	Offline	Not Waiting	Normal
	Offline Prop Clear Fault		Error Logs		
	Probe	e availab	le.		
	✓ Enabled				
	✓ Critical				
	Link				
	Unlink	_			
	Actions	_			
	Refresh Resource Info	F			
	Clear Resource Info				
	Сору	•			
	Paste	F			
		- 1990 B			

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

Group name:	Instance0				
Resource name:	ExchConn				
Resource Type:	GenericServi	се	T	8	
	1				
Attribute name	, Туре	Dimension	Value	Edit	T
Attribute name DelayAfterOnline	Type Integer	Dimension Scalar	Value	Edit	
DelayAfterOnline	Integer	Scalar	10		
DelayAfterOnline DelayAfterOffline	Integer Integer	Scalar Scalar	10		
DelayAfterOnline DelayAfterOffline ServiceName	Integer Integer String	Scalar Scalar Scalar	10		

- 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.

🤠 Edit Attribute	<u>></u>	<
Generation ExchConn		
do not specify a value for this at in the SCM is ignored. To monitor provide explicit values. For exam 2000:UserAccount='LocalSystem	' On Windows 2003: al Service', or 'Network Service'. Domain='NT	
Global Per System VDC-EN-NODEA	Scalar Value	
	OK Cancel	

- 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.

🕏 Edit Attribute	X
C ExchConn	
Domain The domain name to which the use belongs. Note This attribute can ta	er specified in the UserAccount attribute ake localized values.
Slobal Per System VDC-EN-NODEA	Scalar Value
	OK Cancel

- 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.

🔁 Link Resources			×
Parent Resource: E	xchConn		
Group: Instance0 Child Resource:			
UFIService			
	ок	1	Cancel
			Cancer

24. In Cluster Manager, right click ExchConn and select Online for the appropriate node.

😨 clusterveritas - Cluster Explorer : A	DMINIS	TRATOR@YTGQA	P835 (Cluster Adm	inistrator)		_ 🗆 ×
<u>File Edit View Tools H</u> elp						
11 12 13 14 16 16 16 16 16 16 16 16 16 16 16 16 16	🀼 🖺	🛱 🔘 🕐 🌟	🛃 🔓 🔏 🗔 (3		
	Status	Properties				
A chustory pritos		tus View: ExchC				
🛛 🖃 🎲 Instance0	Sca	icus view: Excit	onn			
E GenericService	→ Reso	ource Status on M	1ember Systems			
	×	Name	State	IState	Flags	
View		NODEA	Offline	Not Waiting	Normal	
Online		VDC-EN-NODEA	Offline	Not Waiting	Normal	
Offline		VDC-EN-NODEB		Not Walking	Norma	
Offline Prop	Te	ent Critical/Error	Logs			
Clear Fault		are available.	Logo			
Probe	. T					
✓ Enabled						
Unlink						
Actions						
Refresh Resource Ir	nfo 🕨					
Clear Resource Info						
Сору	•					
Paste) F					
Delete						

25. Select Yes when prompted.

Question	×
?	Are you sure you want to bring ExchConn online on VDC-EN-NODEB?

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"

🔂 FileNet Email N	1anager Server 3.7 Setup
Setup Type Choose the se	tup type that best suits your needs.
Please select a	setup type.
C <u>C</u> omplete	
	All program features for your chosen mail server and repository will be installed.
	Choose which program features you want installed and where they will be installed. Recommended for advanced users.
	< <u>B</u> ack <u>N</u> ext > Cancel

3. In the Custom Setup screen, under the node "Install second instance of eMgr services, select the source connector being used. And click Next.

ustom Setup Select the program features you want installed.	
ck on an icon in the list below to change how a feature is in	Installed. Feature Description Installs a second instance of the Exchange Connector for supporting high-availability installations of Microsoft Exchange This feature requires 0KB on your hard drive.

- 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.

abase Connection		
] Database C	onnection	
ierver Name:		
ogon Information	Password:	
		Retrieve Databases
)atabase Information		
Database Information		
Database		
		OK Cancel

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.
- 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.
- 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.