

Universal File Mover Status Monitor Installation and Operation Manual

UFM Status Monitor : MQWT1 : CAPITALWARE.UFM.STATUS : Last update at 12:38:31

Date / Time	Hostname	IP Address	OS	UserID	Exit Code	UFM Version	UFM Workflow
2012/10/18 16:32:04	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/18 16:10:59	fc4x86-64	127.0.0.1	Linux	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:09:54	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:09:28	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 16:07:02	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 16:06:56	fc4x86-64	127.0.0.1	Linux	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:05:54	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:05:47	fc4x86-64	127.0.0.1	Linux	mqm	8	1.0.0	ufm_mqsend.xml
2012/10/18 16:04:27	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:02:54	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 15:59:35	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 15:59:04	cw-ux31	192.168.10.111	Windows 7	rlacroix	8	1.0.0	ufm_mqsend8.xml
2012/10/18 15:57:37	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 13:39:20	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/18 13:27:07	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/17 20:06:36	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:33:57	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:09:38	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:07:24	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:01:00	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml



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1 Introduction

1.1 Overview

Universal File Mover Status Monitor (UFM-SM) application is designed to display the UFM Workflow status messages from the UFM status queue. The display is automatically refreshed every 60 seconds (default value). The user can alter this refresh rate.

UFM-SM allows the user to view the status messages of an UFM Workflow from a centralized queue. Any UFM Workflow that has a non-zero “Exit Code” will be highlighted in red, so that the user can quickly identify problem Workflows.

The main window displays the UFM Workflows in descending order (by start date and time)

By default, status messages have a default expiry of 7 days. Hence, UFM status messages are self managing. Therefore, the user does not need to take extra action/work to manage/clean the status queue.

UFM-SM can connect to a queue manager in 3 possible ways:

- Locally in binding mode
- Remotely using a Client Channel Definition Table (CCDT)
- Remotely using a MQ XML file

UFM-SM supports both forms of IBM MQ security:

- SSL for connecting to remote queue managers.
- 3rd party security exit for connecting to remote queue managers.

1.2 Executive Summary

The major features of UFM-SM are as follows:

- Provides a concise view of the UFM Workflows started in the user's environment
- Automatically refreshes the display and is sorted in descending order
- Licensed under Apache License 2
- Free to use (support is extra)

1.3 Prerequisites

This section provides the minimum supported software levels.

1.3.1 Java

UFM Status Monitor requires Java v7 or higher.

1.3.2 IBM MQ

UFM Status Monitor requires IBM MQ v7.0, v7.1, v7.5, v8.0, v9.0, v9.1, v9.2 or higher.

1.3.2.1 Command Server

The queue manager's command server must be running; otherwise UFM-SM will not be able to obtain channel status information.

1.4 File Definitions

The file used in UFM-SM is defined as follows:

- *UFM-SM_MQ* XML file is the file that is defined by a *UFM-SM_MQ.dtd*. It contains the information to connect to a particular queue manager

2 Installing UFM-SM

This section describes how to install Capitalware's UFM Status Monitor.

2.1 Windows Installation

To install UFM Status Monitor on Windows, do the following instructions:

- Run the install program called:
 - **ufmsm-setup-32bit.exe** for 32-bit JVM
 - **ufmsm-setup-64bit.exe** for 64-bit JVM
- The installer follows the standard Windows install procedures and provides default values for the user.
- When the install program has completed execution, there will be a newly created folder under *Start -> All Programs* called **UFM Status Monitor**.
- To run UFM Status Monitor, select the UFM Status Monitor icon from within the UFM Status Monitor folder.

2.2 Unix and Linux Installation

To install UFM Status Monitor on Unix or Linux, do the following:

1. ftp or copy the selected `ufmsm.tar.zip` file to the target platform
2. Unzip the `ufmsm.tar.zip` to an appropriate directory with the following command:

```
unzip ufmsm.tar.zip
```

3. Change directory to *Capitalware/UFM-SM/*
4. Next, do the following command:

```
chmod +x *.sh
```

3 UFM-SM_MQ XML File

This section describes how to create an UFM-SM_MQ XML file for use by UFM-SM. The UFM-SM_MQ XML file contains the MQ configuration information for connecting to a remote queue manager as described below.

3.1 <UFM-SM_MQ> Root Element

<UFM-SM_MQ> is the root element for the UFM-SM_MQ XML file. The UFM-SM_MQ root element is comprised of 19 elements. According to the user's needs, one or more of the following 19 elements are selected:

- <RefreshRate> (optional) specifies refresh interval; default value is 60 seconds
- <QMgrName> (required) specifies the name of the queue manager
- <QueueName> (required) specifies the name of the status queue
- <CCDTFile> (optional) specifies a CCDT file
- <Hostname> (optional) specifies the hostname
- <Port> (optional) specifies the port number
- <ChannelName> (optional) specifies the channel name
- <UserID> (optional) specifies the UserID
- <Password> (optional) specifies the Password for the UserID
- <SecurityExit> (optional) specifies the security exit name
- <SecurityExitPath> (optional) specifies the path to the security exit
- <CipherSuiteName> (optional) specifies the the CipherSuite name
- <DistinguishedName> (optional) specifies the Distinguished name
- <TrustedStore> (optional) specifies the Trusted Store
- <TrustedStorePasswd> (optional) specifies the Trusted Store password
- <KeyStore> (optional) specifies the Key Store
- <KeyStorePasswd> (optional) specifies the Key Store password
- <LDAPServer> (optional) specifies the LDAP server hostname or IP address
- <LDAPServerPort> (optional) specifies the LDAP server port number

3.2 Sample

To create an UFM-SM_MQ XML file, open a text editor and input one or more of the above elements as shown in below:

Note: The UFM-SM_MQ XML files must be stored in the <UFM-SM_Install_PATH>\mq\ directory. i.e. C:\Capitalware\UFM-SM\mq\

Example: To display all channels whose name begins with “ABC”, input the following:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE UFM-SM_MQ SYSTEM "UFM-SM_MQ.dtd">
<UFM-SM_MQ>
  <RefreshRate>60</RefreshRate>
  <QMgrName>MQWT1</QMgrName>
  <QueueName>CAPITALWARE.UFM.STATUS</QueueName>
  <Hostname>10.10.10.10</Hostname>
  <ChannelName>SYSTEM.DEF.SVRCONN</ChannelName>
  <Port>1414</Port>
</UFM-SM_MQ>
```

4 Running UFM-SM

This section describes how to invoke UFM-SM. UFM-SM will display a window that shows the status of each channel. The display will be refreshed every 60 seconds unless the user specifies a different value for the RefreshRate XML tag.



The screenshot shows a window titled "UFM Status Monitor : MQWT1 : CAPITALWARE.UFM.STATUS : Last update at 12:38:31". The window contains a table with the following columns: Date / Time, Hostname, IP Address, OS, UserID, Exit Code, UFM Version, and UFM Workflow. The table lists various channels and their status over time. Two rows have a red background in the Exit Code column, indicating an error (Exit Code 8).

Date / Time	Hostname	IP Address	OS	UserID	Exit Code	UFM Version	UFM Workflow
2012/10/18 16:32:04	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/18 16:10:59	fc4x86-64	127.0.0.1	Linux	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:09:54	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:09:28	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 16:07:02	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 16:06:56	fc4x86-64	127.0.0.1	Linux	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:05:54	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:05:47	fc4x86-64	127.0.0.1	Linux	mqm	8	1.0.0	ufm_mqsend.xml
2012/10/18 16:04:27	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:02:54	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 15:59:35	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 15:59:04	cw-ux31	192.168.10.111	Windows 7	rlacroix	8	1.0.0	ufm_mqsend8.xml
2012/10/18 15:57:37	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 13:39:20	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/18 13:27:07	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/17 20:06:36	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:33:57	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:09:38	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:07:24	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:01:00	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml

UFM-SM expects to be passed the name of an UFM-SM_MQ XML on start up. The default value is *mq.xml*. The user can create and name the UFM-SM_MQ XML files anything they want.

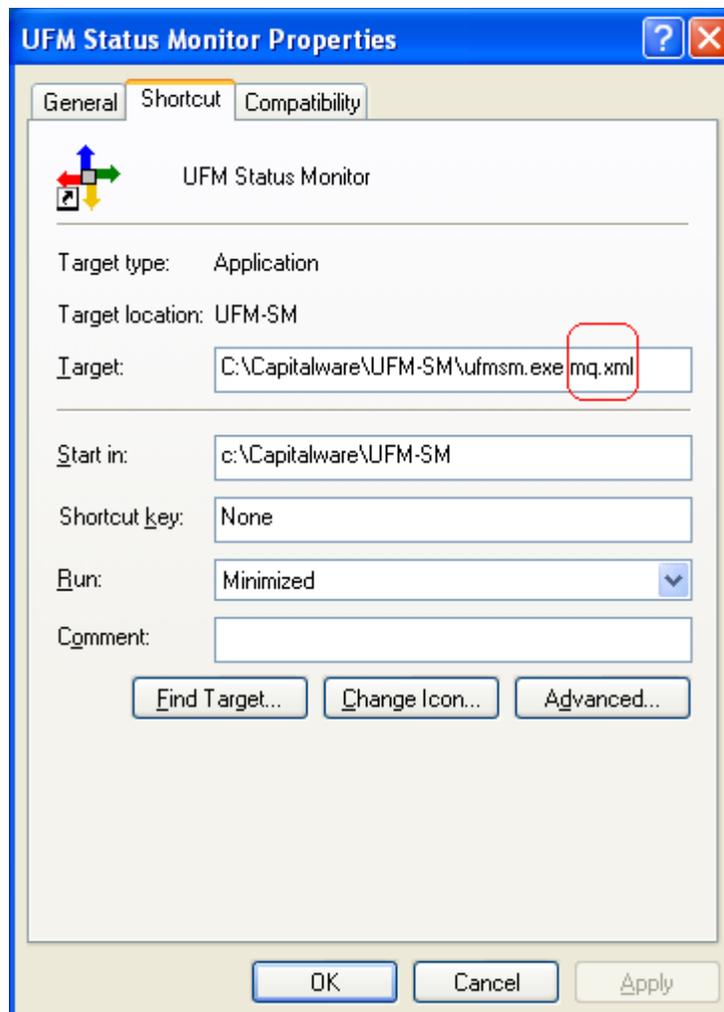
4.1 Configuration

4.1.1 Windows

To run UFM Status Monitor on Windows, select *Start -> All Programs -> UFM Status Monitor -> UFM Status Monitor*

4.1.1.1 GUI

To specify a different UFM-SM_MQ XML file, right click on the UFM-SM icon and select *Properties*. In the *Target* field, replace mq.xml file name with the new name. Click *Apply* and then *OK* to save the information.



4.1.1.2 Command Prompt

To run UFM-SM from a Windows Command Prompt, do the following commands:

```
cd \Capitalware\UFM-SM
ufmsm.exe mq.xml
```

4.1.2 Unix and Linux

To run UFM-SM on Unix or Linux, do the following commands:

```
cd Capitalware/UFM-SM  
./UFM-SM.sh mq.xml
```

4.2 Using UFM-SM

4.2.1 Main Window - Workflow Summary

The main window of UFM-SM displays a table of 8 columns: Date & Time, hostname, IP address, operating system, UserID, Exit Code, UFM Version and UFM Workflow.

- The Date & Time column shows the date and time when the workflow was started.
- The hostname column displays the hostname (server name) of where the workflow was run.
- The operating system (OS) column displays the OS of the server where the workflow was run.
- The UserID column displays the UserID that ran the workflow.
- The Exit Code column displays the last Exit Code (return code) issued by the an Action.
- The UFM Version column displays the version of UFM that was executed.
- The UFM Workflow column displays the name of the Workflow that was executed.

Double click on the row where the user wishes to see the actions of the workflow.



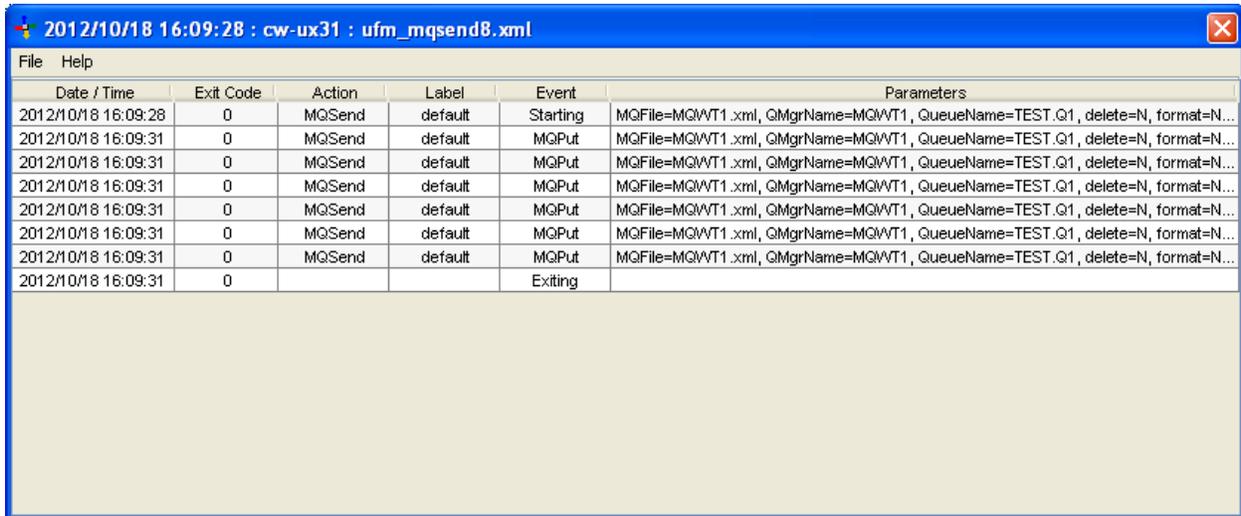
The screenshot shows the 'UFM Status Monitor' application window. The title bar reads 'UFM Status Monitor : MQWT1 : CAPITALWARE.UFM.STATUS : Last update at 12:41:03'. The window contains a table with the following columns: Date / Time, Hostname, IP Address, OS, UserID, Exit Code, UFM Version, and UFM Workflow. The table lists various workflow executions with their respective details. Two rows have a red background in the 'Exit Code' column, indicating a non-zero exit code (8).

Date / Time	Hostname	IP Address	OS	UserID	Exit Code	UFM Version	UFM Workflow
2012/10/18 16:32:04	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/18 16:10:59	fc4x86-64	127.0.0.1	Linux	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:09:54	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:09:28	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 16:07:02	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 16:06:56	fc4x86-64	127.0.0.1	Linux	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:05:54	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:05:47	fc4x86-64	127.0.0.1	Linux	mqm	8	1.0.0	ufm_mqsend.xml
2012/10/18 16:04:27	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 16:02:54	cw-ux31	192.168.10.111	Windows 7	rlacroix	0	1.0.0	ufm_mqsend8.xml
2012/10/18 15:59:35	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 15:59:04	cw-ux31	192.168.10.111	Windows 7	rlacroix	8	1.0.0	ufm_mqsend8.xml
2012/10/18 15:57:37	u10-4	192.168.10.213	SunOS	tester	0	1.0.0	ufm_mqsend.xml
2012/10/18 13:39:20	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/18 13:27:07	cw-r1001	192.168.10.115	Windows XP	rlacroix	0	1.0.0	ufm_mqsend7.xml
2012/10/17 20:06:36	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:33:57	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:09:38	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:07:24	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml
2012/10/17 19:01:00	u10-4	192.168.10.213	SunOS	mqm	0	1.0.0	ufm_mqsend.xml

4.2.2 Workflow Window - Action Summary

The workflow window of UFM-SM displays a table of 6 columns: Date & Time, Exit Code, Action Name, Label Name, Event and Parameters.

- The Date & Time column shows the date and time when the workflow was started.
- The Exit Code column displays the Exit Code (return code) of that particular Action.
- The Action column displays the name of the Action that was processed.
- The Label column displays the Label name for that Action.
- The Event column displays what function took place for the action
- The Parameters column displays all of the parameters for the action.



The screenshot shows a window titled "2012/10/18 16:09:28 : cw-ux31 : ufm_mqsend8.xml". The window contains a table with the following data:

Date / Time	Exit Code	Action	Label	Event	Parameters
2012/10/18 16:09:28	0	MQSend	default	Starting	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0	MQSend	default	MQPut	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0	MQSend	default	MQPut	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0	MQSend	default	MQPut	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0	MQSend	default	MQPut	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0	MQSend	default	MQPut	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0	MQSend	default	MQPut	MQFile=MQWVT1.xml, QMgrName=MQWVT1, QueueName=TEST.Q1, delete=N, format=N...
2012/10/18 16:09:31	0			Exiting	

4.2.3 Action Details

The first row with the Event of “Starting” shows the attributes of the MQSend Action before they are processed.

The screenshot shows the 'Action Details' dialog box with the following fields and values:

- Date: 2012/10/18
- Time: 16:09:28
- Exit Code: 0
- Action Name: MQSend
- Action Label: default
- Event: Starting

Name	Value
MQFile	MQWT1.xml
QMGrName	MQWT1
QueueName	TEST.Q1
delete	N
format	N
priority	-1
persistence	Y
srcFilename	data\test*.txt
Archive	N
createdir	N
todir	F:\eclipse\workspace\UFM\archive\
RemoteDirectory	C:\temp

An 'OK' button is located at the bottom right of the dialog.

Selecting a row with an Event of “MQPut” will show the exact details as UFM performed the action.

The screenshot shows the 'Action Details' dialog box with the following fields and values:

- Date: 2012/10/18
- Time: 16:09:31
- Exit Code: 0
- Action Name: MQSend
- Action Label: default
- Event: MQPut

Name	Value
MQFile	MQWT1.xml
QMGrName	MQWT1
QueueName	TEST.Q1
delete	N
format	N
priority	-1
persistence	Y
srcFilename	data\test2.txt
Archive	N
createdir	N
todir	F:\eclipse\workspace\UFM\archive\
RemoteDirectory	C:\temp

An 'OK' button is located at the bottom right of the dialog.

5 Appendix A – UFM Status Monitor Upgrade Procedures

To upgrade an existing installation of UFM Status Monitor, do the following below:

5.1 For Windows Upgrade

- Stop all instances of Watch and Receive
- Backup all UFM-SM data files in the UFM-SM install directory
- Un-install UFM Status Monitor
- Run the UFM Status Monitor installer: ufmsm-setup-32bit.exe or ufmsm-setup-64bit.exe
- Restore the UFM-SM data files if necessary

5.2 For Unix and Linux Upgrade

- Stop all instances of Watch and Receive
- Backup all UFM-SM data files in the UFM-SM install directory
- Delete the UFM-SM install directory
- Unzip ufmsm.tar.zip archive
- Restore the UFM-SM data files if necessary

6 Appendix B – Support

The support for UFM Status Monitor can be found at the following location (requires a support contract):

Online Help Desk Ticketing System at
www.capitalware.com/phpst/

By email at:
support@capitalware.com

By regular mail at:

Capitalware Inc.
Attn: UFM Status Monitor Support
Unit 11, 1673 Richmond Street, PMB524
London, Ontario N6G2N3
Canada

7 Appendix C – Summary of Changes

- UFM Status Monitor v2.0.0
 - Renamed package from "biz.capitalware" to "com.capitalware"
 - There are now 2 installers for Windows: 32-bit and 64-bit installers

- UFM Status Monitor v1.0.1
 - Add more information to the MQ error message popup window
 - Updated the AboutBox

- UFM Status Monitor v1.0.0
 - Initial release.

8 Appendix D – License Agreement

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

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