



Integration Tools and Software Solution

Fail-Safe – v 1.01

Installation and Implementation





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Introduction

What does Fail-Safe do?

Fail-Safe is monitoring tool that allows monitoring programs/processes running on AS/400.

When any monitored process fails or not active, Fail-Safe performs several actions, defined for this process:

- Replay Message
- Restart the process
- Report error to the responsible person by Mail or SMS

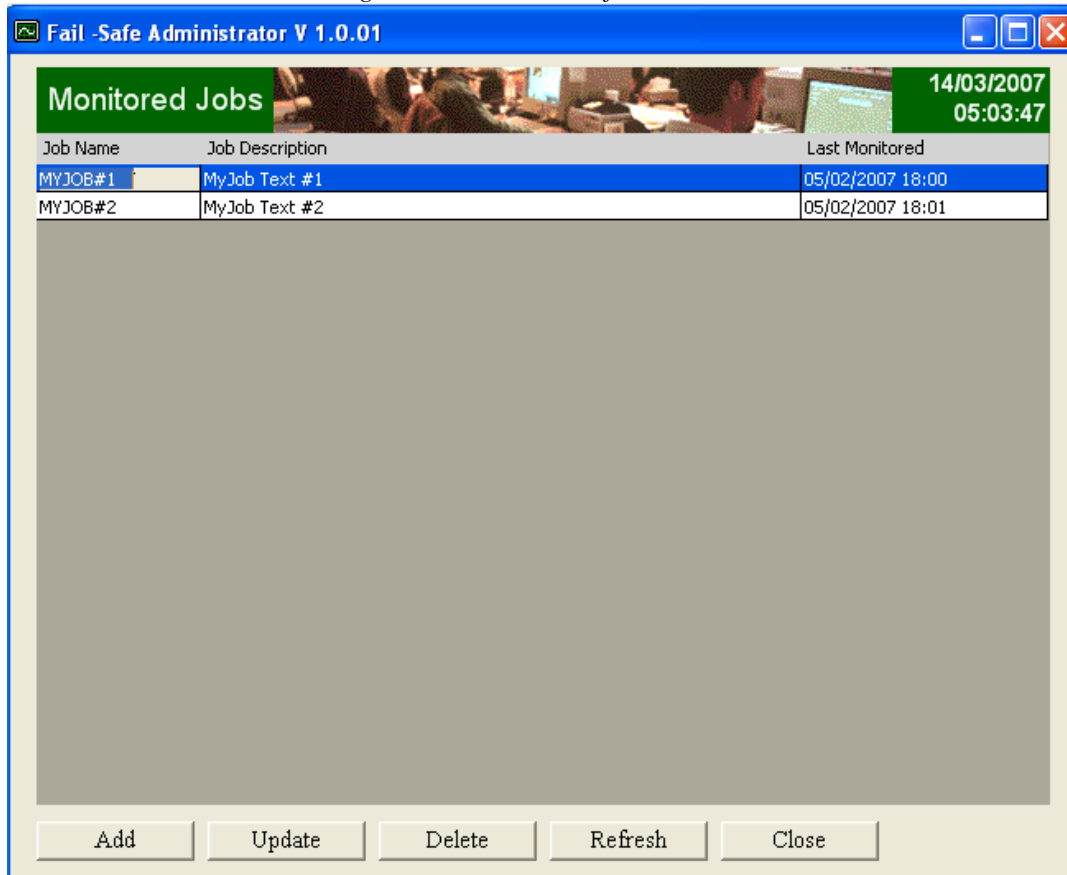
Fail-Safe architecture overview

Fail-Safe consist of two parts the AS/400 and PC:

- ✓ The AS/400 part includes:
 - Job monitoring demon
 - Product data base
- ✓ The PC part includes Fail-Safe Server and Fail-Safe Client
 - Fail-Safe Server takes full care of the failing jobs. Its sends mails, SMS or running some utility.
 - Fail-Safe Client pop up on messages on the screen of user when the job is falling
- ✓ Both, Client and Server, include administrator screen, where you can define what job you want to monitor.



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Benefits of Fail-Safe

- ✓ Light weight monitoring tool for I.B.M AS/400
- ✓ Trace critical jobs on the AS/400
- ✓ Automatic error handling
- ✓ Wide range of error reporting mechanism, via e-mail, SMS and PC brake message at operator(s) screen.



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Installation

Install the AS/400 part

At the AS/400:

1. Insure FTP server is active on the AS/400
if not Start it Via AS/400 command **STRTCPSVR *FTP**
2. Insure that FTP protocol is not suspended via Firewalls or IP filtering.

At the PC:

1. Obtain Failsafe installation from our web site
<http://vrtech.biz/FailSafe.htm>
2. UNZIP the file FailSafe.ZIP into PC folder (recommended C:\TEMP)
Two files are included in the ZIP file LoadPRD.BAT and hv6.savf
This PC must be capable of performing FTP to AS/400.
3. Start PC prompt (Start→CMD)
4. At the DOS prompt:
`CD \TEMP`
`LoadPRD.BAT AS400User AS400Password HV6 IP`

Where:

- AS400User – The AS/400 user to be use in the FTP uploading.
(It is advisable to use power user like QSECOFR to prevent security problems while uploading procedure)
- AS400Password – The AS/400 password.
- HV6 – FailSafe product code.
- IP – the IP of the target AS/400.

Press Enter.

5. Installation messages will appear on screen.
6. At the end of the installation a screen similar to the following will appear:

```
550 1 objects restored. 0 not restored to QGPL..
ftp> close
221 QUIT subcommand received.
ftp> bye
*****
* To proceed with the installation: *
* 1. Start Emulation sesison Using QSECOFR user profile *
* 2. At the AS/400 command prompt apply the command: *
* CALL PGM(QGPL/QV8I) PARM(*SAUF QGPL) *
*****
C:\Temp>
```



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At the AS/400:

7. Sign on as QSECOFR or QSECOFR class.
8. If the product already installed on your system please insure to stop FailSafe server by selecting *STRFS -> Opt 2*
9. At the command line type:
*CALL PGM(QGPL/HV6I) PARM(*SAVF QGPL)*
and press Enter.
10. The installation procedure will end with the message:
"New release of FailSafe successfully installed"
Proceed to the product menu by typing the command
HV6/STRFS

Install the PC part

1. Start the SETUP.EXE program on the PC.
Follow the instruction on the screen.
2. Right click on icon **ClickYes** in down right part of window.
Choose **Resume**, uncheck **Start Suspended** and check **Start on Logon**



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FailSafe main menu and command description

At the AS/400 command line type

HV6/STRFS

A similar menu will appear

```
FSMENU                               FailSafe/400

Select one of the following:

Administration

  1. Start FailSafe/400 Server
  2. Stop FailSafe/400 Server

 10. Work with FailSafe/400 Message Queue
 11. Clear FaileSafe/400 Message Queue

 14. Send SMS via FailSafe/400 PC server

                                         Maintenance
Selection or command                    89. Work with FS Global Parameters
===> █

-----
F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
F13=Information Assistant   F16=AS/400 main menu
```

1. **Manage FS Server (MNGFSSSRV)**

Use this command to start or stop the failsafe server.

The FailSafe server is use to monitor the AS/400 activities and to report on deviation when they occur.

ACTION – The action that is required.

Value:

*START – Start the server.

*STOP – Stop the server.

2. **Work with FailSafe/400 Message Queue**

Use this option to display product messages accumulated in HV6DTA/ FSMSGQ message queue

3. **Clear FaileSafe/400 Message Queue**

3.1.1.1. Use this option to clear the product messages that have been accumulated in HV6DTA/ FSMSGQ message queue

4. **Send FS SMS Message (SNDFSSMS)**

Use this command to send free format SMS messages by the user via the PC SMS server.

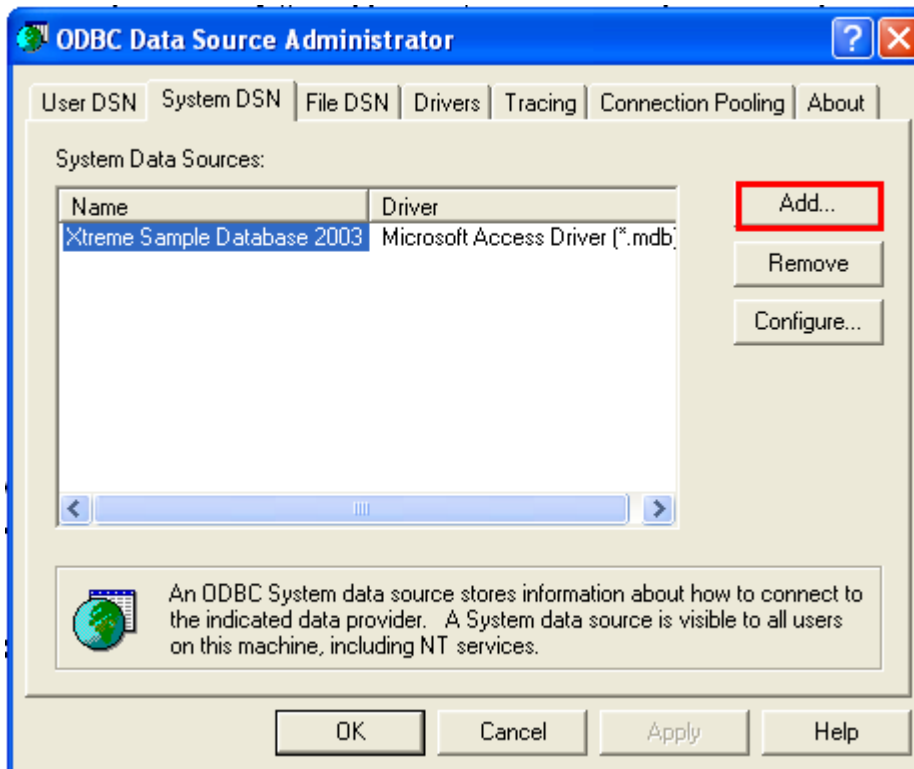
MESSAGE –A free format text message composed bye the user. on that will be used to submit the command to batch.

5. **Work with FS Global Parameters**

This option currently not in use

PC Definition and activation

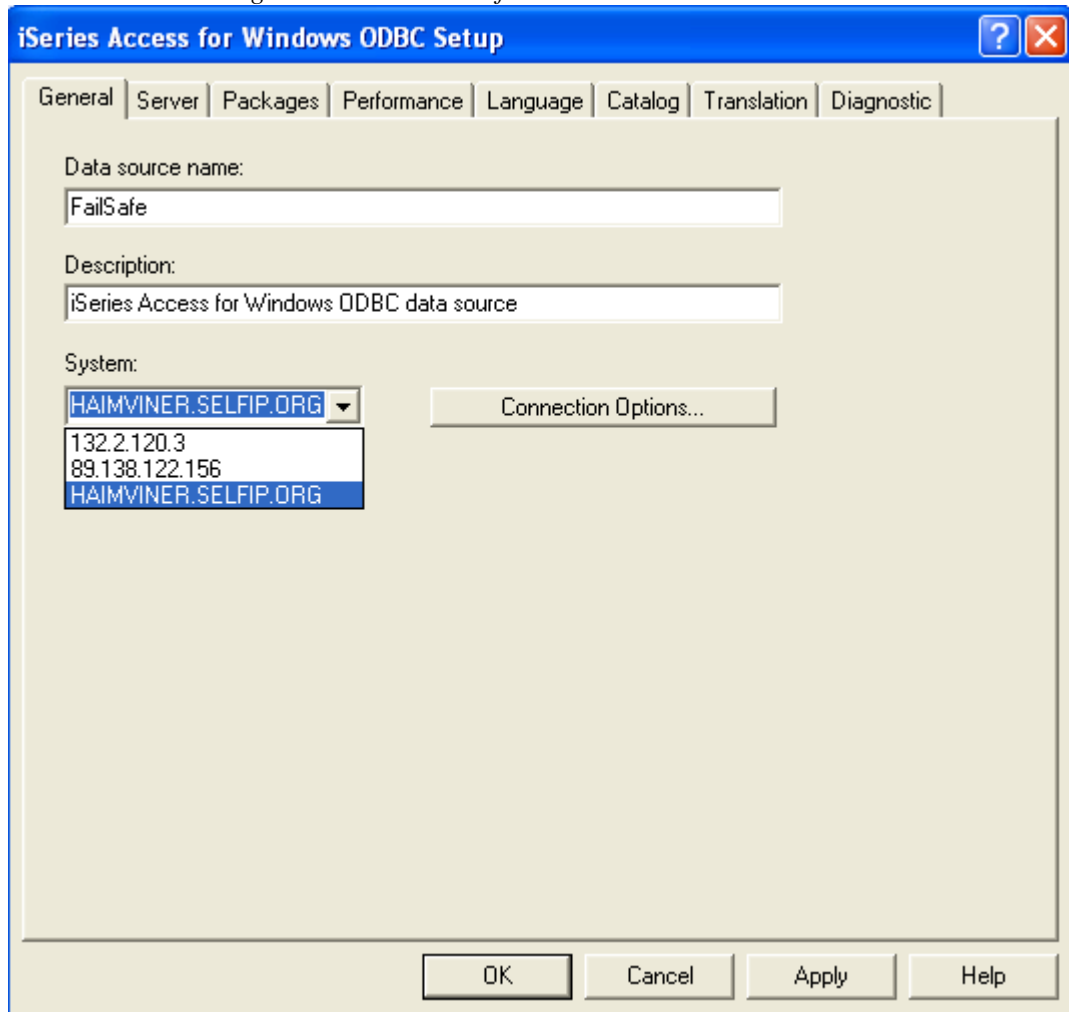
11. Add DNS definition in ODBC for you AS/400 machine
12. Enter Control Panel-> Administrative Tools->Data Sources (ODBS)
13. Press **System DSN** tab and press **Add**



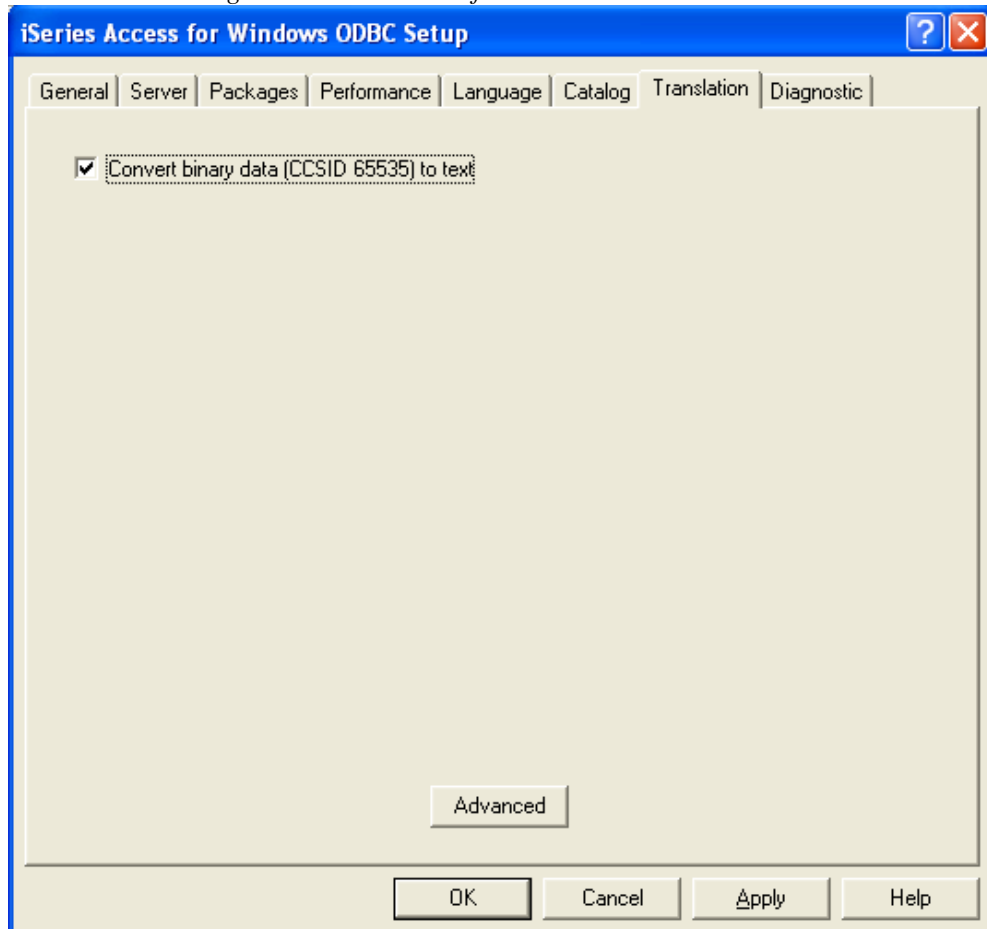
14. Select Client Access ODBC driver and press Finish
15. Enter **FailSafe** in Data Source Name field and select your AS/400 machine



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16. Press Translation tab and check Convert binary...



18. Press Ok and Ok
19. Open fi.xml file in the installation folder

```
1 <content>
2
3 <system SystemName="" DNS="" USER_NAME= "" PASSWORD= "" DQ_NUMBER="FSDQCLNT01" DQ_SERVER="FSDQSRV" />
4
5 </content>
6
7
8
```

20. Enter **System Name** or IP address of your AS/400 machine
21. Enter **DNS** name, **User** name and **Password** access for your AS/400 machine.
Attention! We recommend to define User and Password without permission to Log On .
22. If this is client installation
23. Clear DQ_SERVER tag
24. Enter DQ_NUMBER of the station – FSDQCLNT01, FSDQCLNT02....
25. Start Fail-Safe PC server by clicking the shortcut in the desktop.
26. Right click on Fail-Safe icon and click **Activate** option

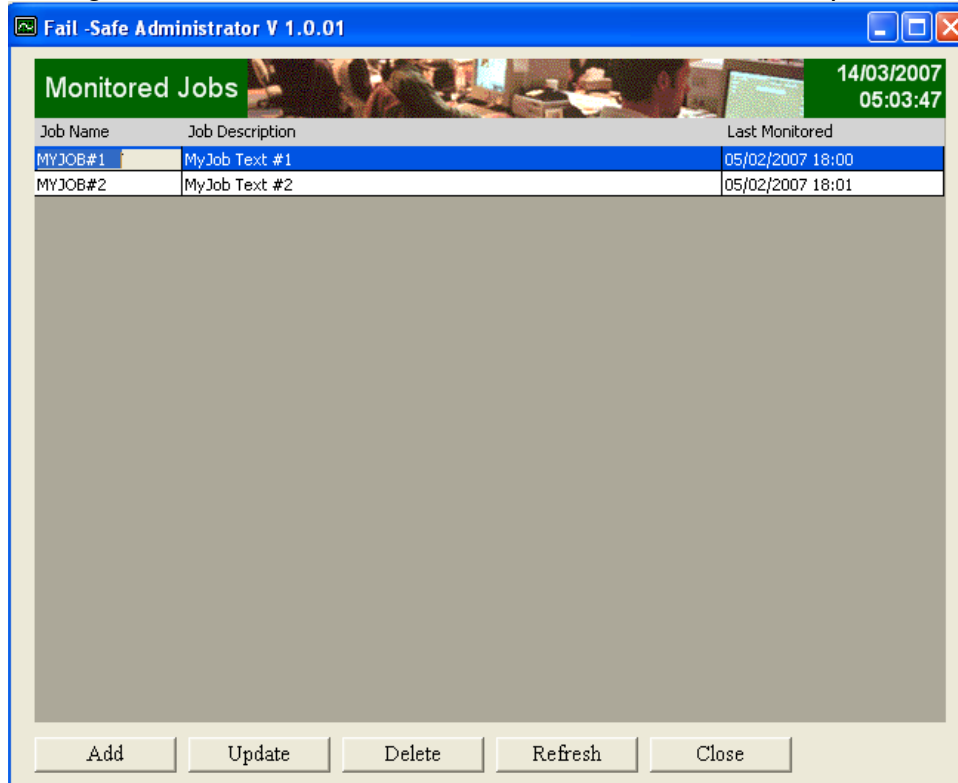


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Fail-Safe PC server

Fail-Safe Administrator

1. Right click on Fail-Safe icon and click **Administrator** option



In this screen you can see all monitored jobs defined in FailSafe.

Press **Refresh** button to display date and time of last monitor.

If you want do remove job from the list – press **Delete** button.

If you want to update existing job, select it in the list and press **Update** button

If you want to add job to the list press **Add** button



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Job Settings

In this screen you can define new job for monitoring

The screenshot shows a 'Job Settings' dialog box with the following fields and sections:

- Job Section:**
 - Name: [Text Field]
 - Description: [Text Field]
 - Job Monitor: [Dropdown Menu, value: *ALL]
 - Managed By: [Text Field]
 - Monitor Frequency: [Text Field] (Min 1-1440)
- Activity on Error Section:**
 - Suspend All Activity
- SMS Section:**
 - Active
 - Error Message: [Text Field]
 - To: [Text Field]
 - Full Path of File: [Text Field] [Browse Button]
- Mail Section:**
 - Active
 - Error Message: [Text Field]
 - To: [Text Field]
- User Program Section:**
 - Active Server (Full Path): [Text Field]
 - Active Client (Full Path): [Text Field] [Browse Button]
 - Active Replay List: [Text Field]
- Monitor Attributes Section:**
 - Number of retries: [Text Field]
 - Delay between retries: [Text Field] (Min 1-1440)
- Send message to system operator
- User Break Message: [Text Field]

Buttons: Save, Close

Name – the name of the job as appear in the WRKACTJOB.

Description – A free description of the job.

Managed By – the name of a person responsible for this job, if exist.

Monitor Frequency – The frequency that this job is being checked in the system. You can enter values from 1 to 1440 minutes

Job Monitor - Define job monitoring type where:

*ALL – monitor both *MSGW, *NOTEXIST

*MSGW – monitor the job only for message waiting

*NOTEXIST – monitor the job for existence in the system

Suspend All Activates – check this box to prevent from the system to respond to a monitoring event.

SMS Active – check this box to provide a monitoring event via SMS.

- Error Message – Type the Error message that will be sending via SMS.
- To – Type the telephone number for the SMS.



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- Full Path – Type full path of the location of the SMS file (SMS file contains the error message and the telephone number, this file will be send by the SMS server)

MAIL Active – check this box to provide a monitoring event via mail.

- Error Message – Type the Error message that will be sending via mail.
- To – Type the email address for the message.

Server User Program Active - check this box to start a server program for a monitoring event and type full path of user program in server system.

Client User Program Active - check this box to start a client program for a monitoring event and type full path of user program on client.

Reply List Active - check this box, to provide the relevant answers for a message waiting job (C-Cancel, I- Ignore, D-Dump etc')

Monitor Attributes

- Number or retries – Define the number of monitoring events that can be received from job before it will be ignored by the product.
This number must be grater then zero.
- Delay between retries – Define the amount of time that the monitor will ignore the job, before it will be re monitored.
This number must be grater then zero.

Send message to system operator - check this box to enable to send a brake message upon monitoring event

Type the **User Break Message** that will be sent in the AS/400

Press **Save** button to save the changes you made

Press **Close** button to exit the form without saving the last changes