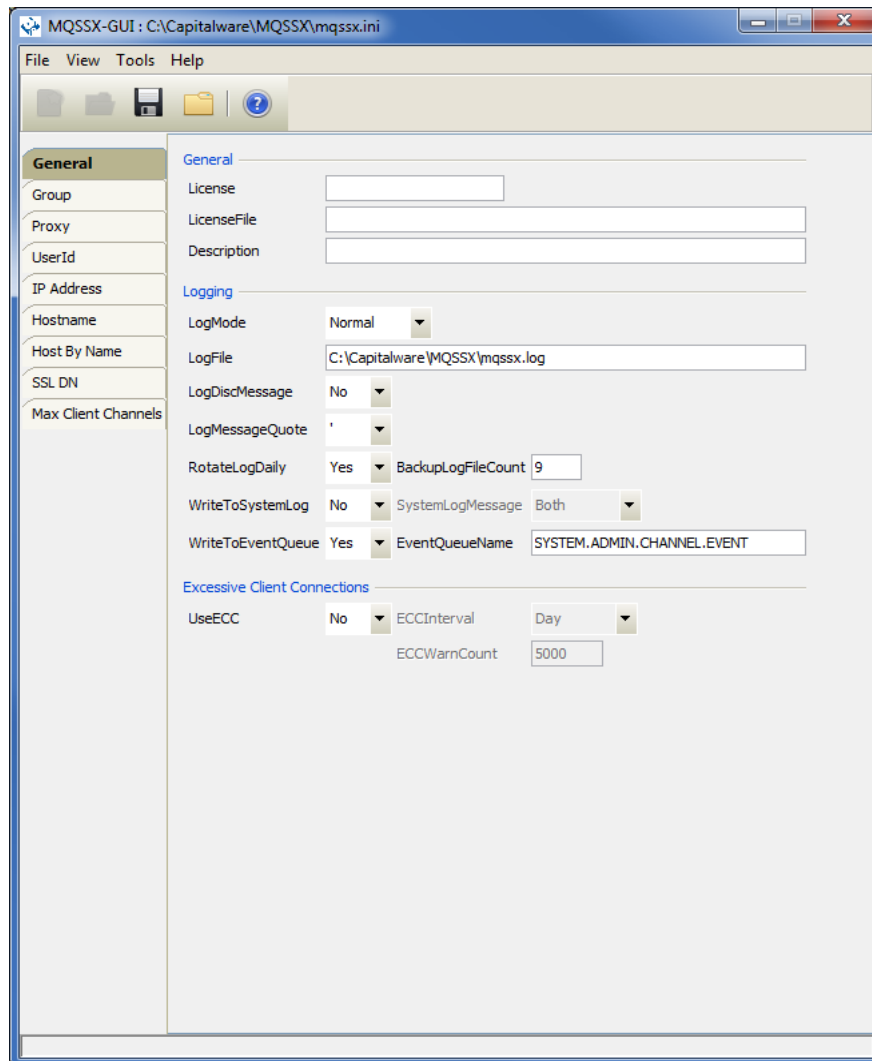


MQSSX-GUI User Guide



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1 Introduction

1.1 Overview

MQSSX-GUI application allows the user to create or update MQSSX IniFiles.

MQ Standard Security Exit (MQSSX) is a solution that allows a company to control and restrict who is accessing a IBM MQ resource. The security exit will operate with IBM MQ v7.1, v7.5, v8.0, v9.0, v9.1 and v9.2 in Windows, IBM i (OS/400), Unix and Linux environments. It works with Server Connection, Receiver, Requester and Cluster-Receiver channels of IBM MQ queue manager.

MQSSX-GUI creates or updates IniFiles that are located on server-side security exit.

MQSSX-GUI can run on any platform that supports Java v1.6 (or higher). This includes: Linux, Mac OS X and Windows Vista/7/8/8.1/10.

2 Installation

This chapter will describe the installation and configuration (optional) of MQSSX-GUI. For Windows users, the installation of MQSSX-GUI is very simple and straightforward. Other Operating Systems will need to unzip the downloaded software package.

2.1 Prerequisites

This section lists the required hardware and software components needed to run the MQSSX-GUI application.

2.2 Software

The following third party software components must be installed in order to properly run MQSSX-GUI:

- Java Runtime Environment (JRE) 1.6 (or higher) or Java 2 SDK, Standard Edition (J2SE) v1.6 (or higher)

2.3 Hardware / OS

MQSSX-GUI is capable of running on the following hardware platforms that support Java v1.6 (or higher):

- Linux
- Mac OS X
- Windows Vista/7/8/8.1/10

2.4 Setting Up and Running the Application

The following section provides instructions on installing and running the MQSSX-GUI application.

2.4.1 For Windows Users:

- Run the install program called: **mqssxgui-setup-withjre.exe**
- The installer should follow the standard Windows install procedures and provide default values for the users.
- When the install program has installed MQSSX-GUI, there will be a newly created folder under **Start -> All Programs** called **MQSSX-GUI**.
- To run **MQSSX-GUI**, select the **MQSSX-GUI** icon from within the **MQSSX-GUI** folder.

2.4.2 For Linux and Max OS X (requires JRE/JDK):

- MQSSX-GUI is provided as a zip file: **mqssxgui.zip**
- To unzip the file, open a shell prompt and execute the following commands:
unzip mqssxgui.zip
- When the unzip command has finished, there should be a directory tree as follows:
Capitalware/MQSSX-GUI
- Change directory by typing the following:
cd Capitalware/MQSSX-GUI
- Before running MQSSX-GUI for the first time, you need to add the execute attribute to the mqssxgui.sh shell scripts. Type the following:
chmod +x mqssxgui.sh
- To run **MQSSX-GUI** from the **Capitalware/MQSSX-GUI** directory, then type the following:
./mqssxgui.sh

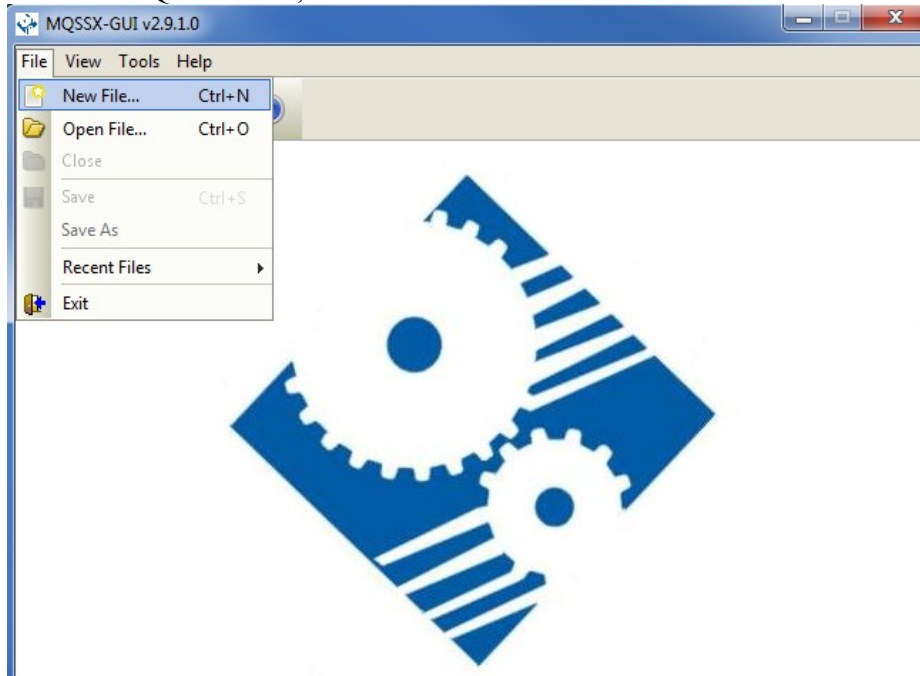
3 Creating / Updating IniFiles

This chapter will describe the how to create and/or update IniFiles.

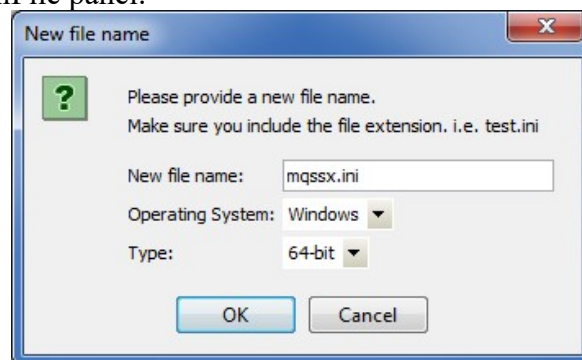
3.1 New IniFile

This section will describe how to create a new MQSSX IniFile. The IniFile can be for a local or remote MQSSX implementation.

From the main menu of MQSSX-GUI, select **File** then **New File**



The following is the New IniFile panel:



Fill in the following information:

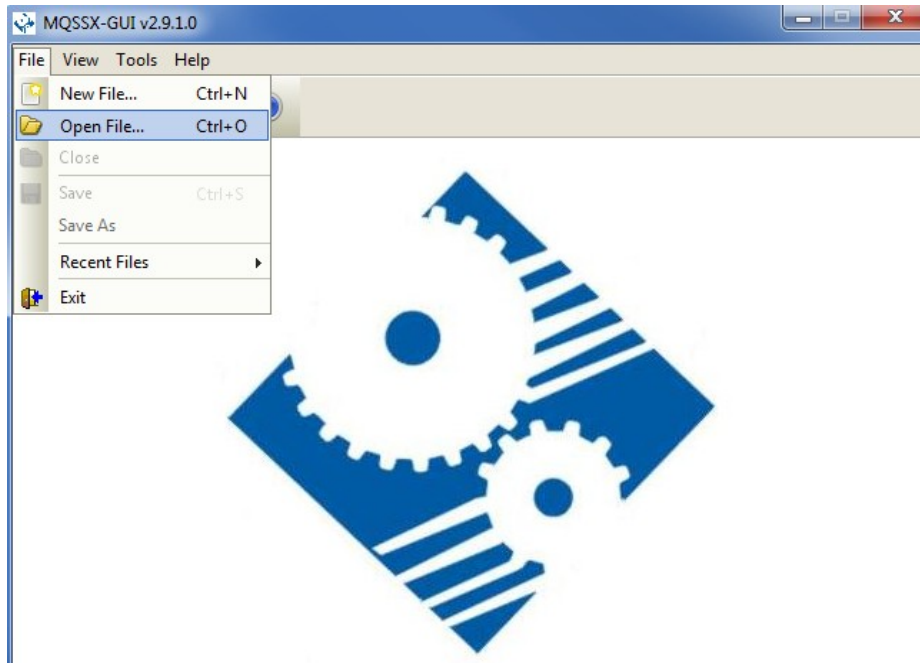
- Input a file name including the extension of '.ini'
- Select the Operating System
- Choose between a 32-bit or 64-bit environment

Finally, click the **Ok** button to create and open the new MQSSX IniFile.

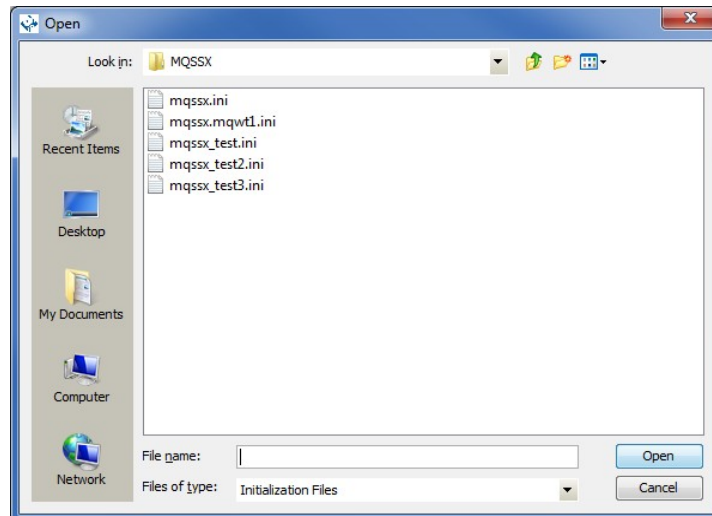
3.2 Open an IniFile

This section will describe how to open a MQSSX IniFile to be viewed or edited. The IniFile can be for a local or remote MQSSX implementation.

From the main menu of MQSSX-GUI, select **File** then **Open File**



The following is the **Open** dialog box:

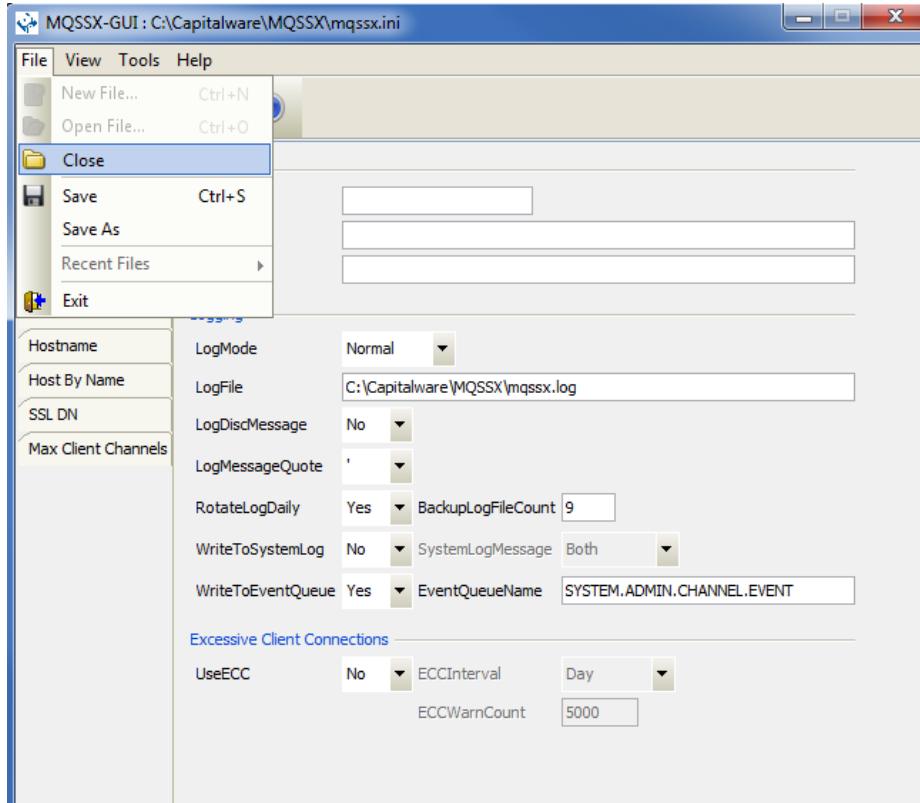


Select the IniFile that you wish to view / edit and then press the **Open** button.

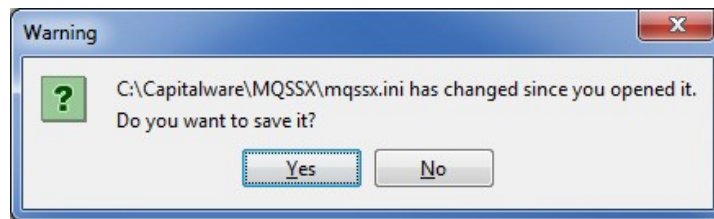
3.3 Close an IniFile

This section will describe how to close a MQSSX IniFile.

From the main menu of MQSSX-GUI, select **File** then **Close**



If the user has altered the IniFile then the user will be presented with the following dialog box:



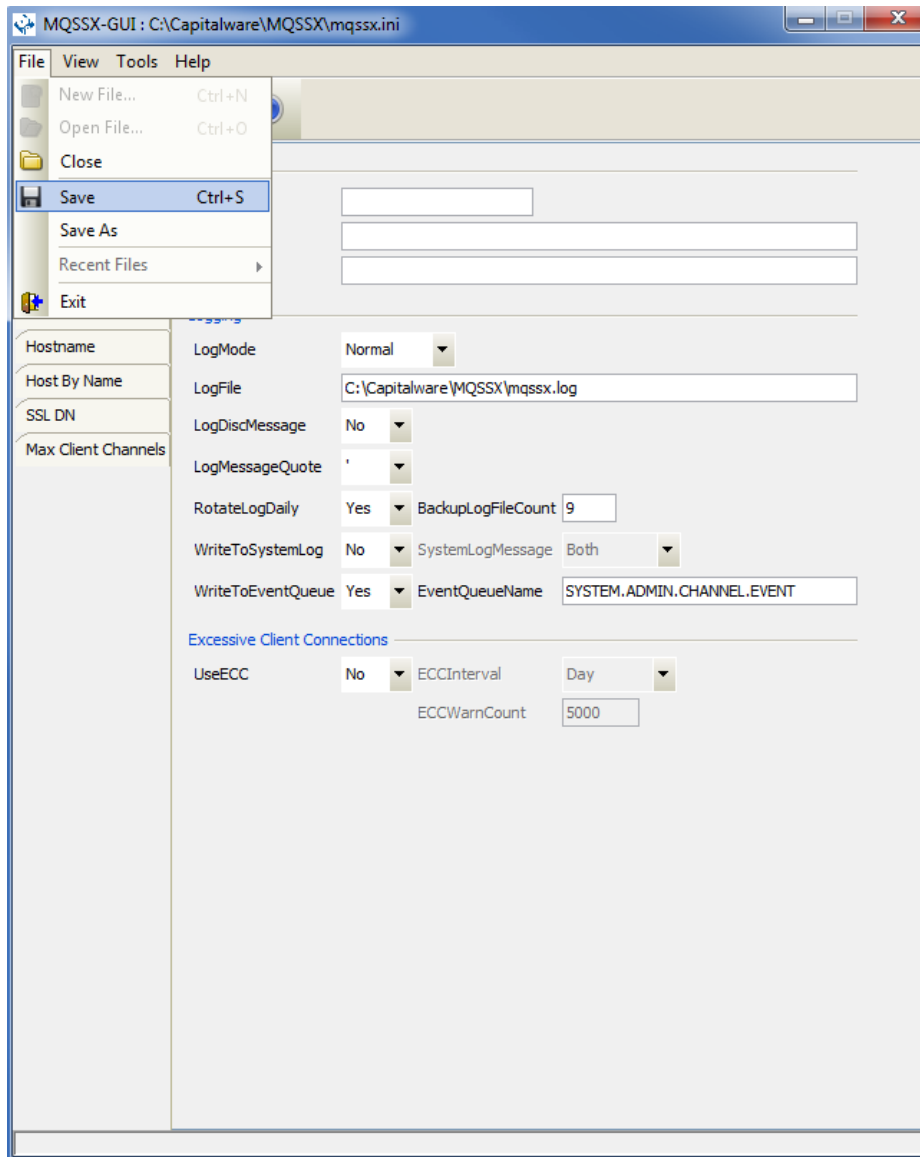
Select **Yes** to save the changes otherwise select **No**.

The MQSSX-GUI program will make a backup of the original file in the same directory called: *{inifilename}.backup*

3.4 Save IniFile

This section will describe how to save an open MQSSX IniFile.

From the main menu of MQSSX-GUI, select **File** then **Save**



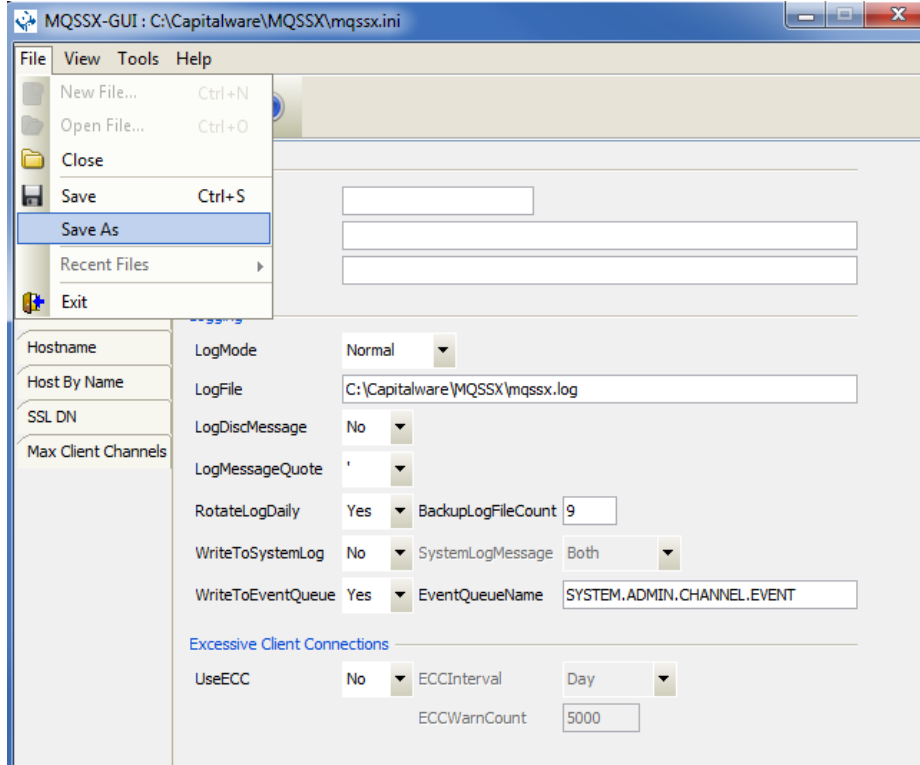
The parameter information will be saved to the IniFile.

The MQSSX-GUI program will make a backup of the original file in the same directory called: *{inifilename}.backup*

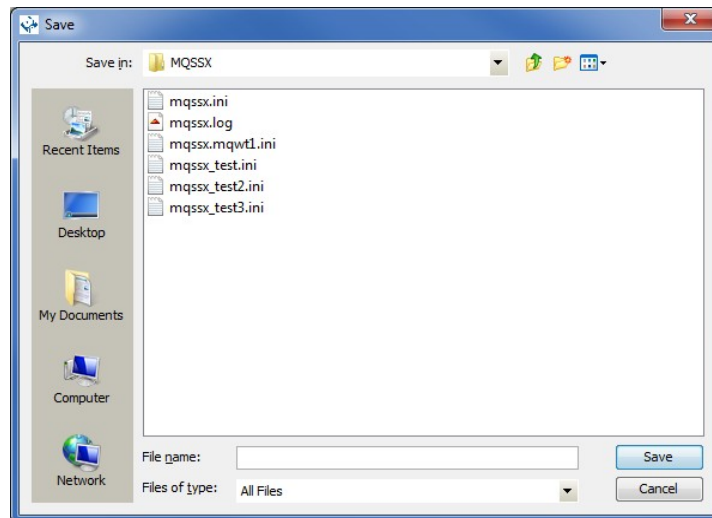
3.5 Save As IniFile

This section will describe how to save an open MQSSX IniFile.

From the main menu of MQSSX-GUI, select **File** then **Save As**



Select / Input the IniFile name that you wish use then press the **Save** button.



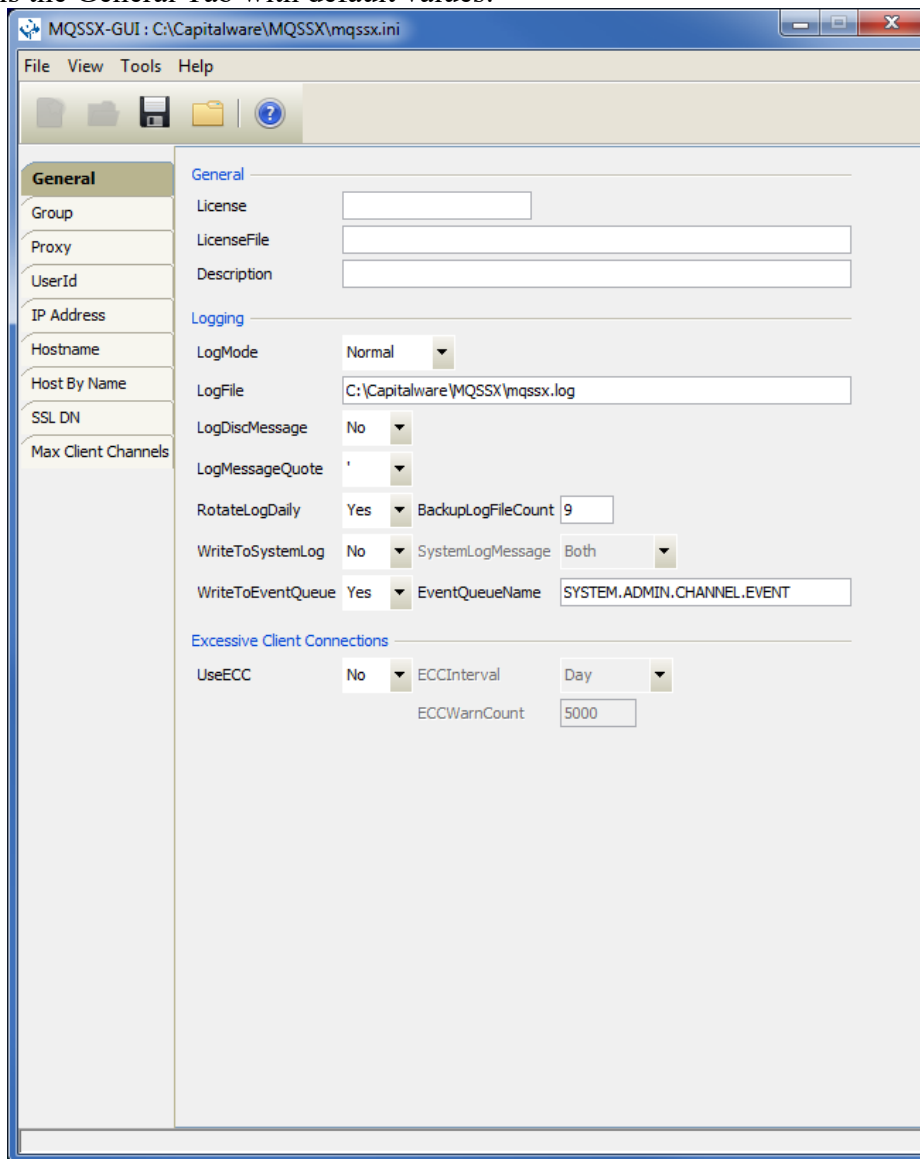
4 Tabs

This chapter will describe the various parameters on each tab.

4.1 General Tab

This section will describe various parameters on the General tab of a MQSSX IniFile.

The following is the General Tab with default values:



The following are the IniFile parameters on the General Tab:

4.1.1 General

This section describes the general keywords and their values.

- **License key** is provided by Capitalware Inc. and is the mechanism on to license MQSSX to a particular queue manager. Your license will look something like: 0000-AAAA-BBBBBBBB (Note: This is a sample license only and will NOT work).
- **LicenseFile** specifies the location of License file that contains all of the customer's license keys. The following are the default values for LicenseFile:
 - For Windows: C:\Capitalware\MQSSX\mqssx_licenses.ini
 - For IBM MQ 32-bit on Unix and Linux: /var/mqm/exits/mqssx_licenses.ini
 - For IBM MQ 64-bit on Unix and Linux: /var/mqm/exits64/mqssx_licenses.ini
 - For IBM i: /QIBM/UserData/mqm/mqssx/mqssx_licenses.ini
- **Description** parameter is optional and is not used by MQSSX. It can be used to provide a brief description / purpose of the IniFile.

4.1.2 Logging

This section describes the keywords related to logging and their values.

- **LogMode** specifies what type of logging the user wishes to have. LogMode supports 4 values: Quiet, Normal, Verbose and Debug. The default value is Normal.
- **LogFile** specifies the location of the log file. The default is as follows:
 - For Windows: C:\Capitalware\MQSSX\mqssx.log
 - For IBM MQ 32-bit on Unix and Linux: /var/mqm/exits/mqssx.log
 - For IBM MQ 64-bit on Unix and Linux: /var/mqm/exits64/mqssx.log
 - For IBM I: /QIBM/UserData/mqm/mqssx/mqssx.log

Token Replacement for LogFile keyword:

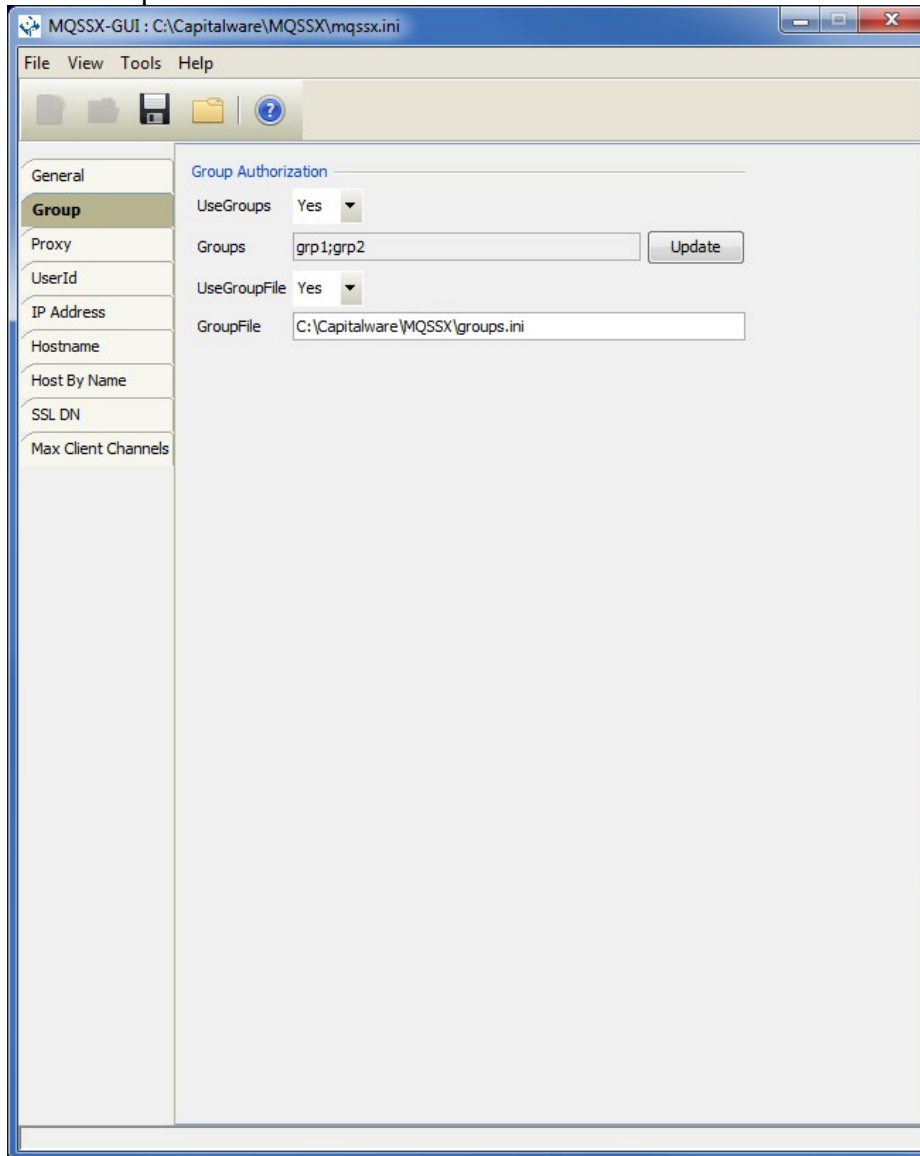
- **%QM%** - Substitutes the name of the queue manager
 - **%CHL%** - Substitutes the name of the channel
 - **%UID%** - Substitutes the UserID
 - **%PID%** - Substitutes the Process ID
 - **%TID%** - Substitutes the Thread ID
- **LogDiscMessage** specifies whether or not MQSSX write a disconnect message when the client application closes the channel. The default value is No.
 - **LogMessageQuote** specifies the type of quote (single or double) to be used on the log message. The default value is ' (single quote).
 - **RotateLogDaily** specifies whether or not MQSSX when auto-rotate the log files. The default value is Yes.

- **RotateLogDaily** specifies whether or not MQSSX when auto-rotate the log files. The default value is Yes.
- **BackupLogFileCount** specifies the number of backup log files to be kept / retained. The default value is 9.
- **WriteToSystemLog** specifies for each connection attempt that a log entry be written to the system log.
 - For Windows this would be the **Event Log**
 - For Unix and Linux this would be the **syslog**.
- **SystemLogMessage** specifies what messages will be written to the system log. SystemLogMessage supports 3 values: “Both”, “Accepted Only”, and “Rejected Only” messages. The default value is Both.
- **WriteToEventQueue** specifies for each failed connection attempt that a log entry be written to the specified event queue.
- **EventQueueName** specifies the name of the queue that the event message will be written to. The default is as follows: 'SYSTEM.ADMIN.CHANNEL.EVENT'.
- **UseECC** enables excessive client connections feature. Valid values are Y/N. The default value is 'N'.
- **ECCIntercal** specifies a time interval to monitor the incoming number of connections. Valid values are D/H/M (Day, Hour and Minute). The default value is 'D'.
- **ECCWarnCount** specifies a count which, when exceed, will cause an alert to be generated. The default value is 5000.

4.2 Group Tab

This section will describe various parameters on the Group tab of a MQSSX IniFile.

The following is the Group Tab with default values:



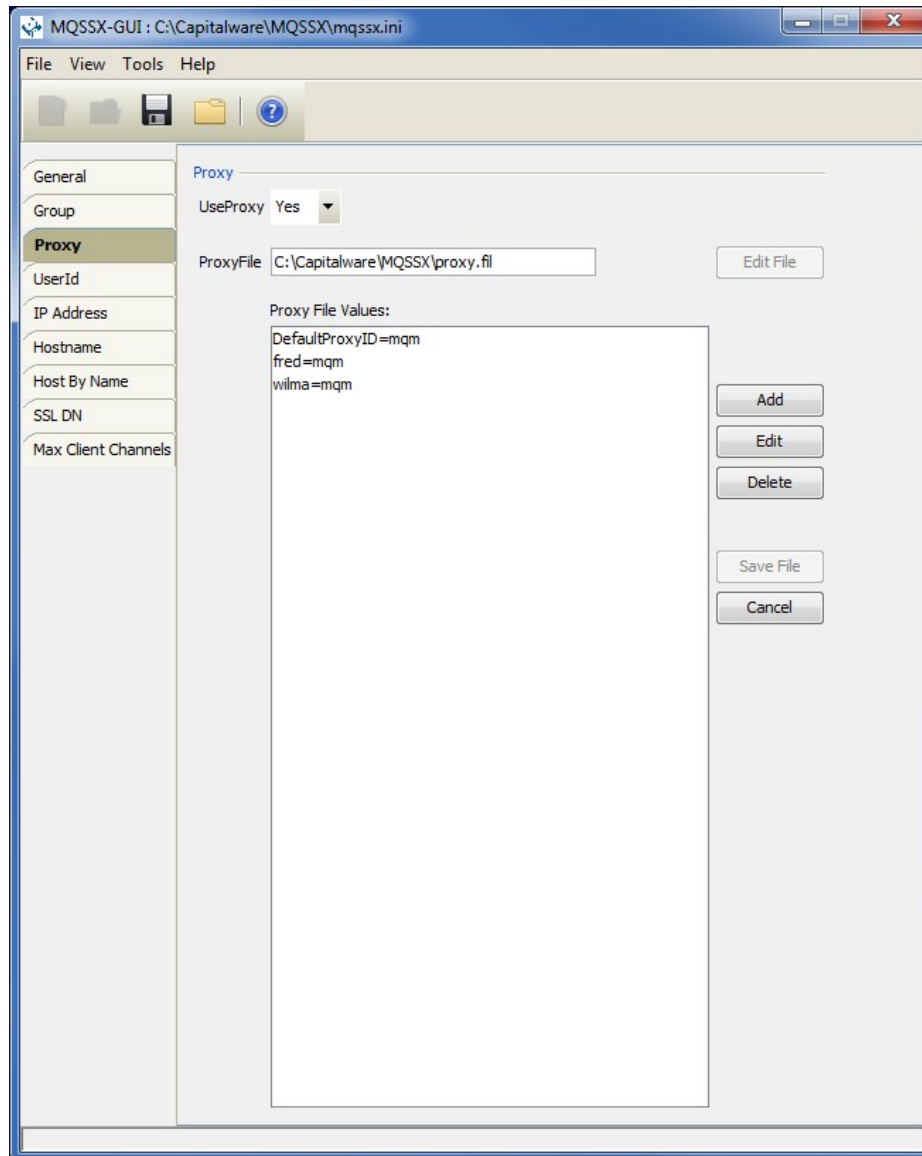
The following are the IniFile parameters on the Group Tab:

- **UseGroup** to allow or restrict an incoming UserID by a local OS group or a group file.
- **Groups** specifies the list of authorized groups.
- **UseGroupFile** specifies if a group file should be used instead of local OS groups.
- **GroupFile** specifies the location of the group file.

4.3 Proxy Tab

This section will describe various parameters on the Proxy tab of a MQSSX IniFile.

The following is the Proxy Tab with default values:



4.3.1 Proxy File

This section describes the necessary steps to enable the use of 'Proxy IDs'. Proxy ID allows an authorized User to use a different UserID for MQ interactions.

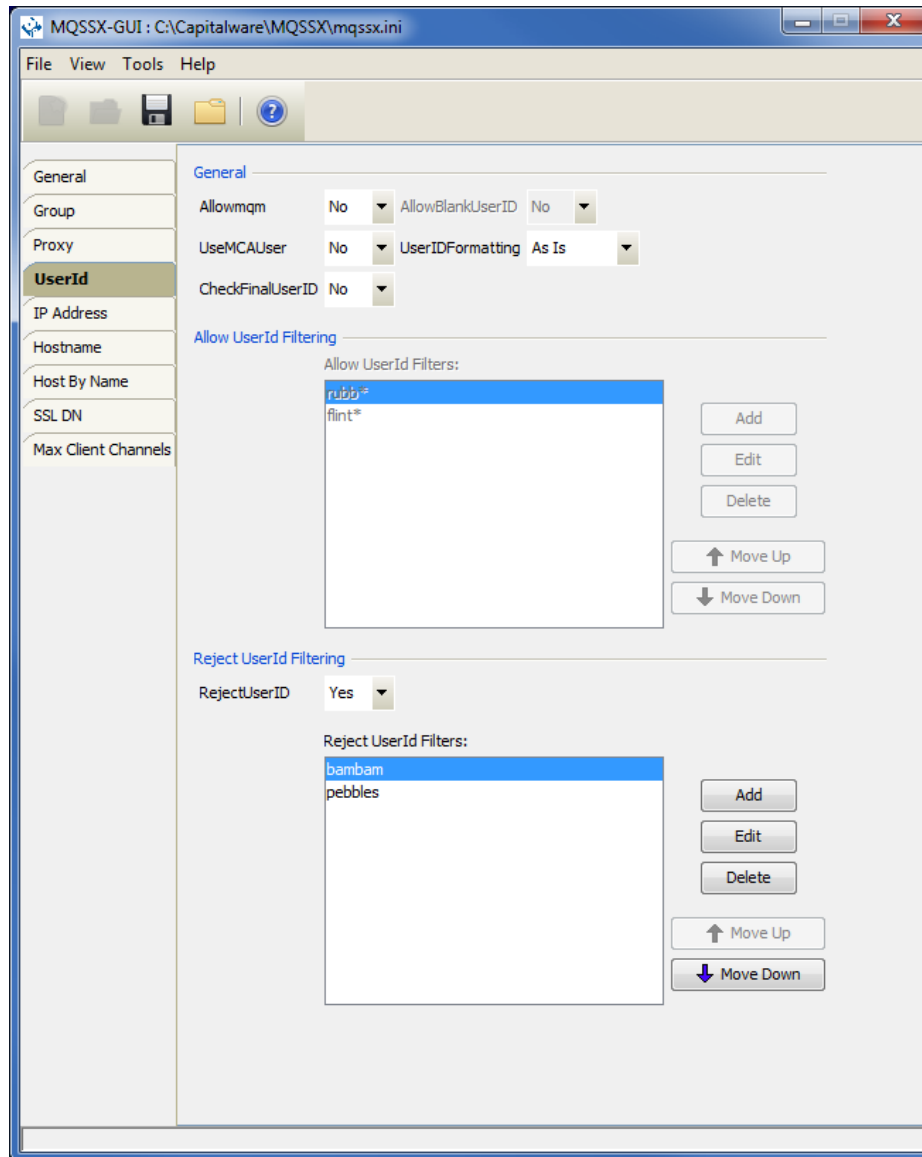
The following are the IniFile parameters on the Proxy Tab:

- **UseProxy** allows an authorized User to use a different UserID for MQ interactions.
- **ProxyFile** specifies the location of the file to do alternate UserID look-up.

4.4 UserId Tab

This section will describe various parameters on the UserId tab of a MQSSX IniFile.

The following is the UserId Tab with default values:



The following are the IniFile parameters on the UserId Tab:

4.4.1 General

This section describes the necessary steps to enable the use of the general options for the UserID tab.

- **Allowmqm** enables users to login with the mqm or MUSR_MQADMIN or QMQM system account. This is controlled by the IniFile's property keyword 'Allowmqm'. Setting 'Allowmqm' to Yes will activate this feature; otherwise, it will be blocked.
- **AllowBlankUserID** enables connection to have a blank UserID. This is controlled by the IniFile's property keyword 'AllowBlankUserID'. Setting 'AllowBlankUserID' to 'Yes' will allow connections to have a blank UserID.
- **UseMCAUser** allows the connection to use the UserID value specified in the channel's MCAUSER field.
- **UserIDFormatting** specifies how to handle/format the incoming UserID. Use it 'As Is' or 'Uppercase' it or 'Lowercase' it. The default is 'As Is'.
- **CheckFinalUserID** specifies whether or not the final UserID will be checked against the UseAllowUserID, AllowUserID, UseRejectUserID, RejectUserID and Allowmqm keywords. CheckFinalUserID supports 2 values [Y / N]. The default is 'N'.

4.4.2 Allow UserID

This section describes the necessary steps to enable the use of filtering of the incoming UserID.

- **UseAllowUserID** enables the feature to allow or to restrict the incoming UserID by using a regular expression pattern. The server-side security exit will look up the regular expression pattern from the 'AllowUserID' property keyword.
- **AllowUserID Filters** is a list of UserIDs (with wildcards) that are allowed to connect to queue manager or particular channel.

4.4.3 Reject UserID

This section describes the necessary steps to explicitly reject an incoming UserID.

- **UseRejectUserID** enables the feature to reject an the incoming UserID by using a regular expression pattern. The server-side security exit will look up the regular expression pattern from the 'RejectUserID' property keyword.
- **RejectUserID Filters** is a list of UserIDs (with wildcards) that are explicitly rejected.

4.4.4 Managing UserID Filtering

This section describes the necessary steps to manage UserID filtering entries. Click the **Add** button to add an entry to the list.



Input the UserID including wildcards and then click the **Ok** button.

Click the **Edit** button to update an entry in the list.



Update the UserID including wildcards and then click the **Ok** button.

Click the **Delete** button to delete an entry in the list.

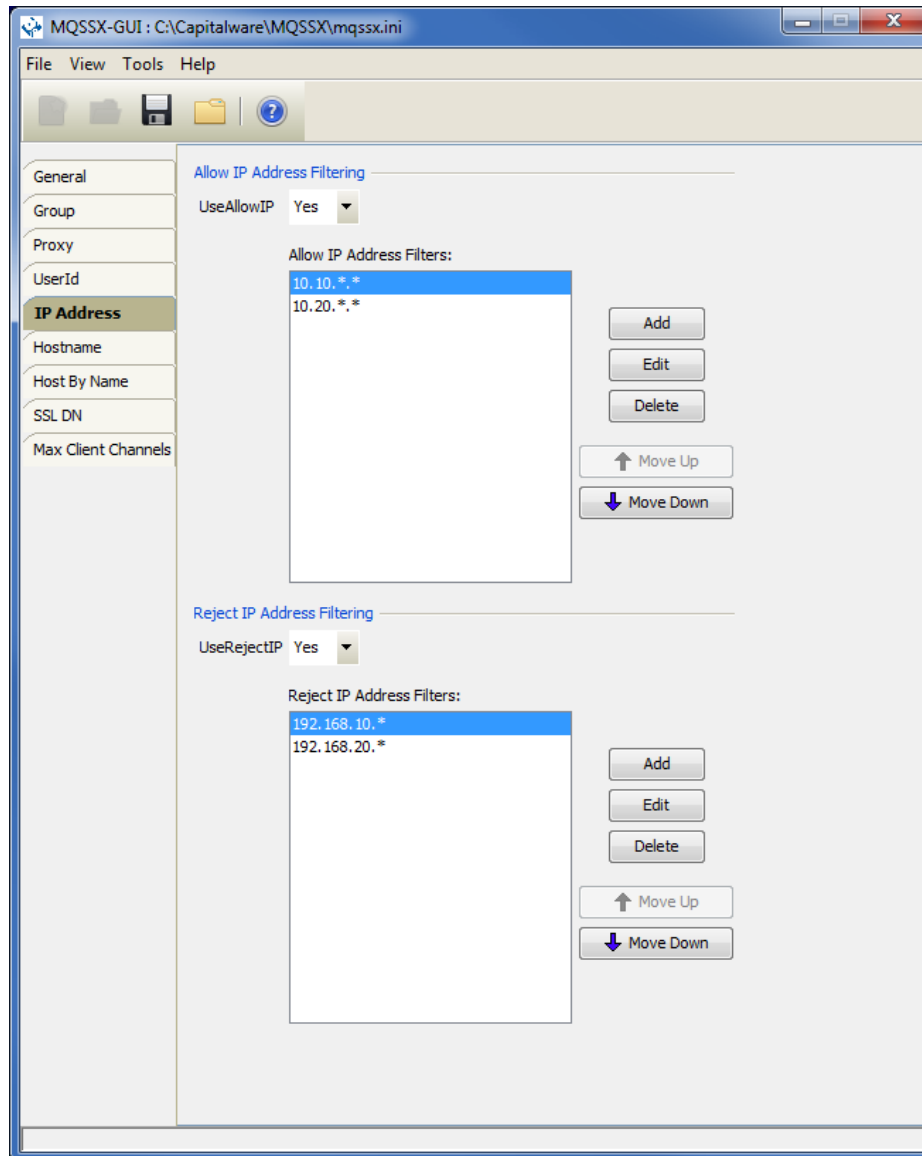


Click the **Yes** button to permanently remove the entry from the list.

4.5 IP Address Tab

This section will describe various parameters on the IP Address tab of a MQSSX IniFile.

The following is the IP Address Tab with default values:



The following are the IniFile parameters on the IP Address Tab:

4.5.1 Allow IP

This section describes the necessary steps to enable the use of filtering of the incoming IP address.

- **UseAllowIP** to allow or restrict an incoming IP address by using a regular expression pattern. This is controlled by the IniFile's property keyword 'UseAllowIP'. Setting 'UseAllowIP' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'AllowIP' property keyword.
- **IP Address Filters** is a list of IP Addresses (with wildcards) that are allowed to connect to queue manager or particular channel.

4.5.2 Reject IP

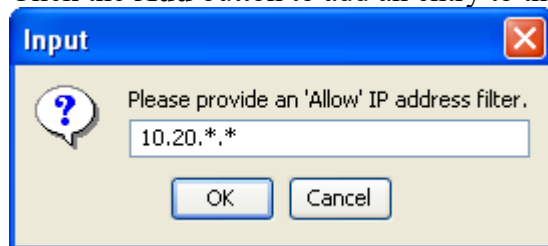
This section describes the necessary steps to explicitly reject an incoming IP address.

- **UseRejectIP** to explicitly reject an incoming IP address by using a regular expression pattern. This is controlled by the IniFile's property keyword 'UseRejectIP'. Setting 'UseRejectIP' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'RejectIP' property keyword.
- **Reject IP Filters** is a list of IP Addresses (with wildcards) that are explicitly rejected.

4.5.3 Managing IP Address Filtering

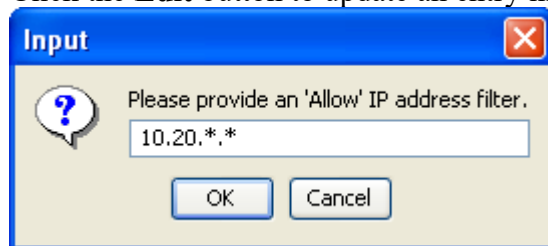
This section describes the necessary steps to manage IP address filtering entries.

Click the **Add** button to add an entry to the list.



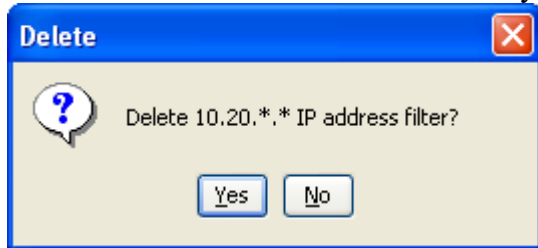
Input the IP Filter including wildcards and then click the **Ok** button.

Click the **Edit** button to update an entry in the list.



Update the IP Filter including wildcards and then click the **Ok** button.

Click the **Delete** button to delete an entry in the list.

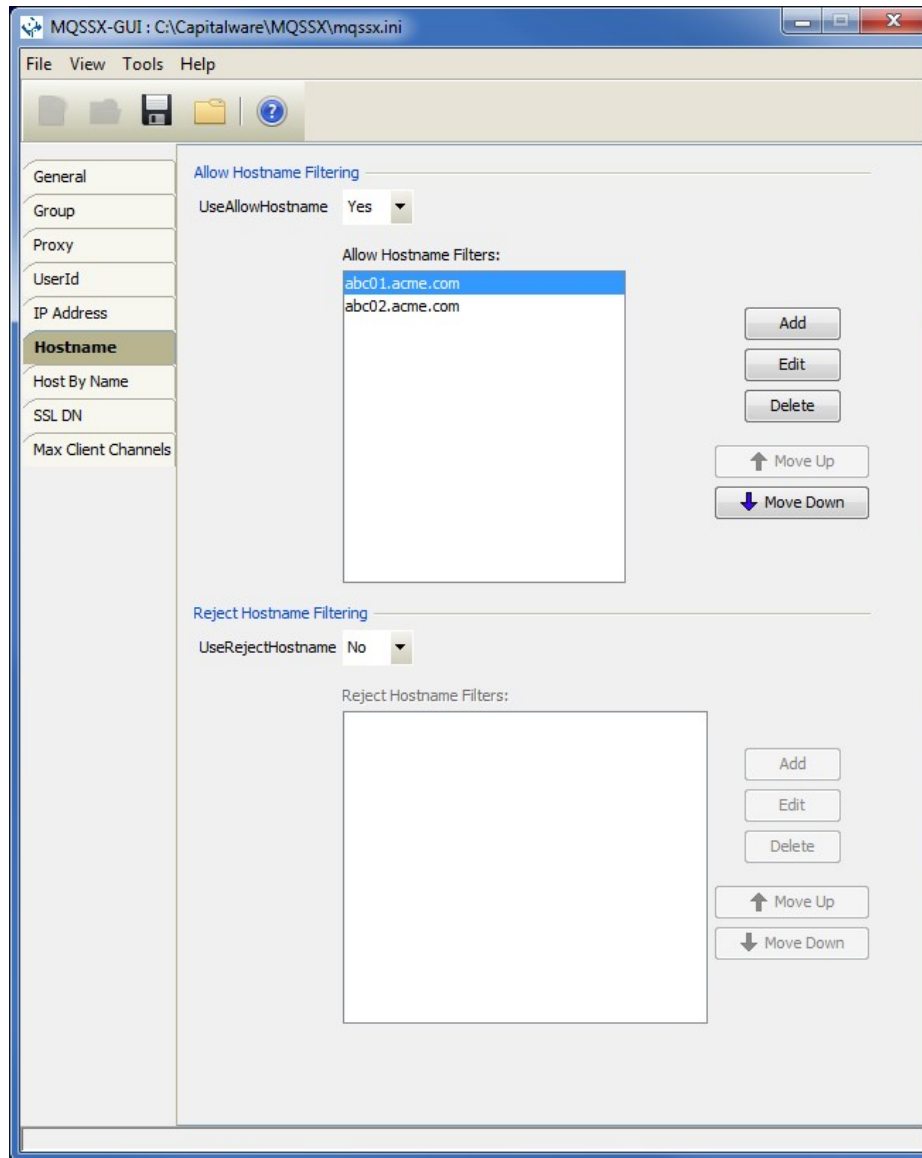


Click the **Yes** button to permanently remove the entry from the list.

4.6 Hostname Tab

This section will describe various parameters on the Hostname tab of a MQSSX IniFile.

The following is the Hostname Tab with default values:



The following are the IniFile parameters on the Hostname Tab:

4.6.1 Allow Hostname

This section describes the necessary steps to enable the use of filtering of the incoming Hostname.

- **UseAllowHostname** to allow or restrict an incoming Hostname by using a regular expression pattern. This is controlled by the IniFile's property keyword 'UseAllowHostname'. Setting 'UseAllowHostname' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'AllowHostname' property keyword.
- **Hostname Filters** is a list of Hostnames (with wildcards) that are allowed to connect to queue manager or particular channel.

4.6.2 Reject Hostname

This section describes the necessary steps to explicitly reject an incoming Hostname.

- **UseRejectHostname** to explicitly reject an incoming Hostname by using a regular expression pattern. This is controlled by the IniFile's property keyword 'UseRejectHostname'. Setting 'UseRejectHostname' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'RejectHostname' property keyword.
- **Reject Hostname Filters** is a list of Hostnames (with wildcards) that are explicitly rejected.

4.6.3 Managing Hostname Filtering

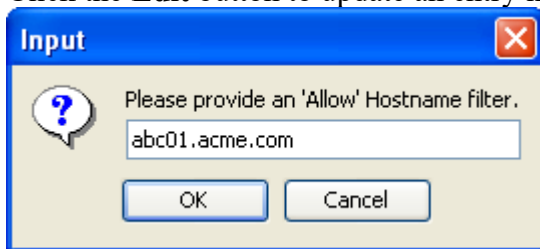
This section describes the necessary steps to manage Hostname filtering entries.

Click the **Add** button to add an entry to the list.



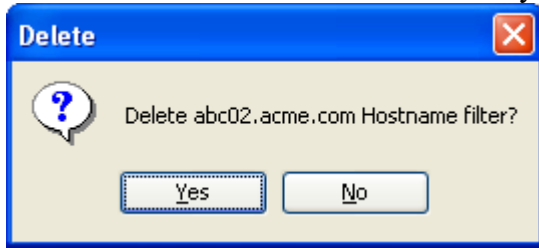
Input the Hostname Filter including wildcards and then click the **Ok** button.

Click the **Edit** button to update an entry in the list.



Update the Hostname Filter including wildcards and then click the **Ok** button.

Click the **Delete** button to delete an entry in the list.

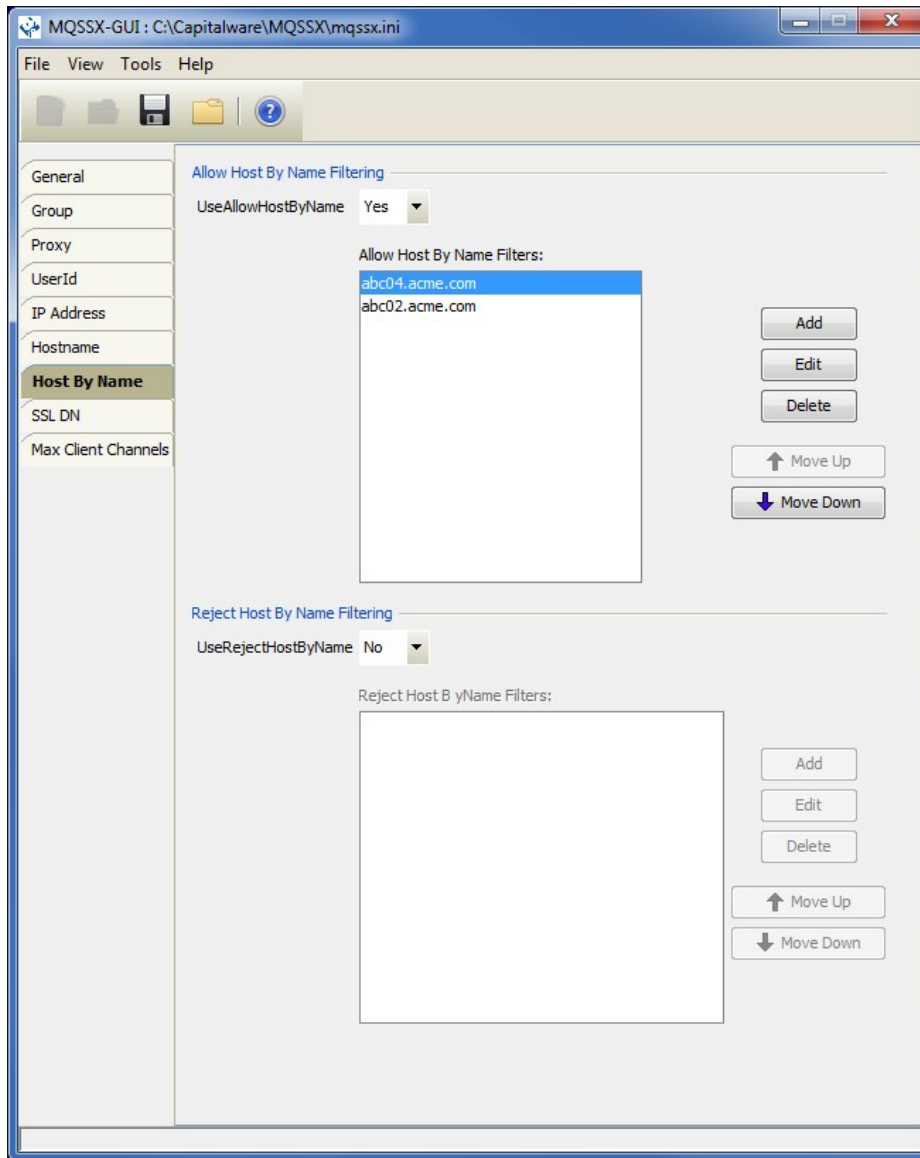


Click the **Yes** button to permanently remove the entry from the list.

4.7 Host By Name Tab

This section will describe various parameters on the Host By Name tab of a MQSSX IniFile.

The following is the Host By Name Tab with default values:



The following are the IniFile parameters on the HostByName Tab:

4.7.1 Allow HostByName

This section describes the necessary entries to enable the feature that allows or restricts the incoming IP against IP of Hostnames that MQSSX will perform a `gethostbyaddr()` call against to compare the returned IP address against the incoming IP address.

- **UseAllowHostByName** controls the use of `AllowHostByName`. Set to `Y` to activate feature.
- **HostByName** specifies the Hostnames that MQSSX will perform a `gethostbyaddr()` call against to compare the returned IP address against the incoming IP address to allow the incoming connection.

4.7.2 Reject HostByName

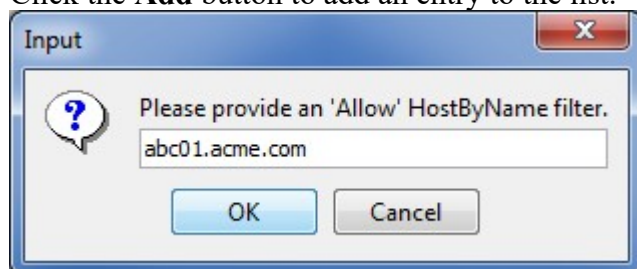
This section describes the necessary entries to enable the feature that rejects the incoming IP against IP of Hostnames that MQSSX will perform a `gethostbyaddr()` call against to compare the returned IP address against the incoming IP address.

- **UseRejectHostByName** controls the use of `RejectHostByName`. Set to `Y` to activate feature.
- **Reject HostByName** specifies the Hostnames that MQSSX will perform a `gethostbyaddr()` call against to compare the returned IP address against the incoming IP address. rejected.

4.7.3 Managing HostByName Filtering

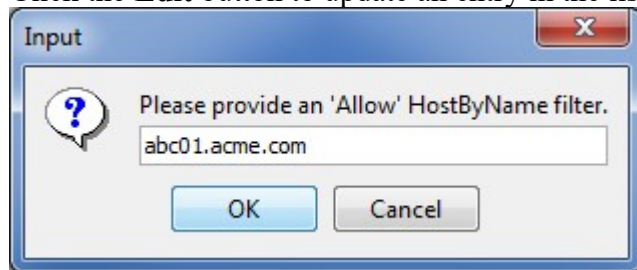
This section describes the necessary steps to manage `HostByName` filtering entries.

Click the **Add** button to add an entry to the list.



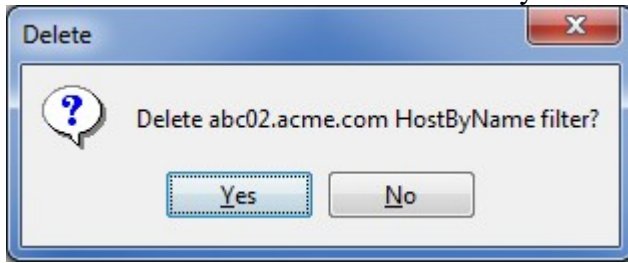
Input the `HostByName` Filter including wildcards and then click the **Ok** button.

Click the **Edit** button to update an entry in the list.



Update the `HostByName` Filter including wildcards and then click the **Ok** button.

Click the **Delete** button to delete an entry in the list.

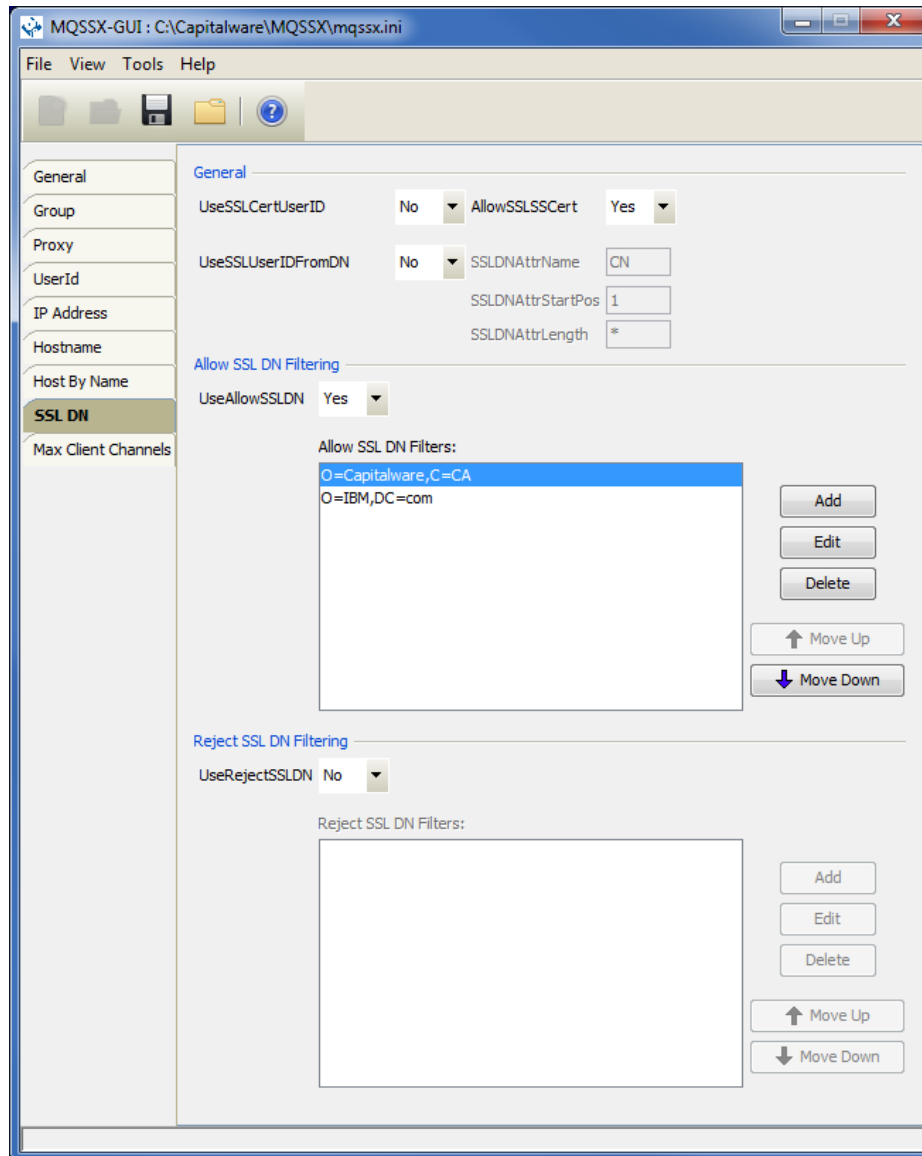


Click the **Yes** button to permanently remove the entry from the list.

4.8 SSL DN Tab

This section will describe various parameters on the SSL DN tab of a MQSSX IniFile.

The following is the SSL DN Tab with sample values:



The following are the IniFile parameters on the SSL DN Tab:

4.8.1 General

This section describes the necessary steps to enable the use of the general options for the SSL DN tab.

- **UseSSLCertUserID** allows the connection to use the UserID value specified in the channel's SSLCertUserID field.
- **AllowSSLSSCert** allows or rejects a connection with a Self-Signed Certificate.
- **UseSSLSSLDNFromDN** specifies that the UserID is to be retrieved from a SSL DN entry.
- **SSLSSLDNAttrName** specifies the SSL DN attribute field name
- **SSLDNAttrStartPos** specifies the start position of the retrieval
- **SSLDNAttrLength** specifies the length of the field to be extracted (* means all)

4.8.2 Allow SSL DN

This section describes the necessary steps to enable the use of filtering of the incoming SSL DN.

- **UseAllowSSL DN** enables the feature to allow or to restrict the incoming SSL DN by using a regular expression pattern. The server-side security exit will look up the regular expression pattern from the 'AllowSSL DN' property keyword.
- **AllowSSL DN Filters** is a list of SSL DNs (with wildcards) that are allowed to connect to queue manager or particular channel.

4.8.3 Reject SSL DN

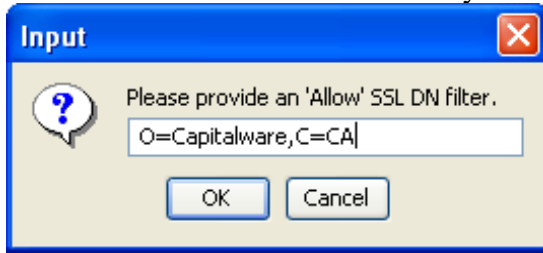
This section describes the necessary steps to explicitly reject an incoming SSL DN.

- **UseRejectSSL DN** enables the feature to reject an the incoming SSL DN by using a regular expression pattern. The server-side security exit will look up the regular expression pattern from the 'RejectSSL DN' property keyword.
- **RejectSSL DN Filters** is a list of SSL DNs (with wildcards) that are explicitly rejected.

4.8.4 Managing SSL DN Filtering

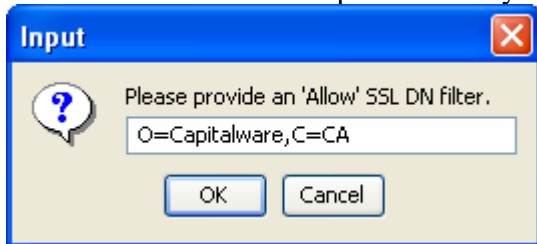
This section describes the necessary steps to manage SSL DN filtering entries.

Click the **Add** button to add an entry to the list.



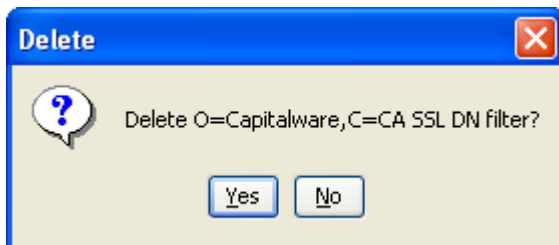
Input the SSL DN including wildcards and then click the **Ok** button.

Click the **Edit** button to update an entry in the list.



Update the SSL DN including wildcards and then click the **Ok** button.

Click the **Delete** button to delete an entry in the list.

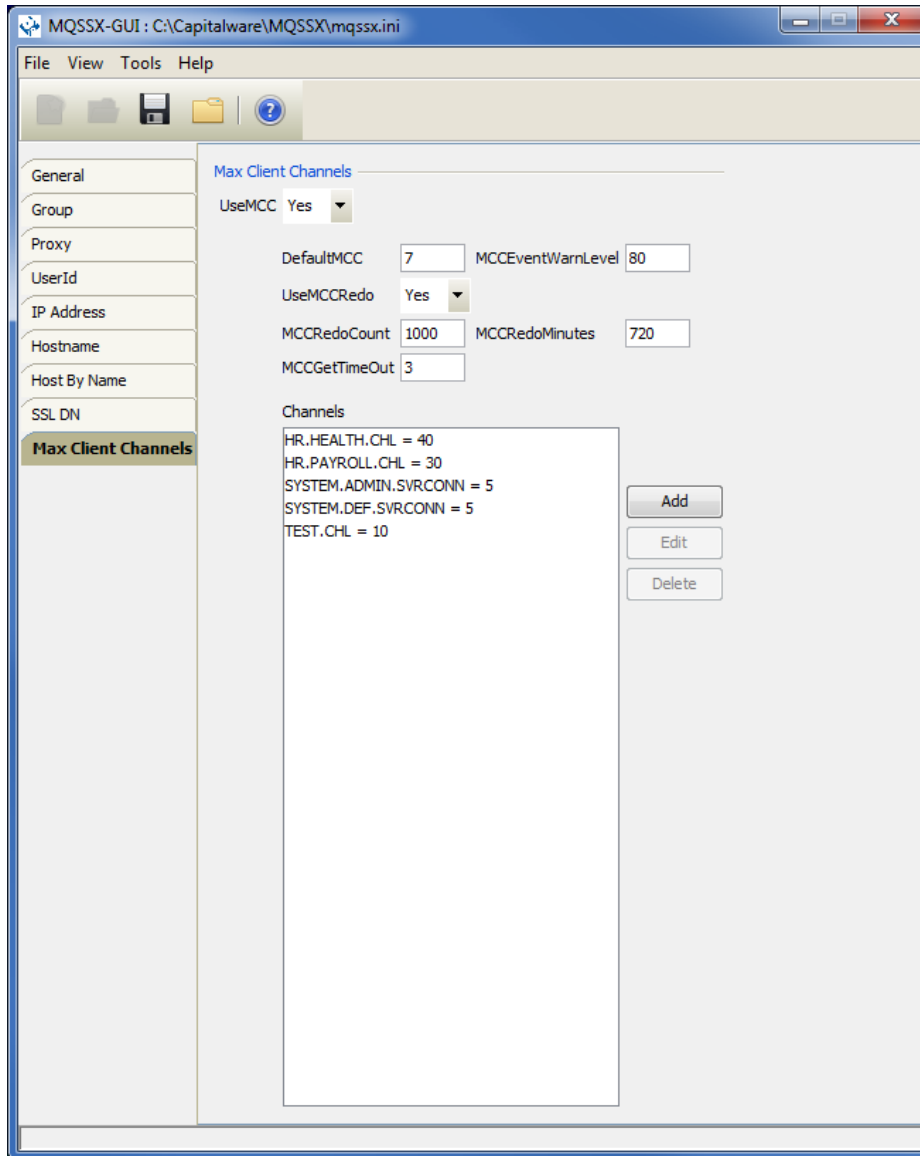


Click the **Yes** button to permanently remove the entry from the list.

4.9 Max Client Channel Tab

This section will describe various parameters on the Max Client Channel (MCC) tab of a MQSSX IniFile.

The following is a Max Client Channel Tab with default values:



The following are the IniFile parameters on the Max Client Channel Tab:

4.9.1 Set Maximum Number of Incoming Connections per Channel

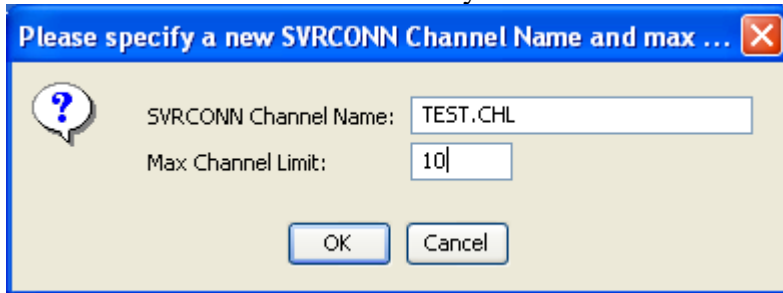
This section describes the necessary entries to set a maximum number of allowable connections per a given channel. This is controlled by the IniFile's property keyword 'UseMCC'. Setting 'UseMCC' to 'Y' (Yes) will cause the server-side security exit to look up channel's name as a property keyword in the IniFile.

For example, if 'UseMCC' is set to 'Y' and the incoming connection is on 'SYSTEM.ADMIN.SVRCONN', the server-side security exit will look up in the IniFile the keyword of 'SYSTEM.ADMIN.SVRCONN'. If the 'SYSTEM.ADMIN.SVRCONN' keyword is not found, then the server-side security exit will look up 'DefaultMCC' keyword in the IniFile.

- **DefaultMCC** is the default maximum number of connections allowed for the channel.
- **MCCEventWarnLevel** keyword provides a percent level of connected channels when a warning messages should be issued to the event queue. The default value for 'MCCEventWarnLevel' is 80 percent.
- **UseMCCRedo** keyword specifies whether or not the server-side security exit should issue the PCF command. The default value for 'UseMCCRedo' is 'N'.
- **MCCRedoMinutes** keyword states that the server-side security exit should issue PCF command if more than 'x' minutes have passed since the last PCF command was issued. The default value for 'MCCRedoMinutes' is 720 minutes.
- **MCCRedoCount** keyword states that the server-side security exit should issue PCF command if more than 'x' connection attempts passed since the last PCF command was issued. The default value for 'MCCRedoCount' is 5000.
- **MCCGetTimeOut** keyword states that the server-side security exit should wait, after issues a PCF command, up to 'x' seconds for the response message from the command server. The default value for 'MCCGetTimeOut' is 3 seconds.

4.9.2 Managing MCC entries

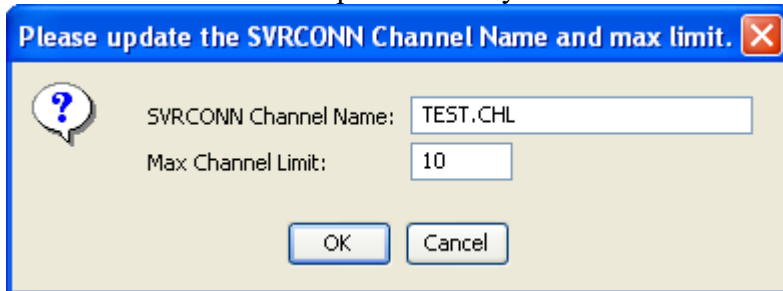
Click the **Add** button to add an entry to the list.



A dialog box with a blue title bar containing the text "Please specify a new SVRCONN Channel Name and max ..." and a close button. The main area has a light beige background and contains a question mark icon in a speech bubble. Below the icon are two text input fields: "SVRCONN Channel Name:" with the value "TEST.CHL" and "Max Channel Limit:" with the value "10". At the bottom are "OK" and "Cancel" buttons.

Input the channel name and the maximum number of connection to be allowed at any given time for this channel and then click the **Ok** button.

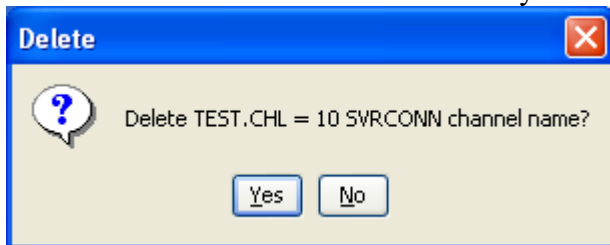
Click the **Edit** button to update an entry in the list.



A dialog box with a blue title bar containing the text "Please update the SVRCONN Channel Name and max limit." and a close button. The main area has a light beige background and contains a question mark icon in a speech bubble. Below the icon are two text input fields: "SVRCONN Channel Name:" with the value "TEST.CHL" and "Max Channel Limit:" with the value "10". At the bottom are "OK" and "Cancel" buttons.

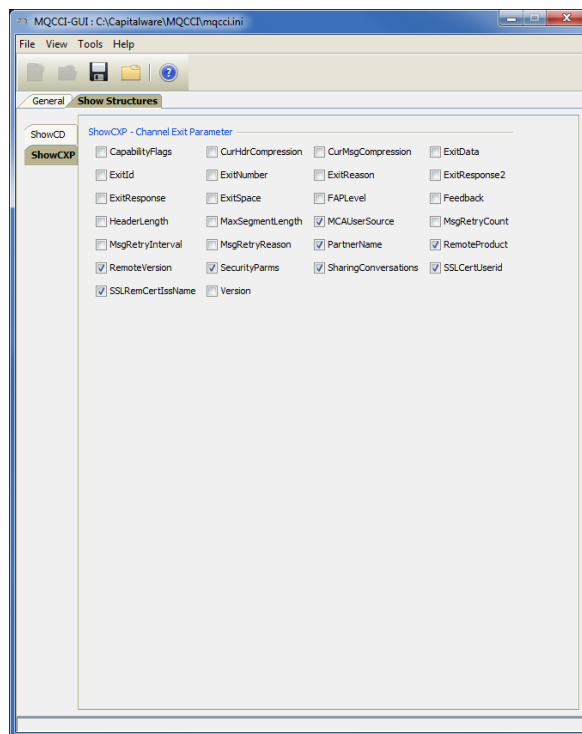
Update the channel name and / or the maximum number of connection to be allowed at any given time for this channel and then click the **Ok** button.

Click the **Delete** button to delete an entry in the list.



A dialog box with a blue title bar containing the text "Delete" and a close button. The main area has a light beige background and contains a question mark icon in a speech bubble. Below the icon is the text "Delete TEST.CHL = 10 SVRCONN channel name?". At the bottom are "Yes" and "No" buttons.

Click the **Yes** button to permanently remove the entry from the list.



5 Other Tools

This chapter will describes how the other tools included with MQSSX-GUI.

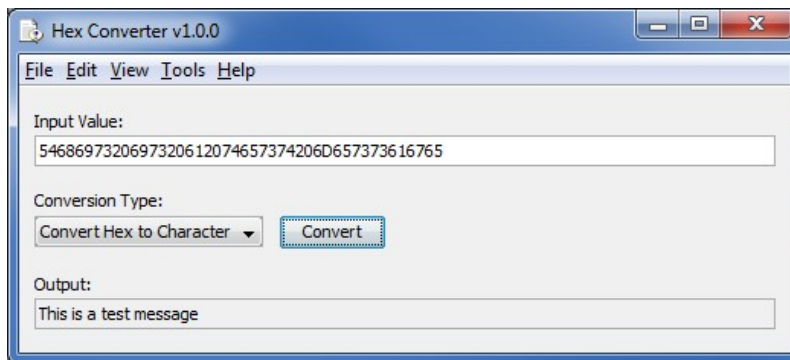
5.1 Hex Converter

This section will describe how to invoke and use the Hex Converter tool. Hex Converter tool can convert a hexadecimal number to its corresponding string representation and vice versa. i.e. 0x'3132333041424344' to '1230ABCD'.

For the Other Tools, you can have unlimited number of them running (up to what your box can support). Also, while any of the Other Tools are running, the user can still use MQSSX-GUI.

From the main panel of MQSSX-GUI, select **Tools**, then **Hex Converter**.

This is the main panel of the Hex Converter.



- The user first selects the Conversion type: "Hex to Character" or "Character to Hex"
- Input the value hex or character value into the "Input Value" field
- Click the Convert button to convert the data

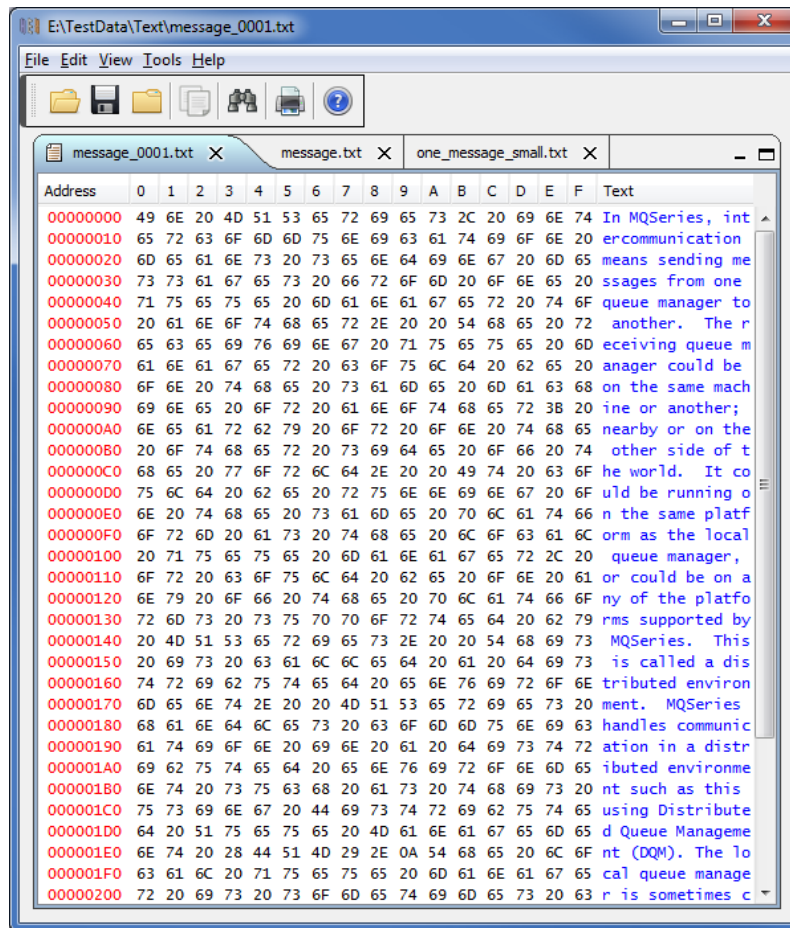
5.2 Hex Editor

This section will describe how to invoke and use the Hex Editor tool. The Hex Editor is a simple multipurpose hex editor. The Hex Editor supports multi-file editing.

For the Other Tools, you can have unlimited number of them running (up to what your box can support). Also, while any of the Other Tools are running, the user can still use MQSSX-GUI.

From the main panel of MQSSX-GUI, select **Tools**, then **Hex Editor**.

This is the main panel of the Hex Editor and it has 3 open files.



Supported features:

- Open / editing of multiple files
- Recent File List
- Copy, Find and Find Next
- Save, Save As and Print

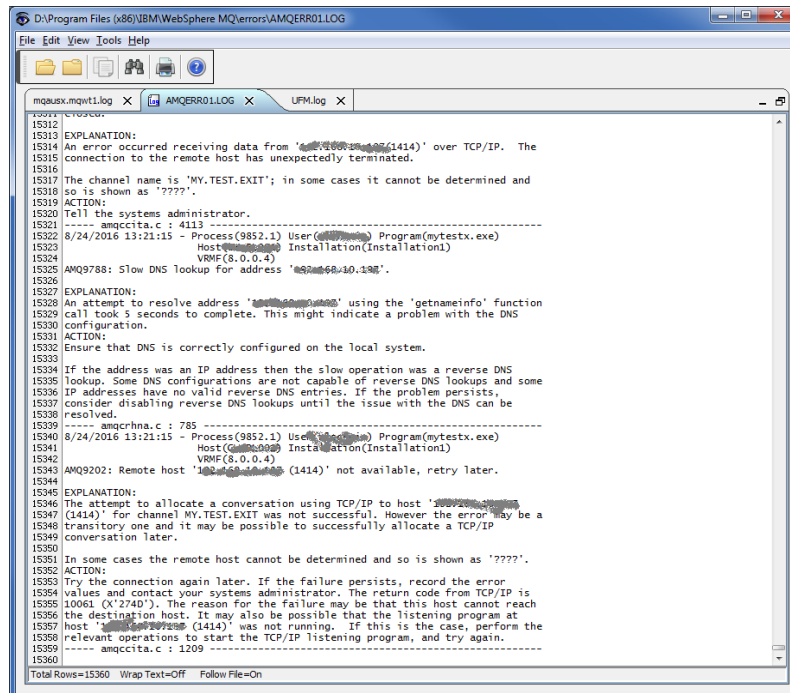
5.3 Tail File

This section will describe how to invoke and use the Tail File tool. The Tail File is a simple multipurpose file monitoring viewer. The Tail File supports monitoring of multiple files at the same time.

For the Other Tools, you can have unlimited number of them running (up to what your box can support). Also, while any of the Other Tools are running, the user can still use MQSSX-GUI.

From the main panel of MQSSX-GUI, select **Tools**, then **Tail File**.

This is the main panel of the Tail File and it has 3 open files.



```
D:\Program Files (x86)\IBM\WebSphere\MQ\errors\AMQERR01.LOG
File Edit View Tools Help
mqssx.mqwt1.log x AMQERR01.LOG x UPM.log x
15311
15312
15313 EXPLANATION:
15314 An error occurred receiving data from '10.20.200.1414' over TCP/IP. The
15315 connection to the remote host has unexpectedly terminated.
15316
15317 The channel name is 'MY.TEST.EXIT'; in some cases it cannot be determined and
15318 so is shown as '????'.
15319 ACTION:
15320 Tell the systems administrator.
15321 ----- amqccta.c : 4113 -----
15322 8/24/2016 13:21:15 - Process(9852.1) User(Carl) Program(mytestx.exe)
15323 Host(10.20.200.1414) Installation(Installation1)
15324 VRMF(8.0.0.4)
15325 AMQ9788: Slow DNS lookup for address '10.20.200.1414'.
15326
15327 EXPLANATION:
15328 An attempt to resolve address '10.20.200.1414' using the 'getnameinfo' function
15329 call took 5 seconds to complete. This might indicate a problem with the DNS
15330 configuration.
15331 ACTION:
15332 Ensure that DNS is correctly configured on the local system.
15333
15334 If the address was an IP address then the slow operation was a reverse DNS
15335 lookup. Some DNS configurations are not capable of reverse DNS lookups and some
15336 IP addresses have no valid reverse DNS entries. If the problem persists,
15337 consider disabling reverse DNS lookups until the issue with the DNS can be
15338 resolved.
15339 ----- amqcrhna.c : 785 -----
15340 8/24/2016 13:21:15 - Process(9852.1) User(Carl) Program(mytestx.exe)
15341 Host(10.20.200.1414) Installation(Installation1)
15342 VRMF(8.0.0.4)
15343 AMQ9202: Remote host '10.20.200.1414' not available, retry later.
15344
15345 EXPLANATION:
15346 The attempt to allocate a conversation using TCP/IP to host '10.20.200.1414'
15347 (1414) for channel MY.TEST.EXIT was not successful. However the error may be a
15348 transitory one and it may be possible to successfully allocate a TCP/IP
15349 conversation later.
15350
15351 In some cases the remote host cannot be determined and so is shown as '????'.
15352 ACTION:
15353 Try the connection again later. If the failure persists, record the error
15354 values and contact your systems administrator. The return code from TCP/IP is
15355 10061 (X'274D'). The reason for the failure may be that this host cannot reach
15356 the destination host. It may also be possible that the listening program at
15357 host '10.20.200.1414' was not running. If this is the case, perform the
15358 relevant operations to start the TCP/IP listening program, and try again.
15359 ----- amqccta.c : 1209 -----
15360
Total Rows=15360 WrapText=Off FollowFile=On
```

Supported features:

- Opening of multiple files
- Wrap Text and Recent File List
- Copy, Find, Find Next and Print

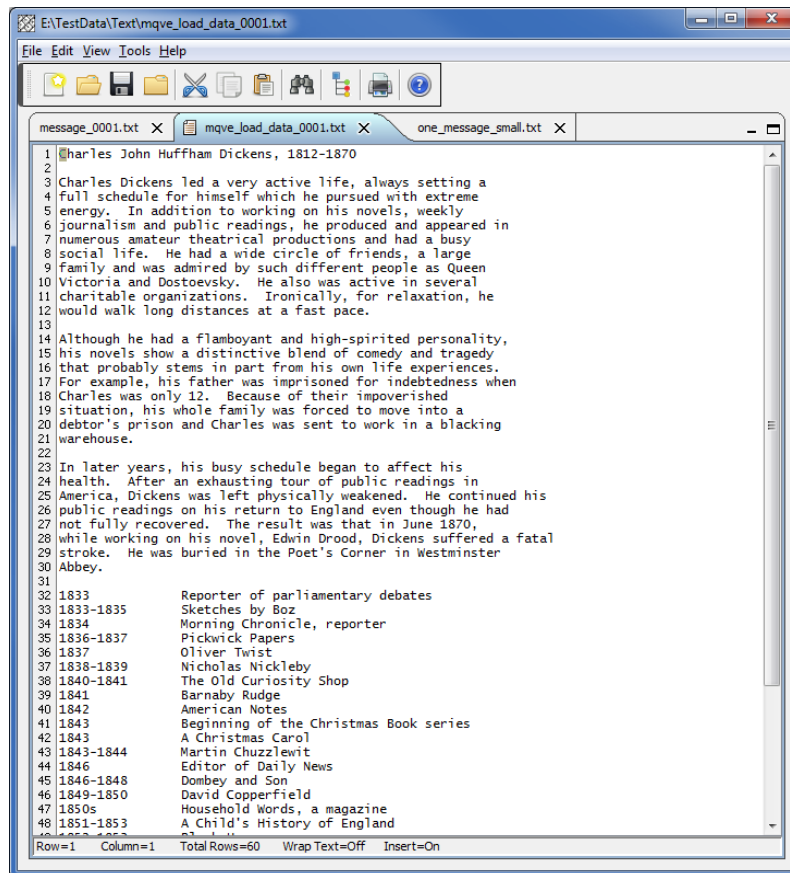
5.4 Text Editor

This section will describe how to invoke and use the Text Editor tool. The Text Editor is a simple multipurpose plain-text editor. The Text Editor supports multi-file editing.

For the Other Tools, you can have unlimited number of them running (up to what your box can support). Also, while any of the Other Tools are running, the user can still use MQSSX-GUI.

From the main panel of MQSSX-GUI, select **Tools**, then **Text Editor**.

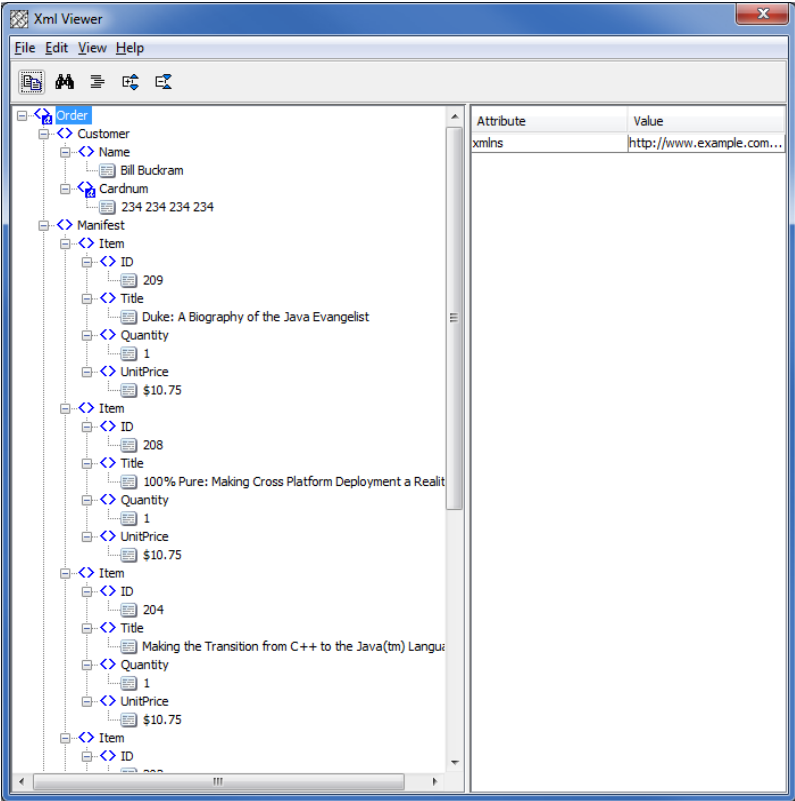
This is the main panel of the Text Editor and it has 3 open files.



Supported features:

- Open / editing of multiple files
- Builtin XML Viewer, Wrap Text
- Recent File List
- Cut, Copy, Paste, Find and Find Next
- Save, Save As and Print

The following shows the Text Editor's builtin XML Viewer.



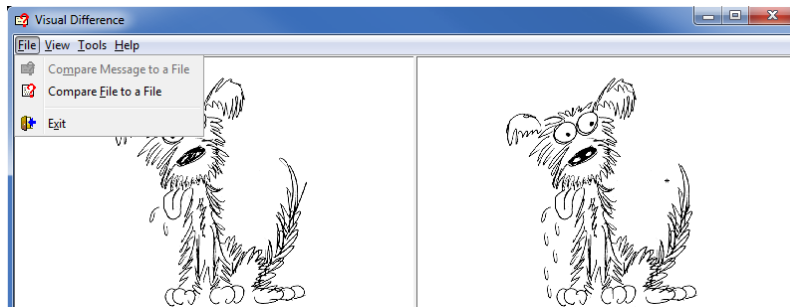
5.5 Visual Difference

This section will describe how to invoke and use the Visual Difference tool. The Visual Difference is a simple file to file comparison tool.

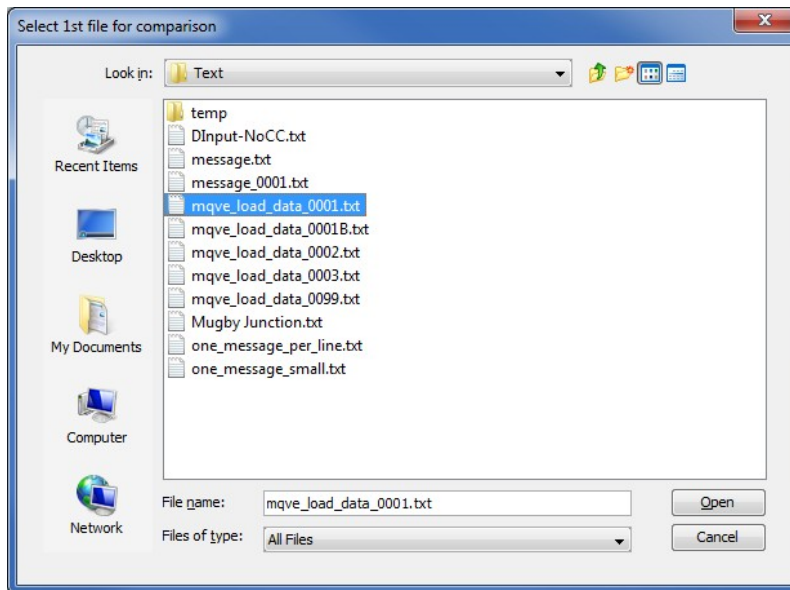
For the Other Tools, you can have unlimited number of them running (up to what your box can support). Also, while any of the Other Tools are running, the user can still use MQSSX-GUI.

From the main panel of MQSSX-GUI, select **Tools**, then **Visual Difference**.

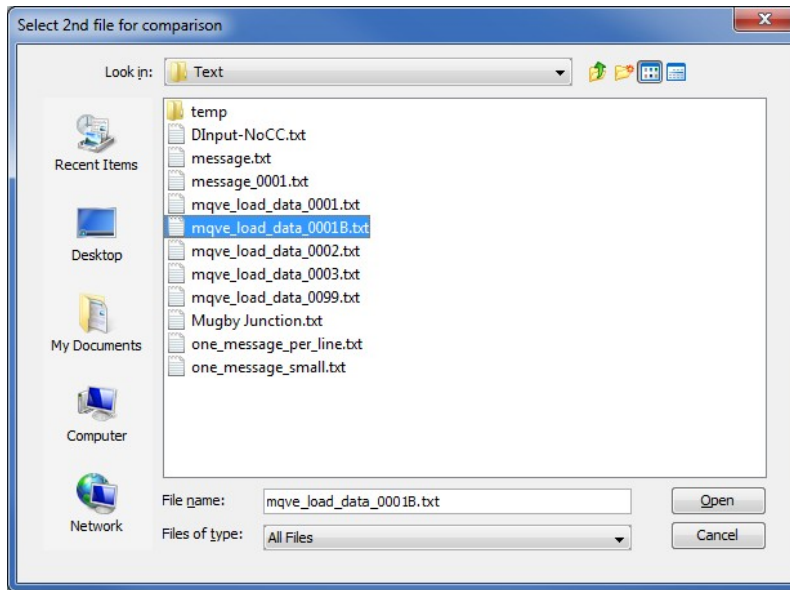
This is the main panel of the Visual Difference. To initiate the file comparison process, click File and then click Compare File to File



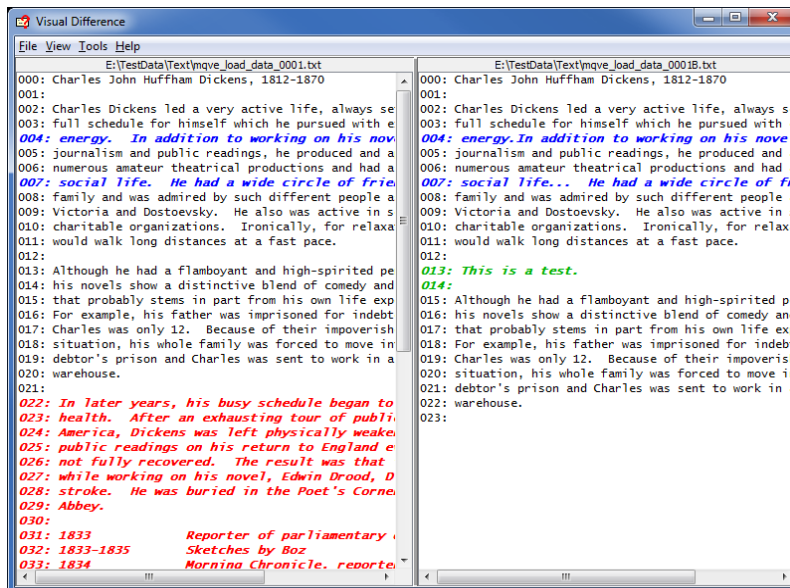
First the user needs to select the first file for the comparison.



Next, the user needs to select the second file for the comparison.



The following shows the difference between 2 files. Differences are highlighted: Green for inserts, Red for deletions and Blue for changes.



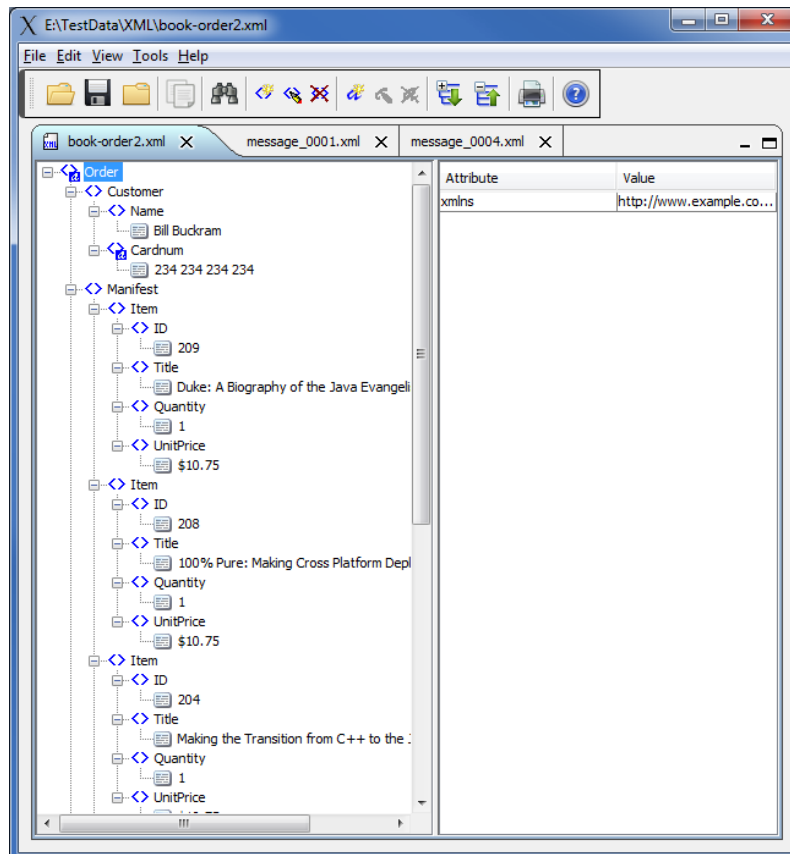
5.6 XML Editor

This section will describe how to invoke and use the XML Editor tool. The XML Editor is a simple multipurpose plain-text editor. The XML Editor supports multi-file editing.

For the Other Tools, you can have unlimited number of them running (up to what your box can support). Also, while any of the Other Tools are running, the user can still use MQSSX-GUI.

From the main panel of MQSSX-GUI, select **Tools**, then **XML Editor**.

This is the main panel of the XML Editor and it has 3 open files.



Supported features:

- Open / editing of multiple files
- Recent File List
- Copy, Find and Find Next
- Save, Save As and Print

6 Miscellaneous

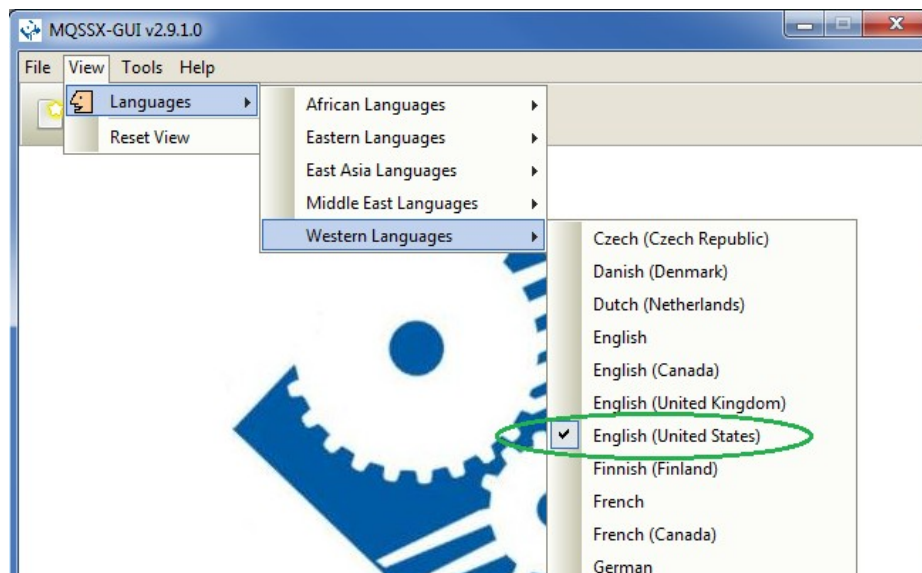
This chapter will describes how the miscellaneous features of MQSSX-GUI.

6.1 Language

This section will describe how to switch MQSSX-GUI's Language Text to another Language Text. MQSSX-GUI has been designed to support Java's multi-language environment. Currently, MQSSX-GUI has language support (menu items, buttons and titles) for the following 55 languages:

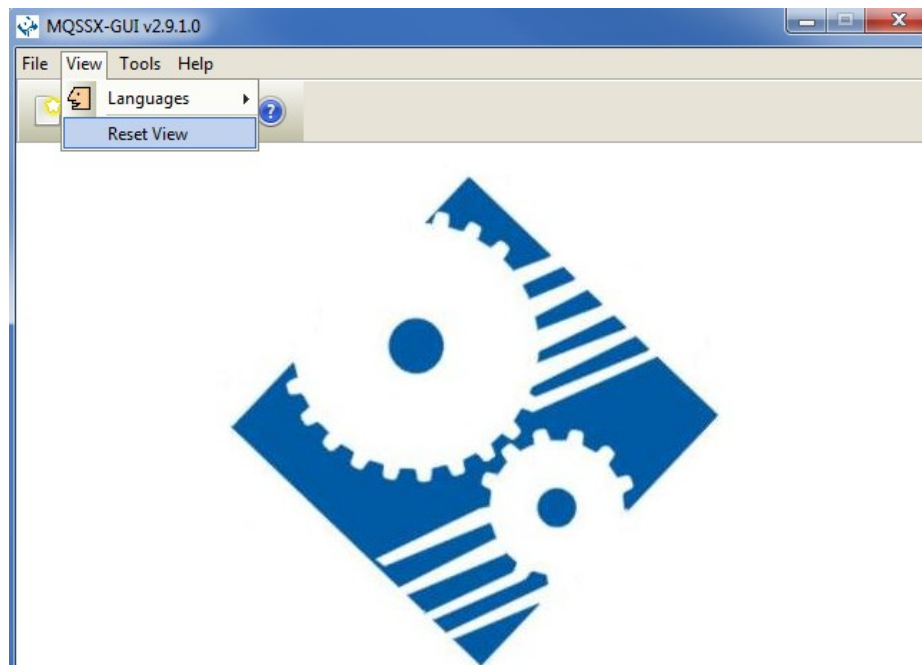
➤ Amharic (am)	➤ Hungarian (hu)	➤ Shona (sn)
➤ Arabic (ar)	➤ Igbo (ig)	➤ Sindhi (sd)
➤ Azerbaijani (az)	➤ Indonesian (in)	➤ Spanish (es)
➤ Bengali (bn)	➤ Italian (it)	➤ Sundanese (su)
➤ Cebuano (ceb)	➤ Japanese (ja)	➤ Swahili (sw)
➤ Chinese (China) (zh)	➤ Javanese (jv)	➤ Swedish (sv)
➤ Chinese (Taiwan) (zh)	➤ Kannada (kn)	➤ Tamil (ta)
➤ Czech (cs)	➤ Korean (ko)	➤ Telugu (te)
➤ Danish (da)	➤ Malay (ms)	➤ Thai (th)
➤ Dutch (nl)	➤ Malayalam (ml)	➤ Turkish (tr)
➤ English (en)	➤ Marathi (mr)	➤ Ukrainian (uk)
➤ Finnish (fi)	➤ Norwegian (no)	➤ Urdu (ur)
➤ French (fr)	➤ Panjabi (pa)	➤ Uzbek (uz)
➤ German (de)	➤ Pashto (ps)	➤ Vietnamese (vi)
➤ Greek (el)	➤ Persian (fa)	➤ Xhosa (xh)
➤ Gujarati (gu)	➤ Polish (pl)	➤ Yoruba (yo)
➤ Hausa (ha)	➤ Portuguese (pt)	➤ Zulu (zu)
➤ Hebrew (iw)	➤ Romanian (ro)	
➤ Hindi (hi)	➤ Russian (ru)	

From the main panel of MQSSX-GUI, select **View**, then **Language**.



6.2 Reset View

This section will describe how to reset the view of MQSSX-GUI if the display is not correct.



The user can also reset the view from the command line by passing in the **RG** parameter.

6.2.1 Windows Command Line

On Windows, issue the following command to reset the view of MQSSX-GUI:

```
mqssxgui.exe RG
```

6.2.2 Linux and macOS Command Line

On Linux and macOS, issue the following command to reset the view of MQSSX-GUI:

```
./mqssxgui.sh RG
```

7 Appendix A – Frequently Asked Questions (FAQ)

Q. Can IniFiles be create on Windows for MQSSX on Unix?

A. Yes. Once the IniFile has been saved, the user can copy or ftp (in ASCII mode) the file to the remote server.

8 Appendix B – MQSSX-GUI Upgrade Procedures

To upgrade an existing installation of MQSSX-GUI, please do the following in the appropriate section below.

8.1 Windows Upgrade

- Stop all instances of MQSSX-GUI
- Backup any MQSSX-GUI data files in the MQSSX-GUI install directory
- Go to the Windows **Control Panel** and select **Program and Features**
- Select MQSSX-GUI and then click the **Uninstall** button
- Run the install program called: **mqssxgui-setup-withjre.exe**
- 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 **MQSSX-GUI**.
- Restore the MQSSX-GUI data files if necessary
- To run MQSSX-GUI, select the MQSSX-GUI icon from within the MQSSX-GUI folder.

8.2 Linux or macOS Upgrade

- Stop all instances of MQSSX-GUI
- Backup any MQSSX-GUI data files in the MQSSX-GUI install directory
- Remove the installation i.e. `rm -Rf Capitalware/MQSSX-GUI/`
- Unzip the file, open a shell prompt and execute the following commands:

```
unzip mqssxgui.zip
```

- When the unzip command has finished, there should be a directory tree as follows:

```
Capitalware/MQSSX-GUI
```

- Change directory by typing the following:

```
cd Capitalware/MQSSX-GUI
```

- Before running MQSSX-GUI for the first time, you need to add the execute attribute to the `mqssxgui.sh` shell scripts. Type the following:

```
chmod +x mqssxgui.sh
```

- To run MQSSX-GUI from the `Capitalware/MQSSX-GUI` directory, then type the following:

```
./mqssxgui.sh
```


9 Appendix B – Support

The support for MQSSX-GUI can be found at the following location:

By email at:

support@capitalware.com

By regular mail at:

Capitalware Inc.
Attn: MQSSX-GUI Support
Unit 11, 1673 Richmond Street, PMB524
London, Ontario N6G2N3
Canada

10 Appendix C – Summary of Changes

- MQSSX-GUI v2.9.3
 - Fixed an issue with ‘AllowBlankUserId’ on the UserId tab
 - Fixed an issue with the Move Up & Move Down buttons on the UserId tab
- MQSSX-GUI v2.9.2
 - Added the ‘Recent Files’ menu option under the File menu option.
 - Added images to buttons for more user-friendly display.
 - Added support for 55 languages for the menu options, buttons and titles (not IniFile keywords).
 - Added the ‘Reset View’ menu option under the View menu option.
 - Added 6 tools under the Tools menu option:
 - Compare File to a File
 - Hex Converter
 - Hex Editor
 - Tail File
 - Text Editor
 - XML Editor
- MQSSX-GUI v2.9.0
 - Added support single or double quote on log message (new keyword: LogMessageQuote)
- MQSSX-GUI v2.7.0
 - Added support log disconnect message (new keyword: LogDiscMessage)
 - Added support single or double quotes for log message (new keyword: LogMessageQuote)
- MQSSX-GUI v2.6.0
 - Ability to monitor for excessive client connections (ECC) and then generate an alert (new keywords: UseECC, ECCWarnCount & ECCInterval)
- MQSSX-GUI v2.5.2
 - Added new CheckFinalUserID keyword. It will take the final UserID and reprocess it against UseAllowUserID, AllowUserID, UseRejectUserID, RejectUserID and Allowmqm keywords.
- MQSSX-GUI v2.5.1
 - Added UseMCCRedo flag to control MCCRedoCount, MCCRedoMinutes and MCCGetTimeOut
 - Added UserIDFormatting flag to force lowercase/uppercase/as_is UserID formatting on all platforms
- MQSSX-GUI v2.5.0

- Major layout of change
- Added new keywords: SystemLogMessage, UseGroups, Groups, UseGroupFile, GroupFile, UseAllowHostByName, AllowHostByName, UseRejectHostByName and RejectHostByName
- MQSSX-GUI v2.2.5
 - Updated the layout of tabs
 - Added new keywords: UseAllowHostname, AllowHostname, UseRejectHostname and RejectHostname
- MQSSX-GUI v2.2
 - Updated the layout of tabs
 - Added new keywords: LicenseFile, UseSSLCertUserID, AllowSSLSSCert, UseSSLUserIDFromDN, SSLDNAttrName, SSLDNAttrStartPos, SSLDNAttrLength, UseAllowSSLDN, AllowSSLDN, UseRejectSSLDN and RejectSSLDN
- MQSSX-GUI v2.0
 - Updated the layout of tabs
 - Added new keywords: BackupLogFileCount, UseRejectIP, RejectIP, UseRejectUserID, RejectUserID and MCCGetTimeOut
- MQSSX-GUI v1.2.5
 - Added new keywords: RotateLogDaily, WriteToEventQueue, EventQueueName and MCCEventWarnLevel
- MQSSX-GUI v1.2
 - Updated default values for keywords.
- MQSSX-GUI v1.1
 - Updated keyword display.
- MQSSX-GUI v1.0
 - Initial release.

11 Appendix D – License Agreement

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12 Appendix E – Notices

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