MQSSX-ISPF-GUI for z/OS User Guide

```
--------------------------- z/MQSSX ISPF GUI ---------------------------
 COMMAND ===>


MQSSX IniFile (PDS or Sequential file):
===> 'CAP01.CPTLWARE.MQSSX.SYSIN'
===>              (Blank or pattern for member selection list)







                 PF3 or PF12 to Cancel.

```

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1 Introduction

1.1 Overview

MQSSX-ISPF-GUI for z/OS application allows the user to create or update MQSSX IniFiles.

MQ Standard Security Exit for z/OS (z/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 v5.3.1, v6.0, v7.0, v7.1, v8.0, v9.0, v9.1 and v9.2 in z/OS environments. It works with Server Connection, Receiver, Requester and Cluster-Receiver channels of IBM MQ queue manager.

The MQ Standard Security Exit for z/OS solution is comprised of a server-side security exit.

MQSSX-ISPF-GUI for z/OS creates or updates IniFiles that are located on server-side security exit.

MQSSX-ISPF-GUI for z/OS is a standard ISPF application that can run under ISPF on z/OS.

2 Installation

This chapter will describe the installation and configuration (optional) of MQSSX-ISPF-GUI for z/OS.

2.1 Prerequisites

This section provides the minimum supported software levels. These prerequisites apply to both client-side and server-side installations of MQ Standard Security Exit for z/OS.

2.1.1 Operating System

MQ Standard Security Exit for z/OS can be installed on any of the following supported servers:

2.1.1.1 IBM z/OS
- ➢ IBM z/OS v1.4 or higher

2.1.2 IBM MQ
- ➢ IBM MQ for z/OS v5.3.1, v6.0, v7.0, v7.1, v8.0, v9.0, v9.1 and v9.2

2.2 Setting Up and Running the Application

The following section provides instructions on installing and running the MQSSX-ISPF-GUI for z/OS application:

2.2.1 z/OS Installation

To install the MQSSX for z/OS, first unzip the **mqssx-ispf-gui-for-zos-setup.zip**. The zip file contains 3 z/OS XMIT prepared datasets.

- **MQSSX.CLIST.ZOS** is the XMIT dataset that contains the REXX script.
- **MQSSX.ISPPLIB.ZOS** is the XMIT dataset that contains the ISPF panels.
- **MQSSX.ISPMLIB.ZOS** is the XMIT dataset that contains the ISPF messages.

Steps to install MQSSX-ISPF-GUI for z/OS:

1. ftp the z/OS XMIT prepared datasets to the z/OS LPAR.

   `ftp –s:mqssx-ispf-gui.ftp  z/OS_hostname`

```
your-z/OS-userid
your-z/OS-password

binary
quote SITE recfm=fb lrecl=80 blksize=3120
put MQSSX.CLIST.ZOS
put MQSSX.ISPPLIB.ZOS
put MQSSX.ISPMLIB.ZOS
quit
```

If the user receives the following error message then they will need to pre-allocate the z/OS datasets:

```
ftp> put MQSSX.CLIST.ZOS
200 Port request OK.
550-SVC99 RETURN CODE=4 S99INFO=0 S99ERROR=38656 HEX=9700 S99ERSN code X'000003F3'.
550 Unable to create data set xxxxx.MQSSX.CLIST.ZOS for STOR command.
ftp> put MQSSX.ISPPLIB.ZOS
200 Port request OK.
550-SVC99 RETURN CODE=4 S99INFO=0 S99ERROR=38656 HEX=9700 S99ERSN code X'000003F3'.
550 Unable to create data set xxxxx.MQSSX.ISPPLIB.ZOS for STOR command.
ftp> put MQSSX.ISPMLIB.ZOS
200 Port request OK.
550-SVC99 RETURN CODE=4 S99INFO=0 S99ERROR=38656 HEX=9700 S99ERSN code X'000003F3'.
550 Unable to create data set xxxxx.MQSSX.ISPMLIB.ZOS for STOR command.
```

To pre-allocating the XMIT datasets go to option 3.2 of ISPF and allocate the 3 datasets: MQSSX.CLIST.ZOS, MQSSX.ISPPLIB.ZOS and MQSSX.ISPMLIB.ZOS.

Use the following dataset attributes when allocating the 3 datasets:

Space	
Units	BLOCKS
Primary Quantity	40
Secondary Quantity	40
Directory Blocks	0
DCB Parameters	
RECFM	FB
LRECL	80
BLKSIZE	3120
DsnType	Blank

After the user has pre-allocated the datasets, they can redo the ftp commands.

2. Log on to z/OS LPAR and issue the following TSO commands:

```
TSO RECEIVE INDATASET(MQSSX.CLIST.ZOS)
TSO RECEIVE INDATASET(MQSSX.ISPPLIB.ZOS)
TSO RECEIVE INDATASET(MQSSX.ISPMLIB.ZOS)
```

After issuing the above commands, the following product datasets will appear:

- **+HLQ+.CPTLWARE.MQSSX.CLIST** is the dataset that contains the REXX script.
- **+HLQ+.CPTLWARE.MQSSX.ISPPLIB** is the dataset that contains the ISPF panels.
- **+HLQ+.CPTLWARE.MQSSX.ISPMLIB** is the dataset that contains the ISPF messages.

2.2.2 z/OS Customization

Before executing MQSSX-ISPF-GUI, the user must customize the high-level qualifier (hlq) of the dataset name. Edit the '+hlq+.CPTLWARE.MQSSX.CLIST(MQSSXGUI)' member and update line number 25 with your datasets high-level qualifier:

```
/**
 * Set your HLQ - high level qualifier for your environment
 */
your_HLQ = "+HLQ+.CPTLWARE.MQSSX"
```

Update '+HLQ+' with your high-level qualifier.

2.2.3 Execute

To execute MQSSX-ISPF-GUI for z/OS, go to option 6 from the main ISPF menu (or type =6) the do the following command:

```
ex '+HLQ+.CPTLWARE.MQSSX.CLIST(MQSSXGUI)'
```

Replace '+HLQ+' with your high-level qualifier.

3 Creating / Updating IniFiles

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

3.1 New / 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.

At the main menu of MQSSX-ISPF-GUI for z/OS, input the name of a partitioned dataset with the member name or a sequential file.

```
--------------------------- z/MQSSX ISPF GUI ---------------------------
 COMMAND ===>


MQSSX IniFile (PDS or Sequential file):
===> 'CAP01.CPTLWARE.MQSSX.SYSIN'
===>               (Blank or pattern for member selection list)








                        PF3 or PF12 to Cancel.

```

The input IniFile can be a member of partitioned dataset (PDS) or a sequential file. Use ISPF option '3.2' to allocate your file as you wish. It is recommended that you use the following values:

Space	
Units	MB
Primary Quantity	2
Secondary Quantity	10
Directory Blocks	50
DCB Parameters	
RECFM	FB
LRECL	1024
BLKSIZE	10240
DsnType	PDS

3.2 Save IniFile

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

From the main menu of MQSSX-ISPF-GUI for z/OS, select the **S** option and then press Enter.

```
---------------------------  z/MQSSX ISPF GUI  ---------------------------
COMMAND ===>

    Option ===>

            1 - Edit the General Settings
            2 - Edit the Group Settings
            3 - Edit the Proxy Settings
            4 - Edit the Allow UserId Settings
            5 - Edit the Allow IP Address Settings
            6 - Edit the Allow Hostname Settings
            7 - Edit the Allow HostByName Settings
            8 - Edit the Allow SSL DN Settings
            9 - Edit the Reject UserId Settings
           10 - Edit the Reject IP Address Settings
           11 - Edit the Reject Hostname Settings
           12 - Edit the Reject HostByName Settings
           13 - Edit the Reject SSL DN Settings
           14 - Edit the Max Client Channel Settings
            B - Browse the IniFile

            S - Save the updates to the IniFile


            Current IniFile: 'CAP01.CPTLWARE.MQSSX.SYSIN(MQSSXINI)'


                        PF3 or PF12 to Cancel.
```

The parameter information will be saved to the IniFile.

4 Option Panels

This chapter will describe the various parameters on each panel.

4.1 General Panel

This section will describe various parameters on the General Panel of a MQSSX IniFile. From the main menu select the number **1** option and then press Enter to go to the General Panel.

The following is a General Panel with default values:

```
-------------------- z/MQSSX ISPF GUI - General Setting -------------------
Command ===>

License Key ===>
LicenseFile ===>
Description ===>
Sequence Number   ===> N        (Y/N)

Logging:
Log Mode          ===> N        (Q/N/V/D)
Log File DD       ===> SYSPRINT
LogDiscMessage    ===> N        (Y/N)  LogMessageQuote   ===> '   ('/")
WriteToSystemLog  ===> N        (Y/N)
SystemLogMessage  ===> B        (B/A/R)

Event Queue:
WriteToEventQueue ===> Y        (Y/N)
EventQueueName    ===> SYSTEM.ADMIN.CHANNEL.EVENT

Excessive Client Connections:
UseECC            ===> N        (Y/N)  ECCInterval   ===> D  (D/H/M)
                                       ECCWarnCount  ===> 5000
```

The following are the IniFile parameters on the General Panel:

➢ **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-BBBBBBBBB (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.

➢ **Description** parameter is optional and is not used by MQSSX. It can be used to provide a brief description / purpose of the IniFile.

➢ **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 value for z/OS is: SYSPRINT.

➢ **LogDiscMessage** specifies whether or not MQAUSX 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).

➢ **WriteToSystemLog** specifies for each connection attempt that a log entry be written to the system log via a WTO (Write To Operator) command.

➢ **SystemLogMessage** specifies what messages will be written to the system log. SystemLogMessage supports 3 values: B / A / R where B is Both, A is Accepted Only, and R is Rejected Only messages. The default value is 'B'.

➢ **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** allows MQ Admin to have MQAUSX generate an alert when the ECCWarnCount is exceeded. UseECC supports 2 values [Y / N]. The default value is N.

➢ **ECCInterval** specifies a time internal 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.

➢ **SequenceNumberFlag** is a z/OS (OS/390) only flag. It states whether or not there are sequence numbers in columns 72 to 80. SequnceNumberFlag supports 2 values [Yes / No]. The default value is No.

4.2 Group Panel

This section will describe various parameters on the Group panel of a MQSSX IniFile. From the main menu select the number **2** option and then press Enter to go to the Group Panel.

The following is a Group Panel with default values:

```
-------------------- z/MQSSX ISPF GUI - Group Setting --------------------
COMMAND ===>

Use Groups    ===> N        (Y/N)
Groups        ===>
Group File DD ===>







                    PF3 to Return or PF12 to Cancel.


```

This section describes the necessary steps to enable the use of authorized 'Groups'.

The following are the IniFile parameters on the Group Panel:

- ➤ **UseGroups** to allow or restrict an incoming UserID by a group file.
- ➤ **Groups** specifies the list of authorized groups.
- ➤ **GroupFile** specifies the DDName of the file

The format of the Group file is similar to an IniFile or properties file where each keyword has an associated value. Each keyword and its value is on a separate line. The format is as follows:

```
Group_name = UserID1;UserID2;UserID3
```

4.3 Proxy Panel

This section will describe various parameters on the Proxy panel of a MQSSX IniFile. From the main menu select the number **3** option and then press Enter to go to the Proxy Panel.

The following is a Proxy Panel with default values:

```
-------------------- z/MQSSX ISPF GUI - Proxy Setting  --------------------
COMMAND ===>

Use Proxy     ===> N        (Y/N)
Proxy File DD ===>






                    PF3 to Return or PF12 to Cancel.


```

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 Panel:

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

The format of the Proxy file is similar to an IniFile or properties file where each keyword has an associated value. Each keyword and its value is on a separate line. The format is as follows:

```
Validated_UserID = ProxyID
```

4.4 Allow UserId Panel

This section will describe various parameters on the UserId panel of a MQSSX IniFile. From the main menu select the number **4** option and then press Enter to go to the UserId Panel.

The following is the Allow UserId Panel with default values:

```
----------------- z/MQSSX ISPF GUI - Allow UserId Setting  - Row 1 to 1 of 1
COMMAND ===>                                             SCROLL ===> PAGE

Allowmqm          ===> N  (Y/N)      AllowBlankUserID  ===> N  (Y/N)
UseMCAUser        ===> N  (Y/N)      UserIDFormatting  ===> A  (A/U/L)
CheckFinalUserID ===> N  (Y/N)

Line Cmd: A Add UserId or D Delete UserId

Cmd  Allow UserId
---  -----------
 _     *
****************************** Bottom of data ******************************
```

The following are the IniFile parameters on the UserId Panel:

➢ **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 parameter is only valid when 'NoAuth' is set to 'Yes'.*** 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 (A/U/L). The default is 'A' ('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'.

➢ **AllowUserID Filters** is a list of UserIds (with wildcards) that are allowed to connect to queue manager or particular channel.

Managing UserId entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.5 Allow IP Address Panel

This section will describe various parameters on the Allow IP Address panel of a MQSSX IniFile. From the main menu select the number **5** option and then press Enter to go to the Allow IP Address Panel.

The following is a Allow IP Address Panel with default values:

```
---------------  z/MQSSX ISPF GUI - Allow IP Address Setting Row 1 to 3 of 3
COMMAND ===>                                             SCROLL ===> PAGE

UseAllowIP ===> Y  (Y/N)

Line Cmd: A Add IP Filter or D Delete IP Filter

Cmd  Allow IP Address
---  -------------------------------------------------------------------
  _    192.168.10.*
  _    192.168.200.*
  _    10.10.*.*
******************************* Bottom of data ********************************
```

The following are the IniFile parameters on the IP Filtering Panel:

➤ **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.

➤ **AllowIP** is a list of IP Addresses (with wildcards) that are allow to connect to queue manager or particular channel.

Managing IP Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.6 Allow Hostname Panel

This section will describe various parameters on the Allow Hostname panel of a MQSSX IniFile. From the main menu select the number **6** option and then press Enter to go to the Allow Hostname Panel.

The following is a Allow Hostname Panel with default values:

```
---------------  z/MQSSX ISPF GUI - Allow Hostname Setting Row 1 to 2 of 2
COMMAND ===>                                          SCROLL ===> PAGE

UseAllowHostname ===> Y  (Y/N)

Line Cmd: A Add Hostname Filter or D Delete Hostname Filter

Cmd  Allow Hostname
---  -----------------------------------------------------------------
 _     abc01.acme.com
 _     abc02.acme.com
****************************** Bottom of data ******************************
```

The following are the IniFile parameters on the IP Filtering Panel:

➢ **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.

➢ **AllowHostname** is a list of hostnames (with wildcards) that are allow to connect to queue manager or particular channel.

Managing IP Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.7 Allow HostByName Panel

This section will describe various parameters on the Allow HostByName panel of a MQSSX IniFile. From the main menu select the number **7** option and then press Enter to go to the Allow HostByName Panel.

The following is a Allow HostByName Panel with default values:

```
----------------  z/MQSSX ISPF GUI - Allow HostByName Setting Row 1 to 2 of 2
COMMAND ===>                                              SCROLL ===> PAGE

UseAllowHostByName ===> Y  (Y/N)

Line Cmd: A Add HostByName Filter or D Delete HostByName Filter

Cmd  Allow HostByName
---  -------------------------------------------------------------------
 _    abc01.acme.com
 _    abc02.acme.com
****************************** Bottom of data ********************************
```

The following are the IniFile parameters on the IP Filtering Panel:

➢ **UseAllowHostByName** to 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. This is controlled by the IniFile's property keyword 'UseAllowHostByName'. Setting 'UseAllowHostByName' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'AllowHostByName' property keyword.

➢ **AllowHostByName** is a list of hostnames (no wildcards) that are allow to connect to queue manager or particular channel.

Managing IP Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.8 Allow SSL DN Panel

This section will describe various parameters on the Allow SSL DN panel of a MQSSX IniFile. From the main menu select the number **8** option and then press Enter to go to the Allow SSL DN Panel.

The following is a Allow SSL DN Panel with default values:

```
---------------- z/MQSSX ISPF GUI - Allow SSL DN Setting Row 1 to 2 of 2
COMMAND ===>                                              SCROLL ===> PAGE

UseSSLCertUserID   ===> N  (Y/N)    AllowSSLSSCert   ===> Y   (Y/N)
UseSSLUserIDFromDN ===> N  (Y/N)    SSLDNAttrName    ===> CN
                                    SSLDNAttrStartPos ===> 1
                                    SSLDNAttrLength  ===> *   (* for all)

UseAllowSSLDN ===> Y  (Y/N)

Line Cmd: A Add SSL DN Filter or D Delete SSL DN Filter

Cmd  Allow SSL DN
---  -------------------------------------------------------------------
 _     O=Capitalware,C=CA
 _     O=IBM,DC=Com
******************************* Bottom of data *******************************
```

The following are the IniFile parameters on the SSL DN Filtering Panel:

➢ **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)

➢ **UseAllowSSLDN** to allow or restrict an incoming IP address by using a regular expression pattern. This is controlled by the IniFile's property keyword 'UseAllowSSLDN'. Setting 'UseAllowSSLDN' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'AllowSSLDN' property keyword.

➢ **AllowSSLDN** is a list of SSL DNes (with wildcards) that are allow to connect to queue manager or particular channel.

Managing SSL DN Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.9 Reject UserId Panel

This section will describe various parameters on the Reject UserId panel of a MQSSX IniFile. From the main menu select the number **9** option and then press Enter to go to the Reject UserId Panel.

The following is the Reject UserId Panel with default values:

```
----------------  z/MQSSX ISPF GUI - Reject UserId Setting   Row 1 to 1 of 1
COMMAND ===>                                                  SCROLL ===> PAGE

UseRejectUserID  ===> N  (Y/N)

Line Cmd: A Add UserId or D Delete UserId

Cmd  Reject UserId
---  -------------
 _
******************************* Bottom of data *********************************
```

The following are the IniFile parameters on the Reject UserId Panel:

➢ **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** is a list of UserIds (with wildcards) that are explicitly rejected.

Managing UserId entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.10 Reject IP Address Panel

This section will describe various parameters on the Reject IP Address panel of a MQSSX IniFile. From the main menu select the number **10** option and then press Enter to go to the Reject IP Address Panel.

The following is a Reject IP Address Panel with default values:

```
--------------  z/MQSSX ISPF GUI - Reject IP Address Setting Row 1 to 1 of 1
COMMAND ===>                                               SCROLL ===> PAGE

UseRejectIP ===> N  (Y/N)

Line Cmd: A Add IP Filter or D Delete IP Filter

Cmd  Reject IP Address
---  --------------------------------------------------------------------
  _
********************************* Bottom of data *********************************
```

The following are the IniFile parameters on the Reject IP Address Panel:

➢ **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.

➢ **RejectIP** is a list of IP Addresses (with wildcards) that are explicitly rejected.

Managing IP Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.11 Reject Hostname Panel

This section will describe various parameters on the Reject Hostname panel of a MQSSX IniFile. From the main menu select the number **11** option and then press Enter to go to the Reject Hostname Panel.

The following is a Reject Hostname Panel with default values:

```
--------------- z/MQSSX ISPF GUI - Reject Hostname Setting Row 1 to 1 of 1
COMMAND ===>                                              SCROLL ===> PAGE

UseRejectHostname ===> N  (Y/N)

Line Cmd: A Add Hostname Filter or D Delete Hostname Filter

Cmd  Reject Hostname
---  -------------------------------------------------------------------
_
******************************** Bottom of data ********************************
```

The following are the IniFile parameters on the Reject Hostname Panel:

➢ **UseRejectHostname** to explicitly reject an incoming hsotname 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.

➢ **RejectHostname** is a list of Hostnames (with wildcards) that are explicitly rejected.

Managing IP Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.12 Reject HostByName Panel

This section will describe various parameters on the Reject HostByName panel of a MQSSX IniFile. From the main menu select the number **12** option and then press Enter to go to the Reject HostByName Panel.

The following is a Reject HostByName Panel with default values:

```
--------------  z/MQSSX ISPF GUI - Reject HostByName Setting Row 1 to 1 of 1
COMMAND ===>                                               SCROLL ===> PAGE

UseRejectHostByName ===> N  (Y/N)

Line Cmd: A Add HostByName Filter or D Delete HostByName Filter

Cmd  Reject HostByName
---  -------------------------------------------------------------------
_
******************************* Bottom of data *********************************
```

The following are the IniFile parameters on the Reject HostByName Panel:

➢ **UseRejectHostByName** controls the use of RejectHostByName. Set to Y to activate feature.

➢ **RejectHostByName** specifies the Hostnames that MQSSX will perform a gethostbyaddr() call against to compare the returned IP address against the incoming IP address.

Managing IP Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.13 Reject SSL DN Panel

This section will describe various parameters on the Reject SSL DN panel of a MQSSX IniFile. From the main menu select the number **13** option and then press Enter to go to the Reject SSL DN Panel.

The following is a Reject SSL DN Panel with default values:

```
--------------  z/MQSSX ISPF GUI - Reject SSL DN Setting Row 1 to 1 of 1
COMMAND ===>                                            SCROLL ===> PAGE

UseRejectSSLDN ===> N  (Y/N)

Line Cmd: A Add SSL DN Filter or D Delete SSL DN Filter

Cmd   Reject SSL DN
---   -------------------------------------------------------------------
 _
****************************** Bottom of data ********************************
```

The following are the IniFile parameters on the Reject SSL DN Panel:

➢ **UseRejectSSLDN** to explicitly reject an incoming IP address by using a regular expression pattern. This is controlled by the IniFile's property keyword 'UseRejectSSLDN'. Setting 'UseRejectSSLDN' to 'Yes' will cause the server-side security exit to look up the regular expression pattern from the 'RejectSSLDN' property keyword.

➢ **RejectSSLDN** is a list of SSL DNes (with wildcards) that are explicitly rejected.

Managing SSL DN Filtering entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

4.14 Max Client Channel Panel

This section will describe various parameters on the Max Client Channel (MCC) panel of a MQSSX IniFile. From the main menu select the number **14** option and then press Enter to go to the Max Client Channel Panel.

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

```
--------------    z/MQSSX ISPF GUI - Max Client Channel Setting Row 1 to 3 of 3
COMMAND ===>                                              SCROLL ===> PAGE

UseMCC            ===> Y     (Y/N)
DefaultMCC        ===> 7                  MCCEventWarnLevel ===> 80
UseMCCRedo        ===> Y     (Y/N)
MCCRedoCount      ===> 5000              MCCRedoMinutes    ===> 720
MCCGetTimeOut     ===> 3

ModelQueueName    ===> SYSTEM.COMMAND.REPLY.MODEL
CommandQueueName  ===> SYSTEM.COMMAND.INPUT
TempDynPrefix     ===> SYSTEM.MQSSX.*

Line Cmds: A Add Channel or D Delete Channel

Cmd  Channel Name          Max Channel Limit
---  ------------          -----------------
  _     ABC.CH01                 30
  _     SYSTEM.DEF.SVRCONN       20
  _     SYSTEM.ADMIN.SVRCONN     5
****************************** Bottom of data ********************************
```

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

4.14.1 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 states that the server-side security exit should issue 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.

4.14.2 MQSC Command requirements

The MQSSX for z/OS issues MQSC commands to gather channel status information. Therefore, this sections describes the required keywords:

➢ **ModelQueueName** is the name of the system model reply queue. The default value for 'ModelQueueName' is SYSTEM.COMMAND.REPLY.MODEL.

➢ **CommandQueueName** is the name of the command queue used by the Queue Manager's Command Server. The default value for 'CommandQueueName' is 'SYSTEM.COMMAND.INPUT'.

➢ **TempDynPrefix** is the queue name prefix that will be used when the Queue Manager creates the temporary dynamic queue. The default value for ' TempDynPrefix ' is 'SYSTEM.MQSSX.*'.

4.14.3 Managing MCC entries

- Use the Line Command **A** and then press Enter to add an entry to the list.
- Use the Line Command **D** and then press Enter to delete an entry from the list.
- To update an entry, simply type over the existing entry and then press Enter.

5   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.

6 Appendix B – Support

The support for MQSSX-ISPF-GUI for z/OS can be found at the following location:

By email at:
support@capitalware.com

By regular mail at:

> Capitalware Inc.
> Attn: MQSSX-ISPF-GUI for z/OS Support
> Unit 11, 1673 Richmond Street, PMB524
> London, Ontario N6G2N3
> Canada

7 Appendix C – Summary of Changes

➢ MQSSX-ISPF-GUI for z/OS v2.3.0
  o Added new keywords: LogDiscMessage & LogMessageQuote

➢ MQSSX-ISPF-GUI for z/OS v2.2.0
  o Added new keywords: UseECC, ECCInterval & ECCWarnCount

➢ MQSSX-ISPF-GUI for z/OS v2.1.0
  o Added new CheckFinalUserID keyword. It will take the final UserID and reprocess it against UseAllowUserID, AllowUserID, UseRejectUserID, RejectUserID and Allowmqm keywords.

➢ MQSSX-ISPF-GUI for z/OS v2.0.1
  o Added UseMCCRedo flag to control MCCRedoCount, MCCRedoMinutes and MCCGetTimeOut
  o Renamed UppercaseUserID flag to UserIDFormatting. UserIDFormatting supports 3 values: A/U/L (As Is/Uppercase/Lowercase)

➢ MQSSX-ISPF-GUI for z/OS v2.0.0
  o Updated the layout of panels
  o Added new keywords: SystemLogMessage, UseGroups, Groups, UseGroupFile, GroupFile, UseAllowHostByName, AllowHostByName, UseRejectHostByName and RejectHostByName

➢ MQSSX-ISPF-GUI for z/OS v1.3.0
  o Updated the layout of panels
  o Added new keywords: LicenseFile, UseSSLCertUserID, AllowSSLSSCert, UseSSLUserIDFromDN, SSLDNAttrName, SSLDNAttrStartPos, SSLDNAttrLength, UseAllowSSLDN, AllowSSLDN, UseRejectSSLDN and RejectSSLDN

➢ MQSSX-ISPF-GUI for z/OS v1.2.0
  o Updated the layout of panels
  o Added new keywords: UseRejectIP, RejectIP, UseRejectUserID, RejectUserID, and MCCGetTimeOut

➢ MQSSX-ISPF-GUI for z/OS v1.1.0
  o Updated keywords: WriteToEventQueue, EventQueueName, RejectUserID, RejectIP, MCCGetTimeOut and MCCEventWarnLevel..

➢ MQSSX-ISPF-GUI for z/OS v1.0.0
  o Initial release.

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9 Appendix E – Notices

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