

MQAUSX, z/MQAUSX and MQ v8 Authentication

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MQAUSX & z/MQAUSX Overview

- MQ Authenticate User Security Exit (MQAUSX) & MQ Authenticate User Security Exit for z/OS (z/MQAUSX) are solutions that allows a company to fully authenticate a user who is accessing a IBM MQ resource.
- MQAUSX authenticates the user's UserId and Password against the server's native OS system, LDAP server, Microsoft's Active Directory, Quest Authentication Services, Centrify's DirectControl or an encrypted MQAUSX FBA file.
- z/MQAUSX authenticates the user's UserId and Password against the z/OS server's native OS system or an encrypted MQAUSX FBA file.

MQAUSX & z/MQAUSX Overview

- The **same** client-side security exit first checks if the server-side exit is defined for the particular channel. The client-side exit will receive a security token to be used in the encryption process of the user's password. It will prompt the user for his / her UserId and Password, encrypt the data and send it to the server-side security exit.

MQAUSX & z/MQAUSX are 4 products in 1

- If the client application is configured with the client-side security exit then the user credentials are encrypted and sent to the remote queue manager. *This is the best level of security.*
- If the client application is not configured with the client-side security exit and the client-side **AND** server-side are at **MQ V8** then MQ V8 will encrypt the user credentials (see #3). *Excellent.*
- If the client application is not configured with the client-side security exit then the user credentials are sent in plain text to the remote queue manager. This feature is available for Java/JMS, Java and C# DotNet client applications. For native applications (i.e. C/C++), then the application must use and populate the MQCSP structure with the UserID and Password.
 - Using MQAUSX with No Client-side Security Exit - Part 1 (coding examples) http://www.capitalware.com/rl_blog/?p=638
 - Using MQAUSX with No Client-side Security Exit - Part 2 (configuring tools like MQ Explorer, SupportPac MO71, MQ Visual Edit, etc..) http://www.capitalware.com/rl_blog/?p=659
- If the MQAdmin sets the MQAUSX IniFile parameter NoAuth to Y then it functions just like MQ Standard Security Exit (MQSSX or z/MQSSX). MQSSX does not authenticate. It filters the incoming connection based on UserID, IP address, hostname and/or SSL DN.

MQAUSX Secondary Features

- Allows or restricts the incoming UserID against a Group
- Provides support for Proxy UserIDs
- Allows or restricts the incoming IP address against a regular expression pattern
- Allows or restricts the incoming SSL DN against a regular expression pattern
- Allows or restricts the incoming UserID against a regular expression pattern
- Allows or restricts the incoming Active Directory server name against a regular expression pattern (Windows only)
- Limit the number of incoming channel connections on a SVRCONN channel.
- Allows or restricts the use of 'mqm', 'MUSER_MQADMIN' or 'QMQM' UserIDs
- Ability to turn off server-side authentication
- Provides monitoring tool tie-in by using custom MQ event messages
- Provides logging capability for all connecting client applications regardless if they are successful or not.

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- Allows or restricts the use of 'CHIN' or the CHIN's Started-task UserIDs
- Ability to turn off server-side authentication
- Allows or restricts the incoming UserID against a regular expression pattern when authentication is off
- Provides logging capability for all connecting client applications regardless if they were successful or not.
- Provides logging capability via Write To Operator (WTO) facility.

MQAUSX & z/MQAUSX IniFiles

- MQAUSX and z/MQAUSX use initialization files (IniFiles) to configure how the security exit is to run.
- One IniFile can be used for all of the channels of a queue manager.
- An IniFile can be used for a group of the channels of a queue manager.
- Every channel of a queue manager can have its own IniFile.

IBM MQ V8 Authentication

- IBM MQ V8 authenticates the user's UserId and Password against the server's native OS system or LDAP server.
- You cannot have a mixture of authentication types because authentication type is set at the queue manager level.

```
ALTER QMGR CONNAUTH(SYSTEM.DEFAULT.AUTHINFO.IDPWOS)
```

```
REFRESH SECURITY TYPE(CONNAUTH)
```

Or

```
DEFINE AUTHINFO('USE.LDAP') AUTHTYPE(IDPWLDAP) CONNAME('superldap.servers.uk') SHORTUSR('uid')  
ADOPTCTX(NO) USRFIELD('uid') BASEDNU('ou=MQ,o=IBM,co=UK') CHCKCLNT(OPTIONAL)  
CHCKLOCL(OPTIONAL) CLASSUSR('account') SECCOMM(NO)
```

```
ALTER QMGR CONNAUTH('USE.LDAP')
```

```
REFRESH SECURITY TYPE(CONNAUTH)
```


MQAUSX vs IBM MQ V8 Authentication

Functionality	IBM MQ V8	MQAUSX
Only allow the connection if the UserId exists in a particular Group	No	Yes
Allow/Reject by IP Address	Yes	Yes
Allow/Reject by Hostname (DNS)	Yes*	Yes
Allow/Reject by Host by Name	No	Yes
Allow/Reject by SSL DN	Yes	Yes
Allow/Reject by UserId	Yes	Yes
Allow/Reject by MS Active Directory Name	No	Yes
Ability to Reject Self Signed Certificates	No	Yes

MQAUSX vs IBM MQ V8 Authentication

Functionality	IBM MQ V8	MQAUSX
Limit the number of connections by Channel	Yes	Yes
Generate an alert when number of connections by Channel reaches a certain percentage	No	Yes
Ability to secure cluster channels	Yes	Yes
Map incoming UserID to another UserID to be used as the connection MCAUSER value	Yes	Yes
Map SSL UserID to the connection MCAUSER value	Yes	Yes
Map the channel's SSLCertUserID to the connection MCAUSER value – z/OS only	No	Yes
Logging of successful connections	Partial	Yes
Logging of failed connection attempts	Yes	Yes
Write event message for failed connection attempts	Yes*	Yes

MQAUSX vs IBM MQ V8 Authentication

Authentication Functionality	IBM MQ V8	MQAUSX
Authentication against Local OS	Yes	Yes
Authentication against LDAP Server	Yes	Yes
Authentication against LDAP Server using SSL	Yes*	Yes
Authentication against MS Active Directory from Windows	No*	Yes
Authentication against MS Active Directory as an LDAP server from Unix/Linux/IBM i	No	Yes
Authentication against Quest Authentication Services	No	Yes
Authentication against Centrify's DirectControl	No	Yes
Authentication against RACF – z/OS only	Yes	Yes
Authentication against ACF2 – z/OS only	No*	Yes
Authentication against TopSecret – z/OS only	No*	Yes
Authentication against File Based Authentication	No	Yes
Ability to use more than 1 authentication type per QMgr	No	Yes
Ability to set authentication order	No	Yes

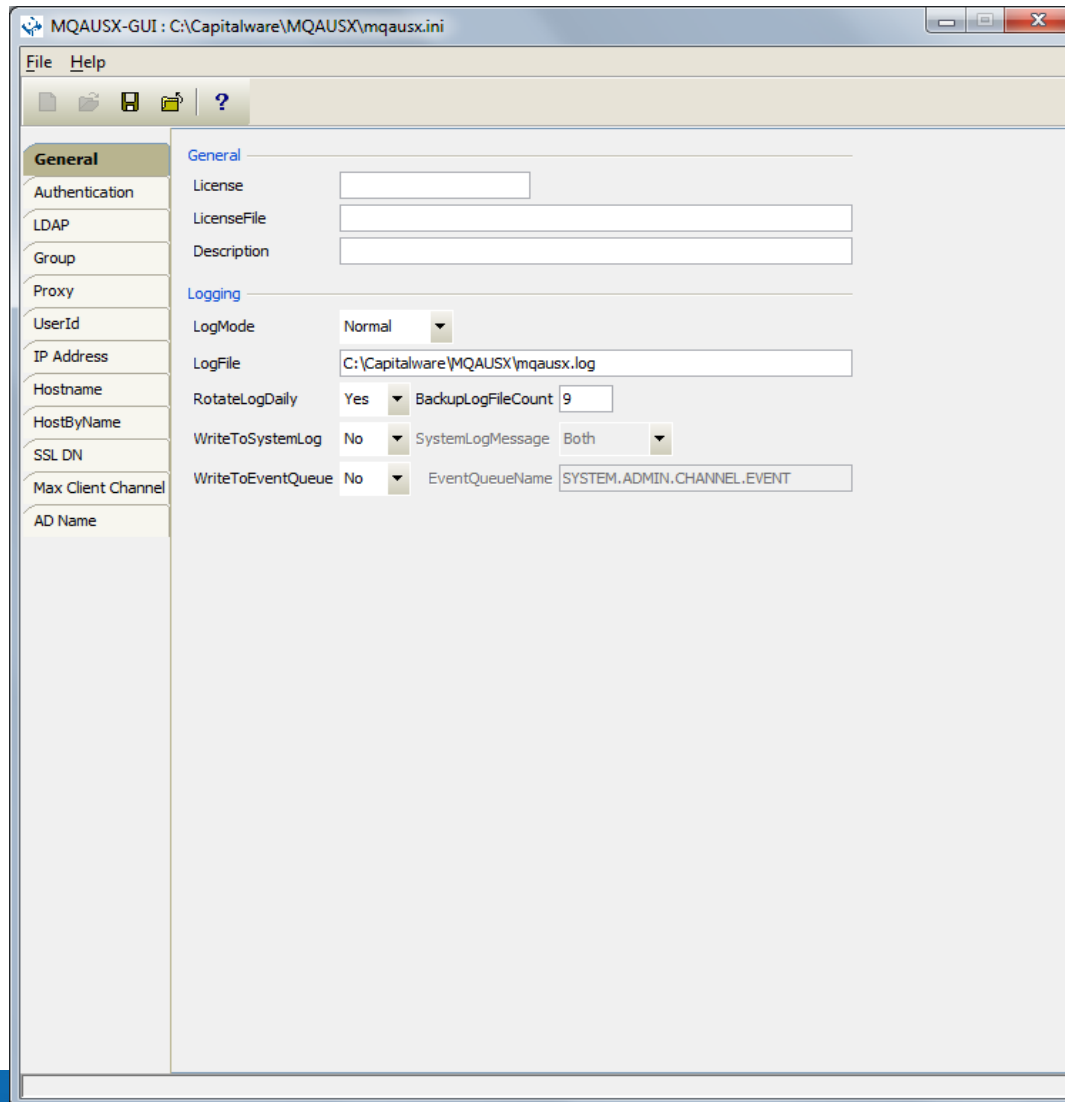
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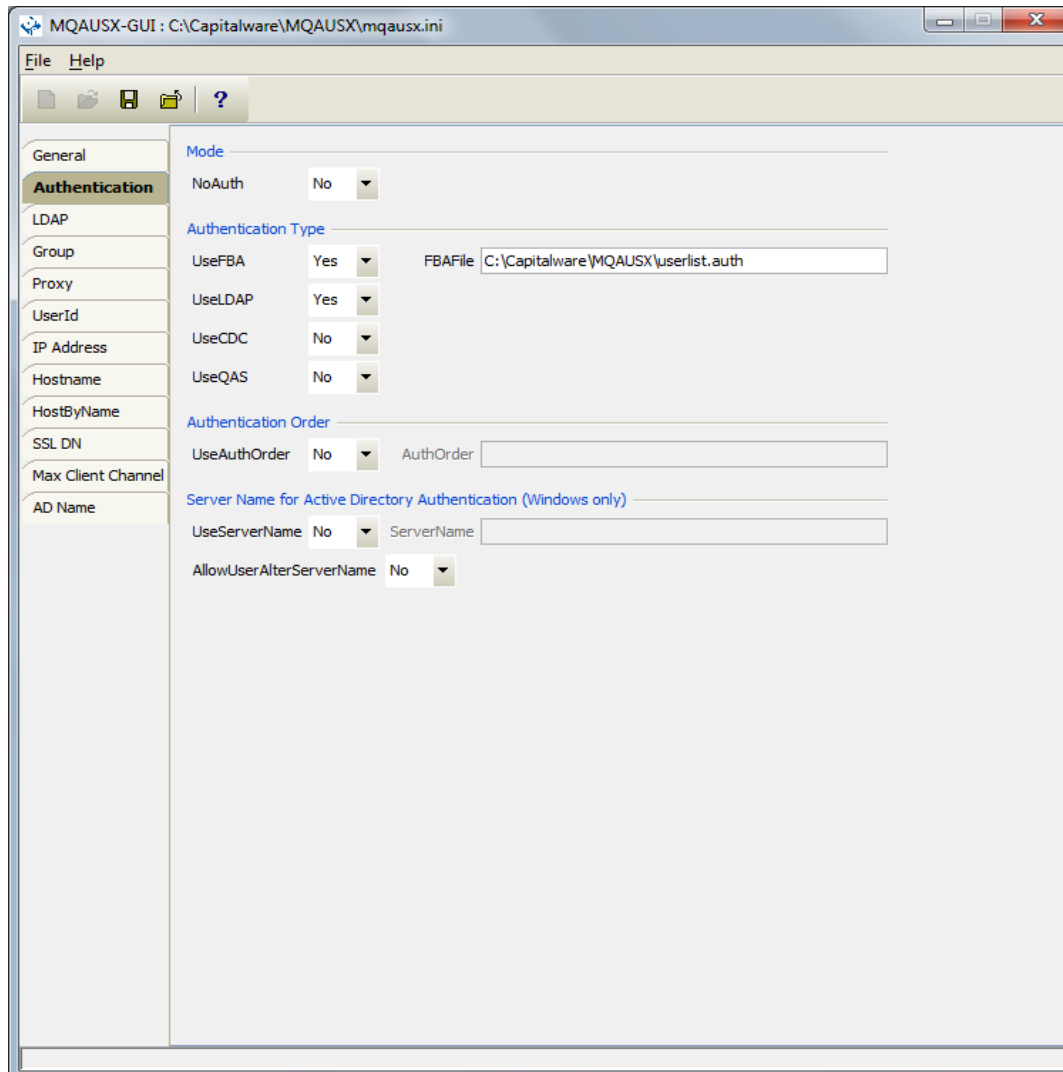
MQAUSX & z/MQAUSX Keywords

- MQAUSX has 103 keywords and values that can be used.
- z/MQAUSX has 62 keywords and values that can be used.
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MQAUSX Configuration via MQAUSX-GUI



MQAUSX Configuration via MQAUSX-GUI

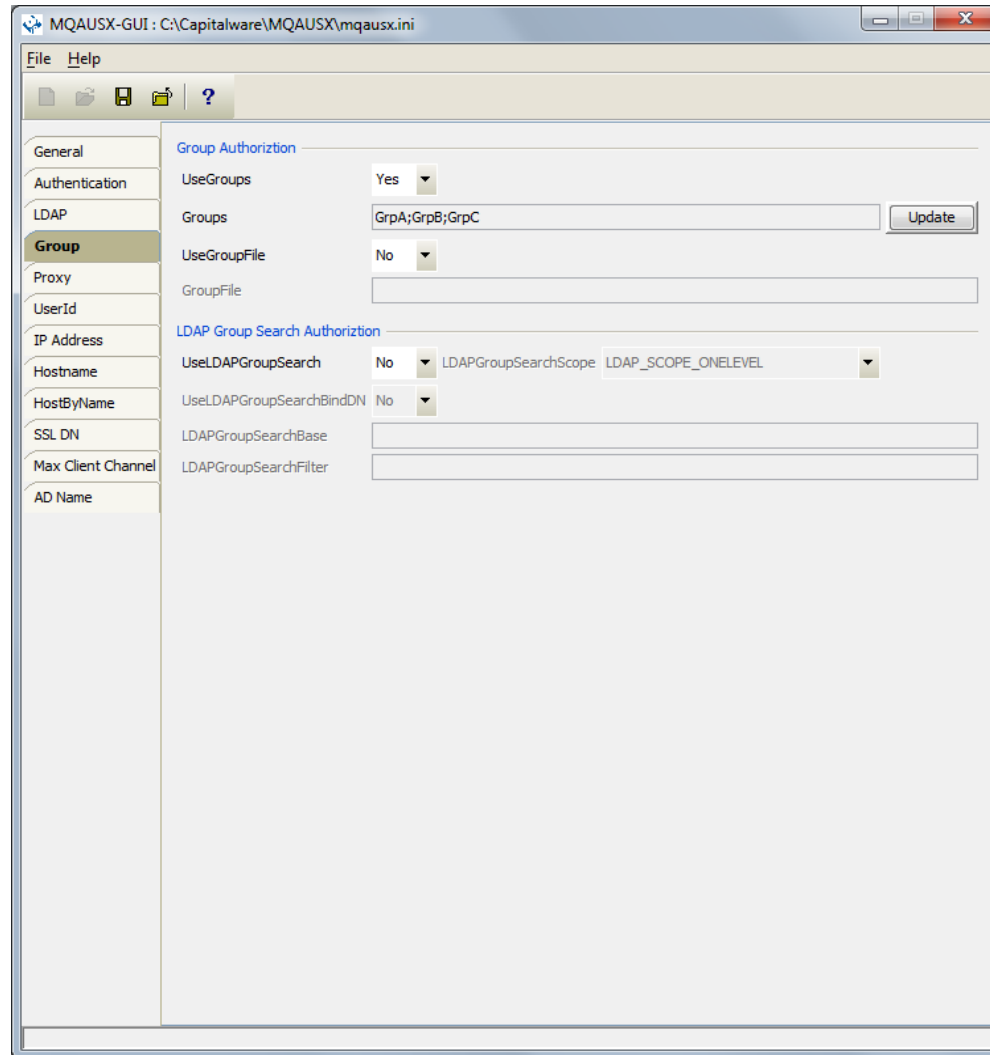


MQAUSX Configuration via MQAUSX-GUI

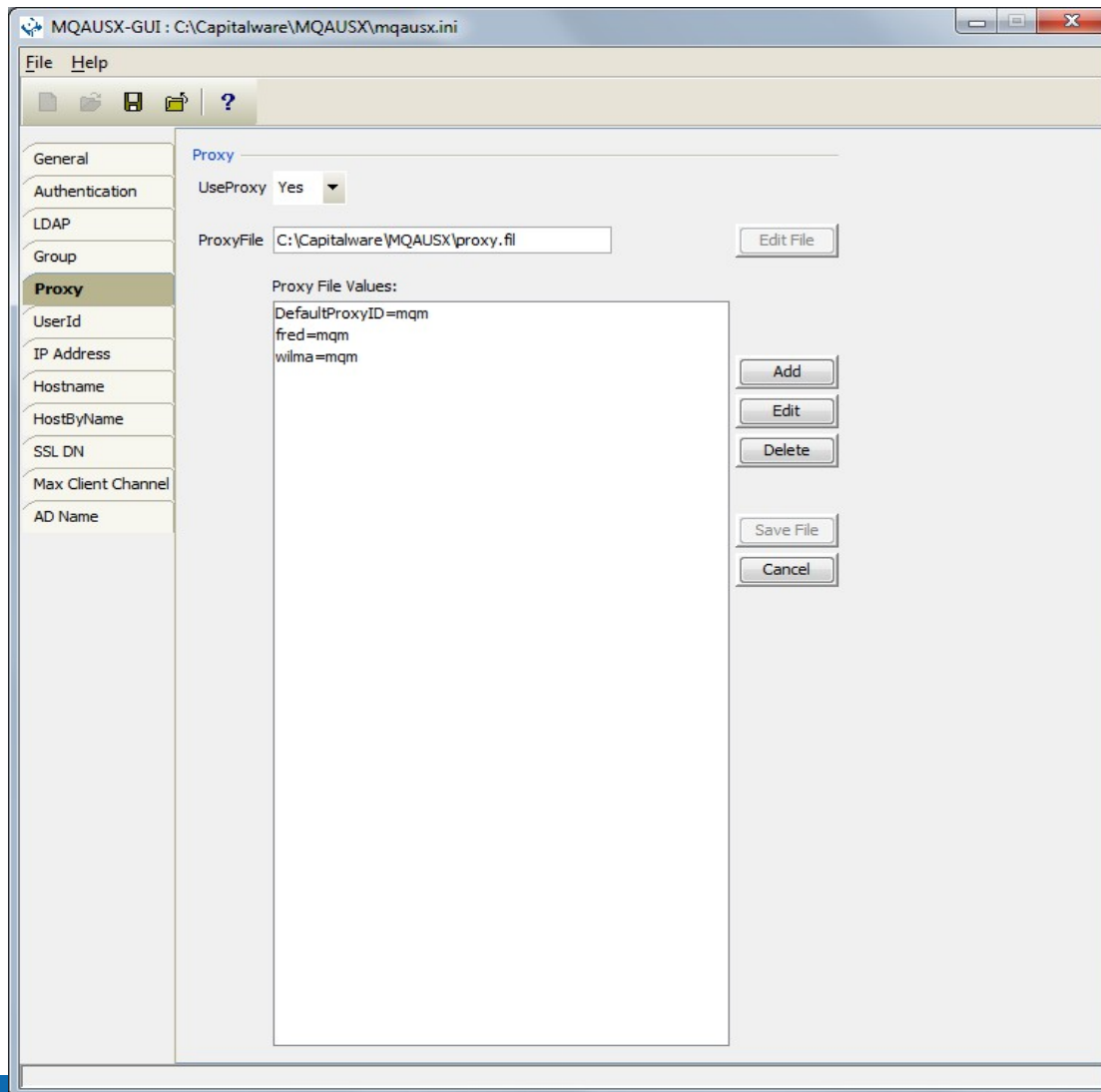
The screenshot shows the MQAUSX-GUI configuration window with the following settings:

- LDAP**
 - LDAPHost: ldap.capitalware.biz
 - LDAPPort: 389;555
 - LDAPTimeOut: 5
 - UseLDAPLoadBalance: Yes
 - LDAPBaseDN: CN=Users,DC=capitalware,DC=biz
 - UseLDAPBindDN: No
 - LDAPBindDN: (empty)
 - LDAPBindPwd: (empty)
 - UseLDAPAuthCompare: No
- LDAP SSL**
 - UseLDAPSSL: No
 - UseLDAPSSLCert: No
 - SSLCertFileType: DER
 - SSLCertFileName: (empty)
 - SSLCertPwd: (empty)
- LDAP LoginDN Prefix**
 - UseLoginDNPrefix: No
 - LoginDNPrefix: (empty)
- LDAP Ambiguous Name Resolution (ANR)**
 - UseANRforLDAP: No
 - UseANRPrefix: No
 - ANRPrefix: (empty)
 - UseANRPostfix: No
 - ANRPostfix: (empty)
 - ExtractUserIDFromANR: No
 - UseANRDelimiter: No
 - ANRDelimiter: @
- LDAP UserID Search**
 - UseLDAPUserIDSearch: No
 - LDAPUserIDSearchScope: LDAP_SCOPE_ONELEVEL
 - LDAPUserIDSearchBase: (empty)
 - LDAPUserIDSearchFilter: (empty)

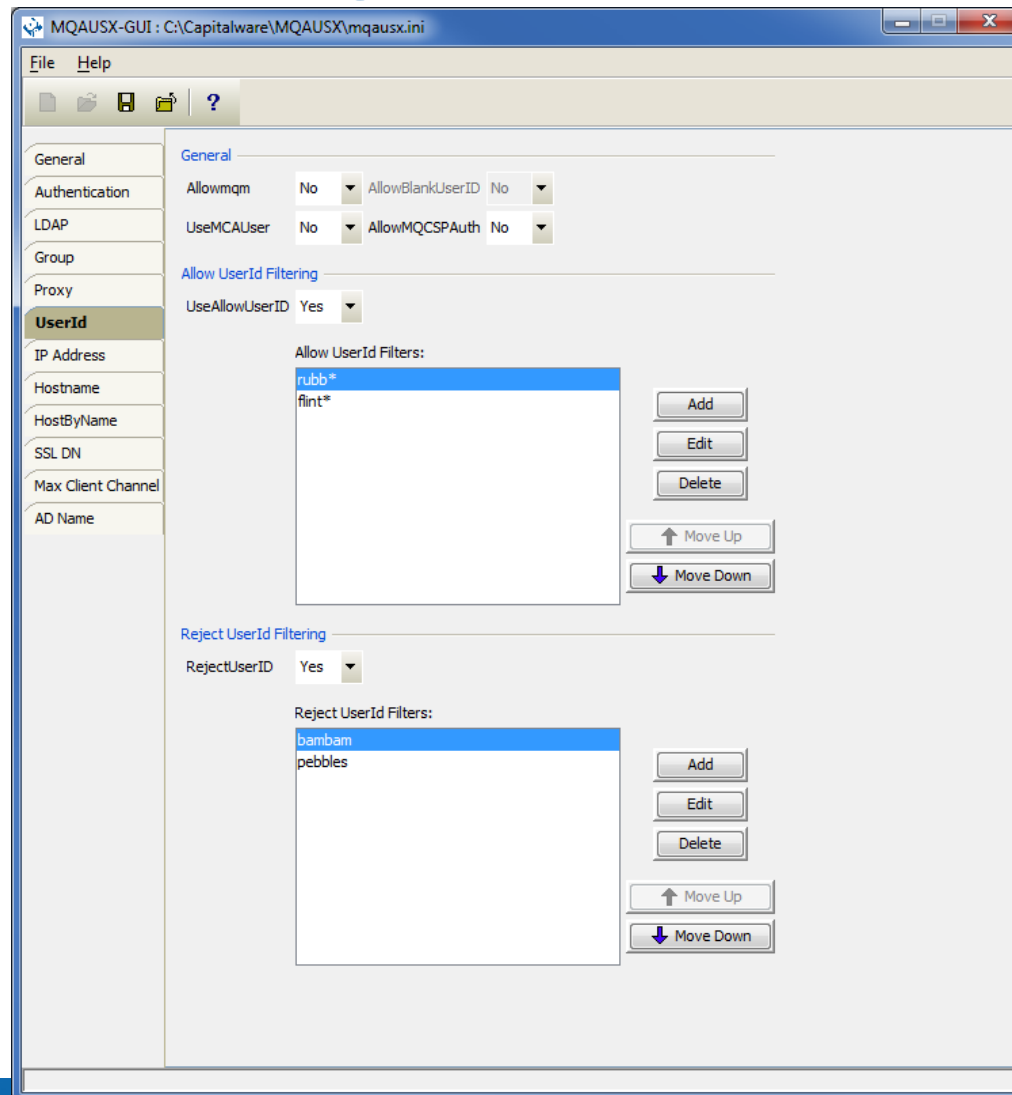
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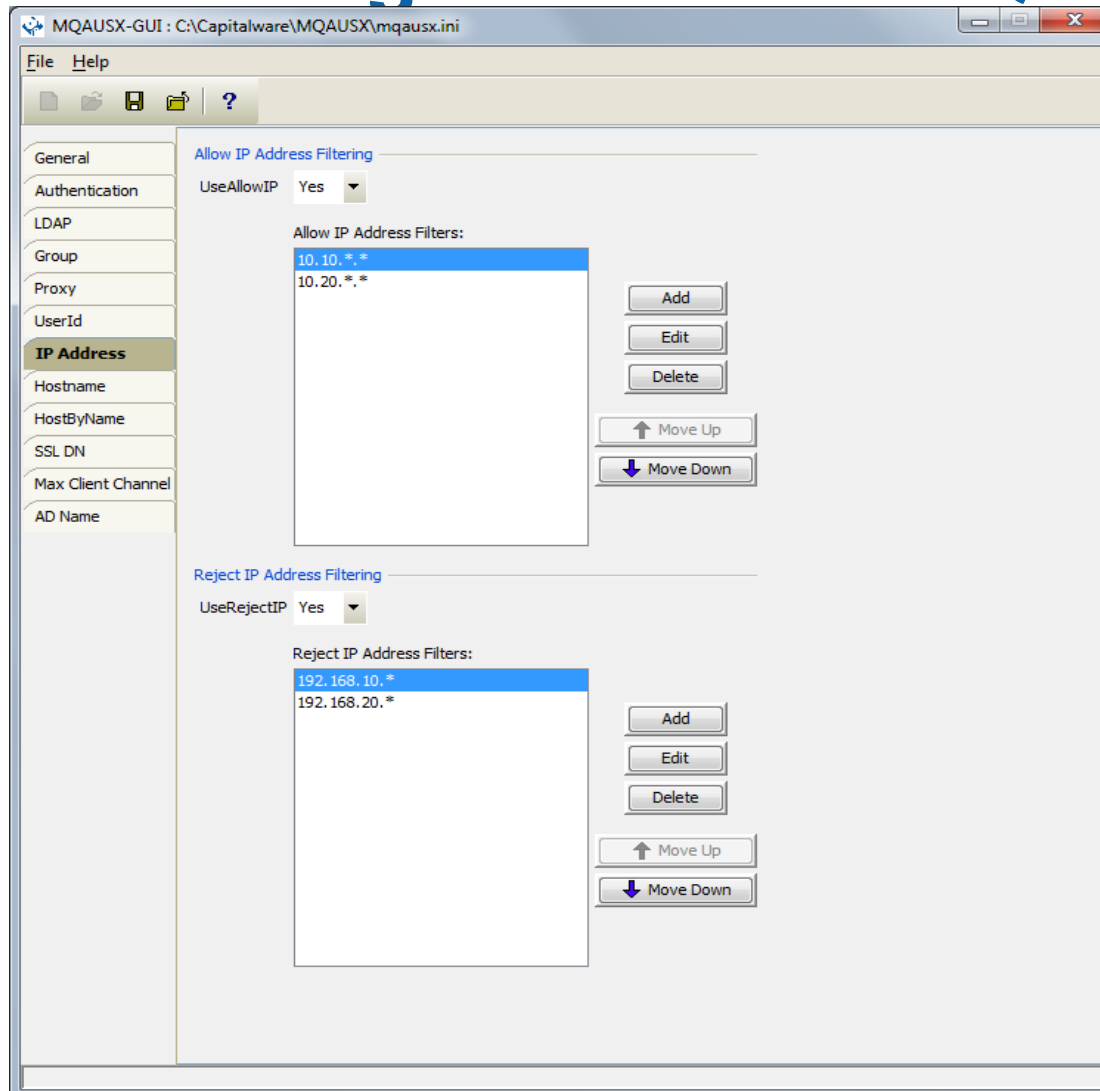
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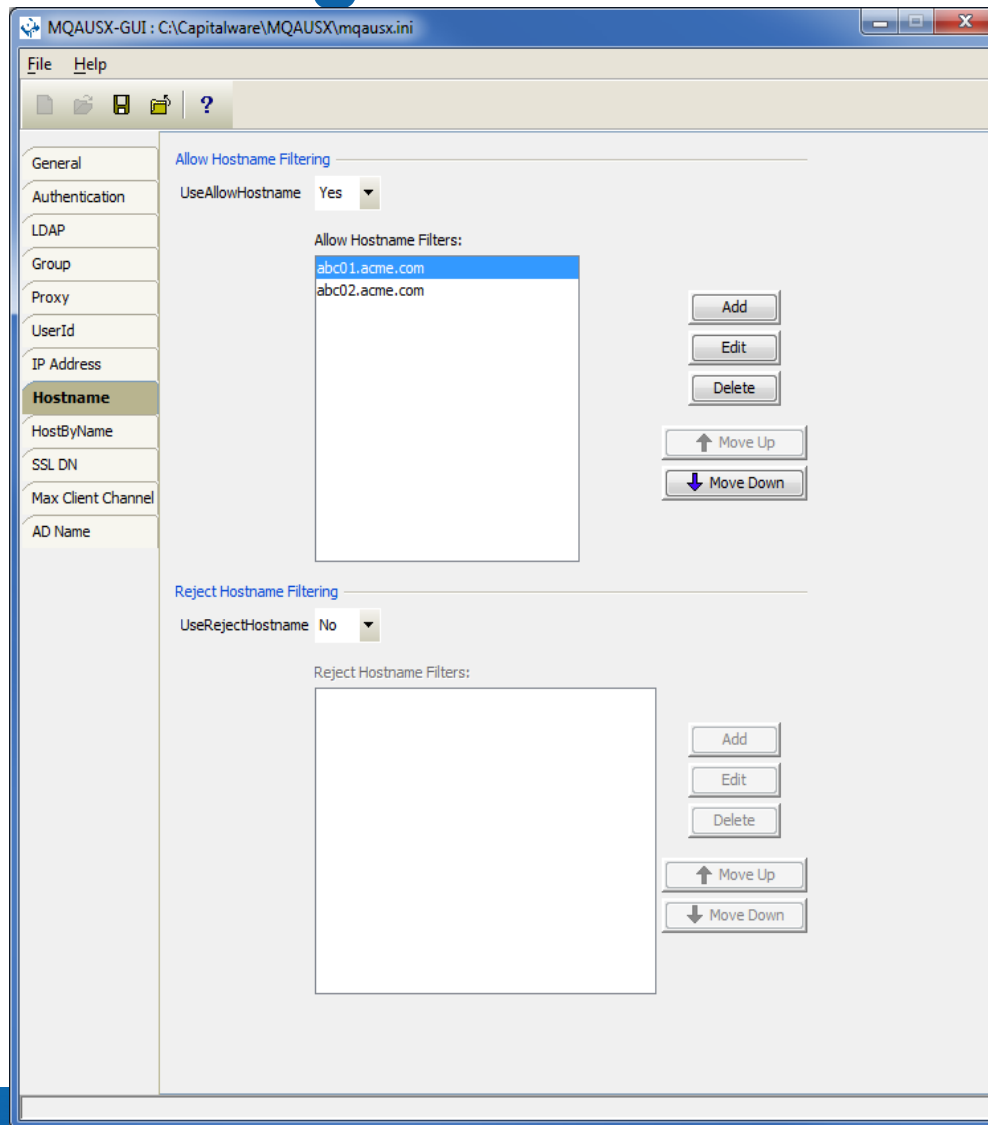
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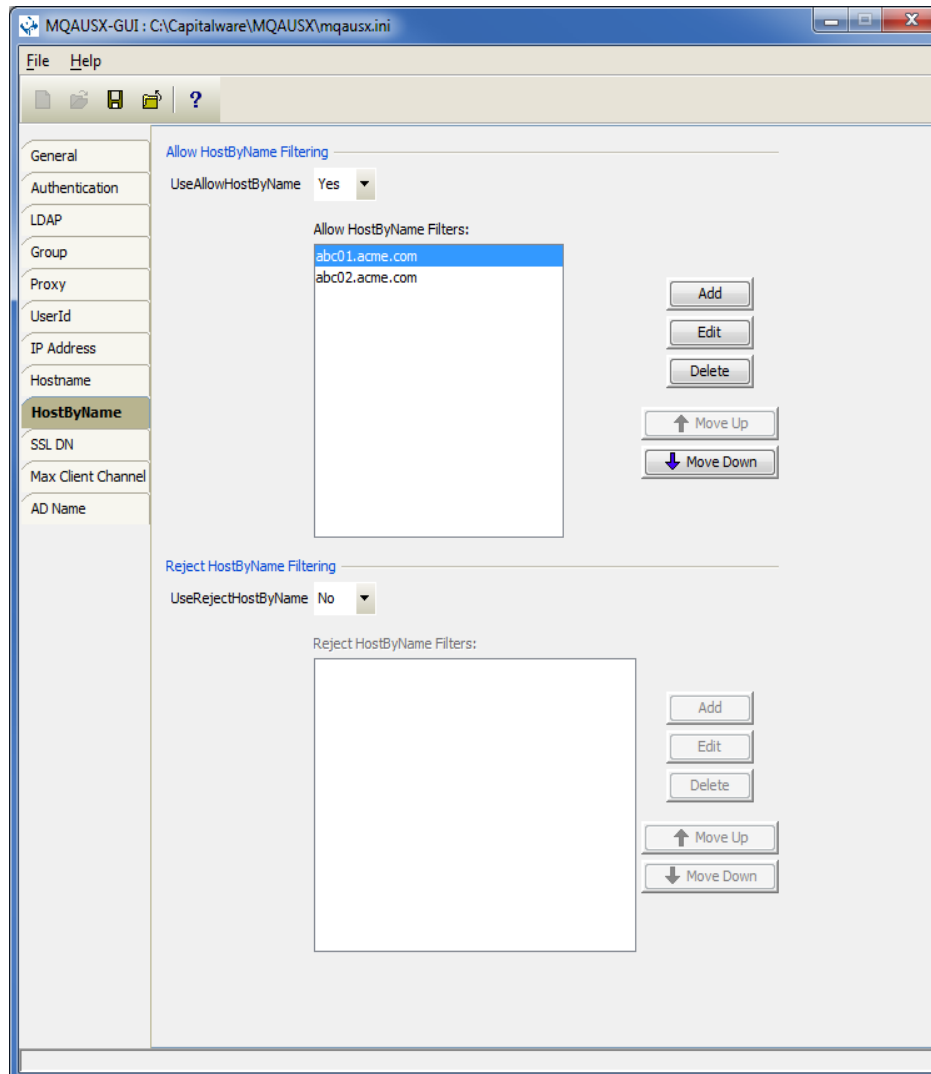
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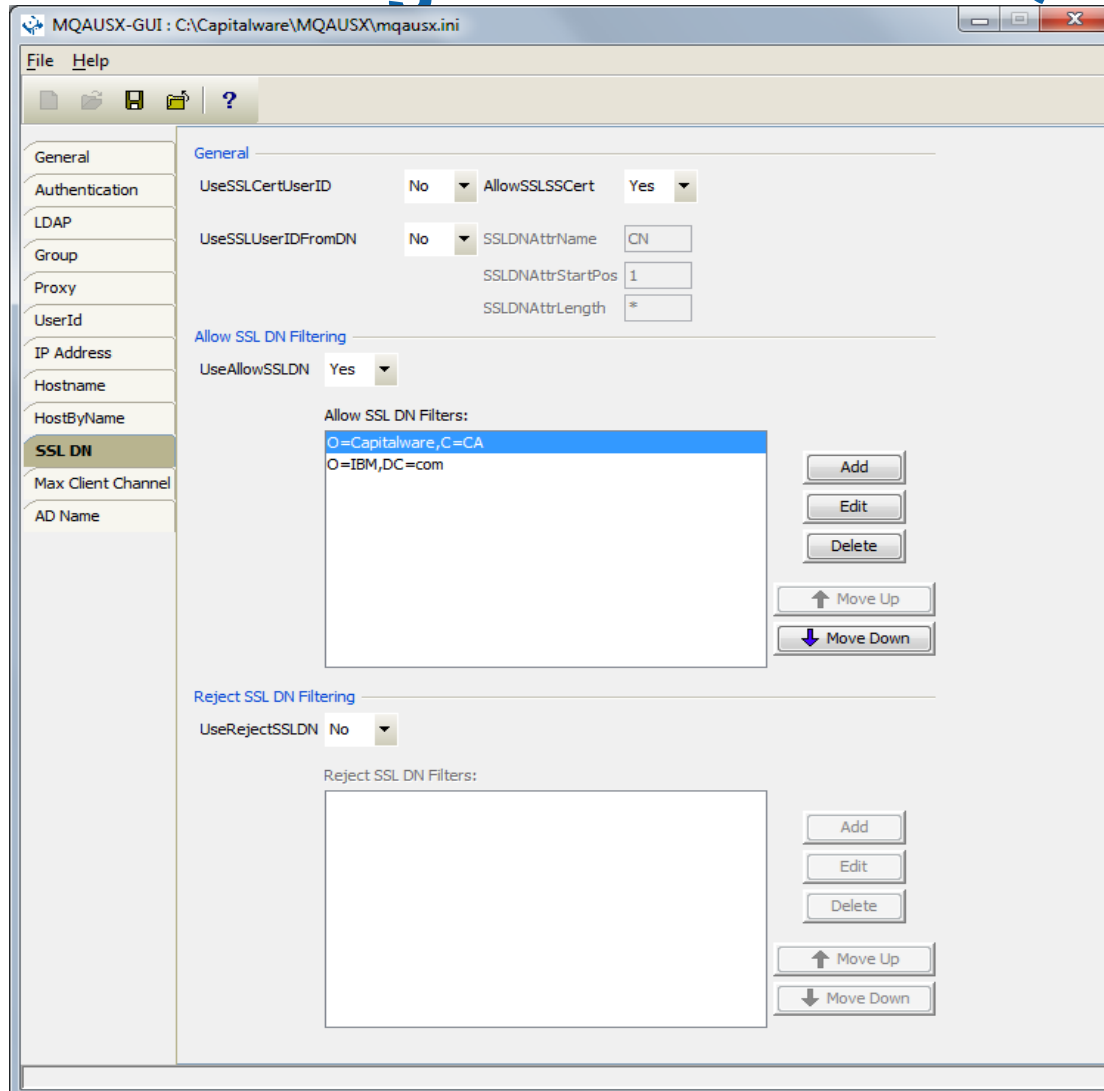
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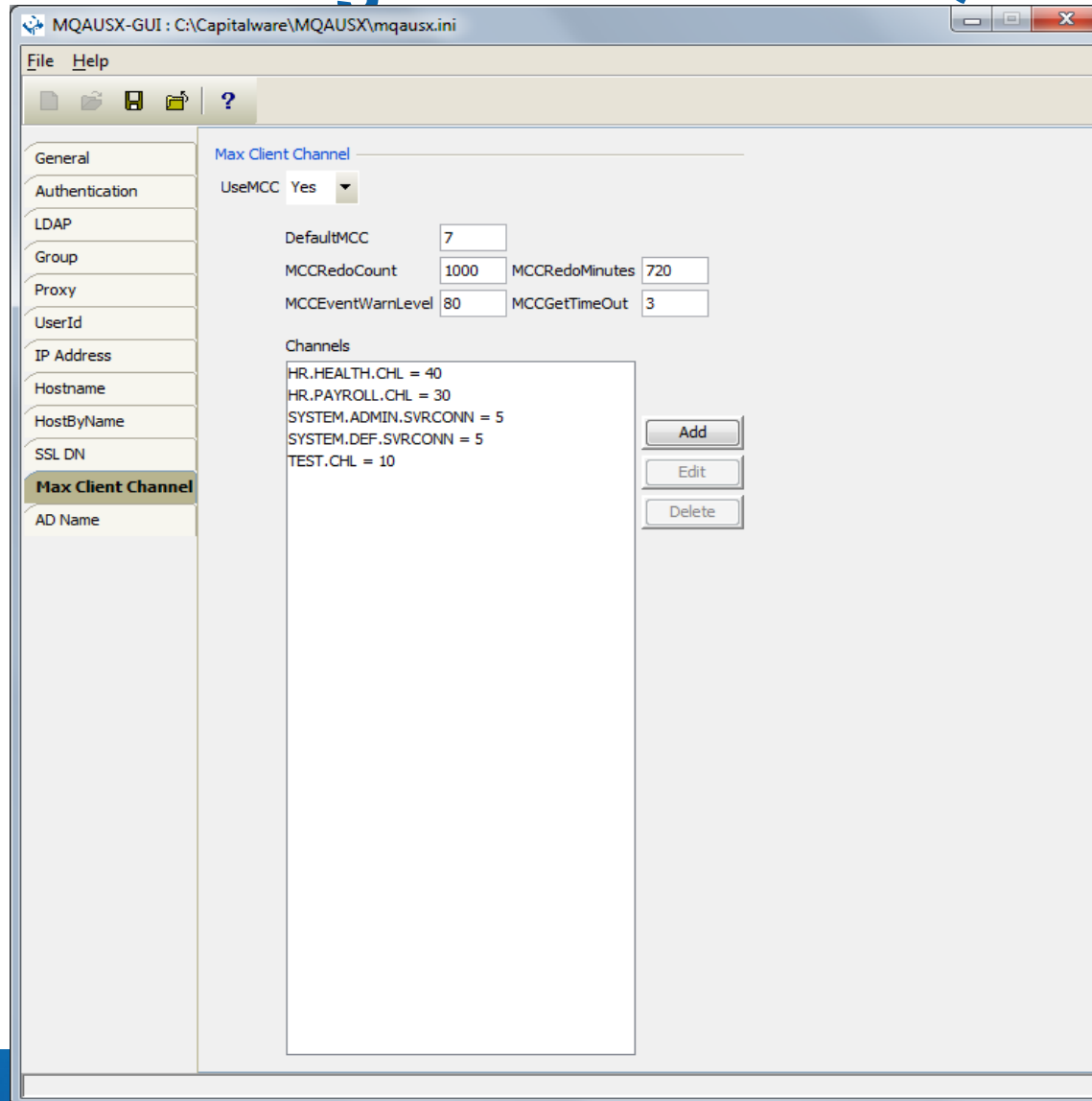
MQAUSX Configuration via MQAUSX-GUI



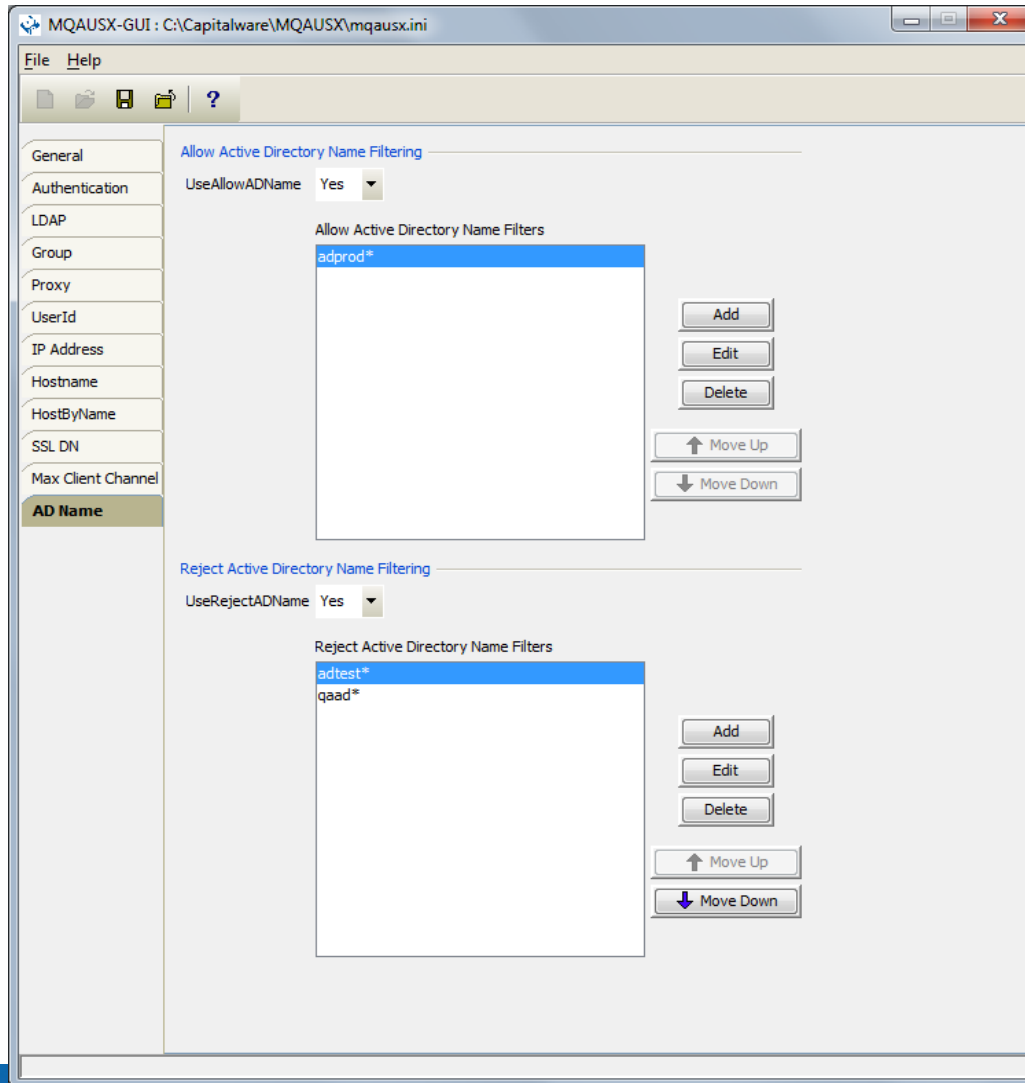
MQAUSX Configuration via MQAUSX-GUI



MQAUSX Configuration via MQAUSX-GUI



MQAUSX Configuration via MQAUSX-GUI



Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - General Setting -----  
COMMAND ==>  
  
License Key ==>  
LicenseFile ==>  
Description ==>  
  
Log Mode          ==> N          (Q/N/V/D)  
Log File DD       ==> SYSPRINT  
WriteToSystemLog  ==> N          (Y/N)  
SystemLogMessage ==> B          (B/A/R)  
WriteToEventQueue ==> N          (Y/N)  
EventQueueName    ==> SYSTEM.ADMIN.CHANNEL.EVENT  
  
Sequence Number  ==> N          (Y/N)  
  
PF3 to Return or PF12 to Cancel.
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Authentication Setting -----  
COMMAND ==>  
  
NoAuth ==> N (Y/N)  
  
File Based Access:  
UseFBA ==> N (Y/N)      FBAFile ==>  
  
Authentication Order:  
UseAuthOrder ==> N      AuthOrder ==>
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Group Setting -----  
COMMAND ==>  
Use Groups   ==> Y          (Y/N)  
Groups       ==> GrpA,GrpB,GrpC  
Group File DD ==> 'CAP01.CPTLWARE.MQAUSX.SYSIN(GRPIN)'
```

PF3 to Return or PF12 to Cancel.

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Proxy Setting -----  
COMMAND ==>  
Use Proxy      ==> N      (Y/N)  
Proxy File DD ==>  
  
PF3 to Return or PF12 to Cancel.
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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)          AllowCSPAuth     ==> Y (Y/N)
                                           UppercaseUserID ==> N (Y/N)

UseAllowUserID ==> N (Y/N)

Line Cmd: A Add UserId or D Delete UserId

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

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```


Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```


Configuration via MQAUSX-ISPF-GUI

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

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

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

Line Cmds: A Add Channel or D Delete Channel

Cmd  Channel Name          Max Channel Limit
----  -
_    ABC.CHL                 30
_    SYSTEM.DEF.SVRCONN     10
_    SYSTEM.ADMIN.SVRCONN   5
***** Bottom of data *****
```

Questions & Answers



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Capitalware's MQ Technical Conference v2.0.1.4

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Ability to Reject Self Signed Certificates	No	Yes

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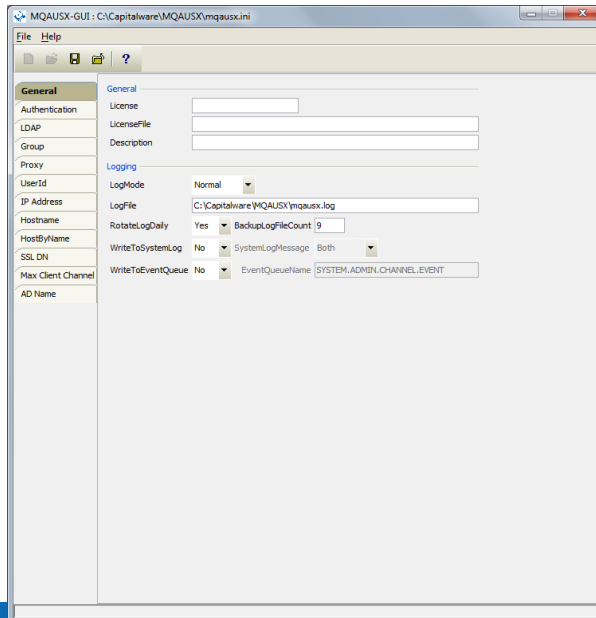
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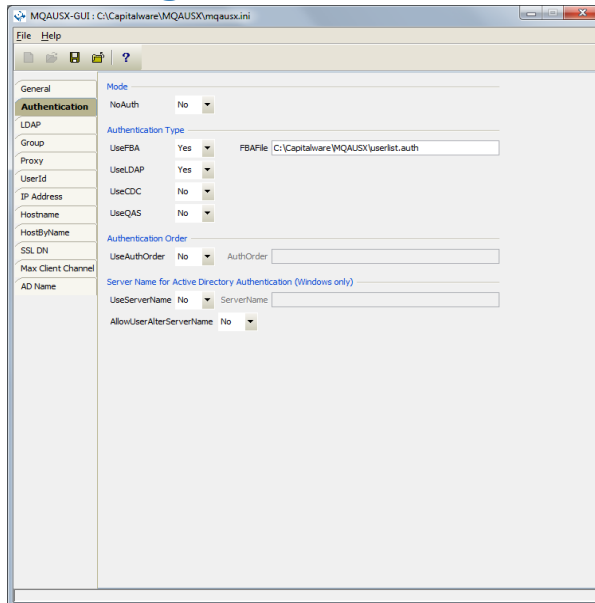
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MQAUSX Configuration via MQAUSX-GUI



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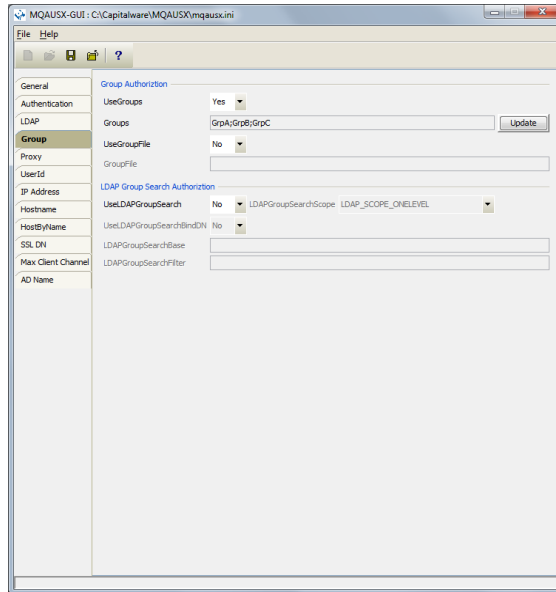


MQAUSX Configuration via MQAUSX-GUI

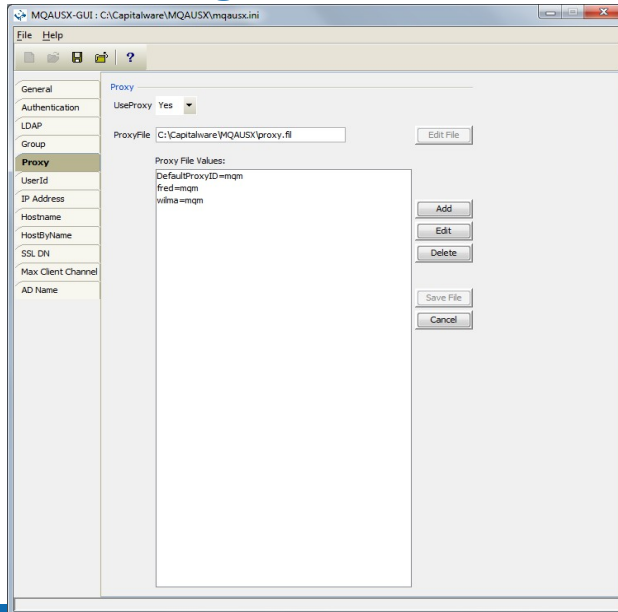
The screenshot displays the MQAUSX-GUI configuration window for the file C:\Capitalware\MQAUSX\mqausx.ini. The window is divided into several sections for configuring LDAP settings:

- General:** Includes fields for LDAPHost (ldap.capitalware.biz), LDAPPort (389;555), and LDAPTimeout (5).
- Authentication:** Includes UseLDAPLoadBalance (Yes) and LDAPBaseDN (CN=Users,DC=capitalware,DC=biz).
- Group:** Includes UseLDAPBindDN (No).
- Proxy:** Includes UseLDAPAuthCompare (No).
- User Id:** Includes fields for LDAPBindDN and LDAPBindPwd.
- IP Address:** Includes fields for Hostname and HostBy/Name.
- SSL DN:** Includes UseDAPSSL (No), UseDAPSSLCert (No), SSLCerFileType (DER), SSLCerFileName, and SSLCerPwd.
- LDAP LoginDN Prefix:** Includes UseLognDNPrefix (No) and LognDNPrefix.
- LDAP Ambiguous Name Resolution (ANR):** Includes UseANRforLDAP (No), UseANRPrefix (No), ANRPrefix, UseANRPostfix (No), ANRPostfix, ExtractUserIDFromANR (No), UseANRDelimiter (No), and ANRDelimiter.
- LDAP User ID Search:** Includes UseLDAPUserIDSearch (No), LDAPUserIDSearchScope (LDAP_SCOPE_ONELEVEL), LDAPUserIDSearchBase, and LDAPUserIDSearchFilter.

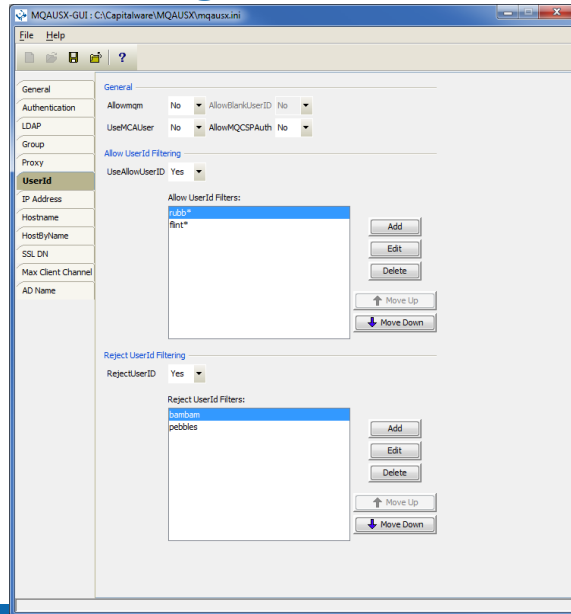
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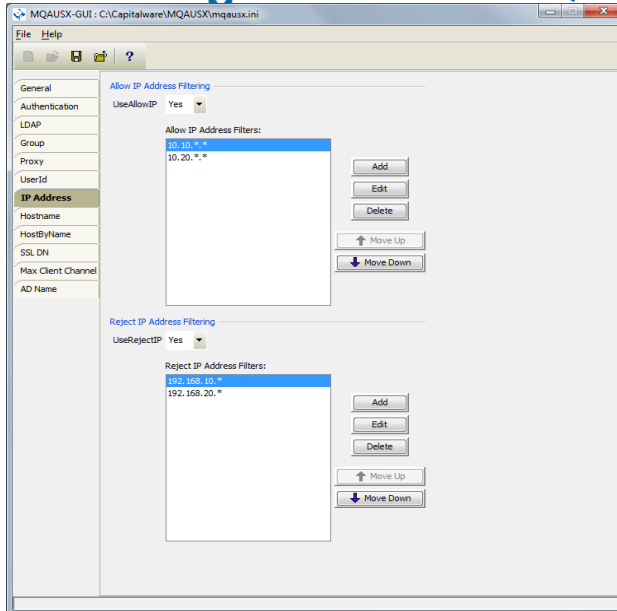
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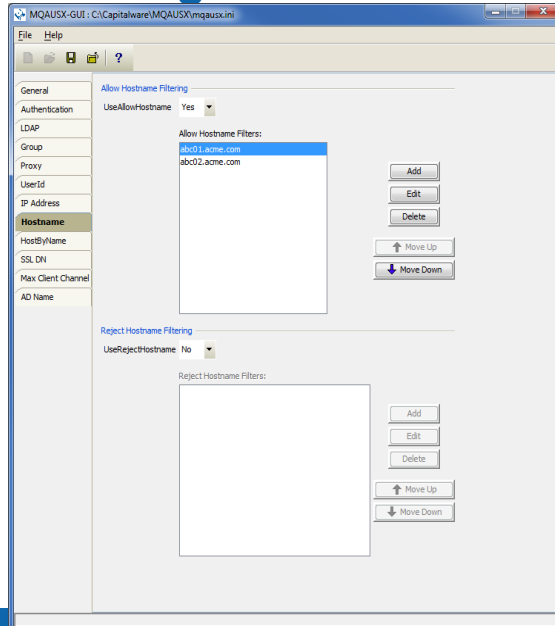
MQAUSX Configuration via MQAUSX-GUI



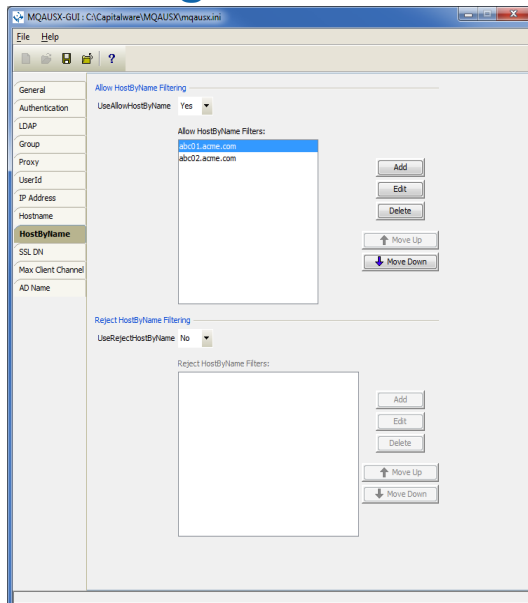
MQAUSX Configuration via MQAUSX-GUI



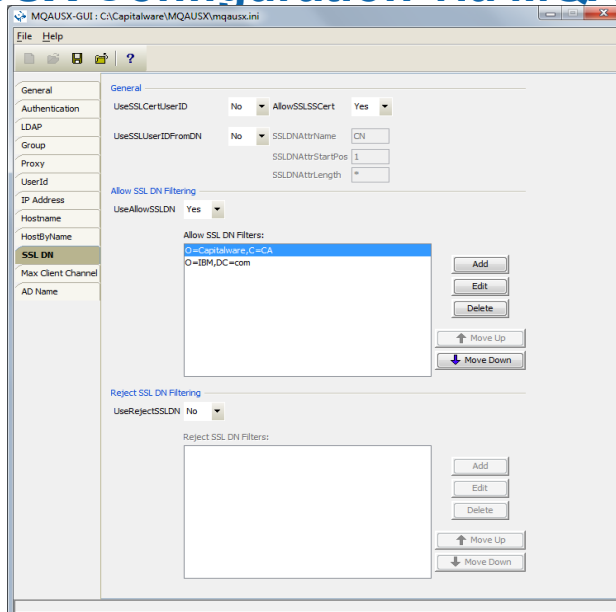
MQAUSX Configuration via MQAUSX-GUI



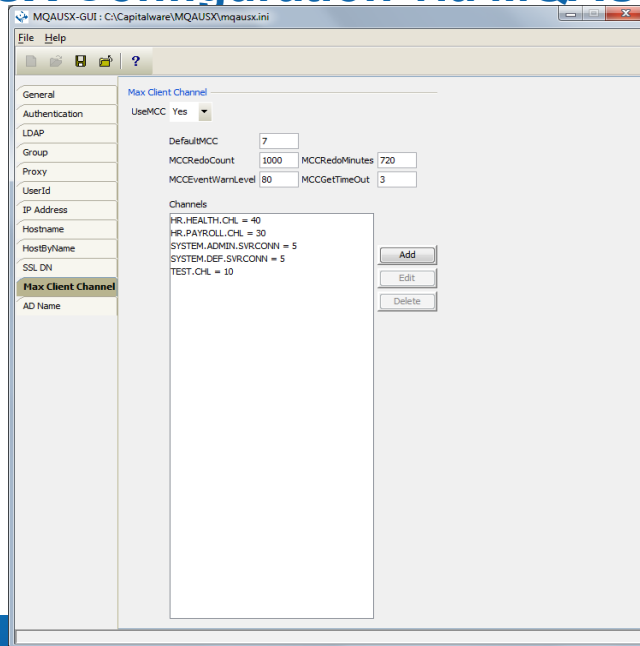
MQAUSX Configuration via MQAUSX-GUI



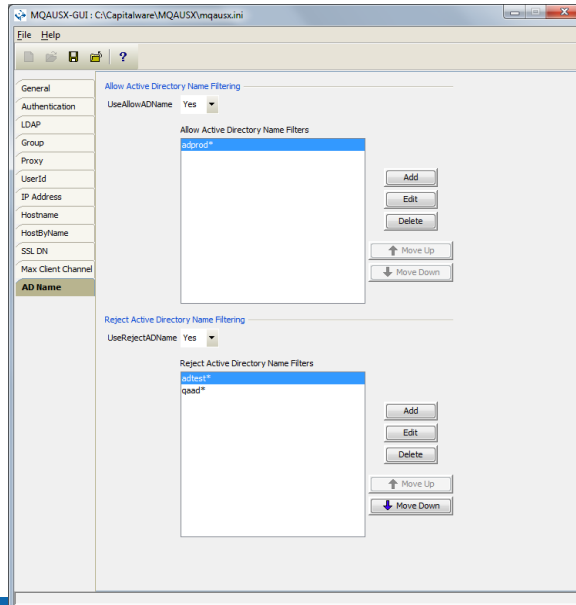
MQAUSX Configuration via MQAUSX-GUI



MQAUSX Configuration via MQAUSX-GUI



MQAUSX Configuration via MQAUSX-GUI



Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - General Setting -----  
COMMAND ==>  
License Key ==>  
LicenseFile ==>  
Description ==>  
  
Log Mode ==> N (Q/N/V/D)  
Log File DD ==> SYSPRINT  
WriteToSystemLog ==> N (Y/N)  
SystemLogMessage ==> B (B/A/R)  
WriteToEventQueue ==> N (Y/N)  
EventQueueName ==> SYSTEM.ADMIN.CHANNEL.EVENT  
  
Sequence Number ==> N (Y/N)  
  
PF3 to Return or PF12 to Cancel.
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Authentication Setting -----  
COMMAND ==>  
NoAuth ==> N (Y/N)  
File Based Access:  
UseFBA ==> N (Y/N)      FBAFile ==>  
Authentication Order:  
UseAuthOrder ==> N      AuthOrder ==>
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Group Setting -----  
COMMAND ==>  
Use Groups ==> Y (Y/N)  
Groups ==> GrpA,GrpB,GrpC  
Group File DD ==> 'CAP01.CPTLWARE.MQAUSX.SYSIN(GRPIN)'  
  
PF3 to Return or PF12 to Cancel.
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Proxy Setting -----  
COMMAND ==>  
Use Proxy   ==> N      (Y/N)  
Proxy File DD ==>  
  
PF3 to Return or PF12 to Cancel.
```


Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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)       AllowCSPAuth ==> Y (Y/N)
                               UppercaseUserID ==> N (Y/N)

UseAllowUserID ==> N (Y/N)

Line Cmd: A Add UserId or D Delete UserId

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

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Allow SSL DN Setting Row 1 to 2 of 2
COMMAND ==>
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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX ISPF GUI - Reject Hostname Setting Row 1 to 1 of 1
COMMAND ==>
UseRejectHostname ==> N (Y/N)
Line Cmd: A Add Hostname Filter or D Delete Hostname Filter
Cmd Reject Hostname
-----
***** Bottom of data *****
```


Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

```
----- z/MQAUSX 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 *****
```

Configuration via MQAUSX-ISPF-GUI

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

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

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

Line Cmds: A Add Channel or D Delete Channel

Cmd Channel Name Max Channel Limit
-----
- ABC.CHL 30
- SYSTEM.DEF.SVRCONN 10
- SYSTEM.ADMIN.SVRCONN 5
***** Bottom of data *****
```

Questions & Answers

