

Specification

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CURRENEX

FIX Retail Password Specification

Please contact Currenex sales representatives and help desk personnel for more information on this documentation.

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1 CURRENEX RETAIL APPLICATION PASSWORD

The Currenex Retail service requires users connecting via the FIX protocol to present a password as part of the logon message. To successfully connect, a user needs to set the password field, FIX tag 554, to the valid password associated with the id specified in tag 49. Note that tag 554 is a Currenex customized tag. A logon message containing an invalid password shall be rejected. The Currenex response to a valid logon message will not contain tag 554. Refer to the below tables for sample successful logon messages exchanged between a client and Currenex.

```
<1 Logon (8=FIX.4.2
9=85
35=A
34=1
49=<logon_id>
52=20070807-19:57:55.703
56=CNX
98=0
108=10
141=Y
554=<password>
10=202 )
```

Table 1: Sample Client Logon Message

```
>1 Logon (8=FIX.4.2
9=72
35=A
49=CNX
56=<logon_id>
34=1
52=20070807-19:57:48.717
108=10
141=Y
98=0
10=123 )
```

Table 2: Sample Currenex Logon Response

1.1 FIX Session Password rules and Support

A password can be reset by the user at anytime by sending the appropriate UserRequest.

An expired password must be reset before trading can begin. A trading session status will be sent indicating the password needs to be reset, tags 340=1 and 58= "Password Reset is Required." Until the password is reset, all further application messages will be rejected by the Currenex FIX gateway.

An account is locked after four (4) invalid password logon attempts. A locked account must be unlocked by the Currenex support desk before a user can logon successfully again.

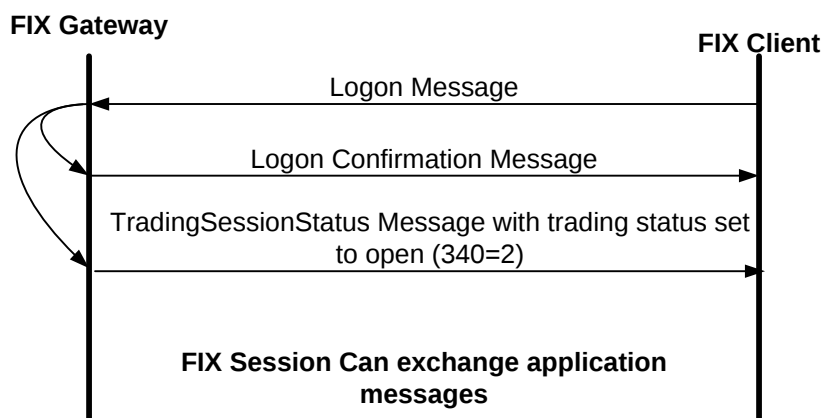
1.2 Message Flow Diagrams

This section shows sample message workflow for invalid, valid, and valid but expired password logon attempts.

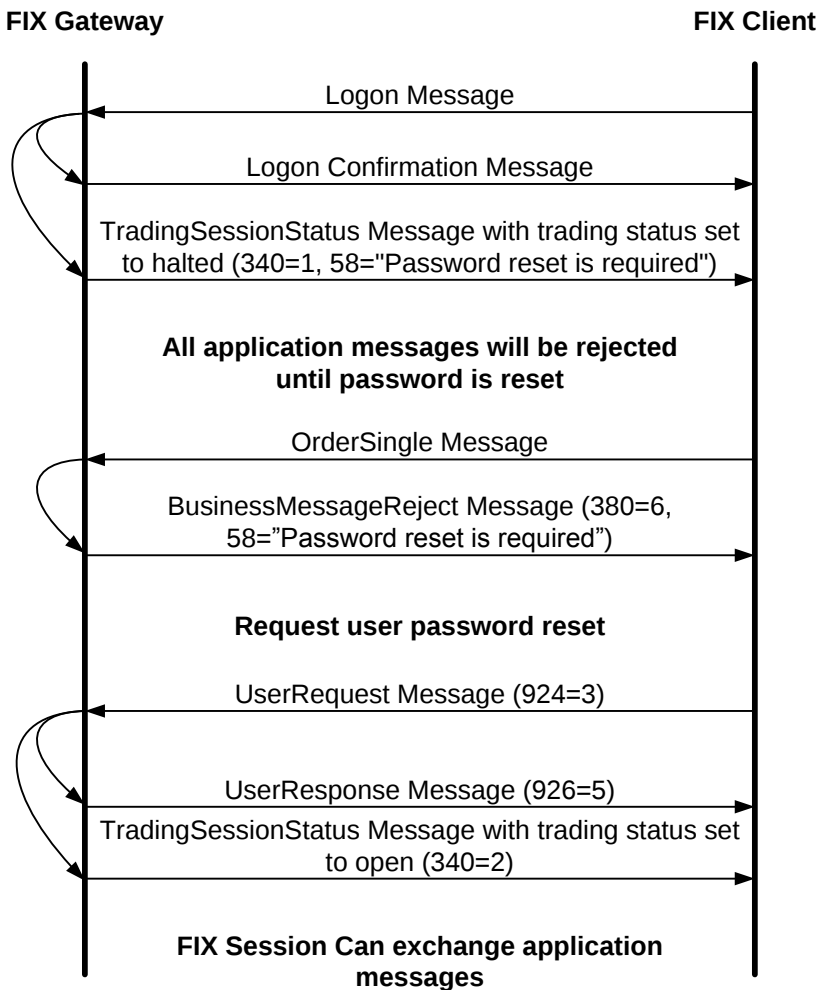
1.2.1 Logon with Incorrect Password



1.2.2 Logon with a Valid Password



1.2.3 Logon Using an Expired Password Followed by a Password Reset



1.3 FIX Messages- Password Reset

1.3.1 UserRequest

Tag	Field Name	Required Tag	Comments
	<i>Standard Header</i>	Y	MsgType tag 35 = BE
923	UserRequestID	Y	Unique identifier for User request
924	UserRequestType	Y	3 = ChangePasswordForUser, only valid value
553	Username	Y	User ID
554	Password	Y	Current Password or pass phrase

925	NewPassword	Y	New Password or pass phrase
	<i>Standard Trailer</i>	Y	

1.3.2 UserResponse

Tag	Field Name	Required Tag	Comments
	<i>Standard Header</i>	Y	MsgType tag 35 = BF
923	UserRequestID	Y	Unique identifier for User request
553	Username	Y	User ID
926	UserStatus	Y	Indicates the status of the user. Valid values are 3 = User not recognized 5 = UserPasswordChanged 6 = Other
927	UserStatusText	N	A text description associated with a user status
	<i>Standard Trailer</i>	Y	

2 QUICKFIX USERS

The following changes are QuickFIX specific.

2.1 Logon Code for Password

Retail QuickFIX users need to modify their FIX code so that the password is returned as part of the logon message. Refer to the sample code in the below table

```
public void toAdmin(quickfix.Message message, SessionID sessionID) {
    MsgType msgType = new MsgType();
    /* If Logon to CX, then set the password */
    if (message.getHeader().getField(msgType).valueEquals("A")) {
        message.setString(Password.FIELD, refSeqNum);
    }
}
```

Table 3: Sample QuickFIX Logon Code

2.2 Additional Required Changes

QuickFIX users need to

1. add the password to the Logon message spec by modifying the file `quickfixj/etc/FIX42.xml`

In the FIX42.xml file, search for "Logon" and add Password. It should look like the below

```
<message name="Logon" msgtype="A" msgcat="admin">
  <field name="EncryptMethod" required="Y" />
  <field name="HeartBtInt" required="Y" />
  <field name="RawDataLength" required="N" />
  <field name="RawData" required="N" />
  <field name="ResetSeqNumFlag" required="N" />
  <field name="MaxMessageSize" required="N" />
  <group name="NoMsgTypes" required="N">
    <field name="RefMsgType" required="N" />
    <field name="MsgDirection" required="N" />
    <field name="Password" required="N"/>
  </group>
</message>
```

2. Change the QuickFIX field specification to include tag 554.

Add the following to the QuickFIX Field specification:

```
<field number="554" name="Password" type="STRING" />
```