User Manual
Two Factor Authentication
(MEMBER PORTAL)
Two Factor Authentication (2FA) - Introduction

As per the requirements of SEBI Cyber Security and Cyber Resilience Framework circular CIR/MRD/DP/13/2015 dated 06 July 2015, 2FA at log-in should be implemented for all users that connect using online / internet facility.

2FA is a security process in which the user provides two means of identification from separate categories of credentials. The purpose of this utility is to support 2FA for increased security and to protect against cyber threats and security attacks.
2FA Flow Diagram

1. Login/Credentials
   - User Id
   - Valid Login Id
     - No
     - Display Image for Manual Authentication
       - Valid
       - Password
         - Is Password Correct?
           - No
           - Block after 3 attempts
           - Yes
             - 2 Factor Authentication
               - Has Q&A been set by user?
                 - No
                 - Show Random 5 Questions from the list of 20 questions to set Answers. Store the Q&A against the User Id
                 - Yes
                   - Prompt the user to enter answers for random 2 questions out of the 5 questions set for this user
                     - Are Answers correct?
                       - No
                       - Prompt the user to enter answers for random other 2Q out of 3Q set for the user
                         - Are Answers correct?
                           - No
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                                                      - Are Answers correct?
                                                        - Yes
                                          - Successful Login

First Level Login Validation

1. The existing users shall use their existing login id and password.

2. On invoking the application, the user shall be prompted to enter the Member Code (Trading Member Code) and the User id (Login Id) and Login Password and system generated CAPTCHA.

3. If the login password is incorrect, the user shall have three attempts to punch in the correct password, failing which his user id shall be blocked. In this case, the user has to contact the Admin.

4. In case, the login password entered is correct, then the user shall be prompted to change his login password. All validations currently applicable for both these passwords shall hold true in this scenario as well.

5. Once the password is successfully changed or after successful login, the user shall be directed to the 2FA authentication screen.

Note: The above login workflow can be different for individual application interfaces.

Second Level validation (2FA)

This screen shall appear post successful first level login authentication.

1. In case the user is logging in for the first time, he shall be asked to set answers to five random questions from a list of 20 questions.

2. On subsequent login, the user shall be prompted to answer two random questions out of the set five questions.

3. Login to the application shall be permitted on successful two factor authentication.

4. In case the user answers incorrectly, he shall be prompt to answer the questions again. He shall be prompted to answer two questions for maximum of 3 times. If he answers correctly in any of the three attempts then he will be logged in successfully & number of wrong attempts will be reset to zero.

5. In case the user answers incorrectly on three successive attempts, his user id shall get disabled. User shall get enabled only after the questions and answers set by the user are reset. Reset can only be carried out by sending an email to our support group i.e. support@nsecl.co.in.

6. Post reset, the user shall be prompted to answer a new set of five questions on re login.
Steps for setting 2FA

1. Use the existing screen and credentials to Log-in to application.

2. Answer any five out of 20 questions and press ‘Submit’ button. Please note that replies are case sensitive.

<table>
<thead>
<tr>
<th>Kindly answer any 5 questions for user authentication</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your grandmother's maiden name?</td>
</tr>
<tr>
<td>What is your favorite dessert?</td>
</tr>
<tr>
<td>What is the vegetable that you hate the most?</td>
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<tr>
<td>What is the brand name of your preferred perfume?</td>
</tr>
<tr>
<td>In which bank did you open your first savings account?</td>
</tr>
<tr>
<td>Which bank offered your first credit card?</td>
</tr>
<tr>
<td>What was the brand name of your first vehicle?</td>
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<tr>
<td>What is the name of your first child?</td>
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<tr>
<td>What is the last name of your family doctor?</td>
</tr>
<tr>
<td>Which company offered your first life insurance?</td>
</tr>
<tr>
<td>What is your other place of birth?</td>
</tr>
<tr>
<td>What is the name of the company you were previously associated with?</td>
</tr>
<tr>
<td>What is your mother's maiden name?</td>
</tr>
<tr>
<td>What is your favorite dish?</td>
</tr>
</tbody>
</table>

3. Answer randomly shown two out of selected five questions at subsequent login.

<table>
<thead>
<tr>
<th>Kindly answer the below questions for user authentication</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the brand name of your laptop? (Eg: LG, Compaq, etc.)</td>
</tr>
<tr>
<td>In which stream did you major in college?</td>
</tr>
</tbody>
</table>

* A facility shall be available to skip setting up questions for 2FA till 30th April 2017. On clicking skip the user shall be directed to existing home page of application.

* A facility shall be available to skip answering set question for 2FA till 30th April 2017. On clicking skip the user shall be directed to existing home page of application.