**Use case name:** User Manage Password

**Description:** This use case describes how a user manages their password.

**Primary actor(s):** User (Provider Enroller, Service Agent, Service Administrator)

**Precondition(s):**

1. User is registered

**Main flow**: Forgot password / Reset password

This flow occurs when the user forgot their password or their account is locked.

1. User invokes option to reset password
2. System displays the following field
   1. Username
3. User enters the following
   1. Username
4. System performs the following:
   1. validates that the username is found (rule 5)
   2. Validates required field was entered (rules 1)
5. System displays:
   1. Challenge Phrase 1
   2. Challenge Phrase 2
6. User enters:
   1. Answer to challenge Phrase 1
   2. Answer to challenge Phrase 2
7. System performs the following:
   1. Validates the required fields were entered (rules 2 and 3)
   2. Validates challenge phrase 1 answer is correct (rule 6)
   3. Validates challenge phrase 2 answer is correct (rule 7)
8. System displays Captcha for user
9. User enters Captcha
10. System performs the following:
    1. Validates the Captcha (rule 8)
    2. Generates a new temporary random password
    3. Sets user change Password Ind = true
    4. Sets the user password equal to the temporary password
    5. Emails the User with a confirmation
11. Use case ends

**Alternate flow:** Change temporary password

This alternate flow happens when the user change password ind is equal to TRUE and after the user successfully logs into MPSE with the temporary password.

1. System displays following fields:
   1. New Password
   2. New Password Confirmation
2. User enters information and continues
3. System performs the following:
   1. Verifies that the new password and new password confirmation agree (rule 10)
   2. Verifies the User password and the new password are not the same (rule 11)
   3. Verifies that the new password meets strength requirements (rule 12)
   4. Sets User password to equal the new password
   5. Sets the user change password ind = FALSE
4. Use case ends

**Alternate flow:** Change password

This alternate flow is invoked instead of the main flow when the user is logged into MPSE and invokes the option to change their password.

1. System displays following fields:
   1. Current password
   2. New password
   3. New password confirmation
2. User enters information and continues
3. System performs the following:
   1. Verifies the current password is correct (rule 9)
   2. Verifies that the new password and new password confirmation agree (rule 10)
   3. Verifies the current password and new password are not the same (rule 11)
   4. Verifies that the new password meets strength requirements (rule 12)
   5. Sets User password equal to the new password
4. Use case ends

**Alternate Flow:** Forgot username

This alternate flow is invoked instead of the main flow when the user is logged into MPSE and invokes the option “Forgot username”.

1. System displays following fields:
   1. Contact Email Address
2. Users enters email address
3. System performs the following:
   1. System validates the entered email address is found (rule 4)
   2. System validates that required fields were entered (rule 13)
4. System display Captcha for user to enter
5. User enters Captcha
6. System performs the following:
   1. Validates the Captcha (rule 8)
   2. Emails the user an email confirming their username
   3. Sends confirmation email to users email address: “Person’s name, Your username is XXXX”
7. Use case ends

**Business Rules:**

| **Rule ID** | **Business Rule** |
| --- | --- |
| 1 | **Rule “Username is required”**  When   * Username is blank   Then   * Display message: “Username is required” |
| 2 | **Rule “Challenge phrase 1 is required”**  When   * Challenge Phrase 1 answer is blank   Then   * Display message: “Challenge phrase 1 answer is required” |
| 3 | **Rule “Challenge phrase 2 is required”**  When   * Challenge Phrase 2 answer is blank   Then   * Display message: “Challenge phrase 2 is required” |
| ~~4~~ | **Rule “email address is invalid”**  When   * The contact email address is not found   Then   * Display message: “Invalid Email address” |
| 5 | **Rule "Username not found"**  When   * Username does not match any user username   Then   * Display message "Invalid username" |
| 6 | **Rule "Challenge phrase 1 answer incorrect"**  When   * Challenge Phrase 1 answer is not equal to User challenge Phrase 1 answer   Then   * Display message "Challenge phrase 1 answer is incorrect" |
| 7 | **Rule "Challenge phrase 2 answer incorrect"**  When   * Challenge Phrase 2 answer is not equal to User challenge Phrase 2 answer   Then   * Display message "Challenge phrase 2 answer is incorrect" |
| 8 | **Rule "CAPTCH must match"**  When   * Actual Captcha does not agree to entered Captcha   Then   * Display error message "CAPTCHA does not match" |
| 9 | **Rule "Current password is invalid"**  When   * Current Password is not equal to User password   then   * display message "Current password is incorrect" |
| 10 | **Rule "New password and new password confirmation do not agree"**  When   * New password is not equal to new password confirmation   Then   * display message "New password does not agree to new password confirmation" |
| 11 | **Rule "New password cannot be same as current password"**  When   * Current password is equal to new password   Then   * Display message "New password must be different from current password" |
| 12 | **Rule "Password does not meet minimum strength requirements"**  When one or more of the following are true:   * New password is < 8 characters * New password does not have at least one uppercase letter * New password does not have at least one lowercase letter   Then   * Display message "New password must be at least 8 characters, contain at least one uppercase letter and one lowercase letter" |
| 13 | **Rule “Email address is required**  When   * Contact email address is blank   Then   * Display error message: “Email address is required” |

**Change control:**

| Version | Date Revised | Revised By | Revisions |
| --- | --- | --- | --- |
| 1 | 01/08/2015 | Mary Wettstein | Removed reference of attributes in the use case. |
| 2 | 01/09/2015 | Mary Wettstein | User name doesn’t need to be an email address. Removed rule 4 from Main flow step 4.1. Modified rule 4 to still work in alternate flow – forgot username step 3.1 |

**Issues:**

**System policy for password**

Minimum Length – 8 char

# of Uppercase required – 1

# of Lowercase required – 1

Password Validity – 365 days

Password Minimum Age – 2 days (self-service resets every 2 days) Change on Reset – yes (if admin resets user passwd, user is forced to change that temp passwd on first login) Password History – 1 (can’t use previous password going back 1 previously used) Login tries – 5 Lockout duration – 24 hours Login tries reset – 1 day (if you lock yourself out on day 1 w/ 5 bad passwd’s, you can try again the next day)