

## Redmine - Feature #4221

### Force passwords to contain specified character classes

2009-11-16 10:08 - jim joseph

<b>Status:</b>	Closed	<b>Start date:</b>	2009-11-16
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Go MAEDA	<b>% Done:</b>	0%
<b>Category:</b>	Accounts / authentication	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	4.1.0		
<b>Resolution:</b>	Fixed		
<b>Description</b>			
<p>I would like to enforce strong password for users in redmine. As if now redmine will accept any four letter password. Is there a way that applicaton checks how strong a password is when a new user register in it.</p> <p>Can we implement any password generator with redmine?</p>			
<b>Related issues:</b>			
Related to Redmine - Feature # 3872: New user password - better functionality		<b>Closed</b>	<b>2009-09-15</b>
Related to Redmine - Feature # 3155: Password policy and secure logon procedure		<b>New</b>	<b>2009-04-10</b>
Duplicated by Redmine - Feature # 25054: Enforcing Strong Password in Redmine		<b>Closed</b>	

#### Associated revisions

##### Revision 18411 - 2019-08-29 03:35 - Go MAEDA

Force passwords to contain specified character classes (#4221).

Patch by Takenori TAKAKI.

##### Revision 18412 - 2019-08-29 04:15 - Go MAEDA

Update locales (#4221).

##### Revision 18413 - 2019-08-29 09:15 - Go MAEDA

Update locales (#4221).

##### Revision 18414 - 2019-08-29 10:46 - Go MAEDA

Send security notifications when password\_required\_char\_classes setting is changed (#4221).

#### History

##### #1 - 2009-11-16 19:37 - Jean-Philippe Lang

As of r2678, you can specify the minimum password length in settings.

But a minimum password strength setting could be also added (eg. Fair, Strong, Very strong) using kind of password strength meter.

##### #2 - 2009-11-19 20:35 - Jean-Philippe Lang

- Category set to Accounts / authentication

**#3 - 2009-11-20 14:17 - Henrik Ammer**

Jean-Philippe Lang wrote:

| *But a minimum password strength setting could be also added (eg. Fair, Strong, Very strong) using kind of password strength meter.*

I would love to see this!

**#4 - 2013-07-18 11:28 - Samuel Suther**

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**#5 - 2013-08-01 19:52 - @ go2null**

| *Can we implement any password generator with redmine?*

- Implemented in [v2.4.0](#) - Feature #3872 *New user password - better functionality*

**#6 - 2013-08-02 04:18 - Toshi MARUYAMA**

- Related to Feature #3872: *New user password - better functionality added*

**#7 - 2014-03-04 08:21 - Simon O**

1

The new feature implemented in 2.4.0+ referring to Feature #3872 includes a secured password generator.

However, if users may change their password at first login, they may pick "aaaaaaaa" which is far away from being secure. Thus, I also recommend to add a kind of password security check as suggested by jim joseph.

Please reopen ticket.

Thanks a lot!

**#8 - 2016-01-01 13:01 - Aleksandar Pavic**

+1

There are some recent efforts as I can see.

[https://github.com/simonswine/redmine\\_password\\_tool](https://github.com/simonswine/redmine_password_tool)

[https://github.com/go2null/redmine\\_account\\_policy](https://github.com/go2null/redmine_account_policy)

But this should be a core system feature, it is a must for enterprise use.

**#9 - 2017-02-12 15:14 - Toshi MARUYAMA**

- Duplicated by Feature #25054: *Enforcing Strong Password in Redmine added*

**#10 - 2019-04-24 04:19 - Go MAEDA**

- Related to Feature #3155: Password policy and secure logon procedure added

**#11 - 2019-08-02 09:19 - Takenori TAKAKI**

- File `enforce-password-char-types.patch` added

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If we can enforce password strength, Redmine will be used in environments where some security policy is required.

I post a patch, as I implemented the following features:

- Enable to setting password strength in admin settings
- Enable to selecting the enforce character types (Uppercase, Lowercase, Digits, Special characters).
- Validation for each enforce character types

**#12 - 2019-08-07 05:15 - Go MAEDA**

- Priority changed from High to Normal

- Target version set to Candidate for next major release

**#13 - 2019-08-07 05:53 - Go MAEDA**

I think the validation in attachment:`enforce-password-char-types.patch` should cover all ASCII special characters, such as '(', ')', '+', '-', and '\_'. The following code does that.

```
diff --git a/app/models/setting.rb b/app/models/setting.rb
index b18f8ed89..4171fa04e 100644
--- a/app/models/setting.rb
+++ b/app/models/setting.rb
@@ -19,6 +19,13 @@
class Setting < ActiveRecord::Base

+ PASSWORD_REQUIRED_CHARACTER_CLASSES = {
+   'uppercase'    => /[A-Z]/,
+   'lowercase'   => /[a-z]/,
+   'digits'      => /[0-9]/,
+   'special_characters' => /[[[:ascii:]]&&[:graph:]]&&[:^alnum:]]/
+ }
+
  DATE_FORMATS = [
    '%Y-%m-%d',
    '%d/%m/%Y',
```

**#14 - 2019-08-27 09:38 - Takenori TAKAKI**

- File `enforce-password-char-types-v2.patch` added

Thank you Mr. Maeda.

I change a patch and post it again.

- Changed definition of 'special\_characters' to the code proposed by Mr. Maeda
- Changed regular expression in validation of special characters. => Almost all special characters within the ASCII range can be used.
- Shortened constant and label names.
- On password generation, contain special characters only when special characters are required.
- Added display of usable characters such as "Change Password" Form.

**#15 - 2019-08-27 11:49 - Go MAEDA**

- Target version changed from Candidate for next major release to 4.1.0

LGTM. Setting the target version to 4.1.0.

**#16 - 2019-08-28 05:58 - Go MAEDA**

- File *setting-required-character-classes-for-passwords@2x.png* added

This is the screenshot of attachment:enforce-password-char-types-v2.patch. Admins can force users to include specified character classes (uppercase, lowercase, digits, or special Characters) in their password. This feature must be welcomed by many admins.

setting-required-character-classes-for-passwords@2x.png

**#17 - 2019-08-29 03:35 - Go MAEDA**

- Subject changed from *Enforcing Strong Password for Users to Force passwords to contain specified character classes*
- Status changed from *New to Closed*
- Assignee set to *Go MAEDA*
- Resolution set to *Fixed*

Committed the patch. Thank you for improving Redmine.

**Files**

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enforce-password-char-types.patch	7.98 KB	2019-08-02	Takenori TAKAKI
enforce-password-char-types-v2.patch	11 KB	2019-08-27	Takenori TAKAKI
setting-required-character-classes-for-passwords@2x.png	48.4 KB	2019-08-28	Go MAEDA