### Redmine - Feature #35001

## Disable API authentication with username and password when two-factor authentication is enabled for the user

2021-04-02 05:18 - Go MAEDA

Status:	Closed	Start date:	Start date:	
Priority:	Normal	Due date:		
Assignee:	Marius BĂLTEANU	% Done:	0%	
Category:	Accounts / authentication	Estimated time:	0.00 hour	
Target version:	5.0.0			
Resolution:	Fixed			
Description				
In Redmine 4.2, two-factor authentication has been introduced.				
When two-factor authentication is enabled, it becomes difficult for an attacker to log in to Redmine even if he knows the username and password.				
However, API authentication is not covered by two-factor authentication. Currently, there are three methods of API authentication:				
1. send the user's API key via X-Redmine-API-Key header				

2. basic authentication with the user's API key (username is the API key and password is a random string)

3. basic authentication with user name and password

If you have two-factor authentication enabled, I think the third method will be problematic. This is because even though the web UI can prevent an attacker from logging in with an illegally obtained username and password, they can still use that username and password to access the data via the API.

To address this risk, I suggest disabling basic authentication with username and password for users who have two-factor authentication enabled.

# Related issues: Closed 2008-05-14 Related to Redmine - Feature #1237: Add support for two-factor authentication Closed 2008-05-14 Related to Redmine - Defect #41220: API Access does not require second factor Closed Closed

#### Associated revisions

#### Revision 21436 - 2022-02-24 20:10 - Marius BÅLTEANU

Disable API authentication with username and password when two-factor authentication is enabled for the user (#35001).

Patch by Go MAEDA.

#### Revision 21441 - 2022-02-25 08:57 - Marius BÅLTEANU

Update API test to use token based authentication when twofa is enabled for user (#35001).

#### History

#### #1 - 2021-04-02 05:26 - Go MAEDA

#### The following code is a sample implementation.

```
diff --git a/app/controllers/application_controller.rb b/app/controllers/application_controller.rb
index b5644e89d..ec64e74cf 100644
--- a/app/controllers/application_controller.rb
+++ b/app/controllers/application_controller.rb
@@ -129,7 +129,11 @@ class ApplicationController < ActionController::Base
        elsif /\ABasic /i.match?(request.authorization.to_s)
        # HTTP Basic, either username/password or API key/random
        authenticate_with_http_basic do |username, password|
- user = User.try_to_login(username, password) || User.find_by_api_key(username)
+ user = User.try_to_login(username, password)
+ # Don't allow using username/password when two-factor auth is active
user = nil if user&.twofa_active?
+
user ||= User.find_by_api_key(username)
```

end if user && user.must\_change\_password? render\_error :message => 'You must change your password', :status => 403

#### #2 - 2021-06-22 20:07 - Marius BĂLTEANU

- Related to Feature #1237: Add support for two-factor authentication added

#### #3 - 2022-01-16 08:46 - Go MAEDA

- File 35001.patch added

Attaching a patch.

#### #4 - 2022-01-16 08:57 - Go MAEDA

- File deleted (35001.patch)

#### #5 - 2022-01-16 08:58 - Go MAEDA

- File 35001.patch added

#### #6 - 2022-02-03 08:08 - Go MAEDA

- Target version set to 5.0.0

Setting the target version to 5.0.0.

#### #7 - 2022-02-24 20:10 - Marius BĂLTEANU

- Status changed from New to Resolved
- Assignee set to Marius BĂLTEANU
- Resolution set to Fixed

Patch committed, thanks!

#### #8 - 2022-02-25 15:31 - Marius BĂLTEANU

- Status changed from Resolved to Closed

#### #9 - 2024-09-04 20:21 - Holger Just

- Related to Defect #41220: API Access does not require second factor added

Files

35001.patch

1.88 KB 2022-01-16

Go MAEDA