

Folders Feature

Functional Specifications

Abstract

This document contains the functional and technical specifications for the folders feature. It is aimed at the development team in order to help with the implementation, and for the current power users of passbolt to review and comment.

Change log

When	Who	What
04/12/2019	Passbolt Team	Initial version

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passbolt.

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Glossary

This glossary regroups the terms used in this document.

Resource (& Secret)

The resource contains the metadata (name, etc.) and the secret the encrypted data. Together they form a password in passbolt.

Item

An item is either a resource or a folder. Actions manipulating an item produce the exact same behavior either the item is a folder or a resource.

Folder

A folder is an object created by a user or by the system. It can be empty or it can contain folders and/or resources. A folder has a permission mask. Depending on permission mask values, the folder is either considered shared or personal.

Root Folder

It is the root of the folder tree. The root folder is a special folder. It is a virtual folder which does not really exist. A root folder belongs to one and only one user. The root folder is only visible to the user it belongs to, hence each user has a different root folder.

Folder permission mask

A folder permission mask is defined on a folder. It defines two things:

- Permissions for the given folder.
- Permissions applied to items inside it at their creation.

Shared Folder

A shared folder is a folder with a permission mask defining more than one user who can see the file.

Personal Folder

A personal folder is a folder with a permission mask defining only permissions for one user.

Folder Tree Widget



The Folder Tree Widget is a simplified version of the overall folder tree structure that contains folders and resources. The folder tree widget displays a tree with only folders. The Folder Tree Widget is displayed on the Password Workspace. It can be used to navigate into the Folders structure and filter the password grid.

Password workspace

The workspace that is selected when the user clicks on "passwords" in the main menu.

Password grid

Password grid is the main area in the password workspace where resources and folders are displayed. It can be used to display the content of a selected folder. It can be empty or composed of resources or folders.

Contextual folder menu

Right-clicking with the mouse on the folder tree widget or inside the folder view opens a contextual menu. This contextual menu displays a list of actions depending on the clicked item and the available contextual information. Some actions could also be displayed but disabled for different reasons: permissions, application version, feature switch, etc.

Breadcrumb

The breadcrumbs show the full path to the directory in which the user is located while navigating through the Folders Tree in the Password Grid.

Current folder

The current folder is the folder being viewed in the Password grid.

Current selection

Current selection is the selection of items made by the user. This selection could be made by drag-and-select, checking checkboxes, click and hold, etc. This selection can be used in different actions like Move, Delete, Share, etc.



Introduction

The goal of the folder feature is to provide a tool for passbolt users to easily organize and share passwords. The users will be able to use nested folders (or directories), in a way that is familiar to what they are used to, for example in a fashion that is similar to a file system or password manager like Keepass.

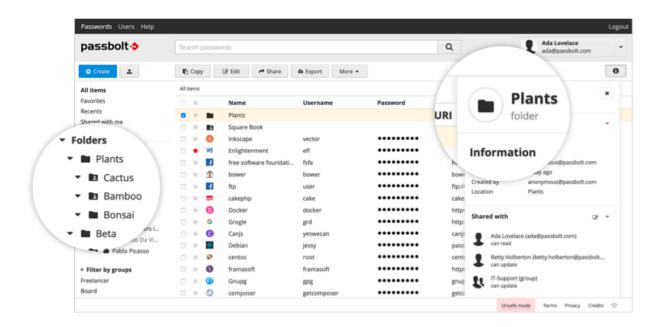


Fig. password workspace with folders

To be useful this feature needs to allow an individual user to sort their items. A user should be allowed to move a shared folder inside a structure of their own design, for example to declutter their root folder with folders shared with them.

Passbolt being a collaboration tool, this feature also needs to facilitate sharing resources. As we will see in this document catering for both use cases, i.e. personal and share usages, is a challenge.

Another challenge lies in how we allow associating permissions with nested folders and making it intelligible for the users. In other password managers folders are called a vault, i.e. an archive that is symmetrically encrypted with a common shared password for all users. Most of the time, subfolders contained in this vault do not carry permissions and it is not possible to redefine permissions individually at an item level.

Passbolt will not follow this approach: the granularity of the permission system has always been a strength of passbolt, and this feature should leverage it.



Approach for folder permissions

Behind the scenes, permissions for folders will reuse the same permissions system currently available for the passwords. This will allow the user to associate a set of permissions to one or more folders, while reusing the metaphors the users are already accustomed to.

Like resources, a folder must have an owner permission defined in the folder permissions. Two other permissions types are available: update and read. Each permission type give access to operations as described in the grid below:

Operation / Folder Permission	OWNER	UPDATE	READ
View folder permissions	Х	Х	Х
View folder	Х	Х	Х
Rename folder	Х	Х	
Delete folder	Х	Х	
Create an item inside a folder	Х	Х	
Move an item inside a folder	Х	Х	
Edit folder permissions	Х		

Once an item is inside a folder what can be done with the items does not depend on the folder permission but the item itself, like on a regular file system. For a user to move an item that is inside a folder they must generally at least have update rights on the item and the destination folder.

Operation / Enclosed Item Permission	OWNER	UPDATE	READ
Move an item outside the folder	X	X	X ¹
Edit / Delete the resource	Х	Х	

To illustrate, let's take a scenario where a user has read permission on a folder, and that this folder contains a resource they own, for example because the owner of the folder created an exception to the folder permission policy. In this case they can indeed delete or move the resources someplace else.

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¹ Only in some cases. See Approach to personal & shared folder organizations



Approach to folder permissions inheritance

One of the key requirements is to be able to apply a given folder permission to the items inside it. For example when a user "share" a folder or create a new item in that folder, or drop an existing resource in a folder, the folder permissions will be applied to the items where possible.

The "where possible" is important here. While folders in passbolt can be used to organize resources and apply permissions, folders do not enforce the permission on its enclosed content at all times, but serve as a guide when an operation such as create or move is performed. As we have seen exceptions can be created, i.e. it is possible for a user to have more rights on an item than they have on a given folder. The opposite is also possible, the same way it is possible to create a hidden or restricted file in a shared folder in a traditional filesystem.

One should picture a folder permission list as a permission mask, i.e. a predefined set of group/user rights, that could be applied to the folder content whenever a user is interacting with it. Applying permissions on a folder is the equivalent of selecting all the resources the user has the right to share inside the given folder and apply a new set of permission to this selection. Items where the user does not have access to (or cannot edit the permissions) will be ignored.

This approach is also needed to work with the limitation of the end to end encryption scheme. Indeed only a user that has access to a secret can provide such access to another user.

Benefits

This approach offers the following benefits:

It works out of the box with the current permission system. It is easier to implement and will not make the software slower when checking permissions.

Most importantly it will be easier to use and to understand where the permissions are coming from since there will be only one source of permissions, the item itself. When creating an item the parent permissions will be included in the children permission list, unless more are added or removed later. There won't be any hidden or frozen permission inherited from a parent folder that restrict the user's ability to interact with secrets that would then need to be explained and worked around.

It supports most complex use cases, such as creating a folder tree where the user will both be increasing and restricting permissions down the folder tree. It is possible to add a group or person to a folder permission mask, and therefore apply the permission mask to resources



inside this folder, and then remove access to a person that is present in the permission mask or add a person that is not present in the permission mask.

Drawbacks

However this approach offers the following drawbacks:

There won't be any enforced persistent inheritance of permissions between folders. While most of the time an organization will achieve inheritance in practice when applying permissions, it will not be enforced all the time. It is indeed complicated to both enforce inherited permissions, while retaining the ability to add and remove permissions directly on subfolders or resources. The system will help set permissions but will not ultimately prevent exceptions to these rules from happening.

This can create a confusing situation for example where a user listed as the owner of a folder cannot see all the content of that folder. While this might be convenient and desirable for some users, this may throw off some others, especially users coming from the "vault" experience.

Similarly, when two users are sharing a folder, if they have different rights for resources inside that folder, the share operation will produce different results. For example, if a resource is inside a shared folder and that this user cannot see the resource, or is not the owner, when sharing the folder, this resource will not be included in the permission change.

Approach to personal & shared folder organizations

Another challenge resides in the fact that the content is not seen by everybody at the same time. Therefore a folder organization used by another user might not make sense for another one. Intuitively the easiest approach would be to enforce one big tree structure for everybody. In practice, this will make the software feel restrictive and encourage top down taxonomy creation, which in turn we believe is not what is expected from a real collaboration software.

Our approach is therefore to allow an item, a password or a folder, to be present in only one folder at a time for a given user. Conversely this means that an item can be in two different folders for two different users, as long as these users cannot view both folders. In other words, an item can be in several folders for many users at a given time.

This approach creates a new interesting set of challenges, but ultimately provides the most flexibility. Let's have a deeper look at how this works.



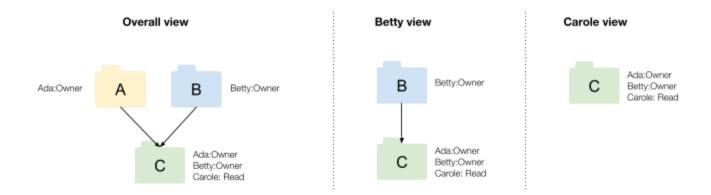


Fig. a possible folder organization scenario

In the example above, we have a folder A owned by Ada alone, a folder B owned by Betty alone, and a shared folder C owned both by Ada, Betty and readable by Carole. In this case Ada can see A and C with, Betty can see both folder B and C, Carole can only see C. Ada placed folder C in folder A, Betty placed folder C in folder B.

Let's see what happens when we share a folder. In the example below Betty decides to share folder B with Ada. Since Folder C can only be in one folder for Ada, passbolt will consider that the folder is moved from A to C.



Fig. a possible folder organization scenario, after share

Let's see what happens if Betty who only has read access on Folder C and is moving it into folder B, and then decides to share folder B with Ada. In this case, Betty does not have the right to move C outside of A for Ada, therefore sharing B with Ada will not move C for Ada.



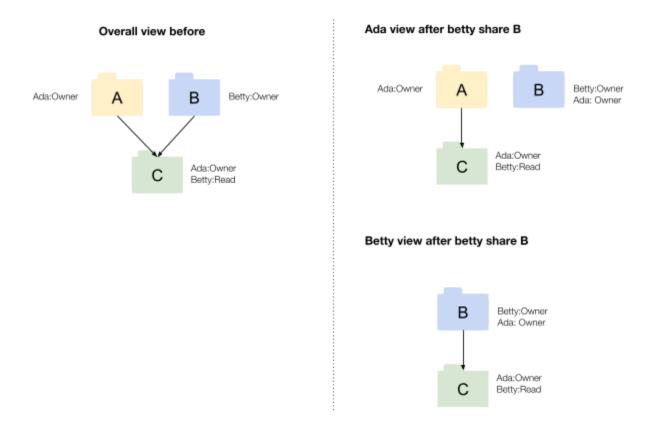
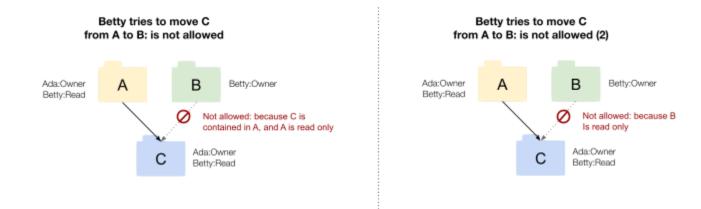


Fig. a possible folder organization scenario, after share

This behavior introduces some drawbacks, such as items appearing in two different folders that both users can see. To mitigate this behavior with more complex folder structures we will prevent a user with read access on an item to move it out of a folder they can only see, i.e. they will only be able to move an item in read only mode if this item is at the root for them.





Approach to folder permissions changes on a move

In our selected approach there are several types of moves. One that affects permissions and the tree structure, and one that affects only the tree structure. Whether one or the other is applied is based on the permissions of the origin and target folder.

Source / Origin B	Destination / Target C	Result
Read or Update or Owner	Read	Not allowed
Read	Owner or Update	Move & keep permissions only for current user and if item is at the root or not contained in read only folder
Update	Owner or Update	Move & keep permissions
Owner	Owner or Update	Move & choose permissions

As we can see, in order to move a folder inside another one, the user must have at least an Update permission on the destination folder and must have at least Update permissions on the origin folder. If the origin is in read-only they can only move it if the item is at the root or the parent folder is not in read only. In order to change the rights, they must have ownership of the origin folder and be able to at least update the destination folder.

Approach to calculate which permissions are inherited

When an item moves from one folder to another, this item will lose the permissions inherited from the parent. To simplify the calculation and storage of which permissions is inherited or set directly on a given item, we assume that a permission is considered as inherited if it is also in the direct parent the given user can see.

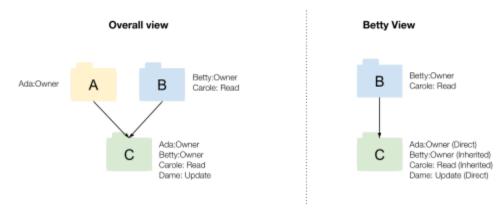


Fig. defining inherited and direct permissions by looking at the visible direct parent rights



We only look at the direct parent because any inherited permissions from indirect parents should, by transitivity, also be in the direct parent.

Approach for handling inherited permissions on a move

Let's take the case where a user wants to move an item into a folder. In this case, the user has an owner permissions on everything. By default the item will

- keep the existing direct permissions;
- lose the inherited permission from the origin parent folder;
- acquire the permissions from the destination parent folder.
 - If a permission from the destination folder is lower than a direct permission, keep the direct permission, otherwise override it.

Below a scenario that illustrates such operation. In this scenario Betty owns folder B and folder C. Betty wants to move folder C from B to D. We keep the direct permission Ada:Owner, since it is not present in B. The permission Carole:Read is dropped, since it is present in B and C but not D. The permissions of D are then applied to C. Please note what happens for Frances, where the direct permissions on C are higher than the permissions on D, we keep the direct permission.

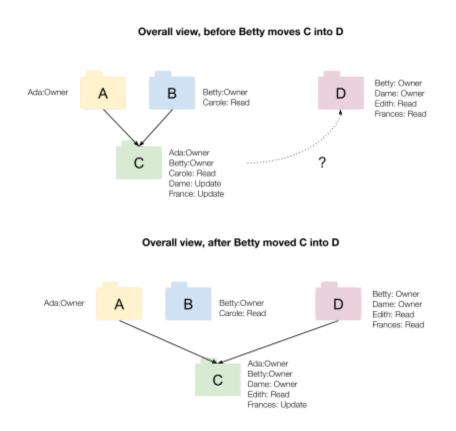


Fig. example of how moving a folder can affect the permissions



Here is a recap of the permission changes for that example:

User	Old Permission	New Permission	Rationale
	Folder C		
Ada	Owner	Owner	No change, this permission is considered direct as Betty cannot see Folder A.
Betty	Owner	Owner	No change, permissions are matching in source and destination.
Carole	Read	None	Permission dropped because it was inherited from B and not present in D.
Dame	Update	Owner	Permission increased since it was a direct permission of C and a higher one is present in D.
Edith	None	Read	Permission added.
Frances	Update	Update	Direct permission kept, since the direct permission is higher in C than the destination D.

Let's reuse this example and see how it would affect the children:

Overall view, before Betty moves C into D

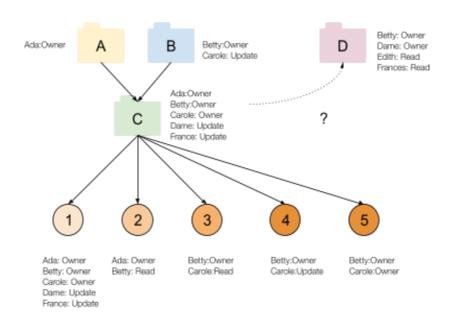


Fig. example of how moving a folder can affect the permissions in children



User	Old Permissions	New Permission	Rationale	
	Item 1			
All	Same than C	Same than C after move	Permissions of children match the Folder C, the same rules apply.	
	Item 2			
Ada	Owner	Owner	Permission do not change because Betty cannot edit them.	
Betty	Read	Read		
	Item 3			
Betty	Owner	Owner		
Carole	Read	N/A	Permission is dropped since it's lower than inherited permission that should be dropped.	
Others	N/A	Same than D		
	Item 4			
Carole	Update	N/A	Permissions is dropped since it's equal to permission inherited from Folder B that should be dropped.	
	Item 5			
Carole	Owner	Owner	Permissions is kept since it's superior to the inherited permission that should be dropped.	

Approach for folder permission changes on a share

The share operation will follow the same principle than a move. By default the permissions changes will be applied to the enclosed items, unless the user specifically request to change only the permission of the given folder.

When adding (or upgrading) a permission, this permission will be applied to the enclosed items if the user is the owner of such items. When removing a permission, the permission will be removed to the enclosed items if the user is the owner and if the permission on the items is equal or inferior to the one being removed. When downgrading a permission, a similar behavior will apply.



Approach for multi item share

As it would be possible for a user to select multiple folders (or even a collection of folders and resources) and perform a share operation, passbolt will reuse the same principles that is available for the current multi password selection bulk share. It will present a list of all permissions present on all selected items and show a "varies" permission option in the list.

The difference between the multi-share permission and the actual permission of the individual item, will be treated as the new permission for this item. In order terms: added, updated, removed permissions will be applied, permission left on "varies" will remain the same.

Let's take the case of a user that is both owner of Folder A and B, and wants to edit the permissions for another user:

Folder A	Folder B	Permission initially displayed on multi-share screen	Permission selected on multi-share screen	Permission after save for Folder B
Owner	N/A	varies	varies	N/A
Read	Update	varies	varies	Update
Read	Update	varies	Update	Update
N/A	Owner	varies	N/A (deleted)	N/A
Read	Read	Read	Read	Read
Read	Read	Read	Update	Update
Read	Read	Read	N/A (deleted)	N/A

Please note that in the special case where a muti-share would create an item without owner, the ownership right is not dropped / downgraded, but the rest of the changes are still applied.

Approach for folder deletion

By default when deleting a folder the enclosed content is moved at the root folder. We will be proposing an option for the user to also delete the content of the folder, where possible. If it is not possible (for example the user is not the owner of an enclosed children) the items will be moved to the root folder.



Approach for bulk operations and atomicity of large operations

Another challenge of working with folders is that an operation simple in appearance for the user may trigger a large number of operations in the background. Let's say a given user selects multiple folders enclosing multiple levels of items and drop them in a folder with different permissions rights. In this case passbolt may end up with a lot of passwords to generate and push to the server.

One approach like passbolt uses for group could consist of pushing all the changes to the server at once and have it recorded as a single atomic operation. This has the obvious advantage of keeping the system consistent. However, this method has the inconvenience of potentially sending very large requests to the server. To be sustainable, passbolt clients would then need to split such large request, therefore introducing a transaction system with a start and end, which would also carries its own challenges. To make things more complicated, what should then happen if another user decides at the same time moving things around?

Approach for bulk operations

Passbolt approach to avoid having the send to the server large state changes, is to break a big operation into a lot of small ones. When performing a bulk move, the system will actually move the items one by one. If the user stops in the middle, for one reason or the other, some items will have moved, others will still be in their original location.

This is similar to what can be seen a file system. For example, if you move a bunch of large files over a hard drive for example, the operating system will try to move the file one by one and stops where it left off if the drive becomes full or unreachable.

Another issue for such bulk operations is the frequency of the email notifications. Nobody wants to receive individual emails for an operation affecting dozens of records. The approach to limit this email notification would be to produce a digest notification instead. This approach will be reused to solve a similar issue with password import.





Quand tu importes 600 mots de passe dans @passbolt et que tu oublies de couper la notification individuelle par email



Fig. we got your back Quentin

Approach for concurrent operations

When performing a bulk operation, if a schedule operation becomes unavailable, passbolt will provide feedback to the user. For example if a user A is moving a bunch of folders into another one, and that another user drops write access to the first user in the middle of the move, then passbolt will display an error and stop.

In a case where the situation has changed but is not a deal breaker, such as the permissions on an item have changed in the meantime (for example another user was added to the permission list of the destination folder), we will display a warning and propose the user to continue or stop.

While this approach may create occasional situations where the results in not explicit for all users, we believe that this approach will generate less friction.



Functional specifications

User Experience

Browse folders

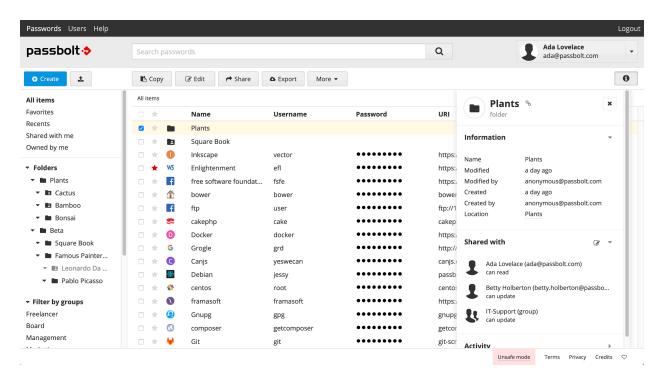


Fig. password workspace

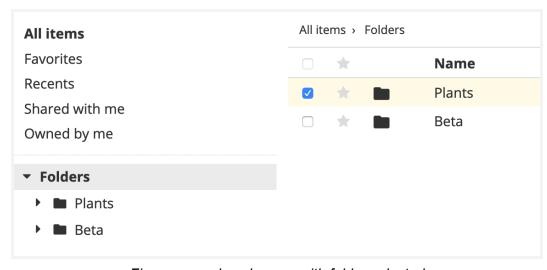


Fig. password workspace with folder selected



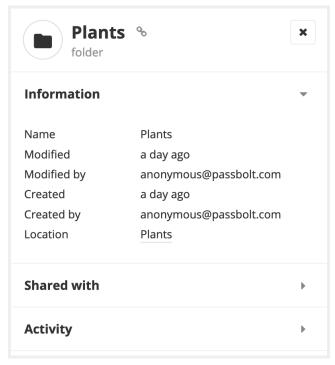


Fig. folder sidebar

Create folder

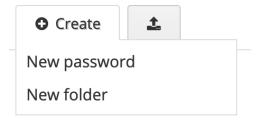


Fig. main create button now contains two options create folder, create password



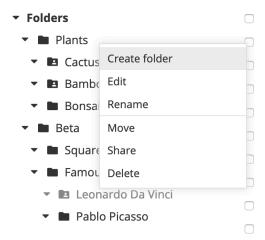


Fig. create folder from folder tree widget contextual menu

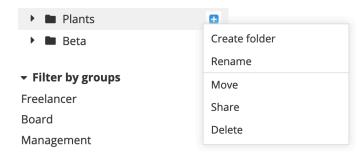


Fig. using action button at the end of the row to trigger contextual menu

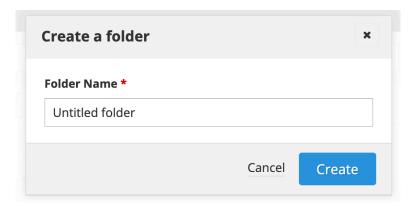


fig . create folder dialog with Untitled folder set by default



Move folders

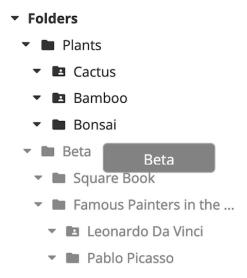


Fig. drag and drop "Beta" folder, makes children disabled

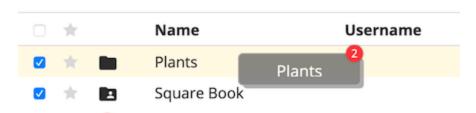


Fig. drag and drop with multiple items selected

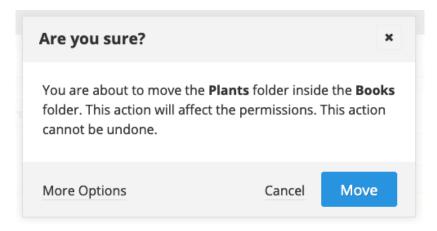


Fig. move confirmation dialog



Delete folder

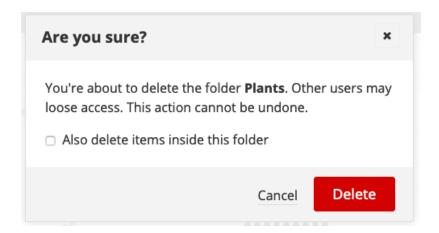


Fig. delete folder confirmation dialog

Contextual warnings

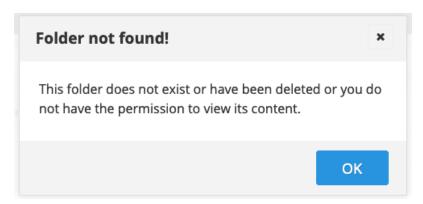


Fig. folder not found



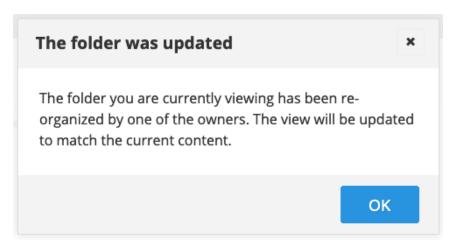


Fig. folder rearranged

Contextual Folder Menu

Contextual Folder Menu opens with a right-click on an Item.

The list of actions described below should be available when a user open the menu from an Item (Folder/Resource) and varies depending on the permissions the user has on the Item and the type of the Item.

Action / Permission Type	Item Type	OWNER	UPDATE	READ
New folder	Folder	X	X	
Edit	Folder	х	Х	
Share	Folder	Х		
Move	Folder	Х		
Delete	Folder	Х		
Move To	Resource	Х		
Remove From	Resource	Х		



User-stories

This section describes the user stories for the folder feature. While it does not take into account all the cases, it tries to provide an accurate view fo the requirements (in the box below the story title) as well as description of the user acceptance scenario (in BDD format).

An overview of all the user stories by capabilities can also be found in a spreadsheet format.

As a logged-in user I can search for a folder

As a logged-in user I do not see my folders in the grid by default under all items

Folders are not displayed under all items by default

Given that I am a logged-in as Ada
And that I own Folder A1, A2
And that A2 is inside Folder A1
And that I am on the password workspace
When I click on "All items" in the left sidebar
Then I do not see Folder A1 or A2 in the grid

As a logged-in user I can search for folders

Search returns both folders and resources

Given that I am a logged-in as Ada
And that I own "Folder A1", "Folder A2"
And that A2 is inside Folder A1
And that I am on the password workspace
When I type "Folder" in the search bar
Then I can see Folder A1 and A2 are displayed in the Grid
When I continue typing " A"
Then I can see Folder A1 and A2 are displayed in the Grid
When I continue typing " A1"
Then I see Folder A1 is displayed in the Grid
And I do not see A2 in the Grid
When I select all the text
And I press delete



Then I see the content of "All items" again And I do not see Folder A1 and A2

As a logged-in user I can navigate the folders tree

As a logged-in user I can see the Folders in the Folders Tree Widget

- ✓ Folder Tree Widget is displayed on the Password Workspace.
- ✓ Folder Tree Widget displays only the 1st level folders by default.
- ✓ Folder Tree Widget does not display resources.
- ✓ All folders and their children are folded.
- ✓ Folder Tree Widget is showing only folders I can see.

Given that I am a logged-in as Ada

And that I own Folder A1, A2

And that A2 is inside Folder A1

And that Betty owns Folder B

When I open the Password Workspace

Then I see the see the Folder Tree Widget

And I see the Folders located at the Folders Root

And I see Folder A1

And I see all sub-folders folded

And I do not see Resources in the Folder Tree Widget

And I do not see Folder B

As a logged-in user I show / hide the folder widget content

✓ The folder widget content can be hidden

Given that I am a logged-in user on the password workspace
And that I can see the Folder Tree Widget content
When I click on the icon next to the Folder Tree Widget title
Then I do not see the Folder Tree Widget content

As a logged-in user I can expand / collapse sections of the folder tree

- ✓ Collapsing/expanding Folder Tree Widget items does not filter the grid
- ✓ Sub folder are collapsed by default when expanding the parent folder.
- ✓ Sub folder that were expanded stay expanded when parent is re-expanded

Given that I am a logged-in user on the Password Workspace



And that I can see the Folder Tree Widget
And that I am the owner of Folder A, B, C
And that Folder A contains Folder B contains Folder C
When I click on the icon to expand the Folder A
Then the Folder A is not selected or highlighted
And the content of the grid does not change
And the Folder B is visible and collapsed
And the Folder C is not visible
When I click on the icon to expand the Folder B
Then the Folder C is visible and collapsed
When I click on the icon to collapse the Folder A
Then the Folder B and C is not be visible
When I click on the icon to expand the Folder A
Then the Folder B is visible and expanded
And the Folder C is visible and collapsed

As a logged-in user I can filter the password grid by folders

As a logged in user I can select the root Folder using the Folder Widget

```
\checkmark Folder widget title acts as a filter to show the Root Folder
```

Selecting the root folder filters the grid

Given that I am a logged-in user on the Password Workspace
And the root folder contains Folder A and resource 1
And that the "All" filter is selected
When I click on "Folders" in the folder Widget
Then I see "Folders" is highlighted
And I see "Folders" is selected
And I see the password grid is updated
And I see Folder A and resource 1 in the grid
And I see the Breadcrumb shows "Folders".

As a logged-in user I can select Folders using the Folder Widget

```
\checkmark A selected folder is highlighted in the Folder Tree Widget but stays collapsed
```

- \checkmark Breadcrumb is updated to match the path of the Current Folder.
- Password Grid displays all the Items of the Current Folder.

Given that I am a logged-in user on the Password Workspace



And that Folder A contains Folder B contains Folder C
And that Folder A contains Resource 1
When I click on folder A in the Folder Widget
Then I see the Folder A is highlighted in the Folder Tree Widget.
And I see Folder A is collapsed
And I see the Breadcrumb shows "Folders > Folder A".
And I see the Password grid shows Folder B and Resource 1

As a logged-in user I can navigate to the root folder in the details sidebar

```
    ✓ As LU I should navigate to the root folder of a resource in the details sidebar
    ✓ As LU I should navigate to the root folder of a folder in the details sidebar
```

Scenario: As LU I should navigate to the root folder of a resource in the details sidebar

Given that I am a logged-in user on the Password Workspace
And a resource has the root folder as folder location
When I select the root folder in the resource details sidebar
Then it should display the root folder's resources
And it should hide the details sidebar

Scenario: As LU I should navigate to the parent folder of a folder in the details sidebar

Given that I am a logged-in user on the Password Workspace
And a folder A has the root folder as folder location
When I select the root folder in the resource details sidebar
Then it should display the root folder's resources
And it should hide the details sidebar

As a logged-in user I see a folder details in the sidebar (right side)

```
✓ Selecting a folder show details in the sidebar✓ Password Grid displays all the Items of the Current Folder.
```

Given that I am a logged-in user on the Password Workspace
And that Folder A contains Folder B
And the sidebar view toggle is enabled
When I select Folder B
Then I see the sidebar



```
And I see the name "Folder B" the sidebar

And I see the last modified date

And I see the creation date

And I see the location with the parent name set to "Folder A"

And I see the "shared with" section is open

And I see the list of people that have access

And I see my name in the list of people that have access

And I see my avatar in the list
```

As a logged-in user I see a locate a folder using the right sidebar

```
✓ Selecting a folder show details in the sidebar✓ Password Grid display all the Items of the Current Folder.
```

```
Given that I am a logged-in user on the Password Workspace
And I have "all items" filter selected
And that Folder A contains Folder B
And that Resource 1 is contained into Folder B
And the sidebar view toggle is enabled
When I select Resource 1 in the grid
Then I see the sidebar
And I see the location is set to "Folder B"
When I click on Folder B
Then I can see the folder tree widget opens
And I see folder B is selected
And the grid is updated with the content of Folder B
And Resource 1 is selected
```

As a logged-in user I can select Folders using the Password Grid

 \checkmark Selecting a folder in the grid also select it in Folder Tree Widget

Given that I am a logged-in user on the Password Workspace
And that Folder A contains Folder B contains Folder C
And that Folder A contains Resource 1
When I click on folder B in the password grid
Then the Breadcrumb show Folders > Folder A > Folder B.
And Folder C is visible in the Password grid
And the Folder B is highlighted in the Folder Widget
And Folder A is expanded
And Folder B is collapsed



As a logged-in user I can select Folders using the Breadcrumbs

✓ User can click on a Folder in the Breadcrumb to select it

Given that I am a logged-in user on the Password Workspace

And that Folder A contains Folder B contains Folder C

And that Folder B is selected

When I click on the Folder A on the Breadcrumb

Then I see Folder A is highlighted and selected in the Folder Tree Widget.

As a logged-in user I mark a folder as favorite

As a user I can mark/unmark a folder as a favorite

✓ User can mark / unmark a folder as favorite just like a resource

Given that I am a logged-in user on the password workspace
And that I own a folder named Folder A
When I click on Folders in the folder tree widget
Then I can see Folder A in the grid
And I can see a grey star in the grid
When I click on the star
Then I can see a notification saying the folder was marked as favorite
And I see the start is now red
When I click on the star again
Then I can see a notification saying the folder was removed from favorites
And I see the start is grey

As a user I can filter folders by favorites

✓ User can see folders under the favorites

Given that I am a logged-in user on the password workspace
And that I own a folder named Folder A
And that Folder A is marked as favorites
When I click on "favorites" in the left side navigation filters
Then I can see Folder A listed in the grid



As a logged-in user I can create a folder

As a logged-in user I can create a folder at the root using the Folder Tree Widget contextual menu

- ✓ User can create a folder at the root.
- ✓ User can submit the create folder dialog form using enter key
- ✓ The Password Grid must be updated.
- ✓ The Folder Tree Widget must be updated.
- ✓ By default the folder name is set to "Untitled folder"

Given that I am a logged-in user on the Password Workspace

And that I can see the Folder Tree Widget

When I right-click on the root element of the Folder Tree Widget

Then I see the Contextual Menu

And I see the New folder action in this menu.

When I click on the New folder action

Then I see the create folder dialog

When I press enter on my keyboard

Then I see a folder called "Untitled folder" appear in the Folder Tree Widget.

And I see the Untitled folder appear in the Password Grid.

As a logged-in user I can create a folder inside a folder I can update using the Folder Tree Widget contextual menu

- ✓ User can create a folder inside another folder if they own or can update
- ✓ Creating a folder inside a collapsed folder does not open it
- ✓ Folder name does not need to be unique.
- ✓ User can see what is the path of the parent folder.

Given that I am a logged-in user on the Password Workspace

And that I can see the Folder Tree Widget

And that Folder A is in the tree, collapsed and selected

And that Folder A contains Folder B

And I have at least UPDATE permission on Folder A

When I right-click on the Folder A in the Folder Tree Widget

Then I see the Contextual Menu

And I see the New folder action in this menu.

When I click on the New folder action

Then I can see the create folder dialog.



And I can see the Parent folder input is showing "Folder A" When I enter the folder name "Folder B" And I click Create
Then I see two Folder B in the Password Grid.
And I do not see the Folder B in the Folder Widget
When I expand Folder A
Then I see two Folder B in the Folder Widget

As a logged-in user I can not create a folder inside a folder I can only read

- ✓ New folder action is disabled in contextual menu if folder is set to read
- ✓ Main create button menu is also disabled

Given that I am a logged-in user on the Password Workspace
And that I can see the Folder Tree Widget
And that Folder A is in the tree, collapsed and selected
And that Folder A contains Folder B
And I have at READ permission on Folder A
When I right-click on the Folder A in the Folder Tree Widget
Then I see the Contextual Menu
And I see the "New folder" action in this menu is disabled.
When I click on Folder A
Then I can see the create button is disabled
When I click on the createbutton
Then I can see a warning dialog saying "You do not have the permission to create an item in this folder."

As a logged-in user I can create a folder from the main create button

- ✓ User can create folder from the Create button of Password Workspace.
- ✓ The root folders is set as the parent path (unless a folder is selected)
- ✓ Dialog can be closed using a dialog top right "x" button

Given that I am a logged-in user on the Password Workspace
And that I can see the Folder Tree Widget
When I click on the Create button
Then the Create Menu should open
And I should see the New folder action in the list.
When I click on the New folder action
Then I can see the create folder dialog
When I press enter



Then I see an on screen notification saying the folder was created When I click on Folders in the folder tree widget

Then I can see the newly created folder "untitled folder"

As a logged-in user I can create a folder inside another folder from the main create button

✓ If folder is selected it is used as parent for new folder

✓ Same goes for passwords

Given that I am a logged-in user on the Password Workspace

And I own Folder A

And that I can see the Folder Tree Widget

And that Folder A is in the tree, collapsed and selected

When I click on the Create button

Then the Create Menu should open

And I should see the New folder action in the list.

When I click on the New folder action

Then I can see the create folder dialog

When I press enter

Then I see an on screen notification saying the folder was created

Then I see untitled folder in the grid

When I expand folder A in the folder tree widget

Then I see untitled folder under Folder A in the folder tree widget

As a logged-in user I cannot create folder name with more than 255 chars

- ✓ User can redefine a name for the folder easily
- ✓ Users can close the dialog using cancel
- ✓ Maximum length for the name is 255.

Given that I am a logged-in user on the Password Workspace

And I see the create folder dialog open

Then I can see the "name" label is marked as mandatory

And I can see the name text input is populated with "Untitled folder"

When I click on the name text input

Then I can see it is empty

When I type a very long name of 255 chars

Then I cannot type anymore

When I click on Cancel button

Then I can not see the create folder dialog



As a logged-in user I can close the create folder dialog using the keyboard

```
\checkmark User can close the create dialog using escape key
```

✓ User can close the move dialog using escape key

Given that I am a logged-in user on the Password Workspace

And I see the create folder dialog open

When I click on change parent location

Then I see the move dialog

When I press the escape key

Then I do not see the move dialog

When I press the escape key

Then I can not see the create folder dialog

As a logged-in user creating a folder inside a folder the parent folder permission mask is reused in the new folder

✓ Parent permissions are applied to the children folder by default

Given that I am a logged-in user on the password Workspace

And that I own a "Folder A" with Accounting as owner and Ada as owner

When I left click on Folder A

And I right click on Folder A in the Folder Widget

And I click on "New Folder" in the contextual menu

Then I can see the create folder dialog

When I enter Folder B as name

And I click create button

Then I can see Folder B in the password workspace

When I click on Folder B

And I click on the "share" button

Then I see Folder B permissions

And I see Folder B permissions are the same than Folder A

As a logged-in user I can rename a folder

As a logged-in user I can rename a folder I can update

```
✓ Edit is essentially rename
```

✓ Rename can be done using contextual menu



- ✓ Rename can be done using the main action buttons if folder is selected in the grid (but not using the Folder Tree Widget)
- \checkmark Closing the dialog should be possible using cancel, cross or esc on keyboard

Given that I am logged in as Betty

And that I can update Folder A

And that Folder A is located a the root folder

When I right click on Folder A in the folder widget

Then I see "rename folder" in the contextual menu

When I click on "rename folder" in the contextual menu

Then I see the rename folder dialog

And I see a cancel button

And I see a close button in the top right corner

When I press escape

Then rename folder dialog is closed

When I click on folder A in the folder widget

Then I can see the "edit" button is disabled in the grid action menu

When I click on folder A in the grid

Then I can see the "edit" button is enabled in the grid action menu

When I press edit

Then I see the rename folder dialog

And I see "Folder A" is written in the input text field

When I select the Folder A text

And press delete on my keyboard

And I click the "rename" button

Then I see an error message saying "the folder name cannot be empty"

When I enter "Folder a" in the folder name input field

And press "rename" button

Then I see the folder name is updated to "Folder a"

And I see "Folder a" in the folder widget

As a logged-in user I cannot rename a folder I cannot update

- ✓ Rename should be disabled in contextual menu if user has only read right
- \checkmark Same for the main action menu when the folder is selected in the grid

Given that I am logged in as Betty

And that I only have "read" right on Folder A

And that Folder A is located a the root folder

When I right click on Folder A in the folder widget

Then I see "rename folder" in the contextual menu is disabled



When I left click on Folder in the grid
Then I can see the "edit" button is disabled in the action menu

As a logged-in user I can import / export files with folders

As a logged in user I can import a file with folders from Keepass

- ✓ Folders from keepass archived can be imported in passbolt
- ✓ File content is imported under a folder bearing the file name

```
Given that I am logged in as Ada
And I am on the password workspace
And I have a keepass file "keepass.kdbx"
And Keepass file contains Folder A which contains Resource 1
When I import the keepass file
Then I can see a folder name "keepass" at the root in the folder tree widget
When I expand the folder "keepass"
Then I can see Folder A
When I click on Folder A
Then I can see Resource 1 in the grid
```

As a logged in user I can export folders to keepass

- ✓ Selecting Folders or a given folder enables export
- ✓ Export can be triggered for keepass with enclosed folders
- ✓ For other format only content of folder is exported

```
Given that I am logged in as Ada
And I am on the password workspace
And I own Folder A, B and resource 1
And Folder B is inside Folder A
And Resource 1 is inside folder B
When I select Folder A in the folder tree widget
Then I can see the export button is enabled
When I click on the export button in the main action menu
And I select keepass format
And I click Export
And I enter a passphrase
And I click continue export
Then I can see a file download prompt
When I press enter
```



Then I can see the file is downloaded When I open the file with keepass THen I can see Folder A, Folder B and resource 1 And Folder B is inside Folder A And Resource 1 is inside folder B

As a logged in user I can export the content of a folder to CSV

✓ For other format only content of folder is exported

Given that I am logged in as Ada And I am on the password workspace And I own Folder A, B and resource 1 And Folder B is inside Folder A And Resource 1 is inside folder B When I select Folder A in the folder tree widget Then I can see the export button is enabled When I click on the export button in the main action menu And I select CSV format And I click Export And I enter a passphrase Then I can see a file download prompt When I press enter Then I can see the file is downloaded When I open the file with a text editor Then I can see resource 1

As a logged-in user I can share a folder

As a logged-in user I can share an empty folder using the folder widget contextual menu

- ✓ User can define a Permissions Mask for folder at the root
 - Current user is added by default
- ✓ Users can be added to the permissions mask
- ✓ Permission mask should contain at least one owner
- ✓ Groups can be added in permission mask
- ✓ Sharing an empty folder should not trigger any passphrase dialog

Given that I am logged in as Ada on the password workspace When I open the create folder dialog using the main create button And I give the folder the name "Folder A"



And I press enter Then I can see Folder A in the folders tree When I right click on Folder A Then I can see the contextual menu And I can see a share option Then I see the share dialog And I see that I am listed in the main list And I see I have the owner permission and cannot change it And I see a disabled delete button next to my name And I see a "Share with people or groups" label And I see an input text box When I type "Be" Then I see an autocomplete dialog And I see "Betty" is listed When I click on "Betty" in the autocomplete dialog Then I see Betty is added to the main list with "read" permission And I see a delete button next to Betty is enabled And I see the delete button next to my name is enabled And I see the dropdown is enabled When I click on the dropdown next to my name Then I see 3 options "Owner", "Update", "Read" When I select "Read" Then I see an error message "There should be at least one owner" When I select the option "Owner" And I click on the delete button next to Betty name Then I can see Betty is removed from the list When I type "Acc" Then I can see "Accounting" group in the autocomplete dropdown list When I press the arrow key down on my keyboard Then I see the Accounting group is selected in the autocomplete dropdown list When I press enter Then I see Accounting group is added to the permission list And I click on the share button

As a logged-in user I can share a folder with using the share button in the grid action list

Then I can see a screen notification telling me the folder has been shared

✓ Adding permissions on non-empty folders should trigger encryption

Given that I am logged in as Ada on the password workspace And I own a Folder A, B and resource 1 And Folder A contains Folder B that contains Resource 1



When I select Folder A in the password grid Then I can see the share button is enabled When I click on the share button Then I can see the share dialog When I add Betty to the list of people And I press enter Then I can see the passphrase dialog When I enter my passphrase And I press enter Then I can see a progress dialog And I see it says "Applying permissions to Folder A" and is 30% loaded Then I see it says "Applying permissions to Folder B" and is 60% loaded Then I see it says "Apply permissions to Resource 1" and is 90% loaded Then I see it is 100% loaded And I see the dialog closes on its own And I see a notification on the screen saying the folder was shared

As a logged-in user I can not share a folder I do not own

✓ Read or Update permissions does not give right to share

Given that I am logged in as Ada on the password workspace
And I can read Folder A
When I select Folder A in the password grid
Then I can see the share button is disabled
When I right click on Folder A in the folder tree widget
Then I see the contextual menu
And the share option is disabled

As a logged-in user I can not share everything in a folder I own that contains content I do not own

- ✓ Sharing is done recursively but only where possible
- ✓ A warning is shown when it's not possible
- ✓ User can choose to ignore this dialog the next time

Given that I am logged in as Ada on the password workspace And Ada own Folder A and resource 1 And Ada can read Folder B and resource 2 And Carole own Folder 2 and resource 2 And Folder A contains Folder B contains Resource 1 and 2



```
When I select Folder A in the password grid
Then I can see the share button is enabled
When I click on the share button
Then I see the share dialog
When I add Betty to the list of people that read
And I press enter
Then I see a warning dialog
And the dialog says I do not have the right on all items inside the folder
And therefore I will not be able to share everything
And I see a checkbox "Do not show this dialog again".
When I press "OK"
Then I can see the enter passphrase dialog
When I enter my passphrase
And press enter
Then I see the progress dialog
And I see it says "Applying permissions to Folder A"
Then I see it says "Applying permissions to Resource 1"
Then I see it is 100% loaded
And I see the dialog closes on its own
And I see a notification on the screen saying the folder was shared
When I select Folder B
Then I can see the Folder permission: Ada:Read, Carole:Owner
When I select Resource 2
Then I can see the Folder permission: Ada:Read, Carole:Owner
```

As a logged-in user I can move a folder inside another

As a logged-in user I can move a personal folder inside another with drag and drop using the folder Widget.

✓ User can move folders inside the Folder Tree Widget.
 ✓ Folders are unfolded on drag and hover in the Folder Widget
 ✓ When permission are same there is no confirmation needed

Given that I am a logged-in user on the Password Workspace
And that I'm the sole owner of Folder A and B
And that I see Folder A and B in the Folder Tree Widget
When I click down on Folder A from the Folder Tree Widget
And I move Folder A towards the Folder B in the Folder Tree Widget
Then I can see the drag and drop bubble
When I hover Folder B



Then I can see the Folder B is expanded

And I can see Folder B is highlighted

When I drop the content on top of Folder B

Then I see the Folder A is shown under Folder B in the Folder Tree Widget

And I see Folder B is selected and expanded

And I see Folder A in the grid

As a logged-in user I can move a folder inside another folder using a drag and drop on the Grid

- ✓ User can move folders inside Grid
- ✓ Hovering with a folder in the grid on another folder enters it

Given that I am a logged-in user on the Password Workspace And that I see a Folder A, B in the Folder Tree Widget and Password Grid And that the Permission mask of Folder A, B are equal And that I am owner for both of them And they are all located at the root folder And the root folder is selected When I drag the Folder A from the Password Grid And I hover Folder B in the password grid Then I can see the Folder B is highlighted When I keep hovering for 3 seconds Then I see the Folder B is blinking slightly And I see Folder B is selected And I see Grid is updated with the content of Folder B When I drop the folder in the grid Then I can see the Folder Widget is updated And I see Folder B is unfolded And I see folder A is inside Folder B

As a logged-in user I can move a folder inside another using both the password Grid and Folder Widget

```
✓ User can move folders from Grid to Widget✓ User can move folders from Widget to Grid
```

Given that I am a logged-in user on the Password Workspace

And that I see a Folder A, B, C in the folders tree widget and Password Grid

And that the Permission mask of Folder A, B and C are equal

And that I am owner for all of them



And they are all located at the root folder
And the root folder is selected
And I drop it into Folder B in the Password Grid
Then I see the Folder A is shown under Folder B in the folder tree widget
When I drag folder B from the password grid
And drop it into folder C in the folder tree widget
Then I see the Folder B is shown under Folder C in the folder tree widget
When I drag folder A from the folder tree widget
And drop it in the Folder C in the grid
Then I see the Folder Tree Widget is updated to show Folder A under folder C

As a logged-in user I can move a folder inside another using the move folder dialog

- ✓ User can move folders using a dialog
- ✓ Move dialog can be closed with cancel, close icon, and escape key press
- ✓ Move dialog have a search that acts as autocomplete with suggestions
- √ Move dialog allow to navigate inside folders using double clicks
- ✓ Simple click on folder select the folder
- √ Folder permissions are shown next the name

And I can see a list of folders with folder A, B

And I can see "owner" permissions next to A and B name

Given that I am a logged-in user on the Password Workspace And that I see a Folder A, B, C in the folders tree widget and Password Grid And that the Permission mask of Folder A, B and C are equal And Folder C is inside folder B And that I am owner for all of them And they are all located at the root folder And the root folder is selected When I right click on Folder A Then I can see a contextual menu And I can see a "move folder" option When I click on move folder option in the contextual menu Then I can see the move folder dialog When I press escape on my keyboard Then I do not see the move dialog anymore When I click on Folder A Then I click "More" in the main action menu Then I can see a drop down menu And I can see a "Move" option When I click on move folder Then I can see the move folder dialog



And Folder A is disabled
And the up button disabled
And the breadcrumb says all folder
When I double click on folder B
Then I can see Folder C
And I can see the breadcrumb says All folders > folder B
When I click on the up button
Then I can see folder A and B
When I click on folder B
And I click on the move button
Then I do not see the move dialog anymore
And I see an on screen notification that folder A was moved
And I see Folder A is inside Folder B

As a logged-in user I can move a folder I am the owner of into another one with different permissions

- ✓ Moving a folder into one with different permissions triggers prompt
- By default permissions of the new parent are applied to children
- ✓ Permissions of the previous folder parent are removed
- ✓ Permissions that are not in the previous parent are kept
- ✓ Permissions are applied recursively where possible
- ✓ Items where permissions that cannot be applied are ignored
- ✓ Permissions can be dropped, downgraded, upgraded, added

```
Given that I am logged in as Carole on the password workspace
And Folder A is owned by Ada and Betty
And Folder B is owned by Carole and can be read by Dame
And Folder D is owned by Ada, Betty, Carole
And Folder D can be read by Dame and Edith
And Folder D can be updated by Francis
And Folder D is in folder B for Carole
And Folder D is in folder A for Ada
And Carole own folder C
And Edith can update folder C
When I drag and drop Folder D inside Folder C
And select folder D
Then I can see the permissions from Folder A are still present (Ada:Owner,
Betty:owner)
And permissions from Folder B have been removed (Dame:Read)
And permissions from Folder C have been applied (Carole:Owner, Edith:Update)
And direct permissions on Folder D are kept (Frances:Update)
```



As a logged-in user I can move a folder I own into another one I own but with different permissions and keep the permissions identicals

✓ It's possible to move folders without changing permission

Given that I am a logged-in user on the Password Workspace

And that I'm the owner of Folder A, B

And that Betty can Read folder B

When I drag and drop Folder A into Folder B

Then I see a the move confirmation dialog

Then I see a confirmation dialog

When I click on "More options"

Then I see the default option is "Apply new permissions"

And I see one option "Do not change existing permissions"

And I see one option "Choose which permission to apply manually"

When I select the second option

Then I see the Folder A is shown under Folder B in the Folder Tree Widget

When I select Folder B

Then I can see Betty is listed in Folder B permission list as Read

As a logged-in user when I move a folder into another one with different permissions I can choose to select which permissions apply manually

```
    ✓ Moving a folder into one with different permissions triggers prompt
    ✓ User can select which permissions to apply in a dialog
    ✓ There is tooltip next to the user that shows rights for both folders
    ✓ There is a checkbox to apply the permissions to the resources
    ✓ There is a checkbox to apply the permissions to the sub folders
```

```
Given that I am logged in as Carole on the password workspace
And Folder A is owned by Carole and can be read by Dame
And Folder B is owned by Carole and can be read by Dame
And Folder C is owned by Carole and can be updated by Edith
And Folder B is inside folder A
When I drag and drop Folder B into Folder C
Then I see the move confirmation dialog
When I click on "More options"
And I select the option to select the permissions manually.
And I click Confirm
Then I see the Permission Selection dialog
```



```
And I see the title "Select permissions" and "Folder D"
And I see a cancel button in the Permission Selection dialog
And I see a close button with a cross icon in the top right corner
And I can see a checkbox "Override existing permissions"
And I see list of permissions
And I see that I am the owner
And I see that Edith is listed as "Varies" and text says "Should be added"
And I see that Dame is listed as "Varies" and text says "Should be deleted"
And I see a tooltip next to it
When I hover on the tooltip
Then I can see "Origin permission: read, destination: none"
When I click on the "Save" in the move dialog
Then I see a warning message
And the warning message says some permissions still need to be set
When I delete permission for Dame
When I select update permission for Edith
And I click "Save"
Then I see the Folder B is shown under Folder C in the Folder Tree Widget
When I select Folder B
Then I can see Dame is not listed in the permissions in the sidebar
Than I can see Edith can update
```

As a logged-in user I can cancel the move a folder into another one with different permissions

```
✓ User can cancel the move using cancel button or cross button✓ Cancelling on "more option" or "manual right selection" dialogs cancel all
```

```
Given that I am a logged-in user on the Password Workspace
And that I'm the owner of Folder A, B
And that Betty can Read folder B
When I drag and drop Folder A into Folder B
Then I see the Move Confirmation dialog
When I click on cancel (or the top right close button)
Then I see the password workspace
When I drag and drop Folder A into Folder B
Then I see the Move Confirmation dialog
When I click on "More option"
Then I can see the move option dialog
When I click on cancel (or the top right close button)
Then I see the password workspace
```



As a logged-in user I can move a shared folder to another location without affecting another user tree I cannot see

- ✓ User can have their own representation of the tree
- ✓ For a given user a folder can only be in one place
- ✓ A folder can be into multiple folders at once from a system perspective

Given that there are four folders: A, B, C, D And that Ada is the owner of Folders A, B and C And that Carole is also the owner of Folder C and D And Folder B was placed inside Folder A by Ada And Folder C was placed inside folder D by Carole When I login as Ada Then I see Folder B inside Folder A And I see Folder A in my Root Folder And I see Folder C in my Root Folder And I cannot see Folder D When I move the Folder C into the Folder B And I select to apply the parent folder permission to Folder D Then I see Folder C inside the Folder B When I login as Carol Then I see Folder D into my Root Folder And I see Folder C inside folder D

As a logged-in user I can not move a folder inside its children

- ✓ User cannot move a parent folder inside a children
- ✓ Visual cues and dialog are shown if the user tries to do it
- Moving a children folder inside its existing parent does nothing

Given that I am logged in as Ada on the password workspace
And I own Folder A, B
And Folder B is inside Folder A
When I select folder A
Then I can see Folder B in the grid
When I drag folder A from the folder tree widget
Then I can see Folder B looks disabled in the grid
When over Folder B in the grid
Then I can see my cursor changes to forbidden
When drop it in the Folder A in the grid
Then I can see a dialog with an error message



And the message says this operation is not allowed

As a logged-in user I can not move a folder into a folder I cannot at least update

- ✓ User can not move shared folders that are not owner of
- ✓ Cursor and target folder changes to show it's not possible
- ✓ An error dialog will be shown if user tries to pursue it

Given that I am Ada logged-in on the Password Workspace
And that Betty is the owner of Folder A
And I have read right on Folder A
And I am the owner of Folder B
When I click to drag and drop Folder B
Then I see the drag and drop bubble
Then I can see Folder A is disabled
When I hover on top of Folder A
Then I can see my cursor change into a forbidden cursor
When I release to drop Folder B into Folder A
Then I can see an error dialog telling me I can not do this
And I can see the dialog says that I am not the owner of Folder A
When I click "OK" button
Then I the dialog is closed

As a logged-in user I can not move a read only item already contained in a read only folder

✓ Read only item can only be moved if they are at the root

Given that I am Ada logged-in on the Password Workspace
And that Betty is the owner of Folder A
And I have read right on Folder A
And I am the read right of Folder B
And Folder B is inside Folder A
And I am the owner of Folder C
When I click to drag Folder B
Then I do not see the drag and drop bubble
And I can see my cursor change into a forbidden cursor
When I drop Folder B into Folder C
Then I can see an error dialog telling me I can not do this
And I can see the dialog says that Folder B is read only
When I click "OK" button



Then I the dialog is closed

As a logged-in user I can move a read only item if it is at the root folder or a folder I own

✓ Read only item can only be moved if they are at the root

Given that I am Ada logged-in on the Password Workspace
And that Betty is the owner of Folder A
And I have read right on Folder A
And I am the read right of Folder B
And I am the owner of Folder C
When I click to drag Folder B
Then I see the drag and drop bubble
When I drop Folder B into Folder C
And validate the move
Then I can see Folder B is moved to Folder C
When I click to drag Folder B
Then I see the drag and drop bubble
When I drop Folder B into Folder root
And validate the move
Then I can see Folder B is moved to the root

As a logged-in user I can move multiple resources and folders

This functions the same as moving folders inside folders (see previous stories). User can select multiple resources and use the move dialog or drag and drop to move them.

As a logged-in user I can move multiple resources inside a folder

```
Given that I am Ada logged-in on the Password Workspace

And that I own resource 1 and 2

And that I own Folder A

And Betty can read Folder A

When I select resource 1 and 2

And I right click on Resource 1

Then I can see a contextual menu with "move selection" enabled

When I click on "More" button in the action menu I can see a "Move" option

When I drag the selection toward Folder A

Then I can see a bubble with "Resource 1 and more"

When I drop the selection inside Folder A

Then I can see a move confirmation dialog
```



```
When I click confirm
Then I can see the enter your passphrase dialog
When I enter my passphrase and press enter
Then I can see the encryption progress dialog
Then I can see the password workspace
When I click on Folder A
Then I can see resource 1 and 2 inside
When I click on resource 1
Then I can see Ada is the owner and betty can read
When I click on resource 1
And I drag and drop it on "Folders" in the folder tree widget
Then I can see a move confirmation dialog
When I press confirm
Then I can see resource 1 is not in folder A anymore
When I click on Folders in the folder tree widget
Then I can see resource 1
When I click on resource 1
Then I can see Ada:owner as permissions
And I do not see Betty listed in the permissions
```

As a logged-in user I can move multiple folders inside a folder using the grid

```
Given that I am Ada logged-in on the Password Workspace
And that I own Folder A, B, C
When I select folder A and B in the grid
And I drag and drop them into folder C
Then I can see a notification that the folders have been moved
When I double click on Folder C in the grid
Then I can see folder A and B in the grid
```

As a logged-in user I can move multiple folders and resources inside a folder using the grid

```
Given that I am Ada logged-in on the Password Workspace
And that I own Folder A, B, C
And that I own Resource 1
When I select folder A and B and Resource 1 in the grid
And I drag them
Then I can see drag and drop bubbles saying "Folder A and more"
When I drop them into folder C
Then I can see a notification that the items have been moved
When I double click on Folder C in the grid
```



Then I can see folder A and B and Resource 1 in the grid

As a logged-in user I can delete a folder

As a logged-in user I can delete a folder I own

- ✓ User can delete a folder from the Contextual Menu.
- ✓ User can delete a folder from the main action menu
- ✓ User can delete a folder by pressing delete on keyboard
- ✓ User needs to confirm deletion
- ✓ User can close delete confirmation dialog using escape, cancel or close
- ✓ There is an option to also delete the content of the folder
- ✓ Content of deleted folder goes back to the root folder

Given that I am Ada logged-in on the Password Workspace

And that I own Folder A and B

And I own Resource 1

And Resource 1 is inside resource B

And Folder B is inside Folder A

When I click on folder A

And I press delete key on my keyboard

Then I see the delete confirmation dialog

When I click escape

Then I do not see the delete confirmation dialog

When I right click on folder A

Then I can see the contextual menu

And I can see the delete option in the contextual menu

When I click the delete option in the contextual menu

Then I see the delete confirmation dialog

When I click on cancel

Then I do not see the delete confirmation dialog

When I click on folder A in the grid

Then I see the delete button in the main action menu is enabled

When I click on delete button

Then I can see the delete confirmation dialog

When I click on the cross icon on the top right corner

Then I do not see the delete confirmation dialog

When I press the delete key on my keyboard

Then I can see the delete confirmation dialog

When I click on delete

Then I do not see the Folder A anymore

And I do see Folder B at the root



When I click on Folder B
Then I can see Resource 1

As a logged-in user I can delete a folder I own and the associated content

✓ There is an option to also delete the content of the folder

Given that I am Ada logged-in on the Password Workspace
And that I own Folder A and B
And I own Resource 1
And Resource 1 is inside resource B
And Folder B is inside Folder A
When I click on folder A
And I press the delete key on my keyboard
Then I see the delete confirmation dialog
And I see a checkbox "Also delete content inside this folder"
And the checkbox is unchecked
When I click on the checkbox
And I click on the delete button
Then I can see an on screen notification that the folder was deleted
And I do not see Folder A or B or resource 1 anymore

As a logged-in user I can not delete a folder I can update or read

✓ User must be the owner to delete a folder

Given that I am Ada logged-in on the Password Workspace
And that I can read Folder A
When I right click on folder A in the folder tree widget
Then I can see the contextual menu
And the delete option is disabled
When I click on the Folder A in the grid
And I click on the more button in the main action menu
Then I can see the delete action is disabled
When I press the delete key on my keyboard
Then I can see an error message dialog

As a logged-in user I can delete multiple folders at once

When selecting folders with owner permissions only, user can delete



Otherwise multiple delete is disabled

Given that I am Ada logged-in on the Password Workspace And I own Folder A and B And I can read Folder C When I select Folder A and B and C in the grid And I right click Then I can see a "delete all" option is disabled When I click on more in the main action menu Then I can see the delete option is disabled When I select Folder A and B only in the grid Then I can see a "delete all" option When I click on more in the main action menu Then I can see the delete option is enabled When I click on delete Then I can see a confirmation dialog telling I'm about to delete 2 folders When I press the enter key Then I do not see Folder A and B in the grid or folder tree widget And I see an on screen notification that the folders were deleted

As a logged-in user I can delete multiple folders and resources at once

- √ When selecting folders with owner permissions only, user can delete
- ✓ Otherwise multiple delete is disabled

```
Given that I am Ada logged-in on the Password Workspace
And I own Folder A and B and Resource 1
And I can read Folder C, and Resource 2
When I select All in the grid
And I right click
Then I can see a "delete all" option is disabled
When I click on more in the main action menu
Then I can see the delete option is disabled
When I select Folder A and B and Resource 1 only in the grid
Then I can see a "delete all" option
When I click on more in the main action menu
Then I can see the delete option is enabled
When I click on delete
Then I can see a confirmation dialog telling I'm about to delete 3 items
When I press the enter key
Then I do not see Folder A and B and resource 1 in the grid
```



And I see an on scree notification that the items were deleted

As a user with at least update permission I can remove items from a folder using contextual menu

- ✓ Its possible to remove items from folders
- ✓ It is the same than a move to the root folder
- ✓ Users must have at least update permission
- ✓ Confirmation is needed if users will lose access

Given that I am a logged-in user on the Password Workspace

And I own Folder A, Folder B and resource 1

And Betty can read Folder B

And Resource 1 is in Folder A

And Folder B is in Folder A

And Folder A is selected

When I select Folder B and Resource 1

And I right click in the grid

Then I can see a contextual menu

And I can see a "Remove from folder" option

When I click on Remove from Folder

Then I can see message telling me some rights will be lost for some users

When I press enter

Then I cannot see Resource 1 and Folder B in Folder A anymore

And I can see an on screen notification

And I see it is saying the items were removed from the folder

When I click on "Folders" in the folder tree widget

THen I can see Resource 1 and Folder B

When I right click on Resource 1 in the grid

Then I can see the contextual menu

And I can see the "Remove from folder option" is disabled

As an admin I can transfer the permissions of a folder when deleting a user or a group

As an admin I can transfer the permissions of a folder when deleting a user that is the sole owner of that folder

Given I am Admin

And I am logged in on the user's workspace

And Ada is the owner of Folder A and Resource 1



And Betty has red access to Folder A and Resource 1

When I click on Ada

And I click on the delete button

Then I should see a message explaining me why the user can't be deleted

And I should see the folder transfer section

And I should see the passwords transfer section

And I should see Folder 1 is requiring a transfer

And I should see Resource 1 is requiring a transfer

And I should see Betty in the lists of possible owners

When I select Betty as new owner for Folder A and Resource 1

When I click on delete button

Then I should see a success notification message saying the user is deleted

And I should not see Ada in the grid

As an admin I can transfer the permissions of a folder when deleting a group that is the sole owner of that folder

Given I am Admin

And I am logged in on the user's workspace

And Administration Group is the owner of Folder A and Resource 1

And Betty has red access to Folder A and Resource 1

When I right click on Administration group

And I click on the delete option in the contextual menu

Then I should see a message explaining me why the Group can't be deleted

And I should see the folder transfer section

And I should see the passwords transfer section

And I should see Folder 1 is requiring a transfer

And I should see Resource 1 is requiring a transfer

And I should see Betty in the lists of possible owners

When I select Betty as new owner for Folder A and Resource 1

When I click on the delete button

Then I should see a success notification message saying the group is deleted

And I should not see Administration group in the left sidebar

As a logged-in user i'm aware of concurrent changes made by another user

As a logged-in user I can see a warning dialog when I lose permissions on the folder I am currently viewing.

Users are moved to another folder if they lose READ permissions on the Current Folder.



✓ User got a message in a dialog with the user who dropped its permissions.

Given that I am a logged-in user on the Password Workspace

And that Folder A contains Folder B

And that my Current Folder is the Folder B

When I lose permissions on the Folder B

Then I see a dialog telling me that I lost permission

When I click OK

Then I see the Root Folder is selected.

And I do not see folder B bellow folder A anymore in the Folder Tree Widget

As a logged-in user I can see a Folder disappear from the Folder Tree and the grid when I lose permissions

- ✓ Folders for which the user does not have permissions are cleaned up from the Password Grid.
- ✓ Folders for which the user does not have permissions are cleaned up from the Folder Tree Widget.

Given that I am a logged-in user on the Password Workspace

And that Folder A contains Folder B

And that my Current Folder is the Folder A

When I lose permissions on the Folder B

Then I do not see Folder B bellow folder A anymore in the Folder Tree Widget

And I do not see Folder B in the grid anymore

As a logged-in user I receive a warning dialog when my Current Folder is deleted.

✓ User should receive a warning dialog when somebody delete a folder i'm seeing✓ User should be moved to the top root folder

Given that I am logged in as Ada on the Password Workspace
And that my current folder is Folder A
When Betty delete Folder A
Then I see a warning dialog saying Folder A was deleted by Betty.
When I click OK
Then I can see Folders root is selected
And Folder A is not present in the folder tree widget

As a logged-in user I see a dialog when I'm trying to access a folder that is currently deleted.



- ✓ User can access folders using links in emails
- ✓ If that folder was deleted (or moved, etc.) a warning dialog is shown

Given that I am logged in as Ada on the Password Workspace
And I received an email concerning Folder A
And Betty deleted Folder A
When I click on the link to access the Folder in my emails
Then I can see a dialog telling me the folder was deleted by Betty

As a logged-in user I have a Warning dialog when my Current Folder is moved.

✓ User should receive a warning dialog.

Given that I am logged in as Ada on the Password Workspace
And that Betty and I are owner of Folder A and B
And that I have folder A selected
When Betty move Folder A in Folder B
Then I can see a warning dialog
And the warning dialog tells me Betty moved the Folder A
When I click OK
Then I can see the Folder A is inside Folder B in the folder tree widget

As a user I receive email notification when there is some activity on a folder

As a logged-in user I receive an email notification when a folder is shared with me

- ✓ Sharing a folder trigger an email notification
- ✓ Email notification contains a link to access the folder

Given that I am logged in as Betty
When Ada share a folder with me
Then I receive an email telling me Ada shared a folder with me
When I click on the "view in passbolt" button
Then I can see the password workspace with the folder selected

As a logged-in user I receive an email notification when a folder is shared with a group I'm a member of

✓ Folder email notification works also for group members



Given that I am logged in as Betty
When Ada share a folder with a group i'm a member of
Then I receive an email telling me Ada shared a folder with me
When I click on the "view in passbolt" button
Then I can see the password workspace with the folder selected

As a logged-in user I receive an email notification when I lose access to a folder

Folder email notification on access loss

Given that I am logged in as Betty

And I own Folder A with Ada

When Ada remove me from the Folder A permission list

Then I receive an email telling me Ada removed my access on Folder A

As an admin I can set email notifications on folder

✓ Folder email notification settings can be controlled by admin

Given that I am logged in as an Admin

And I own Folder A that is shared with Ada

And I am on the email settings screen

Then I can see email settings related to folder

And I see a setting for a notification when a folder is shared with a user

And I see a setting for a notification when access is dropped on a folder

When I disable both settings

And I click save

Then I can see an on screen notification telling me the settings were saved

When I go to the password workspace

And I select Folder A

And I click on the Share button

Then I can see the share folder dialog screen

When I remove Ada from the permission list

And I add Betty to the permission list

And I press enter

Then I can see an on screen notification that folder A was shared

And I can see in the server email logs that no email was sent for Ada or Betty



As a logged-in user I receive only one email notification when multiple items that are part of a folder are shared with me

 \checkmark Folder notifications happening in small time interval are grouped together

Given that I am logged in as Ada on the password workspace

And that I own a Folder B and Folder A

And that Betty can read Folder A

And that Folder B contains with 15 passwords

When I move Folder B inside folder A

Then I see the move confirmation dialog

When I press enter

Then I can see the enter passphrase dialog

And I enter my passphrase

And I press enter

Then I can see the secrets are being encrypted for Betty

When I look into Betty email box

Then I can see a message with "Ada shared 15 passwords with you"

And the email contain 15 sections presenting the details of the passwords that were shared with betty