
Heuristic evaluation of the **Encrypted Email** feature



Kateryna Bieliaieva

Agenda

- Methods and limitations
- Positive findings
- Negative findings
- Suggested plan for further research

Methods

- Clicked through ShareFile as a first-time user of the Encrypted Email feature
- Referred to help docs for clarification and general background information
- Reviewed the feature based on Jacob Nielsen's heuristic principles.


Limitations

- Basic scenarios around sending an email from ShareFile web application, desktop and mobile site versions
- Mobile application and MS Outlook plugin have **not** been tested
- Limited knowledge of the ShareFile product and its Encrypted Email feature.

Nielsen's Usability Heuristics for User Interface Design

- Visibility of system status +
- Match between system and the real world +
- User control and freedom + / -
- Consistency and standards +
- Error prevention -
- Recognition rather than recall +
- Flexibility and efficiency of use +
- Aesthetic and minimalist design +
- Help users recognize, diagnose, and recover from errors -
- Help and documentation + /-

Positive findings

- Aesthetic and minimalistic design
- Effective navigation and labeling
Share > Email with ShareFile > Edit Message Options > Encrypt message
- Clear and concise hover help in the user's menu option Encrypt message
- Helpful  icons provide visibility of system status by identifying sent and received encrypted emails
- Help documentation outlines how to access and use the Encrypted Email feature
- Attaching a file is very easy
- Accelerators offer flexibility and enable experienced users to complete frequent tasks faster.

Negative findings

encountered in the following scenarios:

- Disabled Email Encryption through the Admin menu options
- Compared sending email from Share menu vs. Inbox
- Used mobile site.

Email Encryption is disabled.

Citrix ShareFile

Advanced Search

HomeManage UsersShareRequestAdminMy SettingsApps

My Files & Folders

Shared Folders

Favorite Folders

Connectors

Inbox 1

Sent

Archived

Inbox

<input type="checkbox"/>	From	Subject	Received ▼	Expiration
<input type="checkbox"/>	Short, Melissa	Web Portal Usability Test MS.docx	3/04/2014	Never

Email Encryption is enabled.

Citrix **ShareFile**



[Advanced Search](#)

[Home](#) [Manage Users](#) [Share](#) [Request](#) [Admin](#) [My Settings](#) [Apps](#)

My Files & Folders

Shared Folders

Favorite Folders

Connectors

Inbox 1

Sent

Archived



Inbox

Compose

<input type="checkbox"/>	From	Subject	Received ▾
			Expiration
<input type="checkbox"/>	Short, Melissa	Web Portal Usability Test MS.docx	3/04/2014
			Never

Email Encryption is disabled.

Email with ShareFile

 kbielia@ncsu.edu

Sending an email with encryption feature disabled

I have just disbaled the email encryption feature in the Admin > Advanced Preferences > Email and Notification menu.

So, why do I still get the option to encrypt this message?

[Edit Message Options >](#)

Notifications

☐ Email me when files are accessed

Security

☒ Encrypt message ?

☐ Require recipients to log in ?

Access expires after 30 days


☐ Remember subject and custom message for next time

Done

Cancel

Email Encryption is disabled.

Email with ShareFile

 kbielia@ncsu.edu X


Sending an email with encryption feature disabled


I have just disabled the email encryption feature in the Admin > Advanced Preferences > Email and Notification menu.

So, why do I still get the option to encrypt this message?

[Edit Message Options >](#)

1 item Clear All + Add more

 The message could not be sent at this time. Please try again later. X

 Directions.doc

Email Encryption is enabled and set up as **default** for emails send from SF Inbox; users can't uncheck the box.

Email with ShareFile

This message is encrypted.

Recipients:

Encrypted Message from SF Inbox

Email encryption is enabled in the Admin settings, so emails sent from ShareFile Inbox are automatically encrypted, according to the help documentation.

But why can't I uncheck the box in the Edit Message Options to disable encryption for this particular email? I would need to interview a few target user to find out whether this is even a relevant user need.

Edit Message Options >

Notifications

☐ Email me when files are accessed

Security

☒ Encrypt message ?

☐ Require recipients to log in ?

Access expires

after 30 days

☐ Remember subject and custom message for next time

Done

Cancel

Why do the email copy, user access, and version options disappear with enabling the message encryption feature?

What is difference between encrypting an attachment and a message?
Why are they separated?

Notifications

☒ Send me a copy of this email

☐ Email me when files are accessed

Security

☐ Encrypt message ?

☐ Require recipients to log in ?

Access expires

Accesses per user

☒ Always link to the latest version of the file ?

☐ Remember subject and custom message for next time

Done Cancel

Notifications

☐ Email me when files are accessed

Security

☒ Encrypt message ?

☐ Require recipients to log in ?

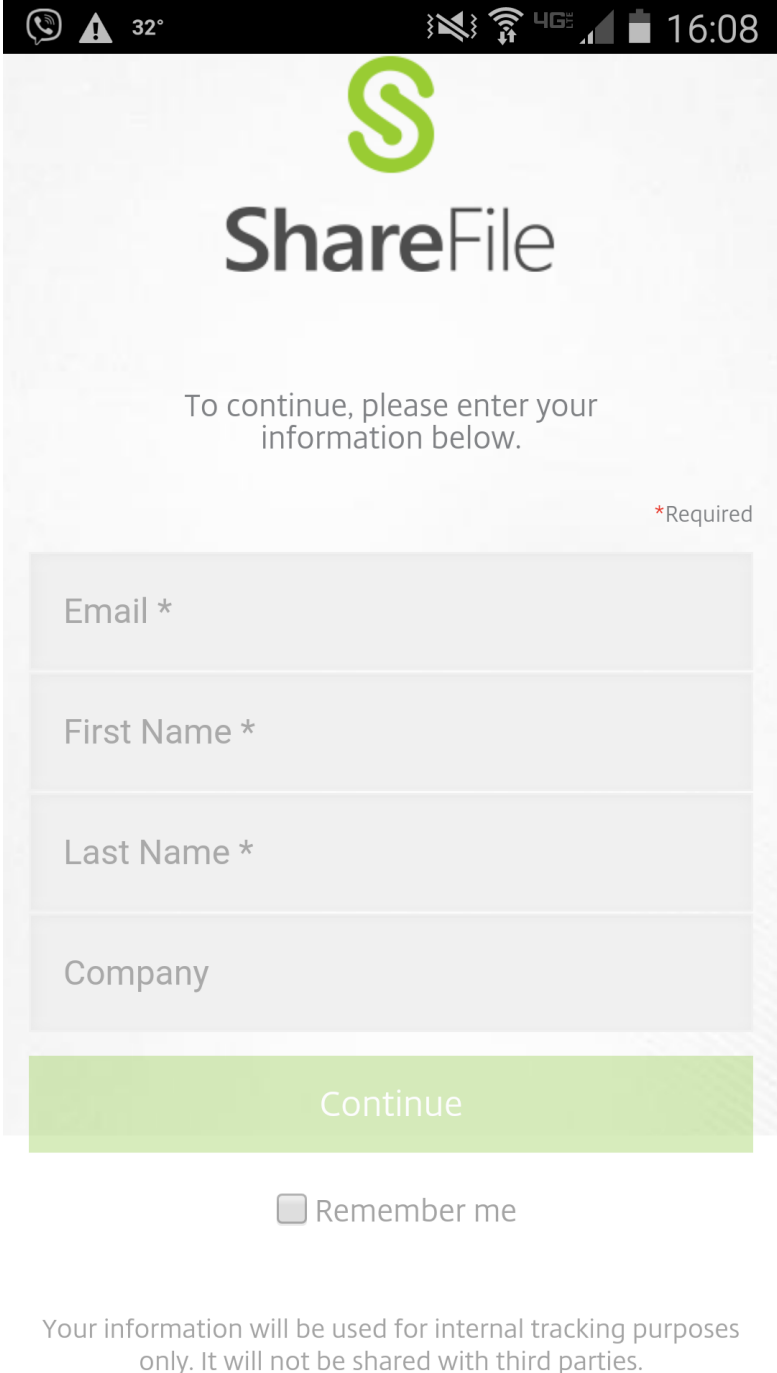
Access expires

☐ Remember subject and custom message for next time

Done Cancel

Mobile web site

- Receiving an encrypted email sent from ShareFile:
Required to “enter my information”
to view a received encrypted email
- Using ShareFile to send an encrypted email:
The site was loading for over 2 minutes
after I entered Melissa’s login information.



The image shows a mobile web interface for ShareFile. At the top, there's a status bar with icons for WhatsApp, a warning, 32° temperature, signal strength, 4G, and a battery icon, along with the time 16:08. Below this is the ShareFile logo, consisting of a green 'S' icon and the text 'ShareFile'. A message says 'To continue, please enter your information below.' To the right of the form is a red asterisk and the word 'Required'. The form has four input fields: 'Email *', 'First Name *', 'Last Name *', and 'Company'. Below these is a green 'Continue' button. At the bottom, there's a checkbox labeled 'Remember me' and a disclaimer: 'Your information will be used for internal tracking purposes only. It will not be shared with third parties.'

32° 16:08

ShareFile

To continue, please enter your information below.

*Required

Email *

First Name *

Last Name *

Company

Continue

☐ Remember me

Your information will be used for internal tracking purposes only. It will not be shared with third parties.

Suggested plan for further research

- Revise help documentation
- Conduct **diary studies** to get organic behavioral insights on
 - Habits and usage scenarios
 - Attitudes and motivation
 - Customer journey
- Conduct **contextual inquiry** to understand the user problems and the context of use for Encrypted Email feature
- Run **usability study** to validate a prototype and finalize design changes.