Alpha usability study

MW4ALL 2.0 - Research iteration #2 - α

Least Authority team - June-July 2021

01

What did we want to learn?

Research goals

- Describing people's experiences with sending/receiving files using the alpha Winden prototype

- Describing people's understanding of and ability to work with synchronous file transfers

- Describing people's experiences with error messages in the alpha prototype

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Research questions

1. How well do people understand how they can send a file?

2. How well do people understand how they can pass on a code/link to a recipient?

3. How well do people understand that sender & recipient need to be online at the same time?

4. How well do people understand how they can receive a file?

5. How well do people understand the status information of transfers?

6. How well do people understand the security properties of a transfer?

7. How well do people understand the error messages to which they are exposed when transfers don't succeed, including knowing what to do to successfully complete a transfer?

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Methodology

- 5 usability tests with participants from 3 countries

- Usability testing with the working alpha prototype (first on our playground environment, then on production).

- Participants recruited through TestingTime, based on profile:

  - Regular WeTransfer user
    (and have sent a file with WeTransfer over the last 2 weeks)

  - Desktop user

  - Europe-based, with gender and age diversity in mind

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02

What did we learn?

Transfer

Send files in real-time

We don't store – *and can't read* – your files. We simply transfer them.
No sign-ups. No snooping. No nonsense.

drop any file
up to 4GB

or

+
select

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1. Overall UI elements work well

Key UI elements, tweaked in a few places since research iteration 1, work well:

- People appreciated the 'simplicity' of the design

- People know how to navigate the app

- The buttons clearly communicate what they are intended to communicate

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2a. Send flow mosty works well

- People mostly know how to send a file.

    - They understood that they can both select and drag & drop files.

    - Improvements over last time: people know they get a link.

    - Copying the link and passing it on was intuitive to most

- However, some were unsure what the next step should be to initiate the transfer.

- One person explicitly did not recognize that the code part of the link can be passed on separately.

- *Recommendation:* Facilitate 'sharing intent' to make it easier and quicker for people to pass on the link/code.

- *Recommendation:* Highlight the code in the user-interface.

2b. (Drag and) drop a file

- Overall, dragging & dropping seemed the preferred way of selecting files.

- People appreciated the spaciousness of the drag & drop zone.

- For some participants, the wording of "drop a file" caused some confusion.

- One participant thought that he could not drag & drop a file because he didn't notice a clear visual change in the drop zone when dragging in a file into it.

- *Recommendation 1:* Rename to "Drag & drop any file". ▸

- *Recommendation 2:* Visually highlight the drop zone when people drag a file there and, and emphasize "Drop any file here". ▸

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3. Receive flow works well

- Prior to testing there was uncertainty about whether people would be able to handle the receive flow, but this seemed to work quite well.

  - People know what to do when receiving a link

  - People know what to do when receiving a code (open the Receive screen)

  - Overall, and unsurprisingly, feedback indicated that people found it easier to get a file with the direct link than to pasting/entering the code separately.

- But people did not always know what kind of file they were receiving based on the filename alone.

  - *Recommendation:* Display the icon associated with file type in the file card

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Hypothesis:

A link represents generally represents something that lives online.

It's a challenge to convey that a link leads to downloading something from someone else's computer
(as opposed to from a server).
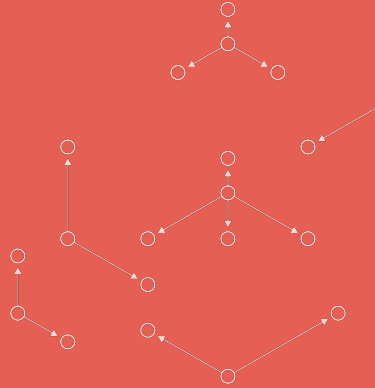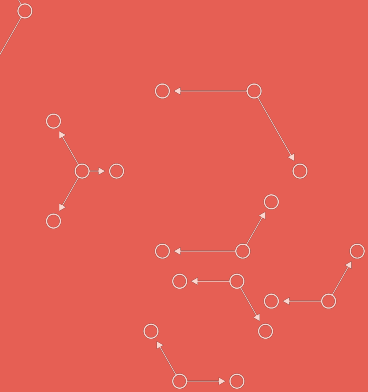
4a. Synchronous transfers - still a challenge

- We have an asynchronous transfers mental model to overcome:
  Despite improvements in people's perceptions since previous testing, there was still confusion about how the system works.

- People don't always *see that* or *know why* they need to keep the browser tab open.

  - One participant thought it was to get notifications about receiver actions.

- Some people believe files are stored on our servers.

- Without a clear understanding on how the system works, people may try using it in unsupported ways and risk failed transfers.

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4b. Synchronous transfers - limitations to utility

- In addition to the confusion, test participants also noted specific file transfer needs that would be unmet with synchronous transfers.

  - Less useful for personal file transfers, and more useful in work settings (when people are online at the same time)

  - When working split-hours: cannot get files to/from colleagues

  - But: useful when on the phone with people, when you know you will send the file immediately.

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4c. Synchronous transfers - seen as extra secure

- After understanding how the synchronous file transfers work, people generally perceived this as a security feature.

  - The same goes for one-time-use codes.

- People described the system in different ways:

  - Telepathy

  - Handing over in person without meeting in person.

  - Real-time file transfers

  - Wormhole: a page is a hole, and both holes need to be open for the transfer to work.

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4d. Synchronous transfers: Recommendations

1. Prompt people's understanding on home / Send default screen.

2. Consider adding visual/animated approach to show how this works.

    a.   This can be in the drag & drop zone or while buffering/generating a code.

3. On Send/instructions: Show 'keep tab open' instructions above the URL to share. ►

4. Update copy: **Keep this tab open.** Files are sent directly from your device. The link/code expires once you close the tab. ►

5. Implement further recommendations [link removed] from research iteration 1.

5a. Error messages

We tested two types of errors, the 'bad code' error, and network interruption.

Bad code error can mainly happen in three circumstances:

1. The code was already used by someone
2. The code does not exist (it may have been mis-typed)
3. The sender is no longer connected to the server (for example if they closed a tab)

Network interruption error can happen for example when:

1. One of the parties' Internet connection fails
2. Sender/receiver close the tab while transfer is in progress

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5b. Error messages mostly seem to work well

1. It appeared that people did not always read the messages entirely. But especially after changing the copy, the messages were generally well understood.

2. In some cases they helped people to understand the system (with people needing to be connected at the same time).

3. And people knew what to do to get transfer success after an error message.

    a. For example, ask the sender for a new code.

Recommendations: Tighten up language and explore whether the error messages can be shown with paragraph breaks.

Other insights 1

- A few testers that used the Safari browser stumbled upon the issue we knew about that hampers successful transfers

  Recommendation: address [GitHub issue #18](#)

- Several other issues from previous testing came up: People missed multiple file transfers; and people had expected to be able to be prompted/be able to select where a file would be downloaded to.

  Recommendation: Implement multiple files support [link removed]; and do development investigation on post-download onward actions [link removed].

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Other insights 2

- Several people clicked on the file card to open/preview the file in the Receive/ consent and Receive/complete screens

  - *Recommendation:* change border to make it look less clickable.

- People were looking for and interested in the security info on our website. Several people tried to click on the (not yet working) links in the bottom to understand how they handle the files/how it works.

  - *Recommendation:* complete that information and do user testing on people's understanding of those pages.

- In initial conversation, people often talked about send-to-self file transfers. For this, synchronous transfers were used quite commonly (with AirDrop).

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Key insights

1. The overall UI elements were an improvement over the pre-alpha design.

2. While the receive and send flows work well, there are improvements we can make to the drag & drop zone and possibly to ease onward sharing of the transfer link.

3. The main challenge remains that people do not not always understand that the file transfers are synchronous, and that they, e.g., need to keep their browser tab open. When they did understand, people also expressed that synchronous transfers are only useful in limited circumstances, but also that they are also extra secure.

4. The error messages helped with people's understanding when things did not work, and also sometimes helped to convey how the system works.

5. We found that people showed interest / wanted to know more about how the web app handles privacy and security.

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Post-testing methodology notes

- We made some changes after the first 3 interviews:
    - To better convey the synchronous nature of file transfers, we changed the title on the Send/default screen to "Send files in real-time", instead of "Send files with ease, speed, and security".
    - We also added branding to the footer: <Made with love for privacy by Least Authority>

- After test 4, we changed our test environment from [link removed] to [link removed]:
    - We were not ready with this in time for doing testing.
    - The old URL 1) affected people's perception that this was not a well-branded page (the domain did not correspond with the product title); 2) helped convey that this was a wormhole-like transfer

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03

Next steps

Next steps

- Fix detected bugs and implement UI changes prior to Beta release

- *Further user testing with beta prototype, including on:*

  - Understanding of the system's synchronous nature

  - Understanding that links/codes cannot be re-used

  - People's perception of security & how it works copy on the website

  - Mobile web version

  - Needs finding: how do people perceive open source products

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Thank you!

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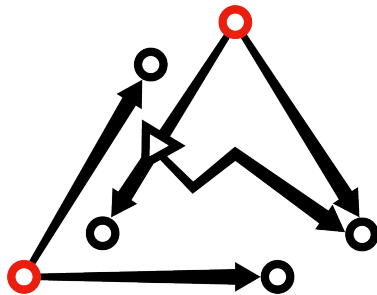PRIVACY MATTERS

04

More resources

More resources [links removed]

- Study plan

- Research guide and script

- Full interview videos

- Full interview notes

- Folder for Research iteration #2 - alpha

- Research iteration 1 findings

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