EPPD - Delta Chat

Required Criteria for Provider Comparisons

Introduction

The **E**-Mail **P**rovider **P**ortability **D**irectory (EPPD) project should help users find a provider that works best with our Delta Chat app suite considering in what user context our messenger is used. We therefore started the EPPD project by not only considering commonly compared characteristics and standards in existing provider comparison tables but focused on collecting criteria particularly important for the optimal use and easy set up of our Delta Chat app suite.

Subsequently, we developed an initial set of criteria based on our first-hand knowledge of providers ecosystem and technical requirements for a provider to be compatible with Delta Chat. In order to consolidate, prioritize and develop this set of criteria we then developed a template to conduct interviews with Delta Chat expert users, multipliers and developers from ten different countries.

This approach helped us collect information about user behavior, expectations and needs and extended our knowledge about region typical providers used for the Delta Chat app suite. After each conducted interview we evaluated our findings, edited and evolved our initial set of criteria to undertake the following interview with an updated version of the latter. The final version containing our criteria selection is to be found in the annex.

In the following report we describe the process of establishing criteria for comparing e-mail providers by conducting interviews with Delta Chat community members around the world during phase 1 of the DAPSI funded EPPD project.

Interview design and progression

Groundwork & Methodology

We tested the preselected criteria with a selection of respondents through a process of a semi-structured interview method we chose after coaching sessions with Dr. Ksenia Emoshina, an UX researcher who has been working with us for a long time. Moreover, we worked with Prof. Dr. Sascha Fahl (Usable Security Researcher) and Prof. Dr. Fabian Schmieder (GDPR Privacy expert) to help us evaluate providers' security performances and get a better understanding for privacy policy issues.

We have focused on what is called "expert interviews", that means, Comparisonwe have selected ten power-users or "multipliers" who are known to be active Delta Chat users and are involved in onboarding other users on Delta Chat. None of the interviewees is affiliated with a specific provider and therefore provides independent opinions.

This approach helped us collect rather representative data with a comparatively small sample because power-users have not only personal experience with Delta Chat but are involved in local IT-communities working as developers, designers, system administrators or digital security trainers. Therefore, they have a broad understanding of technical and usability needs within their communities. The collected data is anonymized and only shows the interviewees' country of origin.

Interview Template

The interview template is structured in four sections. The first part of the questionnaire helped us analyze user backgrounds and patterns in the context of e-mail based chatting e.g. number of active accounts and aliases, experience with Delta Chat and different ways of using Delta Chat.

The second part consists of our previously developed set of criteria. We identified two types of criteria to differentiate between two research methods necessary to obtain useful data for our provider comparison project. The first type are *performance criteria* for which we develop automated measurement scripts. The second type are *qualitative criteria* that are run by our team via a web-ethnographic research process. We formulated each criterion as a question to be answered by deploying the selected criteria.

The interviewees had to rate each criterion considering two aspects in their context of providers performance. We first asked the interviewee how important and/ or useful it is to provide information about each of the listed criterion. In a second step we wanted to know how important it would be that their provider supports, implements and/ or optimizes the respective criterion. We therefore used a rating from one to five[1] and the same two questions for each criterion. This approach helped us develop, consolidate and prioritize our findings.

The third part of our interview template contained open-ended questions designed to gather suggestions for new criteria and new providers to be tested. During our interviews

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1   (1 – not important at all, 2 – slightly important, 3 – important, 4 – fairly important and 5 – highly important)

which took place over video calls and lasted between one hour and two hours, we had open discussions and got oral feedback from the interviewees on various topics.

Therefore, the semi-structured interview method guaranteed, on one hand, a collection of comparable and quantifiable answers, and on the other hand, an open and creative input from our users, which has always been a guiding principle of Delta Chat's developments.

Thereby we found out what information users need in order to chose an appropriate provider for their individual usage of our Delta Chat app suite and how this information should be organized to gather information in the most efficient way. The interview template is designed for iterative deployment and can be used for future projects and follow up research.

Conducted Interview & Criteria iteration

July 17th   with Delta Chat user/ expert, multiplier and developer from Cuba – 2h
July 18th   with Delta Chat user/expert and multiplier from Austria – 2h
July 20th   with Delta Chat user/ expert and multiplier from Germany – 2h
July 20th   with Delta Chat user/ expert and multiplier from Spain – 1,5h
July 23rd   with Delta Chat user/ expert, multiplier and developer from Russia – 1,5h
July 23rd   with Delta Chat user/ expert from Holland – 1h
July 25th   with Delta Chat user/ expert and multiplier from Uruguay – 1h
July 26th   with Delta Chat user/ expert, UX researcher and multiplier from France – 1h
July 29th   with Delta Chat user / trainer from Ukraine – 1h
Aug. 4th   with Delta Chat user/ expert, multiplier and developer from USA – 1h

We evaluated our findings after each conducted interview and integrated the interviewees' suggestions by editing our initial set of criteria as well as the interview structure and questions in order to ensure a maximum of user oriented research.

After the first two interviews we relegated three performance criteria from the interview template that are essential for optimal use of our Delta Chat app but too technical, difficult to explain and mostly depend on our development plans: SMTP / IMAP / valid TLS support, IDLE/ MOVE/ IMAP and quota extension support. Additionally, we changed the order of the performance criteria according to their importance for an optimal set up and use of our app suite.

We also refined the rating method by focusing on two aspects of each criterion which are information and implementation and/or optimization. We realized that for our provider comparison it would not only be important to know what information is needed for users in order to facilitate their provider selection process for an optimal user experience with Delta Chat. Beyond that, and to create more competition among providers, it could be useful to explore how users would like provider performances to evolve and what improvements they expect. Moreover, we added two new criteria such as Grey-listing and systematical blocking of certain smaller or bigger providers.

After the third interview we considered adding a suggested criterion referring to the length and complexity of the onboarding process with the provider and accordingly with the Delta Chat app. During the creation of test accounts for our analysis, we systematically documented the requested onboarding steps and data for account set up of each provider and what steps are necessary to set up Delta Chat with the respective e-mail address.

This lead us to the conclusion that we might integrate these findings in our comparison and that we do not need an additional criterion for our interview template related to this matter.

The interviewees from Spain, Russia and Holland lead us to integrating two additional qualitative criteria asking whether a provider is accessible with open registration or invitation only and what business model a provider is based on which we combined with costs for an account.

Other criteria suggestions involved analyzing a providers' physical location and respective jurisdiction, its traceless deletion options and historical collaboration with governments. However, we did not integrate these in our set of criteria due to a very cost and time intensive research that would go beyond the scope of this project and the fact that this information is only important for a relatively small target group.

Aside from the provider comparison related suggestions we could gather an impression on how users think about our app and what they would like to improve or change. This useful side effect was mostly possible because of the open ended questions at the end of the interview template and inspire future discussions concerning app development.

Annex

Interview Template

Part One

What is your usage background for chat email?

a) Where do you come from?
b) What provider do you use?
c) How many email accounts do you have? How many active aliases on each account?
d) Since when do you use DC?
e) How do you use DC? (professionally / private / both?)
f) Do you use your account also with another mail application?

Part Two

How important is each of the 18 following criterion for you?

Performance Criteria

1. How much delay is between sending and receiving a message through various providers?
a) How important is that you have the criterion's information?
b) How important is optimizing this criterion?

2. Does a provider systematically block e-mails from other providers?
a) How important is that you have the criterion's information?
b) How important is avoiding this criterion?

3. How many recipients per message are allowed (limited group size)?
a) How important is that you have the criterion's information?
b) How important is optimizing this criterion?

4. How many messages per hour are accepted until a rate limit is reached and messages are rejected?
a) How important is that you have the criterion's information?
b) How important is optimizing this criterion?

5. What is the max. attachment size for a message?
a) How important is that you have the criterion's information?
b) How important is optimizing this criterion?

6. Does the provider send quota warnings and efficient means for removing messages from server?
a) How important is that you have the criterion's information?
b) How important is implementing this criterion?

7. Does the provider support SMTP and IMAP and has a valid TLS?
Not to be asked

8. Does the provider support IDLE /MOVE/ IMAP and quota extension?
Not to be asked

9. Does the provider support alias and/ or plus extension?
Not to be asked

Qualitative criteria

10. Does the provider have open registration or invite only?
a) How important is that you have the criterion's information?

11. What are the costs and what kind of business model[2] is applied?
a) How important is that you have the criterion's information?

12. What is the mailbox storage size?
a) How important is that you have the criterion's information?
b) How important is optimizing this criterion?

13. Grey-listing: does the provider delay initial messages from unknown senders?
a) How important is that you have the criterion's information?
b) How important is avoiding this criterion?

14. Is there published information about rate limits?
a) How important is that you have the criterion's information?

15. Privacy Policy: Which personal data is required for account creation?
a) How important is that you have the criterion's information?
b) How important is minimizing the required personal data?

16. Privacy Policy: What data is used for third parties, advertisers?
a) How important is that you have the criterion's information?
b) How important is minimizing data transfer to third parties?

17. Migration: Can I set a forwarding alias address?
a) How important is that you have the criterion's information?
b) How important is implementing this criterion?

18. Migration: Can all data, including contacts and messages (folders) be exported and imported from one provider to another?
a) How important is that you have the criterion's information?
b) How important is implementing this criterion?

Part Three

a) What criterion is missing for a useful provider comparison ?

b) Are you interested in particular providers that we should test?

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2 Crowdfunded, donations, VC funded, etc.