

Technical Disclosure Commons

Defensive Publications Series

June 2022

Smooth Migration of SMS/MMS Conversations to Rich Messaging Apps

Simon J. Perkins

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

Perkins, Simon J., "Smooth Migration of SMS/MMS Conversations to Rich Messaging Apps", Technical Disclosure Commons, (June 12, 2022)

https://www.tdcommons.org/dpubs_series/5193



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

Smooth Migration of SMS/MMS Conversations to Rich Messaging Apps

ABSTRACT

A phone-based chat conversation between two or more people can begin via text message, with the participants using an application that supports chat SMS or MMS. Text is a convenient mode to start a conversation because it is simple and works for almost everyone. However, SMS/MMS lack features found in more advanced messaging apps, such as typing indicators, read receipts, reactions, persistent rooms, better behavior in areas with poor cell service, etc. This disclosure describes techniques to provide a simple, one-touch way for users of SMS-based messaging apps to migrate a conversation to richer messaging applications and take advantage of cross-platform, advanced messaging features.

KEYWORDS

- Messaging application
- Short message service (SMS)
- Multimedia message service (MMS)
- Rich communication services (RCS)
- Rich messaging
- Advanced messaging application

BACKGROUND

A phone-based chat conversation between two or more people can begin via text message, with the participants using an application that supports chat via Short Message Service (SMS) or Multimedia Messaging Service (MMS). Text is a convenient mode to start a conversation because it is simple and works for almost everyone. However, SMS/MMS lack features found in more advanced messaging apps, such as typing indicators, read receipts,

reactions, persistent rooms, better behavior in areas with poor cell service, etc. Moreover, in some countries, e.g., the United States, fewer conversations are started on advanced messaging apps, partly due to general unfamiliarity, but also because advanced messaging apps are often tied not to the participant's phone number.

Some advanced messaging apps are tied to the participant's email address at the messaging service provider or an identity service provider. A user who wishes to migrate from SMS to advanced messaging may be constrained from doing so by the lack of knowledge of the other participants' email addresses, or the lack of knowledge of whether other participants even have the advanced messaging app installed. Participants in a SMS conversation can benefit from the features available in an advanced messaging app, but the effort required to manually migrate a conversation from SMS/MMS to advanced messaging is substantial enough that most users may not attempt it or give up before the migration is complete.

Rich communication services (RCS) is a protocol that can transmit in-call multimedia. However, RCS is not universally supported by all messaging apps (e.g., iMessage on Apple devices does not support RCS), so any conversation that involves at least one non-RCS user cannot be easily migrated.

DESCRIPTION

This disclosure describes techniques to provide a simple, one-touch way for users of SMS-based messaging apps to migrate a conversation to richer messaging applications to take advantage of cross-platform, advanced messaging features.

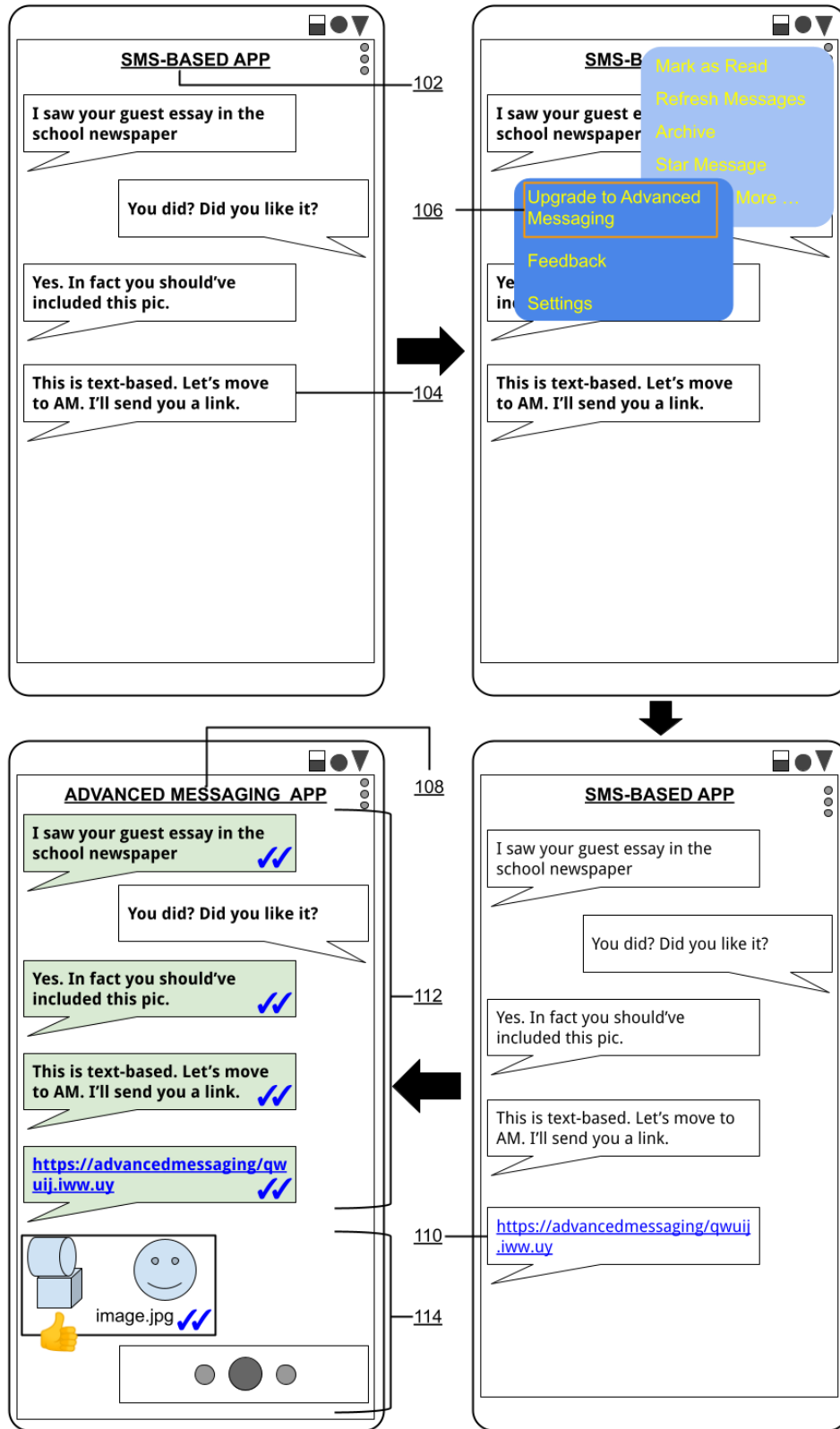


Fig. 1: Smooth migration of SMS-based conversations to an advanced messaging app

Fig. 1 illustrates smooth migration of SMS-based conversations to an advanced messaging app. Participants are in a conversation over SMS via an SMS-based app (102). To take advantage of the features of rich messaging, they decide to move to an advanced messaging app (104). The UI of the SMS-based messaging app includes an option, e.g., in a ‘More’ menu item, to enable the user to upgrade the conversation to an advanced messaging app (106).

Selection of this option leads to one or more of the following, as appropriate:

- Create, on the advanced messaging app, a chat room (108) with the same or similar name as the conversation on the SMS-based app and add the current user to the chat room.
- If the advanced messaging app does not require an identity from an identity service provider, e.g., identity is based on phone number, add other participants on the SMS-based conversation to the chat room.
- If the advanced messaging app requires an identity from an identity service provider, and if a participant’s phone number can be unambiguously associated with their account at the advanced messaging app or other identity service provider, add the participant to the chat room. If such unambiguous association is infeasible, request from the participant the identity with which they would like to appear in the advanced messaging app, and add the participant to the chat room.
- Post a link in the SMS-based conversation which the participants can click to be added to the chat room (110) of the advanced messaging app.
- Copy the existing conversation from the SMS-based messaging app into the chat room (112) of the advanced messaging app.

When the participants open the new conversation in the chat room, the conversation history on the SMS-based messaging app appears automatically. Having frictionlessly migrated

to the advanced messaging app, they can continue the conversation seamlessly while enjoying advanced features such as multimedia exchange, typing indicators, read-receipts, emoji reactions, (114), etc.

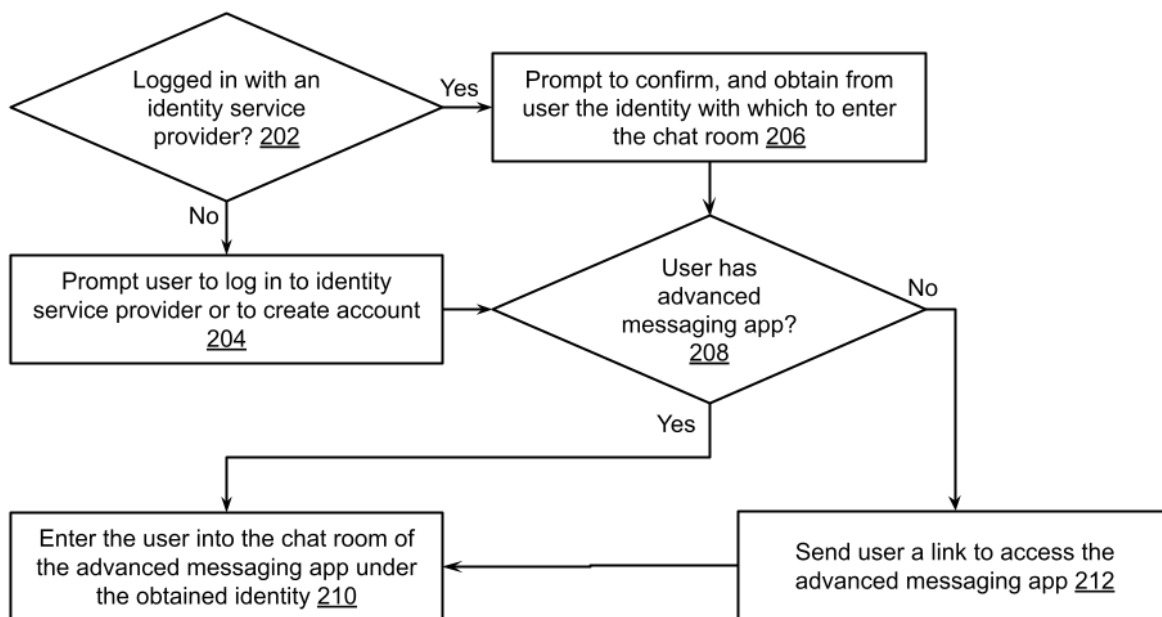


Fig. 2: Onboarding a participant into the chat room of the advanced messaging app

If the advanced messaging app bases its participant identities on phone numbers, then the phone number can be used to add the user into the chat room of the advanced messaging app (as is the case for the SMS-based messaging app). If the advanced messaging app uses an identity service provider, then the onboarding of a participant into the advanced messaging app is illustrated in Fig. 2. When a participant clicks on the link inviting them to migrate to advanced messaging, one or more of the following take place:

- If the participant is currently logged in with an identity service provider (202), they are asked if they want to join the chat room with that identity. The user can either pick the logged-in identity or specify a different identity to join the chat room (206).
- If the participant is not logged in (204), they are prompted to log in or create an account.

- If the advanced messaging app is installed (208), the server returns to the participant a redirect that sends the user to the chat room of the advanced messaging app.
- If the app is not installed (212), the server returns a redirect that sends the user a link to access the advanced messaging app, e.g., via a website, install locally via an application store, etc. The user is automatically logged into the chat room conversation inherited from the SMS-based application.

In this manner, the participants of a conversation over an SMS-based messaging application are enabled to effortlessly migrate to an advanced messaging app. The techniques eliminate or reduce the burdens of manually creating a chat room; copying earlier messages for context; sharing identities of participants as registered with identity service providers; requesting participants to download the advanced messaging app; sending out invites; etc. Access to advanced messaging features is made readily available for SMS-based message users with minimal effort. The techniques also expose users to the features of the advanced messaging application, thereby driving its adoption.

Alternatively, the SMS-based message app can support advanced messaging features natively, such that participants need not be sent to a separate chat app; instead, the conversation can be seamlessly switched over to the advanced messaging app once the participants have been added.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs, or features described herein may enable the collection of user information (e.g., information about a user's messaging apps, a user's phone number, a user's chat conversations, chat actions or activities, profession, or a user's preferences), and if the user is sent content or communications from a server. In addition,

certain data may be treated in one or more ways before it is stored or used so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

CONCLUSION

This disclosure describes techniques to provide a simple, one-touch way for users of SMS-based messaging apps to migrate a conversation to richer messaging applications and take advantage of cross-platform, advanced messaging features.