

# DFengage Release Notes

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## Preface

### DFengage Release 2.5.0

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- via email, [help@dfnetresearch.com](mailto:help@dfnetresearch.com).
- via our website at [dfnetresearch.com](http://dfnetresearch.com).

## Introduction

### Overview

**DFengage** is an application that allows research participants to complete electronic patient-reported outcomes (ePRO) and other study activities (such as questionnaires, surveys, and diaries) assigned to them by the research team. DFengage is fully integrated with **DFdiscover**, using the setup definition defined in DFsetup, the role permissions and user accounts defined in DFadmin, and the participant contact details defined in DFweb. Data completed by participants is available in DFdiscover EDC tools including DFexplore, DFweb, and DFcollect.

DFengage is accessed through a web browser or installed as a mobile app from the Google Play Store (for Android™) or Apple App Store (for iOS® and iPadOS®) on smartphones and tablets. Study participants log in to DFengage with their unique user credentials and complete assigned activities based on the study schedule. DFengage users receive reminders when new activities are available or overdue, as push notifications for mobile app users or as emails for web app users.

In DFengage Version 2.5.0, **custom push notifications** are now available for participants using the mobile application. DFdiscover 2026 Version 5.11 supports custom reminders configured by the study team in **DFsetup**. This new feature enables custom notification content and timing, complete with multi-language support. These reminders are delivered through push notifications on the participant's device, in the participant's time zone.

These changes and more are described in [New Features and Enhancements](#). The complete listing of all changes by type of change, including bug fixes, is available under [All Updates](#). The release notes also provide information about any [Known Issues](#) in the current release as well as any [Advance Notices](#) for planned changes in upcoming releases.

### Supported Devices and Browsers

**DFengage** mobile version 2.5.0 requires a mobile device (tablet or smartphone) running Android™ 8.0 or newer or iOS®/iPadOS® 14.4 or newer.

**DFengage** web version 2.5.0 requires an internet browser with HTML5 capabilities. Check your browser's

capabilities at <https://html5test.com>.

Tested browsers include the current versions of Chrome, Firefox, and Edge on Windows 10 and 11, and Chrome, Firefox, and Safari on macOS 10.14 (Mojave) or later. Browser updates are frequently made available by vendors. **DFengage** web is not compatible with any version of Internet Explorer or any browser in Windows XP or Windows 7.

## Version Compatibility

**DFengage** version 2.5.0 is compatible with **DFdiscover** server and API version 5.4 and later. Some features of **DFengage** are only available with later versions of **DFdiscover**, noted in the release notes and user guides.

## Installation

### Access Links

DFengage access links are provided to simplify the onboarding process for study participants, whether they are using DFengage web or DFengage mobile. Study participants receive these links in their invitation email, reminder emails, or as a link or QR code provided by site staff via DFweb's **ePRO Management** page. Below are details about accessing DFengage without these user-specific access links. Learn more about access links in [DFengage Setup & Admin Guide, Access Links for DFengage](#).

### Mobile Application

The **DFengage** mobile app is available for installation from the [Google Play Store](#) on Android™ devices and from the [Apple App Store](#) on iPadOS® and iOS®.

To assist with opening DFengage in the app store and pre-filling the server and API, customize the following example link to include your own DFdiscover and API: <https://dfengage.dfdiscover.com/open?server=explore.dfdiscover.com&api=dfws.dfdiscover.com>, where the server = explore.dfdiscover.com and API = dfws.dfdiscover.com.

1. Click the link to open DFengage in the app store.
2. Install DFengage on your device from the app store, but don't open the app yet.
3. Click the link again to open DFengage with the server and API pre-filled.
4. Enter your username and password to login.

For existing users, upgrading to **DFengage** 2.5.0 depends on the auto-update setting on their device. If auto-update is enabled, **DFengage** will update automatically as new versions are released. If auto-update is disabled, users will need to manually update **DFengage** to use newer versions.

### Web Application

The **DFengage** web application is accessible via web browser and does not require any download or installation by end users.

The DFnet instance of DFengage web is available at <https://dfengage.dfdiscover.com>, but your system administrator will provide a custom link including your DFengage web URL, DFdiscover server, and API, for example: <https://dfengage.dfdiscover.com/?server=explore.dfdiscover.com&api=dfws.dfdiscover.com>, where the server = explore.dfdiscover.com and API = dfws.dfdiscover.com.

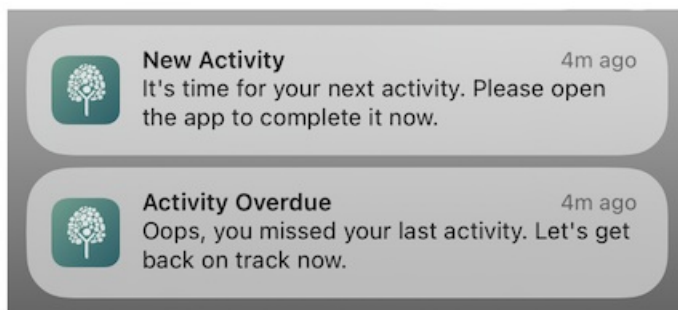
## New Features and Enhancements

This chapter describes the features and enhancements added to **DFengage** since the release of Version 2.4.0. See the next chapter, [All Updates](#) for a table listing all changes, including bug fixes.

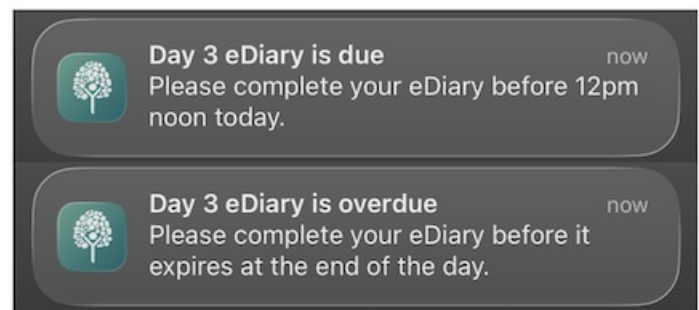
## Custom ePRO Push Notifications

**DFengage mobile** now supports configurable ePRO push notifications defined at the study level in **DFsetup**, when connecting to DFdiscover server and API version 5.11 or later. This feature enhances participant engagement and protocol compliance with timely reminders that align with study requirements.

Study teams can configure participant reminders for scheduled and overdue activities, including custom notification timing and multi-language notification content. These reminders are delivered to study participants as push notifications in DFengage mobile and are scheduled according to each participant's visit schedule and overdue windows using the time zone of the participant's device.



*Generic ePRO Push Notifications*



*Example Custom ePRO Push Notifications*

All **DFengage** push notifications are now defined in the new ePRO Notifications configuration in **DFsetup**. Notifications may be defined for all visits or for specific visits, with timing based on specific clock times or relative offsets in days, hours, or minutes before or after the visit due or overdue date and time. Notification titles and messages may be customized and support placeholders for the study name and participant name. Translation is also supported for multi-language studies. All notification configuration changes are tracked in **DFsetup** history.

Two default generic notification definitions are automatically pre-populated in **DFsetup** and must be manually saved before notifications become active for a study. For existing studies using **DFengage**, after DFdiscover server & API upgrade to version 5.11, you must **manually save** the ePRO Notifications configuration in **DFsetup** in order for participants to continue receiving push notification reminders in DFengage 2.5.

**WARNING:** For studies upgrading from DFdiscover 5.10 or earlier, existing participants may stop receiving new and overdue reminders from **DFengage mobile** until the ePRO Notifications configuration is saved in **DFsetup**.

DFengage mobile previously sent generic notifications in English, French, or Spanish based on the language setting on the user's device. With this update, DFengage mobile uses the study language instead of the device language for determining the notification language. Studies requiring French and Spanish notifications must add the translations in the ePRO Notification configuration in **DFsetup** in order for participants to continue receiving push notification reminders in DFengage 2.5 in their language.

See [Study Setup User Guide, ePRO Notifications](#) for complete details about configuring ePRO notifications.

The ePRO Notifications configured in **DFsetup** are currently used only for push notifications delivered through DFengage mobile. Participant reminders sent by email continue to use the templates defined in the [DFmsgtemplates](#) file and are sent using the [DFeproreminders](#) program.

This feature requires both DFdiscover server and API version 5.11 or later and DFengage mobile version 2.5 or later.

## NGINX Reverse Proxy Support

For system administrators, DFengage Web now supports deployment behind an NGINX reverse proxy, which enables hosting DFengage web along with DFweb and DFws under a single FQDN and port 443. Refer to the [Nginx Configuration Guide](#) for details about how to configure the reverse proxy.

## All Updates

Order	ID	App	Type	Description
1	13044	Mobile	New	Custom reminders can now be sent to study participants using DFengage mobile through push notifications. <a href="#">See details.</a>
2	13010	Web	Fix	DFengage web now supports deployment behind a reverse proxy for self-hosted environments. <a href="#">See details.</a>
3	12718	Web & mobile	Fix	Corrected issues with page label substitutions for completed activities. Substitutions as defined in the DFsetup page map are now displayed consistently, allowing participants to see key recorded values (such as dates or times) in the activity label without reopening completed activities.
4	12743	Web & mobile	Fix	Fixed an issue where a study load failure message could appear on the login page in DFengage web and mobile after the device was left idle or went to sleep.
5	13206	Web & mobile	Fix	An issue was fixed in DFengage where under certain circumstances a user could consume additional license seats. This fix prevents the use of unnecessary sessions by DFengage.
6	13299	Web & mobile	Fix	An issue has been fixed where a required check field could be left blank when completing an activity in DFengage.

Order	ID	App	Type	Description
7	13401	Web & mobile	Fix	DFengage's two-factor authentication dialog no longer indicates that the code will be sent by email, since the verification code may now be sent by email or text/SMS.
8	13193	Mobile	Fix	A critical fix has been applied to DFengage mobile to address a security issue. If a user was already logged in to DFengage mobile (i.e., they had entered their username and password and set a PIN), the app could be opened via a manually constructed deep link to an internal page without prompting for the PIN again. This fix ensures that the PIN is always required when opening the mobile app, regardless of how the app is launched.
9	12737	Mobile	Fix	Resolved issues on iOS and iPadOS during password reset after closing the app or opening it for the first time on the device. The app now correctly resumes the password reset when opened via the link.
10	13262	Web	Change	DFengage Web now requires Node.js version 22 or higher, aligning with current Node.js support policies and ensuring continued security and stability. System administrators running their own DFengage web instance must update their Node.js installation and restart the DFengage service as part of the upgrade process.
11	13424	Web	Fix	DFengage Web dependencies were updated to ensure build integrity and reduce exposure to potential security risks.
12	12710	Web	Fix	Fixed login failures after password reset in DFengage web when using private browsing, different browsers, or multiple accounts in the same browsers.
13	12742	Web	Fix	Ensured the DFdiscover server and API are retained on the login page after logout in DFengage web.
14	12885	Web	Fix	Fixed an issue where activity history doesn't load in some cases in DFengage web.

Order	ID	App	Type	Description
15	12693	Web	Fix	Resolved a known issue in DFengage web on phone-sized screens where the Logout button was not available on the Today page.
16	12725	Web	Fix	Fixed an issue in DFengage web where refreshing the page would reset the study language to the default. The selected language is now preserved across page refreshes.

## Known Issues

This section provides information about low-severity, low-priority issues that exist in the current release, with details about available workarounds. Where possible, known issues are planned to be addressed in a future release.

ID	App	Description
9731	Web & mobile	If a user starts but does not finish an activity in DFengage, when they continue the activity it retains the role permissions and setup definition loaded when the activity was started. This means that any changes to the role permission or setup definition made after the user started the activity in DFengage will not be applied to the activity.
10307	Web & mobile	Some error messages in DFengage are always shown in English even if the rest of the app is shown in a different language. These messages are responses from the DFdiscover server and are not translated into other languages at this time.
13634	Web & mobile	Under rare conditions, DFengage may allow a participant to leave a required field blank, affecting enforcement of required data completion. Based on current testing, the issue is unlikely to occur on mobile devices and is considered low risk on web. It will be addressed in a future release. In the meantime, study teams should continue to review submitted participant data for completeness as part of normal data management procedures.
12984	Mobile	On some mobile devices, using the invite or login link or QR code may not work as expected and instead open the DFdiscover Server page. If the user sees the message "Please connect to a network to continue", check the internet connection and click Continue to proceed. Otherwise, close DFengage completely (close/dismiss from the app switcher) and click the link again to retry. If none of these options work, enter the DFdiscover server, API, and username manually.

## Advance Notices

This section provides information about changes planned in a future release that may impact ongoing projects, in particular any features that will be deprecated. These notices are intended to support planning for future upgrades.

*No advance notices for DFengage in this release.*

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## DCMTK software package

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## Jansson

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## mpack/munpack

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## d3.js

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## jwt-cpp

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## QXlsx

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