

Changepoint 2014 SP2 / 2017 Mobility - What's New

November 2017 Product Management Changepoint Canada ULC

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Introduction

Changepoint is very pleased to provide preliminary information about the next release of our Mobile app: Expense functionality.

In addition to defect fixes, the Changepoint 2017 and 2014 SP2 general patches also introduce new enhancements for the mobile app, and continue to uphold our commitment to provide our customers with the most intuitive and user-friendly PSA/PPM solution on the market today.

Target Release Date

The Changepoint Time and Expense Management app is targeted for general availability on November 24, 2017. Availability may vary slightly based on promotion/approval through the public vendor stores.

The Changepoint 2017 Mobile App patch is targeted for general availability on November 24, 2017. This patch is mandatory to take advantage of the newly-available Mobile App Expense Management capabilities as well as the Time Management defect remediation.

The Changepoint 2014 SP2 Mobile App patch is targeted for general availability on November 30, 2017. This patch is mandatory to take advantage of the newly-available Mobile App Expense Management capabilities as well as the Time Management defect remediation.

All product documentation and software for this release will be available through the standard channels. Contact your project consultant, customer care or customer success representative for assistance.

Mobile App Enhancements for Changepoint 2017 and Changepoint 2014 SP2 - Overview

The Changepoint app and release patches for Changepoint 2017 and Changepoint 2014 SP2 (November 2017) deliver enhancements for the Mobile app in the areas of:

- Expense entry: Enter expenses on a mobile device, including offline expense entry
- Expense report creation: create, manage and submit an expense report on a mobile device
- The ability to attach expense images to expenses or expense reports on a mobile device
- API: the next phase of the new RESTful API that is used by the mobile expense application
- Defect remediation for mobile time entry functionality



Mobility

General Overview

The core functionality of the Changepoint Mobile App now includes time and expense submission, time approval, pull/push notifications and support for offline access. The mobile app will provide tremendous value to the users, especially the remote workforce that is typically working outside the office.

With the mobile app, users can record time and expenses at any time and from anywhere where there may or may not be network connectivity. If time and/or expenses are recorded in an offline mode, when the network connectivity is reestablished, the unsaved data will automatically be submitted to the server. Mobile users will be immediately notified of any compliance validation issues that result from the submission.

With the mobile app, time and expenses can be submitted on timely basis, leaving less room to encounter issues, such as:

- **Overdue/Unsubmitted Time/Expenses**: Employees with busy schedules and/or employees that are constantly on the road might not get time to submit their hours and expenses on time. With the convenience of the mobile app, these employees can record and submit time and expenses anytime and from anywhere.
- Rejected Time/Expense entries: Employees that are generally outside the office, with no or limited access to email, may not be notified of the rejected submissions. With the mobile app, the employees will conveniently receive push notifications on their mobile device, as well as in-app alerts. This will ensure their awareness of the important activities surrounding time and expense submission and the potential to rectify the issue early on.
- Missing or inaccurate time/expense entries: Employees that submit time once a week or once a month might not record all the details for the tasks that they have worked on, or might forget to record the time entirely. With the convenience of the mobile app, all employees are more likely to develop the habit of submitting time every day. Similarly, with expenses, users are more likely to record the expenses as they are incurred rather than having to wait to be connected to the network. Consequently, this will ensure:
 - Accurate project status and cost reporting. Project Managers can keep accurate status of planned vs actual hours allocated to the project and tasks and identify potential schedule and cost slippage ahead of time.



- Less chance of running into compliance issues when submitting more frequently. Even if there are issues encountered these will be much easier to manage when looking at a single day or weeks' worth of data vs multiple weeks or a month.
- Invoicing customers on timely basis. When relevant time/expenses are submitted and approved on time, customers can be billed appropriately and revenue can be potentially recognized much sooner.
- **Delayed Time approval**: The approver might not be aware of any outstanding time items requiring their approval, or might not have time to get through all approvals during regular business hours. With the mobile app and the convenience of the offline access and push notifications functionality, approvers can review and approve the appropriate entries anytime and from anywhere.

With the push notifications functionality, users will conveniently receive mobile notifications on their handheld devices, which provides them with daily reminders about the work to be done. In-app alerts are easily accessible from the app, which allows users to quickly focus on the matters requiring immediate attention.

Mobile App Availability and Supported Platforms

The second release of the app, which includes expense functionality, is targeted to be available on the Online App Stores by November 24, 2017. This release of the mobile app includes the following set of features:

- Login / logout
- Time entry, submission and approval
- Expense entry, expense report creation and submission *New*
- Localization support for time and expense entry
- Pull notifications for time and expenses
- Push notifications for time and expenses
- Offline access for time and expense entry
- App walkthroughs
- App feedback



The app can be downloaded from the following Online App Stores:

- Google Play, for the Android version of the mobile app
- Apple App Store, for the iOS version of the mobile app

To use the mobile app for expenses, the Changepoint server must be upgraded to the November 2017 general patch for Changepoint 2017 or Changepoint 2014 SP2. The mobile app requires the time and expense RESTful APIs that will be available as part of those general patches. The Mobile app will continue to function as before if the corresponding server update is not applied.

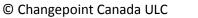
Note: Customer specific customization is not available on the mobile app. For further details regarding the support of your Changepoint customization on mobile, please contact the Changepoint product management team.

Screenshots of the Mobile App

Dashboard View:

- Seamlessly navigate between time, expenses and approval views.
- View key notifications right on the screen and never miss the tasks requiring your attention.
- View expenses and expense reports that require further action.

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Fig. 1 Notifications		Fig. 2 Expense report listing		Fig. 3 Expense





Expense Views:

- Manage existing expenses
- Add new expenses
- Create or modify an expense report
- Support for configurable fields at the expense item and expense report levels, including conditional properties and values
- Add attachments to the expense items or expense report

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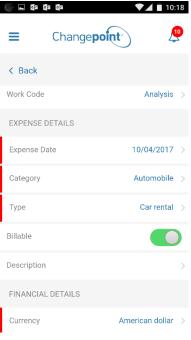


Fig. 4 Add expense

Fig. 5 Add expense, continued

Fig. 6 Add expense, continued



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Fig. 8 Save expense

Fig. 7 Add expense, continued

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Fig. 10 Expense report

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Fig. 11 Expense report details

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Fig 9. Add attachment

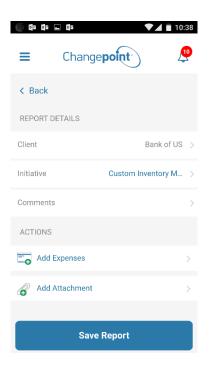


Fig 12. Save expense report



API Enhancements

Second phase of the RESTful API

- The introduction of a new Changepoint REST API is an overall goal of Changepoint. The first phase of this API was delivered to support both the new project planning worksheet and the new mobile time application. The second phase adds expense functionality to support expense entry and submission on the mobile app. This new API functionality is not yet available to customers for their own use.
- The portion of the REST API used by core Changepoint functionality will be included in the Changepoint installer, making it seamless for customers who upgrade.

Upgrade notes

Customers applying the Changepoint November 2017 general patches should be aware of the following:

- The new REST API option is part of the Changepoint 2017 and Changepoint 2014 SP2 installer. The REST API is a mandatory part of the installation process.
- Minimum supported OS versions for the mobile app:
 - o iOS 9
 - o Android 4.4

Frequently Asked Questions (FAQs): Mobility

Is the Changepoint Mobile app a native app or hybrid app?

This is a hybrid mobile app with native and shared components to provide an optimal user experience and performance.

What are the channels of distribution?

The app will be distributed through public Online App Stores such as Google Play and the Apple App Store.

How does the Mobile app connect to the Changepoint database?

The app communicates with the Changepoint database through a RESTful API over HTTPS as the secure communication protocol.



How will the mobile app point to the Changepoint database?

The app will have a setting to allow the user to configure a domain URL to point to the RESTful API that is installed on the server.

Does the mobile app download any information on the device?

Yes, the mobile app downloads the data required to provide the relevant experience to the user on mobile. The app will download lookup fields, and the Time and Expense records that are relevant to the mobile user.

Is the data cached locally on the device?

Yes, the mobile app will download and cache the appropriate data to provide an optimized experience to the user, especially for offline access.

Is the data on the device encrypted?

No, the data on the device is not encrypted. However, on the device, each app operates in a "sandboxed" environment, which means that each app has access only to the data that is a part of their application space.

Can the mobile app be used offline?

Yes, the app supports offline capability for both Time and Expense. Note that only expense entry is available offline. Expense reports must be created and submitted while connected to the network.

Does the mobile app require a persistent connection to work?

The mobile app does not require a persistent connection to work.

How will the users know they are working offline?

There will be a notification displayed on the screen letting users know they are working offline.

What approvals can be done on in the mobile app?

Only time approvals can be done on the app. Other types of approvals such as expense reports, invoices, and workflow, will be considered for future releases based on customer feedback.

Is there investment required for new architecture to support the mobile app?

No, the existing architecture supported by Changepoint will support the mobile app.

What is the minimum version of Changepoint supported for the mobile app?

Both Changepoint 2014 SP2 and Changepoint 2017 with the respective November general patch applied for time and expense functionality support the mobile app.



What are the supported authentication schemes?

The mobile app supports the same authentication schemes that are supported by the Changepoint web application, except for ISAPI SSO, which is not supported on the mobile app. Since the mobile app is an end consumer of the Changepoint website, the mobile app will simply use the existing authentication scheme configured for the Changepoint website.

Does the mobile app require any third-party add-ins?

The app does not require any third-party components to be installed.

Does the RESTful API affect the existing web services used by the Changepoint web application?

No, the RESTful API is totally independent from the web services currently being used by the Changepoint web application.

Does the entire Changepoint website need to be exposed externally?

No, there is no requirement to fully expose the Changepoint website externally. At a minimum, the RESTful API and the sign-in page would have to be available externally.

Can the RESTful APIs be installed separately?

Yes, as an alternative approach, the RESTful APIs can be installed separately on a different server and do not need to sit under the Changepoint Enterprise directory.

Will concurrency conflicts result from using a mobile device and desktop at the same time?

No, time and expense records are considered independent records. Also, from a use case perspective we do not expect many users to simultaneously work on more than one device with the intention of modifying the same record.

