campusM 2022 Release Notes

Developments

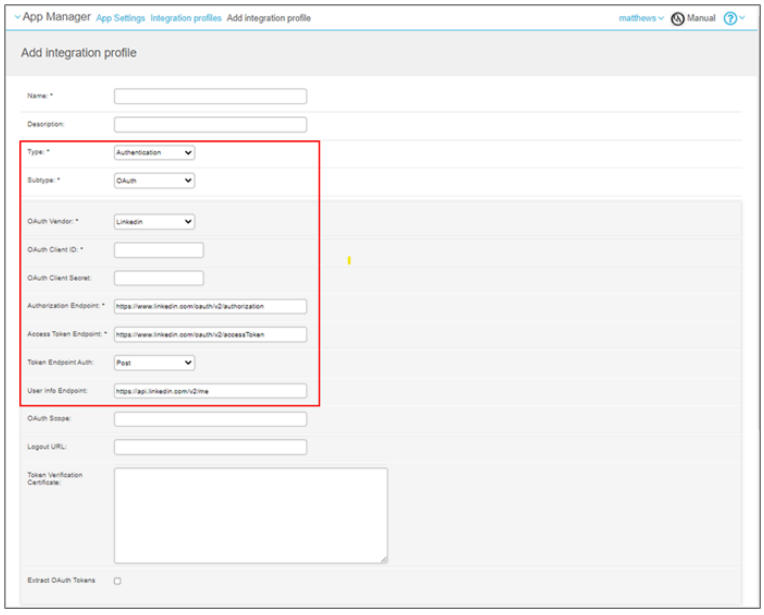
Social Media Login – LinkedIn Support

December 2022

Following the addition of the ability for customers to configure social media login through Google and Facebook, we added support for LinkedIn as a configurable mechanism. This creates a reliable and secure method for users who are not yet known to the institutional authentication system (IDP) - for example, prospective students or alumni – to log in to the app.

The LinkedIn authentication can be configured within the **Integration profile**, selecting **OAuth** and sub-selecting the **LinkedIn** vendor.

Once configured, the user can select **LinkedIn** to sign in to the app. They are redirected to the LinkedIn platform to authenticate and then redirected back to the app. Their user is then created, with the email linked to the chosen social media account used as their primary identifier within campusM.



Note that customers can extract a list of registered users from **App Manager > App Settings > Registered Users**.

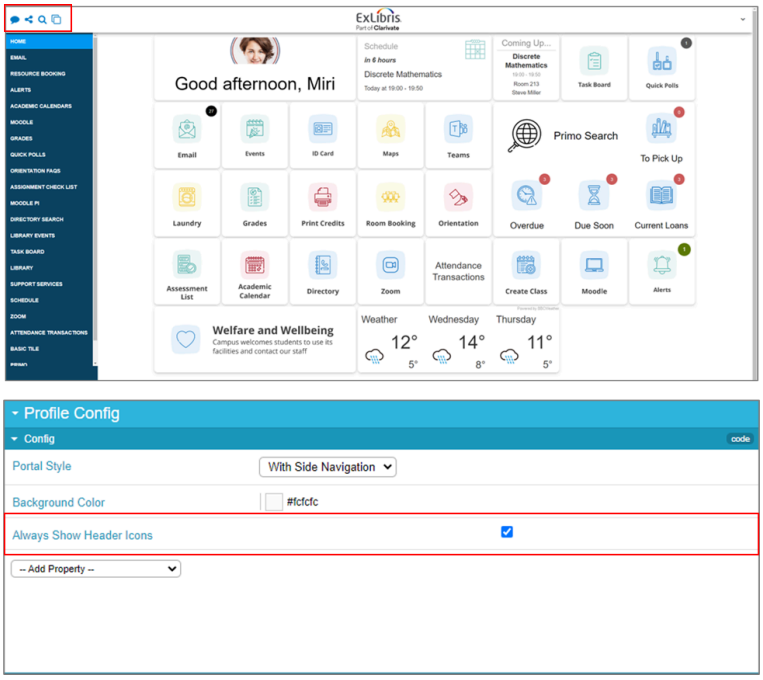
For more information, see Managing Token Based Authentication.

Display Header Icons in the Web App

December 2022

We removed several key links from the **App Settings** menu on the web app header to improve accessibility and speed up access.

Customers can add and enable the **Always Show Header Icons** property for either the App or **Profile Config** in App builder to display the **Feedback**, **Share**, **Search**, and **Arrange** icons in the web app header:



Android App Accessibility – Talkback Enhancements [ANDROID APP]

December 2022

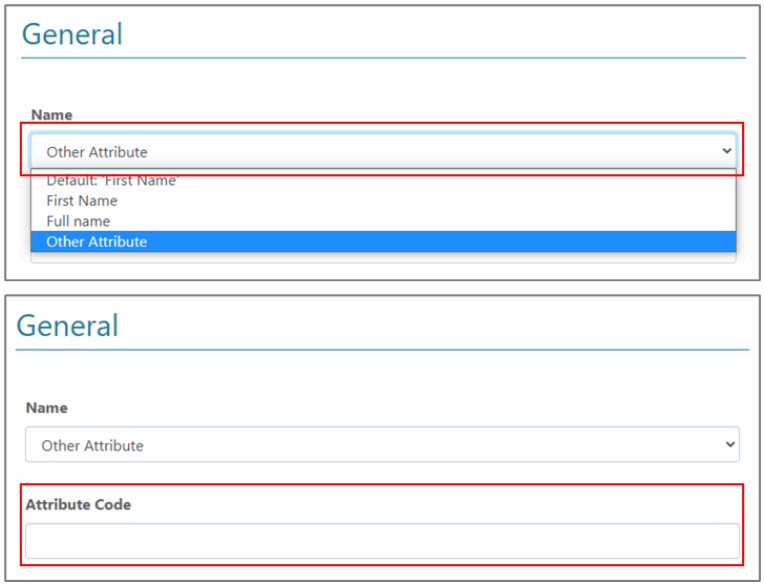
As part of our continued commitment to improving our app accessibility for all users, we made several enhancements to the Android app for how headers are recognized and read by the Android OS Talkback facility. This encompasses a wide range of screens and functions within the Android app.

See our accessibility statement: Accessibility Statement.

Greeting Live Tile Product Integration – Use of Token Attribute for Name

December 2022

We enabled the ability to map the **Name** displayed on the tile to a token attribute, providing additional flexibility to the dynamic data displayed on the homescreen:

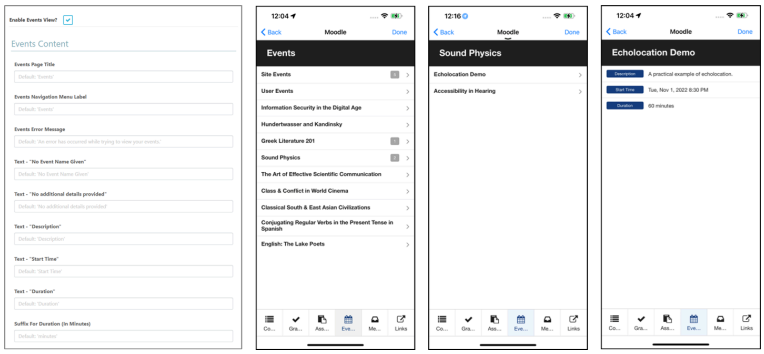


For more information, see Greeting.

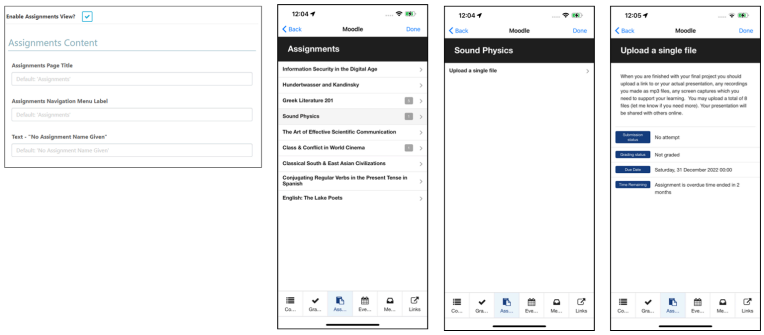
Moodle Product Integration – Additional Screens for Events, Messages, and Assignment Views

December 2022

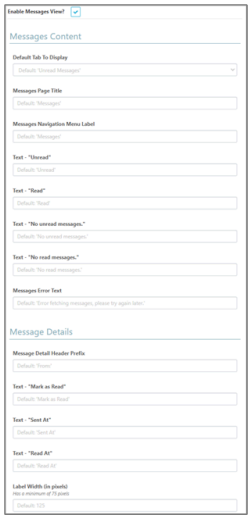
As part of our continued commitment to enhancing product integrations that support student studies, we added several new screens to expand our Moodle product integration. This includes displaying the following information within our integration:



Events



Messages







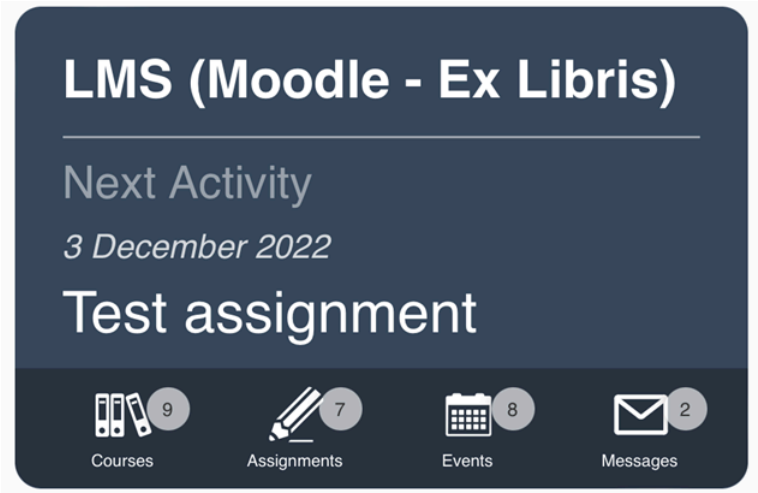
Assignments

For more information, see Moodle.

Moodle Product Integration – Live Tile Links

December 2022 **SF: 05332535**

As an enhancement to the new screens implemented for Moodle (see above), we ensured that the Live Tile now links to the relevant screens when selecting the appropriate areas of the live tile.

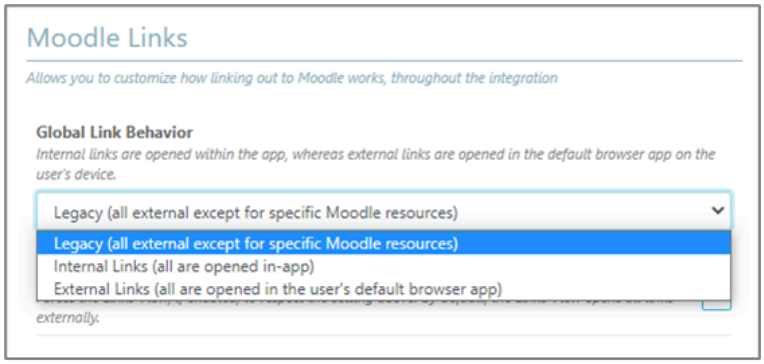


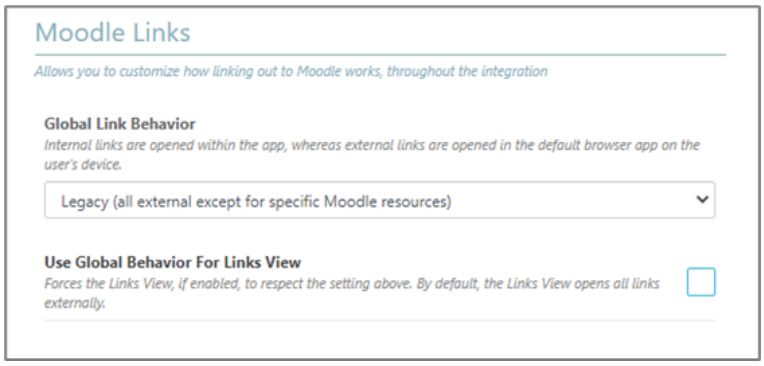
For more information, see Moodle.

Moodle Product Integration – Configurable Link-out Behavior HOTFIX FOR NOVEMBER 2022

December 2022 **SF: 05309518 06333257**

We added support for the Moodle product integration configuration of link outs behavior. This gives customers the ability to define whether links open externally or internally (in App browser). In addition, we allow customers to separately define how the **Links** view behaves, as this is traditionally used for third-party links and requires separate treatment.



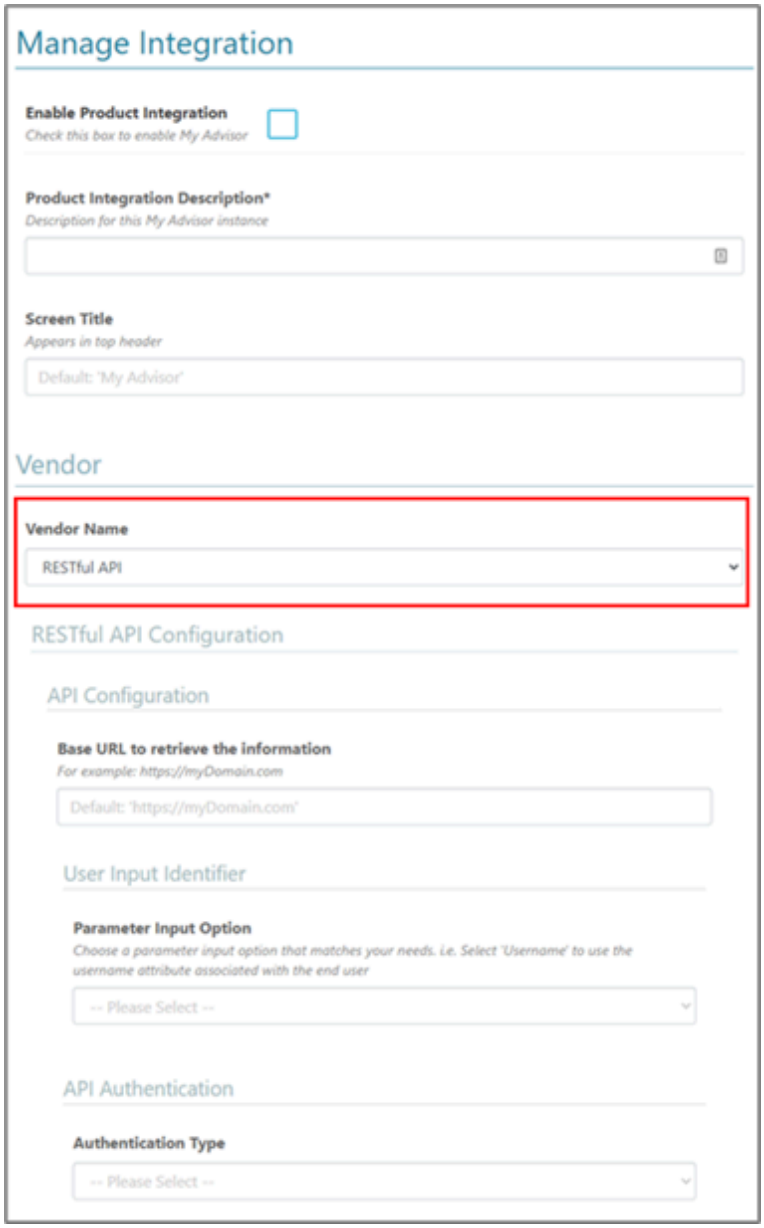


For more information, see Moodle.

My Advisor Product Integration – Support for RESTful API Vendor HOTFIX FOR NOVEMBER 2022

December 2022

We added support for the RESTful API vendor to populate the integration with dynamic data, in addition to the existing Colleague and PeopleSoft vendor support.



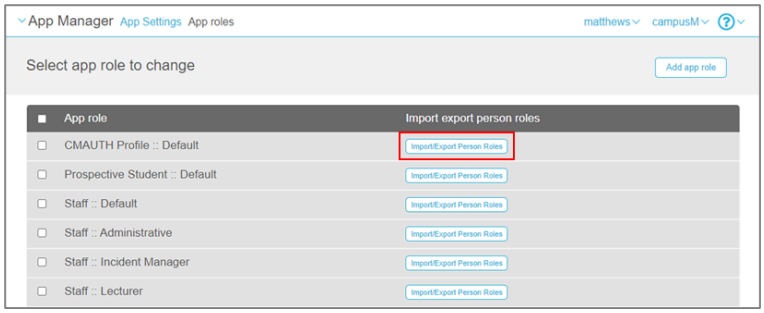
For more information, see My Advisor.

Bulk App Role Subscription Using Excel File Import and Export

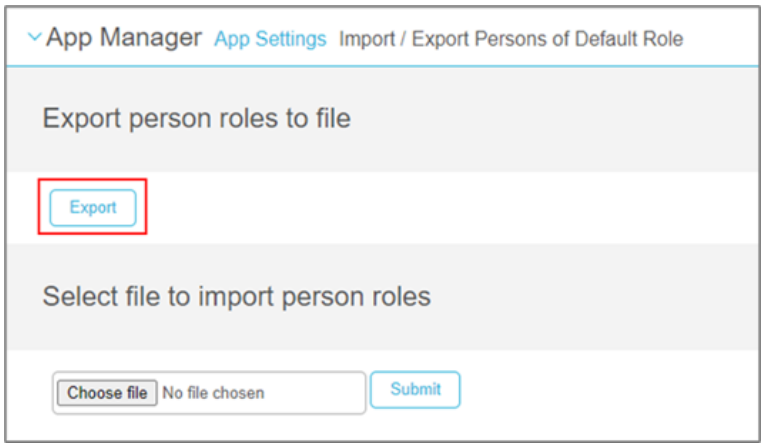
November 2022

We created the ability to bulk-add App role subscriptions through the import of a simple CSV file containing the target user's email address. This enables large App role applications for end users without the need for RoleSync, enabling group management on a more manual basis.

To access the export and import process for a role, select **Import/Export Person Roles** button in the row for the **App role** of choice:

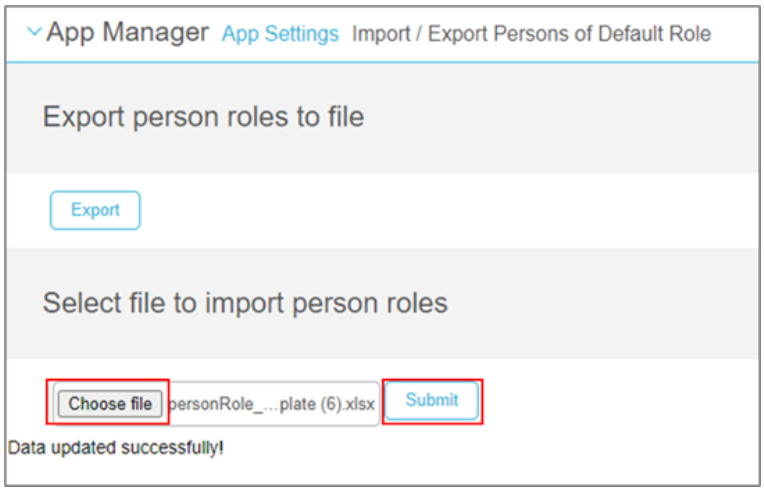


To export the current list of user emails with the selected **App role** and provide a template file for the upload, select **Export**:



This downloads a simple Excel sheet where column one contains the email address for users who have the role. If no email address is shown, no user has the applied role.

To add users to an **App role**, download the export template and populate the first column with the email addresses of the users you want to apply the **App role** against. Save the file and then browse and select this file using the **Choose file** option. Select **Submit** to import the file.



Note

This **appends** the list of users to the App role and does not overwrite the list of users.

Note

The interface provides feedback on any users not imported (as they do not yet exist as a user in campusM) or issues with the import file itself.

Watch our essential training video on App Profiles and Roles.

Feed Tile Clicks Added to Insight Analytics (HOTFIX FOR OCTOBER 2022)

November 2022 SF: 06308015 06309643

The Insight capture data now includes clicks for deployed Feed Tiles. The clicks are aggregated against the title of the feed item that the user clicks. This enables customers to track interest in their social/dynamic news feeds shown on the homescreen.

For more information on Insight Analytics, watch campusM Analytics.

Create New User API

November 2022

We added a new API that enables the creation of campusM users BEFORE they have been authenticated into campusM. This enables you to manage their roles before they have entered the system. The same API also identifies if a user already exists by providing an error message identifying the user already exists.

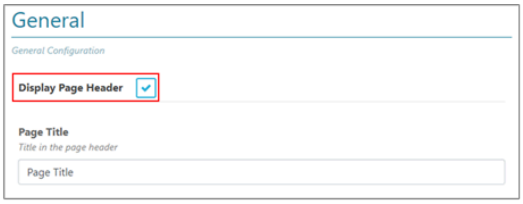
Note

For most user cases, this API is not required since campusM users are created as needed when a new user authenticates into the app, pulling the required personal details from the **Identity management provider**.

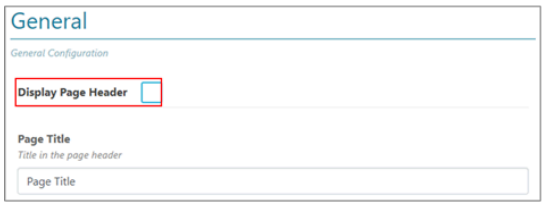
Primo VE Library Product Integration – Hide Header Title and Navigation (HOTFIX FOR OCTOBER 2022)

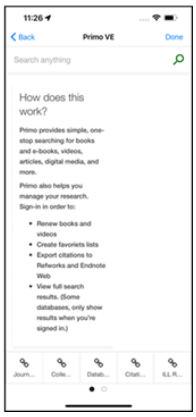
November 2022

We added the ability to hide the header which contains the **Page Title** and the navigation icons on My Library Card, Favorites, and the Search History.









For more information, see Primo VE.

Moodle Product Integration – Category Whitelisting/Filtering

November 2022

We provided additional functionality around the course categories, enabling the ability to whitelist and filter by category names. This enables specific categories to be hidden from the end user. For example, you can use these categories to only whitelist the current active courses, and therefore hide old courses no longer of interest.

To selectively show course categories, in the Moodle product integration **Service Content** section, check **Enable Categories Whitelisting** and add the **Category Name** for the categories to show. You can add more than one by selecting **Add Item**.



For more information, see Moodle.

Events Product Integration – Increased Character Limit for Event Descriptions

November 2022

We increased the character limit for the description field for each event from 256 to 800, to account for longer narratives.

For more information, see Events.

Personal Details Product Integration – Peoplesoft Vendor Support

November 2022

We added support for PeopleSoft for our Personal Details product integration. This enables a range of data fields to be configured and shown within the **Personal Details** screen.



For more information, see Personal Details.

Google Play Developer Program Policy Update (ANDROID APP)

October 2022

As a result of Google enhancing their privacy and security experiences, they have updated their policies and now require additional user permissions to be requested as part of the installation process for the app. From the October 2022 release, the Android app requests permission to send reminder notifications to the end user.

Google continues to require customers to complete the Play Store Data Safety Form. Review the form and complete the instructions found here.

campusM Attendance – Prevention of Geolocation Spoofing on Android (ANDROID APP)

October 2022

To prevent students from potentially spoofing their Geolocation coordinates using 3rd party apps, we modified the check-in process to check for mock GPS providers installed and operating on the device. If identified, the app will not forward the spoofed coordinates, resulting in the geolocation NOT being attached to the transaction and therefore be considered an unvalidated check-in for this check-in validation type.

For more information, see Managing campusM Attendance.

SMS Trigger added to URL Schema

October 2022

We added the ability to initiate an SMS text message to a specified number using an action URL. This can be done from a tile or on a creative studio page.



The action URL must use the format **sms:40770712345678** where the number following the **sms:** must be the intended recipient's mobile number (including country code).

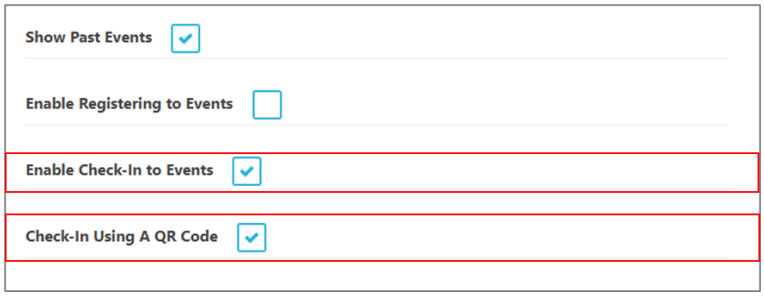
Note

This does not work for the Web App, so the tile must be restricted to the native platform (whether using overrides or disabling for web altogether).

Events Product Integration – QR Code/Text Code Check-In Validation (HOTFIX FOR SEPTEMBER 2022)

October 2022

We added a new configurable check-in option for events – QR Code (for native) and text-based code (for web). If **Enable Check-In to Events** AND **Check-In Using A QR Code** are checked in the **General** configuration area, the user is prompted to scan a valid QR code (native) or enter a valid code (web) to successfully check in.



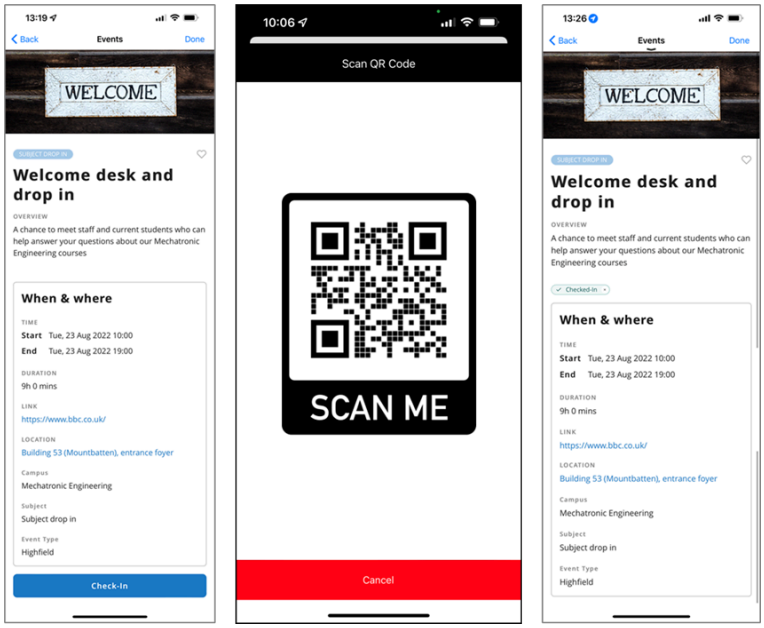
Both the QR code and the code to enter manually are based on the **EventID** that you assign to the corresponding event (either in the RSS feed or Excel file uploaded).

The QR code must be text encoded and use the following format:

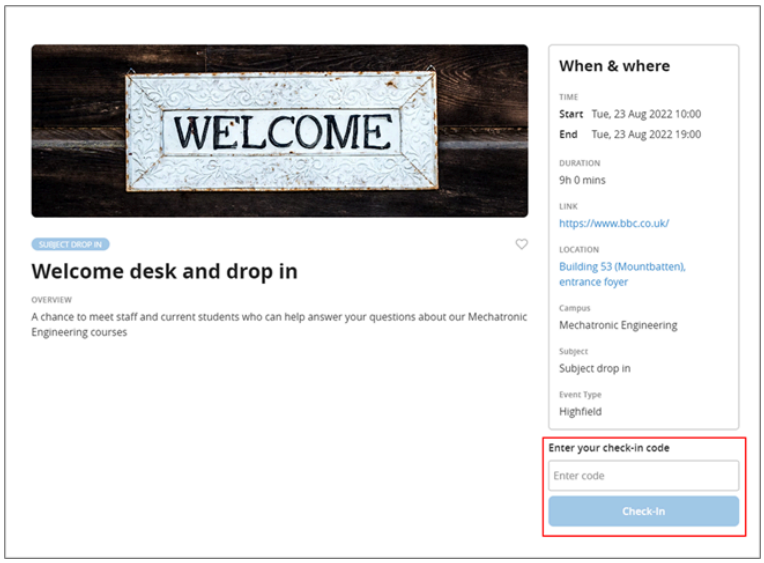
```
{"eventId":"12345"}
```

Where **12345** is substituted with the event ID of the corresponding event. A QR code generator must be employed to create

the text-encoded QR code.



The text to be entered by the user in the web app must be the **event ID** (so in this example, the user would enter the text `12345`).



Note

For both native and web, the user is only checked in IF the correct code is entered.

Events Product Integration – Check-In Without Registration (HOTFIX FOR SEPTEMBER 2022)

October 2022

We modified the check-in function for events behavior to enable end users to check in to an event during the check-in window event if they have not already registered for the event or if registration has not been enabled. This is to streamline the experience.

As a result, customers can configure check-in without checking **Enable Registering to Events**. In this case, if **Enable Check-In to Events** is enabled, then the check-in button will appear during the check-in window for the event. If both are checked, then the student will be able to register in advance of the event, but can check-in without registering during the check-in window (removing the need for the additional registration step)

For more information, see Events.

ID Card Product Integration – Scannable QR Code (HOTFIX FOR SEPTEMBER 2022)

October 2022

We added the ability to configure the barcode to be displayed as a QR code and is available to scan from the screen. This provides the opportunity for the card to be used for a broader range of purposes (for example, tickets for events, loyalty card) by virtue of using the QR code standard.

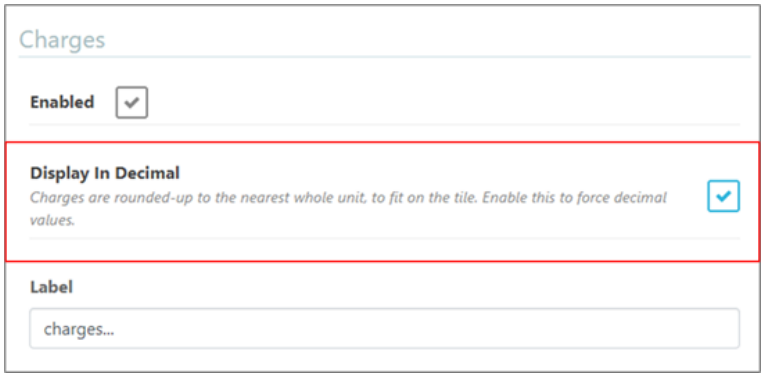


For more information, see ID Card.

Library Product Integration – Primo & Primo VE – Displaying Charges with Decimal Values (HOTFIX FOR SEPTEMBER 2022)

October 2022

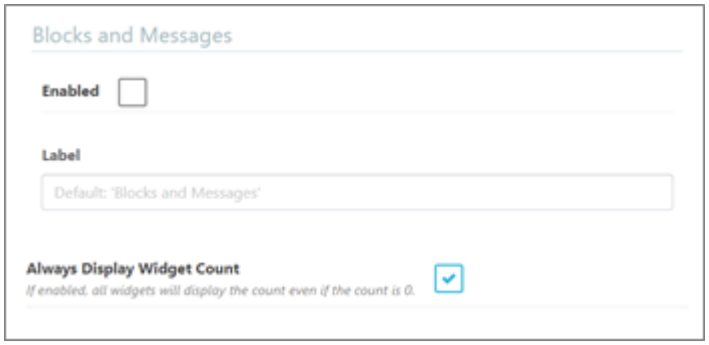
We added the ability to configure how **Charges** are displayed on the live tile. By default, the charges are rounded up to an integer; however, we added a checkbox to display decimal values if enabled:



Library Product Integration – Primo VE – Displaying Blocks and Message Counts

October 2022

We added the ability to display the count for the number of Blocks or Messages the end-user has against their account on the live tile.



For more information, see Library.

LiveTile SDK General Release

September 2022

After a year of beta usage, we are releasing our LiveTile SDK to the general customer population, enabling any customer to create and code their own Live Tiles using our ReactJS development framework and deploy them to the app. This provides a means of creating new and exciting custom experiences on the home screen, displaying dynamic data and enhanced interactions on tile faces.

For more information, see the LiveTile SDK.

Application Extension Kit – Update to Node 14

September 2022

We are updating our Application Extension Kit (AEK) to support Node 14, with further work to migrate to Node 16 over the coming quarters. This update will provide a more stable development platform with incremental enhancements to the toolset.

Customers can continue to manage their existing projects without updating their development environment, but NEW projects should be started in an updated environment.

Note

This will also force new projects to React 16.

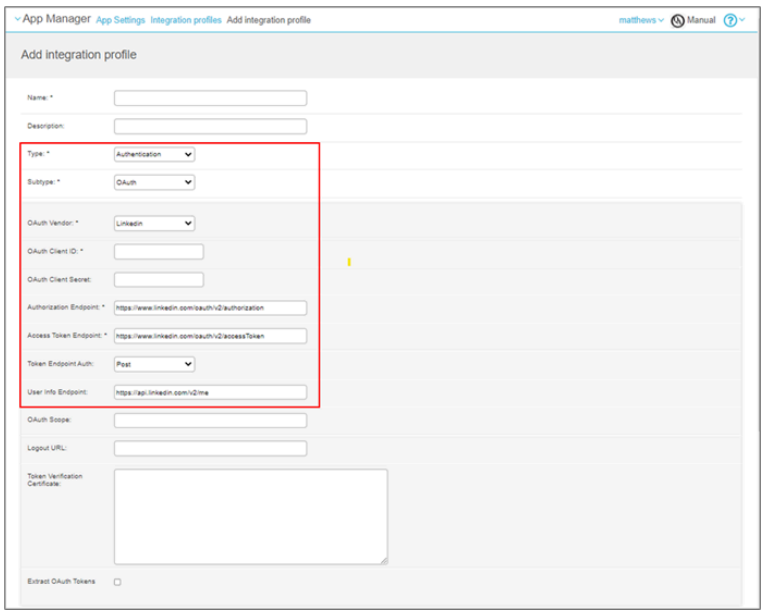
See the AEK NPM repository for guidance on how to update your development environment.

Social Media

September 2022

To enable user authentication for customers where their end users are not yet known to the institutional authentication system (IDP) - for example, prospective students or alumni - we have incorporated social media login support for the following social platforms: Google and Facebook.

Once configured, the user can select one of these authentication mechanisms to sign into the app. They will be redirected to the social media platform to authenticate and then redirected back to the app. Their user will then be created, with the email linked to the chosen social media account used as their primary identifier within campusM.



Note that customers can extract a list of registered users from **App Manager > App Settings > Registered Users**.

For more information, see Managing Token Based Authentication.

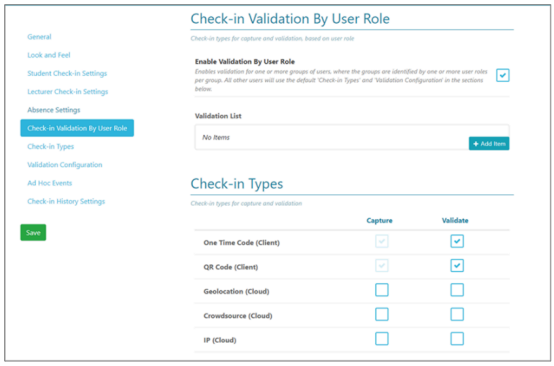
campusM Attendance – Configure Validation Type by Role HOTFIX FOR AUGUST 2022

September 2022

We added the ability to define validation configuration variations by **User Role**. This enables customers to configure a set of different validation mechanisms for users of a particular role. For example, where a set of students require additional levels of validation, or where a set of students might be online learners and therefore would not be able to validate using a physical location mechanism.

In the configuration, when enabled and defined, anyone with the selected role(s) is required to validate with the selected

mechanisms. Everyone else (i.e. those without the specified roles) receives the default validation configuration.





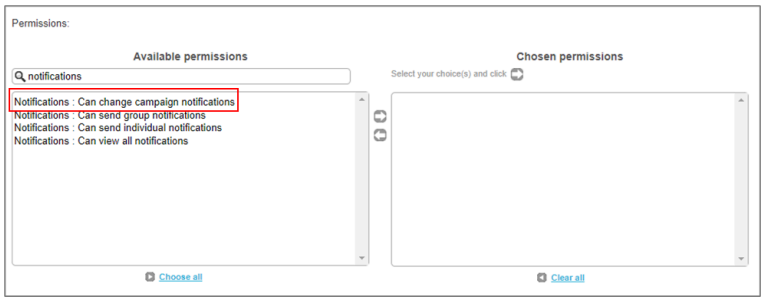
Note that customers need to define the **Validation Configurations** for the selected validation types against the role configuration item.

For more information, see Managing campusM Attendance.

User Permissions – Added Permission for New User Notification Campaign

September 2022 SF: 06429793

We added a new permission that enables customer admins to set App Manager **Permissions** to allow or deny the ability to create New User **campaign notifications**. This can be added to individuals or to groups to enable access.

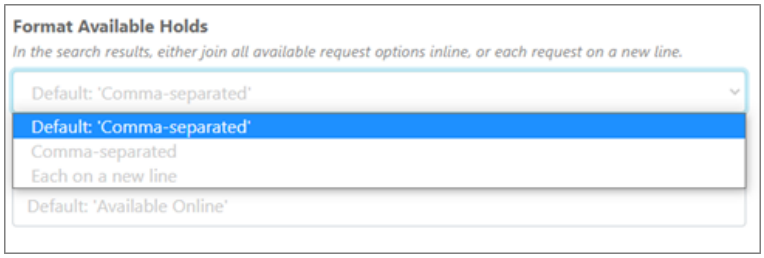


For more information on User permissions, see Managing Users.

Primo Product Integration – Format Available Holds HOTFIX FOR AUGUST 2022

September 2022 SF: 06428215

We added the ability to configure how available holds are displayed within the search results for the Primo product integration. This resolves a behavior where items with a large amount of hold locations would result in an unseparated list that was difficult to read. Customers can now configure the **Available Holds Format** to be separated by commas (default behavior) or by line breaks (optional behavior) to make them easier to interpret.



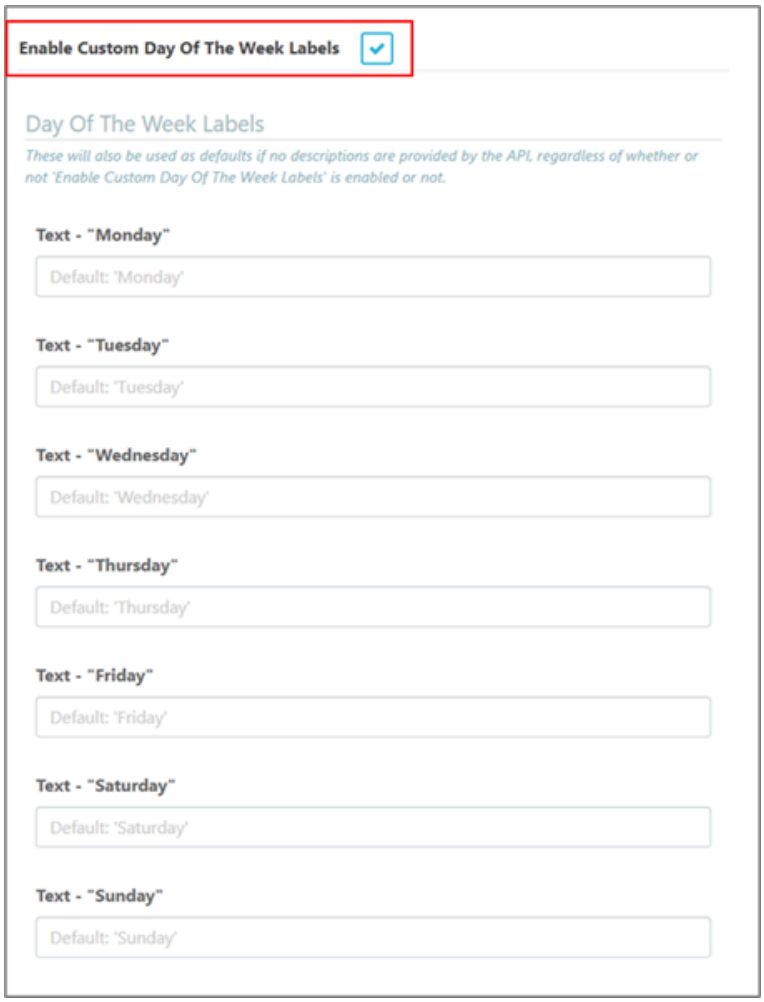
The **Format Available Holds** selection can be found within the **General** configuration section.

For more information, see Primo.

Primo Product Integration – Translation Keys for Days of the Week in Opening Hours

September 2022 SF: 06375939

We added the ability to configure translation keys for the days of the week within the **Opening Hours** section of the product integration. This overrides the English translations returned by Alma with the custom labels defined in the product integration **Configuration**, allowing for translations.



For more information, see Primo.

Notifications – Permission for App Manager Users to See All Their Sent Notifications

August 2022 SF: 06326853

As more customers continue to innovate with campusM Attendance, we are happy to announce the addition of a new client-side validation mechanism – QR Code. The QR Code must be a text encoding of the location code returned by the timetable for the event requiring validation. It can be used in conjunction with the One Time Code validation as either-or option for checking into a class.

As a result of feedback from customers on the inability for some App Manager users with limited notification permissions or permission to send notifications to certain notification groups to be able to see previously sent messages or resend notifications to those end-users who had not read the message.

We have therefore modified the Notification Center to enable those app manager users to view the details of the messages they have sent.

Note

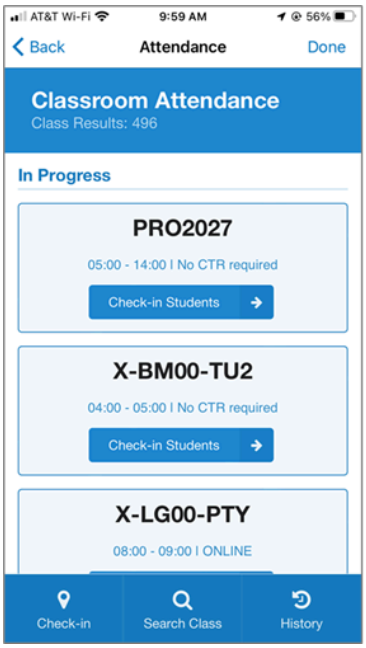
This change only applies to notifications sent after the August release.

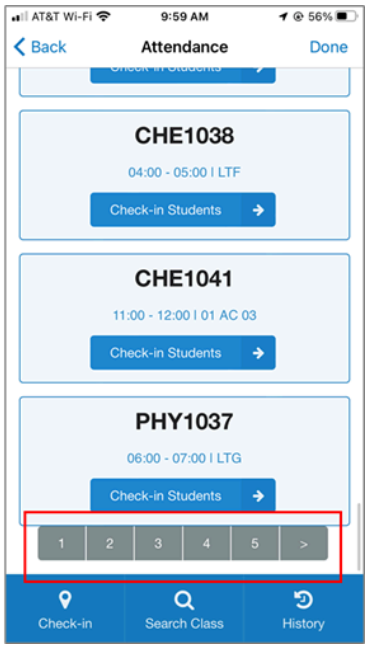
For more information on how to send notifications, watch our Notification Center training videos.

Attendance Alternative Lecturer Check-In – Enabling Pagination for Event Search Results

August 2022

To improve the end-user experience for those customers using the Alternative Lecturer Check-in feature, we have enabled Pagination (aka paging) when the search terms entered result in a large number of events being returned. The user can then page through the results to find their event, rather than waiting for an extended amount of time for the data to be downloaded.





For more information on how to send notifications, see campusM Attendance Alternative Lecturer Check-In.

API – Create Customer Roles API

August 2022

In addition to the Create App Roles API, we added the equivalent Create Customer Roles API which enables developers to add new customer roles programmatically to campusM through the API gateway.

For more information on this new API, see Create and Remove Customer Roles.

API – Check-In Edit API

August 2022

We added a new API that enables customers to add and modify check-in records for end-users programmatically. This can be used to update the campusM cloud with check-in data to ensure consistency across systems.

For more information on this new API, see Add or Modify Attendance Check-in Records.

Lists Product Integration – PeopleSoft Vendor Support

August 2022

We added support for the Peoplesoft RESTful connector to generate a flat file to populate a dynamic list of items for end-users.

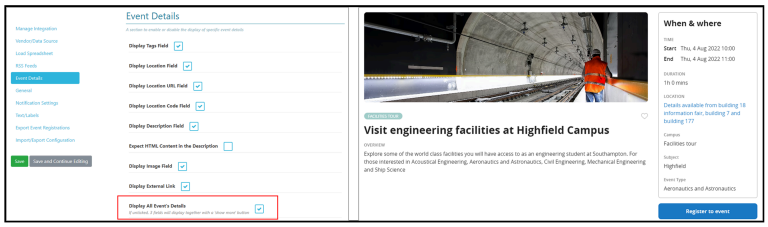
The PeopleSoft Restful connector endpoint can be configured through the **Product Integration Configuration** screen within the **Vendor** section.

For more information, see List.

Events Product Integration – Display All Details in the When & Where Section

August 2022

We added the ability to display all the configured event details in the **When & where** section of the events listing, rather than showing the first three along with a **show more** option to expand visibility of other elements.



The options can be found in the **Events** section of the **Events** product integration configuration.

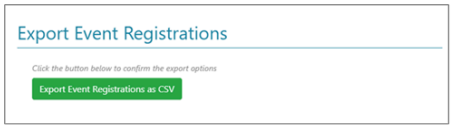
For more information, see Events.

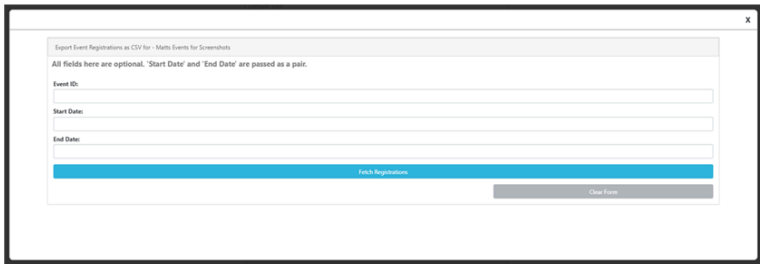
Events Product Integration – Event Registrations and Check-In Data Export

August 2022

We added the ability to download the events registration and check-in data through the **Events Product Integration Configuration** screen, exporting it to a CSV file for external reporting and analysis.

The export feature provides the optional ability to filter exported results by Event ID and date range. If left blank, all events data is exported. This feature is in addition to the API available for extracting data. See Get Event Registration Summary.





For more information, see Events.

Events Product Integration – Support for Multiple Tags Per Event for RSS Feeds

August 2022

We added the ability to define multiple elements for each of the additional fields and the tags as part of the RSS feed. For example,

```
<subject>History</subject>
<subject>Art</subject>
```

is mapped to two different values (history and art) and can be used to filter the events by the end-user.

For more information, see Events.

LMS/VLE D2L Brightspace Product Integration – Aggregated Live Tile Badge Count

August 2022

We added the ability to display an aggregated count of the unread Discussions, un-attempted quizzes, and unread assignment feedback in the alert badge for the live tile.

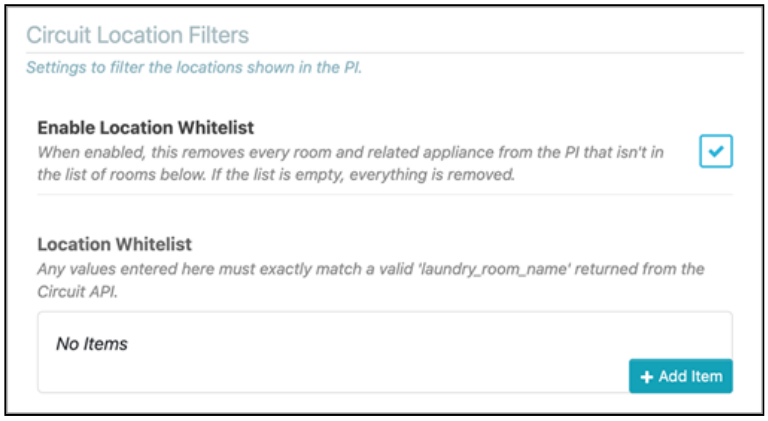


For more information, see D2L Brightspace.

Laundry Product Integration Circuit Vendor – Filter Launderette List by Location Identifier

August 2022

As a result of changes to the Circuit API, we have enabled customers to filter the data sent back by the vendor to specified location identifiers. Within the Circuit vendor configuration, we added the ability to add one or more **laundry_room_name** to filter the results from the API, allowing only selected venues to be displayed.

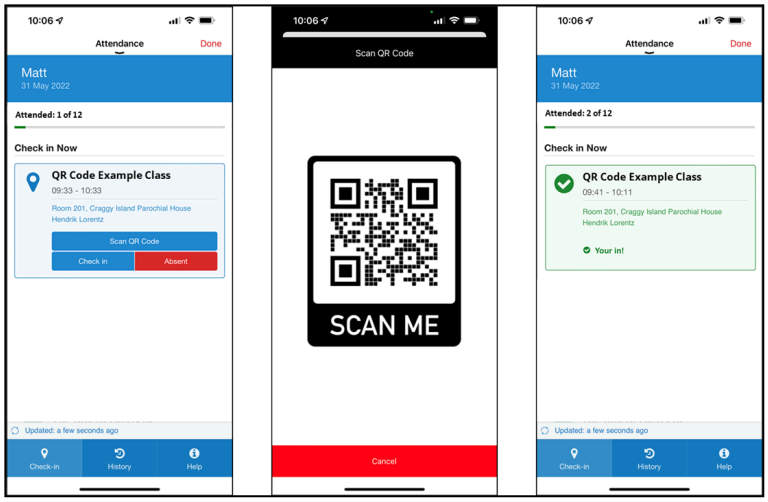


For more information, see Laundry.

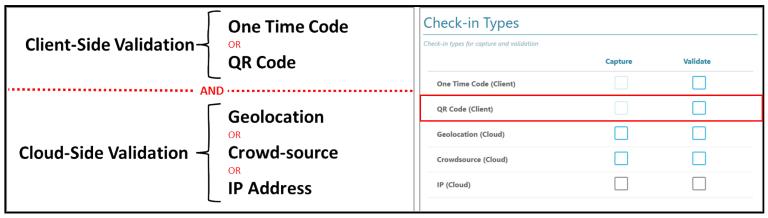
campusM Attendance – QR Code Validation

July 2022

As more customers continue to innovate with campusM Attendance, we are happy to announce the addition of a new client-side validation mechanism – QR Code. The QR Code must be a text encoding of the location code returned by the timetable for the event requiring validation. It can be used in conjunction with the One Time Code validation as either-or option for checking into a class.



Like the One Time Code, QR Code Validation is a client-side validation and has an AND logic relationship with selected cloud-side validation.



The QR Code for each location must be based on a text encoding with the following format:

```
{locationRef:"LOCATIONREFERENCE"}
```

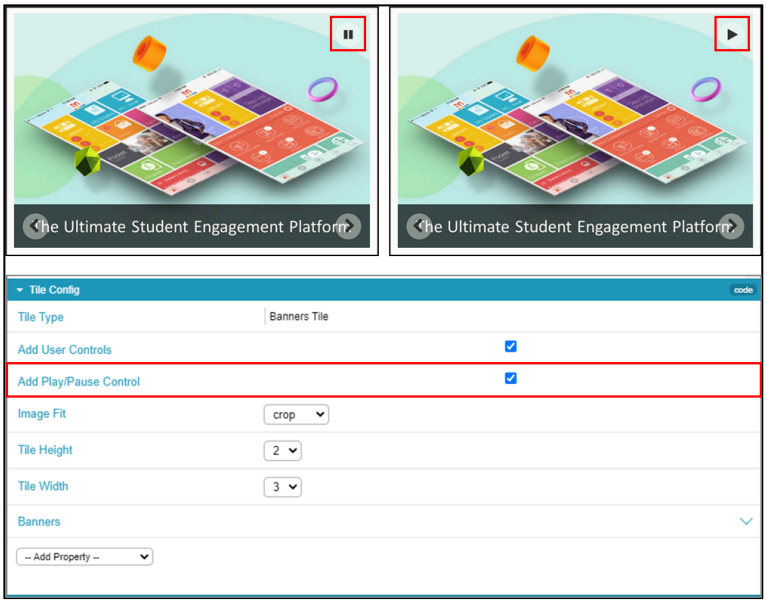
Where the `LOCATIONREFERENCE` is the customer **loc code** parsed in the timetable integration feed. The QR check-in type validation is considered valid if the scanned `LOCATIONREFERENCE` matches that for the class in the timetable. If not, it is invalid.

For more information, see campusM Attendance.

Banner Tiles – Pause Carousel Property

July 2022

As part of our continuous commitment to enhancing the accessibility of campusM, we added a new configurable property for Banner tiles, to enable the end-user to pause the Banner carousel. The pause selection is retained from one session to the next (but not post logout). Users can ‘play’ the Banner tile to resume the carousel.

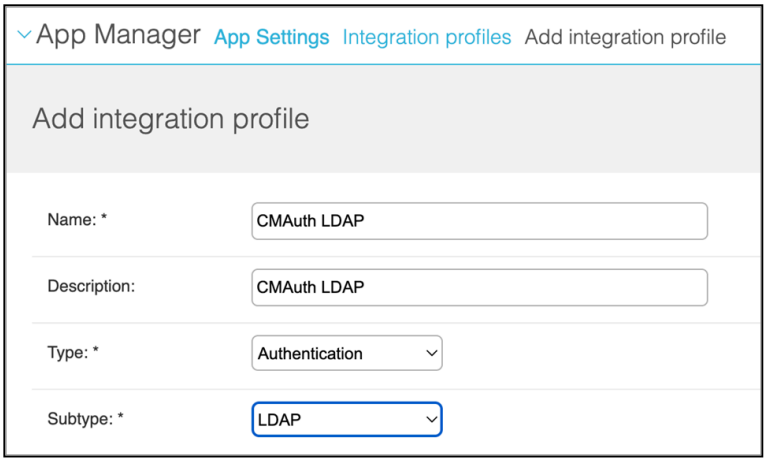


See our training essentials for more information on how to deploy and configure tiles like the Banner tile.

Support for LDAP for CMAuth

July 2022

We added support for LDAP as part of our token-based authentication mechanism – CMAuth. campusM Authentication (CMAuth) is a standardized token-based authentication framework that seamlessly supports the handshake, validation, and mapping attributes for authenticated users offering a variety of possible integrations with systems.



Customers who have previously used LDAP through the Connect Layer now have the option to authenticate cloud to cloud, removing the Connect Layer requirement for LDAP authentication.

For more information about CMAuth and configuring authentication for your apps, see Managing Token Based Authentication.

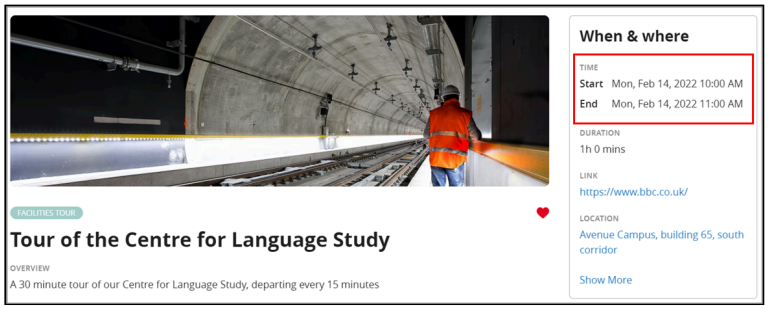
Events Product Integration – UX Enhancement for Start and End Times

July 2022 SF: 06316872

We enhanced how the Start and End dates/times appear for an event, to ensure they are visible and legible. We have,

therefore:

- Added a title Time for the times section.
- Changed the default labels from Start Time and End Time to Start and End respectively.
- Reduced the space between the labels and the content.

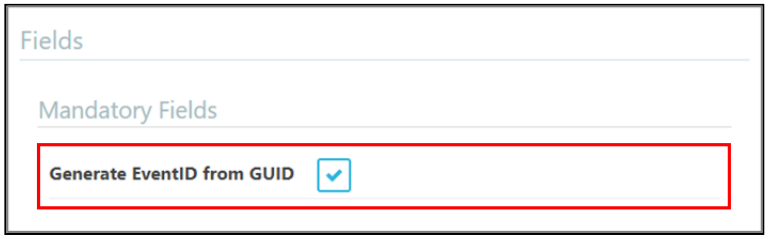


Events Product Integration – Support for HTML Content in the Additional Fields

July 2022

We enhanced the RSS feed to support the element to populate the Event ID as part of the RSS Specification, rather than a concatenation of the event title and date.

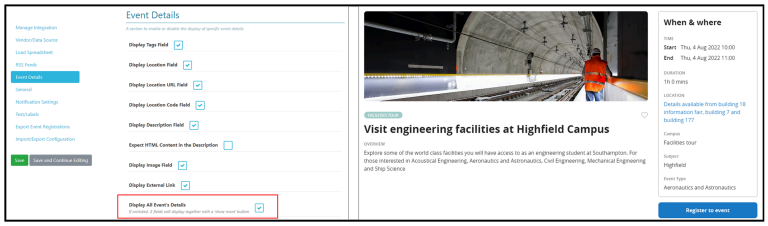
Customers can select to use the GUID as part of the RSS Feed configuration.



Events Product Integration – Support for HTML Content in the Additional Fields

July 2022

We added support for HTML content within the Additional Fields, as well as the Description section. This is enabled when the checkbox is selected for Expect HTML Content in the Description in the Event Detail configuration.



For more information, see Events.

ID Card Product integration – Peoplesoft Vendor

July 2022

We added support for Peoplesoft as a vendor to populate the ID Card product integration. Customers can select the Peoplesoft vendor from the ID Card configuration and set up their instance to start delivering the ID Card experience:

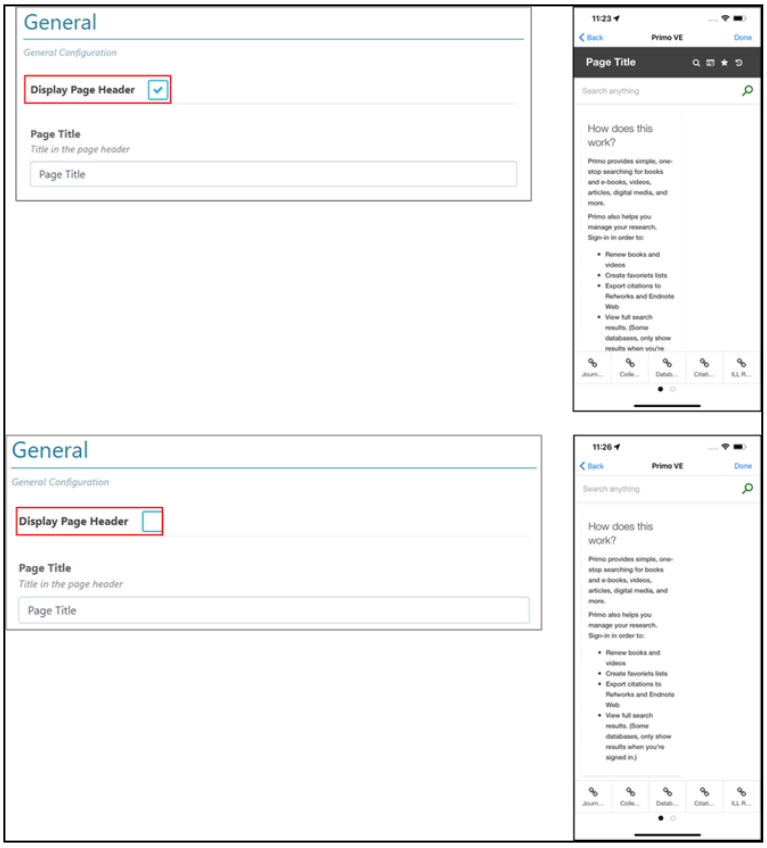


For more information about CMAuth and configuring authentication for your apps, see ID Card.

Primo Product Integration – Live Tile Configuration – Show Charges as Sum or Count

July 2022

We enabled the ability to show the charges as a Total Sum of the charges, or a count of the Number of Records the user has against their account. This is configurable through the product integration configuration.



For more information, see Primo.

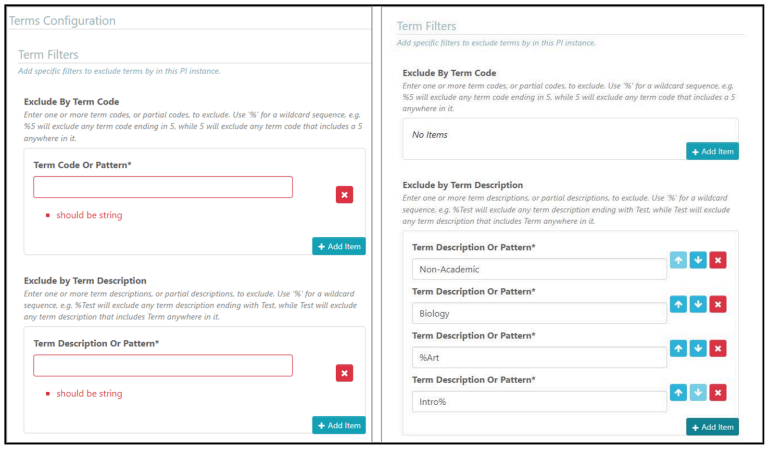
Banner Vendor Product Integrations – Exclude Terms by Term Code or Description

July 2022

We updated the Banner configuration to allow terms to be excluded from the terms list based on their description and/or term code. The exclusion filter can be configured using wildcards or a regular expression, providing flexibility with defining the filter. These filters can be applied as part of configuring the Banner XE Vendor within the following product integrations:

- Timetable
- Grades
- Courses
- Registration Status

More than one pattern can be used by selecting Add Item:



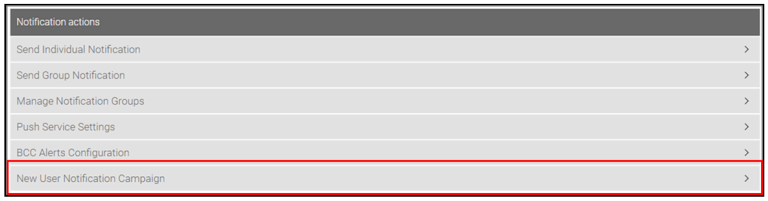
For more information, see the relevant product integration configuration.

New User Registration Notification Campaign

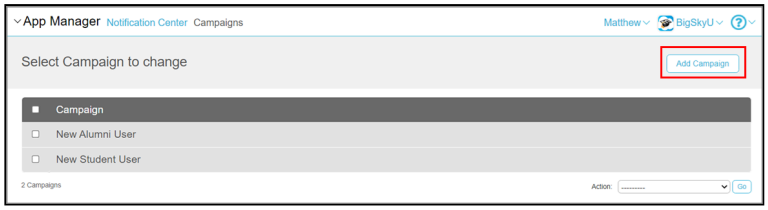
June 2022

We have introduced a brand-new onboarding feature for new user registrations. As part of this feature, we have enabled the ability for customers to configure a series of notifications that are sent to a new user upon first registration into a particular profile. The timing and content of these notifications can be configured to facilitate the creation of a communication campaign to introduce the app and prompt engagement. Customers can configure the notifications to encourage usage or point out useful features through a series of information app notifications.

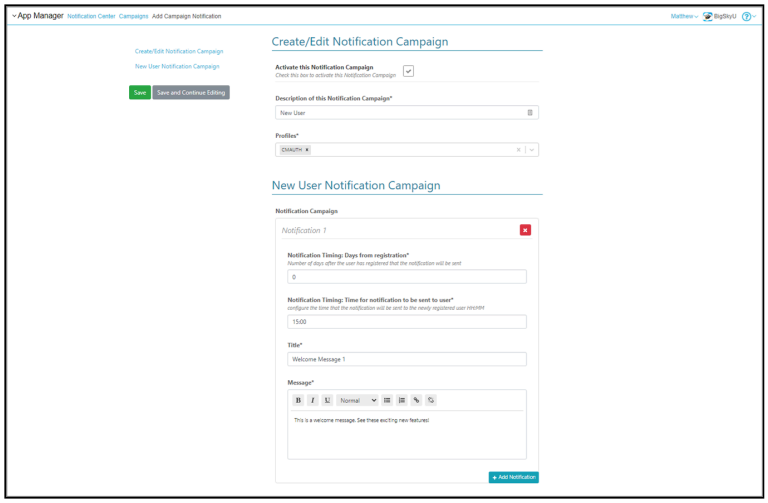
The configuration of this feature can be found in the **App Manager > Notification Center**:



Multiple campaigns can be created and configured:



Additionally, multiple notifications can be configured for one or more profiles when a user first registers for or accesses a profile:



The number of days after the registration that the notification is sent, the timing of the notification (based on the time zone set for the profile in the profile settings), and the content (title and body) of the notification are configurable.

For more information, see Notification Center.

campusM Attendance – Modified Check-In Refresh Icon

June 2022 SF: 05307185

We modified the timetable refresh icon shown on the attendance check-in screen to make it more prominent, and to make it clearer that it can be clicked to initiate a refresh. This is now consistent with other areas of the app.



Whitelisting for Android Apps

June 2022

Google considers the apps installed on a user's device to be sensitive information. Therefore, as part of ongoing support for Android 11, we are required to build the Android app with a whitelist of 3rd party apps that can be launched from campusM. This is in line with the Apple requirement to do the same. We are therefore adding the current Apple whitelisted apps to the Android manifest for each customer.

Note that any new link to a 3rd party app from campusM requires that the 3rd party be added to this whitelist and a new build created. These can be requested through a support ticket.

campusM URL Schema – Web App Support for campusm://search and campusm://feedback

June 2022

We added support for campusm://search and campusm://feedback in the web app, enabling you to link to the app search or the feedback section directly in the web app settings from a menu option (tile) Action URL. This enables clear and direct access to these items using tiles on the home screen.

For more information on the campusM URL Schema, see Working with App URLs.

Web App Accessibility – Menu Option (Tile) Focus Change

June 2022

We modified the focus border in the web app to only be visible if a user uses a keyboard to navigate the app. This means that the thick border shown around the tile in focus is only prominent when keyboard navigation is in operation, rather than when using touch or mouse.



For more information about campusM Accessibility, see Accessibility Statement.

Task Board Product Integration – Enhancements and Fixes

June 2022

We made the following fixes and enhancements:

- Added placeholder images for when there are no tasks for a user, or if there is an error retrieving tasks from the API.
- Added support for URLs as part of the API return, so customers can add hyperlinks to the tasks.
- Resolved an issue with long dates being truncated onscreen. Long dates now wrap over multiple lines.
- Added the ability to configure the labels across the integration to create a custom experience.

For more information, see Task Board.

Bus Tracking Product Integration: Samsara – Enhancements

June 2022

We made the following enhancements to the experience:

- Added configuration to determine the size of the bus tracking circle (current position)
- Added Base Route Labels to indicate the route identifier
- Added a direction indicator for the bus to easily identify the direction of the bus around the route

For more information, see Bus Tracking.

List Product Integration: Checked and Favorited Items

June 2022

We added the ability to post the end-user changes for a list item status (checked items or favorited items) to a customer endpoint, enabling the customer to store and track progress against said items.

- The API will be a POST request in the format: https://www.mydomain.com/updateSelection
- The body of the request will be in the following structure:

Field Name	Type	Description	Mandatory Y/N
category	string	The category title.	Y
item	string	The item title.	Y
add	boolean	True for adding, false for removing.	Y
type	string	Either **favorites** or **checkbox**.	Y
userId	string	The user's identifier as configured in the API configuration.	Y

For information, see List.

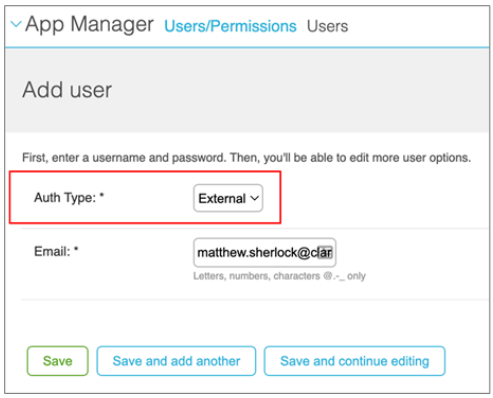
Institutional SSO Login for App Manager

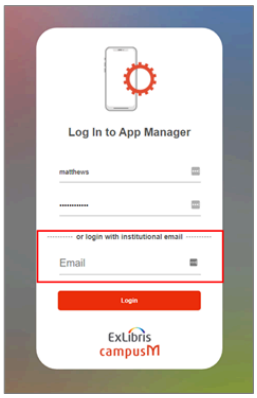
May 2022

We added a more seamless Authentication approach to App Manager, we enabled the use of the institutional IDP to authenticate administrators. The IDP is used to authenticate the user and then the user is authorized within App Manager. As such, user access and their permissions are still managed within the Users/Permissions area of App Manager.

Once configured, to add a user to App Manager, navigate to **Users/Permissions > Users** and create a new user with an **Auth Type** of `External` and with the email address as used by the IDP for authentication. You can configure access control as usual from here.

When the new user comes to log in to App Manager, they must use the **login with institutional email** option. This redirects them to the IDP for authentication and if their email address matches an authorized user, they can access App Manager.





Note

Configuring SSO for app manager requires a support ticket request. Once the ticket is submitted, support can use an (usually existing) Integration Profile to configure authentication against the institutional IDP.

campusM Attendance – New User Migration API

May 2022

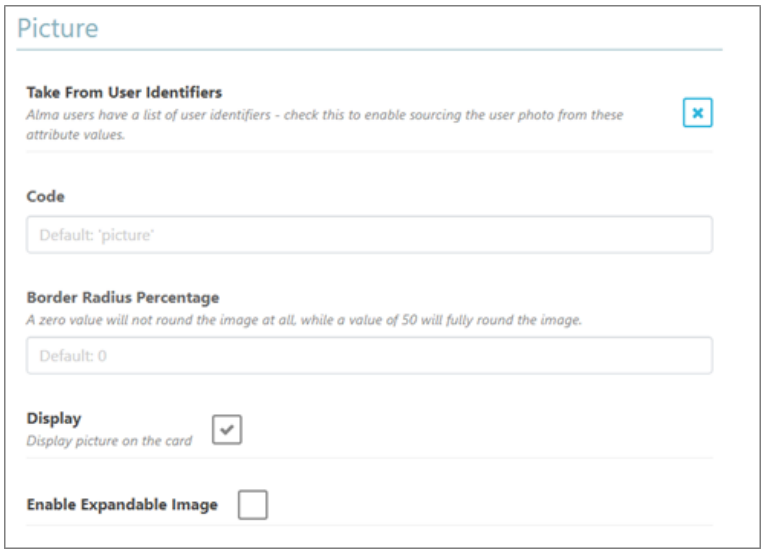
We created an API to enable the transfer of a campusM user's check-in data from one account to another. This may be needed if a student changes their email addresses, to continue to see the check-in data from the old email address and the new email address.

More information on how to use this API can be found on the Developer Network.

ID Card Product Integration – Alma Vendor – Enabling Pulling of User Images from Alma

May 2022

We added the ability to extract the user's photo from Alma to be displayed on the ID Card. We added the flexibility of extracting the image from the User Identifier attributes that come from Alma.

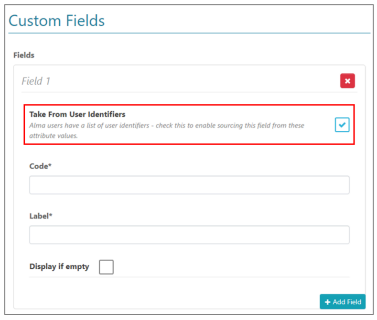


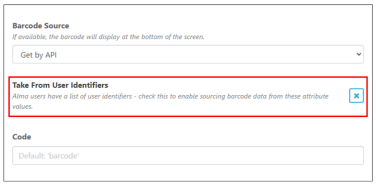
For more information on the ID Card product integration, see ID Card.

ID Card Product Integration – Alma Vendor – Enabling Bar Code and Custom Fields Populated from the User Identifier Attributes Within Alma

May 2022

We added the ability to extract barcode data and to create custom fields using the **User Identifier** attributes that come from Alma. This enables greater flexibility in displaying information about the user account directly from Alma.





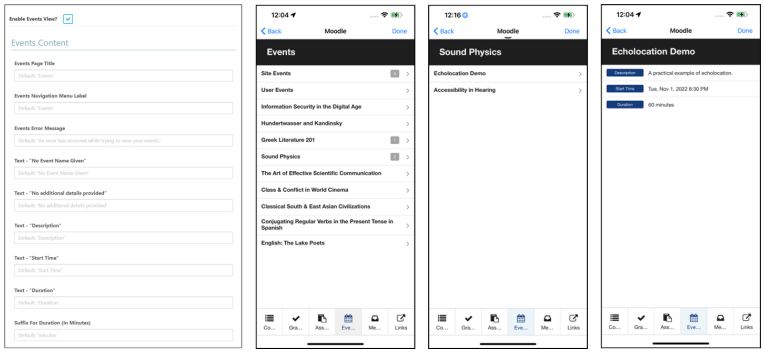
For more information on the ID Card product integration, see ID Card.

Events Product Integration – Event Check-In Facility

May 2022

We added the ability to enable end users to check-in to the events that they have registered for. The enablement of this feature and the configuration of the check-in window for the events (padding around the event start and end times within which a user can check-in to the event) are configured by the admin as part Product Integration instance.

The end user can see the status of their registration and check-in as colored chips within the event interface. They can uncheck themselves and de-register by tapping the x to the right of the chip.



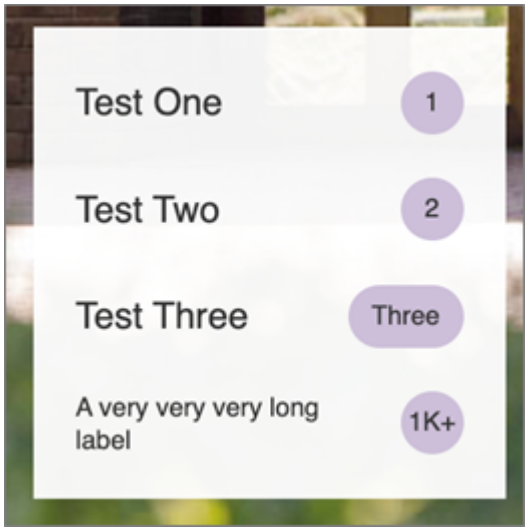
The user registration and event check-in data are available to extract securely through the Get Event Registration API. For more information, see Developer Network

For more information on the Events product integration, see Events.

Generic Live Tile Product Integration – Enhanced Support for Strings and Numbers

May 2022

We enhanced how the Generic Live Tile product integration supports string data. In this case, the badge extends to enclose the string provided up to a maxim of 50% of the tile width, at which point it truncates the string with an ellipsis. For numbers, the number is rounded up to a whole number and displayed. Anything exceeding 999 displays as 1K+.



For more information on the Generic Live Tile product integration, see Generic Live Tile.

LMS VLE Product Integration – Moodle Vendor – Organize Course List by Categories

May 2022

We enhanced how courses can be organized by categories as defined within Moodle. This enables customers to utilize existing categories to order their course list, for example, by semester (as a category) and makes it easier to manage. The configuration of this feature is in the Service Content section of the Moodle product integration.



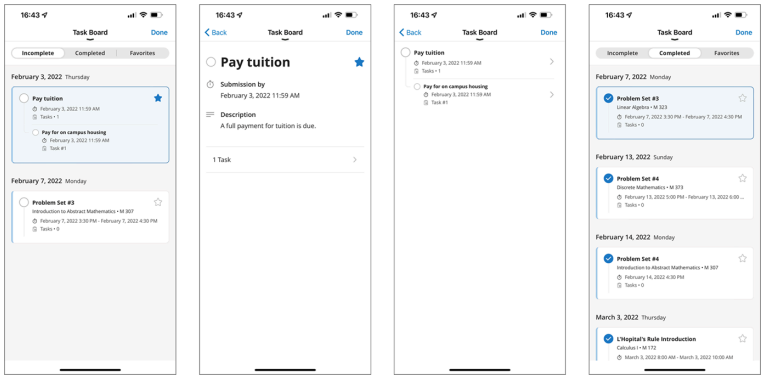
For more information on the Moodle product integration, see Moodle.

Task Board Product Integration

April 2022

As we continue our goal to make campusM more focused on driving user engagement and task completion, we are excited to introduce our latest product integration – Task Board.

Task board provides an interactive interface for end-users to view tasks assigned to them, to track their progress, from in progress to complete all in one place. This initial list enables dynamic tasks to be delivered to end-users through a restful API, enabling the delivery of personalized task lists with due dates. An example use case for this is a dynamic assessment listing for students so they can plan their time accordingly, or induction tasks that new students may need to complete.



We will continue to enhance this product integration to enable students to create their own tasks and subtasks, to enable reminders, to integrate the tasks with their calendar, and to enable multiple feeds to populate the users' tasks.

For more information, see Task Board.

Alternative Lecturer Check-in – Enhanced Service Requirements (HOTFIX FOR MARCH 2022)

April 2022

Following the initial deployment of the Alternative Lecturer Check-in feature, we have separated the timetable search and attendee list services to provide more flexibility when configuring this feature.

The APIs for Alternative Lecturer Check-in endpoints must be the following:

GET https://{base URL and path to return events data}?startDate={start of events}&email={email of lecturer}&desc={course name}&loc={location of course}

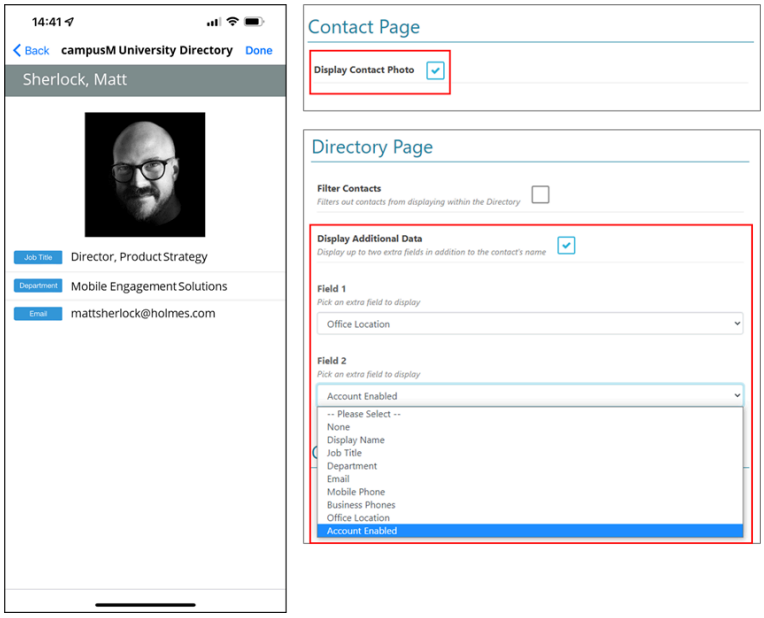
GET https://{base URL and path to return attendees data}?eventRef={event ID}

For more information, see Alternative Lecturer Check-In.

Directory Search Product Integration – User Image Display

April 2022

We added the user image for our Directory Search product integration. This leverages the Graph APIs to display an image of the searched for end-user.



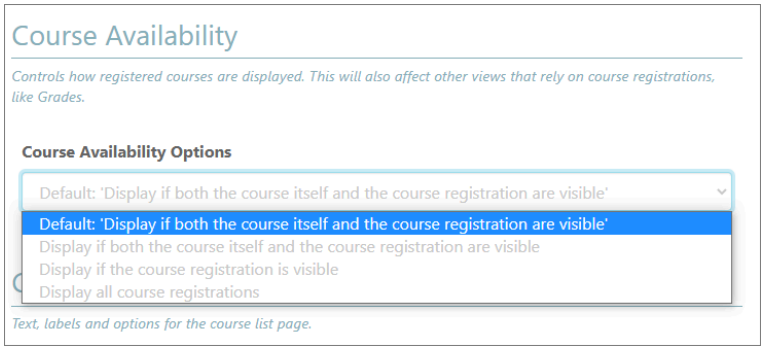
We also enabled the ability to add two additional fields from the directory feed to populate the contact information. Both options are configurable in the Product Integration configuration screen.

For more information, see Directory Search.

Blackboard LMS/VLE Product Integration – Enhanced Configuration for Course Visibility

April 2022

We added additional configuration to the course list, filtered to enable better control over which courses display to end-users. Administrators can configure the visibility based on course visibility and/or course registration visibility.



For more information, see Blackboard LMS/VLE.

Log4Shell Critical Security Vulnerability (HOTFIX FOR FEBRUARY 2022)

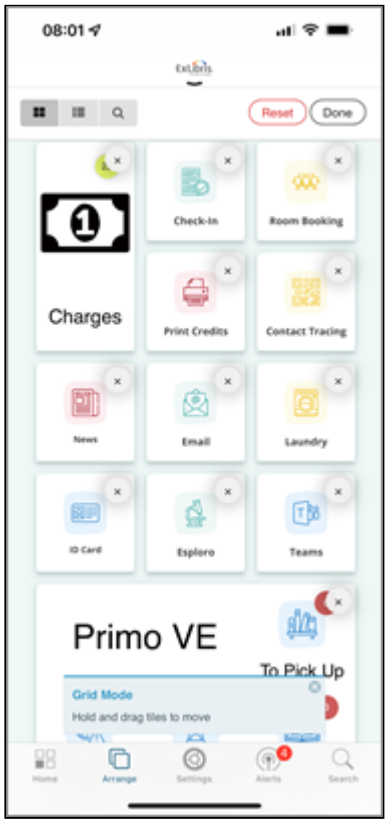
March 2022

As part of our continued focus on mitigating any risk from the Log4Shell vulnerability, we updated all instances of this library to the latest stable version.

Personalization – Native App Personalization Synced to Cloud (Requires iOS and Android Release)

March 2022

We added syncing of a user's personalization selection from the native app to the cloud. This enables their personalization selections to persist post logout or across native devices.



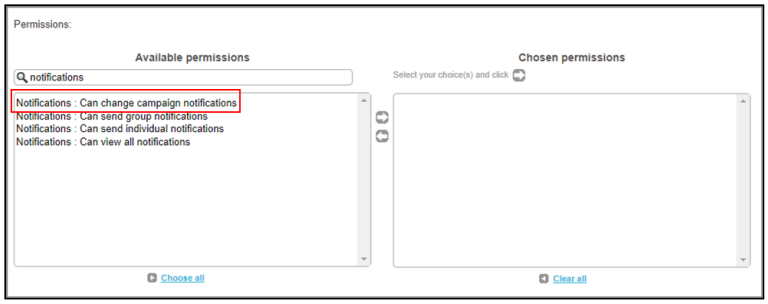
The personalization preferences for the web app are stored separately from the native app, given the usual differences in screen size. Therefore, personalization changes made on the native app do not affect those made on the native app.

For more information, see Managing Profiles.

Notification Center – Permissions Modifications

March 2022

We modified the behavior of the Notification Permissions. Removing one or both of these permissions now hides the option from the Notification Center completely rather than having a button that then reports **Permission denied**. We also modified the visibility of the aggregated counts, analysis, and history so that they are only presented to users that have full access (super users).

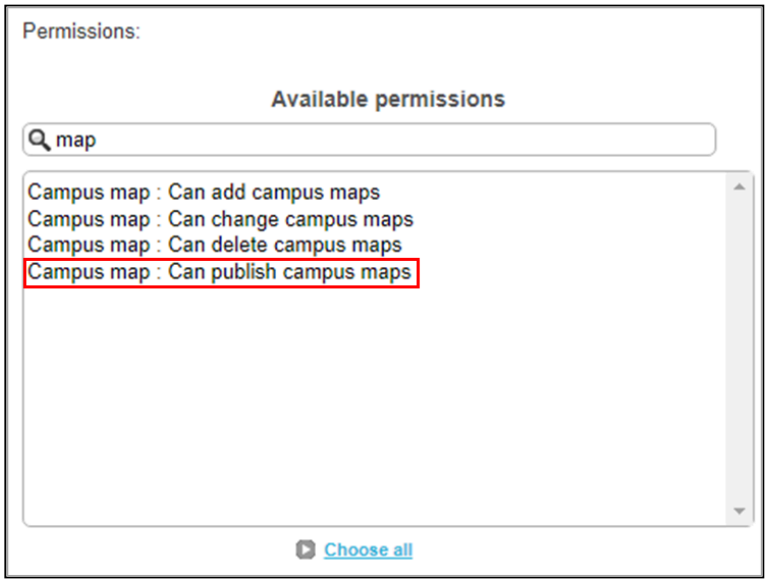


For more information, see Sending Notifications to End-Users from Notification Center.

Publishing Map Positions – New Publish Permission

March 2022

We added a new permission that enables selected users to publish Map updates. Only those users with All Permissions or with this new selected permission (Campus map : Can publish campus maps) assigned to them or to one or more of their access groups can update maps and publish new locations, etc.

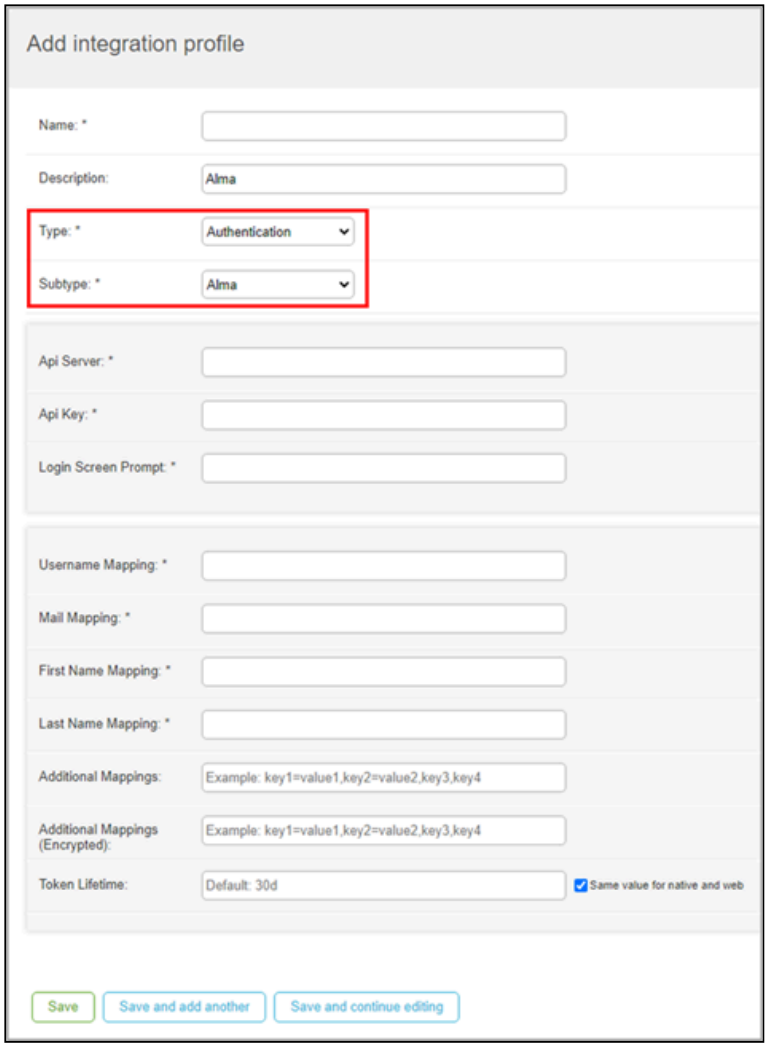


For more information, see Adding Maps and Locations to Services.

Support for Alma IdP for Authentication Mechanism for Integration Profiles

March 2022

We added support to use a customer's Alma instance for authentication. This uses the Alma authenticate or refresh user API and can be selected within the integration profile configuration.

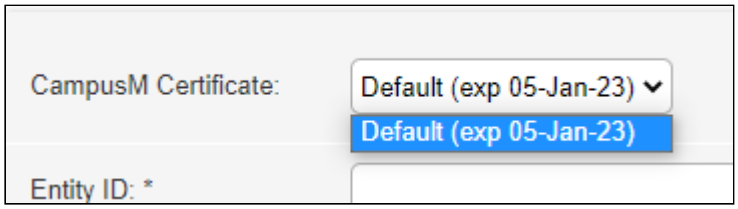


For more information, see Configuring Integration Profiles.

campusM Self Sign Certificate Available for Integration Profiles

March 2022

We enabled a campusM Self Signed Certificate with an extended expiry date that can be selected for signing against an integration profile. The latest available certificate is the default selection when creating a new integration profile.

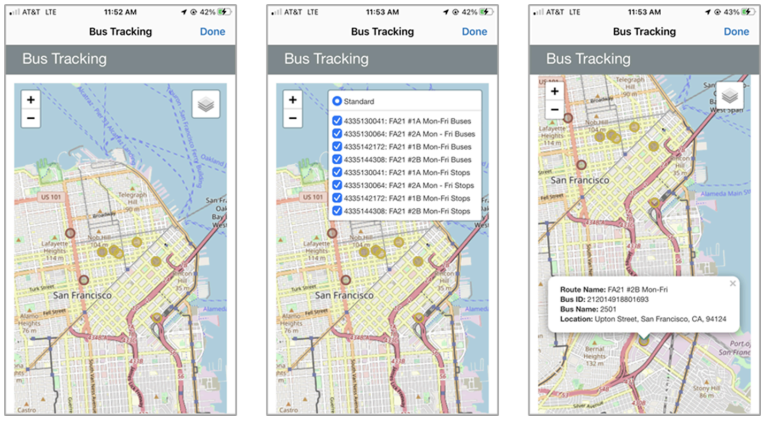


For more information, see Configuring Integration Profiles.

Bus Tracking Product Integration – Samsara Vendor Support

March 2022

We added support for Bus Tracking that maps the locations of buses and their stops, per bus route. This was developed for the Samara Fleet Management vendor. This product integration enables users to view where the buses for various routes are currently located. They can also look up stops per route.



For more information, see Bus Tracking.

Events Product Integration - Get Events Registration API (HOTFIX FOR FEBRUARY 2022)

March 2022

We created an API, available through the API gateway, that enables customers to extract which users have registered for what events. This enables customers to pull delegate lists. The API can be queried using the following parameters:

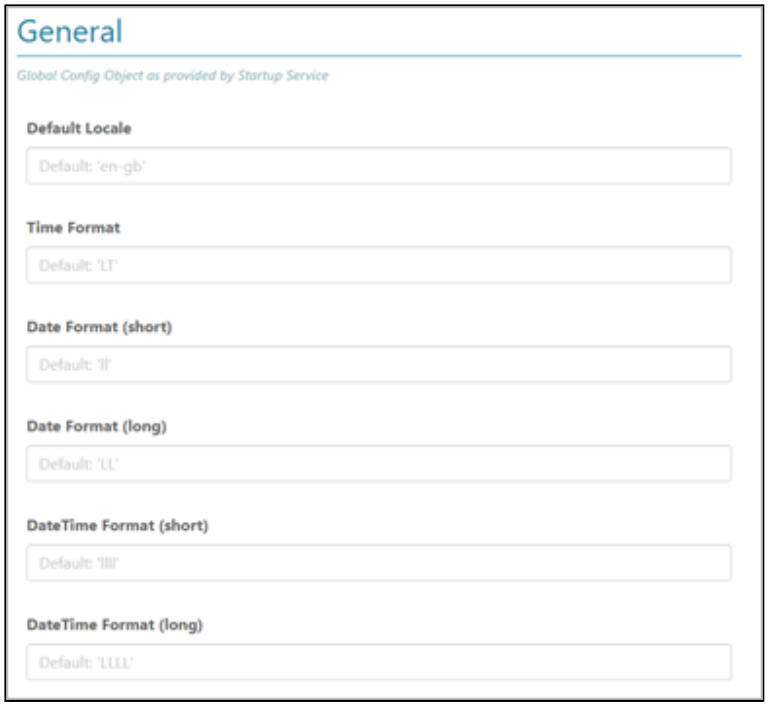
- eventID
- Date range
- Email

For more information on the Get Events Registration API for the Events product integration, see Get Events Registration Summary.

Events Product Integration – Configuring Locale (Timezone and Date/Time Format) (HOTFIX FOR FEBRUARY 2022)

March 2022

We now provide the ability to specify the locale (timezone and date/time formatting) of the source data driving the feed. This is configurable in the product Instance configuration:



Events configuration options

For more information, see Events.

Log4Shell Critical Security Vulnerability

February 2022

On December 10, 2021, A Log4Shell critical security vulnerability (CVE-2021-44228) was discovered in Apache Log4j, a logging tool widely used in consumer and enterprise applications, cloud services, and websites around the world.

For campusM users, we are not using the appender in our log4j and, in versions < 2.0.0, this is the only way to be exposed to this vulnerability; therefore, your connect layer is not affected by this vulnerability.

Our private data centers are protected from this vulnerability.

We are continuously monitoring and assessing the situation to ensure that our systems are protected.

For more information, see Log4Shell.

Attendance – Alternative Lecturer Check-in Enhancements

February 2022

Following the initial release of the Alternative Lecturer Check-in feature in January 2022, we made the following enhancements based on feedback:

- The checkedInBy field returned by the CheckInReport service now reflects the email address of the user who searched for and then checked in the student on the lecturer's behalf (rather than the original lecturers' details)
- The check-in Type was modified to reflect that an Alternative check-in was made. Therefore, the available types are:
  - SELF

- LECTURER
- ALTERNATIVE

- You can now select dates in the past using the date picker in the Alternative Lecturer Check-in search screen. This enables admins/alternative lecturers to retrospectively correct the check-in record for classes.

For more information, see Alternative Lecturer Check-in.

ID Card Product Integration – Alma Vendor Support

February 2022

We added support for Alma as the data provider for the digital ID card, enabling customers to have a digital library card utilizing Alma user information.

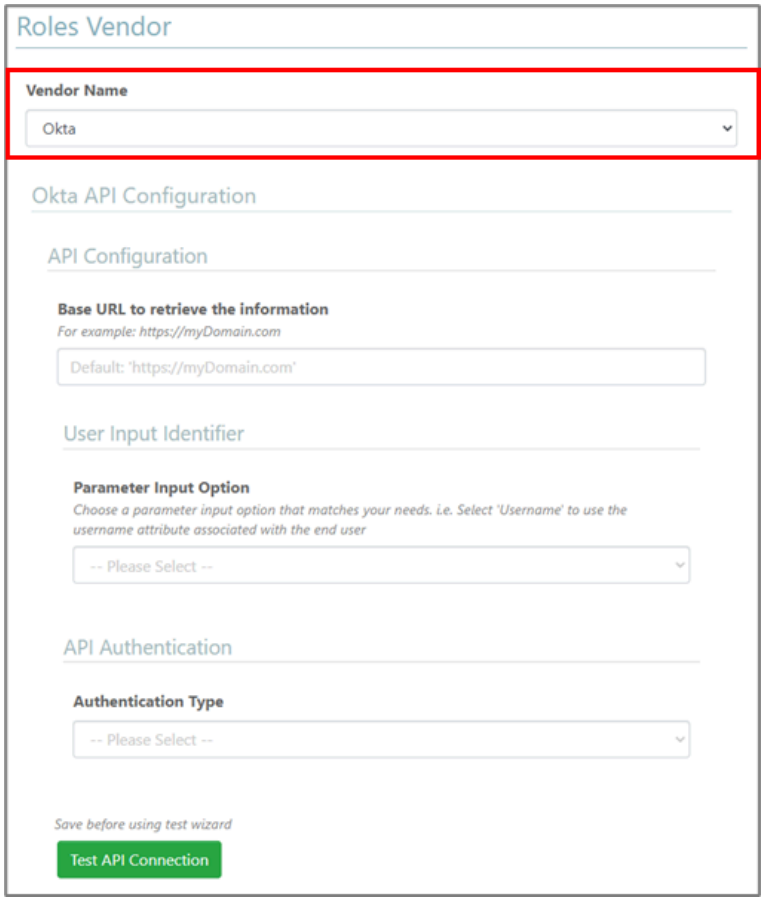


For more information, see ID Card.

Roles Product Integration – OKTA Vendor Support (HOTFIX FOR JANUARY 2022)

February 2022

We added support for OKTA. This uses the Okta Groups API (https://developer.okta.com/docs/reference/api/groups/) as a feed for roles into campusM.

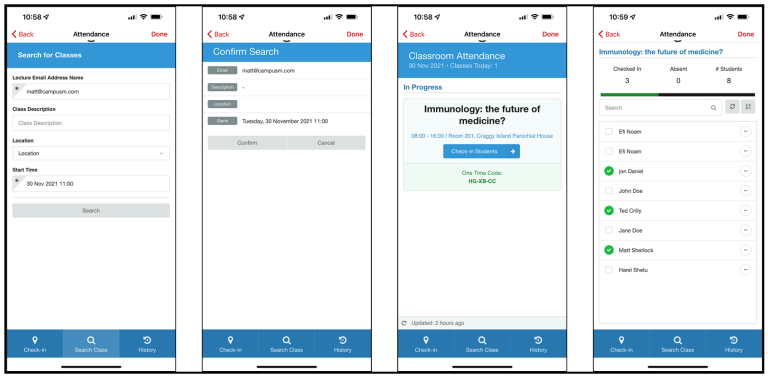


For more information, see Roles.

campusM Attendance – Alternative Lecturer Check-In

January 2022

We added the ability for lecturers or administration staff to search the timetable to locate other teachers' events so they can share the One Time Code or check students in if they are covering classes. The Alternative Lecturer feature is optionally available through the lecturer check-in screens. The alternative member of staff can search for the session using the lecturer's email address and start time, and optionally, a location.



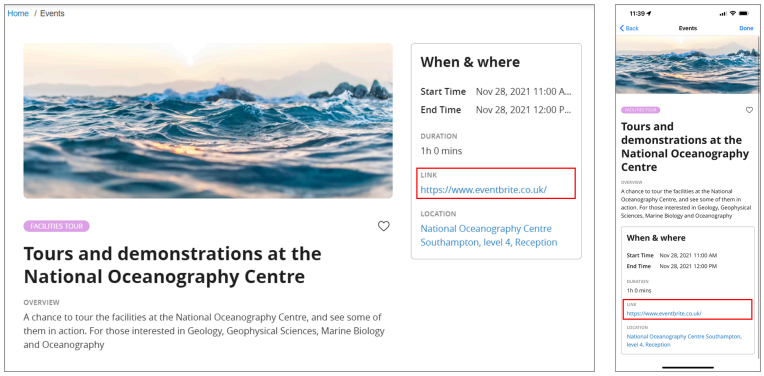
The Alternative Lecturer Check-in requires two additional services, based around the existing timetable and retrieving attendee services. See Alternative Lecturer Check In endpoint requirements.

For more information, see Attendance.

Events Product Integration – New Events URL Link Field

January 2022

We enabled the ability to add a new **LINK** field for each event to display an active link in the event listing.



To facilitate this, a new column (column M) was added to the Excel template, while a new field was added to the RSS configuration:



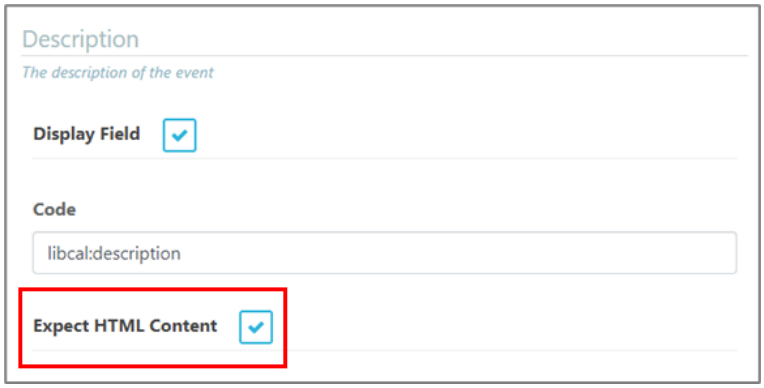
For more information, see campusM Events.

Events Product Integration – HTML Tag Support in RSS Feeds

January 2022

We enabled support of HTML tags in the description feed for RSS events listings. This provides finer control over the appearance of the description information such as font formatting or adding additional links.

To enable support of HTML tags, from the RSS Vendor Description configuration, select **Expect HTML Content**.



We allow for a broad range of standard HTML tags, but iframes, videos, and YouTube tags are processed as links.

For more information, see campusM Events.

Timetable Product Integration – Vendor Support for Public Google Calendars

January 2022

We added support for public Google Calendars as a vendor within the Timetable product integration using the following Google Calendar APIs:

GET https://www.googleapis.com/calendar/v3/calendars/calendarId/events

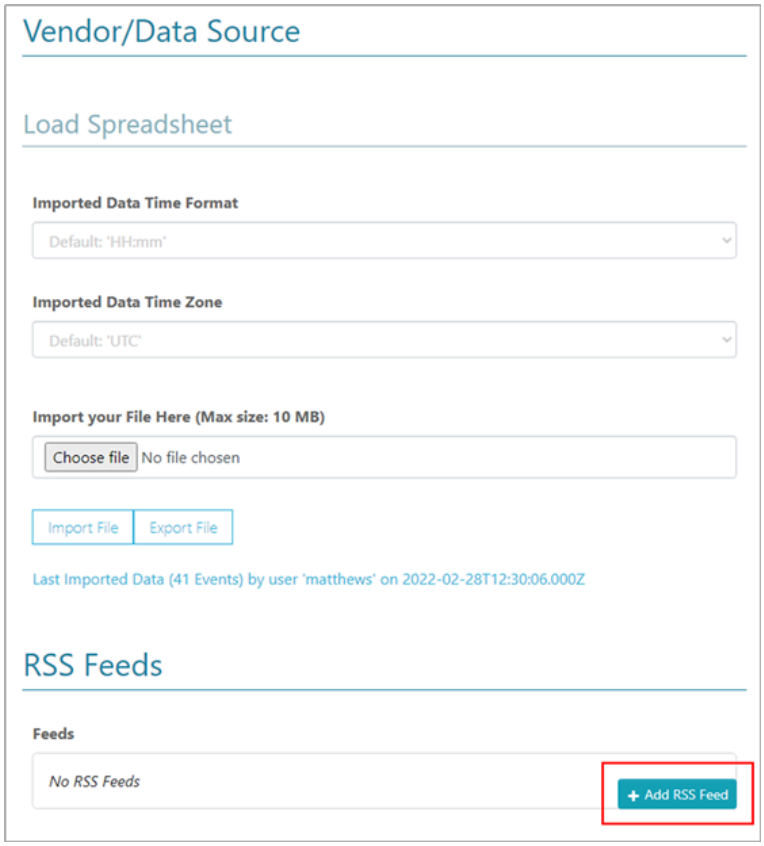
This is a great way to add shared calendars to your app (such as university closed days, events, etc.)

For more information, see Timetable.

Events Product Integration – Combining Multiple RSS Feeds for Import

April 2022

We added the ability to configure a combination of multiple RSS feeds and an Excel file import to populate the Events product integration. This enables customers to merge their events feeds in one place within the app.

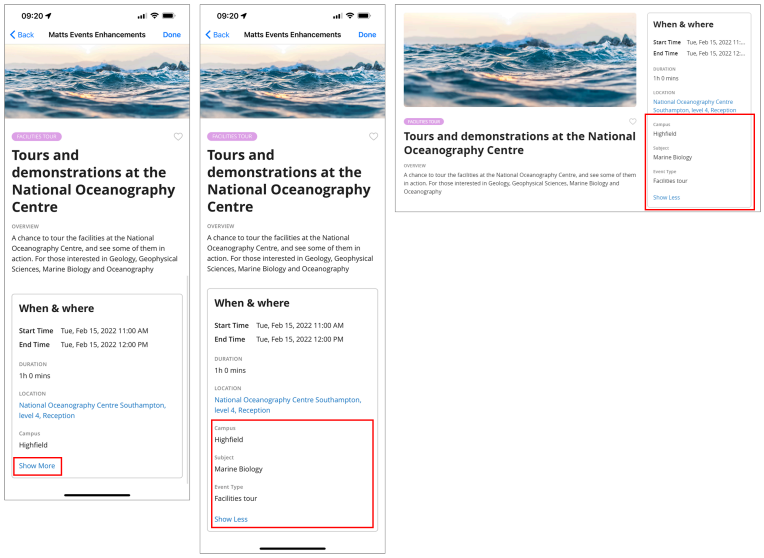


We also enhanced support for Date format for the Start and End dates when importing the file from Excel. You no longer need to convert the Excel sheet to text.

Events Product Integration – Additional Columns in the Event List

April 2022

We added support to display the additional columns (from columns **N** and onwards) as fields in the Events listing. Users can show or hide these events when browsing.

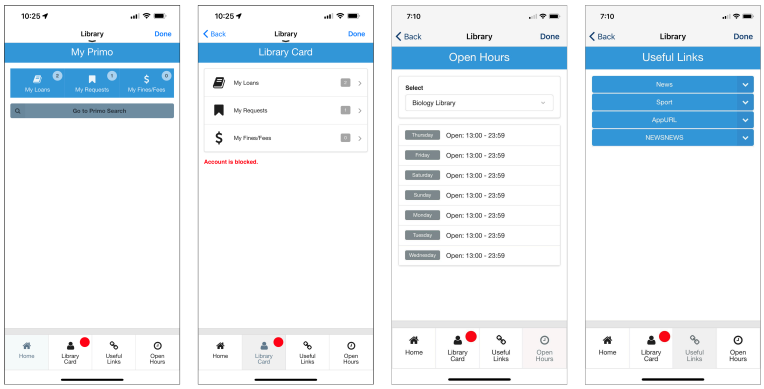


For more information, see Events.

Primo Product Integration – Support for Aleph LMS (HOTFIX FOR MARCH 2022)

April 2022

We added support for account information from Aleph as the integrated library system.



Note

Personal information is not supported by the Aleph ILS vendor.

For more information on the Primo with the Aleph product integration, see Primo.

Primo VE Product Integration – Enhanced Live Tile Linkages

April 2022

We improved the Primo VE Live Tile to direct the end-user directly to the corresponding tab within their Library account.



For more information, see Primo VE.

Resolved Issues

- **December 2022 Platform SF: 06308349**
  Notifications: Resolved an issue that resulted in delays in sending bulk notifications to large notification groups. Changes in how these are batched and sent to Apple and Google significantly enhance the sending speed. HOTFIX FOR NOVEMBER 2022
- **December 2022 Platform SF: 06541479**
  Notification Groups: Resolved an issue that prevented CSV notification group population from operating when uploading a file that contained duplicate email addresses, with no clear error messaging. The import process now handles duplicates and does not prevent uploads.
- **December 2022 Platform SF: 05303415**
  Notification Group Subscriptions: Resolved an issue where user selections for subscription-based notification groups were overwritten by **Roles Synchronization** (standard Alert Group). Now, when a Notification group is user subscription-based AND aligned with a role, a user's selection is retained post logout and role resync.
- **December 2022 Platform**
  Attendance: Resolved an issue with Alternative Lecturer Check-in that prevented check-ins made by students were not reflected in the alternative check in attendee list. Alt check-in now works as expected, showing both check-ins completed by a student and by a lecturer in a searched-for class.
- **December 2022 Android App SF: 06499778**
  Language Packs: Resolved an issue with the Language pack that prevented the translation of the **Lock Screen** label on the Android **App Settings**.
- **December 2022 Platform SF: 06527830**
  Events Product Integration – RSS: Resolved an issue that resulted in the RSS API endpoints being encoded twice, which caused the request to be malformed and nonfunctional. HOTFIX FOR NOVEMBER 2022
- **December 2022 Platform**
  Library Product Integration - Primo Live Tile: Resolved an issue that resulted in the same loan being counted in **Overdue** and **Due Back Soon** on the live tile. The tile now accurately reflects the counts for these corresponding categories.
- **December 2022 Platform SF: 06436171**

Primo Product Integration: Resolved an issue displaying the **Fines** amount without a second decimal place for rounded numbers. The product integration now shows the **Fines** value with two decimal places. HOTFIX FOR OCTOBER 2022

- **December 2022 Platform**
  Alma BCC Notification: Resolved an issue with how the Alma BCC notifications were formatted when being converted to notifications that required users to scroll the notification left/right as well as up and down. The notifications now format correctly within the confines of the screen, scrolling vertically. HOTFIX FOR NOVEMBER 2022
- **November 2022 Platform SF: 06424923**
  Quick Poll Reminder Notifications: Resolved an issue where Quick Poll reminder notifications were still being sent despite the Poll in question being deleted.
- **November 2022 Platform SF: 06468387**
  Timetable Product Integration – Google Calendar: Resolved an issue that prevented 'timed' events not being parsed to the timetable view, only all-day events. Now, both timed and all-day events are displayed correctly.
- **October 2022 Platform SF: 06464730**
  Attendance – Alternative Lecturer Check-in: Resolved an issue with the configuration of the API authentication for the Alternative Lecturer check-in services that prevented the completion of the authentication details for the specified endpoints. **HOTFIX FOR SEPTEMBER 2022**
- **October 2022 Platform SF: 06430158 06464730**
  Attendance – Alternative Lecturer Check-in: Resolved an issue where the lecturer email address entered into the Alternative Lecturer Search field was not being passed into the search request. This was resolved so that the search now includes the email address. **HOTFIX FOR SEPTEMBER 2022**
- **October 2022 Platform SF: 06373772 06465421 06471735 06475481**
  Timetable Product Integration – Banner Vendor: Resolved an issue that resulted in actual class dates being incorrectly substituted with the term start dates. **HOTFIX FOR SEPTEMBER 2022**
- **October 2022 Platform**
  Task Board Product Integration: Resolved an issue with Link encoding as part of the external link attribute for Task Board. This resulted in some links not functioning. **HOTFIX FOR SEPTEMBER 2022**
- **October 2022 Platform SF: 06381440 06428190**
  Events Product Integration: Resolved an issue where the tags in the events listing were truncated after 40 characters and resulted in key details missing. We have now enabled the tags to expand, but to keep the directory usable, we have indicated if additional tags apply to an event. When clicking on the event, all tags are visible.
- **October 2022 Android SF: 06248271**
  General: Resolved an issue that prevented screenshots from being shared from the Android campus settings.
- **September 2022 Platform SF: 06440273**
  ID card Product Integration: Resolved an issue where the barcode did not display on the ID Card. **HOTFIX FOR AUGUST 2022**
- **September 2022 Platform SF: 06377184**
  ID card Product Integration: Resolved an issue displaying long field names in the ID card that resulted in the labels being cut off. The labels now adapt more effectively to the size of the text to prevent clipping.
- **September 2022 Platform**
  Attendance Product Integration: Resolved an issue where the One Time Code could not be copied from the coming up section on the attendance interface, preventing lectures from pasting a code from an upcoming event into their slides. The code is now rendered in a format that allows copying.
- **September 2022 Platform SF: 06375939**
  Primo Product Integration: Resolved an issue with the translation keys for Opening hours where the days of the week were not being translated by the Alma API. We have added configuration to the product integration to allow translation overrides and render custom text for each day. See above Primo product integration enhancement.
- **September 2022 Platform**
  Primo Product Integration: Resolved an issue where the **Available Holds** location of items returned in the search results were not being displayed with line breaks or with commas to separate the locations. Customers can now configure **Format Available Holds** to show as comma separated (by default) or by line break (by configuration) list. See above Primo product integration enhancement. HOTFIX FOR AUGUST 2022
- **September 2022 Platform SF: 06428219**
  Primo Product Integration: Resolved an issue with displaying fines/fees on the Primo product integration Live Tile that resulted in rounding the corresponding fines/fees to a whole number. The fines/fees are now displayed and are

correctly rounded with format XX.XX.

- **August 2022 Platform SF: 06383345 06397001**
  List Product Integration: Resolved an issue that removed the ability to edit the **List Screen** title. The configuration element has been re-enabled. **HOTFIX FOR JULY 2022**
- **August 2022 Android App**
  Bus Tracking Product Integration: Resolved an issue where the page header title (Screen title) was not being displayed correctly for Android (taking the form [[text.busTrackingHeader]] instead). The product integration now displays the screen title correctly.
- **August 2022 iOS App**
  Bus Tracking Product Integration: Resolved an issue that caused the app to crash when accessing the Bus Tracking product integration when location permissions had not been granted for the iOS app. **HOTFIX FOR JULY 2022**
- **August 2022 Platform SF: 06375938**
  Primo Product Integration: Resolved an issue where the opening hours were incorrectly calculated and displayed the following week's opening hours instead of the current week.
- **August 2022 iOS App**
  General: Resolved an issue with the iOS app that resulted in the home screen not loading from the cached local device storage (and therefore not displaying to the end-user) when the app was opened with the phone in Airplane mode.
- **August 2022 Platform SF: 06381424**
  Events Product Integration: Resolved an issue with the event date information not displaying in the configured language format, for example when setting as 'fr-BE'.
- **July 2022 Platform SF: 06375935**
  Primo Product Integration: Resolved an issue where the Language Code configured in the Primo PI configuration was not being picked up, resulting in the user not being directed to the correct language primo instance. The configuration is now correctly picked up.
- **July 2022 Platform**
  ID Card Product Integration: Resolved an issue where a barcode was shown encoded as the Primary ID when no barcode value was provided for the end-user. The behavior has now been modified to show NO barcode if no barcode value is present.
- **July 2022 Platform SF: 06361722 06205383**
  ID Card Product Integration: Resolved an issue where the Barcode was rendered unreadable when modifying the background and font color configuration. The default behavior now ensures that the barcode section remains black text on a white background to ensure readability.
- **July 2022 Platform SF: 06205383**
  ID Card Product Integration: Resolved an issue rendering the full Barcode when the user's mobile device was in landscape mode. Now the barcode is formatted correctly to ensure it is not truncated.
- **July 2022 Platform SF: 06320695**
  Notification Group Subscriptions: Resolved an issue where the notification group subscriptions driven by linking Roles through the Standard Alert Group functionality ONLY used the latest Role selection to populate the subscriptions. You can now link multiple Roles to a Notification Group without overriding previous subscriptions.
- **July 2022 Platform**
  Primo VE Product Integration: Resolved an issue that prevented the Android App from downloading PDF resources from a search, with the **Download PDF** button not undertaking the required action. The button now operates as expected.
- **July 2022 Platform**
  Primo VE Product Integration: Resolved an issue on the Android App that prevented the RefWorks and Endnote links from being selectable against a search result entry. These now operate as expected.
- **July 2022 Platform SF: 06213418**
  Lists Product Integration: Resolved a hard requirement for authentication for the List product integration that resulted in Lists not working in a Guest Profile. Lists now operate in Guest profiles.
- **June 2022 Android App**
  Notifications – Android App: Resolved an intermittent issue with the Android App not receiving notifications in the background when the network request failed. **HOTFIX FOR APRIL 2022**
- **June 2022 Platform SF: 06284797**

Notifications: Clarified the Receive Alerts configuration in the App Profile config to make clear that this hides or shows the subscribe to notification group functionality.

- **June 2022 iOS**
  Notifications: Resolved an issue on iOS where the **Alerts** inbox was not being updated when a notification was sent, resulting in students not seeing that notification in app. We now refresh the **Alerts** inbox on entry into this screen.
- **June 2022 Platform SF: 066334937**
  Events product integration: Resolved an issue reading RSS feeds and displaying dynamic event feeds with some date formats.
- **June 2022 Platform**
  App Manager – SSO Login: Resolved an issue with the configuration of the SSO login for the App Manager that was preventing authentication. **HOTFIX FOR MAY 2022**
- **June 2022 Platform SF: 0606333254**
  Personal Details product integration: Resolved an issue with images within the Personal Details product integration being stretched and distorted. We now center and crop the image to fit the available space.
- **June 2022 Platform SF: 06319114**
  Attendance – Alternative Lecturer Check-in: Resolved an issue that prevented the query parameters from being sent in the request, resulting in no results from being parsed.
- **June 2022 Platform SF: 06333256**
  Web App Navigation Breadcrumbs: Resolved an issue with the wrapping of text in the breadcrumbs that resulted in overlapping text in small browser windows. Text is now wrapped to the next line correctly.
- **June 2022 Platform SF: 06333253**
  Primo VE product integration: Resolved an issue when clicking in white space on the live tile where the user is redirected to an invalid URL.
- **June 2022 Platform SF: 06280179**
  Favicon for Alma IDP Login: Modified the behavior to show the app icon for the favicon when redirecting to the Alma IDP when authenticating, rather than the default (star) icon.
- **May 2022 Platform**
  Timetable product integration – Banner Vendor: Resolved an issue where events were incorrectly being excluded from the data pulled from Banner, resulting in missing data. **HOTFIX FOR MARCH 2022**
- **May 2022 Platform SF: 06316894**
  Security: Resolved a potential (low risk) vulnerability where a registered guest user's password could be reset directly through a web service. This does not impact authenticated users against an institution's LDAP/IDP. **HOTFIX FOR MARCH 2022**
- **May 2022 Platform**
  campusM Attendance: Resolved an issue where events with no event reference were preventing the Lecturer Check-in attendance screen from loading. These events are now filtered out of the view and the screen loads correctly.
- **May 2022 Platform SF: 06293071**
  Events product integration: Resolved an issue where some URLs were not encoded correctly and resulting in a java error. These now parse correctly.
- **May 2022 Platform**
  Events product integration: Resolved an issue where the template export resulted in applying the **General** format for the start date and end date fields rather than the expected **Date** format. **HOTFIX FOR APRIL 2022**
- **May 2022 Android App SF: 06270263**
  Language Packs: Resolved a missing translation key for the **Sign Out** button in the Android App when the app is in Landscape mode.
- **May 2022 iOS App Android App**
  Content Pages: Resolved the behavior that would only refresh content pages if a user's device is connected to Wi-Fi. Given modern data plans, this legacy behavior was removed and pages are updated over cellular and Wi-Fi. **HOTFIX FOR APRIL 2022**
- **May 2022 Platform**
  LMS/VLE Product Integration – Canvas: Resolved an issue that resulted in showing a blank Canvas **Live Tile** when the user does not have the correct permissions to see courses. We now display a configurable error message.
- **May 2022 iOS App Android App**

Accessibility: Resolved an issue where the iOS and Android **Search** features were not announced in TalkBack/ Voiceover (screen readers). **HOTFIX FOR APRIL 2022**

- **May 2022 Platform**
  General – Dark Mode Issues: Resolved an issue for some android devices that rendered images and tiles unreadable when in Dark Mode. The apps now restrict the changes imposed by some browser skins in Dark Mode.
- **April 2022 iOS App**
  Blackboard Product Integration – Resolved an issue with Action URL links that included white space that prevented the links from working on the iOS App. We have improved the tolerance for handling this.
- **April 2022 Platform**
  Blackboard Product Integration – Resolved an issue with an error messaging when a user attempts to access course information that they do not have permission to view as the lecturer has not yet released it. The error messaging used is configurable within the product integration configuration.
- **April 2022 iOS App Android App**
  campusM Attendance – Resolved an issue when configuring the same endpoint for both the student and lecturer check in/timetable services that resulted in missing sessions. **HOTFIX FOR MARCH 2022**
- **March 2022 Android App**
  Attendance – Android App Performance: We resolved an issue that was impacting the load performance of attendance events into the Android Check-in screen, and occasionally causing crashes.
- **March 2022 Android App**
  Timetable – Meeting URL containing email addresses: We resolved an issue resulting in the app crashing if an email address was presented in the meeting URL field for the timetable service. The app no longer crashes but does not open an email address (field is just for Meeting URLs).
- **March 2022 Android App iOS App SF: 06245796 06251569**
  Language Packs: We resolved a number of translation pack issues that prevented label translations from being resolved in the Android app.
- **March 2022 Platform SF: 06213418**
  List Product Integration – Missing URL: We resolved an issue where when a URL is not passed in the API feed for the List product integration (where the action = “URL”) resulted in an app crash. We now just ignore the lack of a URL and the item appears without this element.
- **March 2022 Platform SF: 05324018**
  Primo VE Product Integration – Visibility of text beneath search bar: We resolved an issue that resulted in the text below the search bar being poorly visible when a dark primary color scheme is applied to the product integration. The color varied depending on the chosen primary color to optimize visibility.
- **February 2022 Platform SF: 06206004**
  Personal Details – Resolved an issue where the user's first name and last name were not saved and retained for an authenticated user. This resulted in details not being stored when the user provided in app feedback.
- **February 2022 Platform**
  Timetable Product Integration (Colleague) – Resolved an issue for the Colleague timetable vendor where timetable data was not being pulled for a user due to missing section IDs. We now handle null section IDs. **HOTFIX FOR JANUARY 2022**
- **February 2022 Platform SF: 05317271**
  Events Product Integration – Resolved a UI issue when navigating a long list of events, where opening an event to see the detail and then going back resulted in returning to the top of the events list. The page now has persistence with the scroll position.
- **February 2022 Platform SF: 05322193**
  ID Card Product Integration – Resolved an issue where the call to the vendor for the ID Card picture is made directly from the client rather than routing through the Ex Libris cloud, which resulted in calls being blocked when calls were whitelisted only for Ex Libris Cloud. Requests are now routed through Ex Libris Cloud.
- **January 2022 Android App SF: 05314698**
  Settings Page: Android App – Resolved an issue where the settings screen was not fully covering the homescreen when accessed, leaving a small strip of the homescreen visible. This has been corrected and the Setting page covers the whole screen.
- **January 2022 Platform**
  Welcome Emails – Resolved an issue where welcome emails (when configured) were not being sent to customers’

users when authenticating using CMAuth. **HOTFIX FOR DECEMBER 2021**

- **January 2022 Platform SF: 05305704**
  Attendance – Resolved an issue where lecturer check-ins made to overwrite an existing student check-in were being handled inconsistently depending on the device used by the student. We now made this consistent across all platforms.
- **January 2022 Platform SF: 05302936 05327157**
  Attendance – Resolved an issue with geolocation validation on the web app and the precision of the location data sent. This resulted in offline check-ins being made and never being uploaded to the cloud for validation. **HOTFIX FOR DECEMBER 2021**
- **January 2022 iOS App SF: 05303127 06039728 06041608**
  Insight Analytics – Resolved an issue with insight hits being incorrectly recorded, adding steeply to the number of hits for certain menu options and pages. This issue caused empty tables in Analytics. This was corrected on the devices and the aggregated analytics tables that drive Insight are being reprocessed, removing the duplicated and incorrect records.
- **January 2022 Platform SF: 05323859**
  Insight Analytics – Resolved an issue with support for time zones when viewing Insight analytics data. The Time zone of the organization is now accounted for when looking at data on the day level.
- **January 2022 Platform SF: 05307101**
  Resource Booking product integration – Resolved an issue with Making a New Booking and Cancelling a Reservation function. The API requirements and calls now function as per the Resource Booking product integration documentation. **HOTFIX FOR DECEMBER 2021**
- **January 2022 Platform SF: 00999336**
  Primo VE Product Integration – Resolved an issue where the advanced Search bar is incorrectly formatted on tablets.
- **April 2022 Platform SF: 06275445 06278782 06278799**
  Library Product Integration – Primo VE – Resolved an issue that prevented the **Renew** and **Renew All** links and the **Availability** statement from appearing in the loans tab unless you hovered over where the links should appear (for web) or tap your finger underneath the item details when using native (both iOS and Android). **HOTFIX FOR FEBRUARY 2022**.
- **April 2022 Platform SF: 06205383 06245808**
  ID Card Product Integration – Resolved an issue displaying barcodes generated by the app when viewed on small displays on iOS and Android devices. **HOTFIX FOR MARCH 2022**.
- **April 2022 Platform SF: 06246977**
  Authentication – Resolved an issue where a user who had previously logged in to campusM had their email address modified and then attempted to reauthenticate, which resulted in an Unexpected Error. We now ensure we check for the existence of a previous email address before attempting to create a new user. **HOTFIX FOR MARCH 2022**.
- **April 2022 Platform**
  Authentication – Resolved an issue when authentication fails if an attribute is mapped in the integration profile that returns with no value from the IDP.
- **April 2022 Platform**
  Primo Product Integration – Resolved an issue that opened Primo and required a user to reauthenticate when selecting the availability links from a search. We now support SSO for the internal browser, improving the user experience.
- **April 2022 Platform SF: 05324018**
  Primo VE Product Integration – Resolved an issue with the **Secondary Color** not being applied to the advanced search, which may have created visibility issues for end-users.