API Integration Guide
Property Management System

Lightspeed Hospitality K Series allows for third-party PMS providers to integrate using the pms-providers API and the 'Charge to Room' payment method. Once the integration has been configured and mapped to a payment method, the user is able to send room charge requests to an external PMS.

Authentication

PMS integrations require access to the OAuth scope `propertymanagement`. OAuth scopes apply to an OAuth client and are set by Lightspeed when creating the client. More about authentication [here](#).

Configuring the PMS

The first step in the setup process is to configure the PMS via the API using the [create PMS provider](#) endpoint. The partner must send a POST request to Lightspeed to configure the URL that will be called when the user selects the 'Charge to Room' payment method.
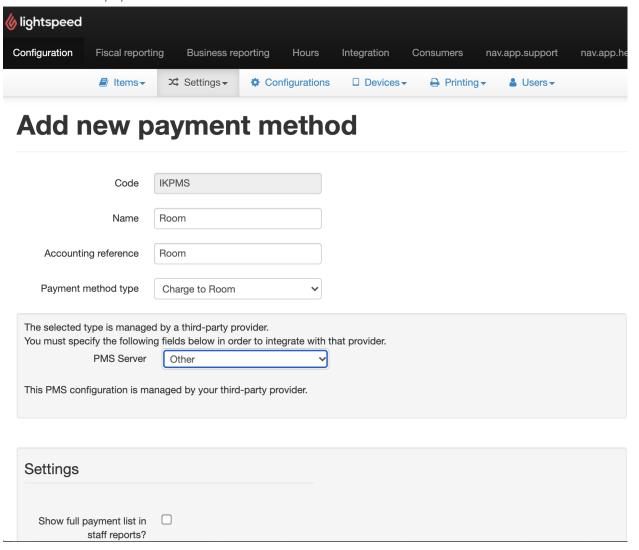
businessLocationID	The unique identifier of the restaurant
name	The name of the PMS provider
endpoint	The base URL of the PMS
apiKey	The API key to be used for authentication. Is passed as the query parameter `apiKey`.
features*	`SEARCH_BY_NAME` – Allow searching by guest name `MIRRORING` – Send all receipts to the PMS `PARTIAL_PAYMENTS` – Allow room charges less than the receipt total `MULTI_PAYMENTS` – Allow for multiple room charges on the same receipt

features are not supported in the current version of Lightspeed

Creating the Payment Method

Once the PMS provider has been configured, a new payment method must be created in the backoffice.

1. Navigate to the backoffice and log in
2. Go to Configuration > Settings > Payment Methods
3. Click **+Add a payment method**
4. Select the payment method type: **Charge to Room**
5. Assign the payment type a name and accounting reference (optional)
   a. Important: the code must remain IKPMS
6. Set the PMS Server to **Other**
7. Save the payment method

Add the Payment Method to a Configuration

Finally, the payment method must be added to a device configuration for it to be accessible in the app. Go to Configuration > Configurations and edit a configuration. Scroll down to Payment methods to allow and ensure that the newly created payment method is highlighted. Reload the configuration on a device to begin using the charge to room payment method.

Using the PMS

The two main functions of the PMS are guest lookup and charging a bill to a room. Requests will always be sent to the URL that has been configured by the partner. Lightspeed will pass the API key that was configured by the partner as a query parameter when querying the PMS.

Searching for a Guest

The first request that gets executed is the /search request. Lightspeed will pass a number of query parameters to the PMS, including the terms that the user searched for. An array of guests matching the terms should be returned to Lightspeed.

Parameter	Description
term	The search term entered by the end user
businessExternalReference	The external reference ID assigned to the restaurant
apiKey	The API key configured by the partner for the restaurant

Example response:

```
{
    "success":"true",
    "errorMessage":"",
    "reservations":[
        {
            "roomId":"1002",
            "roomDescription":"Room 1002",
            "clientName":"Mike Test",
            "reservationId":"001",
            "blocked":"false"
        }
    ]
}
```

Charge Request

Lightspeed will send a POST request to the /charge endpoint with the full receipt in the payload. In this request, the API key is passed in the request body along with the receipt information.

Example Request:

```
POST
/pms/kseries.php/charge
User-Agent: Apache-HttpClient/4.5.2 (Java/1.8.0_131)
Content-Type:
Accept: application/json, application/*+json
```

```json
{
    "name":"",
    "openDate":"2021-02-03T17:52:18.201Z",
    "closeDate":"2021-02-03T17:53:20.034Z",
    "covers":0,
    "ownerId":3696,
    "ownerName":"Manager",
    "deviceId":12787,
    "transactions":[
        {
            "unitAmount":2.6,
            "quantity":1,
            "amount":2.6,
            "description":"Flat White",
            "staffId":3696,
            "staffName":"Manager",
            "groupId":31241592111265,
            "groupName":"Hot Drinks",
            "taxId":31241592111109,
            "taxName":"13% HST",
            "taxRate":1.13,
            "taxIncluded":false,
            "sku":"EN18"
        },
        {
            "unitAmount":3,
            "quantity":1,
            "amount":3,
            "description":"Mocha",
            "staffId":3696,
            "staffName":"Manager",
            "groupId":31241592111265,
            "groupName":"Hot Drinks",
            "taxId":31241592111109,
            "taxName":"13% HST",
            "taxRate":1.13,
            "taxIncluded":false,
            "sku":"EN24"
```

```
        },
        {
            "unitAmount":0.73,
            "quantity":1,
            "amount":0.73,
            "description":"Flat White",
            "staffId":3696,
            "staffName":"Manager",
            "groupId":31241592111265,
            "groupName":"Hot Drinks",
            "taxId":31241592111109,
            "taxName":"13% HST",
            "taxRate":1.13,
            "taxIncluded":false,
            "sku":"EN18"
        }
    ],
    "payments":[
        {
            "paymentDate":"2021-02-03T17:53:20.015Z",
            "staffId":3696,
            "staffName":"Manager",
            "gratuity":0,
            "amount":6.33,
            "methodName":"K Room",
            "reservationId":"001",
            "methodCode":"IKPMS"
        }
    ],
    "receipt":null,
    "uuid":"3fWX14EFTFmeuw1IwnTiMA==",
    "id":null,
    "fiscId":null,

"businessExternalReference":"ls-trialdev-ef41-4a54-a6d2-0b63d787ee9d"
,
    "apiKey":"4f78da63-8c65-4da4-915c-3ba859a70cfb",
    "identifier":"3fWX14EFTFmeuw1IwnTiMA=="
}
```