PlaceOS, Staff API and Guest Access

Guest access utilises a JWT token with a guest scope to provide guests with information about their upcoming visit.
It can also be used for basic interactions such as checking-in and setting visitor preferences such as coffee preferences.

Overview

The following process is used to provide guests with a JWT token:

1. A staff member books a meeting and indicates that a guest will be attending in person.
2. A driver with access to the JWT private key (encrypted) does the following:
    - Monitors for the event: `staff/guest/attending`
    - Generates a JWT token in the format described below
    - Using an email driver, sends a templated email with the details of the booking
3. The guests are emailed, sms'd etc, a link that has the JWT embedded in it
4. The single page application extracts the JWT from the URL to perform API requests

JWT Token

The relevant driver will generate a special JWT:

```
{
  "iss": "POS",
  "iat": 1598513669,
  "exp": 1598520869,
  "jti": "b87aabd6-bd9b-4304-b18e-5d7afbda78b1",
  "aud": "domain.of.application",
  "scope": [ "guest" ],
  "sub": "guest_id",
  "u": {
      "n": "Guest Name",
      "e": "guest.name@external.org",
      "p": 0,
      "r": ["event_id", "control_system_id"]
  }
}
```

This token provides access to the following routes, full details of the Staff API for reference. (where the event_id, system_id and guest_id must match the token if the scope is **guest**)

View event details and update extension data, typically used for catering

- `GET /api/staff/v1/events/:event_id`
    - Does not require the system_id param when using a guest JWT
    - Checks the event_id matches the JWT
    - Checks the guest is still invited to the meeting
- `PATCH /api/staff/v1/events/:event_id`
    - Only updates the event extension_data
- `PATCH /api/staff/v1/events/:event_id/metadata/:system_id`
    - For updating event metadata

Notify hosts of their arrival

- `POST /api/staff/v1/events/:event_id/guests/:guest_id/checkin`
    - Does not require the system_id param when using a guest JWT
    - Event and guest ids are checked against the token
    - Checks the guest is still invited to the meeting

Update their profile (name and phone number)

- `GET /api/staff/v1/guests/:guest_id`
- `PATCH /api/staff/v1/guests/:guest_id`
    - Both check the guest_id matches the JWT

The room the meeting is hosted in and the levels the room is on

- `GET /api/engine/v2/systems/:system_id`
- `GET /api/engine/v2/systems/:system_id/zones`
    - These check the system_id matches the JWT

Metadata for the levels and building

- `GET /api/engine/v2/metadata/:zone_id`
- `GET /api/engine/v2/metadata/:zone_id/children`
    - Checks the zone_ids are in the system in the JWT

    - Guests must supply the `?name=` param (can't dump all available metadata)

Any additional notifications you would like guests to make (a custom driver has to be configured to listen for these)

- `POST /api/engine/v2/signal`
    - Checks the channel path includes `/guest/`

Example driver
https://gitlab.com/aca-engine/pwc-middle-east/pwc-me-private-drivers/-/blob/master/drivers/pwc/visitor_mailer.cr