

AWADA Spread

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AWADA Systems

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1. SPREAD

SPREAD — это серверная часть программного обеспечения AWADA, которая состоит из взаимосвязанных сервисов.

Сервисами SPREAD можно управлять в веб-интерфейсе **Spread Dashboards**. Это дает возможность:

- настраивать расписание или технологическую программу освещения (Инкубатор) для объектов, чувствительных к изменениям освещенности;
- смотреть показатели счетчиков и выключать их;
- проверять работу устройств с помощью системы монитора шины DALI;
- настраивать уличное освещение;
- задавать нужные команды для кнопочных панелей;
- редактировать параметры сервисов и перезагружать их;
- управлять правами доступа.

Также с помощью веб-интерфейса можно построить отчет об энергопотреблении и оперативный отчет.

1.1 Открыть веб-интерфейс

Spread Dashboards доступен по ссылке <http://x.x.x.x/spread/>, где x.x.x.x — ip-адрес контроллера. Веб-интерфейс доступен только в сети, к которой подключен контроллер.

2. Settings

 **Note**

Article in progress.

3. Operational report

Info

Article in development.

4. Settings

Info

Article in development.

5. Changelog

5.1 Version 5.6 (January 2023)

5.1.1 Operational report

We have implemented a real-time report by project. It shows information about lighting settings and statistics for the entire project, individual locations and lighting zones. The report is available in the web interface at the tab **Spread Dashboards → Operational Report**.

The screenshot shows a detailed operational report for a project named 'OpenSpace'. The main area displays a 3D model of a building's exterior with colored lighting zones. Key statistics shown include: Актуальная яркость (Actual brightness) 205.7 cd/m², Средняя яркость (Average brightness) 71 cd/m², Средний цветовой температура (Average color temperature) 2700 K, and Длительность (Duration) 31 ms. On the left, there's a sidebar with a tree view of the project structure and a list of entities. On the right, there are sections for 'Справка' (Help), 'Справка, примененная в плексигласе' (Help applied to plexiglass), and a 'Настройки' (Settings) panel.

Brightness tweak.

A new algorithm has been added to the DALI manager to maintain the brightness in the light zones. Using this algorithm reduces the load on the DALI bus, as well as on the RAM and processor of the controller (by reducing the number of commands sent and using Up/Down commands instead of StepUp/StepDown). The disadvantage of the algorithm - tweaking depends on the values of `fadeRate` in each fixture and at certain values may be less smooth relative to the old algorithm. In practice, the `fadeRate` value should be chosen based on the balance of the bus load and the required smoothness of the tweaking. Large values of `fadeRate` reduce the load but reduce the smoothness, small values are the opposite.

To enable the algorithm:

1. Open the web interface on the **Spread Dashboards → Project Settings** tab.
2. open DALI manager, check the **FadeRate** checkbox and press **Save**.

The screenshot shows the 'DALIManager' configuration page. The 'fadeRate' checkbox is circled in red. Other visible fields include 'Файл:' (File: /etc/spread/dali/dali_0_1.json), 'Идентификатор:' (Identifier: 3336), 'Уровень логирования:' (Logging level: 2-Подробный), 'Частота опроса, мс:' (Polling frequency, ms: 1000), 'Файл дампа:' (Dump file: /var/project/1315/dump/managerdali_0_1.json), 'Время ожидания ответа:' (Response timeout: 1.0), 'Локальный сан-адаптер:' (Local san-adapter: checked), 'Задержка опроса яркости:' (Brightness poll delay: 1.0), 'Коэффициент опроса:' (Polling coefficient: 1), and 'Порог для через fadeRate:' (fadeRate threshold: 1). A 'Сохранить' (Save) button is at the bottom.

5.1.2 Other.

- The climate subsystem control module (**Climate**) is implemented, which includes:
 - temperature sensors **TemperatureSensor**;
 - thermoregulators **Thermoregulators**;
 - fans **Fan**;
 - floor heating **HeatedFloor**.
 Previously, control was available only through Node-RED scripts.
- Implemented **Animeo** manager and **AnimeoRemote** provider for integration with Somfy blinds via Animeo IP controller.
- Added **KnxTemperatureSensor** provider.
- Fixed errors with the **DaliPushButton** provider.
- Shading subsystem **Shading** management and **KnxMotor** provider work were brought in line with the changes in the Shading API (`Motion`, `PositionLevel` and `PositionAngle tops`).
- Publication of project entities appeared. You can connect to the controller via any MQTT-client and see data about providers, equipment, locations, etc.

Translated with www.DeepL.com/Translator (free version)