

AD-DA.ca, Scheduler

Plugin Description

The [AD-DA.ca](#) Scheduler plugin provides comprehensive room power state management for Q-SYS environments. It enables automated scheduling of startup and shutdown events, occupancy-based power control, and centralized coordination across multiple rooms in a facility.

The plugin offers two operating modes: **Room Mode** for individual room control with local scheduling and occupancy sensor integration, and **Central Mode** for facility-wide coordination that can broadcast commands to multiple Room-mode instances. This hierarchical approach allows for flexible deployment scenarios ranging from single-room installations to enterprise-wide building automation.

Integration with occupancy sensors enables intelligent power management, automatically starting up equipment when presence is detected and shutting down after a configurable timeout period of inactivity. The scheduler supports both 12-hour and 24-hour time formats with configurable minute precision for precise event timing.

Key features

- **Dual Operating Modes** - Room Mode for individual control or Central Mode for facility-wide coordination
- **Weekly Scheduling** - Configure independent startup and shutdown times for each day of the week
- **Occupancy Integration** - Support for up to 8 occupancy sensors per room with configurable logic (AND/OR)
- **Configurable Time Format** - Choose between 12-hour and 24-hour time display
- **Minute Precision Options** - Select 5-minute or 15-minute scheduling intervals
- **Central Coordination** - Room instances can follow Central scheduler and accept remote commands
- **Event Logging** - Comprehensive timestamped log of all state changes and triggers
- **Manual Override** - Startup, Shutdown, and Toggle controls for immediate state changes

Use cases

- Conference room and meeting space automation
- Multi-room AV system power management
- Building-wide scheduled startup/shutdown
- Energy-saving occupancy-based control
- Corporate and educational facility automation

Configuration Overview

Plugin version

This document is written for the plugin :

- [AD-DA.ca](#) Scheduler V2.0.0.0

Release note

[2026-04] : V2.0.0.0

- New UI
- Occupancy sensor integration with AND/OR logic
- Startup and Shutdown controls now triggers on event

[2024-07] : V1.0.0.0

- Initial Release

QDS compatibility

This plugin has been developed and tested on :

- Q-SYS Designer version **9.13** thru **10.3.0**

Properties

Mode

Type: **enum**

Choices: **Central**, **Room**

Default Value: **Room**

Description: Selects the operating mode of the plugin. In **Room** mode, the plugin manages a single room with local scheduling and occupancy sensor support. In **Central** mode, the plugin acts as a master controller that can broadcast scheduling commands to Room-mode instances.

Hour Format

Type: **enum**

Choices: **12H**, **24H**

Default Value: **24H**

Description: Determines the time display format used by the scheduler. When set to **12H**, time

selections include AM/PM indicators. When set to `24H`, times are displayed in 24-hour format (00:00 to 23:59).

Minute Precision

Type: `enum`

Choices: `5M`, `15M`

Default Value: `15M`

Description: Sets the granularity of minute selections in the scheduler. `15M` provides quarter-hour intervals (00, 15, 30, 45), while `5M` provides 5-minute intervals (00, 05, 10, 15, etc.).

Occupancy Sensor Count

Type: `integer`

Min: `0`

Max: `8`

Default Value: `2`

Description: Specifies the number of occupancy sensors connected to this room. Each sensor provides independent state input and can be configured to trigger startup or shutdown events. Only available in Room mode.

Central Pin

Type: `boolean`

Default Value: `true`

Description: When enabled, exposes the Central Input pin (Room mode) or Central Output pin (Central mode) for inter-plugin communication. This allows Room instances to receive commands from a Central instance.

Controls

Scheduler Page

Room State & Controls

State Triggers

StartupShutdown

State LED and Toggle

State Toggle

Scheduler

	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Startup Schedule							
Hour	00	7	7	7	7	7	00
Minute	00	00	00	00	00	00	00
AM/PM	AM	AM	AM	AM	AM	AM	AM
Startup state trigger is triggered on Startup Schedule events.							
Shutdown Schedule							
Hour	22	22	22	22	22	22	22
Minute	00	00	00	00	00	00	00
AM/PM	PM	PM	PM	PM	PM	PM	PM
Shutdown state trigger is triggered on Shutdown Schedule events.							

Central's Controls

Allow incoming commands from Central

Enable

Follow Central schedule

Enable

ROOM STATE & CONTROLS

Controls Startup

Controls name: `Startup`

Type: `Button-Trigger`

Description: Triggers an immediate startup event. The room state changes to `true` (Powered) and the State LED illuminates. In Central mode, this also broadcasts a startup command to all connected Room instances.

Controls Shutdown

Controls name: `Shutdown`

Type: `Button-Trigger`

Description: Triggers an immediate shutdown event. The room state changes to `false` (Shutdown) and the State LED turns off. In Central mode, this also broadcasts a shutdown command to all connected Room instances.

Controls Toggle

Controls name: `StateToggle`

Type: `Button-Toggle`

Description: Toggles the room power state between Powered and Shutdown. When `true`, the room is in Powered state; when `false`, the room is in Shutdown state.

Controls State Led

Controls name: `State`

Type: `Indicator-Led`

Description: Visual indicator of the current room power state. Illuminated (green) indicates Powered state; off indicates Shutdown state. This control accepts input to set the state.

SCHEDULER

Scheduler Startup Schedule Event LED

Controls name: `SchedulerPowerOnLedTrigger`

Type: `Indicator-Led`

Description: Flashes briefly when a scheduled startup event is triggered, providing visual confirmation that the scheduler activated a startup.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power On

Controls name: `SchedulerPowerOn` x

Type: `Button-Toggle`

Description: Enables or disables the scheduled startup event for Sunday. When enabled, the room will automatically start up at the configured time.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power On Hour

Controls name: `SchedulerPowerOnHour` x

Type: `Text-ComboBox`

Description: Sets the hour component of the Sunday startup time. Available values depend on the Hour Format property (`01-12` for 12H, `00-23` for 24H).

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power On Min

Controls name: `SchedulerPowerOnMin` x

Type: `Text-ComboBox`

Description: Sets the minute component of the Sunday startup time. Available values depend on the Minute Precision property.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power On AM/PM

Controls name: `SchedulerPowerOnAmpm` x

Type: `Text-ComboBox`

Description: Sets AM or PM for the Sunday startup time. Only enabled when Hour Format is set to `12H`.

Scheduler Shutdown Schedule Event LED

Controls name: SchedulerPowerOffLedTrigger

Type: Indicator-Led

Description: Flashes briefly when a scheduled shutdown event is triggered, providing visual confirmation that the scheduler activated a shutdown.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power Off

Controls name: SchedulerPowerOff x

Type: Button-Toggle

Description: Enables or disables the scheduled shutdown event for Sunday. When enabled, the room will automatically shut down at the configured time.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power Off Hour

Controls name: SchedulerPowerOffHour x

Type: Text-ComboBox

Description: Sets the hour component of the Sunday shutdown time.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power Off Min

Controls name: SchedulerPowerOffMin x

Type: Text-ComboBox

Description: Sets the minute component of the Sunday shutdown time.

Scheduler [Sun-Mon-Tue-Wed-Thu-Fri-Sat] Power Off AM/PM

Controls name: SchedulerPowerOffAmpm x

Type: Text-ComboBox

Description: Sets AM or PM for the Sunday shutdown time. Only enabled when Hour Format is set to 12H.

CENTRAL'S CONTROLS (ROOM MODE ONLY)

Central Control

Controls name: CentralControl

Type: Button-Toggle

Description: Enables or disables acceptance of manual startup/shutdown commands from a Central-mode instance. When enabled, the Central controller can directly trigger state changes in this room.

Central Scheduler

Controls name: CentralScheduler

Type: Button-Toggle

Description: When enabled, this Room instance follows the Central's scheduled events instead of its local schedule. Local schedule controls become disabled when this is active.

CENTRAL COMMUNICATION PINS

Central Input (Room Mode)

Controls name: `CentralInput`

Type: `Indicator-Text`

Description: Input pin for receiving JSON-encoded commands from a Central-mode instance.

Expects messages with `Source` and `State` fields. This pin is only available when the Central Pin property is enabled.

Central Output (Central Mode)

Controls name: `CentralOutput`

Type: `Indicator-Text`

Description: Output pin that sends JSON-encoded commands to Room-mode instances.

Messages contain `Source` (`Scheduler` or `Manual`) and `State` (`true` or `false`) fields. This pin is only available when the Central Pin property is enabled.

Occupancy Page (Room Mode Only)

The Occupancy page is only available when Mode is set to Room and Occupancy Sensor Count is greater than 0.

OCCUPANCY SENSOR(S) SETTINGS

Occupancy Startup Logic

Controls name: `OccupancyPowerOnLogic`

Type: `Text-ComboBox`

Description: Determines the logic used for occupancy-based startup. `or` triggers startup when ANY sensor detects presence. `and` requires ALL enabled sensors to detect presence simultaneously. Disabled when only one sensor is configured.

Occupancy Shutdown Logic

Controls name: `OccupancyPowerOffLogic`

Type: `Text-ComboBox`

Description: Determines the logic used for occupancy-based shutdown. `or` triggers shutdown when ANY sensor times out. `and` requires ALL enabled sensors to time out. Disabled when only one sensor is configured.

Occupancy Shutdown Timeout

Controls name: `OccupancyTimeout`

Type: `Text-ComboBox`

Description: Sets the duration of no movement detection before triggering an automatic shutdown.

Available options: `5 Minutes`, `10 Minutes`, `15 Minutes`, `30 Minutes`, `45 Minutes`, `1 Hour`, `2 Hours`.

OCCUPANCY SENSOR(S)

Occupancy 1 State

Controls name: `OccupancyState[X]`

Type: `Indicator-Led`

Description: Input LED indicator showing the current state of occupancy sensor X. When illuminated (`true`), presence is detected. Connect this to an occupancy sensor output.

Occupancy 1 Power On

Controls name: `OccupancyPowerOn[X]`

Type: `Button-Toggle`

Description: When enabled, sensor X can trigger automatic startup when presence is detected (subject to Startup Logic settings).

Occupancy 1 Power Off

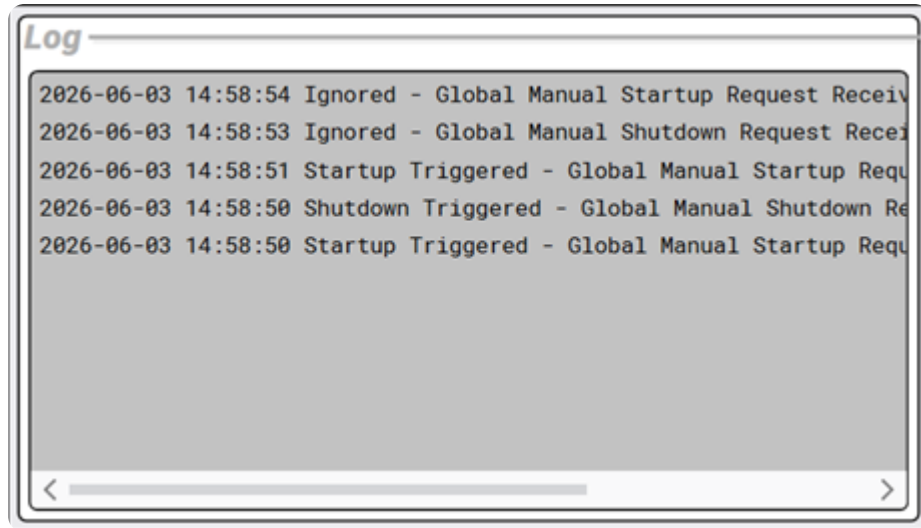
Controls name: `*OccupancyPowerOff[X]`

Type: `Button-Toggle`

Description: When enabled, sensor X participates in automatic shutdown when no presence is detected for the configured timeout period (subject to Shutdown Logic settings).

Additional occupancy sensors (2-8) follow the same pattern and are available based on the Occupancy Sensor Count property setting.

Log Page



LOG

Log

Controls name: `Log`

Type: `Indicator-Text`

Description: Displays a timestamped list of the most recent 50 events including startup triggers, shutdown triggers, and occupancy events. Each entry includes the date, time, and description of the event.

Status

Status

Controls name: `Status`

Type: `Indicator-Text`

Description: Displays the current operational status of the plugin. Shows `Powered` when the room is in startup state or `Shutdown` when the room is in shutdown state.

Control Pins

Common Controls

PIN NAME	VALUE	STRING	POSITION	PINS AVAILABLE
Status	-	-	-	-

Status	0	(Status String)	0	Output
Room State & Controls	-	-	-	-
Controls Startup	(Trigger)	-	-	Input / Output
Controls Shutdown	(Trigger)	-	-	Input / Output
Controls Toggle	0 1	false true	0 1	Input / Output
Controls State Led	0 1	false true	0 1	Output
Scheduler	-	-	-	-
Scheduler Startup Schedule Event LED	0 1	false true	0 1	Output
Scheduler Sun. Power On	0 1	false true	0 1	Input / Output
Scheduler Sun. Power On Hour	-	(String)	-	Input / Output
Scheduler Sun. Power On Min	-	(String)	-	Input / Output
Scheduler Sun. Power On AM/PM	-	(String)	-	Input / Output
Scheduler Mon. Power On	0 1	false true	0 1	Input / Output
Scheduler Mon. Power On Hour	-	(String)	-	Input / Output
Scheduler Mon. Power On Min	-	(String)	-	Input / Output
Scheduler Mon. Power On AM/PM	-	(String)	-	Input / Output
Scheduler Tue. Power On	0 1	false true	0 1	Input / Output
Scheduler Tue. Power On Hour	-	(String)	-	Input / Output
Scheduler Tue. Power On Min	-	(String)	-	Input / Output
Scheduler Tue. Power On AM/PM	-	(String)	-	Input / Output

Scheduler Wed. Power On	0 1	false true	0 1	Input / Output
Scheduler Wed. Power On Hour	-	(String)	-	Input / Output
Scheduler Wed. Power On Min	-	(String)	-	Input / Output
Scheduler Wed. Power On AM/PM	-	(String)	-	Input / Output
Scheduler Thu. Power On	0 1	false true	0 1	Input / Output
Scheduler Thu. Power On Hour	-	(String)	-	Input / Output
Scheduler Thu. Power On Min	-	(String)	-	Input / Output
Scheduler Thu. Power On AM/PM	-	(String)	-	Input / Output
Scheduler Fri. Power On	0 1	false true	0 1	Input / Output
Scheduler Fri. Power On Hour	-	(String)	-	Input / Output
Scheduler Fri. Power On Min	-	(String)	-	Input / Output
Scheduler Fri. Power On AM/PM	-	(String)	-	Input / Output
Scheduler Sat. Power On	0 1	false true	0 1	Input / Output
Scheduler Sat. Power On Hour	-	(String)	-	Input / Output
Scheduler Sat. Power On Min	-	(String)	-	Input / Output
Scheduler Sat. Power On AM/PM	-	(String)	-	Input / Output
Scheduler Shutdown Schedule Event LED	0 1	false true	0 1	Output
Scheduler Sun. Power Off	0 1	false true	0 1	Input / Output
Scheduler Sun. Power Off Hour	-	(String)	-	Input / Output
Scheduler Sun. Power Off Min	-	(String)	-	Input / Output

Scheduler Sun. Power Off AM/PM	-	(String)	-	Input / Output
Scheduler Mon. Power Off	0 1	false true	0 1	Input / Output
Scheduler Mon. Power Off Hour	-	(String)	-	Input / Output
Scheduler Mon. Power Off Min	-	(String)	-	Input / Output
Scheduler Mon. Power Off AM/PM	-	(String)	-	Input / Output
Scheduler Tue. Power Off	0 1	false true	0 1	Input / Output
Scheduler Tue. Power Off Hour	-	(String)	-	Input / Output
Scheduler Tue. Power Off Min	-	(String)	-	Input / Output
Scheduler Tue. Power Off AM/PM	-	(String)	-	Input / Output
Scheduler Wed. Power Off	0 1	false true	0 1	Input / Output
Scheduler Wed. Power Off Hour	-	(String)	-	Input / Output
Scheduler Wed. Power Off Min	-	(String)	-	Input / Output
Scheduler Wed. Power Off AM/PM	-	(String)	-	Input / Output
Scheduler Thu. Power Off	0 1	false true	0 1	Input / Output
Scheduler Thu. Power Off Hour	-	(String)	-	Input / Output
Scheduler Thu. Power Off Min	-	(String)	-	Input / Output
Scheduler Thu. Power Off AM/PM	-	(String)	-	Input / Output
Scheduler Fri. Power Off	0 1	false true	0 1	Input / Output
Scheduler Fri. Power Off Hour	-	(String)	-	Input / Output
Scheduler Fri. Power Off Min	-	(String)	-	Input / Output

Scheduler Fri. Power Off AM/PM	-	(String)	-	Input / Output
Scheduler Sat. Power Off	0 1	false true	0 1	Input / Output
Scheduler Sat. Power Off Hour	-	(String)	-	Input / Output
Scheduler Sat. Power Off Min	-	(String)	-	Input / Output
Scheduler Sat. Power Off AM/PM	-	(String)	-	Input / Output
Log	-	-	-	-
Log	-	(String)	-	Output

Room Mode Controls

PIN NAME	VALUE	STRING	POSITION	PINS AVAILABLE
Central's Controls	-	-	-	-
Central Control	0 1	false true	0 1	Input / Output
Central Scheduler	0 1	false true	0 1	Input / Output
Central Input	-	(JSON String)	-	Input
Occupancy	-	-	-	-
Occupancy Startup Logic	-	(String)	-	Input / Output
Occupancy Shutdown Logic	-	(String)	-	Input / Output
Occupancy Shutdown Timeout	-	(String)	-	Input / Output
Occupancy 1 State	0 1	false true	0 1	Input
Occupancy 1 Power On	0 1	false true	0 1	Input / Output

Occupancy 1 Power Off	0 1	false true	0 1	Input / Output
Occupancy 2 State	0 1	false true	0 1	Input
Occupancy 2 Power On	0 1	false true	0 1	Input / Output
Occupancy 2 Power Off	0 1	false true	0 1	Input / Output

Additional occupancy sensor pins (3-8) follow the same pattern based on the Occupancy Sensor Count property.

Central Mode Controls

PIN NAME	VALUE	STRING	POSITION	PINS AVAILABLE
Central Output	-	-	-	-
Central Output	-	(JSON String)	-	Output



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