



Certified Capability List

This Capability List is based on a certification session performed by the *TALQ Certification Tool (v2.3.0-update.15)* on 2022-04-15 18:49:37.342 +0200.

The Capability List is a consolidated list of TALQ features which are implemented in a product.

The tool has successfully performed 28 tests.

Product details

Product Name Dimmyweb

Company Revetec

Type GATEWAY

Notes

Generated on 2022-04-15 18:49:37.342 +0200

Supported profiles • Lighting

API version certified: 2.3.0

Certification performed by app version: 2.3.0-update.15

Capability list

Security

Enabled ✓

Functions

Basic

The Basic function describes the properties related to the physical asset to which the logical device is associated, such as identification (assetId) and location information.

Attributes

| # | Attribute | Description |
|---|-------------|---|
| ✓ | displayName | Display name of the asset. |
| ✓ | assetId | Customer identifier of the asset. If multiple devices have the same assetId it means they belong to the same asset. |
| ✓ | serial | Serial number of the device. |
| ✓ | hwType | Hardware type of the device. |
| ✓ | hwVersion | Hardware revision of the device. |
| ✓ | swType | Software type of device. This attribute may be useful if the same hardware supports multiple firmware versions with different functions. |
| ✓ | swVersion | Software version installed on the device. |
| ✓ | location | Latitude, Longitude and Altitude. [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new LocationSensorFunction.location instead.] |
| ✓ | currentTime | Current time of the device defined as local time with time zone designator. [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new TimeFunction.currentTime instead.] |

Events

| # | Event type | Description |
|---|-------------|---|
| ✓ | deviceReset | The physical device containing the logical device was reset |

Gateway

The Gateway function includes the necessary attributes to enable the communication between the CMS and the Gateway according to the TALQ Specification.

Attributes

| # | Attribute | Description |
|---|----------------|--|
| ✓ | cmsUri | Base URI for TALQ communication that allows the Gateway to access the CMS. Must be an absolute URI. Other URI's for accessing CMS can be relative to this base. |
| ✓ | cmsAddress | CMS UUID address |
| ✓ | gatewayUri | Base URI for TALQ communication that allows the CMS to access the Gateway. Must be an absolute URI. Other URI's for accessing Gateway can be relative to this base. |
| ✓ | gatewayAddress | Gateway UUID address |
| ✓ | retryPeriod | Time duration before the Gateway retransmits a message for which expected response has not been received. [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new GatewayFunction.gatewayRetryPeriod instead.] |
| ✓ | crlUrn | URI where the Gateway can obtain the Certification Revocation List (CRL). |
| ✓ | vendor | Vendor identification. |

Lamp Actuator

The Lamp Actuator function includes attributes related to lighting control and it represents the smallest unit for control purposes. In practice, however, a Lamp Actuator function can control combinations of several lamps and control gear but all in the same way, as if they are all one individual unit.

Attributes

| # | Attribute | Description |
|---|----------------------|--|
| ✓ | standbyMode | Defines the behavior of the lamp actuator when output level is set to zero. If OFF, light output level is zero with no power to the lamp control gear. If ON, light output level is zero but power is delivered to the lamp control gear (standby mode). |
| ✓ | defaultLightState | Sets the default light output for the lamp actuator. This shall be applicable if no other command is active. This attribute shall be set to 100% as default value. |
| ✓ | targetLightCommand | Latest command for the lamp actuator. |
| ✓ | feedbackLightCommand | This attribute reflects the command in effect and it might deviate from the actualLightState due to propagation time or due to internal ODN specific mechanisms to handle the priority of the requests. |

- | | |
|--------------------|---|
| ✓ actualLightState | This attribute should reflect the physical state of the light source as much as possible, including factors such as CLO. It may be calculated or measured, depending on the specific ODN implementation, which is outside the scope of this specification. |
| ✓ calendarID | TALQ Address of the calendar controlling this lamp actuator. If this attribute is empty, the behavior shall be determined by the ODN. If the attribute is invalid, the ODN shall trigger a generic invalid address event and the behavior shall be determined by the ODN. |

Events

| # | Event type | Description |
|---|------------------|-------------------------|
| ✓ | lightStateChange | Light state has changed |

Lamp Monitor

The Lamp Monitor function enables monitoring of lamp parameters. A Lamp Monitor function should be associated with a specific lamp/control gear combination. Multiple lamp monitor functions may be implemented by a single device.

Attributes

| # | Attribute | Description |
|---|---------------------|--|
| ✓ | monitoringReference | Name of the entity (or physical device) being monitored by this function. |
| ✓ | switchOnCounter | Cumulative number of ON/OFF cycles since installation of the lamp. The wrap around value is $2e32 - 1$. |
| ✓ | operatingHours | Number of hours the lamp is on. This is the value used in CLO and may be set by the CMS. |
| ✓ | activePower | Active power. |
| ✓ | reactivePower | Reactive power. |
| ✓ | apparentPower | Apparent Power. |
| ✓ | activeEnergy | Cumulative active energy (since installation or counter reset). |
| ✓ | supplyLossCount | Incrementing count of supply losses. The wrap around value is $2e32 - 1$. |
| ✓ | lampVoltageTooHigh | Level of lamp voltage (not supply voltage) is greater than highLampVoltageThreshold. |

- ✓ **lampVoltageTooLow** Level of lamp voltage (not supply voltage) is smaller than lowLampVoltageThreshold.
- ✓ **lampFailure** The lamp is not operating as it is supposed to (e.g. the lamp is broken). This event shall be used to detect a situation where the lamp (or LED module(s)) should be lit, but produce no light. This could be detected by the current flowing or power consumed.

Events

| # | Event type | Description |
|---|--------------------|--|
| ✓ | lampVoltageTooHigh | Level of lamp voltage (not supply voltage) is greater than highLampVoltageThreshold. |
| ✓ | lampVoltageTooLow | Level of lamp voltage (not supply voltage) is smaller than lowLampVoltageThreshold. |
| ✓ | lampFailure | The lamp is not operating as it is supposed to (e.g. the lamp is broken). This event shall be used to detect a situation where the lamp (or LED module(s)) should be lit, but produce no light. This could be detected by the current flowing or power consumed. |

Services

Configuration Service

The TALQ Configuration Service enables discovery and configuration of devices and services

Options

| # | Option | Value | Description |
|---|-----------------------------|-------|---|
| ✓ | commissioningSupported* | | This ODN can support commissioning from the CMS side. |
| ✓ | devicesPaginationSupported* | | This ODN can support pagination of devices. |

Control Service

The Control service describes the mechanisms to operate the actuator functions in order to enable schedule based and override control

Options

| # | Option | Value | Description |
|---|----------------|--|--|
| ✓ | supportedTypes | <ul style="list-style-type: none"> ccDate * | Control Program and calendar options supported are defined by announcing support for the given modes |
| ✓ | dayOffset | <ul style="list-style-type: none"> 1 2 | Offset of start of day |
| ✓ | ccDateSupport | | Indicates the ccDate options supported |
| ✓ | ccDaySupport | | Indicates the ccDay options supported |

Events

| # | Event Type | Description |
|---|-----------------|--|
| ✓ | invalidCalendar | An invalid calendar has been provided by the CMS to the ODN |
| ✓ | invalidProgram | A control program has been provided by the CMS, which cannot be implemented by the ODN |

Data Collection Service

The TALQ Data Collection Service is a provision to configure how ODN measurements, status information and events are logged, and when or under what conditions the logged data is transferred to the CMS

Options

| # | Option | Value | Description |
|---|----------------|---|---|
| ✓ | supportedModes | <ul style="list-style-type: none"> VendorRecordingMode EventRecordingMode ImmediateReportingMode | Recording and Reporting modes supported |

Events

| # | Event Type | Description |
|---|---------------------|--|
| ✓ | invalidLoggerConfig | The CMS has provided a data logger configuration that cannot be implemented by the ODN |

On Demand Data Request Service

This service provides the mechanism to access attributes in the logical devices by requesting attribute values from the ODN

Group Management Service

This service provides the mechanisms to define and manage groups

Options

| # | Option | Value | Description |
|---|-----------------------|-------|---|
| ✓ | maximumNumberOfGroups | | Maximum number of groups per Gateway |
| ✓ | maximumGroupSize | | Maximum number of group members per group |

Objects

Event log data

Event log data contains a single event, with eventType and value, in each single log entry. It also includes information about whether the log denotes the start or end of the event. Furthermore additional information can be added with the info attribute.

Properties

| # | Property | Description |
|---|------------|---|
| ✓ | eventType | Identifier of event reported |
| ✓ | srcAddress | Address of Logical device or function within a logical device which is the source of the event or to which this event applies |

Command

A command defines a type of control action that can be applied to a function. Commands can be generated by a manual override action or by a control program.


Properties

| # | Property | Description |
|---|----------|-------------|
|---|----------|-------------|

- ✓ state Light state to be applied to the lamp actuator
- ✓ cmsRefId CMS reference, which can be used for data logging. The cmsRefId in a Command is a free text to be used by the CMS for any purpose, e.g: to differentiate contexts. It is a token that allows the CMS to match client requests to the original notification.

: The Certification Test Tool is designed to provide a high level of confidence that complementary systems can communicate successfully. As both the protocol and the test tool evolve, all mandatory and other core tests are confirmed by comparison with real-life scenarios (plug-fest or similar). Some tests of optional and more peripheral features may not yet have been confirmed in this way; such features are identified with an asterisk ().

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