

IETF 82 – APPSAWG

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Device Classification

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Problem

- More and more **types** of devices now connect to the Internet
- More reasons for devices to interact, sharing:
 - physical space
 - power
 - other resources (audio, light, ...)
- Management functions independent of product functionality
 - energy management
- No standard method for a device to communicate what it **is**

Why I care

- Monitoring energy use in buildings is impaired by not knowing what types of devices are using what portion of energy
- EMAN lacks a registry to point to to report device type
- This is useful for more than just energy management
- Need a mechanism that is universal

Proposal

- IANA registry of basic device types
 - Ideally < 150 entries
 - Universal

Proposal is **NOT** about

- Individual identity
- Specific characteristics
- Protocols for transmitting data
- Service Discovery
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Existing IANA example

RFC 4589, “**Location Types Registry**”

Abstract

This document creates a registry for describing the types of places a human or end system might be found. The registry is then referenced by other protocols that need a common set of location terms as protocol constants. Examples of location terms defined in this document include aircraft, office, and train station.

Location example excerpt

Token 	Description 
aircraft	A device that is used or intended to be used for flight in the air, such as an airplane, helicopter, gyroplane, glider or lighter-than-air devices like a balloon.
airport	A place from which aircraft operate, such as an airport or heliport.
arena	Enclosed area used for sports events.
automobile	A usually four-wheeled automotive vehicle designed for passenger transportation, such as a car.
bank	Business establishment in which money is kept for saving or commercial purposes or is invested, supplied for loans, or exchanged.
bar	A bar or saloon.
bus	A large motor vehicle designed to carry passengers.
bicycle	A vehicle with two wheels tandem, a steering handle, a saddle seat, and pedals by which it is propelled.
bus-station	Terminal that serves bus passengers, such as a bus depot or bus terminal.
cafe	Usually small and informal establishment serving various refreshments (such as coffee); coffee shop.
classroom	Academic classroom or lecture hall.
club	Dance club, nightclub or discotheque.
construction	Construction site.
convention-center	Convention center or exhibition hall.
government	Government building, such as those used by the legislative, executive, or judicial branches of governments, including court houses, police stations and military installations.
hospital	Hospital, hospice, medical clinic, mental institution, or doctor's office.
hotel	Hotel, motel, inn or other lodging establishment.
industrial	Industrial setting, such as a manufacturing floor or power plant.
library	Library or other public place in which literary and artistic materials, such as books, music, periodicals, newspapers, pamphlets, prints, records, and tapes, are kept for reading, reference, or lending.
motorcycle	A two-wheeled automotive vehicle, including a scooter.
office	Business setting, such as an office.
other	A place without a registered place type representation.
outdoors	Outside a building, in or into the open air, such as a park or city streets.
parking	A parking lot or parking garage.
place-of-worship	A religious site where congregations gather for religious observances, such as a church, chapel, meetinghouse, mosque, shrine, synagogue, or temple.

My questions

- What is best path to getting this created
 - Who might be interested to help
 - What existing classifications systems should be drawn on for content
- Any reason not to use the location registry as a model?
 - Anything to add to or remove from that RFC?

Thank you