WHITE SPACE DATABASE DISCOVERY

I-D: DRAFT-PROBASCO-PAWS-DISCOVERY-01

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PROBLEM STATEMENT

- A white space master device is required to discover a database to query for available channels at its current location prior to using that channel
  - At power up a WSD does not reliably know the regulatory domain corresponding to its current location and consequently a corresponding trusted WSDB to query

- WSDB Discovery is a component of the PAWS protocol (See Sec 5.2 and Requirements P.1, P.2 & P.3 in the UC&R I-D)

- WS Database discovery is independent from the query protocol between a master device and a WSDB
DISCOVERY SERVER

Global WSDB discovery servers
WSDB DISCOVERY
SERVER

• A WSDB discovery server has global scope
• The discovery server maintains the most current information about authorized white space databases for each regulatory domain

• A master device is configured with the address of a WSDB discovery server

• WSDB discovery servers may be operated by a DB provider or device manufacturer
DB DISCOVERY PROCESS

Discovery request (location info, etc.)

Discovery response (WSDB address)

WSDB Discovery Server

WSD

WSDB

PAWS
CAVEATS

• Not all WS devices require a database discovery server
  • They could be preconfigured with a WSDB address (Req P.2)

• The WSDB discovery server may deliver a list of WSDBs available within a regulatory domain
  • Policy on the WSD may then decide which of the databases to use
The discovery of a WSDB using a discovery server is simple and easy to deploy

The Discovery request/response messages are HTTPS based

Consider the adoption of this I-D as the starting point for the solution to the DB discovery requirement (P.1, P.2 & P.3)
Questions???