The Dreambox need information from external services. Examples are reachable repeaters, hotspots and users.

Requirements

1. Given DMRid: receive information like user name and address from radioid.org.
2. Based on current geographical location: get information on repeaters from Brandmeister that might be reachable.
3. Based on my DMRid: get information on my hotspots from Brandmeister.
4. Current location is fetched from manually entered location saved in the transceiver. (To be defined)
5. A Talkgroup list is kept with all available static TG from repeaters at Brandmeister.
6. Get available Talk Groups from 5, based on search criteria (to be defined).
7. Repeaters assigned to zones. Can be eg. All in SM6 or near Göteborg .. (to be defined).
8. Repeater and hotspot data periodically synced with Brandmeister,
9. Call version management. Provide a version no in call from client.
10. Possible to be used by international Dreambox user in for example Great Britain or Germany.

## Information

From Brandmeister

### Repeaters or hotspost – main info

uint8\_t zone; //zone no = collection of repeaters or hotspots (for future use)

uint32\_t DMRid; //DMRid för repeater eller Hotspot

uint16\_t IARUchannel; //freq.channel according to IARU like RUxxx and Uxxx,

but saved without prefix. Perhaps better with a freq. pair.

uint8\_t cc; //color code0~15

uint8\_t TimeSlot; //active time slot (valid if TimeSlotNo =1) 0:slot 1 1:slot 2

uint8\_t TimeSlotNo; //number of time slots 1 or 2

char Name[15]; //name of the channel, 14 chars

char Location[15]; //location of device Hotspot or repeater, 14 chars

### Repeater or hotspot – static TG list

uint32\_t DMRid; // DMRid för repeater eller Hotspot

uint32\_t TG; // Talk group

uint8\_t TS; // Time slot

### Talk Groups

From Brandmeister list of known TG completed + additional actual static TGs defined on repeaters.

uint32\_t TG; Talk Group no

char TGname[20]; Name

uint8\_t calltype; Call type 1= group, 0= personal

uint8\_t rxgroup; ??

### Call types

Our own private list.

uint8\_t calltype; as above

char ctname[10]; name

### DMRid

Fetched from Radioid.net.

uint32\_t ri\_id; DMRid

String ri\_callsign; Callsign

String ri\_fname; First name

String ri\_surname; Last name

String ri\_state; State

String ri\_city; City

String ri\_country; Country

## Specifications

### Brandmeister

[API/Halligan API - BrandMeister](https://wiki.brandmeister.network/index.php/API/Halligan_API)

### Radioid

[RadioID - Database](https://database.radioid.net/database/api)

Current implementation in the code

W50WIFI.ino

HTTPGet ..