CC32xx mDNS

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Overview

mDNS(multicast domain name system) is a host name resolution service. Mdns host can multicast messages containing information about its services, ip address, text on mDNS port. An Mdns client on the same subnet shall be able to listen to those messages. CC3200 device can make use of these services.



Note: This wiki page is only applicable for CC3200-SDK v0.5.2 and upward releases. For documentation on older SDKs' examples, refer corresponding file in <cc3200-sdk-installation-location>\cc3200-sdk\docs\examples\

Application Details

This application can either be used as a Advertise(Mdns host) application or as a listen(Mdns client) application. One can switch between the two using a predefined symbol "MDNS_ADVERTISE". First step for each case is to connect to an AP. one can change the AP name by modifying the "DEFAULT_SSID" macro. The advertise application registers and multicasts one service(CC3200._uart._tcp.local) at mDNS port. The Listen application tries to get the IP, port and text of a service multicasted by another device(mdns host).

This mDNS sample application registers services as 'unique services'. .i.e. if a service w/ the same name is already registered in the n/w, the new service registration will fail

Source Files briefly explained

• main.c - Initializes the device, connects to an AP, registers service for broadcast and tries to get IP, port and text of the service by name.

Supporting Files

• **pinmux.c** - Generated by the PinMUX utility.

Common Files

- startup_ccs.c CCS related functions
- startup_ewarm.c IAR related functions
- uart_if.c Interface file for uart communication

Usage

Setup a serial communication application (HyperTerminal/TeraTerm). For detail info visit Terminal setup

On the host PC. The settings are:

- Port: Enumerated COM port

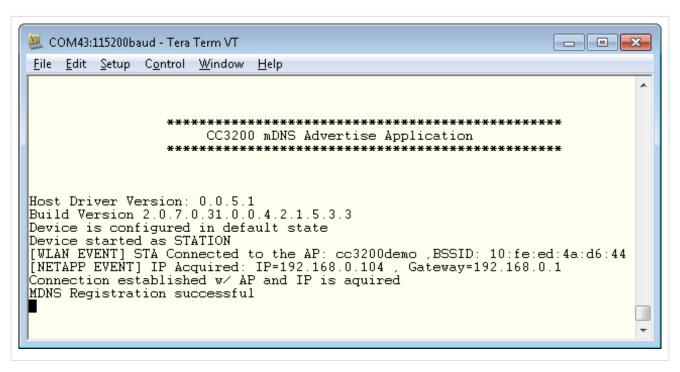
- Baud rate: 115200

- Data: 8 bit- Parity: None- Stop: 1 bit

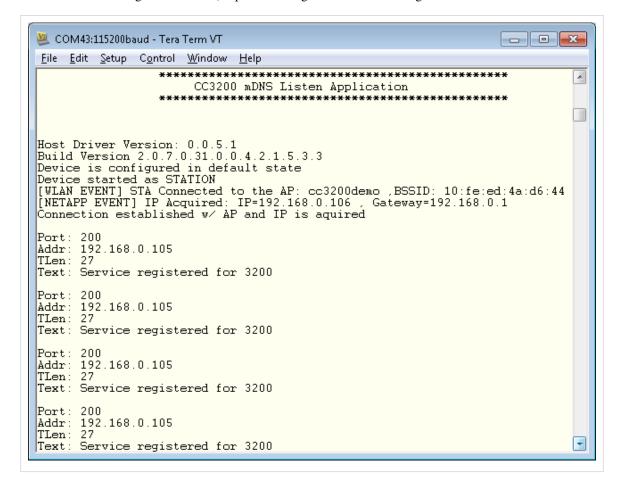
- Flow control: None

- Run the reference application as advertise application or listen application.(Flashing the bin/IAR/CCS).
- If ran as a advertise application, the serial communication will be something like:

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• If ran as a listen application, one needs to run mdns host on the same subnet(can be a PC, mobile or another CC3200 device running as a advertise). upon receiving the multicast message the serial communication will be as:



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Limitations/Known Issues - Trying to get a service broadcasted by the same board is not a valid use case.

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