CC31xx mDNS

Overview

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This sample application demonstrates how to register mDNS services, multicast them on mDNS port and try to get the IP, port and text of another service.

Note: This wiki page is only applicable for **CC3100-SDK v1.0.0** and upward releases. For documentation on older SDKs' examples, refer corresponding file in **<cc3100-sdk-installation-location>\cc3100-sdk\docs\examples**

Application details and Usage

This application registers and multicast three services at mDNS port. It also tries to get the IP, port and text of a service multicast-ed by another device

- Connect the board to a Windows-PC and configure the terminal-program for seeing the logs - [| CC31xx_&_CC32xx_Terminal_Setting_Wiki [1]] has detailed instructions for configuring the terminal-program
- Multicast service parameters can be changed by changing below macros in **main.c**:

```
   #define MDNS_SERVICE_1        "cc3100-service-1._ipp._tcp.local"
   #define MDNS_SERVICE_2        "cc3100-service-2._ftp._tcp.local"
   #define MDNS_SERVICE_3        "cc3100-service-3._ipp._udp.local"
```

```
#define MDNS_TEXT_1            "dev=CC3100"
   #define MDNS_TEXT_2            "dev=CC31xx"
   #define MDNS_TEXT_3            "vendor=texas instruments"
```

- Service to be 'listened-for' can be changed by modifying below macro in **main.c**:

```
   #define DNS_SD_SERVICE        "service-4._ipp._tcp.local"
```

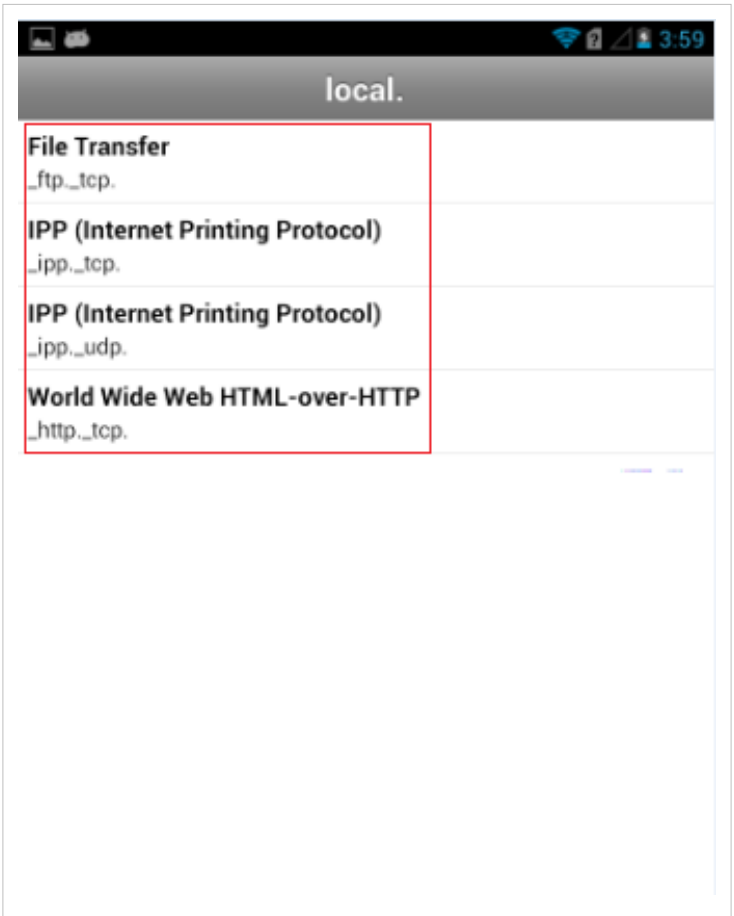
- Edit following parameters in **sl_common.h** to establish connection w/ an AP:

```
   #define SSID_NAME       "<ap_name>"
   #define SEC_TYPE        SL_SEC_TYPE_OPEN
   #define PASSKEY         ""
```

- Build and run the application
- See the self explanatory logs on the terminal-program's console. On success, below message will be displayed on the terminal

```
MDNS application - Version 1.1.0
************************************************************
Device is configured in default state
Device started as STATION
Connection established w/ AP and IP is acquired
Device has registered the services and started broadcasting it
```

- These services can be discovered w/ any service-discovery application:



Note: : 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

i. main - Initializes the device, connects to an AP, registers three services for multicast and tries to get IP, port and text of the service by name.

Limitations/Known Issues

- Trying to get a service multicast by the same board is not a valid use-case and is not supported

References

[1] http://processors.wiki.ti.com/index.php/CC31xx_&_CC32xx_Terminal_Setting

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