CC31xx Getting Started with WLAN AP

Overview and application details

Return to CC31xx & CC32xx Home Page

Return to CC31xx Sample Applications

This sample application demonstrates how to configure CC3100 in **Access-Point** mode. Any WLAN station in its range can connect/communicate to/with it as per the standard networking protocols. On a successful connection, the device pings the connected station.

By default, this application communicates w/ CC3100 over SPI. The SDK has UART-Drivers as well for MSP430F5529LP and Tiva-C platforms. For using the UART interface to communicate w/ CC3100, macro **SL_IF_TYPE_UART** has to be defined in the application-project's properties.

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**

Source Files briefly explained

- main - Initializes the device, configures it in AP mode and verifies the connection status

Usage

- Connect the board to a Windows-PC and configure the terminal-program for seeing the logs - [l CC31xx_&_CC32xx_Terminal_Setting_Wiki [1]] has detailed instructions for configuring the terminal-program
- Open **sl_common.h** and modify values of **SSID_AP_MODE**, **PASSWORD_AP_MODE** and **SEC_TYPE_AP_MODE**. These values will define the device's credentials in AP mode
- Build and run the application using IAR/CCS

```
The device will be configured in AP mode and shall wait for clients to connect w/ it.
It also pings the connected clients to check the connection status\
```

- See the self explanatory logs on the terminal-program's console.
- Connect a client to the device and wait for few seconds for the test to complete
- On success, below message will be displayed on the terminal

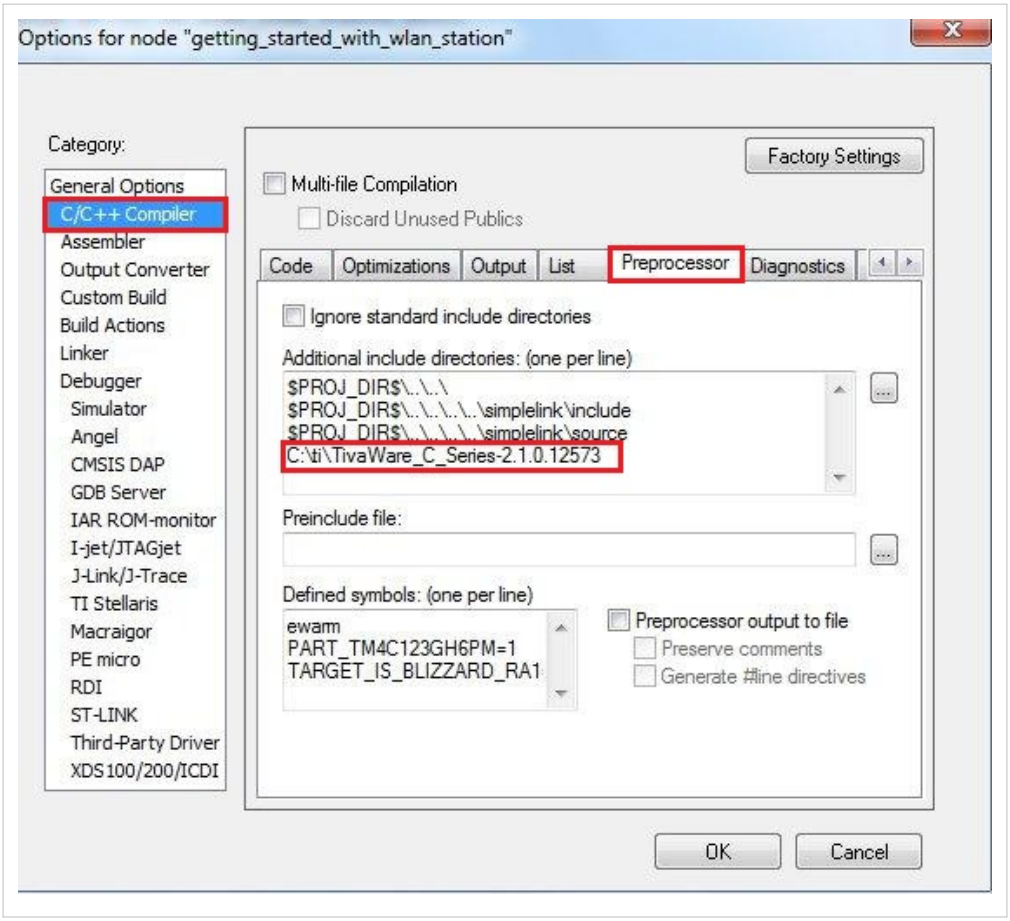
```
Getting started with WLAN access-point application - Version 1.1.0
************************************************************************
Device is configured in default state
Device started as Access Point
Waiting for clients to connect...!
Client connected to the device
Pinging...!
Device and the station are successfully connected
```

Note: : User needs to reconfigure the device in 'Station-Mode' for executing other sample applications. Refer function **configureSimpleLinkToDefaultState** in this example's **main.c** for configuring the device in 'Station-Mode'.

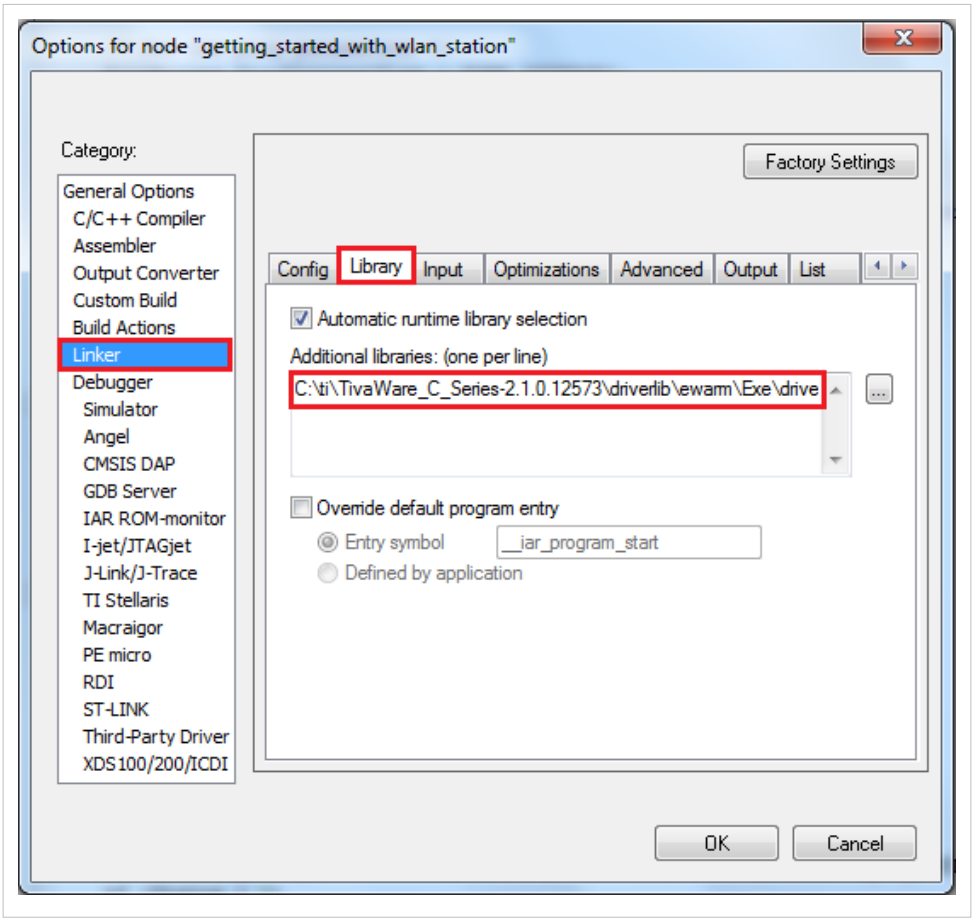
Building for Tiva-C LaunchPad

To build the application for Tiva-C LaunchPad, follow below steps:

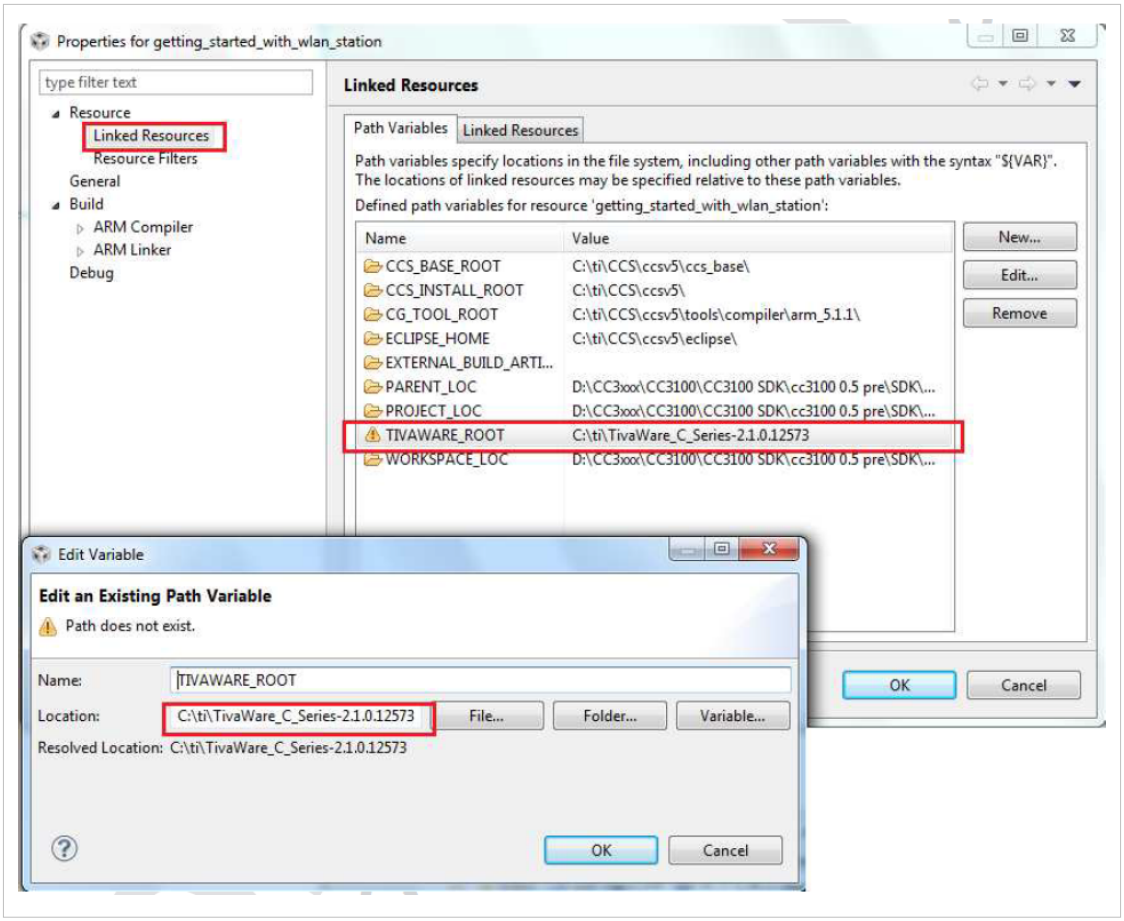
- IAR
  - Open the project's **Options**
  - Replace the tivaware path under **C/C++ Compiler->Preprocessor** section



  - Replace the tivaware library path under **Linker->Library** section



  - Build the project
- Code Composer Studio
  - Open the project property
  - Update **TIVAWARE_ROOT** variable available under **Resource->Linked Resources** with tivaware root directory



- Build the project

Limitations/Known Issues

None

References

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

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