BitCloud 1.12.0 and BitCloud Profile Suite 1.8.0 Migration Guide

1 Introduction

This document describes how to migrate from BitCloud version 1.11.0 to BitCloud version 1.12.0 and from BitCloud Profile Suite version 1.7.0 to BitCloud Profile Suite version 1.8.0 making the existing application work with the newer version.

New BitCloud and BitCloud Profile Suite versions introduce certain changes in the BSP component which can cause errors when compiling an application built on top of the older version with BSP source files for the new version. However, this can be easily fixed by modifying makefiles or IAR projects.

Development toolchain may also require an upgrade.

2 Adjust to the new BSP

Board Support Package (BSP) in the new version includes a fake implementation which may be useful to test applications on custom boards without implementing peripherals. Turning the fake BSP on/off is controlled by the `APP_DISABLE_BSP` flag in the application's `configuration.h` file.

This functionality adds a new file to BSP called `fakeBSP.c` and located at `\BitCloud\Components\BSP\<Board-Name>\src`. This file must be

- added to the IAR project, if the application is compiled from IAR Embedded Workbench
- referenced in makefiles, if makefiles are used for compilation

2.1 Modifying the IAR project

1. Copy the entire application folder to the `Applications` directory of the new BitCloud SDK.
2. Open the project in IAR Embedded Workbench and add `fakeBSP.h` to the BSP source files in the project using the standard adding files to project feature.

2.2 Modifying makefiles

1. Copy the entire application folder to the `Applications` directory of the new BitCloud SDK.
2. To each low-level makefile (from the `makefiles` directory) used for compilation add the following line under `SRCS = \`

   `./../../../../BitCloud/Components/BSP/<Board-Name>/src/fakeBSP.c \`

   In the above lint replace `<Board-Name>` with actual board name (observe the `BSP` directory to see variants).

NOTE You can also replace the entire `makefiles` directory with the `makefiles` directory from a sample application provided for the new SDK version, if the makefiles have not been changed.

3 Upgrade the toolchain

BitCloud version 1.12.0 and BitCloud Profile Suite version 1.8.0 require an upgraded version of the IAR compiler if one used. Refer to AVR2052: BitCloud Quick Start Guide or AVR2055: BitCloud Profile Suite Quick Start Guide to find out what IAR version is used for your platform, and upgrade your development software to the required version.