

# Using CodeWarrior TAP with CodeWarrior for mobileGT 9.2

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This application note provides the step-by-step procedure for manually updating CodeWarrior for mobileGT, version 9.2, to enable the use of CodeWarrior TAP.

After the release of CodeWarrior tools for mobileGT, version 9.2, Freescale developed a new debug probe called CodeWarrior TAP (CWTAP). CWTAP requires new USB drivers to be installed. Freescale distributes the new drivers with recent versions of the CodeWarrior Connection Server (CCS) component, which is part of the CodeWarrior tools.

## NOTE

Before you begin, ensure you are familiar with the CodeWarrior TAP User Guide (CW\_TAP\_UG), which comes with the CWTAP box.

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## Benefits of CodeWarrior TAP

The CodeWarrior TAP enables Freescale target system debugging via a standard debug port (usually JTAG) while connected to a developer's workstation via Ethernet or USB. The CodeWarrior TAP may also be referred to by industry

standard terms such as probe, JTAG probe, JTAG emulator or target probe.

Using the CodeWarrior TAP's Ethernet connection, developers can debug systems remotely or more effectively share a single system with multiple developers. When a shared system is not needed, CodeWarrior TAP connects directly to the developer's workstation with a single USB cable. Power is supplied by the USB port so that no additional cables are needed.

The CodeWarrior TAP is designed to work in conjunction with Freescale CodeWarrior development tools and Freescale processors. It is a critical debug tool in all phases of the project and is necessary for debugging systems prior to running a fully debugged operating system.

### NOTE

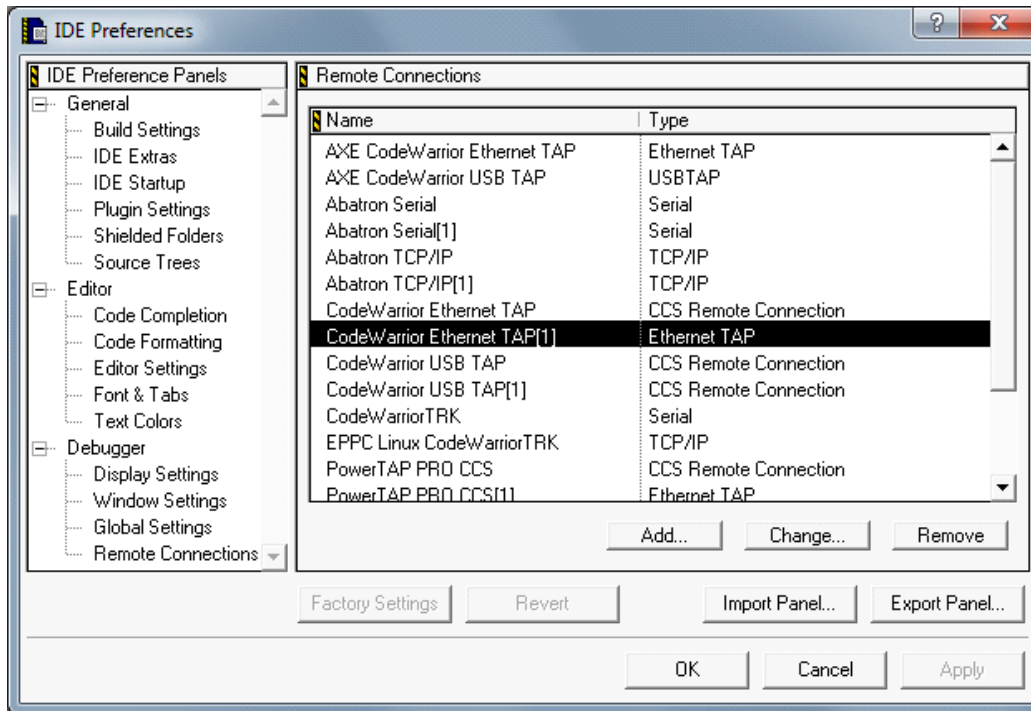
You must order a companion probe tips with this base unit.

## 1 Enable the use of CWTAP

Follow these steps to manually update CodeWarrior for mobileGT, version 9.2, and enable the use of CWTAP:

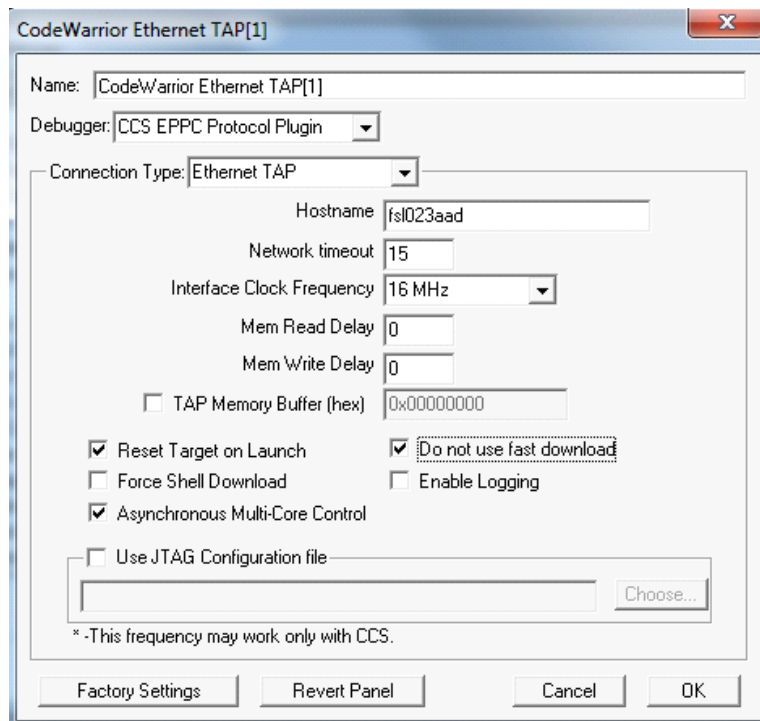
1. Rename mobileGT9.2\ccs folder as ccs\_old. Delete this folder after enabling the new ccs with the new CWTAP probe.
2. Download ccs\_bld369\_win.zip by navigating to the link below and selecting CCS\_GDB\_BIN\_CW\_TAP\_WIN:  
freescale.com/webapp/sps/site/prod\_summary.jsp?code=CW\_TAP&fjsp=1&tab=Design\_Tools\_Tab.
3. Unzip ccs from ccs\_bld369\_win.zip and add the ccs directory to the mobileGT version 9.2 install directory in the following path: mobileGT9.2\ccs.
4. Open mobileGT9.2\ccs\drivers\usb\readme.txt with the following caption: CodeWarrior probes Device Driver Manual Installation and Uninstallation. Complete steps 1 through 7 in this document to remove old drivers and install new drivers.
5. Make the following changes to designate the use of either the Ethernet interface of CWTAP or the USB interface of CWTAP:
  - To update an existing connection, go to Edit\Preferences...\Debugger\RemoteConnections. Select the existing connection and click change. See the example in [Figure 1](#), "IDE preferences dialog."
  - To choose a new connection and designate the use of the Ethernet interface of CWTAP, click Add. Note that you may enter any name in the Name field. From the Connection Type field dropdown menu, select Ethernet TAP. In the hostname field, enter the IP address of the CWTAP, or fsl<last digits of the CWTAP MAC address>. For details, see the example in [Figure 2](#), "Ethernet interface of CWTAP dialog."
  - To choose a new connection and designate the use of the USB interface of CWTAP, click Add. Note that you may enter any name in the Name field. From the Connection Type field dropdown menu, select USBTAP. In the USB TAP Serial Number field, enter the last eight digits of the CWTAP MAC address. For details, see the example in [Figure 3](#), "USB interface of CWTAP dialog," where 9f023aad is used as the USB TAP serial number.

This figure shows how to update the existing connection.



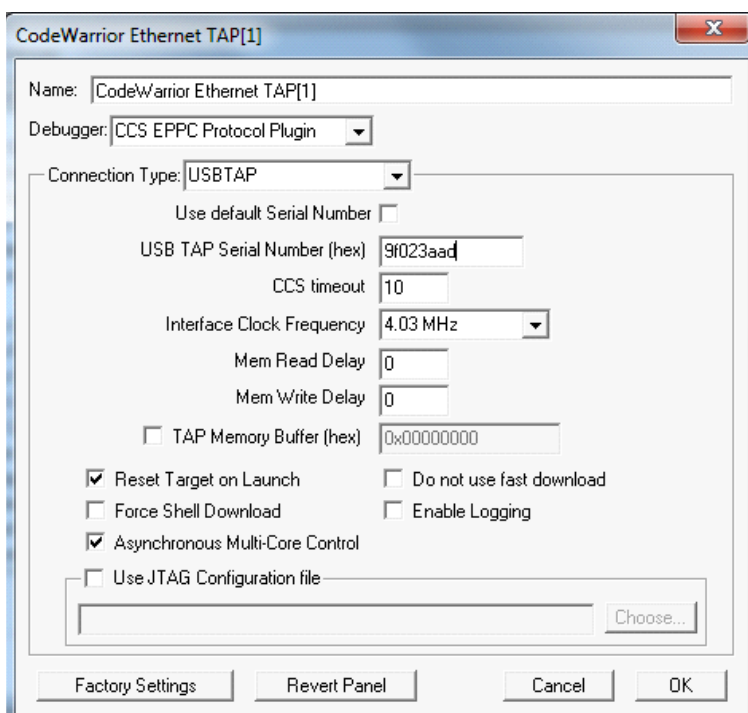
**Figure 1. IDE preferences dialog**

This figure shows how to create a new connection to use the Ethernet interface of CWTAP.



**Figure 2. Ethernet interface of CWTAP dialog**

This figure shows an example of how to configure the USB TAP connection.



**Figure 3. USB interface of CWTAP dialog**

6. When using CWTAP with an Ethernet connection, you may connect a serial cable from the target board to the target side of the CWTAP to view the serial output from the board over the TCP/IP protocol. Use the following command to open a telnet on your PC: telnet <IP of CWTAP or name of CWTAP> 1082.

## 2 Revision history

This table provides a revision history for this document.

**Table 1. Document revision history**

| Rev. number | Date    | Substantive change(s)   |
|-------------|---------|-------------------------|
| 0           | 11/2013 | Initial public release. |

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