

# 8 Managing BTs

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## About This Chapter

This function is performed to lock or unlock a BT. You can reset a BT, self-test a RC, view the states of the channels for the current BT, and enable a specified RC to transmit signals at a specified power level.

### [8.1 Changing BT Management States](#)

This function is performed to lock or unlock a BT.

### [8.2 Initializing BTs](#)

This function is performed to reset the BT to reload the configuration data.

### [8.3 Testing BTs](#)

The BT loopback test consists of the BIU loopback test and the TRX self-test. The BIU loopback test is performed to test the connection between the BT of the specified TRX and the physical links of the Abis signaling channel. The TRX self-test is performed to test RCs and report the test result.

### [8.4 Viewing Channel States](#)

This function is performed to view the states of all the channels in a cell.

### [8.5 Testing TRX Transmit Power Levels](#)

This function is performed to enable a specified TRX to perform full power emission and to test the transmit power level of signals. Based on this level, the software and hardware parameters can be adjusted accordingly during network planning. Therefore, the coverage of the BTS can be optimized.

## 8.1 Changing BT Management States

This function is performed to lock or unlock a BT.

### Prerequisite

You have logged in to the BTS through the Site Maintenance Terminal.

### Context



### CAUTION

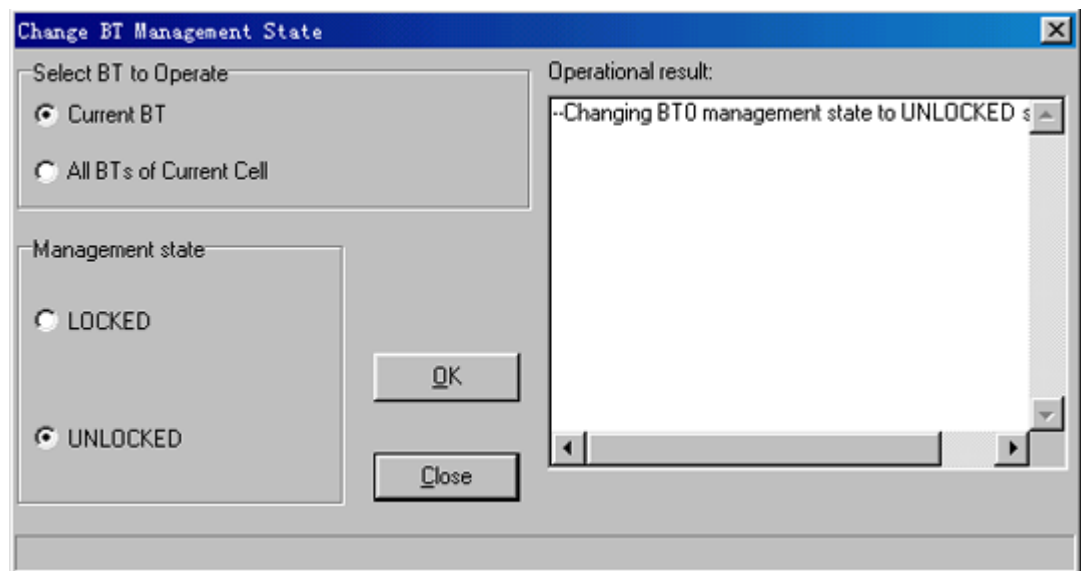
When you set the BT management state to Locked, all the channels of the baseband are in out of service state. That is, the baseband cannot provide any service. Therefore, you should perform this function carefully.

### Procedure

- Step 1** In the left pane of the **Site Maintenance Terminal System** window, select **BT**. In the right pane of the window, double-click **Change BT Management State**.

The **Change BT Management State** dialog box is displayed, as shown in [Figure 8-1](#).

**Figure 8-1** Changing the BT management state



- Step 2** Choose a BT and a management state.

#### NOTE

The parameters displayed on the terminal are the activated parameters on the BTS. You can adjust their values.

- Step 3** Click **OK**.

The BT management state is changed successfully. The result is displayed in the **Operational result** dialog box, as shown in [Figure 8-1](#).

 **NOTE**

If you click the **Operational result** list box, the area of the list box can be enlarged. The detailed information is displayed in the list box. You can obtain the original state by clicking the enlarged list box.

----End

## 8.2 Initializing BTs

This function is performed to reset the BT to reload the configuration data.

### Prerequisite

You have logged in to the BTS through the Site Maintenance Terminal.

### Context



### CAUTION

This function is performed to reset the BT hardware. All the services of the BT are interrupted during the reset. Therefore, you should perform this function carefully.

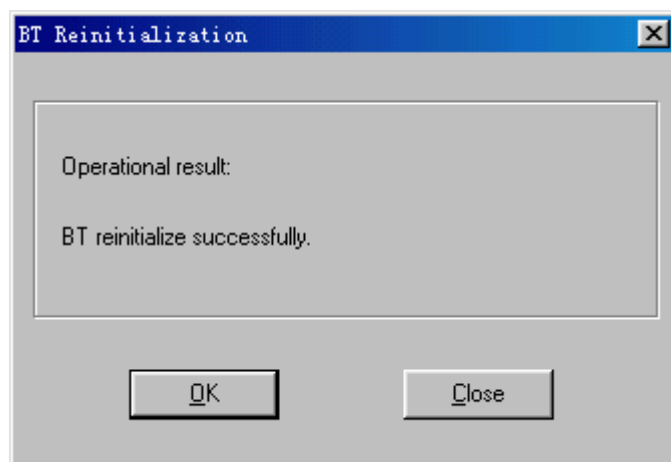
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### Procedure

- Step 1** In the left pane of the **Site Maintenance Terminal System** window, select **BT**. In the right pane of the window, double-click **BT Reinitialization**.

The **BT Reinitialization** dialog box is displayed, as shown in [Figure 8-2](#).

**Figure 8-2** BT reinitialization



- Step 2** Click **OK**.

The result is displayed in the **BT Reinitialization** dialog box, as shown in [Figure 8-2](#).

----End

## 8.3 Testing BTs

The BT loopback test consists of the BIU loopback test and the TRX self-test. The BIU loopback test is performed to test the connection between the BT of the specified TRX and the physical links of the Abis signaling channel. The TRX self-test is performed to test RCs and report the test result.

### Prerequisite

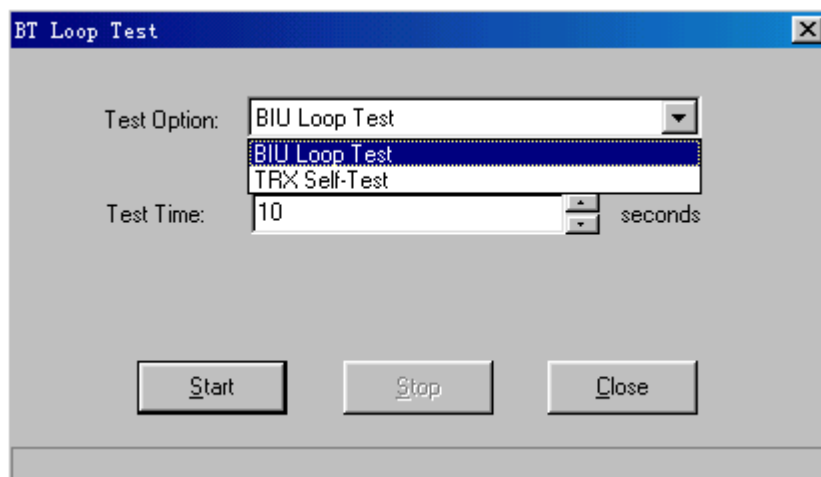
You have logged in to the BTS through the Site Maintenance Terminal.

### Procedure

- Step 1** In the left pane of the **Site Maintenance Terminal System** window, select **BT**. In the right pane of the window, double-click **BT Loop Test**.

The **BT Loop Test** dialog box is displayed, as shown in [Figure 8-3](#).

**Figure 8-3** BT Loopback Test dialog box



- Step 2** Set the test option and the test time, as shown in [Figure 8-3](#).

**NOTE**

The test time is related to the test option. Generally, the longer the test lasts, the stabler the performance is.

- Step 3** Click **Start**.

After the test is complete, a bit error ratio report is received. The result is displayed on the status bar in the **BT Loop Test** dialog box.

**NOTE**

During the test, if you click **Stop**, the test is stopped. In addition, on the status bar of the **BT Loop Test** dialog box, the **Stopping test successfully.** message is displayed.

----End

## 8.4 Viewing Channel States

This function is performed to view the states of all the channels in a cell.

### Prerequisite

You have logged in to the BTS through the Site Maintenance Terminal.

### Context

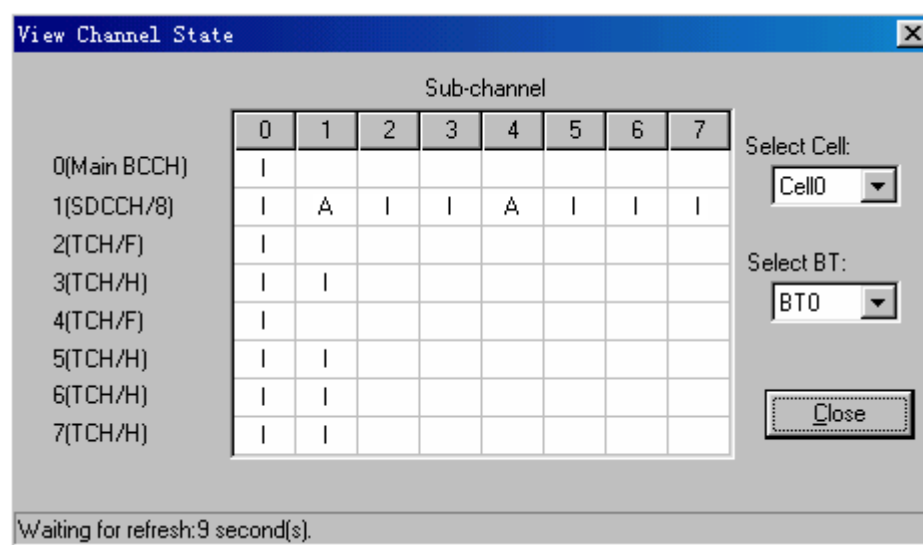
There are five kinds of channel states: A (Active), I (Idle), O (Out of Service), B (Blocked), and U (Unavailable). A channel in the O, B, or U state cannot be occupied.

### Procedure

In the left pane of the **Site Maintenance Terminal System** window, select **BT**. In the right pane of the window, double-click **View Channel State**.

The **View Channel State** dialog box is displayed, as shown in [Figure 8-4](#).

**Figure 8-4** View Channel State dialog box



---End

## 8.5 Testing TRX Transmit Power Levels

This function is performed to enable a specified TRX to perform full power emission and to test the transmit power level of signals. Based on this level, the software and hardware parameters can be adjusted accordingly during network planning. Therefore, the coverage of the BTS can be optimized.

### Prerequisite

- You have logged in to the BTS through the Site Maintenance Terminal.

- The power test devices are prepared.

## Context

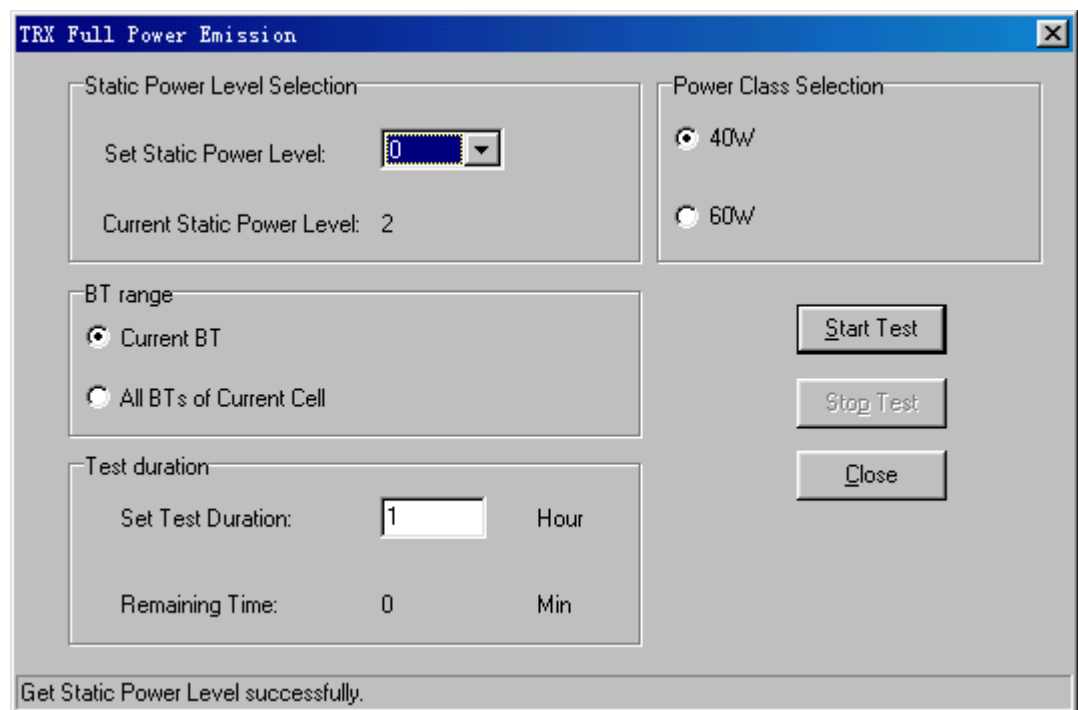
The static power level ranges from 0-10 dBm in steps of 2 dBm.

## Procedure

- Step 1** In the left pane of the **Site Maintenance Terminal System** window, select **BT**. In the right pane of the window, double-click **TRX Full Power Emission**.

The **TRX Full Power Emission** dialog box is displayed, as shown in [Figure 8-5](#).

**Figure 8-5** TRX full power emission



- Step 2** Choose a static power level, a BT, and the test duration, as shown in [Figure 8-5](#).

**NOTE**

In the **Set Static Power Level** drop-down list box, you can set the working power level of the TRX in a test. **Current Static Power Level** is the current power level of the TRX before a test.

Generally, the longer the test lasts, the stabler the test result is.

- Step 3** Click **Start Test**.

After the test is complete, the result is displayed on the status bar of the **TRX Full Power Emission** dialog box.

**NOTE**

During the test, if you click **Stop Test**, the test is stopped. In addition, on the status bar of the **TRX Full Power Emission** dialog box, the **Get Static Power Level Successfully.** message is displayed.

----End