



## CSR Synergy Bluetooth 18.2.0

# Obex Message Access Profile Client

## Demo Description

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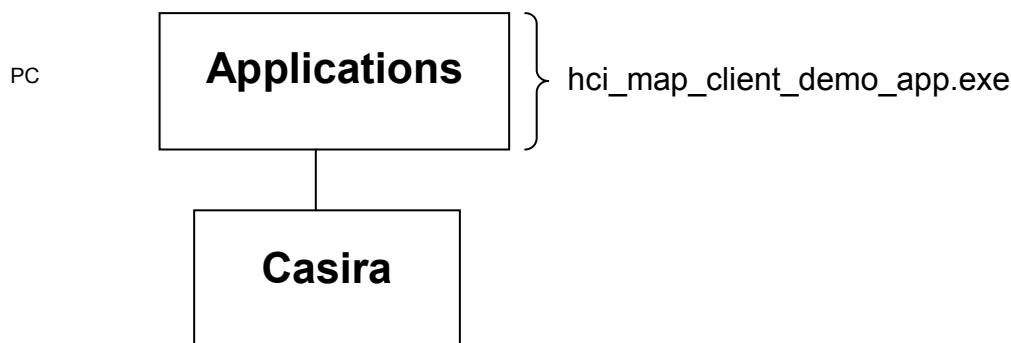
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# 1 OBEX Message Access (MAP Client) Profile

## 1.1 Generally

The OBEX MAP client example application can be used testing the OBEX Message Access profile. This demo is running with a Casira with HCI-build firmware.



The MAP client program provides the following example functionality:

- Discovery of remote devices
- Connection management
- Testing the OBEX Message Access profile as a client

The application has been made to run on Windows and Linux and may be connected to the Casira using either a serial connection using BCSP (`rfc_map_client_demo_app.exe`), a serial connection using H4DS (`rfc_map_client_demo_app_h4ds.exe`) or an USB connection (`rfc_map_client_demo_app_usb.exe`), and their HCI equivalent.

## 1.2 Use of the `hci_map_client_demo_app.exe` program

**Note:** This description is for CSR Synergy Bluetooth HCI. The functionality of the application for the RFCOMM build is identical. The only difference is the naming: `hci_map_client_demo_app.exe` versus `rfc_map_client_demo_app.exe`.

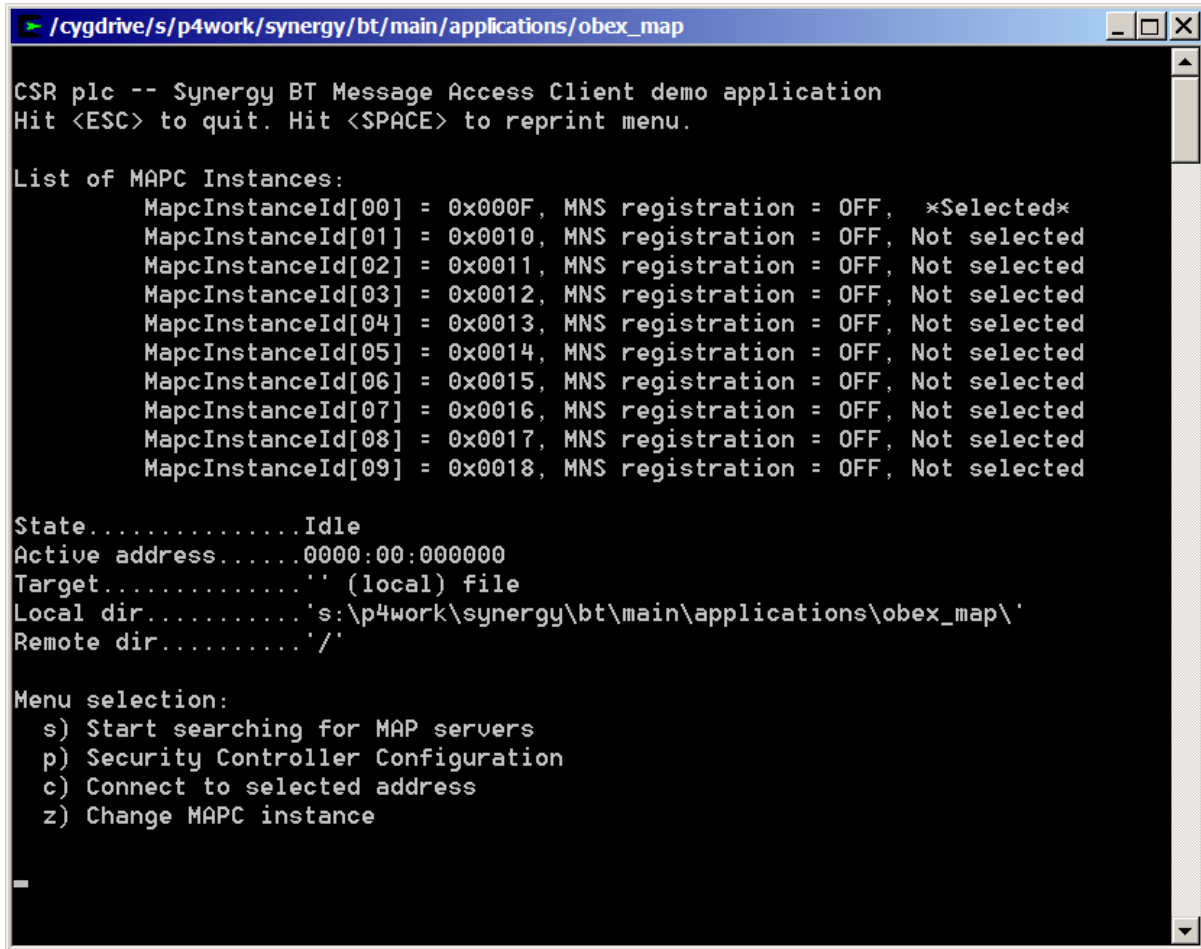
### Program invocation:

The following program parameters can be given as command line parameters at program start:

-C port	to specify which COM port the program should use (connected to the Casira). For example, -C COM2, default is COM1. ( <b>On Linux use /dev/ttyS0, etc.</b> )
-B baud rate	to specify which baud rate to use between the PC and Casira. For example, -B 921600, default is 115200.
-A BD addr.	to specify a device address for default, e.g. <code>hci_map_client_demo_app.exe -a 0002:5b:01a494</code> . If no address is specified it is necessary to perform a search for servers in order to establish a connection.
-X BD addr	Specify the device address

### 1.3 Program usage:

The MAP client demo is a simple console program with an interactive menu and status area. When the application is started, the following screen is displayed:



```

/cygdrive/s/p4work/synergy/bt/main/applications/obex_map

CSR plc -- Synergy BT Message Access Client demo application
Hit <ESC> to quit. Hit <SPACE> to reprint menu.

List of MAPC Instances:
  MapcInstanceId[00] = 0x000F, MNS registration = OFF, *Selected*
  MapcInstanceId[01] = 0x0010, MNS registration = OFF, Not selected
  MapcInstanceId[02] = 0x0011, MNS registration = OFF, Not selected
  MapcInstanceId[03] = 0x0012, MNS registration = OFF, Not selected
  MapcInstanceId[04] = 0x0013, MNS registration = OFF, Not selected
  MapcInstanceId[05] = 0x0014, MNS registration = OFF, Not selected
  MapcInstanceId[06] = 0x0015, MNS registration = OFF, Not selected
  MapcInstanceId[07] = 0x0016, MNS registration = OFF, Not selected
  MapcInstanceId[08] = 0x0017, MNS registration = OFF, Not selected
  MapcInstanceId[09] = 0x0018, MNS registration = OFF, Not selected

State.....Idle
Active address.....0000:00:000000
Target.....'' (local) file
Local dir.....'s:\p4work\synergy\bt\main\applications\obex_map\'
Remote dir.....'/'

Menu selection:
s) Start searching for MAP servers
p) Security Controller Configuration
c) Connect to selected address
z) Change MAPC instance
  
```

The screen is roughly divided into three sections: Program name area, status area and menu.

The program name area simply states the name of the program, and that the user at any time can press the ESCAPE key to exit the demo, and that the SPACE key will reprint the menu.

The status area always contains the following six lines:

- **List**  
Status on the different MAP client instances
- **State**  
This is the current state (or status) of the application. The state can be one of the following: Idle, Searching, Closing search, Pairing, Select address, Connecting, Connected, Select local/remote file/dir, Transferring, Disconnecting, Create directory, Authenticate and Searching for services.  
On the picture above, the current state can be seen to be **Idle**.
- **Active address**  
This is the address of the remote system to which the application is connected, trying to pair, etc.  
On the picture above, the current active address is **0000:00:000000**.
- **Target**  
This is the selected file which is the target of the next Transfer or Delete action. The target is always a file, and can be either situated in the *local* directory or *remote* directory (see below).  
On the picture above, the current target can be seen to be a non-existent ("") **local** file.

- **Local dir**  
This is the working directory of the application. All transfers will take place to/from this folder.
- **Remote dir**  
This is the working directory of the server to which the application is connected.

The last application area is the menu area, which will change depending on the application state. The user can press the key in front of the menu text to carry out the particular action. The following options are available:

s	Start searching for MAP servers
p	Change security configuration
c	Connect to a selected MAP server. This can either be given on the command line (-A) or found during a device search (option s)
z	Switch to a different MAP client instance

## 2 Linux

This section describes how to build and run the MAP client demo application on Linux.

The MAPC demo application (pure user space), located in `./applications/obex_map`, may be compiled on Linux by means of:

```
> make clean all TARGET=pclin-2.6-x86
```

The demo applications are used like described above for Windows.

## Terms and Definitions

BlueCore®	Group term for CSR's range of Bluetooth wireless technology chips
Bluetooth®	Set of technologies providing audio and data transfer over short-range radio connections
CSR	Cambridge Silicon Radio
UniFi™	Group term for CSR's range of chips designed to meet IEEE 802.11 standards

## Document History

Revision	Date	History
1	26 SEP 11	Ready for release 18.2.0

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