



CSR Synergy Bluetooth 18.2.0

BPPS Basic Printing Profile Server

Demo Description

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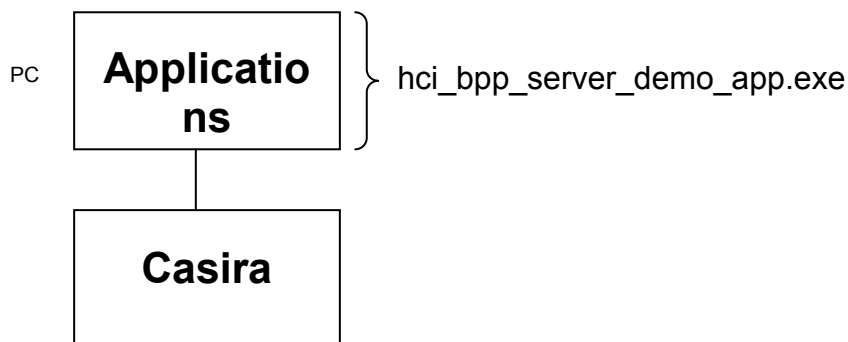
Contents

1	Basic Printing Profile (BPP Server)	3
1.1	Generally	3
1.2	Use of the hci_bpp_server_demo_app.exe program	3
	Applications	3
	Casira	3
2	Linux	6
	Terms and Definitions	7
	Document History	7
	TradeMarks, Patents and Licences	8
	Life Support Policy and Use in Safety-critical Compliance	8
	Performance and Conformance	8

1 Basic Printing Profile (BPP Server)

1.1 Generally

The BPP server example application can be used for transferring files in various formats from a BPP client (e.g. a camera or PDA) to the BPP server using either the simple push transfer model or job-based transfer model as specified in the BPP specification. This demo is running with a Casira fitted with a BlueCore module that has a HCI-build of the firmware running on it.



The BPP server program provides example functionality, which make is possible to print several different document types.

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 (`hci_bpp_server_demo_app.exe`) or a serial connection using H4DS (`hci_bpp_server_demo_app_h4ds.exe`) or an USB connection (`hci_bpp_server_demo_app_usb.exe`).

1.2 Use of the `hci_bpp_server_demo_app.exe` program

Note: This description is for CSR Synergy Bluetooth HCI. Due to the resource requirements of implementing BPP server it is not available in a RFCOMM version.

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 baudrate to specify which baud rate to use between the PC and Casira. For example, -B 921600, default is 115200.
- A < BD addr.> Specifies the device address for the default connection, e.g. `hci_bpp_client_demo_app.exe -a 0002:5b:01a494`. If no address is specified it is necessary to perform a search for servers in order to establish a connection.

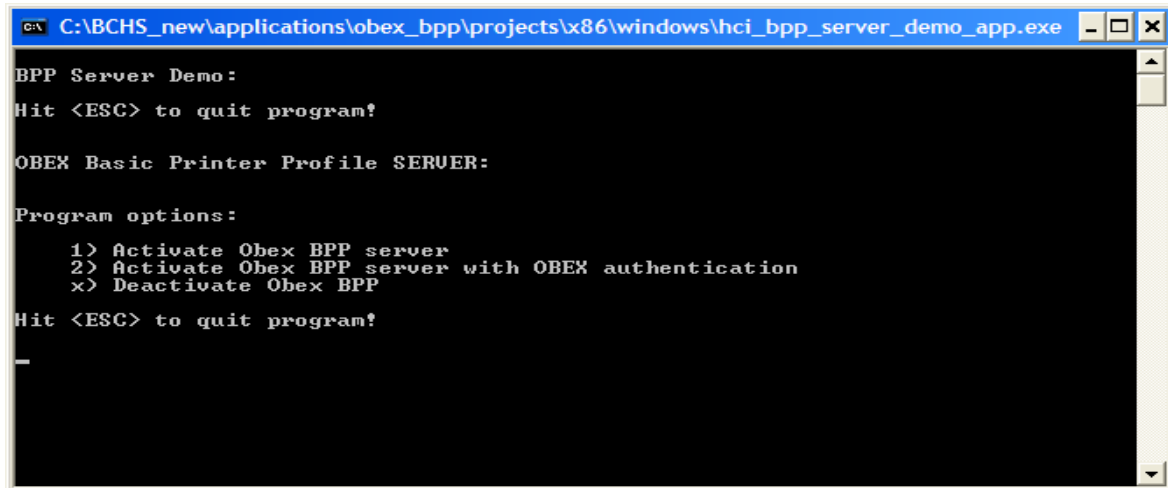
Program usage:

The demo application is implemented as a limited shell. The shell only understands 2 different commands.

The shell interpreter can be closed (the program aborted) by pressing the ESC key at any time.

When starting the BPP server demo application three options are presented:

1. Activate Obex Basic Printer Profile Server. This option activates the BPP server so that other devices can discover and connect to the device.
2. Activate Obex Basic Printer Profile Server with OBEX authentication. This option activates the BPP server so that other devices can discover and connect to the device after being authenticated.
3. Deactivate Obex Basic Printer Profile Server. This option deactivates the BPP server so that other devices can NOT discover and connect to the device.



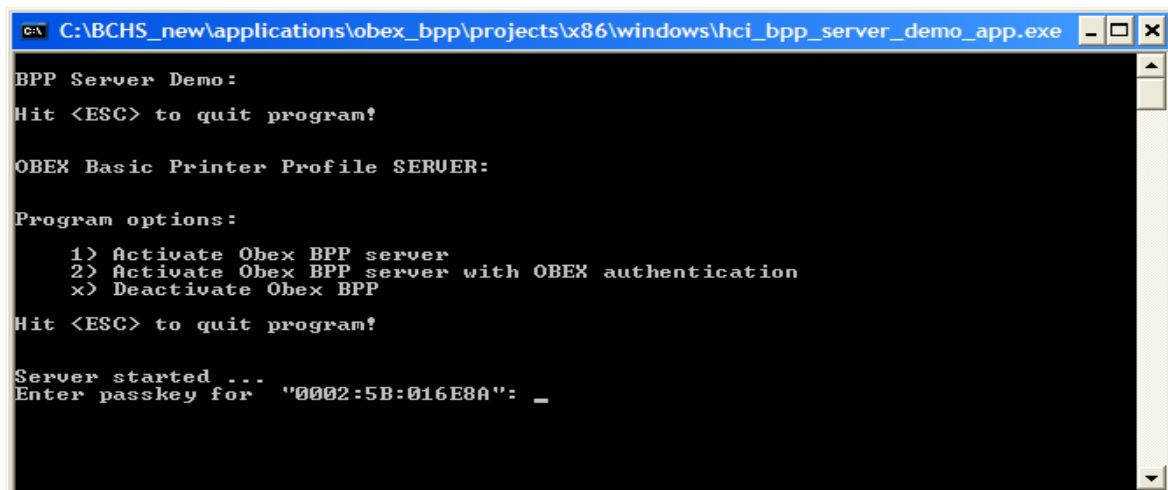
```

C:\BCHS_new\applications\obex_bpp\projects\x86\windows\hci_bpp_server_demo_app.exe
BPP Server Demo:
Hit <ESC> to quit program!

OBEX Basic Printer Profile SERVER:

Program options:
  1> Activate Obex BPP server
  2> Activate Obex BPP server with OBEX authentication
  x> Deactivate Obex BPP
Hit <ESC> to quit program!
_
  
```

When the BPP server is activated it is possible to discover, connect and send files to it. If the remote client device requires a PIN code, enter a PIN code.



```

C:\BCHS_new\applications\obex_bpp\projects\x86\windows\hci_bpp_server_demo_app.exe
BPP Server Demo:
Hit <ESC> to quit program!

OBEX Basic Printer Profile SERVER:

Program options:
  1> Activate Obex BPP server
  2> Activate Obex BPP server with OBEX authentication
  x> Deactivate Obex BPP
Hit <ESC> to quit program!

Server started ...
Enter passkey for "0002:5B:016E8A": _
  
```

When transferring of files to the BPP server application from a BPP client starts then the demo application will display the name of the file received as well as the BPP method that was used for transferring it. The transfer method described will be either the simple push model or job-based transfer.

```

C:\BCHS_new\applications\obex_bpp\projects\x86\windows\hci_bpp_server_demo_app.exe
BPP Server Demo:
Hit <ESC> to quit program!

OBEX Basic Printer Profile SERVER:

Program options:
  1) Activate Obex BPP server
  2) Activate Obex BPP server with OBEX authentication
  x) Deactivate Obex BPP
Hit <ESC> to quit program!

Server started ...
Enter passkey for "0002:5B:016E8A": 0
Send bluetooth authenticate
Bonding succesfull.
Client: 0002:5B:00016E8A request connection.
Connection Accepted.
xhtml_file_ver1_0.htm received <simple push model method>

```

```

C:\BCHS_new\applications\obex_bpp\projects\x86\windows\hci_bpp_server_demo_app.exe
BPP Server Demo:
Hit <ESC> to quit program!

OBEX Basic Printer Profile SERVER:

Program options:
  1) Activate Obex BPP server
  2) Activate Obex BPP server with OBEX authentication
  x) Deactivate Obex BPP
Hit <ESC> to quit program!

Server started ...
Enter passkey for "0002:5B:016E8A": 0
Send bluetooth authenticate
Bonding succesfull.
Client: 0002:5B:00016E8A request connection.
Connection Accepted.
xhtml_file_ver0_95.htm received <job-based transfer method>

```

2 Linux

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

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

```
> make clean all TARGET_ARCH=Linux-2.6-x86
```

This will output four files: `hci_bpp_server_demo_app`, `hci_bpp_server_demo_app_h4ds`, and `hci_bpp_server_demo_app_usb`, for serial and USB communication using a HCI.

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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