BlueTool v0.1 Documentation

Compilation

1. Install the required packages:

\$ sudo apt-get install libbluetooth1 libbluetooth1-dev libdbus-1-1 libdbus-1-dev hal

2. Checkout the latest version:

\$ svn co svn://svn.berlios.de/bluetool

3. Compile:

\$ cd blued

\$ make blued

4. Update dbus configuration:

\$ sudo su

\$ cp bluetool.conf/etc/dbus-1/system.d/

5. Restart dbus:

\$. /etc/init.d/dbus restart

\$ exit

6. Start Bluetooth daemon:

\$./blued

Testing

Invoking arbitrary commands on dbus objects using dbus-send:

\$ dbus-send --system --type=method_call --print-reply \

-dest=<service_name> <object_path> <interface>.<member> \

[<parameters>]

Troubleshooting

Enabling dbus debug output:

\$ DBUS_VERBOSE=true ./bluetool

Reading HCI command stream:

\$hcidump -X

(requires hcidump)

BlueTool API specification

Service name: org.bluetool.hci

Interface: org.bluetool.hci.manager

Member: ListDevices

Input parameters: none

Output parameters: list of local device objects (DBUS_TYPE_STRING)

Member: EnableDevice

Input parameters: device name (eg: hci0) (DBUS TYPE STRING)

Output parameters: error status (DBUS_TYPE_UINT16)

error string (DBUS_TYPE_STRING) (if status != 0)

Member: DisableDevice Input parameters: same as above Output parameters: same as above

Member: ResetDevice
Input parameters: same as above
Output parameters: same as above

Signal: HciDeviceAdded (todo)

Input parameters: DBUS device path (DBUS_TYPE_STRING)

Signal: HciDeviceRemoved (todo)

Input parameters: same as above

Interface: org.bluetool.hci.device

Member: GetProperty

Input parameters: property name (DBUS_TYPE_STRING) **Output parameters:** error status (DBUS_TYPE_UINT16)

error string (if status != 0)

property-specific parameters (if status == 0)

Member: SetProperty

Input parameters: property name (DBUS_TYPE_STRING)

specific parameters

Output parameters: error status

error string, if any

Properties: auth_enable (bool)

encrypt_mode (byte) scan_type (byte) packet_type (string) address (string) local_name (string) device_class (u32) voice_setting (u16) features (string array)

version_info (string, u16, string, u16, string)

(more to be done)

Member: StartInquiry
Input parameters: lap (byte[3])
Output parameters: error status

error string, if any

Member: CancelInquiry

Input parameters: none **Output parameters:** as above

Member: PeriodicInquiry

Input parameters: todo **Output parameters:** as above

Member: ExitPeriodicInquiry

Input parameters: none **Output parameters:** as above

Member: InquiryCache

Input parameters: none

Output parameters: dbus remote devices path (string list)

Member: CreateConnection

Input parameters: remote device object (string) packet type (byte)

Output parameters: status

connection object path on success

Signal: DeviceInRange

Input parameters: dbus path of remote device object

Signal: DeviceOutOfRange

Input parameters: dbus path of remote device object

<TODO>

Interface: org.bluetool.hci.remote

Member:

Input parameters: Output parameters:

Interface: org.bluetool.hci.connection