TR64 Application Notes

For BCM963xx DSL Linux

Version 1.1

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REVISION HISTORY

Revision Number	*Date*	*Change Description*
V1.0	1/11/2007	Initial Release.
V1.1	8/15/07	Add TR133 and SSL support

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1.0 OVERVIEW

TR64 application is implemented in three different phases; phase 1 and phase 2 have been completed and released in some special releases based on 3.08L and 3.10L01 release (not formally released). The following are summary of what are supported and not supported:

- Services and actions listed in bcm963xxTR64Services.xls are supported.
- CPE has IP address assigned to LAN as a router with DHCP server support. Auto IP is not implemented.

This document describes the procedure to enable TR64 application in the CPE image and how to use Intel DeviceSpy tool to demonstrate functions of CPE's TR64 application when TR64 application is not yet available.

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2.0 REFERENCE

- *UPnP Device Architecture 1.0*. Version 1.0.1, May 6, 2003. UPnP Forum.
- *DSL Forum TR-064/ LAN-Side DSL CPE Configuration*. May 2004. DSL Forum.
- *DSL Forum TR*-133. TR-064 Extensions for Service Differentiation. September 2005. DSL Forum
- Information on **Intel® Tools for UPnP Technologies** on http://www.intel.com/cd/ids/developer/asmo-na/eng/downloads/upnp/overview/index.htm. Device Spy can be downloaded and used.
- *Bcm963xxTR64Services.xls*. Version 1.1. August 15, 2007. Broadcom Corporation.

3.0 HOW TO ENABLE TR64 APPLICATION

Some build profiles have TR64 enabled by default. In the case, it is not enabled; this is the procedure to enable it.

1. Run make menuconfig on /CommEngine directory

/CommEngine > make menuconfig

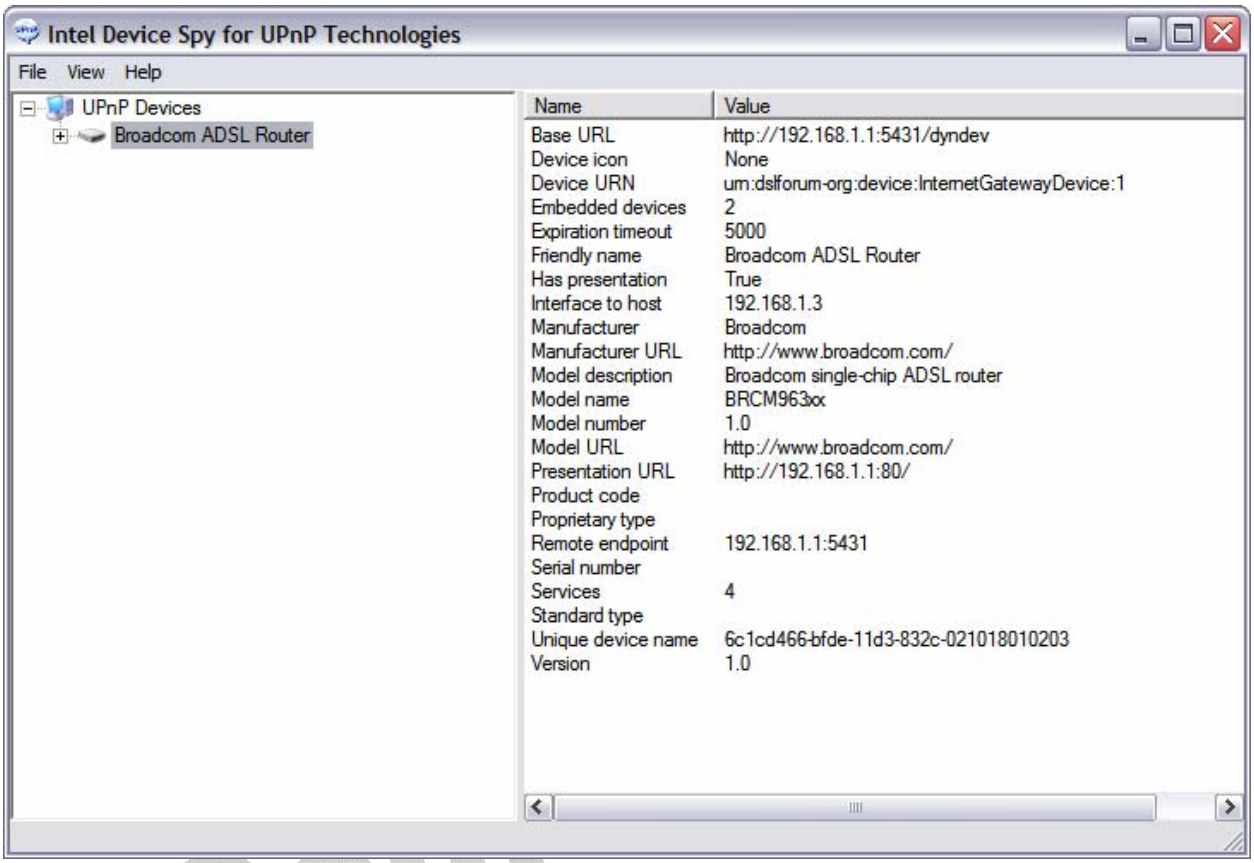
2. User application selection, enable TR64 Application
3. Pick the service(s) desired.
4. When new image boots up, TR64 is started by configuration manager. Process name tr64 should be seen in the process list running on modem. There is no runtime configuration needed in Phase 1.

4.0 HOW TO TEST TR64 WITH DEVICE SPY TEST TOOL

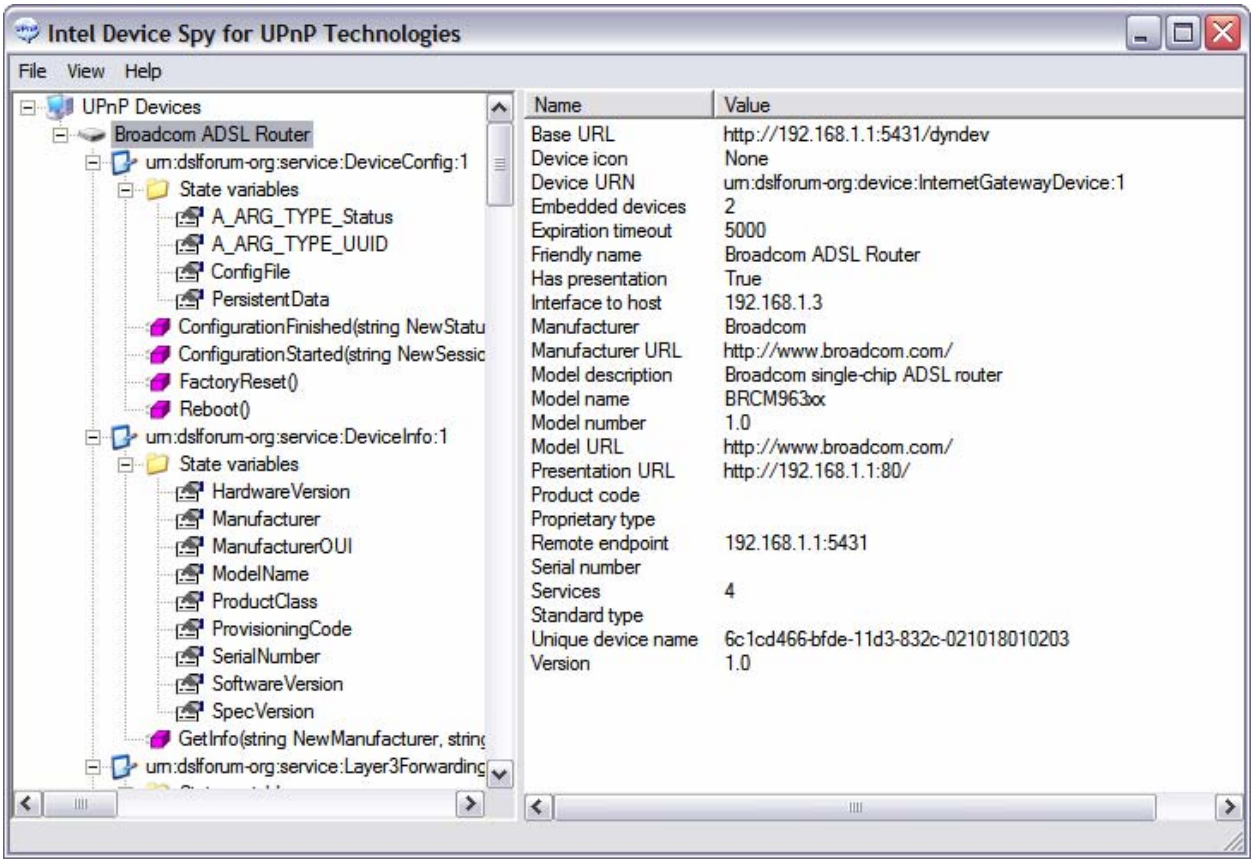
Intel DeviceSpy tool which runs on Windows environment is a freeware and can be downloaded from http://www.intel.com/cd/ids/developer/asmo-na/eng/downloads/upnp/overview/index.htm

To run this test tool, the following steps need to be done on Windows (Windows XP is used in this example).

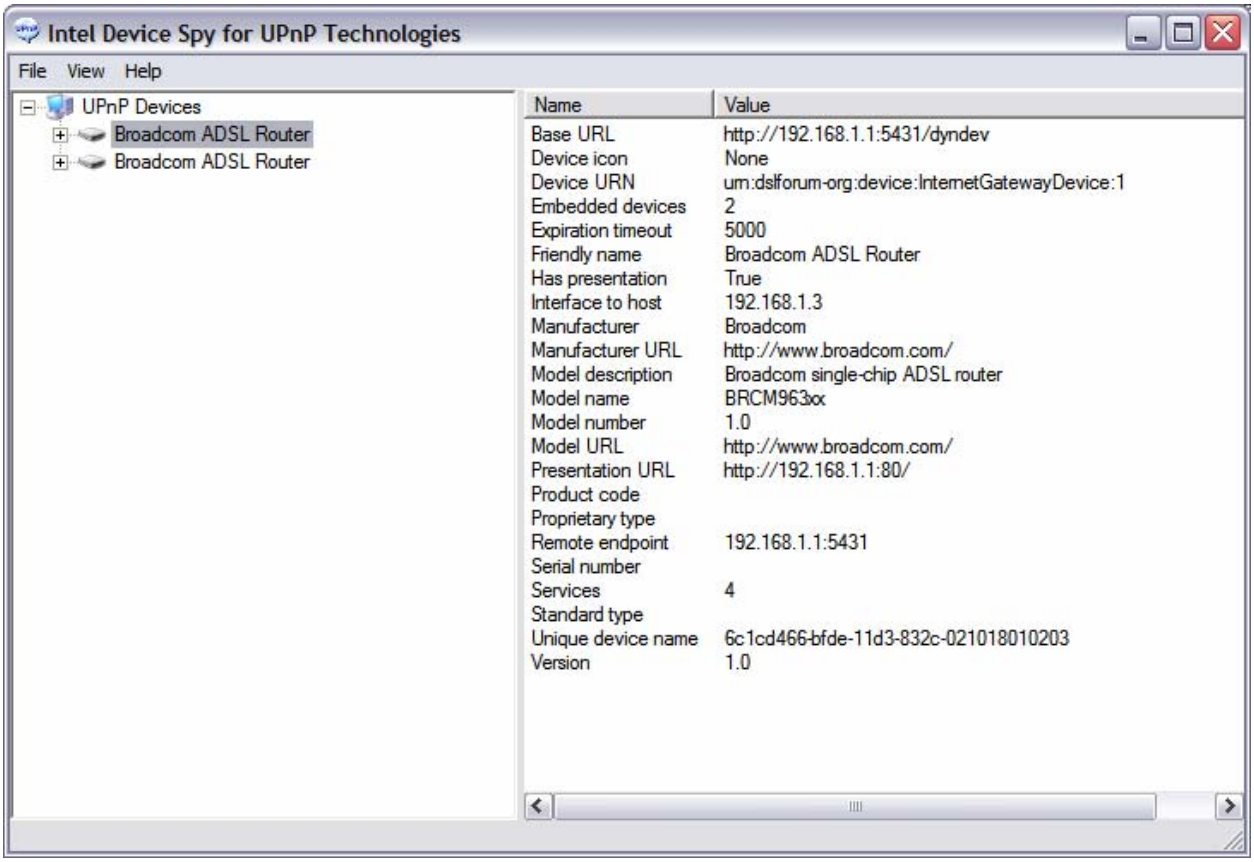
1. Control Panel, Add/Remove Windows Components, Networking Services, Enable two components: “Internet Gateway Device Discovery and Control Client” and “UPnP User Interface”.
2. Install Intel test tools by running the setup program.
3. Run “Device Spy”, Broadcom ADSL Router should be discovered and displayed by the test tool as followed:



Expand the device and all the supported services are seen as following:



If the modem reboots, two Broadcom ADSL Routers will be seen on the test tool display. The first one is a stale one; performing action on its services will be erroneous. The tool doesn't clean up old devices, but keeps adding new devices to the display. User need to either always performs actions on the newest one on the list or Remove the old stale device(s) manually by "Remove Device" option.



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