

SERVICES

TRAININGS

MSAG provides trainings specially designed for mobile systems and applications software developers. This customized training is entitled "Opening the Source:" An Introductory Training on Bluetooth Applications Development in Linux.

MSAG also accommodates requests for trainings (trainings-on-demand), relating to the following topics, which are the core capabilities of the team:

- Bluetooth Technology – Advanced Course (Protocol Stack Modeling / Design)
- Linux Programming & Administration – Advanced Course (with Anaconda Customization, Kernel Patch and Compilation)
- Bayanihan Linux - Comprehensive
- Glade, QT, GTL, KDevelop, C++
- Java Programming
- Python Scripting
- RPM Building, CVS, Apt-Repository
- Interoperability and Coexistence of Bluetooth and 802.11b / Wi-Fi
- Open Office Tools

CONSULTANCIES

Aside from the scheduled and on-demand trainings, MSAG also provides consultancy services in the said topics. It also assists students doing thesis or projects by accommodating them and providing free use of facilities in the laboratory.

PARTNERSHIPS AND COLLABORATIONS

In working for its goals, MSAG calls on the private sector industries and other government agencies for collaborative projects and partnerships. This is to come up with market-driven projects that would strengthen national competence in strategic Science and Technology Research and Development towards commercialization.

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MOBILE SYSTEMS & APPLICATIONS GROUP

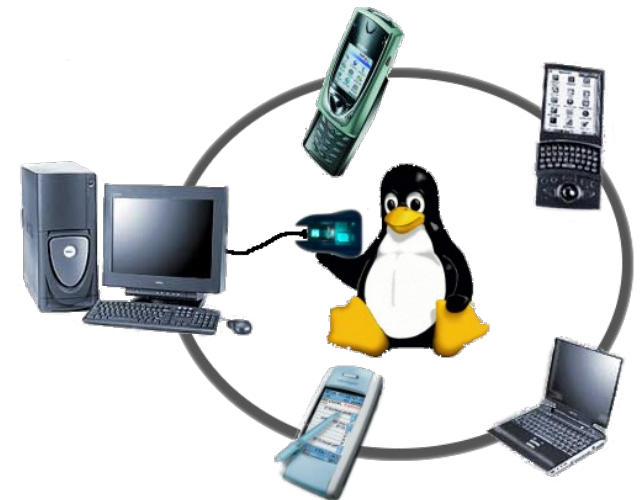
Email: mobilesys@asti.dost.gov.ph

URL: <http://bayanihan.gov.ph/bluetooth>



**Advanced Science &
Technology Institute**

Mobile Systems & Applications Group (MSAG)



Moving Beyond Possibilities...

ABOUT MSAG

The Mobile Systems and Applications Group (MSAG) of the Advanced Science & Technology Institute (ASTI) aims to:

...empower the Filipino software developers by providing world-class, high-quality, and affordable tools, services, and solutions to jumpstart the evolution of the Philippine software industry...

... advocate knowledge and establish the reputation of the Philippines in emerging wireless mobile technologies through research...

... provide a venue for the exchange of ideas, technology transfer, training, support for the academe, government, and industry...



"Tadeo" the tarsier is the official mascot of the Mobile Systems and Applications Group. The tarsier, being small but seemingly intelligent and keen, symbolizes the team's humble efforts towards improving the quality of life for every Filipino.

PRODUCT

Bayanihan Bluetooth Developer's Toolkit (BBTDTk)

Bluetooth is an emerging technology that aims to wirelessly interconnect electronic devices that are in close proximity with each other. It operates at the unlicensed Industrial, Scientific, and medical (ISM) free band of 2.45GHz.

The *BBTDTk* is an initial step to consolidate ASTI's efforts into one name, *Bayanihan*. This will encompass the work of the different groups in ASTI in line with its mission. In this edition, the target audience are Bluetooth applications developers.

The *BBTDTk* is a project of the Mobile Systems & Applications Group of ASTI, which is fully funded by the Philippine Council for Advanced Science and Technology Research and Development (PCASTRD).

The *BBTDTk* is composed of hardware and software components that have been customized to be a complete and integrated solution that will serve as a platform for Bluetooth development.



The Software Bayanihan Linux Bluetooth Developer Edition (BLBTDEd)

BLBTDEd is a Linux distribution specially customized for Bluetooth Developers. It is released under the General Public License. Please take time to look and understand the license at <http://www.gnu.org/copyleft/gpl.html>.

Features of the BLBTDEd:

- Customized Kernel 2.4.22
- K Desktop Environment 3.1.3
- GRand Unified Bootloader (GRUB)
- BlueZ - Official Bluetooth™ Linux Protocol Stack
- Glade 2.0.0 - GTK+ User Interface Builder
- KDevelop - C/C++ Integrated Development Environment (IDE)
- GIMP 1.2.5z

The Hardware Bayanihan Bluetooth™ Development Kit (BBTDK)

The *BBTDK* is a Bluetooth™ hardware solution intended to aid in the development and testing process of Bluetooth™ applications.

Features of BBTDK:

- Using CSR Bluecore 2; HCI module
 - Antenna is provided on board
 - Supports Bluetooth™ Class 2 (Max. 4dBm)
 - Bluetooth™ standard Ver. 1.1 conformity
 - Internal baseband clock oscillator
 - Support functions: ACL links, Piconet <7>, Hold, Sniff, Park
 - Interface: USB
 - Memory: 8Mb
 - Operating temperature range 0~70 degrees
 - Operating voltage: 5v
 - Suitable applications include: PC & PC Peripheral devices
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