Personal Mobile Server / Center for the Study of Mobile Devices and Communications

Gurminder, Singh
Monterey, California: Naval Postgraduate School.

http://hdl.handle.net/10945/37294
A personal server is any small, light-weight, battery-powered mobile device with capability for data storage and some form of wireless connectivity means such as Bluetooth and 802.11. It may be without any standard I/O capabilities such as keyboard and display. Access to it will be from any computing infrastructure within range of the wireless connection.

The goal of our personal mobile server project is to develop an architecture and support software to aid first-responders, such fire fighters, police and military units in performing their job. For a first responder, his server would automatically aggregate information that he needs to accomplish his mission, such as maps, weather information, news and relevant phone numbers etc. Working in a totally autonomous fashion, his server would aggregate and store this information locally whenever it can find the required resources such as network connectivity. The system would update this information on a regular basis.

We have implemented a proof of concept personal server, acting as a email aggregation system to eliminate the hassle of managing many email accounts, has been successfully implemented. The project has been implemented on an H3650 iPAQ running LINUX v0.72. Email aggregation is just one of the possible attractive applications for a personal server. Many other meaningful applications are waiting for experimentation and adoption in the near future for personal server.
**Related Thesis:**
- A Personal Mobile Server Architecture for First-Responders
- Autonomous Information Aggregation on Personal Mobile Servers

**Research Team:**
- Gurminder Singh ([gsingh@nps.edu](mailto:gsingh@nps.edu))
- Arijit Das ([adas@nps.edu](mailto:adas@nps.edu))
- Oh, Khoon Wee
- Koh, Jin Hou

[Back to Projects](http://faculty.nps.edu/gsingh/CMDC/PersonalServer/PersonalMobileServer.htm)