

Bare Computing - An informal and unofficial examination.

We have examined the papers you provided RE: Bare Computing. In general, it lacks the kind of detail we would prefer for evaluation of a technical concept and resembles more closely a marketing document.

There are some similarities to work done on virtualization, e.g., LINUX-based virtualization, where an application runs on a device as if itself were the computer, but using the computer hardware but not the OS.

There are beginning to be a plethora of products utilizing the architecture of USB devices and the rapidly-expanding capacity of flash drives. Some of these, of which we are aware, contain an "on-board" OS, usually LINUX-based, with the application (e.g., Open Office) also contained on the device.

We are also aware to some degree of Karne's work, and work in this general area dates at least to 2000 by Karne and others.

With regard to the VoIP example, it is not clear how one avoids a server in the network (ref: Executive Summary), although we do understand the general concept of not having to use the OS of the "host" computer. With regard to encryption security, this obviously depends on which encryption or privacy method is employed and is independent of the question of what device - in this case - the encryption is being run.

With regard to the basic definition provided in the paper, i.e., "Bare computing refers to running applications without the support of an OS or kernel:" we assume this means "...of a host computer," and this is not unique and we also assume that the "OS" as such is the instruction set contained in the host device, e.g., the USB device.

With regard to the statement that bare computing does "...not have security holes due to OS-related flaws" is essentially correct (if we correctly interpret the architecture), we would only observe that any device connected to a/the network is inherently vulnerable; thus encryption becomes a key factor in privacy and security.

In general, the idea of "bare computing" is interesting and possibly advantageous. It is impossible to delve into more detail in any unclassified evaluation.

Our recommendation would be for the entrepreneurs to submit an unsolicited proposal, clearly marked as "Proprietary," and one which contains the requisite technical details. Doing so might provide an opportunity for a more formal and comprehensive evaluation.