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Device Access Networks Will the pot call the kettle back? (1)

This month saw the pre-launch announcement from Sun of their 'JINI' local connectivity hardware platform. In the same way that Java is predicated on the basis of providing heterogeneous software connectivity (software platform transparency), 'JINI' is positioned to provide heterogeneous hardware connectivity, the building of a device community in which devices offer their services to a network (the services being either distributed storage and/or distributed processing) – the device becomes a network citizen (netizen).

You may have read our rather jaundiced view of RF connectivity platforms in our November hot topic. There we suggested that initiatives such as Bluetooth were likely to founder in the face of competing local access connectivity standards such as IEEE802 and other cordless protocol derivations (such as SWAP). Also we pointed to future developments in IrDA which would continue to move the performance benchmark forward (the latest IrDA Area Infra Red 'AIR' specification promises 4 M/bits over 4 metres, 120 degree beam width and point to multipoint support).

We continue to hold this view, in fact our prejudices are rather confirmed by JINI. Let's assume that Bluetooth will win the local access connectivity battle. Bluetooth is a device access network technology. Device access network connect people and devices together. Some of these devices will have a JINI protocol stack (and JINI code and memory space and probably a JINI virtual machine). Some of these devices will have Microsoft's Universal Plug and Play (or a sub-set of their new 'Millenium' software protocol stack), some of these devices will have Motorola's 'PIANO' access connectivity architecture. Frankly, the future prospects for universal connectivity look pretty dim – will the pot call the kettle back? – only if it speaks the same language.

When I first joined Philips in 1977, X10 had just been introduced. This was (still is) a signalling system which used domestic and office wiring as a signalling conduit, using the 60 Hz A/C signal as a sub-carrier and delivering a stately 30 bits per second of signalling bandwidth. We built a home of the future in Eindhoven in which every conceivable domestic and office appliance collaborated together in a universal connectivity solution – the problem was, every time you turned the kettle on, the curtains opened. The EMC issues of device access networks will continue to dog practical ubiquitous implementation.

Some new **connectivity acronyms** courtesy of Sun:-

Web Tone

Mail Tone

Video Tone

IP Tone

Oracle Tone

ERP Tone (Enterprise Resource Planning)

and for the telco/celco, just coming to terms with the Wireless Internet Service Provider (**WISP**) proposition, don't forget **WESPs** (Wireless Enterprise Service Providers) and **WASPs** (Wireless Application Service Providers). More about these in future hot topics

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