Motorola Connected Home Experience with OSGi

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MS1000 Managed Application Gateway

- **Hardware**
  - 2 10/100 Ethernet ports (1 WAN, 1 LAN)
  - USB host (2)
  - Optional hard drive
  - Optional WiFi via PC Card slot
  - Internal PCI slot for application specific hardware
  - Powerful MIPS CPU

- **Software**
  - Motorola’s middleware - OSGi, Embedded Linux & Java
  - NAT, DHCP client and server, PPPOE
  - USB Drivers for Motorola Cable Modem and DSL Modem
  - 802.11a,b,g Access Point code

- **Motorola Gateway Management System (MGMS)** can monitor gateway vitals, manage SW downloads, etc

- **Application bundles**
  - Home control
  - UPnP A/V server
Motorola Media Station version 1

- Media Station device is first implementation of OSGi for Motorola – a platform approach
- MS1000 device was key to Shell HomeGenie
  - Over 4000 units sold, 400 deployed to homes in 2 month roll out… marketed then halted within 3 months
- MS1000 used as internal development platform
  - Six different programs, prototypes throughout Motorola
    - Industrial applications
    - In home and small office uses for storage, b-up, and retrieval
- MS1000 used for many demonstrations of deterministic, non-PC based computing needs
Media Station Positives

• Tested out the core software and returned results that the platform is stable and robust

• Learned it was very easy to upgrade deployed units via a management system
  – Software defects were quickly addressed
  – Troubleshooting was made quicker and easier

• Some MS1000s still run the existing bundle active at the time of the HomeGenie shut down… more than 1 year later

• New applications emerging
Media Station Business Results

• A multi service gateway is proper starting point for a broad development platform

• It is very difficult to sell a multi service gateway to operators as a market entry product
  – The promise of multi application support does not match the business needs of the first app on at least a P/L neutral basis

• Special purpose, reduced function gateway is perhaps a better approach to volume
  – A managed gateway sold in for operational cost savings
  – Special purpose device allocated directly against one service P/L