Motorola Connected Home Experience with OSGi

Vince Izzo

HOME MONITORING AND CONTROL

MOTOROLA

Shell **Home Genie**

Solutions that enable access, control and monitoring of the home from anywhere

Home portal

Access home information

Monitor doors

Internet

Gateway manages in-home devices and communicates to portal

Home network

Receive notifications from and access to the home from anywhere on the Internet

View front door camera on TV

Control and schedule HVAC systems

Control appliances
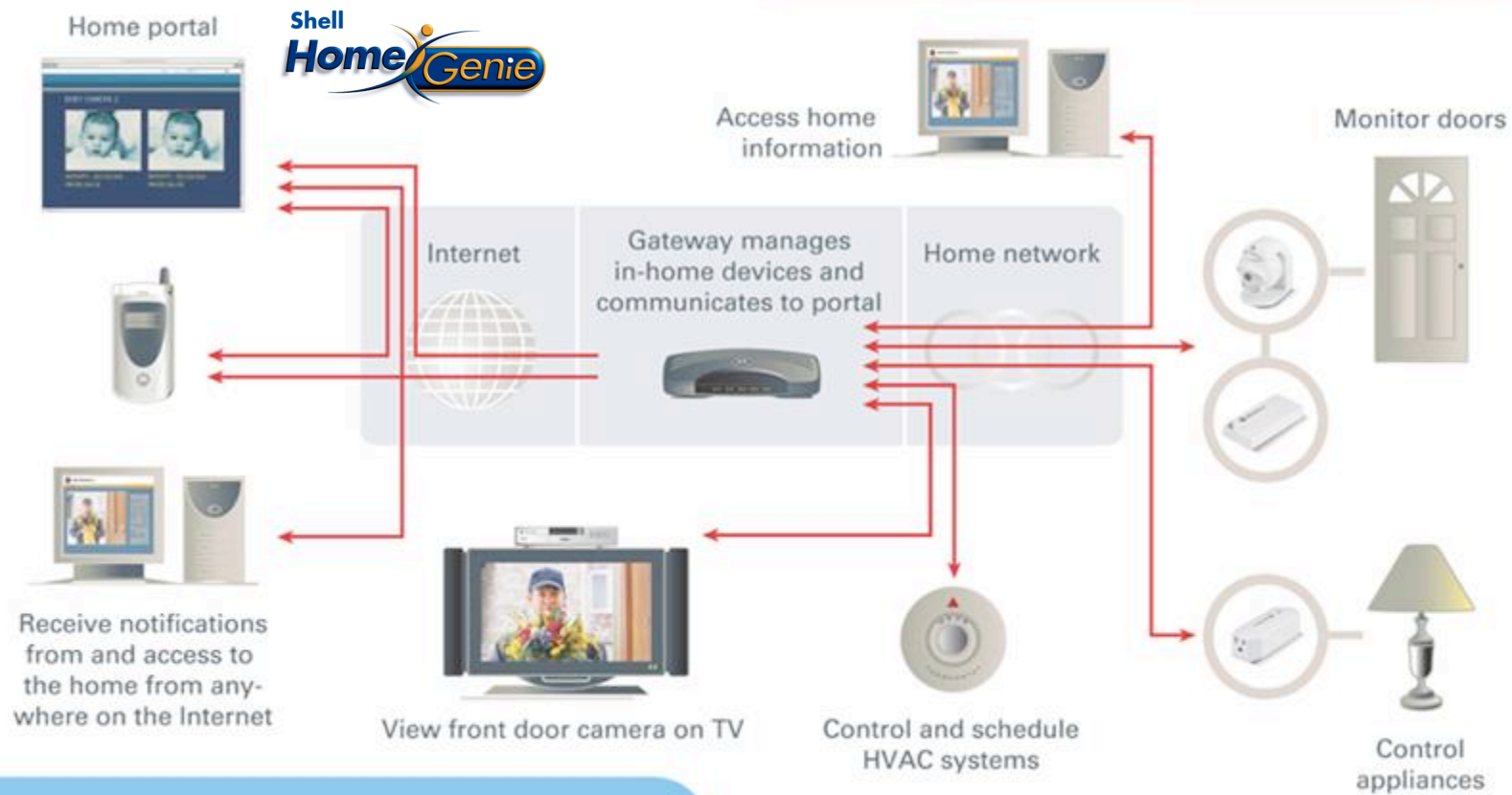
INFORMMEMOTO

Motorola
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