Challenges for Today’s Consumer Electronics and White Goods Manufacturers

The consumer electronics (CE) and “smart home” manufacturer today is challenged by the consumer’s increased demand for easy-to-handle technologies that don’t become obsolete immediately after purchase. Consumers want some security in that what they buy will be usable for many years to come, not diminished in value by the next technological advance that comes along. At the same time, consumers are demanding media and entertainment applications and cost-efficient services on demand. All of this, of course, at prices the mass market can afford.

How can a CE or White Goods manufacturer extend the product life cycle without retrofit? How can a consumer access ever-emerging new services and new extended applications? Is there a way to provide increased security, customization, and maintenance affordably?

Is there a single platform that fits the needs of both operator-driven and retail-driven markets? Is there a modular platform with a tunable security mechanism that can integrate many different devices with plug and play capabilities? How do manufacturers deal with the challenge of the new base requirement: network capable electronic platforms and devices?

The OSGi™ Service Platform

The OSGi Service Platform specification provides the answers to these CE and White Goods manufacturer dilemmas. This technology allows for strategic market differentiation by painless automatic discovery, installation, and management of devices and nodes in networks via plug and play capabilities. It also provides for integration of existing wired backbones and new wireless solutions that offer QoS managed throughput.

This platform also enables support of multiple service providers on a common, modular platform with a tunable security mechanism and the ability to complement native code environment and augment pure Java bundles with alternative payloads such as markup languages, graphic images, and native libraries. In addition, it also permits the integration of existing software-components.

The OSGi Service Platform was specifically designed to be:

- **Secure**, so you can trust it with your valuable data and programs
- **Reliable**, so there are no unnecessary support calls
- **Remotely manageable**, so that the platform can be adapted to the wishes of its owner without great cost
- **Usable on a large variety of hardware and operating systems**. Since Java technology provides a virtual machine environment, it means that the OSGi Service Platform can run on virtually any operating system or processor in existence.
The OSGi Service Platform provides significant cost savings for the CE and White Goods manufacturer through a flexible and scalable integration platform based on open standards and standardized APIs and basic libraries. The modular platform enables decomposition of services and software reuse and provides reduced software maintenance costs through remote diagnosis and maintenance. The benefits of these features help to reduce time to market for new applications and provide less of a project risk through incremental improvements instead of bottom-up design for each new project. Additionally, there is reduced platform choice risk through platform independence due to the underlying virtual machine technology.

All in all, the manufacturer saves money and the consumer’s product investment is secured through years of technology changes. Since software can be remotely configured and managed, costly recalls are a thing of the past. And future “killer applications” can be purchased and deployed post-sale with great efficiency. The software/hardware mismatch is resolved, and obsolescence becomes obsolete. Who is behind this technology? Who supports the service platform? Is it already deployed and how can your company benefit from it?

About The OSGi Alliance

Founded in March 1999, the OSGi™ Alliance and its members specify, create, advance, and promote wide industry adoption of an open service delivery and management platform. The OSGi Alliance serves as the focal point for a collaborative ecosystem of service providers, developers, manufacturers and consumers.

The OSGi specifications define a standardized, component oriented, computing environment for networked services. Incorporating the OSGi Service Platform in a networked device (embedded as well as servers), adds the capability to manage the life cycle of software components from any other authorized remote network location. Software components can be installed, updated, or removed dynamically during the lifetime of a device with minimal disruption of device operation.

OSGi technology is currently being delivered in products and services shipping from several Fortune Global 500 companies. Device manufacturers and service providers benefit from the improved time-to-market, the reduction of their development and maintenance costs, and unique new after-market sales opportunities. In addition, the OSGi Alliance’s horizontal software integration platform is ideal for both vertical and cross-industry business models within mobile, vehicle, home and industry environments.

Products & Solutions

Many OSGi member companies have deployed the OSGi Service Platform in the consumer electronics and home solutions space. For a listing of the most current products and solutions, to become a member of the OSGi Alliance, or for other information, please visit our website at www.osgi.org.