

Device Web Services

Overview

Our Device Web Services product includes all the server and client tools required to deploy Web Services to Internet-enabled devices. To date, our product has been used to deploy antivirus, antispam, managed VPN and other **subscription services**. Our software development kit lets you build your services quickly and efficiently. In addition, you can hit the ground running with our pre-packaged core services:

- ✔ Port monitoring
- ✔ Resource monitoring
- ✔ DNS and domain services
- ✔ Software updates
- ✔ Security audits

If building a service solution is a new undertaking, our optional billing, storefront and customer relationship management (CRM) engine can also significantly reduce development time. Alternatively, we offer our professional services for integrating the Device Web Services solutions into existing systems.

The adjacent screenshot comes from a deployed Device Web Services system. It shows activity for a single broadband gateway: a software update, dynamic DNS, and antivirus service are shown.

Event Logs			
Device	Description	Time (EST)	
woburn	Snort - Update successful	Apr. 21 02:00 PM	
woburn	Snort - Update error	Apr. 21 10:07 AM	
woburn	Dynamic DNS - clarkthedog.com - 24.112.192.220	Apr. 20 11:04 AM	
woburn	Antivirus - 1 virus(es) detected, destined for clarkthedog.com	Apr. 18 01:00 PM	
woburn	Dynamic DNS - clarkthedog.com - 24.112.192.220	Apr. 15 09:58 PM	

Business Case

Companies that build their own Device Web Services systems end up creating and maintaining the underlying platform themselves. This work can involve four to ten full-time engineers on an ongoing basis – more if the requirements and integration are complex. This represents an engineering investment of \$400,000 to \$1,000,000 per year. Our solution not only realizes substantial cost savings, but also reduces the development time.



Features

- ✔ SDK for developing Web Services
- ✔ Optional billing and storefront engine
- ✔ Pre-packaged web services modules
- ✔ Clustering
- ✔ Public key infrastructure (PKI)
- ✔ AES encryption
- ✔ Device Manager product included
- ✔ Distributed architecture
- ✔ J2EE support
- ✔ Integration with existing legacy systems and OSS

How It Works

Once implemented, the Device Web Services solution is accessible via a web-based interface. Administrators and end users have the ability to add, manage and control devices and services via their online accounts. The sample screenshot below shows a system monitor log – one of the pre-package services available for deployment.

System Monitor Logs for Shack	
Description	Time (EST)
◆ System Monitor-System load normal	Apr. 19 04:25 PM
◆ System Monitor-System load alert	Apr. 19 04:09 PM
◆ System Monitor-Hard disk normal	Apr. 09 11:02 PM
◆ System Monitor-Hard disk alert	Apr. 09 10:42 PM

The following software and hardware are required for deployment:

- A minimum of five servers (for reliability/scalability)
- DNS and Public Key Infrastructure
- Application servers: J2EE, servlets, or others
- A database solution
- Security tools and denial of service protection
- Billing and customer relationship management (CRM)

In a typical deployment, the Device Web Services solution operates on a clustered server farm operating across multiple geographic locations. In addition, all solutions from Point Clark Networks are built with security, scalability and reliability. The back office solution uses Unix or Linux – the industry standard for **mission critical** and **secure** infrastructure.

What You Get

Fortunately, you do not have to worry about the underlying details. Instead, you can focus on developing your core products and services. We offer two hosting options: shared and dedicated infrastructure:

Our off-the-shelf **shared infrastructure** solution is ideal for basic device management. We can get your system up and running in days, not months. Instead of having to invest in multiple servers and software, your system will run off of our existing infrastructure.

Our **dedicated infrastructure** solution is ideal for large deployments and integration with existing OSS, CRM and legacy systems. With this option, we deploy dedicated servers and systems to meet your needs.



About Point Clark Networks

Point Clark Networks started developing solutions for the broadband device and services market in May 2000.

The first version of our Service Delivery Network was launched in late 2000. This initial release included a basic software update system along with a dynamic DNS service. Today, our solution includes dozens of unique services to help consumers and businesses get the most out of their Internet-based devices.

Everyday, we see new devices appear on our network; and every *minute* of the day, we are handling services for the thousands of devices installed across 40 countries. Our customers include not only end users, but also ISPs, Internet appliance manufacturers, and ISVs.

Whether you are looking for a turnkey system or consulting services to build your own broadband device service solution, we can help.

Legal

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