

Device Manager

Overview

Our Device Manager solution includes all the server and client tools required to deploy Internet-enabled devices in the field. Whether you are deploying a few dozen handheld devices or tens of thousands of broadband gateways, the solution:

- ✓ Locates
- ✓ Provisions
- ✓ Updates
- ✓ Configures

The old days of shipping a system and never seeing it again are over. With the Device Manager deployed, you will know the who, what, where and when of all your devices. Is an end user having trouble with configuration and settings? Use our solution to offer remote configuration tools. Do your Internet devices require an urgent software patch? The solution will automatically handle the situation.

You will be surprised at how easy it is to build a system for managing devices, subscribers, and web services.

The adjacent screenshot comes from a deployed Device Manager system. The screen displays information from a system administrator's session – a history of IP address updates. Several updates occur every minute of the day!

Device Manager - IP Update Summary

Username	Domain	IP	Timestamp
eames	eames.pointclark.net	80.212.184.119	Apr 28, 2003 - 1:34 PM
plainviewag	plainviewag.pointclark.net	209.181.191.163	Apr 28, 2003 - 1:34 PM
kayc	kayc.pointclark.net	80.255.43.194	Apr 28, 2003 - 1:34 PM
kosburn	kosburn.pointclark.net	68.159.204.222	Apr 28, 2003 - 1:33 PM
crystaltech2	crystaltech2.pointclark.net	216.139.176.84	Apr 28, 2003 - 1:33 PM
crystaladmin	crystaladmin.pointclark.net	216.139.176.83	Apr 28, 2003 - 1:33 PM

Business Case

Companies that build their own Device Manager systems end up creating and maintaining the underlying platform themselves. This work can involve two to four full-time engineers on an ongoing basis – more if the requirements and integration are complex. This represents an engineering investment of \$200,000 to \$400,000 per year. Our solution not only realizes substantial cost savings, but also reduces the development time.



Factoid

In 2002, Point Clark Networks handled over 1 million IP address and network information updates from thousands of Internet devices from around the world.

Features

- ✓ Dynamic DNS services
- ✓ Optional billing/CRM modules
- ✓ Clustering
- ✓ Distributed architecture
- ✓ SDK for developing tools
- ✓ J2EE support
- ✓ Integration with existing legacy systems and OSS

Building Device Web Services

The Device Manager is a standalone product as well as a building block for delivering Web Services to Internet enabled devices. See our website for more information on our product for building subscription-based Web Services.

How It Works

Once implemented, the Device Manager solution is accessible via a web-based interface. Administrators and end users have the ability to add, manage and control a device (or groups of devices) via their online accounts. The sample screenshot below shows a configuration screen for manually updating the IP address of the traffic1 device.

Dynamic DNS	
Subdomain	<input type="text" value="traffic1"/>
Domain	<input type="text" value="pointclark.net"/>
IP Address	<input type="text" value="198.182.196.56"/>
Last IP Update	April 15, 2003 - 12:50 PM (EST)
	<input type="button" value="Update"/>

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 Manager 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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