

Samara™ 2.0

Appliance Management Platform Software for Linux Internet Appliances

Samara (sə-mâr'ə)

Samara is the fruit or seed produced by North American maple trees.

It epitomizes our 'just add water' philosophy—with our solution, simply add your core technology to rapidly bring a product to market.

Samara 2.0 is appliance management platform software for Linux-based Internet appliance start-ups and vendors. A comprehensive, highly customizable management platform, Samara helps you accelerate product development by 12 - 18 months, while also saving 50% of the typical product development costs.

Samara includes all of the components and platform development tools you'll need to build an appliance—only your core functionality needs to be added. Samara gives Internet appliance start-ups and vendors a flexible, extensible platform that reduces the risks and costs associated with building an appliance from scratch, ensuring increased functionality, higher quality and rapid delivery to market. Tall Maple's 'just add water' approach enables appliance manufacturers to shorten their prototype-to-product engineering efforts, representing a dramatic reduction in execution risk and time to market. Existing standalone applications can also be ported to Samara.

Never Build Another Appliance From Scratch

New product development typically requires a team of engineering resources to spend at least a year specifying, designing, implementing, and testing. Time is also needed to handle the base operating system, build system, packaging and manufacturing aspects of the product. Who has time to build from scratch?



TALL MAPLE
systems

About Tall Maple Systems

Founded in 2002, Tall Maple Systems is a privately-held technology company that develops appliance management platform software for Linux-based Internet appliance start-ups and vendors. Our technology serves as the foundation of Internet appliances on the market and successfully deployed at multiple large customer sites. For more information on our solutions, licensing options and pricing, please visit www.tallmaple.com or write to us at info@tallmaple.com.

Samara Key Features

- » A complete, licensable software platform
- » Modular "plug-in" architecture for flexibility and extensibility
- » Cisco-style Command Line Interface
- » Easy-to-use Web UI with monitoring and graphing
- » SNMP
- » System imaging, installation, upgrade, feature licensing keys
- » Statistics and monitoring core
- » 32-bit and 64-bit versions
- » A comprehensive build system

Samara is licensed with full source code, including reference implementation for all commonly required appliance functionality. The solution comprises hundreds of commands and dozens of web pages, including commands for interfaces, hosts, routes, NTP, logging, SSH, RADIUS, TACACS+ and SNMP.

Samara Components

Command Line Interface (CLI)

Samara's Cisco-style CLI provides a text-based interface for configuration, monitoring and maintenance of the system. The CLI Infrastructure includes:

- » Command line editing: uses cursor and control keys (emacs style)
- » Command history
- » Terminal emulation: VT100 and many others
- » Command completion and abbreviation
- » Context-sensitive help
- » Hidden commands: for field use by support or engineering
- » Command access control: based on user account privileges
- » Configurable inactivity logout

Samara's Cisco CLI 'personality' can easily be replaced with a different style without affecting the underlying functionality.

Web Management User Interface

The Web Management UI provides a Web Management Infrastructure and Reference UI, everything you'll need to quickly produce a full-featured, friendly user interface. The Web Management Reference UI provides a simple look and feel which can be customized.

The Web Management Infrastructure provides the web server and a flexible web template system, giving you even more power for rapid development. Using HTML rendered with tag-style TCL extensions, Samara provides simple, custom tags for many operations, eliminating the need for detailed knowledge of TCL or other tools. The Web Management Infrastructure also provides authorization hooks and integration with the configuration and monitoring infrastructure.

Other features include:

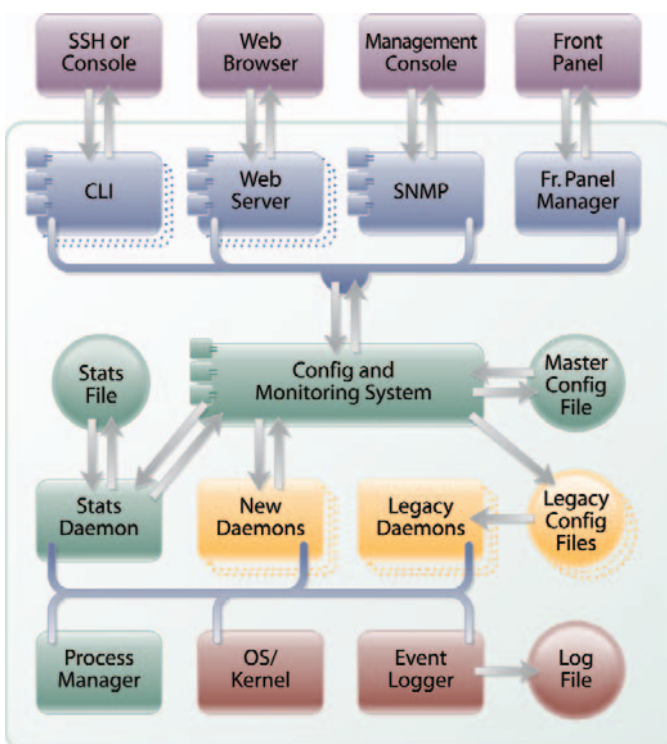
- » Graphing statistical or monitoring data
- » Login authentication by local accounts, RADIUS and TACACS+
- » Login uses cryptographically strong cookies; also supports inactivity timeout
- » File upload and download
- » Integrated with Apache web server, but easily replaced as needed
- » HTTP and HTTPS support

SNMP

Samara includes SNMP read-only support for versions 1 and 2. Our solution makes it very easy to expose variables, even by those who do not know how SNMP works. The SNMP Infrastructure includes:

- » MIB II support
- » Configurable community name and system information
- » Configurable list of external trap receivers
- » Extensions that allow quick MIB writing without having to re-implement monitoring instrumentation

Samara Architecture



Management Backplane

The Management Infrastructure serves as the access point for all changes and queries about configuration and monitoring, and includes:

- » Atomic, multi-stage commit process for consistency
- » Capabilities-based access control to all management data
- » Download, upload and merge configuration files from other systems
- » Single authoritative configuration file
- » Ability to load, save, copy, switch to and delete configuration files
- » Upgrade / downgrade support
- » Audit logging of changes that occur
- » Management events which can trigger SNMP traps, Email, custom processing or logging
- » Monitoring hooks for instrumenting new components
- » Management actions for activities like restarting the system

Other Features:

- » Statistics and Trending
- » Feature Licensing: global and box-specific cryptographic license generation and validation
- » Initial Configuration Wizard
- » User Accounts
- » Authentication and Authorization: local users, RADIUS and TACACS+
- » Scheduled Commands
- » Plug-in Architecture for easy extensibility in all major components
- » Documentation: detailed design and usage documents
- » Base Operating System Image, Manufacturing, Install and Upgrade
- » System Startup and Process Management: process restarts and detailed failure notifications
- » Supporting tools: a Build System and a Customizable Feature Set

Platforms Supported:

- » Fedora™ Core 3
- » Fedora™ Core 2
- » RED HAT™ Linux 9

Samara is designed to be portable, so other platforms can easily be supported. Both 32-bit and 64-bit versions are supported.

Samara Centralized Management Console

Tall Maple Systems also offers Samara CMC (Centralized Management Console), additional software that is licensed separately that you can use to build dedicated Central Management Consoles.



TALL MAPLE
systems

Tall Maple Systems
85 Saratoga Ave.
Suite 139
Santa Clara, CA 95051
Phone: 408-248-4867
Fax: 408-248-4868
www.tallmaple.com