Release Notes for Cisco Smart Storage Optware PKG Package Version 0.99.163

December 2010

These Release Notes provide information for the Optware PKG Package version 0.99.163 for the Cisco NSS 300 Series Smart Storage.

Contents

This document includes the following topics:

Introduction

Your NSS 300 Series Smart Storage comes with built-in applications and the ability to add new applications. Add-on applications add new functionality to your Smart Storage device. Add-on applications are downloaded from Cisco.com via a PKG package or PKG plugin installation file.

Description

The Optware PKG package is design for software installation within small embedded systems. Optware is a command-line utility and was originally created for the Linksys NSLU2 Unslung firmware. Using the ipkg command, Optware allows you to install software programs ported to the NSLU2 on the Cisco Smart Storage.

After Optware is installed, you can SSH to the NAS system and use the command "ipkg install <software name>" to install extra pre-compiled, hardware-dependent software, such as GCC Compiler. The list of compatible software can be found at:

http://ipkg.nslu2-linux.org/feeds/optware/ts509/cross/unstable/

NOTE The software in the unstable directory might be the latest software, although it might not have completed full testing for compatibility. Consult the Optware community with any questions or concerns about compatibility.

For additional Optware links, see **Additional Resources, page 7**.

Prerequisites

Prior to running the Optware software PKG package, you need an internet connection and the DNS server needs to be configured on the Cisco NSS 300 Series Smart Storage device. See **Configure DNS Server, page 6**.

Firmware Requirements

The Cisco NSS 300 Series Smart Storage device should be running firmware version 1.0.0 or higher. To update your firmware see, **Downloading and Upgrading the Firmware**.

Downloading and Upgrading the Firmware

This procedure describes how to upgrade the firmware on the NSS 300 Series Smart Storage devices from the Network Attached Storage (NAS) interface.

⚠️
CAUTION As a precautionary measure, back up the NAS system configuration before upgrading the firmware.

⚠️
CAUTION Do not upgrade the firmware over a WAN or Wi-Fi link since an interuption in service can lead to corruption of the firmware upgrade process.

From the *Administration > Firmware Upgrade* window, you can view the current firmware version and update the firmware on the NAS. The current NAS settings will not change while performing the firmware version update.

To upgrade the firmware:

STEP 1 Click **Administration > Firmware Upgrade** from the Navigation menu. The *Firmware Upgrade* window appears. The current firmware version is displayed.

STEP 2 Click **Browse** to locate the correct firmware file for the system update. Before updating the system, verify that the product model and firmware version you are going to update is correct.

STEP 3 Click **Update The System**.

Within 15 seconds, a MD5 checksum result window will display to confirm the integrity of the system. After the successful integrity check of the NAS, click **OK** for the new firmware file to upload to the NAS. After this has completed, a message displays and asks you to reboot the system. Please wait patiently. A system log in window will automatically display after the successful update to the new firmware.

The MD5 verification window does not perform any processing on the NAS or the candidate firmware for installation. Once the target firmware has been selected, the MD5 verification allows the user to validate the checksum calculated by the NAS against the provided checksum value found in a separate file that was provided alongside the firmware download. Mismatched checksums indicate firmware integrity has been compromised.

PKG Package Installation

From the *Applications > PKG Plugins* window, you can install PKG packages to add more functions to the NAS. Before you install the packages, make sure the files are correct, read the instructions carefully, and back up all important data on the NAS. Download the software package that you want to install on NAS to your computer.

To install a new PKG package:

STEP 1   Choose **Applications > PKG Plugins > Installation** from the Navigation menu. The *PKG Plugins INSTALLATION* window appears.

STEP 2   Click **Browse** to locate and select the Optware_0.99.163_x86.pkg file.

STEP 3   Click **Install**. The Optware PKG Plugin is installed to the NAS.

NOTE   To verify the PKG is installed, choose **Applications > PKG Plugins > PKG Installed**. A graphical icon appears in the window, indicating that the PKG is installed on the NAS system.

NOTE   Before using the ipkg utility, Optware must be enabled from the NAS interface. If there is an existing SSH session open when Optware is enabled, the ipkg utility will not be available in this same session. You need to open a new SSH session to use

the ipkg command. Also, if Optware is disabled from the NAS interface, the ipkg utility will remain available until the NAS system is rebooted. The NAS system must be rebooted for the disable action to take effect.

To enable the Optware PKG package:

STEP 1 Choose **Applications > PKG Plugins > PKG Installed** from the Navigation menu. The *PKG Plugins PKG INSTALLED* window appears.

STEP 2 Click the graphical Optware icon to open the application.

STEP 3 Click **Enable**. The status changes to *Enabled*.

STEP 4 Click **Close** to exit.

After Optware is installed, you can SSH to the NAS system and use the command "ipkg install <software name>" to install extra pre-compiled, hardware-dependent software, such as GCC Compiler. Further instructions can be found in the "How to Use iPKG" section at http://www.nslu2-linux.org/wiki/Optware/Packages.

To remove a Optware PKG package:

STEP 1 Choose **Applications > PKG Plugins > PKG Installed** from the Navigation menu. The *PKG Plugins PKG INSTALLED* window appears.

STEP 2 Click on the Optware icon. The Optware application window appears.

STEP 3 Click **Remove**. The Optware PKG package is removed from the NAS.

Caveats

Information regarding any known caveats with Optware can be accessed from the following website:

http://trac.nslu2-linux.org/optware

Configure DNS Server

To configure the DNS settings for your NAS:

STEP 1 Choose **Administration > Network > TCP/IP** from the Navigation menu. The *TCP/IP* window opens.

STEP 2 Configure the following parameters in the DNS Server section:

You can either specify the DNS server address here or choose to obtain it automatically.

- **Obtain DNS server address automatically**—Click to obtain the DNS server address automatically.

  - **DNS information**—Click the link to view the DNS Server list and IP addresses.

- **Use the following DNS server address**—Click to manually configure the primary and secondary DNS servers.

  - **Primary DNS Server**—Enter the IP address of the Domain Name System (DNS) server. This address is typically provided by your Internet Service Provider (ISP).

  - **Secondary DNS Server**—Enter the IP address of the secondary DNS server.

STEP 3 Click **Apply** to save your settings.

Additional Resources

Support for the add-on applications is available via open source online community support resources.

Cisco Resources	URL
Cisco PKG Add-on Application Downloads (Firmware Link)	http://www.cisco.com/go/smallbizsmartstorage
Cisco Smart Storage Application Support	http://www.cisco.com/go/smartstorage-apps
Cisco Smart Storage Documentation, Application Notes, and Video Application Notes	http://www.cisco.com/go/smallbizsmartstorage
Optware Resources	URL
Optware Information	http://www.nslu2-linux.org/wiki/Optware/Packages
Pre-compiled Software	http://ipkg.nslu2-linux.org/feeds/optware/ts509/cross/unstable/

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