

Alacritech Release 9.0.1.322 Release Notes

Date: Monday Nov 27, 2006

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Introduction

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This is the official release of the 9.0.1.322 driver package for Alacritech Accelerators on Windows Server platforms using the Microsoft Scalable Networking Pack.

This is a maintenance release, and contains no new features that were not available in the 9.0.1.129 release.

This release only supports Alacritech SEN2000 and SES2000 series Gigabit products. 1000x1 and SES1001 products continue to be supported through the 7.x.x.x drivers. 100 Mbit products continue to be supported through the 6.x.x.x drivers.

This file provides details on known outstanding bugs, support issues and feedback mechanisms for this release.

Content List

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This release contains the following file and directories:

autorun.inf

Launches the installation process on a Windows system if it is located on CD media.

install.html

Front end introduction to the drivers included on the CD.

doc

Files and documentation associated to Alacritech's hardware and software products. The snp directory contains documentation specific to this software release. This includes the Alacritech Accelerator Users Guide.

doc\images

Folder containing files referenced by html documentation.

doc\include

Folder containing files referenced by html documentation.

doc\snp

The snp directory contains documentation specific to this software release. This includes the Alacritech Accelerator Users Guide.

readme.html

Front end introduction to the driver

RelNotes.txt

This file.

FlashImage

Flash image files to provide a PXE UNDI interface to Alacritech Accelerators based on the STA2000 ASIC.

snp

Directories for x86 and x64 versions of the driver software.

x86

The install programs, software drivers, libraries, and utilities for Windows Server 2003 with Scalable Networking Pack installed.

amd64

The install programs, software drivers, libraries, and utilities for Windows Server 2003 x64 Editions with Scalable Networking Pack installed.

x86 File Versions:

| File | Version | Build Date | | Description |
|----------|-----------|------------|---------|-------------------------|
| slic.sys | 9.0.1.322 | 11/18/2006 | 5:38 PM | Network Miniport Driver |

amd64 File Versions:

| File | Version | Build Date | | Description |
|----------|-----------|------------|---------|-------------------------|
| slic.sys | 9.0.1.322 | 11/18/2006 | 5:34 PM | Network Miniport Driver |

PXE/UNDI File Versions:

| File | Version* | Build Date | | Description |
|-------------|----------|------------|---------|---------------------|
| oasis0.bin | 1.0.1.2 | 10/30/2006 | 8:58 AM | iSCSI boot firmware |
| oasis1.bin | 1.0.1.2 | 10/30/2006 | 8:59 AM | iSCSI boot firmware |
| oasis2.bin | 1.0.1.2 | 10/30/2006 | 9:00 AM | iSCSI boot firmware |
| stub_m.nic | 1.0.1.2 | 10/30/2006 | 9:14 AM | iSCSI boot firmware |
| stub_mf.nic | 1.0.1.2 | 10/30/2006 | 9:16 AM | iSCSI boot firmware |

*At this time there is no version stamp in the PXI/UNDI files. Version can be determined with 'findstr "Alacritech" *.nic'.

Caveats

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Supports only SEN2000 and SES2000 series gigabit products.
Windows Scalable Networking Pack (kb91222) must be installed.

Features

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Supported Hardware

This release supports the following products:

| Part Number | Product Description |
|-------------|---|
| SEN2001XT | PCI-X Gigabit Copper 1-port Network Accelerator |
| SEN2001XF | PCI-X Gigabit Fiber 1-port Network Accelerator |
| SES2001XT | PCI-X Gigabit Copper 1-port iSCSI Accelerator |
| SES2001XF | PCI-X Gigabit Fiber 1-port iSCSI Accelerator |
| SEN2002XT | PCI-X Gigabit Copper 2-port Network Accelerator |
| SEN2002XF | PCI-X Gigabit Fiber 2-port Network Accelerator |
| SES2002XT | PCI-X Gigabit Copper 2-port iSCSI Accelerator |
| SES2002XF | PCI-X Gigabit Fiber 2-port iSCSI Accelerator |
| SEN2102ET | PCI-Express Gigabit Copper 2-port Network Accelerator |
| SEN2102EF | PCI-Express Gigabit Fiber 2-port Network Accelerator |
| SEN2104ET | PCI-Express Gigabit Copper 4-port Network Accelerator |
| SEN2104EF | PCI-Express Gigabit Fiber 4-port Network Accelerator |
| SES2102ET | PCI-Express Gigabit Copper 2-port iSCSI Accelerator |
| SES2102EF | PCI-Express Gigabit Fiber 2-port iSCSI Accelerator |
| SES2104ET | PCI-Express Gigabit Copper 4-port iSCSI Accelerator |
| SES2104EF | PCI-Express Gigabit Fiber 4-port iSCSI Accelerator |

Supported Platforms

This release is supported only for IA32 x86 and x64 compatible architecture running selected Microsoft Windows operating system versions:

Supported Windows Versions

Windows Server 2003
Windows Server 2003 x64 Editions
Windows Server 2003 R2
Windows Server 2003 R2 x64 Editions
Windows XP Professional x64 Editions

This driver supports vhd operation over iSCSI with Virtual Server 2005. A virtual TCP offload network driver is not available at this time, and use of the network driver supplied with Virtual Server 2005 results in TCP offload not being available on that virtual server.

Existing Features

- Basic NIC Functionality
- TCP Offload
- TCP Checksum Offload (Only when TCP Offload is enabled)
- Large Memory Support (/PAE)
- Checksum offload in dumb NIC mode.
- PXE UNDI flash ROM support (To enable iSCSI boot)

Discontinued Features (Supported in a future release)

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- Link Aggregation (Teaming)
 - + 802.3ad/(Fast/Gigabit) EtherChannel compatible mode
 - + Hot Standby Failover mode
 - Jumbo Frames
 - Membership in a single tagged vlan

Windows Logo (Designed for Microsoft Windows)

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These drivers meet the new Designed for Microsoft Windows Server 2003 logo requirements for scalable networking.

Known Issues

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This section contains a list of currently understood issues. Both open bugs and known integration issues are documented based on this specific release. Please review the current open bugs and known issues before filing a bug report. See the Support and Feedback section below for details on reporting bugs.

Open Bugs

Bug 01275 [All]

Changing DHCP to Static Address causes BSOD

If installing the slic.sys driver with DHCP enabled on your network segment and the card is connected to the segment and acquires a DHCP issued IP Address, Windows may crash upon setting the interface to a STATIC address.

Workaround - disconnect the network cable prior to reconfiguring from DHCP to static address. This has been determined to be an SNP bug. See Microsoft KB919948.

Bug 01303 [All]

Perfmon data rate shows spurious peaks.

Integration Issues

No offload on windows XP x64

Problem - Windows XP Professional x64 Edition does not offload any connections by default with SNP driver installed.

Workaround - This is typically a result of networking functions enabled by default that are mutually exclusive with TCP offload, such as a Windows Firewall and Internet Connection Sharing (ICS). Ensure the firewall is disabled in Windows XP. See Section 3.4 of the User's Guide for Scalable Networking Pack located on the Alacritech Driver Installation CD in the \docs\snp directory.

Resolved Issues

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Resolved since 9.0.0.129

Bug 01286 [All]

Receive Window can overflow if Window Scaling enabled

If Window Scaling (Tcp1323Opts 0x1) is enabled, the receive window can overflow causing data corruption.

Bug 01289 [All]

Iometer Small Frame Performance Broken

Iometer performance using small frames does not work well.

Bug 01291 [All]

Crash in slic.sys

BugCheck D1, {c, 2, 0, b934238e}

Bug 01294 [All]

Dropped connections on idled connections

TCP keepalive processing not working properly, causing valid connections to be terminated.

Bug 01298 [All]

FTP connection does not close after receiving data.

If the TCP FIN is sent in the last recv data packet, the connection will not complete, causing ftp to hang.

Bug 01305 [All]

Crash in slic.sys @ SlicProcessTcbEvent+1ab

This crash typically occurs when trying to send out lots of small packets very quickly.

Readme

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The readme.html contained with distribution should be used as the starting point for learning about this driver.

Users Guide

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There is a Users Guide contained in the doc directory provided to customers for use with Alacritech Accelerators. For details on installation, management, teaming, and interoperability issues, please review the Users Guide, as full details have been provided there.

Support and Feedback Mechanism

Before Contacting Customer Support, please browse the troubleshooting section of the Users Guide. Should you need to contact customer support, please gather all of the following information requested in the Incident Reports section below before initiating contact.

To contact Alacritech customer support you may use one of the following options:

Email: support@alacritech.com
Phone: 877.341.8267

Incident Reports

Please include the following information when sending in an incident request:

Hardware:

- CPUs
- Amount of memory
- PCI busses
- Number of Alacritech accelerators
- Other network interfaces

Software:

- Windows Version (2000, XP, 2003)
- Windows Service Pack version
- Version of Alacritech drivers

Log information:

- Event Viewer details related to Alacritech
- Windows dump files (if there is a crash)

Testing environment:

- What software is being tested
- What types of tests reproduce the problem
- Where is the failure occurring
- What has been done to try and solve the problem

Patents

One or more U.S. and international patents apply to Alacritech products, including without limitation: U.S. Patent Nos. 6,226,680, 6,247,060, 6,334,153, 6,389,479, 6,393,487, 6,427,171, 6,427,173, 6,434,620, 6,470,415, 6,591,302, 6,658,480, 6,687,758, 6,697,868, 6,751,665, 6,757,746, 6,807,581, 6,938,092, 6,941,386, 6,965,941, 7,042,898, 7,076,568, 7,089,326, 7,093,099, and 7,124,205.

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