

UDI HDK Roadmap

<http://www.sco.com/forum1999/conference/developfast/f7>

Matt Kaufman

Senior Software Engineer

E-mail: mek@sco.com



This is the second in a series of eight UDI presentations for SCO Forum 1999.

This session explains how and when UDI development kits will be made available, and how they will ultimately be merged into the SCO HDK and Base OS. It also describes plans for test suites, sample drivers, and debugging tools.

UDI HDK Roadmap - Why UDI?

- **UDI lets you write once, port for free**
- **UDI Version 1.0 is at the editors. See <http://www.sco.com/udi/specs.html>**
- **UDI will be supported on all SCO O/S's**
 - UnixWare 7, Release 7.1 and 7.2
 - OpenServer runtime (Mid-2000)
 - Monterey 64

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 2



UDI HDK Roadmap - UDI Timetable

- **UDI alpha DK available today at**
<http://www.sco.com/UDI/sco/udidk>
- **UDI DK and runtime PTF for UnixWare 7,
Release 7.1 in Q4 1999**
- **Native UDI DK, doc, runtime for
UnixWare 7, Release 7.2 in '00**

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 3



UDI HDK Roadmap - UDI Timetable

- Going forward, UDI will be on Monterey but DDI will not
- Download the UDI spec today; go to the talks
- UDI - your path to Monterey 64

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 4



UDI HDK Roadmap - UW 7.1

- **Alpha version of the UDI Developer kit for UnixWare 7 Release 7.1 available today**
- **Downloadable from**
<http://www.sco.com/UDI/sco/udidk>
- **UDI version 1.0rc3 compliant**

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 5



UDI Alpha DK info (cont'd)

- **Alpha DK includes tools to**
 - compile your driver (**udibuild**)
 - create UDI-compliant driver package (**udimkpkg**)
 - install a UDI-compliant driver package on UW (**udisetaup**)
- **pkgaddable atop UW 7.1**

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 6



UDI Alpha DK info (cont'd)

- **Alpha DK supports UDI specs, including**
 - Core Services
 - Physical I/O
 - SCSI Driver
 - Network Driver
 - PCI Bus Binding

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 7



UDI Alpha DK (cont'd)

- **Alpha DK includes sample drivers**
 - DPT SCSI (see F12: *UDI SCSI Drivers*)
 - CMOS
- **Alpha DK includes tools to**
 - compile driver (**udibuild**)
 - build driver package (**udimkpkg**)
 - install package on UW system (**udisetaup**)

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 8



UDI Alpha DK info (cont'd)

- **Alpha DK to be updated monthly, see release notes for restrictions**
- **E-mail address (udidk@sco.com) for feedback**
- **Plan to ship as official PTF Q4 1999**
 - includes tuning, doc, full 1.0 support
 - will form basis for UnixWare 7 Release 7.2 implementation

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 9



UDI HDK Roadmap - UW7.2

- **UDI will be the native driver model for UnixWare 7 Release 7.2**
- **Still will support drivers written to DDI version 6 or higher**
- **Full support (HDK, samples, tools, debugging)**

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 10



Project Monterey



Available at Initial Merced Release

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 11



Project Monterey is a joint project of SCO, IBM, and Intel.

End result is a common “family” of server platforms:

UnixWare 7 on IA-32

AIX on PowerPC

Monterey-64 on IA-64

Monterey-64 is a merging of UnixWare 7 & AIX technologies, with contributions from Sequent & other OEMs as well as new 64-bit specific enhancements.

Targeted to be available at the initial release of the Merced processor:

2nd half 2000

UDI Support in Project Monterey

- **UDI critical to Project Monterey success**
 - Single driver model for all 3 platforms
- **UDI is preferred driver model for Monterey-64 on IA-64**
 - Available in the first release

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 12



Monterey UDI SDK Schedule

- **UDI SDK first release in mid-2000**
 - Monterey-64 on IA-64
 - AIX® on PowerPC
- **UnixWare® 7 is obvious development platform of choice for now**
 - Simply recompile for IA-64 or PowerPC

F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 13



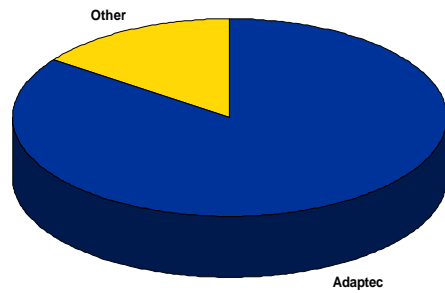
Adaptec UDI Roadmap

<http://www.sco.com/forum1999/conference/developfast/f7>

Mark Bradley
Adaptec
Project UDI Advisor
E-mail: markb@btc.adaptec.com



Adaptec Market Share in the SCSI I/O marketplace



Adaptec owns the SCSI I/O marketplace due to:
Superior compatibility, Outstanding reliability,
Professional support, and.....



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 15



Adaptec Supports UDI

- **Early involvement w/ Project UDI**
- **UDI Driver for Prototyping of spec.**
- **Drivers for U160 products**
 - Announcements to OEM's has been done
 - Public Announcement of availability '00



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 16



Adaptec Supports UDI

- **UDI is in line with our value-add proposition of solid drivers for our customers**
- **Allows Adaptec to hit several OS's with one driver source**
- **Unlike other standards, allows continued value to be in silicon, and....**



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 17



Leading with New SCSI Technology

Ultra
160 SCSI

Speed

- 160 MB/second
doubles the transfer
rate of Ultra2 SCSI

Manageability

Domain Validation
intelligently tests the storage
networkCRC enables higher
reliability

SCSI

- Backward compatibility
protects your investment
with the same SCSI your
business runs on today



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 18



Introduction to UDI

Intel's Network Interface Division Roadmap

John A. Ronciak
Staff Software Engineer
Intel Corporation

E-mail: john.ronciak@intel.com



This is the SCO Forum 1999 presentation template.

Please use this presentation (strikeover) to create yours instead of “applying the style” of this presentation to a pre-existing or new one. This is so handouts will retain the style of the ones in this presentation. Note: PowerPoint doesn't have the capability of “applying the style” to handouts other than presenter's notes.

Intel's NID Roadmap

- **Why UDI?**
- **Intel's plans**
 - When and where to expect UDI nic drivers
- **Expectation of UDI**
 - Performance, extensibility and OS neutrality



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 20



Why UDI?

- **Our division acts as an IHV for Intel's network adapters**
 - Problems that UDI attempts to solve for an IHV
 - » Multiple OSs supported with one driver
 - » Multiple adapter drivers derived from a single driver
 - only hardware specific source code changes



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 21



An optional second logo can be placed in lower left-hand corner of slide. If the logo is to be used on EVERY slide, put it on the master slide.

Why UDI? (cont.)

- Results from using UDI
 - » Testing effort for the multiple OSs becomes much easier
 - » Brings the industry together by offering a standard way in which to write device drivers making it easier for the industry to get more devices supported
 - » Makes the migration from IA-32 to IA-64 easy
 - The same driver will work on both architectures with a re-compile



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 22



Intel's plans

- **Have been working on our driver design since the 0.90 version of the specification was produced**
 - We've moved onto the 1.0 version to finish the design
 - Driver design almost finished today
- **Will be ready for the early beta's of Monterey**
 - AIX version of our current DDI 8 driver for power-on
- **Will be fully supported through the IA-64 launch**
- **Intel's PRO/100+ and the PRO/1000 series nics will be supported at the IA-64 launch**



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 23



A subtitle can be added to the title of a slide. Carriage return after title and type in text of subtitle after title. Highlight subtitle text and reduce type size and remove BOLD style. It should be in regular (NOT BOLD), size 24 type.

Expectation of UDI

- **Better performance**
 - Better network performance
 - Fewer CPU cycles used to produce the same network load
 - Better reliability and stability
- **Fewer versions of nic drivers to support**
 - Development costs as well as the support and testing efforts are reduced with fewer driver versions
- **Get our driver onto more OSs than it currently is ported to since the driver is OS neutral**



F7: UDI HDK Roadmap
© 1999 SCO All Rights Reserved - Slide 24



The machine icons shown here were drawn from an aerial-view perspective. Whenever possible, please try to keep your diagramming similar to that shown here to keep the perspective/style consistent.

F7: UDI HDK Roadmap

August 19, 1999

