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Tru64 UNIX – New Features and Future

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Agenda

- Overview
- Support Roadmaps
- Tru64 UNIX V5.1B
- Tru64 UNIX V5.1B Enhancements
- Future Release and Plans
- Tru64 UNIX to HP-UX Migration Solutions
- Resources


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Overview

- Unchanged Roadmaps still on schedule
 - New version added
- V5.1B Support at least until 2011
 - 5 years beyond last alpha server sale date
- PVS extended for selected versions
 - Tru64 UNIX V4.0F/G extended 21 months
 - Tru64 UNIX V5.1A extended 28 months
 - Ends 30 June 2007

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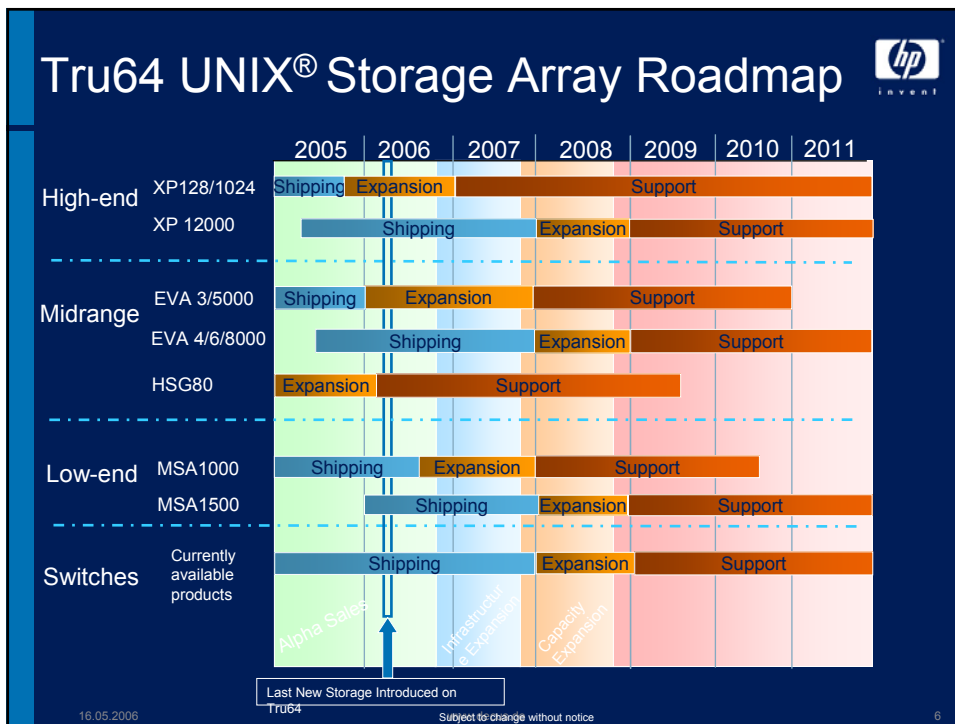
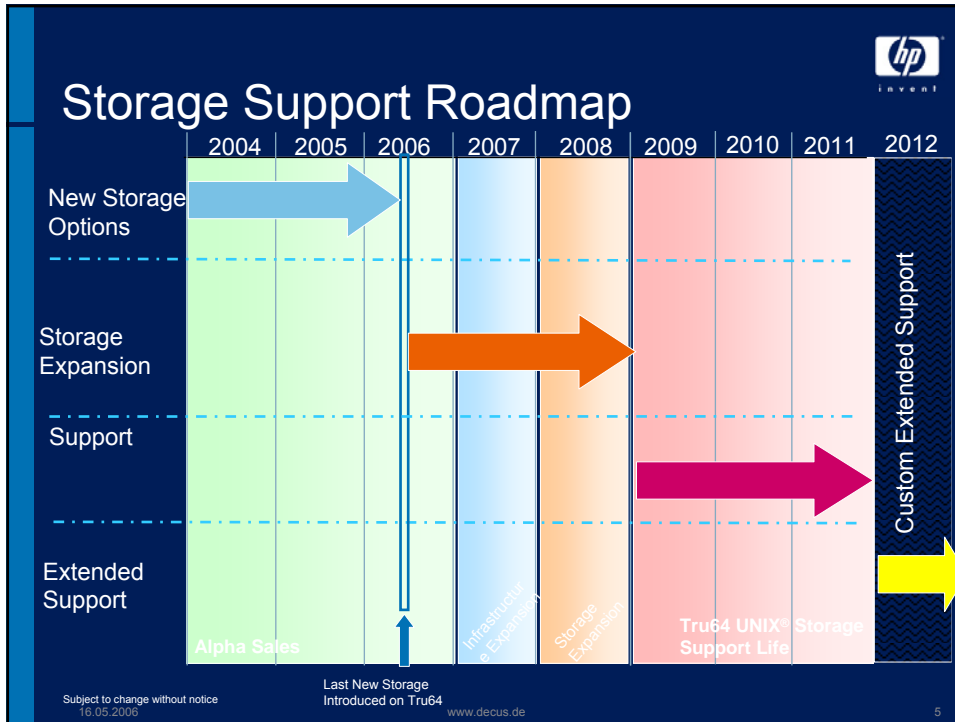
Tru64 UNIX® O/S Support Roadmap

	2005	2006	2007	2008	2009	2010	2011
4.0F/G**	PVS-SE						
5.1A**	PVS-SE						
5.1B-2	Standard						
5.1B-3	42 months						
5.1B-4		42 months					
5.1B-5			Min 42 months				
5.1B with updates	Support at least through 2011						
	Custom Engineering Support						


Guaranteed 42 month Support V5.1B-3 and beyond *









* Certain features may require update to latest release
 ** Restricted Configurations PVS-SE: Prior Version Support – Sustaining Engineering

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Top ISV Support Roadmap



	Oracle RDBMS (9i/10g), 9iAS, Application Server 10g, E-Business Suite 11iR1, supported at least through 2011 , except Oracle Collaboration Suite which is supported at least through 2006.
	Informix Dynamic Server (IDS) v9.40 and WebSphere MQ 5.1, supported at least through 2011 with a 12-month advance notice of any change.
	PeopleTools 8.20 and 8.45, supported at least through 2010
	WebLogic Server, WebLogic Portal, Tuxedo, and BMQ, supported at least until 2009 – in accordance with BEA standard and extended support agreements, unless the specific BEA product and version is retired on all platforms sooner.
	VERITAS NetBackup™ software support until mid-2008 . See the VERITAS Support Handbook at support.veritas.com for additional support details.
	OpenEdge™ 10 and Progress® Version 9, supported at least until 2007 , at least as long as customers with maintenance contracts require support.
	ASE 12.5 and RepServer 12.6, supported in accordance with Sybase standard and extended support agreements - at least until 2007 - unless the specific Sybase product and version is obsoleted on all platforms sooner.
	DataStage V7.5 and QualityStage 7.0, supported through 2005


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Tru64 UNIX V5.1B



- EV7 platform support (Marvel)
 - 2-8, 16 and 32 CPU's (ES47, ES80, GS1280)
- New Management Enhancements
 - SysMan
 - Collect, Collgui, Sys_check
 - Environmental monitoring
 - Improved boot times
 - IPv6 production mode
 - Kernel Crash Dump
 -


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Tru64 UNIX V5.1B

- New monitoring utilities and daemons
 - Essential Services Monitor Daemon (esmd)
 - maintains the availability of essential system daemons
 - Performance Manager metrics server daemon (pmgrd)
 - provides general UNIX performance metrics on request
 - PK-2
 - xmesh (EV7 based systems)
 - utilization reports for mesh components
 - PK-3/PK-4


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Tru64 UNIX V5.1B

- Security Enhancements
 - SSH bundled with V5.1B
 - set EnforceSecureRutils=yes
 - rlogin, telnet or rsh equivalent ssh2
 - rcp or ftp equivalent scp2 or sftp
 - Buffer overflow protection (PK-2)


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Tru64 UNIX V5.1B

- New AdvFS Features
 - Online LUN/Unit Expansion
 - mount [-u] -o extend ...
 - vFast Utility
 - continuously defragmenting and balancing files
 - Freeze/Thaw
 - allow coherent hardware snapshots within multivolume
- New LSM Features
 - Fast Plex Attach
 - Volclonedg supports snaps/clones


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Tru64 UNIX V5.1B

- Big Memory Pages Support
 - Support for pages of 64KB, 512KB and 4096KB
 - Optimized page size controlled by kernel
- TruCluster Server Enhancements
 - CFS Load Monitoring Daemon (cfsd)
 - Dynamic load balancing
 - CAA application resource balancing
 - parallel roll support
 - Faster SW upgrades


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Tru64 UNIX V5.1B-1

- Binary Compatibility to V5.1B
- Support for 64 CPU EV7 Systems
- Support for DS15
- HP-UX 11i migration tools availability
 - filescanner, scansummary, scandetail ...
- V5.1B-1 „Vail“ release includes NHD-7 and PK-3
 - plus updated/new applications


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Tru64 UNIX V5.1B-1

- Enhanced Big Memory Pages Support
 - Application tunable button in 5.1B-1
- Greater file system scalability
 - Higher LSM I/O throughput
 - AdvFS panic avoidance
- Broader support of StorageWorks products
 - MSA1000, EVA, XP-Storage Array...
 - HP Data Protector


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Tru64 UNIX V5.1B-2

- Binary Compatibility to V5.1B
- Support for EV7z
- Updated HP-UX 11i compatibility tools
 - Scanwizards
 - developers documentation
 - HP-UX Manual-Pages included
- V5.1B-2 „Utah“ includes NHD-7 and PK-4
 - plus updated/new applications

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Tru64 UNIX V5.1B-2

- Enhanced Big Memory Pages Support
 - Basic functionality in 5.1B
 - Application tunable in 5.1B-1
 - Support for system page tables in 5.1B-2
 - Will greatly improve performance of
 - Memory Intensive Applications (i.e. DB)
 - Finite Element Applications (i.e. Modeling)

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Tru64 UNIX V5.1B-2

- Reduced time for patch installation
- Faster boot with clustered LSM
- Improved memory channel performance
- Unified Buffer Cache scaling
 - Improved performance (SMP, Numa, EV7, PCI-X)
- Improved bad disc detection and handling
- XP12000 support added

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Tru64 UNIX V5.1B-3

- Tru64 UNIX V5.1B-3 „Tahoe“ release
 - Support for new I/O operations
 - Enhanced HP-UX 11i compatibility tools
 - Application Updates
 - Quality Updates
- V5.1B-3 includes NHD and PK-5
 - plus updated/new applications

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Tru64 UNIX V5.1B-3

APCD I	Updated Components	Unchanged
Advanced Printing SW		•
Advanced Server for UNIX	•	
Cobol RT Library		•
Development Enhancements		•
Fortran RT Library		•
Hypersort		•
Java™		•
LDAP Client Utilities	•	
DataDirect (ODBC/JDBC Driver)	•	
Mozilla	•	
Multimedia Services		•
OpenLDAP	•	
Pascal RT Library		•
Worldwide Language Support	(updated via patch kit)	
Tru64 UNIX® to HP-UX STK vX		•
BinaryScan v1.0	•	
hpuxman v1.1		•


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Tru64 UNIX V5.1B-3

APCD II	Updated Components	Unchanged
Perl	TBD	
Collgui	TBD	
DECevent		•
Extended System V		•
GNU Source		•
Graphical Program TK		•
Legato Networker	TBD	
Motif	•	
Porting Assistant		•
Powerstorm Graphics		•
Secure Web Server	•	
Sysman SW Manager ADK		•
TruCluster Server	(updated via patch kit)	
UniCensus check	•	
Visual Threads	TBD	
WEBES	TBD	
Windows 2000 SSO		•
Xemacs		•
Retired components		•


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Tru64 UNIX V5.1B-3

- AdvFS quality updates
- Optimization of NUMA Architecture in EV7
 - Set CPUs in a Resource Affinity Domain (RAD)
- Collect Utility Enhancements
 - Support dynamic changes to AdvFS
- Better Cluster Performance
 - Better performance Cluster inter-node communication
 - Faster Cluster boot time


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Tru64 UNIX V5.1B-3

- Storage Handling Improvements
 - More robust search to determine a path to target disk
 - Support for LSM fast failover
- ISV enablement
 - Improvements to the OS necessitated by ISV partners
- Accounting
 - Refined accounting of system end user utilization time


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Tru64 UNIX V5.1B-3

- Patch installation/deleting enhancements
 - License Wrapper included
 - Accept license agreement on patch installation
 - Deleting patch kit in multi-user mode
 - Single user mode still recommended
 - Forced installation on system conflicts
 - Expansion to baseline
 - Limited use still recommended


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Tru64 UNIX V5.1B-3

- Clusterwide *fuser()* command
- Cluster Application Availability (CAA)
 - Improve the overall quality of the code base
- Cluster Alias Serviceability Enhancement
 - Improved debugging capabilities


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Tru64 UNIX V5.1B-3

- LSM performance improvements
 - Mirrored volume plex detach on device error
 - LSM startup and rescan for large cluster environments
- Fast-fail option for LSM mirrored volume I/O
 - Selectable for I/O improvements on device errors
- LSM improved supportability
 - New vold option for real-time debugging


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Future Release and Plans

- Tru64 UNIX Version 5.1B-4
 - Planned for 2006
 - Application updates
 - Quality updates
 - Storage options
 - Enhanced Cluster Interconnect Distance
 - Only with CA - LSM not supported


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Future Release and Plans


- New Tru64 UNIX Version 5.1B-5 added
 - Planned for 2008
 - Application updates
 - Quality updates
 - Storage options
 - ??

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Tru64 UNIX® Roadmap

V5.1B with updates, sales until 2006; support at least through 2011

V5.1B-3 June 2005	V5.1B-4 2006	V5.1B-5 2008 
<ul style="list-style-type: none"> • Storage options • Resiliency enhancements • ISV support • HP-UX 11i compatibility tools • Application updates 	<ul style="list-style-type: none"> • Storage options • Resiliency enhancements • Performance enhancements • Enhanced cluster interconnect distance • ISV support • Application updates 	<ul style="list-style-type: none"> • Storage Options • Resiliency enhancements • ISV support • Application updates

Maintain binary compatibility, Continued focus on quality, stability and security


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Tru64 to HP-UX Migration Solutions

<i>Existing Tru64 Solutions</i>	<i>Equivalent HP-UX Solutions</i>
<i>LSM</i>	<i>VxVM + HP File Mover Tool</i>
<i>AdvFS</i>	<i>VxFS + HP File Mover Tool</i>
<i>AdvFS & LSM</i>	<i>Storage Foundation + HP FMT</i>
<i>TruCluster (v4 and v5)</i>	<i>HP Serviceguard + Storage Foundation (v4) or Storage Foundation CFS (v5)</i>
<i>TruCluster for Oracle customers (v4 and v5)</i>	<i>HP Serviceguard + Storage Foundation (v4) for Oracle or Storage Foundation CFS for Oracle (v5)</i>
<i>TruCluster for Oracle RAC customers (v5)</i>	<i>HP Serviceguard + Storage Foundation CFS for Oracle RAC</i>

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- ## Tru64 to HP-UX Migration Solutions
- **HP File Mover Tool (FMT)**
 - Designed to assist customers with data migrations
 - In-house application developed by HP
 - Moves directory contents
 - Source system (Tru64 UNIX) Target system (HP-UX 11i)
 - Will not handle ISV files (database files for instance)
 - Will not handle application binaries
 - Will handle **SOME** endian issues
 - Incompatible file systems between Tru64 UNIX and HP-UX
 - Endian conversion program for customer specific binary formats
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Tru64 to HP-UX Migration Solutions

- HP File Mover Tool
 - Client Server Design
 - A set of programs that operate in four sequential stages
 - Stage 1: Analysis
 - Stage 2: Transfer
 - Stage 3: Endian Conversion (optional)
 - Stage 4: Verification


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Resources

- Tru64 UNIX to HP-UX migration information
 - [Application Transition Homepage](#)
 - [Tru64 UNIX HP-UX Transition Tools](#)
 - [Tru64 UNIX HP-UX Transition Modules](#)

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Resources

- [DECUS IT Symposium 2004 - Bonn](#)
- [Sustaining Engineering Supported Product List](#)
- [Tru64 UNIX Technical Updates](#)
- [Tru64 UNIX and TruCluster Server Info](#)
- [Tru64 UNIX Reference Pages](#)

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