

# AIX – The Future of UNIX

## April 2010



# Power Systems Software Editions



Power Systems Software Editions	Express	Standard	Enterprise
Systems Director VMControl	✓ ✓	✓ ✓	✓ ✓
PowerHA	Cluster Feature of OS*	✓	✓
IBM i	✓	✓	✓
AIX	✓ <sup>1</sup>	✓	✓
PowerVM	✓	✓	✓






<sup>1</sup> AIX 6 Express Edition 04/10

<sup>2</sup> PowerHA SystemMirror Editions for IBM i 04/10

\* Cluster feature of IBM i, AIX 7 Cluster Aware Feature (SOD)

# Power Systems Software Editions

- ✓ Scales with server size and edition content
- ✓ Choose the pre-packaged solution that best fits your needs and price point

Power Systems Software Edition Template	Express	Standard	Enterprise
<b>Entry Servers</b> 	\$	\$\$	\$\$\$
<b>Midrange Servers</b> 	\$\$	\$\$\$	\$\$\$\$
<b>High End Servers</b> 	\$\$\$	\$\$\$\$	\$\$\$\$\$

# AIX Pricing Strategy

## ***AIX price is consistent with the Power Systems software price strategy***

- Simplify AIX price tier structure to three tiers:
  - Small, Medium and Large servers
- More consistent scaling of price between small and large tiers
- License to SWMA price ratio consistent across IBM software
- AIX 6 Express offering
  - Entry price point for low end servers and blades
  - Promotes consolidation of small partitions on enterprise servers

## **Staged implementation of the strategy for AIX:**

- February 2010: New price tiers and restructured AIX Enterprise Edition
- April 2010: AIX 6 Express Edition

# Previous AIX Prices

- ✓ Simplifies AIX price tier structure from six tiers to three
- ✓ Delivers more consistent scaling of price between small and large tiers
- ✓ Provides consistent license to SWMA price ratio

## Previous AIX Prices (US)

Proc. Group	Current Power Models	Standard Edition			Enterprise Edition		
		License	SWMA	Total	License	SWMA	Total
C5	Blades JS21, JS22	\$85	\$299	\$384	\$825	\$542	\$1,367
D5	50x, 51x, 52x, E4A Value Pak	\$170 \$150	\$299	\$469 \$449	\$910	\$542	\$1,452
E5	550, E8A, 560Q, EMA Value Pak	\$430 \$385	\$449	\$879 \$834	\$1,420	\$817	\$2,237
F5	570, MMA, 575, F2A	\$1,225	\$725	\$1,950	\$2,215	\$1,093	\$3,308
G5	590	\$1,895	\$900	\$2,795	\$3,135	\$1,393	\$4,528
H5	595, FHA	\$2,495	\$1,050	\$3,545	\$3,735	\$1,543	\$5,278

Six tiers

Wide variation in price

Wide variation in price / SWMA ratio

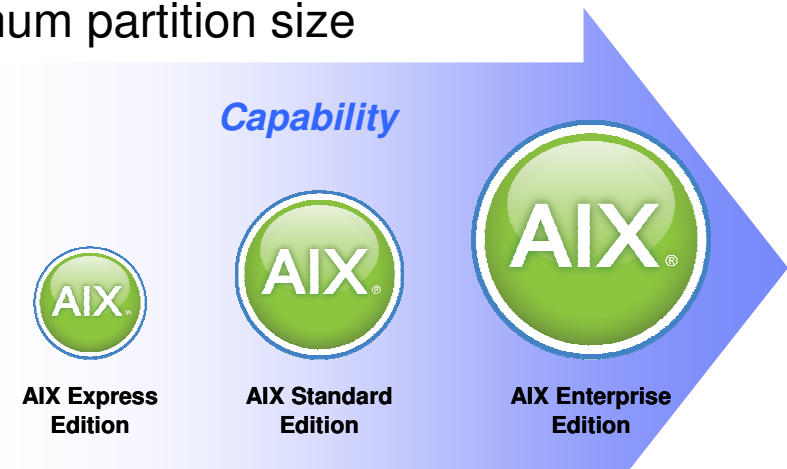
# Simplified Software Pricing Tiers

- Reduces the number of AIX software price tiers from six to three
- New tiers apply to AIX 6 and AIX V5.3 on all Power Systems servers
- Consistent price tiers across all IBM Power Systems software

<i>Legacy Tiers</i>	<i>New Tiers</i>	<i>Example Systems</i>
C5	<b>Small</b>	POWER6 - Power 550 and below including blades POWER7 – Power 750, Power 755, PS 700, PS701, PS702
D5		
E5		
F5	<b>Medium</b>	POWER6 - Power 560, Power 570 & Power 575 POWER7 – Power 770
G5		
H5	<b>Large</b>	POWER6 – Power 595 POWER7 – Power 780

## Introducing AIX 6 Express Edition (April 2010)

- A new edition of AIX priced for smaller workloads
  - AIX 6 and 7 will feature Express Edition
  - AIX 5.3 will not feature Express Edition
- Intended for two deployment situations
  1. Entry price on entry servers and blades
  2. Consolidation of smaller workloads on enterprise servers
- AIX 6 Express Edition terms are designed for small workloads
  - Vertical scalability limited to 4 core maximum partition size
  - 8 GB memory per core maximum
- Flexibility to optimize for multiple workloads
  - Run any combination of AIX Editions on a server



# AIX Express can improve the economics of consolidation

Example: Consolidate eight 4-way POWER6 520s into a 24 way POWER7 770



***With AIX Express***

AIX License + SWMA

List price 24 cores x \$1,000  
Total (list) **\$24,000**

**Savings of \$22,800**

(U.S. prices shown)

***Old price with AIX Standard Edition***

AIX License + SWMA

List price 24 cores x \$1,950  
Total (list) **\$46,800**

(U.S. prices shown)



# New Pricing Structure is Simple & Consistent

- ✓ Simplifies AIX price tier structure from six tiers to three
- ✓ Delivers more consistent scaling of price between small and large tiers
- ✓ Provides consistent license to SWMA price ratio
  - Significant reduction in SWMA for AIX on POWER7

## New AIX Prices for POWER7 (US)

Tier	Express Edition			Standard Edition				Enterprise Edition ( w/ IBM Systems Director EE)		
	License AIX 6.1	SWMA 1 Yr 9x5	Total	License AIX 5.3	License AIX 6.1	SWMA 1 Yr 9x5	Total w/ AIX 6.1	License AIX 6.1	SWMA 1 Yr 9x5	Total
S	\$300	\$75	\$375	\$525	\$500	\$125	\$625	\$790	\$198	\$988
M	\$800	\$200	\$1,000	\$1,470	\$1,400	\$350	\$1,750	\$2,125	\$531	\$2,656
L	\$1,500	\$375	\$1,875	\$2,730	\$2,600	\$650	\$3,250	\$4,050	\$1,013	\$5,063

## New AIX Prices for POWER6 (US)

Tier	Express Edition			Standard Edition				Enterprise Edition ( w/ IBM Systems Director EE)		
	License AIX 6.1	SWMA 1 Yr 9x5	Total	License AIX 5.3	License AIX 6.1	SWMA 1 Yr 9x5	Total w/ AIX 6.1	License AIX 6.1	SWMA 1 Yr 9x5	Total
S	\$300	\$225	\$525	\$525	\$500	\$349	\$849	\$790	\$422	\$1,212
M	\$800	\$595	\$1,395	\$1,470	\$1,400	\$749	\$2,149	\$2,125	\$930	\$3,055
L	\$1,500	\$795	\$2,295	\$2,730	\$2,600	\$1,000	\$3,600	\$4,050	\$1,363	\$5,413

# AIX 6 Express Edition pricing versus previous AIX price

## Previous AIX Prices (US)

Proc. Group	Current Power Models	Standard Edition				Enterprise Edition (w/Management Edition for AIX)		
		AIX 5.3 License	AIX 6.1 License	SWMA	Total	AIX 6.1 License	SWMA	Total
C5	Blades JS21, JS22	\$89	\$85	\$299	\$384	\$825	\$542	\$1,367
D5	50x, 51x, 52x, E4A Value Pak	\$179	\$170	\$299	\$469	\$910	\$542	\$1,452
		\$158	\$150		\$449			
E5	550, E8A, 560Q, EMA Value Pak	\$452	\$430		\$879	\$1,420	\$817	\$2,237
		\$404	\$385	\$449	\$834			
F5	570, MMA,575, F2A	\$1,286	\$1,225	\$725	\$1,950	\$2,215	\$1,093	\$3,308
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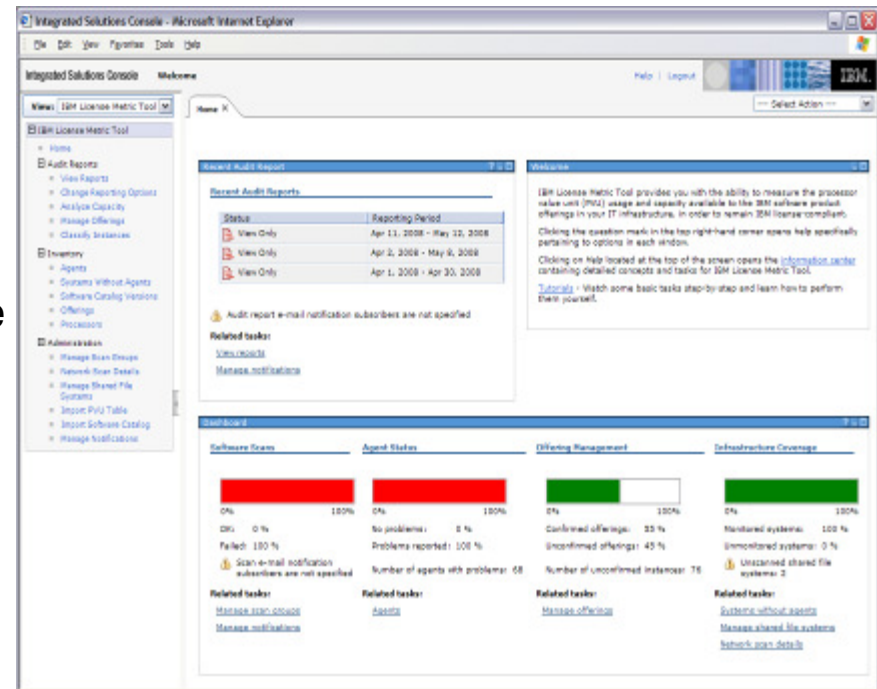
**AIX Express can substantially reduce the price compared to legacy price**

## New AIX Prices (US)

POWER7	Tier	Express Edition			Standard Edition				Enterprise Edition (w/ IBM Systems Director EE)		
		License AIX 6.1	SWMA 1 Yr 9x5	Total	License AIX 5.3	License AIX 6.1	SWMA 1 Yr 9x5	Total w/ AIX 6.1	License AIX 6.1	SWMA 1 Yr 9x5	Total
	S	\$300	\$75	\$375	\$525	\$500	\$125	\$625	\$790	\$198	\$988
M	\$800	\$200	\$1,000	\$1,470	\$1,400	\$350	\$1,750	\$2,125	\$531	\$2,656	
L	\$1,500	\$375	\$1,875	\$2,730	\$2,600	\$650	\$3,250	\$4,050	\$1,013	\$5,063	

# IBM License Metric Tool

- Common IBM monitoring tool for SWG, Power Systems & Systems Director software products
- Provides a data center view of IBM software licenses
- Simplifies customer license tracking, compliance & audit reporting
- ILMT does NOT report back to IBM
- Tool Provides\*:
  - Software inventory
  - Web-based administration
  - Standard & custom license reports
  - Audit reports



Required for clients using AIX Express Edition on Medium and Large servers

\*Implementation of some features will be staged over time

# AIX 7 -- The Future of UNIX



## ■ Workload-Optimizing Systems

- Vertical scalability for massive workloads with up to 256 cores/1024 threads in a single AIX partition

## ■ Virtualization without limits

- Run AIX 5.2 in a WPAR to simplify consolidation of legacy environments on POWER7

## ■ Resiliency without downtime

- Built in clustering to simplify configuration and management of scale-out workloads and high availability solutions

## ■ Management with Automation

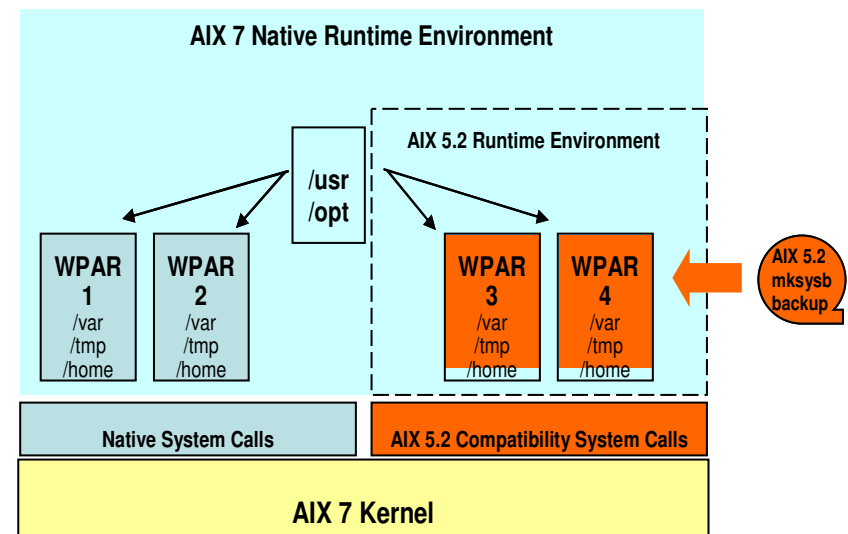
- Profile based configuration management eases the management of pools of AIX systems

\*All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Some features require the purchase of additional software components.

# AIX 5.2 WPARs for AIX 7

*New offering that enables consolidation of existing AIX 5.2 environments inside of an AIX 7 Workload Partition on POWER7*

- Customer Value
  - Minimize effort to consolidate old environments on new, more efficient hardware
  - Allows clients who must stay on AIX V5.2 to move up to POWER7
  
- Features
  - Allows a legacy AIX 5.2 environment to be run inside a WPAR on POWER7 processor-based systems with AIX 7
  - Simply back up existing environment and restore inside of an AIX 7 WPAR
  - This offering will also provide how-to and limited defect support for the AIX 5.2 operating system
  - Managed via IBM Systems Director Workload Partitions Manager



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# Cluster Aware AIX

*Designed to simplify construction and management of clusters of AIX systems for scale-out computing and high availability*

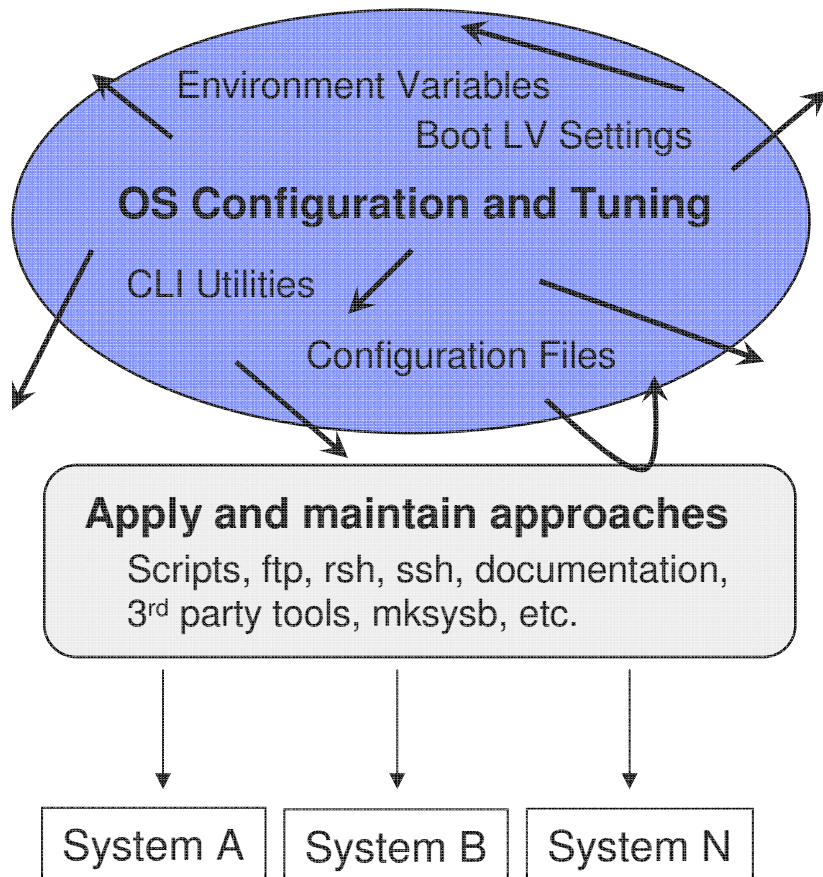
- Easily create clusters of AIX instances for scale-out computing or high availability
- Designed to:
  - Significantly simplify cluster configuration, construction, and maintenance
  - Designed to improve availability by reducing the time to discover failures
  - Capabilities such as common device naming help simplify administration
  - Built in event management and monitoring
- A foundation for future AIX capabilities and the next generation of PowerHA SystemMirror



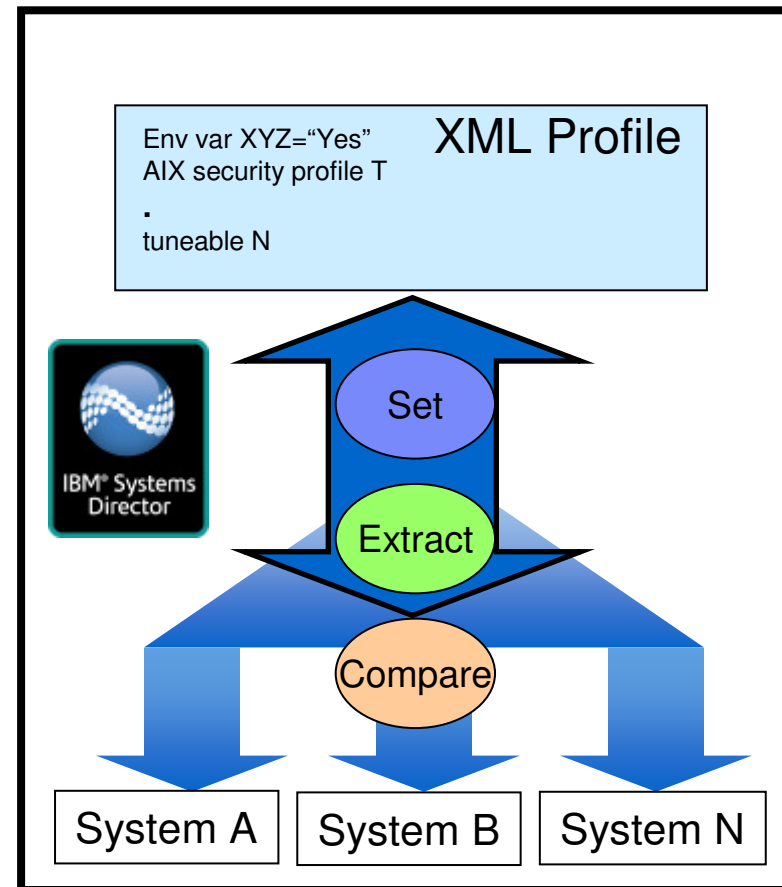
# AIX 7 Profile Manager

*Providing simplified discovery, application, update, and verification of AIX configuration properties across multiple systems*

Old Way



Using the AIX Profile Manager for configuration



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## AIX 7 is Binary Compatible with prior AIX versions

- AIX 7 is binary compatible with AIX 6 and AIX V5\*
  - *Current applications will continue to run – no need to recompile applications*
  - *Even supports 32 bit applications created on AIX versions prior to AIX V5*
  - *Fully exploits POWER7 processor-based systems*
  - *Also exploits systems based on POWER4™, POWER5™, POWER6 processors*
  - *Binary compatibility guarantee planned*
- Upgrade process
  - *Prior upgrade tools will support upgrade to AIX 7*
  - *Clients can upgrade directly to AIX 7 from AIX 6 and AIX V5*
  - *Free upgrade for customers with Software Maintenance Agreements (SWMA)*

**Open beta planned for AIX 7 Mid-year**

\*See general conditions at [ibm.com/systems/power/software/aix/compatibility](http://ibm.com/systems/power/software/aix/compatibility)

# AIX Version 5.3 End of Marketing Announcement

- Announce withdrawal of marketing for AIX 5.3 effective April 2011
- Goal is to give customers advance notice for planning and an additional incentive to move up to AIX 6 or consider move to AIX 7



# AIX Announcement Summary



- AIX Price structure changes (February)
- Introduction of AIX 6 Express Edition
  - Lower priced edition of AIX for Consolidation and lower end systems
  - IBM License Metric Tool available to help clients manage AIX licenses
- AIX 7 Preview
  - Vertical Scalability of up to 1024 threads and 256 cores in a single partition
  - Cluster Aware AIX infrastructure to simplify high availability and
- AIX V5.3 End of Marketing Announcement
  - Effective April 2011