Software Pricing for the z196 – AWLC, Transition Program, & WLP

29 July 2010
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Chart 2

zEnterprise 196 Software Pricing Strategy

- **MLC Software** – New metric "Advanced Workload License Charges" (AWLC) provides MLC price performance
  - Modeled after VWLC, same MSU tiers, sub-cap, and aggregation benefits
  - All products with VWLC will also be announced with AWLC
  - AWLC on a z196 provides 1%-10% savings compared to VWLC on a z10
    - Includes incremental savings on middleware products above 875 MSUs
  - Transition program will provide partial AWLC benefit as customers migrate their Sysplexes to all z196 machines

- **zIPLA Software**
  - zOTC software and the associated S&S will continue to be priced using System z Value Units, typically based upon MSUs

- **Distributed Passport Advantage Software**
  - On a z196 distributed software will continue to be priced using PVUs
  - Rating for a z196 engine (IFL or CP) is 120 PVUs, same as for the z10

Chart 3

Advanced Workload License Charges*

for Sub-Capacity Eligible Products
Advanced Workload License Charges (AWLC)

for non-Sub-Capacity Eligible Products
Flat Workload License Charges (FWLC)

Full-Cap mode - use rated MSU capacity
 or
Sub-Cap mode - use MSU values from Sub-Capacity Reports

AWLC Price Structure

Level	Range
Base	3 MSUs
Level 0	4 - 45 MSUs
Level 1	46 - 175 MSUs
Level 2	176 - 315 MSUs
Level 3	316 - 575 MSUs
Level 4	576 - 875 MSUs
Level 5	876 - 1315 MSUs
Level 6	1316 - 1975 MSUs
Level 7	1976+ MSUs

cumulative monthly pricing

Flat WLC Structure

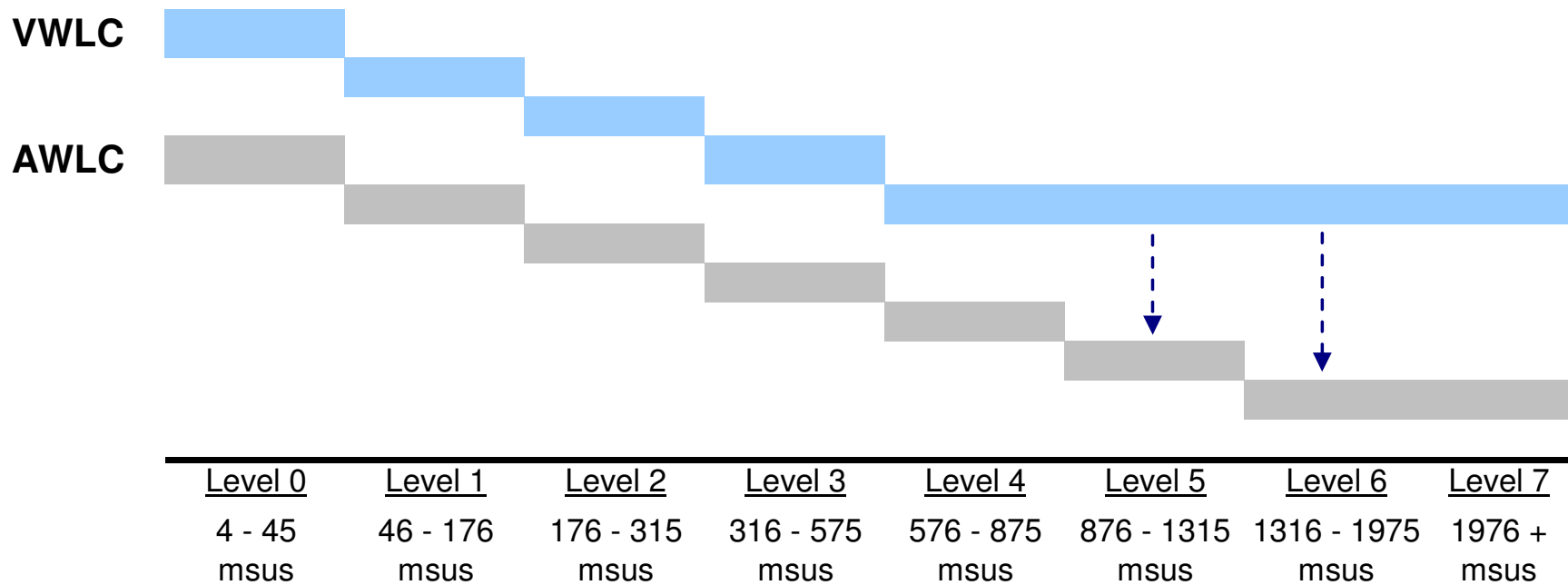| per server	single charge

flat monthly pricing

zEnterprise 196

*AWLC is available on z196 only

Chart 4

AWLC Price Performance

Chart 5

AWLC Price Performance

- AWLC has price performance improvements compared to VWLC at all MSU tiers above 3 MSUs

- Middleware price reductions on MSU tiers 5 and 6 provide additional unit cost improvement for customers > 875 MSUs

	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
	4 - 45 msus	46 - 176 msus	176 - 315 msus	316 - 575 msus	576 - 875 msus	876 - 1315 msus	1316 - 1975 msus	1976 + msus

Chart 6

AWLC Middleware price performance improvements

- All AWLC products above 3 MSUs have a price performance benefit compared to VWLC

- VWLC Middleware products have the same price for MSU Tiers 4, 5, 6 and 7

- AWLC Middleware products have price performance improvements for MSU Tiers 5 and 6 as compared to Level 4

- The MSU Tier 5 and 6 price changes for Middleware contribute to the overall cumulative AWLC price performance improvements

- <u>Example</u>:

5655R36 - WebSphere MQ V7			
Tier Level	MSU Range	VWLC Price *	AWLC Price *
Base	3	2662	2662
Tier 0	4 to 45	119	115
Tier 1	46 to 175	66	63
Tier 2	176 to 315	49	47
Tier 3	316 to 575	38	37
Tier 4	576 to 875	29	28
Tier 5	876 to 1315	29	27
Tier 6	1316 to 1975	29	26
Tier 7	1976 and more	29	26

*All prices are estimates in USD and subject to change

Chart 7

AWLC Software Licensing Rules and Transition Charges for Sysplexes

Chart 8

IBM

AWLC Software Licensing Rules

z/OS and MLC middleware:

- Stand-alone z196:
  - **AWLC** *
  - VWLC not allowed
  - PSLC is allowed +

- Parallel Sysplex with all z196 machines:
  - **AWLC** *
  - VWLC not allowed
  - PSLC is allowed +

- Mixed Parallel Sysplex (z196 with z10 and/or z9):
  - **VWLC under Transition Charges for Sysplexes program** *
  - AWLC not allowed
    - *Without transition program the machines in the Sysplex would become disaggregated: z196's with AWLC and z10/z9's with VWLC*
  - PSLC is allowed +

* Requires customer to sign AWLC contract
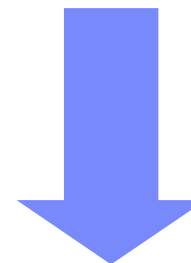
+ PSLC optionally allows ULC

Chart 9

A simple transition program provides VWLC savings for Sysplex customers as they migrate to z196 machines

- Transition Charges for Sysplexes program requires AWLC contract to be signed

- All machines in sysplex remain on VWLC until 100% of capacity migrated to z196

- A published discount schedule defines VWLC savings for partial plex upgrades

- VWLC discount will be based on the % of plex MSUs migrated to z196 machines, the % of z196 in plex is calculated using the **Full Capacity MSUs** of all Machines

- Transition Charges for Sysplexes program is **not** a special bid
  - It is announced and available for all sysplex customers
  - It is implemented in the CFSWeb configurator and in ESW/CBS

% of z196 MSUs in Sysplex *	Monthly Discount applied to VWLC
> 0 - 20%	0.5%
21 - 40%	1.5%
41 - 60%	3.0%
61 - 80%	4.0%
81 - < 100%	4.5%

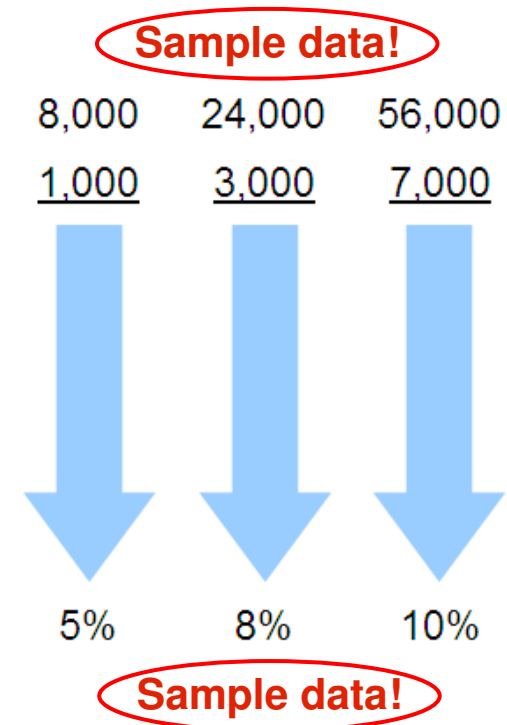*Program designed to phase in AWLC savings ...*

100% z196 = AWLC

Chart 10

The sysplex transition program was designed to phase-in MLC savings without providing the maximum AWLC benefit

% of z196 MSUs in Sysplex	Monthly Discount applied to VWLC $
> 0 - 20%	0.5%
21 - 40%	1.5%
41 - 60%	3.0%
61 - 80%	4.0%
81 - < 100%	4.5%

Sample data!

MIPS	8,000	24,000	56,000
MSUs	1,000	3,000	7,000

Max AWLC Benefit example >   5%   8%   10%

Sample data!

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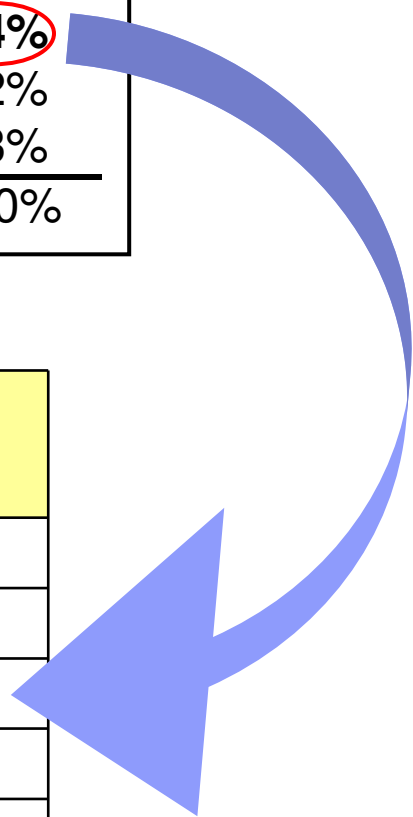Chart 11

A sysplex with 44% of MSUs on z196 qualifies for a 3.0% discount on the total sysplex VWLC bill

Current Plex

	MSUs	% Plex
z9	197	28%
z10	296	42%
z10	215	30%
Plex	708	100%

Upgrade →

After Upgrade

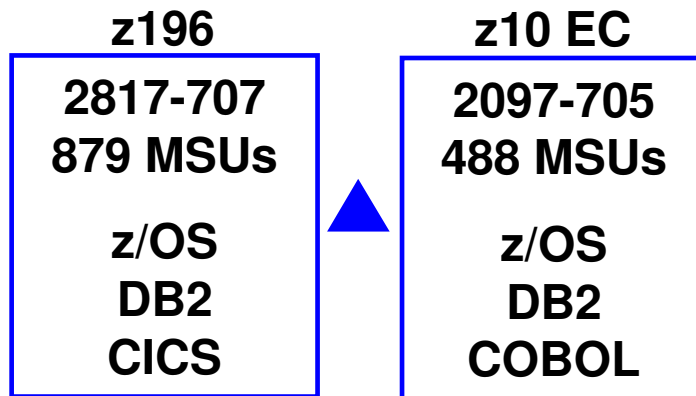|	MSUs	% Plex
z196	408	**44%**
z10	296	32%
z10	215	23%
Plex	919	100%

Don't forget:

MSU values must be full capacity values

% of z196 MSUs in Sysplex	Monthly Discount applied to VWLC $
> 0 - 20%	0.5%
21 - 40%	1.5%
41 - 60%	3.0%
61 - 80%	4.0%
81 - < 100%	4.5%

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Chart 12

Transition Discount Applies to All VWLC in the Sysplex

- Discount percent calculated without looking at any software!
  - Use Full Capacity MSUs of each machine to get Percentage of z196 in plex
  - Percentage of z196 hardware sets the VWLC discount percent across the plex

- Once discount percent is set it gets applied to **all** VWLC in the plex, whether or not an individual program is running on the z196

z196

2817-707
879 MSUs

z/OS
DB2
CICS

z10 EC

2097-705
488 MSUs

z/OS
DB2
COBOL

- Example:
  - Percent z196 HW: 64%
  - Transition discount: 4%

Product	z196 Sub-cap MSUs	z10 EC Sub-cap MSUs	Total Billing MSUs	List Price	Price with 4% Discount
z/OS	804	475	1269	167673.00	160966.08
DB2	798	417	1215	98269.00	94338.24
CICS	647	---	647	81060.00	77817.60
COBOL	---	165	165	4488.00	4308.48

All prices are estimates in USD and subject to change

Chart 13

Transition Charges for Sysplexes program Rules

- **Aggregated Parallel Sysplex with one or more z196 servers <u>and</u> one or more z10/z9 servers needs Transition Charges for Sysplexes**
  - To allow VWLC to be licensed on a z196
  - To provide partial AWLC price performance benefit during sysplex migration

- **Sysplex stays on aggregated VWLC during migration**
  - AWLC is not available to Sysplex until all machines are z196

- **Amount of Transition Charges VWLC discount is based upon the percentage of z196 hardware in the Sysplex**
  - Count only full-capacity MSUs of machines (<u>not</u> SCRT values)
  - Do not include OOCoD, CBU, Unassigned, or Specialty engines
  - Round the z196 portion of Sysplex to the nearest whole percent
    - e.g. 0.204999 rounds down to 20%
    - e.g. 0.205000 rounds up to 21%

- **Any time any Sysplex hardware changes, for example when one or more of the machines is upgraded or downgraded in type or size, the Transition Charges price benefit must be re-calculated!**

Chart 14

Other z196 Software Licensing Rules

- z/OS MLC operating system and middleware
  - AWLC applies to z/OS

- z/TPF MLC operating system and middleware
  - AWLC applies to z/TPF (also PSLC is still allowed)

- z/OS IPLA middleware
  - Value Units (unchanged by AWLC announcement)

- z/VSE
  - MWLC (unchanged by AWLC announcement)

- z/VM
  - Engine based Value Units (unchanged by AWLC announcement)

- Passport Advantage Middleware for Linux on System z
  - 120 PVUs per z196 engine (unchanged by AWLC announcement)

- FWLC, zNALC, old NALC, and SALC all continue to work with AWLC the same way they worked with VWLC

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Chart 15

New AWLC Contract

- ICA Attachment for IBM System z Advanced Workload License Charges
  - AWLC Attachment number Z125-8538 / INTC-8538
  - With accompanying Exhibit Z125-8539 / INTC-8539

- **Required** for AWLC on z196 machines
  - Stand-alone
  - Aggregated Parallel Sysplex

- **Required** for VWLC on mixed z196 and non-z196 Parallel Sysplexes
  - Transition Charges for Sysplexes permits VWLC on a z196
  - Without the AWLC contract customer may not use VWLC on a z196
  - Customers may not keep VWLC and decide to give up the transition program in order to avoid signing the AWLC contract

- Not required for customers staying on PSLC
  - Without the AWLC contract only PSLC is available on a z196

- **Do not wait to ask your customer to sign the AWLC contract!!**

Chart 16

IBM

AWLC Contracts and Exhibits

- **ICA Attachment for IBM System z AWLC (Z125-8538 / INTC-8538) Definitions**

  – AWLC - Advanced Workload License Charges available for selected IBM Programs which are used on an Eligible Machine and are running under an Eligible Operating System. AWLC charges allow for Sub-Capacity Pricing.

  – Eligible Machine - A Machine to which an Eligible Operating System is licensed. Any copies of Eligible Operating Systems that run on an Eligible Machine must run in z/Architecture (64-bit) mode. Eligible Machines are specified on the IBM System z Advanced Workload License Charges Exhibit, INTC-8539-00 or later, ("Exhibit").

- **ICA IBM System z AWLC Exhibit (Z125-8539 / INTC-8539)**

  – Eligible Operating Systems
    - z/OS   5694-A01
    - z/TPF   5748-T15

  – Eligible Machines
    - For product information, see
      http://ibm.com/systems/z/swprice/reference/exhibits/hardware.html
    - (See Machines with an (A) in the WLC column.)

<div align="center">Continued on next chart…</div>

Chart 17

AWLC Contracts and Exhibits (continued)

- **IBM Eligible Machine Exhibit (ZSL03030-USEN-02)**

Vendor	Machine	WLC	PSLC	Full Capacity MSUs	Coupling Facility	Group	PR/SM	Other	zNALC	MWLC
IBM System z Software Pricing Information								Updated 6/21/2010		

IBM zEnterprise 196 (z196)

In this exhibit, Machine type 2817 is described with a model nomenclature of Nxx where N represents the capacity setting (4 is smallest, 7 is largest) and xx represents the number of general purpose central processors (CPs). For 2817, the hardware machine model (M15, M32, M49, M66, M80) is not an indicator of machine capacity.

Vendor	Machine	WLC	PSLC	Full Capacity MSUs	Coupling Facility	Group	PR/SM	Other	zNALC	MWLC
IBM	2817-700				CF			IPLA Only		
IBM	2817-401	(A)	PSLC = Yes	30	CF	Group 70	Standard		zN	M
IBM	2817-402	(A)	PSLC = Yes	58	CF	Group 80	Standard		zN	M
IBM	2817-403	(A)	PSLC = Yes	85	CF	IMLC/ELC	Standard		zN	M
IBM	2817-404	(A)	PSLC = Yes	110	CF	IMLC/ELC	Standard		zN	M
IBM	2817-405	(A)	PSLC = Yes	135	CF	IMLC/ELC	Standard		zN	M
IBM	2817-406	(A)	PSLC = Yes	160	CF	IMLC/ELC	Standard		zN	M
IBM	2817-407	(A)	PSLC = Yes	183	CF	IMLC/ELC	Standard		zN	M

- **Footnote for 2817 machines in the "WLC" column:**

  (A) The default price metric for a 2817 machine is AWLC. Customer may select WLC pricing for a 2817 machine only when the 2817 participates in a WLC Sysplex under AWLC Transition Charges for Sysplexes terms and conditions with at least one of the following machines (2094, 2096, 2097, or 2098), and all other AWLC and WLC conditions are met.

Chart 18

IBM

Workload Pricer (WLP)

Chart 19

Workload Pricer (WLP) V13.1 became available 1 July

- Use it to configure AWLC prices and Transition Charges for Sysplexes

- Price Files with the z196 hardware and AWLC prices became available on announcement day, 22 July 2010

- WLP will configure the appropriate pricing metric:
  - AWLC for standalone z196 or Sysplex with all z196 machines **+**
  - VWLC for Sysplex with a mix of HW technologies **+**

- For mixed Sysplex pricing the new "AWLC Transition Report" calculates the VWLC benefit for a plex containing z196 and other HW technologies
  - Calculates the percent z196 hardware and the benefit discount
  - Calculates the VWLC price and the TP price with the discount applied

- Workload Pricer is an internal tool not available for customer use!

+ PSLC also works as usual

Chart 20

Workload Pricer V13.1: New Hardware, New Pricing, New Report

- z196 machine Type is 2817

- AWLC pricing metric is new for z196

- New Transition Program Report

Chart 21

IBM

WLP Example 1

IBM - Workload Pricer
Price Report

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System

#	Machine Name	System Name	Machine No	Designated	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-707		879		Yes
2	IBM zEnterprise 196	System02	2817-709		1091		Yes
	Total MSUs				**1970**		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	Price Type 2
5635DB2	DB2 for z/OS	1788	120,770	WA	WA
5635DB2	QMF Enterprise	1788	53,869	WA	WA
5655A26	IODM V3.1		18,092	WF	WF
5655R36	WS MQ Base for z/OS	1777	64,174	WA	WA
5655S71	COBOL V4	1412	16,360	WA	WA
5655S97	CICS TS for z/OS	1783	143,464	WA	WA
5694A01	z/OS V1 Base	1814	184,287	WA	WA
5694A01	z/OS V1 DFSMS	1814	16,720	WA	WA
5694A01	z/OS V1 HCM		449	WF	
5694A01	z/OS V1 HLASM		117	WF	
5694A01	z/OS V1 RMF	1814	10,096	WA	WA
5694A01	z/OS V1 SDSF	1814	4,331	WA	WA
5694A01	z/OS V1 Security	1814	12,406	WA	WA
Total			**645,135**		

- **For a z196 box or an entirely z196 sysplex the AWLC price metric is available, indicated by "WA" in the Price Type field.**

- **FWLC ("WF") is also used when applicable for flat priced products**

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Chart 22

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IBM - Workload Pricer
AWLC Transition Report

WLP Example 2a

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System

#	Machine Name	System	Machine No	System Serial	Designated Machine	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-710			1191		Yes
2	IBM System z9 Enterprise Class	System02	2094-607			385		Yes
	Total MSUs					1576		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	Price Type 2	VWLC Price Benefit (76% 2817 MSUs)	Transition Program
5635DB2	DB2 for z/OS	1576	117,402	WV	WV	4%	112,705.92000
5635DB2	QMF Enterprise	1576	52,478	WV	WV	4%	50,378.88000
5655A26	IODM V3.1		18,092	WF	WF		18,092.00000
5655R36	WS MQ Base for z/OS	1576	62,009	WV	WV	4%	59,528.64000
5655S71	COBOL V4	1576	18,017	WV	WV	4%	17,296.32000
5655S97	CICS TS for z/OS	1576	140,516	WV	WV	4%	134,895.36000
5694A01	z/OS V1 Base	1576	182,485	WV	WV	4%	175,185.60000
5694A01	z/OS V1 DFSMS	1576	15,660	WV	WV	4%	15,033.60000
5694A01	z/OS V1 HCM		898	WF	WF		898.00000
5694A01	z/OS V1 HLASM		234	WF	WF		234.00000
5694A01	z/OS V1 RMF	1576	9,382	WV	WV	4%	9,006.72000
5694A01	z/OS V1 SDSF	1576	4,093	WV	WV	4%	3,929.28000
5694A01	z/OS V1 Security	1576	11,822	WV	WV	4%	11,349.12000
Total			633,088				608,533.44000

Tier	% 2817 MSUs	VWLC
1	>0% - 20%	0.50%
2	21% - 40%	1.50%
3	41% - 60%	3.00%
4	61% - 80%	4.00%
5	81% - <100%	4.50%

- **Box 1 is a z196 with 1191 MSUs, Box 2 is a z9 EC with 385 MSUs**

- **1191 / 1576 = 0.755710 which rounds up to 76% which earns 4.00% VWLC discount**

All prices are estimates in USD and subject to change

Chart 23

IBM

IBM - Workload Pricer
AWLC Transition Report

WLP Example 2b

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System

#	Machine Name	System	Machine No	System Serial	Designated Machine	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-710			1191		Yes
2	IBM System z9 Enterprise Class	System02	2094-607			385		Yes
	Total MSUs					**1576**		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	Price Type 2	VWLC Price Benefit (76% 2817 MSUs)	Transition Program
5635DB2	DB2 for z/OS	1576	117,402	WV	WV	4%	112,705.92000
5635DB2	QMF Enterprise	1576	52,478	WV	WV	4%	50,378.88000
5655A26	IODM V3.1		18,092	WF	WF		18,092.00000
5655R36	WS MQ Base for z/OS	1576	62,009	WV	WV	4%	59,528.64000
5655S71	COBOL V4	1576	18,017	WV	WV	4%	17,296.32000
5655S97	CICS TS for z/OS	1576	140,516	WV	WV	4%	134,895.36000
5694A01	z/OS V1 Base	1576	182,485	WV	WV	4%	175,185.60000
5694A01	z/OS V1 DFSMS	1576	15,660	WV	WV	4%	15,033.60000
5694A01	z/OS V1 HCM		898	WF	WF		898.00000
5694A01	z/OS V1 HLASM		234	WF	WF		234.00000
5694A01	z/OS V1 RMF	1576	9,382	WV	WV	4%	9,006.72000
5694A01	z/OS V1 SDSF	1576	4,093	WV	WV	4%	3,929.28000
5694A01	z/OS V1 Security	1576	11,822	WV	WV	4%	11,349.12000
Total			**633,088**				**608,533.44000**

Tier	% 2817 MSUs	VWLC
1	>0% - 20%	0.50%
2	21% - 40%	1.50%
3	41% - 60%	3.00%
4	61% - 80%	4.00%
5	81% - <100%	4.50%

Compare regular MLC to TP MLC

- **Box 1 is a z196 with 1191 MSUs, Box 2 is a z9 EC with 385 MSUs**

- **1191 / 1576 = 0.755710 which rounds up to 76% which earns 4.00% VWLC discount**

- **Only VWLC is affected by the TP, not FWLC or any other metric**

- **You must round off TP decimals per country rules**

All prices are estimates in USD and subject to change

Chart 24

IBM

WLP Example 3a

IBM - Workload Pricer
AWLC Transition Report

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System

#	Machine Name	System	Machine No	System Serial	Designated Machine	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-715			1648		Yes
2	IBM System z10 Enterprise	System02	2097-713			1076		Yes
	Total MSUs					**2724**		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	Price Type 2	VWLC Price Benefit (60% 2817 MSUs)	Transition Program
5635DB2	DB2 for z/OS	1319	103,781	WV	WV	3%	100,667.57000
5635DB2	QMF Enterprise	1319	46,310	WV	WV	3%	44,920.70000
5655A26	IODM V3.1		18,092	WF	WF		18,092.00000
5655R36	WS MQ Base for z/OS	1345	55,310	WV	WV	3%	53,650.70000
5655S71	COBOL V4	703	10,160	WV	WV	3%	9,855.20000
5655S97	CICS TS for z/OS	1356	126,436	WV	WV	3%	122,642.92000
5694A01	z/OS V1 Base	1485	178,299	WV	WV	3%	172,950.03000
5694A01	z/OS V1 DFSMS	1485	15,205	WV	WV	3%	14,748.85000
5694A01	z/OS V1 HCM		898	WF	WF		898.00000
5694A01	z/OS V1 HLASM		234	WF	WF		234.00000
5694A01	z/OS V1 RMF	1485	9,109	WV	WV	3%	8,835.73000
5694A01	z/OS V1 SDSF	1485	4,002	WV	WV	3%	3,881.94000
5694A01	z/OS V1 Security	1485	11,549	WV	WV	3%	11,202.53000
Total			**579,385**				**562,580.17000**

Tier	% 2817 MSUs	VWLC
1	>0% - 20%	0.50%
2	21% - 40%	1.50%
3	41% - 60%	3.00%
4	61% - 80%	4.00%
5	81% - <100%	4.50%

- **Box 1 is a z196 with 1648 MSUs, Box 2 is a z9 EC with 1076 MSUs**

- **1648 / 2724 = 0.604992 which rounds down to 60% which earns 3.00% VWLC discount**

All prices are estimates in USD and subject to change

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Chart 25

IBM - Workload Pricer
AWLC Transition Report

WLP Example 3b

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System

#	Machine Name	System	Machine No	System Serial	Designated Machine	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-715			1648		Yes
2	IBM System z10 Enterprise	System02	2097-713			1076		Yes
	Total MSUs					**2724**		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	Price Type 2	VWLC Price Benefit (60% 2817 MSUs)	Transition Program
5635DB2	DB2 for z/OS	1319	103,781	WV	WV	3%	100,667.57000
5635DB2	QMF Enterprise	1319	46,310	WV	WV	3%	44,920.70000
5655A26	IODM V3.1		18,092	WF	WF		18,092.00000
5655R36	WS MQ Base for z/OS	1345	55,310	WV	WV	3%	53,650.70000
5655S71	COBOL V4	703	10,160	WV	WV	3%	9,855.20000
5655S97	CICS TS for z/OS	1356	126,436	WV	WV	3%	122,642.92000
5694A01	z/OS V1 Base	1485	178,299	WV	WV	3%	172,950.03000
5694A01	z/OS V1 DFSMS	1485	15,205	WV	WV	3%	14,748.85000
5694A01	z/OS V1 HCM		898	WF	WF		898.00000
5694A01	z/OS V1 HLASM		234	WF	WF		234.00000
5694A01	z/OS V1 RMF	1485	9,109	WV	WV	3%	8,835.73000
5694A01	z/OS V1 SDSF	1485	4,002	WV	WV	3%	3,881.94000
5694A01	z/OS V1 Security	1485	11,549	WV	WV	3%	11,202.53000
Total			**579,385**				**562,580.17000**

Tier	% 2817 MSUs	VWLC
1	>0% - 20%	0.50%
2	21% - 40%	1.50%
3	41% - 60%	3.00%
4	61% - 80%	4.00%
5	81% - <100%	4.50%

- **Box 1 is a z196 with 1648 MSUs, Box 2 is a z9 EC with 1076 MSUs**

- **1648 / 2724 = 0.604992 which rounds down to 60% which earns 3.00% VWLC discount**

- **Notice that sub-cap MSUs for product pricing have no effect upon z196 percent calculation**

All prices are estimates in USD and subject to change

Chart 26

IBM

IBM - Workload Pricer
AWLC Transition Report

WLP Example 4a

This tool is for estimation only. These stated prices are for your information only and subject to change. Applicable taxes are not shown. Licensed Programs are available only under the IBM Customer Agreement, International Program License Agreement, or any equivalent agreement in effect between the customer and IBM.

System

#	Machine Name	System	Machine No	System Serial	Designated Machine	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-610			777		Yes
2	IBM System z10 Enterprise	System02	2097-739			2585		Yes
3	IBM System z9 Enterprise Class	System03	2094-608			428		Yes
	Total MSUs					**3790**		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	2	3	VWLC Price Benefit (21% 2817 MSUs)	Transition Program
5635DB2	DB2 for z/OS	3457	217,095	WV	WV	WV	1.50%	213,838.57500
5635DB2	QMF Enterprise	3457	97,622	WV	WV	WV	1.50%	96,157.67000
5655A26	IODM V3.1		27,138	WF	WF	WF		27,138.00000
5655R36	WS MQ Base for z/OS	3434	115,891	WV	WV	WV	1.50%	114,152.63500
5655S71	COBOL V4	3387	34,316	WV	WV	WV	1.50%	33,801.26000
5655S97	CICS TS for z/OS	3074	236,388	WV	WV	WV	1.50%	232,842.18000
5694A01	z/OS V1 Base	3607	261,050	WV:ZN	WV	WV	1.50%	257,203.80500
5694A01	z/OS V1 DFSMS	3607	24,053	WV:ZN	WV	WV	1.50%	23,698.05500
5694A01	z/OS V1 HCM		1,347	WF	WF	WF		1,347.00000
5694A01	z/OS V1 HLASM		351	WF	WF	WF		351.00000
5694A01	z/OS V1 RMF	3607	13,843	WV:ZN	WV	WV	1.50%	13,639.25500
5694A01	z/OS V1 SDSF	3607	6,124	WV:ZN	WV	WV	1.50%	6,034.09000
5694A01	z/OS V1 Security	3607	16,283	WV:ZN	WV	WV	1.50%	16,042.65500
Total			**1,051,501**					**1,036,246.18000**

Tier	% 2817 MSUs	VWLC
1	>0% - 20%	0.50%
2	21% - 40%	1.50%
3	41% - 60%	3.00%
4	61% - 80%	4.00%
5	81% - <100%	4.50%

- **Box 1 is a z196 with 777 MSUs, Box 2 is a z10 EC with 2585 MSUs, Box 3 is a z9 EC with 428 MSUs**

- **777 / 3790 = 0.205013 which rounds up to 21% which earns 1.50% VWLC discount**

All prices are estimates in USD and subject to change

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Chart 27

IBM

IBM - Workload Pricer
AWLC Transition Report

WLP Example 4b

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System

#	Machine Name	System	Machine No	System Serial	Designated Machine	MSUs	Group	WLC
1	IBM zEnterprise 196	System01	2817-610			777		Yes
2	IBM System z10 Enterprise	System02	2097-739			2585		Yes
3	IBM System z9 Enterprise Class	System03	2094-608			428		Yes
	Total MSUs					3790		

Software

Product ID	Entitlement Description	MSUs	Monthly	Price Type 1	2	3	VWLC Price Benefit (21% 2817 MSUs)	Transition Program
5635DB2	DB2 for z/OS	3457	217,095	WV	WV	WV	1.50%	213,838.57500
5635DB2	QMF Enterprise	3457	97,622	WV	WV	WV	1.50%	96,157.67000
5655A26	IODM V3.1		27,138	WF	WF	WF		27,138.00000
5655R36	WS MQ Base for z/OS	3434	115,891	WV	WV	WV	1.50%	114,152.63500
5655S71	COBOL V4	3387	34,316	WV	WV	WV	1.50%	33,801.26000
5655S97	CICS TS for z/OS	3074	236,388	WV	WV	WV	1.50%	232,842.18000
5694A01	z/OS V1 Base	3607	261,050	WV:ZN	WV	WV	1.50%	257,203.80500
5694A01	z/OS V1 DFSMS	3607	24,053	WV:ZN	WV	WV	1.50%	23,698.05500
5694A01	z/OS V1 HCM		1,347	WF	WF	WF		1,347.00000
5694A01	z/OS V1 HLASM		351	WF	WF	WF		351.00000
5694A01	z/OS V1 RMF	3607	13,843	WV:ZN	WV	WV	1.50%	13,639.25500
5694A01	z/OS V1 SDSF	3607	6,124	WV:ZN	WV	WV	1.50%	6,034.09000
5694A01	z/OS V1 Security	3607	16,283	WV:ZN	WV	WV	1.50%	16,042.65500
Total			**1,051,501**					**1,036,246.18000**

Tier	% 2817 MSUs	VWLC
1	>0% - 20%	0.50%
2	21% - 40%	1.50%
3	41% - 60%	3.00%
4	61% - 80%	4.00%
5	81% - <100%	4.50%

261,050 – 1.5% = 257,134.25000
but TP sum = 257,203.80500
which is higher by 69.555
because zNALC portion did not
receive any discount

- **Box 1 is a z196 with 777 MSUs, Box 2 is a z10 EC with 2585 MSUs, Box 3 is a z9 EC with 428 MSUs**

- **777 / 3790 = 0.205013 which rounds up to 21% which earns 1.50% VWLC discount**

- **zNALC doesn't get TP discount; must note that TP report shows sum of discounted VWLC and regular zNALC**

All prices are estimates in USD and subject to change

Chart 28

IBM

CFSWeb Configurator

Chart 29

CFSWeb will pass the TP discount level to ESW/CBS

- When CFSW sees a mixed machine type sysplex:
  - Calculates the percentage of z196 hardware in the sysplex
  - Determines the VWLC discount tier:

% of z196 MSUs in Sysplex	Monthly Discount applied to VWLC $	Transition Process Option Tier
> 0 - 20%	0.50%	0005
21 - 40%	1.50%	0015
41 - 60%	3.00%	0030
61 - 80%	4.00%	0040
81 - < 100%	4.50%	0045

  - Sets a Process Option variable corresponding to that discount tier and passes it to ESW for each of the VWLC programs in the order

```
5695-068       Airline Control System
        Add   TRANSITION PROCESS OPTION Airline Control System   0005

        Entitlement entity selection:
S000BKC  Airline Control System V2
        Add   Charge option                    Monthly Charge         320,627.00
        Add   MSU                              1151
        Add   License type                     Basic
        Add   Pricing Model                    Var. Workload License Charge
```

  - ESW will convert that Process Option variable into the VWLC discount percent and apply it to the VWLC price

Chart 30

IBM

The End