Advanced Entry Workload License Charges (AEWLC)

Advanced Entry Workload License Charges (AEWLC) is a monthly license pricing metric designed to support today's on demand business requirements. AEWLC may be applied to stand-alone IBM z14 Model ZR1 (z14 ZR1), z13s (z13s), IBM zEnterprise BC12 (zBC12), and IBM zEnterprise 114 (z114) servers running z/OS, z/TPF, or z/VSE in z/Architecture (64-bit) mode. AEWLC enables customers to:

- Grow hardware capacity without necessarily increasing your software charges
- Pay for key software, such as z/OS, z/TPF, z/VSE, DB2, CICS, and WebSphere MQ with LPAR-level granularity
- Experience a low cost of incremental growth
- Manage software cost by managing workload utilization

AEWLC and TWLC on z14 ZR1, z13s, zBC12, and z114 Stand-alone Servers
z14 ZR1, z13s, zBC12, and z114 stand-alone customers will have AEWLC pricing. All sub-capacity eligible products will be priced using the AEWLC pricing metric. The remaining, non-sub-capacity eligible products will be priced using the Tiered EWLC (TWLC) price structure. The TWLC price structure, for non-subcapacity products, offers flat pricing based on server capacity using a tiered structure. The TWLC price structure is exclusive to the z14 ZR1, z13s, zBC12, z114, z10 BC, z9 BC and z890 servers. Note: the entry models of these servers, capacity settings A01 or 110, are priced using zELC.

Z14 ZR1, z13s, zBC12, or z114 Servers in a Qualified Parallel Sysplex
Customers operating a Z14 ZR1, z13s, zBC12, or z114 in a qualified Parallel Sysplex may elect to have their server priced as a stand-alone machine (AEWLC and TWLC) or may elect aggregated PSLC or aggregated AWLC pricing, subject to applicable terms and conditions. If the customer selects aggregated pricing then AEWLC and TWLC price structures do not apply. While AEWLC is MSU-based, aggregation of MSUs is not permitted if AEWLC is selected.

Advanced Entry Workload License Charges Structure
(cumulative monthly pricing)

Level	MSU Range
Base AEWLC	3 MSUs
Level 1	4 - 17 MSUs
Level 2	18 - 30 MSUs
Level 3	31 - 45 MSUs
Level 4	46 - 87 MSUs
Level 5	88 - 175 MSUs
Level 6	176 - 260 MSUs
Level 7	261 - 315 MSUs
Level 8	316+ MSUs

Customers may choose to implement AEWLC in one of two ways:
- Full-Capacity AEWLC - charges are based on the full server capacity where each AEWLC product executes

- Sub-Capacity AEWLC - charges are based on the utilization of the LPAR or LPARs where an AEWLC product executes
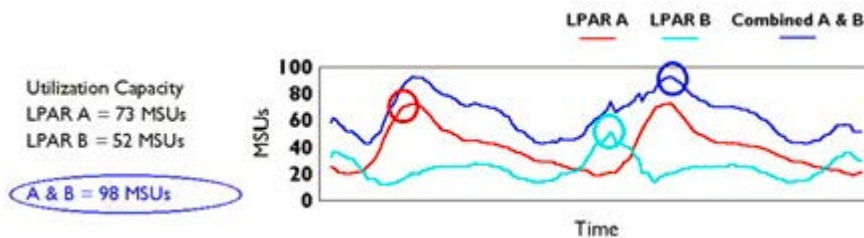
Tiered Entry Workload License Charges (TWLC) Structure
(flat monthly pricing based upon full capacity MSUs of the server)

Tier	MSU Range
Tier A	1 - 11 MSUs
Tier B	12 - 15 MSUs
Tier C	16 - 40 MSUs
Tier D	41 - 75 MSUs
Tier E	76 - 1500 MSUs
Tier F	1500+ MSUs

Mechanics of Sub-Capacity AEWLC

The graph below shows a server rated at 100 MSUs with Sub-Capacity AEWLC. The machine is configured with two LPARs, LPAR A and LPAR B. The customer sees a highest observed rolling 4-hour average for LPAR A at 73 MSUs. Accordingly, software running only in LPAR A would be charged at 73 MSUs. Likewise, LPAR B has a highest observed rolling 4-hour average of 52 MSUs. Accordingly, software running only in LPAR B would be charged at 52 MSUs. They have not set a defined capacity or any LPAR cap for either LPAR A or LPAR B.
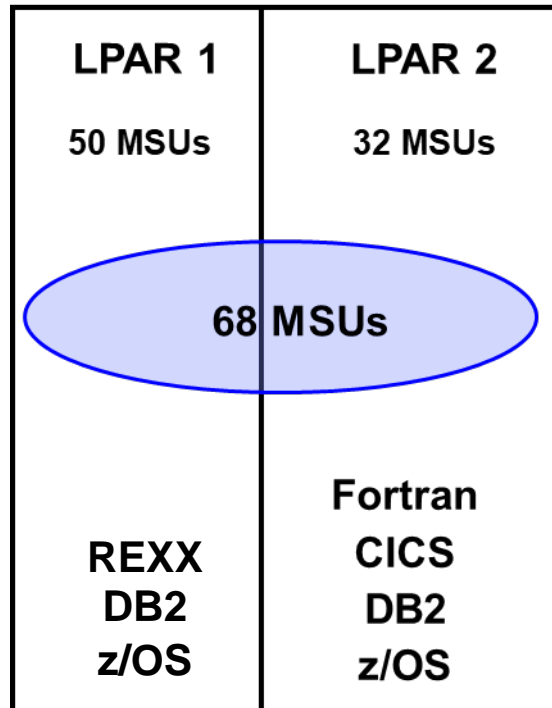

Software running in both LPARs, such as z/OS, would require the customer to examine the rolling 4-hour average utilization of the combined LPAR A & LPAR B, also shown on the graph. The combined LPAR utilization has a highest observed rolling 4-hour average of 98 MSUs and software running in both LPARs would be charged at 98 MSUs.

AEWLC and TWLC on z14 ZR1 Example

This example shows a two LPAR z14 ZR1 machine, capacity setting K02 with a rated capacity of 71 MSUs. The highest rolling 4-hour average for LPAR1 is shown as 50 MSUs, the highest rolling 4-hour average for LPAR2 is shown as 32 MSUs and the highest rolling combined 4-hour average for LPAR1 and LPAR2 is 68 MSUs. Also, the software shown in each LPAR is indicated in the diagram, below:

3907-K02 @ 71 MSUs

LPAR 1	LPAR 2
50 MSUs	32 MSUs
68 MSUs	
	Fortran
REXX	CICS
DB2	DB2
z/OS	z/OS

This example assumes that the customer has met all of the AEWLC Sub-Capacity terms and conditions. Therefore, the following are the pricing options available for this machine:

Product	Full-Capacity Charges	Sub-Capacity Charges
CICS	AEWLC 71 MSUs	AEWLC 32 MSUs
DB2	AEWLC 71 MSUs	AEWLC 68 MSUs
Fortran	TWLC Tier D	TWLC Tier D
REXX	TWLC Tier D	TWLC Tier D
z/OS	AEWLC 71 MSUs	AEWLC 68 MSUs

AEWLC Technology Transition Offerings

Two AEWLC Technology Transition Offerings are available for eligible Operating Systems Families (consisting of an operating system and its associated middleware programs) when running in a qualifying stand-alone z Systems hardware environment. Eligibility is determined separately for each Operating System Family environment.

- **Technology Update Pricing for the z14 ZR1 (TU6)** extends the software price/performance of the AEWLC pricing metric for customers running on a stand-alone z14 ZR1 server.
- **Technology Update Pricing for the z13s (TU4)** extends the software price/performance of the AEWLC pricing metric for customers running on a stand-alone z13s server.
- **Technology Update Pricing for AEWLC (TU2)** extends the software price/performance of the AEWLC pricing metric for customers running on a stand-alone zBC12 server.

The number of MSUs of a stand-alone server are based on the announced IBM full capacity ratings that can be found on the [Mainframe Exhibits section of the z Systems Software Contracts website.](#)

All MSUs used in determining any Technology Transition Offering reduction exclude capacity related to specialty engines, unassigned capacity, Solution Edition capacity, and temporary capacity such as, but not limited to, "Capacity Back Up", "Capacity for Planned Events", and "On/Off CoD".

Technology Update Pricing for the z14 ZR1 (TU6)

When stand-alone z14 ZR1 servers are priced with AEWLC, these servers receive a reduction to AEWLC pricing which is called Technology Update Pricing for the z14 ZR1.

Schedule of AEWLC reductions for Technology Update Pricing for the z14 ZR1:

Number of z14 ZR1 Full Capacity MSUs	Reduction in Monthly AEWLC
1 - 11 MSUs	18.0%
12 - 17 MSUs	18.0%
18 - 30 MSUs	18.0%
31 - 45 MSUs	15.0%
46 - 87 MSUs	14.0%
88 - 175 MSUs	14.0%
176 - 260 MSUs	13.0%
261 - 315 MSUs	13.0%
316 - 390 MSUs	13.0%
391 - more MSUs	13.0%

Example: A customer has a stand-alone z14 ZR1 machine (not in an actively coupled Parallel Sysplex). Machine is a z14 ZR1 model B03 server with 33 MSUs, so it receives a 15.0% reduction in AEWLC billing.

Technology Update Pricing for the z13s (TU4)

When stand-alone z13s servers are priced with AEWLC, these servers receive a reduction to AEWLC pricing which is called Technology Update Pricing for the z13s.

Schedule of AEWLC reductions for Technology Update Pricing for the z13s:

Number of z13s Full Capacity MSUs	Reduction in Monthly AEWLC
1 - 10 MSUs	13.0%
11 - 17 MSUs	13.0%
18 - 30 MSUs	13.0%
31 - 45 MSUs	10.0%
46 - 87 MSUs	9.0%
88 - 175 MSUs	9.0%
176 - 260 MSUs	9.0%
261 - 315 MSUs	9.0%

Number of z13s Full Capacity MSUs	Reduction in Monthly AEWLC
316 - 390 MSUs	9.0%
391 - more MSUs	9.0%

Example: A customer has a stand-alone z13s machine (not in an actively coupled Parallel Sysplex). Machine is a z13s model C03 server with 33 MSUs, so it receives a 10.0% reduction in AEWLC billing.

Technology Update Pricing for AEWLC (TU2)

When stand-alone zBC12 servers are priced with AEWLC, these servers receive a reduction to AEWLC pricing which is called Technology Update Pricing for AEWLC.

Schedule of AEWLC reductions for Technology Update Pricing for AEWLC:

Number of zBC12 Full Capacity MSUs	Reduction in Monthly AEWLC
1 - 7 MSUs	5.0%
8 - 17 MSUs	5.0%
18 - 30 MSUs	5.0%
31 - 45 MSUs	5.0%
46 - 87 MSUs	4.0%
88 - 175 MSUs	4.0%
176 - 260 MSUs	4.0%
261 - 315 MSUs	4.0%
316 - 390 MSUs	4.0%
391 - more MSUs	4.0%

Example: A customer has a stand-alone zBC12 machine (not in an actively coupled Parallel Sysplex). Machine is a zBC12 model H03 server with 42 MSUs, so it receives a 5.0% reduction in AEWLC billing.

AEWLC News

On 10 April 2018 IBM announced one new and three updated Technology Transition Offering in support of the announcement of the IBM z14 ZR1 server. Technology Update Pricing for the z14 ZR1 provides additional price performance on z14 ZR1 servers compared to AEWLC on older generations of servers. The enhancements to Transition Charges for Sysplexes provide additional price performance to include a z14 ZR1 server but which is not yet made up entirely of z14 (all models) servers. The enhancements to Transition Charges for Sysplexes provide additional price performance to AWLC pricing for an actively coupled z/OS Parallel Sysplex or z/TPF Loosely Coupled Complex which includes a z14 ZR1 server but which is not yet made up entirely of z14 (all models) servers.

On 16 February 2016 IBM announced one new and two updated Technology Transition Offerings in support of the announcement of the IBM z13s (z13s) server. Technology Update Pricing for the z13s provides additional price performance on z13s servers compared to AEWLC on older generations of

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servers. The enhancements to Transition Charges for Sysplexes provide additional price performance to AWLC pricing for an actively coupled z/OS Parallel Sysplex or z/TPF Loosely Coupled Complex which includes a z13s server but which is not yet made up entirely of z13 or z13s servers.

On 23 July 2013 IBM announced a new Technology Transition Offering (TTO) called Technology Update Pricing for Advanced Entry Workload License Charges (AEWLC), as well as revisions to the Technology Update Pricing for Advanced Workload License Charges (AWLC) offering and revisions to the two Transition Charges for Sysplexes offerings, all in support of the announcement of the IBM zEnterprise BC12 (zBC12) server. Technology Update Pricing for AEWLC provides additional price performance on zBC12 servers compared to AEWLC on the z114 server. The other Technology Transition Offerings now include the zBC12 server. More information on AWLC Transition Charges for Sysplexes is available on the web.

On 12 July 2011 IBM announced a new pricing metric called 'z Systems Advanced Entry Workload License Charges (AEWLC)' for z/OS, z/TPF, and z/VSE in support of the announcement of the IBM zEnterprise 114 (z114) server. AEWLC is a Sub-Capacity eligible pricing metric which provides additional price performance on a z114 server compared to Entry Workload License Charges (EWLC) on older generations of servers. More information on AEWLC is available on the web.