Country Multiplex Pricing (CMP)

CMP is a sub-capacity offering that allows z/OS and z/TPF clients to use their z Systems capacity within a given country without the constraints of sysplex aggregation rules and many of the limitations of previous reporting methodologies. This is a new way of measuring and pricing sub-capacity program MSUs that allows for more flexible deployment and movement of workloads across all machines within a country.

A Multiplex is the collection of all eligible IBM z Systems machines or sysplexes or both within a single country, measured as one machine for purposes of software sub-capacity reporting. Sub-Capacity Reporting Tool (SCRT) V23 R10 or later will be able to generate a Multiplex report providing sub-capacity program utilization peaks across all machines in the Multiplex simultaneously, as opposed to separate peaks by machine, which is how SCRT works in a non-Multiplex environment.

CMP also simplifies the process for software migrations with a shift from Single Version Charging (SVC) and limited migration windows, to Multiplex Version Measurement (MVM) reporting where there are no time constraints. In addition, the cost of growth per-MSU for a given sub-capacity program is based on the total reported Multiplex MSUs, which means any given sub-capacity program has a single price point for growth in the country regardless of where the workload runs.

Shifting to CMP brings flexibility, simplicity, and growth going forward. Selecting this offering transitions a client's existing software pricing structure to the new model, which includes the establishment of an MLC and MSU baseline for each program. Pricing for all sub-capacity eligible programs will be implemented with the new CMLC price metric, or with the new MzNALC price metric for zNALC customers migrating to CMP.

Prerequisites and Restrictions

A Multiplex will consist of all eligible machines owned or leased by an Enterprise within a country. An Enterprise is any legal entity and the subsidiaries it owns by more than 50%. For clients not acting as service providers, all machines with an eligible operating system within an Enterprise in a given country (including all Capacity Back Up (CBU) machines available to be used by these machines) must be included in the Multiplex when a client first implements this offering. Clients may have only one Multiplex per country and a Multiplex may not span country borders.

Machines eligible to be included in a new Multiplex cannot be older than two generations prior to the most recently available server at the time a client first implements a Multiplex. The most recently available server generation at any point in time is considered generation N, and the prior two generations are N-1 and N-2 respectively.

Currently the machine generations are:

Full Machine Name	Short Name	Machine Type	CMP Machine Generations as of 17 July 2017	CMP Machine Generations as of 13 September 2017
IBM z14	z14	3906	(not available)	N
IBM z13	z13	2964	N	N-1
IBM z13s	z13s	2965	N	N-1
IBM zEnterprise EC12	zEC12	2827	N-1	N-2
IBM zEnterprise BC12	zBC12	2828	N-1	N-2
IBM zEnterprise 196	z196	2817	N-2	N-3
IBM zEnterprise 114	z114	2818	N-2	N-3

Clients are not eligible to implement a Multiplex until all machines with eligible operating systems (along with any associated CBU machines) that are older than generation N-2 are upgraded, or that workload is transferred to eligible machines, or the older ineligible machines are converted to no longer run z/OS nor z/TPF software. Once a client establishes a Multiplex they may keep the machines originally included in their Multiplex indefinitely. Going forward, any machine to be added to an existing Multiplex must conform to the machine types that satisfy the generation N, N-1, and N-2 criteria at the time that machine is added.

The following types of servers will not be included in a Multiplex and will continue to be licensed, reported, and billed according to their applicable non-CMP terms:
- Cold Disaster Recovery (DR) machines that are not running any billable software
- Dedicated Solution Edition machines
- Developer Discount machines
- Machines running only z/VSE, z/VM, or Linux

Multiplex Version Measurement (MVM)

Under CMP terms Multiplex Version Measurement (MVM) replaces Single Version Charging (SVC). All Multiplexes that run multiple versions of a given sub-capacity-eligible program will now be measured and priced according to MVM terms. For clients running multiple versions of a given sub-capacity program, such as DB2 for z/OS, all MSUs for multiple versions within a given Program Family of Program IDs (PIDs) will be reported on a concurrent basis, similar to how SCRT reports multiple versions of z/OS since z/OS V2 became available. SCRT will calculate the Rolling 4-Hour Average for the concurrent peak (indicated by "(All)" in the report) by adding up the LPAR values where any version of the product is running. There are no time limits for version migration under CMP, so SVC terms do not apply under CMP. For billing purposes, all MSUs within a given family will be reported on a concurrent peak basis and priced at the cost of the latest version of the program within the family. Clients will essentially be paying for all instances of any version of a program, reported as if it was a single version.

IPLA program terms under CMP

Migration of IPLA program versions
- The previously announced IPLA Version Migration Grace Period time limit of six months (described at the bottom of the IPLA page) has been eliminated under CMP. Clients may run multiple program versions concurrently without additional charge so long as such aggregate use

does not exceed that program's license entitlement. In addition, CMP clients will not be subject to the base IPLA contract terms that terminate the right to use the older version of a program when a more recent version is acquired with an upgrade or trade-up.

IPLA Execution-based programs

- For IPLA Execution-based programs, the peak MSUs used for billing purposes will be the Multiplex MSU peak reported by SCRT for that program. For clients running multiple versions of a program in a [Program Family](#), SCRT will report an "(All)" line that shows the concurrent peak for all versions of the program running in the Multiplex. This single concurrent peak will be the MSU value used for collectively billing all versions running in the Multiplex, and will be priced using the price points of the most recent version installed.

IPLA z/OS-based programs

- IPLA z/OS-based programs will continue to use the z/OS MSUs reported for the machines where they are running. The Multiplex report will show the contribution of each machine's MSUs to the overall Multiplex peak, and IBM will use the sum of those individual machine values as the MSUs for billing IPLA z/OS-based programs. In the case where SCRT reports both z/OS traditional and z/OS zNALC values for a given Multiplex, the sum of the traditional and zNALC MSUs will be the value used when calculating total MSUs for billing a z/OS-based program on a given machine or group of machines.

IPLA Reference-based programs

- For IPLA Reference-based programs, which are priced according to the reported MSUs for a given parent program, the billing MSUs will have an Environment scope based upon an Establishment, as opposed to the previously used Environment scope of either a sysplex or a stand-alone server. An Establishment is defined as a single physical site, including the surrounding campus and satellite offices located within 50 kilometers of a client's site address. MSUs used for billing the IPLA program will be the sum of the MSUs reported by SCRT for the parent program (combined concurrent peak) for all machines that run in the same Establishment as the IPLA program. Note: The machine values will represent the contribution of each machine's MSUs to the overall Multiplex peak, as reported by SCRT, and not the individual machines' peaks.

Full-capacity IPLA

- Sub-capacity IPLA terms are not required under CMP. Clients who have not adopted IPLA sub-capacity may continue to maintain their existing full-capacity program entitlements.

Links to additional CMP information

- The [CMP Announcement Letter](#) and the [CMP Frequently Asked Questions (FAQ) document (PDF, 2.63MB)](#) each contain additional detailed information about CMP eligibility and the process under which clients can establish their MLC and MSU baselines and convert to CMP billing.
- The [SCRT Users Guide (PDF, 4.8MB)](#) has a detailed explanation of the changes made to the tool enabling the creation of a Multiplex Report for CMP.
- The Sub-Capacity Reporting Tool (SCRT) itself can be [downloaded](#) from the web.
- The IBM Mainframe Exhibit available from the [IBM z Systems Software Contracts Mainframe Exhibit web page](#) includes a designation of which servers are currently eligible for CMP and which servers were previously eligible for CMP.

- The IBM Z Software Pricing Reference Guide available from the [IBM z Systems Software Pricing Library web page](#) includes the list of all the IBM Z servers including their eligibility for CMP.

CMP News

On 17 July 2017 IBM [announced](#) the IBM z14 (z14) server. The z14 is the first new generation of IBM Z hardware since the introduction of Country Multiplex Pricing (CMP). See the "Machines eligible to participate in Country Multiplex Pricing" section of the announcement letter for more information about the changes to the machines which are currently eligible and the machines which will become previously eligible when the z14 becomes generally available.

On 28 July 2015 IBM [announced](#) Country Multiplex Pricing (CMP) for z/OS and z/TPF. CMP is a sub-capacity offering that allows clients to use their z Systems capacity within a given country with the objective of creating a flexible, country-wide z Systems platform. Clients can configure and balance workloads more easily without the constraints of sysplex aggregation rules and many of the limitations of previous reporting methodologies. A Multiplex is the collection of all eligible IBM z Systems machines or sysplexes or both within a single country, measured as one machine for purposes of software sub-capacity reporting.