

IBM Z & LinuxONE



IBM LinuxONE™ III



IBM z15™

April 14, 2020

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Branding Notice

Effective December 2017, start using Linux® on IBM Z® (Linux on Z) and Linux for IBM Z (Linux for Z).

Effective September 12, 2019, new IBM LinuxONE™ systems will be designated IBM LinuxONE III, where the III refers to the fact that these are the third generation. The terms Rockhopper and Emperor will not be used IBM LinuxONE systems announced on or after September 12, 2019.

Naming and Usage Guidelines

The following guidelines are designed to illustrate how and when to correctly use and incorporate the IBM Z “family” and “product” level naming conventions and terminology usage.

The IBM Z family name has replaced IBM z Systems® and will now represent the mainframe portfolio as a whole including prior hardware products from S/360™ through the new IBM z15™ and any future systems.



IBM Z Product Naming Summary Overview

IBM z15 (z15):

| | |
|---|---|
| Brand Name: | IBM |
| Product Class: | IBM mainframe |
| Family Name: | IBM Z® |
| Family Short Name: | Z |
| Product Line Name: | IBM Z |
| Product Line Short Name: | Z |
| Product Names (Short Names): | IBM z15™ (z15) |
| Model and Processor Capacity Features: | T01 and Max34, Max71, Max108, Max145, Max190 T02 |
| Machine Type: | 8561 |

IBM z14 (z14):

| | |
|-------------------------------------|---|
| Brand Name: | IBM |
| Product Class: | IBM mainframe |
| Family Name: | IBM Z® |
| Family Short Name: | Z |
| Product Line Name: | IBM Z |
| Product Line Short Name: | Z |
| Product Names (Short Names): | IBM z14® (z14) |
| Models: | ZR1, M01, M02, M03, M04, M05 |
| Machine Type: | 3907 (Model ZR1), 3906 (Models M01, M02, M03, M04, M05) |

IBM z13s (z13s):

| | |
|-------------------------------------|------------------|
| Brand Name: | IBM |
| Product Class: | IBM mainframe |
| Family Name: | IBM Z® |
| Family Short Name: | Z |
| Product Line Name: | IBM Z |
| Product Line Short Name: | Z |
| Product Names (Short Names): | IBM z13s® (z13s) |
| Models: | N10, N20 |
| Machine Type: | 2965 |

IBM z13 (z13):

| | |
|-------------------------------------|-------------------------|
| Brand Name: | IBM |
| Product Class: | IBM mainframe |
| Family Name: | IBM Z® |
| Family Short Name: | Z |
| Product Line Name: | IBM Z |
| Product Line Short Name: | Z |
| Product Names (Short Names): | IBM z13® (z13) |
| Models: | N30, N63, N96, NC9, NE1 |
| Machine Type: | 2964 |

IBM LinuxONE Naming Overview

IBM LinuxONE III:

| | |
|---------------------------|---|
| Brand Name: | IBM |
| Family Name: | IBM LinuxONE™ |
| Family Short Name: | LinuxONE |
| Model: | IBM LinuxONE III |
| Model Short Name: | LinuxONE III |
| Machine Type: | 8561 (based on IBM z15) |
| Models: | LT1 and Max34, Max71, Max108, Max145, Max190 LT2 |

IBM LinuxONE Emperor II:

| | |
|---------------------------|--------------------------|
| Brand Name: | IBM |
| Family Name: | IBM LinuxONE™ |
| Family Short Name: | LinuxONE |
| Model: | IBM LinuxONE Emperor™ II |
| Model Short Name: | Emperor II |
| Machine Type: | 3906 (based on IBM z14) |
| Models: | LM1, LM2, LM3, LM4, LM5 |

IBM LinuxONE Rockhopper II:

| | |
|---------------------------|-----------------------------------|
| Brand Name: | IBM |
| Family Name: | IBM LinuxONE™ |
| Family Short Name: | LinuxONE |
| Model: | IBM LinuxONE Rockhopper™ II |
| Model Short Name: | Rockhopper II |
| Machine Type: | 3907 (based on IBM z14 Model ZR1) |
| Models: | LR1 |

IBM LinuxONE Emperor:

| | |
|---------------------------|-------------------------|
| Brand Name: | IBM |
| Family Name: | IBM LinuxONE™ |
| Family Short Name: | LinuxONE |
| Model: | IBM LinuxONE Emperor™ |
| Model Short Name: | Emperor |
| Machine Type: | 2964 (based on IBM z13) |
| Models: | L30, L63, L96, LC9, LE1 |

IBM LinuxONE Rockhopper:

| | |
|---------------------------|---|
| Brand Name: | IBM |
| Family Name: | IBM LinuxONE™ |
| Family Short Name: | LinuxONE |
| Model: | IBM LinuxONE Rockhopper™ |
| Model Short Name: | Rockhopper |
| Machine Type: | 2828 (based on IBM zEnterprise BC12), 2965 (based on IBM z13s*) |
| Models: | 2828: H06, H13 2965: L10, L20 |

Basic Usage Guidelines for New Naming:

1. Trademark registration is in process for IBM z15. Please use a (™) until further notice.
2. IBM Z is a registered and protected trademark of IBM and must appear with a (®) on first usage and listed in the trademark attribution list
3. IBM z Systems is a registered and protected trademark of IBM and must appear with a (®) on first usage and listed in the trademark attribution list
4. IBM System z is a registered and protected trademark of IBM and must appear with a (®) on first usage and listed in the trademark attribution list.
5. IBM zEnterprise is a registered trademark of IBM and must appear with a (®) on first usage and listed in the trademark attribution list.
6. IBM BladeCenter is a registered trademark of IBM and must appear with a (®) on first usage and listed in the trademark attribution list.
7. IBM System z10 is a registered trademark of IBM and must appear with a (®) on first usage and listed in the trademark attribution list.
8. If a trademarked term appears in a title or graphic up first usage, the trademark attribution can wait until its first appearance in regular text.
9. There is no official logo, font, or typeface requirement, however, you may not capitalize ANY letters except "IBM," the "S" in "System," the "E" in "zEnterprise", the "E", "B" and "C" in "Enterprise Class" and "Business Class", the "B", "C" and "E" in "BladeCenter Extension" and the E, U, R and M in Z Unified Resource Manager. Therefore, do not use "SYSTEM z, zENTERPRISE, SYSTEM Z, System Z10, or Z10 ENTERPRISE CLASS" etc. IBM Z must always be all capitalized.
10. Utilize the new family umbrella name "IBM Z" when referring to multiple product lines or the IBM mainframe class of products in general; unless a reference to a specific product line, model or its features is required. When referring to a singular or several systems, but not by its product name, you may use "IBM Z". After the first use of the full name, it is not necessary to precede "IBM Z" with "IBM." Utilize family name "IBM Z" whenever possible when referring to the latest generation of mainframe products.

New IBM z15 and LinuxONE Naming considerations

The 19” frames on the IBM z15 and IBM LinuxONE III are available with two power and cooling options. The first is the Intelligent Power Distribution Unit (iPDU). Use of iPDU on the IBM z15 may enable fewer frames. As such, there may be a traditional “high end” z15 or LinuxONE with only one frame. The proper usage of the terms multi frame for our “high end” IBM Z offerings and single frame for our traditional “midrange” offerings is the appropriate approach to differentiate systems with different processor clock speeds or capacity scalability. A single frame “high end” z15 can easily scale (be upgraded) to a multi frame system and that is how this can be rationalized.

The terms “entry model”, “midmarket” or “midrange” system or server should not be used. Many large enterprises in IBM’s defined Industry Sector segment use IBM single frame IBM z13, z14 or z15 in their computing environments. Furthermore, smaller organizations do not view themselves as midmarket or midrange and consider the terms “entry”, “Midrange” or “Midmarket” as applied to servers as offensive or limited. The directive to not use these terms in marketing materials, sales enablement collateral, technical materials or any customer communications is based on customer data and market research and not opinion.

You can see this use today in the mainframe comparison tool – www.ibm.com/it-infrastructure/us-en/tools/z-systems-product-comparison/.

When you are titling a slide, labelling a picture/graphic, creating a table, etc. you MUST use the correct product names. In text, after clearly establishing the different models, you have some flexibility. For example – both of the following are acceptable:

- IBM z14 Model ZR1 is only available with air cooling whereas the z15 Model T01 has both air and water cooling options

For consistency across all documents, ensure you use the terms high end and entry models when it is appropriate. For example:

The IBM z14 Model ZR1 entry model extends the IBM z14 family to enterprises of all sizes. The product name is IBM z14. However, due to obvious differences between it and the previously announced models, the Model ZR1 designation must be added when you are referring to anything that is different between the two. Do not use any of the following names:

1. IBM ZR1
2. IBM Z R1
3. IBM z14 zR1
4. IBM z14 Single Frame
5. IBM z14 II
6. IBM z14 19”
7. IBM z14s
8. IBM z14 BC

The IBM LinuxONE Rockhopper II has a unique name differentiating it from the Emperor II and previous generation Rockhopper. Therefore, it is not required to call it IBM LinuxONE Rockhopper II Model LR1.

The IBM LinuxONE announced on September 12, 2019 is named LinuxONE III and will no longer use the Emperor or Rockhopper model names.

Do not use any of the following names:

1. Rockhopper LR1
2. Rockhopper II LR1
3. IBM z14 Rockhopper II
4. LinuxONE single frame
5. L1 Rockhopper II
6. Rockhopper 19”

New Naming Usage Examples

The IBM z15 is the industry's most robust, resilient, securable and technologically advanced computing platform (3,000 patents) for hybrid cloud. Co-developed with 342 customers from 102 organizations, the IBM z15 is designed for running mission critical business in the cloud through modernizing your application investments and building new cloud native services with the most open, scalable and modern capabilities available.

The z15 introduces a new 19" standardized frame that can flexibly scale from one to four frames, enhancements to pervasive encryption, the ability to protect data beyond the IBM Z with Data Privacy Passports, cloud data efficiency through the Integrated Accelerator for zEnterprise Data Compression, increased availability through Instant Recovery and increased performance and scalability.

The IBM z15 delivers the cloud that customers want, with the privacy and security that they need.

When describing or differentiating the models within the IBM z15 and LinuxONE III families, please use this language: The IBM z15 T01 is our multi frame water cooled offering and the T02 model is our single frame air cooled offering. Likewise, the LT1 is the LinuxONE multi frame water cooled offering and the LT2 model is the single frame air cooled offering.

PLEASE do not use these terms:

1. The family name is IBM Z but the product names remain lowercase like z15. Do not change capitalization like "Z15" and don't put the family name before the product name like "IBM Z z15"
2. Systems z15, Systems z14, Systems z13s, System z13s, Systems z13, System z13, System BC12, System EC12, System z196 or System z114 there is no 'System' or 'Systems' in the name
3. Do not say Linux/x86 or other forms of Linux with the System x product EXCEPT Linux on System x
4. Do not say or use the terms "zLinux" or "ZLinux" or "z/Linux" or "zL" or "z/L" or LoZ; The correct usage is Linux on IBM Z
5. Please note, "IBM" can be dropped only after first usage of full family, product line or product name.

An example of the proper use of IBM model numbers in naming is as follows:

IBM z15 Model T01 (formal name) or z15 T01 (short name)

The formal name must be used initially in any marketing or sales material, After that, the short name is to be used.

Most Common IBM Z DO's and DON'Ts

For this section, the **DON'T USE** example on the left corresponds to the **DO USE** example(s) directly across from it only.

| DON'T USE | DO USE |
|--|---|
| 1. Don't use family name and product or Central Processor Complex (CPC) name together | |
| IBM Z z15 IBM Z z14 IBM Z z13s IBM Z z13 IBM System z zEnterprise System IBM System z zEnterprise BC12 IBM System z zEnterprise EC12 IBM System z zEC12 (or System zEC12) | IBM Z or IBM Z15 IBM Z or IBM z14 IBM Z or IBM z13s IBM Z or IBM z13 IBM Z or IBM zEnterprise® System IBM zEnterprise BC12 IBM zEnterprise EC12 IBM zEnterprise EC12 (zEC12) |
| 2. For zEnterprise System products don't combine the family name and the product or Central Processor Complex (CPC) name | |
| IBM zEnterprise System BC12 zEnterprise System BC12 IBM zEnterprise System EC12 zEnterprise System EC12 | IBM zEnterprise BC12 zEnterprise BC12, zBC12 IBM zEnterprise EC12 zEnterprise EC12, zEC12 |
| 3. Don't use family name as a noun | |
| Running on an IBM Z the IBM Z's strengths | Running in an IBM Z environment the IBM Z platform's strengths or IBM Z mainframe strengths |
| 4. Don't use non-approved product names | |
| IBM Z 15 IBM z14 Single Frame IBM z14 Dual Frame IBM Z 14 IBM Z z13s or Z z13s IBM Z 13s or Z 13s IBM Z 13s or Z 13s IBM Z z13 or Z z13 IBM Z 13 or Z 13 zSystems 13 or zSystem 13 System z12 Business Class z12 Enterprise Class z12 zAware IBM Wave for z OSA ExpressXX | IBM z15 IBM z14 IBM z14 IBM z14 IBM z13s IBM z13s IBM z13s IBM z13 IBM z13 IBM z13 IBM z13 zEnterprise BC12 (zBC12) zEnterprise BC12 (zBC12) zEnterprise EC12 (zEC12) IBM zAware IBM Wave for z/VM® OSA-ExpressXX <i>[You must have a hyphen in the name]</i> |
| 5. Don't use adjectives or descriptors that are redundant | |
| IBM Z System technology, family | IBM Z mainframe, platform, environment, IBM Z |

| | |
|--|---|
| 6. Don't shorten the short names | |
| 15 ZR1 Model ZR1 14 13s 13 BC12, BC, zBC, z12 EC12, EC, zEC, z12 z10, z9, EC, BC, System EC, System BC | z15 z14 ZR1 z14 Model ZR1 z14 z13s z13 zEnterprise BC12, zBC12 zEnterprise EC12, zEC12 IBM System z10®, System z10 EC, z10 EC™; System z10, System z10 BC, z10 BC™ IBM System z9®, System z9 EC, z9 EC; System z9, System z9 BC, z9 BC |
| 7. Don't capitalize words or letters unnecessarily | |
| IBM Z15 IBM Z14 IBM Z13s, IBM z13S, IBM Z13S IBM Z13 IBM zENTEPRRISE SYSTEM, IBM ZENTERPRISE zENTERPRISE BC12, ZBC12 zENTERPRISE EC12, ZEC12 IBM SYSTEM, SYSTEM Z SYSTEM Z10, z10 ENTERPRISE CLASS z10 BUSINESS CLASS | IBM z15 IBM z14 IBM z13s IBM z13 IBM zEnterprise System, IBM zEnterprise zEnterprise BC12, zBC12 zEnterprise EC12, zEC12 IBM Z, Z System z10, z10 System z10 Enterprise Class (z10 EC™) System z10 Business Class (z10 BC™) |
| 8. Don't use unapproved short names or acronyms | |
| IDAA zAware | IBM Db2® Analytics Accelerator for z/OS® IBM zAware |
| 9. Don't call the 'xxxx Express' adapters that go into the I/O drawers anything but 'adapters' | |
| FICON Express16S+ card OSA-Express 25 GbE SR1.1 feature 25 GbE RoCE Express2.1 card | FICON Express16S+ adapter OSA-Express 25 GbE SR1.1 adapter 25 GbE RoCE Express2.1 adapter |
| 10. Don't add plural to 'z13s or z13' | |
| There are seven z13s' in the data center There are eight z13s in the data center | There are seven z13s systems in the data center There are eight z13 systems in the data center |
| 11. Don't externally use the term 'CEC' when talking about an IBM Z | |
| CEC (Central Electronics Complex) | CPC (Central Processor Complex) |
| 12. Do not use the term "Rack" | |
| When referring to the enclosure housing IBM Z hardware components. | Do use the term "Frame" when discussing the enclosure housing IBM hardware components. |

Quick Overview of Server Naming Guidelines

| Official Name | Description | Comment |
|----------------------------------|---|--|
| IBM Z (Z) | <ul style="list-style-type: none"> ▪ Official family name ▪ Covers the mainframe platform and its products – including z15, z14, z13s, z13, zEC12, zBC12, z196, z114, z10 EC, z10 BC, z9 EC, z9 BC, z990, z890, z900, z800, and earlier generations ▪ IBM Z can be used only as an adjective except in titles and headings where it can be used as a noun ▪ IBM Z Is a registered trademark of IBM. | <ul style="list-style-type: none"> ▪ To be used in employee titles and in communications when referring to the combination of IBM z15, IBM z14, IBM z13s, IBM z13, IBM zEnterprise®, IBM System z10®, IBM System z9®, IBM eServer™ zSeries® and earlier generations ▪ Refers to the family only. If you are addressing a single product like the System z10 EC, that should still be referred to by its product name ▪ Examples: <ul style="list-style-type: none"> – The IBM Z install base – IBM Z Offering Manager – The IBM Z mainframe had 5 TB of memory installed. |
| IBM z15 (z15) | <ul style="list-style-type: none"> ▪ Official name of current IBM Z family member ▪ Can be used as a noun | <ul style="list-style-type: none"> ▪ The current central processor complex component of the IBM Z family ▪ Full name must be used on first usage, after which, short name can be used. |
| IBM z14 (z14) | <ul style="list-style-type: none"> ▪ The one name, IBM z14, has both models that are dual frame (z14 Models M01, M02, M03, M04 and M05) and single frame (z14 Model ZR1) ▪ Can be used as a noun | <ul style="list-style-type: none"> ▪ The central processor complex component of the IBM Z family ▪ Full name must be used on first usage, after which, short name can be used. ▪ For the entry model, you should use 'IBM z14 Model ZR1' on first instance, after that you can use short name of z14 ZR1. Don't just use 'ZR1' or 'Model ZR1'. |
| IBM z13s (z13s) | <ul style="list-style-type: none"> ▪ Official name of the single frame IBM Z family member based on IBM z13 technology ▪ Can be used as a noun | <ul style="list-style-type: none"> ▪ Use when referring to the single frame central processor complex component of the IBM z13s ▪ Full name must be used on first usage, after which, short name can be used. |
| IBM z13 (z13) | <ul style="list-style-type: none"> ▪ Official name of the IBM Z family member ▪ Can be used as a noun ▪ A dual frame system | <ul style="list-style-type: none"> ▪ Use when referring to the central processor complex component of the IBM z13 ▪ Full name must be used on first usage, after which, short name can be used. |
| IBM LinuxONE | <ul style="list-style-type: none"> ▪ Official family name ▪ Describes IBM's Linux Enterprise Scale Up System ▪ Covers the LinuxONE platform and its products – including LinuxONE III, and earlier generations ▪ IBM LinuxONE can be used only as an adjective except in titles and headings where it can be used as a noun ▪ IBM LinuxONE Is a registered trademark of IBM. ▪ | <ul style="list-style-type: none"> ▪ To be used in employee titles and in communications when referring to the combination of LinuxONE and earlier generations ▪ Refers to the family only. If you are addressing a single product like the System LinuxONE III, that should still be referred to by its product name ▪ Examples: <ul style="list-style-type: none"> – The LinuxONE install base – IBM LinuxONE Offering Manager ▪ The IBM LinuxONE system had 5 TB of memory installed. |

| Official Name | Description | Comment |
|---|--|---|
| z15, z14, z13, z13s, zEC12, zBC12, z196, z114, z10 EC, z10 BC, z9 EC, z9 BC, z990, z890, z900, z800, zEC12, zBC12, z196, z114, z10 EC, z10 BC, z9 EC, z9 BC, z990, z890, z900, z800, G5/G6 | <ul style="list-style-type: none"> ▪ List in this sequence | <ul style="list-style-type: none"> ▪ When listing multiple products, begin with newest generation first, and list the dual frame system for each generation first followed by the single frame ▪ Note that the z14 is BOTH single and dual frame. |
| z15, z14, z13, z13s, zEnterprise, System z10, System z9, zSeries, and S/390® environments | <ul style="list-style-type: none"> ▪ Approved format ▪ Encouraged to use family name “IBM Z environments” | <ul style="list-style-type: none"> ▪ Use this format when all are acceptable |
| Linux on IBM Z / Linux for IBM Z | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Approved for use when referring to Linux running on an IBM mainframe |
| IBM zEnterprise System (zEnterprise) | <ul style="list-style-type: none"> ▪ Official product portfolio name ▪ A first-of-a-kind workload-optimized multiplatform (or multi-architecture) computing environment that spans (and tightly integrates) mainframe and distributed technologies and managed as a single logical virtualized system by the Unified Resource Manager. | <ul style="list-style-type: none"> ▪ To be used when referring to the combination of the central processor complex (zEC12, zBC12, z196 or z114), zBX Model 002 or Model 003 and the IBM Unified Resource Manager ▪ Full name must be used on first usage, after which short name may be used. |
| IBM Z install base | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Use when referencing IBM Z family of products which includes IBM z14, IBM z13, IBM zEnterprise, IBM System z10, IBM System z9 and IBM eServer zSeries, and earlier product lines |
| zEnterprise install base | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Applies only to zEnterprise EC12, zBC12, z196 and z114 installations |
| System z10 install base | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Applies only to z10 EC, z10 BC |
| System z9 install base | <ul style="list-style-type: none"> Approved format | <ul style="list-style-type: none"> ▪ Applies only to z9 EC, z9 BC |
| zSeries install base | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Use when referencing z990, z890, z900 and z800 |
| Mainframe install base | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Use when referencing z14, z13, zEnterprise, System z10, System z9, eServer zSeries, and earlier product lines. |
| System z10 server | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Discouraged unless referencing the hardware only |
| IBM Z system, technology, environment, platform | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ Acceptable – be consistent |
| IBM mainframe | <ul style="list-style-type: none"> ▪ Approved format | <ul style="list-style-type: none"> ▪ OK to use; it’s the product class and refers to all IBM Z generations |
| Server | <ul style="list-style-type: none"> ▪ Hardware Only | <ul style="list-style-type: none"> ▪ Avoid using server unless referring specifically to the hardware element of the system |
| System | <ul style="list-style-type: none"> ▪ Some combination of hardware, software, networking, and/or storage | <ul style="list-style-type: none"> ▪ Use when context references some combination of hardware, software, networking, and/or storage |



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04/20

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