

The Networking ABC's - Y is for Yobibyte



Joe Pruitt, 2008-02-09

Today's word in the Networking ABC's is the letter Y. It took me a long time to find the right networking term that starts with the letter "Y". A few folks mentioned using "Yank" (as in Yank the cord) or "YMMV" (for Your Mileage May Vary) but I wasn't satisfied with those so I waited. Finally I came across a term that I thought deemed satisfactory for the Networking ABC's. The work for today is "Yobibyte". The Yobibyte is the largest unit of measurement for computer data and seeing how we are immersed in data day and night, I figured this was just the one.



"Y" is for Yobibyte



Yobibyte

Pronounced: *Yaw-Be-Bite*

The yobibyte (a contraction of **yotta binary byte**) is a unit of computer storage commonly abbreviated as YiB. 1 yobibyte = 2^{80} bytes = 1,208,925,819,614,629,174,706,176 bytes = 1,024 zetabytes. The yobibyte is closely related to the yottabyte, which can either be a synonym for yobibyte, or refer to 10^{24} bytes = 1,000,000,000,000,000,000,000,000 bytes, depending on context.

To refresh your memory on prefixes and to put the yobibyte in context with numbers you might be more familiar with, here's a list of the prefixes from kibi up to yobi.

Name	Symbol	Base 2	Base 16	Value (Base 16)	Value (Base 10)	Binary Name	Binary Symbol
kibi	Ki	2 ¹⁰	16 ^{2.5}	400	1,024	kilo	k/K
mebi	Mi	2 ²⁰	16 ⁵	10 0000	1,048,576	mega	M
gibi	Gi	2 ³⁰	16 ^{7.5}	4000 0000	1,073,741,824	giga	G
tebi	Ti	2 ⁴⁰	16 ¹⁰	100 0000 0000	1,099,511,627,776	tera	T
pebi	Pi	2 ⁵⁰	16 ^{12.5}	4 0000 0000 0000	1,125,899,906,842,624	peta	P
exbi	Ei	2 ⁶⁰	16 ¹⁵	1000 0000 0000 0000	1,152,921,504,606,846,976	exa	E
zebi	Zi	2 ⁷⁰	16 ^{17.5}	40 0000 0000 0000 0000	1,180,591,620,717,411,303,424	zetta	Z
yobi	Yi	2 ⁸⁰	16 ²⁰	1 0000 0000 0000 0000 0000	1,208,925,819,614,629,174,706,176	yotta	Y

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