

IBM Servers and Storage Demos

IBM z9 Power Planning and Monitoring

Abstract

IBM System z9 Power Planning can be used to estimate power consumption and heat output for a specific new machine configuration or for an upgrade to an existing machine. Power Monitoring can be used to view actual power consumption, heat output, and cooling air input temperature

Pronunciation notes

CEC is pronounced keck

1a Time: 00:00 20sec

IBM System z9 Power Planning can be used to estimate power consumption and heat output for a specific new machine configuration or for an upgrade to an existing machine. Power Monitoring can be used to view actual power consumption, heat output, and cooling air input temperature.

1b Time: 00:20 45sec

We begin by logging on to the Resource Link web site.

1c

We then navigate to the “Tools” section, and then “Power Estimation Tools.”

1d

Here we select our desired model. For the new machine configuration we are planning, we enter the specific configuration data. This includes input power, room air temperature, and CEC and I/O cage configuration by feature code.

Note that this tool does not verify our input against the configuration rules, so we check our data carefully.

2a Time: 01:05 10sec

We now select “Calculate” to compute the projected heat load and input power consumption for our configuration.

3a Time: 01:15 20sec

To assist you, The Power Estimation Tool also includes a typical small configuration and a large configuration as a guide.

For a machine upgrade, we would look at the difference between the estimate for our base configuration and the target configuration.

4a Time: 01:35 40sec

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For installed machines, power monitoring is available on the HMC System Activity Display. It is presented in all the Activity Profiles.

4b

Here we see the actual total system power consumption, heat output, and air input temperature for our machine.

4c

Finally, note that System Activity Display Power Monitoring requires the 2.9.2 or later level of HMC and processor code.

5a

For more information on Power Planning and Monitoring or assistance in implementing this function, contact your IBM Business Partner or IBM representative.