

IBM Dynamic Partition Manager

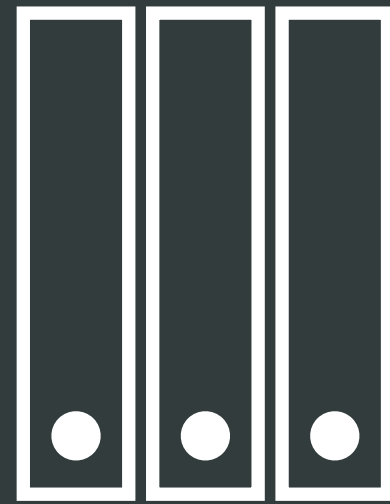
Customer Webcast

Carl Mayer et al. | STSM, z Systems Firmware Development

What if

we are able to create a **new partition**
including **I/O configuration** within **10 minutes**
through **a single management endpoint?**

Back to reality



Deep mainframe
knowledge
required



Several
management
endpoints



Complex
platform
management

We built it

Dynamic **P**artition **M**anager

**What
is
DPM**

**Power
of
DPM**

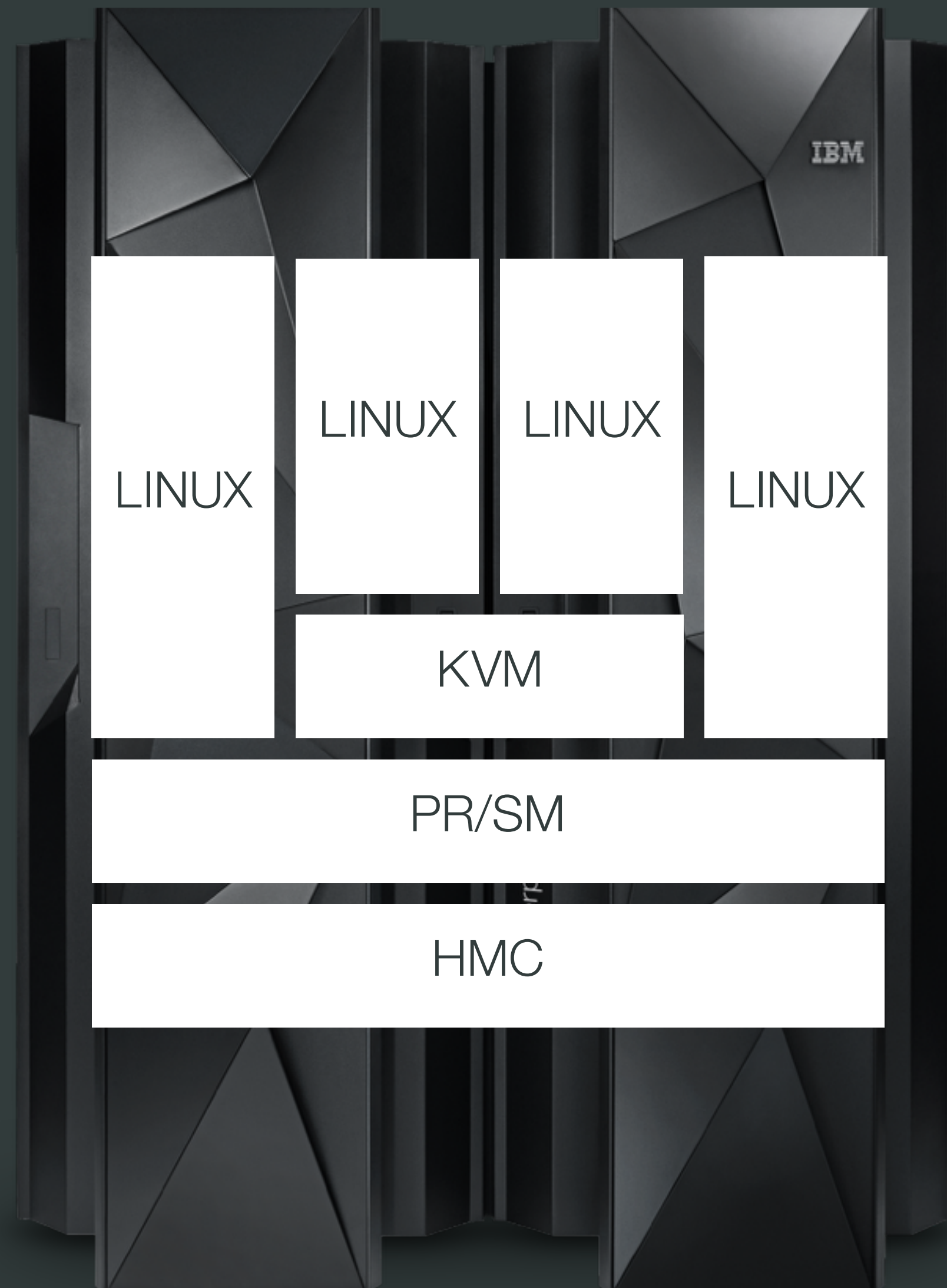
**Making
of
DPM**

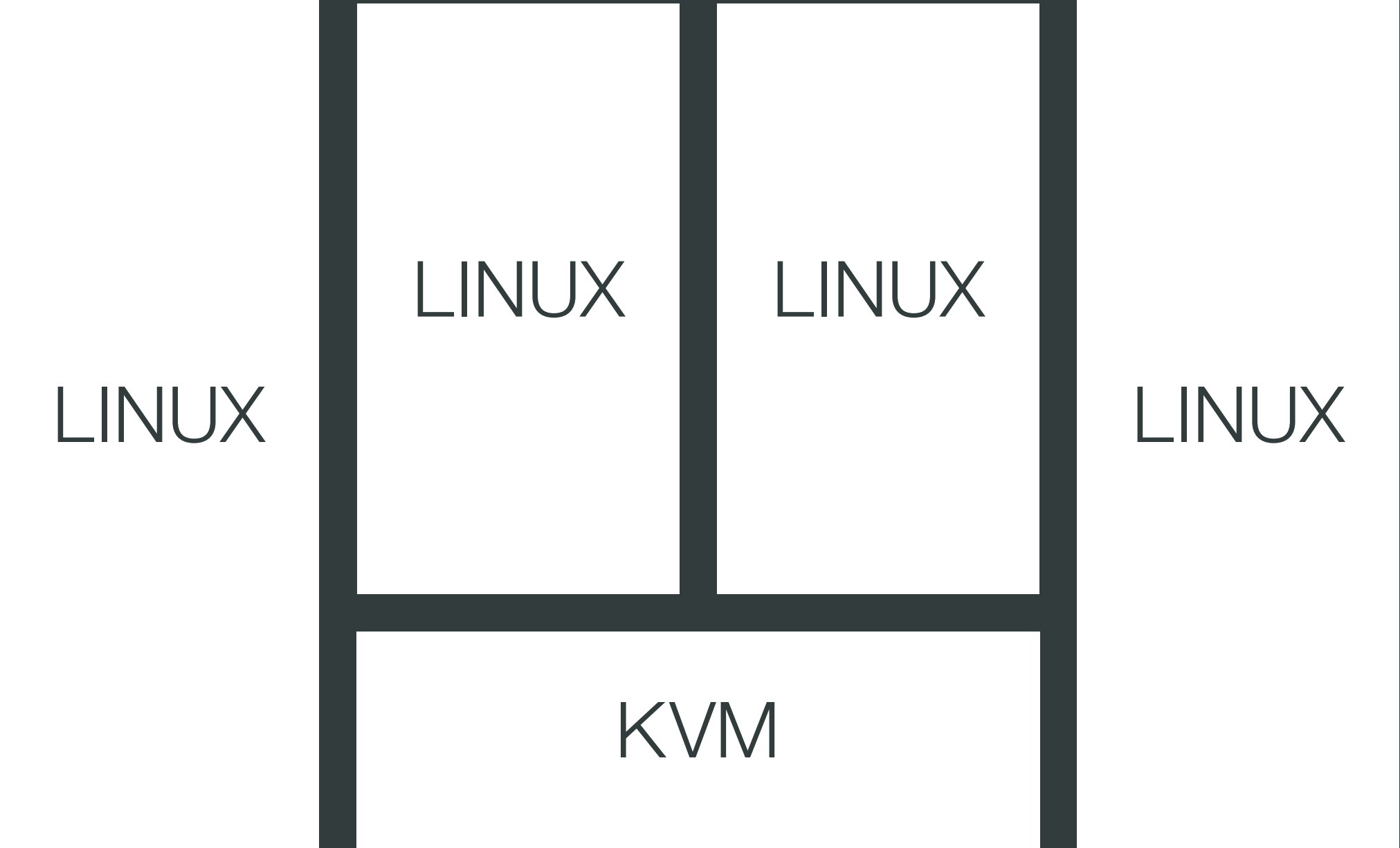
**What
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**Power
of
DPM**

**Making
of
DPM**

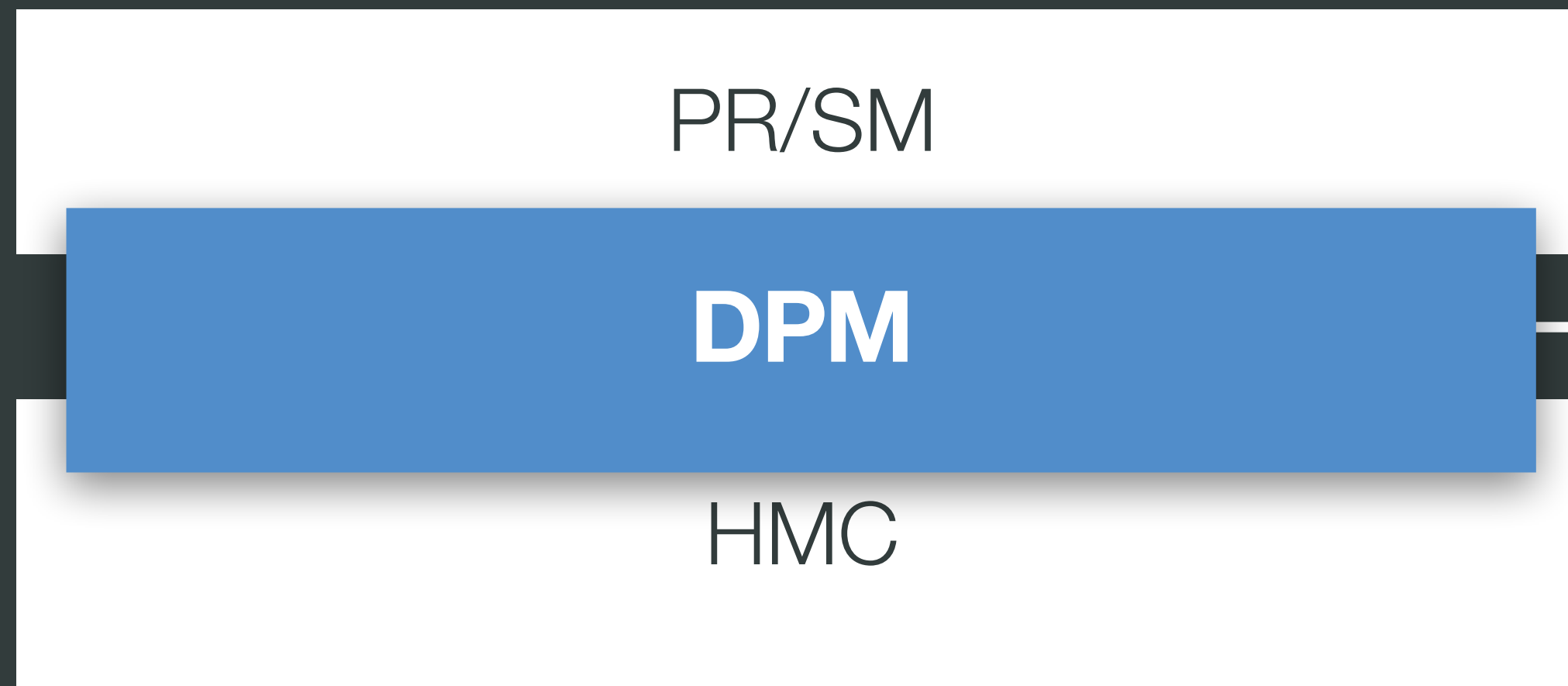
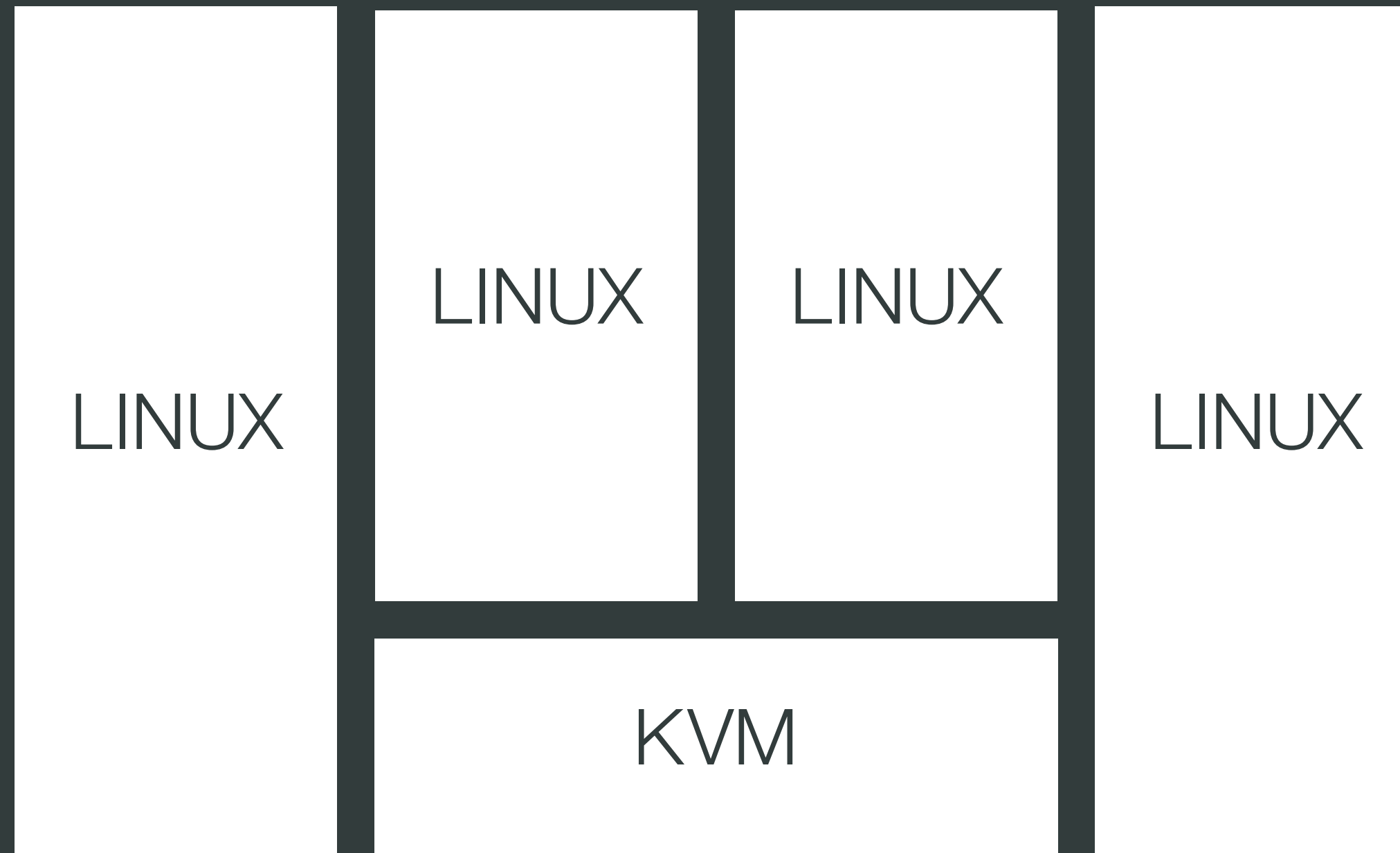
What is the Dynamic Partition Manager?





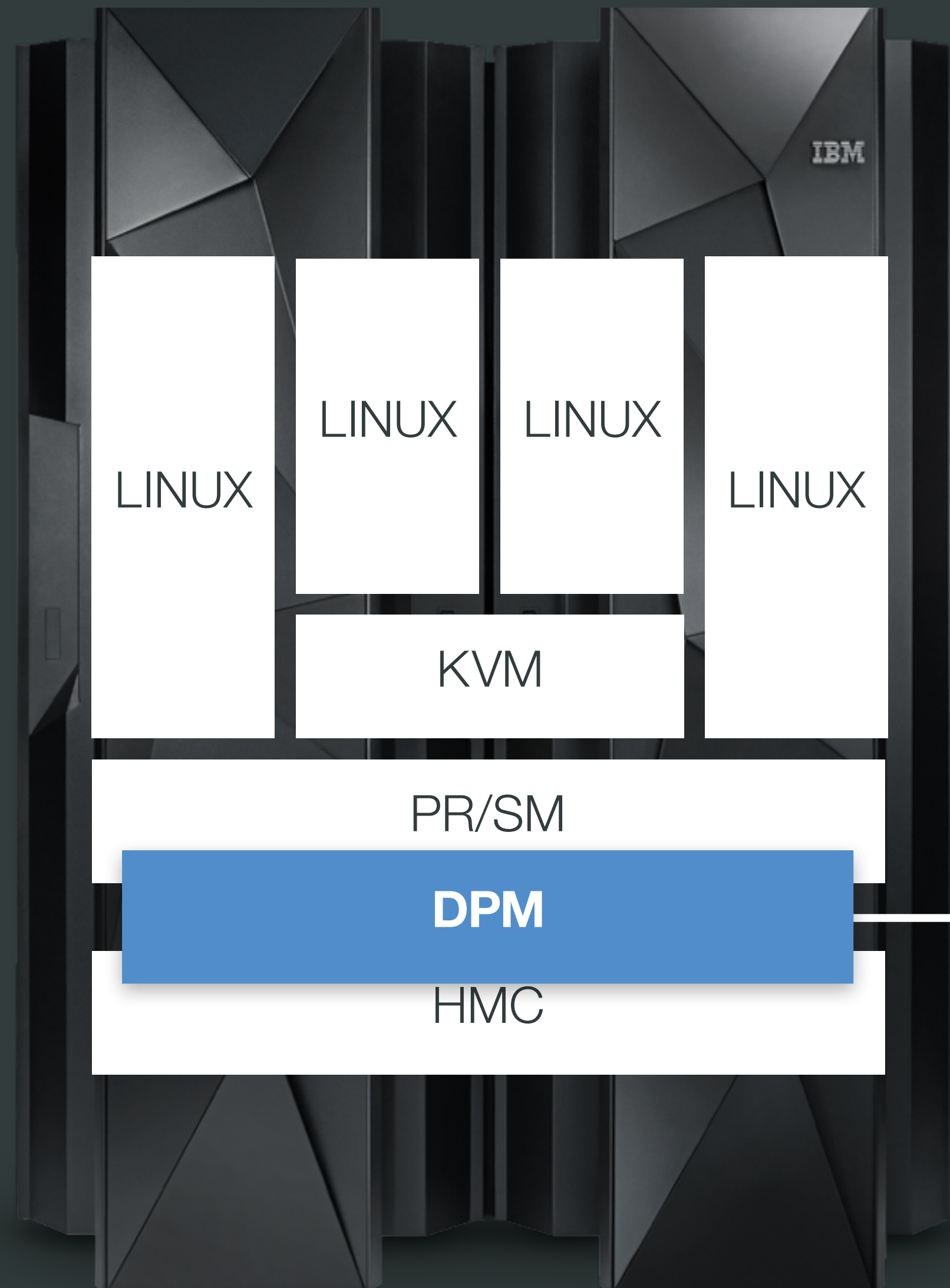
PR/SM
Powerful but complex





PR/SM + DPM
Powerful and easy

What is the Dynamic Partition Manager?



PR/SM + DPM
Powerful and easy

What
is
DPM

Power
of
DPM

Making
of
DPM



Introducing Adele

System Administrator

29 years old

From Newark, NJ

General virtualisation management skills

No profound mainframe knowledge

The Power of DPM

Create Partition

Modify Resources

Gain Insights

+

“

I want to **create a new partition including I/O configuration, within 10 minutes** just by myself.

”



Adele
System Administrator

Setup of Demo Environment

IBM **z Systems z13**

Machine Type	2964
Model	N63
Hardware Details	2 CEC Drawers (63 Processors, 1.5 TB Memory) 32 I/O Adapters (OSA, FCP, RoCE, zEDC and Crypto)

IBM DPM is enabled and the CPC is started.

A light blue icon of an eye, with a circular pupil and a surrounding outline, is positioned to the left of the word "DEMO".

DEMO

Create Partition



Several days



10 minutes

Create Partition

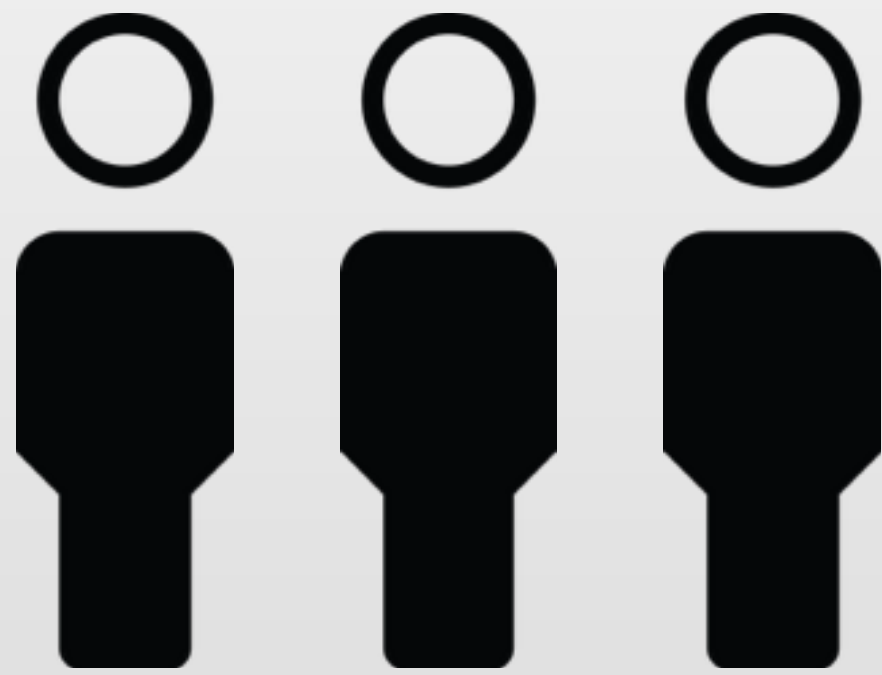


Several
management endpoints

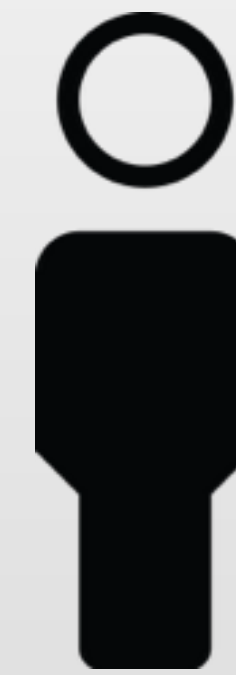


Single
management endpoint

Create Partition



Several
System Administrators



Single
System Administrator

The Power of DPM

Create Partition

Modify Resources

Gain Insights

+

“

I want to **easily modify** the system resources **without interrupting** the running workload by myself and **within minutes**.

”



Adele
System Administrator

A light blue icon of an eye, with a circular pupil and a surrounding iris, is positioned to the left of the word "DEMO".

DEMO

Modify Resources

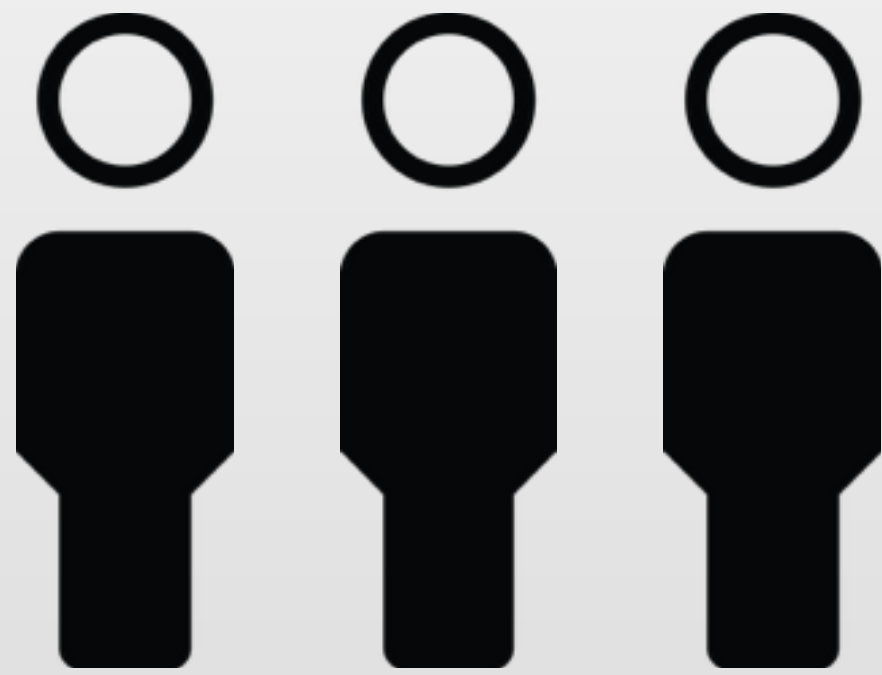


Hours

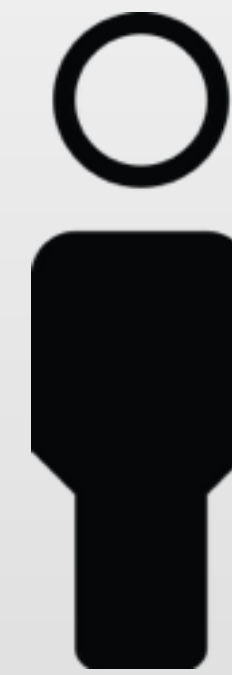


Minutes

Modify Resources



Several
System Administrators



Single
System Administrator

The Power of DPM

Create Partition

Modify Resources

Gain Insights

+

“

I need to **get insights** on how
a **system and its resources**
are doing **over time**.

”



Adele
System Administrator

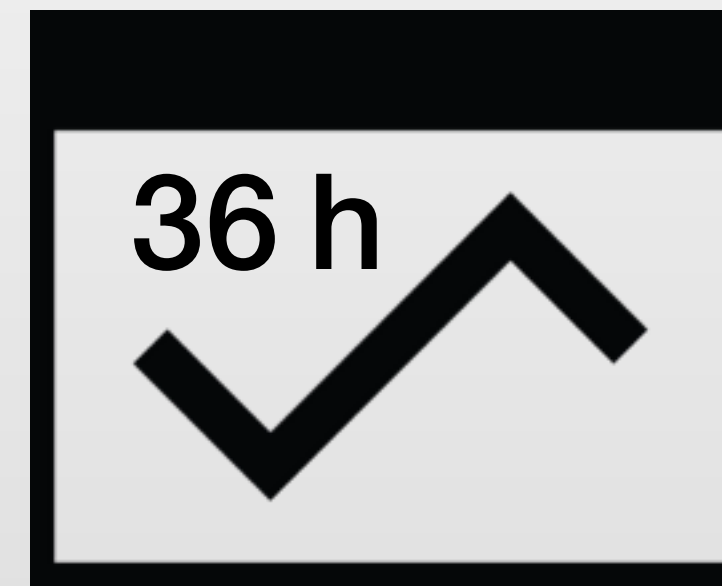
A light blue icon of an eye, with a circular pupil and a surrounding outline, is positioned to the left of the word "DEMO".

DEMO

Gain Insights

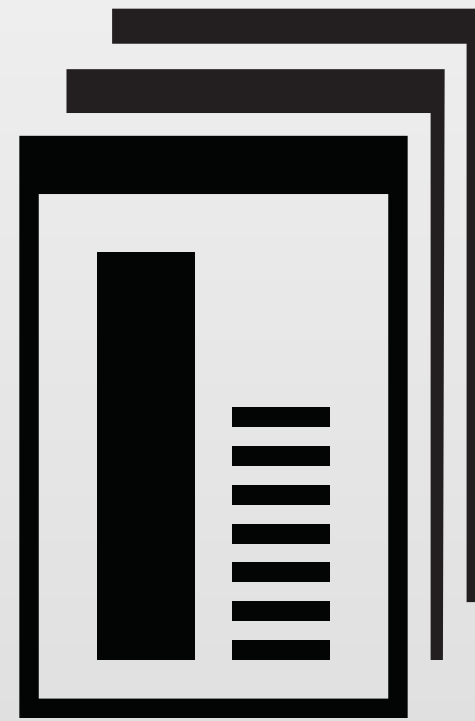


Monitoring data



Insights over time

Gain Insights



Data scattered across
several pages



All insights
in one place

The Power of DPM

Create Partition

Modify Resources

Gain Insights

+

Light Path

9.152.151.47:8080/hmc/content?taskId=29&refresh=34





Manage Adapters - P0000S12

Adapters

Devices













Cryptos

Related Tasks

Filter:  Network  Storage  Accelerator  Crypto

Actions

Search

<input type="checkbox"/>	Name	ID	Type	Status	State	Card Type	Location	Device Allocation	Number of Partitions	Descr
<input type="checkbox"/>	 OSD 01D4 Z15B-26	01D4	OSD	Not active	Reserved	OSA-Express4s 1Gb	Z15B-LG26J.00-LG26J.01	0%	1	
<input type="checkbox"/>	 OSD 01DC Z15B-28	01DC	OSD	Not active	Reserved	OSA-Express4s 10Gb	Z15B-LG28-J.00	0%	0	
<input type="checkbox"/>	 OSD 01E4 Z15B-31	01E4	OSD	Not active	Reserved	OSA-Express4s 1Gb	Z15B-LG31J.00-LG31J.01	0%	0	
<input type="checkbox"/>	 OSD 01F4 Z15B-36	01F4	OSD	Not active	Reserved	OSA-Express5s 1Gb	Z15B-D136J.01-D236J.01	0%	2	
<input type="checkbox"/>	 OSM 01A0 Z15B-11	01A0	OSM	 Active	Online	OSA-Express5s 1000Base-T	Z15B-D111J.01-D211J.01		0	
<input type="checkbox"/>	 OSM 01F0 Z15B-35	01F0	OSM	 Active	Online	OSA-Express4s 1000Base-T	Z15B-LG35J.00-LG35J.01		0	
<input type="checkbox"/>	 RoCE 01BC Z15B-19	01BC	RoCE	Not active	Reserved	10GbE RoCE Express	Z15B-LG19J.01-LG19J.02	0%	0	
<input type="checkbox"/>	 RoCE 01FC Z15B-38	01FC	RoCE	Not active	Reserved	10GbE RoCE Express	Z15B-LG38J.01-LG38J.02	0%	0	
<input type="checkbox"/>	 zEDC 01C4 Z15B-21	01C4	zEDC	Not active	Reserved	zEDC Express	Z15B-LG21	0%	1	
<input type="checkbox"/>	 zEDC 01CC Z15B-23	01CC	zEDC	Not active	Reserved	zEDC Express	Z15B-LG23	0%	0	

Total: 33 Selected: 0

Close

Help

What
is
DPM

Power
of
DPM

Making
of
DPM

Making of the Dynamic Partition Manager

IBM Engineering

IBM Design Thinking

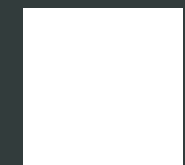
IBM Design



1Q 2016

Dynamic
Partition
Manager

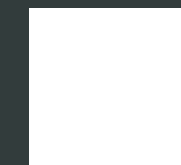
Technical Specifications Today



IBM z13 or z13s
IBM LinuxONE Emperor or Rockhopper

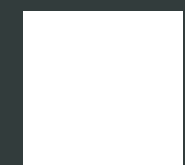
Feature Code #0016:
Hardware Requirements for IBM DPM

Two dedicated OSA-Express5S
1000BASE-T Ethernet (#0417)



**KVM for IBM z Systems & LinuxONE and/or
Linux on IBM z Systems & LinuxONE**

Initially no support for:
z/VM, z/OS, z/VSE, z/TPF



FICON Express (Type FCP)
OSA Express
Crypto Express
zEDC Express
RoCE Express
HiperSockets



Initially no support for

IBM zAware or
GDPS® Virtual Appliance
FICON Express (Type FC)

Q & A

Join us on our way

Carl Mayer

z Systems Firmware Development

IBM Systems

Böblingen, Germany

 carl@de.ibm.com

