



CLOUD COMPUTING APPLICATIONS

Metal As A Service

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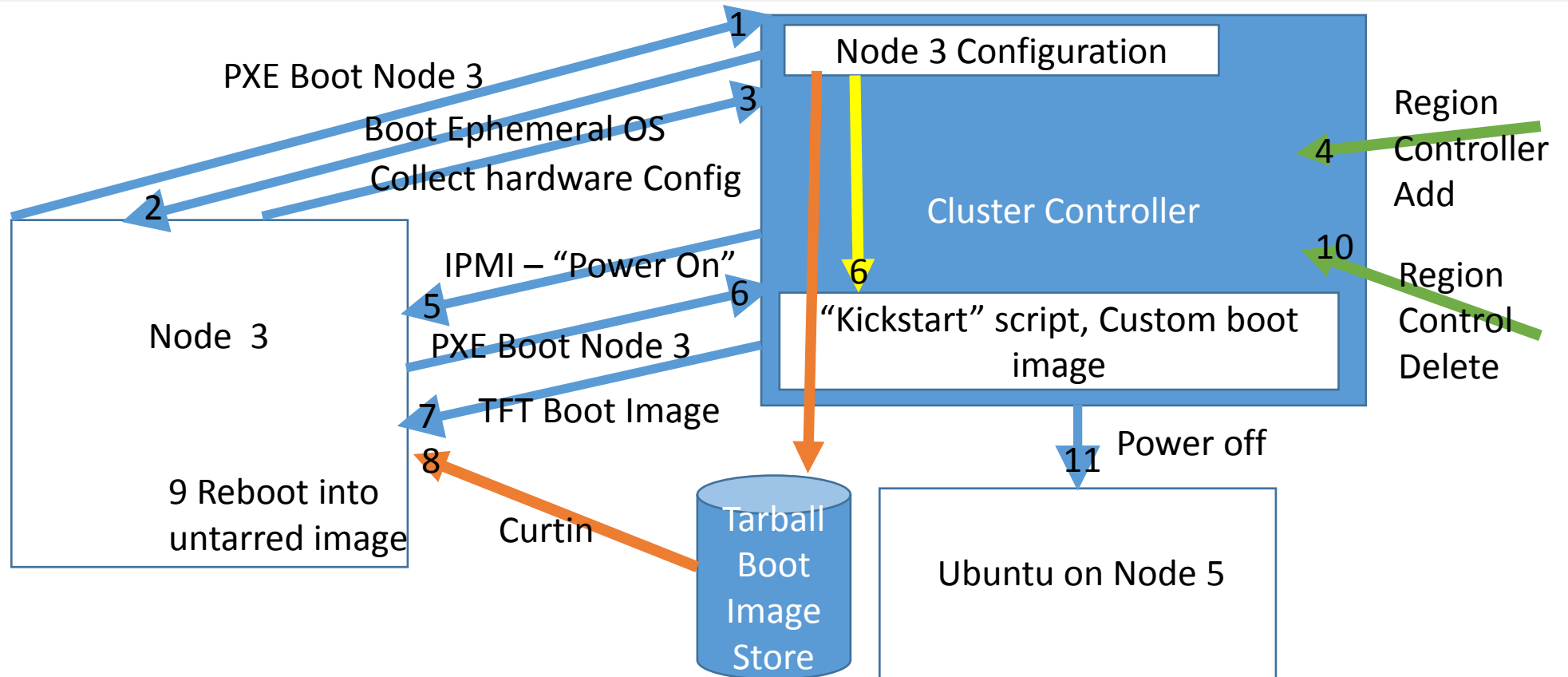
Maas Sequence of Events

- Discovery or Enlisting
- Enrolling
- Commissioning
- Deploying

SRG Demonstration of MAAS

- <http://192.17.176.2/MAAS/#/nodes>

MAAS



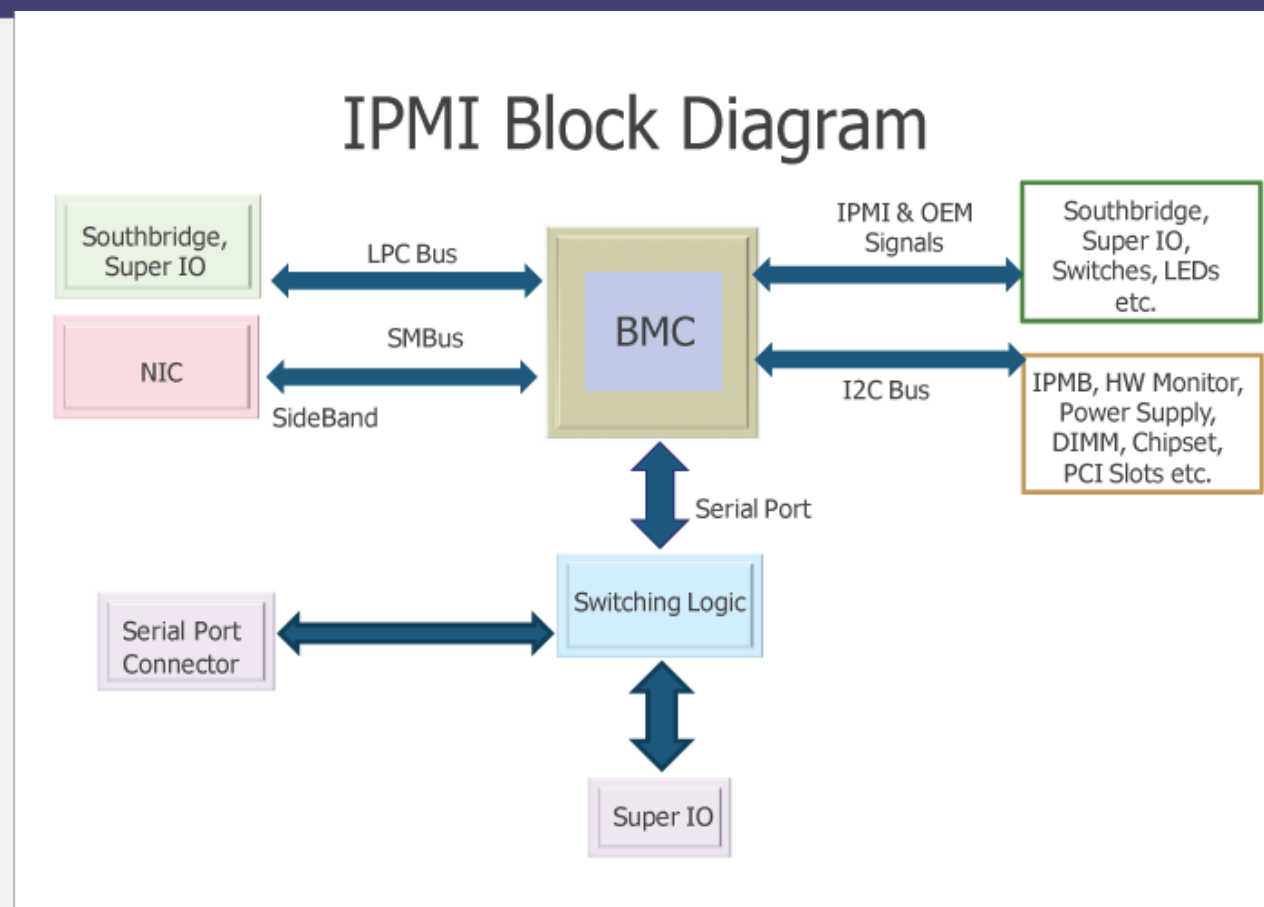
MaaS use

- Pool of nodes
- Nodes can be allocated to users with user authentication credentials for remote access using queries like memory size and numbers of cores
- Users can choose the operating system and application to run on a node(s)
- When finished with nodes, they can be returned to pool

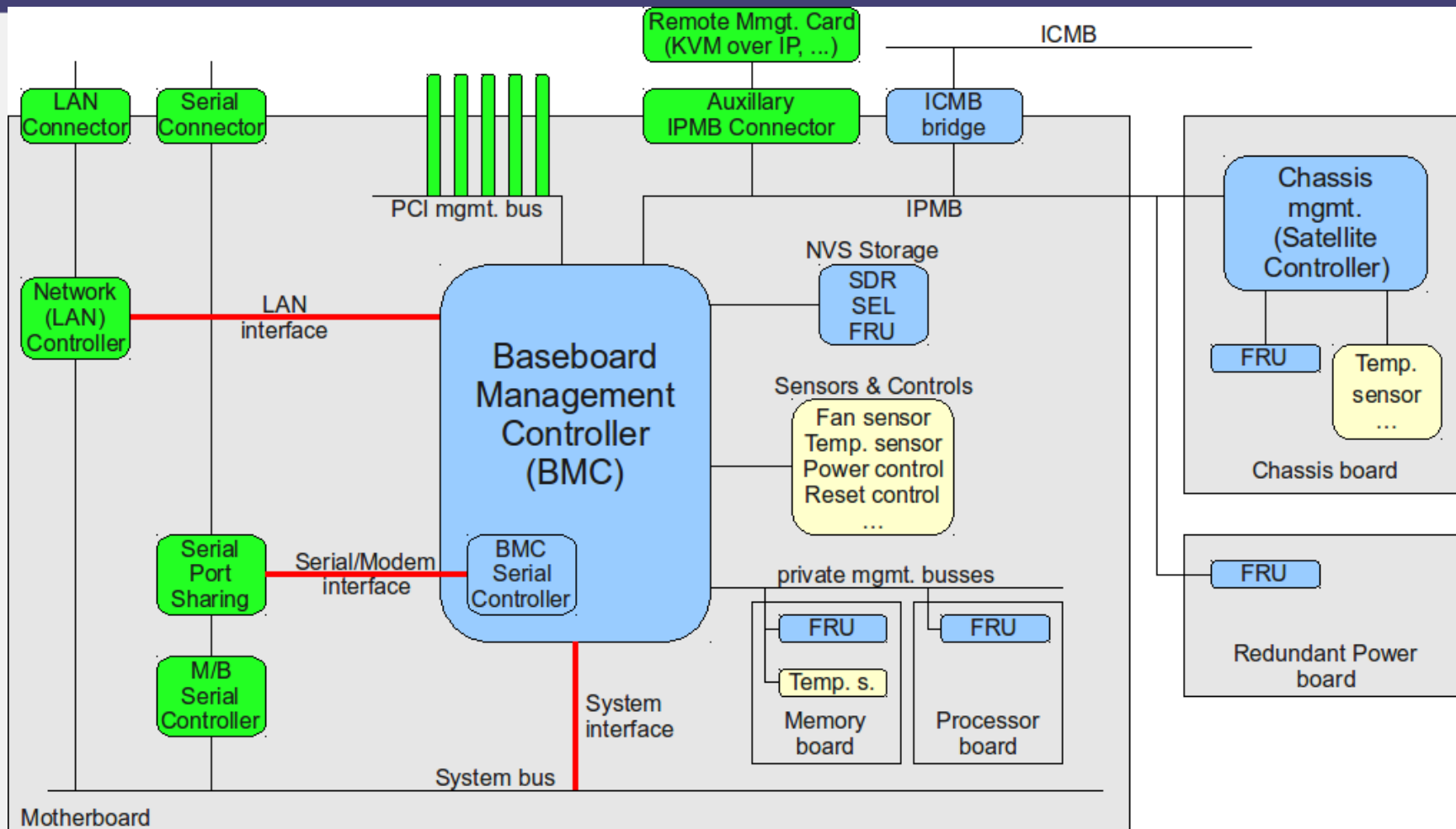
Intelligent Platform Management Interface (IPMI)

- autonomous computer subsystem
 - set of computer interface specifications
- management and monitoring capabilities
- independent of the host system's CPU, firmware (BIOS or UEFI) and operating system.

IMPI Hardware



Baseboard Management Controller



IPMI Usage

- before an OS has booted (allowing, for example, the remote monitoring or changing of BIOS settings)
- when the system is powered down
- after OS or system failure – the key characteristic of IPMI compared with in-band system management such as by remote login to the operating system using [SSH](#)

PXE

- When using PXE the boot process is changed from the normal order to:
- Power on → BIOS → Network Card's PXE stack → Network Boot Program (NBP) downloaded using TFTP from server to Client's RAM → NBP's responsibility to perform the next step (a.k.a. 2nd stage boot).
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