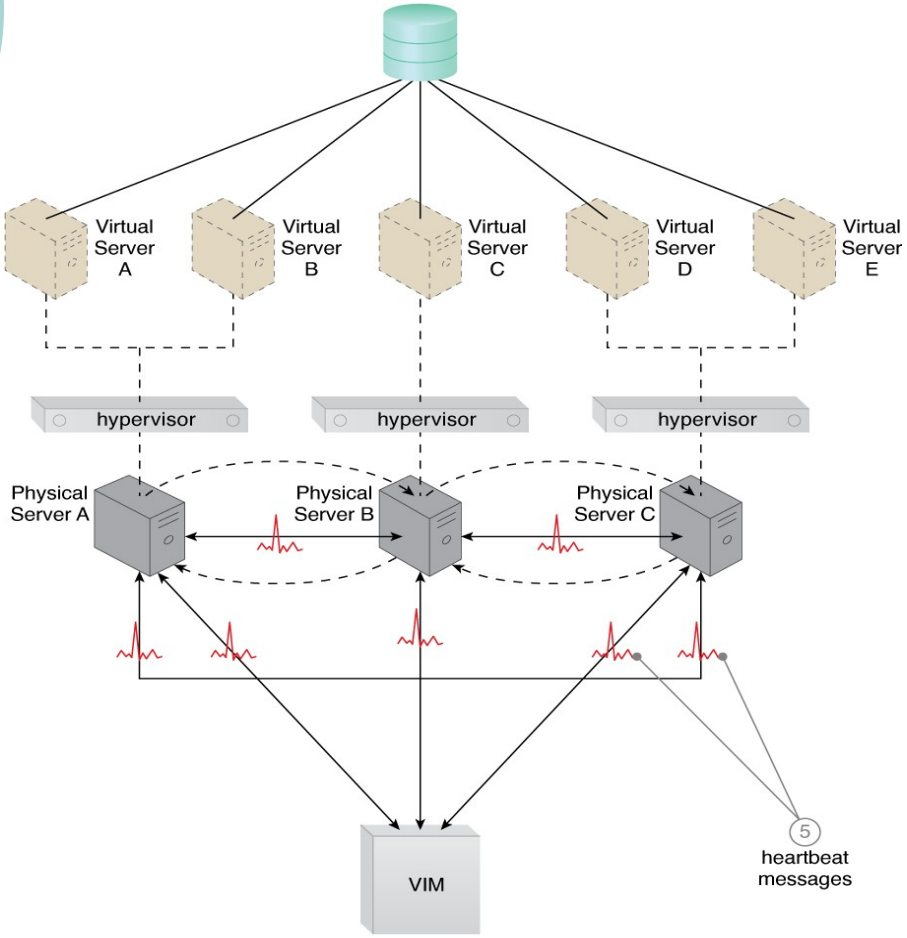
Hypervisor/Virtual Server在线迁移



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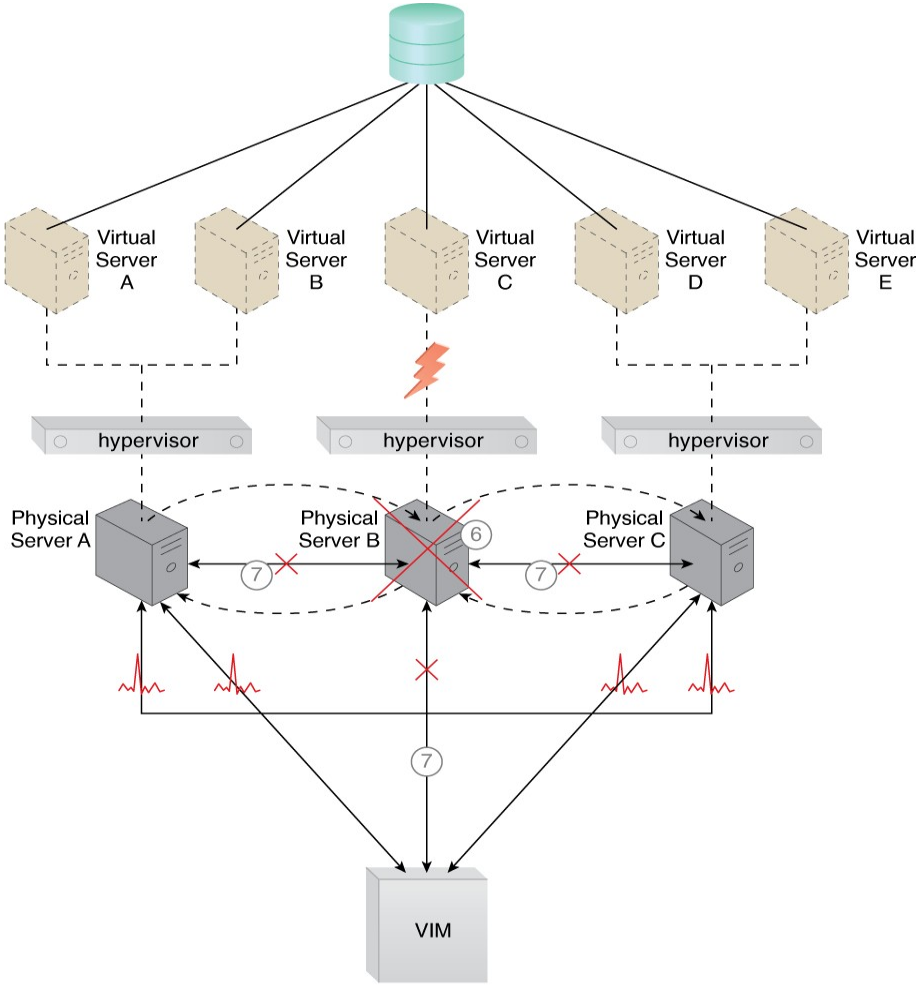

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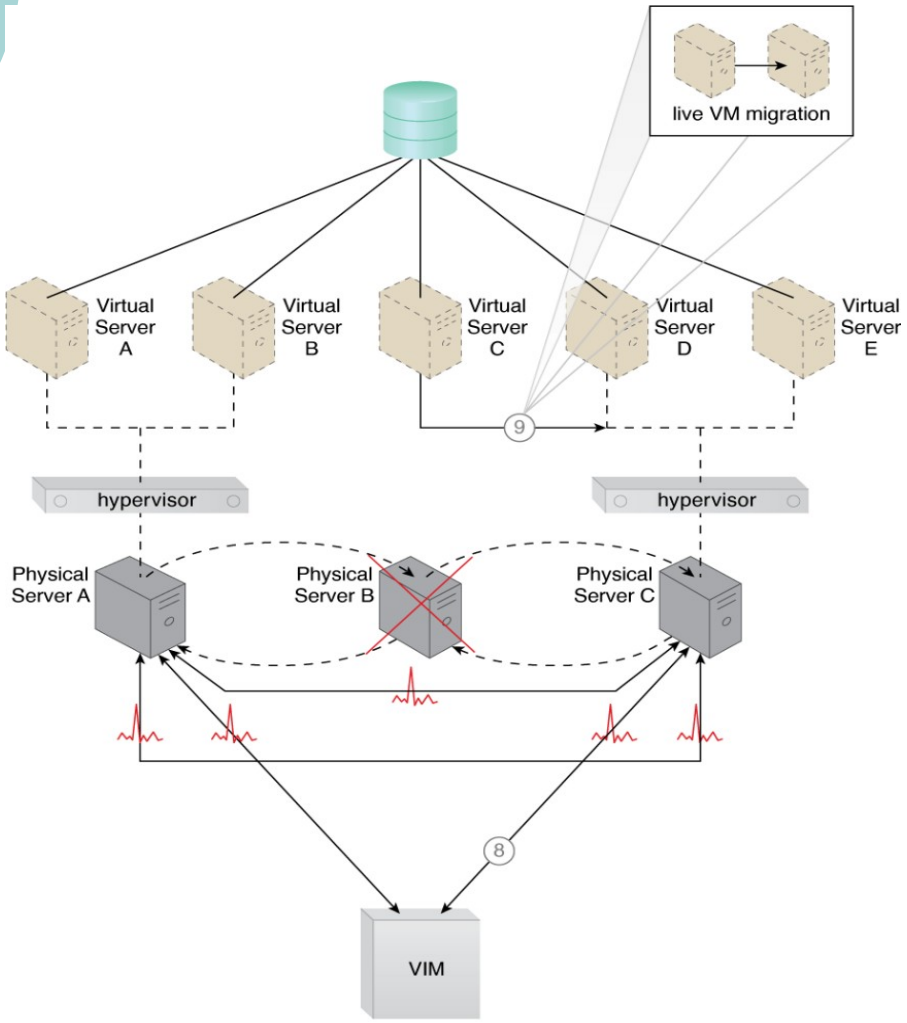
Hypervisor/Virtual Server 在线迁移



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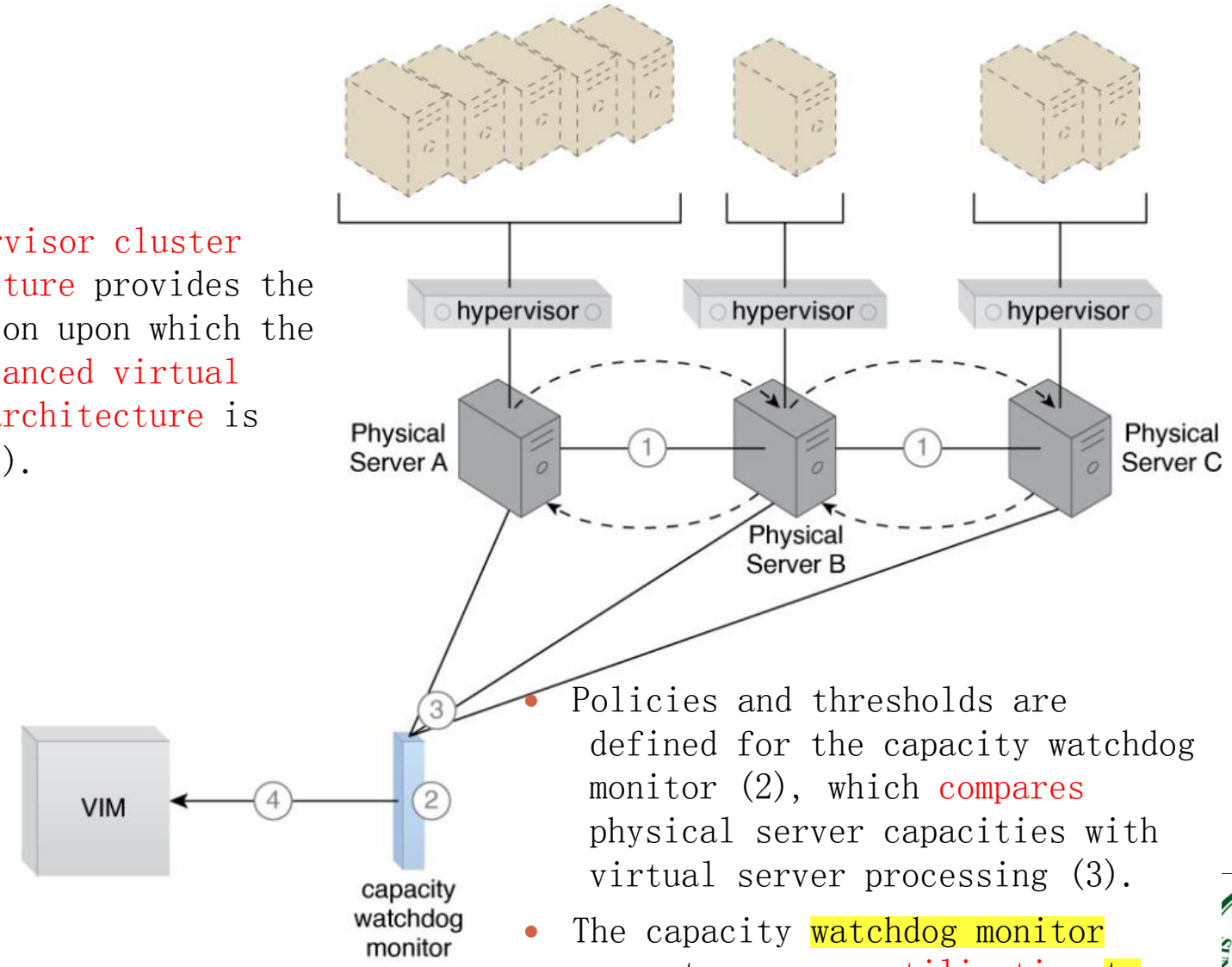
- The VIM chooses Physical Server 3 as the new host after assessing the available capacity.
- Virtual Server C is live-migrated to the hypervisor running on Physical Server 3
- Restarting may be necessary

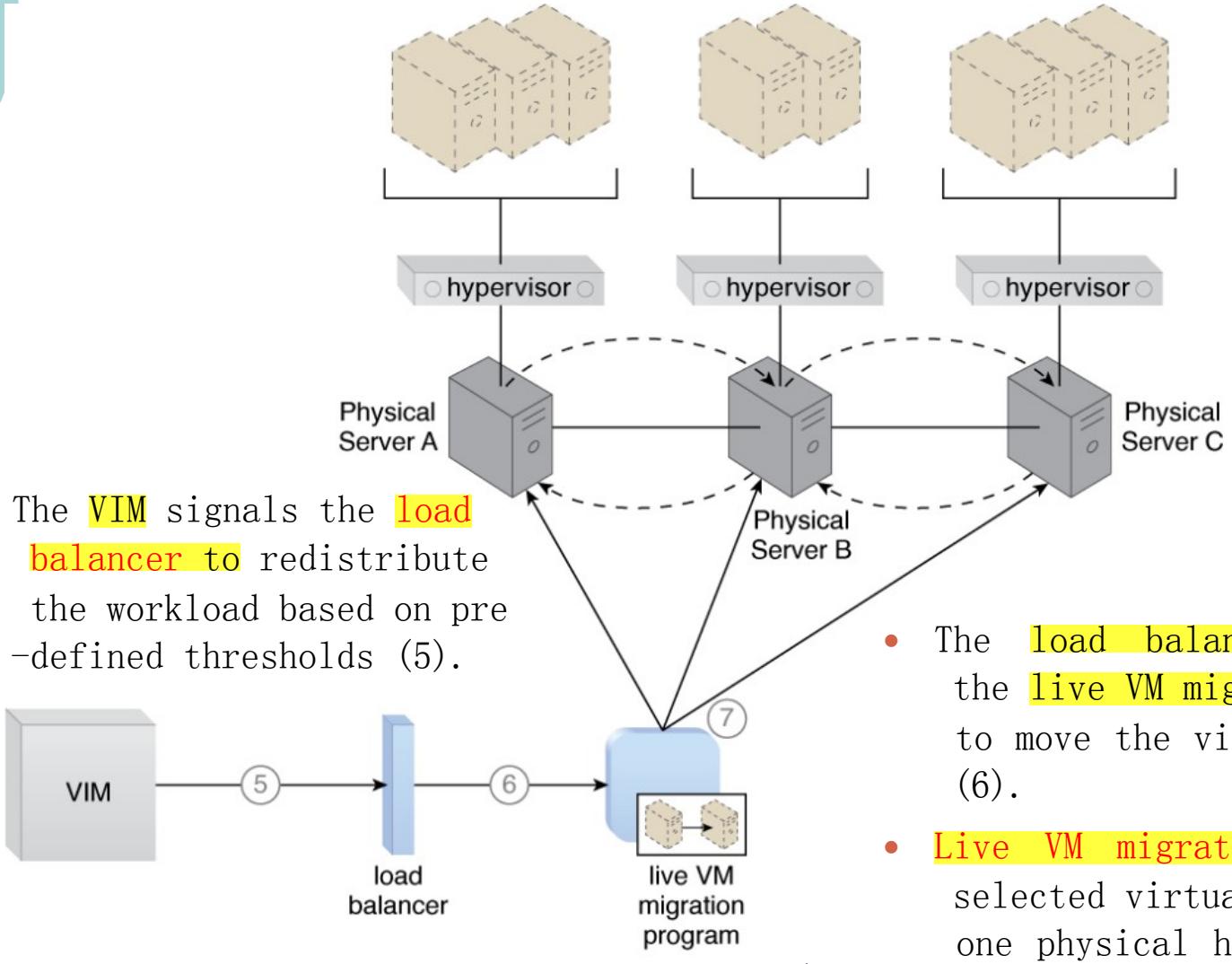
虚拟服务器实例均衡

- The hypervisor cluster architecture provides the foundation upon which the load-balanced virtual server architecture is built (1).



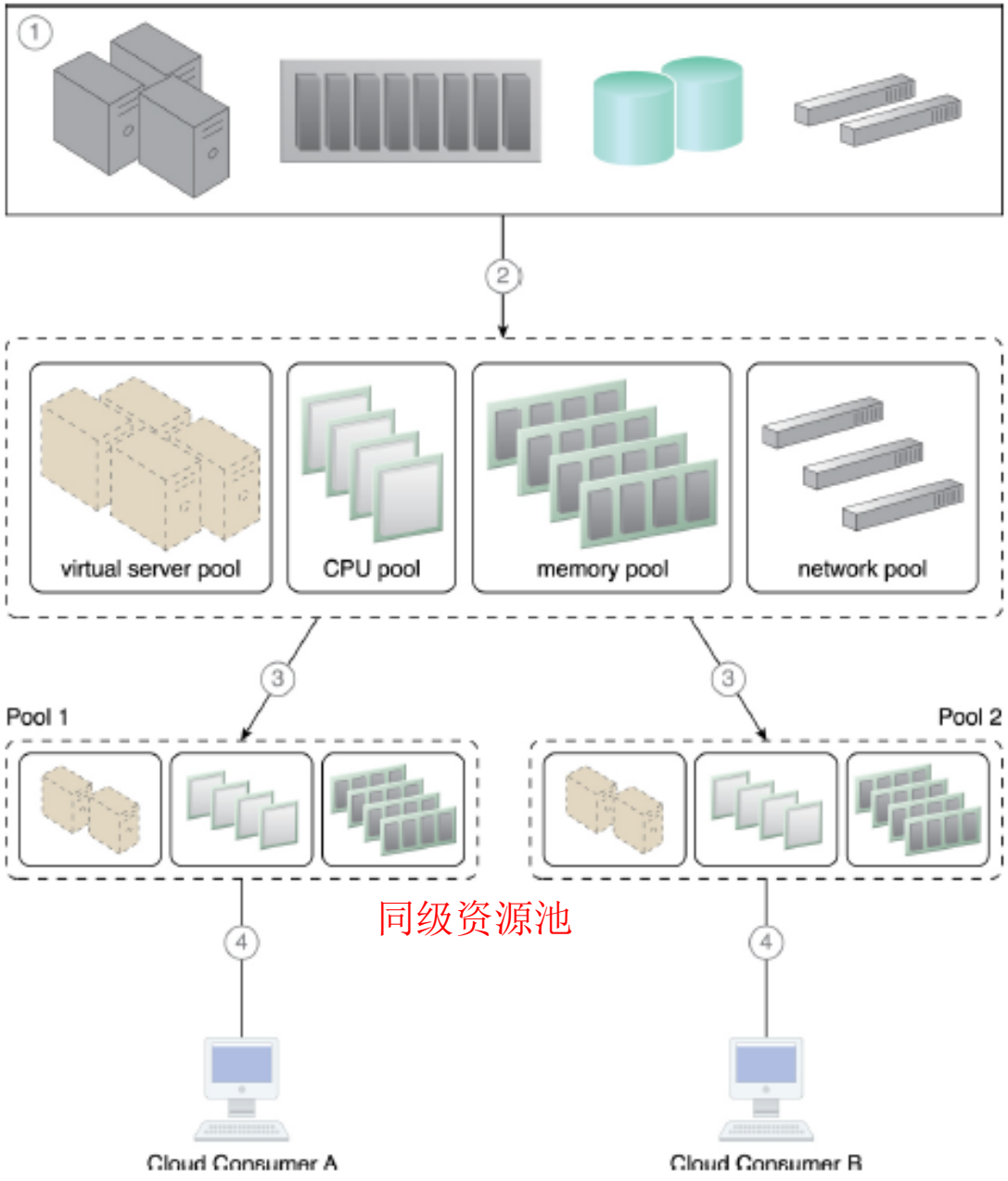
- Policies and thresholds are defined for the capacity watchdog monitor (2), which compares physical server capacities with virtual server processing (3).
- The capacity watchdog monitor reports an over-utilization to the VIM (4).

虚拟服务器实例均衡



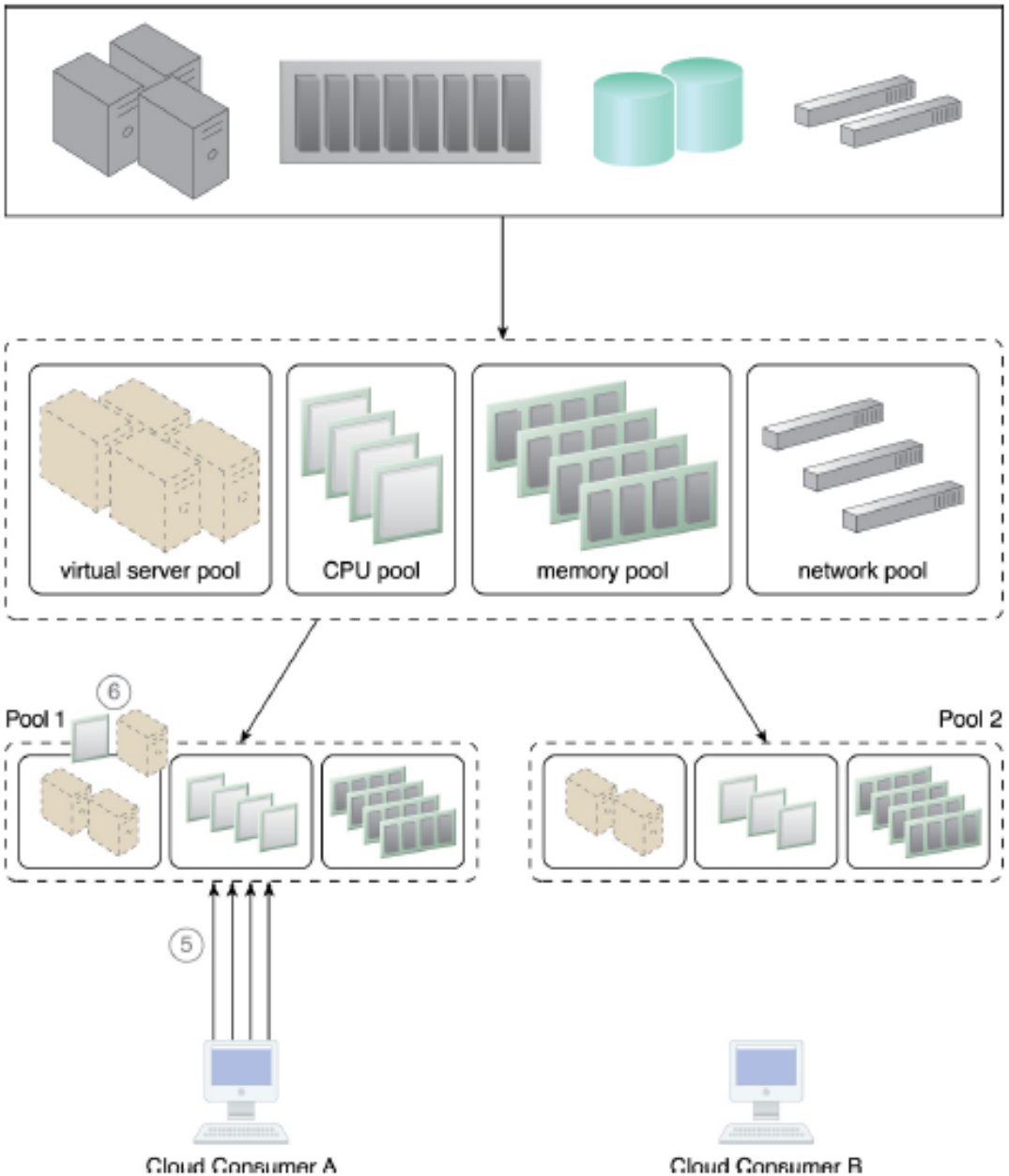
- The VIM signals the load balancer to redistribute the workload based on pre-defined thresholds (5).
- The load balancer initiates the live VM migration program to move the virtual servers (6).
- Live VM migration moves the selected virtual servers from one physical host to another (7).

资源预留示例---1



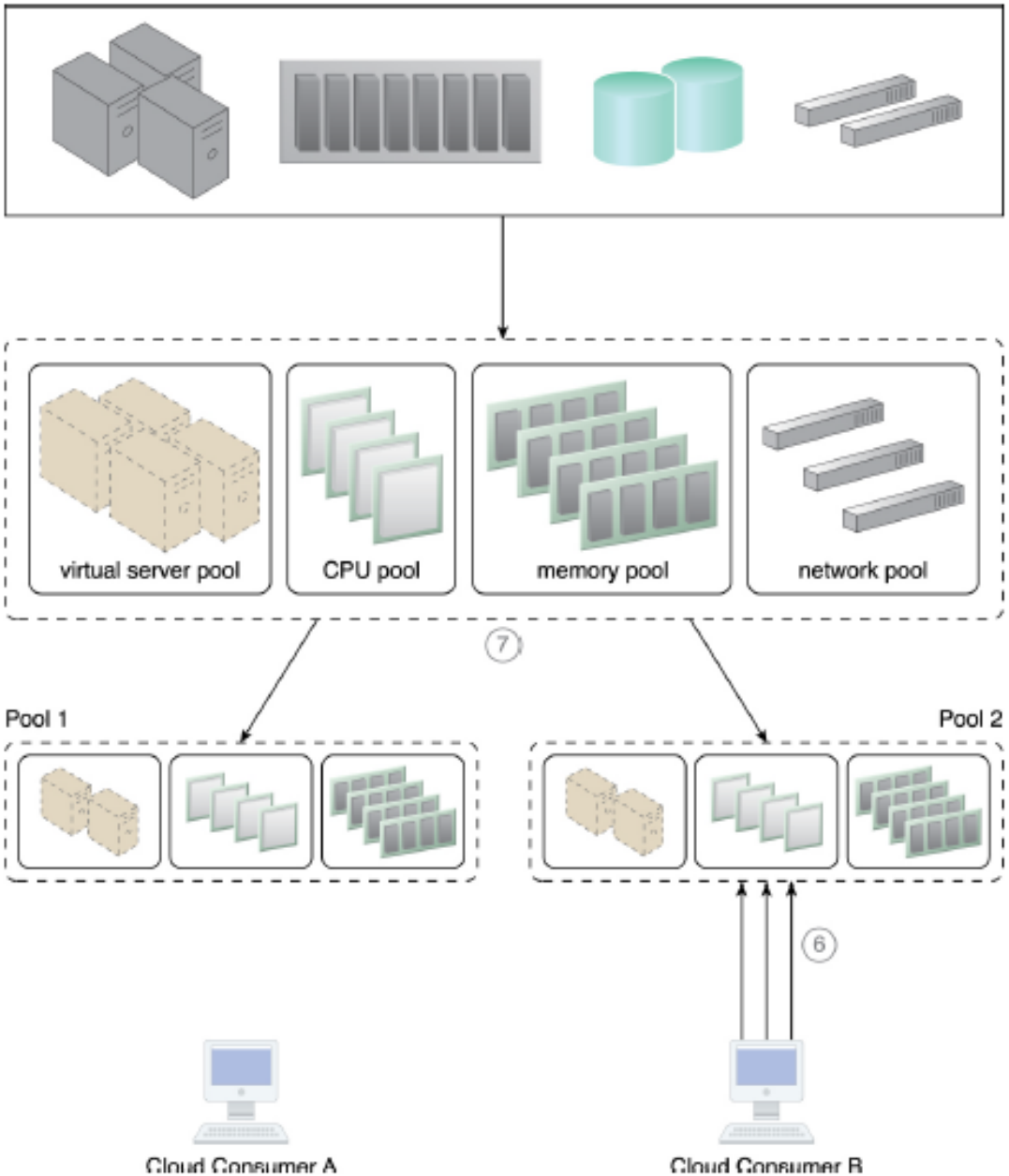
A physical resource group is created (1), from which a parent resource pool is created as per the resource pooling architecture (2). Two smaller child pools are created from the parent resource pool, and resource limits are defined using the resource management system (3). Cloud consumers are provided with access to their own exclusive resource pools (4).

资源预留示例---2



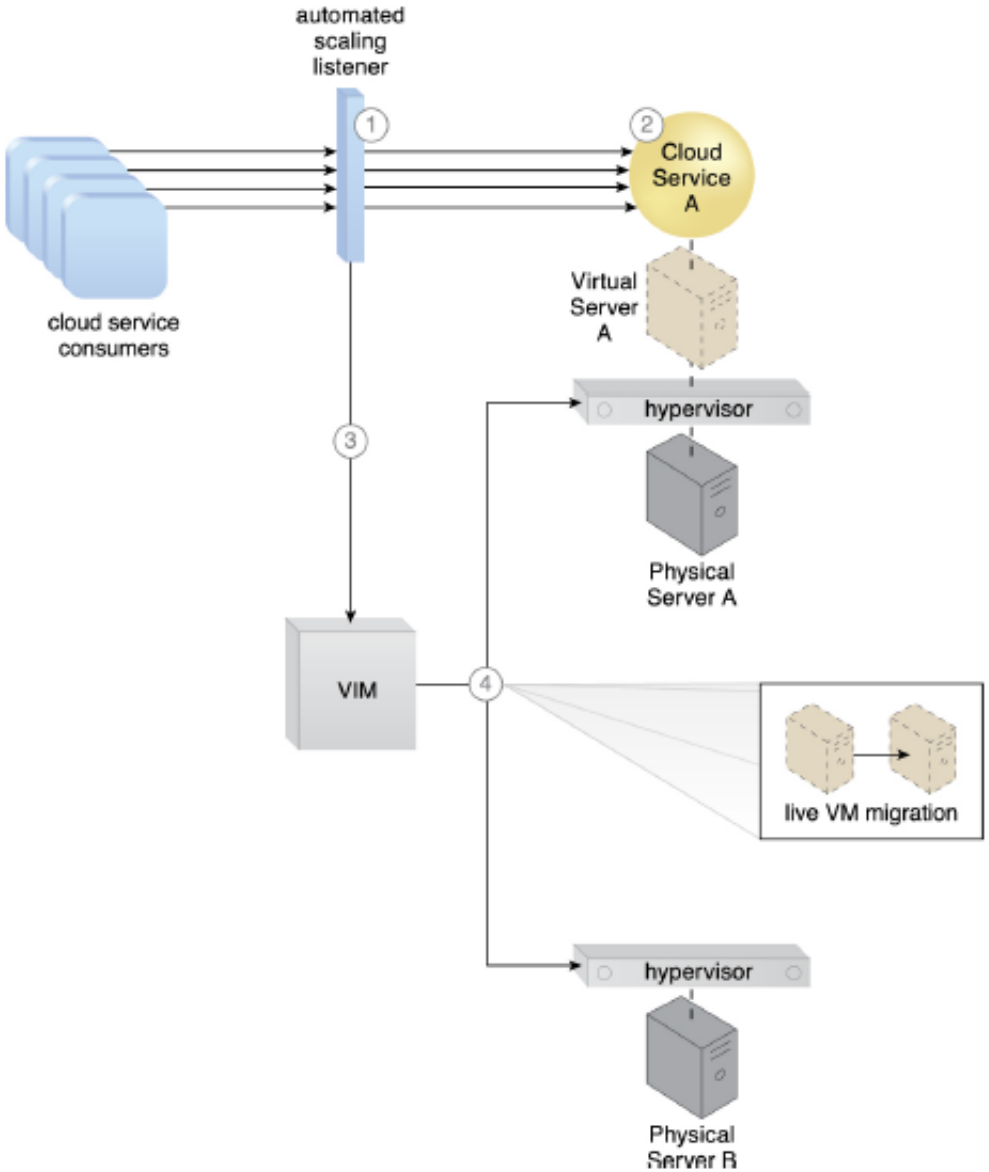
An increase in requests from Cloud Consumer A results in more IT resources being allocated to that cloud consumer (5), meaning some IT resources need to be borrowed from Pool 2. The amount of borrowed IT resources is confined by the resource limit that was defined in Step 3, to ensure that Cloud Consumer B will not face any resource constraints (6).

资源预留示例---3



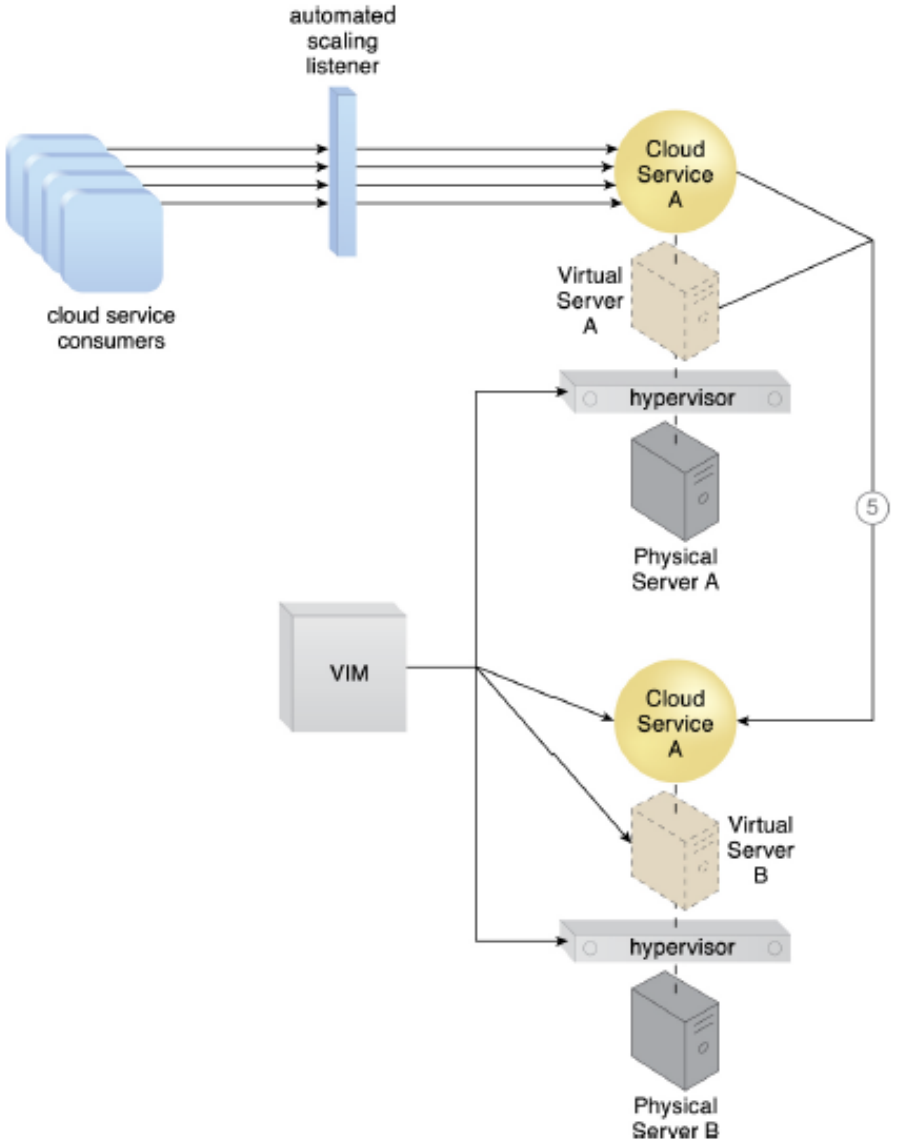
Cloud Consumer B now imposes more requests and usage demands and may soon need to utilize all available IT resources in the pool (6). The resource management system forces Pool 1 to release the IT resources and move them back to Pool 2 to become available for Cloud Consumer B (7).

不中断服务重定位架构---1



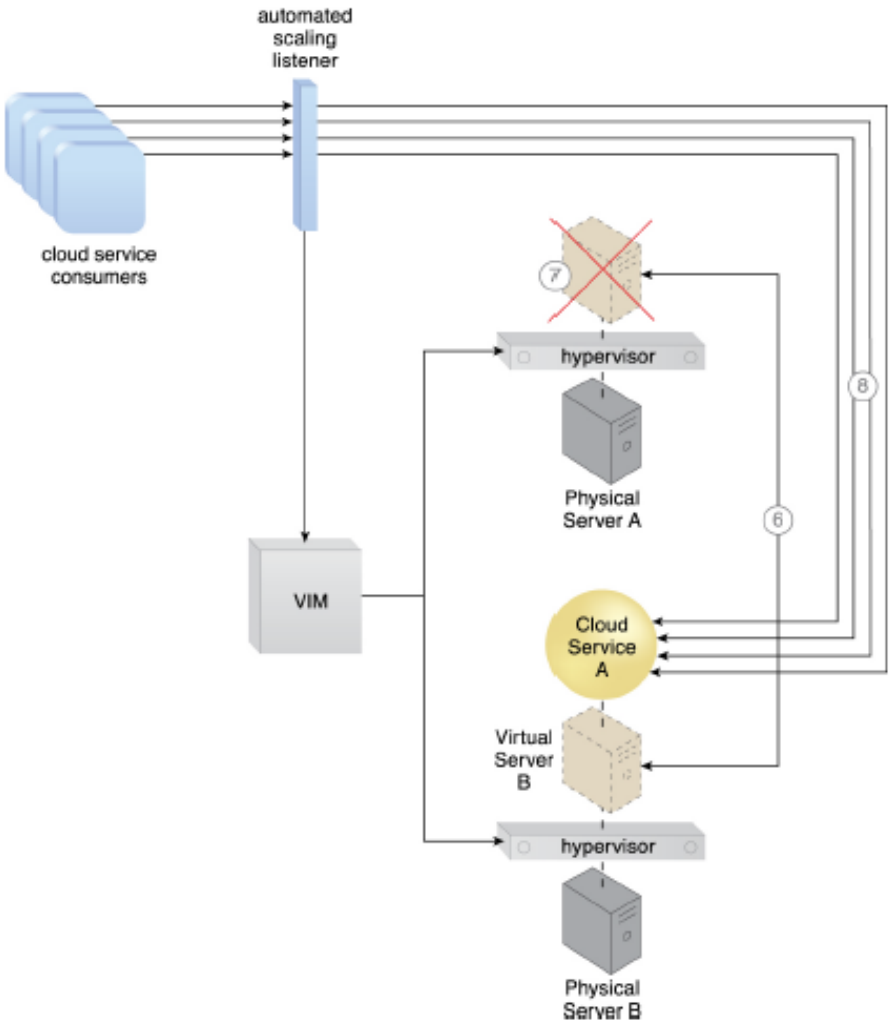
The automated scaling listener monitors the workload for a cloud service (1). The cloud service's predefined threshold is reached as the workload increases (2), causing the automated scaling listener to signal the VIM to initiate relocation (3). The VIM uses the live VM migration program to instruct both the origin and destination hypervisors to carry out runtime relocation (4).

不中断服务重定位架构---2



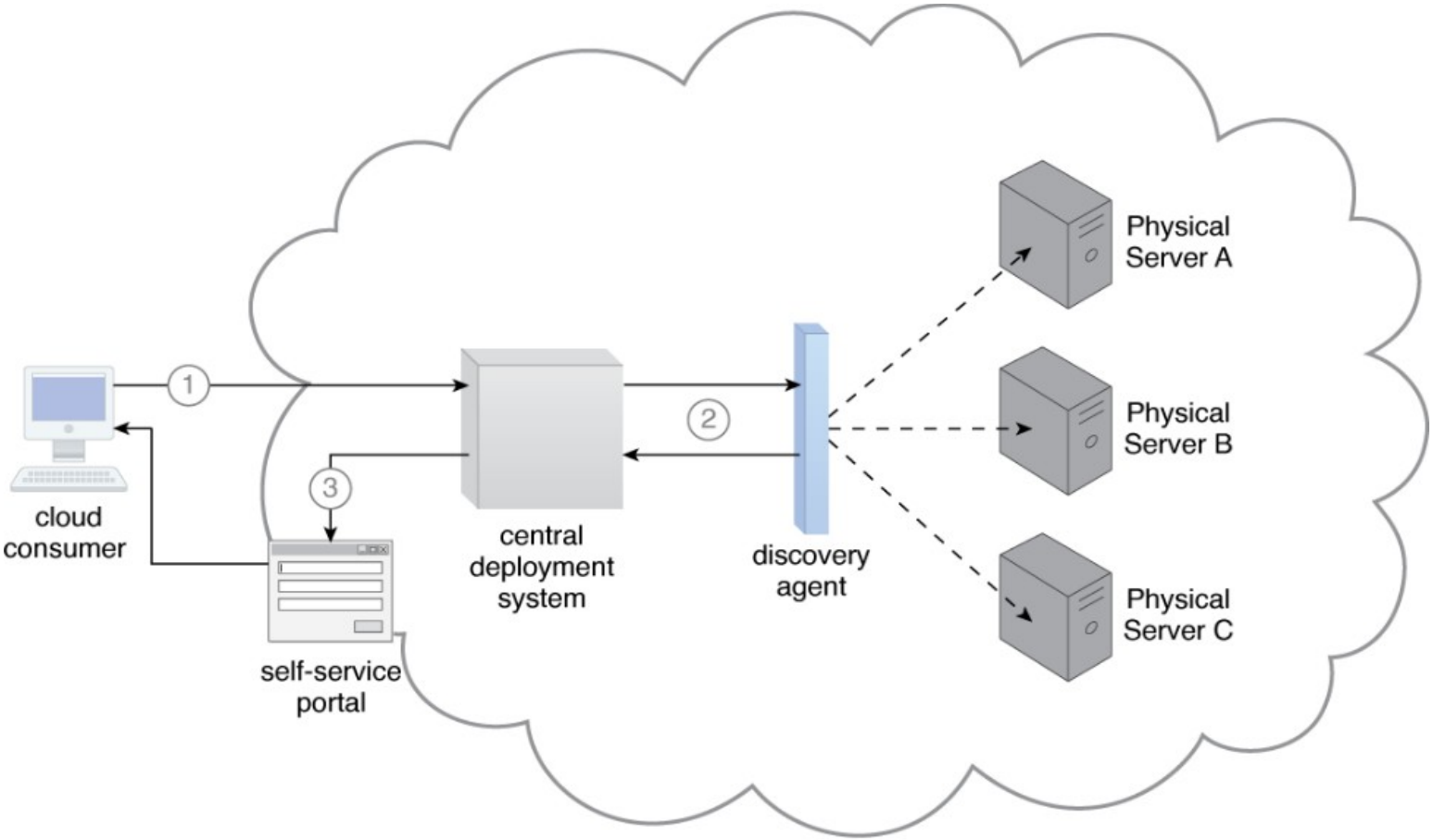
A second copy of the virtual server and its hosted cloud service are created via the destination hypervisor on Physical Server B (5).

不中断服务重定位架构---3



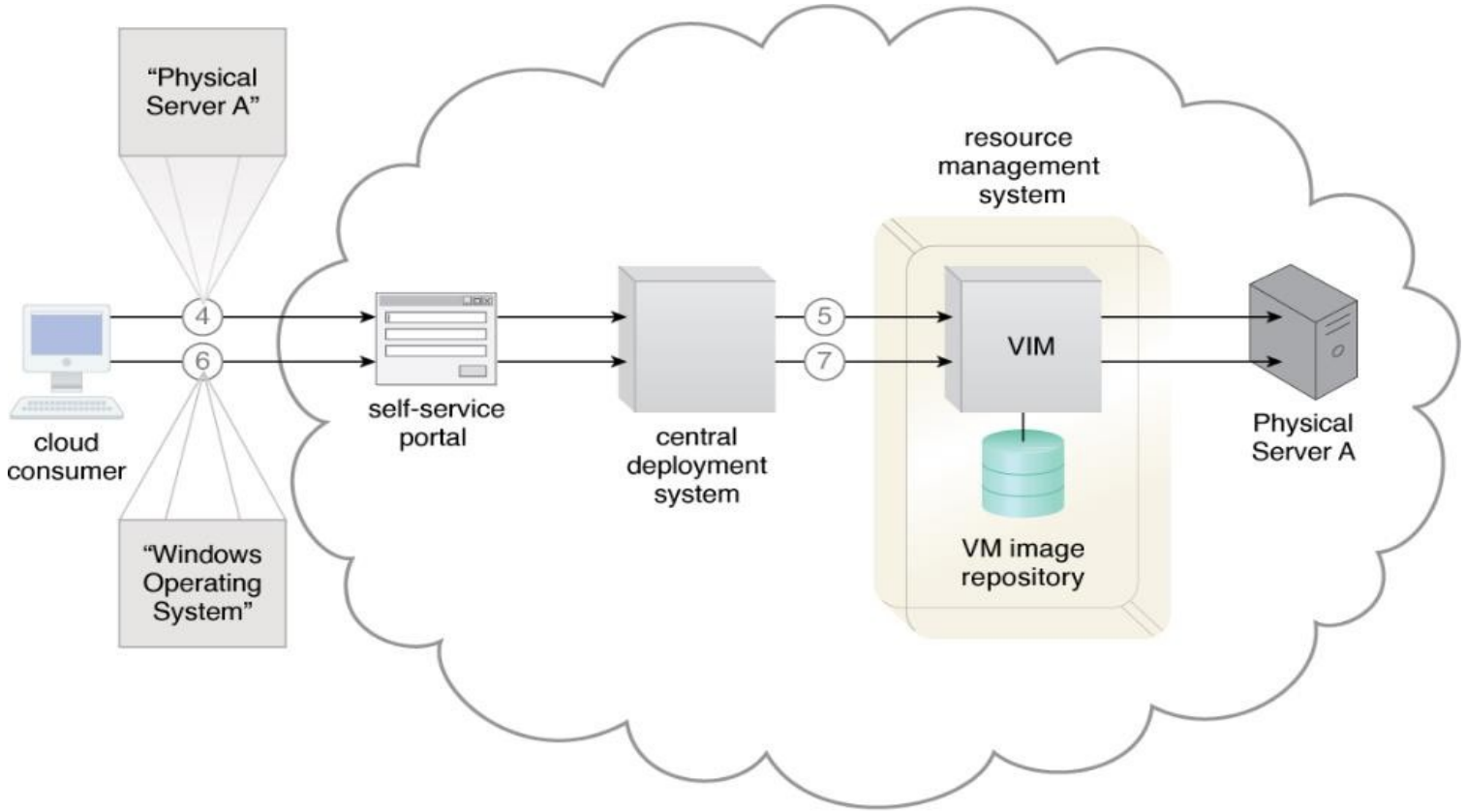
The state of both virtual server instances is synchronized (6). The first virtual server instance is removed from Physical Server A after cloud service consumer requests are confirmed to be successfully exchanged with the cloud service on Physical Server B (7). Cloud service consumer requests are now only sent to the cloud service on Physical Server B (8).

裸机供给架构



- The cloud consumer connects to the deployment solution (1), and uses the deployment solution to perform a search using the discovery agent (2).
- The available physical servers are shown to the cloud consumer, which selects the target server for usage (3).

裸机供给架构



- The deployment agent is loaded to the physical server's RAM via the remote management system (4).
- The cloud consumer selects an operating system and method of configuration via the deployment solution (5).
- The operating system is installed and the server becomes operational (6).

课后题

1、分析比较云服务容错的几种机制。

2、思考云服务负载均衡和存储负载均衡两种负载均衡需求及对应机制的差别。