

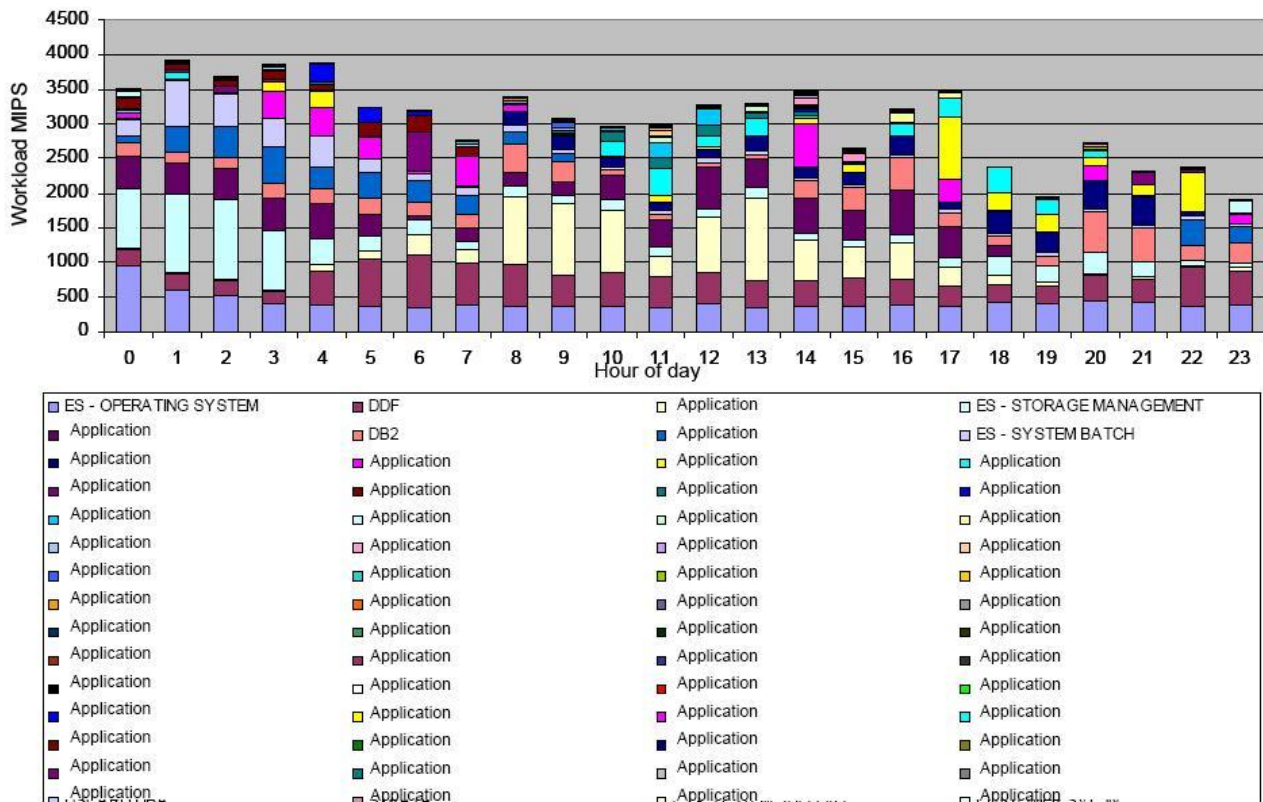


CLABBY ANALYTICS

What Is a Mainframe?

A mainframe is a general workload server. It can run hundreds or thousands of different applications simultaneously at high utilization rates (mainframes often run in the 90-100% utilization range). Figure 1 shows a mainframe running many disparate applications simultaneously while operating at a high utilization rate.

Figure 1 -- Mainframe Architecture: Multiple, Virtualized Workloads Operating Simultaneously

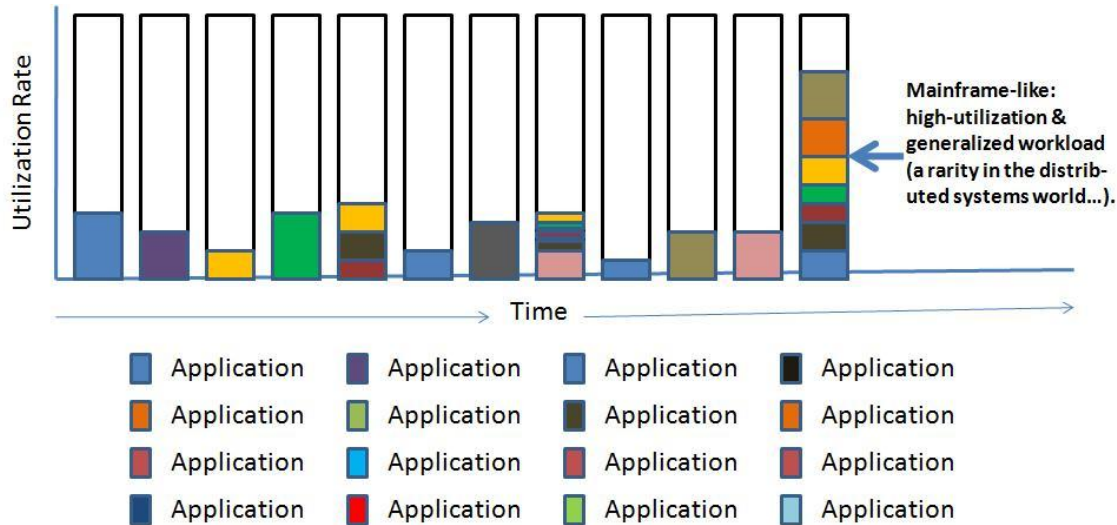


How Are Distributed Servers Different?

By contrast, distributed servers have been designed to run one application very well (which is why distributed server vendors stress single application performance benchmarks so heavily). And some distributed servers have been designed to run multiple applications (Figure 2 illustrates both scale-up as well as scale-within distributed server designs).

Because the virtualization, provisioning, and workload management software on distributed servers is far less advanced than can be found on a mainframe -- it is comparatively harder to manage resources and balance workloads within your distributed server environments.

Figure 2 -- Scale-up and Scale-within Applications on Underutilized Distributed Servers



Distributed servers generally operate in the 10-20% utilization range (because distributed server managers and administrators leave lots of "headroom" for peak processing periods during the day). To fix this underutilization problem, you're spending millions of dollars to buy virtualization/provisioning software (available from a variety of software vendors); and you are spending a small fortune deploying and integrating this software. Further, you're spending additional IT budget educating your systems/network managers on how to use this new software. And, because distributed environments rely heavily on networking between servers, you're wasting money on expensive communications and network equipment. Finally, you are spending far more money than you have to on security, risk and compliance, and business resiliency. STOP DOING THIS!

There Are Some Legitimate Reasons to Build a Distributed Computing Environment

Sometime you don't have a choice when it comes to building a distributed computing environment. Examples include: 1) if you require Microsoft Windows (Windows doesn't run on a mainframe); 2) if you require Unix (Unix doesn't run on a mainframe); 3) if your workload needs to be processed at geographically dispersed sites; 4) if you cannot get the telecommunications connections that you need to access a centralized mainframe; 5) if your computing workload is too small for a mainframe (in this case, a scale-up/scale-within midrange server can do the work -- or multiple distributed servers can be used).

But, if you've got a large collection of disparate applications -- and if you want to cut your data center operational costs (including human labor-related management, power, cooling, real estate, and physical plant) -- YOU SHOULD BE LOOKING AT MAINFRAME ARCHITECTURE.