Most organizations combat risk in virtualized infrastructure by significantly over-provisioning hardware. But this inefficiency can be avoided by optimizing workload placements and right-sizing VM allocations to simultaneously combat both risk and capacity waste. The same applies in bare metal clouds which must be managed and optimized in the same way as internal virtualized infrastructure.

Densify™ is a predictive analytics service that optimizes cloud environments in real-time, enabling customers to operate with less cloud cost, less infrastructure and better performing applications.

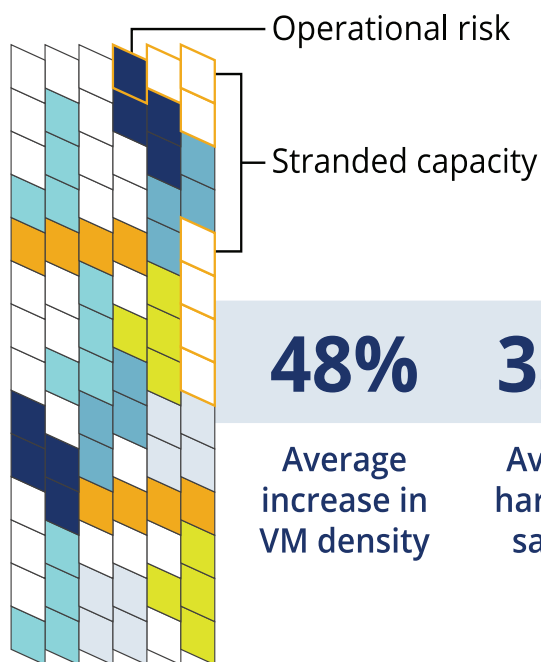## Optimize VM Placements to Increase Density

Densify's predictive analytics optimize VM placements considering all technical and business requirements and detailed utilization patterns and personalities to significantly increase density while reducing the risk of resource contention. Leveraging patented analytics, Densify uniquely dove-tails workloads, optimally fitting VMs together on host infrastructure. Think of it like a game of Tetris®, poorly placed workloads strand capacity and can lead to resource contention, while optimally placed workloads make the best possible use of the physical infrastructure. The analytics powering Densify increases VM density by 48% on average, reducing hardware requirements by an average of 33%.

Unique Insight into Your Infrastructure

Densify uniquely dovetail workloads like in the game of Tetris® to optimally increase density. This means your applications run better and need less infrastructure, both on-prem and in the cloud.
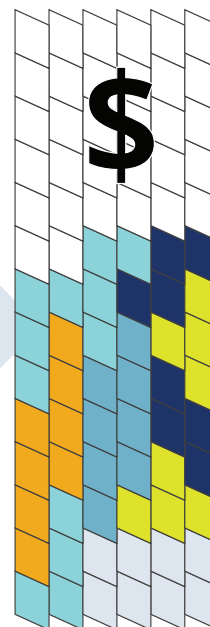

Before Densify

Operational risk

Stranded capacity

48%
Average increase in VM density

33%
Average hardware savings

55%
Average software license savings

After Densify

$

Densify

Proactive Automated Optimization with Predictive Analytics

As environments grow and as workloads change, what was once optimal may no longer be. Densify's predictive analytics model what workloads will do in the future, and uses this information to proactively and automatically optimize resource allocations and placements. Unlike a reactive load balancer, Densify's placements avoid performance issues and dramatically reduce VM motioning and volatility.
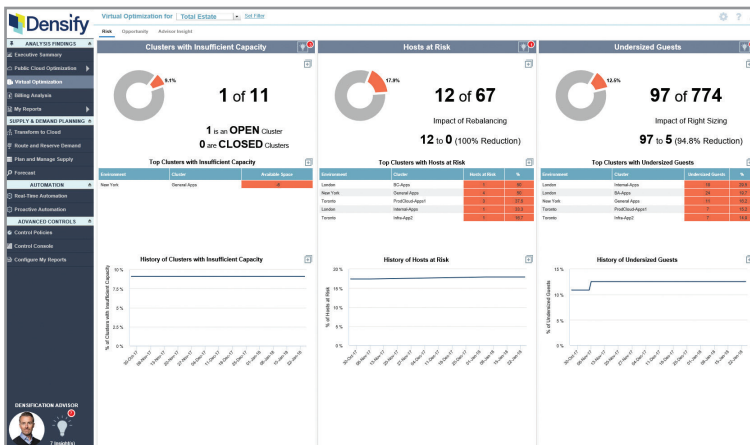
Proactive automated optimization enables:

- **Increased efficiency** by reclaiming resources from over-sized VMs
- **Increased VM density** by rebalancing VMs to safely dove-tail workloads and avoid resource contention
- **Bumping up resource allocations** before issues arise
- **Identification of inadequate capacity** at the cluster and environment level

Real-time response is there for you when you need it

Sometimes operational anomalies occur and real-time response is required to address the issue. Densify gives you the best of both worlds with automated, proactive optimization and real-time response that gets you out of trouble. Densify's real-time automated actions enable:

- Real-time hot-adds in response to CPU and memory resource allocation shortfalls
- Scheduling of resource reclamation and right-sizing when real-time changes to allocations are not suitable due to policy and operational constraints
- Intelligent real-time VM rebalancing through synchronization of Densify's predictive analysis models and integration to VMware® DRS
- Real-time analysis of new workload placement across on-prem and public cloud infrastructure, to avoid resource imbalances at the cluster and environment levels

See Automated Optimization in Action

Get a demo at:
www.densify.com/try

www.densify.com