

# REDUCE RESOURCE OVER AND UNDER PROVISIONING WITH RESERVATIONS



*No Reservations* is the late Anthony Bourdain's Emmy Award-winning series chronicling his travels around the globe to explore the cities, villages, and countries that offer life's truest surprises, without requiring reservations. However, in IT service and operations management, not having reservations could lead to negative implications that can impact service, reliability, costs, and customer satisfaction.

## What are reservations and why are they important?

The ability to accurately estimate future resource requirements and align with ever changing business demand is critical for service assurance without overprovisioning, which can increase costs, or under provisioning, which can put service quality at risk. Reservations help ensure that the resources for new applications and business services are available when they're needed, without incurring costs, until deployment.

So, what is a reservation? A reservation is a method of allocating resources at the time of the project, instead of pre-allocating resources and associated costs before they are needed. Examples of events that would require reservations are Black Friday, health insurance open enrollment periods, marketing campaigns, and product launches. Planning for these events requires input from multiple sources: marketing, sales, customer sentiment—and not just historical data.

Artificial intelligence (AI)- and machine learning (ML)-driven predictive analytics aligned with business key performance indicators (KPIs) helps enterprises identify the required resources they need to support increases in business demand due to special events or business growth. However,

additional insight is required to determine how and when to allocate a given resource or set of resources for use by an event, specific workload, instance, project, user, department, or tenant for a specific period in time.

## How and why reservations work

Reservations enable IT to deploy applications and services on time and understand which resources are available at the time of release. Viewing current resources—both used and available—along with future onboarded and offboarded resources, enables IT to accurately reserve resources for future needs without incurring costs ahead of time.

The more accurately and efficiently that IT departments can right-size resources with demand, the less they need to overprovision and waste resources. That also reduces the risk that services, applications, end-users, and customers will experience performance issues related to cost concerns and under provisioning. Actively aligning resources with demand also improves service while reducing both cost and risk, rather than pitting one goal against the other. This can result in significant savings without sacrificing service, workload, and application performance.

The benefit of reservation-aware resource management is that it provides detailed, projected saturation information to manage capacity based on future resource commitments. IT departments can manage resource reservations and increase future capacity by onboarding. This enables them to automatically evaluate and predict the spare capacity to optimize resources and costs while also reducing the trap of overprovisioning and underprovisioning.

To learn more about reservations and efficient resource, capacity, and cost management in today's complex IT environments, download the e-book, ["Service Assurance and Optimization with AIOps"](#)

Thanks for reading.