



En Masse Entertainment delivers great games and great service on CenturyLink

En Masse Entertainment was founded in 2009 with the goal of building loyal audiences for the finest online games in the world, with the motto “Great Games — Great Service.” En Masse successfully launched its inaugural title, TERA — a revolutionary action-combat MMO — in 2012, followed closely by the online shooter ZMR (Zombies Monsters Robots). But today, their motto isn’t limited by platform; En Masse has expanded into mobile games with multiple titles.

“Game publishing isn’t what it was 30 years ago,” said Paul Harwood, director of operations at En Masse. “It’s all online now. We distribute online. We monetize online. We support the user base online.”

Staying true to the “great service” part of the company’s brand promise requires an IT strategy that scales with unpredictable demand as new games hit the internet, and players binge on compute-intensive scenarios. Managing a business whose core DNA and offerings are online brings new challenges and costs.

Challenge

Migrating games to the cloud to manage growth

When En Masse launched its first game they bought all the hardware required to run it. The “great game” part of the brand promise was obvious as players enjoyed the monster battles and melees in the game. But En Masse’s great service could only scale as far as that infrastructure would permit.

When Harwood was hired by En Masse, the company was looking at spending more than \$1 million just to upgrade its internal infrastructure to the latest technology. With the business expanding into other

At a glance

Industry

- Online gaming

Challenge

- Deliver an uninterrupted online gaming experience that keeps players in the game and the excitement streaming

Solution

- CenturyLink® Cloud Compute turns \$1M CapEx into \$25K/month opex to meet the demand of popular games and new launches

games and a mobile gaming initiative coming to fruition, a new IT strategy was necessary to avoid soaring costs and the erosion of the user experience that is so vital in the gaming world.

At the same time, En Masse's user base was experiencing global growth. The company was expanding into Brazil, Australia and elsewhere. So any solution had to have a global footprint, with multiple data centers to avoid latency issues that can kill game performance.

"All this growth became very, very expensive," Harwood said. "How are we going to continue to add cool new games? How do we efficiently manage swings in demand as games go through their normal cycles? The cloud is the only way to manage that expansion and business cycle."

The fluid nature of IT demand in the gaming business also required En Masse to seek the greatest flexibility possible in how capacity and capabilities could be purchased, while ensuring proximity to major markets and player concentration. Each game is its own business, essentially. Some are more successful than others and some can go viral quickly. Spikes in processing can happen for a variety of reasons as thousands of users play the games. From Harwood's perspective, an increase in processor capacity should not automatically trigger additional billing on network usage or storage, especially if those features were not used. Some vendors link purchases of various solution components — a certain amount of processor has to be purchased with a certain amount of network or storage, for instance — and that was a problem for Harwood.

"We have to be ready for all kinds of possibilities," Harwood said, "And that means slicing and dicing services so we're not paying for things we aren't actually using."

En Masse already knew the CenturyLink dedication to service and flexibility, having leveraged CenturyLink® Colocation services for their own internal IT needs. Harwood knew the reliability of the service and the determination of CenturyLink staff to provide great support. Working with us to support their new gaming infrastructure vision was a strategic next step in the relationship.

Solution

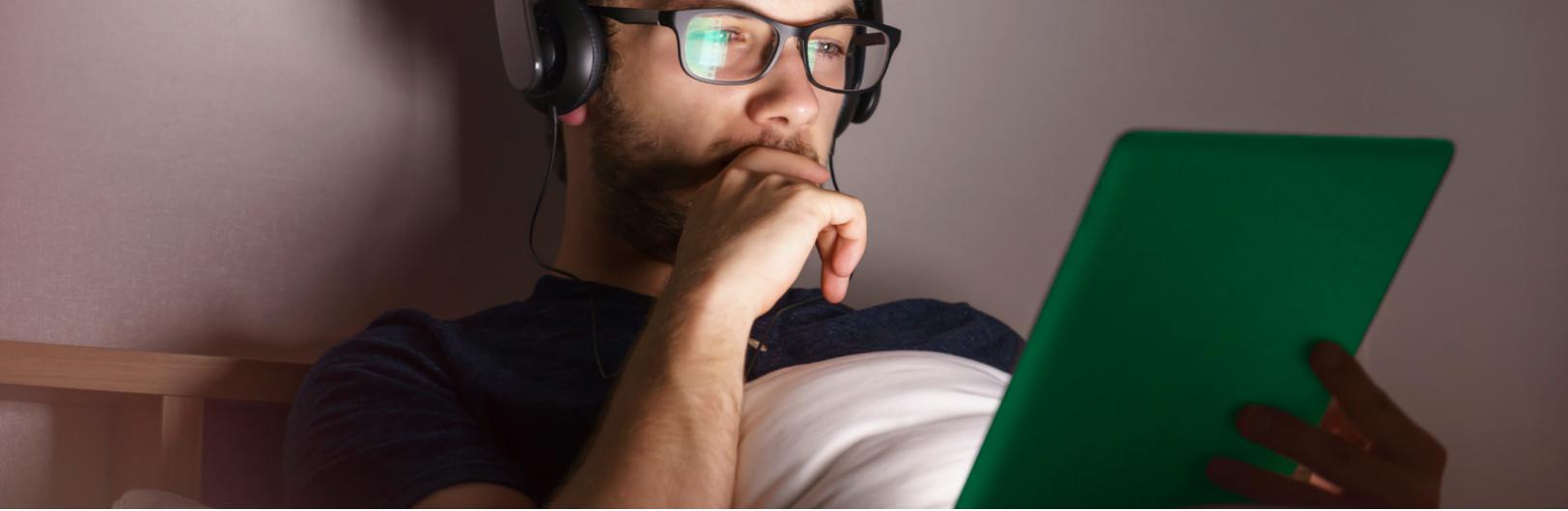
A dedicated cloud with great flexibility

En Masse has shifted many of its games into CenturyLink Cloud® compute, a public cloud offering processing capability that can expand its virtual and physical resources on demand. CenturyLink was ready for En Masse's needs, having developed a gaming reference architecture with customers like En Masse in mind. The architecture is designed to maximize centralized management and global replication in other cloud data centers so that latency is not an issue for users in any corner of the world.

These games can support anywhere from a few dozen to hundreds of users at any one time. Spikes in demand are handled through automated provisioning without burdensome linkages that raise costs. When more CPU or memory is needed it's configured on the fly. A gigabit connection from the CenturyLink data center in Chicago easily handles bandwidth needs. That available bandwidth is crucial to reduce or avoid latency issues.

"A game is like any enterprise application, it needs CPU and RAM. The cloud is ideal for delivering games to different platforms, from PCs to mobile phones."

**- Paul Harwood,
En Masse Director of Operations**



Results

Great CenturyLink service for great En Masse games

The difference in the financial models between the cloud and En Masse's legacy IT strategy are pretty staggering. The company can now launch games with no up-front costs versus buying servers and hoping the game is successful enough to justify the expenditures. Harwood reported that just for the onboarding of a single game, he changed his cost structure from \$1.2 million in CapEx (hardware purchases as well as the provisioning of a physical data center) to \$25,000 a month in OpEx that will scale up or down with usage.

He can also provision in minutes. One of the more important changes he has noticed is how transparent his ongoing support has become. His small, internal IT staff can now focus entirely on how the game is performing rather than managing infrastructure.

“Our guys can focus on the game,” Harwood said. “Let the CenturyLink engineers go do everything else, like network engineering or monitoring performance.

**- Paul Harwood,
En Masse Director of Operations**

Future

Great games — great service — great growth

As they grow their business, En Masse now plans to launch all new games in the cloud. This cloud-first strategy enables them to scale resources if the game is wildly successful and moderate those resources as the game goes through its normal cycles of popularity.

Harwood will also leverage the vast footprint of CenturyLink data centers around the globe as they expand into new geographies.

“We need a very versatile cloud partner,” Harwood said. “And that’s CenturyLink.”