

# Cloud, Simplified: Why it Matters to Today's Lotteries

## Why Cloud Technology Matters

In recent years, there has been much discussion, on many levels, about “Cloud” – and we are not talking about the weather. Storing and managing data on the Cloud across the global network of remote Internet servers has been transformational for businesses, individuals, and governments, which have begun to use cloud technology for everything from driver's licenses to tax refunds.

As a result of IGT's most recent Cloud deployments and solutions, we are making important investments for our customers and progress for the industry, as IGT works proactively to leverage the vast opportunities of the Cloud.

## Cloud Native Solution

IGT partners with lottery customers to help them benefit from the advantages of the Cloud. While some technology partners have rushed to offer the first Cloud lottery solutions by “lifting and shifting” their existing systems to the Cloud, just deploying existing code to run on Cloud infrastructure is not optimizing all the benefits Cloud can offer. IGT looks to truly maximize the potential of the Cloud for its customers. To do that, IGT has built an integral Cloud Native Solution. “Cloud Native is not a ‘lift and shift,’” explains Jesse Saccoccio, Director, Global iLottery Platform Sales, IGT. “If on-premise products are ‘lifted and shifted’ to the Cloud, then lotteries cannot reap the benefits completely. **Our products are developed with a Cloud Native Solution to seamlessly harness the advantages of Cloud benefits.**”

## Delivery Pipeline

“Cloud-y” skies are a positive sign – for the distribution of software, that is. IGT has **advanced the delivery pipeline, with improved continuous integration, delivery and/or deployment**, known as CI/CD.

## A Shift in the Weather

“Thanks to ‘lightning speed’ technology, possibilities for the Cloud advance at a rapid pace,” notes Srinu Nedunuri, Senior Vice President, iLottery, IGT. “IGT continually **pushes the boundaries of Cloud capabilities forward for lotteries**, tailored to client needs, from customary to revolutionary.”

The latest technology built by the IGT team **encompasses a complete Cloud offering for all essential iLottery components. This includes player**

**account management, artificial intelligence, machine learning, elstants remote game server, draw game services, and many more features, all running on public Cloud infrastructure, using public Cloud services.**

IGT has worked to unlock the advantages of the Cloud for the lottery industry. Below are just four of the key Cloud benefits – **Healing, Scaling, Enhancement, and Security** – which all reinforce how IGT and their customers can work together to reach lottery goals.

## Healing, Simplified

Everyone benefits from the healing elements of good weather, like soaking in some vitamin D on a sunny day. The healing aspects of IGT's Cloud Native Solution are similar. With Healing, Simplified, IGT can supply **nearly uninterrupted player experiences** and **improve system resiliency**. The system can self-correct; upon registering that it is not running as it should, it is able to try and



IGT's Cloud Native Solution provides Healing, Simplified to lotteries with self-correcting system capabilities, allowing for nearly uninterrupted player experiences.

resolve the issue, on its own, without human interaction. This happens **automatically** in the background, letting operators focus on more time-sensitive activities.

Because the system knows how to correct in these situations, the Cloud Native Solution helps improve the overall experience for players, who will not see or experience noticeable downtime when this occurs. The **increase in autonomy**, with **minimal human intervention**, is a significant Cloud Native benefit.

## Scaling, Simplified

IGT can help grow lotteries to the **right-sized system, at the right time**. In the past, operators might provision hardware and infrastructure for several years into the future. In the meantime, only a minimal capability percentage would be utilized, and other capacity would be idle. It was previously necessary to predict player demand and prepare without exact knowledge of the future player population, potentially underutilizing or wasting resources.

With the simplified scaling of the Cloud Native approach, the system is instructed about existing computer power; **when more is needed, the system will grow to another level**. IGT crafts the **custom Cloud Native Solution** for



By supplying capacity on time and on demand, and with an infinite capability to grow as player need expands, IGT's Cloud Native Solution offers lotteries **Scaling, Simplified**.

operators to be right-sized, right now, **for the volume of players that they are currently seeing**, and for the **performance and experience those players demand**.

Thanks to the infinite scaling opportunities of the Cloud, future capability is ensured, helping lotteries **optimize resource** use and operational expenditures. There are multiple benefits for overall player experience, and for lotteries, which can keep selling for longer periods and not require as many planned downtimes as in the past. From the players' perspective, it is important to access the required services on demand and on time – for example, if players are trying to check their numbers during peak jackpot periods when the traffic is quite high. When a service cannot

manage that demand, that is of course frustrating for players. With IGT's Cloud Native Solution, **capacity can expand dynamically over time**. From checking numbers to ticket sales, **lotteries can seamlessly “scale up” to accommodate**, and then **scale back down when that expanded space is no longer needed**.

With the benefits of Scaling, Simplified, the Cloud Native Solution allows systems to adjust **correctly, modify naturally, and evolve as required**.

## Enhancements, Simplified

The Cloud Native Solution enables IGT to **streamline the process of making enhancements**. This increases the speed at which IGT can deliver new and exciting innovations for lotteries and their players.

Utilizing Cloud Native positively impacts the time and requirements needed to upgrade platforms. This allows IGT engineers to supply the necessary software through the Cloud, and let that **process implement an upgrade and install the latest features, without taking the system offline for maintenance**. **These updates then roll out naturally**, enabling the system to upgrade and install itself when the time is right.

Time-consuming human intervention is reduced as a result. Once set up, there is no need for an engineer to access, deploy and/or check that a particular installation has been completed. This process is

**Thanks to Enhancements, Simplified: Faster, easier, autonomous enhancement and upgrades are available on the Cloud, enabling lotteries to innovate and release new features at speed.**





IGT's Cloud Native Solution delivers Security, Simplified to lotteries by sourcing proven security solutions built upon meaningful Cloud provider investment.

available via the tools IGT is utilizing from the Cloud, and the services they provide, **improving efficiency.**

The Enhancements, Simplified process is executed autonomously. Lotteries benefit from **increased uptime**, supporting the ability to continue supplying exciting new player experiences. This provides the opportunity **for more frequent releases, including improvements to existing features and functionality.**

## Security, Simplified

IGT harnesses the **proven security benefits of Cloud providers** to ensure the necessary peace of mind lotteries are looking for.

“Lottery is a highly regulated industry, as readers are aware,” says Saccoccio. “There are other industries that are more highly regulated — such as healthcare and banking — which also run on these Cloud services. IGT utilizes Cloud, and **leverages investments in Cloud providers’ systems, specifically for the lottery business.**”

Cloud providers and the industries they serve require key certifications, from International Organization for Standardization (ISO) and National Institute for Standards and Technology (NIST) for instance, to federal and state requirements, which help lottery security support. Operators can be secure

in the knowledge that their **networks – and their data at rest – are encrypted.** IGT can then provide lotteries with a more secure system, while **reducing time spent on security**, and instead allow **resources to be focused on improving the player experience.**

Association with Cloud providers also fosters the **opportunity for forensics:** If operators need to take a snapshot of the server to view what happened at a certain time, providers can supply the ability to take that snapshot. They can oversee the change of custody control and access to that information, without having to visit a data center and extract a physical server from it. The Cloud providers allow lotteries and regulators to directly access that information as quickly as possible, and then manage it for the different investigations needed for each scenario.

## The Cloud in Europe

IGT recently integrated learning about Cloud Native benefits and deployed it to one of the fastest growing lotteries in Europe: Poland's Totalizator Sportowy (TS), in its recent iLottery system conversion.

“I am very pleased that we have been able to finalize this ambitious project of adoption of Cloud Native in Poland,” said Maciej Kasprzak, General Manager, Online Gaming

Division, Totalizator Sportowy. “I’m sure that the advancement in system performance and reliability will result in the improvement of customer experience. It should also allow us to develop and integrate more tools to support advanced analytics and CRM.”

The entire TS iLottery platform from IGT is a complete, digital Cloud Native Solution. As an important pillar supporting sport and culture in Poland, TS Lottery makes use of the Cloud Native benefits outlined in this article to help support its goal of transferring maximum funds to good causes.

The latest iLottery Cloud Native blueprint was recently rolled out to Loterie Romande in Switzerland.

“We are excited to utilize IGT’s Cloud Native Solution, based on Microsoft Azure, that meets our Federal Act on Gambling (Gambling Act) rules of having a solution hosted in Switzerland,” said Jean-Luc Moner-Banet, CEO, Loterie Romande. “The opportunity to benefit from continuous integration, delivery, and deployment of iLottery components and upgrades will help Loterie Romande enrich the experience for our players well into the future.”

The Cloud Native approach to infrastructure will help strengthen Loterie Romande’s commitment to distribute 100% of its profits each year to social action, sport, and culture.

## Sunny Skies Ahead

Poland’s Totalizator Sportowy and Switzerland’s Loterie Romande are just the beginning.

The Cloud Native Solution is soon to be deployed to IGT’s U.S. customers. More news and insights about progress and evolution to the Cloud on behalf of customers is to come.

As IGT invests in customer success with the Cloud, the forecast looks bright. IGT is excited and proud of its **brand-new complete digital iLottery Cloud Native Solution and all the benefits** it responsibly brings to lotteries and their players. ■

