Dream11 gets reliability, scalability, and performance with Instaclustr Managed Apache Cassandra

Overview

Dream11 is the principal sponsor of the IPL competition and the leading gaming company in India.

Dream11 had mainly been self-managing their technology stack that powers the Dream11 app and the competitions that run through it. They chose several distributed, open source data technologies to be the backbone of their application due to the high scalability, reliability, and performance that it offers and what their users had come to expect.

Use Case:
Online Gaming

Technology:
Open Source Managed Apache Cassandra®

Website:
dream11.com

> *We trust Instaclustr as we grow. We have an ongoing partnership with them and they are our partner and reliable teammate to manage reliability at scale.*

Sanjeev Jaiswal
VP of DevOps, Dream11

Challenge

The specific challenge they needed to address was related to their key data store, Apache Cassandra. By self-managing this data layer in previous competitions, they were very aware of the complexity of operating at scale. They needed leading expertise and support to optimize their existing systems and ensure they could deliver their application at lightning-fast speeds, with zero downtime to their users through their high traffic season—the IPL competition.

Some specific challenges they were facing:

- Lack of internal operational resources to manage and operate the Apache Cassandra environment
- Known issues to do with scaling, compaction strategies, node outages, and unexpected downtime
- Lack of time to dedicate to known/and unknown issues that could affect their application performance
- Lack of business confidence in the technology due to historical issues
- Lack of production-ready provisioning, monitoring, backup tooling, and procedures in place to satisfy internal expectations.

Expected Outcomes From Working With Instaclustr

- First-class Cassandra consulting expertise to optimize existing data model and architecture
- World-leading DBA and Technical Operations capability to provide depth of expertise, and always-on availability
- Tooling and provisioning platform to accelerate time to value and ease the operational burden on internal development resources at D11
- Enable innovation at the app level by outsourcing complex DBA and operations functions to Instaclustr.

Why Was Instaclustr Chosen?

- Proven capability at managing high volume and mission-critical Cassandra clusters, especially in the gaming vertical
- Reference checks were completed through talking with existing customers on whether they would recommend Instaclustr as a partner to work with for critical business continuity.
- Dedication and collaboration from technical and business leaders to align services and commercial models to meet requirements
- Building of a trusted, mutually beneficial business relationship

- Seen as the best path to stability and optimization through partnering with Instaclustr, specialists at providing reliability at scale.

Instaclustr Solution

- Conduct an initial Apache Cassandra Health Check on their existing environment to review known issues, areas for architecture and infrastructure optimization, data model review
- Provisioning of a Proof-of-Concept environment to test application, run load testing, approve application and production readiness
- On-boarding to Instaclustr's Managed Data platform, running in Dream11's own AWS environment.

Timeline: From on-boarding to production go-live LESS THAN TWO WEEKS

Results

- Dream11 ran their most successful and busiest IPL season on record
- Achieved 0 downtime
- They went through a rapid period of innovation without their team being bogged down through the complexities of managing their data layer
- Continued long-term partnership established, Instaclustr is seen as a strategic partner to help manage reliability at scale, enable D11 to operate at limitless scale, provide always-on availability, and free their team up to focus on what matters—creating a cutting-edge app that continues to delight its users.

About Instaclustr

Instaclustr helps organizations deliver applications at scale through its managed platform for open source technologies such as Apache Cassandra®, Apache Kafka®, Apache Spark™, Redis™, and OpenSearch®.

Instaclustr combines a complete data infrastructure environment with hands-on technology expertise to ensure ongoing performance and optimization. By removing the infrastructure complexity, we enable companies to focus internal development and operational resources on building cutting edge customer-facing applications at lower cost. Instaclustr customers include some of the largest and most innovative Fortune 500 companies.