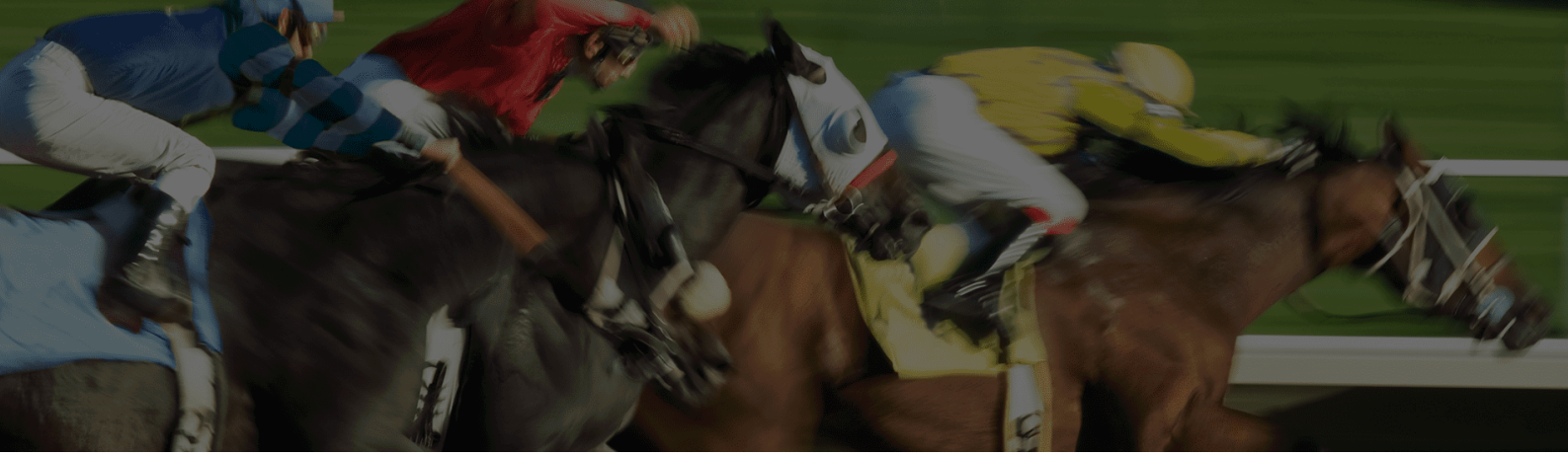
CASE STUDY

Keeping pace with the hybrid monitoring needs of a fast-growing global business

Redgate Monitor

redgate



The rapidly expanding online gaming provider, PointsBet, introduced Redgate Monitor to provide an expansive overview of its entire worldwide server estate, whether on-premises or on Azure.

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“There was a clear roadmap for growth and we needed to prepare for it. We brought in a monitoring tool, which was an obvious thing to do as a DBA.”

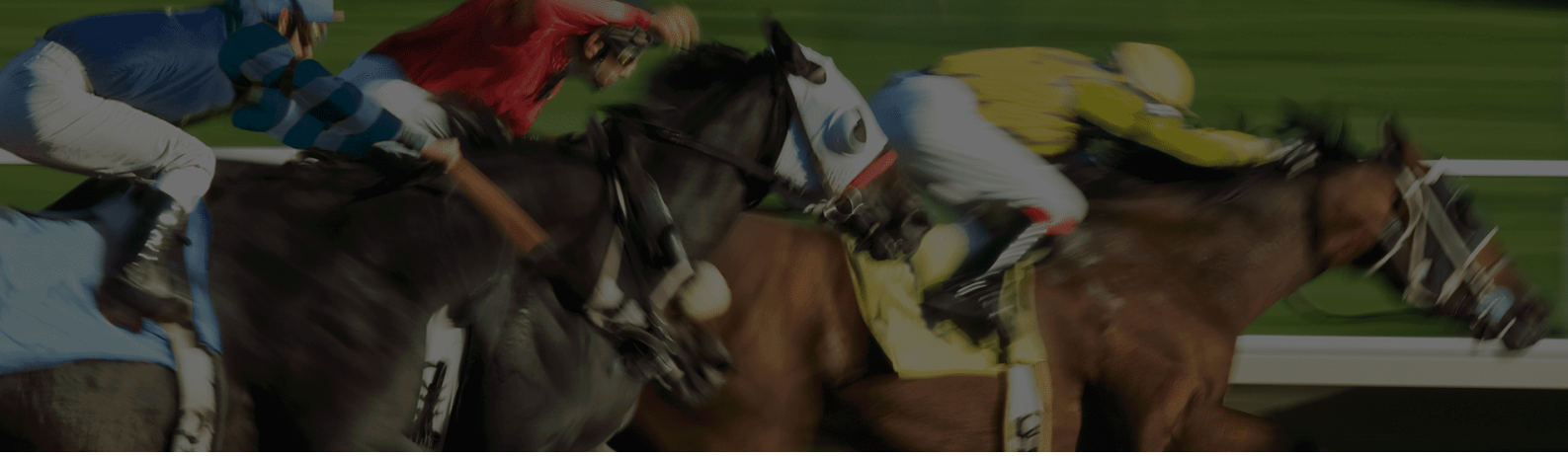
Praveen Kumar, Head of Data Services and Data Engineering

The Customer

Founded in Melbourne, Australia, in 2015, PointsBet is an ASX-listed sports wagering operator and iGaming provider. Using a scalable, cloud-based technology platform, it offers innovative sports and racing betting products and services direct to clients. The company has grown rapidly and now has offices and IT teams in multiple US states, Canada, India and Ireland as well as Melbourne.

From day one, technology has been a major differentiator for PointsBet and the priority is to provide a fast and immersive experience for its customers across a range of channels. To meet those expectations, and cope with the huge rate of growth the company is experiencing, around half of the company’s 900+ staff work on the technology side of the business.

As the company has grown, the database estate has become larger and more varied. In Australia and Canada, for example, the majority of the SQL Server databases are hosted on Azure, while in the US, some of the databases are on Azure and others are on-premises, depending on the regulatory requirements for each state.



Praveen Kumar, the Head of Data Services and Data Engineering, leads the team responsible for managing and monitoring the large and fast-growing server estate. In order to satisfy the ongoing demands of the business for 24/7 support, a follow the sun model is used, there are DBAs in Melbourne, India and in the US.

900+

STAFF

24/7

SUPPORT

> “We knew we would grow and didn’t want the additional overhead of having to develop and manage an in-house monitoring solution on an ongoing basis.”
>
> Praveen Kumar, Head of Data Services and Data Engineering

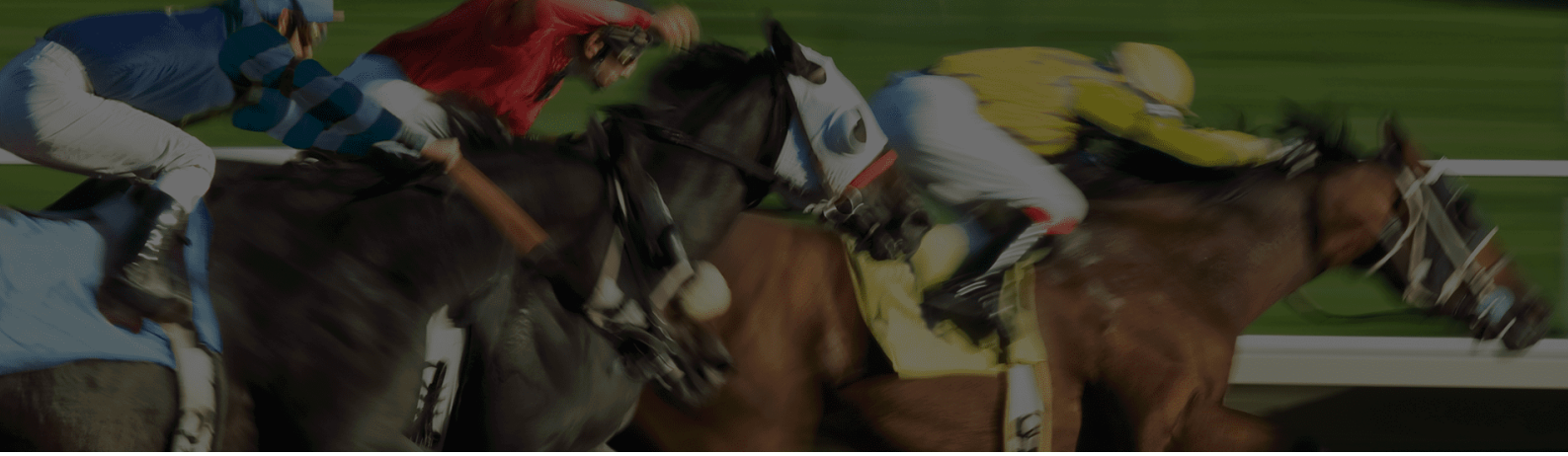
The Challenge

When Praveen Kumar joined PointsBet in early 2019, there was no database monitoring outside of the native monitoring provided by Azure and some hand-rolled scripts written to address specific monitoring needs. With ambitious plans to expand rapidly into the US market, he knew this would no longer be enough.

They were going into multiple US states quickly, and there was a requirement to bring in a monitoring solution that would provide a more elaborate and expansive overview of the estate, whether on Azure or on-premises, anywhere around the world.

While Azure does have monitoring capabilities in terms of monitoring and alerting, it doesn’t offer the in-depth analysis or the tracking of baseline trends month by month or year on year. This was increasingly needed in order to support the high velocity development at PointsBet and aid in the planning of future rollouts.

The team of full-stack developers work on a range of applications and micro-services and use advanced agile software development practices with continuous integration and continuous delivery processes in place. Changes progress quickly through Development and UAT environments before being released to Production.



The more information the developers and the rest of the business had about how their changes impacted database performance, the more time and effort they would save in the software development lifecycle.

The team were already using Redgate's SQL Change Automation for database deployments, and SQL Toolbelt Essentials for DBA tasks, so when they were looking for a monitoring tool, they looked at Redgate Monitor from Redgate, along with two other tools.

> “We want to compare baselines year-on-year and Redgate Monitor gives us that capability, better than what we would have if we set up our own dashboards.”
>
> Praveen Kumar, Head of Data Services and Data Engineering

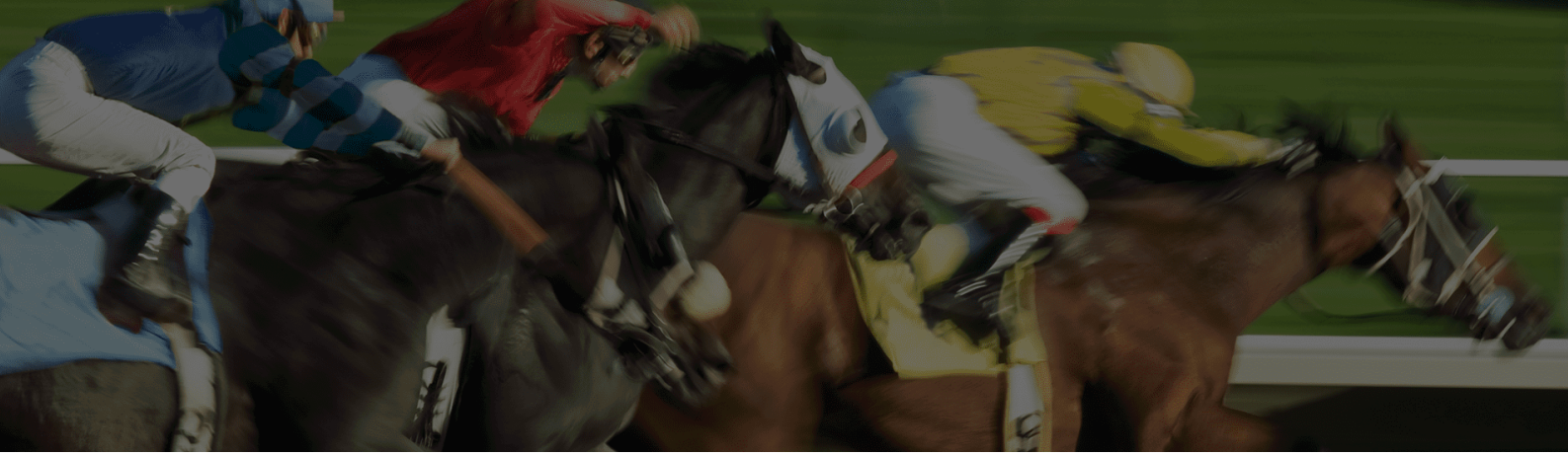
The Solution

Praveen Kumar and his team expected a lot from the monitoring solutions they considered and conducted Proofs of Concept with.

Firstly, they were building the capacity to monitor and maintain a rapidly growing estate in the US, with different US states each having their own database farm. In order to satisfy regulatory requirements, they had to have the same database in different states, sometimes hosted in Azure, sometimes on-premises.

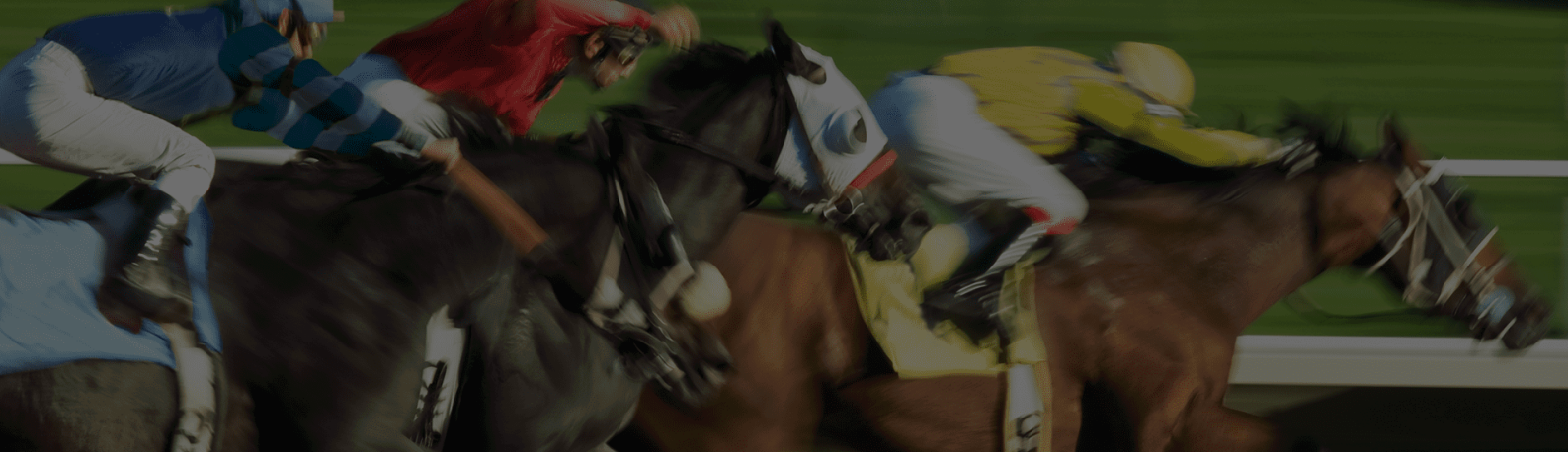
They were looking for the ability to monitor each database individually, wherever it was hosted, while also being able to compare databases across the whole estate to understand which databases behaved differently in the various states.

Secondly, given their worldwide presence, they wanted to make sure that latency was not a problem for developers sitting in, say, Australia accessing the databases in the US, and vice versa. Rather than having an Agent service installed on each monitored service, this called for a Base Monitor which connects remotely to each server.



And thirdly, they wanted to enhance their DevOps development practices further. PointsBet develops, tests, deploys and manages its applications using the Azure platform and the solution needed to be able to complement and integrate with those practices.

Redgate Monitor was chosen following the PoC because it offers a global overview of PointsBet's entire server estate, whether the servers and instances are on-premises or in Azure, on one screen, along with performance metrics and any alerts. If anything needs attention, the PoC also showed how the team can quickly drill down to the issue, pinpoint the cause and take action immediately.



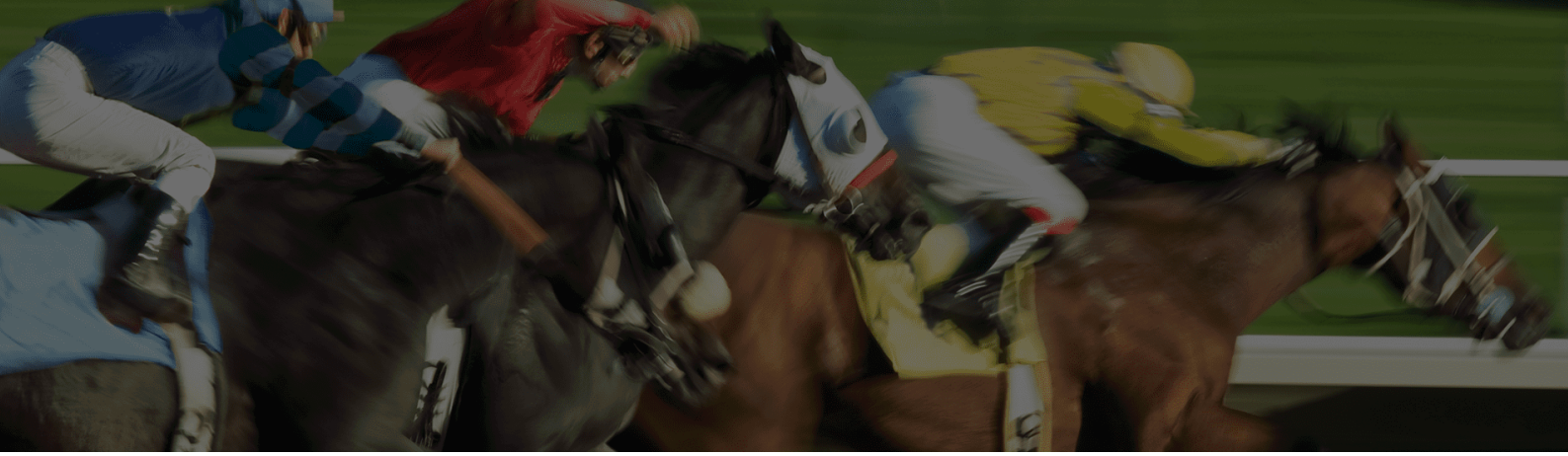
The Results

Redgate Monitor has now taken its place as a natural part of the software development process at PointsBet. Its web-based interface and agentless setup mean the estate overview can be accessed from anywhere, instantly, with varying levels of access based on user roles.

While admin access to Redgate Monitor is restricted to the Data Services Team, the data provided by Redgate Monitor is widely shared with other teams in the business like the data engineering and reporting team, Performance Engineers, SREs, and developers.

This has been widely welcomed across the whole business, particularly by the developers who use it when a release window happens to check how their changes are affecting performance. Redgate Monitor also integrates with PagerDuty and, when alerts are triggered, they can be assigned to the relevant developer who can click on it and take further action to find the cause.

Praveen Kumar is now planning to explore Redgate Monitor's capability further by using it to unearth problematic database releases. Its annotations API, for example, can be used to add annotations to the timeline for SQL Server instances so that every time a deployment is made, the information can be picked up and displayed alongside key SQL Server metrics.



As PointsBet continues its ambitious growth, the baselines and trending information Redgate Monitor provides will also help in planning when and how to make the best use of Azure's flexibility and scalability.