

Securing Product Development at Paddy Power Betfair

Safeguard for Privileged Sessions



Paddy Power Betfair plc was formed in 2016 from the merger of two of the fastest-growing online betting operators in the world: Paddy Power plc and Betfair Group plc. Paddy Power is an international multi-channel betting and gaming group widely seen as one of the most distinctive consumer brands in Europe. Betfair is an innovative online betting and gaming operator which pioneered the betting exchange in 2000, changing the landscape of the sports betting industry. Paddy Power Betfair has a market-leading presence in the UK, Ireland, Australia and the USA, as well as a range of B2C and B2B operations across Europe

The Challenge

As an online sports betting and gaming operator, managing millions of sensitive transactions, Paddy Power Betfair is regulated by several external bodies including gaming/ gambling regulators, ISO 27001, and the Payment Card Industry Data Security Standard (PCI DSS). In addition, as a public listed company, it must demonstrate strict general IT controls. The company is focused on continually improving its products through the use of development concepts such as Agile, DevOps or Continuous Delivery. Historically, products were developed by one team and then supported in production by another. This is a broken model, however, that leads to knowledge pools stuck in the wrong places – developers know the inner workings and can fix highly complex problems, but lesser problems are passed to production support teams. As a result, the company decided to move support activities to the development teams as this creates a better sense of ownership, more reliable products and leads to faster incident resolution.

"We decided that we wouldn't restrict developers to limited accounts, or delay support response times by requiring an access request for each incident, or a break-glass procedure to gain access to the production environment. These aren't rare events, but relatively common and complex requirements that cover lots of operational disciplines such as better design, transition and operation from ITIL perspective." – explains Vasile Dorca.

Indeed, allowing privileged commands from non-privileged users was the core of the company's strategy. In addition, there are cases when elevation of privileges (to a local administrator or "root") is necessary – so they needed a solution that could also govern this.

In the past, the company did not have any kind of session recording solution. They kept users with direct shell access to a minimum, with bastion servers controlling access to production hosts and some simple management tools that managed tasks like deployments or server restarts

"The first requirement was to create a secure audit trail of who did what and when in production. While many operating system logs have gaps, full and comprehensive session recording is unequivocal." - adds Vasile Dorca.

Learn more

- <u>Safeguard homepage</u>
- Request callback

- "I AM REALLY IMPRESSED WITH THE QUALITY AND FEATURES AVAILABLE WITHIN SAFEGUARD FOR PRIVILEGED SESSIONS."
- Vasile Dorca, Head of Security Compliance and Assurance, Paddy Power Betfair

The Solution

During vendor selection, Paddy Power Betfair considered vendors offering simple shell recording tools and larger "full suite" solutions that offer far more functionality. It also considered building its own solution or using an open source product. The production environment consists of thousands of virtual servers needing protection, which are changing constantly, making the challenge harder.

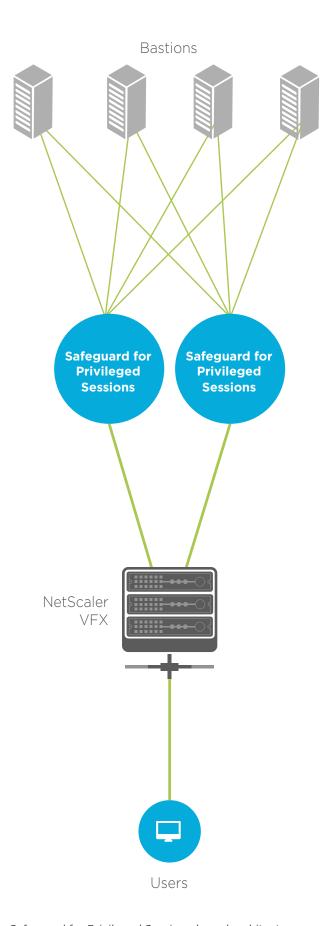
Vasile Dorca explains the reasons why they finally selected One Identity Safeguard for Privileged Sessions privileged activity monitoring virtual appliance: "Simplicity was certainly key for us. The ability to deploy a single VM within 30 minutes as well as keyword searching were excellent. They also offered terrific value for money, and willingness to do a tactical deal which bought us enough time to think about solutions in more detail."

In phase one the company implemented a single Safeguard for Privileged Sessions virtual appliance – to gain real-life experience of the product – with the help of a selected group of users and servers. For improved resiliency, in phase two a total of four Safeguard for Privileged Sessions virtual appliances were deployed in the data centers to ensure load balancing and high availability.

The company uses Safeguard for Privileged Sessions solutions in transparent mode to audit access to their Linux servers as well as to some Windows systems. Each Safeguard for Privileged Sessions connection policy is an alias for pre-existing bastions, located in different data centers. To access a server, the user first establishes a connection via Safeguard for Privileged Sessions to a bastion using 2 factor authentication. Then he/she performs an LDAP authentication against the Linux directory services to get the selected privileges on the target server. When granted access to the bastion, Safeguard for Privileged Sessions monitors and records all activities of the user.

Integration

The solution was deployed by an integration partner. The deployment of two Safeguard for Privileged Sessions Virtual Appliances in the two data centres allow for load balancing and failover. The partner had to work with Betfair to overcome a number of challenges ranging from the interpretation of existing Betfair gaming and operational rules and the impact on capacity of the Virtual machines to ensuring and understanding the existing and planned integrations with 3rd party solutions and more recently, since the merger between Betfair and PaddyPower, expanded the Safeguard for Privileged Sessions service to cover the PaddyPower estate.



Safeguard for Privileged Sessions-based architecture at Paddy Power Betfair

Benefits

Safeguard for Privileged Sessions helped Paddy Power Betfair gain the following organizational and business benefits:

- changed support model for improved product development processes;
- delivered product improvements to customers at a faster pace;
- improved flexibility of development teams and
- ability to deploy virtual user monitoring solutions quickly and cost-effectively.

Long-term plans based on One Identity technologies

Currently, Paddy Power Betfair focuses its monitoring efforts on developers and the systems they support – hundreds of users and thousands of servers. However, in the mid-term they want to extend the coverage to the entire production environment and to all privileged users, including third-party users with remote access to internal hosts.

In the longer term, the company expects great changes to the way they grant privileged access to production systems. These include:



Role-based identity and access control to grant a developer access to a code repository and production servers (but just to the ones they need).



Integration with an external credential management solution to automatically manage privileged user access.



More dynamic controls around what is done at the point of a connection (for example, enforcing 4-eyes authorization in specific cases).



More advanced, automatic analysis of sessions to improve efficiencies and the workload of security and line managers.



"I am really impressed with the quality and features available within Safeguard for Privileged Sessions. My expectations and requirements were initially pretty basic. From the moment I discovered the product, it was the leader compared to other products in all the criteria that were important to my project's success: fast implementation, easy configuration, reliable logging and transparency for users."

concludes Vasile Dorca

About One Identity

One Identity helps organizations get identity and access management (IAM) right. With our unique combination of offerings, including a portfolio of identity governance, access management, privileged management and identity as a service solutions, organizations can achieve their full potential – unimpeded by security, yet safeguarded against threats. Learn more at OneIdentity.com

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