

Bohemia Interactive and Nitrado – Multiplayer gameplay for Mini DayZ 2

MINIDAYZ 2

Nitrado and Bohemia Interactive have worked closely together on a server hosting project with enormous success. Mini DayZ 2 is a mobile version inspired by the highly successful game that is available on PC, Xbox and PlayStation. Nitrado was the first company ever to offer private game servers for mobile games. Being a pioneer in the industry and having more than 130+ games in their portfolio made Nitrado also a preferred provider for Bohemia Interactive. Mobile games have different requirements when it comes to server solutions than a standard video game on PC or console. For example, Mini DayZ 2's multiplayer is match-based without a persistent world which requires allocating server resources much more dynamically.

Nitrado faced the challenges and **it resulted in a win-win situation within the mobile gaming sector. All benefited from their expertise and flexible solutions.** This success story is a great example that server hosting with the right partner and the latest and greatest hardware, can contribute to the success of almost any game.

Background:

Nitrado and Bohemia Interactive have been in close contact since 2016. Both teams have worked closely on other projects in the past. This is why Bohemia reached out to Nitrado in March 2021.

This project touched on many different aspects of Nitrado's infrastructure and Enterprise Console functionality. The team at Nitrado was building on top of already existing functionality and they were able to create features **that will benefit all of Nitrado's upcoming customers.**

First steps were taken immediately after Bohemia Interactive reached out to Nitrado and the implementation was concluded in June 2021 before the game multiplayer was released.

Challenges:

Introducing server solutions for any game can have its own set of challenges. Every game is different and in order to guarantee a smooth launch a lot of boxes need to be ticked, tests need to be run and each step needs to be carefully planned when it comes to the deployment.

Different from Bohemia Interactive's DayZ, Mini DayZ 2's multiplayer is match-based without a persistent world. This requires allocating server resources much more dynamically. Since individual sessions last 15 to 30 minutes, traditional maintenance windows for rolling out game updates would result in a bad player experience by interrupting ongoing sessions. **However, no matter how complex the task at hand might be, Nitrado can draw from their many years of experience and wealth of knowledge to navigate any obstacle.**

Solutions:

Dynamic provisioning

A smooth launch is the key to a happy player base. Nitrado gave Bohemia Interactive the ability to combine statically allocated resources on dedicated machines rented from Nitrado with cloud capacity that can be scaled up on demand: a so-called hybrid solution. This removed the uncertainty usually associated with capacity planning for game launches.

Rolling updates

Nitrado established and implemented an update workflow together with Bohemia Interactive that does not interrupt ongoing player sessions. For this, a way to incorporate status information from external matchmaking solutions into Nitrado's management system and automated processes was built.

This mechanism will check the matchmaking system if a given game server instance is currently hosting a session, and will only update the instance if no active session is interrupted. Therefore old and new versions of the game server software are running simultaneously, until all sessions on the old version are completed.

This granular control over the running game versions is made possible via Nitrado's self-developed Game Package Manager (GPM). **Nitrado's GPM is a patch management and update distribution utility for Windows and Linux, and has been designed to solve challenges specific to updating game server software.**

Nitrado's Enterprise Console

All of the features described are part of the Nitrado Enterprise Console, which is used to automatically spin up and configure the whole Mini DayZ 2 server fleet. Nitrado's sophisticated hybrid solution has the advantage that customers only pay for what they really use. It is taking the guesswork out of the scaling needs. Using a bare metal base and adding the ability to flexibly scale up or down to and from the cloud exactly when it is needed is what many studios prefer.

Another important point is that the Nitrado Enterprise Console also interfaces with Bohemia Interactive's matchmaking systems to manage game updates, provides monitoring data, and makes all related information accessible through a single interface.

The software developed for purposes like this is offered to all Nitrado business customers to make their own metrics accessible from right within the Enterprise Console installations. During the project the scaling functionality got improved, now allowing game developers to spin up hundreds of game server instances with a specific set of configuration parameters at once.



"Choosing the right server provider for Mini DayZ 2 was crucial for our project. Our fans have looked forward to the multiplayer experience for many years. Luckily, with Nitrado as a partner we were able to get exceptional service that didn't limit our game nor the players!"

– Matěj Smrček, Brand Manager at Bohemia Interactive

Results:

The most important result is that the players are happy and this means that Mini DayZ 2 became more attractive as a game due to the offer of multiplayer gameplay. Players of Mini DayZ 2 have the ability to team up with other players to do raids.

Nitrado has game server hosting locations all over the planet to ensure low latency for an optimized player experience. Especially for Mini DayZ the global presence became important as the game has a very strong user base in Russia, where players directly benefited from the Nitrado data center location in Moscow.

To summarize this is a very important success story for Bohemia as well as Nitrado. Having partners you can rely on and who have the experience to tackle anything no matter how complex is very important to be able to give the players what they want.



About the game Mini DayZ 2

Mini DayZ 2 drops you square in the middle of a zombie apocalypse. Embark on dangerous Raids to gather food and materials then use them to build a safe haven for your group of survivors. Hop into multiplayer mode to join forces with your friend or with survivors from around the globe. Work together to preserve humanity on both Android and iOS mobile devices!

Spotlight on Nitrado

Nitrado is a leading global game server hosting company with more than 20 years of experience and strong partnerships throughout the industry. It has a unique system, which administers game servers and hosted applications dynamically and automatically.

Nitrado is the preferred choice of many big names in the industry and has more than 130 games in their ever growing portfolio.

Spotlight on Bohemia Interactive

Pushing the aspects of simulation and freedom, Bohemia Interactive has built up a diverse portfolio of products, which includes the popular Arma® and Take On® series, DayZ®, and various other kinds of proprietary software. With its high-profile intellectual properties, multiple development teams across several locations, and its own motion capturing and sound recording studio, Bohemia Interactive has grown in 15 years to be a key player in the PC game entertainment industry.

