

A UBISOFT COMPANY

CASE STUDY

Winning as a team Next-level gaming in the Middle East with i3D.net and DE-CIX

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The race is on, that tricky curve is coming up, and – crash! But the failure was in the network, not the 'driving'. Because of high latency, someone else took the prize. Again. Until a few years ago, this scenario played out repeatedly for online gamers in the Middle East. Then, in 2016, a collaboration between i3D.net and DE-CIX, as the operator of the UAE-IX Internet Exchange in Dubai, literally opened up new worlds for these frustrated users. As one of the most successful hosting platforms for the gaming industry, i3D.net had long recognized the potential of the region. However, it was only the continuous growth of the Internet Exchange in Dubai that ensured the technical capabilities necessary to offer highperformance, multiplayer video games online. Working in close cooperation with DE-CIX, i3D.net won over telecom providers and system integrators to the idea of building a gaming ecosystem in the Middle East.

And with great success! Online gamers in the Middle East have only become more enthusiastic since then. Many new games are now immediately offered in their own Arabic localization upon release – and hosted directly by i3D.net in the region.

About DE-CIX

As the leading Internet Exchange operator and interconnection provider, DE-CIX helps companies to realize new opportunities and future-proof their connectivity needs to manage growing data volumes and new applications. From easy and secure cloud connection to creating interconnection ecosystems: DE-CIX makes interconnection easy. Anywhere.

Online gaming with conviction

In video games, delays are an absolute deal-breaker. This is why key players in the gaming market and more than 300 million users worldwide rely on the i3D.net platform. i3D.net's self-operated backbone spans more than 40 points-of-presence (PoP) across six continents. And new ones are being opened up all the time, in order to address bottlenecks in routing pathways, ballooning data volumes at an Internet Exchange, or a customer's need to cover new geographical regions, for example. However, local conditions at the various locations also pose new challenges, as the opening of the PoP in Dubai showed.

Latency as a fun-killer

Online games are real-time applications and require low latency times; caching simply won't do. Martijn Schmidt, VP Network at i3D.net, explains: "The content of an online game is unpredictable. Every millisecond counts. The optimal network infrastructure is a basic requirement for successful hosting of online video games. This is the only way to make the gaming experience authentic and fun." Without peering on site in Dubai, the data had to be forwarded through Internet Exchanges in Europe. The latencies caused by backhauling via far-away Europe were well over 100 ms! This is precisely where the experts saw the greatest challenge. For the further expansion of online gaming in the Middle East, it was crucial to develop a local backbone with as many peering partners as possible.

Before and after: Previously, traffic from Dubai to Kuwait had to be forwarded through Internet Exchanges in Europe causing latencies well over 100 ms. After setting up its own PoP in Dubai and using UAE-IX's GlobePEER service, i3D.net can use a direct connection.



Peering as a recipe for success

DE-CIX's establishment of the first carrier- and data-center-neutral Internet Exchange in the GCC region, UAE-IX, had already given the entire communications landscape in the Middle East an enormous boost. In 2016, i3D.net seized the next opportunity that presented itself: A customer wanted to launch a game locally in the region, thus providing a concrete reason to set up its own PoP in Dubai. UAE-IX is based on a fully redundant switching platform that spans multiple data centers in Dubai. In one of them, i3D.net set up a PoP and decided to use the GlobePEER service. In this way, i3D.net reached all connected networks directly via the route server.

Connection instead of foreclosure

Nevertheless, local telcos and service providers were still reluctant to get involved in network peering and gaming, as Martijn Schmidt explains: "Providers often assumed that, due to the games, their networks would be overburdened with high traffic. In fact, the video rendering itself takes place on the user's computer. The quantities of data transmitted are relatively low, in the range of Kbps per user." Furthermore, in terms of communications in the region, many sovereign rights lie with the individual states, and many markets are subject to strict regulation. Directly connecting different networks was also viewed critically. But, working together through numerous discussions at events and conferences, the experts from i3D.net and DE-CIX explained the technical details and allayed concerns. Service providers in the region were gradually won over in this way.

Gaming as opportunity

In 2020, i3D.net customers were able to reach more than 80% of end users in the Middle East via the PoP in Dubai; in the meantime, almost all countries in the Persian Gulf can be reached via local network connections. "Latency has been reduced by 80% or more compared to before, thanks to the GlobePEER service at UAE-IX. Now, with the lower latency combined with local availability of many games in the region, user satisfaction is on the rise," says Martijn Schmidt. The market for online video games is booming, and the overall importance of real-time interaction is growing. In addition, especially in terms of monetization, the Middle East is fast becoming a lucrative market for online video games – which is a strong motivator for ever more customers of i3D.net to get a local footprint in the region.

Despite the challenges, the number of providers using the i3D.net network and services in the Gulf region has increased significantly in recent years. In 2021 alone, i3D.net quadrupled its capacity in Dubai and now the company is working towards getting that newly-achieved capacity tripled again. Martijn Schmidt is certainly convinced: "The partnership between i3D.net and DE-CIX made a significant contribution to this positive market development. While a functioning network ecosystem is a basic prerequisite for online video games and real-time interaction in general, it is also true that persistent demands from the gamer scene promote continued development and expansion of that same ecosystem. We're already looking forward to seeing how the region advances."



A partnership with added value

Currently, the experts from DE-CIX and i3D.net have a new goal in mind: Together they are working on replicating the success of the Arab world's Internet Exchange at the largest Internet Exchange in the Asia-Pacific region, which DE-CIX operates in Mumbai. Despite the challenges, they are committed to creating a suitable environment for the gaming industry via DE-CIX Mumbai. One thing, however, is certain: Once carriers see and recognize the potential of online gaming, they do everything in their power to open up their networks and minimize latency. At least UAE-IX keeps setting new records: According to the 2020 growth report, the total bandwidth used grew by 63%, the number of customers climbed by 15% to over 80, and the trend is still positive.



About i3D.net

i3D.net is one of the leading providers of high-performance hosting and global infrastructure services. The company operates a low-latency network, with thousands of servers spread over 40+ points of presence on 6 continents. i3D.net excels in the gaming market and hosts a variety of AAA games, which led to its acquisition by Ubisoft in 2019. They continue to help various large-scale gaming & enterprise customers deploy, scale, and manage their applications to over 300 million users globally. i3D.net's goal is to reach 1 billion users on its platform by 2025. For more information visit i3D.net.

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