



A-Rush offloads terabytes of gaming updates with hands-off process

Challenge

- Gaming updates are huge
- Updates take hours to download, rendering devices unplayable for longer, losing revenue
- Leaves gamers with less bandwidth and a slower experience
- Only 3-4 of 40 PC's at a time can update before congestion occurs
- Hands-on practice laborious and wastes manhours wasted

Solution

- **CACHEBOX130**

Benefit

- Updates for all 40 PC's happen at the same time, automatically
- Intervention-free, overnight practice
- Gaming downtime minimised, revenue maximised
- 86% of bandwidth freed
- Staff free to focus on customer service

About A-Rush Gaming Lounge

Based in the Houston Texas area, A-Rush is an esports gaming lounge and internet café. It provides all players with a high-end gaming experience and top of the line gaming systems, including virtual reality and racing simulation.

With community one of the biggest parts of today's gaming, A-Rush wants to be certain it delivers an experience that gamers will enjoy time and time again, and will happily recommend to friends.

Gaming isn't all play

However, A-Rush has been struggling to find a way to better handle today's gaming burden. Despite its rapidly expanding popularity and the rise of gaming lounges worldwide, modern gaming comes with a regular and often problematic headache - updates.

Across the Americas, PlayStation and Xbox downloads alone were responsible for nearly 8% of internet traffic in the first half of 2020*.

Modern gaming software updates are big, regularly 25-50GB in size - but some can be huge, as large as 250GB. New and upcoming games require much bigger installation sizes, and need larger and more regular updates. Some games update on a weekly basis.

But such bandwidth intensive downloads for a single game risk swamping esports connectivity. Multiply that by the hundreds of games a lounge needs to offer, then by the number of gaming stations offered (40 at A-Rush), and you have a serious congestion issue that impacts revenue and the customer user experience.

Business impact

For A-Rush, software updates meant taking gaming stations offline for long periods. The longer each game and each device needed to update, the higher the loss in revenue.

Joint business owner Derrick Fields explains, "Gaming is so popular nowadays. We're seeing more and more videogame cafes/bars opening up. But modern gaming updates are huge, take hours to pass through the internet pipe, and happen all the time! Imagine how slow things got when we had 40 PCs all trying to complete these huge updates at the same time!"

With congestion risking a slowdown in the gaming experience, the team split the practice into smaller groups of PCs. But, as Derek pointed out, "It used to take hours because we had to do all our updates in batches of 4, which was extremely time-consuming." As they also needed to wait for updates to complete before moving on to the next batch, far too many hours were being wasted every week.

Offloading updates by serving them locally

Admitting to having limited server experience and knowhow, Derek was delighted to discover **CACHEBOX's** proven experience handling updates for all manner of operating systems and apps, from Microsoft to antivirus.

With a highly specialised cache, update files need only be downloaded once to local storage. Served directly over the LAN, all subsequent requests can be met – at much faster LAN speeds. A-Rush's games, firmware and PC software can be updated without further access to the internet.



*The bandwidth savings we've seen have been phenomenal, **CACHEBOX** has had a huge impact on our organisation! Customers can continue to use the devices without experiencing any slow downs.*



Derrick Fields
Joint Owner

* The Global Internet Phenomena Report, COVID-19 Spotlight, May 2020 by Sandvine



We're now serving 86% of our content from the **CACHEBOX**, rather than fetching Terabytes of gaming updates from the internet - and the difference really shows.

Derrick Fields
Joint Owner



CACHEBOX also deploys expert algorithms to download whole upload files and serve just the parts needed by each individual request, helping them clear the network faster.

In dramatically slashing demand for the internet, congestion simply doesn't occur. Instead, capacity is freed for other content, more games, or the potential to add more gaming stations – all without a change to existing bandwidth.

Instant results

Impressed, Derek quickly deployed a **CACHEBOX130**. Its impact was instant. The majority of A-Rush's typical internet traffic was gone and up to 86% of content was being served from cache. Terabytes of gaming updates were now being handled by **CACHEBOX**.

In February 2020, the top gaming domains for the month show the vast majority of demand being met locally.

But with 40 gaming stations also running Microsoft platforms, **CACHEBOX** has helped offload even more software updates. Up to 87.8% of Microsoft and Windows content, as well as 86.5% of essential graphic hardware updates, are now served locally.

Top Gaming Domains	Traffic Volume	Served from Cache	% served from Cache
steamcontent.com	2,238.2 GB	1,943.7 GB	86.8%
blizzard.com	576.9 GB	283.1 GB	49.1%
epicgames.com	301.1 GB	134.5 GB	44.7%
discordapp.net	2.2 GB	2.2 GB	100.0%
steampowered.com	0.7 GB	0.6 GB	84.8%
steamstatic.com	0.3 GB	0.2 GB	65.5%
All domains (total)	4.2 TB	2.8 TB	67.1%

A-Rush Gaming Lounge, Gaming Traffic, Feb 2020

Derek has been delighted with the results, "We set up the device and started seeing really impressive bandwidth savings straight away - we're now serving 86% of our content from the **CACHEBOX**, rather than fetching Terabytes of gaming updates from the internet - and the difference really shows."

PC Update Domains	Traffic Volume	Served from Cache	% served from Cache
akamaized.net	649.8 GB	380.3 GB	58.5%
microsoft.com	91.4 GB	80.3 GB	87.8%
windowsupdate.com	9.5 GB	7.1 GB	74.6%
nvidia.com	7.6 GB	6.6 GB	86.5%
gvt1.com	0.7 GB	0.5 GB	62.2%
s-microsoft.com	0.3 GB	0.3 GB	87.5%
All traffic (overall total)	4.2 TB	2.8 TB	67.1%

A-Rush Gaming Lounge, PC Update Traffic, Feb 2020

All-at-once and automated

A-Rush previously struggled with wasted manhours and downtime. **CACHEBOX** delivers much more. Updates can now be served concurrently to all stations – updating them at the same time and doing so without intervention.

With updates automated and able to run outside lounge opening times, there's no need to take any PCs offline. Precious gaming hours - and revenues - including 24 hour weekend sessions, are no longer impacted.

And with no staff member needing to be there to kickstart it, monitor progress or be there at the end to ensure it is complete, Derek is delighted. "As soon as we installed **CACHEBOX**, we noticed the difference straight away. **CACHEBOX** now looks after the updates automatically - the bandwidth savings are great - but I've also saved so much time!"



We used to spend hours doing gaming and device updates in batches. Now, with **CACHEBOX** serving updates from cache, this process is immensely faster.

Derrick Fields
Joint Owner



Faster than the internet

All that data served locally is also arriving at much faster LAN delivery speeds – often over 100 times faster than from the internet.

In the same month, both gaming downloads and operating system updates – served free of any upstream web interference - are arriving at 20, 80 and even 110 times faster than internet speeds.



*I highly recommend **CACHEBOX**; it's transformed our processes! I can't imagine running this place without it!*



Derrick Fields
Joint Owner

Gaming traffic	Speed from internet	Speed from CACHEBOX	X times faster
square-enix.com	0.02 Mbps	2.7 Mbps	110.6 x
pubgbluehole.com	0.93 Mbps	19.0 Mbps	20.4 x
deadorbit.net	0.17 Mbps	2.1 Mbps	12.8 x
steamcontent.com	0.57 Mbps	3.0 Mbps	5.2 x
enjin.com	3.11 Mbps	15.1 Mbps	4.9 x
unrealengine.com	0.06 Mbps	0.3 Mbps	4.1 x
discordapp.net	11.70 Mbps	45.0 Mbps	3.8 x
steampowered.com	4.04 Mbps	14.2 Mbps	3.5 x
PC update traffic			
nvidia.com	0.43 Mbps	35.2 Mbps	81.1 x
gvt1.com	1.30 Mbps	35.7 Mbps	27.4 x
microsoft.com	0.15 Mbps	3.3 Mbps	21.6 x

A-Rush Gaming Lounge, Content Acceleration, Feb 2020

Easy to use, quick to perform

Equipped with comprehensive performance reports that confirm A-Rush's now foremost user experience, Derek is ready to recommend **CACHEBOX**'s outstanding performance to other gaming lounges, "Comparing before and after we had **CACHEBOX** is like night and day. The bandwidth savings we've seen have been phenomenal, **CACHEBOX** has had a huge impact on our organisation! It's saved us a huge amount of time and now customers can continue to use the devices without experiencing any slow downs."

Derek is also relieved by how easy everything has been. "I had very little understanding of networking at all but the support team walked me through the setup in under an hour total! I've been very impressed with how high performance and low maintenance this product is. I can't imagine running a place like this without it!"