



Netacea's Threat Research Team investigated the top five items targeted by scalper bots from July to September 2021. The research revealed many of the same trends observed in Q2 (April to June 2021), including video game equipment and designer items targeted aggressively by scalpers. However, the specific items targeted by bots continue to change to mirror the latest "hot drops", while the rise in popularity of non-fungible tokens (NFTs) sees a new entry to the list in Q3, and cryptomining continues to steer the gaming/scalper landscape.

This quarter, the team also made predictions on the top items set to be targeted by scalpers in the run up to, and during, Black Friday weekend and the Christmas period 2021. Aside from maintaining the trend of sneakers and consoles remaining clear targets, predictions landed on desirable and limited-edition items which, as we see retailer stock levels drop, we can except to appear quickly on reseller sites for a considerably higher fee.

1. Nike LeBron 18 Low Wile E vs. Roadrunner Space Jam sneaker







Retail price: \$200

Aftermarket price: \$457

Increase: 129%

Coming out on top is the Nike LeBron 18 Low Wile E vs. Roadrunner Space Jam sneaker. Nike sneakers also topped the list last quarter, proving that designer products are a consistent target for scalpers.

Released in July to coincide with *Space Jam: A New Legacy* starring LeBron James, the limited-edition Looney Tunes sneakers were highly anticipated and snapped up by movie and basketball fans. They quickly became difficult to purchase outside of the resale market where they could be found for double their retail price. In 2003, NBA star LeBron James signed a lifetime deal with Nike. Since then, Nike has consistently released limited-edition sneakers as part of the LeBron series.

Mirroring last quarter, these Nike sneakers fall under our "hype" category. Hype items are highly targeted products due to the limited amount of them sold on the conventional market and the anticipation created around their "hot drops" across social media. As long as there is hype around the product, there is always going to be a demand for it, and consequently always a market for scalper bots to exploit. The problem with hype category products is that items change rapidly due to the instantaneous and fluid nature of social media and influencer marketing. For now, designer trainers are firmly cemented as a top scalper bot target and are expected to remain so until demand significantly shifts.





2. Yeezy Slide Pure







Retail price: \$60

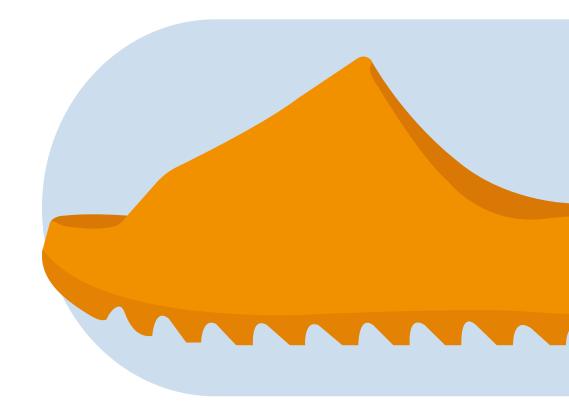
Aftermarket price: \$649

Increase: 982%

Yeezy footwear also features in the list for a second time this year, moving up to second place after the Yeezy Boost 700 MNVNs came in at fourth in Q2. Kanye West's Slide Pures retail at \$60 but can sell on the scalper market for more than \$600. The highly anticipated releases of Kanye West's Yeezy shoe collection are a constant reminder that scalpers continue to focus their efforts on designer footwear, and are still making profit from the "hot drops" of celebrity-endorsed garments.

When the Adidas Yeezy Slide Pure dropped on September 6th 2021, fans of West's designer shoe collection moved fast to get their hands on the newest model. The second of our "hype" products, West's sneakers are a common favorite of scalper bots (or sneaker bots), exacerbated by the immense social media hype around new releases, and the publicity surrounding "Yeezy Day" in August 2021, when West's footwear releases were "dropped" by the hour on the Adidas website to give consumers better chance of securing the limited designs. As bots buy and resell the items in rapid time, the reality of Yeezy releases is that genuine customers are left empty handed and frustrated.

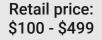
With more Yeezy releases scheduled to drop before the end of the year and West's brand garnering high levels of media attention, demand is unlikely to subside; we expect Yeezy drops to maintain a firm hold on our scalper target list.





3. Games console restocks: Xbox X Series, PS5 & Nintendo Switch OLED







Aftermarket price: \$400 - \$2000



Increase: 300%

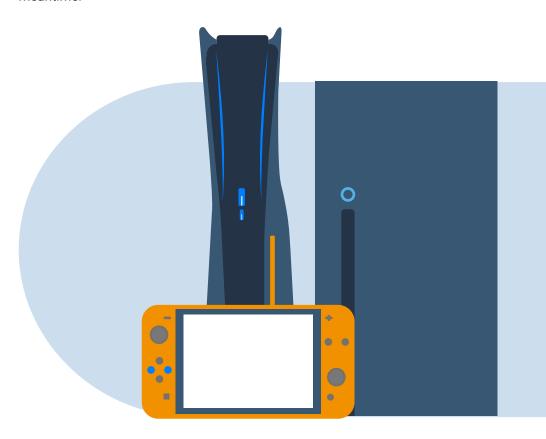
This quarter, game console restocks move down a position, but the Xbox X Series, Nintendo Switch OLED and scalper favorite PS5 are still being sold online for more than double their retail value.

Even though the console has been on the market for a year – come Black Friday – consumers are still struggling to get hold of the Sony PlayStation 5 and appear determined to try again this year with fresh hope. The demand has generated a global shortage and attackers are aware of this – where there is still demand for the PS5, the scalpers will continue to target the restocks. With the busiest eCommerce period around the corner, scalper groups are aware that such consoles will be a big seller over the festive period as they continue to jump on "hot drop" presents.

A reminder of PS5 activity from Q2:

The recent PS5 launch has been perhaps the most well-publicized, large-scale scalper bot attack in recent times. In fact, Netacea data shows that a botnet that used 300 compromised machines to buy PS5s made one million purchase attempts over six hours. The PS5 scalper bots provide us with some useful insights into the scale of the scalper bot issue and how the market is still being exploited.

In 2021, users who previously showed no involvement in scalping discovered that they could make a significant profit by reselling in-demand items such as the PS5 for more than double their retail value, whilst others saw scalping as the only way to get their hands on such limited-edition stock. The sixth generation of the PlayStation console is not expected to be released for another five years, meaning the hype around the PS5 is still a healthy market for scalper bots. As for five years' time, the attention and anticipation will no doubt shift to the PS6, or another console in the meantime.





4. Non-Fungible Tokens (NFTs)



Most expensive sold at auction: \$530m

The scalping of non-fungible tokens (or NFTs as they are commonly known) comes in fourth place as a new entry to the list.

NFTs are unique non-interchangeable units of data stored on a digital ledger, sold on the resale market for upwards of thousands of dollars. Non-fungible tokens are unique and cannot be replaced with something else. For example, a Bitcoin is a fungible token, meaning it can be traded for another Bitcoin and you have exchanged it for exactly the same thing. A one-of-a-kind piece of digital art, trading card or even tweet, for example, is non-fungible. Trading these would mean you end up with something entirely different. In simple terms, trading NFTs is comparable to buying pieces of art and selling at a high price. While people have bought and sold physical art for centuries, NFTs provide the digital version of art dealing.

Over the course of 2021, we have observed the buying of NFTs early, in the hope they will become as valuable as Bitcoin in the near future. As with all digital, commodifiable trends, scalpers too are getting ahead in bidding on and buying NFTs faster than any human is able. Their aim is to resell the unique piece for a profit which will hopefully increase in value as NFTs gain popularity. NFTs are often sold at online auctions, opening them up to spinner bot attacks. Opportunistic criminals use bots to simulate a large number of low bids on an item, forcing the seller to reduce

the price ceiling and allowing the item to be bought cheaply before being resold at a profit later.

In October 2021, CryptoPunk #9998, part of a collection of 10,000 NFTs, was sold on for \$530 million. This made CryptoPunk #9998 the most expensive NFT ever purchased. NFT collections exist when artists and developers create thousands of NFTs that share the same template with different characteristics – the rarer the properties, the more valuable the NFT. CryptoPunks is considered the original NFT collection, dating back to 2017, with the cheapest item starting at around \$400,000.









5. NVIDIA RTX 3060 graphic card



Retail price: \$369



Aftermarket price: up to \$800



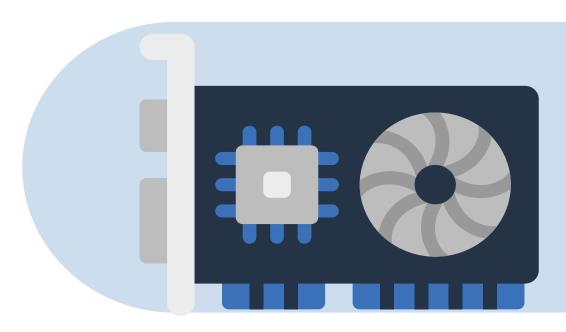
Increase: 117%

The RTX 3060 graphic card comes in fifth, after graphics cards featured twice in last quarter's list. With demand from both video gamers and cryptominers, scalpers target top-end graphics cards for both mining and gaming, leaving genuine gamers empty handed. The release of NVIDIA's RTX 3000 series was hotly anticipated by PC gamers in 2020, when the demand was capitalized upon by scalpers, and high-performing GPU cards are still being resold at a huge markup.

Graphics cards are used by cryptominers to generate cryptocurrency like Bitcoin and Ethereum on a mass scale. To generate cryptocurrency, computers need to complete complex calculations as fast as possible. When the price of Bitcoin and Etherium was low, the calculations involved simple prime numbers, but as the value has increased, the calculations now require multiplying prime numbers thousands of digits long, which in turn requires an immense amount of computing power. Graphics cards possess the computational power necessary to perform such calculations at speed, using a separate processor to do the math and freeing up the CPU for other tasks. The more GPUs you have, the more sums you can complete, meaning the more cryptocurrency (and more profit) you can generate.

With Bitcoin price poised to hit a new all-time high, demand isn't likely to decrease any time soon. Meanwhile, new cryptocurrencies are being developed – such as Dogecoin, endorsed by Tesla and SpaceX entrepreneur Elon Musk earlier this year – and cryptominers must invest early to reap the rewards when the value goes up.

Besides cryptomining, gaming for a profit is a growing phenomenon across the globe, as more people attempt to game professionally either through streaming on platforms like Twitch or by entering international ESports competitions. This has created a healthy appetite in the market for high-end gaming equipment like graphics cards.



What will scalper bots target in the lead up to Christmas 2021?

Looking ahead to Black Friday, Netacea's Threat Research Team predicts that games consoles and graphics cards will almost certainly be targeted once again, as the demand for "hype" items remains dependent upon the growth of social media and influencer marketing.

Sneakers are also set to be a popular choice for scalpers over the festive period, with at least four new Yeezy drops due before the end of the year.

Luxury and limited-edition items remain at risk; designer goods such as watches and handbags will almost certainly be targeted ahead of Black Friday, as prices drop and demand spikes, as well as one-off toys like the brand-new LEGO Titanic model.

Depending on stock levels and demand, we expect scalpers to set their sights on the newest technology releases, including the iPhone 13 (released back in September 2021), VR headsets and other advanced equipment used for competitive gaming. Electronic items of high retail value are facing a general shortage, as the raw materials used to build computer chips suffer supply chain disruption.





How can businesses stay ahead of scalper bots?

Choosing the right bot management solution is a major decision for any business. At Netacea we take a consultative approach, working closely with you to understand not only the threats bots pose to your business, but how our solution fits into your wider strategy and organization. This partnership, paired with our server-side approach and innovative Intent Analytics® technology, allows us to seamlessly integrate with your business and deliver accurate, intelligent and effective mitigation against scalper bots and beyond.

To find out how much scalper bots are costing your eCommerce business, visit netacea.com/impact-of-bots-calculator.



To learn more about scalper bot trends, talk to the Netacea Threat Research Team today at hello@netacea.com.