

A Tiny Lag in Her Keystrokes Gave Her Away: How Amazon Caught a North Korean Spy

The delay was barely noticeable, just 110 milliseconds, but it was enough to unravel a state-sponsored fraud operation stretching from Pyongyang to Arizona



The new systems administrator seemed like a great hire. The resume checked out. The background cleared. So, Amazon shipped the laptop to the employee's address in Arizona.

Then Amazon's security team noticed something odd about the typing.

When the employee pressed a key, the signal took more than 110 milliseconds to reach Amazon's servers. For an employee sitting in Arizona, the data should have arrived in tens of milliseconds, but it took longer than expected.

That caught Amazon's security team's eye and they dug deeper.

The Keystroke That Cracked the Case

Stephen Schmidt, Amazon's chief security officer, revealed details of the investigation at a company security event this week. The contractor had been hired through an outside staffing firm.

Everything looked normal until the monitoring systems flagged the unusual network behavior.

"If we hadn't been looking for the DPRK workers, we would not have found them," Schmidt told Bloomberg.

When investigators dug deeper, they discovered the laptop was physically located in Arizona. But someone thousands of miles away was controlling it remotely, routing commands through the American machine to create the appearance of a domestic worker.

The traffic traced back as far as China before they could not trace it any further.

A Laptop Farm in the Desert

The Arizona connection led the investigators to Christina Chapman in Phoenix. She was accused of running a laptop farm with many laptops from her residence.

Chapman pleaded guilty to conspiracy to commit wire fraud, aggravated identity theft, and conspiracy to launder monetary instruments. The FBI seized more than 90 laptops from Chapman's home during an October 2023 raid.

Chapman helped North Korean workers fraudulently obtain jobs at 309 U.S. companies and two international businesses, using 68 stolen American identities.

She would receive corporate laptops at her home, install remote access software, and let North Korean workers connect as if they were sitting in Arizona. She also shipped 49 laptops to locations overseas, including multiple shipments to a city in China on the border with North Korea.

The operation generated more than \$17 million, most of which flowed back to North Korea's government.

It's A Real Wake-Up Call For Banks

Amazon says the problem is getting worse, not better. Since April 2024, the company has blocked more than 1,800 infiltration attempts by North Korean workers. The rate of attempts has increased 27 percent from one quarter to the next.

"North Korea is not just a threat to the homeland from afar. It is an enemy within," said U.S. Attorney Jeanine Pirro. "The call is coming from inside the house. If this happened to these big banks, to these Fortune 500, brand name, quintessential American companies, it can or is happening at your company."

The threat has forced companies to rethink how they verify remote workers. Traditional background checks, which rely on documents and databases, often miss these schemes because the impostors use real American identities stolen from real people.

Schmidt said his team now looks for patterns that criminals tend to follow. North Korean applicants often list the same schools or claim experience at overseas consulting firms that are difficult to verify from the United States. In conversations, they fumble American idioms and struggle with English articles like "a," "an" and "the."

Chapman Sent An Apology Letter

In sentencing documents, Chapman's attorneys said she initially did not understand she was aiding North Korea. But when it became clear she was involved in wrongdoing, she continued with the scam to help pay for her terminally ill mother's cancer treatment.

In a letter to the judge, Chapman apologized. "I dealt with identity theft myself and it took me 17 years to recover from the damage it caused me," she wrote. "Knowing that I had a part in causing that kind of stress and suffering for others makes me feel deeply ashamed."

The judge ordered her to forfeit \$284,555 that was to be paid to North Korean workers and to pay \$176,850 in restitution, the same amount she charged for her services.