# **APT34 Analysis**

### Who Are They?

APT34, also known as OilRig or HelixKitten, is a cyber espionage group that's been active since at least 2014. They are believed to be connected to the Iranian government, specifically the Islamic Revolutionary Guard Corps (IRGC).

## Where Are They From?

APT34 is thought to operate out of Iran. Cybersecurity experts link them to Iran's IRGC, a major military organization involved in the country's cyber operations.

### Who Do They Target?

APT34 goes after a variety of industries, such as energy, finance, telecommunications, and government agencies, mostly in the Middle East and the United States. Their main goal is to gather sensitive information and carry out cyber espionage.

#### What Are Their Motives?

The main motive of APT34 is espionage. They aim to steal intellectual property, financial data, and government secrets to support Iran's strategic interests.

#### **How Do They Attack?**

APT34 uses several methods to carry out their attacks, including:

- Spear-phishing: Sending targeted, deceptive emails to trick people into revealing sensitive information.
- Social Engineering: Manipulating people into performing actions or divulging confidential information.
- Malware Delivery: Using harmful software through fake websites.

- Password Spraying: Attempting to access many accounts with a few common passwords.
- Custom Malware: Deploying their own malicious software like a backdoor named POWRUNER to maintain access and avoid detection.

Once inside a network, they use various tactics to stay hidden and maintain control, including custom-built malware, command-and-control servers, and legitimate tools and software to avoid being caught.

#### **How Can You Protect Yourself?**

To defend against attacks from APT34, you can implement several security measures:

- Employee Training: Regularly train employees on cybersecurity to prevent them from falling for spear-phishing and social engineering tactics.
- Multi-Factor Authentication (MFA): Use MFA to add an extra layer of security, making it harder for attackers to access sensitive information even if they have passwords.
- Endpoint Protection: Install antivirus and anti-malware software to detect and prevent infections.
- Network Segmentation: Divide your network into smaller sections to contain and control the spread of malware in case of a breach.
- Incident Response Plan: Have a plan ready to quickly respond to any security breaches and minimize their impact.

By taking these steps, you can better protect your networks and systems against APT34 and other cyber threats.