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Radware and SecureX Integration Demo Guide

Cisco SecureX™ is a cloud-native, built-in platform that connects our Cisco® Secure portfolio and your infrastructure, providing a consistent experience that provides visibility, enables automation, and enhances security across network, endpoint, cloud, and applications. SecureX simplifies security and integrates into the solutions that customers have already deployed.

In order to demo the features and functionality of Cisco solutions as well as Cisco solutions integrated with Radware solutions, Cisco has developed a portal that allows configuration, testing, and demoing of Cisco and Cisco-Radware solutions. This environment, known as dCloud, is accessible via the following weblink: https://dcloud.cisco.com/

Please note that a valid Cisco Connection Online (CCO) account is required to access Cisco's dCloud environment. Please speak with your local Cisco account team if you do not have a CCO account or create one here: https://www.cisco.com/c/en/us/about/help/login-account-help.html.

One of the dCloud demo environments is called **Cisco SecureX and Secure Endpoints with Orbital v1.** In this environment, it is possible to view a wide breadth of SecureX integrations, including integration with the Cisco Cloud Web Application Firewall (WAF) solution. Cisco DDoS, WAF, and other solutions are available through Cisco's OEM partnership with Radware.

To learn more about this demo environment, please visit the following link:

https://dcloud-docs.cisco.com/c/r/dcloud-docs/sites/en_us/Security/secure_x_v1_output/b_secure_x_w_secure_endpoints_w_orbital_v1_bookmap1.html?dc=rtp

SecureX is a collection of cloud tools that integrate with other cloud services, including Radware-enabled solutions for Cisco Cloud DDoS and WAF services, and on-prem devices such as Cisco FMC, WSA, etc. SecureX pulls in threat and event type of information, correlates it between various security devices, and enriches it with Cisco security threat research and forensics.

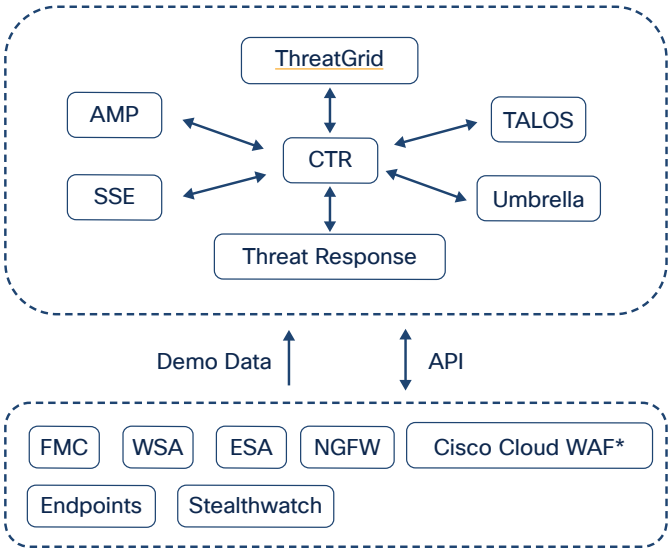


Figure 1. SecureX – dCloud demo environment: architecture

* Cisco Cloud WAF is powered by Radware.

Cisco SecureX with the Cloud WAF demo environment consists of a single web application (www.ciscowaf.com) that is protected by the Cisco Cloud WAF solution against attacks such as crosssite scripting, brute force attacks, and SQL attacks, as shown in the diagram below:

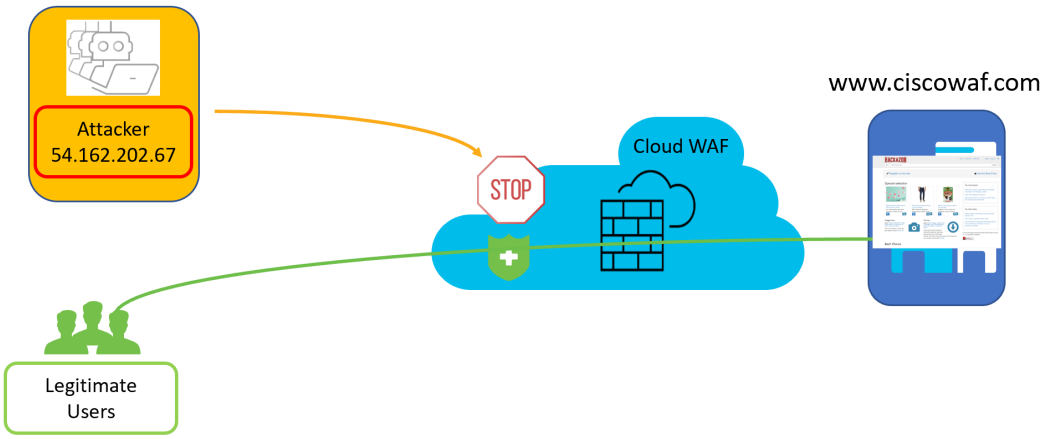


Figure 2. Cisco Advanced WAF – dCloud demo environment

Security Events in the Cloud WAF portal show the source IP of the attacker and the type of vulnerability they were trying to exploit. The attacker, whose IP address is **54.162.202.67**, is launching a series of application-level attacks such as URL violations in an attempt to browse the website's directory. Cloud WAF is stopping the attempted exploit.

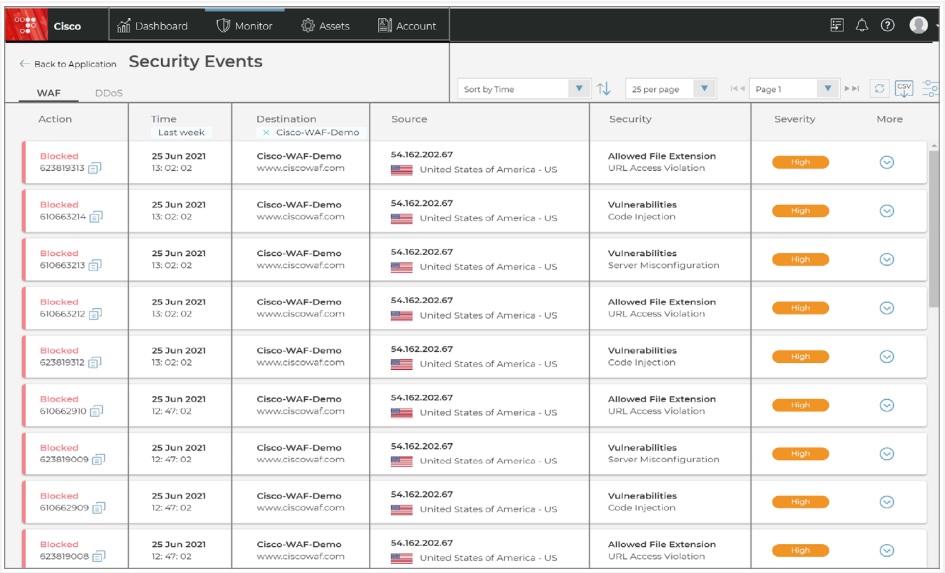


Figure 3. Cisco Advanced WAF – Customer Portal

With the attacker's IP information, we can now leverage the power of Cisco's SecureX portal to help further investigate this attacker.

Connect to Cisco dCloud SecureX demo cloud:

https://dcloud2-rtp.cisco.com/content/instantdemo/cisco-securex-threat-response-v1-instant-demo?returnPathTitleKey=content-view

Click on the View button, as shown in the screenshot below:

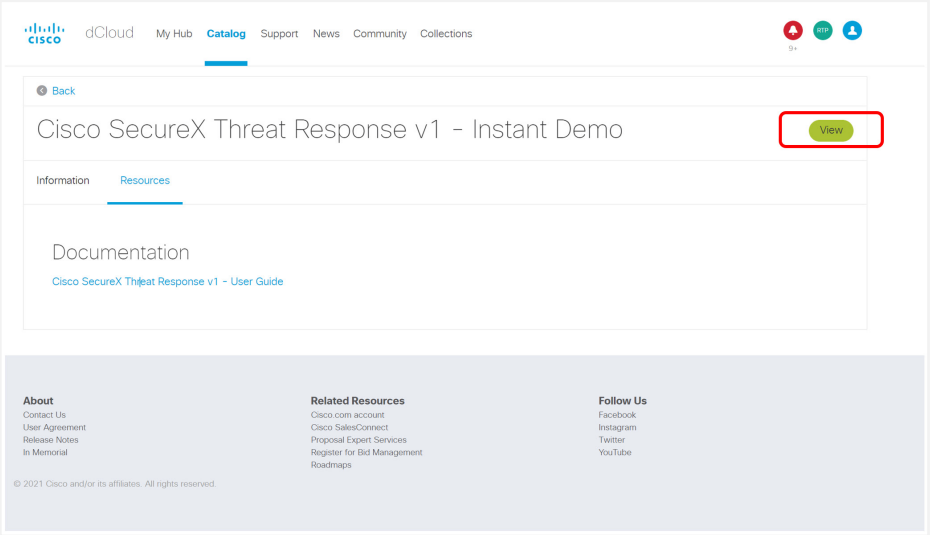


Figure 4. dCloud demo environment access

As mentioned earlier, SecureX is a collection of security tools. The tool that is leveraged to investigate an attacker is the SecureX Threat Response. Click “View,” as shown in the screenshot below:

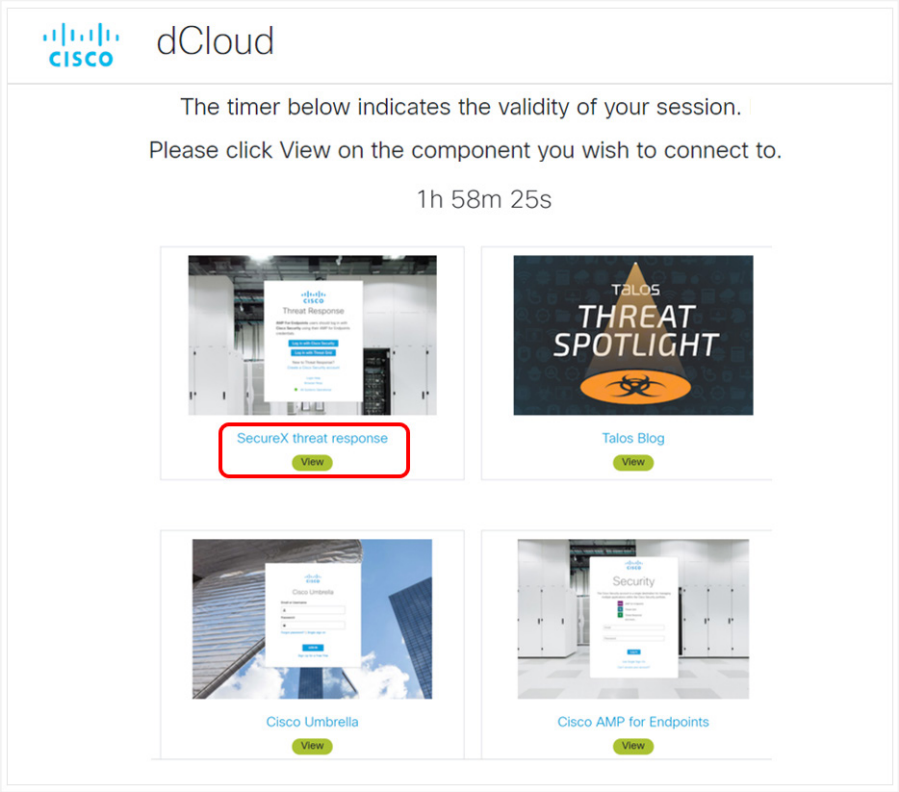


Figure 5. Threat Response dCloud demo access

Once connected to the SecureX Threat Response, go to the top left of the page where there is a box with the words “Paste log entry, IP address, domain, etc” and enter the IP address of the attacker seen earlier in this document, **54.162.202.67**.

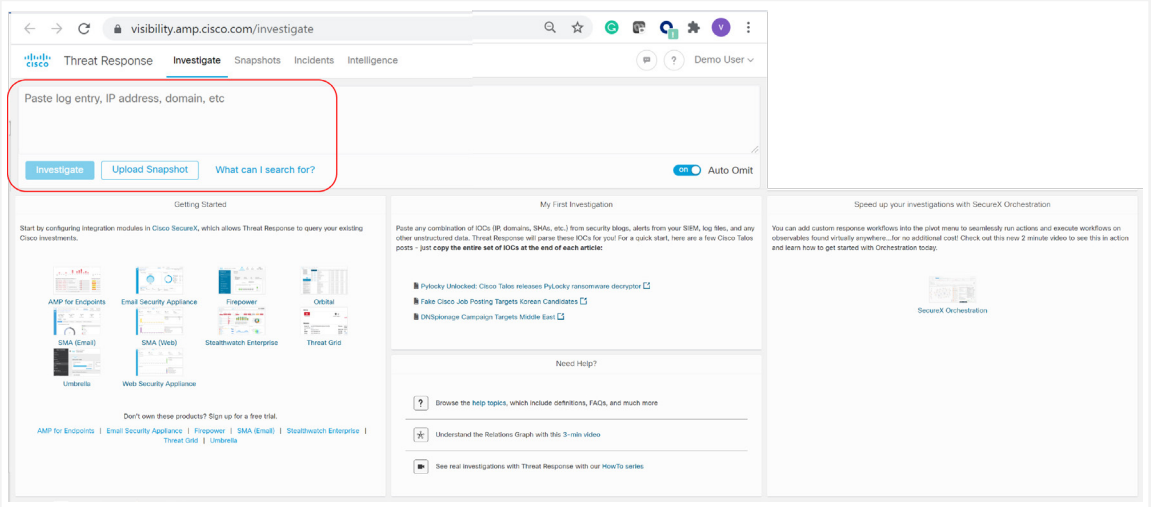


Figure 6. Threat Response – Entering IP address information required to launch an investigation

Then click the Investigate button:

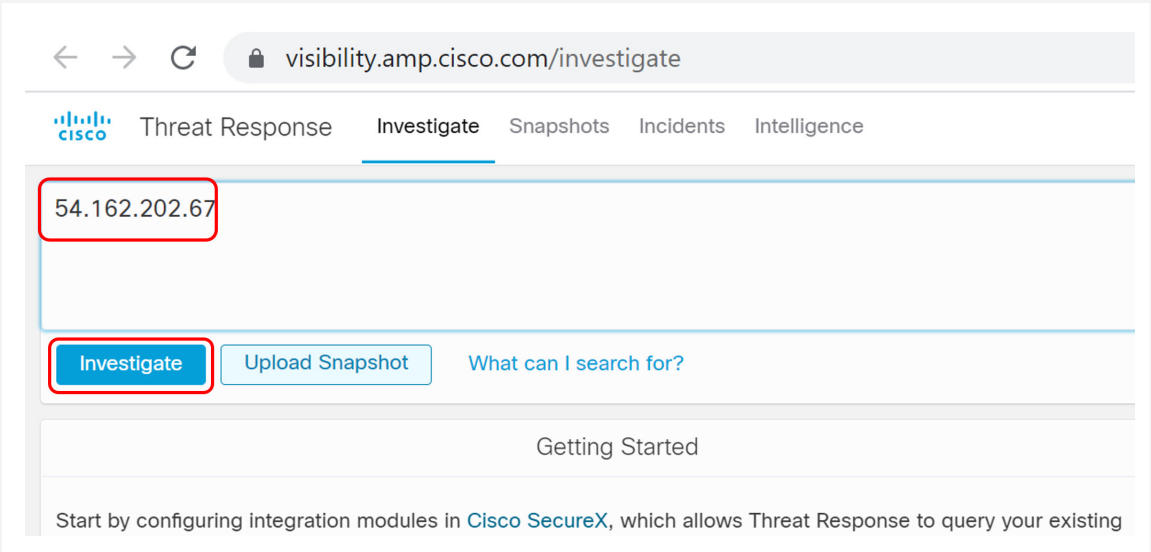


Figure 7. Threat Response – Launching a new investigation

SecureX using API calls will retrieve information from the Cloud WAF and other Cisco Security solutions like Cisco Umbrella®, Talos®, FMC, etc., and will correlate all information regarding this attacker's IP from all of its services and sources.

Note: Because these are live feeds, you may not see exactly the same messages or attacks shown in the example below. This is normal and depends on the attacks which are occurring at the time of your lab and the Cisco Cloud Security threat information at the time of the demo. However, all the steps will be the same in investigating an attacker.

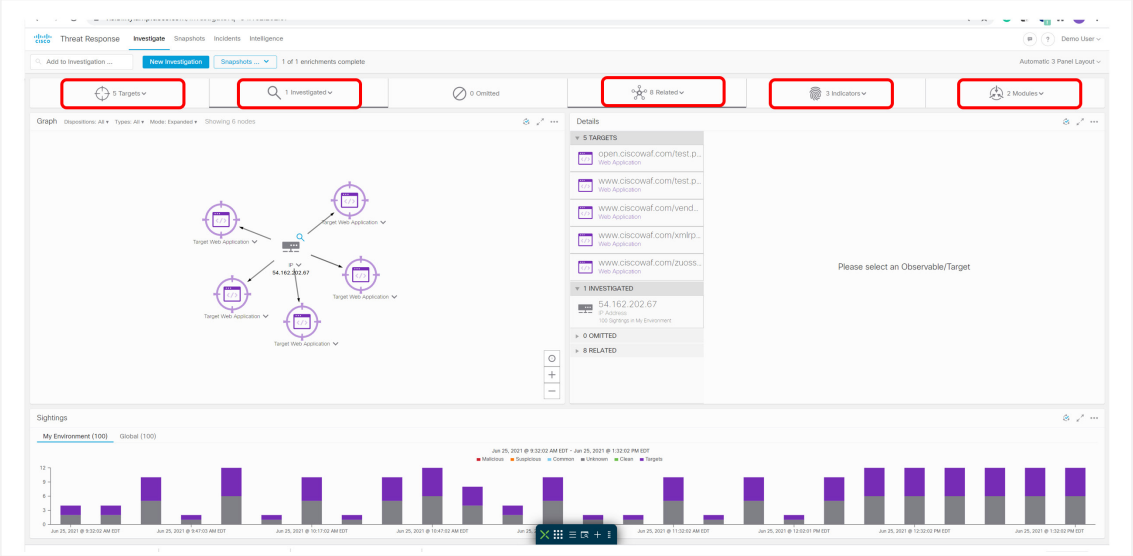


Figure 8. Threat Response – Active investigation

SecureX provides this enriched and correlated data view of an attacker and its attack vectors. Moving from left to right, we can see that this attacker IP targeted five systems. There is one investigation, with three indicators and by two modules.

Looking at the five targets, click on the down arrow to view these targets.

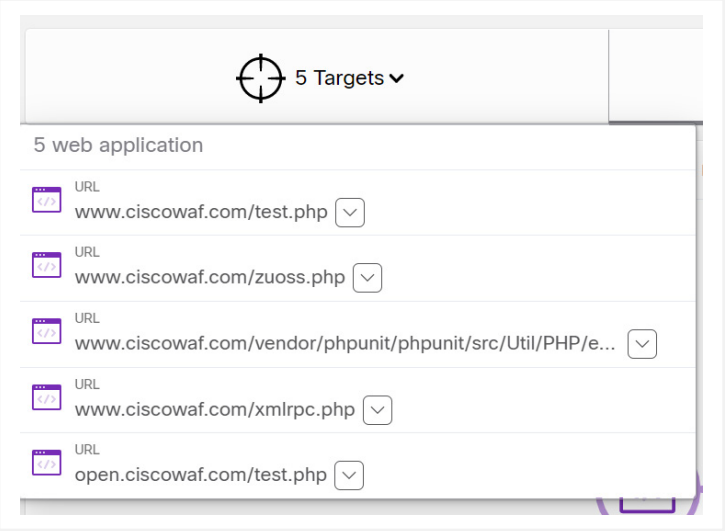


Figure 9. Targeted URLs

We can see the five URLs that were targeted.

For the Indicators, click on the down arrow.

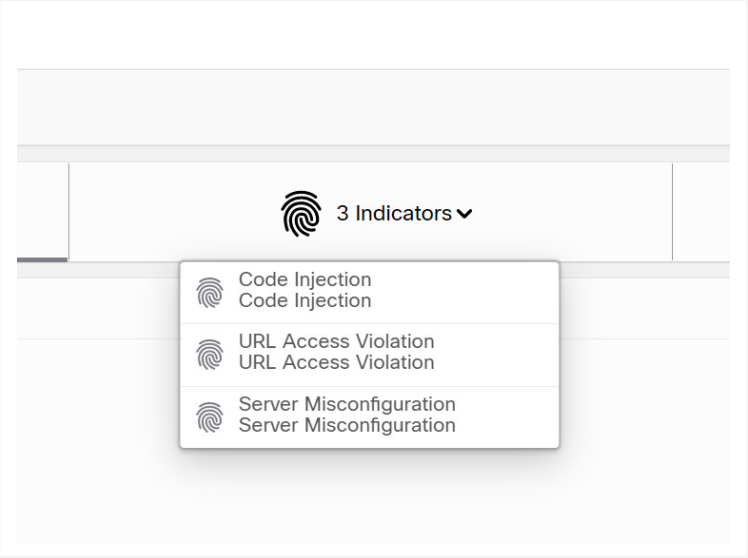


Figure 10. Indicators

We can see the three types of security threats that were launched by this attacker: Code Injection, URL Access Violation, and Server Misconfiguration.

The two modules that provided information for this attacker were the Radware Cloud WAF service and Cisco Umbrella.

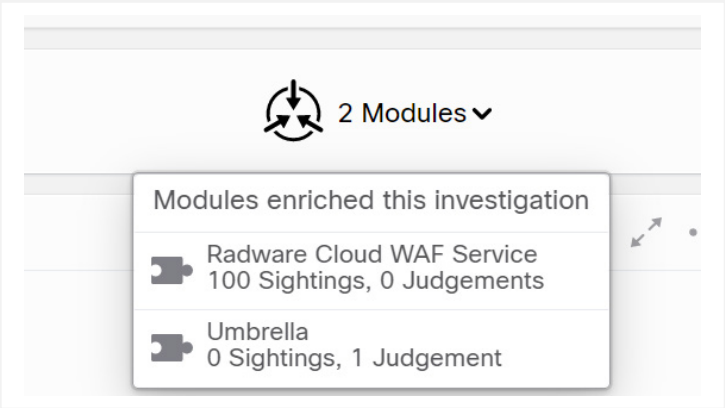


Figure 11. Modules

By clicking on the IP address in the middle of the screen, we get another perspective of this data.

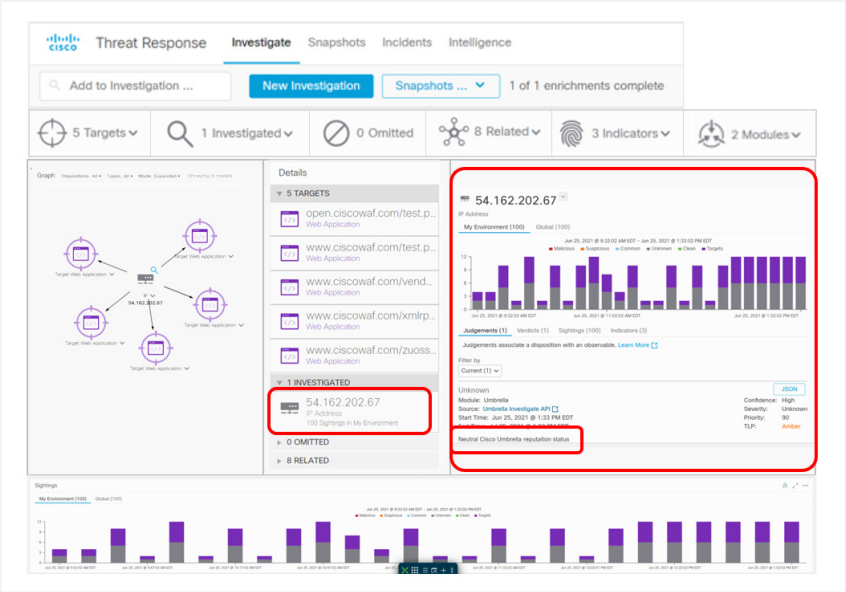


Figure 12. Investigation details

In the Judgement tab, we can see that Umbrella provided a Neutral judgement for this IP address.

By clicking the Indicators tab, we can see all the indicators for this attacker's IP. In each indicator, we can see the confidence of the attack. In this example, it is High.

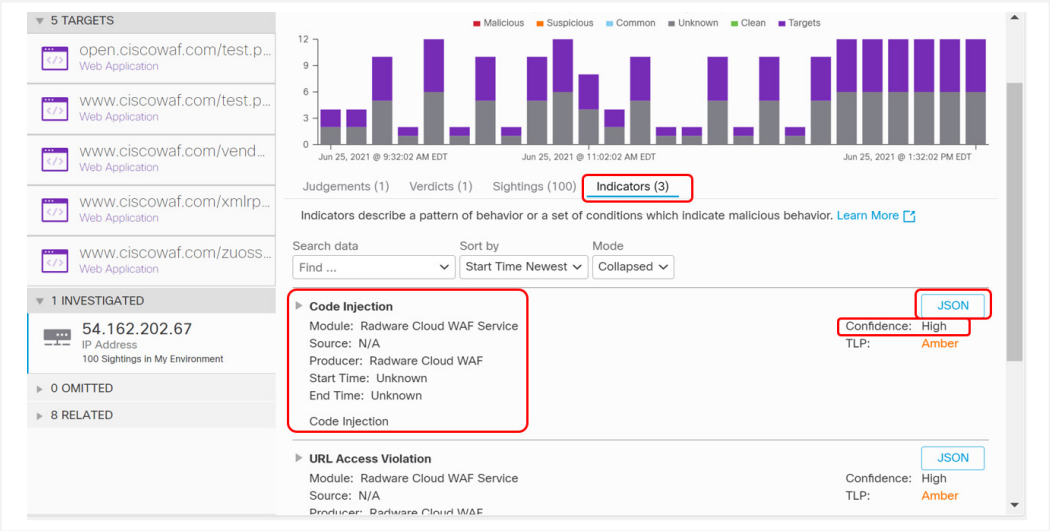


Figure 13. Indicators

By clicking the JSON button for a given indicator, the API response information in JSON format can be analyzed.

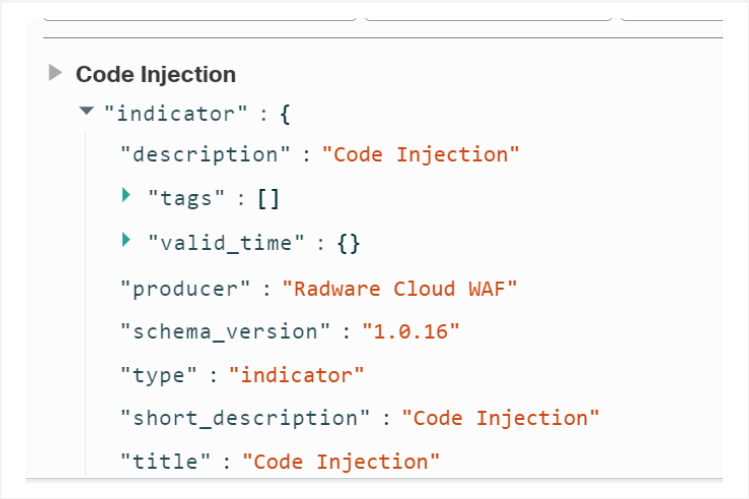


Figure 14. Indicator in JSON format

Additionally, SecureX is able to push configuration out to the Cloud WAF. For example, if an IP is deemed malicious, the SecureX administrator can block that IP by adding it to the block list in the Cloud WAF service. This prevents this IP from accessing the website altogether.

Click on the down arrow next to the IP address and a menu will open with the option to Add IP to block list.

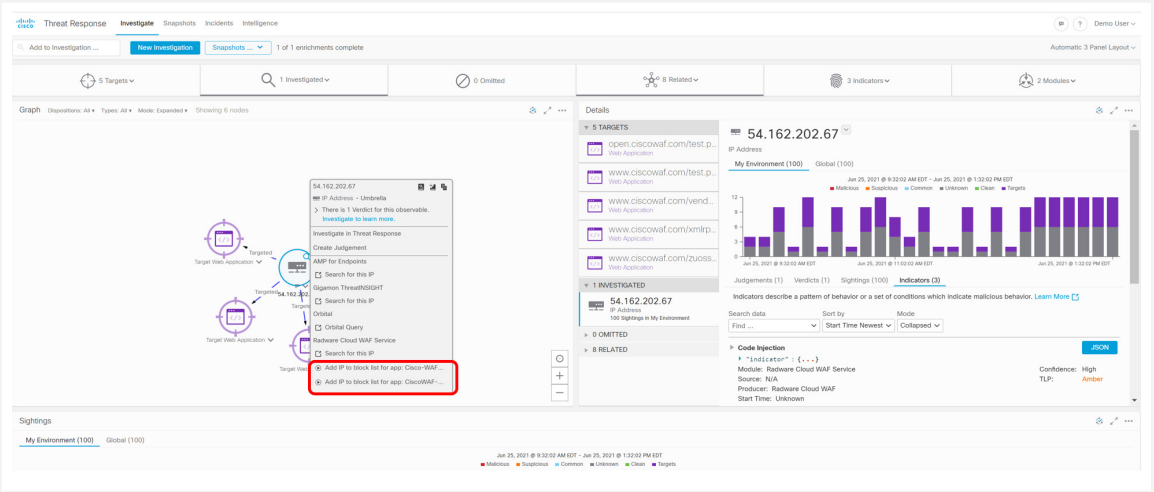
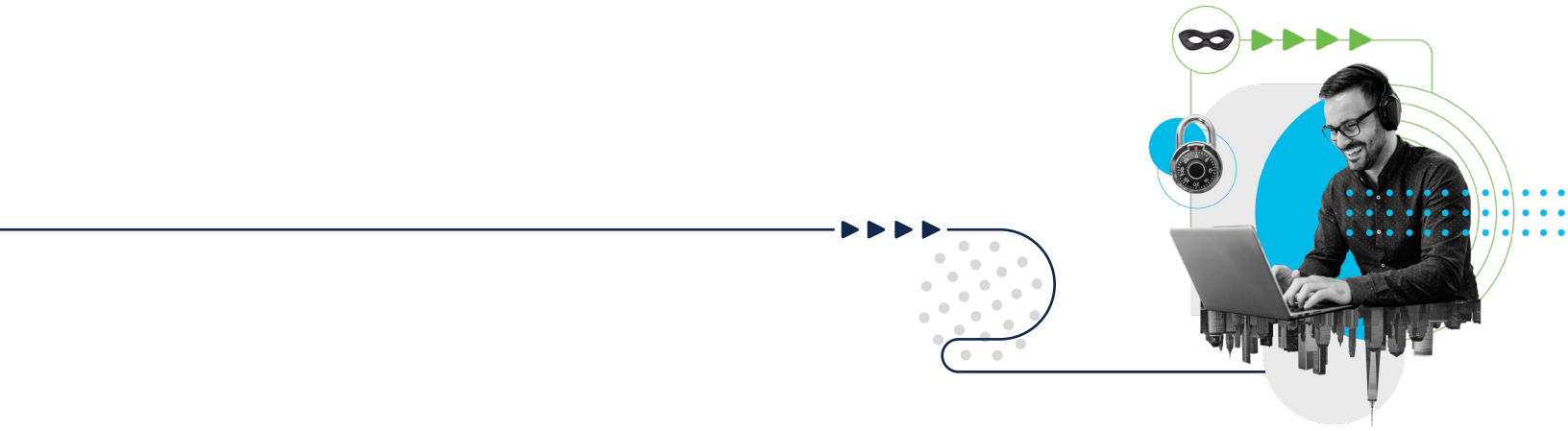


Figure 15. Adding an IP address to a block list

The action of “Add IP to block for the app” will fail as the API credentials do not have write permission and we don’t want to block this IP as it will affect others’ experiences with the demo.

Note: In this dCloud SecureX demo for Cloud WAF, there was not a lot of correlated information because the Attacker IP is not a real-world attacker. This IP is only attacking this website under our control, and Talos, Umbrella, and AMP are real environments that are only collecting real threat information. In a real-world attack, there would be much richer and correlated events that can be viewed in SecureX. This is why SecureX is better experienced in a real-world environment than in a demo.

As mentioned, dCloud SecureX and Cloud WAF provided in this demo are a real environment; however, the attackers are not real world. What this means is you can test it by launching your own nonmalicious attack that will be detected and blocked by Cloud WAF from your PC.



First determine your internet IP address by googling "What's my IP."

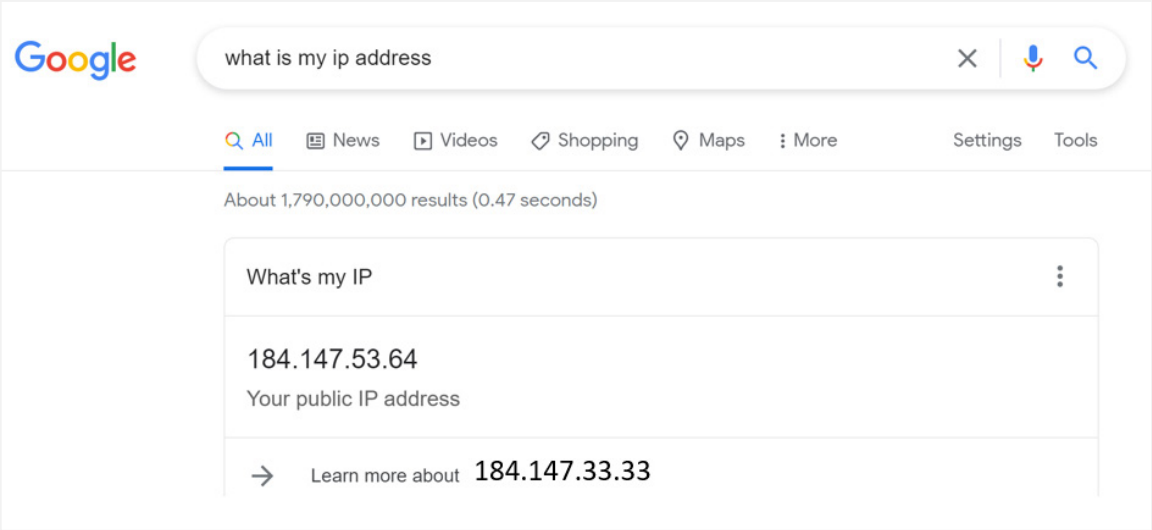


Figure 16. What's my IP address?

From your web browser's URL box, enter the following:

www.ciscowaf.com/zuoss.php

You should get the following message: "Unauthorized Activity Detected"

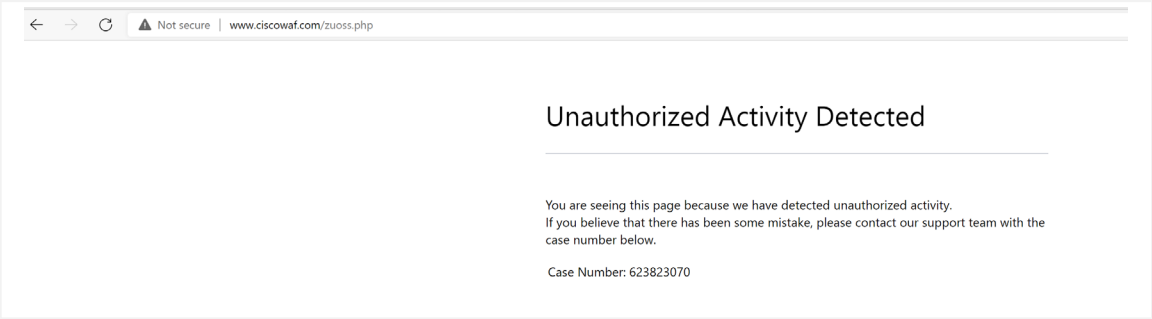


Figure 17. Unauthorized Activity Detected

Wait a couple of minutes, and then go back to the SecureX Threat Response window.

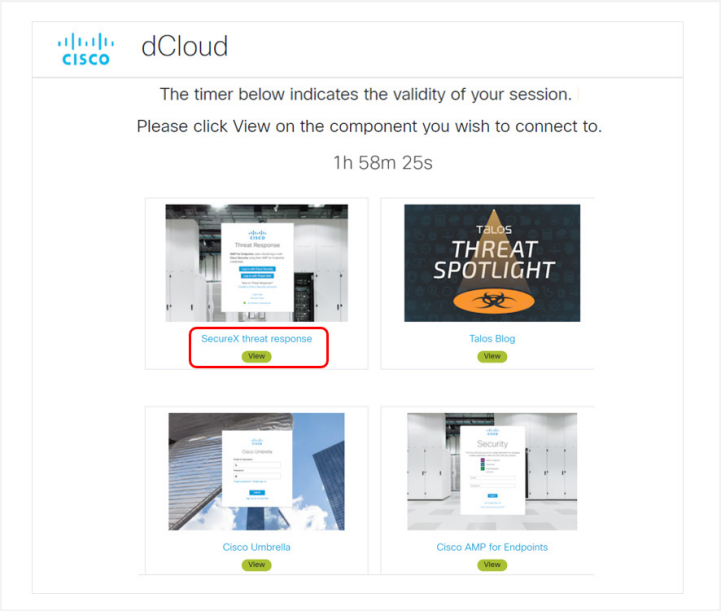


Figure 18. SecureX Threat Response window

Enter your IP address and click “Investigate.”

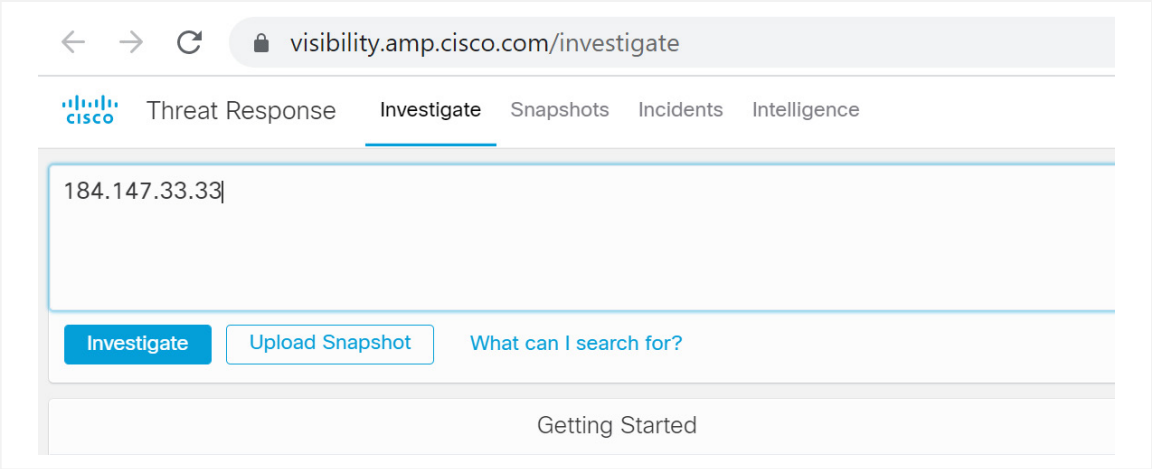


Figure 19. Investigate on an IP address

You should be able to see your IP address and the type of attack you attempted on the www.ciscowaf.com website.

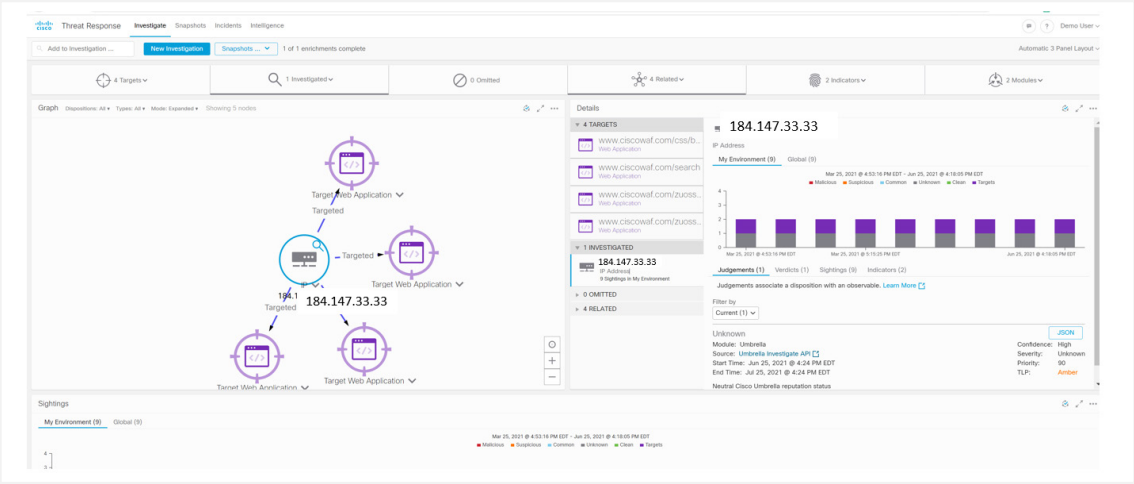


Figure 20. Investigation in Threat Response

Investigate further by looking through all the options within the SecureX Threat Response window.

If you would like further information, reach out to your Cisco or Radware account team (cisco.alliance.team@radware.com), who will be happy to provide further information.

Thank you for your interest in the Radware and SecureX integration demo.