

APPTRANA PROTECTION

Rules Coverage Report:

Summary:

Most WAF solution fails, as application security is complex and creating rules inhouse is a time-Consuming job which requires expertise. Other Cloud security solutions that provide WAF generally go with cookie cutter solution. They provide certain generic rules and then provide customer means to write rules by themselves. It is up to the organizations to fine tune the rules to meet the application needs. Since default rules create false positives and fine-tuning rules becomes complex over time, organizations end up giving up on WAF compromising security for convenience.

We at Indusface approach the problem differently. Webelieve, security of the application starts with detection and AppTrana ensures that all the vulnerabilities are detected, and we also ensure it is protected by expert written rules. Our experts fine-tune the rules based on the application need to avoid false positives and ensure that your application remain secure round the clock.

The following checklist gives you overview of rule coverage provided by AppTrana's different rules.

Advance Rules: Rules which are fine tuned for FPs and are put in block mode from day zero.

Premium Rules: Rules which are applied to site and moved to block mode after monitoring traffic for 14 days ensuring there are no FPs.

Custom Rules: Rules which are written for specific application needs in consultation with customer. Note that we can have more variants of WAF rules in place for each category and only generic category and types are captured in this document.

Summary:

| S.no | Category | Severity | Rule Type | Rule Description |
|------|---|----------|-----------|--|
| 1 | HTTP Method Restriction Policy | Critical | Premium | Non-supported HTTP request method (other than GET, POST & HEAD) detected. |
| 2 | HTTP Header Restriction Policy | Critical | Advance | Non-supported HTTP request headers detected. |
| 3 | Encoding Abuse Attacks Protection Policy | Critical | Advance | Encoding Abuse Attacks |
| 4 | Bot Protection Policy | Critical | Advance | Security scanner related HTTP header detected. |
| 5 | Bot Protection Policy | Critical | Premium | Automated program based User- Agent/HTTP header detected. |
| 6 | Blind SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected in HTTP request cookies and XML requests. |
| 7 | Blind SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected in HTTP request URI and arguments. |
| 8 | Blind SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected - 1. |
| 9 | Blind SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected - 2. |
| 10 | SQL Injection Protection Policy | Critical | Premium | SQL Injection attempt detected in HTTP request cookies and XML requests. |
| 11 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected in HTTP request URI and arguments. |
| 12 | SQL Injection Protection Policy | Critical | Premium | SQL Injection attempt detected - 1. |

| 13 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected in HTTP request cookies or in XML requests. |
|----|---|----------|---------|---|
| 14 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected - 2. |
| 15 | Cross-Site Scripting Protection Policy | Critical | Advance | Cross-Site Scripting attack attempt detected in HTTP request Cookies and XML requests. |
| 16 | Cross-Site Scripting Protection Policy | Critical | Premium | Cross-Site Scripting attack attempt detected in HTTP request URI, Arguments and XML reugests - 1. |
| 17 | File Injection Protection Policy | Critical | Advance | File injection attempt detected in HTTP request header and XML requests. |
| 18 | File Injection Protection Policy | Critical | Advance | File injection attempt detected in HTTP request URI and arguments. |
| 19 | SSI Injection Protection Policy | Critical | Advance | Server side Injection attempt detected in HTTP request URI or arguments. |
| 20 | SSI Injection Protection Policy | Critical | Advance | Server side Injection attempt detected in HTTP headers or XML file. |
| 21 | PHP Injection Protection Policy | Critical | Advance | PHP injection attempt detected in HTTP request URI and arguments. |
| 22 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected - 3. |
| 23 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected in HTTP request URI , arguments or HTTP Headers. |
| 24 | Bot Protection Policy | Error | Advance | Bad reputated IP detected. |
| 25 | Local File Inclusion Protection Policy | Critical | Advance | Local File Inclusion (LFI) attempt detected via file traversal character sequences. |
| 26 | Local File Inclusion Protection Policy | Critical | Premium | Local File Inclusion (LFI) attempt detected using path pointing from root directory. |

| 27 | Base64 Encoding Abuse Attacks Protection Policy | Critical | Advance | Base64-encoded payload detected in HTTP request. |
|----|---|----------|---------|--|
| 28 | Remote File Inclusion Protection Policy | Critical | Premium | Remote File Inclusion (RFI) attempt detected. |
| 29 | Blind SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected - 3. |
| 30 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected in HTTP request URI , arguments or Cookie. |
| 31 | Blind SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected - 4. |
| 32 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected - 4. |
| 33 | SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected in HTTP request URI, arguments or Cookie. |
| 34 | JavaScript Encoding Abuse Attacks Protection Policy | Critical | Advance | JavaScript encoding abuse detected - 1. |
| 35 | JavaScript Encoding Abuse Attacks Protection Policy | Critical | Advance | JavaScript encoding abuse detected - 2. |
| 36 | GNU Bash Remote Code Execution (CVE- 2014-6271) Protection Policy | Critical | Advance | GNU Bash remote code execution (CVE-2014-6271) detected - 1. |
| 37 | SQL Injection Protection Policy | Critical | Advance | Blind SQL Injection attempt detected in HTTP request URI , arguments or Request Headers. |

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|----|---|----------|---------|---|
| 30 | PHP Injection Protection Policy | Critical | Advance | PHP injection attempt detected in HTTP request header and XML requests. |
| 39 | GNU Bash Remote Code Execution (CVE- 2014-6271) Protection Policy | Critical | Advance | GNU Bash remote code execution (CVE-2014-6271) detected - 2. |
| 40 | GNU Bash Remote Code Execution (CVE- 2014-6271) Protection Policy | Critical | Advance | GNU Bash remote code execution (CVE-2014-6271) detected - 3. |
| 41 | GNU Bash Remote Code Execution (CVE- 2014-6271) Protection Policy | Critical | Advance | GNU Bash remote code execution (CVE-2014-6271) detected - 4. |
| 42 | HTTP Response Splitting Protection Policy | Critical | Advance | HTTP response splitting attempt detected in HTTP request cookies - 1. |
| 43 | HTTP Response Splitting Protection Policy | Critical | Advance | HTTP response splitting attempt detected in HTTP request cookies - 2. |
| 44 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected - 5. |
| 45 | OS Command Injection Protection Policy | Critical | Advance | System command injection attempt detected - 1. |
| 46 | OS Command Injection Protection Policy | Critical | Advance | System command injection attempt detected - 2. |
| 47 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected - 6. |
| | | | | |

| | Protection Policy | | | |
|----|---|----------|---------|---|
| 49 | HTTProxy Protection Policy | Critical | Advance | HTTP Proxy request header detected. |
| 50 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected in HTTP request URI , arguments ,HTTP Headers or XML file. |
| 51 | Cross-Site- Scripting | Critical | Premium | Cross-Site Scripting attack attempt detected in HTTP request URI, Arguments and XML reugests - 2 |
| 52 | Bot Protection Policy | Critical | Advance | Security scanner related URI detected. |
| 53 | Bot Protection Policy | Critical | Advance | Command Line Tool/Library related User- Agent/HTTP header (from internal database) detected. |
| 54 | Cross-Site Scripting Protection Policy | Critical | Premium | Cross-Site-Scripting |
| 55 | Apache Struts2 REST XStream RCE Vulnerability Protection Policy | Critical | Advance | Remote code execution attempt via suspicious Java class detected. User can execute system commands via processbuilder or runtime calls and an attacker can misuse these classes submitting improperly sanitized objects to run malicious system commands. |
| 56 | SQL Injection Protection Policy | Critical | Advance | SQL Injection attempt detected - 7. |
| 57 | Cross-Site Scripting Protection Policy | Critical | Advance | Cross-Site-Scripting |
| 58 | Generic Deserialization Defence for Java | High | Advance | Generic Deserialization attempt detected in Java. |
| 59 | Generic Deserialization Defence for Java | High | Advance | Generic Deserialization attempt detected in Java. |
| 60 | Generic Deserialization Defence for | High | Advance | Generic Deserialization attempt detected in Microsoft Products. |

| | Microsoft | | | |
|----|---|----------|---------|---|
| | products | | | |
| 61 | Generic Deserialization Defence for Ruby on Rails | High | Advance | Generic Deserialization attempt detected in Ruby on Rails. |
| 62 | Generic Deserialization Defence for Ruby on Rails | High | Advance | Generic Deserialization attempt detected in Ruby on Rails. |
| 63 | XML External Entity (XXE) Injection Policy | High | Advance | XML External Entity (XXE) Injection attempt detected as local file inclusion. |
| 64 | Possible Apache Struts OGNL RCE Protection Policy | Critical | Advance | Possible Apache Struts OGNL Code Execution Policy |
| 65 | Apache Tomcat Remote Code Execution Vulnerability Protection Policy | Critical | Advance | Apache Tomcat Remote Code Execution (CVE-2019-0232) attack attempt detected. |
| 66 | Possible Malicious File Upload | Critical | Advance | File upload with malicious extensions detected |
| 67 | HTML5 ping DOS Protection Policy | Critical | Advance | DoS attack using Ping headers in HTML5 - 1. |
| 68 | HTML5 ping DOS Protection Policy | Critical | Advance | DoS attack using Ping headers in HTML5 - 2. |
| 69 | HTML5 ping DOS Protection Policy | Critical | Advance | DoS attack using Ping headers in HTML5 - 3 |
| 70 | IIS Remote Code Execution Protection Policy | Critical | Advance | Microsoft IIS HTTP.sys Remote Code Execution Exploit attempt (CVE-2014-6321) |
| 71 | Apache DOS Protection Policy | High | Advance | Attempt to exploit DOS on Apache Server Based on Range Header |
| 72 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |

| 73 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
|----|--|------|---------|---|
| 74 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 75 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 76 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 77 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 78 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 79 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 80 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 81 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 82 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 83 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |
| 84 | PHP Remote Code Execution | High | Advance | Attempt to exploit Remote Code Execution based on php vulnerabilities |

| | Protection Policy | | | |
|----|--|----------|---------|--|
| 85 | PHP Remote Code Execution Protection Policy | High | Premium | Attempt to detect possibility of Remote Code Execution based on php vulnerabilities |
| 86 | PHP Remote Code Execution Protection Policy | High | Advance | Attempt to detect possibility of Remote Code Execution based on php vulnerabilities |
| 87 | Malicious File Upload Attacks: Blocking Large File upload Attempts | Critical | Advance | Malicious File Upload Attacks: Blocking Large File upload Attempts |
| 88 | CVE-2020-5902 F5 BIG-IP RCE | Critical | Advance | CVE-2020-5902 F5 BIG-IP Remote Code Execution |
| 89 | Bot Protection Policy | Critical | Advance | Malicious bot related User-Agent/HTTP header detected. |
| 90 | Bot Protection Policy | Critical | Advance | Website Security Scanner related User- Agent/HTTP header detected. |
| 91 | Bot Protection Policy | Critical | Advance | Website Crawler related User-Agent/HTTP header detected. |
| 92 | Bot Protection Policy | Critical | Advance | Website Scrappers related User-Agent/HTTP header detected. |
| 93 | ESI Injection Vulnerability | Critical | Advance | Rule to detect ESI Injection Vulnerability in request body or header or uri |
| 94 | Invalid Content- Length HTTP header | Critical | Advance | Invalid Content-Length HTTP header |
| 95 | HTTP Request Smuggling Attack | Critical | Advance | HTTP Request Smuggling Attack |
| 96 | Unicode Full/Half Width Abuse Attack Attempt | Critical | Advance | Unicode Full/Half Width Abuse Attack Attempt |
| 97 | URL file extension is restricted by policy | Critical | Advance | URL file extension is restricted by policy |
| 98 | Attempt to access a backup or working file | Critical | Advance | Attempt to access a backup or working file |

| 99 | Request with | Critical | Advance | Request with Header x-up-devcap-post- |
|-----|--|----------|---------|--|
| 99 | Header x-up- devcap-post- charset | Critical | Advance | charset detected in combination with \'UP\' User-Agent prefix |
| | detected in combination with \'UP\' | | | |
| | User-Agent prefix | | | |
| 100 | HTTP Request Smuggling Attack | Critical | Advance | HTTP Request Smuggling Attack |
| 101 | HTTP Request Smuggling Attack | Critical | Advance | HTTP Request Smuggling Attack |
| 102 | HTTP Header Injection Attack via payload (CR/LF and header-name detected) | Critical | Advance | HTTP Header Injection Attack via payload (CR/LF and header-name detected) |
| 103 | HTTP Splitting (CR/LF in request filename detected) | Critical | Advance | HTTP Splitting (CR/LF in request filename detected) |
| 104 | Node.js- injection Attacks | Critical | Advance | Node.js Injection Attack |
| 105 | Apache Struts and Java Attacks | Critical | Advance | Remote Command Execution: Java process spawn (CVE-2017-9805) |
| 106 | Apache Struts and Java Attacks | Critical | Advance | Suspicious Java class detected |
| 107 | Apache Struts and Java Attacks | Critical | Advance | Base64 encoded string matched suspicious keyword |
| 108 | Remote File Inclusion Attacks | Critical | Advance | Possible Remote File Inclusion (RFI) Attack: Common RFI Vulnerable Parameter Name used w/URL Payload |
| 109 | PHP Injection Attack: PHP Open Tag Found | Critical | Advance | PHP Injection Attack: PHP Open Tag Found |
| 110 | PHP Injection Attack: Configuration Directive Found | Critical | Advance | PHP Injection Attack: Configuration Directive Found |

| 111 | PHP Injection Attack: Variables Found | Critical | Advance | PHP Injection Attack: Variables Found |
|-----|--|----------|---------|---|
| 112 | PHP Injection Attack: I/O Stream Found | Critical | Advance | PHP Injection Attack: I/O Stream Found |
| 113 | PHP Injection Attack: Wrapper scheme detected | Critical | Advance | PHP Injection Attack: Wrapper scheme detected |
| 114 | PHP Injection Attack: High- Risk PHP Function Call Found | Critical | Advance | PHP Injection Attack: High-Risk PHP Function Call Found |
| 115 | PHP Injection Attack: Serialized Object Injection | Critical | Advance | PHP Injection Attack: Serialized Object Injection |
| 116 | PHP Injection Attack: Variable Function Call Found | Critical | Premium | PHP Injection Attack: Variable Function Call Found |
| 117 | Path Traversal Attack (//) | Critical | Advance | Path Traversal Attack (//) |
| 118 | Restricted File Access Attempt | Critical | Advance | Restricted File Access Attempt |
| 119 | OS File Access Attempt | Critical | Advance | OS File Access Attempt |
| 120 | Cross-site- scripting Attempt | Critical | Premium | Cross-site-scripting Attempt |
| 121 | NoScript XSS InjectionChecke r: Attribute Injection | Critical | Premium | NoScript XSS InjectionChecker: Attribute Injection |
| 122 | IE XSS Filters - Attack Detected | Critical | Premium | IE XSS Filters - Attack Detected |
| 123 | IE XSS Filters - Attack Detected | Critical | Premium | IE XSS Filters - Attack Detected |
| 124 | JavaScript global variable found | Critical | Premium | JavaScript global variable found |
| 125 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017- 5638) using echo and expr commands in Apache Struts via content-type request |
| | | | | |

| | | | | header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and error-message generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
|-----|--|----------|---------|--|
| 126 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017-5638) using variations of grep commands in Apache Struts via content-type request header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and error-message generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
| 127 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017-5638) using variations of grep commands in Apache Struts via content-type request header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and error-message generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
| 128 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017-5638) using cc or wget commands in Apache Struts via content-type request header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and error-message generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
| 129 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017-5638) using commands in Apache Struts via content-type request header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and errormessage generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
| 130 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017- 5638) using linux system commands in Apache Struts via content-type request header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and error-message |

| | | | | generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
|-----|--|----------|---------|--|
| 131 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2017-5638) using windows system commands in Apache Struts via content-type request header detected. The Jakarta Multipart parser in Apache Struts has incorrect exception handling and error-message generation during file-upload attempts, which allows remote attackers to execute arbitrary commands. |
| 132 | Apache Struts Remote Code Execution Policy | Critical | Advance | Remote code execution attempt (CVE-2018-11776 and CVE-2017-5638) in Apache Struts via suspicious Java class detected. The vulnerability exists in the core of Apache Struts due to improper validation of user-provided untrusted inputs under certain configurations causing remote code execution. |
| 133 | Advanced SQL Injection Attacks | Critical | Advance | SQL Injection Attack: Common DB Names Detected |
| 134 | Advanced SQL Injection Attacks | Critical | Advance | Detects blind sqli tests using sleep() or benchmark() including Conditional Queries |
| 135 | Advanced SQL Injection Attacks | Critical | Advance | Postgres/MongoDB based SQLi Attempt Detected |
| 136 | Advanced SQL Injection Attacks | Critical | Advance | Detects MySQL and PostgreSQL stored procedure/function injections |
| 137 | Advanced SQL Injection Attacks | Critical | Advance | MySQL in-line comment detected |
| 138 | Advanced SQL Injection Attacks | Critical | Advance | Detects MySQL charset switch and MSSQL DoS attempts |
| 139 | Advanced SQL Injection Attacks | Critical | Advance | SQL Injection Attack |
| 140 | Advanced SQL Injection Attacks | Critical | Advance | SQL Injection Attack |

| 141 | Advanced SQL Injection Attacks | Critical | Advance | SQL Injection Attack |
|-----|---|----------|---------|--|
| 142 | Malicious File Upload Attacks: Preventing all File Upload Attempts | Critical | Advance | Malicious File Upload Attacks: Preventing all File Upload Attempts |
| 143 | Malicious File Upload Attempt: Denying all Non- Document File upload Attempts | Critical | Advance | Malicious File Upload Attempt: Denying all Non-Document File upload Attempts |
| 144 | Malicious File Upload Attacks: Denying all Non- Media File upload Attempts | Critical | Advance | Malicious File Upload Attacks: Denying all Non-Media File upload Attempts |
| 145 | Malicious File Upload Attacks: Denying all Non- Document and Non-Media File upload Attempts | Critical | Advance | Malicious File Upload Attacks: Denying all Non-Document and Non-Media File upload Attempts |
| 146 | Advanced Command Injection Attacks | Critical | Advance | Remote Command Execution: Windows Command Injection |
| 147 | Advanced Command Injection Attacks | Critical | Advance | Remote Command Execution: Unix Command Injection |
| 148 | Advanced Command Injection Attacks | Critical | Advance | Remote Command Execution: Windows Command Injection |
| 149 | Advanced Command Injection Attacks | Critical | Advance | Remote Command Execution: Unix Shell Expression Found |

| HTTP Request Smuggling Attack | | | | | |
|--|-----|--------------------------|----------|---------|--|
| Smuggling Attack Advance Restricted JAVA SPRING RCE Attack Detected for CVE-2022-22963. Advance Rule to prevent path traversal attack Smuggling Attack Advance Rule to prevent path traversal attack Smuggling Attack Advance Rule to prevent path traversal attack Advance Sulle to prevent path tra | 150 | Smuggling | Critical | Advance | |
| Smuggling Attack 153 HTTP Request Smuggling Attack 154 HTTP Request Smuggling Attack 155 JAVA SPRING Attack 156 MS Http.sys RCE vulnerability 157 Apache Log4j Remote Code Execution Vulnerability 158 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 161 Apache Log4j Remote Code Execution Vulnerability 162 Apache Log4j Remote Code Execution Vulnerability 163 Apache Log4j Remote Code Execution Vulnerability 164 Apache Log4j Remote Code Execution Vulnerability 165 Apache Log4j Remote Code Execution Vulnerability 166 Apache Log4j Remote Code Execution Vulnerability 167 Apache Log4j Remote Code Execution Vulnerability 168 Apache Log4j Remote Code Execution Vulnerability 169 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 161 Apache Log4j Remote Code Execution Vulnerability 162 Apache Log4j Remote Code Execution Vulnerability 163 PHP Remote Critical Advance Advance Advance Advance Advance Apache Log4j Remote Code Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Advance Advance Apache Log4j Remote Code Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Apache Log4 | 151 | Smuggling | Critical | Advance | Unusual HTTP Protocol Format |
| Smuggling Attack 154 HTTP Request Smuggling Attack 155 JAVA SPRING Critical Advance Restricted JAVA SPRING RCE Attack Detected for CVE-2022-22963. 156 MS Http.sys RCE Critical Advance Rule to block MS Http.sys RCE attacks vulnerability 157 Apache Http Server Path Traversal Vulnerability 158 Apache Log4j Critical Advance Restricted JAVA SPRING RCE Attack Detected for CVE-2022-22963. 158 Apache Log4j Critical Advance Rule to block MS Http.sys RCE attacks vulnerability 158 Apache Log4j Critical Advance Apache Log4j Remote Code Execution Vulnerability 159 Apache Log4j Critical Advance Apache Log4j Remote Code Execution Vulnerability 159 Apache Log4j Critical Advance Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Critical Advance Restricted malicious requests with apache log4j DOS attack CVE-2021-44228) attack detected 161 Apache Log4j Critical Advance Restricted malicious requests with apache log4j DOS attack CVE-2021-45105 162 Apache Log4j Critical Advance Restricts malicious requests with apache log4j CVE-2021-45046 DOS attack Execution Vulnerability 163 Apache Log4j Critical Advance Advance Apache Log4j Remote Code Execution Vulnerability 164 Apache Log4j Critical Advance Restricts malicious requests with apache log4j CVE-2021-45046 DOS attack Execution Vulnerability 165 Apache Log4j Critical Advance Advance Apache Log4j Remote Code Execution Vulnerability 166 Apache Log4j Critical Advance Advance Apache Log4j Remote Code Execution Vulnerability 167 Apache Log4j Critical Advance Advance Attempt to detect possibility of Remote Code Execution Vulnerability (CVE-2021-44228) attack detected | 152 | Smuggling | Critical | Advance | HTTP Request Smuggling Attack |
| Smuggling Attack 155 JAVA SPRING RCE Attack 156 MS Http.sys RCE Critical Advance Rule to block MS Http.sys RCE attacks vulnerability 157 Apache Http Server Path Traversal Vulnerability 158 Apache Log4j Remote Code Execution Vulnerability 159 Apache Log4j Remote Code Execution Vulnerability 150 Apache Log4j Remote Code Execution Vulnerability 151 Apache Log4j Remote Code Execution Vulnerability 152 Apache Log4j Remote Code Execution Vulnerability 153 Apache Log4j Remote Code Execution Vulnerability 154 Apache Log4j Remote Code Execution Vulnerability 155 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 161 Apache Log4j Remote Code Execution Vulnerability 162 Apache Log4j Remote Code Execution Vulnerability 163 PHP Remote Critical Advance Advance Advance Apache Log4j Remote Code Execution Vulnerability 164 Apache Log4j Remote Code Execution Vulnerability 165 Apache Log4j Remote Code Execution Vulnerability 166 Apache Log4j Remote Code Execution Vulnerability 167 Apache Log4j Remote Code Execution Vulnerability 168 Apache Log4j Remote Code Execution Vulnerability 169 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 161 Apache Log4j Remote Code Execution Vulnerability 162 Apache Log4j Remote Code Execution Vulnerability 163 PHP Remote Critical Advance Advance Advance Apache Log4j Remote Code Execution Vulnerability 164 Advance Apache Log4j Remote Code Execution Vulnerability 165 Advance Advance Apache Log4j Remote Code Execution Vulnerability 166 Apache Log4j Remote Code Execution Vulnerability 167 Apache Log4j Remote Code Execution Vulnerability 168 Advance Apache Log4j Remote Code Execution Vulnerability 169 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 161 Apache Log4j Remote Code Execution Vulnerability | 153 | Smuggling | Critical | Advance | |
| RCE Attack for CVE-2022-22963. 156 MS Http.sys RCE vulnerability 157 Apache Http Server Path Traversal Vulnerability 158 Apache Log4j Remote Code Execution Vulnerability 159 Apache Log4j Remote Code Execution Vulnerability 159 Apache Log4j Remote Code Execution Vulnerability 150 Apache Log4j Remote Code Execution Vulnerability 150 Apache Log4j Remote Code Execution Vulnerability 151 Apache Log4j Remote Code Execution Vulnerability 152 Apache Log4j Remote Code Execution Vulnerability 153 Apache Log4j Remote Code Execution Vulnerability 154 Apache Log4j Remote Code Execution Vulnerability 155 Apache Log4j Remote Code Execution Vulnerability 166 Apache Log4j Critical Advance Restricted malicious requests with apache log4j DOS attack CVE-2021-45105 167 Apache Log4j Remote Code Execution Vulnerability 168 Apache Log4j Remote Code Execution Vulnerability 169 Apache Log4j Remote Code Execution Vulnerability 160 Apache Log4j Remote Code Execution Vulnerability 161 Apache Log4j Remote Code Execution Vulnerability 162 Apache Log4j Remote Code Execution Vulnerability 163 PHP Remote Cotical Advance Attempt to detect possibility of Remote | 154 | Smuggling | Critical | Advance | Possible HTTP Request Smuggling Attack |
| Vulnerability Server Path Server Path Traversal Vulnerability | 155 | | Critical | Advance | Restricted JAVA SPRING RCE Attack Detected for CVE-2022-22963. |
| Server Path Traversal Vulnerability 158 | 156 | • • | Critical | Advance | Rule to block MS Http.sys RCE attacks |
| Remote Code Execution Vulnerability 159 Apache Log4j Critical Remote Code Execution Vulnerability 160 Apache Log4j Critical Remote Code Execution Vulnerability 161 Apache Log4j Critical Remote Code Execution Vulnerability 162 Apache Log4j Critical Remote Code Execution Vulnerability 163 PHP Remote Critical Advance Advance Attempt to detect possibility of Remote Code Execution Vulnerability Advance Restricted malicious requests with apache log4j DOS attack CVE-2021-45105 Restricts malicious requests with apache log4j CVE-2021-45046 DOS attack Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Attempt to detect possibility of Remote | 157 | Server Path Traversal | Critical | Advance | Rule to prevent path traversal attack |
| Remote Code Execution Vulnerability Critical Advance Execution Vulnerability Apache Log4j Remote Code Execution Vulnerability Critical Advance Execution Vulnerability Advance Restricted malicious requests with apache log4j DOS attack CVE-2021-45105 Execution Vulnerability Advance Restricts malicious requests with apache log4j CVE-2021-45046 DOS attack Execution Vulnerability Advance Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Execution Vulnerability (CVE-2021-44228) attack detected Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability Advance Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability (CVE-2021-44228) attack detected Vulnerability Advance Attempt to detect possibility of Remote | 158 | Remote Code Execution | Critical | Advance | Vulnerability (CVE-2021-44228) attack |
| Remote Code Execution Vulnerability 161 Apache Log4j Critical Advance Restricts malicious requests with apache log4j CVE-2021-45046 DOS attack Execution Vulnerability 162 Apache Log4j Critical Advance Apache Log4j Remote Code Execution Remote Code Execution Vulnerability Advance Apache Log4j Remote Code Execution Vulnerability (CVE-2021-44228) attack detected Vulnerability 163 PHP Remote Critical Advance Attempt to detect possibility of Remote | 159 | Remote Code Execution | Critical | Advance | Vulnerability (CVE-2021-44228) attack |
| Remote Code Execution Vulnerability 162 Apache Log4j Critical Advance Apache Log4j Remote Code Execution Remote Code Execution Vulnerability (CVE-2021-44228) attack Execution Vulnerability 163 PHP Remote Critical Advance Attempt to detect possibility of Remote | 160 | Remote Code Execution | Critical | Advance | |
| Remote Code Execution Vulnerability 163 PHP Remote Critical Advance Attempt to detect possibility of Remote | 161 | Remote Code Execution | Critical | Advance | |
| · | 162 | Remote Code Execution | Critical | Advance | Vulnerability (CVE-2021-44228) attack |
| | 163 | | Critical | Advance | |

| 164 | Path Traversal Coverage | Critical | Advance | Rule to cover encoded payloads (2f2f 2e2e2f 326532653266) |
|-----|--|----------|---------|--|
| 165 | Cross Site Scripting Attack | Critical | Advance | This rule prevents Cross-Site-Scripting attacks by idThis rule prevents Cross-Site-Scripting attacks by identifying and preventing XSS payloads.entifying and preventing XSS payloads. |
| 166 | JSON SQL Injection Attack | Critical | Advance | JSON SQL Injection attempt detected in HTTP request URI and arguments. |
| 167 | ProxyNotShell (CVE-2022- 40140 & CVE- 2022-41082) | Critical | Advance | MS Exchange ProxyNotShell (CVE-2022-40140 & CVE-2022-41082) Attack Detected. |
| 168 | Advanced SQL Injection Attacks | Critical | Advance | This rule detects JSON based SQL injection. |
| 169 | Java Attacks | Critical | Advance | This rule detects Java class reflection usage to execute methods that allow OS commands execution. |
| 170 | Content Injection | Critical | Advance | HTML content injection within Request URL detected. |
| 171 | SQL Injection | Critical | Advance | SQL Injection attempt detected in HTTP request URI and arguments. |
| 172 | LDAP Injection | Critical | Advance | To identify LDAP injection attacks |
| 173 | Command Injection | Critical | Advance | To identify command injection attacks |
| 174 | Manage Engine Remote Code Execution | Critical | Advance | CVE-2022-47966 Manage Engine Remote Code Execution |
| 175 | Apache Struts and Java Attacks | Critical | Advance | Apache Struts and Java Attacks |
| 176 | MOVEit Transfer Vulnerability Policy | Critical | Advance | MOVEit Transfer Vulnerability Policy |
| 177 | MOVEit Transfer Vulnerability Policy | Critical | Advance | MOVEit Transfer Vulnerability Policy |
| 178 | MOVEit Transfer Vulnerability Policy | Critical | Advance | MOVEit Transfer Vulnerability Policy |
| 179 | MOVEit Transfer Vulnerability Policy | Critical | Advance | MOVEit Transfer Vulnerability Policy |

| 180 | MOVEit Transfer Vulnerability Policy | Critical | Advance | MOVEit Transfer Vulnerability Policy |
|-----|--|----------|---------|--|
| 181 | MOVEit Transfer Vulnerability Policy | Critical | Advance | MOVEit Transfer Vulnerability Policy |
| 182 | Bot Attacks | Critical | Advance | Bot Attacks |
| 183 | Remote Unauthenticate d API Access Vulnerability(CV E-2023-35078) policy | Critical | Advance | Remote Unauthenticated API Access Vulnerability(CVE-2023-35078) |
| 184 | Cross-Site- Scripting Attacks | Critical | Advance | This rule prevents SSTI Injection Attacks |
| 185 | Privilege Escalation in WooCommerce WordPress Vulnerability Policy | Critical | Advance | CVE-2023-28121 Privilege Escalation in WooCommerce Payments plugin for WordPress Vulnerability |
| 186 | PHP File Upload detection policy | Critical | Advance | PHP File Upload detection policy |
| 187 | Adobe Cold Fusion Vulnerability Policy | Critical | Advance | CVE-2023-29298 Adobe ColdFusion Access Control Bypass |
| 188 | Adobe Cold Fusion Vulnerability Policy | Critical | Advance | CVE-2023-38203 Adobe ColdFusion Deserialization Vulnerability |
| 189 | Cross-Site- Scripting Attack Policy | Critical | Advance | Cross-Site-Scripting attack detection. |
| 190 | Cross-Site- Scripting Attack Policy | Critical | Advance | Cross-Site Scripting attack attempt detected in Multiple targets. |
| 191 | Remote Code Execution (RCE) Detection Policy | Critical | Advance | Remote Code Execution (RCE) attack attempt detected in Multiple targets. |
| 192 | LDAP Injection Policy | Critical | Advance | LDAP Injection at arguments and XML |
| 193 | NoSQLI Injection Policy | Critical | Advance | NoSQLI Injection Detection |

| 194 | LFI Attack Policy | Critical | Advance | LFI attacks |
|-----|---|----------|---------|--|
| 195 | PHP Injection Attacks Policy | Critical | Advance | PHP Injection attacks |
| 196 | Server Side Template Injection Policy | Critical | Advance | Server Side Template Injection detection |
| 197 | Server-Side Request Forgery (SSRF) Policy | Critical | Advance | Server-Side Request Forgery (SSRF) detection |
| 198 | GraphQL Policy | Critical | Advance | GraphQL detetction |
| 199 | CVE-2023- 22515 - Broken Access Control Vulnerability in Confluence Data Center and Server Policy | Critical | Advance | Coverage for CVE-2023-22515 and CVE- 2023-22518 |
| 200 | SQL Injection Attacks | Critical | Advance | SQL Injection attempt detection |
| 201 | Remote Code Execution (RCE) Detection Policy | Critical | Advance | Remote Code Execution (RCE) Attack Detection at Cookie |
| 202 | Base64 Encoded Attack Detection Policy | Critical | Advance | Base64 Encoding Attack Detection |
| 203 | Base64 Encoded Attack Detection Policy | Critical | Advance | Base64 Encoding Detected |
| 204 | Apache OFBiz Auth bypass and Pre-Auth RCE Vulnerability (CVE-2023- 49070 and CVE- 2023-51467) policy | Critical | Advance | Apache OFBiz Auth bypass and Pre-Auth RCE Vulnerability (CVE-2023-49070 and CVE- 2023-51467) detection |
| 205 | Apache Hadoop and Flink application Misconfiguratio n exploitation detection policy | Critical | Advance | Apache Hadoop and Flink application Misconfiguration exploitation detection policy |

| 206 | Server-Side Request Forgery leading to RCE in the SAML component of lvanti(CVE- 2024-21893 & CVE-2024- 21887) detected | Critical | Advance | Server-Side Request Forgery leading to RCE in the SAML component of Ivanti(CVE-2024 21893 & CVE-2024-21887) detected |
|-----|--|----------|---------|--|
| 207 | Auth bypass ScreenConnect CVE-2024-1708 and CVE-2024- 1709 Policy | Critical | Advance | Auth bypass ScreenConnect CVE-2024-1708 and CVE-2024-1709 Detection |
| 208 | Base64 Encoded Attack Detection Policy | Critical | Advance | Malicious Base64 Encoding detected at useragent. |
| 209 | SQL Injection Attacks | Critical | Advance | SQL Injection detected at useragent. |
| 210 | Jet Brains Auth Bypass Policy | Critical | Advance | Jet Brains Auth Bypass Policy |
| 211 | CVE-2024- 23897 Jenkins Code Execution Policy | Critical | Advance | Jenkins Remote Code Execution Policy CVE- 2024-23897 |
| 212 | Possible Unauthenticate d Privilege Escalation (CVE 2024-2172) Policy | Critical | Advance | Possible Unauthenticated Privilege Escalation Detection |
| 213 | SQL Injection Attacks | Critical | Advance | SQL Injection Attack Detection at multiple targets |
| 214 | Advance Threat Detection Policy | Critical | Advance | Malicious command Injection Attack Detection at multiple targets |
| 215 | Advance Threat Detection Policy | Critical | Advance | Malicious Injection Attack Detection at Request Headers |
| 216 | Advance Threat Detection Policy | Critical | Advance | Obfuscated Injection Attack Detection at multiple targets |
| 217 | Advance Threat Detection Policy | Critical | Advance | Path traversal and sensitive file access attempt at Headers and Arguments |
| | Advance Threat | Critical | Advance | SSRF attempt at Headers and Arguments |

| 219 | Advance Threat Detection Policy | Critical | Advance | Base64 encoded Malicious Injection Detection at multiple targets like URL, Headers, Body, ARGS etc., |
|-----|---|----------|---------|--|
| 220 | Advance Threat Detection Policy | Critical | Advance | Cross Site Scripting detection at Headers and arguments |
| 221 | Incorrect Authorization in Apache OFBiz (CVE-2024- 38856) | Critical | Advance | CVE-2024-38856, CVE-2024-36104 and CVE-2024-32113 Incorrect Authorization vulnerability leading to RCE in Apache OFBiz |
| 222 | Incorrect Authorization in Apache OFBiz (CVE-2024- 38856) | Critical | Advance | CVE-2024-38856, CVE-2024-36104 and CVE-2024-32113 Incorrect Authorization vulnerability leading to RCE in Apache OFBiz. Rule checks for encoded unicode characters sent from groovyprogram argument. |
| 223 | Advance Threat Detection Policy | Critical | Advance | Path traversal and sensitive file access attempt detected at URL |
| 224 | Advance Threat Detection Policy | Critical | Advance | SQL Injection attempt detected at Arguments |
| 225 | Advance Threat Detection Policy | Critical | Advance | Command Injection attempt detected at Arguments |
| 226 | Cross-Site Scripting Protection Policy | High | Advance | Cross-Site-Scripting attacks detected |
| 227 | VMWare Aria Remote Code Execution Policy | Critical | Advance | VMWare Aria Remote Code Execution Policy |
| 228 | Restrict Access to Suspicious Apache Tomcat Default Web Management Pages | Critical | Advance | Restrict Access to Suspicious Apache Tomcat Default Web Management Pages |
| 229 | Malware Policy | Critical | Advance | Malware Policy |
| 230 | Illegal Content- type Header Detection Policy | Critical | Advance | Multiple Content-type Header detection in a Request Header |
| 231 | WordPress URLs Protection Policy | Critical | Advance | WordPress User Enumeration Policy |
| 232 | WordPress URLs Protection Policy | Critical | Advance | WordPress User Enumeration-1 Policy |

| 233 | WordPress URLs Protection Policy | Critical | Advance | Wordpress Popup-Maker Injection Policy |
|-----|--|----------|---------|--|
| 234 | WordPress URLs Protection Policy | Critical | Advance | WordPress Plugin Verison Disclosure Policy |
| 235 | WordPress URLs Protection Policy | Critical | Advance | WordPress Google Maps SQL Injection Policy |
| 236 | WordPress URLs Protection Policy | Critical | Advance | WordPress xmlrpc Blocking Policy |
| 237 | WordPress URLs Protection Policy | Critical | Advance | Detect attempts to use phpinfo or unauthorized file deletion through specific callback parameter |
| 238 | WordPress URLs Protection Policy | Critical | Advance | Prevent retrieval of user emails based on specific roles (administrator, subscriber) |
| 239 | WordPress URLs Protection Policy | Critical | Advance | External URL injection attempts within nested 'args' parameters |
| 240 | Malicious Pattern Detection-1 | Critical | Advance | Malicious Injection Attack Detection at multiple targets |
| | | | | |

Apart from this, specific custom rules are written to address application specific needs. These rules are again created by Indusface security experts. Certain use cases that can be addressed are provided below, please note these are not comprehensive and should be used to judge the type of use cases that can be addressed through AppTrana.

Theft/DLP Protection:

Customers who need to protect sensitive information protected and ensure certain information do not leave the organization can request for response-based rule, which would monitor their response traffic and mask sensitive data. When these rules are enabled, sensitive information will be masked on the logs as well.

Note

Response based rules are highly intrusive and should be enabled judiciously as it may affect functioning of the application. *BAD IP Protection*:

Indusface provide IP protection that shows IP's which are malicious. customers can choose to monitor these malicious IP's either manually or have automated rule enabled that could block these IPs automatically. IPs with bad reputation is identified by using internal Global Threat Platform which identifies malicious IPs based on behaviour across all sites under Indusface Protection. Apart from this Global Threat Platform also gets periodic updates from Global 3rd party database which marks certain IP malicious.

Customer can also choose to have TOR IPs blocked through custom rule.

Protection Against Hidden Form Fields:

If customers have any hidden form fields and want to restrict requests which sends out of bound values for the field, then customer can request for custom rule which would be written by our security experts based on their need.

File Upload Violation:

Customers based on application need can request for custom rule written to avoid file uploads that does not meet the acceptable parameters.

Positive Security Rules:

Customer can choose to enable positive security model, in which some or all negative model rules would be disabled for the customer based on their need and positive security rules created which would take into accepted values for various fields like URLs, directories, cookies, headers, form/query parameters, File upload Extensions, allowed metacharacters etc and allow only values that meets the accepted parameters.

Honey Pot Bot Defender Rule:

We have enhanced our Bot defender rules which can now identify malicious bots through honeypots and block them. If a new malicious bot is identified when it attacks one of the protected sites, this information will be registered in our global threat intelligence database and attack from same botnet on any other sites under our protection will be blocked faster.

Behaviour Rules:

We have sophisticated anomaly scoring/ behaviour rules that changes the protection status of rules based on certain behaviour observed in the application. This can be done at application level or at a specific page level.

Tampering Protection Policies:

Customers can also enable tampering policies which would help them against cookie tampering/poisoning attacks. It also protects application from tampering like URL rewriting, encryption tampering, and so on. This rule can also be configured to protect against attacks to identify predictable resource location, unauthorized access, server reconnaissance.

HTTP Parameter Controlling Policies:

Solution protects HTTP Parameter pollution, tampering attacks, and policies can be written to protect against HTTP parameter pollution attack, restricting/controlling HTTP methods and validating header length, content length, Body length, Parameter length, body line length etc.

Enterprise Features:

AppTrana supports all enterprise use cases including- Support for Transformation Functions:

As part of core rules AppTrana supports transformation functions like URL Decoding, Null Byte string termination.

Customized Error Message:

Based on application requirement customer can request for rules to mask their server errors and show custom pages instead of default server errors.

Support for Custom Ports & Protocols:

By default, the rules are written for HTTP/HTTPS traffic and WAF listens on port 80/443. Customers can request for additional custom ports be opened based on their need and monitoring of additional protocols like SOAP, XML etc.

Support for IPv6:

Customer can enable IPv6 support for their sites by requesting it while onboarding. With this clients connecting to the application will be able to connect using IPv6 even if backend does not support IPv6.

Support for SIEM:

SIEM APIs are available that will enable customers to get real time attack logs from AppTrana that can be integrated with their SIEM tools for further analysis.

Support for 2FA & RBCA:

AppTrana provides support for Role based access control as well ensures access to AppTrana portal through 2FA support.