BUGCROWD'S

VULNERABILITY RATING TAXONOMY

Bugcrowd is proud of the VRT, a valuable resource for both researchers and customers to better understand the technical rating we use to classify vulnerabilities. This report details how and why we created the VRT, and a usage guide to accompany the taxonomy itself.

v1.7- Mar. 25, 2019

BUGCROWD'S VRT

THE METHODOLOGY

At the beginning of 2016, we released the Bugcrowd Vulnerability Rating Taxonomy (VRT) in an effort to further bolster transparency and communication, as well as to contribute valuable and actionable content to the bug bounty community.

Bugcrowd's VRT is a resource outlining Bugcrowd's baseline severity rating, including certain edge cases, for vulnerabilities that we see often. To arrive at this baseline rating, Bugcrowd's security engineers started with generally accepted industry impact and further considered the average acceptance rate, average priority, and commonly requested program-specific exclusions (based on business use cases) across all of Bugcrowd's programs.

Implications For Bug Hunters

Bugcrowd's VRT is an invaluable resource for bug hunters as it outlines the types of issues that are normally seen and accepted by bug bounty programs. We hope that being transparent about the typical severity level for various bug types will help bug bounty participants save valuable time and effort in their quest to make bounty targets more secure. The VRT can also help researchers identify which types of high-value bugs they have overlooked, and when to provide exploitation information (POC info) in a report where it might impact priority.

Interested in becoming a Bugcrowd researcher? Join the crowd.

Implications For Customers

The VRT helps customers gain a more comprehensive understanding of bug bounties. The following information in this document will help our customers understand the impact of a given vulnerability, assist any adjustments to a bounty scope, and provides insight to write a clear bounty brief. During remediation, the VRT will help business units across the board in communicating the severity of identified security issues.

USAGE GUIDE:

The VRT is intended to provide valuable information for bug bounty stakeholders. It is important that we identify the ways in which we use it successfully, and what considerations should be kept in mind.

The Severity Rating is a Baseline

The recommended severity, from P1 to P5, is a baseline. That having been said, while this severity rating might apply without context, it's possible that application complexity, bounty brief restrictions, or unusual impact could result in a different rating. As a customer, it's important to weigh the VRT alongside your internal application security ratings.

For bug hunters, if you think a bug's impact warrants reporting despite the VRT's guidelines, or that the customer has misunderstood the threat scenario, we encourage you to submit the issue regardless and use the Bugcrowd Crowdcontrol commenting system to clearly communicate your reasoning.

Low Severity Does Not Imply Insignificance

For customers, it's important to recognize that the base severity rating does not equate to "industry accepted impact." This rating is defined by our Security Operations Team and our VRT is a living document - see the following point about the "VRT Council." Your internal teams or engineers might assess certain bugs – especially those designated P4 or P5 within the VRT – differently. As a bug hunter, it's important to not discount lower severity bugs, as many bug hunters have used such bugs within "exploit chains" consisting of two or three bugs resulting in creative, valid, and high-impact submissions.

Importance of a VRT Council

Bugcrowd reviews proposed changes to the VRT every week at an operations meeting with "VRT Council." We use this time to discuss new vulnerabilities, edge cases for existing vulnerabilities, technical severity level adjustments, and to share general bug validation knowledge. When the team comes to a consensus regarding each proposed change, it is committed to the master version. Members of the Security Operations team look forward to this meeting each week, as examining some of the most difficult to validate bugs serves as a unique learning exercise.

This specific document will be updated on an ongoing basis.

Communication is King

Having cut-and-dry baseline ratings, as defined by our VRT, make rating bugs a faster and less difficult process. We have to remember, however, that strong communication is the most powerful tool for anyone running or participating in a bug bounty.

Both sides of the bug bounty equation must exist in balance. When in doubt, ask dumb questions, be verbose, and more generally, behave in a way that allows you and your bounty opposite to foster a respectful relationship. As a customer, keep in mind that every bug takes time and effort to find. As a bounty hunter, try to remember that every bug's impact is ultimately determined by the customer's environment and use cases.

One Size Doesn't Fit All

While this taxonomy maps bugs to the OWASP Top Ten and the OWASP Mobile Top Ten to add more contextual information, additional meta-data could include CWE or WASC, among others. As always, the program owner retains all rights to choose final bug prioritization levels.

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P1			
	Server Security Misconfiguration	Using Default Credentials	
	Server-Side Injection	File Inclusion	Local
	Server-Side Injection	Remote Code Execution (RCE)	
	Server-Side Injection	SQL Injection	
	Server-Side Injection	XML External Entity Injection (XXE)	
	Broken Authentication and Session Management	Authentication Bypass	
	Sensitive Data Exposure	Critically Sensitive Data	Password Disclosure
	Sensitive Data Exposure	Critically Sensitive Data	Private API Keys
	Insecure OS/Firmware	Command Injection	
	Insecure OS/Firmware	Hardcoded Password	Privileged User
	Broken Cryptography	Cryptographic Flaw	Incorrect Usage
	Automotive Security Misconfiguration	Infotainment	PII Leakage
	Automotive Security Misconfiguration	RF Hub	Key Fob Cloning
P2			
	Server Security Misconfiguration	Misconfigured DNS	High Impact Subdomain Takeover
	Server Security Misconfiguration	OAuth Misconfiguration	Account Takeover
	Sensitive Data Exposure	Weak Password Reset Implementation	Token Leakage via Host Header Poisoning
	Cross-Site Scripting (XSS)	Stored	Non-Privileged User to Anyone
	Broken Access Control (BAC)	Server-Side Request Forgery (SSRF)	Internal High Impact
	Cross-Site Request Forgery (CSRF)	Application-Wide	
	Application-Level Denial-of-Service (DoS)	Critical Impact and/or Easy Difficulty	
	Insecure OS/Firmware	Hardcoded Password	Non-Privileged User
	Automotive Security Misconfiguration	Infotainment	Code Execution (CAN Bus Pivot)
	Automotive Security Misconfiguration	RF Hub	CAN Injection / Interaction
P3			
	Server Security Misconfiguration	Misconfigured DNS	Basic Subdomain Takeover
	Server Security Misconfiguration	Mail Server Misconfiguration	No Spoofing Protection on Email Domain
	Server-Side Injection	HTTP Response Manipulation	Response Splitting (CRLF)
	Server-Side Injection	Content Spoofing	iframe Injection

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P3 CONTINUED	Broken Authentication and Session Management	Second Factor Authentication (2FA) Bypass	
	Broken Authentication and Session Management	Weak Login Function	HTTPS not Available or HTTP by Default
	Broken Authentication and Session Management	Session Fixation	Remote Attack Vector
	Sensitive Data Exposure	EXIF Geolocation Data Not Stripped From Uploaded Images	Automatic User Enumeration
	Cross-Site Scripting (XSS)	Stored	Privileged User to Privilege Elevation
	Cross-Site Scripting (XSS)	Stored	CSRF/URL-Based
	Cross-Site Scripting (XSS)	Reflected	Non-Self
	Broken Access Control (BAC)	Server-Side Request Forgery (SSRF)	Internal Scan and/or Medium Impact
	Application-Level Denial-of-Service (DoS)	High Impact and/or Medium Difficulty	
	Client-Side Injection	Binary Planting	Default Folder Privilege Escalation
	Automotive Security Misconfiguration	Infotainment	Code Execution (No CAN Bus Pivot)
	Automotive Security Misconfiguration	Infotainment	Unauthorized Access to Services (API / Endpoints)
	Automotive Security Misconfiguration	RF Hub	Data Leakage / Pull Encryption Mechanism
P4			
	Server Security Misconfiguration	Misconfigured DNS	Zone Transfer
	Server Security Misconfiguration	Mail Server Misconfiguration	Email Spoofing to Inbox due to Missing or Misconfigured DMARC on Email Domain
	Server Security Misconfiguration	Database Management System (DBMS) Misconfiguration	Excessively Privileged User / DBA
	Server Security Misconfiguration	Lack of Password Confirmation	Delete Account
	Server Security Misconfiguration	No Rate Limiting on Form	Registration
	Server Security Misconfiguration	No Rate Limiting on Form	Login
	Server Security Misconfiguration	No Rate Limiting on Form	Email-Triggering
	Server Security Misconfiguration	No Rate Limiting on Form	SMS-Triggering
	Server Security Misconfiguration	Missing Secure or HTTPOnly Cookie Flag	Session Token
	Server Security Misconfiguration	Clickjacking	Sensitive Click-Based Action
	Server Security Misconfiguration	CAPTCHA	Implementation Vulnerability
	Server Security Misconfiguration	Lack of Security Headers	Cache-Control for a Sensitive Page
	Server Security Misconfiguration	Web Application Firewall (WAF) Bypass	Direct Server Access
	Server-Side Injection	Content Spoofing	External Authentication Injection
	Server-Side Injection	Content Spoofing	Email HTML Injection
	Broken Authentication and Session Management	Cleartext Transmission of Session Token	

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P4 CONTINUED	Broken Authentication and Session Management	Weak Login Function	Other Plaintext Protocol with no Secure Alternative
	Broken Authentication and Session Management	Weak Login Function	LAN Only
	Broken Authentication and Session Management	Weak Login Function	HTTP and HTTPS Available
	Broken Authentication and Session Management	Failure to Invalidate Session	On Logout (Client and Server-Side)
	Broken Authentication and Session Management	Failure to Invalidate Session	On Password Reset and/or Change
	Broken Authentication and Session Management	Weak Registration Implementation	Over HTTP
	Sensitive Data Exposure	EXIF Geolocation Data Not Stripped From Uploaded Images	Manual User Enumeration
	Sensitive Data Exposure	Visible Detailed Error/Debug Page	Detailed Server Configuration
	Sensitive Data Exposure	Token Leakage via Referer	Untrusted 3rd Party
	Sensitive Data Exposure	Token Leakage via Referer	Over HTTP
	Sensitive Data Exposure	Sensitive Token in URL	User Facing
	Sensitive Data Exposure	Weak Password Reset Implementation	Password Reset Token Sent Over HTTP
	Cross-Site Scripting (XSS)	Stored	Privileged User to No Privilege Elevation
	Cross-Site Scripting (XSS)	Flash-Based	
	Cross-Site Scripting (XSS)	IE-Only	IE11
	Cross-Site Scripting (XSS)	Referer	
	Cross-Site Scripting (XSS)	Universal (UXSS)	
	Cross-Site Scripting (XSS)	Off-Domain	Data URI
	Broken Access Control (BAC)	Server-Side Request Forgery (SSRF)	External
	Broken Access Control (BAC)	Username/Email Enumeration	Non-Brute Force
	Unvalidated Redirects and Forwards	Open Redirect	GET-Based
	Insufficient Security Configurability	No Password Policy	
	Insufficient Security Configurability	Weak Password Reset Implementation	Token is Not Invalidated After Use
	Insufficient Security Configurability	Weak 2FA Implementation	2FA Secret Cannot be Rotated
	Insufficient Security Configurability	Weak 2FA Implementation	2FA Secret Remains Obtainable After 2FA is Enabled
	Using Components with Known Vulnerabilities	Rosetta Flash	
	Insecure Data Storage	Sensitive Application Data Stored Unencrypted	On External Storage
	Insecure Data Storage	Server-Side Credentials Storage	Plaintext
	Insecure Data Transport	Executable Download	No Secure Integrity Check
	Privacy Concerns	Unnecessary Data Collection	WiFi SSID+Password

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P4 CONTINUED	Mobile Security Misconfiguration	Clipboard Enabled	On Sensitive Content
	Automotive Security Misconfiguration	Infotainment	Source Code Dump
	Automotive Security Misconfiguration	Infotainment	Denial of Service (Dos / Brick)
	Automotive Security Misconfiguration	Infotainment	Default Credentials
	Automotive Security Misconfiguration	RF Hub	Unauthorized Access / Turn On
	Automotive Security Misconfiguration	CAN	Injection (Disallowed Messages)
	Automotive Security Misconfiguration	CAN	Injection (Dos)
P5			
	Server Security Misconfiguration	Directory Listing Enabled	Non-Sensitive Data Exposure
	Server Security Misconfiguration	Same-Site Scripting	
	Server Security Misconfiguration	Misconfigured DNS	Missing Certification Authority Authorization (CAA) Record
	Server Security Misconfiguration	Mail Server Misconfiguration	Email Spoofing to Spam Folder
	Server Security Misconfiguration	Mail Server Misconfiguration	Missing or Misconfigured SPF and/or DKIM
	Server Security Misconfiguration	Mail Server Misconfiguration	Email Spoofing on non-email domain
	Server Security Misconfiguration	Lack of Password Confirmation	Change Email Address
	Server Security Misconfiguration	Lack of Password Confirmation	Change Password
	Server Security Misconfiguration	Lack of Password Confirmation	Manage 2FA
	Server Security Misconfiguration	Unsafe File Upload	No Antivirus
	Server Security Misconfiguration	Unsafe File Upload	No Size Limit
	Server Security Misconfiguration	Unsafe File Upload	File Extension Filter Bypass
	Server Security Misconfiguration	Cookie Scoped to Parent Domain	
	Server Security Misconfiguration	Missing Secure or HTTPOnly Cookie Flag	Non-Session Cookie
	Server Security Misconfiguration	Clickjacking	Form Input
	Server Security Misconfiguration	Clickjacking	Non-Sensitive Action
	Server Security Misconfiguration	CAPTCHA	Brute Force
	Server Security Misconfiguration	CAPTCHA	Missing
	Server Security Misconfiguration	Exposed Admin Portal	To Internet
	Server Security Misconfiguration	Missing DNSSEC	
	Server Security Misconfiguration	Fingerprinting/Banner Disclosure	
	Server Security Misconfiguration	Username / Email Enumeration	Brute Force

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P5 CONTINUED	Server Security Misconfiguration	Potentially Unsafe HTTP Method Enabled	OPTIONS
	Server Security Misconfiguration	Potentially Unsafe HTTP Method Enabled	TRACE
	Server Security Misconfiguration	Insecure SSL	Lack of Forward Secrecy
	Server Security Misconfiguration	Insecure SSL	Insecure Cipher Suite
	Server Security Misconfiguration	Insecure SSL	Certificate Error
	Server Security Misconfiguration	Reflected File Download (RFD)	
	Server Security Misconfiguration	Lack of Security Headers	X-Frame-Options
	Server Security Misconfiguration	Lack of Security Headers	Cache-Control for a Non-Sensitive Page
	Server Security Misconfiguration	Lack of Security Headers	X-XSS-Protection
	Server Security Misconfiguration	Lack of Security Headers	Strict-Transport-Security
	Server Security Misconfiguration	Lack of Security Headers	X-Content-Type-Options
	Server Security Misconfiguration	Lack of Security Headers	Content-Security-Policy
	Server Security Misconfiguration	Lack of Security Headers	Public-Key-Pins
	Server Security Misconfiguration	Lack of Security Headers	X-Content-Security-Policy
	Server Security Misconfiguration	Lack of Security Headers	X-Webkit-CSP
	Server Security Misconfiguration	Lack of Security Headers	Content-Security-Policy-Report-Only
	Server Security Misconfiguration	Bitsquatting	
	Server-Side Injection	Parameter Pollution	Social Media Sharing Buttons
	Server-Side Injection	Content Spoofing	Flash Based External Authentication Injection
	Server-Side Injection	Content Spoofing	Text Injection
	Server-Side Injection	Content Spoofing	Homograph/IDN-Based
	Server-Side Injection	Content Spoofing	Right-to-Left Override (RTLO)
	Broken Authentication and Session Management	Weak Login Function	Not Operational or Intended Public Access
	Broken Authentication and Session Management	Session Fixation	Local Attack Vector
	Broken Authentication and Session Management	Failure to Invalidate Session	On Logout (Server-Side Only)
	Broken Authentication and Session Management	Failure to Invalidate Session	Concurrent Sessions On Logout
	Broken Authentication and Session Management	Failure to Invalidate Session	On Email Change
	Broken Authentication and Session Management	Failure to Invalidate Session	Long Timeout
	Broken Authentication and Session Management	Concurrent Logins	

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P5 CONTINUED	Sensitive Data Exposure	Visible Detailed Error/Debug Page	Full Path Disclosure
	Sensitive Data Exposure	Visible Detailed Error/Debug Page	Descriptive Stack Trace
	Sensitive Data Exposure	Disclosure of Known Public Information	
	Sensitive Data Exposure	Token Leakage via Referer	Trusted 3rd Party
	Sensitive Data Exposure	Sensitive Token in URL	In the Background
	Sensitive Data Exposure	Sensitive Token in URL	On Password Reset
	Sensitive Data Exposure	Non-Sensitive Token in URL	
	Sensitive Data Exposure	Mixed Content (HTTPS Sourcing HTTP)	
	Sensitive Data Exposure	Sensitive Data Hardcoded	OAuth Secret
	Sensitive Data Exposure	Sensitive Data Hardcoded	File Paths
	Sensitive Data Exposure	Internal IP Disclosure	
	Sensitive Data Exposure	JSON Hijacking	
	Cross-Site Scripting (XSS)	Stored	Self
	Cross-Site Scripting (XSS)	Reflected	Self
	Cross-Site Scripting (XSS)	Cookie-Based	
	Cross-Site Scripting (XSS)	IE-Only	XSS Filter Disabled
	Cross-Site Scripting (XSS)	IE-Only	Older Version (< IE11)
	Cross-Site Scripting (XSS)	TRACE Method	
	Broken Access Control (BAC)	Server-Side Request Forgery (SSRF)	DNS Query Only
	Cross-Site Request Forgery (CSRF)	Action-Specific	Logout
	Cross-Site Request Forgery (CSRF)	CSRF Token Not Unique Per Request	
	Application-Level Denial-of-Service (DoS)	App Crash	Malformed Android Intents
	Application-Level Denial-of-Service (DoS)	App Crash	Malformed iOS URL Schemes
	Unvalidated Redirects and Forwards	Open Redirect	POST-Based
	Unvalidated Redirects and Forwards	Open Redirect	Header-Based
	Unvalidated Redirects and Forwards	Open Redirect	Flash-Based
	Unvalidated Redirects and Forwards	Tabnabbing	
	Unvalidated Redirects and Forwards	Lack of Security Speed Bump Page	
	External Behavior	Browser Feature	Plaintext Password Field
	External Behavior	Browser Feature	Save Password

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
P5 CONTINUED	External Behavior	Browser Feature	Autocomplete Enabled
	External Behavior	Browser Feature	Autocorrect Enabled
	External Behavior	Browser Feature	Aggressive Offline Caching
	External Behavior	CSV Injection	
	External Behavior	Captcha Bypass	Crowdsourcing
	External Behavior	System Clipboard Leak	Shared Links
	External Behavior	User Password Persisted in Memory	
	Insufficient Security Configurability	Weak Password Policy	
	Insufficient Security Configurability	Weak Password Reset Implementation	Token is Not Invalidated After Email Change
	Insufficient Security Configurability	Weak Password Reset Implementation	Token is Not Invalidated After Password Change
	Insufficient Security Configurability	Weak Password Reset Implementation	Token Has Long Timed Expiry
	Insufficient Security Configurability	Weak Password Reset Implementation	Token is Not Invalidated After New Token is Requested
	Insufficient Security Configurability	Weak Password Reset Implementation	Token is Not Invalidated After Login
	Insufficient Security Configurability	Lack of Verification Email	
	Insufficient Security Configurability	Lack of Notification Email	
	Insufficient Security Configurability	Weak Registration Implementation	Allows Disposable Email Addresses
	Insufficient Security Configurability	Weak 2FA Implementation	Missing Failsafe
	Using Components with Known Vulnerabilities	Outdated Software Version	
	Using Components with Known Vulnerabilities	Captcha Bypass	OCR (Optical Character Recognition)
	Insecure Data Storage	Sensitive Application Data Stored Unencrypted	On Internal Storage
	Insecure Data Storage	Non-Sensitive Application Data Stored Unencrypted	
	Insecure Data Storage	Screen Caching Enabled	
	Lack of Binary Hardening	Lack of Exploit Mitigations	
	Lack of Binary Hardening	Lack of Jailbreak Detection	
	Lack of Binary Hardening	Lack of Obfuscation	
	Lack of Binary Hardening	Runtime Instrumentation-Based	
	Insecure Data Transport	Executable Download	Secure Integrity Check
	Network Security Misconfiguration	Telnet Enabled	
	Mobile Security Misconfiguration	SSL Certificate Pinning	Absent
	Mobile Security Misconfiguration	SSL Certificate Pinning	Defeatable
	Mobile Security Misconfiguration	Tapjacking	
	Mobile Security Misconfiguration	Clipboard Enabled	On Non-Sensitive Content
	Client-Side Injection	Binary Planting	Non-Default Folder Privilege Escalation
	Client-Side Injection	Binary Planting	No Privilege Escalation
	Automotive Security Misconfiguration	RF Hub	Roll Jam

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
	Automotive Security Misconfiguration	RF Hub	Replay
	Automotive Security Misconfiguration	RF Hub	Relay
VARIES CONTINUED			
	Server Security Misconfiguration		
	Server Security Misconfiguration	Unsafe Cross-Origin Resource Sharing	
	Server Security Misconfiguration	Path Traversal	
	Server Security Misconfiguration	Directory Listing Enabled	
	Server Security Misconfiguration	Directory Listing Enabled	Sensitive Data Exposure
	Server Security Misconfiguration	SSL Attack (BREACH, POODLE etc.)	
	Server Security Misconfiguration	Misconfigured DNS	
	Server Security Misconfiguration	Mail Server Misconfiguration	
	Server Security Misconfiguration	Database Management System (DBMS) Misconfiguration	
	Server Security Misconfiguration	Lack of Password Confirmation	
	Server Security Misconfiguration	No Rate Limiting on Form	
	Server Security Misconfiguration	Unsafe File Upload	
	Server Security Misconfiguration	Missing Secure or HTTPOnly Cookie Flag	
	Server Security Misconfiguration	Clickjacking	
	Server Security Misconfiguration	OAuth Misconfiguration	
	Server Security Misconfiguration	OAuth Misconfiguration	Missing/Broken State Parameter
	Server Security Misconfiguration	OAuth Misconfiguration	Insecure Redirect URI
	Server Security Misconfiguration	CAPTCHA	
	Server Security Misconfiguration	Exposed Admin Portal	
	Server Security Misconfiguration	Username Enumeration	
	Server Security Misconfiguration	Potentially Unsafe HTTP Method Enabled	
	Server Security Misconfiguration	Insecure SSL	
	Server Security Misconfiguration	Lack of Security Headers	
	Server Security Misconfiguration	Web Application Firewall (WAF) Bypass	
	Server-Side Injection		
	Server-Side Injection	File Inclusion	
	Server-Side Injection	Parameter Pollution	
	Server-Side Injection	HTTP Response Manipulation	
	Server-Side Injection	Content Spoofing	
	Broken Authentication and Session Management		
	Broken Authentication and Session Management	Privilege Escalation	
	Broken Authentication and Session Management	Weak Login Function	

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
VARIES CONTINUED	Broken Authentication and Session Management	Session Fixation	
	Broken Authentication and Session Management	Failure to Invalidate Session	
	Broken Authentication and Session Management	Weak Registration Implementation	
	Sensitive Data Exposure		
	Sensitive Data Exposure	Critically Sensitive Data	
	Sensitive Data Exposure	EXIF Geolocation Data Not Stripped From Uploaded Images	
	Sensitive Data Exposure	Visible Detailed Error/Debug Page	
	Sensitive Data Exposure	Token Leakage via Referer	
	Sensitive Data Exposure	Sensitive Token in URL	
	Sensitive Data Exposure	Weak Password Reset Implementation	
	Sensitive Data Exposure	Sensitive Data Hardcoded	
	Sensitive Data Exposure	Cross Site Script Inclusion (XSSI)	
	Cross-Site Scripting (XSS)		
	Cross-Site Scripting (XSS)	Stored	
	Cross-Site Scripting (XSS)	Reflected	
	Cross-Site Scripting (XSS)	IE-Only	
	Cross-Site Scripting (XSS)	Off-Domain	
	Broken Access Control (BAC)		
	Broken Access Control (BAC)	Insecure Direct Object References (IDOR)	
	Broken Access Control (BAC)	Server-Side Request Forgery (SSRF)	
	Broken Access Control (BAC)	Username Enumeration	
	Broken Access Control (BAC)	Exposed Sensitive Android Intent	
	Broken Access Control (BAC)	Exposed Sensitive iOS URL Scheme	
	Cross-Site Request Forgery (CSRF)		
	Cross-Site Request Forgery (CSRF)	Action-Specific	
	Cross-Site Request Forgery (CSRF)	Action-Specific	Authenticated Action
	Cross-Site Request Forgery (CSRF)	Action-Specific	Unauthenticated Action
	Application-Level Denial-of-Service (DoS)		
	Application-Level Denial-of-Service (DoS)	App Crash	
	Unvalidated Redirects and Forwards		
	Unvalidated Redirects and Forwards	Open Redirect	
	External Behavior		
	External Behavior	Browser Feature	
	External Behavior	Captcha Bypass	

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Priority	OWASP Top Ten + Bugcrowd Extras	Specific Vulnerability Name	Variant or Affected Function
VARIES CONTINUED	Insufficient Security Configurability	Weak Password Reset Implementation	
	Insufficient Security Configurability	Weak Registration Implementation	
	Insufficient Security Configurability	Weak 2FA Implementation	
	Using Components with Known Vulnerabilities		
	Using Components with Known Vulnerabilities	Captcha Bypass	
	Insecure Data Storage		
	Insecure Data Storage	Sensitive Application Data Stored Unencrypted	
	Insecure Data Storage	Server-Side Credentials Storage	
	Lack of Binary Hardening		
	Insecure Data Transport		
	Insecure Data Transport	Cleartext Transmission of Sensitive Data	
	Insecure Data Transport	Executable Download	
	Insecure OS/Firmware		
	Insecure OS/Firmware	Hardcoded Password	
	Broken Cryptography		
	Broken Cryptography	Cryptographic Flaw	
	Privacy Concerns		
	Privacy Concerns	Unnecessary Data Collection	
	Network Security Misconfiguration		
	Mobile Security Misconfiguration		
	Mobile Security Misconfiguration	SSL Certificate Pinning	
	Mobile Security Misconfiguration	Clipboard Enabled	
	Client-Side Injection		
	Client-Side Injection	Binary Planting	
	Automotive Security Misconfiguration		
	Automotive Security Misconfiguration	Infotainment	
	Automotive Security Misconfiguration	RF Hub	
	Automotive Security Misconfiguration	CAN	

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A NOTE FROM OUR SECURITY OPERATIONS TEAM

We believe in growth and transparency for security and bug bounty communities and see the release of our VRT as a tool that may help align expectations between researchers and program owners across ALL programs. Much of our employees' expertise in validating and rating thousands of submissions across hundreds of managed bounties is distilled into this document, making it a key component of Bugcrowd's managed services. Our VRT is a living document that changes constantly in response to discussions at our VRT Council.

As our first and foremost goal is usability, the VRT is not exhaustive. We believe that foregoing extreme technical depth for usability in creating such a community resource is a worthwhile tradeoff. We're confident that a security engineer using our VRT as a guide can triage and run a successful bug bounty program.

Happy Hunting,

Bugcrowd Security Operations Team

Follow us at @Bugcrowd and continue the discussion on our forum.

UPDATES

0.1 - February 5, 2016
Original

0.2 - March 23, 2016
Divided the Cross-Site Scripting (XSS) entries to provide additional granularity that captures priority variations for XSS within applications with multiple user privilege levels.

0.4 - November 18, 2016
Minor priority changes, minor additions and subtractions, and typo fixes. Switched to a formal versioning system.

1.0 - February 24, 2017
Major changes to taxonomy structure with the addition of top-level categorizations to provide flexibility for context-dependent severity ratings. With this update we also launched our web-based taxonomy at bugcrowd.com/vrt. Read more about it on our blog here.

1.1 - May 5, 2017
Substantial additions, some priority changes, minor subtractions, and typo fixes. With this update we also released the open source taxonomy which can be found at github.com/bugcrowd/vulnerability-rating-taxonomy Read more about it on our blog here.

1.2 - August 4, 2017
This update includes priority changes (most notable changes GET-based open redirects now set as P4, as well as all existing weak password policies as P5 "informational"), a few additions , and some minor modifications to increase the clarity of the taxonomy and align it with the security industry. Read more about it on our blog here.

1.3 - September 28, 2017
Addition of VRT to CVSS v3 mapping as well as Broken Access Control category, aligned with the OWASP top 10 2017 release candidate. Revisions of VRT entries were made to provide better transparency for researchers and consistent triaging guidance. Read more about it on our blog here.

1.4 - April 13, 2018
This release includes new entries that address missing, but commonly reported classes of issues, the removal of a few entries, and updated entry names to reduce ambiguity. Additionaly, minor baseline severity rating adjustments were made along with increased granularity to some categories to assist our ASEs with more precise triage guidance. To submit suggested changes, edits, or additions to the VRT, use our open source taxonomy found at github.com/bugcrowd/vulnerability-rating-taxonomy.

1.5 - October 1, 2018
The latest version includes improving transparency by adding multiple entries for commonly reported issues. Additionally, aligning the baseline severity rating to best reflect the market by increasing taxonomy grunularity. And lastly, we added designated variants for vulnerabilities that require Flash including some cases of XSS or open redirects. Read more about it on our blog here.

1.6 - November 2, 2018
Last VRT Council led us to deciding that we need to expedite the release of VRT 1.6. The release includes two changes: revision to internal SSRF and how we rate email spoofing, more specifically the baselines around SPF and DMARC. These changes are a result of how major providers, such as Outlook, Gmail, and some other large email providers started to disregard the SPF standard and rely on DMARC. What this means is that if you don't have DMARC set up on your email domain, spoofed emails will land in people's inbox even if there's SPF. Read more at https://github.com/bugcrowd/vulnerability-rating-taxonomy.

1.7 - March 25, 2019 (Current Version)
The latest version of VRT includes specific security misconfiguration vulnerabilities for the automotive industry as well as revisions for Sensitive Data Exposure and Insufficient Security Configurability. Read more at https://github.com/bugcrowd/vulnerability-rating-taxonomy.