

Fortify Standalone Report Generator

OWASP Top 10 2017

Blockchain-Bless_transformations_utility



Table of Contents

Executive Summary

Project Description

Issue Breakdown

Issue Details

A1 Injection

A2 Broken Authentication

A3 Sensitive Data Exposure

A4 XML External Entities (XXE)

A5 Broken Access Control

A6 Security Misconfiguration

A7 Cross-Site Scripting (XSS)

A8 Insecure Deserialization

A9 Using Components with Known Vulnerabilities

A10 Insufficient Logging and Monitoring

Description of Key Terminology

About Fortify Solutions

© Copyright 2008-2023 Open Text. The only warranties for products and services of Open Text and its affiliates and licensors ("Open Text") are as may be set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Open Text shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

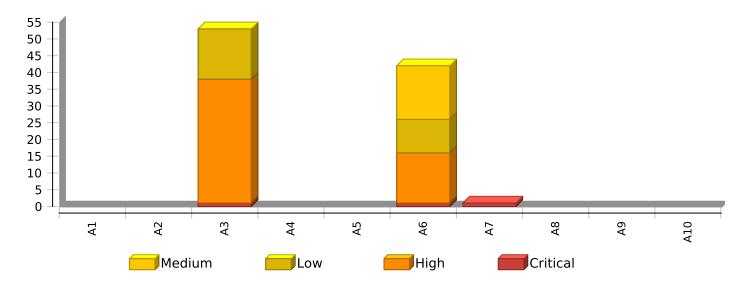


Executive Summary

The OWASP Top Ten 2017 provides a powerful awareness document for web application security focused on informing the community about the consequences of the most common and most important web application security weaknesses. The OWASP Top Ten represents a broad agreement about what the most critical web application security flaws are with consensus being drawn from data collection and survey results. Project members include a variety of security experts from around the world who have shared their expertise to produce this list.

Blockchain-**Issues by Folder Project Name:** Bless_transformations_utili 52 -**Project Version:** Results Present SCA: - 3 Results Not Present WebInspect: Results Not Present **WebInspect Agent:** 16 Results Not Present Other: **Remediation Effort (Hrs):** 8.0 Critical High Low Medium

Issues by OWASP Top 10 2017 Categories



^{*} The detailed sections following the Executive Summary contain specifics.



Project Description

This section provides an overview of the Fortify scan engines used for this project, as well as the project meta-information.

SCA

Date of Last Analysis:	Oct 27, 2023 7:34 AM	Engine Version:	23.1.0.0136
Host Name:	czcholspc000080	Certification:	VALID
Number of Files:	338	Lines of Code:	36,719

Rulepack Name	Rulepack Version
Fortify Secure Coding Rules, Community, Cloud	2023.3.0.0006
Fortify Secure Coding Rules, Community, Universal	2023.3.0.0006
Fortify Secure Coding Rules, Core, Cloud	2023.3.0.0006
Fortify Secure Coding Rules, Core, JavaScript	2023.3.0.0006
Fortify Secure Coding Rules, Core, Python	2023.3.0.0006
Fortify Secure Coding Rules, Core, Universal	2023.3.0.0006
Fortify Secure Coding Rules, Extended, Configuration	2023.3.0.0006
Fortify Secure Coding Rules, Extended, Content	2023.3.0.0006
Fortify Secure Coding Rules, Extended, JavaScript	2023.3.0.0006



Issue Breakdown

The following table summarizes the number of issues identified across the different OWASP Top 10 2017 categories and broken down by Fortify Priority Order.

	Folder	Issues	Audited	Effort (Hrs)
A1 Injection	·	0	0	0.0
	Critical	0	0	
	High	0	0	
	Medium	0	0	
	Low	0	0	
A2 Broken Authentication		0	0	0.0
	Critical	0	0	
	High	0	0	
	Medium	0	0	
	Low	0	0	
A3 Sensitive Data Exposure		53	0	5.4
	Critical	1	0	
	High	37	0	
	Medium	0	0	
	Low	15	0	
A4 XML External Entities (XXE)		0	0	0.0
	Critical	0	0	
	High	0	0	
	Medium	0	0	
	Low	0	0	
A5 Broken Access Control		0	0	0.0
	Critical	0	0	
	High	0	0	
	Medium	0	0	
	Low	0	0	
A6 Security Misconfiguration		42	0	2.7
	Critical	1	0	
	High	15	0	
	Medium	16	0	
	Low	10	0	
A7 Cross-Site Scripting (XSS)	- Annual Control of the Control of t	1	0	0.1
	Critical	1	0	
	High	0	0	
	Medium	0	0	
	Low	0	0	
A8 Insecure Deserialization		0	0	0.0
	Critical	0	0	
	High	0	0	
	Medium	0	0	



Folder	Issues	Audited	Effort (Hrs)
A8 Insecure Deserialization	0	0	0.0
Low	0	0	
A9 Using Components with Known Vulnerabilities	0	0	0.0
Critical	0	0	
High	0	0	
Medium	0	0	
Low	0	0	
A10 Insufficient Logging and Monitoring	0	0	0.0
Critical	0	0	
High	0	0	
Medium	0	0	
Low	0	0	

NOTE:

- 1. Reported issues in the above table may violate more than one OWASP Top 10 2017 category. As such, the same issue may appear in more than one row. The total number of unique vulnerabilities are reported in the Executive Summary table.
- 2. For the same reason, the Project-level remediation effort total shown in the Executive Summary removes the effect of any duplication and may be smaller than the sum of the remediation effort per individual category.
- 3. Similarly, the remediation effort per external category is not intended to equal the sum of the remediation effort from the issue details section since individual files may contain issues in multiple Fortify priorities or audit folders.



Issue Details

Below is an enumeration of all issues found in the project. The issues are organized by OWASP Top 10 2017, Folder, and vulnerability category. The issues are then further broken down by the package, namespace, or location in which they occur. Issues reported at the same line number with the same category originate from different taint sources.

A1 Injection

OWASP Top 10 Application Security Risks, A1:2017 states: "Injection flaws, such as SQL, NoSQL, OS, and LDAP injection, occur when untrusted data is sent to an interpreter as part of a command or query. The attacker's hostile data can trick the interpreter into executing unintended commands or accessing data without proper authorization."

No Issues

A2 Broken Authentication

OWASP Top 10 Application Security Risks, A2:2017 states: "Application functions related to authentication and session management are often implemented incorrectly, allowing attackers to compromise passwords, keys, or session tokens, or to exploit other implementation flaws to assume other users' identities temporarily or permanently."

No Issues



Insecure Transport Remediation Effort(Hrs): 0.1		Critical	
Package: jenkins-remote.work	sspace.Blockchain-Bless.transformations_utility.TransComm	-DubaiCustom.src	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/src/ main.ts:291	Sink: FunctionPointerCall: listen Enclosing Method: bootstrap() Source:	SCA	
Password Management: Passw Remediation Effort(Hrs): 1.5	vord in Comment	Low	
Package: .src.modules.v1.auth	ı		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/src/modules/v1/auth/ auth.controller.ts:118	Sink: Comment Enclosing Method: () Source:	SCA	
Package: .src.modules.v1.data			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/src/modules/v1/data/ db.service.ts:38	Sink: Comment Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/API/src/ modules/v1/data/db.service.ts:38	Sink: Comment Enclosing Method: () Source:	SCA	
Package: .src.modules.v1.payload.ibs			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/modules/v1/payload/ ibs/ibs.controller.ts:49	Sink: Comment Enclosing Method: () Source:	SCA	



Password Management: Passw Remediation Effort(Hrs): 1.5	vord in Comment	Low
Package: .src.providers		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/src/providers/ util.service.ts:7	Sink: Comment Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/src/providers/ util.service.ts:16	Sink: Comment Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/providers/ util.service.ts:7	Sink: Comment Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/providers/ util.service.ts:16	Sink: Comment Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/API/src/ providers/util.service.ts:6	Sink: Comment Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/API/src/ providers/util.service.ts:15	Sink: Comment Enclosing Method: () Source:	SCA
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.IBM VendorOrder.Python_kafka_client		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/ Python_kafka_client/setting.py:40	Sink: Comment Enclosing Method: () Source:	SCA



Password Management: Passw Remediation Effort(Hrs): 1.5	vord in Comment	Low		
	Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.IBM VendorOrder.vendor_order_service			
Location	Analysis Info	Analyzer		
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/ vendor_order_service/setting.py:43	Sink: Comment Enclosing Method: () Source:	SCA		
Package: jenkins-remote.work	${\bf xspace. Block chain-Bless. transformations_utility. Trans Air-FS}$	SU.API.src		
Location	Analysis Info	Analyzer		
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/app.module.ts:44	Sink: Comment Enclosing Method: () Source:	SCA		
Package: jenkins-remote.work	${f cspace}. {f Block chain-Bless.transformations_utility.copy-to-excess}$	ption		
Location	Analysis Info	Analyzer		
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/setting.py:30	Sink: Comment Enclosing Method: () Source:	SCA		
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.email clients.s3_emai_protocol_clients				
Location	Analysis Info	Analyzer		
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/email clients/s3_emai_protocol_clients/ email_protocol_client.py:14	Sink: Comment Enclosing Method: () Source:	SCA		



OWASP Top 10 Application Security Risks, A3:2017 states: "Many web applications and APIs do not properly protect sensitive data, such as financial, healthcare, and PII. Attackers may steal or modify such weakly protected data to conduct credit card fraud, identity theft, or other crimes. Sensitive data may be compromised without extra protection, such as encryption at rest or in transit, and requires special precautions when exchanged with the browser."

Password Management: Hard Remediation Effort(Hrs): 3.5	coded Password	High	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.IBM VendorOrder.Docker			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/Docker/SIT-docker- compose-vendor-order.yml:28	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/Docker/UAT-docker- compose-vendor-order.yml:28	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work VendorOrder.Python_kafka_o	sspace.Blockchain-Bless.transformations_utility.IBM client		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/ Python_kafka_client/docker- compose.yml:27	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work VendorOrder.vendor_order_s	sspace.Blockchain-Bless.transformations_utility.IBM service		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/ vendor_order_service/docker- compose.yml:27	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work	xspace.Blockchain-Bless.transformations_utility.Kalma-Lobs	star.API.Docker	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/Docker/docker-	Sink: ConfigPair Enclosing Method: () Source:	SCA	



compose.yml:25

Password Management: Harde Remediation Effort(Hrs): 3.5	coded Password	High
Package: jenkins-remote.work	sspace.Blockchain-Bless.transformations_utility.SFTP_File r	nover.configuration
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/SFTP_File mover/configuration/ sftp_config.json:7	Sink: ConfigPair Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	${f xspace}. {f Blockchain-Bless.transformations_utility.TransAir-FS}$	SU.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker/docker- compose.yml:24	Sink: ConfigPair Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	$space. Block chain-Bless. transformations_utility. Trans Air-FS$	SU.Docker-CAI
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CAI/docker-compose- tnt-cai.yml:23	Sink: ConfigPair Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	$x space. Block chain-Bless. transformations_utility. Trans Air-FS$	SU.Docker-CCN
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CCN/docker- compose-tnt-ccn.yml:23	Sink: ConfigPair Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CCN/docker-	Sink: ConfigPair Enclosing Method: () Source:	SCA



Password Management: Hardcoded Password Remediation Effort(Hrs): 3.5		High	
Package: jenkins-remote.work	${\bf xspace. Block chain - Bless. transformation s_utility. Trans Air - FS and all the contractions and the contraction of the $	SU.Docker-CMA	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CMA/docker- compose-tnt-cma.yaml:23	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CMA/docker- compose.yml:24	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work	${\bf xspace. Block chain-Bless. transformations_utility. Trans Air-FS}$	SU.Docker-IBS	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-IBS/docker-compose- tnt-ibs.yml:23	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-IBS/docker- compose.yml:24	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm- DubaiCustom.docker			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/docker/ docker-compose.yml:18	Sink: ConfigPair Enclosing Method: () Source:	SCA	



Password Management: Hardcoded Password Remediation Effort(Hrs): 3.5		High	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm- WebService.Docker			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker/ docker-compose.yml:25	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker/ docker-compose.yml:74	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker/ docker-compose.yml:123	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.worl WebService.Docker-Confirml	kspace.Blockchain-Bless.transformations_utility.TransComm Return	1-	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker- ConfirmReturn/docker- compose.yml:26	Sink: ConfigPair Enclosing Method: () Source:	SCA	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-WebService.Docker-ExceptionModule			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker- ExceptionModule/docker- compose.yml:25	Sink: ConfigPair Enclosing Method: () Source:	SCA	



Password Management: Hard Remediation Effort(Hrs): 3.5	coded Password	High	
Package: jenkins-remote.wor	Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.copy-to-exception.configuration		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config copy.json:8	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config copy.json:21	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config copy.json:34	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config copy.json:47	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config copy.json:60	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config.json:8	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config.json:21	Sink: ConfigPair Enclosing Method: () Source:	SCA	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config.json:34	Sink: ConfigPair Enclosing Method: () Source:	SCA	



Password Management: Hard Remediation Effort(Hrs): 3.5	coded Password	High
Package: jenkins-remote.worl	cspace.Blockchain-Bless.transformations_utility.copy-to-exce	eption.configuration
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config.json:47	Sink: ConfigPair Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/configuration/ sftp_config.json:60	Sink: ConfigPair Enclosing Method: () Source:	SCA
Privacy Violation Remediation Effort(Hrs): 0.3		High
Package: .src.shared.services		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read CCNresult from TransAir-FSU/API/src/modules/v1/payload/ccn/ccn.controller.ts~CCNController0.updates() In jenkins-remote/workspace/Blockchain-Bless/transformations_utility/TransAir-FSU/API/src/modules/v1/payload/ccn/ccn.controller.ts:127	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read CCNresult['awbDetails']['originCity'] from TransAir-FSU/API/src/modules/v1/payload/cc n/ccn.controller.ts~CCNController0.updates() In jenkins-remote/workspace/Blockchain-Bless/transfo rmations_utility/TransAir-FSU/API/src/modules/v1/ payload/ccn/ccn.controller.ts:118	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read CCNresult['awbDetails']['destination City'] from TransAir-FSU/API/src/modules/v1/paylo ad/ccn/ccn.controller.ts~CCNController0.updates() In jenkins-remote/workspace/Blockchain-Bless/tr ansformations_utility/TransAir-FSU/API/src/module s/v1/payload/ccn/ccn.controller.ts:120	SCA



OWASP Top 10 Application Security Risks, A3:2017 states: "Many web applications and APIs do not properly protect sensitive data, such as financial, healthcare, and PII. Attackers may steal or modify such weakly protected data to conduct credit card fraud, identity theft, or other crimes. Sensitive data may be compromised without extra protection, such as encryption at rest or in transit, and requires special precautions when exchanged with the browser."

Privacy Violation Remediation Effort(Hrs): 0.3		High
Package: .src.shared.services		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read CCNresult['awbDetails']['carrierCode '] from TransAir-FSU/API/src/modules/v1/payload/c cn/ccn.controller.ts~CCNController0.updates() In jenkins-remote/workspace/Blockchain-Bless/transfo rmations_utility/TransAir-FSU/API/src/modules/v1/ payload/ccn/ccn.controller.ts:116	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read CCNtransformedData from TransAir-FSU /API/src/modules/v1/payload/ccn/ccn.controller.ts ~CCNController0.updates() In jenkins-remote/work space/Blockchain-Bless/transformations_utility/Tr ansAir-FSU/API/src/modules/v1/payload/ccn/ccn.con troller.ts:135	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read this.ccnTransformer from TransAir-FS U/API/src/modules/v1/payload/ccn/ccn.controller.t s~CCNController0.updates() In jenkins-remote/wor kspace/Blockchain-Bless/transformations_utility/T ransAir-FSU/API/src/modules/v1/payload/ccn/ccn.co ntroller.ts:108	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/API/src/shared/services/ httpService.ts:29	Sink: ~JS_Generic.log() Enclosing Method: sendBlessPost() Source: Read CCNresult['awbDetails']['fwbSerialNu mber'] from TransAir-FSU/API/src/modules/v1/paylo ad/ccn/ccn.controller.ts~CCNController0.updates() In jenkins-remote/workspace/Blockchain-Bless/tr ansformations_utility/TransAir-FSU/API/src/module s/v1/payload/ccn/ccn.controller.ts:114	SCA

A4 XML External Entities (XXE)

OWASP Top 10 Application Security Risks, A4:2017 states: "Many older or poorly configured XML processors evaluate external entity references within XML documents. External entities can be used to disclose internal files using the file URI handler, internal file shares, internal port scanning, remote code execution, and denial of service attacks."

No Issues



A5 Broken Access Control

OWASP Top 10 Application Security Risks, A5:2017 states: "Restrictions on what authenticated users are allowed to do are often not properly enforced. Attackers can exploit these flaws to access unauthorized functionality and/or data, such as access other users' accounts, view sensitive files, modify other users' data, change access rights, etc."

No Issues



Insecure Transport: Weak SSI Remediation Effort(Hrs): 0.1	L Protocol	Critical
Package: jenkins-remote.work	${\bf xspace. Block chain-Bless. transformations_utility. TransComm}$	-DubaiCustom.src
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/src/ main.ts:212	Sink: FunctionPointerCall: createServer Enclosing Method: bootstrap() Source:	SCA
Dockerfile Misconfiguration: S Remediation Effort(Hrs): 1.2	Sensitive Host Directory	Low
Package: jenkins-remote.work	${f xspace}. {f Block chain-Bless.transformations_utility. Kalma-Lobs}$	tar.API.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/Docker/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	${f xspace. Block chain-Bless. transformations_utility. Kalma-Lobs}$	tar.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/Docker/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	${\bf xspace. Block chain-Bless. transformations_utility. Trans Air-FS}$	SU.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransAir-FSU.Docker-CCN		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CCN/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA



Dockerfile Misconfiguration: Semediation Effort(Hrs): 1.2	Sensitive Host Directory	Low
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransAir-FSU.Docker-CMA		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CMA/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	kspace.Blockchain-Bless.transformations_utility.TransAir-FS	SU.Docker-IBS
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-IBS/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm- DubaiCustom.docker		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/docker/ Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.work WebService.Docker	kspace.Blockchain-Bless.transformations_utility.TransComm	1-
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker/ Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-WebService.Docker-ConfirmReturn		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker- ConfirmReturn/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA



Dockerfile Misconfiguration: Sensitive Host Directory Remediation Effort(Hrs): 1.2		Low
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm- WebService.Docker-ExceptionModule		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker- ExceptionModule/Dockerfile:22	Sink: COPY Enclosing Method: () Source:	SCA
Weak XML Schema: Unbound Remediation Effort(Hrs): 0.7	led Occurrences	Medium
Package: jenkins-remote.work DubaiCustom.wsdlfiles.XSD	space.Blockchain-Bless.transformations_utility.TransComm	i-
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ BatchDeclarationB2B.xsd:7	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ Common_2_0.xsd:184	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ CourierBulkProcessingParameters.	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ CourierBulkProcessingParameters.	Sink: Enclosing Method: () Source:	SCA



Weak XML Schema: Unbounded Occurrences Remediation Effort(Hrs): 0.7		Medium
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-DubaiCustom.wsdlfiles.XSD		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ CourierBulkProcessingParameters.	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ CourierBulkProcessingParameters.	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ CourierBulkProcessingParameters.	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:348	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:349	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:356	Sink: Enclosing Method: () Source:	SCA



Weak XML Schema: Unboun Remediation Effort(Hrs): 0.7	ded Occurrences	Medium
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-DubaiCustom.wsdlfiles.XSD		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:576	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:816	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:817	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:1044	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:1242	Sink: Enclosing Method: () Source:	SCA
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/ wsdlfiles/XSD/ DeclarationB2B.xsd:1243	Sink: Enclosing Method: () Source:	SCA



Dockerfile Misconfiguration: l Remediation Effort(Hrs): 0.6	Default User Privilege	High	
· · · · · · · · · · · · · · · · · · ·	Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.IBM VendorOrder.Python_kafka_client		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/ Python_kafka_client/Dockerfile:2	Sink: FROM Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work VendorOrder.vendor_order_s	kspace.Blockchain-Bless.transformations_utility.IBM service		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/IBM VendorOrder/ vendor_order_service/Dockerfile:2	Sink: FROM Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work	kspace.Blockchain-Bless.transformations_utility.SFTP_File n	nover	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/SFTP_File mover/Dockerfile:1	Sink: FROM Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work	${f xspace. Block chain-Bless. transformations_utility. copy-to-excess$	eption	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/copy-to- exception/Dockerfile:2	Sink: FROM Enclosing Method: () Source:	SCA	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.email clients			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/email clients/Dockerfile:2	Sink: FROM Enclosing Method: () Source:	SCA	



Dockerfile Misconfiguration: land Remediation Effort(Hrs): 1.2	Dependency Confusion	High
Package: jenkins-remote.work	${f xspace}. {f Blockchain-Bless.transformations_utility. Kalma-Lobston and {f Colored}$	tar.API.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/API/Docker/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	kspace.Blockchain-Bless.transformations_utility.Kalma-Lobs	tar.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/Kalma- Lobstar/Docker/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	${\bf xspace. Block chain - Bless. transformations_utility. Trans Air - FS}$	SU.Docker
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA
Package: jenkins-remote.work	kspace.Blockchain-Bless.transformations_utility.TransAir-FS	SU.Docker-CCN
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CCN/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransAir-FSU.Docker-CMA		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-CMA/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA



Dockerfile Misconfiguration: 1 Remediation Effort(Hrs): 1.2	Dependency Confusion	High	
Package: jenkins-remote.work	Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransAir-FSU.Docker-IBS		
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/TransAir- FSU/Docker-IBS/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm- DubaiCustom.docker			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/docker/ Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA	
Package: jenkins-remote.work WebService.Docker	kspace.Blockchain-Bless.transformations_utility.TransComm	1-	
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker/ Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA	
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-WebService.Docker-ConfirmReturn			
Location	Analysis Info	Analyzer	
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker- ConfirmReturn/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA	



OWASP Top 10 Application Security Risks, A6:2017 states: "Security misconfiguration is the most commonly seen issue. This is commonly a result of insecure default configurations, incomplete or ad hoc configurations, open cloud storage, misconfigured HTTP headers, and verbose error messages containing sensitive information. Not only must all operating systems, frameworks, libraries, and applications be securely configured, but they must be patched and upgraded in a timely fashion."

Dockerfile Misconfiguration: Dependency Confusion Remediation Effort(Hrs): 1.2		High
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-WebService.Docker-ExceptionModule		ı-
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-WebService/Docker- ExceptionModule/Dockerfile:16	Sink: RUN Enclosing Method: () Source:	SCA

A7 Cross-Site Scripting (XSS)

OWASP Top 10 Application Security Risks, A7:2017 states: "XSS flaws occur whenever an application includes untrusted data in a new web page without proper validation or escaping, or updates an existing web page with user-supplied data using a browser API that can create HTML or JavaScript. XSS allows attackers to execute scripts in the victim's browser which can hijack user sessions, deface web sites, or redirect the user to malicious sites."

Cross-Site Scripting: Reflected Remediation Effort(Hrs): 0.1		Critical
Package: jenkins-remote.workspace.Blockchain-Bless.transformations_utility.TransComm-DubaiCustom.src		
Location	Analysis Info	Analyzer
jenkins-remote/workspace/Blo ckchain-Bless/ transformations_utility/ TransComm-DubaiCustom/src/ main.ts:221	Sink: ~JS_Generic.end() Enclosing Method: lambda() Source: lambda(0.url) from lambda() In jenkins-r emote/workspace/Blockchain-Bless/transformations_ utility/TransComm-DubaiCustom/src/main.ts:212	SCA

A8 Insecure Deserialization

OWASP Top 10 Application Security Risks, A8:2017 states: "Insecure descrialization often leads to remote code execution. Even if descrialization flaws do not result in remote code execution, they can be used to perform attacks, including replay attacks, injection attacks, and privilege escalation attacks."

No Issues



A9 Using Components with Known Vulnerabilities

OWASP Top 10 Application Security Risks, A9:2017 states: "Components, such as libraries, frameworks, and other software modules, run with the same privileges as the application. If a vulnerable component is exploited, such an attack can facilitate serious data loss or server takeover. Applications and APIs using components with known vulnerabilities may undermine application defenses and enable various attacks and impacts."

No Issues

A10 Insufficient Logging and Monitoring

OWASP Top 10 Application Security Risks, A10:2017 states: "Insufficient logging and monitoring, coupled with missing or ineffective integration with incident response, allows attackers to further attack systems, maintain persistence, pivot to more systems, and tamper, extract, or destroy data. Most breach studies show time to detect a breach is over 200 days, typically detected by external parties rather than internal processes or monitoring."

No Issues



Description of Key Terminology

Likelihood and Impact

Likelihood

Likelihood is the probability that a vulnerability will be accurately identified and successfully exploited.

Impact

Impact is the potential damage an attacker could do to assets by successfully exploiting a vulnerability. This damage can be in the form of, but not limited to, financial loss, compliance violation, loss of brand reputation, and negative publicity.

Fortify Priority Order

Critical

Critical-priority issues have high impact and high likelihood. Critical-priority issues are easy to detect and exploit and result in large asset damage. These issues represent the highest security risk to the application. As such, they should be remediated immediately.

SQL Injection is an example of a critical issue.

High

High-priority issues have high impact and low likelihood. High-priority issues are often difficult to detect and exploit, but can result in large asset damage. These issues represent a high security risk to the application. High-priority issues should be remediated in the next scheduled patch release.

Password Management: Hardcoded Password is an example of a high issue.

Medium

Medium-priority issues have low impact and high likelihood. Medium-priority issues are easy to detect and exploit, but typically result in small asset damage. These issues represent a moderate security risk to the application. Medium-priority issues should be remediated in the next scheduled product update.

Path Manipulation is an example of a medium issue.

Low

Low-priority issues have low impact and low likelihood. Low-priority issues can be difficult to detect and exploit and typically result in small asset damage. These issues represent a minor security risk to the application. Low-priority issues should be remediated as time allows.

Dead Code is an example of a low issue.

Remediation Effort



The report provides remediation effort estimates. You can use these estimates to perform a relative comparison of projects and as a starting point for estimates specific to your organization. Remediation effort estimates are provided in the following report sections:

- Executive Summary
- Issue Breakdown
- Issue Details

To determine remediation effort for a collection of issues, Software Security Center weights each issue based on its category ("remediation constant") and adds an overhead calculation based on the number of distinct files which contain the set of issues. The formula used at each report level is the same:

• Remediation Effort (in mins) = SUM(remediation constant for each issue in the set) + 6 * Number of distinct files in that set of issues.

At the lowest level of detail, issues are grouped based on Fortify category and Fortify priority OR Fortify category and folder name, depending on report options. So, for example, the Issue Details section of the report might show the remediation effort for "SQL Injection, Critical" or "SQL Injection, MyFolder".

At the Issue Breakdown level, remediation effort is shown at the level of each external (non-Fortify) category (such as "AC-3 Access Enforcement" in the case of NIST, or "A1 Unvalidated Input" in the case of OWASP Top10). Remediation effort is calculated for the set of all issues that fall into that external category (irrespective of Fortify priority or folder name). As an example, if there are two SQL injection vulnerabilities, one critical and one medium, within the same file, the file overhead is only included once.

At the Executive Summary level, all issues of that project which are mapped to the specified external category list (such as NIST or CWE) are used in the remediation effort calculation.

Fortify recommends that you treat the different levels of remediation effort as information relevant at that level only. You cannot add up remediation effort at a lower level and expect it to match the remediation effort at a higher level.

