



CAIRO SECURITY
CLAN

TOKEN BOUND ACCOUNTS

SECURITY ASSESMENT REPORT

NOVEMBER 2024

Prepared for
HORUS LABS



Contents

1	About Cairo Security Clan	2
2	Disclaimer	2
3	Executive Summary	3
4	Summary of Audit	4
4.1	Scoped Files	4
4.2	Issues	4
5	Risk Classification	5
6	Issues by Severity Levels	6
6.1	Low	6
6.1.1	TBA Deployment is Not Linked to the Registry Contract	6
6.2	Info	7
6.2.1	lock_until Should Not Be Set in the Past	7
6.2.2	Multicall Should Panic With the Call's Error Message	7
6.2.3	AccountV3 Should Implement onERC721Received(...) Function	8
7	Test Evaluation	9
7.1	Compilation Output	9
7.2	Tests Output	19



1 About Cairo Security Clan

Cairo Security Clan is a leading force in the realm of blockchain security, dedicated to fortifying the foundations of the digital age. As pioneers in the field, we specialize in conducting meticulous smart contract security audits, ensuring the integrity and reliability of decentralized applications built on blockchain technology.

At Cairo Security Clan, we boast a multidisciplinary team of seasoned professionals proficient in blockchain security, cryptography, and software engineering. With a firm commitment to excellence, our experts delve into every aspect of the Web3 ecosystem, from foundational layer protocols to application-layer development. Our comprehensive suite of services encompasses smart contract audits, formal verification, and real-time monitoring, offering unparalleled protection against potential vulnerabilities.

Our team comprises industry veterans and scholars with extensive academic backgrounds and practical experience. Armed with advanced methodologies and cutting-edge tools, we scrutinize and analyze complex smart contracts with precision and rigor. Our track record speaks volumes, with a plethora of published research papers and citations, demonstrating our unwavering dedication to advancing the field of blockchain security.

At Cairo Security Clan, we prioritize collaboration and transparency, fostering meaningful partnerships with our clients. We believe in a customer-oriented approach, engaging stakeholders at every stage of the auditing process. By maintaining open lines of communication and soliciting client feedback, we ensure that our solutions are tailored to meet the unique needs and objectives of each project.

Beyond our core services, Cairo Security Clan is committed to driving innovation and shaping the future of blockchain technology. As active contributors to the ecosystem, we participate in the development of emerging technologies such as Starknet, leveraging our expertise to build robust infrastructure and tools. Through strategic guidance and support, we empower our partners to navigate the complexities of the blockchain landscape with confidence and clarity.

In summary, Cairo Security Clan stands at the forefront of blockchain security, blending technical prowess with a client-centric ethos to deliver unparalleled protection and peace of mind in an ever-evolving digital landscape. Join us in safeguarding the future of decentralized finance and digital assets with confidence and conviction.

2 Disclaimer

Disclaimer Limitations of this Audit:

This report is based solely on the materials and documentation provided by you to Cairo Security Clan for the specific purpose of conducting the security review outlined in the [Summary of Audit](#) and [Scoped Files](#). The findings presented here may not be exhaustive and may not identify all potential vulnerabilities. Cairo Security Clan provides this review and report on an "as-is" and "as-available" basis. You acknowledge that your use of this report, including any associated services, products, protocols, platforms, content, and materials, occurs entirely at your own risk.

Inherent Risks of Blockchain Technology:

Blockchain technology remains in its developmental stage and is inherently susceptible to unknown risks and vulnerabilities. This review is specifically focused on the smart contract code and does not extend to the compiler layer, programming language elements beyond the reviewed code, or other potential security risks outside the code itself.

Report Purpose and Reliance:

This report should not be construed as an endorsement of any specific project or team, nor does it guarantee the absolute security of the audited smart contracts. No third party should rely on this report for any purpose, including making investment or purchasing decisions.

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3 Executive Summary

This document presents the security review performed by **Cairo Security Clan** on the ERC-6551 Reference Implementation on Starknet, Token Bound Account(TBA) SNIP of **Horus Labs**.

The audit was performed using

- manual analysis of the codebase,
- automated analysis tools,
- simulation of the smart contract,
- analysis of edge test cases

4 points of attention, where 0 is classified as Critical, 0 is classified as High, 0 is classified as Medium, 1 is classified as Low, 3 are classified as Informational and 0 is classified as Best Practices. The issues are summarized in Fig. 1.

This document is organized as follows. Section 1 About Cairo Security Clan. Section 2 Disclaimer. Section 3 Executive Summary. Section 4 Summary of Audit. Section 5 Risk Classification. Section 6 Issues by Severity Levels. Section 7 Test Evaluation.

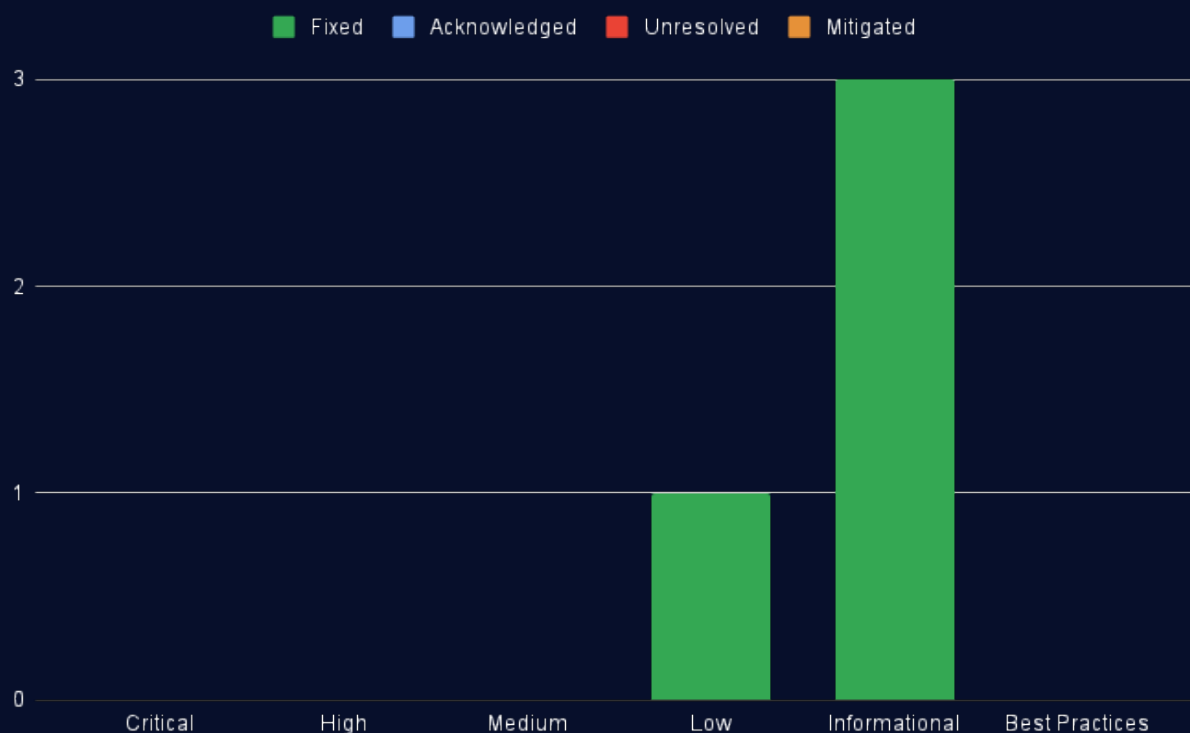


Fig 1: Distribution of issues: Critical (0), High (0), Medium (0), Low (1), Informational (3), Best Practices (0).
Distribution of status: Fixed (3), Acknowledged (0), Mitigated (0), Unresolved (1).



4 Summary of Audit

Audit Type	Security Review
Scarb Version	2.8.2
Final Report	20/11/2024
Repository	horuslabsio/TBA
Initial Commit Hash	6a7ea81d619cb3b5f3bd7c4360bdc1619799d884
Final Commit Hash	6ce9c2209f2ec4e326741d02268927e30af55e55
Documentation	Website documentation
Test Suite Assessment	High

4.1 Scoped Files

	Contracts
1	src/accountV3.cairo
2	src/components.cairo
3	src/interfaces.cairo
4	src/lib.cairo
5	src/registry.cairo
6	src/accountV3/accountV3.cairo
7	src/components/account.cairo
8	src/components/lockable.cairo
9	src/components/permissionable.cairo
10	src/components/presets.cairo
11	src/components/signatory.cairo
12	src/components/upgradeable.cairo
13	src/components/account/account.cairo
14	src/components/lockable/lockable.cairo
15	src/components/permissionable/permissionable.cairo
16	src/components/presets/account_preset.cairo
17	src/components/signatory/signatory.cairo
18	src/components/upgradeable/upgradeable.cairo
19	src/interfaces/IAccount.cairo
20	src/interfaces/IAccountV3.cairo
21	src/interfaces/IERC721.cairo
22	src/interfaces/IExecutable.cairo
23	src/interfaces/ILockable.cairo
24	src/interfaces/IPermissionable.cairo
25	src/interfaces/IRegistry.cairo
26	src/interfaces/ISRC6.cairo
27	src/interfaces/ISignatory.cairo
28	src/interfaces/IUpgradeable.cairo
29	src/registry/registry.cairo

4.2 Issues

	Findings	Severity	Update
1	TBA deployment is not linked to the registry contract	Low	Fixed
2	lock_until should not be set in the past	Informational	Fixed
3	Multicall should panic with the call's error message	Informational	Fixed
4	AccountV3 should implement onERC721Received(...) function	Informational	Fixed



5 Risk Classification

The risk rating methodology used by **Cairo Security Clan** follows the principles established by the **CVSS risk rating methodology**. The severity of each finding is determined by two factors: **Likelihood** and **Impact**.

Likelihood measures how likely an attacker will uncover and exploit the finding. This factor will be one of the following values:

- a) **High**: The issue is trivial to exploit and has no specific conditions that need to be met;
- b) **Medium**: The issue is moderately complex and may have some conditions that need to be met;
- c) **Low**: The issue is very complex and requires very specific conditions to be met.

When defining the likelihood of a finding, other factors are also considered. These can include but are not limited to Motive, opportunity, exploit accessibility, ease of discovery, and ease of exploit.

Impact is a measure of the damage that may be caused if an attacker exploits the finding. This factor will be one of the following values:

- a) **High**: The issue can cause significant damage such as loss of funds or the protocol entering an unrecoverable state;
- b) **Medium**: The issue can cause moderate damage such as impacts that only affect a small group of users or only a particular part of the protocol;
- c) **Low**: The issue can cause little to no damage such as bugs that are easily recoverable or cause unexpected interactions that cause minor inconveniences.

When defining the impact of a finding other factors are also considered. These can include but are not limited to Data/state integrity, loss of availability, financial loss, and reputation damage. After defining the likelihood and impact of an issue, the severity can be determined according to the table below.

		Likelihood		
		High	Medium	Low
Impact	High	Critical	High	Medium
	Medium	High	Medium	Low
	Low	Medium	Low	Info/Best Practices

To address issues that do not fit a High/Medium/Low severity, **Cairo Security Clan** also uses three more finding severities: **Informational**, **Best Practices** and **Gas**

- a) **Informational** findings do not pose any risk to the application, but they carry some information that the audit team intends to formally pass to the client;
- b) **Best Practice** findings are used when some piece of code does not conform with smart contract development best practices;
- b) **Gas** findings are used when some piece of code uses more gas than it should be or have some functions that can be removed to save gas.



6 Issues by Severity Levels

6.1 Low

6.1.1 TBA Deployment is Not Linked to the Registry Contract

File(s): [src/registry/registry.cairo](#)

Description: Token-bound accounts (TBAs) should be created using the Registry contract's `create_account(...)` function, which allows only the NFT owner to create a TBA. The account is then deployed to a deterministic address based on the constructor's calldata, salt, and the implementation hash.

```
1 fn create_account(...) -> ContractAddress {
2     // ...
3     let mut constructor_calldata: Array<felt252> = array![
4         token_contract.into(),
5         token_id.low.into(),
6         token_id.high.into(),
7         get_contract_address().into(),
8         implementation_hash,
9         salt
10    ];
11
12    let class_hash: ClassHash = implementation_hash.try_into().unwrap();
13    let result = deploy_syscall(class_hash, salt, constructor_calldata.span(), true)
14    // ...
15 }
```

Currently, the TBA is deployed using the `deploy_syscall(..., true)`, setting the deployer to the zero address. This setup allows an arbitrary deployment to the same address without the Registry contract, potentially bypassing its intended control. To enforce the connection to the Registry contract, it would be beneficial to designate the Registry as the deployer.

Recommendation(s): Set the Registry contract as the deployer of TBAs.

Status: Fixed

Update from client: Fixed in this [commit](#).



6.2 Info

6.2.1 lock_until Should Not Be Set in the Past

File(s): [src/components/lockable/lockable.cairo](#)

Description: The TBA contract owner and authorized users can lock the contract via the `lock(...)` function, which calls the internal `_lock(...)` function.

```
1 fn _lock(ref self: ComponentState<TContractState>, lock_until: u64) {
2     let current_timestamp = get_block_timestamp();
3     assert(
4         lock_until <= current_timestamp + YEAR_TO_SECONDS, Errors::EXCEEDS_MAX_LOCK_TIME
5     );
6
7     let (lock_status, _) = self._is_locked();
8     assert(lock_status != true, Errors::LOCKED_ACCOUNT);
9     // ...
10 }
```

The function is designed to lock the contract, preventing upgrades and execution of Calls until the specified `lock_until` time. Currently, however, `lock_until` can be set to a timestamp in the past, which fails to enforce the intended lock. Although this issue does not impact security, it creates a functional inconsistency with the lock's intended purpose.

Recommendation(s): Consider checking that `lock_until` is greater than the current timestamp.

Status: Fixed

Update from client: Fixed in this [commit](#).

6.2.2 Multicall Should Panic With the Call's Error Message

File(s): [src/components/account/account.cairo](#)

Description: The TBA account contract supports multi-call processing, enabling multiple contract calls within a single transaction using the `_execute_calls()` function.

```
1 fn _execute_calls(...) -> Array<Span<felt252>> {
2     // ...
3     loop {
4         match calls.pop_front() {
5             Option::Some(call) => {
6                 match call_contract_syscall(call.to, call.selector, call.calldata) {
7                     Result::Ok(mut retdata) => { result.append(retdata); },
8                     Result::Err(_) => { panic(array!['multicall_failed']); }
9                 }
10            },
11            Option::None(_) => { break (); }
12        };
13    };
14    // ...
15 }
```

Currently, if any call fails, the entire transaction reverts with a `multicall_failed` error. However, providing the specific call index and an error message would offer more insight to the user regarding which call failed and why.

Recommendation(s): Consider updating the panic behavior to include the error returned by `Result::Err(<error>)` along with the index of the failed call.

Status: Fixed

Update from client: Fixed in this [commit](#).



6.2.3 AccountV3 Should Implement `onERC721Received(...)` Function

File(s): [src/accountV3/accountV3.cairo](#)

Description: The AccountV3 contract currently implements the `on_erc721_received(...)` function to receive ERC721 tokens via the `safe_transfer_from(...)` method. However, since the TBA contract is expected to support a variety of ERC721 tokens, some of which may use CamelCase naming conventions, implementing an `onERC721Received(...)` function would improve compatibility and prevent unnecessary reverts during safe token transfers.

This approach aligns with the `ERC721Receiver` component from OpenZeppelin, which supports similar functionality [?].

Recommendation(s): Consider implementing a CamelCase version of `on_erc721_received(...)`.

Status: Fixed

Update from the client: Fixed in this [commit](#).



7 Test Evaluation

7.1 Compilation Output

```

1  scarb build
2      Updating git repository github.com/openzeppelin/cairo-contracts
3      Updating git repository github.com/foundry-rs/starknet-foundry
4      Updating crates.io index
5      Updating git repository `github.com/xJonathanLEI/starknet-rs`
6      Updating git submodule `github.com/OpenZeppelin/cairo-contracts`
7      Updating git repository `github.com/software-mansion/cairo-profiler/`
8  Downloading crates ...
9      Downloaded percent-encoding v2.3.1
10     Downloaded android_system_properties v0.1.5
11     Downloaded untrusted v0.9.0
12     Downloaded webpki v0.22.4
13     Downloaded reqwest v0.11.18
14     Downloaded unicode-xid v0.2.5
15     Downloaded cairo-lang-sierra-type-size v2.8.2
16     Downloaded same-file v1.0.6
17     Downloaded const_format_proc_macros v0.2.33
18     Downloaded cairo-lang-starknet-classes v2.8.2
19     Downloaded include_dir_macros v0.7.4
20     Downloaded matchit v0.7.3
21     Downloaded sync_wrapper v0.1.2
22     Downloaded oorandom v11.1.4
23     Downloaded zstd-safe v5.0.2+zstd.1.5.2
24     Downloaded fd-lock v3.0.13
25     Downloaded project-root v0.2.2
26     Downloaded phf_macros v0.11.2
27     Downloaded primitive-types v0.12.2
28     Downloaded starknet-curve v0.4.2
29     Downloaded normalize-line-endings v0.3.0
30     Downloaded colorchoice v1.0.2
31     Downloaded dirs v5.0.1
32     Downloaded shellexpand v3.1.0
33     Downloaded ark-std v0.4.0
34     Downloaded ark-serialize v0.4.2
35     Downloaded zip v0.6.6
36     Downloaded utf8parse v0.2.2
37     Downloaded option-ext v0.2.0
38     Downloaded ark-serialize-derive v0.4.2
39     Downloaded vcpkg v0.2.15
40     Downloaded windows_x86_64_gnullvm v0.52.6
41     Downloaded regex-automata v0.4.7
42     Downloaded windows_aarch64_gnullvm v0.52.6
43     Downloaded windows_i686_gnullvm v0.52.6
44     Downloaded num-prime v0.4.4
45     Downloaded rust_decimal v1.36.0
46     Downloaded dirs-sys v0.4.1
47     Downloaded libc v0.2.158
48     Downloaded blockifier v0.8.0-rc.3
49     Downloaded bstr v1.10.0
50     Downloaded anstream v0.6.15
51     Downloaded snapbox v0.4.17
52     Downloaded starknet-curve v0.3.0
53     Downloaded starknet-crypto v0.5.2
54     Downloaded cairo-vm v1.0.1
55     Downloaded num-modular v0.5.1
56     Downloaded unicode-width v0.1.13
57     Downloaded bzip2-sys v0.1.11+1.0.8
58     Downloaded nix v0.23.2
59     Downloaded radix_trie v0.2.1
60     Downloaded snapbox-macros v0.3.10
61     Downloaded zstd-sys v2.0.13+zstd.1.5.6
62     Downloaded windows_x86_64_msvc v0.52.6
63     Downloaded windows_x86_64_gnu v0.52.6

```



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```
64 | Downloaded windows_aarch64_msvc v0.52.6
65 | Downloaded strum_macros v0.24.3
66 | Downloaded windows_i686_gnu v0.52.6
67 | Downloaded windows_i686_msvc v0.52.6
68 | Downloaded ethbloom v0.13.0
69 | Downloaded strum v0.24.1
70 | Downloaded proptest v1.5.0
71 | Downloaded cairo-lang-runner v2.8.2
72 | Downloaded starknet_api v0.13.0-rc.1
73 | Downloaded nom v7.1.3
74 | Downloaded hyper v0.14.30
75 | Downloaded openssl v0.10.66
76 | Downloaded encode_unicode v0.3.6
77 | Downloaded console v0.15.8
78 | Downloaded doc-comment v0.3.3
79 | Downloaded fixed-hash v0.8.0
80 | Downloaded impl-codec v0.6.0
81 | Downloaded rustc-hex v2.1.0
82 | Downloaded rlp v0.5.2
83 | Downloaded impl-rlp v0.3.0
84 | Downloaded h2 v0.3.26
85 | Downloaded rustls v0.21.12
86 | Downloaded rust-analyzer-salsa v0.17.0-pre.6
87 | Downloaded zstd v0.11.2+zstd.1.5.2
88 | Downloaded similar v2.6.0
89 | Downloaded hyper-rustls v0.24.2
90 | Downloaded http v0.2.12
91 | Downloaded windows-sys v0.52.0
92 | Downloaded http-body v0.4.6
93 | Downloaded hyper-tls v0.5.0
94 | Downloaded ipnet v2.10.0
95 | Downloaded mime v0.3.17
96 | Downloaded rustls-pemfile v1.0.4
97 | Downloaded tokio v1.40.0
98 | Downloaded ignore v0.4.23
99 | Downloaded impl-serde v0.4.0
100 | Downloaded serde_urlencoded v0.7.1
101 | Downloaded foreign-types-shared v0.1.1
102 | Downloaded foreign-types v0.3.2
103 | Downloaded openssl-macros v0.1.1
104 | Downloaded rustls-webpki v0.101.7
105 | Downloaded encoding_rs v0.8.34
106 | Downloaded rustyline v9.1.2
107 | Downloaded anstyle-parse v0.2.5
108 | Downloaded anstyle-query v1.1.1
109 | Downloaded anstyle v1.0.8
110 | Downloaded anstyle-wincon v3.0.4
111 | Downloaded is_terminal_polyfill v1.70.1
112 | Downloaded security-framework v2.11.1
113 | Downloaded tokio-native-tls v0.3.1
114 | Downloaded sct v0.7.1
115 | Downloaded cairo-lang-starknet v2.8.2
116 | Downloaded tokio-rustls v0.24.1
117 | Downloaded str-buf v1.0.6
118 | Downloaded clipboard-win v4.5.0
119 | Downloaded promptly v0.3.1
120 | Downloaded rpassword v7.3.1
121 | Downloaded darling_core v0.14.4
122 | Downloaded darling_macro v0.14.4
123 | Downloaded darling v0.14.4
124 | Downloaded cached_proc_macro v0.17.0
125 | Downloaded cached v0.44.0
126 | Downloaded windows_aarch64_msvc v0.48.5
127 | Downloaded windows_i686_gnu v0.48.5
128 | Downloaded winapi-i686-pc-windows-gnu v0.4.0
129 | Downloaded winapi-x86_64-pc-windows-gnu v0.4.0
130 | Downloaded starknet-crypto-codegen v0.3.3
131 | Downloaded ark-ff-macros v0.4.2
132 | Downloaded crossbeam-deque v0.8.5
133 | Downloaded globset v0.4.15
```



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```
134 Downloaded windows-sys v0.59.0
135 Downloaded openssl-sys v0.9.103
136 Downloaded rtoolbox v0.0.2
137 Downloaded strsim v0.10.0
138 Downloaded cached_proc_macro_types v0.1.1
139 Downloaded windows_i686_msvc v0.48.5
140 Downloaded itertools v0.10.5
141 Downloaded windows-sys v0.48.0
142 Downloaded ark-ff-asm v0.4.2
143 Downloaded globwalk v0.9.1
144 Downloaded cairo-lang-formatter v2.8.2
145 Downloaded lru v0.12.4
146 Downloaded uint v0.9.5
147 Downloaded schannel v0.1.24
148 Downloaded derive_more v0.99.18
149 Downloaded wasm-bindgen-futures v0.4.43
150 Downloaded socket2 v0.5.7
151 Downloaded wiremock v0.6.2
152 Downloaded der v0.7.9
153 Downloaded elliptic-curve v0.13.8
154 Downloaded p256 v0.13.2
155 Downloaded k256 v0.13.3
156 Downloaded static_assertions v1.1.0
157 Downloaded core-foundation v0.9.4
158 Downloaded native-tls v0.2.12
159 Downloaded num-rational v0.4.2
160 Downloaded tower-service v0.3.3
161 Downloaded signal-hook-registry v1.4.2
162 Downloaded tokio-macros v2.4.0
163 Downloaded data-encoding v2.6.0
164 Downloaded group v0.13.0
165 Downloaded pem-rfc7468 v0.7.0
166 Downloaded spki v0.7.3
167 Downloaded pkcs8 v0.10.2
168 Downloaded sec1 v0.7.3
169 Downloaded primeorder v0.13.6
170 Downloaded serdect v0.2.0
171 Downloaded windows_aarch64_gnullvm v0.48.5
172 Downloaded ethereum-types v0.14.1
173 Downloaded openssl-probe v0.1.5
174 Downloaded pkg-config v0.3.30
175 Downloaded security-framework-sys v2.11.1
176 Downloaded phf_generator v0.11.2
177 Downloaded phf_shared v0.11.2
178 Downloaded phf v0.11.2
179 Downloaded strum_macros v0.25.3
180 Downloaded ctor v0.2.8
181 Downloaded convert_case v0.4.0
182 Downloaded unarray v0.1.4
183 Downloaded const-hex v1.12.0
184 Downloaded fs_extra v1.3.0
185 Downloaded scarb-stable-hash v1.0.0
186 Downloaded genco v0.17.9
187 Downloaded typenum v1.17.0
188 Downloaded strum v0.25.0
189 Downloaded flatten-serde-json v0.1.0
190 Downloaded fs4 v0.7.0
191 Downloaded base16ct v0.2.0
192 Downloaded rand_xorshift v0.3.0
193 Downloaded xxhash-rust v0.8.12
194 Downloaded cairo-lang-macro-attributes v0.1.0
195 Downloaded cairo-lang-macro-stable v1.0.0
196 Downloaded linkme-impl v0.3.28
197 Downloaded linkme v0.3.28
198 Downloaded cairo-lang-macro v0.1.0
199 Downloaded cairo-lang-diagnostics v2.8.2
200 Downloaded genco-macros v0.17.9
201 Downloaded relative-path v1.9.3
202 Downloaded xshell-macros v0.2.6
203 Downloaded xshell v0.2.6
```



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```
204 | Downloaded cairo-lang-syntax-codegen v2.8.2
205 | Downloaded lalrpop v0.20.2
206 | Downloaded lalrpop-util v0.20.2
207 | Downloaded sha2 v0.10.8
208 | Downloaded zeroize_derive v1.4.2
209 | Downloaded zeroize v1.8.1
210 | Downloaded generic-array v0.14.7
211 | Downloaded crypto-common v0.1.6
212 | Downloaded subtle v2.6.1
213 | Downloaded digest v0.10.7
214 | Downloaded bimap v0.6.3
215 | Downloaded fs2 v0.4.3
216 | Downloaded glob v0.3.1
217 | Downloaded signature v2.2.0
218 | Downloaded ecdsa v0.16.9
219 | Downloaded ark-ff v0.4.2
220 | Downloaded regex-syntax v0.8.4
221 | Downloaded error-code v2.3.1
222 | Downloaded winapi-util v0.1.9
223 | Downloaded walkdir v2.5.0
224 | Downloaded block-buffer v0.10.4
225 | Downloaded const-oid v0.9.6
226 | Downloaded cpufeatures v0.2.14
227 | Downloaded ff v0.13.0
228 | Downloaded bitflags v1.3.2
229 | Downloaded memoffset v0.6.5
230 | Downloaded nibble_vec v0.1.0
231 | Downloaded thiserror-impl-no-std v2.0.2
232 | Downloaded bzip2 v0.4.4
233 | Downloaded sha3 v0.10.8
234 | Downloaded endian-type v0.1.2
235 | Downloaded paste v1.0.15
236 | Downloaded rustc_version v0.4.1
237 | Downloaded starknet-ff v0.3.7
238 | Downloaded starknet-crypto v0.6.2
239 | Downloaded thiserror-no-std v2.0.2
240 | Downloaded constant_time_eq v0.1.5
241 | Downloaded crossbeam-utils v0.8.20
242 | Downloaded sha1 v0.10.6
243 | Downloaded starknet-types-core v0.1.5
244 | Downloaded syn v2.0.77
245 | Downloaded keccak v0.1.5
246 | Downloaded lambdaworks-crypto v0.7.0
247 | Downloaded lambdaworks-math v0.7.0
248 | Downloaded cairo-lang-sierra v2.8.2
249 | Downloaded cairo-lang-debug v2.8.2
250 | Downloaded path-clean v1.0.1
251 | Downloaded semver v1.0.23
252 | Downloaded cairo-lang-filessystem v2.8.2
253 | Downloaded bitflags v2.6.0
254 | Downloaded axum v0.7.5
255 | Downloaded windows_x86_64_gnu v0.48.5
256 | Downloaded windows_x86_64_msvc v0.48.5
257 | Downloaded petgraph v0.6.5
258 | Downloaded winapi v0.3.9
259 | Downloaded regex v1.10.6
260 | Downloaded scopeguard v1.2.0
261 | Downloaded lock_api v0.4.12
262 | Downloaded redox_syscall v0.5.3
263 | Downloaded pin-project-internal v1.1.5
264 | Downloaded tower v0.4.13
265 | Downloaded cairo-lang-semantic v2.8.2
266 | Downloaded windows_x86_64_gnullvm v0.48.5
267 | Downloaded bitvec v1.0.1
268 | Downloaded syn v1.0.109
269 | Downloaded axum-core v0.4.3
270 | Downloaded sync_wrapper v1.0.1
271 | Downloaded pin-project v1.1.5
272 | Downloaded diff v0.1.13
273 | Downloaded pretty_assertions v1.4.0
```



Cairo Security Clan

274 Downloaded cairo-lang-sierra-generator v2.8.2
275 Downloaded cairo-lang-casm v2.8.2
276 Downloaded good_lp v1.8.1
277 Downloaded zerocopy v0.7.35
278 Downloaded aho-corasick v1.1.3
279 Downloaded tower-layer v0.3.3
280 Downloaded yansi v0.5.1
281 Downloaded cairo-lang-test-utils v2.8.2
282 Downloaded id-arena v2.2.1
283 Downloaded assert_matches v1.5.0
284 Downloaded cairo-lang-sierra-ap-change v2.8.2
285 Downloaded matrixmultiply v0.2.4
286 Downloaded minilp v0.2.2
287 Downloaded cairo-lang-eq-solver v2.8.2
288 Downloaded minimal-lexical v0.2.1
289 Downloaded cairo-lang-parser v2.8.2
290 Downloaded anyhow v1.0.87
291 Downloaded unicode-segmentation v1.11.0
292 Downloaded derivative v2.2.0
293 Downloaded bit-vec v0.6.3
294 Downloaded itertools v0.11.0
295 Downloaded itertools v0.12.1
296 Downloaded hashbrown v0.14.5
297 Downloaded winnow v0.6.18
298 Downloaded libm v0.2.8
299 Downloaded serde_json v1.0.128
300 Downloaded unicode-normalization v0.1.23
301 Downloaded idna v0.5.0
302 Downloaded include_dir v0.7.4
303 Downloaded cairo-lang-test-plugin v2.8.2
304 Downloaded cairo-lang-sierra-to-casm v2.8.2
305 Downloaded const_format v0.2.33
306 Downloaded bincode v2.0.0-rc.3
307 Downloaded windows-targets v0.48.5
308 Downloaded colored v2.1.0
309 Downloaded const-fnv1a-hash v1.1.0
310 Downloaded convert_case v0.6.0
311 Downloaded ascii-canvas v3.0.0
312 Downloaded bit-set v0.5.3
313 Downloaded ena v0.14.3
314 Downloaded fixedbitset v0.4.2
315 Downloaded pico-args v0.5.0
316 Downloaded new_debug_unreachable v1.0.6
317 Downloaded siphasher v0.3.11
318 Downloaded phf_shared v0.10.0
319 Downloaded precomputed-hash v0.1.1
320 Downloaded string_cache v0.8.7
321 Downloaded libredox v0.1.3
322 Downloaded redox_users v0.4.6
323 Downloaded dirs-sys-next v0.1.2
324 Downloaded rustversion v1.0.17
325 Downloaded allocator-api2 v0.2.18
326 Downloaded toml_edit v0.22.20
327 Downloaded hashbrown v0.12.3
328 Downloaded num-bigint v0.4.6
329 Downloaded memchr v2.7.4
330 Downloaded dirs-next v2.0.0
331 Downloaded term v0.7.0
332 Downloaded crunchy v0.2.2
333 Downloaded tiny-keccak v2.0.2
334 Downloaded predicates v3.1.2
335 Downloaded predicates-core v1.0.8
336 Downloaded assert_fs v1.1.2
337 Downloaded clap_lex v0.7.2
338 Downloaded clap_builder v4.5.17
339 Downloaded clap_derive v4.5.13
340 Downloaded clap v4.5.17
341 Downloaded portable-atomic v1.7.0
342 Downloaded indicatif v0.17.8
343 Downloaded camino v1.1.9



Cairo Security Clan

344 Downloaded hashbrown v0.13.2
345 Downloaded ark-ec v0.4.2
346 Downloaded rayon v1.10.0
347 Downloaded cairo-lang-lowering v2.8.2
348 Downloaded tracing v0.1.40
349 Downloaded cairo-lang-syntax v2.8.2
350 Downloaded indexmap v2.5.0
351 Downloaded parity-scale-codec v3.6.12
352 Downloaded bumpalo v3.16.0
353 Downloaded rand v0.8.5
354 Downloaded serde_derive v1.0.210
355 Downloaded serde v1.0.210
356 Downloaded unicode-bidi v0.3.15
357 Downloaded url v2.5.2
358 Downloaded indent v0.1.1
359 Downloaded difflib v0.4.0
360 Downloaded termtree v0.4.1
361 Downloaded predicates-tree v1.0.11
362 Downloaded home v0.5.9
363 Downloaded which v5.0.0
364 Downloaded heck v0.5.0
365 Downloaded instant v0.1.13
366 Downloaded number_prefix v0.4.0
367 Downloaded scarb-metadata v1.12.0
368 Downloaded scarb-ui v0.1.5
369 Downloaded serde_path_to_error v0.1.16
370 Downloaded ark-secp256k1 v0.4.0
371 Downloaded ark-poly v0.4.2
372 Downloaded ark-secp256r1 v0.4.0
373 Downloaded cairo-lang-project v2.8.2
374 Downloaded rayon-core v1.12.1
375 Downloaded cairo-lang-compiler v2.8.2
376 Downloaded cairo-lang-defs v2.8.2
377 Downloaded cairo-lang-plugins v2.8.2
378 Downloaded cairo-lang-proc-macros v2.8.2
379 Downloaded overload v0.1.1
380 Downloaded nu-ansi-term v0.46.0
381 Downloaded diffy v0.3.0
382 Downloaded crossbeam-epoch v0.9.18
383 Downloaded ring v0.17.8
384 Downloaded parking_lot_core v0.9.10
385 Downloaded parking_lot v0.12.3
386 Downloaded smallvec v1.13.2
387 Downloaded tracing-core v0.1.32
388 Downloaded arrayvec v0.7.6
389 Downloaded indexmap v1.9.3
390 Downloaded schemars v0.8.21
391 Downloaded num-traits v0.2.19
392 Downloaded zerocopy-derive v0.7.35
393 Downloaded js-sys v0.3.70
394 Downloaded log v0.4.22
395 Downloaded wasm-bindgen v0.2.93
396 Downloaded unicode-ident v1.0.12
397 Downloaded cairo-lang-sierra-gas v2.8.2
398 Downloaded linux-raw-sys v0.4.14
399 Downloaded ahash v0.8.11
400 Downloaded ryu v1.0.18
401 Downloaded proc-macro2 v1.0.86
402 Downloaded tinyvec v1.8.0
403 Downloaded pin-project-lite v0.2.14
404 Downloaded tracing-attributes v0.1.27
405 Downloaded valuable v0.1.0
406 Downloaded stable_deref_trait v1.2.0
407 Downloaded triomphe v0.1.13
408 Downloaded thiserror v1.0.63
409 Downloaded serde_derive_internals v0.29.1
410 Downloaded spin v0.9.8
411 Downloaded wasi v0.11.0+wasi-snapshot-preview1
412 Downloaded once_cell v1.19.0
413 Downloaded wasm-bindgen-backend v0.2.93



Cairo Security Clan

```
414 Downloaded getrandom v0.2.15
415 Downloaded rand_core v0.6.4
416 Downloaded quote v1.0.37
417 Downloaded rawpointer v0.2.1
418 Downloaded ndarray v0.13.1
419 Downloaded num-complex v0.2.4
420 Downloaded num-traits v0.1.43
421 Downloaded sprs v0.7.1
422 Downloaded web-sys v0.3.70
423 Downloaded webpki-roots v0.22.6
424 Downloaded chrono v0.4.38
425 Downloaded rustix v0.38.36
426 Downloaded object v0.36.4
427 Downloaded heck v0.4.1
428 Downloaded rust-analyzer-salsa-macros v0.17.0-pre.6
429 Downloaded rustc-hash v1.1.0
430 Downloaded either v1.13.0
431 Downloaded funty v2.0.0
432 Downloaded radium v0.7.0
433 Downloaded tap v1.0.1
434 Downloaded wyz v0.5.1
435 Downloaded impl-trait-for-tuples v0.2.2
436 Downloaded toml_datetime v0.6.8
437 Downloaded proc-macro-crate v3.2.0
438 Downloaded parity-scale-codec-derive v3.6.12
439 Downloaded schemars_derive v0.8.21
440 Downloaded lazy_static v1.5.0
441 Downloaded num-integer v0.1.46
442 Downloaded autocfg v1.3.0
443 Downloaded ppv-lite86 v0.2.20
444 Downloaded rand_chacha v0.3.1
445 Downloaded cfg-if v1.0.0
446 Downloaded wasm-bindgen-shared v0.2.93
447 Downloaded wasm-bindgen-macro-support v0.2.93
448 Downloaded itoa v1.0.11
449 Downloaded smol_str v0.2.2
450 Downloaded form_urlencoded v1.2.1
451 Downloaded aes v0.8.4
452 Downloaded base64 v0.21.7
453 Downloaded flate2 v1.0.33
454 Downloaded serde_json_pythonic v0.1.2
455 Downloaded cc v1.1.18
456 Downloaded time v0.3.36
457 Downloaded serde_with v3.9.0
458 Downloaded crypto-bigint v0.5.5
459 Downloaded base64 v0.22.1
460 Downloaded futures-util v0.3.30
461 Downloaded tokio-util v0.7.12
462 Downloaded h2 v0.4.6
463 Downloaded http v1.1.0
464 Downloaded thiserror-impl v1.0.63
465 Downloaded unescaper v0.1.5
466 Downloaded byte-slice-cast v1.2.2
467 Downloaded version_check v0.9.5
468 Downloaded serde_spanned v0.6.7
469 Downloaded dyn-clone v1.0.17
470 Downloaded cairo-lang-utils v2.8.2
471 Downloaded indoc v2.0.5
472 Downloaded byteorder v1.5.0
473 Downloaded winreg v0.10.1
474 Downloaded auto_impl v1.2.0
475 Downloaded base64ct v1.6.0
476 Downloaded password-hash v0.4.2
477 Downloaded salsa20 v0.10.2
478 Downloaded uuid v0.8.2
479 Downloaded crc32fast v1.4.2
480 Downloaded core-foundation-sys v0.8.7
481 Downloaded jobserver v0.1.32
482 Downloaded windows-core v0.52.0
483 Downloaded iana-time-zone v0.1.60
```




Cairo Security Clan

```
484 | Downloaded darling_core v0.20.10
485 | Downloaded darling v0.20.10
486 | Downloaded serde_with_macros v3.9.0
487 | Downloaded deranged v0.3.11
488 | Downloaded powerfmt v0.2.0
489 | Downloaded time-macros v0.2.18
490 | Downloaded hex v0.4.3
491 | Downloaded hmac v0.12.1
492 | Downloaded rfc6979 v0.4.0
493 | Downloaded fastrand v2.1.1
494 | Downloaded tempfile v3.12.0
495 | Downloaded toml v0.8.19
496 | Downloaded async-trait v0.1.82
497 | Downloaded deadpool v0.10.0
498 | Downloaded futures-executor v0.3.30
499 | Downloaded futures v0.3.30
500 | Downloaded futures-channel v0.3.30
501 | Downloaded futures-task v0.3.30
502 | Downloaded pin-utils v0.1.0
503 | Downloaded atomic-waker v1.1.2
504 | Downloaded futures-core v0.3.30
505 | Downloaded futures-sink v0.3.30
506 | Downloaded fnv v1.0.7
507 | Downloaded gimli v0.31.0
508 | Downloaded equivalent v1.0.1
509 | Downloaded wasm-bindgen-macro v0.2.93
510 | Downloaded tinyvec_macros v0.1.1
511 | Downloaded ctr v0.9.2
512 | Downloaded pbkdf2 v0.11.0
513 | Downloaded inout v0.1.3
514 | Downloaded cipher v0.4.4
515 | Downloaded scrypt v0.10.0
516 | Downloaded eth-keystore v0.5.0
517 | Downloaded android-tzdata v0.1.1
518 | Downloaded shlex v1.3.0
519 | Downloaded ident_case v1.0.1
520 | Downloaded strsim v0.11.1
521 | Downloaded darling_macro v0.20.10
522 | Downloaded num-conv v0.1.0
523 | Downloaded time-core v0.1.2
524 | Downloaded errno v0.3.9
525 | Downloaded test-case-core v3.3.1
526 | Downloaded test-case-macros v3.3.1
527 | Downloaded test-case v3.3.1
528 | Downloaded assert-json-diff v2.0.2
529 | Downloaded deadpool-runtime v0.1.4
530 | Downloaded num_cpus v1.16.0
531 | Downloaded http-body-util v0.1.2
532 | Downloaded futures-io v0.3.30
533 | Downloaded futures-macro v0.3.30
534 | Downloaded slab v0.4.9
535 | Downloaded http-body v1.0.1
536 | Downloaded httparse v1.9.4
537 | Downloaded httpdate v1.0.3
538 | Downloaded want v0.3.1
539 | Downloaded hyper-util v0.1.8
540 | Downloaded addr2line v0.24.1
541 | Downloaded Adler2 v2.0.0
542 | Downloaded miniz_oxide v0.8.0
543 | Downloaded rustc-demangle v0.1.24
544 | Downloaded backtrace v0.3.74
545 | Downloaded hermit-abi v0.3.9
546 | Downloaded mio v1.0.2
547 | Downloaded windows-targets v0.52.6
548 | Downloaded iana-time-zone-haiku v0.1.2
549 | Downloaded try-lock v0.2.5
550 | Downloaded hyper v1.4.1
551 | Downloaded bytes v1.7.1
552 | Downloaded openssl-src v300.3.2+3.3.2
```



```
553   Compiling snforge_scarb_plugin v0.31.0 (github.com/foundry-rs/starknet-foundry.git?tag=v0.31.0#72
    ea785ca354e9e506de3e5d687da9fb2c1b3c67)
554   Compiling proc-macro2 v1.0.86
555   Compiling unicode-ident v1.0.12
556   Compiling autocfg v1.3.0
557   Compiling version_check v0.9.5
558   Compiling libc v0.2.158
559   Compiling serde v1.0.210
560   Compiling lock_api v0.4.12
561   Compiling parking_lot_core v0.9.10
562   Compiling quote v1.0.37
563   Compiling syn v2.0.77
564   Compiling cfg-if v1.0.0
565   Compiling once_cell v1.19.0
566   Compiling ahash v0.8.11
567   Compiling num-traits v0.2.19
568   Compiling memchr v2.7.4
569   Compiling serde_derive v1.0.210
570   Compiling typenum v1.17.0
571   Compiling zerocopy v0.7.35
572   Compiling generic-array v0.14.7
573   Compiling indexmap v1.9.3
574   Compiling rand_core v0.6.4
575   Compiling serde_json v1.0.128
576   Compiling allocator-api2 v0.2.18
577   Compiling smallvec v1.13.2
578   Compiling rand v0.8.5
579   Compiling hashbrown v0.14.5
580   Compiling num-integer v0.1.46
581   Compiling serde_derive_internals v0.29.1
582   Compiling schemars v0.8.21
583   Compiling ryu v1.0.18
584   Compiling itoa v1.0.11
585   Compiling hashbrown v0.12.3
586   Compiling equivalent v1.0.1
587   Compiling indexmap v2.5.0
588   Compiling schemars_derive v0.8.21
589   Compiling num-bigint v0.4.6
590   Compiling dyn-clone v1.0.17
591   Compiling scopeguard v1.2.0
592   Compiling either v1.13.0
593   Compiling aho-corasick v1.1.3
594   Compiling itertools v0.12.1
595   Compiling dirs-sys-next v0.1.2
596   Compiling tracing-attributes v0.1.27
597   Compiling tracing-core v0.1.32
598   Compiling regex-syntax v0.8.4
599   Compiling crunchy v0.2.2
600   Compiling heck v0.4.1
601   Compiling stable_deref_trait v1.2.0
602   Compiling pin-project-lite v0.2.14
603   Compiling tracing v0.1.40
604   Compiling triomphe v0.1.13
605   Compiling rust-analyzer-salsa-macros v0.17.0-pre.6
606   Compiling regex-automata v0.4.7
607   Compiling cairo-lang-utils v2.8.2
608   Compiling dirs-next v2.0.0
609   Compiling parking_lot v0.12.3
610   Compiling crypto-common v0.1.6
611   Compiling block-buffer v0.10.4
612   Compiling siphasher v0.3.11
613   Compiling oorandom v11.1.4
614   Compiling thiserror v1.0.63
615   Compiling rustc-hash v1.1.0
616   Compiling tiny-keccak v2.0.2
617   Compiling semver v1.0.23
618   Compiling rust-analyzer-salsa v0.17.0-pre.6
619   Compiling phf_shared v0.10.0
620   Compiling digest v0.10.7
621   Compiling term v0.7.0
```



Cairo Security Clan

```
622 Compiling smol_str v0.2.2
623 Compiling thiserror-impl v1.0.63
624 Compiling new_debug_unreachable v1.0.6
625 Compiling genco-macros v0.17.9
626 Compiling precomputed-hash v0.1.1
627 Compiling bit-vec v0.6.3
628 Compiling log v0.4.22
629 Compiling same-file v1.0.6
630 Compiling fixedbitset v0.4.2
631 Compiling petgraph v0.6.5
632 Compiling walkdir v2.5.0
633 Compiling ena v0.14.3
634 Compiling bit-set v0.5.3
635 Compiling string_cache v0.8.7
636 Compiling itertools v0.11.0
637 Compiling ascii-canvas v3.0.0
638 Compiling lalrpop-util v0.20.2
639 Compiling regex v1.10.6
640 Compiling cairo-lang-debug v2.8.2
641 Compiling pico-args v0.5.0
642 Compiling tinyvec_macros v0.1.1
643 Compiling cpufeatures v0.2.14
644 Compiling unicode-xid v0.2.5
645 Compiling path-clean v1.0.1
646 Compiling keccak v0.1.5
647 Compiling lazy_static v1.5.0
648 Compiling syn v1.0.109
649 Compiling sha3 v0.10.8
650 Compiling lalrpop v0.20.2
651 Compiling cairo-lang-filesystem v2.8.2
652 Compiling sha2 v0.10.8
653 Compiling tinyvec v1.8.0
654 Compiling xxhash-rust v0.8.12
655 Compiling data-encoding v2.6.0
656 Compiling anyhow v1.0.87
657 Compiling lambdaworks-math v0.7.0
658 Compiling xshell-macros v0.2.6
659 Compiling relative-path v1.9.3
660 Compiling genco v0.17.9
661 Compiling lambdaworks-crypto v0.7.0
662 Compiling xshell v0.2.6
663 Compiling scarb-stable-hash v1.0.0
664 Compiling unicode-normalization v0.1.23
665 Compiling cairo-lang-sierra v2.8.2
666 Compiling unescaper v0.1.5
667 Compiling linkme-impl v0.3.28
668 Compiling unicode-bidi v0.3.15
669 Compiling percent-encoding v2.3.1
670 Compiling unicode-segmentation v1.11.0
671 Compiling convert_case v0.6.0
672 Compiling form_urlencoded v1.2.1
673 Compiling linkme v0.3.28
674 Compiling idna v0.5.0
675 Compiling derivative v2.2.0
676 Compiling cairo-lang-syntax v2.8.2
677 Compiling cairo-lang-macro-attributes v0.1.0
678 Compiling cairo-lang-syntax-codegen v2.8.2
679 Compiling starknet-types-core v0.1.5
680 Compiling cairo-lang-diagnostics v2.8.2
681 Compiling colored v2.1.0
682 Compiling cairo-lang-macro-stable v1.0.0
683 Compiling const-fnv1a-hash v1.1.0
684 Compiling cairo-lang-macro v0.1.0
685 Compiling cairo-lang-parser v2.8.2
686 Compiling url v2.5.2
687 Compiling indoc v2.0.5
688 Compiling snforge-scarb-plugin v0.31.0 (git/checkouts/starknet-foundry-v6206fshfutuo/72ea785c/crates/snforge-
    scarb-plugin)
689 Finished `release` profile [optimized] target(s) in 2m 23s
690 Compiling lib(token_bound_accounts) token_bound_accounts v0.3.0 (/contracts/Scarb.toml)
```



```
691 Compiling starknet-contract(token_bound_accounts) token_bound_accounts v0.3.0 (/contracts/Scarb.toml)
692 Finished release target(s) in 4 minutes
```

7.2 Tests Output

```
1 Run snforge test
2   Compiling snforge_scarb_plugin v0.31.0 (git+https://github.com/foundry-rs/starknet-foundry.git?tag=v0.31.0#72
   ea785ca354e9e506de3e5d687da9fb2c1b3c67)
3   Finished `release` profile [optimized] target(s) in 0.16s
4   Compiling lib(token_bound_accounts) token_bound_accounts v0.3.0 (/contracts/Scarb.toml)
5   Compiling starknet-contract(token_bound_accounts) token_bound_accounts v0.3.0 (/contracts/Scarb.toml)
6   Finished release target(s) in 61 seconds
7   Compiling snforge_scarb_plugin v0.31.0 (git+https://github.com/foundry-rs/starknet-foundry.git?tag=v0.31.0#72
   ea785ca354e9e506de3e5d687da9fb2c1b3c67)
8   Finished `release` profile [optimized] target(s) in 0.15s
9   Compiling test(token_bound_accounts_unittest) token_bound_accounts v0.3.0 (/contracts/Scarb.toml)
10  Compiling test(token_bound_accounts_integrationtest) token_bound_accounts_integrationtest v0.3.0 (/contracts/
   Scarb.toml)
11  Finished release target(s) in 80 seconds
12 Collected 44 test(s) from token_bound_accounts package
13 Running 44 test(s) from tests/
14 [PASS] token_bound_accounts_integrationtest::test_account_component::test_event_is_emitted_on_initialization (gas
   : ~1406)
15 [PASS] token_bound_accounts_integrationtest::test_account_component::test_constructor (gas: ~1572)
16 [PASS] token_bound_accounts_integrationtest::test_account_component::test_execute_multicall (gas: ~1884)
17 [PASS] token_bound_accounts_integrationtest::test_account_component::test_execute (gas: ~1881)
18 [PASS] token_bound_accounts_integrationtest::test_account_component::test_execution_emits_event (gas: ~1882)
19 [PASS] token_bound_accounts_integrationtest::test_account_v3::
   test_owner_and_permissioned_accounts_are_valid_signers (gas: ~1862)
20 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_owner_can_lock_account (gas: ~1852)
21 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_owner_can_set_permissions (gas: ~1918)
22 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_owner_can_upgrade (gas: ~1788)
23 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_permissioned_accounts_cannot_set_permissions (
   gas: ~1647)
24 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_permissioned_accounts_cannot_upgrade (gas:
   ~1922)
25 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_permissioned_addresses_can_lock_account (gas:
   ~1994)
26 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_safe_transfer_fails_if_owner_cycle_detected (
   gas: ~1710)
27 [PASS] token_bound_accounts_integrationtest::test_lockable_component::test_execute_should_fail_when_locked (gas:
   ~1888)
28 [PASS] token_bound_accounts_integrationtest::test_lockable_component::test_lockable (gas: ~1782)
29 [PASS] token_bound_accounts_integrationtest::test_lockable_component::test_lockable_emits_event (gas: ~1780)
30 [PASS] token_bound_accounts_integrationtest::test_lockable_component::test_locking_should_fail_if_already_locked
   (gas: ~1785)
31 [PASS] token_bound_accounts_integrationtest::test_account_component::test_execution_fails_if_invalid_signer (gas:
   ~1676)
32 [PASS] token_bound_accounts_integrationtest::test_account_component::test_execution_updates_state (gas: ~1886)
33 [PASS] token_bound_accounts_integrationtest::test_account_component::test_owner (gas: ~1577)
34 [PASS] token_bound_accounts_integrationtest::test_account_component::test_token (gas: ~1572)
35 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_context (gas: ~1642)
36 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_locked_account_cannot_execute (gas: ~1955)
37 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_on_erc721_received_with_safe_transfer (gas:
   ~1723)
38 [PASS] token_bound_accounts_integrationtest::test_account_v3::test_owner_and_any_permissioned_account_can_execute
   (gas: ~2115)
39 [PASS] token_bound_accounts_integrationtest::test_lockable_component::
   test_should_fail_for_greater_than_a_year_lock_time (gas: ~1582)
40 [PASS] token_bound_accounts_integrationtest::test_lockable_component::test_unlock_once_lock_duration_end (gas:
   ~1788)
41 [PASS] token_bound_accounts_integrationtest::test_lockable_component::test_upgrade_should_fail_when_locked (gas:
   ~1788)
42 [PASS] token_bound_accounts_integrationtest::test_permissionable_component::test_has_permissions (gas: ~1854)
43 [PASS] token_bound_accounts_integrationtest::test_permissionable_component::
   test_permissioned_accounts_can_execute (gas: ~2030)
44 [PASS] token_bound_accounts_integrationtest::test_permissionable_component::
   test_permissioned_accounts_can_upgrade (gas: ~1863)
```



Cairo Security Clan

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45 [PASS] token_bound_accounts_integrationtest::test_permissionable_component::test_set_permission_emits_event (gas: ~1913)
46 [PASS] token_bound_accounts_integrationtest::test_permissionable_component::test_set_permissions (gas: ~1913)
47 [PASS] token_bound_accounts_integrationtest::test_permissionable_component::
    test_should_fail_if_unequal_permissioned_addresses_and_permissions (gas: ~1579)
48 [PASS] token_bound_accounts_integrationtest::test_registry::test_create_account (gas: ~1422)
49 [PASS] token_bound_accounts_integrationtest::test_registry::test_create_account_emits_event (gas: ~1419)
50 [PASS] token_bound_accounts_integrationtest::test_registry::test_create_account_should_fail_if_not_nft_owner (gas: ~855)
51 [PASS] token_bound_accounts_integrationtest::test_registry::test_get_account (gas: ~1419)
52 [PASS] token_bound_accounts_integrationtest::test_signatory_component::test_is_valid_signature_for_base_owner (gas: ~1654)
53 [PASS] token_bound_accounts_integrationtest::test_signatory_component::test_is_valid_signer_for_base_owner (gas: ~1650)
54 [PASS] token_bound_accounts_integrationtest::test_signatory_component::
    test_is_valid_signer_for_permissioned_addresses (gas: ~1918)
55 [PASS] token_bound_accounts_integrationtest::test_upgradeable::test_upgrade (gas: ~1714)
56 [PASS] token_bound_accounts_integrationtest::test_upgradeable::test_upgrade_emits_event (gas: ~1712)
57 [PASS] token_bound_accounts_integrationtest::test_upgradeable::test_upgrade_with_unauthorized (gas: ~1576)
58 Running 0 test(s) from src/
59 Tests: 44 passed, 0 failed, 0 skipped, 0 ignored, 0 filtered out
```