

STELLAR CLI

A R C A N E S P E L L B O O K

STELLAR
QUESTS



Stellar CLI Manual (Condensed)

Use the Stellar CLI to work with Stellar accounts, contracts, and assets. This manual provides command references and examples.

Core Capabilities

- **Key management:** `stellar keys`
 - **Soroban contract interaction:** `stellar contract`
 - **Stellar Asset Contract (SAC) deployment:** `stellar contract asset`, `stellar contract id asset`
 - **Event streaming:** `stellar events`
 - **Local testnet containers:** `stellar container`
 - **XDR manipulation:** `stellar xdr`
 - **Classic transaction handling:** `stellar tx`
-

Additional Information

- **Stellar Docs:** <https://developers.stellar.org>
 - ****Smart Contract Docs **:** <https://developers.stellar.org/docs/build/smart-contracts/overview>
 - ****CLI Docs **:** <https://developers.stellar.org/docs/tools/developer-tools/cli/stellar-cli>
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Getting Started Example

1. Generate & Fund Identity

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```
stellar keys generate alice --network testnet --fund
```

- Use the identity (`alice`) with `--source` in relevant commands.

2. Deploy a Contract (Requires `contract.wasm`)

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```
stellar contract deploy --wasm ./path/to/contract.wasm --source alice --network testnet --alias my_contract
```

- Outputs Contract ID; `--alias` saves it locally.

3. Invoke a Contract Function

Pass arguments after `--`.

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```
# Example: Initialize contract stellar contract invoke --id my_contract --source alice --network testnet -- initialize --admin alice --param_value 10
```

```
# Example: Call another function stellar contract invoke --id my_contract --source alice --network testnet -- process --input_data "some_data"
```

Global Options

These apply to most `stellar` commands:

Option	Description
<code>--global</code>	Use global config <code>~/.config/stellar/</code> (
<code>--config-dir <DIR></code>	Specify config directory (default: ".")
<code>-f, --filter-logs <FILTER></code>	Filter log output (e.g., <code>RUST_LOG</code> format)
<code>-q, --quiet</code>	Suppress logs
<code>-v, --verbose</code>	Log DEBUG events
<code>--very-verbose</code>	Log DEBUG and TRACE events

Option	Description
<code>--list</code>	List installed plugins
<code>--no-cache</code>	Disable local caching for simulations/transactions

Top-Level Commands

`stellar contract`

Tools for Soroban smart contracts.

Subcommands: `asset`, `alias`, `bindings`, `build`, `extend`, `deploy`, `fetch`, `id`, `info`, `init`, `upload`, `invoke`, `optimize`, `read`, `restore`.

(Deprecated: `inspect`, `install`)

Command Details (selected examples):

`stellar contract build`

Builds Soroban contract WASM from a Rust Cargo project.

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```
cd path/to/my_contract_crate
stellar contract build
```

- Outputs WASM to `target/wasm32-unknown-unknown/release/`
- Options: `--package`, `--features`, `--out-dir`

`stellar contract extend`

Extend Time-To-Live (TTL) for contract instances/data to prevent archival.

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```
# Extend instance & code
```



```
stellar contract extend --id <ID_OR_ALIAS> --ledgers-to-extend 535679 --source  
<IDENTITY> --network testnet --durability persistent
```

```
# Extend persistent data (Symbol Key) stellar contract extend --id  
<ID_OR_ALIAS> --key MY_KEY --durability persistent --ledgers-to-extend 535679  
--source <IDENTITY> --network testnet
```

```
# Extend persistent data (XDR Key) stellar contract extend --id <ID_OR_ALIAS>  
--key-xdr <BASE64_XDR> --durability persistent --ledgers-to-extend 535679  
--source <IDENTITY> --network testnet
```

- Note: 535679 ledgers $\approx$ 30 days (max extension).

stellar events

Streams contract events from the network.

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```
stellar events --network testnet --id <ID_OR_ALIAS> --start-ledger latest #  
Optional: --cursor <CURSOR>, --count 100, --topic <TOPIC_FILTER>, --output  
json
```

stellar keys

Manage local identities (keypairs).

- Add identity:

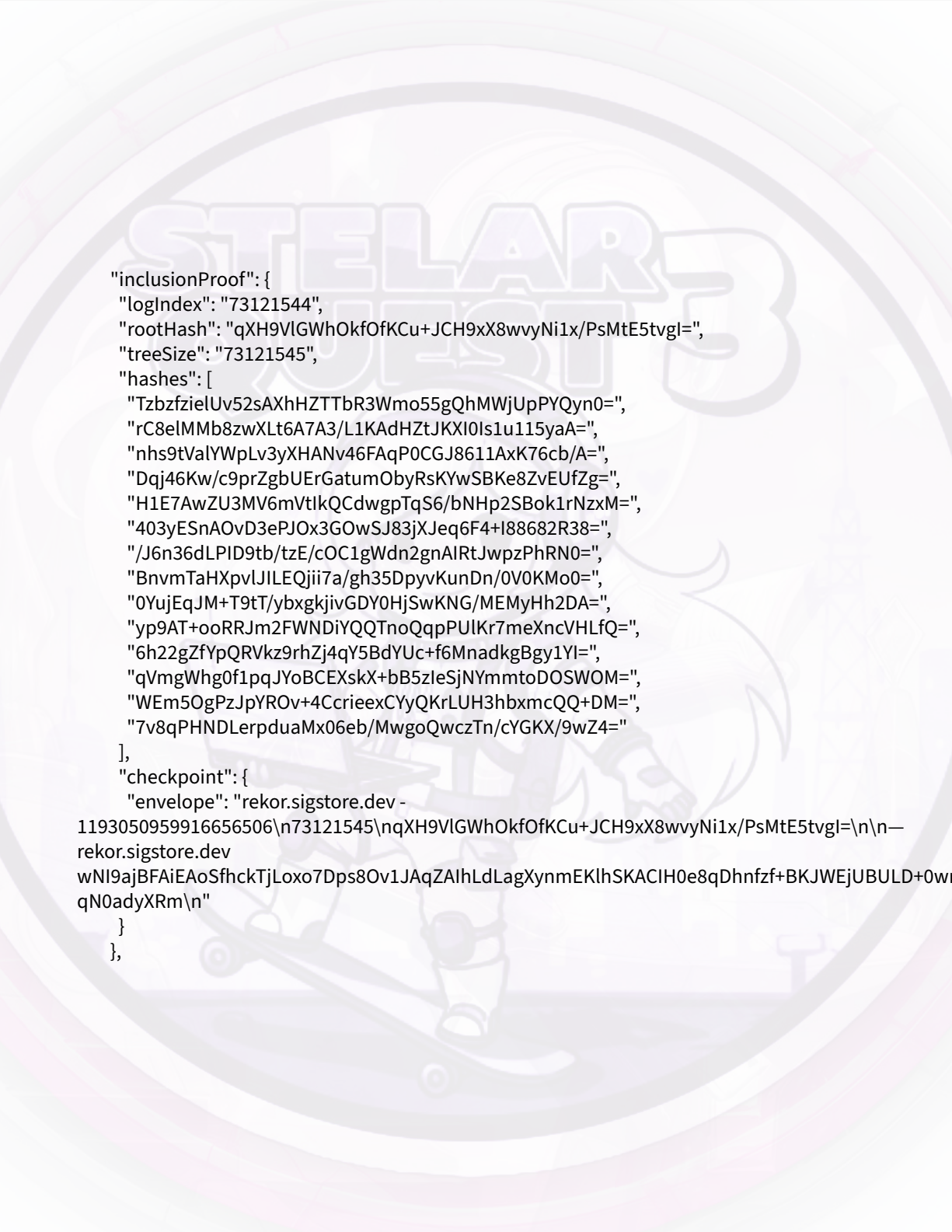
Unset

```
stellar keys add <NAME> stellar keys add  
<NAME> --public-key <PUBKEY>
```

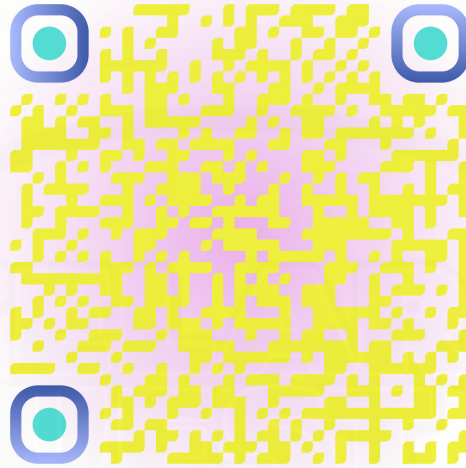
- Generate new identity:

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```
stellar keys generate <NAME> --network testnet --fund
```


The background of the page features a large, faint watermark of the 'Stellar Quest 3' logo. The logo consists of the words 'STELLAR' and 'QUEST' in a stylized, blocky font, with a large '3' to the right. Below the text is a circular emblem containing a character on a skateboard, with a star above the character's head. The entire watermark is rendered in a light purple/pink color.

```
"inclusionProof": {
  "logIndex": "73121544",
  "rootHash": "qXH9VIGWhOkfOfKCu+JCH9xX8wvyNi1x/PsMtE5tvgl=",
  "treeSize": "73121545",
  "hashes": [
    "TzbzfzielUv52sAXhHZTTbR3Wmo55gQhMWjUpPYQyn0=",
    "rC8elMMb8zwXLt6A7A3/L1KAdHZtJKXI0Is1u115yaA=",
    "nhs9tValYWpLv3yXHANv46FAqP0CGJ8611AxK76cb/A=",
    "Dqj46Kw/c9prZgbUErGatumObyRsKYwSBKe8ZvEUfZg=",
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    "403yESnAOvD3ePJOx3GOwSJ83jXJeq6F4+l88682R38=",
    "/J6n36dLPID9tb/tzE/cOC1gWdn2gnAIRtJwpzPhRN0=",
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    "yp9AT+ooRRJm2FWNDiYQQTnoQqpPULKr7meXncVHLfQ=",
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    "WEm5OgPzJpYROv+4CcreeexCYyQKrLUH3hbxmcQQ+DM=",
    "7v8qPHNDLerpduaMx06eb/MwgoQwczTn/cYGKX/9wZ4="
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  "checkpoint": {
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rekor.sigstore.dev
wNI9ajBFAiEAoSfhckTjLoxo7Dps8Ov1JAqZAIhLdLagXynmEKlhSKACIH0e8qDhnfzf+BKJWEjUBULD+0wrpObG/L7
qN0adyXRm\n"
  }
},
```

```
"certificate": {  
  "rawBytes":
```

```
"MIIHKTCBq+gAwIBAgIUAn5Pg3yCuD7/xrA9N7STH2ytoLowCgYIKoZlZj0EAwMwNzEVMBMGA1UEChMMc2lnc3Rvc  
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W3CHI5qSE0H5fn37a4sbFE+aW4LbxtOhzBCw6tQ=="
```

```
}
```