

STELLAR CLUB

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

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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`
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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

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

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

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

```
Unset
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 `--`.

```
Unset
# 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
--list	List installed plugins
--no-cache	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.

```
Unset
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.

```
Unset
# 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 ≈ 30 days (max extension).

stellar events

Streams contract events from the network.

Unset

```
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:

Unset

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

stellar network

Configure connections to Stellar networks.

```
Unset
stellar network add testnet \
--rpc-url https://soroban-testnet.stellar.org \
--network-passphrase "Test SDF Network ; September 2015"

stellar network ls -l
```

Additional Commands (Summarized):

- **Containers** (`stellar container`): Manage local Docker Stellar networks.
- **Transactions** (`stellar tx`): Create, sign, simulate, send classic Stellar transactions.
- **XDR Manipulation** (`stellar xdr`): Encode/decode Stellar XDR data.
- **CLI Cache** (`stellar cache`): Manage local CLI cache.
- **Snapshot management** (`stellar snapshot`): Download ledger states.
- **Completion Scripts** (`stellar completion`): Generate shell completion scripts.
- **Version and Environment** (`stellar version`, `stellar env`): Display CLI version/configured environment.

Further Examples & Details

Please view the official Stellar CLI documentation for further detailed command usages: [CLI Documentation](#).