

# Iroha CLI 2019

Priority	MUST
Type of change request	FEATURE
Epic link	<a href="https://jira.hyperledger.org/browse/IR-567">https://jira.hyperledger.org/browse/IR-567</a>
Status	DRAFT
Target release	

## What happened to existing iroha-cli?

The existing CLI tool for Iroha is built on C++ and uses legacy primitives. It was not updated for a long time and it is considered relatively hard to maintain. It was decided to discontinue support of the existing CLI and archive its source code.

## What's next?

The new CLI is going to be developed to substitute the outdated one.  
The key features of the new CLI are:

- An ability to operate with multi-signature transactions (MST)
- An ability of fine-tuning of transactions/queries content (e.g. specifying of creation timestamp)
- All the recently added commands, queries and permissions to Iroha have to be supported in CLI (in general, the CLI has to support everything that the latest Iroha can do)
- Improved interactive mode experience
- A way for genesis blocks composing
- Everything that was broken has to work 🙄 (saving and loading transactions or queries to a file / from a file, etc)
- ~~Command line parameters support (it has to be possible to do actions not exclusively in an interactive mode but using sole command line parameters too)\*~~

Besides the items listed above, the new CLI is going to be written in Python 3 and uploaded to PyPi repository. Such an approach gives us a benefit of ease of use and there will be no more need to compile and, in the worst case, the need to set up an environment to build a C++ app with potential dependency hell resolution pleasure.

\* - the last item is considered as the last priority feature due to quite developed state of Iroha client libraries (Java, Python, Swift, JS)?

## Functional details

If possible, the new CLI has to use all the benefits of protobuf reflection opportunities. For example, whenever it possible CLI code should not be necessary updated when a new Iroha proto scheme is released (it should be enough just to specify the path to updated proto files).