

Smart Contracts Working Group



Smart Contract
Working Group

Group Status: Regular meetings have been postponed until autumn. We remain active through our mail list and rocket chat

Github repository: <https://github.com/hyperledger/smart-contracts-wg>

(please send email to group's chair sterzi@iti.gr for being added or make a pull request by following this link)

D Smart contracts provide automation in blockchain solutions. They are immutable, decentralized and deterministic, which make them ideal to remove third-parties and let peer-to-peer interactions. Once agreed between the parties and deployed on a distributed ledger, their activities and outcomes can be verified, so they can be trusted by all stakeholders. Everybody involved in DLTs are interested in smart contracts and the benefits they bring, but are also worried because there are many aspects about smart contracts they don't understand including legal and ethical insecurities. The main goal of this workgroup will be to give an academic perspective to this research topic and in parallel make clear to users, developers, researchers, businessmen, decision makers and others interested in smart contracts practical ways to utilize them on the different DLTs that are under the Hyperledger umbrella and explore all potentials from deploying them in everyday software solution scenarios.

Charter

Please see [Charter](#) for the full text of the charter..

Scope

The scope is to define concepts regarding smart contracts and to produce material to describe the various aspects and meanings, trying to come up to standards or good practices. The audience for smart contracts is large and spans from researchers, developers, businessmen, decision makers, policy makers, law makers, software users, citizens to governments, banks, financial institutions, insurance providers, etc

Two main research topics and separation of interests are:

1. **Technology oriented**
 - a. Models of and mechanism for computation
 - b. Formal guarantees on outputs of smart contracts
 - c. Smart contract packaging, code reuse, and dependency auditing
 - d. Generation of smart contracts from existing artifacts (natural language, business process, state machines, non smart-contract code)
 - e. Data structures and state
 - f. Privacy
 - g. Tooling and compilers for existing virtual machines
 - h. Design Patterns for Smart Contracts
 - i. Upgradeability of smart contracts
2. **Law oriented**
 - a. Smart contracts as representatives of obligations and fulfillment
 - b. Smart contracts law enforcement cascading actions

Please see [Extended Scope](#) for an extended version of Technology and Law topics.

Meetings

All Hyperledger meetings are run covered by the following [Antitrust Policy](#) and [All are Welcome in the Hyperledger Community](#)

How to Get Involved

Please see [Work Products](#) and Links to Ongoing Work.

Please visit the chat channel <https://chat.hyperledger.org/channel/smart-contracts-wg>.

Contact WG chair [Sofia Terzi](#)

TSC Working Group Updates

[2019 Q2 Smart Contracts Working Group](#)

[2019 Q3 Smart Contracts WG](#)

[2019 Q4 Smart Contracts WG](#)

[New TSC Working Group Update](#)

Communication Channels

These are the mechanisms that this working group uses to communicate.

Mailing List

<https://lists.hyperledger.org/g/smart-contracts-wg>

smart-contracts-wg@lists.hyperledger.org

- [Subscribe](#)
- [Archives](#)

Chat Channel

[#smart-contracts-wg](#)

Teleconference bi-weekly on **Wednesday 3 PM GMT** time. See the [Calendar of Public Meetings](#) for the next meeting and dial in details.



Join from PC, Mac, Linux, iOS or Android: <https://zoom.us/my/hyperledger.community.3>

Meeting Agendas

Please see [Meeting Agendas](#)

Meeting Notes

Please see [Meeting Notes](#)

Links to Ongoing Work

Work Products

Links to External Resources

Please see [Links to External Resources](#)

Announcements

Recent space activity

[Sofia Terzi](#)

[Smart Contracts Working Group](#) updated May 22, 2020
• [view change](#)

[Kelly Cooper](#)

[Whitepaper - Interoperability Supported by Smart Contracts in Hyperledger Framework](#) updated Apr 25, 2020 • [view change](#)



[Charlie Wolfsandle](#)

[BPMN - Bicycle Use Case](#) updated Apr 23, 2020 • [view change](#)

[Kelly Cooper](#)

[BPMN - Bicycle Use Case](#) created Apr 22, 2020

[Smart Contracts Annotated Bibliography](#) updated Apr 22, 2020 • [view change](#)

Links to Completed Work

[Smart Contracts Taxonomy Categories Ver 1.0](#)

Space contributors

- [Sofia Terzi](#) (51 days ago)
- [Kelly Cooper](#) (78 days ago)
- [Charlie Wolfsandle](#) (80 days ago)
- [Candace Dodson](#) (97 days ago)
- [Jeff Welch](#) (98 days ago)
- ...