

Smart Contracts Working Group



Smart Contract Working Group

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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](#).

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

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](#)

[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](#)

Please see [Meeting Agendas](#)

Meeting Notes

Please see [Meeting Notes](#)

[Links to Ongoing Work](#)

[Work Products](#)

[Links to items for REVIEW](#)

[Blockchain 3.0 Smart Contracts in e-Government 3.0 Applications \[Review\]](#)

[Taxonomy \[REVIEW\]](#)

Links to External Resources

Please see [Links to External Resources](#)

Active Members

Name	Company
Sofia Terzi	CERTH-ITI
Silas Davis	Monax
Sean Young	Monax
Dan Selman	Accord
Vipin Bharathan	dlt.nyc
Mohan Venkataraman	Chainyard
Srinivasan (Murali) Muralidharan	State Street
Sumabala Nair	IBM
John Carpenter	Global Blockchain Summit
Bobbi Muscara	Ledger Academy
Mic Bowman	Intel
Shawn Amundson	Bitwise.io
Silvan Villiger	Digital Asset
Paul Imseih	Daimon Consulting
Marco Carvalho	RSM US, LLP
David McLaughlin	RSM US, LLP
Saptarshi Choudhury	Paramount Software Solutions
Kelly Cooper	Independent

Links to Completed Work

[Smart Contracts Taxonomy Categories Ver 1.0](#)

Recent space activity

[Kelly Cooper](#)

[Taxonomy and Supply Chain in Practice \(draft blog post\)](#) updated 47 minutes ago • [view change](#)

[Smart Contracts Annotated Bibliography](#) updated yesterday at 10:37 PM • [view change](#)



[Patrick Erichsen](#)

[Smart Contracts Annotated Bibliography](#) updated Nov 13, 2019 • [view change](#)

[Sofia Terzi](#)

Space contributors

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- [Saptarshi Choudhury](#) (66 days ago)
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[Contact Information](#) updated Nov 11, 2019 • [view change](#)

Kelly Cooper

[2019-11-06 Meeting Agenda and Notes](#) updated Nov 06, 2019 • [view change](#)