Lisk RBAC

A *standalone* Lisk Module providing flexible *role-based access controls* to Lisk blockchain applications.



HackOnLisk Submission Scope.

Primary

- The standalone <u>Lisk-RBAC Module</u> providing as an interface 7 transactions, 10 actions, 6 commands, 3 reducers.
- An HTTP Rest API plugin with RBAC specific 8 endpoints, including a spec file in OpenAPI 3.0 format.
- The module includes a demo blockchain application for testing purposes and to serve as a blueprint for integration in other projects.

Secondary (HackOnLisk ruleset requires a frontend to be included in the submission package)

 A separate <u>demo blockchain application</u> which serves a user frontend to more conveniently configure the Lisk RBAC module.

Motivation #1.

By providing a solid implementation of a Lisk Module taking care of **authorizing** all operations which are being performed on a blockchain ...

... this module directly addresses a common challenge that any IT project - blockchain-related ot not - faces already early on.

... upcoming blockchain development teams don't need to spend 'brain time' on the complex domain problem of *authorization*.

... this project shows how 'the authorization challenge' itself might even directly benefit from blockchain technology.



Motivation #2.

To make the Lisk ecosystem known to a wider audience, the newly released Lisk SDK needs to see accelerated adoption.

By providing use-case agnostic application building blocks ...

... the barrier of entry is lowered for new development teams.

... development speed of blockchain projects accelerates.

... the Lisk SDK becomes more interesting for *businesses*, which are the key drivers behind any technology adoption.



The Team behind Lisk RBAC.



How does Lisk RBAC actually work?



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Main Feature: a fast and flexible "HasPermission" api to answer the 'question':

The client asks:

"Does **User A** with {Lisk Account} have **Permission** to perform **Operation B** on **Resource C**?"

The Module translates this into:



"Does a **Policy** exist which grants any of the **Roles** assigned to **User A** with {Lisk Account} **Permission** to perform **Operation B** on **Resource C**"



true *or* false



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