

Hydro ruwan sama  
Tabbataccen Jama'a a kan Blockchain

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# Gabatarwar

HYDRO: Abubuwan da suka shafi kimiyya - Daga Girkanci na zamanin dā ūḏpo- (hydro-), daga ωḏωp (húdōr, "ruwa")

Hydro yana samar da sababbin kamfanoni masu zaman kansu don haɗa kai da kuma kwarewa da fasaha na kwakwalwar jama'a don bunkasa aikace-aikace da kuma tsare sirri, sarrafawa ta sirri, ma'amaloli, da basirar karya ne.

A cikin wannan takarda, za a yi wani shari'ar ga masu zaman kansu, irin su APIs, don amfani da rubutun jama'a na Hydro don inganta tsaro ta hanyar tabbatarwa ta jama'a.

Wannan fasahar da ake kira "Ruwan sama" - wani ma'amala da aka yi ta hanyar kwangila mai kyau wanda ke tabbatar da damar samun damar jama'a a fili, kuma zai iya daidaita hanyoyin ingantaccen kwarewar sirri. An yi amfani da fasaha don samar da karin tsaro ga bayananku kudi da ke da matukar damuwa daga sacewa da kuma fashewa.

An fara aiwatar da samfurin Hydrogen Ruwan sama akan Hydrogen API dandamali . Wannan tsarin na API yana samuwa ga kamfanoni da masu ci gaba a duniya don samfurin, ginawa, gwadawa, da kuma aiwatar da samfurori na fasahar fasaha da samfurori.

Za a iya samar da Hydro Ruwan sama ga mahalarta duniyar duniyar don samar da matakan budewa, don ba da damar masu haɓaka su haɗa da Hydro Ruwan sama tare da kowane huta API.



## Blockchain & Ethereum

Ana aiwatar da ruwa a cibiyar sadarwa na Ethereum. Kafin samar da cikakkun bayanai a kan aikin, yana da muhimmanci a fahimci wasu muhimman ra'ayoyi game da blockchain da Ethereum.

Gina kan Ethereum

Mafi yawa kamar yadda apps kamar Snapchat aka gina tare da gudu da wasu kayan aikin miƙa a saman

na samfurin Apple iOS, haka ma za a iya aiwatar da aikace-aikacen blockchain a saman na Ethereum. Snap Inc. bai buƙatar gina iOS ba, yana amfani da shi a matsayin kayan aikin don kaddamar da aikace-aikacen kafofin watsa labarun canzawa.

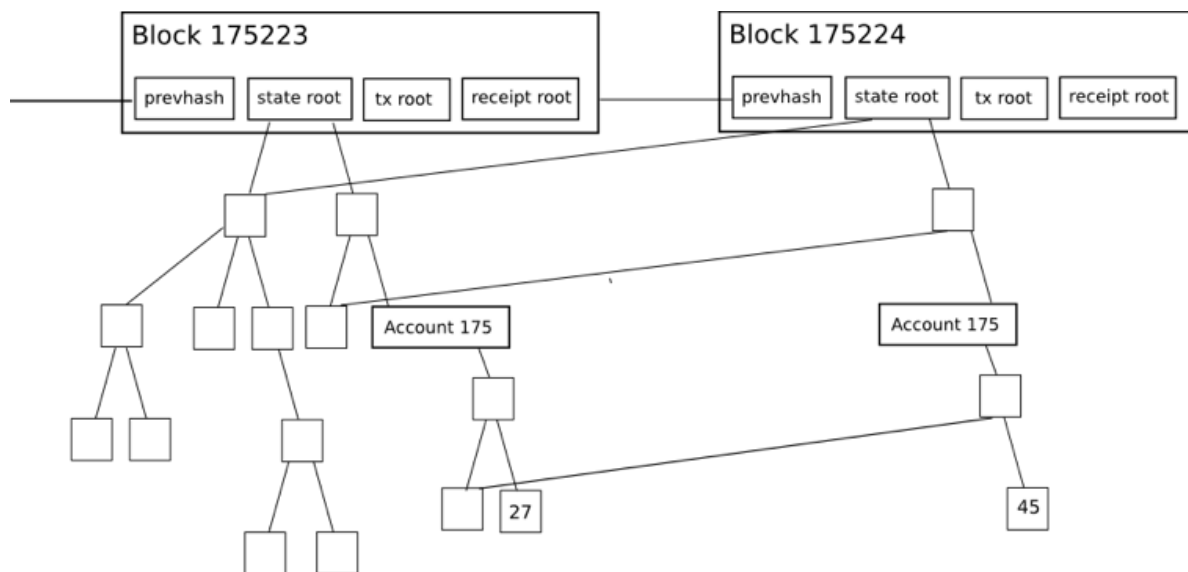
aikin Hydro ne kama. Yana dogara akan dubban masu ci gaba a duniya da suke aiki don yin amfani da fasaha ta hanyar fasahar sauri, da karfi, da kuma mafi inganci. Hydro yana inganta wannan ingantaccen ingantaccen kayan aiki ta hanyar kaddamar da hulƙar da aka yi da samfurori game da fasaha mai tsabta wanda zai iya bayar da amfanoni masu amfani ga aikace-aikace na kudi.

Merkle Bishiyoyi

Ana amfani da itatuwan Merkle a cikin tsarin rarraba don tabbatar da gaskiyar bayanai.

Suna da kyau saboda suna amfani da hashes maimakon fayilolin cikakken. Hashes ne hanyoyi na fayiloli masu rikodin waƙanda suka fi yawa fiye da ainihin fayil kanta.

Kowace mahimmin rubutun a cikin Ethereum ya kunshe uku Merkle Bishiyoyi don Ayyuka



Wannan yana sa sauƙi ga abokin ciniki mai haske don samun amsoshin tabbatarwa ga tambayoyi,

kamar:

- Akwai wannan asusun?
- Menene daidaitaccen halin yanzu?
- An haɗa wannan ma'amala a cikin wani gunki?
- Akwai wani taron da ya faru a wannan adireshin a yau?



## Kyawawan Kasuwanci

Wata mahimman bayani da Ethereum ya ba da kuma sauran hanyoyin sadarwa na blockchain ita ce

na kwangilar basira. Wadannan su ne aiwatar da takaddun shaida na lambar da mahara jam'iyyun za su iya hulfa tare da, yanke abin da ake bukata don kwaƙwalwar masu amana.lambar a

wani kwangila mai tsabta za a iya gani kamar kama da ka'idodi na shari'a a cikin gargajiya kwangilar takarda, amma kuma za ta iya samun karin aiki mai yawa.

Ka'idoji na iya samun dokoki, sharuƙfa, fansa don rashin bin doka, ko iya kickstart sauran mata kai. Lokacin da aka jawo, kwangila sun kashe kamar yadda aka fara ya bayyana a lokacin sanyawa a kan sakin jama'a, samar da ginawa abubuwa na rashin daidaituwa da haɓakawa.

Kamfanin mai basira ya zama kayan aiki mai mahimmanci don ginawa a kan tasirin Ethereum.

Ana amfani da kananan aiki na Layer Layer Layer ta hanyar al'ada kwangila, kamar yadda aka tattauna a baya a wannan takarda.

### Ma'aikatar Ma'aikatar Ethereum

Ma'aikatar Ma'aikata na Ethereum (EVM) ita ce yanayi mai gudu don basira kwangila a kan Ethereum. EVM ta taimaka wajen hana Denial of Service (DoS) hare-haren, tabbatar da shirye-shiryen kasancewa maras tabbas, kuma yana bada damar sadarwa

ba za a iya katsewa ba. Ayyuka akan EVM suna da farashin haɗi da su, da ake kira gas, wanda ya dogara ne akan abubuwan da ake bukata. Kowane Kasuwanci yana da adadin yawan gas da aka ba shi, wanda aka sani da iyakar.

Idan iskar ta cinikin ta kai iyaka, zai karere ci gaba da aiki.



Harsashi jama'a

Harsashi talla na Kamfanoni Masu zaman kansu

Tsarin da ke samar da dandalin sha'anin kudi, shafukan intanet, da kuma aikace-aikace sau da yawa ana iya bayyana su matsayin matsakaici na bayanan bayanai - suna aikawa, dawo, adana,

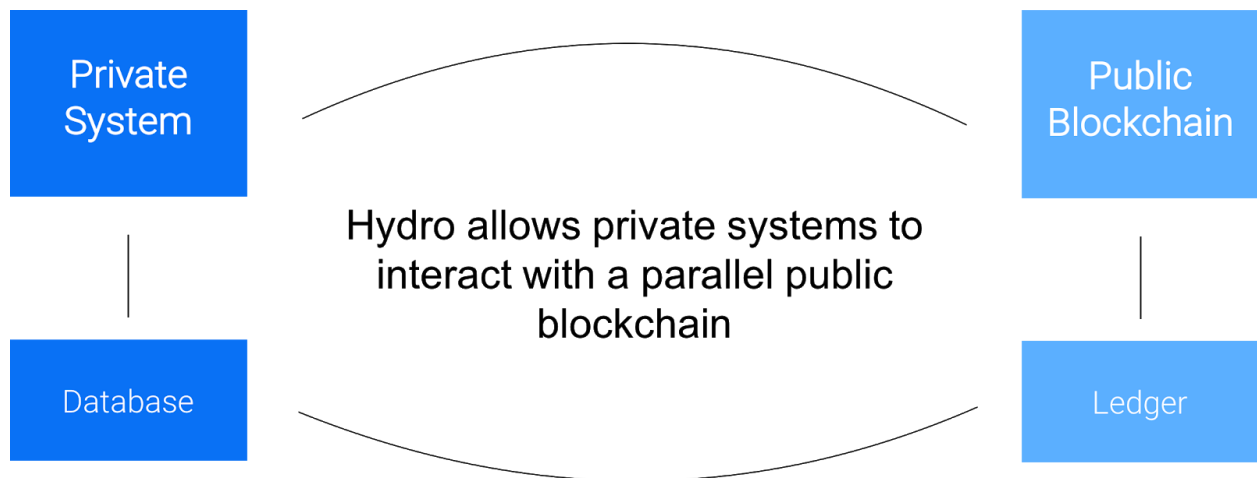
sabuntawa, da kuma aiwatar da bayanai ga mahalli da suke dubawa tare da. Saboda yanayin wannan bayanai, da kuma ayyukan kudi fiye da gaba ɗaya, waɗannan tsarin sau da yawa gidaje cikin hadaddun aiki a cikin hanyar sirri da kuma rarraba. Amincewa kan ɗakin sirri, ɗayan kuma, yana buɗe ƙofar don tsaro mai yawa, nuna gaskiya, da kuma dacewa da samuwar ta hanyar kunshe da ƙarfin waje wanda ya wuce yadda za a iya shiga tsarin na ciki.

Irin wannan shine batun tare da samfurin API na Hydrogen. Hanyoyin haɗi na Hydro don shiga cikin

Abubuwan da aka ambata a baya ta hanyar barin masu amfani da Hydrogen suyi amfani da shi tare da wani blockchain

a cikiAyyuka na tushen layi na jama'a na iya faruwa kafin, lokacin, ko bayan masu zaman kansu aiki. Hanyoyin da ke tsakanin masu zaman kansu da jama'a za su iya aiki ingantaccen, hatimi, rikodin, ko inganta tsarin tafiyarwa a cikin tsarin halitta.

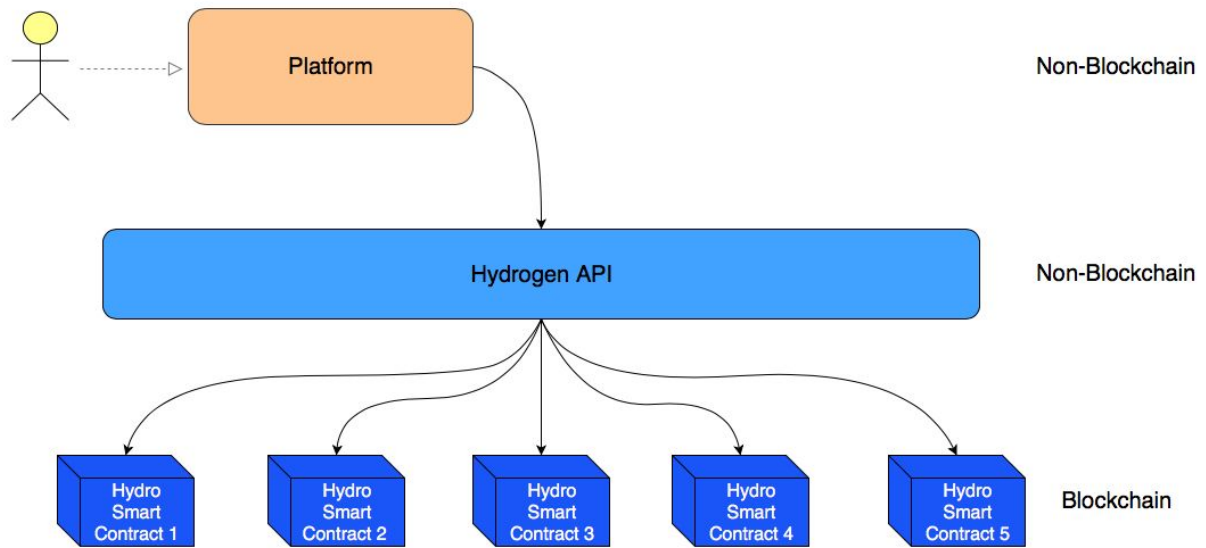
Harshen wannan samfurin yana samar da mata kai mafi ƙarfi ta hanyar shiga cikin amfani da fasaha na blockchain musamman inda zai iya samar da mafi tasiri mai kyau. Duk da yake wannan matasan tsarin bazai dace da kowa ba dandamali, Hydro na mayar da hankali ga samar da ma'auni ga lamarin da yake.



Tsarin gini don tallafi

Hydro ya bambanta da manufofi masu tarin yawa, don yana iya zama da kansa da kuma Layer a kusa da sababbin tsarin zamani ko ba tare da bukata ba sauyawa tsarin. Maimakon maye gurbin, Hydro yana nufin ƙarawa.Dandamali da.





Cibiyoyin da ke shiga cikin API na Hydrogen zasu iya samun damar shiga ta atomatik blockchain. Kididdigar dandamali na ayyuka na kudi wanda zai iya ɗaukar Hydrogen mai zurfi ne.

Wadannan dandamali na iya rinjayar kusan kowane kwarewa, gida duk wasu sabis na kayan gida, yin duk wani aiki na sirri, da kuma sanyawa a kowane yanayi. Hakan ya sa yanayin Hydrogen ya inganta shi kuma yana da

yin aiki tare da Hydro, aiki a matsayin direba na tallafi.



Ruwan sama.

Gina a saman wannan littattafan jama'a na Hydro haske tushen kirar blockchain sabis, da ake kira "Ruwan sama." Wannan yana da banbanci, wanda ba zai yiwu ba, a duniya Ajiyayyen na tsaro wanda ya tabbatar da bukatar dama yana zuwa daga wani tushen izini.

Saitunan sirri na sirri na sirri irin su OAuth 2.0 yana ba da mataakai daban-daban da karfi da kuma amfani ga irin yanayin da ake amfani da su. Akwai kadan bukatar yin gasa da ko koƙarin maye gurbin waƙannan ladabi - Hydro yana ba da hanya don bunkasa su ta hanyar haɗawa da na'urorin injiniya na blockchain a matsayin

wani ɓangare na hanyar tabbatarwa. Wannan zai iya ƙara darajar mai amfani tsaro don taimakawa wajen kawar da tsarin fashewa da kuma daidaitawar bayanai. Kafin mu bincika bangarori na fasaha na Ruwan sama, bari mu fara kallo matsala yana kokarin warwarewa.

Jihar Tsaron Tsaro

Yunƙurin shekarun shekarun ya haifar da haɓakawa a cikin yanayin haɗari, kuma wannan yana da mahimmanci ga ayyukan kudi. Siffofin kudi suna sau da yawa hanyoyi zuwa manyan kamfanoni na masu zaman kansu da mahimmanci irin su gwamnati Lambobin ID, bayanan asusun ajiyar kuɗi, da kuma tarihin ma'amala. Saboda yadda Muhimmancin muhimmancin wannan bayanan haske, samun damar da ba a amince da su ba ne

sakamakon sakamakon masifa.

Kamfanin bincike na masana'antu ya wallafa rahoto da aka gano layin sata Ana sayar da Abubuwan Bayani na Bayani na Gida (PII) a kan zurfi Web don kadan kamar \$ 1, bincikar takardu kamar fasfoci suna samuwa a matsayin kaƙan kamar \$ 10, da kuma takardun shaidar shiga shiga don ƙananan \$ 200, yin rarraba na sace bayanai ƙara ƙaddara kuma ba a iya ganewa ba.

Abin takaici, tsarin kudi na yanzu ba shi da wata hanya mara kyau rikodin lokacin da ya zo don hana, bincikar ganowa, da kuma sadarwa bayanai tare da masu ruwa da tsaki.

➤ Kamar yadda binciken da Javelin Strategy & Research ya yi kwanan nan - A 2017 Binciken Shafin Farko - An sace dala biliyan 16 daga U.S. miliyan 15.4. masu amfani a shekara ta 2016 saboda rashin lalacewar tsarin kudi don kare Bayani na Bayani na Gaskiya (PII).

➤ A watan Afrilu 2017, Symantec ya wallafa rahoton Sashin Intanet na Tsaro na Intanet, wanda aka kiyasta kimanin biliyan 1.1 na PII an daidaita shi a wasu Abubuwan da suka dace a cikin shekara ta 2016.

Rahotanni na 2016 na Ƙarin bayanai sauri...Tsaro na Tsaro, ya samo cewa irin wannan fashewar da aka yi, ya kai 4,149, a harkokin kasuwancin duniya, a 2016, yayinda yake bayyana fiye da biliyan 4.2.

➤ Rahoto wasa da barazana na Thales na shekara ta 2017 - Ayyukan Shirye-shiryen Bincike, a

bincikar masu sana'a na duniya a cikin sana'a, sun gano cewa





49% na kungiyoyin raya tattalin arziki sun sha wahala kan rashin tsaro  
A baya, kashi 78% suna ciyarwa don kare kansu, amma 73% suna  
ƙaddamar da sababbin abubuwan da suka danganci AI, IoT, da kuma fasahar hasken rana  
kafin shirya matakan tsaro.

Equifax tseren

A ranar 29 ga watan Yuli na shekarar 2017, Equifax, wani kamfanin dillancin labaran Amurka na  
shekara 118, ya kasance. Miliyoyin masu amfani da wutar lantarki miliyan 143 sun sami PII, ciki  
har da zaman lafiyar jama'a.

Lambobi. Kasuwanci 209,000 suna da katin katunan katin bashi.

Mene ne dalilin wannan rushewa?

Ana farawa tare da ɗaya daga cikin fasaha na baya wanda Equifax yayi amfani da su. Hoto ne  
tushen tushen tsarin don bunkasa aikace-aikacen yanar gizo a cikin Java  
harshen shirin, wanda aka gina ta Apache Software na Apache. CVE-2017-9805 haske  
wani sauƙi a Apache Struts dangane da amfani da Struts REST plugin da  
mai kula da XStream don ɗaukar nauyin da aka saka na XML. Idan aka yi amfani da shi, zai ba  
da damar nesa

mai amfani da ba a tabbatar da shi ba don gudu lambar mugunta akan uwar garken  
aikace-aikace

ko dai ka ɗauki na'ura ko kaddamar da wasu hare-hare daga gare ta. Wannan shi ne  
An shafe Apache watanni biyu kafin raunin Equifax.

Apache yana dauke da lalata a cikin REST Plugin XStream wanda aka haifar dashi  
wannan shirin ba tare da damuwar shigar da mai amfani da aka ba da mai amfani ba a cikin  
buƙatun XML. Kara

musamman, matsala ta auku ne a cikin hanyar XStreamHandler toObject (), wanda  
ba ya sanya wani ƙuntatawa akan darajar mai shiga lokacin amfani da XStream  
deserialization a cikin wani abu, sakamakon shi sabani code kisa  
hadari.

Ko da ma an sanya wannan REST plugin ɗin ta hanyar sulhu, ya kamata ya yi daidai? akwai  
wani

hanyar yin amfani da fasaha na blockchain don tabbatar da bayanin kudi na waɗannan  
Miliyoyin mutane miliyan 143 yayin da suke dogara ga masu REST API da tushen Java  
tsarin?

Kara Layer Blockchain

Ya bayyana a fili cewa ana iya inganta daidaitattun ƙididdigar kudi.

Bari mu bincika yadda za a sami ƙarin tsaro na tsaro ta hanyar Hydro.

Tsarin yarjejeniya na cibiyar sadarwa na Ethereum ya tabbatar  
amintacciyar ciniki saboda mahalarta sun hada da ma'amala  
wanda aka sanya hannu daidai. Wannan gaskiyar tana haifar da daidaituwa da kuma  
amma, mafi mahimmanci, yana samar da wani  
samun izini mara izini ga ƙofar da ke kula da bayanai mai mahimmanci.

Tare da Hydro, ana iya ƙaddamar da ingantattun bayanai a kan ayyukan sarrafawa  
da blockchain. API, alal misali, zai iya zaɓar don inganta masu ci gaba da kuma



aikace-aikace ta hanyar bukatar su su fara siffanta ma'amaloli, tare da musamman bayanan bayanan bayanai, tsakanin adiresoshin musamman akan blockchain, a matsayin

daidai cewa kickstarts wani daidaitattun ka'idodin yarjejeniya.

Hydro Ruwan sama

Rain yana dauke da fakitoci na ruwa mai ragu daga 0.0001 zuwa 0.005 centimeters a diamita. A cikin ruwan sama mai yawa, akwai biliyoyin kwakwalwa, kowane nau'i na kira, kima, da kuma siffar. Saboda wannan, ba wanda zai iya ba Tabbataccen hango ko hasashen ainihin ruwan sama. Hakazalika, kowane Hydro Tantance kalmar sirri na musamman ne kuma kusan ba zai iya yiwuwa ba ba zato ba tsammani - shi ya sa muke kira su Ruwan sama.

Shirye-shiryen sha'anin kuɗi na yau da kullum suna amfani da tabbaci na ajiya Tabbatar da asusun abokan ciniki. Ma'anar abu mai sauƙi ce: dandamali ya sa kananan asusun ajiyar kuɗi a cikin asusun ajiyar kuɗi na mai amfani. Domin tabbatar da mai amfani yana da asusun asusun, shi ko ita dole ne yaɗa da ajiya yawan kuɗi zuwa ga dandamali, wanda aka tabbatar da shi. Hanyar hanyar mai amfani iya sanin kima da ake amfani da shi (banda yin tsammani) ita ce ta hanyar isa ga asusun banki a cikin tambaya.

Tabbatar da aka kera Ruwan sama tare da Hydro haske. Maimakon aika da adadin mai amfani da kuma ci gaba da komawa baya, muna kayyade ma'amala da mai amfani dole ne ya aiwatar da shi daga walat da aka sani. Hanyar kawai mai amfani zai iya gudanar da aiki

ma'amala shine ta hanyar isa ga walat a cikin tambaya.

Ta amfani da Ruwan sama, duka tsarin da mai shiga yana iya duba izini gwagwarmaya a kan wani rubutun jama'a mai ban mamaki. Wannan tallace-tallace na tushen blockchain ne

wanda aka lalata daga tsarin aiki na ainihi, yana faruwa a cibiyar sadarwa, kuma ya dogara da mallakin makullin masu zaman kansu. Saboda haka, yana hidima a matsayin da amfani.

Binciken Dubi

Akwai kungiyoyi hudu da ke cikin tsarin aikin ingantarwa na Hydro:

1. Wurin shiga - Kungiyar ta koƙarin samun dama ga tsarin. A cikin yanayin Hydrogen, mai samar da kayan aiki shi ne ma'aikata na kuɗi ko aikace-aikacen amfani da Abubuwan Hanyoyi na Hydrogen don haɓakaccen kayan fasahar zamani.
2. Tsarin - Tsarin ko koƙar da ake samun dama ta damar shiga Ga Hydrogen, tsarin haske Hydrogen API kanta.
3. Hydro - Aikin da ake amfani da shi ta hanyar System don sadarwa da dubawa tare da blockchain.
4. Blockchain - Rabalar jama'a ta rarraba cewa HYDRO ma'amaloli kuma ya kunsu kamfanonin Hydro mai kaifin baki kwangila, ta hanyar da bayani za a iya turawa, ja, ko kuma ana sarrafa shi a kan haka.



Kowace Ruwan sama, a dukansa, kayyadaddun sigogi biyar ne:

1. Mai aikawa - Adireshin da ya kamata ya fara ma'amala.
  2. Mai karɓa - Gudun ma'amala. Wannan ya dace da kira a hanya a cikin yarjejeniya mai tsabta ta Hydro.
  3. ID - Wani mai ganowa wanda ke hade da tsarin.
  4. Yawan - Lambaccen HYDRO don aikawa.
  5. Kalubalanta - Tsarin alphanumeric da aka yi ta wata hanya.
- Da ke kasa an kwatanta tsarin tsarin tarin gaskiyar, wanda zai iya zama kullum  
Kidaya cikin mata kai uku:

1. Gyarawa
2. Ruwan sama
3. Amincewa

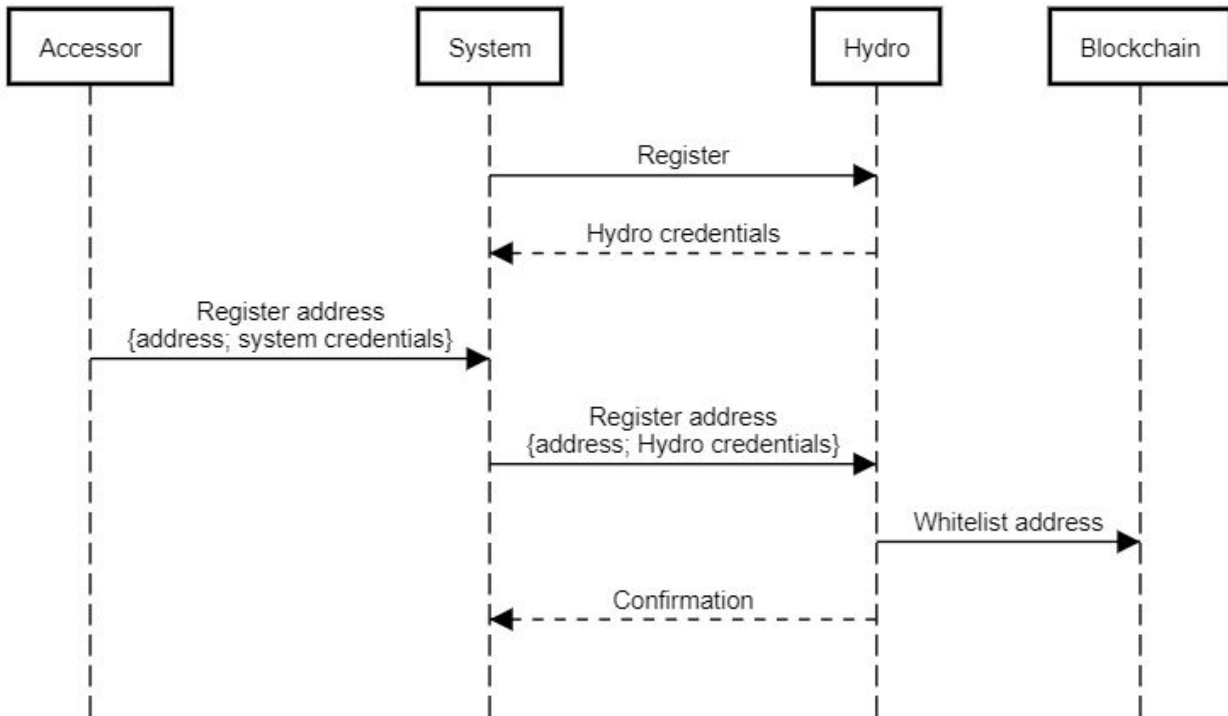
Inganci farawa da tsarin (misali Hydrogen) yin rijistar amfani da Hydro da kuma samun takardun shaidarka, don taimakawa tsarin don sadarwa tare da blockchain ta hanyar Hydro module. Sakamakon Siffar ta hanyar mai amfani (misali a ku] a] en ku] a] e, wanda ke kula da adireshin jama'a, sa'an nan kuma ya wuce adireshin rajista zuwa Hydro. Wannan adireshin an rubuta shi a kan blockchain zuwa wani adana a cikin wani Hydro mai kaifin baki kwangila. Ana karɓar tsarin Tabbar da cewa an adreshin adireshin, wanda za'a iya tabbar da haka wani taron da aka iya gani a fili. Dole ne buƙatar tsarin tsarin kawai faruwa sau ɗaya, yayin da Ba za a iya samun buƙatar mai amfani ba kawai sau ɗaya kawai ta hanyar.

Bayan shi ne cikakke, da zuciyar na ingantaccen kwarewar Hydro za a fara. The Accessor, wanda dole ne aiwatar da wani Ruwan sama ma'amala, tsalle wannan tsari ta hanyar neman ruwan sama bayanai daga System, da kuma System hanyar dabarar zuwa Hydro. Hydro ya haifar da sabon ruwan sama, ya adana wasu cikakkun bayanai ba tare da gangan a kan blockchain ba, kuma ya dawo da cikakkun bayanai ga

Mai samun dama ta hanyar System



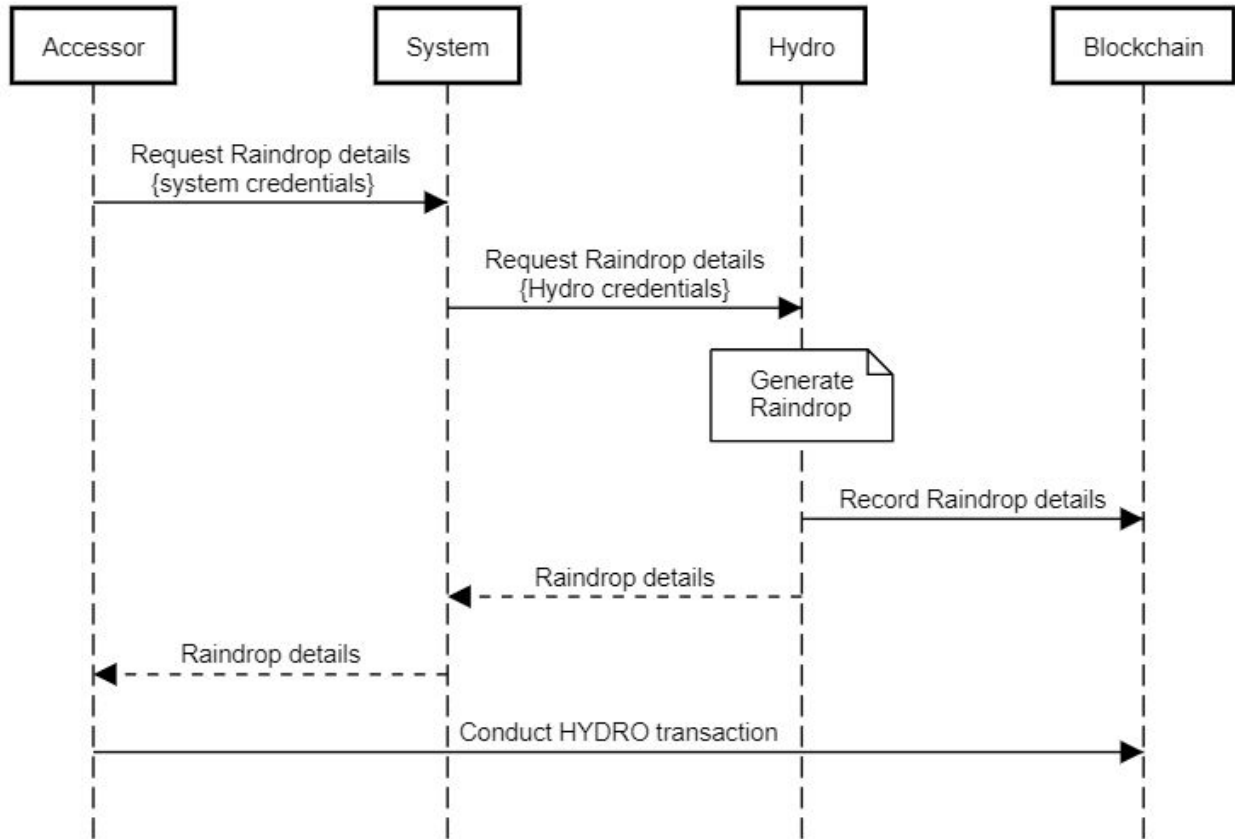
## Authentication with Hydro: Initialization



Mai shiga , sanye take da duk bayanin da ake bukata, yana gudanar da ma'amala daga adireshin da aka rajista zuwa hanya a cikin Hydro kulla yarjejeniya. Idan adireshin ba ya da kyau, an ki aikin - in ba haka ba, an rubuta shi a cikin kwangilar basira. Yana da muhimmanci a lura cewa wannan ma'amala ya kamata ya faru a waje da System, kai tsaye daga shiga zuwa Blockchain, saboda dole ne a sanya hannu tare da maƙallin keɓaɓɓen mai amfani (wanda kawai shiga ya kamata ya samu).



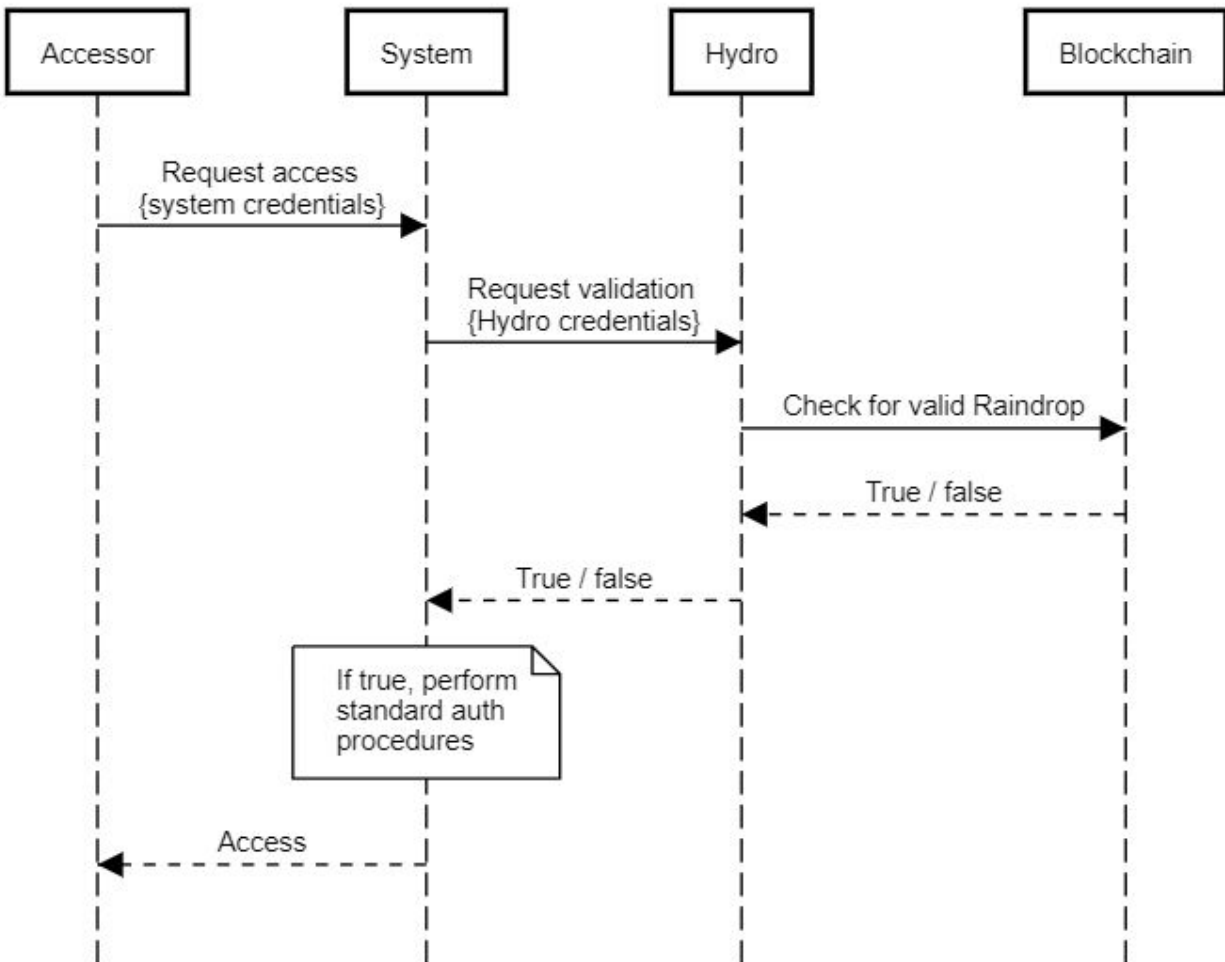
## Authentication with Hydro: Raindrop



Mataki na karshe na tsari haske Jagorar. A cikin wannan mataki, mai amfani yana bukatar izinin shiga ta hanyar hanyar da aka kafa ta System. Kafin aiwatar da duk wani ka'idodin tabbatar da daidaitattun ka'idodin, tsarin na tambayar Hydro ko ko da mai shiga ya yi tasiri na ruwan sama mai aiki. Sadarwar haɗi tare da yarjejeniyar basira, bincike don inganci, kuma ya amsa da gaskiyar / karya. Tsarin yana iya yanke shawarar yadda ya kamata ya ci gaba bisa ga wannan zabin - idan karya ne, tsarin zai iya kyamar samun dama, kuma idan gaskiya ne, tsarin zai iya ba da dama.



## Authentication with Hydro: Validation



- Fasaha 2 - kai hari ya boye maɓalli na sirri (s) zuwa ga wajan damar shiga
  - Yunkurin kai hare-hare don gudanar da ma'aruwan sama malar Hydro daga adireshin rijista, ba tare da an buƙata bayanin ba
  - Mai kuntatawa ba zai iya yin ma'amala na blockchain aiki ba

Kai hari kuma bazai iya buƙatar samun dama ga tsarin ba tare da Daidaitaccen takaddun shaida

A bayyane yake cewa kai hari dole ne yayi sata dukansu tushen takardun shaida da da maɓallin keɓaɓɓen asusun mai amfani na damar shiga don samun dama ga tsarin. A cikin wannan

ra'ayi, Hydro ya samu nasarar kara wani ƙarin na ingantattun.



Faɗakar daruwan sama Ga Jama'a

Duk da yake an gina wannan asusun ingantaccen asusu na asali don taimakawa tabbatar da tsarin halittu na API na Hydrogen, ana iya amfani dashi da dama dandamali da kuma tsarin. Domin muna jin cewa wasu zasu iya amfani da su daga wannan takaddun shaida, muna buɗe shi don amfani.

Kamar yadda Hydrogen zai hade shi a matsayin kayyadaddun hanya don samun damar API Tsarin halitta, haka kuma duk wani tsarin zai iya kara shi zuwa hanyoyin da ake gudanarwa da ka'idoji.

Duk wani dandamali - zama API, aikace-aikacen, software na kayan aiki, dandalin wasan kwaikwayo,

da dai sauransu. - zai iya faukar Hydro don kirar manufofin. Rubutun takardun za a samuwa a kan GitHub ga wadanda suke so su hada wannan blockchain Layer a cikin tsarin tabbatarwa ko API REST.

Nazarin Bincike - ruwan sama Tare da OAuth 2.0

Akwai hanyoyi da yawa na masu amfani da raindrop za'a iya amfani dasu kungiyoyin. APIs masu zaman kansu, bayanai, da kuma cibiyoyin sadarwa sun kirkiro tsarin alamu, makullin, aikace-aikace, da ladabi a cikin shekaru goma da suka wuce, a cikin koƙarin tabbatar da bayanai bayanai. Google, alal misali, ya zama ɗaya daga cikin mafi yawan masu samfurin samar da kayayyaki a kasuwa tare da Google Authenticator app. Kamar yadda da aka ambata a baya, akwai kadan don babu dalili don yin gasa da ko maye gurbin wadannan ka'idodin da suka kasance.

A matsayin binciken shari'ar, a nan akwai taƙaitacciyar bayani game da yadda Hydrogen ke amfani da Hydro

Tabbatarwa a matsayin tsari na tsaro a cikin tsarin tsarin API na gaba:

1. Aboki na API na lantarki dole ne su fara samun adireshin IP na daban yanayin whitelisted.
2. Abokan hulɗa dole ne su buƙaci adireshin jama'a na Hydro.
3. Duk kira zuwa API na Hydrogen da kuma canja wurin bayanai an ɓoye shi kuma aikawa ta hanyar yarjejeniyar HTTPS.
4. Abokan hulɗa dole ne su kammala aikin haɗi na Hydro ruwan sama daga Rijistar kamfanin Hydro.
5. Abokan hulɗa dole ne su yi amfani da OAuth 2.0 ingantawa. OAuth (Gidajen Gida) yana da buɗe daidaitattun don alama-tushen ingantattun bayanai da izni. Hydrogen yana goyan bayan "Takardun Kalmar Asusun Mai amfani" da kuma "Abokin ciniki Bayanan shaidar "kyauta, da kowane mai amfani na API dole ne ya samar da takardun shaida don aikace-aikacen gaskat
6. Idan babu wani abu daga cikin abubuwa biyar da ke sama da aka keta, abokin haɗin Hydrogen ne Ya ba da alama ta musamman, don bincika da kuma tabbatar da kowane kira API.
7. Alamar yana da aiki ga sa'o'i 24, bayan haka abokin tarayya ya inganta kansu sake.

Idan an keta wasu daga cikin wadannan mataakai, an kulle mai amfani a API



damar shiga. Mai hacker ba zai iya kewaye wadannan abubuwan tsaro ba ta hanyar yin tunanin bazuwar, saboda akwai dubban abubuwa na musamman. Ma'anar tushen tsaftace ta lantarki muhimmin abu ne na Hydrogen tsaro yarjejeniya. Kungiyar Hydrogen ta karfafa abokan aiki don kafa wallafe-wallafe masu yawa, da kuma adana maƙallan masu zaman kansu a wurare masu amintattun wurare masu yawa da kansa daga wasu takardun shaidar, don haka babu wata aya ɗaya rashin nasara. Tabbatar da takalma da yawa da aka sanyawa takarda ba kawai ba ne sata, amma yanayin jama'a na blockchain kuma yana ba da izinin gaggawa amincewa da kowane sata kamar yadda ya shafi tsaro na API. Kowane mutum na iya duba kwaƙwalwar kwaƙwalwar kwaƙwalwa na Kamfanin Hydro mai kaifin baki kwangila, wanda yana nufin kwanakin dandamali da aka sanya su a cikin kwanakin ƙarshe zasu iya zama abu na baya. API yan bindigar iya yanzu za karya da karin nan take saboda ƙwarewar gano kwaƙwalwar izinin ba da gangan a ainihin lokacin, daga ko'ina a duniya.





Hadarin:

Yawanci kamar kowane fasaha na zamani, irin su farkon kwanakin kafon watsa labarun, imel, da kuma gudana aikace-aikace (wanda ya danganci akan haɗin haɗakarwa), yana da mahimmanci cewa ci gaba da ci gaba da bunkasa ci gaba a cikin Ethereum fassarar gudu da kundin. Za ku iya tunanin YouTube koƙarin kaddamar a 1995? Ko Instagram da aka fara miƙa a kan BlackBerry?

Core Ethereum masu ci gaba irin su Vitalik Buterin da Joseph Poon sun ba da shawara Plasma: Scalable M Smart Contracts haɓaka zuwa Ethereum yarjejeniya:

Plasma wata tsari ne da aka tsara don aiwatar da kisa na kwangilar basira wanda zai iya daidaitawa zuwa gagarumin adadin jihar sabuntawa ta biyu (yiwuwar biliyoyin) yana sa blockchain ya kasance iya wakiltar wani adadi mai yawa na kudi aikace-aikace a dukan duniya. Wadannan kwangila masu basira suna karfafawa ci gaba da aiki ta dace ta hanyar ma'amala na hanyar sadarwa, wanda shine a ƙarshe dogara kan abin da ke faruwa (misali Ethereum) zuwa tilasta yin amfani da karfin kudi.

Sauran, irin su Raiden cibiyar sadarwa, sun ba da shawarar samar da wani sassaucin shinge an tsara su don yin tasiri da sauri da kuma rage kudade. A wannan lokaci, da ruwan sama zai sanya matsala kadan a tsarin Ethereum, ta haka daidaituwa shine ƙananan haɗari ga nasarar fasaha.



Kammalawa

Abinda ba a iya amfani da ita ba ne a cikin sababbin hanyoyin da za a inganta tsaro masu zaman kansu kamar tsarin APIs.

Wannan takarda ya nuna abubuwa uku masu muhimmanci:

1. Shafin yanar gizo na iya kara darajar kudi.
2. Hydro ruwan sama zai iya inganta tsaro na kamfanoni masu zaman kansu.
3. Akwai aikace-aikace na gaggawa na Hydro ruwan sama a cikin Fasahar API na Hydrogen.

Kungiyar Hydro sun yi imanin tsarin da aka shimfiɗa zai iya kasancewa tsaron tsaro kayan aiki don sabuwar tsarin tsarin kamfanoni masu zaman kansu wanda ke so amfana duk masu ruwa da tsaki a cikin masana'antu da ayyukan kudi.

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