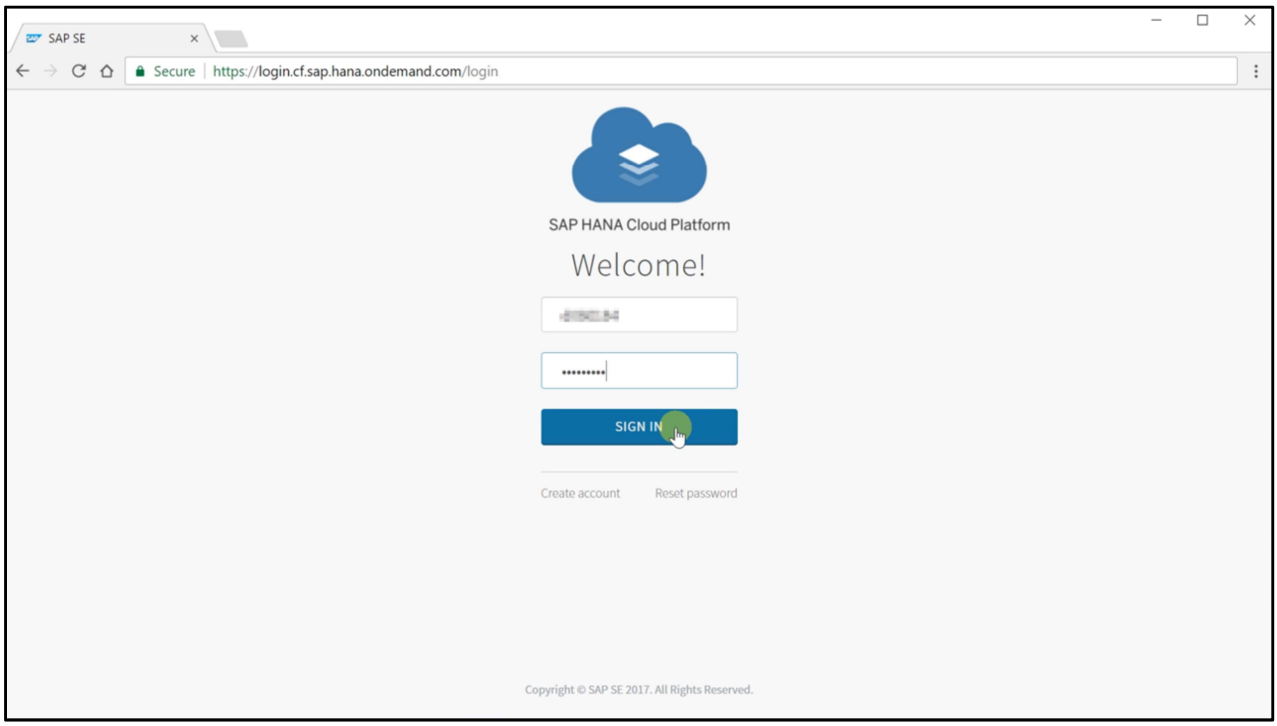
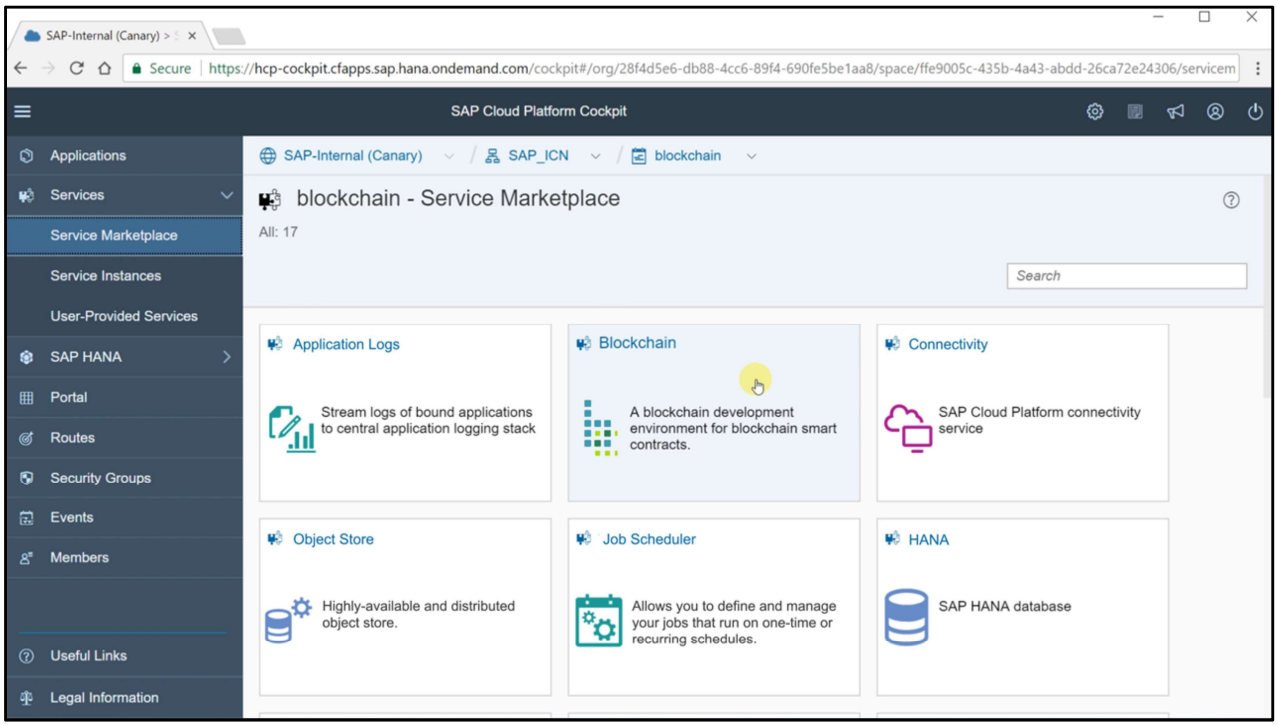
SAP Cloud Platform

How to create a blockchain service instance



Login to SAP Cloud Platform Cockpit
(Canary Landscape: hcp-cockpit.cfapps.sap.hana.ondemand.com)



Go to Service Marketplace and click on the Blockchain service

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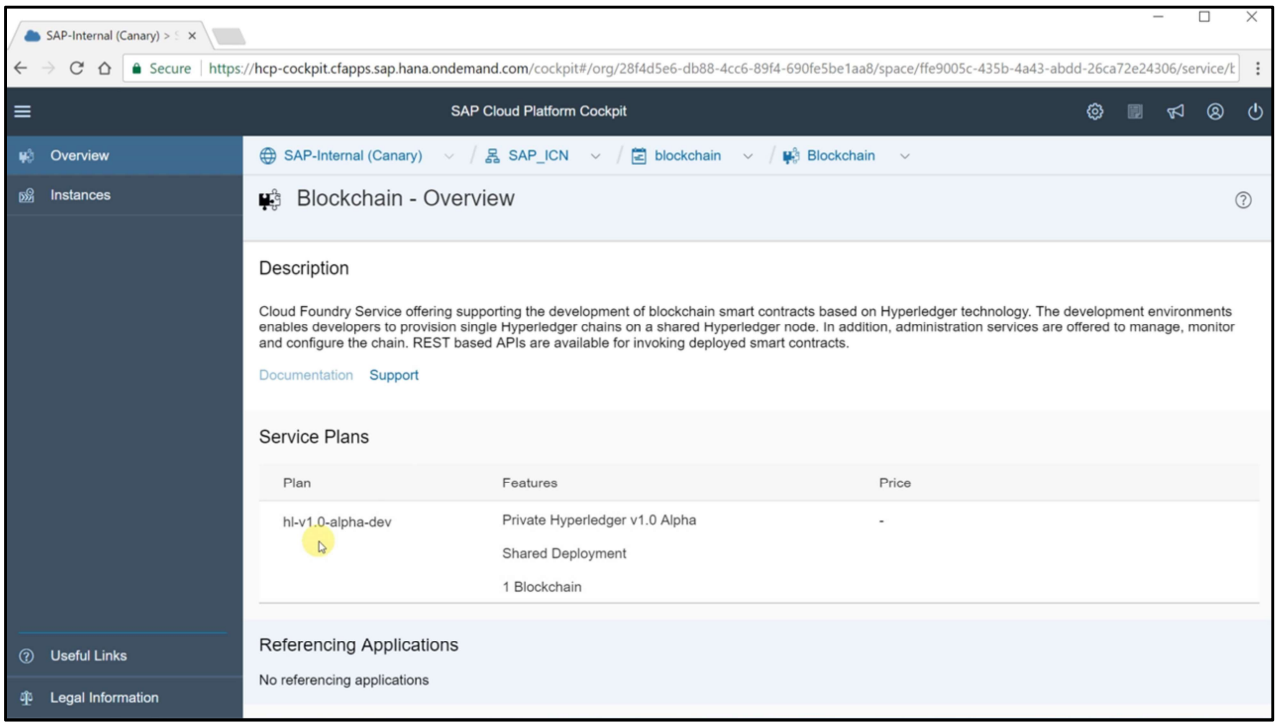
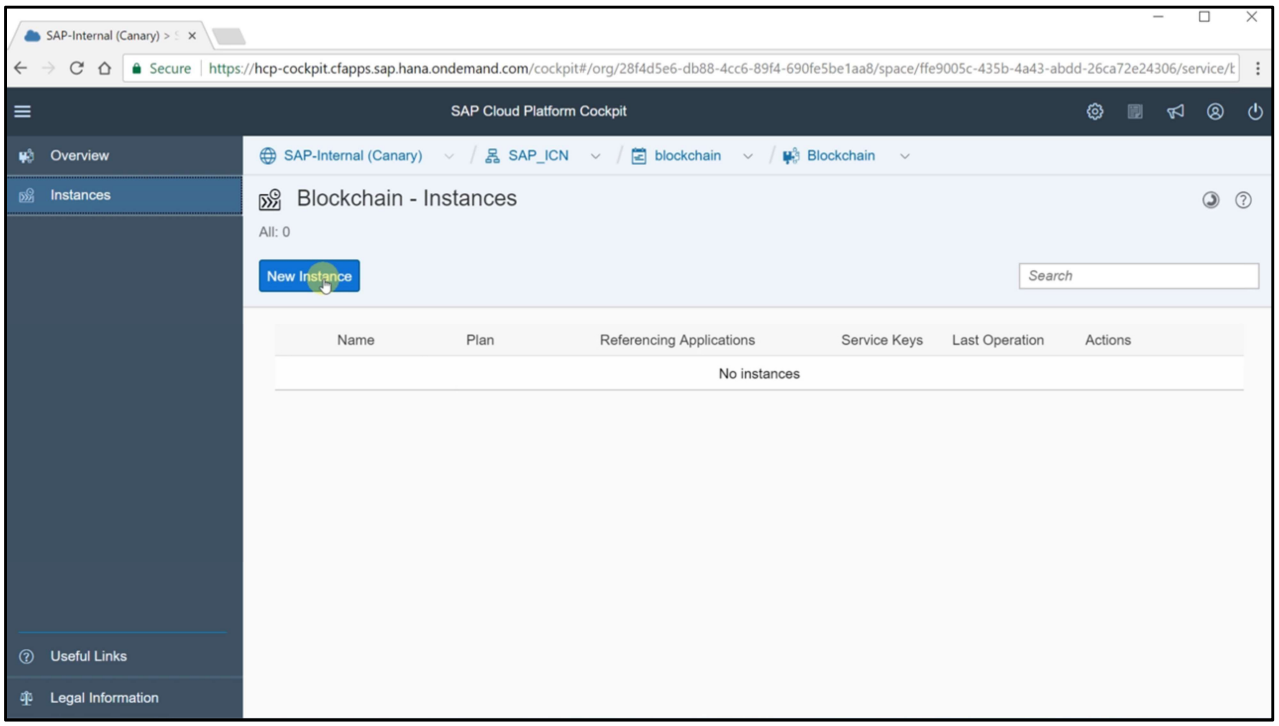
In the Service Marketplace you can see all the services that are available for your SAP Cloud Platform account.



On the Blockchain Service overview page you can see the available service plan.

We offer a developer service plan of the v1.0 Alpha version of Hyperledger Fabric.

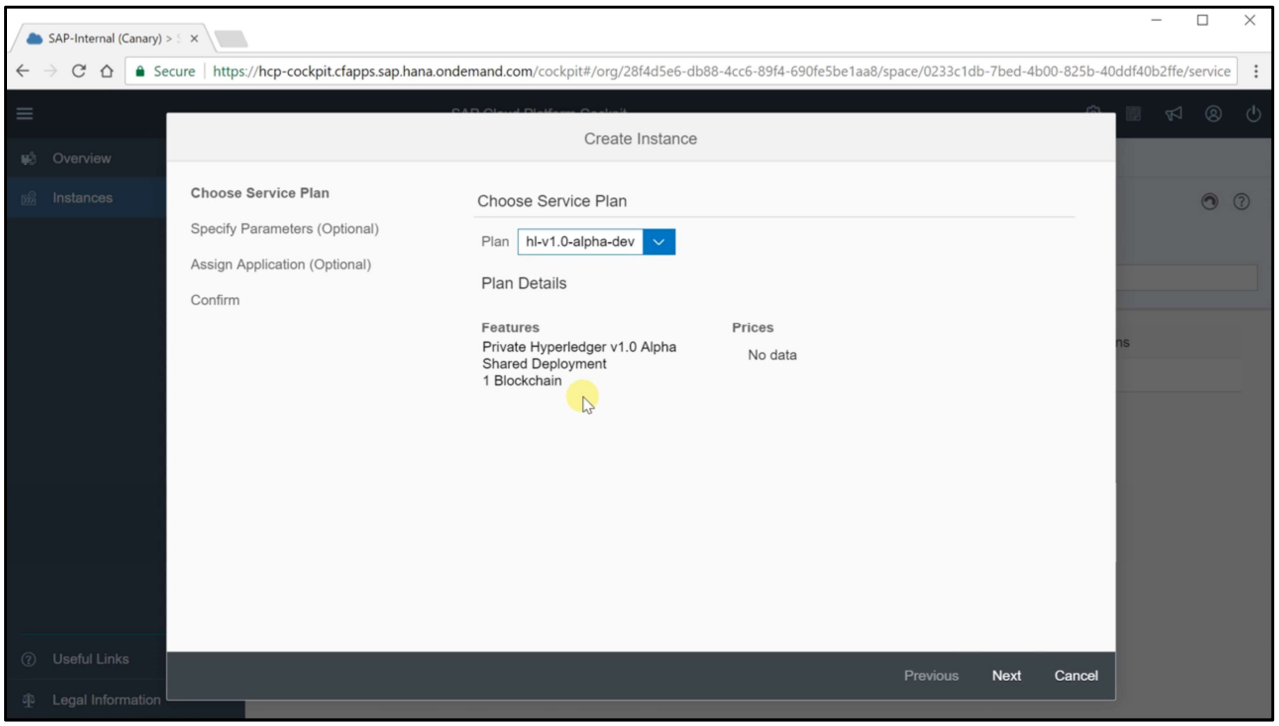


Go to the Instances tab.

There you can see all the blockchain service instances you have created in your SAP Cloud Platform account.

Click on and click New Instance.

Since there is no service instance created yet, we click on New Instance to get into the Create Instance dialog.

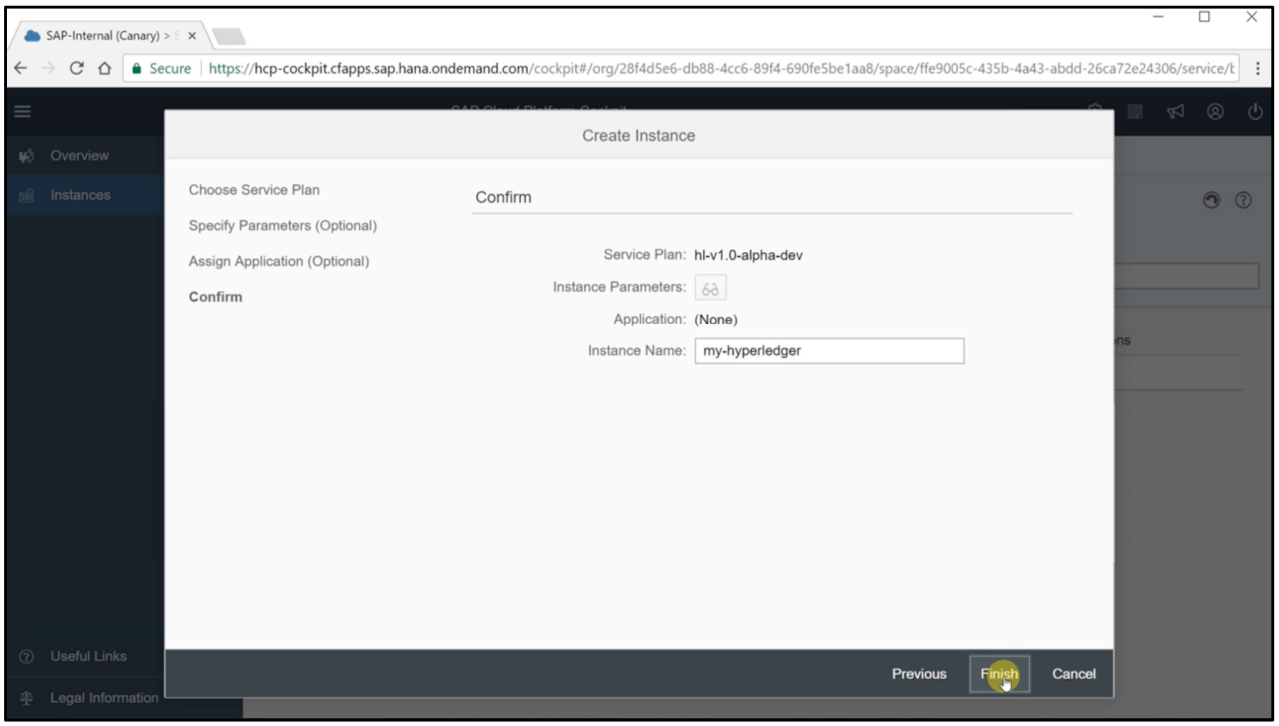


Choose the service plan „hl-v1.0-alpha-dev“.

As the right plan is already pre-selected we hit Next to get to the next configuration step.

In our case the service does not need additional configuration parameters so we skip the second step by clicking Next.

<TODO: Assign Application tab>



Skip the optional steps and choose a name for your personalthe blockchain service instance

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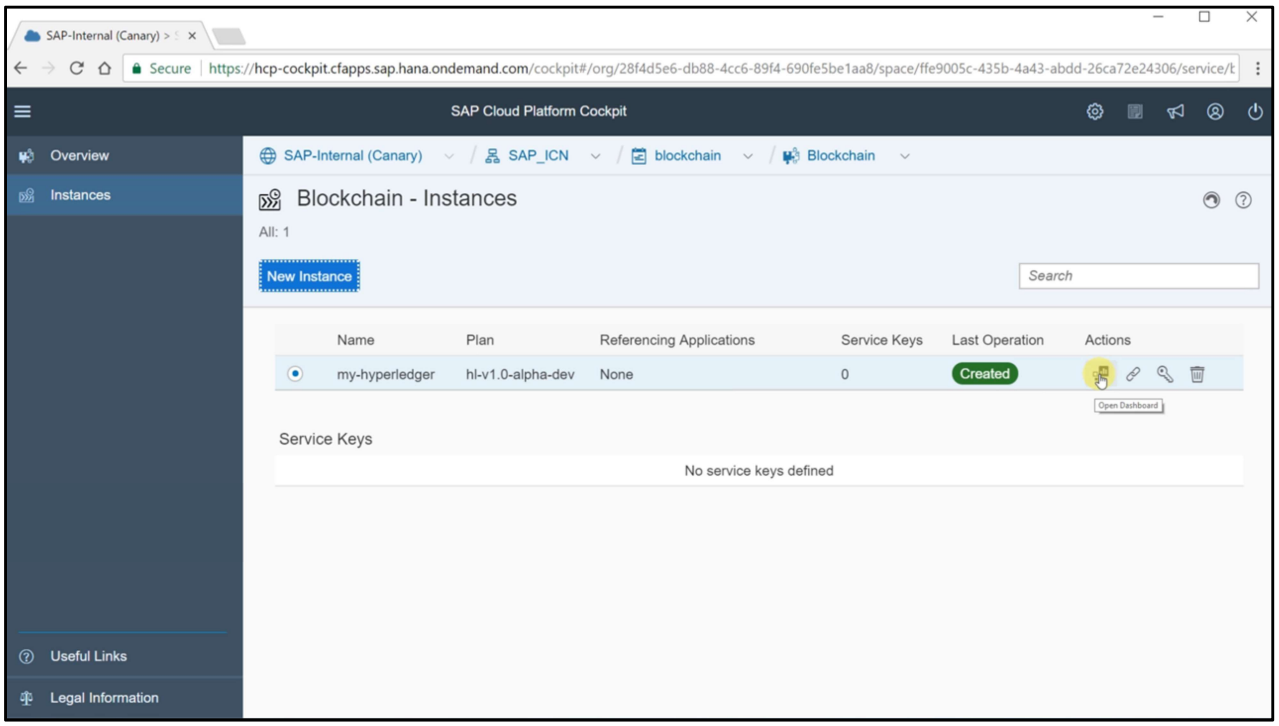
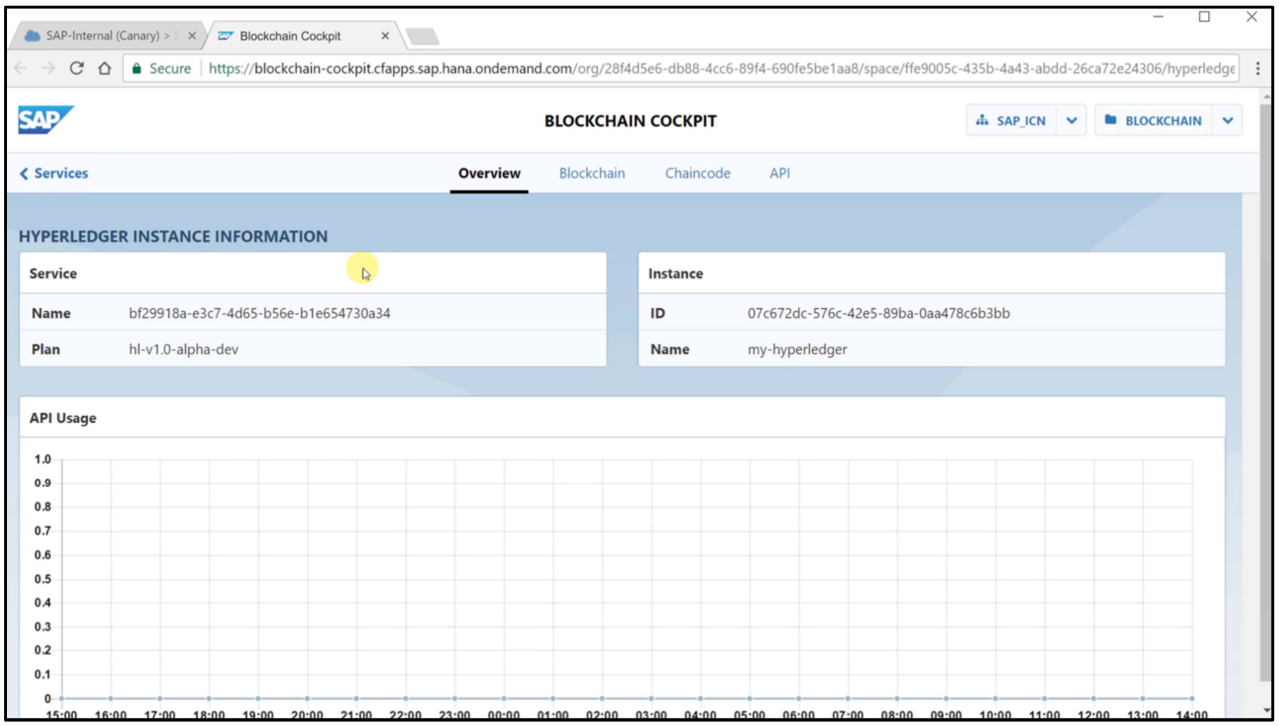
Name your service instance and create the instance by clicking Finish.



Now you can see a newly created service instance. You can either bind the service to a SAP Cloud Platform application or you can create a service key to access the service from an external system.
For managing your hyperledger blockchain you can jump into the SAP Blockchain Cockpit by clicking on the Open Dashboard button of your service instance.



The Blockchain Cockpit opens in a new Browser tab and you see the overview of your service

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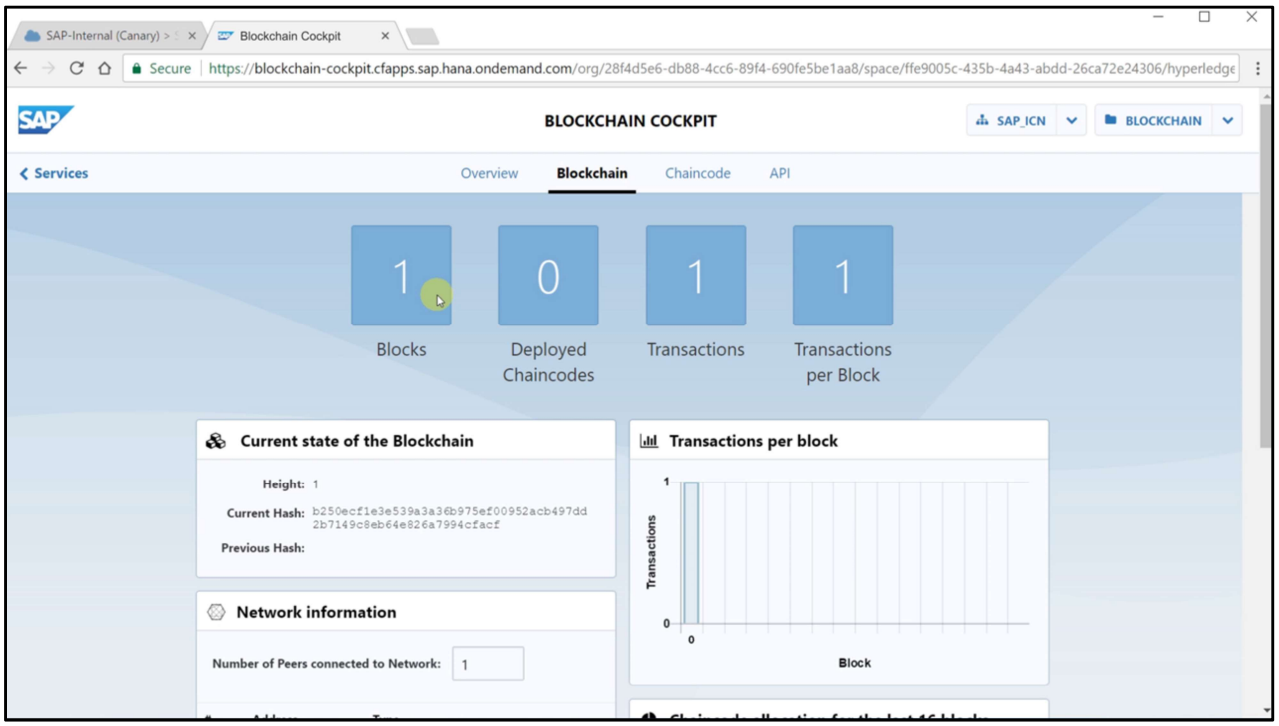
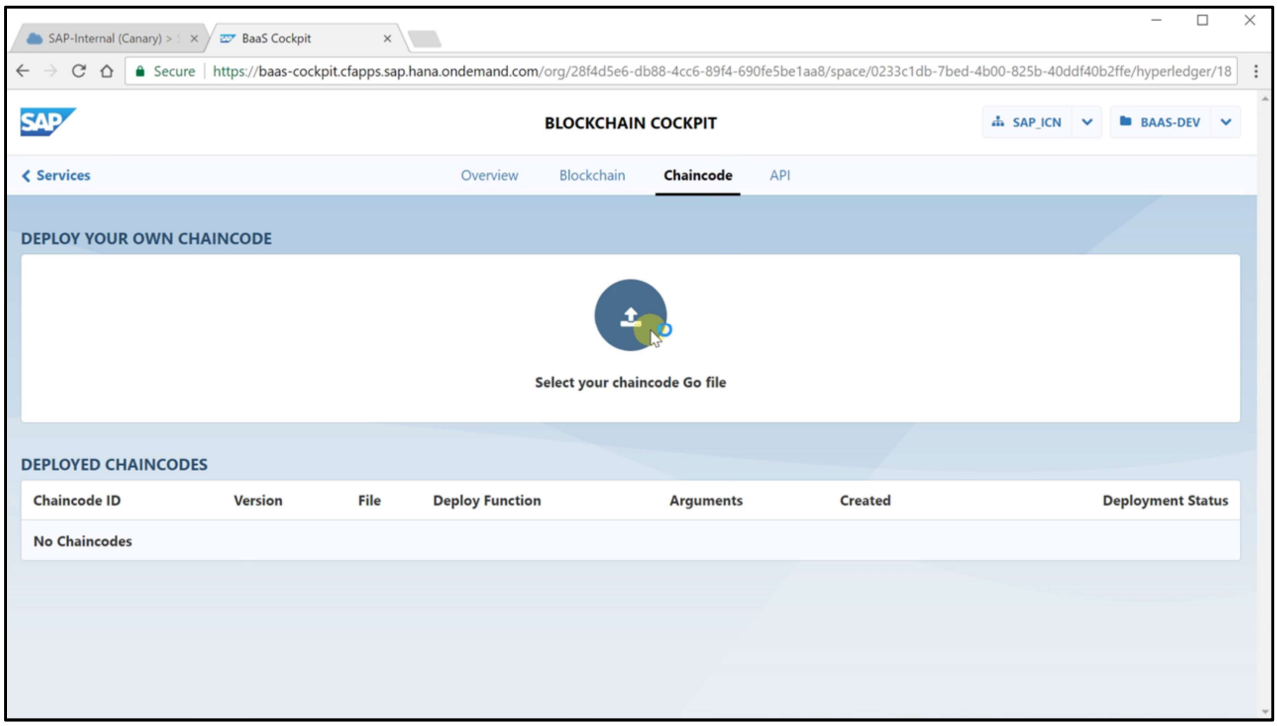
The Overview page of our Blockchain Cockpit you get some general information about the service instance we recently created as well as some usage information represented in a graph.



Click on the Blockchain tab

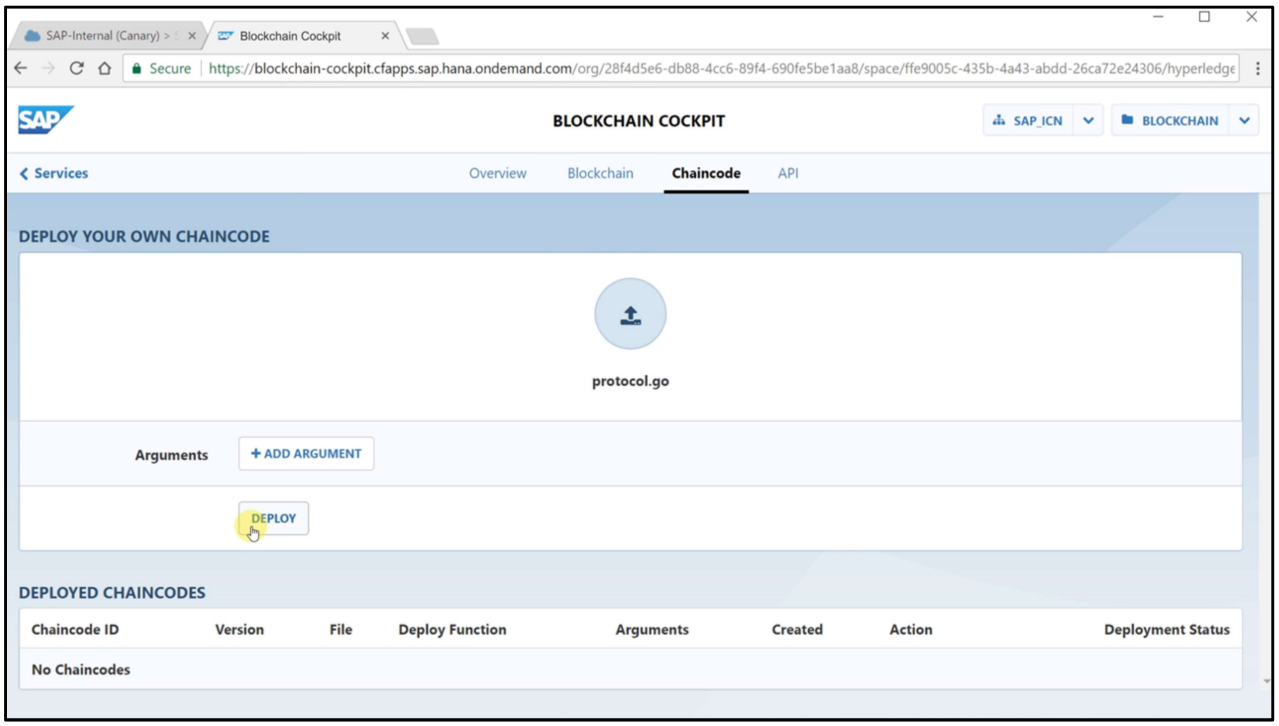
There you see the current state of the hyperleger blockchain instance

The newly created instance is empty and has only the so called „genesis block“ in the blockchain

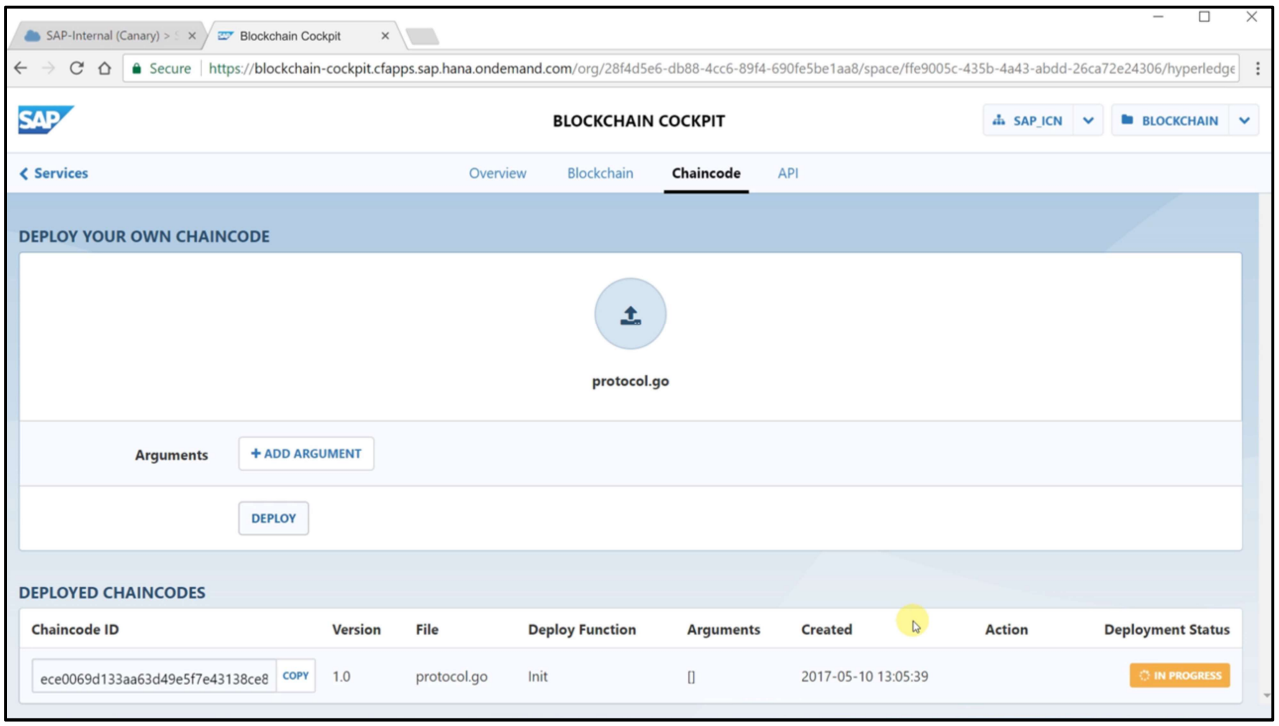


Click on the Chaincode Tab.

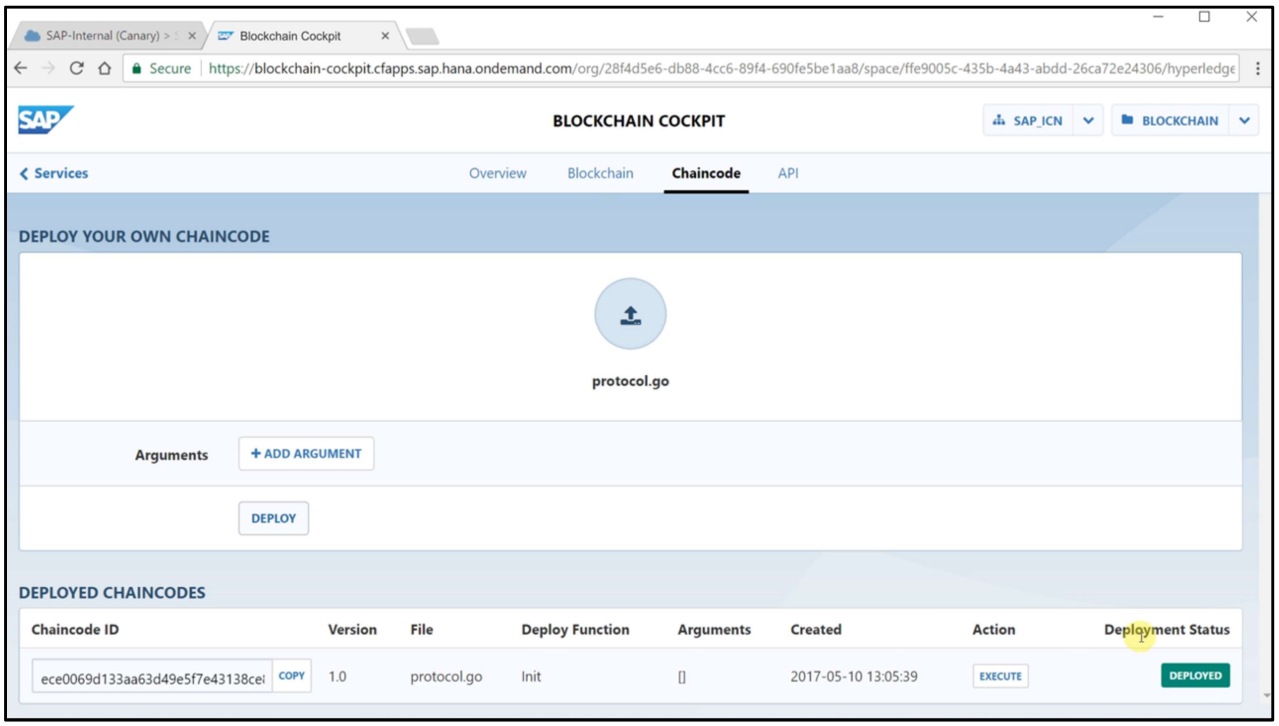
There you can deploy your own chaincode files to the blockchain network.



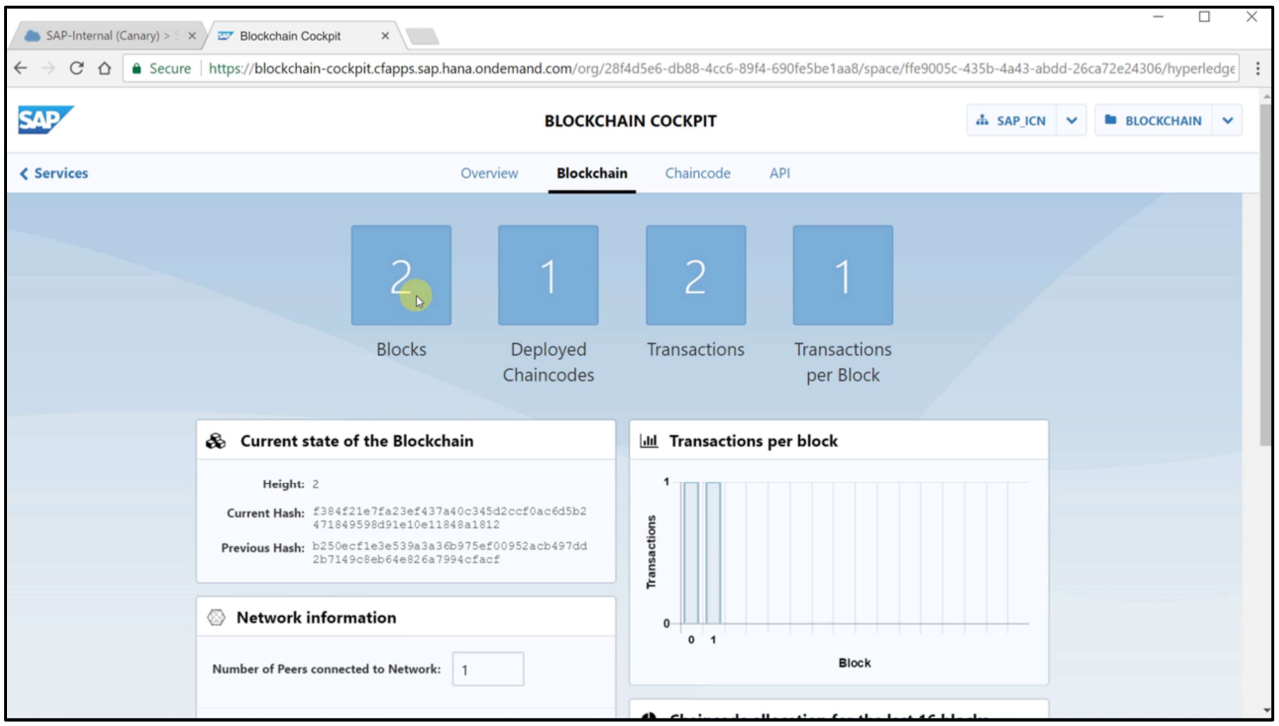
Select you chaincode .GO file and add initialization arguments if necessary
Click deploy to upload and install your chaincode to the blockchain network.



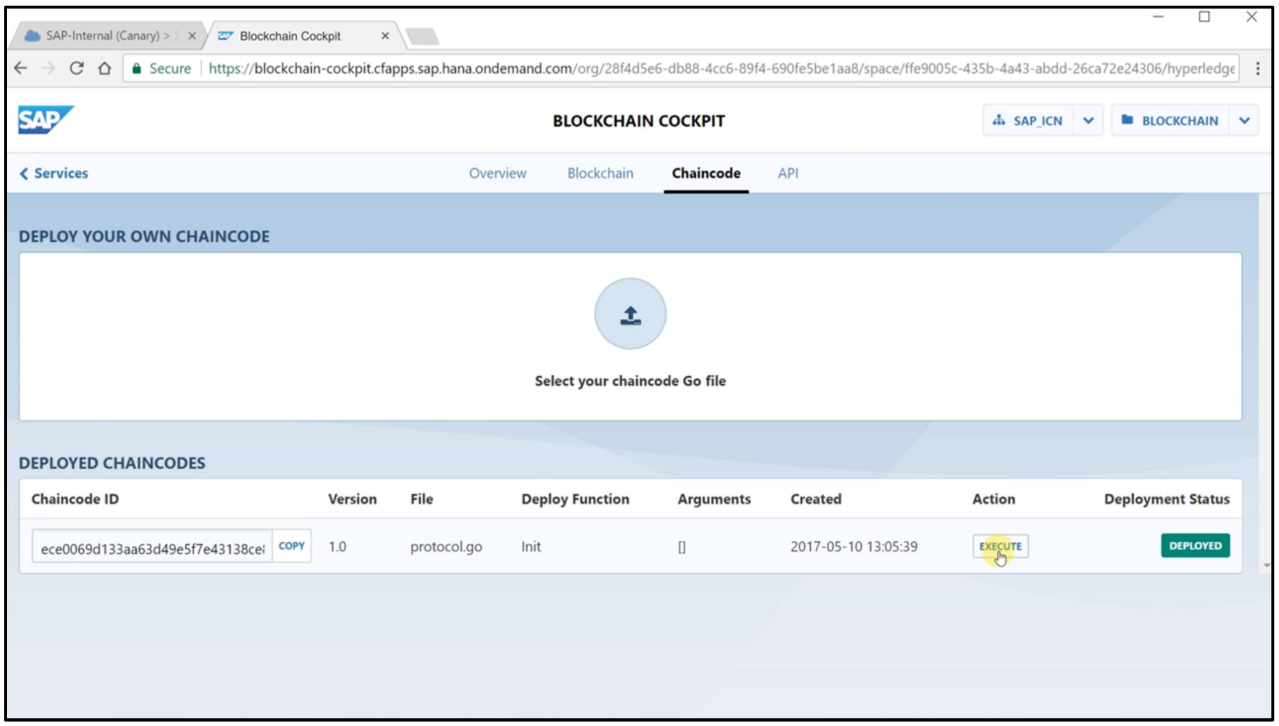
A new chaincode ID is generated. You can see the deployment status in the list.



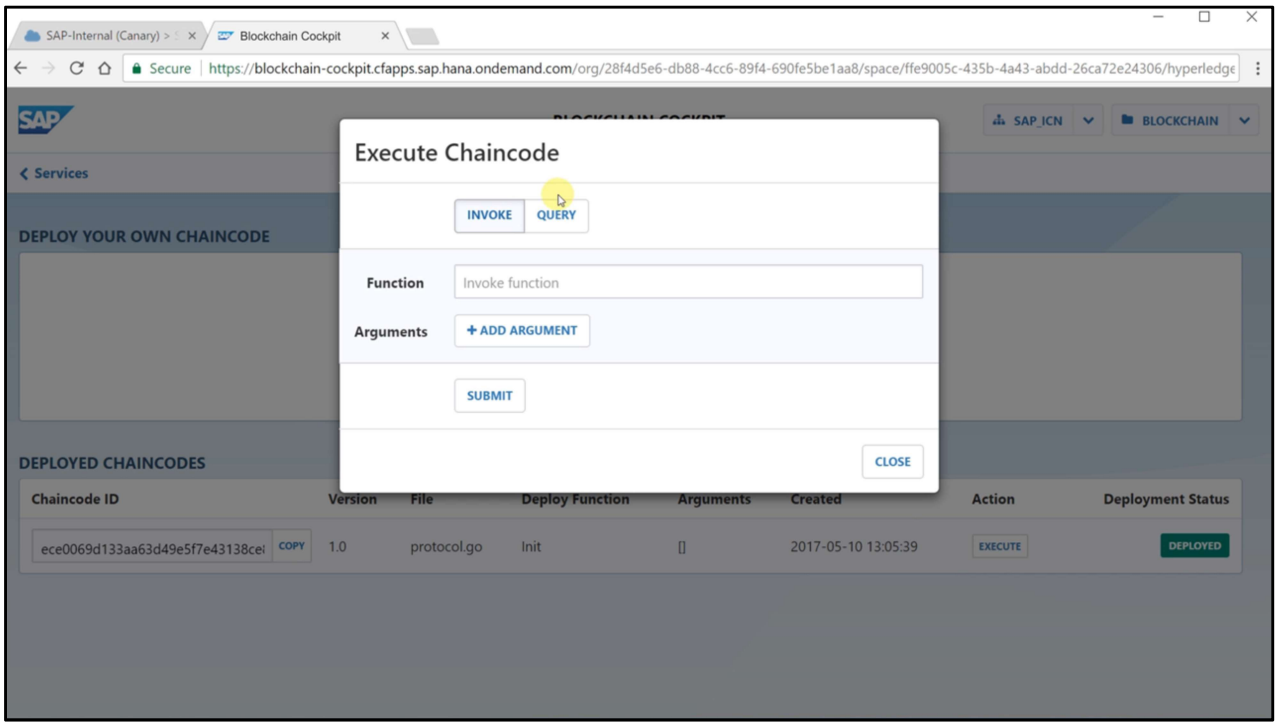
When the deployment status changes to „deployed“ your chaincode is ready for interaction.



Go back to the Blockchain Tab of the Blockchain Cockpit
There a new Block was generated because of the chaincode deployement.
Additionally the number of deployed chaincodes changed to „1“

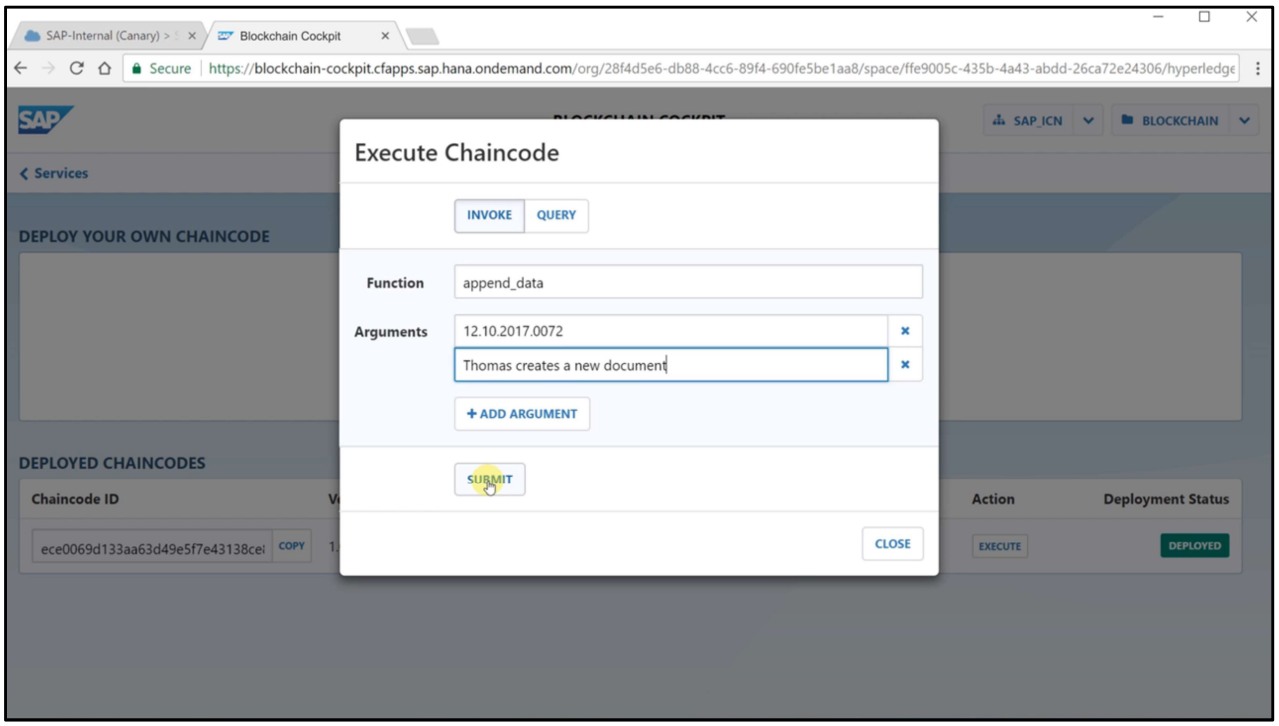


The next step is to test the deployed chaincode via the API provided by the SAP Blockchain Cockpit.



Therefore click on the Execute button next to the deployment status.

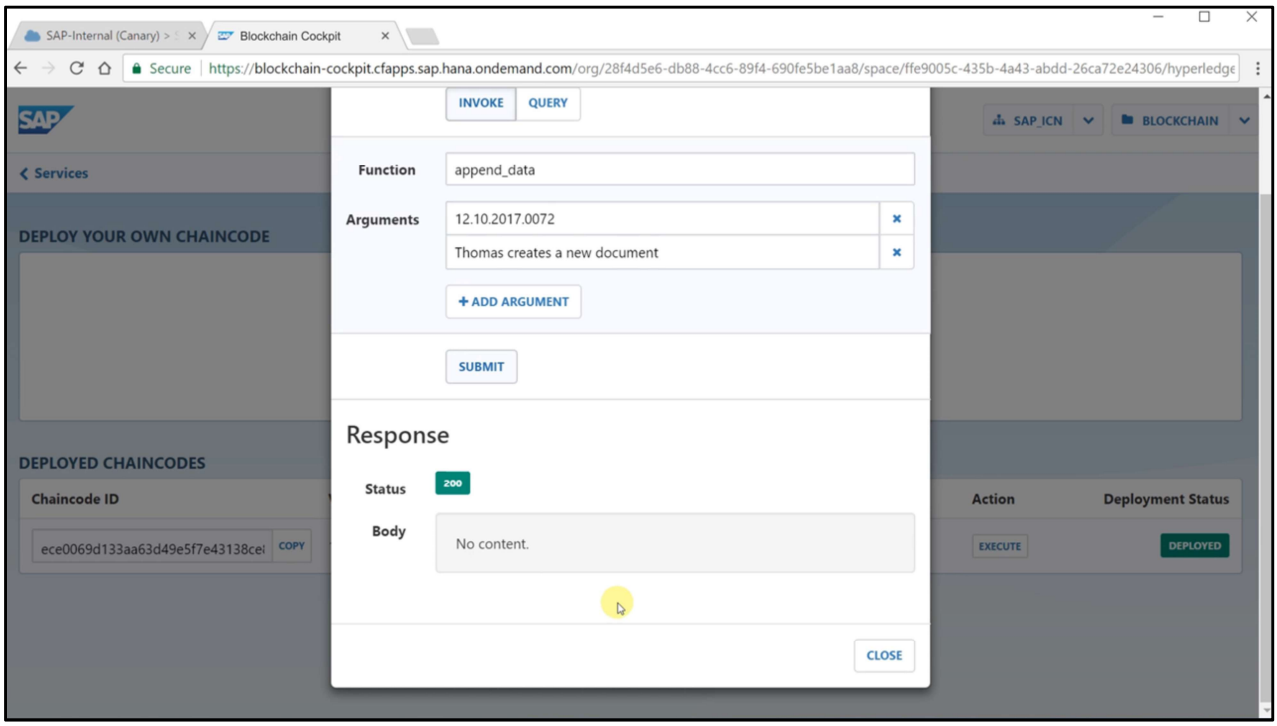
A new window pops up where you can choose between the blockchain functionalities invoke and query. (Write and read)



To test our chaincode fill out the form with parameters necessary for your chaincode.

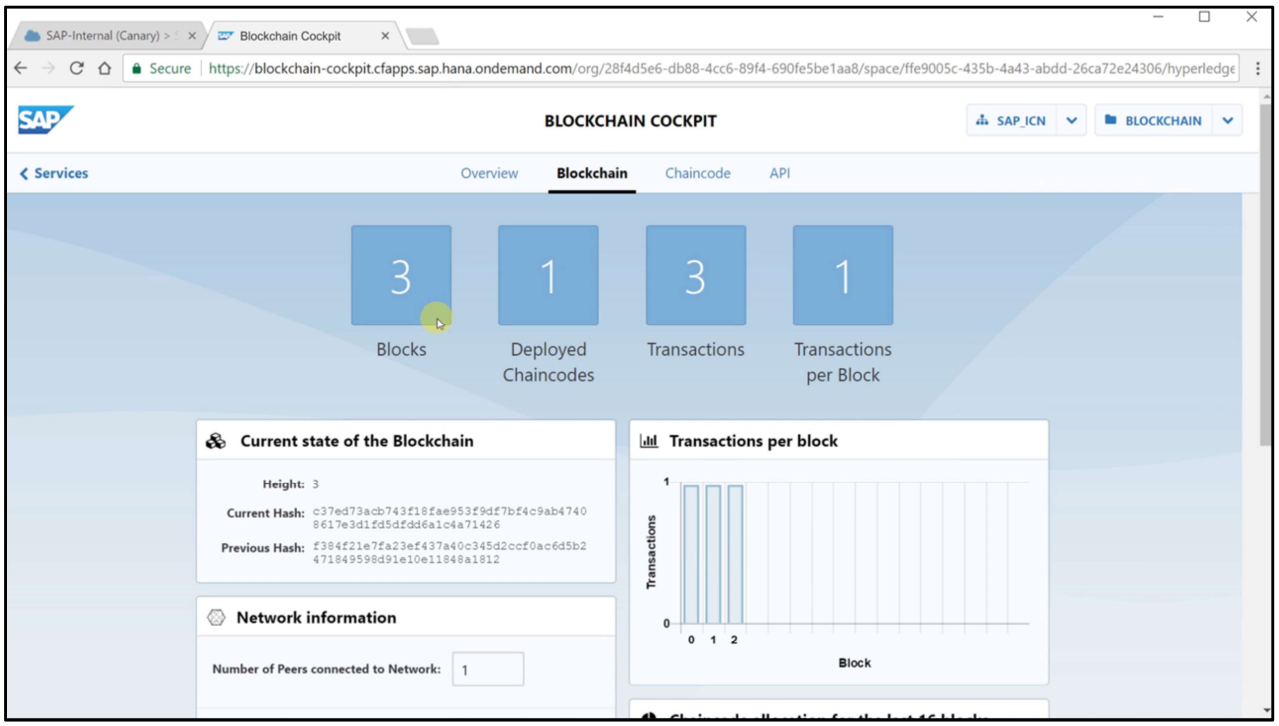
In this case we want to invoke the function append_data providing an ID and a protocol entry.

Hit submit



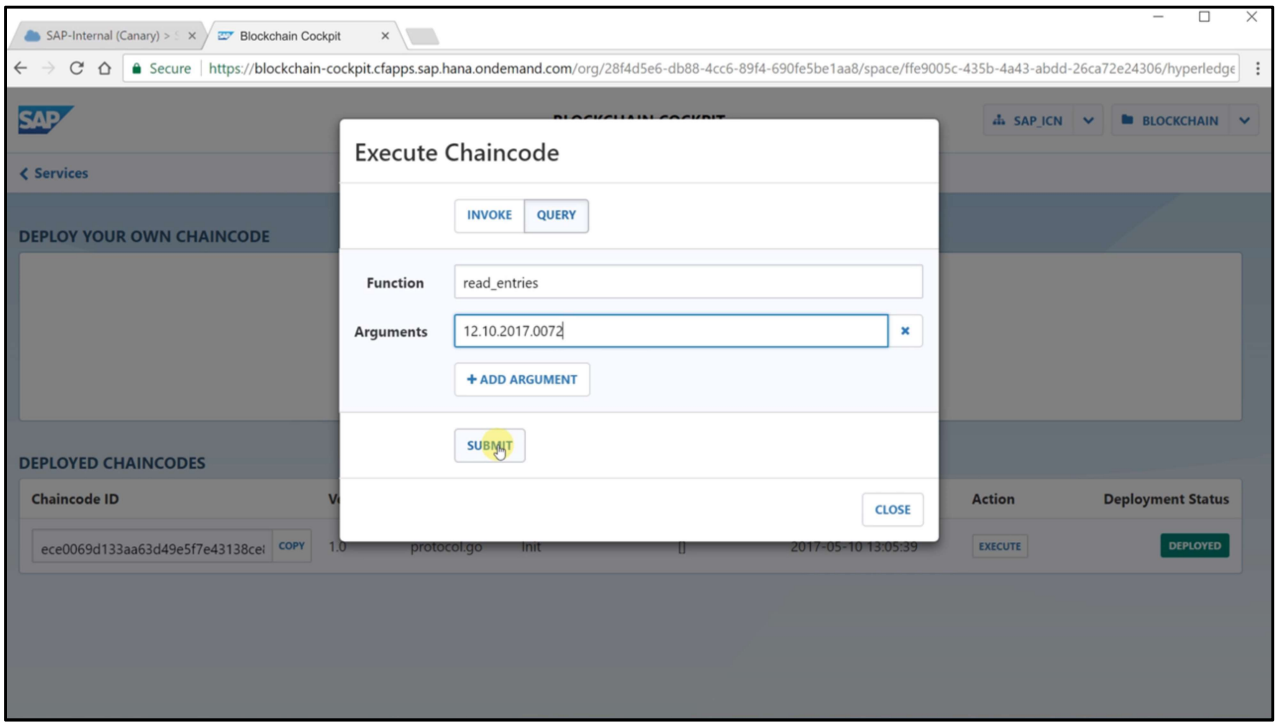
In the bottom part of the dialog window the Response will be displayed.

Usually Invoke calls don‘t have a response body



Now we can switch back to the blockchain tab.

Because we created a new transaction via the invoke call a new Block was generated.



To read our newly created protocol entry we have to call the query function „read_entries“ with the ID specified before

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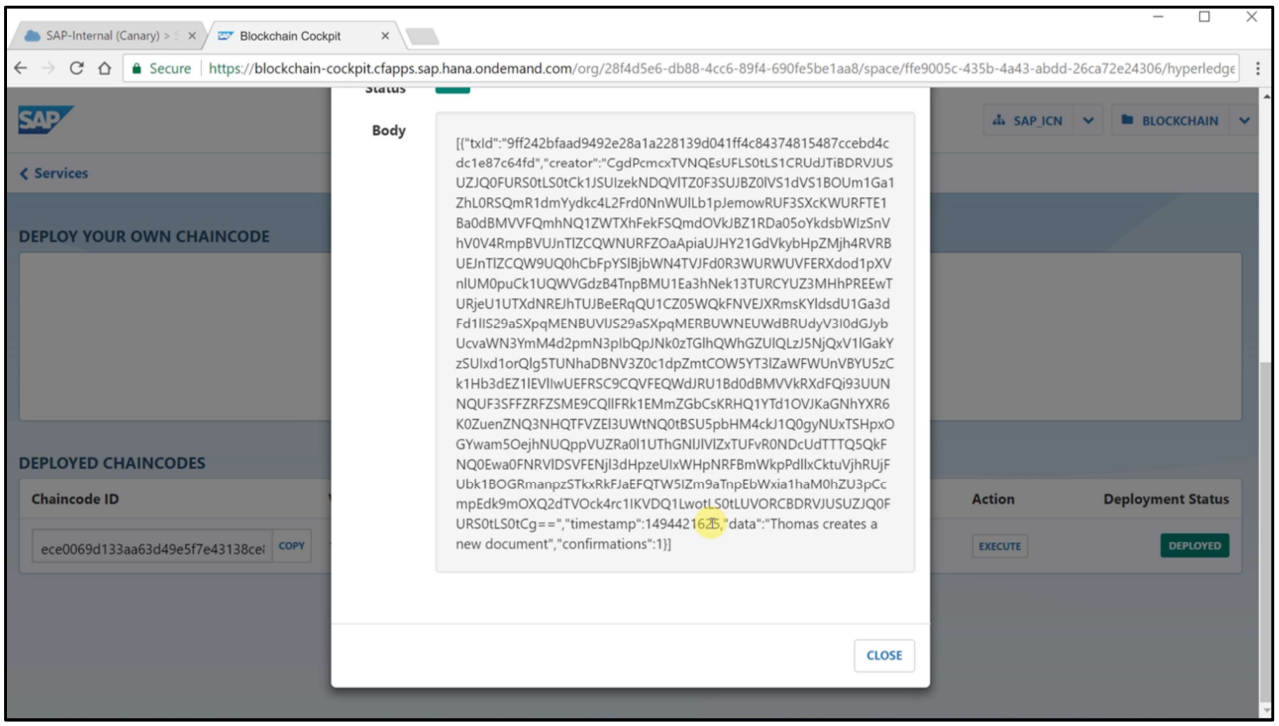
Hit submit



The response body shows the protocol entry as well as some additional information from the blockchain e.g. the timestamp and the transaction ID.

SAP Cloud Platform

Blockchain Service