

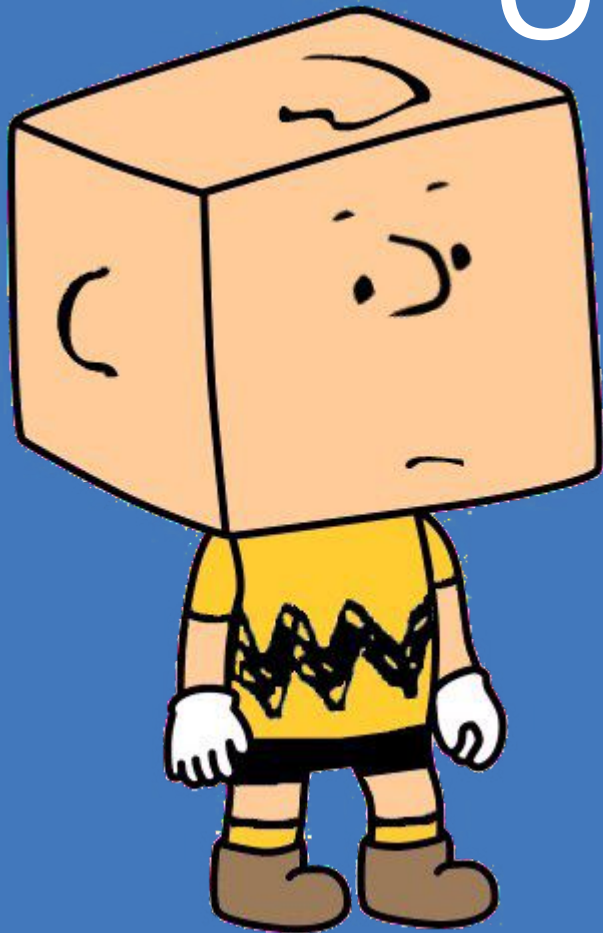


# Blockhead Open Service Broker

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# The Blockhead Open Service Broker



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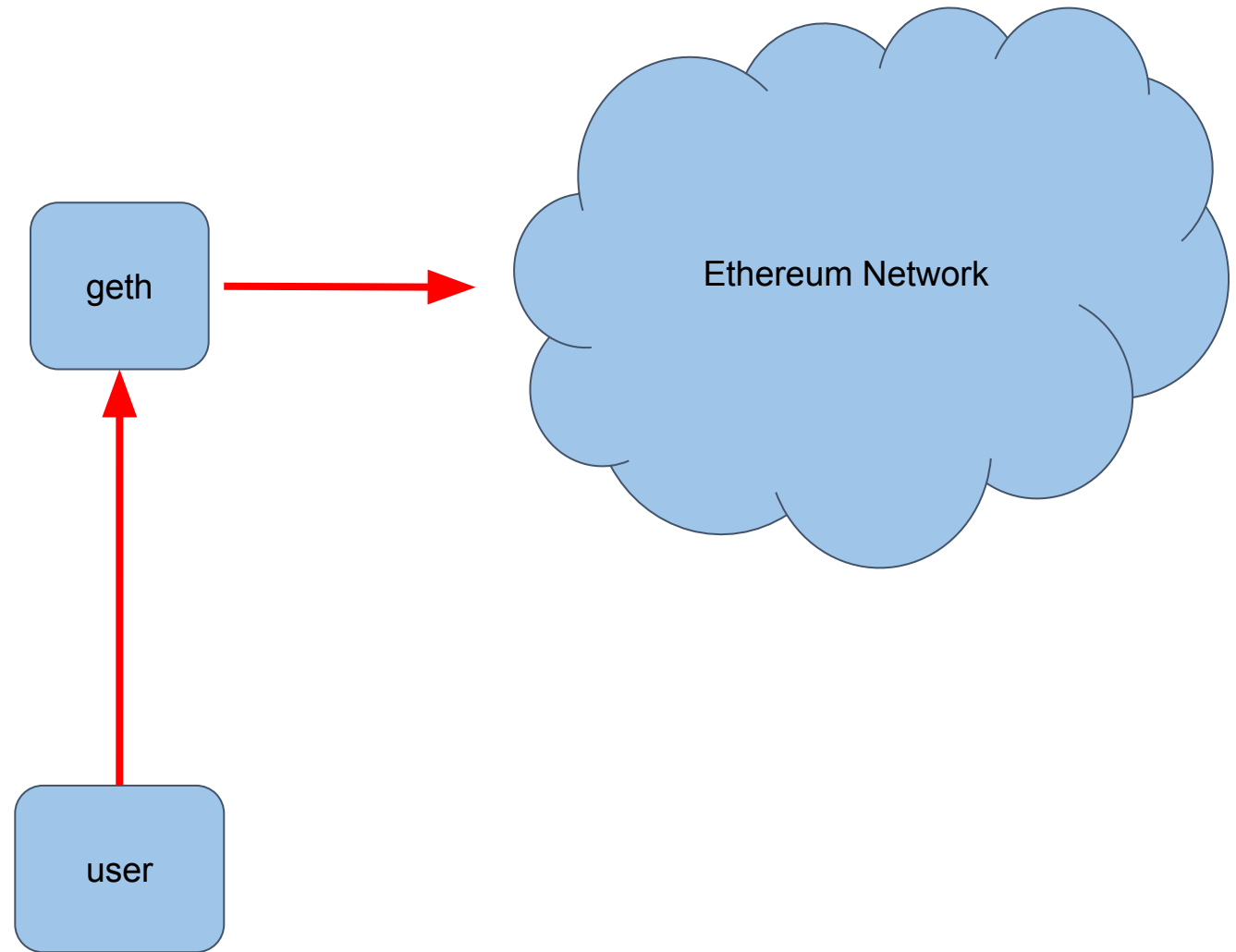
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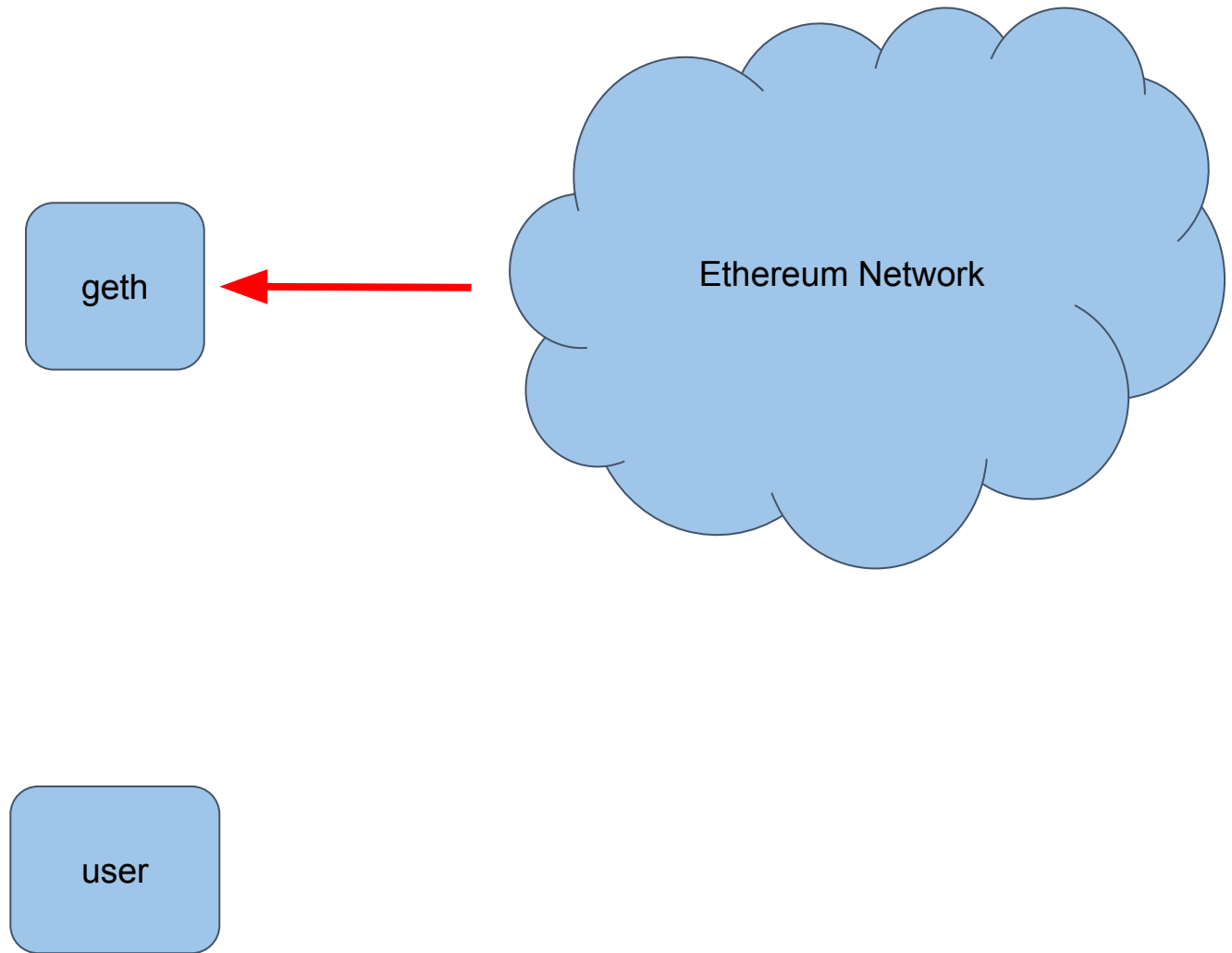
# Blockchain



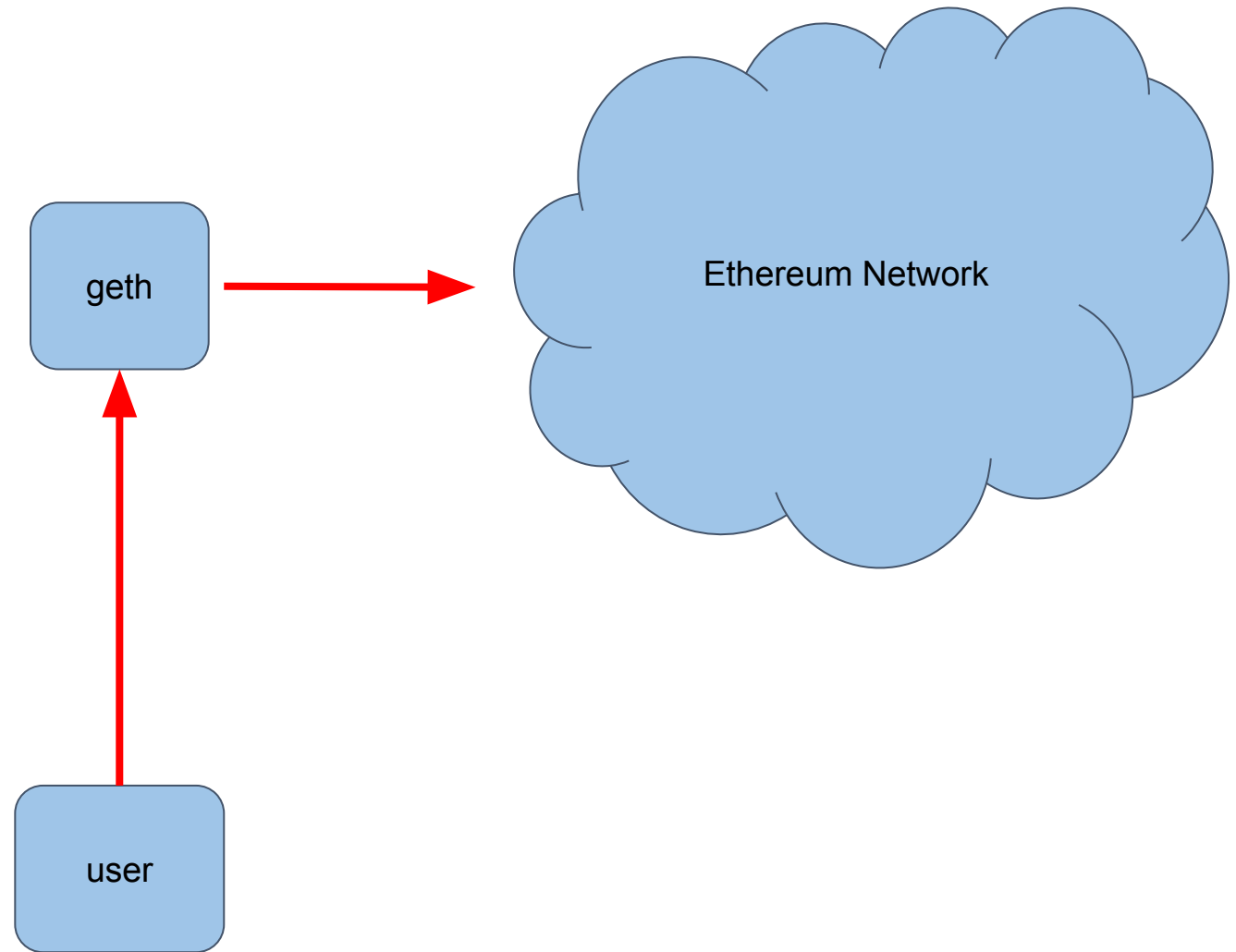
1. Deploy geth, or some type of local ethereum node



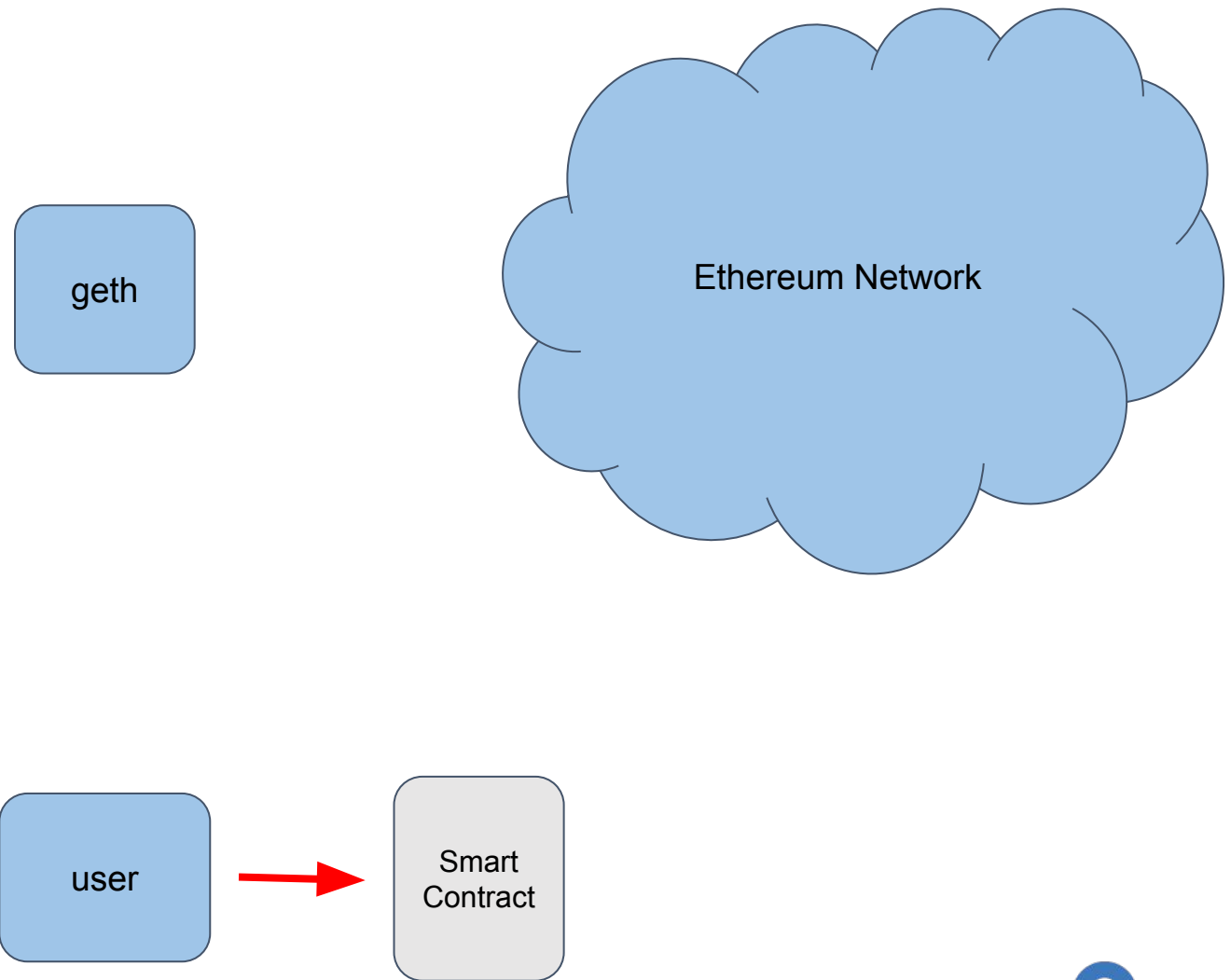
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2. Download and sync the network ledger



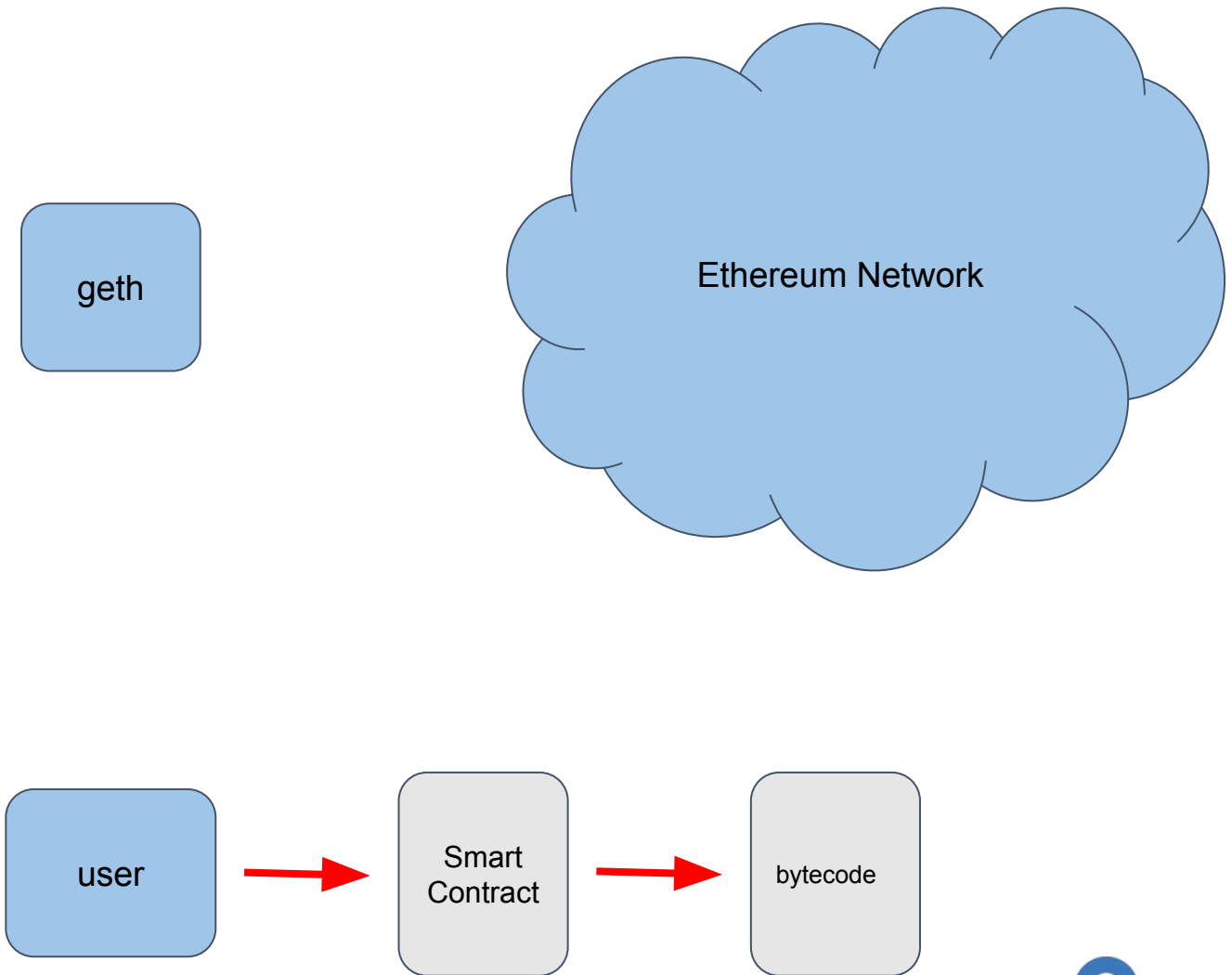
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3. Create a user account



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4. Write your contract

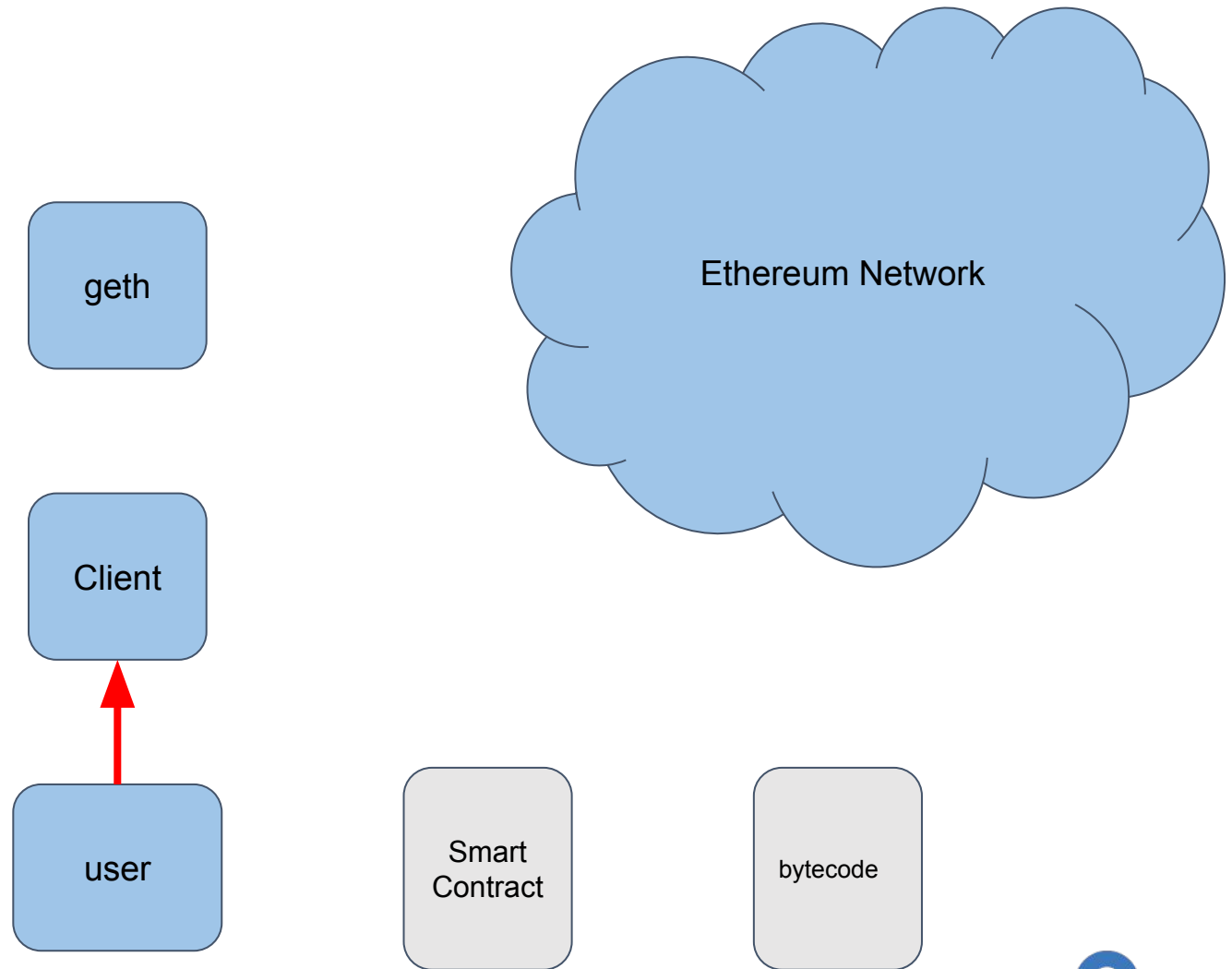


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4. Write your contract
5. Compile your contract to create bytecode

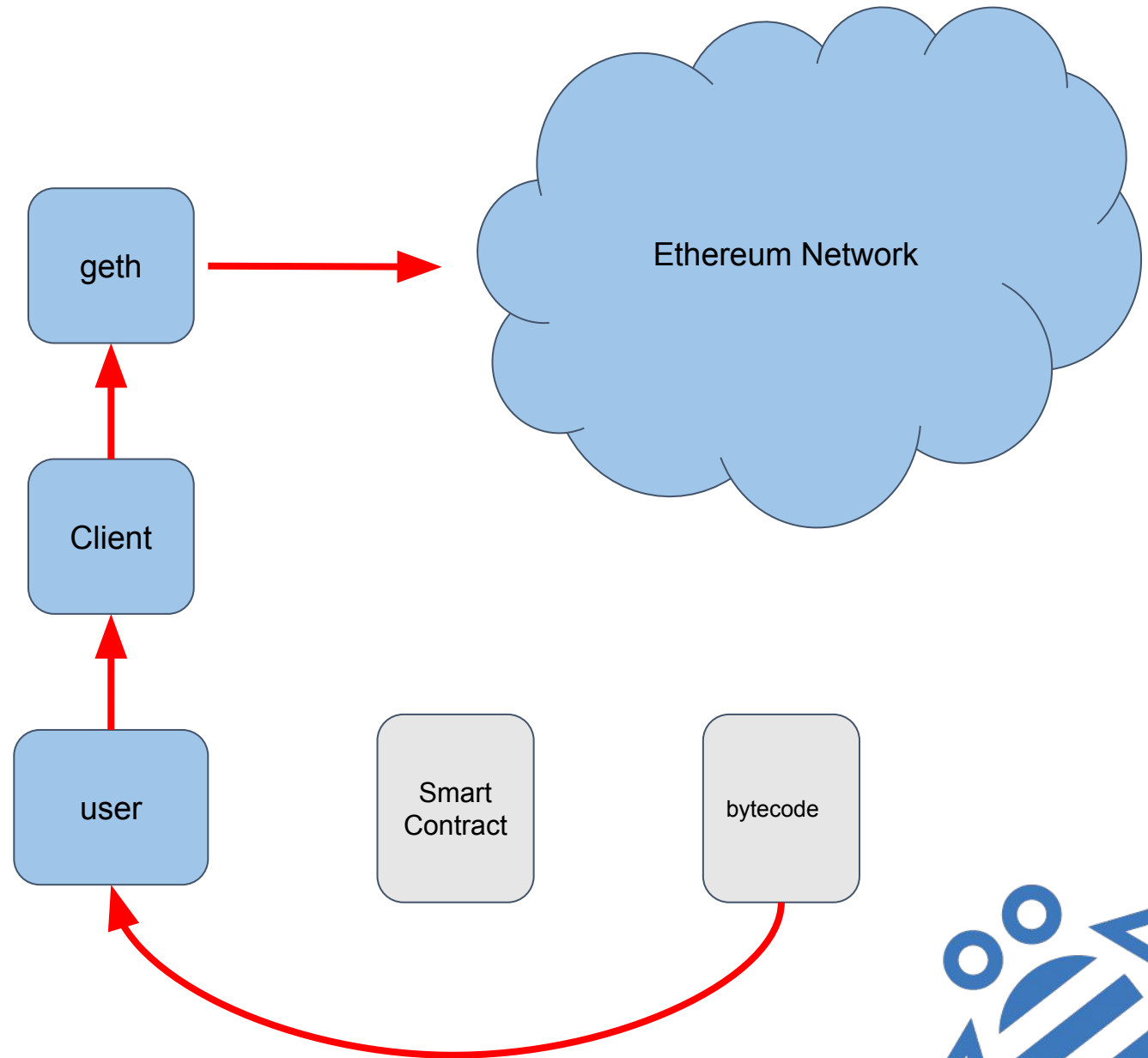




1. Deploy geth, or some type of local ethereum node
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5. Compile your contract to create bytecode
6. Download another client to talk to geth



1. Deploy geth, or some type of local ethereum node
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6. Download another client to talk to geth
7. Learn how to deploy your bytecode through the client



# Blockhead

- Server Implementation of the Open Service Broker API
- Automatically does most of the heavy lifting for you



# Open Service Broker API

- App developers want to use blockchain
- App devs should focus on writing apps
- We want to deliver this functionality in an easy to use way
- OSB API



# Open Service Broker API

- Open standard for the provisioning and management of cloud services in relation to a cloud platform
- Any service that can be decomposed into the OSB workflow can be provisioned as a OSB service
- Once a broker is subscribed to your platform, can be utilized easily by end appl developers
- Current implementations for Cloud Foundry, Kubernetes



# Blockhead

- Automates the deployment and use of a blockchain node
  - Currently supports Ethereum
    - Deploys and syncs an Ethereum node
    - Creates an account on that node
    - Compiles and applies a smart contract you specify
    - Returns the Application Binary Interface for your use
  - Plan to add support for Hyperledger Fabric



# Blockhead - 2 Simple Steps

1. Create Service
2. Bind Service (with contract URL)

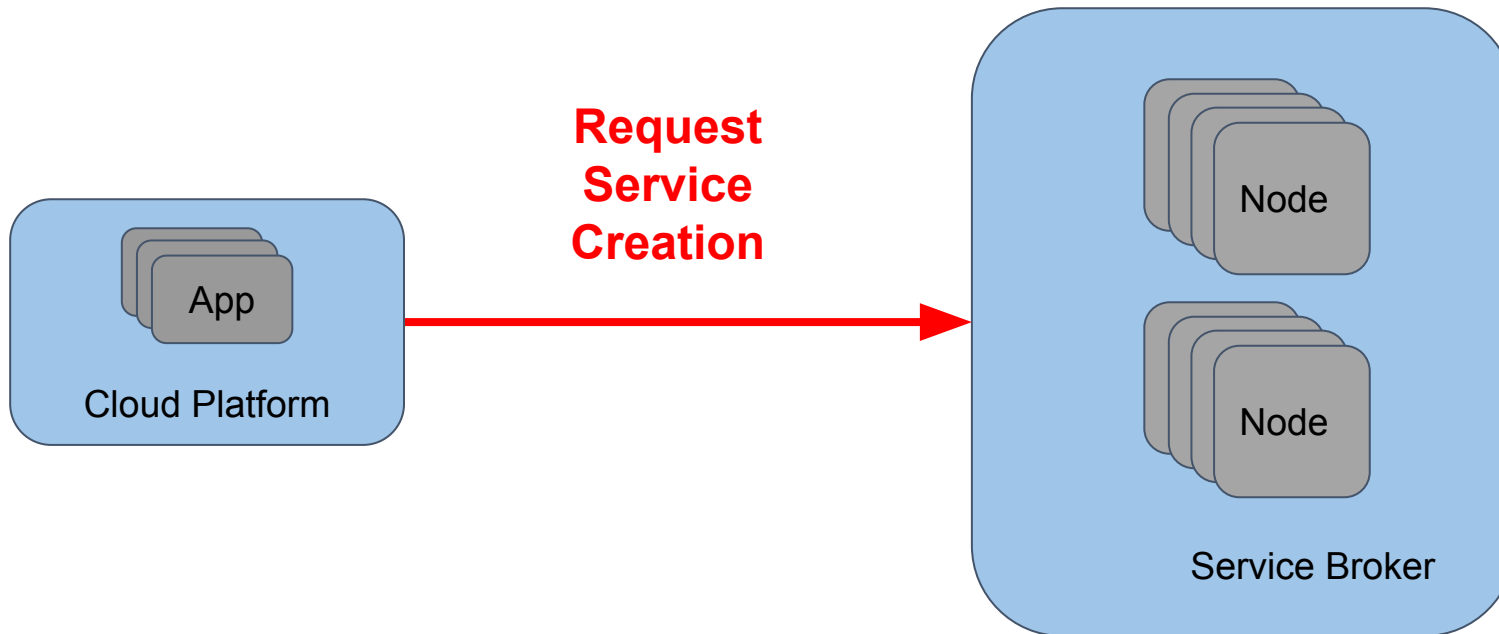


# Behind the Scenes

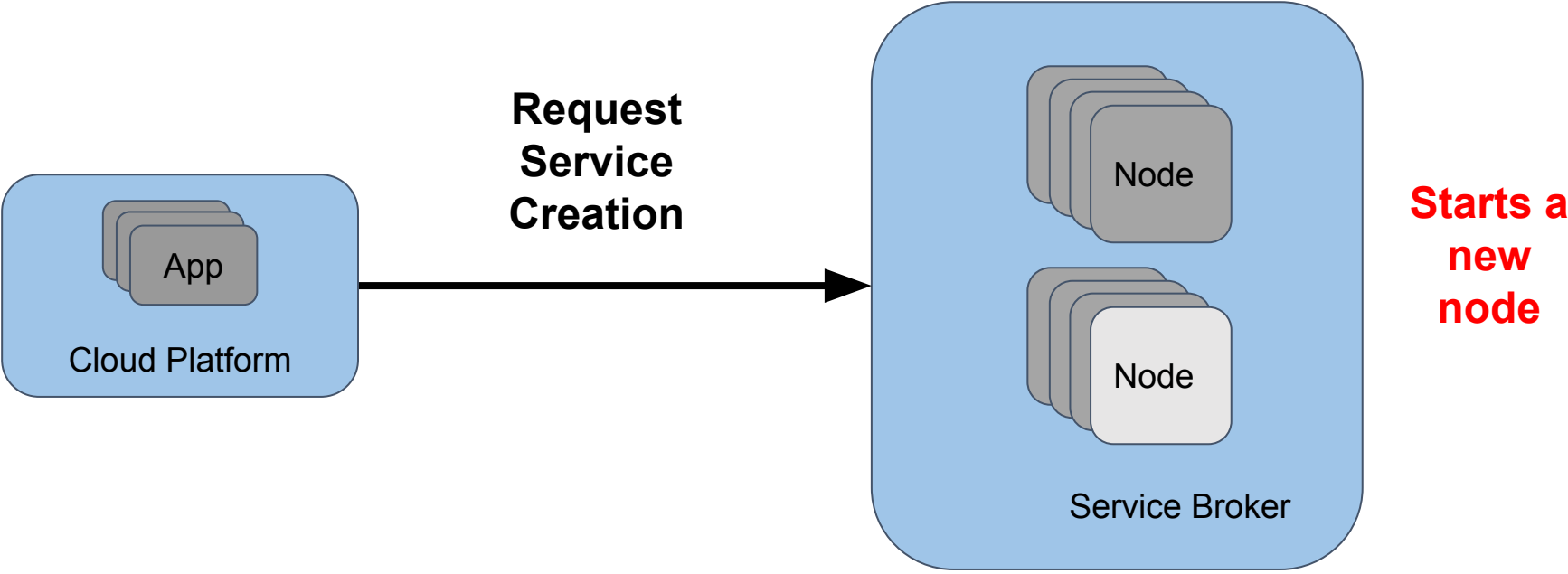




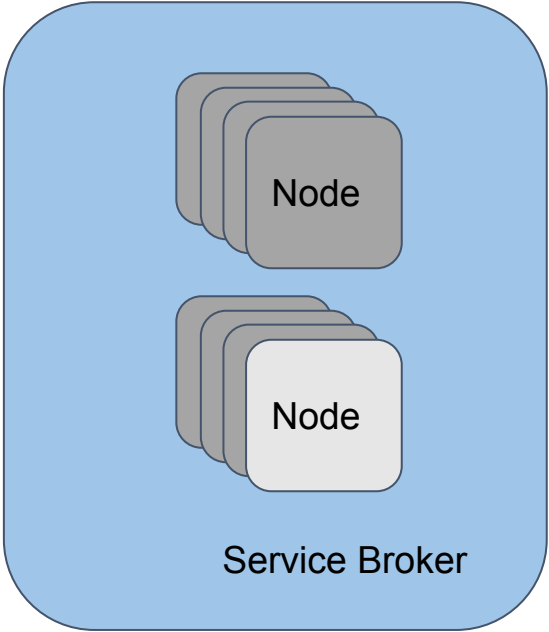
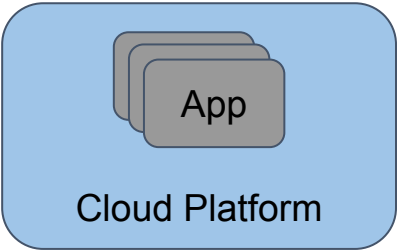
# Service Provisioning



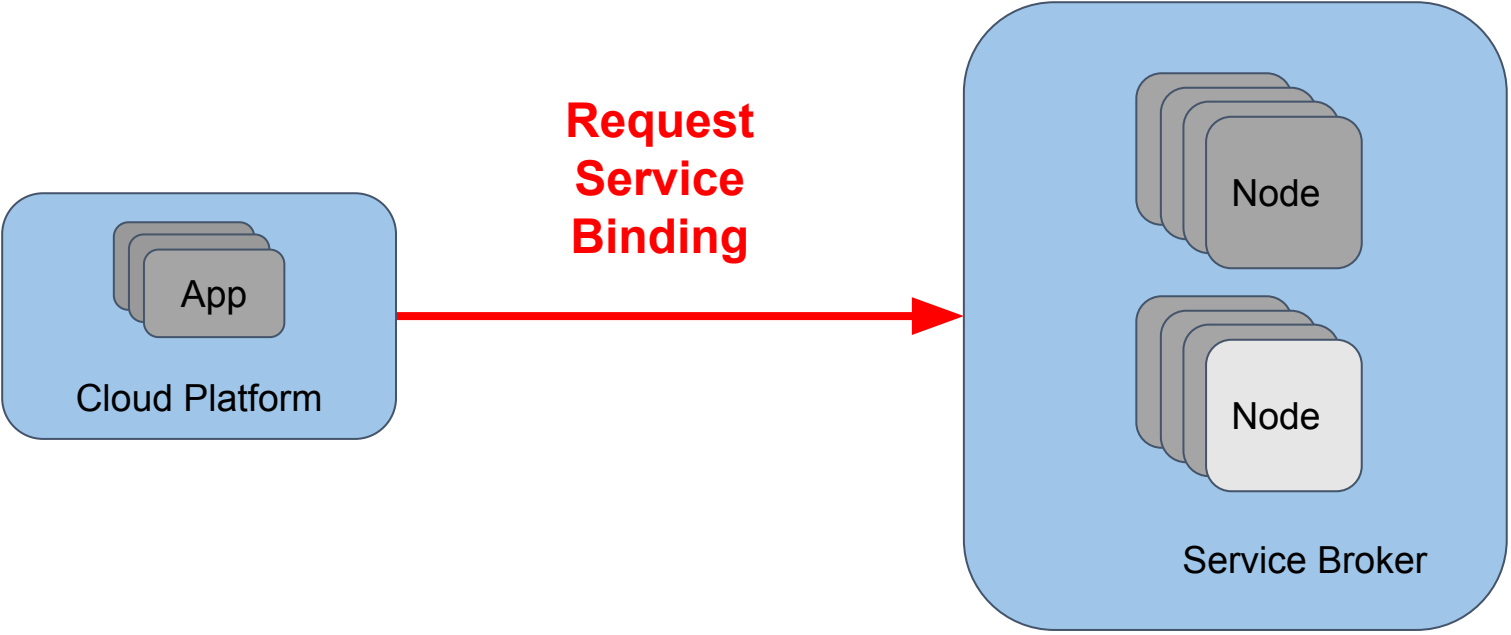
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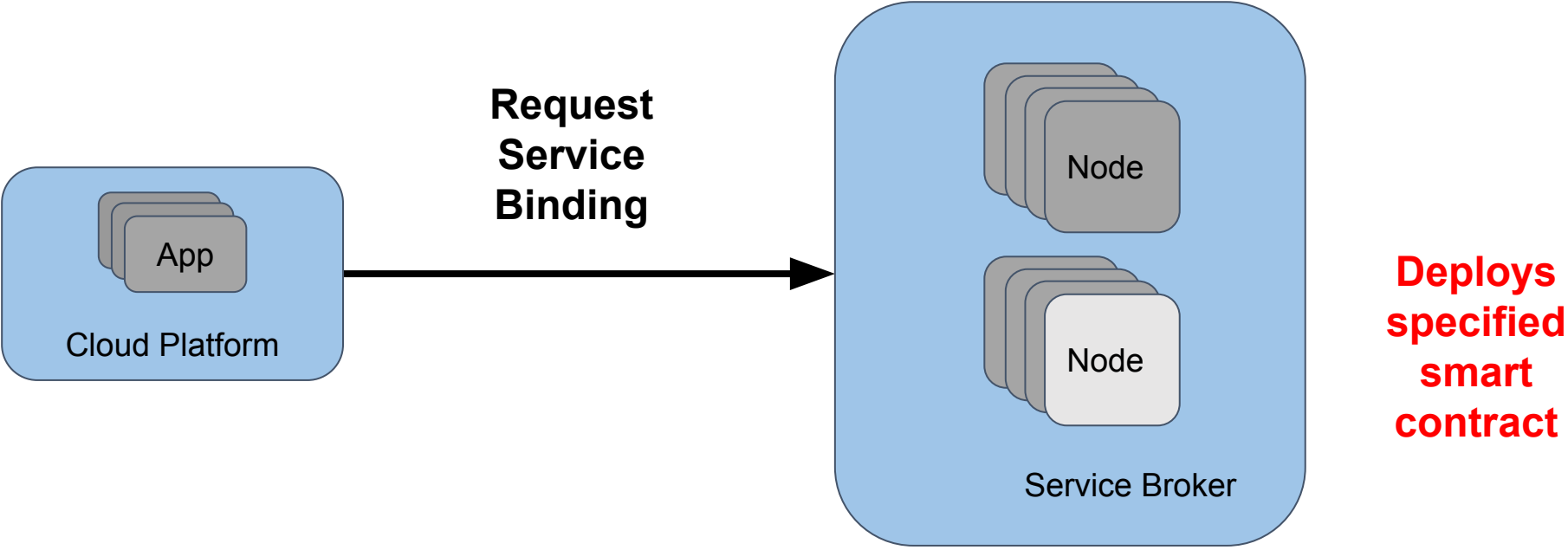
# Service Binding



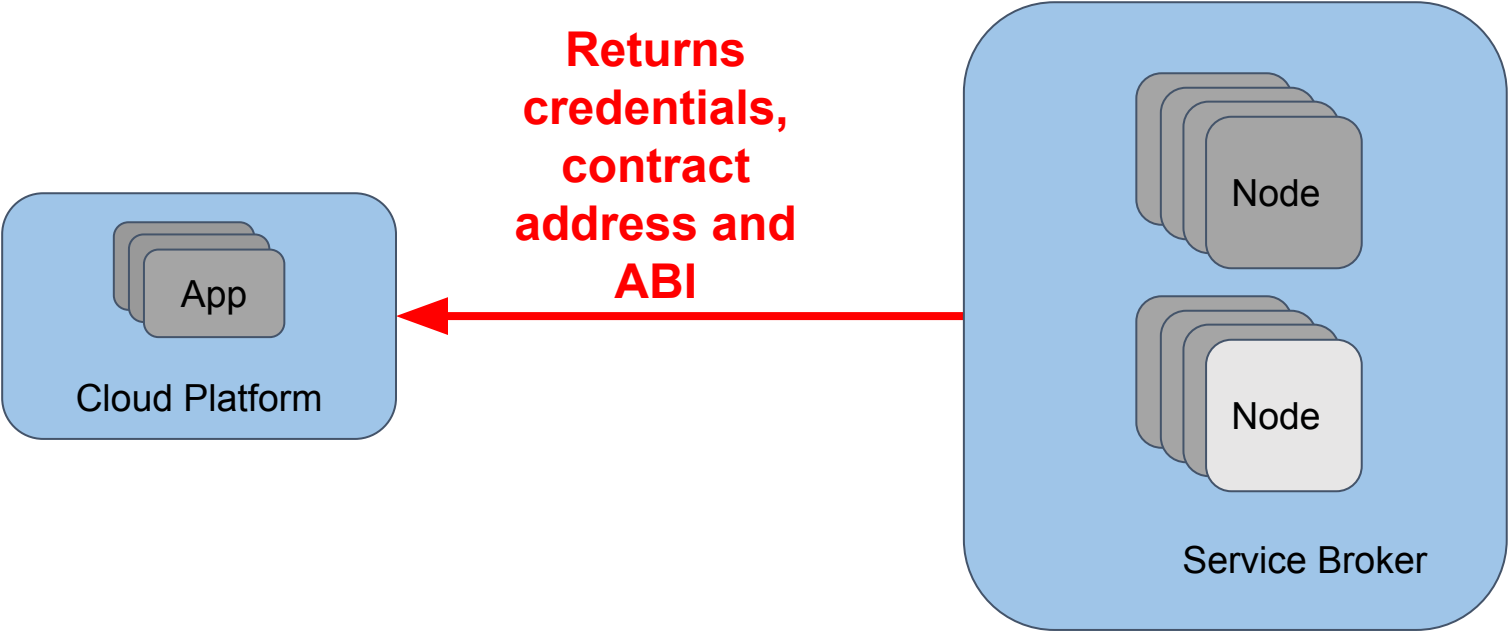
# Service Binding



# Service Binding



# Service Binding



# DEMO



# References

- OSBAPI : <https://github.com/openservicebrokerapi/servicebroker>
- Bosh Release:  
<https://github.com/nimakaviani/ethereum-container-broker>
- Demo App:  
<https://github.com/swetharepakula/blockhead-broker-demo>
- Blog Post:  
<https://hackernoon.com/project-blockhead-an-ethereum-smart-contract-service-broker-for-kubernetes-and-cloud-foundry-88390a3ac63f>





Any Questions?

