

# Ethereum Blockchain on Azure

Perth Cloud Meetup 10<sup>th</sup> October 2017

# Rules of Blockchain Club!

**Rule 1: Blockchain is not Bitcoin!**

**Rule 2: Blockchain is not Bitcoin!**

**Rule 3: Blockchain is all about trust in an untrusted environment.**

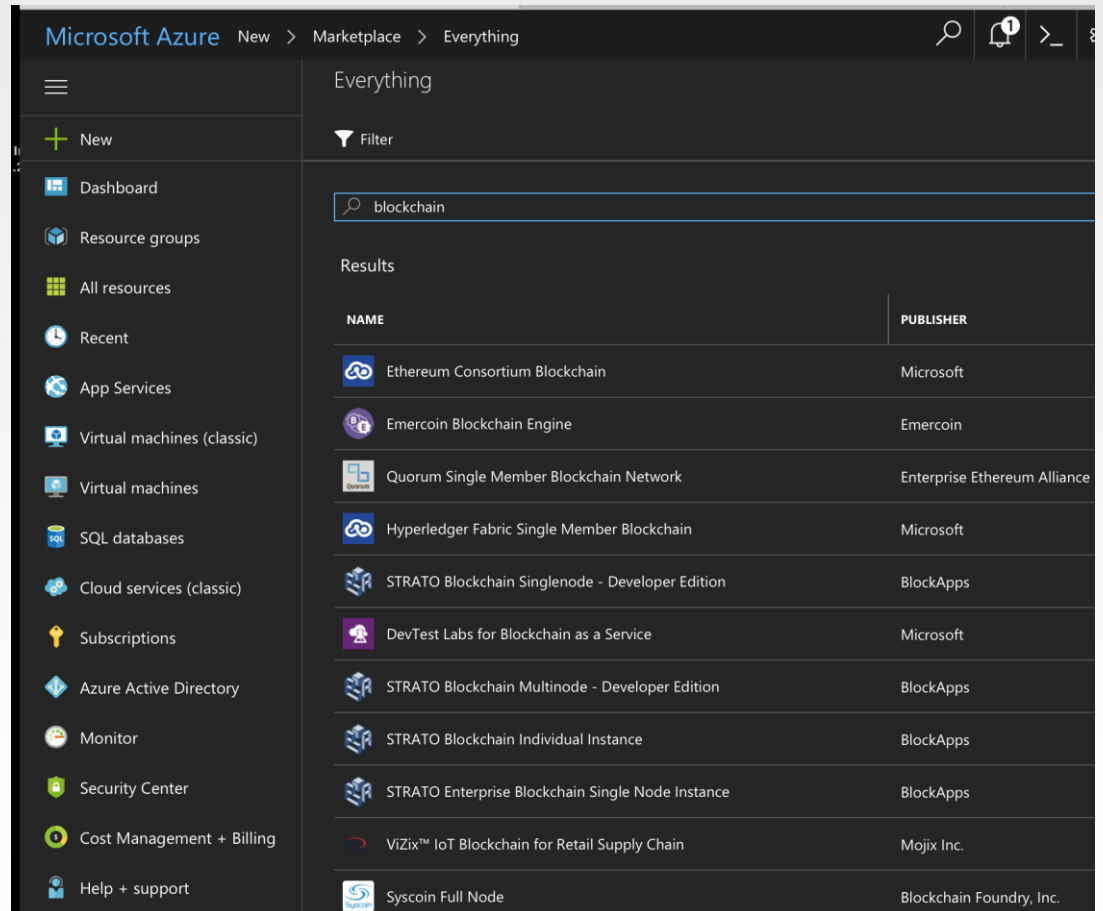


# Agenda

- We'll setup Azure
- Well talk about how it all works
- Discuss Smart Contracts and some real world examples
- Demo of setting up account and sending "Eth".
- If we have time ...
  - Deploy a Contract

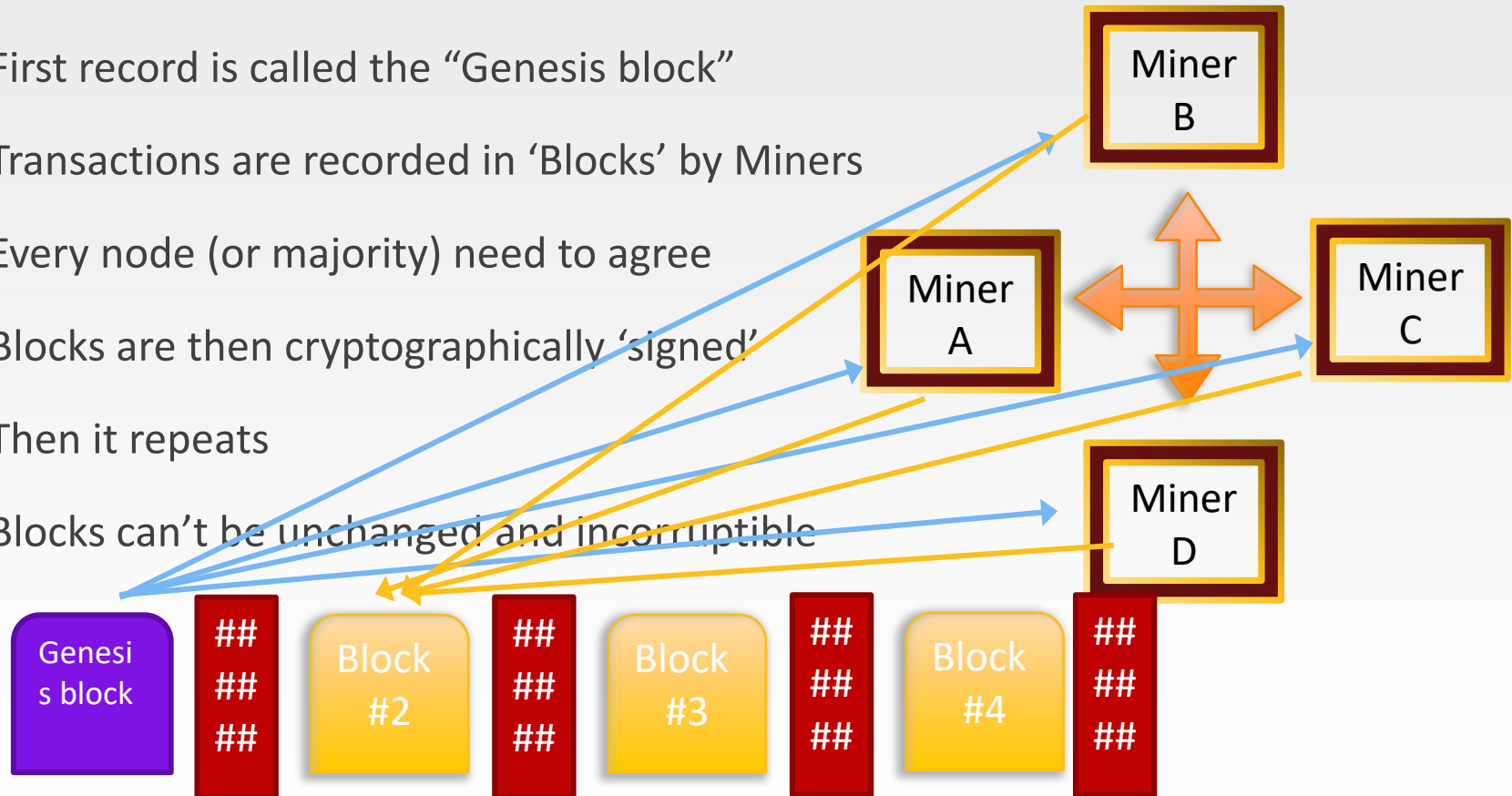
# First up is the Azure Setup

- Plenty of options in Azure
  - HyperLedger
  - Etheruem
  - Quorum
  - Stratro
  - Vizix
  - Syscoin
  - Emercoin
- Just search “Blockchain”



# What is a block chain? Some basics.

- Distributed Database of processing nodes aka “Miners”
- First record is called the “Genesis block”
- Transactions are recorded in ‘Blocks’ by Miners
- Every node (or majority) need to agree
- Blocks are then cryptographically ‘signed’
- Then it repeats
- Blocks can’t be unchanged and incorruptible



# But we're also looking at Smart Contracts

- Important
  - Your smart contract is NOT smart and NOT a contract! It's just code that updates a ledger.
  - Your contracts are merciless and programmers make mistakes
  - Contracts run on every node in the network
- Act as a automated “trusted” third party
  - Transfer tokens and pay out when a criteria has been reached
  - Trusted as code does not lie or cheat
  - Contracts can be published, checked and audited also “verified” to ensure what is supposed to happen, will happen.

# Some real world examples.

- FINANCIAL / COMMERCIAL SERVICES



The DAO  
Various services



Shares



Bill-of-lading



Diamond  
tracking

- GOVERNMENT / CIVIL



Food distribution  
and Supply chain



Autonomous  
Record Keeping



Swedish Land Registry



# Demo

- **Lets start with 1 trillion Eth. !!!**
- **Create a few accounts**
- **Transfer Eth between accounts**
- **Deploy a simple Contract**
- **Interact with the contract**

