



Integrating AEM with the Blockchain

Carsten Ziegeler, David Bosschaert – Adobe

About Carsten

- Principal Scientist @ Adobe
- Member of the Apache Software Foundation
- OSGi Expert Groups + Member of the Board

About David

- Senior Computer Scientist @ Adobe
- Member of the Apache Software Foundation
- OSGi Enterprise Expert Group co-chair

Blockchain

Blockchain Why?



A use-case for AEM

- Press Releases!



Pick a Blockchain

- We picked Hyperledger Sawtooth
- ASL 2 License
- Libraries for Java, JavaScript and Python
- Easy to run (on Linux)
- <https://github.com/hyperledger/sawtooth-core>

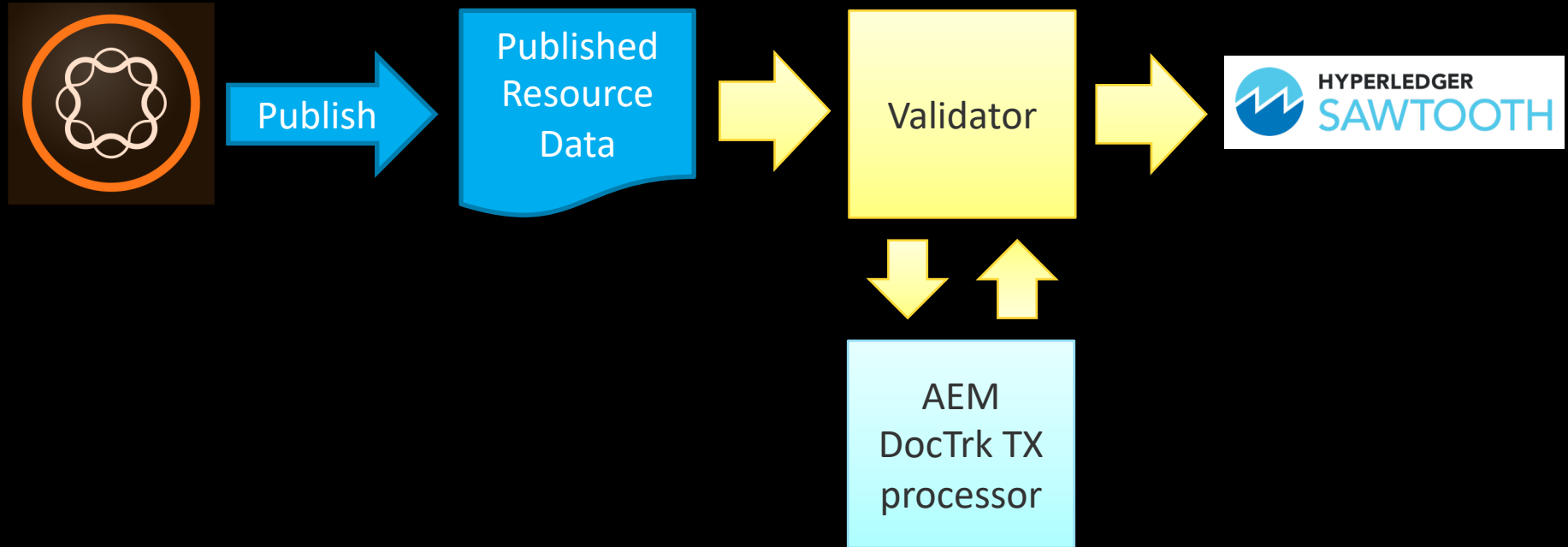


HYPERLEDGER

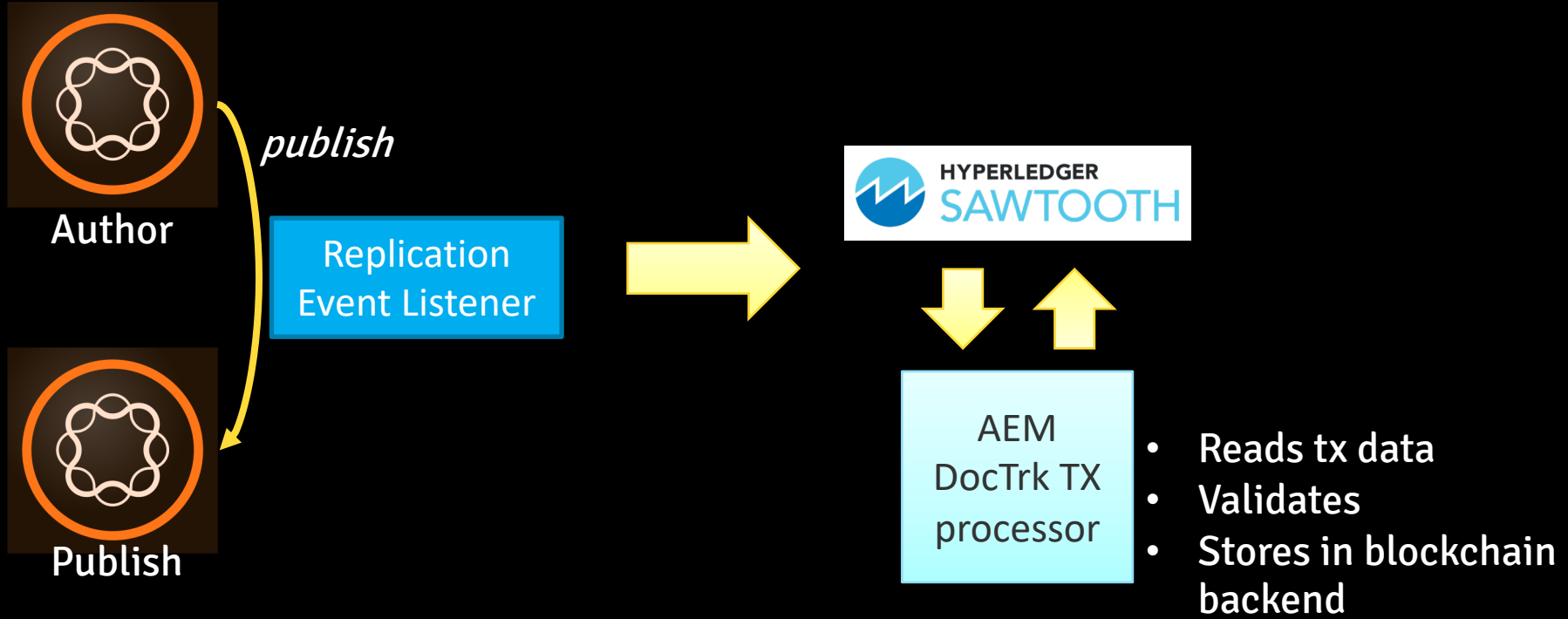


HYPERLEDGER
SAWTOOTH

How?



Some integration details



Demo!

"If you look at all the press releases about blockchain and replace blockchain with distributed database, they actually make much more sense" – Andrew Ng

Blockchain: Public, distributed DB

- Decentralized
- Audit-able/verifiable
- “Trustless” / Consensus based
- Slow

- Owner
- Access Control
- GDPR

Audit-able / Verifiable ?

- Public data ✓
- Links ✗
- Encrypted ✓ / ✗

Unchangeable ?

- Hashing
- Reinterpretation
- Consensus based (51%)

Often heard use cases

- File/Contract Storage
- Supply chain
- DRM
- Distributed Identity
- Monetizing existing processes

Conclusion

Do I need a blockchain?

✓ Problem → Is blockchain a good solution?

✗ Blockchain is the solution! → Problem

(c) Jackson Palmer (Founder of Dogecoin)

Acknowledgements

- Title slide image photo by David Bosschaert 2018
- Blockchain Why? Image by Luis Louro licensed from Adobe Stock <https://stock.adobe.com>
- Press Release image by Coloures-Pic licensed from Adobe Stock <https://stock.adobe.com>