

EEA ARCHITECURE STACK FOR ENTERPRISE ETHEREUM BLOCKCHAIN PLATFORMS

The Enterprise Ethereum Architecture Stack (EEAS) is a conceptual framework that characterizes and standardizes components from the Ethereum ecosystem. The EEAS details functions of an Enterprise Ethereum blockchain client without regard to its underlying software code, application programming interfaces (APIs), and communications protocols.

The purpose of the EEAS is to guide the development of the EEA's coming Enterprise Ethereum standards-based specification. Both the concepts and technologies from the public Ethereum community and the EEA Technical Steering Committee (TSC) will be integrated into the EEA's Enterprise Ethereum specification.

The EEAS offers businesses and developers better visibility into the enterprise connections between business processes and Ethereum blockchain. The diagram below reveals how each application relates to technology resources. This comprehensive view of applications, tools and technologies defines how groups, outside vendors, developers and entire ecosystems will be able take advantage of the Enterprise Ethereum Specification.

The EEA Stack and Specification will accelerate the deployment of Enterprise Ethereum solutions and motivate businesses to deploy EEA standardized solutions by providing interoperability among multiple vendors of choice.

ENTERPRISE ETHEREUM ARCHITECTURE STACK APPLICATION DAPPS INFRA CONTRACTS & STANDARDS NETWORK GOVERNANCE TOKEN STANDARDS ETHEREUM NAME SERVICE SMART CONTRACT TOOLS FORMAL VERIFICATION SMART CONTRACT LANGUAGES TOOLING WALLETS KEY MANAGEMENT PERMISSIONING / AUTHENTICATION INTEGRATION & DEPLOYMENT TOOLS ENTERPRISE MANAGEMENT SYSTEMS INTEGRATION LIBRARIES CLIENT INTERFACES / JSON-RPC INTER-CHAIN ORACLES PRIVACY / SCALING PRIVACY OFF-CHAIN (TRUSTED EXECUTION) PRIVATE TRANSACTIONS ON-CHAIN SCALING ON-CHAIN (LAYER 1) OFF-CHAIN (LAYER 2 COMPUTE) CORE BLOCKCHAIN STORAGE/LEDGER ON-CHAIN PUBLIC STATE ON-CHAIN STORAGE OFF-CHAIN STORAGE ON-CHAIN PRIVATE STATE EXECUTION PRECOMPILED CONTRACTS TRUSTED EXECUTION SYNC CONSENSUS PUBLIC CONSENSUS PRIVATE CONSENSUS NETWORK ENTERPRISE P2P NETWORK PROTOCOL Public Ethereum Application Layer All Yellow Paper, Public Ethereum, and Application Layer components may be extended for Enterprise Ethereum as required © 2018 Enterprise Ethereum Alliance

The EEA is proud to make this architecture stack depiction publicly available to the entire blockchain industry.

For more information, or to join the EEA, visit http://eea.wpengine.com/