DIDO RA 3.0 (Full Version)

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- American National Standards Institute (ANSI)
- American Standard for Information Interchange (ASCII)
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- Architecture Adaptability
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- Biometrics
- Bitcoin Wallet
- Bit Error
- Black Box Testing
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- Bluetooth
- Bootstrap
- Bridge
- Brownfield
- Bylaws
- Byzantine Fault Tolerance (BFT)
- Byzantine Generals Problem
- Glossary C Terms
- Cable Subscriber Protection
- California Consumer Privacy Act (CCPA)
- Capability Maturity Model Integration (CMMI)
- Category 5 (Cat-5)
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- Central Processing Unit (CPU)
- Charter
- Children's Online Privacy Protection Act (COPPA)
- Claim
- Class
- Client

- Client-Server
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- Coins
- Comma Separated Values (CSV)
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- Command Shell
- Commercial Off-The-Shelf (COTS)
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- Common Language Runtime (CLR)
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- Communication Protocol
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- Computer Architecture
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- Conceptual Schema
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- Confidentiality Agreement
- Configuration Management (CM)
- Conformance Specification
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- Container
- Container Engine
- Container Host
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- Cryptocurrency
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- Daemon
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- DataBase Management System (DBMS)
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- Data Link Layer (DLL)
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- Data Manipulation Language (DML)
- Data Model (DM)
- Data Object (DO)
- Data Protection
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- Data Quality
- Data Reader
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- Datastore
- Data Structure
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- DDS Domain
- Decentralized Finance (DeFi)
- de facto Standard
- Delegated Byzantine Fault Tolerant (dBFT)
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- DIDO Domain Community
- DIDO Ecosphere Community
- DIDO Ecosystem Community
- DIDO Platform
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- Disk Image
- Distributed Application (ĐApp or DApp)
- Distributed Denial-of-Service (DDoS)
- Distributed Immutable Data Objects (DIDO)
- Distributed Ledger Technology (DLT)
- Distributed System
- Docker
- Domain Integrity
- Domain Knowledge
- Domain Name System (DNS)
- Domain Participant
- Download Speed
- Downtime
- Driver's Privacy Protection Act of 1994 (DPPA)
- Duck Typing
- Durability
- Dynamic Host Configuration Protocol (DHCP)
- Dynamic Link Library (.dll)

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- Elastic Compute Cloud (EC2)
- Encryption
- End-of-life (EoL)
- End-to-End Solution (E2ES)
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- Enterprise Resource Planning (ERP)
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- Fault Tolerance
- Federal Deposit Insurance Corporation (FDIC)
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- Fifty-One Percent (51% Attack)
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- Figure of Merit (FoM)
- File Transfer Protocol (FTP)
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- Firewall
- Five Nines
- Flowchart
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- General Data Protection Regulation (GDPR)
- Goal
- Google Mobile Services (GMS)
- Government Off-The-Shelf (GOTS)
- Graphical User Interface (GUI)
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- Greenfield
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- Health Insurance Portability and Accountability Act (HIPAA)
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- Institute of Electrical and Electronics Engineers (IEEE)
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- International Organization for Standardization (ISO)
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- Internet Protocol (IP)
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- Interoperability
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- ISO 9001
- ISO 15288
- ISO 90003-2018
- Glossary J Terms
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- Jitter
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- Ledger
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- Read-Only Memory (ROM)
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- Relational DataBase Management System (RDBMS)
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- Software Firewall
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- Symmetric Multiprocessing (SMP)
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- eXtensible Markup Language (XML)
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- ZigBee
- xapend.b_stds
- Technical Standards Bodies
- asf
- apa_2.0
- ECMA International
- ECMA: Standard ECMA-262 - ECMAScript® 2018 Language Specification (Javascript)
- ECMA: Standard ECMA-334 - C# Language Specification
- ECMA: Standard ECMA-335 - Common Language Infrastructure (CLI)
- ECMA: Technical Report TR/84 - Common Language Infrastructure (CLI) - Information Derived from Partition IV XML File
- ECMA: Technical Report TR/89 - Common Language Infrastructure (CLI) - Common Generics
- Institute of Electrical and Electronics Engineers (IEEE)
- posix
- Internet Engineering Task Force (IETF)
- RFC0147 - The Definition of a Socket
- RFC0768 - User Datagram Protocol (UDP)
- RFC0791 - Internet Protocol (IPv4)
- RFC0793 - Transmission Control Protocol
- RFC1034 - Domain Names - Concepts and Facilities

- RFC1035 - Domain Names - Implementation and Specification
- RFC1112 - Host Extensions for IP Multicasting
- RFC1831 - Remote Procedure Call Protocol Specification Version 2 (RPC)
- RFC2026 - The Internet Standards Process
- RFC2104 - Keyed-Hashing for Message Authentication (HMAC)
- RFC2246 - The TLS Protocol
- RFC2315 - Cryptographic Message Syntax
- RFC2426 - vCard MIME Directory Profile
- RFC2460 - Internet Protocol, Version 6 (IPv6) Specification
- RFC2818 - HTTP Over TLS (HTTPS)
- RFC3339 - Date and Time on the Internet: Timestamps
- RFC3447 - PKCS #1: RSA Cryptography Specifications
- RFC3596 - DNS Extension to support IP Version 6
- RFC4122 - A Universally Unique IDentifier (UUID) URN Namespace
- RFC5011 - Automated Updates of DNS Security (DNSSEC) Trust Anchors
- RFC5234 - Augmented BNF for Syntax Specifications: ABNF
- RFC5424 - The Syslog Protocol (SYSLOG)
- RFC6101 - The Secure Sockets Layer (SSL) Protocol Version 3.0
- RFC6376 - DomainKeys Identified Mail (DKIM) Signatures
- RFC6455 - The WebSocket Protocol
- RFC6749 - The OAuth 2.0 Authorization Framework
- RFC6750 - The OAuth 2.0 Authorization Framework: Bearer Token Usage
- RFC6891 - Extension Mechanisms for DNS (EDNS(0))
- RFC6979 - Deterministic Usage of the Digital Signature Algorithm (DSA) and Elliptic Curve Digital Signature Algorithm (ECDSA)
- RFC7061 - eXtensible Access Control Markup Language (XACML) XML Media Type
- RFC7235 - Hypertext Transfer Protocol (HTTP/1.1): Authentication
- RFC7405 - Case-Sensitive String Support in ABNF
- RFC8259 - The JavaScript Object Notation (JSON) Data Interchange Format
- International Organization for Standardization (ISO)
- ISO/IEC 19506:2012 Architecture-Driven Modernization (ADM) -- Knowledge Discovery Meta-Model (KDM)
- ISO/IEC 23360-1:2006 Linux Standard Base (LSB) core specification 3.1 -- Part 1: Generic specification
- ISO 9001:2015 Quality management
- ISO/IEC 9075-01:2016 Database languages — SQL — Part 1: Framework (SQL/Framework)
- ISO/IEC 9075-02:2016 Database languages — SQL — Part 2: Foundation (SQL/Foundation)
- ISO/IEC 9075-03:2016 Database languages — SQL — Part 3: Call-Level Interface (SQL/CLI)
- ISO/IEC 9075-04:2016 Database languages — SQL — Part 4: Persistent stored modules (SQL/PSM)
- ISO/IEC 9075-09:2016 Database languages — SQL — Part 9: Management of External Data (SQL/MED)
- ISO/IEC 9075-10:2016 Database languages — SQL — Part 10: Object language bindings (SQL/OLB)
- ISO/IEC 9075-11:2016 Database languages — SQL — Part 11: Information and definition schemas (SQL/Schemata)
- ISO/IEC 9075-13:2016 Database languages — SQL — Part 13: SQL Routines and types using the Java TM programming language (SQL/JRT)
- ISO/IEC 9075-14:2016 Database languages — SQL — Part 14: XML-Related Specifications (SQL/XML)

- ISO/IEC 9241-210:2019 Ergonomics of human-system interaction
- ISO/IEC/IEEE 90003:2018 Software engineering – Guidelines for the application of ISO 9001:2015 to computer software
- ISO/IEC/IEEE 25000:2014 SQuaRE -- Guide to SQuaRE
- ISO/IEC 25001:2014 SQuaRE -- Planning and Management
- ISO/IEC 25010:2011 SQuaRE -- System and Software Quality Models
- ISO/IEC 25012:2008 SQuaRE -- Data Quality Model
- ISO/IEC 25020:2007 SQuaRE -- Measurement Reference Model and Guide
- ISO/IEC 25021:2012 SQuaRE -- Quality Measure Elements
- ISO/IEC 25022:2016 SQuaRE -- Measurement of Quality in Use
- ISO/IEC 25023:2016 SQuaRE -- Measurement of System and Software Product Quality
- ISO/IEC 25024:2015 SQuaRE -- Measurement of Data Quality
- ISO/IEC 25030:2007 SQuaRE -- Quality Requirements
- ISO/IEC 25040:2011 SQuaRE -- Evaluation Process
- ISO/IEC 25041:2012 SQuaRE -- Evaluation Guide for Developers, Acquirers and Independent Evaluators
- ISO/IEC 25045:2010 SQuaRE -- Evaluation Module for Recoverability
- ISO/IEC 9899:2018 Programming languages -- C
- ISO/IEC 14882:2017 Programming languages -- C++
- ISO/IEC 22275:2018 Programming Languages - ECMAScript Specification Suite
- ISO 8601-1:2019 Date and time -- Representations for information interchange -- Part 1: Basic rules
- ISO 8601-2:2019 Date and time -- Representations for information interchange -- Part 2: Extensions: Basic rules
- ISO/IEC/IEEE 15288:2015 Systems and software engineering -- System life cycle processes
- ISO/IEC 9834-8:2014 Information technology -- Procedures for the operation of object identifier registration authorities -- Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers
- ISO 10001:2018 Quality management — Customer satisfaction — Guidelines for codes of conduct for organizations
- ISO 10002:2018 Quality management — Customer satisfaction — Guidelines for complaints handling in organizations
- ISO 10003:2018 Quality management — Customer satisfaction — Guidelines for dispute resolution external to organizations
- ISO 10004:2018 Quality management — Customer satisfaction — Guidelines for monitoring and measuring
- International Telecommunications Union (ITU)
- ITU-T Y.2060 - Overview of the Internet of things
- National Institute of Standards and Technology (NIST)
- NIST: FIPS PUB 186-4: Digital Signature Standard (DSS)
- NIST: SP 800-89: Recommendation for Obtaining Assurances for Digital Signature Applications
- NIST: SP 800-126: The Technical Specification for the Security Content Automation Protocol (SCAP)
- Organization for the Advancement of Structured Information Standards (OASIS)
- OASIS: Assertions and Protocols for the OASIS Security Assertion Markup Language (SAML)
- OASIS: eXtensible Access Control Markup Language (XACML)
- Object Management Group (OMG)
- OMG: Automated Source Code CISQ Maintainability Measure (ASCMM)

- OMG: Automated Source Code CISQ Measures (ASCQM)
- OMG: Automated Source Code CISQ Security Measure (ASCSM)
- OMG: Automated Source Code CISQ Performance Efficiency Measure (ASCPEM)
- OMG: Automated Source Code CISQ Reliability Measure (ASCRM)
- OMG: CISQ Automated Enhancement Points (AEP)
- OMG: CISQ Automated Function Points (AFP)
- OMG: CISQ Automated Technical Debt Measure (ATDM)
- OMG: Case Management Model and Notation (CMMN)
- OMG: Data Distribution Service (DDS)
- OMG: DDS Interoperability Wire Protocol (DDSI-RTPS)
- OMG: ISO/IEC C++ 2003 Language DDS PSM (DDS-PSM-Cxx)
- OMG: Java 5 Language PSM for DDS (DDS-Java)
- OMG: OPC-UA/DDS Gateway (DDS-OPCUA)
- OMG: RPC Over DDS (DDS-RPC)
- OMG: DDS Security (DDS-SECURITY)
- OMG: Web-Enabled DDS (DDS-WEB)
- OMG: DDS Consolidated XML Syntax (DDS-XML)
- OMG: DDS For Extremely Resource Constrained Environments (DDS-XRCE)
- OMG: Extensible and Dynamic Topic Types for DDS (DDS-XTypes)
- OMG: Interface Definition Language (IDL)
- OMG: Ontology Definition Metamodel (ODM)
- OMG: Semantics Of Business Vocabulary and Rules (SBVR)
- OMG: Structured Assurance Case Metamodel (SACM)
- OMG: Structured Metrics Metamodel (SMM)
- OMG: Systems Modeling Language (SysML)
- OMG: Unified Architecture Framework (UAF)
- Open Source Initiative (OSI)
- OSI: The 2-Clause BSD License (BSD-2-Clause)
- OSI: The 3-Clause BSD License (BSD-3-Clause)
- OSI: GNU Library General Public License version 2 (LGPL-2.0)
- OSI: GNU Lesser General Public License version 2.1 (LGPL-2.1)
- OSI: GNU General Public License version 3 (GPL-3.0)
- OSI: The MIT License (MIT)
- OSI: Common Public License, Version 1.0 (CPL-1.0)
- OSI: Eclipse Public License Version 2.0 (EPL-2.0)
- OSI: Mozilla Public License (MPL-2.0)
- World Wide Web Consortium (W3C)
- W3C: Cascading Style Sheets Level 2 Revision 2 (CSS 2.2) Specification
- W3C: Decentralized Identifiers (DIDs) 1.0
- W3C: Document Object Model (DOM) Level 3 Core Specification
- W3C: HTML5 (HTML5)
- W3C: OWL 2 Web Ontology Language - Structural Specification and Functional-Style Syntax (second Edition)
- W3C: RDF 1.1 Concepts and Abstract Syntax (RDF)
- W3C: RDF 1.1 Terse RDF Triple Language (Turtle)
- W3C: SPARQL 1.1 Overview (SPARQL)
- W3C: Extensible Markup Language (XML) 1.0 (Fifth Edition)
- W3C: XML Schema Definition Language (XSD) 1.1 Part 1: Structures

- W3C: XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes
- W3C: XSL Transformations (XSLT) Version 3.0
- W3C: XML Path Language (XPath) 3.1
- de facto Standards Bodies
- amazon
- apache
- Apache: Log4cxx
- Apache: Log4j
- Apache: log4jscala
- Apache: log4net
- Apache: log4php
- apple
- Apple: Darwin
- Apple: iOS
- Apple: MacOS
- bitcoin
- Bitcoin: Bitcoin Improvement Proposals (BIPs)
- BIP 0011 - M-of-N Standard Transactions
- BIP 0013 - Address Format for pay-to-script-hash
- BIP 0014 - Protocol Version and User Agent
- BIP 0016 - Pay to Script Hash (soft fork)
- BIP 0021 - URI Scheme
- BIP 0022 - getblocktemplate - Fundamentals
- BIP 0023 - getblocktemplate - Pooled Mining
- BIP 0030 - Duplicate transactions (soft fork)
- BIP 0031 - Pong message
- BIP 0034 - Block v2, Height in Coinbase (soft fork)
- BIP 0035 - mempool message
- BIP 0037 - Connection Bloom filtering
- BIP 0042 - A finite monetary supply for Bitcoin (soft fork)
- BIP 0061 - Reject P2P message
- BIP 0065 - OP_CHECKLOCKTIMEVERIFY (soft fork)
- BIP 0068 - Relative lock-time using consensus-enforced sequence numbers (soft fork)
- BIP 0070 - Payment Protocol
- BIP 0071 - Payment Protocol MIME types
- BIP 0072 - bitcoin: uri extensions for Payment Protocol
- BIP 0073 - Use "Accept" header for response type negotiation with Payment Request URLs
- BIP 0091 - Reduced threshold Segwit MASF (soft fork)
- BIP 0112 - CHECKSEQUENCEVERIFY (soft fork)
- BIP 0113 - Median time-past as endpoint for lock-time calculations (soft fork)
- BIP 0137 - Signatures of Messages using Private Keys
- BIP 0141 - Segregated Witness (Consensus layer) (soft fork)
- BIP 0143 - Transaction Signature Verification for Version 0 Witness Program (soft fork)
- BIP 0144 - Segregated Witness (Peer Services)
- BIP 0145 - getblocktemplate Updates for Segregated Witness
- BIP 0147 - Dealing with dummy stack element malleability (soft fork)

- BIP 0148 - Mandatory activation of segwit deployment (soft fork)
- Bitcoin: Developer's Guidance
- Bitcoin: Guide 1 Blockchain
- Bitcoin: Guide 2 Transactions
- Bitcoin: Guide 3 Contracts
- Bitcoin: Guide 4 Wallets
- Bitcoin: Guide 5 Payment Processing Guide
- Bitcoin: Guide 6 Operating Modes
- Bitcoin: Guide 7 Peer-to-Peer Networks
- Bitcoin: Guide 8 Mining
- Bitcoin: Bitcoinj Developer's Documentation
- cisq
- ethereum
- ethereum_solidity
- ethereum_vm
- Ethereum: Ethereum Improvement Proposals (EIPs)
- EIP 20: ERC-20 Token Standard
- EIP 55: Mixed-case checksum address encoding
- EIP 137: Ethereum Domain Name Service - Specification
- EIP 141: Designated invalid EVM instruction
- EIP 155: Simple replay attack protection
- EIP 162: Initial ENS Hash Registrar
- EIP 165: ERC-165 Standard Interface Detection
- EIP 181: ENS support for reverse resolution of Ethereum addresses
- EIP 190: Ethereum Smart Contract Packaging Standard
- EIP 191: Signed Data Standard (DRAFT)
- EIP 211: New opcodes: RETURNDATASIZE and RETURNDATACOPY
- EIP 214: New opcode STATICCALL
- EIP 721: ERC-721 Non-Fungible Token Standard
- EIP 777: ERC-777 Token Standard
- EIP 1167: Minimal Proxy Contract
- EIP 1820: Pseudo-introspection Registry Contract
- EIP 107: safe "eth_sendTransaction" authorization via html popup (DRAFT)
- EIP 234: `blockHash` to JSON-RPC filter options (DRAFT)
- EIP 695: Create `eth_chainId` method for JSON-RPC (DRAFT)
- EIP 712: Ethereum typed structured data hashing and signing (DRAFT)
- EIP 758: ERC-NN Subscriptions and filters for completed transactions (DRAFT)
- EIP 1102: Opt-in account exposure (DRAFT)
- EIP 1186: RPC-Method to get Merkle Proofs - eth_getProof (DRAFT)
- EIP 1193: Ethereum Provider JavaScript API (DRAFT)
- EIP 1474: Remote Procedure Call (RPC) specification (DRAFT)
- EIP 1767: GraphQL interface to Ethereum node data (DRAFT)
- EIP 1803: ERC-NN Rename opcodes for clarity (DRAFT)
- EIP 1898: ERC-NN Add `blockHash` to JSON-RPC methods which accept a default block parameter (DRAFT)
- Ethereum: Clients
- Ethereum: cpp Project
- Ethereum: Ethereumh Project

- Ethereum: Ethereumjs-lib Project
- Ethereum: Ethereum_j Project
- Ethereum: Go-ethereum Project
- Ethereum: Parity Project
- Ethereum: Pyethapp Project
- Ethereum: Ruby-ethereum Project
- Ethereum: Clients
- Ethereum: cpp Project
- Ethereum: Ethereumh Project
- Ethereum: Ethereumjs-lib Project
- Ethereum: Ethereum_j Project
- Ethereum: Go-ethereum Project
- Ethereum: Parity Project
- Ethereum: Pyethapp Project
- Ethereum: Ruby-ethereum Project
- google
- Google: Android
- Google: Go (software language)
- Google: gRPC
- Google: Protocol Buffers
- iota
- linuxf
- Linux Foundation: Hyperledger
- Linux Foundation: OpenJS Foundation
- Kubernetes
- Node.js
- Linux Foundation: Open Middleware Agnostic Messaging API (OpenMAMA)
- Linux Foundation: Open Messaging
- ISO/IEC The Linux Standard Base 5 Specification Series (LSB 5)
- microsoft
- Microsoft: Windows API
- orcle
- Oracle: The Java® Language Specification SE 8 Edition
- Oracle: The Java® Virtual Machine Specification JVM
- Oracle: Java logger API
- todo
- TODO: How to create an open source program
- TODO: Measuring your open source program's success
- TODO: Tools for managing open source programs
- TODO: Using open source code
- TODO: Participating in open source communities
- TODO: Recruiting open source developers
- TODO: Starting an open source project
- TODO: Improve your open source development impact
- TODO: Shutting down an open source project
- TODO: Building leadership in an open source community

- TODO: Setting an Open Source Strategy
- git
- ipfs
- jenkins
- jira
- partosscommunity
- zeromq
- zmtp
- xapend.c_hwarch
- C.1 Embedded Systems
- C.1.1 Embedded Subsystem
- C.1.2 Standalone Embedded Systems
- C.1.3 Networked Embedded Systems
- C.2 Servers
- C.2.1 Software Servers
- C.2.2 Hardware Servers
- C.3 Desktops
- C.4 Handheld Computers
- C.5 Supercomputers
- C.6 Network Devices
- xapend.d_opsys
- android
- apstra
- axure_rtos
- azure_sphere_os
- balenaos
- blackberry_qnx
- centos
- chromium_os
- cisco_dna_software
- cisco_ios
- cisco_ios_xr
- cisco_nx-os
- clearos
- cloudready
- extremexos
- freebsd
- freertos
- ibm_i
- ios
- junos_os
- lynxos
- nokia_x_software_platform
- open_network_linux
- openserver
- oracle_linux
- oracle_solaris
- rhel

- santricity_software
- sco_unixware
- suse_linux_ee
- truenas
- ubuntu_linux
- windows
- windows_iot
- windows_nt
- windows_server
- windows_xp
- xapend.e_tools
- Tools: Archiving and Release Management
- Tools: Bug and Issue Tracking
- Tools: Code Reviews
- Tools: Contributor License Agreements (CLA)
- Tools: GitHub Management at Corporate Scale
- Tools: Logging Tools
- Tools: Network Traffic Analysis
- Tools: Open Source Paradigm
- Tools: Project Quality
- Tools: Source Code Scanning and License Compliance
- Tools: Tracking Project Health
- xapend.f_qos
- F.1 User Data
- F.2 Topic Data
- F.3 Group Data
- F.4 Durability
- F.5 Durability Service
- F.6 Presentation
- F.8 Latency Budget
- F.7 Deadline
- F.9 Ownership
- F.10 Ownership Strength
- F.11 Liveliness
- F.12 Time Based Filter
- F.13 Partition
- F.14 Reliability
- F.15 Transport Priority
- F.16 Lifespan
- F.17 Destination Order
- F.18 History
- F.19 Resource Limits
- F.20 Entity Factory
- F.21 Writer Data Lifecycle
- F.22 Reader Data Lifecycle
- Appendix G: Tests

- Appendix H: Acronyms
- Appendix I: Cognitive Model
- Appendix J: Governance Model

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