



# FORUM SYSTEMS™

THE LEADER IN API SECURITY MANAGEMENT



## FORUM SENTRY

API SECURITY GATEWAY



ACCESS CONTROL



SINGLE SIGN-ON (SSO)



THREAT MITIGATION



SECURE INTEGRATION



## FORUM SENTRY BENEFITS AND SPECIFICATIONS

FORUMSENTRY

API VIRTUALIZATION	<ul style="list-style-type: none"> <li>⇒ API creation and endpoint abstraction</li> <li>⇒ URI cloaking and conversion</li> <li>⇒ Format conversion among XML, SOAP, REST, and JSON</li> <li>⇒ WSDL-virtualization from multiple endpoints into single virtual WSDLs</li> <li>⇒ Selectively expose service &amp; API definitions to consumers based on credentials</li> </ul>
DATA LEAKAGE AND INTRUSION PREVENTION	<ul style="list-style-type: none"> <li>⇒ Threat prevention for embedded content including DLP and IDP</li> <li>⇒ On-Board Antivirus with embedded BASE64 and binary scanning</li> <li>⇒ OWASP Top 10 API Threat Prevention</li> <li>⇒ Protection against NIST Web Service Vulnerabilities</li> <li>⇒ Bi-directional Content-based Access Control</li> </ul>
AGGREGATION	<ul style="list-style-type: none"> <li>⇒ Message translation and combined aggregation</li> </ul>
ACCESS CONTROL	<ul style="list-style-type: none"> <li>⇒ Protocol Level and Message Level Access Control</li> <li>⇒ RBAC, ABAC, and CBAC</li> <li>⇒ SSO and session management</li> </ul>
SLA THROTTLING	<ul style="list-style-type: none"> <li>⇒ Bi-directional rate and size sensors</li> <li>⇒ Rates based on API, User, Device, or defined group</li> <li>⇒ Block, Throttle and Quarantine API transactions</li> </ul>
DATA LEVEL PRIVACY & INTEGRITY	<ul style="list-style-type: none"> <li>⇒ Content-level message encryption and signatures, asymmetric and symmetric PKI</li> <li>⇒ Extensive standards-based support for superior interoperability</li> <li>⇒ XML and JSON Schema Validation, XML Schema Facet Tightening, HTTP RFC Conformance.</li> </ul>
INFORMATION ENRICHMENT & TRANSFORMATION	<ul style="list-style-type: none"> <li>⇒ Policy and task libraries and functions for comprehensive document workflow processing</li> <li>⇒ Comprehensive Message Transformation and Content-Based Routing</li> <li>⇒ Extensible APIs for scripting automation including REST API, and ability to script API workflow adapters via languages such as JavaScript, VBScript, Perl, Groovy, Python, Ant</li> <li>⇒ Streaming one-pass high-speed XSLT transformation and data mapping</li> <li>⇒ Dynamic value mapping across protocol headers, X509, IdM attributes, Databases, message-content, and external APIs</li> </ul>
CENTRALIZED POLICY MANAGEMENT	<ul style="list-style-type: none"> <li>⇒ Secure Web-based Administration with centralized policy storage</li> <li>⇒ Distribute policies across multiple product deployments with environment mappings</li> <li>⇒ Role-based and domain-based administration enable selective access to designated policies</li> <li>⇒ Policy versioning and rollback</li> </ul>
SUPERIOR SECURITY & PERFORMANCE	<ul style="list-style-type: none"> <li>⇒ Low latency processing</li> <li>⇒ Accelerated processing with hybrid wire-speed XML/JSON parser</li> <li>⇒ Large file payload processing</li> </ul>



BASE STANDARDS	⇒ XML, XHTML, SOAP, REST, JSON, WSDL, UDDI, XPath, XSD, DTD, XSLT, SwA MIME, DIME, MTOM, WS-Addressing, WS-RM, WS-Policy, AS2, ebXML, cXML, SAML, OAuth, OpenID, JWT
PROTOCOLS	⇒ HTTP(S), IBM MQ, Tibco EMS, Oracle JMS, JBOSS JMS, ActiveMQ, OpenWire, SolaceJMS, AMQP, FTP(S), SMTP, sFTP ⇒ Protocol Mixing ⇒ Remote Service Endpoint Load Balancing ⇒ Virtual network interface aliasing.
SECURITY	⇒ Encrypted key storage ⇒ Encrypted policy storage ⇒ XML/JSON Firewall, XML/JSON Threat Detection and Prevention ⇒ Web Application Firewall with OWASP Top 10, schema poisoning, cookie tracking ⇒ WS-Security 1.1 and 2004 ⇒ TLS 1.2 (with customizable ability to support legacy SSL v3, TLS 1.0/1.1) ⇒ Application DoS ⇒ Authorization breach detection ⇒ Data exfiltration prevention
CRYPTOGRAPHY & PKI	⇒ Import, Generation and Management of X.509 and PKCS Formats. Direct Java Key Store Import ⇒ PKCS #1, PKCS #7, PKCS #8, PKCS #11, PKCS #12, X.509 Certificates and CSRs ⇒ OCSP, CRL via LDAP, XKMS, HTTP, FILE, CDP ⇒ DoD PKI Certified X509 Authentication and CRL checking ⇒ RSA, DSA, ECDSA, SHA-1, SHA-2, RSA-SHA2, RIPEMD, HMAC, AES, 3DES, RSA-OAEP ⇒ OpenPGP
ENCODING & DIGESTS	⇒ BASE64, HEX, URL ⇒ Symmetric Encrypt, Decrypt, Digest Hashing
IDENTITY	⇒ SAML, OAuth, OpenID Connect, JWT ⇒ HTTP Basic Auth, SSL X.509, Digest Auth, Cookie, Form Post, Kerberos, NTLM, SPNEGO, URI ⇒ WS-Security Auth : Username Token, X.509, Kerberos, DSIG ⇒ Adaptable authentication using custom designated URI, Header or Body content ⇒ Dynamic authentication ⇒ Identity Token Mediation and format conversion ⇒ Built-in Token Services STS for OAuth, SAML, and OpenID Connect ⇒ Federation session management ⇒ IdM Adapters: Local, LDAP, Active Directory, SiteMinder, RSA SecureID, HP Select Access, IBM TAM, JSAM, OpenAM, XACML, OAuth, SAML, OpenID Connect, WS-Trust, PingIdentity, OKTA, Auth0, Google, Facebook, LinkedIn, Salesforce, REST custom, SOAP custom



ZERO TRUST	⇒ FIPS 140-2 and NDPP compliant Policy Enforcement Point (PEP)
ARCHITECTURE	⇒ Dynamic security based on LDAP, Database, AD, AzureAD ⇒ Content-level and protocol level encryption ⇒ AI Audit logging
LOGGING, REPORTING, & MONITORING	⇒ Data-Level Evidence Repository with External Archiving to MySQL, IBM DB2, Oracle, MS SQL ⇒ SYSLOG UDP/TCP/SSL, SNMP v3, JMX, SOAP Logging, Database Logging, Customized logging ⇒ Integrated 3rd party Logging and Monitoring: Splunk, Greylog, Elastic Cloud ⇒ Traffic Reporting ⇒ Transaction and throughput statistics, ⇒ Latency processing statistics ⇒ Configurable logging of any attribute ⇒ Configurable logging levels globally and per policy ⇒ Log tracing with unique session identifiers to distinguish transactions ⇒ Machine learning log format
ALERTS	⇒ Real-time alert sensors for customized event triggers or standard handling of errors and exceptions ⇒ Alerts via SNMP Trap, email, SYSLOG, Database, or custom API
TRANSFORMATION	⇒ Bi-directional protocol translation and message translation
ADMINISTRATION	⇒ Web-based GUI ⇒ Command-line Interface (CLI) with SSH access and Virtual Serial Terminal ⇒ REST API ⇒ Global Device Management (GDM) with Full Mirroring and Individual Policy Version & Promotion ⇒ Role-based Access Control (RBAC) and Multi-Domain Administration



HARDWARE

## Hardware

ForumOS™. FIPS 140-2 Level II purpose-built chassis. NIAP NDPP Certified. Patented cryptographic acceleration



OVA IMAGE

## VMWare

Fully encapsulated virtualized rendition of Hardware system in a deployable OVA VMWare image



AMI IMAGE

## Amazon

Fully encapsulated virtualized rendition of Hardware system in a deployable Amazon AMI



AZURE IMAGE

## Azure

Fully encapsulated virtualized rendition of Hardware system in a deployable MS Azure Image



docker

## Docker

Dockerized containers with rapid spin-up and small footprint



WINDOWS LINUX

## Software

Windows or Linux software provided via single-package install with no dependencies.

Forum Systems is the global leader in API Security and Zero Trust with industry-certified, patented, proven products deployed in the most rigorous and demanding customer environments worldwide. Forum Systems has been an industry leader since 2001 and has built the core architecture of its technology on the foundation of FIPS 140-2 and NDPP. Forum Systems security-first product architecture enables enterprise-class, mission critical deployments of API and Zero Trust Architecture with lower risk and lower cost. Our product technology is purpose-built and designed for highly scalable, agile solutions for on premise, cloud, mobile, B2B, and IoT communications with modern security protection to mitigate risks.

Forum Systems supports global enterprise customers across industries in commercial and government. Forum Systems technology provides the leading-edge of modern-day cyber-security innovation with integrated identity and SSO features that enable out-of-the box business solutions with point-and-click technology. Forum's patented FIPS 140-2 and NDPP certified products make modern-day business communications secure by actively protecting and accelerating data exchange and for API Security and Zero Trust assurance across networks and business boundaries.

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