

# RSA<sup>®</sup> Security Analytics

Detect & Investigate Threats.

## INFRASTRUCTURE

### HIGHLIGHTS

#### RSA Security Analytics Infrastructure

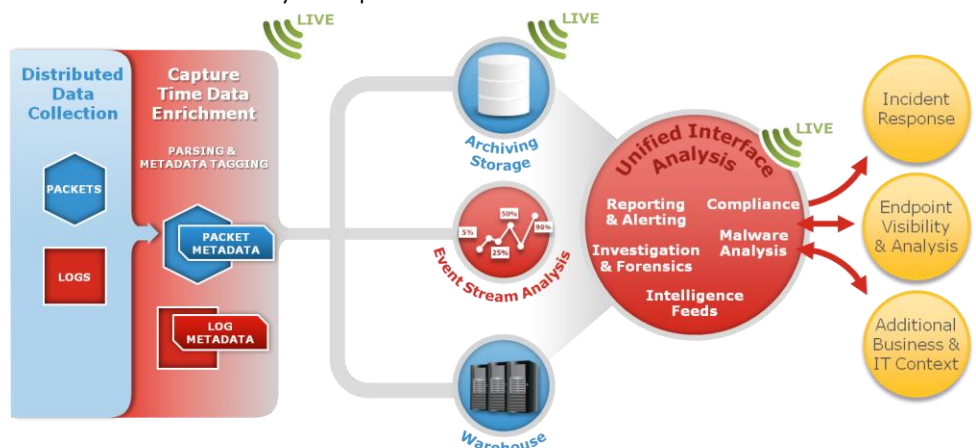
- Single, flexible monitoring platform for log and network packet data
- Modular architecture that can expand with your security use cases and requirements
- Capture time data enrichment providing efficient indexing, storage, search-ability, and indications of compromise
- Powerful event stream analytics that supports large data volumes to detect incidents and bring meaning to events flowing through your enterprise
- Long term log retention to help meet compliance reporting and forensic requirements

### COLLECT, MANAGE, AND ANALYZE EVERYTHING OCCURRING ON YOUR NETWORK

With today's rapidly evolving threat environment, one of the keys to securing your organization is to see and understand everything that is happening on your network. Real-time visibility and high powered analytics along with long term data retention is required to fulfill detection, investigation, analysis, forensic, and compliance needs. The RSA Security Analytics solution makes this a reality via two primary infrastructure elements: the capture infrastructure and the analysis and retention infrastructure.

The capture infrastructure is made up of three core components: Decoders (both for logs and packets), Concentrators and Brokers. Each component has a critical role in providing scalability and achieving an organization's security monitoring goals. In order to enable application layer traffic analysis in real-time at high data rates, the capture infrastructure must scale out as well as scale up. The distributed and hierarchical nature of the Security Analytics infrastructure enables an organization to incrementally add data collection, analysis, and archiving as-needed. In higher throughput environments, the ability to separate primary read and write-to-disk functions allows Security Analytics to maintain both high capture rates as well as fast analytic response times.

### SECURITY ANALYTICS INFRASTRUCTURE



DATA SHEET

RSA LIVE INTELLIGENCE Threat Intelligence | Rules | Parsers | Alerts | Feeds | Apps | Directory Services | Reports & Custom Actions



# THE CAPTURE ARCHITECTURE

## DECODER

The Decoder is the cornerstone and the frontline component of the enterprise-wide network and log collection, and analysis infrastructure of Security Analytics. The Decoder is a highly configurable appliance that enables the real-time collection, filtering, enrichment, and analysis of all network packet and log data. Position the Decoder(s) wherever you require on the network: egress, core, or other segment.

The Packet Decoder collects, extracts metadata, fully reassembles and globally normalizes network traffic at layers 2-7 of the OSI model, for real-time, full session analysis. The appliances can be operated in continuous rapid capture mode or used tactically to consume network traffic from any source.

The Log Decoder leverages the same proven, highly scalable architecture used for network traffic recording and indexing - recognizing over 250 Event Source Types.

The Decoder's patented technology represents a breakthrough in security monitoring by dynamically creating a complete data structure of searchable metadata across all network layers, logs, events, and applications. Combined with log data, RSA Security Analytics also delivers compliance reporting, long term archiving and analysis.

## CONCENTRATOR

Concentrators are designed to aggregate metadata and to hierarchically enable scalability and deployment flexibility. This enables implementation across various organization-specific network topologies and geographies. As a result, Concentrators can be deployed in tiers across multiple Decoders to provide visibility.

## BROKER AND SECURITY ANALYTICS SERVER

The Broker operates at the highest level of the infrastructure hierarchy. Its function is to facilitate queries across an enterprise-wide deployment where two or more Concentrators are employed. Brokers provide a single point of access to all the Security Analytics metadata and are designed to operate and scale in any network environment, independent of network latency, throughput, or data volumes.

The Security Analytics (SA) Server is generally deployed with a Broker and hosts the security analyst's user interface that enables incident detection, investigation, reporting and administration, among other analysis functions. It also includes support for role based access control and strong authentication. In addition, the SA server enables reporting on data held in the Security Analytics Warehouse and Archiving storage.

# THE ANALYSIS & RETENTION ARCHITECTURE

## ARCHIVER FOR LONG TERM RETENTION

The Security Analytics Archiver is an appliance that enables long term log archiving by indexing and compressing log data and sending it to archiving storage. The archiving storage is then optimized for long term data retention, forensic analysis, and compliance reporting.

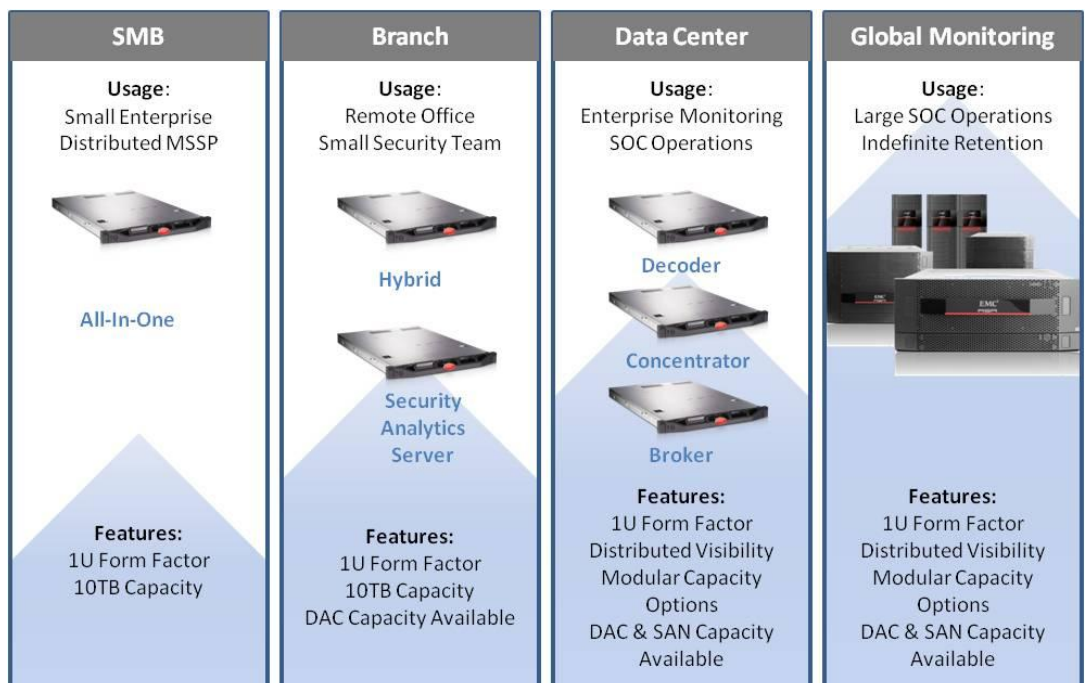
## EVENT STREAM ANALYSIS

The Security Analytics Event Stream Analysis (ESA) appliance provides advanced stream analytics such as correlation and complex event processing at high throughputs and low latency. It is capable of processing large volumes of disparate event data that cannot be achieved by traditional correlation engines. ESA is tailor made to handle the vast data volumes of today's organizations and brings meaning to the events flowing through your enterprise. ESA's advanced Event Processing Language (EPL) allows you to express filtering, aggregation, joins, pattern recognition and correlation across multiple disparate event streams. Event Stream Analysis is at the heart of Security Analytics' ability to perform powerful incident detection and alerting.

## WAREHOUSE FOR ADVANCED ON-REQUEST ANALYSIS

The Security Analytics Warehouse provides a massively parallel computing infrastructure where computing power is scaled upon a standardized hardware platform or node. The Warehouse is specifically designed to manipulate large amounts of data and run complex queries for advanced analysis that is not be feasible without a big-data security analytics architecture.

### PLATFORM OPTIONS



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To meet the specific needs of an organization and its security use cases, RSA Security Analytics is available in a series of deployment options:

### SMALL-MEDIUM ENTERPRISE

The All-In-One appliance brings the RSA Security Analytics experience to smaller enterprises or more narrowly scoped implementations in larger organizations. The All-In-One is a fully integrated, self-contained Security Analytics appliance that resides on the customer's premise. The appliance contains the Decoder and Concentrator software as well as the Security Analytics Server and is offered in a packet-only or log-only implementation. Included in each All-In-One appliance is 10 TB of capacity. This appliance can be expanded with a single DAC of 22TB or 32TB.

### BRANCH OFFICE

For optimizing branch monitoring and lowering the total cost ownership, the Security Analytics Hybrid provides the functionality of a Decoder and Concentrator pair on a single appliance that can be hosted on the branch premises. The Hybrid enables the branch office or small security team to scale to next-generation requirements and still meet important operational security initiatives for responsive incident management and threat mitigation. A Hybrid offering is available for either packets or log collection. The use of a separate Security Analytics Server is required in a Hybrid deployment either in a Hybrid-only deployment or as part of a larger enterprise implementation which includes Hybrids. The Hybrid can be expanded with a single DAC of 22TB or 32TB.

### DATA CENTER

For high performance enterprise-scale environments, separate Security Analytics Decoder, Concentrator and Broker appliances offer the flexibility to meet bandwidth, events-per-second (EPS), archiving, and reporting performance requirements of the organization. The product's hierarchical architecture allows geographically dispersed locations to be sized appropriately while maintaining enterprise-wide, centralized operational standards for real-time situational awareness and long term archiving.

### GLOBAL SCALE MONITORING

For the most demanding environments that require high scalability and global security analytics, this RSA platform brings industry-leading technology and experience to support any security incident response team. From a global organization operating their own backbone to large service providers, RSA Security Analytics offers an extensible platform to maximize investment value and deliver the operational performance needed to improve incident response and enable better risk management and security decisions.

## FLEXIBLE INTEGRATION

Users can create their own custom security solutions by using Security Analytics' open API to integrate with the Security Analytics platform and to extend the value of their existing security investments. By having relevant information immediately accessible organizations have the agility to respond to emerging threats and forensic investigations, identify broken business processes, mitigate malicious data



exfiltration and adapt to tomorrow's challenges. Security Analytics represents the intersection of network monitoring, logs, event, threat intelligence, and rich application layer content and context that differentiates it from any other solution on the market.

## CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at [www.EMC.com/rsa](http://www.EMC.com/rsa).

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