

# Assuria Log Manager

Forensic Log Management. SIM/SIEM.



Log Management. Analysis & Alerting. Protective Monitoring.  
Forensic Readiness. CESG CCTM Accredited



## Security Intelligence

Just about every IT system, application and device has the ability to create an audit log (a detailed record of system activity). These logs are a primary source of cyber security intelligence. Securing and retaining them for forensic purposes is a mandatory compliance requirement within most IT security standards, including PCI-DSS and GPG-13.

## Protective Monitoring

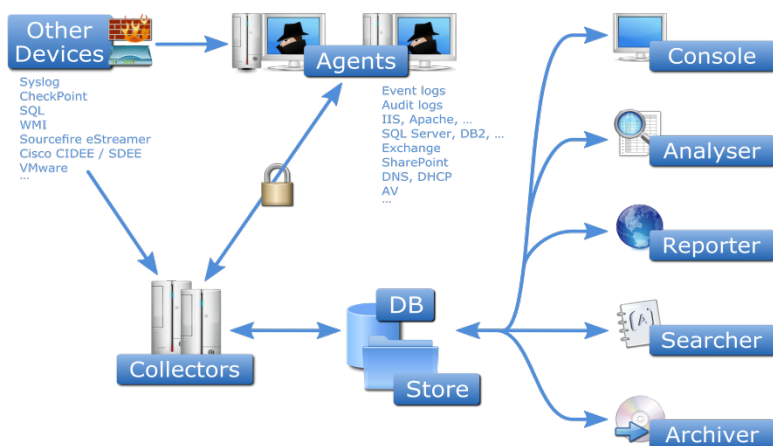
Audit logs are also vital for improving IT security. Automated monitoring and analysis of these logs can provide complete visibility of all IT system activity, enabling powerful protective monitoring and SOC (Security Operations Centre) services. SIM/SIEM solutions such as Assuria Log Manager (ALM) are designed to meet these needs. ALM is CCTM accredited.

## Scalable & Flexible

With a fully scalable software architecture that allows small initial implementations to be incrementally scaled up to enterprise wide deployment, ALM's impeccable and almost unique design heritage provides a perfect platform to satisfy the SIEM/Log Management needs of government agencies and commercial enterprises of any size.

ALM provides automated log management, secure log collection and storage, integrity monitoring, data analysis, anomaly detection, reporting and alerting of critical events from across the whole IT infrastructure.

ALM collects, manages and analyses logs from almost any system, application or device from across the whole IT infrastructure.



ALM Basic Architecture (Fig 1)

## Forensic integrity of log data

Security incidents are hard to spot in real time and SIM/SIEM solutions must enable forensic investigation of log data at any time. For this, critical logs must be secured and retained in complete and original form. However, most SIEM solutions don't collect complete logs at all, collecting only selected events and worse, reformatting and storing them in proprietary format. But ALM, designed from the outset to meet stringent forensic security needs, collects and stores log files in complete and original form, with a verifiable chain of custody.

## Role Based Access Control

Privilege control is provided by built-in RBAC features. Multiple users can log into the ALM Console to manage security policies, agents, log collection policies, agent policies, and syslog forwarding, as well as to create archives, generate reports and many other processes.

## Agent based efficiency

ALM resident agents provide the highest levels of forensic integrity, efficiency and automation and are available for most Windows, Unix and Linux systems. For agentless operations, via its own built-in Syslog server, using Tcl/Python scripted plugins, ALM can collect logs from just about any source.

Out of the box, ALM supports a wide range of log sources and formats. Even logs with voice, video and image content can be managed and secured. ALM also comes with a large library of standard reports, such as for PCI-DSS and GPG-13 compliance. A powerful analysis engine and report generator allows easy generation of highly customised views of event and log data.

#### ALM Features:

**Enterprise Wide Log Collection.** Secure and forensically sound collection of logs from almost any system into a central store.

**Log Management.** Enterprise wide automated log management, including log rotation.

**Forensic Readiness.** Logs are collected in a secure and forensically sound manner, retaining their original form, complete with relevant meta data, thus allowing repeated examination and re-analysis and use of the logs by other applications and processes.

**Real-time Event Alerting.** Configurable to specific log events, sent via Email and/or SNMP traps.

**Agent Based Log Management.** Ensures the security, continuity and integrity of all collected logs and alerting at source.

**Digitally Signed.** An RSA/SHA256 digital signature is calculated and the log digitally signed before transfer. Transfer is authenticated and encrypted using TLS.

**Secure Storage.** Log cataloguing, chain of custody records, archive creation and management. Archive to secure long term storage, complete with a digitally-signed manifest.

**Scalable and Modular Architecture.** Designed to support almost any sized IT environment up to thousands of log sources. Supports multiple collection points, with load balancing and resilience built-in.

**Analysis.** Collected logs are processed by a rules-driven analysis and anomaly detection engine. Flexible and extensible analysis rules allow 'interesting' events to be tagged and written to a database for further analysis and reporting.

**Unstructured Querying.** ALM provides facilities to analyse and report on stored original log data, allowing unstructured 'Google' type searches on any item, providing effective interactive analysis and learning features.

**Reporting.** Flexible analysis, correlation, aggregation and reporting in HTML, PDF, XLS, XML and CSV.

**Data Export.** Export of collected log data to external systems in various forms – raw logs, form normalised or content normalised.

ALM can help with PCI DSS, ISO27001, GPG13, PSN CoCo compliance standards as a protective monitoring solution available as an In-premise software installation, an ALM appliance or a Managed Service



#### Log sources:

The ALM architecture allows collection and management of almost any log format and a wide range of log sources is supported as standard, including the following:

AIX Audit	Apache Web Server
AppGate	Bloxx
Barracuda	Check Point OPSEC LEA
Cisco IOS, Cisco ASA, Cisco Pix	ClearSwift Email, ClearSwift Web
HP-UX Audit	IBM DB2, IBM Websphere
Juniper	Kiwi syslog server
McAfee ePolicy Orchestrator & NSM	MS Exchange Server
MS IIS 5,6,7,7.5, MS IAS	MS SharePoint, MS DNS Server Debug
MS SQL Server Error & Audit	MS Windows .EVT and .EVTX logs
Netflow versions 1,5,6,7 & 8	Oracle Directory Server (All logs)
ODBC (i.e. SQL DB Query)	Palo-Alto
RHEL Audit	SDEE / Cisco CIDEE
Solaris BSM	Sophos
Sourcefire syslog, JDBC, eStreamer	SuSE SLES Audit
Symantec Netbackup & Endpoint Protection	Unix Daemon, Linux Daemon
Unix/Linux syslog	VMware ESX and ESXi

Our Tcl, Python, C and C# SDK supports the collection of infinite log formats / types, (so please discuss your needs with us)

#### ALM Agents:

ALM software Agents provide automated and configurable log management features, including log collection, rotation, digital signing and forwarding. ALM agents are available for a wide range of platforms including:

- Windows Server 2008/2008R2/2012/2012R2
- Windows XP, Vista, 7, 8, 10
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server
- CentOS, Debian, Ubuntu Lucid
- IBM AIX 5L 5.1+, 6.1
- HP HP-UX 11+ (PA-RISC/ITANIUM)
- Oracle Solaris 8+