

Service Definition Document

SIEM as a Service

SDXSIEM-001 Published 19 September 2017 Public - Freely Distributable

Acknowledgements

Cisco WebEx® is a registered trademark of Cisco Systems, Inc. and-or its affiliates in the United States and certain other countries.

ITIL® is a registered trade mark of AXELOS Limited. All rights reserved

Linux [®] is a registered trademark of Linus Torvalds administered by Linux Marks Foundation

LogMeIn Rescue® is a registered trademark of LogMeIn Inc., in the United States and-or other countries

LogRhythm [®] is a registered trademark of LogRhythm, Inc.

Microsoft ® and Windows ® are registered trademarks of Microsoft Corporation

RedHat® and Fedora® are registered trademarks of Red Hat, Inc

Any other brand or product trademarks (registered or otherwise) referenced within this document – but not explicitly acknowledged here – are the intellectual property of their respective holders and should be treated as such.

Phone: +46 (0)8 410 666 00 Fax: +46 (0)8 410 668 80 Email: <u>info@proact.eu</u> www.proact.eu



Contents

Chapters

1 Service overview	1
2 Service scope	3
3 Available service levels	10
4 Service deliverables	11
5 Service transition	17
6 Service charging policy	18
7 Additional services	19
8 Service demarcation	20
Glossary	21
Appendices	
Appendix A: Technical Requirements	IV
Tables	
Table 1: Available service level measures	18
Figures	
Figure 1: SIEMaaS schematic diagramFigure 2: Stage 0-6 transition model	2 17



1 Service overview

Proact's SIEM as a Service (SIEMaaS) is a remote monitoring and security service offered by Proact to improve customers' security knowledge of their infrastructure and application environments.

SIEMaaS is designed to meet the customer's requirement to store, analyse and triage data from infrastructure, operating system and application logs, and for being alerted to potential threats.

The solution provides for the remote collection and analysis of logs using an industry-standard Security Information and Event Management solution (*LogRhythm's Enterprise SIEM*).

LogRhythm simplifies the correlation, consolidation and comprehension of events recorded in transient, disparate and widely dispersed system logs to deliver:

- Alerts for unexpected events;
- Extended storage of usually transient log data;
- Prioritisation of logs by risk scoring
- Online access to comprehensive log data.

SIEMaaS comes in two service-package options:

- Hosted enables the customer's Security Officer(s) obtain a better understanding of their IT environment by allowing them to view security related events from a single portal
- Managed This 24x7x365 service provides security guidance and advice to a customer's general IT team, whereby Proact's Security

Secure

- Logs held in a secure ISO 27001¹ certified Proact datacentre
- All data in-flight and at rest is encrypted
- All data remains within the Proact datacentre's national boundary, assuring data sovereignty
- You retain full visibility through a Self-service management portal (LogRhythm).
- End of term data handback or deletion policy

Available

- Highly-available storage capacity
- 24x7x365 infrastructure support from Proact Service Desk located in an ISO 27001¹ certified Proact Network Operation Centre (NOC)
- 24x7x365 Proact Service Desk monitoring the platform.

Flexible

Service can be taken at two levels:

- Hosted self-service view of log data and trends
- Managed 24x7x365 SOC analysis and recommendations for incident resolution

Flexible storage retention and log volume policies.

What is the charging policy?

Cost based on the types, sizes, configuration of the CIs selected and the quantity of messages per second (MPS) generated

Vendor terms

This service is subject to vendor terms, which customers can view in full at these links:

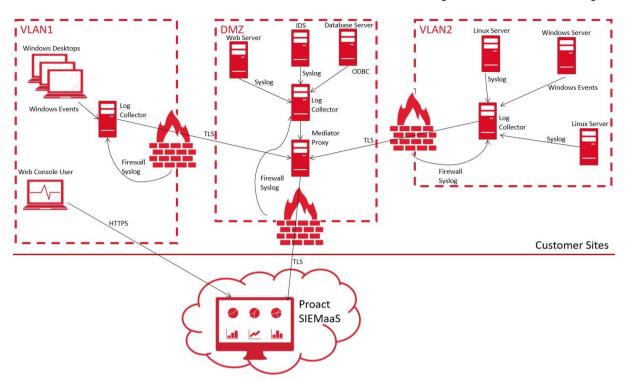
http://www.proact.eu/terms/vendor

Operations Centre (SOC) to become a cost-effective virtual member of the customer's security team. This service package ensures that the customer's environment is analysed for suspect activity and advises the customer on appropriate steps to take to prevent suspect activity from escalating. The Managed service reduces the workload of the customer's Security Officer(s), by analysing and notifying them of high-risk events and continually tuning the alerting process, and ensuring that only abnormal events are escalated to the customer

¹ ISO27001-certified Datacentres and NOCs are available in selected Proact delivery countries only



Figure 1: SIEMaaS schematic diagram





2 Service scope

This chapter identifies and describes the high-level components that make-up the service, which comprise the:

 Service package – which defines the service, capabilities and options.

Further information ...

See Service deliverables (Chapter 4 on page 11) for more detail on the components.

- Service platform infrastructure which defines the service delivery mechanism, such as:
 - Service architecture
 - SIEM components
 - Connectivity
 - Applications and licensing
- Supporting services any processes or resources that support the delivery of the service, such as the Self-service support portal, through which the customer's authorised users can log cases and change requests.

2.1 Service package

'	
Objective	To provide the remote collection and analysis of logs using an industry-standard Security Information and Event Management solution.
	SIEMaaS simplifies the task of identifying, analysing and understanding security events by correlating the dispersed and often transient logs generated by IT elements (for example, operating systems, applications, firewalls and switches etc.), to provide:
Description	Persistent logs, stored for an extended period of time (that is, the duration of contract) Prioritis at least and an electric of a silitar for an extended prioritis at least and in the contract.
	 Prioritised logs and an alerting facility for unexpected events detected in the environment Comprehensive and easily accessible data.
	- Comprehensive and easily accessible data.
Hosted-in	A Proact datacentre on a secure multi-tenant platform. Proact's ISO 27001 certification assures security.
Supported log sources	Logs can be collected from any device that supports one of the following protocols Syslog SNMP Trap Microsoft Windows Event Log formats
	LogRhythm includes built-in log parsers for a wide range of industry-leading infrastructure components, operating systems and applications, providing out-of-the-box best-practice log classification. For systems that do not have built-in log parsers available, Proact's SOC will work with the Customer to define common log patterns that can be classified using Regular Expressions (RegEx).
Supported-from	All support and management is delivered remotely from a secure, accredited <i>Proact Network Operations Centre (NOC)</i> .
Support level	Monitoring, support and service management of the infrastructure only.
Required connection types	All connection is by encrypted (HTTPS/SSL/TLS) public internet link using existing shared firewalls.
Engagement	 Use the Proact Self-service management portal – see Appendix B: (on page IV) – to monitor SIEM activity Use the Proact Self-service support portal to request additions of log sources
Complementary services	You can combine SIEMaaS with other Proact service offerings – Ch. 7 (on page 19) – such as Proact Service Management or other Proact vSOC services



	SIEMaaS is offered in two service packages with d from making security information more accessible to real time monitoring and the availability of 24x7x36 Proact to become a cost effective virtual member of the Hosted – provides a consolidated and persistent - Managed – provides security specialist guidance	to the provision 5 security advic If the customer's t view of security	of remote near e that allows s security team. y information
	SIEMaaS Deliverables	Hosted	Managed
	Usage reporting & billing	✓	✓
	Log data consolidation	✓	✓
	Log data classification	✓	✓
Available	Log data risk scoring	✓	✓
service	Tuning activities	×	✓
packages	Security risk notification (email, 24x7x365)	×	✓
	Security specialist guidance & advice	×	✓
	Access to assistance from Proact security	×	✓
	Review & recommendations for incidents faced	×	✓
	Reporting engine for custom reports	✓	✓
	Regular summary report (SIEM statistics)	✓	✓
	Regular summary report (SIEM utilisation & tuning)	×	✓
	Incident review & recommendations	×	✓
	SIEM self-service management portal	✓	✓
	Self-service support portal	✓	✓
	Service capabilities – Hosted package		
Objective	 The Hosted service package is designed to help enable the customer's Security Officer(s) obtain a better understanding of the customer's IT environment by allowing the customer to view the security related events from a single portal and take the appropriate action to deal with event directly. 		
Log monitoring	 The Proact SIEMaaS platform monitors custon 	ner log sources	24x7x365
Log data consolidation	 Proact handle the consolidation and storage of scope of the solution Logs are retained for the customer specified re Logs are viewable through a central point, the 	etention period	
	All log messages are automatically classified in t	o categories su	ıch as:
Log data classification	Access controlAuditSecurityError		
Log risk scoring	 Each log message is assigned a risk score bas source 	sed on its type,	contents and
Log source alerts	Proact raise alerts if a log source fails		
Reporting engine	SIEMaaS provides a configurable reporting engingenerate a wide array of reports. For example: List: Top 10 Log Sources over the period (by If List: Top 10 Log Sources generating suspicious Pie Chart: Percentage of events logged in each Pie Chart: Percentage of events logged by each pieces.	/ hostname)s log activityh criticality	ers can use to



Self-service management portal	 A Self-service management portal allows customers to monitor the status of their items covered by the SIEMaaS solution. Functionality includes: View trends, reports, alerts, and a near-live log view Perform searches and investigations Create cases relating to the log data from the items monitored in the SIEMaaS solution scope. Full details are provided in Appendix B: (on page IV).
	Service capabilities - Managed package
Objective	To reduce the workload of the customer's Security Officer(s), by analysing and notifying them of high risk events and by continually tuning the alerting process, to ensure only the appropriate events are escalated to customer's Security Officer(s). To provide guidance and advice to a customer's general IT team, ensuring that the customer's environment is analysed for suspect activity and the appropriate steps taken to prevent that activity escalating.
	The managed package includes all capabilities of the Hosted package.
Raise security risk alerts	Security risk alerts, identified by the Proact Security team, are sent by email to a nominated customer contact as defined in the customer's Service Operations Manual.
	Responsibility 1: [Managed] Nominate contact point for security risk alerts
	Proact security specialist are available, when necessary, to assist the customer to:
	Investigate security risks on the customer's behalf
	The Proact Security Team analyse and filter the events as they are logged
Access to security specialists	 Provide detailed guidance and advice on dealing with security risks to customer representatives
	 The Proact Security Team provide recommendations (via email or support portal) in line with best practices. The customer is responsible for implementing these recommendations.
	Responsibility 2: [Managed] Implement Proact security recommendations as required
Recommend continuous improvement activities	Recommendation to help give the customer an increased view-of and control-over security incidents.
	For example, expanding the scope of SIEMaaS to include additional log sources, or enable verbose logging for increased visibility and more holistic security intelligence.
Tuning activities	Fine-tuning security measures ensures the customer maximises the value of their SIEMaaS solution. This can include, for example, turning off unnecessary log messages and automatically reviewing the noisiest log sources thereby increasing the efficiency of the solution.

2.2 Service infrastructure

2.2.1 Service platform

Platform	 A secure multi-tenant platform within a Proact datacentre
	 Each customer is provided a distinct collection entity, ensuring they can see only their own logs.
	 Utilises proven LogRhythm software
Compute	Compute resources are provided in the form of:
	 Virtual Servers dedicated to the running of the SIEMaaS master services.



Storage

 Proact provides secure storage vault capacity to cater for the contracted volume of log data sent to the SIEMaaS platform.

This capacity is used to hold the central log database for each customer, retaining data in line with the contracted retention period

2.2.2 Components

Proact's SIEMaaS offering is based on the Enterprise SIEM product LogRhythm and structured in a hub-spoke topology. It comprises four main components:

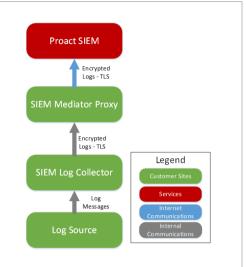
- Multiple SIEMaaS Log Collectors
- (Optionally) A Mediator Proxy
- A LogRhythm master service

to Proact SIEM.

A Self-service management portal

Component summary

Note: The Mediator Proxy is an optional component. SIEM Log Collectors can communicate directly and securely with Proact SIEM. The Mediator Proxy simply enables a single point through which Log Collector communications can be forwarded



- The SIEMaaS Log Collectors are installable software packages running on dedicated Microsoft Windows Server operating systems on the customer's site(s).
 - The Customer must provide a Windows Server for each Log Collector (see Appendix A.1.1: on page II)
- Each SIEMaaS Log Collector collects logs from the devices in its local security zone, they:
 - Act as receivers for log messages sent to them (for example, by syslog) from monitored items in the customer's environment
 - Perform log collection by remotely logging on to machines in their respective network segments and collecting flat log files from, for example, hardware devices, operating systems, and applications, using the appropriate collection methods, which include (non-exhaustive):
 - IETF Syslog (client-initiated, unauthenticated)
 - SNMP Trap (client-initiated, unauthenticated)
 - NetFlow (client-initiated, unauthenticated)
 - Microsoft Windows Server Event Logs (collector-initiated, authenticated by Active Directory)
 - Encrypt the raw log information obtained from the LAN
 - Pass the information to the SIEMaaS Mediator Proxy
- Typically one SIEMaaS Log Collector per monitored network segment or vLAN is required.
- The customer is responsible for determining the level of logging on their devices, and the intelligence gathered from the logs will be restricted by the verbosity of the log content

Prerequisite 1: Provide Windows Server for SIEMaaS Log Collector

Prerequisite 2: Deploy SIEMaaS Log Collector software

Responsibility 3: Maintain operability of SIEMaaS Log Collector server(s) during contract

Log Collector



Mediator Proxy	 The SIEMaaS Mediator Proxy consolidates encrypted log data received from the SIEMaaS Log Collectors and transmits it to the SIEMaaS Master Service as a periodic digest. The proxy: Is optional (Proact will recommend whether a mediator proxy is required or the Log Collector(s) should communicate with the SIEM Master Service directly) Is installed on customer site on a customer provide VM Is typically connected to the customer network's DMZ and outwardly through firewall port 443 to the SIEMaaS Master Service Facilitates a single point to point firewall rule to enable and restrict communications between Proact's SIEMaaS Master service and the customer's site Is connected to virtual or physical SIEMaaS Log Collectors deployed throughout the customer's infrastructure on each VLAN being monitored (whether on site or hosted in a hyperscale or public cloud data centre) The Customer must provide a Fedora/RedHat Server for each Mediator Proxy (see Appendix A.1.2: below on page II) Prerequisite 3: Provide Linux Server for Mediator Proxy
	Responsibility 4: Maintain operability of SIEMaaS Mediator Proxy server(s) during contract
Master Service	 The resilient central LogRhythm master service is located in a Proact's datacentre Receives consolidated log data from SIEM Log Collectors and SIEMaaS Mediator Proxies.
Monitoring	The Proact SIEMaaS platform monitors the customer environment, monitored items include: SIEMaaS platform SIEMaaS log monitoring software SIEMaaS storage systems SIEMaaS hypervisors Log sources
	The Customer should:
Endpoint configuration	 Create a read-only Active Directory service account to be used by the SIEMaaS Log Collector to connect to in-scope Windows Server endpoints to collect Event Logs Configure syslog or SNMP Trap on each endpoint (appropriate to capability) to point to IP address of the server running the SIEMaaS Log Collector
	Prerequisite 4: Configure active directory account for remote Windows Event Log collection Prerequisite 5: Configure syslog on each endpoint for SIEMaaS Log Collector server IP

2.2.3 Service connectivity

		 All communication between the customer's site(s) and Proact datacentre(s) is
Conne	ectivity	over encrypted (HTTPS/SSL/TLS) public internet link; there is no requirement for
option	ıs	a site-site VPN or other dedicated communications channel
•		For security purposes all SIEMaaS data, in flight or at rest, is encrypted

communications channel For security purposes all SIEMaaS data, in flight or at rest, is encrypted

Public - Freely Distributable SIEM as a Service - Service Definition Document



Firewall	 All internet communication uses Proact's existing shared firewall infrastructure and either the customer's existing firewall or the firewall in the public cloud data centre (as required) The open port requirements are documented in Appendix A.2: on page II During the initial setup phase, and throughout the term of the contract, a customer representative must be available to assist with configuring their firewall(s) and other security devices to allow new log sources to contact Log Collectors, and to allow new Log Collectors and/or Mediator Proxy servers to contact the central SIEMaaS platform in Proact's datacentre Note: Where log traffic between in-scope devices and the SIEMaaS Log Collector must
	traverse a firewall additional rules must be configured (see <i>Appendix A.2.1: on page II</i>) Note : A separate internet connection and firewall is required for each site location unless the site(s) are connected through an internal WAN. Note : The customer must notify Proact of the public IP address(es) the logs will be sent from, to allow the IP to be whitelisted
	Prerequisite 6: Provide an administrator to assist with firewall configuration as necessary Prerequisite 7: Open firewall ports as required Prerequisite 8: Notify Proact of the Public IP Address from which logs will be sent
	SIEMaaS communications bandwidth is sized based on the following assumptions: - Average size of an encrypted log message sent by SIEMaaS: 500 Bytes
Bandwidth use	 Average number of log messages sent by items in the SIEMaaS scope: 3 per second The minimum bandwidth required is 1Mbps The above is based on an average environment which may vary based on the types of items managed by individual SIEMaaS deployments and the number of
	messages generated. The self-service management portal provides secure access using HTTPS (TCP)
Connectivity for self-service management portal	 port 443). Secure access to the service is maximised by restricting it to whitelisted IP addresses. This requires the customer provide Proact with a list of the IP addresses requiring portal access.
	Prerequisite 9: Identify IPs requiring self-service management portal access
	Proact undertake all Service configuration in-scope remotely, and therefore the customer should provide resource for this remote access.
Connectivity for transition	The customer must also ensure that their network environment has sufficient capacity, ports and configuration to support on-going service operation.
	Prerequisite 10: Provide remote access for Proact configuration and support tasks Exclusion 1: All configuration shall be performed by Proact remotely Responsibility 5: Maintain sufficient network capacity for service operation
Interoperability with Customer- managed systems	Where this service interacts with any system, application or environment not managed by Proact, it is the customer's responsibility to ensure that it remains compatible with any Proact-managed systems/applications at the hardware, firmware, OS, and application version levels – as recommended by Proact or its vendors as best practice.
	Responsibility 6: Maintain compatibility of interacting external systems or environments at all times

2.2.4 Service security

The security of the customer's data assets is paramount, and Proact endeavour to maintain its approach to security in line with established industry standard practice.

See also ...

Further details are available in the technical white paper Proact Managed Service Security Policy.



Anti-virus protection	Proact's infrastructure incorporates enterprise level antivirus protection.
Patching	Proact and the customer will manage patching according to the following responsibilities. SIEMaaS platform patching – Proact are responsible for patching and updating all the infrastructure software and hardware under their management Operating system patching – It is assumed that customers will maintain and patch the servers on their premises running SIEM Log Collector and-or Mediator Proxy software.
	Responsibility 7: Patch guest OS for Log Collector and Mediator Proxy
Data encryption	 Secure HTTPS/SSL/TLS encryption is applied to all data connections between Proact and their customers All transmitted log messages are protected by a hashing algorithm, which calculates the message hash and stores it in the database to guard against potential tampering during transmission In all architecture models, data is stored in an encrypted format to ensure its security, whether at rest or inflight.
Audit capability	Proact keeps a limited log of all actions undertaken on the platform. This can be helpful in detecting attempts, whether successful or not, to gain illegitimate access to the system, probe its information, or disrupt its operation. Knowing an attack is attempted and the details of the attempt can help in mitigating the damage and preventing future attacks. These audit logs are available to Proact's security team only.

2.2.5 Applications and licensing

SIEM Licensing	Proact provide all licensing for SIEM Log Collectors and for the processing of log messages through the SIEM Master server
Log Collector and Mediator Proxy servers	The Customer must provide appropriate operating system licensing for all Log collector and Mediator Proxy servers,

2.3 Supporting services

Proact Service desk	 Provides 24x7x365 support and management of the service and supporting infrastructure – see Service infrastructure (Section 2.2, on page 5) Handles events, requests, queries and incidents raised by authorised users only, whether by phone, e-mail or self-service support portal Handles Change Requests (CR) in accordance with Proact's Change Management process. Resolves problems with, applies changes to and maintains the patch state of, the service platform in accordance with Proact's change management process Makes configuration changes on request (for example, changes to log feeds).
Proact Self- service support portal	Proact provides customer-nominated administrators with access to a Self-service support portal through which they can: Request additional log sources to be configured Create new and update existing incidents for investigation Create new and update existing changes from a change catalogue The credentials assigned to users are for their sole use. Shared accounts are not available.



3 Available service levels

This chapter identifies the service level measures applicable to the service – see Table 1 (below)

You should consider these measures in the context of the general terms and conditions described in full in the *Proact Service Level Agreement* document, which customers may view at this web address: http://www.proact.eu/terms.

Table 1: Available service level measures

Availability	MSS (Managed Security Services)Comms – Internet
Response time	 Incidents P1 P2 P3 Changes Standard Normal Emergency



4 Service deliverables

This chapter provides more detail about the deliverables that make up the Service package described in Section 2.1 (on page 3).

4.1 ITIL processes

Proact monitor, support and manage the service infrastructure using processes aligned with the ITIL framework for IT Service Management.

This section summarises the processes' key capabilities and deliverables.

The Proact Customer Service Operations Guide provides full detail on how Proact deliver and operate these processes.

•	dolly orabico.		
Event management		The Proact monitoring platform continuously monitors the service infrastructure to:	
	Near real-time monitoring	 Deliver near-real-time device monitoring Collect metrics for analysis Identify alert conditions and thresholds breaches Send triggered alarms to the Service Desk 	
	Alert notifications	The Proact Service Desk responds to triggered alarms, analysing, investigating and taking appropriate remedial action.	
	Event handling	Proact process all alerts (not just critical alerts), taking the appropriate action to resolve the issue (if required.	
	Service desk	The Proact Service Desk provides an escalation path for the customer's administrators when assistance is required with software issues, firmware issues and hardware faults on Cls.	
Incident Management	Incident Response	 Proact Service Desk escalates alerts to its technical teams for resolution as appropriate Proact Service Desk inform the customer's nominated contact of any service impacting alerts and the resolution timeframe For incidents categorised as P1, Proact take whatever action is required to restore operation and-or to minimise any service down time. Proact co-ordinate any product vendor involvement necessary to achieve resolution of an issue. 	
Change Management	Controls	 All changes to the service infrastructure are performed under the Proact Change Management process Proact perform changes to the service infrastructure only when authorised to do so by a CAB approved Change Request (CR) 	
	Tools	 Proact use orchestration appliances to perform changes where compatible and appropriate. 	
Problem Management	Pre-emptive maintenance	 Proact's proactive problem management processes help avoid recurring issues. Proact applying patches, bug-fixes and upgrades to the service infrastructure in line with best practice. Proact maintain problem records in the CMDB to aid identification and prompt resolution of issue. 	
	Trend analysis	Proact perform regular incident <i>trend analysis</i> to proactively identify any reoccurring service infrastructure problems and their root causes.	
Capacity management		Proact monitor and respond to service infrastructure threshold breaches and growth forecasts to maintain agreed performance levels and adequate capacity for growth.	
Service reporting	Proact provide	quarterly service review reports through their Service Delivery team	



Continual Service Improvement	Proact manage service improvement plans which track recommendations for changes to improve service provision.
Configuration & Knowledge Management	 Proact maintain a definitive record of the service infrastructure in a CMDB Proact maintain a knowledge database to allow support teams to efficiently resolve known issues and find supporting information.

4.2 Resources

Deliverable	Frequency	Description and content summary
Comico Dool	Continuous	 Proact provide the customer with a 24x7x365 service desk telephone number for the purpose of reporting incidents and raising Change Requests (CRs) for Configuration Items (CIs) Calls are logged on receipt, and will be acted upon within the customer's contractual service window The Proact Service Desk and Proact Self-service support portal are accessible to named individuals only; not to the customer's users in general. Proact do not offer end-user support.
		Exclusion 2: Unauthorised use of the Proact Self-service support portal and-or Service Desk
Proact Self- service support portal	Continuous	The customer is provided with access to the <i>Proact Self-service</i> support portal via the internet. Using the portal, the customer can: Create new and update existing incidents for investigation Create new and update existing CRs from a change catalogue View their CIs on the CMDB Proact provide each named individual with an account for their sole use, with their username being their email address. No shared accounts are provided.
Proact Self- service management portal	Continuous	 Proact provide login credentials for named authorised customer representatives, assigning each a unique username and password. Access to the portal requires one of: Google Chrome; Internet Explorer 11; Mozilla Firefox; Safari. Prerequisite 11: Provide appropriate browser for Self-service management portal
Proact Self- service monitoring portal	Continuous	Proact provide the customer with access to the Proact Self-service monitoring portal, showing monitoring metrics for in-scope systems, to allow customer administrators to view trends and manage infrastructure resources.

4.3 Operational Activities

Deliverable	Frequency	Description and content summary
Log handling	Continuous	 Proact consolidate and store all logs sent from the customer site in a central database for the contracted retention period.
Log classification	Continuous	The Proact SIEMaaS platform automatically classifies all logs sent to it. Categories include, for example, as access control, audit and security.
Risk scoring	Continuous	 The Proact SIEMaaS platform automatically risk scores all logs sent to it. Scoring is based on message type, message content and log source.



Deliverable	Frequency	Description and content summary
Donvordible	rioquency	Service package Managed
Alert handling	Per Event	Where Proact detect an unusual event or an alert threshold is breached the Proact Service Desk deal with the alert directly, generating a support case, investigating the issue and taking appropriate action as required.
A La vit		Service package Managed
Alert notification	Per Event	 Proact will send email notification whenever they detect an unusual event or an alert occurs.
		Service package Managed
Provision of advice and guidance	As required	 The Proact Security Team: Analyse and filter events as they are logged Provide the customer with recommendations in line with best practices using email or the self-service support portal. The customer is responsible for implementing this guidance. Review significant incidents, providing recommendations for: Preventing or dealing with similar incidents in the future Improving the customer's security posture.
Maintain platform infrastructure resources	Continuous	 Proact maintain the infrastructure to a standard that enables its availability to at least match the agreed service level Proact provide planning and implementation of upgrades and-or patches to software and firmware on the underlying platform infrastructure Proact make configuration changes to customer IP addressing, certificate changes and IP routing on Proact communication devices located in a Proact datacentre when requested by the change control process
Planned maintenance	As required	 Proact endeavour to provide, by email, advanced notification of any planned maintenance activities, either by Proact or by its third-party providers, at least five working days in advance of the maintenance commencement Where maintenance is required more urgently, to prevent a longer outage or a security incident, or due to third-party provider timescales, Proact may give less notice than five working days The customer must inform Proact whenever they intend to perform any maintenance to sites, networks or other devices that may affect the availability, communicability, performance or integrity of any system monitored or managed by Proact
		See also: Proact's Customer Service Operations Guide, where this requirement is described further
		Responsibility 8: Provide at least 24-hours' notice of planned maintenance
Change Management	Continuous	All changes to the customer's log sources or policy configuration are planned and implemented according to the Proact Change Management processes



Deliverable	Frequency	Description and content summary
	Continuous	 Proact continuously monitor the availability of the SIEMaaS platform.
		The service is deemed available if the SIEMaaS log monitoring software's incoming message queue responds to the platform's software probe.
Platform Monitoring		 Proact Service Desk monitor the continuity of log feeds from Customer's log sources and SIEMaaS Log Collectors. Upon detection of interruption of log feeds, Proact will alert the customer and recommend action to remediate, such as:
		Reboot a Log Collector
		Reboot a log sourceAmend the firewall configuration.
		- Amena the lifewall configuration.
		Exclusion 3: The solution does not support monitoring of customer applications or appliances
Storage Capacity Management	As required	Proact extend storage capacity in line with contractual limits where storage volumes reach certain thresholds to ensure that they do not run out of space.
Log Collector Installation	As required	Proact will assist the customer with the installation of additional Log Collectors as required. The customer must complete the documented pre-requisites for additional Log Collectors and Mediator Proxies, and provide an administrator with elevated privileges to work with Proact engineers on the installation.
		Responsibility 9: Assist in installation of Log Collectors and Mediator Proxies by providing elevated privileges

4.4 Service Guides, Documents and Reports

Proact provide – and maintain as required throughout the contract term – the following service guides, operational documents and reports:

Deliverable	Frequency	Description and content summary
Service Specification	Contract	A schedule of the customer's contracted services and associated charges.
Service Level Agreements	Contract	Proact's standard Service Level Agreements.
Terms and conditions	Contract	Proact's terms and conditions for all services.
Managed Service Transition Guide	Start-up	How customer services are transitioned into live operation.
Customer Prerequisites Guide	Start-up	The activities the customer must perform before the service can be commissioned.
Customer Service Operations Guide	Ongoing	A guide to how Proact operate customer service, how to communicate with Proact and how to best use the service.



Deliverable	Frequency	Description and content summary
- Don Vertable	Troquency	Proact produce and maintain a <i>SOM</i> document, which details the scope of the services provided including:
Service Operations Manual	Ongoing	 Services and service levels Customer contacts Locations and environments Cls Change management contacts and classifications Incident management processes and contacts Monitoring Thresholds and defined event response actions Regular scheduled operational activities
Service Review Report (SR)	Quarterly	A quarterly Service Review Report showing service performance statistics, for example: Incident & change statistics Incident response times Incident by category Incident logged by method Incident and change log SIEM storage capacity and log volume reports SIEM statistics report, including: Most Impacted Log Sources Most Common Events Most Impacted Applications in the customer's environment. Number of Log Messages processed in period Busiest Log Sources Average Messages Per Second With the Managed service-package, Proact will also include the following in the Service Review Report: SIEM incident review & recommendations SIEM utilisation & tuning advice, including: Identification of unnecessary log messages Recommendations for re-classification of logs, where appropriate
		Note: This is an example report. Technical content is subject to change
Major Incident Report	Per Major Incident	 In the event that a major incident occurs, for which Proact are responsible, Proact provide a MIR detailing the following: Timeline of the incident Root cause analysis Workarounds employed Remedial actions Lessons learned SLA status Proact aim to complete the MIR and deliver it to the customer within ten working days of the resolution of the incident.
Service Transfer Policy	Contract	Proact's policy for handling data and asset returns at end-of- contract.
Service Transfer Plan	End of contract	A plan for handling data and asset returns for the customer, in accordance with the <i>Proact Service Transfer Policy</i> .

4.5 Meetings

The following meetings are held between the customer and Proact as part of this service:



Deliverable	Frequency	Description and content summary
Service Review	Quarterly	Service package Managed
Meeting		A Service Review teleconference meeting is held between the customer, their assigned SDM and Account Manager, and a security specialist from Proact's SOC, to discuss the performance and use of the service, and identify any future requirements for expansion, integration or additional services. This meeting takes place following delivery, by email, of each period's Service Review report and covers the following agenda items at a minimum:
		 Review of Proact's performance against SLAs Review of any high-impact Incidents or Problems from the reporting period Review of capacity (where relevant) Recommendations by Proact for any non-essential remedial work or upgrades that should be considered Review new Proact technologies / services as appropriate Overview from the customer of any relevant forthcoming projects and plans that may require assistance from Proact Overview from the customer of key priorities for the next period Review usage and consumption of licence entitlements where relevant Review of the SOM, and any other service-specific documentation that requires regular customer review. Review of system capacity growth, performance, risks and other technical observations and recommendations. Provision of guidance on inclusion of additional monitored devices or on configuration changes for increased visibility and security intelligence.
Service Improvement Plan Meeting	Weekly, Fortnightly or Monthly, as preferred by the customer	Service package
Other Meetings by Request	Upon Request	Proact join teleconference meetings and, according to availability, any other meetings requested by the customer. Meetings may involve third parties of either Proact or the customer, but there must always be a representative of both Proact and the customer in attendance.



5 Service transition

Proact use a standard methodology for transitioning the customer's services into live operation.

This methodology is described in full in the *Proact Managed Service Transition Guide*.

Transition prerequisites

- General prerequisites are detailed in the Proact Customer Prerequisites Guide
- Service-specific prerequisites are summarised in Chapter 8 (Service demarcation) of this document.

Proact follow a Stage 0-6 model for all Service Transitions (Figure 2 below).

Figure 2: Stage 0-6 transition model



	Service transition workshop
	The Customer is required to attend a Service Transition workshop and any further workshops required to complete the detailed service and technical design, and make available appropriate service and technical personnel with suitable skill sets at these meetings.
	Service owners and-or technical owners for any log sources to be collected by Proact Technical owners for any supporting infrastructure needed to allow Proact to
Meetings	collect and transmit logs (for example, network engineers, for creating firewall rules) Project manager, if the customer has chosen to use one.
	Project Closedown
	The Customer is required to attend a Project Closedown meeting to formally close projects for transitioning new services into operation.
	Prerequisite 12: Provide appropriate customer representation at transition workshops Responsibility 10: Provide appropriate representation at project closedown workshop
Data migration	Migration of log history from legacy SIEM systems to Proact's SIEMaaS platform is not included in this service.
	Exclusion 4: Data migration is excluded from the scope of service transition
	 Using the Proact Self-service management portal A Proact engineer will provide a single remote web-based training session to the customer's administrator(s) covering the access and use of Proact's Self-service management portal for SIEMaaS, which will include:
Training	How to view backup job statusesHow to initiate restore operations
sessions	 Using the Proact Self-service support portal
	Proact provide, on request, a single remote web-based training session to the customer's administrator(s) covering the access and use of Proact's Proact Self-service support portal, to supplement the instructions provided in the <i>Proact Customer Service Operations Guide</i>



6 Service charging policy

Proact's monthly invoicing and flexible usage models free the customer's capital budgets.

Self-service portals and intrinsic infrastructure support minimise mundane operational tasks, freeing the customer's focus for strategic business projects. Proact base the charges for the solution on usage information provided and on assumptions made on the basis of that information, all of which forms part of the contractual agreement. Any prolonged and significant variation in usage may require a reassessment of the charges.

Table 2: Service charging-model

ltem	Allocation model
Contract term	12 – 60 months
Charging metric	 Set-up charge according to the types, sizes and configuration of the CIs selected by the customer Minimum commit and Flexible charge according to the types, sizes, configuration of the CIs selected by the customer. For example, the quantity of messages per second (MPS) generated.
Billing profile	 Milestones or Time & Materials for Set-up charges Monthly or quarterly in advance for Minimum commit charges Monthly or quarterly in arrears for Flexible charges



7 Additional services

Customers should contact their Proact Account Manager to discuss the available options, some of which are shown Table 3 (below).

Table 3: Service change options

	7 mm 2 2 2 mm 3 4 mm 2
Service upgrade	 Upgrade service package from Hosted to Managed. Service review upgrade – A quarterly remote service review meeting is included as standard. It can be upgraded to monthly and-or delivered onsite instead of via teleconference at additional cost.
Bespoke services	Proact Professional Services can be engaged to assist with a range of bespoke services including, but not limited to: Out of scope support – Proact can provide support and professional services for out of scope elements Service transfer and end-of-life – Any bespoke activities required by the customer outside of the Service Transfer Plan can be provided using Proact Professional Services – See also: Proact Service Transfer Policy
Complementary services	Proact provides a range of services complementary to SIEMaaS, including, but not limited to: • Monitoring, Support and Service management • Proact Premium Support Plus • Proact Service Management for Servers • A range of vSOC services to complement SIEMaaS, including • VAaaS (Vulnerability Assessment and Intelligence) • NLDaaS (Network Layer Defense)



8 Service demarcation

This chapter identifies the prerequisites, responsibilities and exclusions upon which the delivery of the service defined in this document depends.

Prerequisites	Prerequisite 1: Provide Windows Server for SIEMaaS Log Collector	.6 .7 .7 .8 .8 .8 .8 .8 .2
Responsibilities	Responsibility 1: [Managed] Nominate contact point for security risk alerts	.5 .6 .7 .8 .8 .9 .3
Exclusions	Exclusion 1: All configuration shall be performed by Proact remotely	2 4 7



Glossary

	Ciossary						
Term		Definition					
Availability SLA		Availability service level agreements, typically defined in terms of service up-time, are particularly applicable for infrastructure and service provision arrangement where a continuous IT service is provided.					
Change advisory board	CAB	Delivers support to a change management team by approving requested changes and assisting in the assessment and prioritisation of changes.					
Change request	CR	A document requesting a change to an item within the scope of the contracted service, or to the service itself					
Configuration item	CI	A hardware, firmware, software or other item monitored, supported and-or managed by Proact. That is, it is included in the agreed list of in-scope items as an item covered by the selected service					
Configuration management database	CMDB	A repository for information technology installations. It holds data relating to a collection of IT assets					
Contract change note	CCN	Contract change notes are used to legally document amendments to contractual commitments during the contract term					
Contractual SLA		A Contractual service level agreement defines the boundaries of responsibility between customer and supplier, sets standards of performance and defines the measurement of service performance.					
		It commits the supplier to delivering to required service levels and identifies the consequences of failure, usually in the form of service credits or other compensation.					
Customer service operations guide	CSOG	The Proact Customer Service Operations Guide. A guide to how Proact operate customer service, how to communicate with Proact and how to best use the service.					
Customer service specification		Defines the service configuration to be deployed for a specific customer					
Customer-site	Site	Customer-site refers to a geographically-local collection of in-scope customer networks, devices or resources, whether they are physically located on customer premises, in a Proact or third-party provider datacentre, or in a Proact or third-party public or private cloud.					
Dashboard		A view presented via a Proact Portal or application that shows the current service status and a summary of performance and usage.					
Datacentre	DC	A data centre is a facility used to house computer systems and associated components, such as telecommunications and storage systems					
Disaster recovery	DR	The process of restoring and assuring the continuation of essential IT services in the event of a disaster disrupting normal operation/					
Exclusion		Exclusions are, for the purposes of this document, items outside of the scope of this service contract for which Proact are not liable.					



Term		Definition			
ITIL	Information Technology Infrastructure Library	A set of practices for IT service management that focuses or aligning IT services with the needs of business.			
ITSM	IT Service Management system	The system used by the Proact Service desk to manage events, incidents, problems and changes			
Log Collector		The (virtual) machine that is used to collect logs from configured log sources.			
Major incident		The parties and process for declaring an incident a major incident are agreed during service transition. Whilst no formal ITIL definition exists these are typically incidents with significant corporate impact over and above a P1 incident, which do not require invocation of disaster recovery.			
Major incident report	MIR	Major incident reports identify incident timeline, root cause, workarounds and-or remedial actions and lessons learned			
Mediator Proxy		The (virtual) machine through which agent communications can be forwarded to allow a single point of egress to Proact's SIEM platform.			
Monitoring threshold		The monitoring threshold is the trigger value beyond which an alert will be raised. See also – threshold breach			
Network operations centre	NOC	A location from which Proact deliver their monitoring, support and or management services.			
Near-real-time		Near real-time (in telecommunications and computing) refers to the time delay introduced by automated data processing or network transmission between the occurrence of an event and the use of the processed data (for example, for display or feedback & control purposes).			
Operating System	os	The program which, after initially loading, manages the other programs in a (virtual) machine. The installed applications make use of the operating system. For example, Microsoft [®] Windows [®] , Windows Server [®] and Linux [®]			
Prerequisite		Prerequisites are, for the purposes of this document, tangible resources, actions or commitments without which the service cannot be initiated and whose provision and maintenance (where applicable) is the responsibility of the customer for the duration of the contract.			
Proact Premium Support	PS	Proact Premium Support is Proact's proven break-fix support solution			
Proact Premium Support Plus	PSP	Proact Premium Support Plus is Proact's proven monitoring solution			
Public IP Address		IP address that can be accessed from the public internet.			
Remote desktop protocol	RDP	Remote desktop protocol provides remote display and input capabilities over network connections for Windows-based applications running on a server.			
Regular Expression	RegEx	A sequence of characters that define a search pattern			
Response-time SLA		Response time service level agreements define the time taken to respond to a reported event.			



Term		Definition			
Responsibility		Responsibilities are, for the purposes of this document, ongoing actions or commitments necessary to sustain service delivery, which must be maintained for the duration of the contract			
Service delivery manager	SDM	Proact service delivery managers oversee the delivery of a service or service technology to the customer. The SDM establishes policies designed to ensure consistently high service performance, monitors the delivery and responds to customer feedback to develop quality improvement processes.			
Service improvement plan	SIP	The Proact maintained service improvement plan logs and tracks the status of any technical or service issues highlighted by the customer or by Proact in relation to the service provided			
Service operations manual	SOM	The Service operations manual details the scope of the services provided.			
Service transition		The process of transitioning a contracted service from planning through to a live delivery state.			
Security Information and Event Monitoring	SIEM	A software toolset that Software tools that collates, manages, analyses and correlates multiple sources of security information and log files in a network			
Service level agreement	SLA	An official commitment to the level of service provision that prevails between a service provider and their customer			
Security Operations Centre	soc	Proact's security monitoring and management function, and its associated analysts			
SNMP traps		Alert messages sent from remote devices to a central collector			
Syslog		A logging standard that allows event messages to be sent from network devices to a logging server			
Threshold breach		In the context of the Proact Monitoring Platform a threshold breach occurs when an event on a monitored item exceeds a pre-set threshold. For services that include monitoring, Proact define these thresholds and agree them with the customer during the service transition stage, they are maintained throughout the contract term.			
		See also – Monitoring thresholds Analysis of data to identify patterns. Trend analysis is used			
Trend analysis		in problem management to identify common points of failure or fragile configuration items.			
User		A user is a customer defined entity that allows an administrator to login to Proact's Self-Service Portals.			
Virtual Servers		A Virtual Server, or Virtual Machine, is an Operating System which runs in a container within a hypervisor host, and imitates a hardware server.			



Appendices

Appendix A: Technical Requirements	. I
Appendix B: Self-service management portal functionality	١٧
Appendix C: Data retention, deletion and extraction	·V



Appendix A: Technical Requirements

A.1: Minimum server specifications

A.1.1: Log Collector

A dedicated server (preferably virtual) running Microsoft Windows Server is required to run each Log Collector and Mediator Proxy (if selected). The network location of these servers will be agreed between Proact and the Customer during Service Transition.

The minimum requirements for each server are as follows:

- Windows Server 2008 or later (full installation)
- 2 x (v)CPU
- 4GB (v)RAM
- 1 x (v)NIC
- Minimum 65GB Disk

The above minimum specification is for basic operation - resource requirements may be higher (and therefore may need to be amended by the Customer during the term of the contract) depending on the log volume generated from of the in-scope endpoints.

A.1.2: Mediator Proxy

A dedicated server (preferably virtual) running Fedora or RedHat Enterprise Linux is required to run each Mediator Proxy (if selected). The network location of these servers will be agreed between Proact and the Customer during Service Transition.

The minimum requirements for each server are as follows:

- Fedora 23 / RHEL 6 or later
- 2 x (v)CPU
- 4GB (v)RAM
- 2 x (v)NIC
- Minimum 12GB Disk

The above minimum specification is for basic operation - resource requirements may be higher (and therefore may need to be amended by the Customer during the term of the contract) depending on the log volume generated from of the in-scope endpoints.

A.2: Firewall Ports

A.2.1: Ports required for Log Collection

The following firewall rules must be implemented where devices sending logs to / having logs collected by the Log Collector are located in different security zones from the collector and the traffic must therefore traverse a firewall.

NOTE: These rules are not required for any systems in scope that can communicate directly with the SIEM Log Collector without going through a firewall.



Component Interactio	n				
Client	Client Port	Server	Server Port	Protocol	Communications
Devices Sending Logs	S				
UDP Syslog Device	Random	LogRhythm Collector	514	UDP	Unidirectional
TCP Syslog Device	Random	LogRhythm Collector	514	TCP	Unidirectional
NetFlow v1, v5 or v9 Device	Configurable	LogRhythm Collector	5500	UDP	Unidirectional
J-Flow Device	Configurable	LogRhythm Collector	5500	UDP	Unidirectional
sFlow Device	Configurable	LogRhythm Collector	6343	UDP	Unidirectional
SNMP Trap Device	Configurable	LogRhythm Collector	161	UDP	Unidirectional
Remote Log Collectio	n				
LogRhythm Collector	Random	Windows Host (Windows Event Logs)	135, 137, 138, 139,445	TCP/RPC	Bidirectional, Client Initiated
LogRhythm Collector	Random	Database Server (UDLA)	DB Server dependent*	TCP/ODBC	Bidirectional, Client Initiated
LogRhythm Collector	Random	Check Point Firewall	18184	TCP/OPSEC LEA	Bidirectional, Client Initiated
LogRhythm Collector	Random	Cisco IDS (SDEE)	443	TCP/HTTPS	Bidirectional, Client Initiated
LogRhythm Collector	Random	Nessus Server	8834	TCP/HTTPS	Bidirectional, Client Initiated
LogRhythm Collector	Random	Qualys Server	443	TCP/HTTPS	Bidirectional, Client Initiated
LogRhythm Collector	Random	Metasploit Server	3790	TCP/HTTPS	Bidirectional, Client Initiated
LogRhythm Collector	Random	Nexpose Server	3780	TCP/HTTPS	Bidirectional, Client Initiated
LogRhythm Collector	Random	Retina Server	1433	TCP/ODBC	Bidirectional, Client Initiated
LogRhythm Collector	Random	eStreamer Server	4444	TCP/HTTPS	Bidirectional, Client Initiated

^{*} The server port for UDLA collection will vary based on the database server being queried. (SQL Server default = TCP 1433; MySQL default 3306; Oracle default = TCP 1521; DB2 default = TCP 50000)

A.2.2: Ports required for SIEM Master Service

If the Mediator Proxy component is utilised for consolidated log transport, each Log Collector will need to communicate with the SIEM Mediator Proxy, which will forward communications to Proact's central SIEM platform.

The following traffic must be allowed through Customer firewall(s) and the Customer must inform Proact of the source Public IP from which this traffic will originate:

Client	Client Port	Server	Server Port	Protocol	Communications
SIEM Log Collector(s)	3333	SIEM Mediator Proxy	443	TCP	Unidirectional
SIEM Mediator Proxy	3333	Proact Master SIEM Service	443	TCP	Unidirectional

Alternatively, if the topology agreed during Service Transition is for Log Collector(s) to communicate directly with Proact's central SIEM platform, the following rules are required:

Client	Client Port	Server	Server Port	Protocol	Communications
SIEM Log Collector(s)	3333	Proact Master SIEM Service	443	TCP	Unidirectional



Appendix B: Self-service management portal functionality

The service includes a configurable Self-Service Management Portal engine that can be used to generate a wide array of reports, and allows multiple focussed dashboards to be created for a variety of audiences (e.g. technical, security, executive).







The functionality of the Portal includes:

- Searching
 - Usernames
 - IP Addresses
 - Hostnames
 - Geographic Location
 - Log Classification
 - Create, store and rerun searches
- Create Cases
 - Add selected logs
 - Share case with collaborators
 - Audit trail for each case
- Dashboards (Trends)
 - Top X information
 - Double click drill down functionality
 - Internal/External flow of events
- Analyse
 - Detailed look in to log data
 - Correlate activities
 - Extract raw log data



Appendix C: Data retention, deletion and extraction

C.1.1: Data Retention

During transition, Proact and the customer agree on a policy configuration that meets the customer's retention requirements, within the operating parameters of the SIEMaaS product.

Proact's default policy is to archive all logs and only remove logs from the archive upon written customer request or following service termination; no automatic removal process is scheduled.

Logs are archived after 30 days, at which point they are no longer available for instant access. Archived logs can be retrieved and made available via a change request submitted to Proact through the portal.

C.1.2: Data Deletion

Proact will only retain logs in line with the agreed SIEMaaS configuration policy during the term of the SIEMaaS contract. It is not obligated to retain the data beyond the contract end date.

At the end of the contract term the customer can choose to either:

- Renew the contract, if both parties agree new terms
- Request that Proact delete logs from the SIEM platform, in which case Proact will:
 - Remove the customer entity to prevent additional log messages from being collected.
 - Delete the customer's archived logs once any log messages in the database have been flushed to the archive,
 - Advise the customer that all the log messages have been deleted.
- Request that Proact extract and return logs from SIEM platform storage (see Section C.1.3:)

By default, Proact will, irrespective of the retention policy, delete the log message data unless written confirmation of the customer's request for it to be

Exclusion 5: Log data is not retained beyond the contract end date

extracted and returned is received within 30 days of the contract termination date.

C.1.3: Data Extraction

If the customer requests that Proact extract and return logs at the end of the contract term, Proact will:

- Export the log message data into native format (flat files) on customer provided hardware (servers and-or storage as appropriate) so that it can be accessed by the customer as required.
- The customer's participation in the process is necessary to agree the logistics around the extraction and to organise for any resources required.

Note: This is not a part of Proact's standard managed service offering. The required work is undertaken as a standalone project, scoped and costed on receipt of the customer's notification of its intent to recover the data.