

# Professional Managed Services Health/HSCN Assured

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# **HSCN Assured for Health**

The requirements for information access and sharing have changed. Underlying networking arrangements needed to support an affordable, agile and integrated health and social care sector need to change.

As Exponential-e are an accredited HSCN Stage 2 Compliant CN-SP provider of services, we offer HSCN assured digital technologies that will benefit both staff and patients alike. These benefits come from our ability to deliver multiple services over "assured unified platforms". By empowering different healthcare entities to securely aggregate their infrastructure requirements, the resulting outcome brings not only new found agility but also the ability to realise significant cost savings.

# **Service Particulars**

## Service Overview

Exponential-e Managed Services support and enable our customers to get the maximum value from the investments made in their technology assets across a range of key vendor technologies and cloud services through the delivery of a reliable UK based 24x7 Service Desk solution fully aligned to ITIL and vendor best practice standards.

FLEX SUPPORT	FLEX <b>MANAGE</b>
A pre-purchased support service that may be used for planned or emergency break-fix support or advice via telephone or a variety of remote access methods.	A managed support, maintenance, and management service to supplement or replace the internal IT function of organisations of all sizes.
FLEX MONITOR	FLEX <b>VALUE</b>
An infrastructure monitoring service that delivers 24x7 proactive and reactive monitoring, infrastructure health checks, and alerts.	A value added offering that delivers a combination of licensing and managed service for a number of key IT services.

The Managed Services portfolio of products provides an end-to-end service, which includes proactive services, reactive problem resolution, and on-going service delivery management.





Exponential-e's Managed Service addresses all three components of service management, and is the subject of this datasheet.

The Manage Service is a highly flexible and responsive extension of an organisation's own IT function and seamlessly augments the IT support and management services for organisations of all sizes. It provides multi-vendor telephone, email, and onsite support, consultancy, and management services.

We recognise that each customer is unique and have different management needs. As a consequence each Managed Service agreement is bespoke and tailored to our customer's exacting requirements by following a best practice approach to service management.

# Service Scope

## Service Description

Our Customers may choose from different levels of cover for the Managed Services agreement. These levels include:

- Monitoring only service, which reports alerts to the Customer
- OS Managed service, where Exponential-e manages entities up to the OS layer and the Customer manages the applications layered upon it
- Fully Managed service, where Exponential-e fully manages the entities

The scope of cover may be varied for each managed entity. This means that the Customer may choose for individual systems to be managed differently from others as desired.

The following graphic details at a high level the components included with the aforementioned levels of cover.







# Service Technologies

Exponential-e have provided a robust Managed Service to its customers for the past 8 years. During this time there has been a significant amount of advancements in technologies, and where appropriate, these have been absorbed and delivered upon by our business. This has extended to our Managed Services division, with the Managed Services now being available for use with the following technologies and locations.

Amazon Web Services	aws	Management of AWS infrastructure environments as well as connectivity to AWS.
Exponential-e Cloud		Management of Exponential-e shared and private cloud environments as well as third party services such as connectivity, security, and telephony.
Microsoft Azure	Microsoft Azure	Management of Azure infrastructure environments as well as connectivity to Azure.
Microsoft Office 365	Office 365	Management of all Office 365 tenancy types, down to user level support and assistance.
Private Cloud		Management of private cloud infrastructure environments.
Private Hardware		Management of private server infrastructure based on physical hardware.
Third Party Cloud		Management of private cloud infrastructure environments located on third party cloud infrastructures.

#### Service Desk

The Exponential-e Service Desk is based in Aldgate, London and are manned 24x7 by a full complement of level 1-3 engineers and managers. The Service Desk capability is not reduced after hours. As a result Exponential-e operates a single SLA all hours of the day.



The Service Desk is aligned to ITIL and industry best practice guidelines and is underpinned by ServiceNow, a fully ITIL based service management platform. The Service Desk includes the following services across the managed infrastructure.

- Event management
- Incident management
- Request fulfilment



- Problem management
- Service management
- Service catalogue management
- Capacity management
- Service Level management
- Availability management
- Supplier management
- Change management
- Asset management
- Configuration management
- Release and deployment
   management

#### **Monitored Only**

This level of cover provides a fully featured monitoring solution that includes hardware, OS, and application monitoring. Management of the entity is solely the responsibility of the Customer, with Exponential-e only providing a proactive and reactive monitoring and alerting function.

The monitoring solution operates 24x7 by default. Customers may choose to receive alerts via email or view these alerts in the customer portal, or both.

## **OS Managed**

This level of cover provides support and management up to the Operating System level. Management of the entity is shared with the Customer, with the Customer performing support and management of the applications installed on top of the Operating System. Built-in services such as Active Directory or IIS are considered applications and are not included with this service. Product upgrades are not included with this service.

Monitoring and patching are included for the Operating System only and are not extended to the applications installed on the managed server or workstation.

The following details the entities that may be selected and the service components included with the OS Managed service:

<ul> <li>Physical Server</li> <li>Virtual Server</li> <li>Remote Desktop Session Host</li> <li>Storage</li> <li>Expansion Tray</li> <li>Workstation</li> <li>Thin Client</li> <li>DaaS</li> </ul>	<ul> <li>Service Desk</li> <li>Hardware and OS monitoring</li> <li>Backup monitoring, file restores, full system restores</li> <li>AV monitoring, full management</li> <li>OS break-fix and remediation</li> <li>OS patching, firmware updates</li> <li>OS in-place upgrades</li> <li>OS Reporting</li> </ul>
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## **Fully Managed**

This level of cover provides full support and management for the given entity. Management of the entity is solely the responsibility of the Flex Service Desk and the Customer does not perform any support or management for the managed infrastructure. Applications installed on the servers and built-in services such as Active Directory or IIS are included for management with this service.

This service benefits from minor version product upgrades for the Operating System as well as applications, where in-place upgrades are performed

All day-to-day management activities are included with this service such as expanding storage volumes or LUNs on servers or on storage devices. In addition all configuration tasks are included as well. Customers are not required to manage any aspects of fully managed infrastructure.

The following details the entities that may be selected and the service components included with the Fully Managed service in addition to the standard Service Desk services highlighted above:

<ul> <li>Physical Server</li> <li>Virtual Server</li> <li>Remote Desktop Session Host</li> <li>Storage</li> <li>Expansion Tray</li> <li>FC Switch</li> <li>Switch</li> <li>Router</li> <li>Access Point</li> <li>Hardware Firewall</li> <li>vShield Edge</li> <li>Load Balancer</li> <li>Tape drive/library</li> <li>User</li> <li>Workstation</li> <li>Thin Client</li> <li>DaaS</li> <li>Tablet</li> <li>Student</li> <li>Printer</li> <li>Projectors</li> <li>Office 365</li> </ul>	<ul> <li>Hardware, OS, and application monitoring</li> <li>Backup monitoring, file restores, application restores, full system restores</li> <li>AV monitoring, full management</li> <li>OS and applications break-fix and remediation</li> <li>OS and application patching, firmware updates</li> <li>Minor version OS and application in-place upgrades</li> <li>OS and application Reporting</li> </ul>
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#### Service Levels

Providing the right levels of response to an incident is a process of co-operation between the Customer and our Service Desk team. To assist us to respond in a suitable fashion to each incident, a priority needs to be set. This is automatically set by the Service Desk team for incidents raised by the RMM solution. For incidents logged by the Customer this should be set by the individual when initially raising the call.

DESCRIPTION SLA • A Critical business service is non-operational impacting the customer organisation, multiple users or multiple sites; or Severe functional error or degradation of service affecting production, demanding immediate Ρ1 attention. Business risk is high, with immediate financial, legal or reputational impact. • The customer is experiencing failure or performance degradation that severely impairs operation of a critical business service; or the customer or service has been affected, although a workaround may exist; or Application P2 functionality is lost; or significant number of users or major site is affected. Business risk is high. • The customer is experiencing a problem that causes moderate business impact. The impact is limited to a user or a small site; or incident has moderate, not widespread impact; or the customer or IT service may not P3 have been affected. Business risk is low. • • Standard service request (e.g. User Guidance); or updating documentation. P4 • Low or Minor localised impact.

The four categories below provide a guide to service level classification.

In most cases, a support response will be immediate. The maximum primary response time (i.e. the maximum elapsed time between the customer raising the call and receiving a technical response from one of our Service Desk technicians or an engineer) is detailed below. Our aim is to offer the following level of service for incidents logged within contracted hours:

PRIORITY	RESPONSE TIME	TIME TO ASSIGN	TARGET FIX TIME	UPDATES
P1	15 minutes	1 hour	4 hours	Every hour
P2	15 minutes	2 hours	8 hours	Every 2 hours
P3	30 minutes	4 hours	4 days	Every 2 days
P4	30 minutes	8 hours	7 days	Every 3 days

The Response Time Service Level Agreement applies to the entire contract and may be modified at the customer's request. Variation of this RTSLA may incur additional charges. Updates will be provided by the Service Desk to the Customer at the specified frequency. Adherence to the RTSLA is automatically monitored and reported on using the ServiceNow service management platform, where workflows automatically escalate incidents.



## Service Availability

The Managed Services provided by Exponential-e is a 24x7 Service Desk Service. This service is therefore available 24x7x365 (including UK Bank Holidays).

# **Escalation Procedures**

#### **Internal Escalation**

The Service Desk operates an escalation procedure to monitor the progress of support incidents which includes notifying first and second line Service Desk managers of any incident that remains unresolved beyond internally defined time limits. This enables us to effectively monitor whether the appropriate resources are being made available and are actively working to resolve a support incident.

Complex technical issues will be escalated by a Service Desk manager or a 3rd line support operative to a 4th line consultant in the event it cannot be resolved by the Service Desk.

Internal escalation happens automatically through the ServiceNow management platform. SLAs are continually and automatically monitored by ServiceNow.

## **Customer Targeted Escalation**

The Service Desk will escalate incidents and problems to the Customer for OS and application incidents and problems when the OS or applications are not under support cover by Exponential-e. For systems under Monitoring Only cover this includes all OS and Application issues and problems, whereas for systems under OS Managed cover this includes OS issues and problems.

#### **Customer Initiated Escalation**

A Service Level Priority should be set by the Customer when initially raising the call. The priority levels are detailed elsewhere in this document. The Customer may request the Service Desk to increase the priority level of a given case due to a change in circumstances or the amount of time elapsed during support.

In addition Exponential-e allows customers to escalate service to one SLA level higher on request, for any reason. Customers may request the Service Desk to escalate requests to the next SLA level i.e. S3 requests can be escalated to a S2 and S2 requests may be escalated to a S1.

The Customer escalation procedure is typically invoked by the Customer contacting the Service Desk using an approved contact method. Both the person requesting the escalation and the person receiving the escalation have certain commitments to ensure there is effective escalation management.

In the event that the standard escalation procedure via the Service Desk does not result in the desired effect, the Customer may choose to invoke additional levels of escalation during Business Hours.



A summary of the levels is given below:

Level	Position	Elapsed Time from Logging Incident to Escalate to Next Level
Level 1	Service Desk	100% of SLA Time
Level 2	Service Desk Manager	4 hours
Level 3	Director of Engineering	8 hours
Level 4	Managing Director	

#### **Vendor Escalation**

The Service Desk also has an escalation procedure in place with major manufacturers and vendors should the need to escalate an incident arise. The Service Desk will escalate an incident or problem on request from the Customer at the Customer's expense, or if the Customer has an active maintenance agreement in place with the vendor that can be utilised for incident or problem resolution. We will liaise with the vendor and provide the relevant information and assistance to assist in a speedy resolution.

#### **Third Party Escalation**

The Customer may choose for a third party to carry out remediation or maintenance for the OS or Applications. In this event the Service Desk will escalate incidents and problems to the Customer's agents in the same way it would escalate these to the Customer. One notable difference is that the Customer's agents will not be provided with a ServiceNow login.

# **Flex Manage Detail**

#### Service Components

In addition to the ITIL based Service Desk service, the Exponential-e Managed Service includes as standard the following components. These items are available with all Service Technologies detailed in this document.

- **Proactive Monitoring.** 24x7 monitoring will be configured for the managed infrastructure. This monitoring solution will monitor key health statistics such as CPU speed, RAM usage, disk space utilisation and free space monitoring, uptime, service uptime/failure, and event logs. Additional monitoring requirements may be specified and carried out if this is desired/required. The monitoring solution will carry out regular automated health checks against servers and workstations to ensure they are operating optimally. Issues are automatically logged to ServiceNow, where an operative will further investigate the issue.
- **Break-fix Support.** When a fault is detected via the monitoring system or reported by the Customer the Service Desk will investigate the cause of the issue and take remedial action. Each fault and issue is logged on our support systems, and root cause analysis follows the resolution to prevent reoccurrences.



- **Reporting.** Exponential-e provides monthly performance and management reports which includes resource usage with trend analysis, and monthly patch position. Additional bespoke reports can be provided once discussed with customer based on their requirements.
- **Capacity Planning.** Resource monitoring for CPU, RAM, disk space, and network (WAN) bandwidth utilisation will identify future resource requirements, and resources can be amended as appropriate to ensure an excellent responsive service to end users.
- **Routine maintenance.** Operating system and application patching, backup monitoring and maintenance, AV monitoring and maintenance.
- **Product upgrades.** In-place product upgrades for fully managed services are carried out without additional charges as required.
- **Inventory/stock management**. Management of managed equipment stock, inventory, spares, order recommendations.
- Procurement and advice. Software, licensing, hardware, ancillaries.
- Secure Data Destruction and equipment disposal.
- **Professional Services.** Delivery of professional services are conducted in collaboration with our managed services division to ensure all work is aligned to current and future improvement plans. Strong focus on Citrix, Microsoft, VMware technologies. No Professional Service days have been included with this agreement but may be added at additional cost.
- **Strategic planning and advice.** Detailed infrastructure planning to align with business drivers and changes, and short and long term strategic technology planning to ensure technology underpins the business direction.
- **Unlimited support.** No limits on the amount of remote support provided for the managed infrastructure.
- **Onsite support cover.** Onsite support cover may be included with this agreement as required. These days will be utilised at a time that suits the Customer best, following prior arrangement with the Managed Services team. Onsite support cover has not been included with this agreement but may be included at additional cost.

#### Management

The managed infrastructure, regardless of the Service Technology used, will be monitored 24x7 by our Service Desk. In the event of a detected fault or failure the Service Desk will log a case and investigate the issue.

The same process will be followed for issues not detected by the monitoring system, such as perceived latency/slowness by users. These will be highlighted to Exponential-e by the customer's users, at which time it will be investigated.

Remediation times depend entirely on the nature of the incident, as some incidents are easier or quicker to remedy than others. Hardware faults will initially be investigated by the Service Desk and will then be escalated to the appropriate hardware vendor for investigation, and remedied according



to the service SLA with the vendor. For on premise server infrastructure an engineer will be dispatched to site within 4 hours of the issue having been investigated by the vendor and authorised for service, or next business day as appropriate for the hardware maintenance agreement in place.

#### Service, Application, and Event Monitoring

Exponential-e will employ the use of a remote monitoring and management (RMM) solution to continuously monitor the health of the server, storage, and network infrastructure and the event and fault logs generated by these. This will alert the Exponential-e Service Desk of any issues as they occur. These issues can immediately be investigated and corrected rather than onsite or Service Desk personnel being made aware of the issue by the user community.



The monitoring solution also performs daily checks on hundreds of components and an alert is generated whenever these are breached, before an issue occurs. An example of this

is continuous disk space checks to ensure that volumes do not fill up as well as daily backup checks to ensure backups run successfully.

All information is displayed on a dashboard, and the health of all systems is available to our Service Desk on a single pane of glass at all times. Through automated systems health checking and monitoring, more time is freed for the Service Desk technician to respond promptly to user requests.

The RMM solution utilised by Exponential-e is updated only when the main product is upgraded. Exponential-e operates a development platform that is used to test new product revisions, prior to rolling them out to our production platform or to customer systems. Updates are extensively tested against live systems, with various test systems that forms part of our development test bed being configured as monitoring clients. Updates for the RMM solution are released every 6 months by the vendor, with Exponential-e operating a delayed deployment schedule of at least 4 weeks to production systems to allow for sufficient testing to be performed.

#### **Proactive Management**

The monitoring solution will carry out regular automated health checks against the servers to ensure they are operating optimally. These checks can be automated through the RMM system for a range of checks. Further checks that cannot be automated will be scheduled to be completed manually for all supported infrastructure.



## **Maintenance Windows**

Exponential-e operate maintenance windows so that proactive as well as remedial work can be carried out at pre-planned scheduled times. Maintenance windows will be arranged with the customer's input to minimise the disruption to the user community. These maintenance windows differ from customer to customer. The following maintenance windows are recommended as a starting point.

Daily	Weekly	Monthly	Quarterly	Annually
Backups	Non-disruptive infrastructure configuration changes	Backup restore testing Patching	Disruptive infrastructure configuration changes	Infrastructure upgrades DR testing Security testing and review (penetration)

The Customer may choose one of the two monthly maintenance windows on a per device basis. To minimise user disruption and to streamline service provision, Exponential-e attempts for maintenance performed on all devices to be confined to the two standard maintenance windows per month. Where this is not possible for a particular managed device, and an alternate global service window cannot be selected, a bespoke service window will be maintained for the affected device on an exception basis.

## Service Delivery Management

Exponential-e makes use of a structured service delivery framework to improve the quality of ICT project and support services on all Service Technologies. Service Management is covered in greater detail elsewhere in this document.

## **Change Management**

Exponential-e's Service Desk is aligned to ITIL standards and employs a change management procedure for small and large changes to the IT configuration and strategy. This procedure ensures proper accounting of activities and that standardised methods and procedures are used for efficient handling of all changes. Exponential-e's standard change management procedures are initially based on standard change management procedures and are constantly refined to suit each customer organisation.

Changes are categorised by criticality (planned, emergency) and type (commercial, technical). Commercial changes affect the cost of the solution, either favourably or unfavourably, for Exponential-e and/or the Customer. For example, this may arise when there has been a change in a third party supplier's pricing structure after a quote has been issued, so the price we are charging a Customer for a service is not in line with the price we are being charged by the third party supplier.

Technical changes are any changes when the physical or technical nature of the solution requires an addition, removal or amendment. An example of a technical change includes, but is not limited to, the addition of a cross connect not considered at the presales level, a change in supplier due to the initial supplier being unable to deliver as required, a change in presentation or the amendment of equipment. In keeping with our customers' requirements, we will advise if a change is chargeable



within two working days and if it is not chargeable we will provide an estimated timescale for performing the work at the same time. If work is chargeable a written quotation will be provided to the Customer within five working days which shall include a timescale for performing the work.

A change will not be considered complete until it has successfully undergone user acceptance testing by the Customer and has been successfully implemented on the live system. The Customer is required to carry out acceptance testing without undue delays.

Change management information is recorded to ServiceNow by the Service Desk. This information and the progress of all active change requests is viewable at all times in the ServiceNow Customer Portal, as is historic changes.

The following graphic depicts the activities for Planned and Emergency changes.

Planned Changes	
Change Registration	<ul> <li>Change is logged with Exponential-e Support desk</li> <li>Change is assigned to an engineer who will take ownership and manage.</li> <li>Client will receive a change reference to track the change.</li> </ul>
Change Planning	• Change is assessed by engineer ensuring that there are no conflicts with existing configuration and plan the change.
Change Approval	•Skilled engineer ensures that it conforms to standard and ensures the roll out and back up plan is acceptable. Sign off is obtained.
Infrastructure Change Implementation	•Exponential-e agree date and time to implement the change •Implement the change and ask customer to test
Application Change Implementation	<ul> <li>Exponential-e speak to client agree date and time to implement the change if related to application (software) example to implement. Then we will implement the change and ask customer to test.</li> </ul>
Planned Changed Closure	•Once confirmation is obtained that it is working we will then close the change ticket.
Emergency Changes	
Emergency Change Implementation	• This procedure is used by specialists and release administrators to implement changes to resolve incidents.
Emergency Change Closure	<ul> <li>This procedure is used by specialists and change coordinators to complete and close out emergency changes.</li> </ul>

#### Planned Changes

Where changes are identified by Exponential-e or the Customer as being urgent, the emergency change control procedure is invoked. This procedure is a variation of the regular change control procedure and aims to expedite the time needed to approve the change without unduly risking the quality of service provided or the users affected.

In order for a change to be considered urgent it will first undergo analysis to clarify and classify the risk profile to the estate. This is not a long, drawn-out process and the SLA for completing this is 2 hours. Only when it is deemed appropriate is the emergency change control procedure invoked.



The following items are considered part of this process:

- What the risks are of implementing the change
- What the risks are to delaying implementation of the change
- Whether the change should undergo full testing prior to being made, or whether the criticality of the change warrants immediate action
- Whether the change will be made during a maintenance window (after hours) or if it warrants immediate action even if this would affect users

Based on this information an implementation/deployment plan is drawn up by the Exponential-e Service Team. This includes a method statement, affected systems, and schedule. This is circulated to the Customer for approval, and executed upon receiving approval to do so.

The Service Team's change control form includes a section on risk. The following fields are captured:

- Description of risk
- Risk (Out of 10, with 10 being the highest risk)
- Chance of risk (Out of 10, with 10 meaning the risk is certain to come to pass)
- Necessity of change (As a negative number up to -10, with -10 meaning the change is mandatory)
- People affected (as an estimated number)
- Mitigation
- Back out options

This information is reviewed by the responsible change manager for the Customer account and a decision is made to approve or reject the change based on the risk. During the transition program the Project Team and the Customer will collectively decide what risk profile to approve, and what risk profile should be referred to the Change Advisory Board for review. Typically all changes with a combined risk value greater than 10 (as a sum of the risk, chance of risk, and necessity of change) are referred to the CAB.

#### **Fault Management**

Exponential-e has a robust fault management process, which form part of our ISO9001 accredited QMS. Fault management will be handled by the Service Desk manager. All support requests will be entered into Exponential-e's Service Desk systems. Requests and incidents are assigned to a support operative, either the onsite support engineer or the Service Desk operatives, and monitored by the Service Desk manager.

Exponential-e operates a fault escalation procedure. Issues that are not resolved when 70% of the SLA is reached are escalated to a higher priority and the Service Desk manager is notified. Issues that reach 90% of the quoted SLA get immediate attention of the Servicer Desk Manager and are escalated appropriately.



## **Problem Management**

The purpose of the problem management procedure is to resolve detected problems and to prevent the recurrence of incidents. The problem management procedure initiates root cause analysis following every incident in an attempt to identify underlying problems. In addition multiple incidents of the same type invokes the problem identification and management procedures as a result of trend analysis that occurs following resolution of each incident.

#### **Release Management**

The Service Desk operates an ITIL compliant release management process that aims to protect the live environment and its services through the use of formal procedures and checks. This procedure is enacted during routine maintenance activities such as patching, as well as major software release updates. A bespoke release management procedure is created for each Customer during on boarding that controls the release of updates, communication of changes with the business, and roll-back options in the event of a failed release.

## Maintenance

#### **Backups**

Taking regular backups is essential to safeguard important systems and data. As part of the Flex Manage service the Service Desk will set up and manage the running of backups daily. The OS Managed service includes maintenance of the backup platform, monitoring of backups, remediation of backup faults, restoring individual file system files, and performing a full system restore. Additionally the Fully Managed service includes restore services for applications for the fully managed equipment. A backup report is compiled and delivered to the Customer on a monthly basis as part of the service review.

#### Antivirus

The OS Managed and Fully Managed services include antivirus management as standard. This activity includes monitoring the environment for incidents such as virus infection or signature update failures, remediating these incidents, upgrading agent software, and configuration of the antivirus solution to vendor best practice.

#### Patching

Exponential-e operates a patch management procedure that consists of several tasks. The patch management tasks include:

- Patch approval
- Patch installation
- Server reboot
- Functional testing



Managed Microsoft equipment will be patched with Microsoft updates through the RMM system or by utilising the Customer's WSUS or SCCM installation. Other vendor updates will be carried out manually or via an alternate management platform. Managed updating is highly recommended for a number of reasons:

- Automated update installation and reboots can be configured for servers and workstations. Reboots can be staggered to ensure no loss of service for redundant services.
- Exponential-e can ensure that updates are actually being installed by configuring automated installations and can report on whether updates have been installed on target computers.
- Unwanted updates can be blocked from being installed.
- Specific updates such as new versions of Internet Explorer can be delayed from being installed until they have been tested with the customer's applications.
- Exponential-e can dictate the frequency that updates are applied to the customer's estate.

Exponential-e carries out patch tests in a lab environment where possible to ascertain whether patches are safe to deploy. In addition Exponential-e typically lags its update schedule 2-4 weeks behind vendors' release cycles so that faults may be identified by the community and corrected before they are approved for installation.

Software and hardware patches are carried out to the change management and release management processes and are installed during scheduled maintenance windows. The Service Desk can accommodate bespoke/changing monthly maintenance windows, but in our experience regular maintenance windows reduces user confusion and exceptions. Where appropriate/possible, systems are configured for automatic installation of updates. Any servers deemed unsuitable for automated installation will have the patches downloaded for manual installation by the Service Desk.

Equipment is typically divided into two update groups which are patched at different times of the month. This is typically useful in scenarios where redundant systems have been configured, such as Domain Controllers or clustered servers. In the event that an update negatively affects the production system and it consists of redundant systems the faulty system can be removed from the network and the service can be resumed using the remaining server(s). The faulty system can then be investigated and rolled back if appropriate. Some updates must be installed at the same time, such as storage firmware updates for redundant SAN controllers.

Where possible, updates are tested prior to being installed on live systems. Update testing is performed centrally on Exponential-e's testing platform prior to being recommended for install. This testing platform represents a standard configuration for Operating Systems and applications and is useful to identify updates that will cause issues. This platform is not intended to simulate an exact representation of our Customer's environment.

For fully managed equipment Exponential-e typically only requires its customers to approve updates. All other aspects are performed by the Service Desk maintenance teams. Equipment that is OS Managed will require the Customer's IT staff to carry out patching as well as functional and acceptance testing for applications.





The following diagram details our default patch procedure:

Where patches are identified by Exponential-e or the Customer as being urgent, the emergency change control procedure is invoked. This procedure is a variation of the regular patch installation procedure and aims to expedite the time needed to install the update without unduly risking the operation of the servers or applications affected. This procedure is detailed elsewhere in this document.

# **Support Methods**

## **Telephone and Email**

Telephone and email support provides a virtual helpdesk service to an organisation's support staff or its users to aid in fault resolution. This service also provides third line telephone and email advice for an organisation's IT staff seeking to ratify upgrade, management, or implementation procedures.

• 24x7 support is delivered Monday to Sunday, including Bank Holidays.



#### **Remote Support**

Remote support is delivered in an identical way as described for telephone and email support. Numerous remote support options can be catered for such as RDP, Citrix, VPN, VNC, TeamViewer, LogMeIn, as well as through Exponential-e's RMM platform. Managed servers and workstations are provisioned with Exponential-e's RMM agent software, which allows unsolicited access to the managed device. Solicited remote support methods are required where the RMM agent has not been installed and require the presence of an individual at the supported computer.

# **Emergency Call-out Support**

Some Managed Service agreements include the provision of onsite service. In the event that an engineer is required to attend a customer's site in an emergency the same or next working day this can normally be arranged (resources permitting).

## **On Site Support**

Where onsite support is included the agreement, it is normally arranged at a convenient time agreed between Exponential-e and the customer, or performed as a scheduled visit. For any site visit a minimum of half a day is subtracted from the agreement. Half a support day is up to 3.75 hours of support. If an engineer is onsite for longer than 3.75 hours, support time will be consumed pro-rata until 1700, at which time any time spent onsite after 1700 will be consumed pro-rata at 1.5 times the normal rate.

A normal support day is between the hours of 0900 and 1700, Monday to Friday. Support outside of these hours is consumed at 1.5 times the normal rate apart from Sundays and Bank Holidays which is consumed at twice the normal rate.

#### **On Site Consultancy**

Where onsite consultancy is included the agreement, it is normally arranged at a convenient time agreed between our Service Desk and the customer. For any site visit a minimum of half a day is subtracted from the agreement. Half a day is up to 3.75 hours of service. If an engineer is onsite for longer than 3.75 hours their time will be consumed pro-rata until 1700, at which time any time spent onsite after 1700 will be consumed pro-rata at 1.5 times the normal rate.

A normal service day is between the hours of 0900 and 1700, Monday to Friday. Service outside of these hours is consumed at 1.5 times the normal rate apart from Sundays and Bank Holidays which is consumed at twice the normal rate.



# **Service Model**

The following graphic shows an example Service Model that may be implemented between the customer and Exponential-e. It is expected that initial due diligence or on boarding will fully define the model to be utilised. This model may be modified through mutual contract variation, as it suits the customer, throughout the contracted period. These variations are carried out via the change process, and may incur additional charges. Where alternate Service Technologies are utilised by the Customer, their appropriate partner service desks will form part of the Service Model.



# **Service Tiers**

Our vision for the service delivered for our Customers is to enable the IT services function to become an industry leading internal service provider, recognised for innovation, service flexibility and technology leadership. To this end and to meet the SLA requirements, but also to not overkill availability, retention, site availability etc. for non-critical services, Exponential-e propose the implementation of Customer specific service tiers.

The services tiers will create a set of tiers from which full applications and service delivery can be mapped, optimising delivery. This allows the best levers to be applied covering the technical, service, and commercial principles that drive cloud consumption and determine the system availability. Through this delivery model, the Customer will be able to leverage these service tiers and commercial tariffs to allow the flexible mapping of applications and service into a new service model, aligned to their business importance and usage patterns.



While largely a commercial construct, service tiers simplify the association of managed equipment with the relevant managed service scope. The use of service tiers will be explored during the on boarding phase to determine the Customer benefits to be derived from the use of such a model.

# RACI

A responsibility assignment (RACI) matrix shows the split of responsibilities between Exponential-e and the Customer. Such a matrix will be drawn up to formalise the responsibilities assigned to each party to ensure a joint understanding. The RACI is bespoke to each contract and is formalised during the on boarding phase. The following responsibilities are typically captured in the RACI:

- Provisioning
- Configuration
- Patching
- Backup
- Security
- Antivirus
- Monitoring
- Release management
- Capacity management
- Availability management
- Change management

#### **Out of Scope Requirements**

The appointed Service Manager will report on all regular project, programme, and on-going activities as part of the on-going service reviews. Time spent by consultants or support staff completing billable work not included with the managed service is reported on internally on a daily basis. Typically the following information is captured:

- Consultant carrying out the work
- Date
- Time started
- Time finished
- Description of tasks completed
- Larger project this work is a part of (if applicable)

This information is collated on a monthly basis and forms the basis of the Service Manager's report. This information is captured in Exponential-e's CMDB.

# **On-Boarding and Off-Boarding**

#### **On-Boarding**

Once an order has been accepted, Exponential-e's Service Desk initiates the Managed Service on boarding process. This process includes a thorough review and health check of the environment to be supported to ensure the Service Desk understands and appreciates the business and IT requirements of the system, and to ensure the system is in a supportable state. Where Service



Technologies such as AWS, Azure, or third parties are utilised by the Customer, their organisations are included as part of the service to ensure the system is in a supportable state.

During on boarding Exponential-e collects a variety of information which will assist in the efficient and successful delivery of the managed service. This may include:

- Detailed design documentation
- Network diagram
- Third party relationship details (contact and contract)
- Disaster Recovery and Business Continuity documentation
- Internal systems usage policies and guidelines
- System priority matrix
- Internal technical and non-technical stakeholder details
- Strategic planning documentation
- System availability and SLA information
- Any other relevant documentation

Once the information collection phase has been completed, Exponential-e will enter the information into its secure CMDB and perform cross-training of Service Desk staff to increase familiarity of supported systems.

The on boarding process will be managed by Exponential-e's dedicated Project Management team using PRINCE2 project management methodology to ensure the successful completion of this phase.

## **Off-Boarding**

Off boarding of supported systems occurs upon termination of the support agreement, either through the natural end of the support agreement or through cancellation prior to the contract termination date. Once the contract term has expired or all other commercial and legal obligations have been met by the customer, Exponential-e initiates the off-boarding process.

As part of this process Exponential-e will:

- Remove all management agents from the customer systems
- Remove all customer support information, including password details, from its CMDB
- Provide privileged account information to the customer
- Configure all assigned management accounts configured in Active Directory to expire on the date and time of contract expiry
- Provide the customer with any system information collected during the course of providing the managed support service

Exponential-e will endeavour to have completed its obligations to the customer prior to the cessation of service where possible, or within 10 working days of the contract end date where it is not possible.



# **Standards**

Exponential-e operates a standards based, compliant Service Desk solution against all Service Technologies. We have achieved a variety of qualifications and operate to the standards set out by these. This section details the standards and qualifications Exponential-e operate throughout its business.



**ISO 9001 Quality Management Systems:** This is a global quality management standard which establishes an organisation's quality management system (QMS). The standard demonstrates our commitment to quality, client satisfaction and continuously improving operations.

**ISO 27001 Information Security Management Systems:** This specifies requirements for implementing security controls to meet the needs of our Information Security Management System. It highlights our ability to select and implement appropriate security controls to protect company information assets.

**The Information Security System** for the provision of bespoke communications services, including: WAN solutions and Cloud, Voice and IP managed services to corporate enterprises in the UK and Internationally. Security management covers physical security of our premises, our data centres, the management of our Network and related products and services. To keep our ISO27001 certification actively implemented, our policies include strict virus and password control, regularly reviewed business continuity plans and maintenance of information systems.

**The HMG Cyber Essentials/Cyber Essentials PLUS:** Cyber Essentials has been developed as part of the UK's National Cyber Security Programme and is a set of controls that provide the minimum level of protection against cyber threats. It is a standalone certification and complements compliance to industry.

**ISO 20000-1 Information Technology Service Management:** This standard shows an organisation can ensure its IT service management processes are aligned both with the needs of the business and with international best practice. It recognises our capability to meet client requirements and create frameworks for independent assessment. This ISO standard covers our client helpdesk, performance reporting, capacity management, business relationship management, supplier management, problem management and change management activities. Members of the team that deliver service management for Exponential-e clients are ITIL qualified.

**ISO 22301 Business Continuity Management:** This standard specifies the requirements for a management system to protect against, reduce the likelihood of, and ensure a business recovers from disruptive incidents.



**ISO 14001 Environmental Management System:** This standard is the world's first international environmental management standard. It maps out a framework that our business can follow for an effective environmental management system. ISO 14001 provides an integrated approach to environmental management – putting sustainability at the heart of our business.

**ISO 50001 Energy Management System:** This standard supports organisations to use energy more efficiently, through the development of an Energy Management System (EMS). ISO 50001 makes it easier for our business to integrate energy management to improve quality and environmental management.

**CSA STAR:** This is a rigorous third party independent assessment of the security of a cloud service provider. Holding this certification enhances our commitment to ISO 27001. It provides our clients with the extra confidence that their data is fully protected by improving transparency and assurance within the Exponential-e cloud.

**ITIL:** ITIL is the most widely adopted approach for IT Service Management in the world. It provides a practical framework for identifying, planning, delivering and supporting IT services to the business. This qualification is held by Exponential-e's Service Desk and Service Management employees.

**PRINCE2:** PRINCE2 is a process-based method for effective project management. Our Project Managers are PRINCE2 qualified and follow best practice guidance on project management, ensuring all clients receive exceptional project management.

**PCI DSS:** The PCI DSS is a set of comprehensive requirements for enhancing network security. It includes requirements for security management, policies and procedures, network architecture and their critical protective measures. It reflects an organisation's ability to proactively protect its network.

**Agile:** Agile Complements and works with existing corporate processes such as PRINCE2, quality and audit processes which improves rigour and visibility around project management, leading to a proven track record of successful deliveries to our clients.

# **Service Management**

To ensure maximum return for our Customer's support investments a layer of Service Management is included with all Managed Service agreements. Service management is overseen by our dedicated Service Managers. Your assigned service manager will work with you on:

- Service Delivery Planning & Business Alignment
- Service Delivery Management

#### Service Management Structure

The basic structure for how your assigned Service Manager will engage with your organisation is provided overleaf:





# Technical Service Manager

The Customer will be assigned a nominated Service Manager. The Service Manager will work closely with the Exponential-e Service Desk during faults or issues affecting the services in your solution. They will also manage the overall service engagement to ensure that the Customer's service level agreements are met or exceeded. In the event of any incidents, the Service Manager will produce an incident report, giving an overview of the sequence of events, the root cause, and capture any corrective actions.

The Service Manager acts as an additional point of escalation, interfacing with relevant operational teams from Service Delivery through to Engineering, Change Control, Service Desk and Accounts. This ensures that any issues are resolved effectively.

The Service Manager has all the relevant skills to manage the Customer account, reflected by the formal qualifications they have attained such as ITIL. The Service Manager will be dedicated to understanding your needs while setting dates and deadlines to ensure tasks are completed on time. This long established approach has proved successful for Exponential-e customers that had previously experienced poor service with other providers.

The Exponential-e Service Manager will be responsible for the operational performance of the Services. The core responsibilities of the Service Manager include:

- Ensuring that Services are delivered in a manner that achieves the service level agreements
- Financial reporting including any efficiency recommendations
- Attending regular performance reviews with the Customer management team
- Attending monthly service review meetings with the Customer management team. The purpose of these reviews will be to:
  - Review the features and SLA of the Services against the current requirements of the Customer in order to identify any changes that may be required
  - $\circ\,$  Review suggestions from the Customer or Exponential-e concerning potential improvements to the Services
  - Review suggestions from the Customer or Exponential-e for changes or additions to the set of Standard Service Requests documented in the Service Catalogue
- Identifying and implementing tactical changes to improve service quality and efficiency



- Providing a primary point of escalation and interface for the Customer management team for handling issues with respect to the Services
- Overseeing the impact of the delivery of any projects on the Services
- Owning any service improvement plan that may be defined by Exponential-e

#### **Client Relations Manager**

Exponential-e's proposed solution includes a Client Relations Manager (CRM) dedicated to the Customer. The CRM run service review meetings with the Customer in which new requirements (such as UC or O365 as examples), services changes (such as application landscape changes or changes in the IT arena) and new services from Exponential-e (such as service improvements or areas for awareness and potential interest) could be raised. These meetings would be regularly scheduled, however service-specific review meetings could be called at short notice should this be desired.

The CRM is responsible for the operational and financial performance of the Services. The CRM acts as an additional point of escalation, interfacing with relevant operational teams from Service Delivery through to Engineering, Change Control, Service Desk, and Accounts. This ensures that any issues are resolved effectively and that that services are delivered in a manner that achieves the SLA.

#### Service Improvement Reviews

During the life of the agreement there will be continual focus on service improvement; this will be delivered via a joint service improvement plan which Exponential-e will develop as part of the ongoing service. The commercial model allows for such variations to be managed without the need for contract renegotiations. Changes in volume demand will be recognised and reviewed for their implications to the delivery of service and resource plans established to meet the change in demand. Exponential-e will provide service reports and drive the service performance review meetings. Review frequency is anticipated to be monthly moving to quarterly when both parties agree the service is stable and that it is appropriate.

A highly structured approach to meeting our customers' goals and agreed KPIs is achieved through a combination of Exponential-e's 24x7 technical support function and the Client Relations team that provide all non-technical support. Exponential-e is accredited in ISO 20000 for Service Management. Detailed account and service management processes for the Customer would be set out in a customer service plan document.

Service Improvement Reviews (SIRs) will be undertaken on a quarterly basis as part of the Service Review meeting. The purpose of the quarterly review is to review the overall service activity provided during the preceding quarter and benchmark it against Customer expectations.

Details of the information that is captured during the quarterly periods as well as the review criteria that will be included within the service improvement review document are defined during the service on boarding process.

Exponential-e will provide service reports and drive the service performance review meetings. Review frequency is anticipated to be monthly moving to quarterly when both parties agree the service is stable and that it is appropriate.



A typical service review cover the following reports and subjects as a starting point, however Exponential-e welcome additional topics should they be of value to the Customer.

- Last Meeting Minutes
- Incident Review
- Scheduled Planned Maintenance
- Service Provisioning
- Performance Reporting (Bandwidth, SLA, CPU, Storage) All reports can be downloaded from Insight on a daily basis 24 x 7 by the Customer also.
- Commercial Status
- Trends in any repeat issues arising from the customer or specific systems
- Review case utilisation levels and targeted technologies
- Identify any new product sets to be supported across the customer's estate during the coming quarter
- Identify any performance improvement opportunities within the customer's environment
- AOB

#### Commitment to Continual Improvement and Customer Satisfaction

To support an approach that ensures service levels are evaluated and KPIs are achieved throughout the contract term, Exponential-e will constantly challenge the performance of the service through 24x7x365 management. This is made possible through a structure spanning our Client Relations team, Account Management, and the Service Desk, backed up by a rapid escalation procedure, up to board level if required.

On award of contract Exponential-e will discuss the defined goals the Customer has set and agree how these should be measured. Exponential-e and the Customer will agree the KPIs that will provide quantitative data to help evaluate chosen objectives. We provide competitive service levels and KPIs across our service portfolio and as a point of differentiation, our customers receive a true end-toend SLA. Our KPIs provide important quantitative data to help evaluate customer objectives. During monthly client service reviews, Exponential-e will benchmark our performance against Customer expectations, helping to ensure that targets for service levels and KPIs are met.

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#### Service Improvement Plan

Exponential-e has a continual focus on service improvement. This will be delivered via a joint service improvement plan which Exponential-e will develop as part of the on-going service. The commercial model allows for such variations to be managed without the need for contract renegotiations. Changes in volume demand will be recognised and reviewed for their implications to

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#### Service Manager

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#### **SLA Performance Monitoring**

Performance against the SLA for the Customer solution will be tracked and reported by the dedicated Service Manager associated to the account. Any breaches of the SLA will be addressed in a structured fashion during either a face to face meeting or a conference call at the earliest opportunity. In the unlikely event that Exponential-e fails to meet our SLAs or KPIs, agreed service credits will become payable. We understand that our customer need to know that we will be focused on resolving issues should they occur, and that service credits help ensure that. Our commitment to support as detailed in this document, in addition to our shared escalation paths, also demonstrates how focused we are on resolving any and all issues.

Exponential-e would present to the Customer an RFO report for every service affecting incident and for any breach of service levels. All 'reason for outage' reports contain a summary of the incident, root cause analysis and corrective action.

#### Institute of Customer Service

Exponential-e holds a corporate membership with the Institute of Customer Service (ICS). The partnership enables us to improve our customers overall experience and enable the business to utilise the great training, research, best practice and accreditations that the ICS can offer. This is an independent professional body with the primary purpose of driving improvements in client service performance and professionalism. The membership is an excellent way to position our organisation for continued growth and improve business performance.



# **Reporting and Self Service**

Exponential-e has invested considerably in monitoring and management platforms, which have been integrated to provide an end-to-end view of the Customer's services. The Customer will have access to some of these tools, notably our Service Desk management platform with Customer Portal based on ServiceNow, and Insight unified server and networking monitoring, which is based on EMC Smarts technology.

These tools provide customers online access to a graphical view of their entire server and network infrastructure, including service and site performance. This means that customers have 24x7 access to their service statistics. Data is available based on regular polling of devices with near real-time, historical, and projected statistics. The reports in the Customer portal empower IT teams to proactively monitor their core critical infrastructure and promotes efficient decision-making.

#### **Reporting capability:**

- Global reports
- Location reports
- Device reports
- Trend reports
- Situations to watch reports

With its user-friendly interface, the Insight monitoring portal offers personalised, actionable information for the appropriate users in your organisation. The global reporting dashboard offers instant end-to-end visibility of your entire infrastructure. Service, site and device status is easily identified with green, amber and red traffic light colour codes, helping our clients' IT professionals troubleshoot and fine tune performance. Using the global dashboard, or the navigation panel, users can easily drill down to each location. Simply clicking on one of the network locations highlighted on the global map will reveal location specific reports such as:

- Availability
- Memory
- CPU
- Storage
- Bandwidth throughput
- Device summary
- Top N reports
- Recent alarms
- Event summary

The Insight tool enables IT teams to easily track server issues as well as latency, jitter and packet loss of their wide area network to ensure business performance is maintained. The portal in Insight allows users to view resources by device types, location, global summary, availability, trend, and more. An automatic view per device model can be seen in the portal, with drill-down facilities to generate granular reports such as availability, interface usage, and device health.



#### **Benefits of Insight:**

- Monitor usage, capacity and response times in near real-time.
- Track traffic and bandwidth, CPU and memory usage for capacity planning.
- Ensure compliance with contracted service levels and agreements.
- Identify potential issues before they impact the business with built in analytics.
- Discover potential cost savings by finding redundant resources.
- Measure latency, packet loss and jitter on Wide Area Networks.

Screenshots are provided below from Insight to help provide a sense of the information and analysis capabilities of the tool, showing the top level view and global reporting.

## **Global Reporting**





#### **Top Level View**

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Network Interfaces



# **Exporting Information**

There are a number of ways to export information, including the option to export data to PDF and Microsoft Excel.



# Appendix

## Training

Exponential-e will ensure that the customer's staff is fully trained on its procedures and systems for raising support requests, escalating issues, the billing process, important contact numbers and email addresses, and all other elements that the customer and Exponential-e mutually feel is needed in order to fulfill the managed service.

## **Ordering and Invoicing Process**

The managed service is billed for based on the infrastructure to be supported under this service. The service is available on pay as you go (PAYG) terms with an on boarding charge, or on an annual basis without an on boarding charge. Additional discounts are applied to annual agreements with longer terms.

#### **Termination Terms**

For PAYG agreements the service may be cancelled at any time with 30 days' notice. For annual agreements please refer to the Supplier Terms and Conditions for full details relating to termination.

#### **Responsibilities**

The following table highlights the respective areas that the customer and Exponential-e are responsible for in the delivery of this service.

Item	Responsible Party
On boarding meeting	Customer and Exponential-e
Requesting on boarding documentation and information	Exponential-e
Providing on boarding documentation and information	Customer
Installing management agents on supported systems	Exponential-e
Communicate escalation paths	Exponential-e



Make firewall modifications to allow remote management	Customer and Exponential-e
Conduct training of key staff members on making use of the managed service	Exponential-e
Agree maintenance windows	Customer and Exponential-e
Agree support procedures	Customer and Exponential-e
Sign off on boarding	Customer

#### **Technical Requirements**

- The monitoring and management agent used by Exponential-e requires .Net Framework 3.5.
- Internet access is required for software agents to check in with the Exponential-e management server.
- Administrative credentials are required for supported systems to provide this service effectively.

## **Trial Service**

Customers who wish to trial the Managed Service should elect to take up a PAYG model initially, and can convert this to an annual agreement if desired.