Technical Support Handbook

Rethinking Healthcare Delivery

LUMEON

Contents

Introduction

Lumeon is dedicated to driving the success of our customers through the provision of the highest levels of professional, efficient and high-quality support.

Lumeon delivers support to our customers under the terms of our support agreement. Our support offers are tiered and designed to meet the varying needs of each customer.

This document describes the available services offered by the different support levels and is supplementary to the Lumeon Support policy, the Lumeon License agreement and Lumeon Service description.
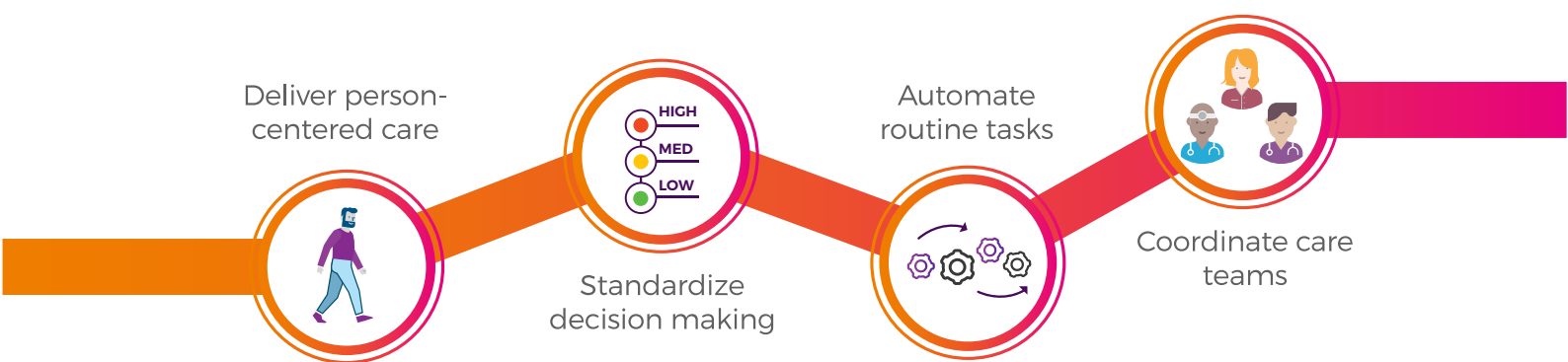
Support services

Lumeon recognizes that good support is fundamental to extracting the full potential of The Lumeon Care Pathway Management (CPM) platform. Our aim is to maximize your investment through the delivery of a comprehensive set of service offerings. Our services have been developed to cater for the differing needs of our customers, while maintaining a consistent operational approach.

Tiered support offerings

Lumeon offers three tiers of support

Essentials
A highly reactive and responsive service during normal office hours (local time, 9am – 5:30pm M-F, except national holidays). This enables Lumeon to take immediate ownership of reported issues, providing full visibility of progress and status through the end-to-end management of incidents. Customers automatically receive Essentials support as part of their solution.

Professional
Designed to provide additional hours of incident coverage (local time, 8am – 8pm M-F, except national holidays), and additional critical issue support (local time, 8am-8pm 7 days a week). The service also provides quarterly telephone service reviews.

Premium
Our highest and most intimate level of support provides Professional Support plus full critical issue support 24 x 7, 365 days a year. Your dedicated technical account manager will provide services including best practice consultation, service health check, on-site support days and regular on-site service reviews.

Lumeon support portal

Access to support is provided by a dedicated online support portal at **https://help.lumeon.com**. The support portal provides a personalized interface to Lumeon support and many other useful resources. Named technical contacts can use the support portal to report new incidents, submit requested information and monitor service progress with automated emails providing notification of updates.

On-Demand Services

Lumeon Technical Support offers On-Demand Services, designed to provide quick and cost-effective professional services engagement for smaller activities. These smaller activities typically don't require a full professional services engagement with detailed project management and a quote. The On-Demand Services are delivered by expert Customer Support specialists and are ideal for items such as development of new dashboards, modification of existing reports and system tuning, which fall outside our standard support terms.

Customers can choose from defined services or, if needed, engage the team through a Support request at which point we will identify your exact requirements. To ensure speed, cost efficiency and simplify payment, we have introduced the concept of On-Demand Service Tokens.

Each token represents two hours of specialist time, and can be purchased in bundles of 5, 10 and 20, providing a block of time that can be drawn down over a 12 month period.

For more information about On-Demand Services, please visit **http://www.lumeon.com/on-demand-services/**

Quarterly releases

Our support offerings are designed to ensure the future success of your investment with entitlement to new, innovative and visionary releases of the Lumeon Care Pathway Management platform as it evolves. We offer two types of upgrade release:

Quarterly release (x.Y.z) – delivering modifications to existing functionality or additional functionality in the existing service, delivered once per quarter For example, this would represent an upgrade from version 5.0.0 to version 5.1.0 or 5.2.0.

Quarterly releases increment in major version every fourth release (X.y.z). For example, 5.0 will increment to 5.1, 5.2, 5.3, before incrementing to 6.0 at the next Quarterly release.

These releases future-proof your investment, keeping it current with new technologies while introducing new functionality and efficiency that helps to reduce the total cost of ownership.

Maintenance releases

Lumeon has a clear commitment to product quality and performance. We proactively adjust and update our solution to keep in line with market and technology advances, while reactively applying periodic service packs to improve underlying operation and to resolve and prevent problems. Our solution maintenance cycle provides:

Maintenance release (x.y.Z) – delivering multiple Defect Report (Bug) fixes, may include Enhancement Requests. For example, this would represent an upgrade from version 5.1.0 to version 5.1.1

Hot fix release (x.y.z.Z) – emergency, temporary patches correcting a single component-level Bug Fix to resolve a critical Defect Report.

All Lumeon customers with active support agreements are entitled to receive upgrade and maintenance releases for their Care Pathway Management platform under license.

End of Life policy

The nature of support provided by Lumeon will depend on where the solution release is within the solution lifecycle. Older versions incompatible with ongoing market trends and technology, require an End-of-Life (EOL) process.

Lumeon encourages customers to keep up to date with releases to ensure that they are achieving the maximum benefit from their deployed solution and are eligible for support. As referenced above, both Version and Quarterly releases are included in the EOL process. Lumeon commits to providing support and maintenance services for the latest (n) and previous (n-3) Quarterly releases. For example: If the current version is 5.3.1, support will be offered for versions 5.0.0 to 5.3.1, inclusive. Subsequent release 6.0.0 will include support for 5.1.x to 6.0.x, inclusive. The solution lifecycle stages are defined in subsequent sections of this document.

Support offerings

Lumeon provides tiered support offerings. All offerings are built from the Essentials foundation support tier which is then enhanced with additional services.

Support at a glance

Description	Essentials	Professional	Premium
Support access via, phone and web portal. Ongoing communication via email	⊘	⊘	⊘
24 x 7 x 365 access to Lumeon support portal knowledge base	⊘	⊘	⊘
Working week (5 days) office hours (9am - 5:30pm) excluding national holidays	⊘	⊘	⊘
3 named technical contacts per live licensed service	⊘	⊘	⊘
Access to new version upgrade releases	⊘	⊘	⊘
Automated maintenance release updates for critical issues	⊘	⊘	⊘
Defined service level targets for incident response and resolution	⊘	⊘	⊘
Proactive communications (forums and RSS service feeds)	⊘	⊘	⊘
Proactive system monitoring and recovery	⊘	⊘	⊘
Full support: weekdays, 8am – 8pm, except national holidays Critical issue: 7 days a week, 8am – 8pm	–	⊘	⊘
Quarterly service reviews (telephone)	–	⊘	⊘
2 additional named technical contacts per live licensed instance	–	⊘	⊘
24 x 7 x 365 critical issue support including all national holidays	–	–	⊘
Technical Account Manager for fast track escalation and service reporting	–	–	⊘
Annual system health check	–	–	⊘
Assigned support account manager	–	–	⊘
2 dedicated support days (on-site)	–	–	⊘
Quarterly service reviews (on-site)	–	–	⊘
Best practice policy, modifications and compliance recommendations	–	–	⊘
Personal briefings on our roadmap and releases	–	–	⊘
Documented critical incident reports	–	–	⊘

Full support (prior to EOL)

This defines the standard term of support for the current release (n), with customers eligible to receive technical support, services and maintenance updates for the solution under license.

Sustaining support (prior to EOL)

This defines the standard term of support for the three previous versions prior to the current release (n-3) and is available until the stated EOL date for that release. During this period, customers can receive on-going Maintenance Releases.

Extended support (beyond EOL)

This defines the standard term of support for releases that reach EOL (n-4). This is a support-only term provided for one year beyond stated EOL. During this period, customers are not eligible to receive further maintenance releases. Extensions to this period of support are negotiable, with a potential increase in monthly solution charge to cover any additional cost incurred by Lumeon in delivering the on-going service.

End of support life (EOSL)

Any release that is not subject to the terms of an Extended support agreement will move into EOSL. At this point, Lumeon will stop providing any level of support for the product other than self-service support provided by our online knowledge base and associated documentation. Where customers do request support for an EOSL solution, Lumeon will use reasonable efforts to provide support on a one-time basis, providing the necessary information to assist the customer in upgrading to the latest support version.

Lumeon support tiers

Essentials Support

Every supported customer is entitled to our Essentials Support offering, delivered via telephone, email and our web portal. This service allows us to take immediate ownership of any reported issues, providing you with full visibility of progress and status throughout the lifecycle of the incident.

You'll be entitled to three named technical contacts per live licensed instance of your Lumeon solution. These contacts can raise support incidents with our Support team and they will also benefit from full access to our searchable knowledge base.

You can also contribute to our product roadmap by raising product enhancement requests.

Our Essentials offering includes:

- **Service desk availability week days during standard office hours (local time) from 9am – 5:30pm, except national holidays**

- **24x7 access to the Lumeon support portal for access to our knowledge base and self-help resources**

- **First line (L1) solution support for initial review and response to customer service requests and escalation of unresolved issues to technical support specialists**

- **Second line (L2) technical support through solution specialists and subject matter experts for the provision of comprehensive diagnostic and root cause analysis and incident resolution**

- **Third line (L3) escalation support through Product Support Engineers for detailed solution/code review and incident resolution**

- **Entitlement of future evolutionary upgrade releases for licensed solution**

- **Three registered technical contacts per licensed live instance of your Lumeon solution**

- **Availability of 3 solution instances – Development, Test, and Live**

Professional Support

Building on the Essentials Support offering, Professional Support provides extended hours of service ideal for those customers supporting early morning and evening engagements. As well as the Essentials Support features, The Professional Support offering adds:

- **Full service support (local time) 8am-8pm weekdays, except national holidays, plus critical issue support (8am-8pm, 7days per week)**

- **Two additional registered technical contact per licensed live instance of your Lumeon solution**

- **One additional solution instance to cover user acceptance testing (UAT)**

- **Quarterly remote reviews of your service history and usage trends to help identify potential service improvements**

Premium Support

Premium Support customers receive unmatched proactive levels of assistance. Our premium level of support builds on our Essentials and Professional support offerings, providing you with a personalized high value service coordinated through a Technical Account Manager (TAM).

While issue reporting and resolution continue to leverage existing channels, your TAM is available for fast track escalation and will engage with you regularly through:

- **Full support access 24x7 365 days a year**

- **An annual health check to evaluate your current operations and providing you with recommendations for improvement**

- **Two onsite support days for problem resolution, system evaluation and knowledge transfer**

- **Quarterly service history reviews and documented critical incident reports**

- **Discussions on best practice and compliance requirements**

- **Briefings on forthcoming releases**

- **Updates on status of Software Change Requests**

- **Bespoke roadmap briefings**

How to Engage Technical Support

Lumeon support services are designed to offer a seamless incident handling experience so that customers always know the status of their open incidents. The support process is based on a well-defined, transparent case flow methodology. From initiation through to resolution, this methodology ensures that Lumeon takes ownership of incidents and efficiently advances them across different levels of the support organization.

Technical Contacts

Only registered Technical Contacts are permitted to open or update incidents. Technical Contacts should be suitably trained on Lumeon solutions prior to opening any incidents.

Support communication channels

Lumeon offer multiple communication channels for support. The Lumeon Support Portal is the most efficient and preferred channel for raising incidents and providing updates, but service requests can also be initiated by telephone. The following channels are available:

Channel	Service	Description
Support Portal	https://help.lumeon.com	The most efficient method for creating incidents and finding updates.
Telephone	UK: +44(0)203 137 9999 US: +1 888 450 3195	The recommended communication method for critical /high severity issues that require rapid response and action.

https://help.lumeon.com

Incident management

To maintain effective communications with our customers, the handling of incidents flows through an agreed chain of actions. When issues are identified, the Technical Contact will document the issue and raise the incident with the Lumeon support team providing the following information:

- **Solution and version**

- **Incident description/symptoms**

- **Supporting information**

- **Contact details where required**

- **Impact and urgency**

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Note: Before a customer can create an incident, they must be registered with Lumeon as a Technical Contact. To register, please contact Lumeon support by telephone or contact your Account Manager

Incident category

Incident category	Description
Technical question	A query relating to specific system use/functionality or general enquiry related to the Care Pathway Management Platform.
Support Incident	An error in the use/function of the solution
Enhancement request	A request to modify the solution to overcome known limitations or functional gaps.

Incident severity

The responsiveness of Lumeon support is driven by the severity of an incident. Incidents are assigned a severity level by support, but this may be changed after consultation with the Technical Contact, if it is reasonable to do so based on the severity levels defined below.

Severity	Description
1 Critical	Solution functionality is completely unavailable or inaccessible. The situation requires immediate attention. Example scenarios: • All services unavailable – total loss of service • Services unavailable to a multitude of solutions

2 High	System functionality is severely limited, resulting in the prevention of key operations. With no available workaround, the situation requires urgent attention. Example scenarios:
	• **Single service unavailable** • **Unable to access multiple patient records** • **Significant degradation of service/performance**

3 Medium	The system is impaired; a single function is impacted with no workaround but key business processes are not interrupted. Example scenarios:
	• **Low degradation of system performance** • **10 or more users are impacted** • **Unable to write custom reports** • **Unable to design new workflows** • **Unable to book an appointment type'**

4 Low	The problem causes minimal operational or business impact, a general technical question or enhancement request. Example scenarios:
	• **issue with no impact to service** • **Documentation error** • **Technical solution query** • **Enhancement request**

For the purposes of clarity, the following faults are handled as Priority 1 issues regardless of the overall system availability

- **Unavailability of calendars (losing the ability to manage, create or edit)**

- **Unavailability of clinical information (EMR and EMR2 components)**

- **Unavailability of the data supply service (if provided)**

- **Unavailability of the NHS Electronic Referral Service (ERS or Choose-and-Book (CAB)) - UK only**

Service Level Targets

Lumeon support work to standard service milestones and targeted service times to deliver against those milestones as set out in the Lumeon support agreement.

Service milestones

Milestone	Description
Response	Initialization of the support process through engagement with the customer to progress information gathering, analysis or issue replication.
Target resolution	Provision of a solution to an incident or problem either by employing a temporary fix, an answer or a technique that provides a solution to the reported problem.

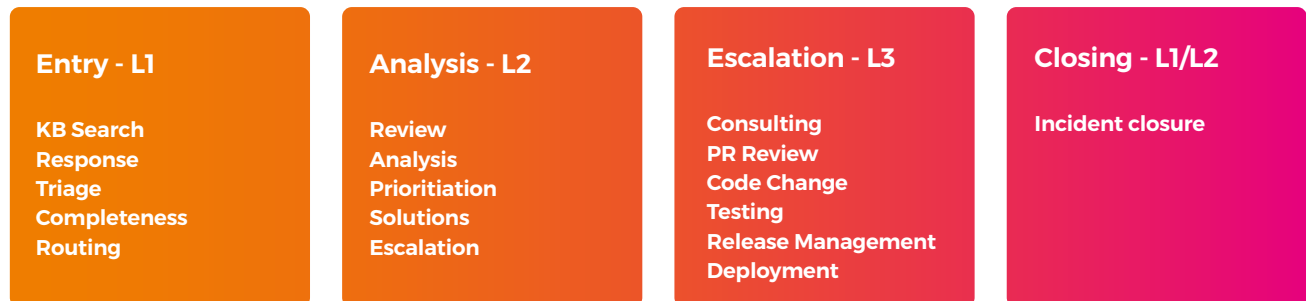| Severity	Response	Target resolution
1 Critical	0.5 Business Hour	4 Hours
2 High	1 Business Hour	8 Business Hours
3 Medium	1 Business Day	5 Business Days
4 Low	1 Business Day	10 Business Days

Timescales

All timescales are measured from the original time and date of the incident report, unless otherwise specified. Lumeon monitors performance against response and resolution timescales and shall report on the percentage of incidents where these timescales are achieved within the respective target. Lumeon aims to achieve 90% compliance against these stated targets.

Note: should Lumeon reasonably request additional information, the time periods where Lumeon is awaiting a response from the Technical Contact will be deducted from the measurement of the Service Level Targets (SLTs).

Incident workflow

Support services are delivered through a tiered support model with full visibility of the functional escalation between support tiers provided to the Technical Contacts through the status of the incident. The following diagram details the process flow followed during the lifecycle of an incident and the key responsibilities defined within each support tier.

Entry - L1	Analysis - L2	Escalation - L3	Closing - L1/L2
KB Search Response Triage Completeness Routing	Review Analysis Prioritiation Solutions Escalation	Consulting PR Review Code Change Testing Release Management Deployment	Incident closure

Incident lifecycle

Once a reported incident has been received by support, it is considered open until a resolution has been arrived at to the mutual satisfaction of both the customer and Lumeon. Lumeon support use the status of the incident to provide visibility of progress to the Technical Contacts. See appendix for a full list of incident status definitions.

Problem management

Any problem reproduced as a generic solution issue (Bug) or a change request to overcome an identified functional limitation (Enhancement Request) will be reported to Lumeon Product Management via a problem Report. The analysis of the Problem Report will result in the identification of a Software Change Request (SCR) required to deliver a resolution to a Bug or Enhancement Request.

Bug processing

Once a reported problem has been qualified, reproduced and raised as a Bug Report, customers are entitled to escalate Severity 1 and 2 Bug Reports for resolution through the maintenance release cycle. Upon escalation, the Support Engineer working on the incident will liaise with the Development team to assist in the determination of the Bug Report priority and which fixes are to be included in a given release. The Support Escalation process will ensure that the Technical Contact and the relevant account personnel within Lumeon are consulted to provide input regarding the business justification for the Bug Report escalation. The information provided is documented against the incident and associated Bug Report.

Enhancement Request Processing

Lumeon listens to its customers. One of the best sources of information we have concerning the development of our solution and features are the Enhancement Requests (ERs) that Technical Contacts submit.

An ER is any requested additional feature or function (even if originally reported as a problem). ERs raised by customers via Support are reported to Lumeon Product Management and considered for inclusion in new feature releases depending on their suitability, alignment to the Lumeon product roadmap and general market trends, as well as the overall importance to our existing customer installed base.

The support engineer owning the incident will work with the Technical Contact to fully document details of the ER as well as the business need driving the request. The support engineer will then dispatch the ER to Product Management for review. ERs will be reviewed during the planning stages of each release.

Knowledge Base (KB) articles

Lumeon provides a wealth of vital information via the Support Portal including solution documentation and FAQs.

For general technical queries, troubleshooting specific issues or seeking to prevent known problems from occurring, the KB is an effective resource. The KB consists of articles created to enable the sharing of information about known problems and their resolution, update releases, 'how to' information, implementation tips/tricks etc.

KB articles will contain the following information:

- **Problem definition**

- **Related solution**

- **Reproducible steps**

- **Resolution/workaround**

Escalation

Escalation is the process by which incident details are made known to the personnel for the purpose of notification or to obtain resources to assist in the problem resolution. Escalation usually occurs when difficulties or delays are being experienced or are considered likely in resolving the issue.

Functional escalation

The objective of functional escalation is to obtain additional resources and expertise required to resolve a particularly difficult or complex incident. This assistance may come from L3 Engineering, 3rd suppliers, or from other departments within Lumeon such as Development.

Hierarchical escalation

The objective of Hierarchical escalation is to ensure that potential problems are made known to relevant managers and resource owners within Lumeon. This ensures the right level of focus across the organization and the engagement of appropriate resource and expertise to expedite the resolution of customer issues. Customers can request this type of escalation if they experience or foresee delays or other problems with the resolution of issues as set out below.

Level	Contact	Escalation Procedure
1	Technical support incident owner	Support will escalate the incident on request and change the priority of the incident providing visibility to the Technical Support manager. The incident owner will contact the customer within 1 business day and agree target timescales for the communication of updates and resolution.
2	Technical support manager	The Technical support manager will be assigned as a key contact within the escalation team for the incident and will contact the customer within 1 business day to communicate the rescue plan for the incident. If the problem is not resolved within the target timeframe for the rescue plan, the incident shall immediately be notified to the next level of escalation.
3	Technical support director	The Technical support director will work with the technical support manager and assign escalation team members to determine a rescue plan for the incident, with agreed communication updates to the customer and a target resolution date. If the incident is still not resolved, the customer may request an escalation to the Chief Operating Officer. The Chief Operating Officer will contact the customer at the earliest possible opportunity and agree a plan for resolution. The Chief Operating Officer is the final point of escalation.

Reports

Lumeon support can provides client-specific, periodic reports about incident activity. These reports include detailed information about all open and recently closed incidents and are available via the Support Portal.

Incident closure

When a problem has been corrected, Lumeon support will close the incident with the agreement of the customer contact. Lumeon may close an incident due to any of the following conditions:

- **The incident reported is determined to be out of scope of the support agreement.**

- **A solution has been provided to resolve the incident.**

- **Installation of a software maintenance release has resolved the incident.**

- **The customer has requested the incident closed.**

- **The solution or release for which support has been requested is no longer subject to the maintenance agreement.**

Service policy

Lumeon provides a service desk function via https://help.lumeon.com, giving Technical Contacts access to Lumeon support services during the hours specified for the offering purchased. Customers shall report incidents primarily via the support portal but may also use the telephone. The support desk should be used for, but not limited to:

- **Query, problem and defect reporting.**

- **Requests for general technical support.**

- **Requests for expert technical support to achieve issue resolution.**

- **Submission of enhancement/feature requests.**

Lumeon obligations

- **The Lumeon support portal shall be available 24x7 apart from the occasional times where the online service is down for essential maintenance.**

- **Lumeon support will work on the customer's incident during stated services hours as dictated by their level of support.**

- **Lumeon shall provide customers with access to the customer support knowledge base. The knowledge base shall include information on solution issues raised and their resolution.**

- **Lumeon shall provide each Technical Contact with individual accounts to access the Lumeon support portal, with sufficient privileges to enable access to all issues raised by the customer.**

- **Lumeon shall be responsible for ensuring that it has back to back support agreements in place with its key suppliers to ensure that it can meet the requirements specified in the support agreement.**

- **Lumeon shall supply on request details on any back to back support agreements with third party suppliers.**

- **Lumeon shall retain ownership of any problem relating to services provided by Lumeon and assigned to them, until that problem is effectively resolved by mutual agreement.**

- **Lumeon shall track and escalate problems based in the agreed Service Level Targets defined in this document.**

Customer obligations

- **Customers shall formally report any incident to Lumeon technical support and obtain an incident reference number. An incident is only tracked by Lumeon once an incident number is issued.**

- **Customers shall provide Lumeon with up-to-date contact details of their named representatives appointed as Technical Contacts for reported incidents.**

- **Customers must ensure that users of Lumeon solutions are suitably qualified and trained on the use of the application.**

- **If a reported incident is determined to be due to the use of third party products outside of the scope of the Lumeon Support and maintenance agreement, it is the responsibility of the customer to work with the third party supplier to resolve the issue, although Lumeon support will continue to remain engaged.**

- **The customer is responsible for ensuring that the support fees are paid within agreed payment terms and that a valid and active support and maintenance agreement is in place to indicate service entitlement.**

Out of support scope

The following services are not included within the scope of the Lumeon support offerings:

- **On-site support, unless agreed with the Lumeon Support Director as part of an active plan of action to resolve an escalation.**

- **Support for interfaces to data sources not expressly included in the license agreement.**

- **Data management, data retrieval, data file copying or distribution, administration and other routine operational responsibilities.**

Glossary

Term	Description
Category	The incident category as described in the service description.
Defect	An error/malfunction that causes the Lumeon solution to function outside of material conformity with the documentation.
Enhancement request	Any request to change the functionality, performance or scope of the solution that is not directly related to a defect.
Incident	Any event that is not part of the standard operation of the solution that causes or may cause an interruption or a reduction in quality.
Incident Severity	The categorization of a reported incident based on impact and prioritization as defined within the terms of the service description.
Problem Report	Engineering case defining a state identified from incidents, that indicates a defect in the product or solution.
Service Description	The document defining the level of service to be provided by Lumeon support.
Service Desk	The Lumeon support team responsible for the delivery of services as described in the Service Description.
Service Hours	Help desk support during Lumeon Support center hours.
Service Level Targets	Stated commitments for the delivery of support services as detailed in the Service Description.
Support Portal	The channel provided to enable customers to raise incidents with Lumeon support via a web based tool.
Support Services	The support and maintenance services performed by Lumeon pursuant to the Service Description.
Technical Contact	A customer registered in the support incident management system authorized to raise incidents via the Support Portal and receive support.