

CenturyLink Technology Solutions Service Guide

Service Management Packages

Version	Previous	Section Modified	Date
HOS-20140815-SG-GlobalServiceManagementPackages	HOS-201404030-SG-GlobalServiceManagement Packages	Cover	August 15, 2014

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Service Description

The CenturyLink Service Management Package provides flexible, ongoing service management to customers.

The CenturyLink Service Management Package is available for customers purchasing Managed Hosting, Network, Cloud or Colocation services. The Service configuration is flexible and there are several variations the Customer may select when ordering the Service. As further depicted in the table below, the Service may include customer support from a Client Service Partner (CSP), proactive technical consultation provided by Client Technology Advisors (CTA), and technical support provided by Technical Service Engineers (TSE). Additional resources are available including Operational support from a Technical Operations Manager (TOM), Security support from a Security Account Manager (SAM), and a dedicated service desk via the Adaptive Help Desk.

Customer may order CenturyLink Service Management in the following service tiers. The monthly hours stated are included in the base package for each configuration, but Customer may order additional hours and resources as needed within a Supplemental Package covered below.

Available Service Management Tiers

Service Management Tiers	Basic	Standard	Select	Advanced	Elite
Support Personnel	CSP	CSP	CSP, CTA, TSE	CSP, CTA, TSE	CSP, CTA, TSE
Hours per Month included	8	20	80	160	360

Overages in monthly hours will be billed in addition to the monthly recurring charge for both the base package and any Supplemental Service Packages.

Supplemental Service Packages: The Technical Operations Manager (TOM), Security Account Manager (SAM), and Adaptive Help Desk are available as Supplemental Service Packages to be added on to a base tier or base Service package. The TOM is available in 40, 80 and 160-hour monthly options, the SAM is available in 80 and 160 hour packages, and the Adaptive Help Desk is available in 80 and 160 hour monthly packages. Customer may also order additional CSP, CTA and/or TSE monthly hours to add on to a base Service Management Package as needed through a Change Request and an additional monthly rate. Customer must have a base Service package in order to add Supplemental hours. Additional monthly hours for the Service may be ordered in minimal lots of 20, 40, 60, 80 and 160 hours per month and one personnel role per Supplemental Service Package. Personnel cannot be combined in the Supplemental Service Package. Multiple Supplemental Service Packages may be added on to any base Service package.

Supplemental Packages					
Hours per month included	20	40	60	80	160
Support Personnel / Service available	CSP, CTA, TSE	CSP, CTA, TSE, TOM	CSP, CTA, TSE	CSP, CTA, TSE, TOM, SAM, Adaptive Desk	CSP, CTA, TSE, TOM, SAM, Adaptive Desk

Any base Service Management Package or Supplemental Service Package containing a Technical Services Engineer (TSE), requires the Customer to select TSE type. TSE options include: OS (Unix, Windows), Applications, Hosting Area Network, Database, and Storage. If more than one type is required, additional Service package(s) must be ordered.

All Service Management Packages and associated hours are the Customer's minimum commitment and will include a monthly charge regardless of the total hours actually consumed. Customer details of the charges for these Service Management Packages, Supplemental Service Packages, and overage rates, are available from the CenturyLink Account Management team.

The tables on the following pages identify the task or activities performed by support personnel: CSP, CTA, TSE, TOM, SAM roles and Adaptive Help Desk, and provides detail for each task or activity.

Roles & Responsibilities

Client Service Partner (CSP)

Service Personnel Task and Activities

The following Service personnel tasks and activities are included in the CSP's tasks and activities limited by the hours per month included in the base Service Management Package or as supplemented by Customer via a purchase of a Supplemental Package. Customer and CenturyLink may mutually agree in writing to alter the task or activities by executing a Change Request.

Key	Task or Activity
CRM Customer Relationship Management	
CRM 1	Proactive calls to Customer with regular touch points
CRM 2	Provide product introduction or enhancements information
CRM 3	Customer tours of CenturyLink Data Centers
CRM 4	Contact Management and Administration - with new Customer contacts
CRM 5	Customer queries (e.g. what is the storage capacity available?)

Key	Task or Activity
CRM 6	Customer advocate at CenturyLink
CRM 7	Contractual queries
CRM 8	Informing Customer on CenturyLink changes, such as Invoice layout, DCMW
CRM 9	SavvisStation Portal training
INP Incident / Problem Management	
INP 1	Incident and problem trending and reporting
INP 2	Escalation management (via CenturyLink Operations Center)
INP 3	Conduct Root Cause Analysis, provide RCA Report and follow up, business impact review
INP 4	Create Automated Service Procedures
CHG Change Management	
CHG 1	Assist with documentation of Customer -written scripts for standard changes
CHG 2	Management of non-standard Change Requests
CHG 3	Management of Emergency Change Requests
CHG 4	Risk management for Change Requests
CHG 5	Proactively advise on CenturyLink maintenance
CHG 6	Development and delivery of project plans for changes.
CHG 7	Proactive review of change cases
REL Release Management (Install & Decommissioning)	
REL 1	Overseeing project management for new and major Service Integrations
REL 2	Supply Customer handover documentation
REL 3	Provide Customer with CenturyLink Handbook
REL 4	Establish service interfaces
CFG Configuration Management	
CFG 1	Coordinate review of Customer firewall rules
CFG 2	Review Customer infrastructure at Service Reviews

Key	Task or Activity
CFG 3	Undertake quarterly review of infrastructure monitoring
CFG 4	Provide updated Customer configuration documentation following major changes
CFG 5	Review authorized Customer contact list
SLM Service Level Management	
SLM 1	Service Reviews
SLM 2	SLA monitoring & reporting (via service reviews)
SLM 3	Executive Reviews including product enhancement and business direction
SLM 4	Implementation of SDP (Service Development Plan)
AVM Availability Management	
AVM 1	Optimization of Service Uptime
AVM 2	Availability Report
AVM 3	Customer -specific CenturyLink crisis & DCMW impact communication
FIN Finance	
FIN 1	Proactively manage bill production
FIN 2	Process Service Credits
FIN 3	Resolve Billing enquiries
PM Performance Management	
PM 1	Provide basic performance reporting and recommendations on key servers, networks (Internet/IIPT/ATN), Storage & Utility Back-up
Working Hours	Service Management is available 9am to 5pm (local time) during business days. The CenturyLink Operations Center is available on a 24/7 basis to support incident escalations. The Service Management organization will support major events with significant business impact outside of normal business hours.
DCMW	Data Center Maintenance Window (this is a standard weekly period for CenturyLink to conduct essential maintenance work).
CMDB	Configuration Management Database (CenturyLink uses the Vantive system to record all CMDB items).
Resource days	Amount of Service Management time (maximum days per month), which is pre-paid within the

Key	Task or Activity
included in the package	agreed Service Order.
CRM – Customer Relationship Management	
CRM 1	A status update call (or courtesy call) made to Customer to maintain communication between the parties.
CRM 2	Provide Customer with information on the new product enhancement(s) that CenturyLink has brought to market.
CRM 3	Occasional site visit for Customer. For example, when a Customer would like to take their own customers on a tour of a Data Center from which their Services are managed.
CRM 4	Contacts at Customer's site(s) who interface with CenturyLink may change from time to time. The CSP will bring the new contact up to speed and build a relationship. This will include introduction to CenturyLink, Services, Customer's committed Services, infrastructure, contact details, meetings with Operations Center Managers, etc. Professional Services can provide resources to work with a Customer partner to assist with solution design, implementation or support activities which fall outside of normal service management. For example, additional support may be required in managing Customer's telecommunications provider who has to install services at a CenturyLink Data Center to implement a service for the Customer.
CRM 5	The CSP will receive, respond to and follow-up Customer queries to conclusion.
CRM 6	The CSP is familiar with Customer's business, services and requirements in general and is responsible for managing Customer satisfaction with all areas of CenturyLink. Customer satisfaction is measured via formal Customer surveys as part of the Customer loyalty program. The CSP represents the Customer internally within Savvis, and will work with Customer to maximize Customer's use of Services, including quote timescales, service delivery and incident management.
CRM 7	Answering contractual queries.
CRM 8	Update Customer on forthcoming events & changes at CenturyLink, such as technology refresh, product updates, SavvisStation enhancements, holiday cover, etc.
CRM 9	A 60-minute introductory training session is included for every new Customer as a part of the package when purchasing Service Management.
INP - Incident / Problem Management	
INP 1	Incident and problem volume trending per month, highlighting areas for improvement to reduce incidents. Proactively review open incidents and problems on a bi-weekly basis. Basic package includes availability of data via SavvisStation.

Key	Task or Activity
INP 2	Active escalation management for major incidents such as extended outages is provided by the CenturyLink Operations Center (Operations Center Shift Managers outside of normal working hours) and/or CSPs. Packages for Standard CSP Support onwards provide 24-hour coverage by the Operations Center, with support from the CSP during normal business hours.
INP 3	Coordinating internal meeting(s) following a major incident or problem to obtain root cause and provide Customer Root Cause Analysis report within 72 hours. This includes tracking open corrective actions until closure and reporting to the Customer on regular basis. Basic package includes the supply of Reason For Outage (RFO's) by the Service Desk via the SavvisStation Portal.
INP 4	CenturyLink Automated Service Procedures are Customer specific actions that will be followed during an event or trap from our monitoring system. These enable both CenturyLink and Customer to establish repeatable processes that will enhance the consistency and execution of responses to specific events.
CHG - Change Management	
CHG 1	Provide guidance to the Customer through the process to introduce scripted changes for repetitive change requests into the CenturyLink Operations Center enabling the Engineers to implement this after approval at the Change Advisory Board.
CHG 2	Clarify Customer requirements, align resources to perform the change, technically check feasibility to implement, obtain commercial authorization from Customer, work with Technical teams within CenturyLink to develop implementation and back out plans, confirm the Change is represented at the Change Advisory Board (CAB) for approval, coordinate implementation, update the Customer. Should the CAB reject the change, work with the Customer and CenturyLink Technical teams to resolve the rejection.
CHG 3	Clarify the Customer requirements and reason for urgency, work with internal teams to have the request planned and resourced. Emergency changes will bear additional charges as per the Agreement.
CHG 4	Identified risks of the Change are communicated to Customer with suggestions, providing guidance on how to schedule the work with CenturyLink in an effort to complete implementations within Customer's milestones. Full risk assessment documentation is provided with the Select Tier and above.
CHG 5	Provide details of emergency or standard DCMW work and potential impact to Customer's service in advance and answers Customer queries. Such changes are implemented for either resolving operational issues, or CenturyLink Infrastructure refresh or providing additional Infrastructure capacity.
CHG 6	Major changes may benefit from CSP involvement to oversee the project and add value by providing high level update communications to the Customer. Implementation plans and project plans may be provided to complete changes within agreed timelines and with minimal

Key	Task or Activity
	disruptions. These are developed with assistance from project management and various technical engineers and documented for effective execution of changes. This also facilitates approval at the CAB and provides level of assurance to Customer. Such plans are communicated to Customer and queries answered. This work would be chargeable under the Change process.
CHG 7	All open change cases are reviewed and followed up on a bi-weekly basis.
REL - Release Management (Install & Decommissioning)	
REL1	Working alongside the CenturyLink Project Management team, the CSP will oversee all new Integration(s) to assist in meeting Customer requirements and add value by co-coordinating regular update communications to the Customer. In addition to this, we can provide resources to assist with planning and overseeing a decommissioning if required, working with the CenturyLink Service Delivery and Billing teams and Operations Center to implement Customer's exit plan.
REL 2	Oversee the CenturyLink Project Management function to manage communication of service handover documentation, providing details of the services integrated by CenturyLink, such as Server specs, OS, patch levels, applications installed, disc partitions, IP details, User private access path, etc.
REL 3	Provide Customer with the CenturyLink Customer Information Guide and Handbook that outlines our internal processes, functions and facility access details, which will assist in answering queries that a new CenturyLink Customer may have. The development of a bespoke Customer operations manual ('run book') or resource library can be provided by the TSE.
REL 4	Provide an overview of the CenturyLink service delivery function and support processes to the Customer in an effort to provide an effective partnership and smooth operational service. Educate the internal CenturyLink organization, providing information about the Customer's business applications and technical solution, building Customer intimacy to improve support.
CFG Configuration Management	
CFG 1	Annual review of Customer firewall rules as a proactive audit.
CFG 2	High-level review of Customer infrastructure at regular Service Reviews.
CFG 3	Quarterly review of infrastructure monitoring thresholds to facilitate efficient response to proactive alerts.
CFG 4	Coordinate the production and distribution of an updated Customer configuration document (PowerPoint or Visio) following major changes, supplying a copy to the Customer.
CFG 5	Customer can review and update their authorized contact list via the SavvisStation Portal. CSP will conduct a proactive audit on an annual basis and update the portal on the Customer's behalf.

Key	Task or Activity
SLM Service Level Management	
SLM 1	Preparing and delivering regular Service Reviews (either in person or via conference calls). This includes Case volume trending, major incident review, service improvement, proactive recommendations, project updates, SLA reporting, monthly fees tracking, CenturyLink roadmap, intro to new or enhanced CenturyLink services and Customer roadmap. On-Site visit limitations are detailed at the end of this document.
SLM 2	Track and report on SLA attainment. Follow-up on corrective action plans where SLAs are not met to prevent repetitions. Additional ad hoc reporting may be required by Customer to review an aspect of their service.
SLM 3	Executive reviews are targeted to aid each company in understanding each other's future business direction to proactively provide information that may be useful in future product and service releases and Customer's future business needs.
SLM 4	The CSP is actively involved in account strategy planning, incident and problem management and the Customer loyalty program. A Service Development Plan (SDP) is maintained to improve Customer satisfaction and implement desired service improvements and service developments. Multiple inputs are taken to the SDP, including Customer surveys, service review feedback and actions arising from incident reports (RCAs). Progress updates are provided to the Customer on regular basis.
AVM - Availability Management	
AVM 1	Proactively identify any weaknesses within the infrastructure design or process execution of the services and make recommendations for resolution.
AVM 2	Track and report service availability with respect to SLA through the year, downtime causes & corrective action plans at regular service reviews.
AVM 3	For complex infrastructures, further analysis & communication on how the planned CenturyLink Data Center maintenance work will impact Customer service is available.
FIN - Finance	
FIN 1	Work with billing production team to proactively check CMDB data in an effort to provide correct monthly billing. Advance reporting and financial planning is available via Professional Services for an additional charge.
FIN 2	Process due Service Credits internally for authorization and confirm Customer receives credit
FIN 3	Resolve any billing queries that Customer may have.
PM - Performance Management	
PM 1	The Customer portal, the SavvisStation Portal, provides infrastructure utilization data and

Key	Task or Activity
	trending for Customer to manage their own capacity and scale up plans to meet its business requirements. The CSP will review key service items regarding capacity utilization at the regular service reviews, highlighting areas for Customer to review (upgrade/downgrade) their service commitment with CenturyLink, such as Internet bandwidth usage or high CPU utilization for a particular server. In depth capacity management and planning services are available from Professional Services team as part of the Client Technology Advisor Service upon request. This Service provides predictive analysis of the impact of changes on current infrastructure and future design.

Client Technology Advisor (CTA)

CTA tasks provided with the Services are set forth below and are limited to the hours per month purchased by Customer within the Service package. Additional hours will be charged to Customer. Infrastructure Changes are charged to Customer separately.

Key	Description
TEC	Technical Leadership
TEC 1	Technical advocate at CenturyLink
TEC 2	Understand Customer's technical environment and business drivers
TEC 3	Representation at technical forums
TEC 4	Proactive recommendations for service optimization and enhancement
TEC 5	Product Updates
TEC 6	Participate in Customer tours of CenturyLink Data Centers
TEC 7	Technical overview for new Customer contacts
INP	Incident / Problem Management
INP 1	Incident and problem trending and reporting
INP 2	Technical Escalation management (via Savvis Operations Center)
INP 3	Conduct Technical Root Cause Analysis, Provide RCA Report and follow up. Provide recommendations for reoccurrence and mitigation.
CHG	Change Management
CHG 1	Assist with introduction of Customer-written scripts for standard changes

Key	Description
CHG 2	Management of non-standard Change Requests
CHG 3	Management of Emergency Change Requests
CHG 4	Technical Risk management for Change Requests
CHG 5	Proactively evaluate technical impact with regard to CenturyLink maintenance
CHG 6	Development technical strategy for changes within Customer's environment
CHG 7	Technical review of change cases
REL	Release Management (Install and Decommissioning)
REL 1	Overseeing technical management for new and major Service Integrations
REL 2	Supply Customer technical handover documentation
REL 3	Provide Customer with CenturyLink Handbook
REL 4	Establish service interfaces
CFG	Configuration Management
CFG 1	Technical review of Customer firewall rules
CFG 2	Review Customer Infrastructure at technical workshops
CFG 3	Advise on continuous improvement of technical monitoring options and changes
CFG 4	Coordinate Customer configuration documentation
REP	Reporting and Service Improvement
REP 1	Technical Reports and Documentation
REP 2	Participate in Service Reviews
REP 3	Technical review of Service uptime and provide recommendations for continuous improvement
REP 4	Deliver SDP actions (Service Development Plan)
REP 5	Performance reporting

Description

Key	Description
Working Hours	Service Management is available 9am to 5pm (local time) during business days. The Savvis Operations Center is available on a 24/7 basis to support incident escalations. The Service Management organization will support major events with significant business impact outside of normal business hours.
CTA	Client Technology Advisor
Resource days included in the package	Amount of CenturyLink resource (maximum hours per month), which is pre-paid within the agreed Service Management Tier.
TEC - Technical Leadership	
TEC 1	The CTA is familiar with the Customer's technical solution, business applications and future IT strategy in order to maximize the effectiveness and value of services provided by CenturyLink. CTA provides a technical point of reference for the Customer solution internally at CenturyLink, responsible for thought leadership and knowledge transfer, working to maximize Customer's use of Service.
TEC 2	Understand a Customer's current technical environment, business applications, future IT strategy and requirements. If required, this can be extended to a detailed understanding of the Customer's solution in order to maintain a library of the Customer's applications, hardware and software and to map their applications, hardware and software to CenturyLink's product capabilities (business application mapping).
TEC 3	The CTA will become embedded in the Customer's technical design and feasibility process. They provide an extension of the Customer's technical team, representing the Customer to CenturyLink and CenturyLink to the Customer. Attendance at Customer technical forums to provide input into strategy and requirements specification. Take the lead in Customer solution development workshops.
TEC 4	Engage with CenturyLink Sales and Solutions Engineering, coordinating CenturyLink technical resources to make proactive recommendations to Customer for service optimization and enhancement. Lead technical workshops and meetings. Demonstrate added value by continually exploring cost saving initiatives for the Customer. Identify efficiencies, such as server consolidation, reduction of storage and backup, along with opportunities for automation (helping Customers to do more with less).
TEC 5	The CTA will work with CenturyLink Sales and Solutions Engineering to provide the Customer with information on the CenturyLink product roadmap and review/propose new products and enhancement(s) which have been launched by CenturyLink.

Key	Description
TEC 6	The CTA will accompany Customer during site visits for Customer personnel or their own Customers, providing information and answering questions relating to the solution and service provided.
TEC 7	The CTA will assist with introducing new Customer contacts to CenturyLink by providing an overview of the technical solution and services provided by CenturyLink. They will make introductions to relevant teams and may also provide SavvisStation training if required. If required, the CTA can work with a Customer's partner to assist with solution design, implementation or support, activities which fall outside of normal service management. For example, additional support may be required in managing a Customer's telecommunications provider who has to attend a CenturyLink Data Center to implement a service for the Customer.
INP - Incident / Problem Management	
INP 1	Incident and problem volume reporting for inclusion in monthly service review reports. Identify and investigate trends, highlighting areas for improvement to reduce incidents and making proactive recommendations to improve service.
INP 2	Active involvement in escalation, providing technical input during major incidents such as extended outages. 24 hour escalation management is provided by the CenturyLink Operations Center (Operations Center Shift Managers outside of normal working hours) with additional support from the Service Team (CSPs and CTAs) during normal business hours.
INP 3	Coordinating internal meetings following a major incident or problem to obtain root cause and provide Customer a Root Cause Analysis report within 72 hours. This includes tracking open corrective actions until closure and reporting to the Customer on regular basis.
CHG - Change Management	
CHG 1	Work with the CSP to provide guidance to the Customer through the process to introduce scripted changes for repetitive change requests into the CenturyLink Operations Center enabling the CenturyLink Engineers to implement this after approval at the CenturyLink Change Advisory Board.
CHG 2	Work with the CSP to clarify Customer requirements, align resources to perform the change, technically check feasibility to implement, obtain commercial authorization from Customer, work with Technical teams within CenturyLink to develop implementation and back out plans, confirm the Change is represented at the Change Advisory Board (CAB) for approval, coordinate implementation, update the Customer. Should the CAB reject the change, then work with Customer and CenturyLink Technical teams to resolve the rejection.
CHG 3	Work with the CSP to clarify Customer requirements and reason for urgency, work with internal CenturyLink teams to have the request planned and resourced. Emergency changes will bear additional charges as per the Agreement.

Key	Description
CHG 4	For Customer changes, the CTA will provide additional analysis and communication on how this will impact the Customer. The CTA will conduct high level impact assessments on Customer infrastructure for changes and create testing and backout plans if required. Full risk assessment documentation can be made available by the CTA if required.
CHG 5	Work with the CSP to provide details of emergency or standard DCMW work and potential impact to Customer service in advance and answers Customer queries. Such changes are implemented for either resolving operational issues, or CenturyLink infrastructure refresh or to provide additional Infrastructure capacity.
CHG 6	Major changes benefit from CTA involvement to oversee the project and add value by providing high level update communications to the Customer. Implementation plans and project plans may be provided to complete changes within agreed timelines and with minimal disruptions. These are developed with assistance from project management and various technical engineers and documented for effective execution of changes. This also facilitates approval at the CAB and provides level of assurance to Customer. Such plans are communicated to Customer and queries answered. This work would be chargeable under the Change process.
CHG 7	All open change cases are reviewed and followed up on a bi-weekly basis.
REL - Release Management (Install and Decommissioning)	
REL 1	Working alongside the CenturyLink Project Management team, the CTA will oversee installations to help meet Customer expectations and technical requirements are met and add value by coordinating regular update communications to the Customer. In addition to this, CenturyLink can provide resources to assist with planning and overseeing a decommissioning if required, working with the CenturyLink Service Delivery and Billing teams and Operations Center to implement a Customer's exit plan.
REL 2	Oversee the CenturyLink Project Management function to manage communication of service handover documentation, providing details of the services integrated by CenturyLink, such as Server specs, OS, patch levels, applications installed, disc partitions, IP details, User private access path, etc.
REL 3	Work with the CSP to provide Customer with the CenturyLink Customer Information Guide and Handbook that outlines our internal processes, functions and contact details, which will assist in answering queries that a new CenturyLink Customer may have. Assist the TSE with the development of a bespoke Customer operations manual ('run book') or resource library.
REL 4	Provide an overview of the CenturyLink service delivery function and support processes to the Customer to provide for an effective relationship and smooth operational service. Educate the internal organization, providing information about the Customer's business applications and technical solution, building Customer intimacy to improve support.

Key	Description
CFG - Configuration Management	
CFG 1	The CTA will conduct an annual review of Customer firewall rules as a proactive audit if required; application mapping can be used to interpret Customer requirements regarding firewall changes to facilitate the administration of the change via the standard CenturyLink process.
CFG 2	The CTA will coordinate a review of Customer infrastructure at CenturyLink at regular technical workshops and present findings at Service Reviews.
CFG 3	The CTA will lead a quarterly review of infrastructure monitoring thresholds to facilitate efficient response to proactive alerts.
CFG 4	Coordinate the production and distribution of updates to Customer configuration documentation (PowerPoint or Visio) following major changes, supplying a copy to the Customer.
REP - Reporting and Service Improvement	
REP 1	The CTA will create Customer facing technical documentation and coordinate the production and distribution of technical documentation from other CenturyLink teams. Additional ad hoc reporting may be required by Customer to review an aspect of their service. If not covered by the Service Order, these can be provided for additional charge by the CenturyLink Professional Services team.
REP 2	Assisting the CSP in preparing and delivering regular Service Reviews [either in person or via conference calls]. The CTA will contribute technical reports, such as statistics on server, storage and bandwidth utilization along with proactive recommendations to enhance the technical solution. On-Site visit limitations are detailed at the end of this document.
REP 3	Proactively identify any weaknesses within the infrastructure design or process execution of the services and make recommendations for resolution.
REP 4	The CTA and the CSP are actively involved in account strategy planning, incident and problem management and the Customer loyalty program. A Service Development Plan (SDP) is maintained to improve Customer satisfaction and implement desired service improvements and service developments. Inputs from multiple sources are taken to the SDP, including Customer surveys, service review feedback and actions arising from incident reports (RCAs). The CTA works alongside the CSP to confirm that progress updates are provided to the Customer on regular basis.
REP 5	Performance reporting on key items (Servers, networks (Internet / IIP / ATN), Storage and Utility Back-up) and recommendations. CenturyLink' Customer portal, the SavvisStation Portal, provides infrastructure utilization data and trending for Customers to manage capacity and scale up plans to meet their business requirements. The CTA will review key service items regarding capacity utilization and present their findings at the regular service reviews,

Key	Description
	making recommendations for the Customer to review (upgrade/downgrade) their service commitment with CenturyLink, such as Internet bandwidth usage, or high CPU utilization for a particular server. Where Application Performance Monitoring services are provided by CenturyLink, the CTA will use these tools to provide advance troubleshooting and performance reporting. In depth capacity management and planning services can be made available by agreement If required. This service provides predictive analysis of the impact of changes on current infrastructure and future design.

Technical Service Engineer (TSE)

TSE Task and Activities

TSE tasks provided with the Services are set forth below and are limited to the hours per month purchased by Customer within the Service package. Additional hours will be charged to Customer. Infrastructure Changes are charged to Customer separately.

Key	Description
TEC	Technical Leadership
TEC 1	Technical Engineer at CenturyLink
TEC 2	Understand Customer's technical environment and can implement changes
TEC 3	Representation at technical forums
TEC 4	Proactive recommendations for service optimization and enhancement
INP	Incident / Problem Management
INP 1	Incident escalation
INP 2	Escalation / Crisis management
INP 3	Technical Root Cause Analysis, hands on review of log files and applicable information
CHG	Change Management
CHG 1	Technical approval of all Customer changes
CHG 2	Create scripts for standard changes
CHG 3	Implementation of non-standard Change Requests
CHG 4	Implementation of Emergency Change Requests

Key	Description
CHG 5	Create Method Of Procedure (MOP) for change requests
CFG	Configuration Management
CFG 1	Review Firewall policy changes for technical impact
CFG 2	Review Customer Infrastructure at technical workshops
CFG 3	Implement monitoring changes as recommended / required
CFG 4	Author Customer configuration documentation

Descriptions

Key	Description
Working Hours	Service Management is available 9am to 5pm (local time) during business days. The CenturyLink Operations Center is available on a 24/7 basis to support incident escalations. The Service Management organization will support major events with significant business impact outside of normal business hours.
Resource days included in the package	Amount of CenturyLink resource (maximum hours per month), which is pre-paid within the agreed Service Management Tier.
TEC - Technical Leadership	
TEC 1	The TSE is a “hands on” resource that has the ability to configure and change components in the environment. TSEs will have a broad array of technical abilities, but are typically specialized to specific technologies, (i.e. Windows, Unix, Network)
TEC 2	Understand a Customer’s current technical environment, business applications, able to make approved changes to the environment, and configure operating system variables, software and middleware. They act as a hands on technical resource assigned to the Customer for the purposes of configuration changes.
TEC 3	The TSE will become embedded in the Customer’s technical design and feasibility process. They provide an extension of the Customer’s technical team, representing the Customer to CenturyLink and CenturyLink to the Customer. Attendance at Customer technical forums to provide input into requirements specification.
TEC 4	Engage with Sales, Solutions Engineering, coordinating CenturyLink technical resources to make proactive recommendations to Customer for service optimization and enhancement. Lead technical workshops and meetings. Demonstrate added value by continually exploring cost saving initiatives for the Customer. Identify efficiencies, such as server consolidation, reduction of storage and backup, along with opportunities for automation (helping Customer

Key	Description
	to do more with less).
INP - Incident / Problem Management	
INP 1	Technical resolution of incidents that are complex in nature and have the potential for critical business impact. Receive escalations from shared resources. Assist the shared teams in supporting the Customer's environment.
INP 2	Crisis management and coordination of severe events impacting the business. Coordination of appropriate CenturyLink resources. Launching and driving a Crisis call driving all resources to resolution.
INP 3	Provide initial summary at conclusion of crisis call. Obtain technical details as to root cause of failure, engaging vendors as required. Provide technical details as to actual failure.
CHG - Change Management	
CHG 1	Plan and approve changes for technical feasibility. Confirm Method Of Procedure (MOP) from several groups is complete and integrated into a single MOP.
CHG 2	Scripting changes to existing Customer scripts.
CHG 3	The TSE is available to implement non-standard Change Requests when required.
CHG 4	Administration of emergency Change Requests.
CHG 5	Plan changes and write Method Of Procedure (MOP) for all changes to Customer environment. Manage changes so that they are appropriately planned and all files are staged on servers. Organize all teams involved in an effort to promote a successful change.
CFG - Configuration Management	
CFG 1	Review firewall changes and work with the firewall teams to confirm changes will not impact Customer applications. Make recommendations to minimize security vulnerabilities.
CFG 2	Review build documentation with Customer at regular intervals to confirm it is up to date. Include non CenturyLink responsible information in an effort to maintain a complete view of the environment.
CFG 3	Maintain monitoring of Customer servers. Enable all available monitoring and work to reduce false positives.
CFG 4	Develop and maintain Customer build documentation in a centralized location for use by the CenturyLink Operations Center.

Technical Operations Manager (TOM)

TOM Task and Activities

TOM tasks provided with the Services are set forth below and are limited to the hours per month purchased by Customer within the Service package. Additional hours will be charged to Customer. Infrastructure Changes are charged to Customer separately.

Key	Description
TEC	Technical Leadership
TEC 1	Technical operations lead overseeing the Customer environment
TEC 2	Understand Customer's technical environment and drive coordination of incident, request, change, and problem management activities within CenturyLink
TEC 3	Lead technical team meetings with CenturyLink operations
TEC 4	Analyze operational data used to develop proactive strategies and to provide recommendations for service optimization and enhancement.
INP	Incident / Problem Management
INP 1	Incident escalation point for operational services
INP 2	CenturyLink Crisis manager for Customer affected services
INP 3	Customer Specific technical Root Cause Analysis preparation
INP 4	Request and review problem records per CenturyLink defined process
INP 5	Identify and document customer specific crisis manager contacts
INP 6	Integrate CenturyLink operational processes with Customer specific processes
INP 7	Manage case priority within CenturyLink Operations Center
INP 8	Consult with Customer technical status of open issues/items as requested
CHG	Change Management
CHG 1	Customer approval of all Customer changes
CHG 2	Approve template creation for CenturyLink change activities
CHG 3	Setup change review call as agreed upon between CenturyLink and Customer
CHG 4	Assessment and scheduling of Emergency Changes
CHG 5	Validate Method Of Procedure (MOP) for proper level of change detail

Key	Description
CFG	Configuration Management
CFG 1	Participate in the review of Customer Infrastructure on behalf of CenturyLink operations at technical workshops.
CFG 2	Audit managed service monitoring and request changes with the Customer when required
CFG 3	Approve Customer configuration documentation for CenturyLink managed services
SLM	Service Level management
SLM 1	Attend quarterly service review on behalf of CenturyLink operations
SLM 2	Operational SLA/SLO monitoring & reporting
SLM 3	Drive the creation of Automated Service Procedures (ASP)
SLM 4	Maintain ongoing operational run book documentation

Descriptions

Key	Description
Working Hours	Service Management is available 9am to 5pm (local time) during business days. The CenturyLink Operations Center is available on a 24/7 basis to support incident escalations. The Service Management organization will support major events with significant business impact outside of normal business hours.
Resource days included in the package	Amount of CenturyLink resource (maximum hours per month), which is pre-paid within the agreed Service Management Tier.
TEC - Technical Leadership	
TEC 1	The TOM is a point of contact within CenturyLink who performs the lead role for operational resources.
TEC 2	Understand Customer's solution and manage the coordination of incident, request, change, and problem management activities.
TEC 3	The TOM will hold regular team meetings with CenturyLink operational resources to review the operational activities within the Customer environment.
TEC 4	Analyze and review operational data and make proactive recommendations when required to the CenturyLink technical team with Customer approval.

Key	Description
INP - Incident / Problem Management	
INP 1	Serve as the technical escalation for P1 cases and aid in gathering the appropriate technical resources to resolve the case.
INP 2	Serve as the crisis manager which includes leading the Customer call on behalf of operations in the event of a P1 crisis. This includes coordinating the launch of the crisis call, gathering of all appropriate CenturyLink resources, and driving all resources to resolution.
INP 3	The TOM will work with the CenturyLink engineering resources to develop a formal root cause analysis (RCA) with corrective actions for incident prevention.
INP 4	Manage problem records to ensure engineering resources are continually engaged to resolve the issue within a timely manner to avoid future reoccurrence.
INP 5	Document Customer's point of contact(s) to ensure proper communication in the event of a crisis.
INP 6	Collaborate with Customer's operational team to integrate Customer's specific operational processes into CenturyLink' operational processes.
INP 7	Act as the Customer's operational advocate to help set and/or reset proper case priority to help meet the needs of Customer's business.
INP 8	The TOM will perform regular operational case review meetings as agreed upon between CenturyLink and Customer. This effort aids in driving case resolution and visibility into outstanding operational items.
CHG - Change Management	
CHG 1	Work with Customer's operational team to document proper customer contacts for change notification and approval. Join Customer's CAB call on behalf of CenturyLink and approve CenturyLink changes on behalf of the customer.
CHG 2	Work with the technical teams to identify and create change templates. Communicate to Customer how to leverage the change templates for Customer specific changes.
CHG 3	Setup a change review call with Customer at an agreed upon time between CenturyLink and Customer to review all CenturyLink managed service changes.
CHG 4	Responsible for scheduling and coordination of CenturyLink engineering resources in the event of an emergency change.
CHG 5	Oversee the technical teams and review changes for technical feasibility, risk mitigation, and ensure a complete Method Of Procedure (MOP) has the proper steps to facilitate a change.
CFG - Configuration Management	

Key	Description
CFG 1	Participate in technical meetings regarding Customer's infrastructure and provide operational guidance for the managed services.
CFG 3	Continually review and maintain the proper monitoring of Customer CenturyLink managed servers. Analyze incident trap data to help aid in the reduction false positives and repeat issues.
CFG 4	Work with the engineering teams to develop and maintain Customer build and solution documentation. Create a space within the CenturyLink document repository to allow for use by the CenturyLink Operations Center.
SLM – Service Level Management	
SLM 1	Participate in the quarterly service reviews with the CenturyLink account team (including the CSP) to review the current operational state of the services provided by CenturyLink.
SLM 2	Manage and drive adherence to CenturyLink SLOs for case management and ensure that proper case management is being followed by CenturyLink operations.
SLM 3	Work with Engineering teams and Customer to create and document Automated Service Procedures (ASPs). Enforce ASPs usage within CenturyLink operations to aid in lower mean time to resolution for incident monitoring traps.
SLM 4	Maintain and approve technical run book documentation within the internal CenturyLink document repository for consumption by all operational staff.

Using the RASIC Table to Outline Task Ownership

The following RASIC table defines CenturyLink's roles and responsibilities in providing the Service, as well as Customer responsibilities. Task owners include the Client Service Partner (CSP), Client Technology Advisor (CTA), Technical Service Engineer (TSE), Technical Operations Manager (TOM), and Client.

Key	Term	Description
R	Responsible	Primary responsibility and ownership for completing the defined task(s)
A	Approving	Responsibility for reviewing and approving the defined task(s) quality and completeness.
S	Supporting	Secondary responsibility, which includes the contribution of skill, resources and/or tools for completing the defined task(s).
I	Informed	Stakeholders who must be informed about the progress of the defined task(s).
C	Consulted	Responsibility to provide assistance in providing design and/or quality review criteria for the defined task(s).

Service Lifecycle

Ordering Services

Task	Client	CSP	CTA	TSE	TOM
Receive request for services on an existing account of service augmentation or minor services	S	R	I		I
Confirm Design of service augmentation or minor services	A		R	C	C
Create contract package of service augmentation or minor services.	I	S			
Perform Feasibility Review of service augmentation or minor services. R is provided by your Solution Engineer	A		S	C	C
Present Order to Customer of service augmentation or minor services.	S	S	S		I
Create Technical Documents (HTOF/HiW/Etc.).	S		S	C	C
Manage Quote Activities / Escalation Issues.	I	R			I

Implementation

Task	Client	CSP	CTA	TSE	TOM
Handover environment to Customer (burn-in phase)	A	I	I	I	I
Escalation awareness of implementation delays/issues from customer to management	I	R	I		I

New Customer Onboarding

Task	Client	CSP	CTA	TSE	TOM
CenturyLink lifecycle processes introduction / overview	I	R			
SavvisStation Portal introduction / overview	I	R			
Verify portal accuracy and representation	A	R			
Client Loyalty (Survey) overview	S	R			
Contact Review in portal (confirm executive and Site Main Contacts)	A	R			

Task	Client	CSP	CTA	TSE	TOM
Change Management overview (Infrastructure maintenance, Patching, VMAC, EVMAC, LB, Firewall)	I	S			R
Operations Center overview (priority level/escalation matrix, structure)	I	S			R
Support Procedure creation	C	S			R
Online Welcome Website review (microsite in portal)	I	R			
Documentation for hand-off to steady state	A	I	R	S	S
Maintain ongoing operational documentation	A	I	S	S	R

Billing

Task	Client	CSP	CTA	TSE	TOM
Initiate billing - CAF tracking	I	R			
Verify AIP/SIP all posted with Start Bill Date	I	R			
Customer Billing and Invoice Review - Includes internal first invoice audit and review - Resolve inaccurate invoice issues - Manage customer credit requests	I	R			
Move services between accounts, site name changes, and addition of support information to custom invoices	I	R			I
Provide invoices, credit/debit memo copies to Customer; Review and explain invoices and memos with Customer as needed	I	R			

Production Support

Task	Client	CSP	CTA	TSE	TOM
Coordinate all technical resources in support of the delivery of CenturyLink Services					R
Work with appropriate functional / Resource manager to ensure proper service levels are achieved		S			R
Identify and communicate opportunities for process improvements	I	C	S	S	R

Task	Client	CSP	CTA	TSE	TOM
in support of Customer's environment					
Identify opportunities for environment design and architecture enhancements	S	I	R	S	S

P1 Incident/Crisis Management (break-fix)

Task	Client	CSP	CTA	TSE	TOM
Internal/external notification	I	S			R
Escalation point for incident tickets	I	S		I	R
Ongoing customer communication	I	S		C	R
Aid in troubleshooting	S		C	R	C
Work with Operations Center to prioritize case management		C		I	R
Ensure cases are being handled by following case management standards					R
Maintain and manage monitoring of all environment devices and review for efficiency opportunities	A	I		S	R
Manage process integration with Customer and their partners providing operational support (e.g. Customer's Help Desk)	S	C		I	R
Incident Trending	I	I		I	R
Incident Analysis at the request of the client (RCA)	I	I	C	R	S

Customer Process Automation

• Identifying where we can automate	I	S	R	R
• Technical documentation		S	R	A
• Implementation & validation			R	A
24 x 7 Consultative support to CenturyLink Operations			R	A

Crisis Management

• Ensure implementation of crisis management procedure per GOCS policy	S			R
• 24/7 crisis management and point of escalation for production impacting incidents	S		S	R
• Identify and engage CenturyLink engineers to troubleshoot and resolve an impacting incident			S	R
• Provide status to the customer throughout the event until it is resolved		R		S

Task	Client	CSP	CTA	TSE	TOM
Ensure internal operations notifications are sent per GOCS policy		S			R
Incident Report					
Single Client IR creation		S		S	R
Multi-Client IR request		R		S	S
Root Cause - Analysis and remediation					
Manage the required remediation steps and action plan within agreed upon time periods				S	R
Implement required remediation steps and action plan within agreed upon time periods				R	S
Consult with customer to provide technical status of open issues/items as requested.				S	R

Change Management

CenturyLink Infrastructure

Task	Client	CSP	CTA	TSE	TOM
Review of all maintenance in region		R	S		S
Attend CM review calls		R			S
Provide portal training to review upcoming change activities and activity monitor		R			
Communicate to Customers potential change impact		R	S		S
Alert CM team of Customer concerns regarding change activities		R			S
Arrange for special notifications		R			I

Customer Change

Task	Client	CSP	CTA	TSE	TOM
Educate customer on change process		R		S	S
Obtain CenturyLink Approval / Verify resource availability		S		S	R
Communicate status of change request lifecycle (Open Approved Completed Failed)	I			S	R
Submit request for change (Client responsible for request	R	I	C	S	A

Task	Client	CSP	CTA	TSE	TOM
submission)					
Creation of change activity template	C		C	R	A
Attend Customer Change Advisory Board meetings on behalf of CenturyLink	S	C	S	I	R

Problem Management

Task	Client	CSP	CTA	TSE	TOM
Problem identification – reactive and proactive	I	I	C	R	I
Problem record creation	I	I	C	R	S
Problem record action plan creation/Change Management - Customer initiated	A	I	I	R	S
Problem record root cause analysis & documentation - Customer initiated	I	A	C	R	S
Problem record workaround identification - Customer initiated	A	I	I	R	S
Problem record closure – including communication with Customer	I	I	I	R	A

Lifecycle Account Management

Task	Client	CSP	CTA	TSE	TOM
Service Management Introduction	S	R	I	I	I
Relationship management	S	R			
Support Customer technical architecture (Design)	S		R	S	I
Support Customer technical architecture (implementation AND management)	S		S	R	C
Understand Customer business	S	R	S	S	S
Ensure CenturyLink's existing solution meets customer requirements	A	S	R	C	C
Drive value for cost (solution optimization)	A	S	R	C	C

Task	Client	CSP	CTA	TSE	TOM
Business issue escalation	A	S	R	C	C
Schedule & lead Customer Service Reviews (QBR, QSR)	I	R	S	C	S
Schedule & lead weekly / monthly tactical (account/service) meetings	S	R	S	S	S
Schedule & lead weekly / monthly operational (delivery and management) status meetings	S	S	S	S	R
Create & drive customer Service Alignment Plan	A	R	C	C	S
Customer Run Book:					
Overall coordination	I		S	S	R
Technical Run Book components creation, ownership and ongoing maintenance.	C	I	C	R	A
Operations Run Book components creation, ownership and ongoing maintenance.	C	I		S	R
Business Runbook components creation, ownership and ongoing maintenance.	S	R	I		I
Contact management (validation & updates)	A	R			
Proactive notification to customer of impending billable overage situation	I	R			S
Contract SLA metric trending & reporting	I	R			S
Service uptime & availability reporting	I	R			S
Custom report ownership	I	R			S
Manage and coordinate renewals for CenturyLink procured software licenses		R	C		S
Customer capacity, quality, and risk management:					
Quality of CenturyLink Service	A	R			S
Capacity	I	C	R	S	C
Risk management		S	R	S	S
Customer environment audits (order vs. CMDB vs. physical)	I	R	S	S	C
Provide operational data analysis	I	I	I	S	R
Organize and support customer physical tours of the CenturyLink data center locations where customer has hosted operations	S	R			
Provide CenturyLink Service Guide ("SG") change notification	I	R			I
Provide Acceptable Use Policy ("AUP") change notification	I	R			I

Customer Loyalty (NPS)

Task	Client	CSP	CTA	TSE	TOM
Educate Customer about NPS surveys and 360 CLP	I	R			
Gain agreement from Customer contacts to participate in survey	A	R			
Submit / validate / update Customer contacts per process	S	R			
Call detractor / passive / promoters upon survey receipt per OLA	I	R			
Create, assign, & own case per 360 Closed Loop Process	I	R			

Security Account Manager (SAM)

SAM Tasks and Activities

The **Security Account Manager (SAM)** provides consulting, advisory and operational services that acts as an overlay to the CenturyLink managed security services and works with the Customer across a wide variety of security functions to advise, analyze, resolve issues, incidents and provide guidance across a gamut of various CenturyLink provided security solutions and technologies: Network Intrusion Detection System, Log Management, Threat Management, Web Application Firewalls, Network Firewalls, Integrity Management, Change Management, Patching and Hardening analysis and Security governance functions.

Some of the common SAM related functions are:

- Review and advise on security related aspects on Customer IT infrastructure hosted in the Security premises
- Proactively review, analyze, scan and remediate the environment against any new or potential security threats and vulnerabilities
- Develop and maintain security profiles, policies and procedures as pertinent to the CenturyLink hosted infrastructure
- Recommend new technologies/processes in the Customer's environment to improve the security of infrastructure and applications based upon current trends and industry standards
- React to any unauthorized intrusions and provide forensic analysis as needed
- Customize CenturyLink technical security controls and configurations to reflect Customer's customized requirements and needs
- Review and approve technical security controls, other than those made by CenturyLink, prior to implementation
- Work in conjunction with, but independently from, the technical and project management teams and the Architect in evaluating all proposed changes to the hosted infrastructure

The SAM resource is available in two options: 80 and 160 hour per month packages.

Customer must have the one of the following Service Management tiers in order to add the SAM resource: Standard, Select, Advanced or Elite. Multiple packages can be applied to any account.

80 Hour SAM Option

Scoping assumptions and boundaries:

- Supports one (1) Customer business unit

- Up to eighty (80) physical hosts, virtual hosts, and network devices of all types combined may be present in the supported client environment
- Up to three firewalls (redundant pairs count as one) may be present in the supported Customer environment
- Up to fifteen (15) change requests per month
- Up to one (1) WAF per month will be reviewed and analyzed
- Up to one (1) Log Management System per month will be reviewed and analyzed (The LMS review is confined to health and performance of the LMS solution)
- Up to one (1) DDOS mitigation implementation will be reviewed
- Up to ten (10) hosts with Content Integrity Monitoring (IMS or CIMS) will be reviewed per month

SAM Tasks

Tasks/Activities	SAM	CenturyLink	Customer
Security Program Review and Advisory Support			
Review Customer's compliance, governance, and risk management requirements	R	A	I
Security Governance Support			
Lead periodic security related meetings with Customer in relation to the scope of security services	R, A		
Review and advise security operations changes requested by the Customer and provide agreed to direction to CenturyLink managed services teams for the implementation of associated changes	R	A	C, I, D
Work with CenturyLink managed service teams to compile and deliver environmental information as a result of related security breach to the Customer's CenturyLink hosted environment	R	A	C, I, D
Utilize the standard CenturyLink change management system for any changes within the CenturyLink environment	R	A	C, I, D
Provide documentation of findings and recommendations on related security operational changes	R, A		C, I, D
Provide weekly/monthly status reports (as agreed to between CenturyLink and the Customer)	R, A		C, I, D
Maintain Security documentation			
Maintain security documentation for processes specific to managed security and hosting services purchased by Customer from CenturyLink, such as Customer-	R, A		C, I, D

Tasks/Activities	SAM	CenturyLink	Customer
specific security incident Runbook			
Audit and Compliance Support			
Provide ongoing support to auditors, assessors, and remediators for audit and compliance related purposes for the CenturyLink hosted environment	R	A, C, I	C, I, D
Review and advise on security requirements, practices and coordinate with 3rd parties as needed	R, A	C, I	C, I, D
Review CenturyLink questionnaires and answer customer queries around FFIEC, SSAE, PCI etc.	R	A, C, I	C, I, D
Security Policy Enforcement, Architecture and Design Guidance			
Review new projects or changes destined for the CenturyLink hosted environment for compliance with customer IT Security policies (including applicable compliance regimes), and documents mandated by customer, document exceptions	R, A		C, I, D
Help ensure exceptions are documented	R, A		C, I, D
Change Management Participation			
Review change requests based upon knowledge of how all the security elements in the environment work together, and reduces the likelihood of missed configurations and delayed deployments	R	A	C, I, D
Participate in CenturyLink and Customer's change management processes	R, A		C, I, D
Review change requests to ensure proper connectivity and rule generation within security device and services and highlight associated security or operational risks to the specific project and to the customer environment as a whole	R, A		C, I, D
Security Incident Response Analysis, Review and Advisory Support			
Work with the Customer and CenturyLink's managed service teams and third parties as needed to mutually define security incident escalation procedures; draft and maintain associated incident response plans	R	A	C, I, D

Tasks/Activities	SAM	CenturyLink	Customer
Review and report security incidents and provide Root Cause Analysis reports for incidents that have occurred	R	A	C, I, D
Advise on responses to IT security incidents, assist with efficient communications and use of resources during IT security related incidents, and recommend technical and operational responses	R	A	C, I, D
Firewall Rule Base Audit and Advisory Support			
Validate firewall request against the Customer guidelines and the current implementation architecture. (Customer is responsible for creating the firewall rules in a CenturyLink defined template, and provide requirements to CenturyLink)	R	A	C, I, D
Validate firewall requests are received from an authorized source from Customer	R, A		C, I, D
Validate firewall requests for security and design compliance prior to implementation	R, A		C, I, D
Verify rules that will be implemented on the appropriate firewalls, reasonable use of ACLs, object-groups and minimizing the need for redundant rules. Coordinate with requestor to address discrepancies found during validation	R, A		C, I, D
Interface between the CenturyLink managed firewall team and the Customer requestor as needed	R	A	C, I, D
Coordinate with CenturyLink Managed Services teams and provide appropriate customer feedback during the complete firewall change implementation process	R	A	C, I, D
Work with CenturyLink managed services teams to schedule upgrades, patch application, and signature updates on CenturyLink standard firewall products.	R	A	C, I, D
Coordinate and provide appropriate Customer feedback during the complete firewall change implementation process.	R, A		C, I, D
Provide firewall security architecture and design guidance for CenturyLink-managed IT infrastructure,	R, A		C, I, D

Tasks/Activities	SAM	CenturyLink	Customer
incorporating Customer's technological and business requirements.			
At the Customer's request, provide a monthly overview of firewall changes executed and address any implementation concerns.	R, A		C, I, D
Log Management Advisory and Analysis Support			
Interface with customer to define and review custom alert rules and reporting to address specific security or compliance requirements.	R, A		C, I, D
Provide on-going support for custom alert rules and design reporting templates (as appropriate) based on Customer's needs.	R	A	C, I, D
Provide enhanced alert rule analysis based on correlating log logic data across systems in-scope.	R, A		C, I, D
Perform a monthly review (or appropriate) log activity reports, identifying trends and reporting potential issues to Customer.	R, A		C, I, D
Participate as part of the CenturyLink alert escalation path to help investigate potential security incidents.	R	A	C, I, D
Meet with Customer to define and review custom alert rules and reporting to address specific security or compliance requirements.	R	A	C, I, D
On-going Web Application Firewall Review Services ('WAF') Reviews			
Define the Web Application Firewall event policies and notifications as part of the implementation process of the services.	R, A		C, I, D
Provide additional application profiling support and application-specific tuning of WAF policies. This would be performed in an advisory capacity with the appropriate CenturyLink support teams implementing the requested adjustments.	R	A	C, I, D
Work with CenturyLink Managed services teams to develop custom application rule configuration, whitelisting and/or blacklisting of IPs to address	R	A	C, I, D

Tasks/Activities	SAM	CenturyLink	Customer
application and web services security incidents.			
Analyze alert rules, false positives while proactively keeping the various application teams informed on potential impact.	R, A		C, I, D
Develop custom application rule configuration to address application and web services security incidents.	R	A	C, I, D
Provide weekly/monthly assessment report related to WAF incidents.	R, A		C, I, D
Provide documentation of findings and recommendations to address appropriate WAF issues.	R, A		C, I, D
On-going Network Intrusion Detection / Prevention System Review Services ('NIDS/IPS') Reviews			
Work with the CenturyLink managed service teams and Customer's system teams and provide assistance for on-going NIDS/IPS policy tuning and support.	R	A	C, I, D
Meet with system teams to configure custom alert rules to address specific security or compliance requirements.	R	A	C, I, D
Provide in-depth alert analysis to minimize false positives, highlighting critical alerts and their potential impact to the hosted environment.	R, A		C, I, D
Participate in CenturyLink's NIDS/IPS alert escalation path to help investigate potential security incidents.	R	A	C, I, D
Provide weekly/monthly summary of alerts, rules and overall status of the Service.	R, A		C, I, D
Provide documentation of findings and recommendations to address appropriate NIDS/IPS issues.	R, A		C, I, D
Content Integrity Analysis and Advisory Services			
Design/facilitate a process to suppress or minimize alerts/reports from the Content (File) Integrity Monitoring service during periods when customer is	R, A		C, I, D

Tasks/Activities	SAM	CenturyLink	Customer
performing planned changes.			
Review reports and investigate if reported changes were associated with a CenturyLink initiated change to the operating system or specific managed application.	R, A		C, I, D
Mark planned maintenance/patch related activity as false positives.	R, A		C, I, D
DDoS Review Services ('DDoS') Reviews			
Conduct awareness training so that the customer's IT Security points of contact understand CenturyLink's DDOS incident response process.	R, A		C, I, D
Review Actual DDoS incidents for trending (targets, methods, frequency)	R, A		C, I, D
Access controls protection for the specific servers targeted by attacks.	R, A		C, I, D
Review mitigation grouping with customer to ensure good logical organization	R, A		C, I, D
At client request, advise regarding mitigation enablement, disablement.	R, A		C, I, D
Review and advise on security operations changes associated with the DDOS service requested by Customer staff and provide agreed to direction to CenturyLink Managed Services teams for the implementation of associated changes.	R	A	C, I, D
Network Vulnerability Scans and Penetration Testing			
Conduct network vulnerability scans and penetration testing as per defined schedules, using the CenturyLink TMS services	R, A		C, I, D
Prepare a report of findings to be delivered in PDF document format.	R, A		C, I, D
Executive Summary – a concise summary of the findings and associated recommendations targeted to a non-technical, executive audience. Emphasis in the executive summary will be business-focused,	R, A		C, I, D

Tasks/Activities	SAM	CenturyLink	Customer
concentrate on actionable risk areas.			
Technical Report – a detailed technical report with supporting appendices where applicable (for example, technical tool output) outlining all issues observed	R, A		C, I, D

Adaptive Help Desk Roles and Responsibilities

The **Adaptive Help Desk** is a 24 x 7 x 365 global support team that performs tier 1, tier 2, and basic documented engineering tasks. The Adaptive Help Desk is designed to have deeper client intimacy due to the focused client base which then drives improved mean time to completion (Request) and resolution (Incident) times. The Adaptive Help Desk can also be leveraged for nonstandard support tasks and services as agreed upon between CenturyLink and the client to meet the complex needs of the solution.

The following table defines CenturyLink's roles and responsibilities in providing the Adaptive Help Desk. Every Adaptive Help Desk account must also include a Technical Operations Manager (TOM). Task owners include the Adaptive Help Desk (CenturyLink), Technical Operations Manager (TOM), and Customer.

CenturyLink Adaptive Help Desk

IT Help Desk (Level 1 Application Support)

Task	Customer	CenturyLink	TOM
Define and maintain Help Desk process	C	S	R
Perform analysis of Customer environment to identify the appropriate skill sets, training and experience needed by Help Desk staff	I	R	S
Develop and maintain Help Desk triage steps as appropriate to improve performance and overall case management	S	R	I
Document and maintain Customer provided supplier escalation contact list(s)	R	S	
Create and maintain authorized contact lists for CenturyLink engagement	R	S	
Manage and adapt to unique Customer SLAs as	S	A	I

Task	Customer	CenturyLink	TOM
defined by contract			
Incident Management			
Define, implement and manage the CenturyLink incident management process	I	R	
Engage and escalate to appropriate engineering resources for incident resolution per CenturyLink escalation process	I	R	
Monitor incident progress during case life cycle	I	R	S
Participate in P1 Incident/ crisis management calls when CenturyLink managed services are impacted	C	R	S
Respond to alerts as defined by CenturyLink SLOs	I	R	
Perform Root Cause Analysis (RCA)	I	S	R
Problem Management			
Participate in the identification of reoccurring incidents in support of problem management	I	R	I
Participate in the knowledge management for reported incidents and problems and their resolutions and workarounds	I	R	
Aid in identifying ASP/documentation gaps to allow for incident prevention	I	R	S
Change Management			
Implement pre-approved/standard requests within the scope of Adaptive Desk	I	R	
Create changes based on Customer submitted request cases	S	R	
Approve Changes with Customer (obtain Customer approval)	S	I	R
Notify of changes to or cancellation of request cases	R	I	
Monitoring the change progress during the VMAC execution	I	R	
Coordinate actions of contributing CenturyLink	I	R	

Task	Customer	CenturyLink	TOM
resource			
Identify and resolve Change Management related issues per the CenturyLink Change Management Process within the scope of the Adaptive Desk	S	R	I
Communicate resource availability for change request and inform of cancellation or rescheduling	S	R	
If change is completed by the Adaptive Desk, notify the appropriate parties that the change request has been closed and status of its disposition (success / fail)	I	R	
Release Management			
Restart services hosted on managed server upon request	I	R	
Perform Customer code/content deployment per the agreed upon process and procedures release	S	R	
Availability Management			
Monitor alerts for service availability	I/C	R	
Monitor CenturyLink URL alerts for Site availability	I/C	R	
Validate alerts, send customer notifications and escalate incident to appropriate resources as defined by CenturyLink case management	I/C	R	

SavvisStation Web Portal

Service reports are viewable via SavvisStation, the web portal available at www.savvisstation.com

The SavvisStation link to the Service includes:

- Customizable high-level view of account activity
- System level base hours available per month
- Hours consumed, hours remaining in a given month
- Overages
- Completed tasks
- Reporting on tasks completed and hours used in previous months

Customers are equipped with the ability to create custom email notifications to alert in the event the Customer is trending toward an overage in hours for a given month.

Service Policies and Additional Requirements:

The Client Service Partner (CSP) should be considered a focal point of contact for the Customer.

Each Service tier provides access to unique personnel and a specific number of total support hours per month. For Customers in the Select, Advanced and Elite tiers (where a blend of resources are provided) the approximate designated hours per resource (CSP, CTA, TSE) are detailed below. Please note that these are intended to be general and may flex above the allotted amount per resource by up to 20 hours per month if needed. The Total Hours per service tier must remain. Example: The Advanced tier may use the CSP for 80 hours and the CTA for only 20 in a given month.

Tier	Select	Advanced	Elite
CSP	40	60	160
CTA	20	40	80
TSE	20	60	120
Total	80	160	360

All Adaptive Help Desk Customers must also include a Technical Operations Manager (TOM).

The CSP, CTA or TSE are available for on-site visits within the Select, Advanced and Elite Service tiers. Elite Service Customers are eligible for a CSP and CTA on-site up to 100% of the time. Customers with the Standard Service may have a CSP on-site when required. The Basic Service tier includes no on-site travel. In the event Customer's site is greater than 50 miles from the assigned Savvis personnel, Savvis will charge Customer for travel expenses and accommodations at cost and within the Savvis travel and expense policy.

Savvis shall provide cover during the 'working hours' in 'business days' on a reasonable basis for the Customer's allocated CSP for contracted holiday time and sickness greater than 2 consecutive days. Business Days shall mean Monday through Friday, and does not include Public Holidays.

Monthly hours cannot be shared between Customer accounts. Monthly hours must be used within each month and cannot be transferred or carried over.

Billing for the Service will begin upon assignment and introduction of resources. (Typically within 45 business days after the order is submitted) Billing for Adaptive Desk services will begin upon the commencement of Savvis monitoring the Customer's environment.

Customer may choose to upgrade the Service Management Package should business or technical requirements mandate. If the Customer places an order to increase the level of Service Package, Savvis shall not be obligated to maintain the same individual(s) for the next level of Service. However, Savvis shall use good faith efforts to maintain

continuity of support personnel where practical. If Customer elects to downgrade or terminate the Savvis Service Management service, a notification of three (3) months is required.

IT Governance and Advisory Services:

- Serves as a point of contact for CenturyLink and Customer's related security incidents
- Works with CenturyLink managed service teams to compile and deliver environmental information as a result of related security breach to Customer's CenturyLink hosted environment
- Interface with Customer's internal staff to support Customer's IT security audit requests related to CenturyLink-managed infrastructure
- Participates and leads monthly Security related meetings with Customer in relation to the scope of security services requested

Change Review Services:

- Reviews change requests for managed IT Security Platforms submitted for implementation
- Validate changes are received from an authorized source
- Validate change requests against the Customer guidelines and the current implementation architecture

Security Log Review Services

- Reviews and Analyzes Firewall, Web Application Firewall, Content Integrity Monitoring, IDS/IPS, DDOS, and Log Management (for LMS performance, not content) logs on an ongoing basis and provides weekly summary reports of capacity, utilization, and critical alerts and incidents

160 Hour SAM

Scoping Assumptions and Boundaries

- Supports up to three (3) Customer Business Units
- Supports up to two (2) monthly environment changes (changes in architecture, routing topology, or new project integrations)
- Up to one hundred sixty (160) hosts, virtual hosts, and network devices of all types may be present in the supported Customer environment
- Up to four (4) firewalls (redundant pairs count as one) may be present in the supported Customer environment
- Up to twenty (20) network firewall change requests per month
- Scans and reports on vulnerabilities up to 250 IP addresses per month
- One (1) WAF will be reviewed per month
- One (1) Log Management System per month will be reviewed (The LMS review is confined to health and performance of the LMS solution, and excludes)
- One (1) DDOS mitigation implementation will be reviewed
- Up to fifty (50) hosts with Content Integrity Monitoring (IMS or CIMS) will be reviewed per month

IT Governance and Advisory Services:

- Participates in the change management process to highlight and, when possible, avoid IT security risks
- Work with Customer and CenturyLink managed Security service teams to monitor capacity of firewalls on a monthly basis and jointly determine an appropriate course of action, if necessary
- Review and advise on security operations changes requested by Customer and provide agreed to direction to CenturyLink managed services teams for the implementation of associated changes
- Serve as a point of contact for CenturyLink and Customer's related security incidents

- Work with CenturyLink managed service teams to compile and deliver environmental information as a result of related security breach to Customer's CenturyLink hosted environment
- Participates and leads monthly Security related meetings with Customer in relation to the scope of security services
- Interface with Customer's internal IT security and audit staff on information security issues related to CenturyLink-managed infrastructure
- Offer security architecture and design guidance for CenturyLink-managed IT infrastructure, incorporating Customer's technological and business requirements (e.g., network segmentation, host lockdown, etc.)
- Interface with the Customer's internal staff to support the Customer's IT security audit requests related to CenturyLink-managed infrastructure
- Maintain security documentation for processes specific to managed security and hosting services such as the Customer-specific security incident Runbook

Firewall Review Services:

- Review firewall requests submitted for implementation
- Validate firewall received from an authorized source
- Validate firewall request against the Customer guidelines and the current implementation architecture
- Coordinate with requestor to address discrepancies found during validation
- Verify that the firewall change request forms are completed, as per the changes suggested by the customer. This will include verifying the rules that will be implemented on the appropriate firewalls, verifying reasonable use of object-groups and minimizing the need for redundant rules
- Quarterly Review and suggest improvements to manageability of the rule set
- Review and verify the accuracy of the configured ACL
- Interface between the firewall team and the requestor as needed
- Produce a monthly report indicating the firewall changes performed

Monthly Vulnerability Scanning:

- Perform quarterly external and/or internal vulnerability scans, analyze results, and create reports using CenturyLink's Threat Management Service (TMS)
- Perform customized vulnerability scan reporting
- Recommend security patches that should be applied to CenturyLink-managed IT infrastructure based on vulnerabilities identified
- Perform scans on the affected servers to validate patches have been applied
- Review non-resolved vulnerabilities and provide a report on patching status
- Review missing patch report for the managed servers provided by CenturyLink managed hosting
- Review processes to collect patch information from the managed servers provided by CenturyLink managed hosting
- Participate in patch scheduling discussions between CenturyLink Managed Hosting and Customer

Change Review Services:

- Review change requests for managed IT Security Platforms submitted for implementation
- Validate changes are received from an authorized source
- Validate change requests against the Customer guidelines and the current implementation architecture

Security Log Review Services

- Reviews Firewall, Web Application Firewall, Content Integrity Monitoring, IDS/IPS, DDOS, and Log Management (for LMS performance, not content) logs on an ongoing basis and provides weekly summary reports of capacity, utilization, critical alerts and incidents, and changes