



ALWAYS LEADING

CloudSelect® Contract
IaaS, BaaS & DRoD
Appendices A & B to
Master Services Agreement



Village of Hanover Park



Table of Contents

APPENDIX A (CS001-DS)	3
I. PROVISION OF SERVICES	3
II. CLOUDSELECT® INFRASTRUCTURE AS A SERVICE (IAAS)	3
A. Services Included	3
III. CLOUDSELECT® IAAS DEFINITIONS	3
A. General Definitions	3
B. Virtual Computing Processing Definitions:	4
IV. CLOUDSELECT® IAAS AND MANAGED SERVICES INCLUSIONS	4
A. Sentinel HANS™	4
B. CloudSelect® Internet VPN Services (site to site)	5
C. Private Virtual Data Center (PVDC) Services	5
V. CLOUDSELECT® BACKUP AS A SERVICE (BAAS)	6
A. Sentinel CloudSelect® BaaS Delivery Options	6
B. Contractor Responsibilities	6
C. Customer Responsibilities	7
VI. CLOUDSELECT® DISASTER RECOVERY ONDEMAND (DRONDEMAND)	8
A. CloudSelect® Disaster Recovery On Demand Network Services	8
B. CloudSelect® DROnDemand Policy	8
C. Responsibilities Of The Parties	8
VII. SERVICE LEVEL AGREEMENTS (SLAS)	10
D. General SLAs	10
E. SLA Measurement Methodology	10
F. SLA Financial Commitment	11
G. General SLA Exclusions	11
VIII. SPECIFIC CLOUDSELECT® SERVICES CONTRACTED	12
IX. STANDARD TERMS & CONDITIONS	12
APPENDIX B (CS002-DS)	13
X. PROJECT SCHEDULE	13

APPENDIX A (CS001-DS)

Customer Name: Village of Hanover Park

Street Address: 2121 Lake Street

City, State, Zip: Hanover Park, IL 60133

The Master Services Agreement (MSA) entered by and between Sentinel Technologies, Inc., ("Sentinel" or "Contractor") with principal offices at 2550 Warrenville Road, Downers Grove, Illinois 60515, and Village of Hanover Park ("Customer") with principal offices at 2121 Lake Street, Hanover Park, IL 60133 is hereby appended to include the following:

I. Provision of Services

The Parties acknowledge that this Appendix A and B (collectively referred to as "Cloud Agreement" or "Agreement") includes certain service alternatives available to the Customer. Not every alternative will be included as part of the final solution agreed to by the Parties. Instead, Appendix B shall delineate all selected service alternatives.

II. CloudSelect® Infrastructure as a Service (IaaS)

A. Services Included

The following services (checked boxes only) are included as part of this CloudSelect® IaaS Agreement between the Parties:

1. Private Virtual Data Center (PVDC) Services

PVDC – Silver

III. CloudSelect® IaaS Definitions

A. General Definitions

1. **Co-Location** – For this Agreement, CloudSelect® service for locating customer equipment within the same or connected data center to CloudSelect® services. A co-location ("colo") is a data center facility in which a business can rent space for servers and other computing hardware. Typically, a colo provides the building, cooling, power, bandwidth and physical security while the customer provides servers and storage. Often within CloudSelect® this is referred to as space, power and cooling for a customer-owned asset or dedicated equipment to be located and covered under contract.
2. **Global System Services** – Those services that are system wide and impact all elements. Examples would include major system upgrades where all components require updates and/or matching release versions.
3. **Guest or VM** – A virtual computer running under a hypervisor.
4. **HANS™** – HANS™ is the trade name for Contractor's hardware support services. HANS™ is contracted separately from the CloudSelect® agreement and is not required but is highly recommended on any and all customer premise devices or devices co-located but owned by the tenant within CloudSelect®.

5. **Host** – The physical server running a hypervisor or operating system within CloudSelect®
6. **Hypervisor Layer or Virtual Machine Monitor (VMM)** – A piece of computer software, firmware or hardware that creates and runs virtual machines. A computer on which a hypervisor is running one or more virtual machines is defined as a host machine. Each virtual machine is called a guest machine.
7. **IaaS (Infrastructure as a Service)** – A cloud computing model which refers to infrastructure delivered from CloudSelect® services.
8. **Moves, Adds and Changes (MACs)** – Routine administrative tasks for users, phones, trunks or other connections to managed infrastructure or user services.
9. **Service Level Agreements (SLAs)** – The binding service levels agreed for delivery of the CloudSelect® contracted offerings. In general, SLAs refer to the contracted level at which there could be financial ramifications for non-performance. Exceptions and reductions are noted when a tenant opts for a reduced level of redundancy, usually in order to receive a reduced monthly cost for a service.
10. **SLA Exclusions** – Specific items that are not included in the SLAs. These may be managed and monitored elements but are usually items outside of Contractor's direct control, such as an act of nature or other impact that is beyond the agreed to service delivery.
11. **Service Level Targets (SLTs)** – Non-binding minimum standard targets. SLTs do not create a contractual obligation but are referenced and used to lead to final SLAs (see definition above). Exceptions and reductions are noted when a tenant opts for a reduced level of redundancy, usually in order to receive a reduced monthly cost for a service.

B. Virtual Computing Processing Definitions:

1. **Physical and Virtual Processors** – A physical processor is a processor in a physical hardware system. Physical operating system environments use physical processors. A virtual processor is a processor in a virtual (or otherwise emulated) hardware system. Virtual OSEs use virtual processors. Solely for licensing purposes, a virtual processor is considered to have the same number of threads and cores as each physical processor on the underlying physical hardware system.
2. **Physical Core** – A physical core is a core in a physical processor. A physical processor consists of one or more physical cores.
3. **Hardware Thread** – A hardware thread is either a physical core or a hyper-thread in a physical processor.
4. **Virtual Core** – A virtual core is the unit of processing power in a virtual (or otherwise emulated) hardware system. A virtual core is the virtual representation of one or more hardware threads. Virtual OSEs use one or more virtual cores.
5. **Core Factor** – The core factor is a numerical value associated with a specific physical processor for purposes of determining the number of licenses required to license all of the physical cores on a server.

IV. CloudSelect® IaaS and Managed Services Inclusions

A. Sentinel HANS™

As noted above, HANS™ is the Contractor direct delivered maintenance service. HANS™ is not required but is highly recommended on any tenant equipment co-located within CloudSelect® or on the customer premise. HANS™ is a separate offering and contract that would complement the CloudSelect® services offering.

HANS™ manages and tracks on a device-by-device basis by serial number. In most cases IaaS solutions that do not contain Customer premise equipment will not require HANS™ contracts. Any Customer owned devices that are under a CloudSelect® IaaS SLA are recommended to have a HANS™ agreement wherever applicable to assure end-to-end support and services are in place for a single call maintenance, support and cloud experience.

B. CloudSelect® Internet VPN Services (site to site)

Included **Excluded**

If included within the Contracted Services, Contractor will provide site to site VPN services. This will be to the Customer private tenant space (assuming a PVDC design, as discussed below), via a tunnel to either Customer provided equipment (subject to Contractor review and recommended under a managed services agreement with Contractor) or preferably to a Contractor-provided VPN termination device.

Contractor will configure the VPN service from the Customer tenant router to Customer premise. Customer tenant routers are specific to the performance of the VPN service link and will include a Customer tenant virtual machine. Site-to-site VPN services using the PVDC design include the following capabilities:

Route based VPN (static)

CloudSelect® Internet VPN Service DOES NOT provide users Internet access. This is specifically an allocation of CloudSelect® redundant internet services for Customer over VPN tunnel.

C. Private Virtual Data Center (PVDC) Services

Included **Excluded**

Contractor's PVDC services are a Cisco Powered IaaS offering which provide for each tenant to contract for its own virtual data center space in CloudSelect® data centers. Network segmentation is used to provide customers their own "containers" within the multi-tenant CloudSelect® enterprise data centers. Multiple levels of PVDC are available as well as various options that can be added to any PVDC level. Each tenant is provisioned custom to the requirements and overall contract commitments. If the Customer has contracted for any level of PVDC, the closest appropriate option should be selected as well as any applicable optional items in the later section.

PVDC – Silver

- (4) public IP address contracted.
- (2) VLANs Included.
- VLAN routing via contracted Cisco CSR.
- Simple access control list/basic Cisco IOS included firewall services on Cisco CSR available (up to 2 hours of included time with additional time via ticket at T&M rates).
- Contractor managed and monitored shared Internet bandwidth per the Contractor Internet contracted capacity included and any usage charges appropriate.
- Redundant Internet service at 25% guaranteed "normal" performance (upgrade options available for redundancy).
- Infrastructure security zone – owned and managed by CloudSelect® operational team.
- (50Mbit) capacity Cisco CSR (cloud services router) for the term of the Agreement and appropriate sized VM for same.

- Managed services and monitoring of Cisco CSR.
- (1) VPN tunnel to customer provided Cisco CSR compatible device.
- Please note any additional items included within the contract.

V. CloudSelect® Backup as a Service (BaaS)

A. Sentinel CloudSelect® BaaS Delivery Options

1. Contractor's BaaS is delivered across multiple network mediums:
 - Delivered over an Internet VPN connection. Contractor is responsible for providing a device on Customer premise for connection back to the CloudSelect® network, as well as all networking devices in the CloudSelect® environment.
2. The bandwidth is estimated based on values provided during the due diligence process for change rate and total size. If actual change rate or size varies, the bandwidth requirements will change. Additional required bandwidth will be the responsibility of the Customer to obtain. Internet bandwidth from CloudSelect® is mostly available on demand through an incident ticket and is invoiced monthly. Additional private connection bandwidth and/or bandwidth at the Customer premise will be the responsibility of the Customer. In all cases, Customer has assumed the connections are reliable with very minimal packet loss, discards or other errors. Latency is assumed to be 20ms or less and additional latency could introduce additional time for backup and/or replication completion. Any Customer-provided connection is outside of the scope or SLA or remediation unless accompanied by a Managed Services contract for same (this is highly recommended). Any and all bandwidth quoted assumes that amount of bandwidth will be available throughout the entire backup window for backup services. Shared circuits unable to meet the minimum requirements will result in additional backup time completion. In addition, backups will saturate links that are insufficient for the backup window and or the backup window may extend and could extend into production business hours and cause performance or availability issues of other systems. Additional bandwidth may also require a larger premise router and/or cloud services router in the Customer tenant space. Actual costs for these will be noted with the additional monthly charge for bandwidth.

B. Contractor Responsibilities

1. Contractor's proposed backup solution consists of the following options for on-site installed components:
 - vAppliance for disk-to-disk backup. vAppliance will be installed on Customer infrastructure;
2. Cloud Backup storage capacity is measured using RAW storage as noted in Appendix B.
3. Contractor will supply agents for backup of devices and installation of these agents, as applicable, based on the CloudSelect® product being delivered. See Appendix B for included quantity of agents.
4. Contractor will configure and supply all materials in the Cloud environment. This includes server, storage, and network resources required to meet the needs of the contracted values set forth in Appendix B.
5. Contractor will install the vAppliance on Customer premise (if this option is selected and included in Appendix B).
6. Where contracted, Contractor will perform onboarding of Managed Backup Hardware and Provisioning of Cloud Resources.

7. Full level backups are performed during the initial seeding of data. If initial seeding of data is online, it will occur at a time mutually agreed upon between Contractor and the Customer. If initial seeding of data is via a physical mobile device, Contractor will come onsite with a NAS, back up data and transfer to the CloudSelect® infrastructure. Incremental backups are performed nightly on each server thereafter.
8. Unless otherwise contracted, Contractor shall (i) retain all backups for seven (7) days; (ii) retain all weekly backups for five (5) weeks; and (iii) retain all monthly backups for twelve (12) months. Note: retention space has been estimated using the available reporting and/or details provided in the due diligence process. Additional retention space is available on demand and will be increased as needed monthly using current Sentinel CloudSelect® storage rates. By default, and unless otherwise noted, backup data is stored to the CloudSelect® archive tier which includes DRonDemand and Recovery Assist. DRaaS by default is replicated to CloudSelect® production storage tier.
9. 24x7 NOC monitoring of Sentinel CloudSelect® infrastructure (includes vAppliance and CAN if installed).
10. 24x7 NOC monitoring of Customer and/or Contractor-provided internet connected router or firewall, or customer provided connections. Note: Contractor assumes any Customer-provided router or firewall will perform all routing, security or other services in a non-blocking manner at or beyond the minimum bandwidth speeds required.
11. 24x7 NOC monitoring and remediation of backup jobs. Any failed backup job will have the Customer option of being re-performed immediately or being performed again at the next scheduled interval. Failed backup jobs will not be considered an Event as defined elsewhere within this contract, but will have a customer ticket entered as an Incident and tracked within the Contractor's ticketing system.
12. Verify initial data seeding is successful.
13. Verify backup data replication process.
14. Patching and Preventative Maintenance of Sentinel Managed Backup infrastructure. This includes vAppliance, Sentinel CAN and Sentinel CloudSelect® infrastructure.
15. Quarterly File or Folder restoration on 1 (one) file on 1 (one) server.

C. Customer Responsibilities

1. LAN and WAN connectivity from the Customer location and equipment. This includes bandwidth required and defined in the Appendix B, for each service.
2. Provide Contractor remote access to Customer devices documented in this statement of work.
3. Site cabling, power, and access.
4. File level restores can be performed by the Customer via the Contractor Managed Backup Portal. Optionally, these can be performed by opening a ticket with the Contractor's call center.
5. Software and Licensing outside the scope of this Cloud Agreement. Any special requirements related to any type of compliance or audit requirements unless noted specifically within this contract. Any services provided for any compliance or audit requirements for the Customer will be invoiced at actual time using the current year time and materials rates.
6. If minimum bandwidth requirements are not accurate or are reduced by Customer subsequent to execution of this Appendix A, the potential exists that the solution will not work. In such event, Sentinel can, at its sole discretion, cancel the contract and impose a 2-month service fee from the date of cancellation, in addition to the remedies set forth elsewhere herein.

VI. CloudSelect® Disaster Recovery onDemand (DRonDemand)

A. CloudSelect® Disaster Recovery On Demand Network Services

Depending on the type of failure that occurs in the network, Contractor offers the ability to have Customer VPN into the CloudSelect® environment to access the data privately. This is an optional service and details are outlined in Appendix B. Contractor has two different options for this configuration:

- Contractor's default VPN connection is delivered via Cisco IPSec using the Cisco VPN Client. This is provisioned per user and requires an authentication server in the customer virtual data center to be active at all times. Exact quantities and details are outlined in Appendix B.

B. CloudSelect® DRonDemand Policy

Contractor estimates the ability to recover data in two ways:

1. *Recover Point Objective (RPO) – How old the off-site recovery data is after deeming a Disaster.*

For Disaster Recovery on Demand, these recovery points are determined by the product the Customer is using for backup of the data. If using Contractor BaaS, reference the backup settings section; for target only backups, Contractor will use the data that has been targeted to the data center to restore the Customer's environment.

2. *Recover Time Objective (RTO) – How fast the environment can be accessed and utilized after deeming a Disaster.*

	Priority	RTO	RPO
Disaster Recovery as a Service (DRaaS)	1	4 Hours	4 Hours
Disaster Recovery as a Service (DR on Demand)	2*	24 Hours	24 Hours
Disaster Recovery as a Service (DR on Demand)	3*	3 Days	5 Days
Recovery Assistance	4	N/A (No SLA – Best Effort)	N/A (No SLA – Best Effort)

**This is a target RTO/RPO. Actual may vary due to data restore time.*

With the setting pre-defined to declare a disaster the customer simply places a ticket by phone through the Customer Service Center or using the "Get Service Now™" Web Portal. Contractor will provision a virtual infrastructure using the pre-setup plan that was agreed upon during onboarding or in order of customer request.

Once the environment is restored and active within CloudSelect®, VPN access will be available for the Customer to access the applications and data to continue business as needed.

C. Responsibilities Of The Parties

1. Contractor Responsibilities:

- a. Cloud storage capacity is measured on RAW storage as noted in Appendix B.
- b. Contractor will configure and supply all materials in the Cloud environment. This includes server, storage, and network resources required to meet the needs of the contracted values in Appendix B.
- c. As contracted, Contractor will perform onboarding of Managed Disaster Recovery Hardware and Provisioning of Cloud Resources.

- d. Planning and configuration of Disaster Recovery plan in regard to the server start-up order and the networking required to declare a disaster.
- e. 24x7 NOC monitoring of CloudSelect® infrastructure.
- f. 24x7 NOC monitoring of Customer and/or Contractor-provided internet connected router or firewall, or Customer provided connections. Contractor assumes any Customer provided router or firewall will perform all routing, security or other services in a non-blocking manner at or beyond the minimum bandwidth speeds required.
- g. Patching and Preventative Maintenance of Managed Backup infrastructure. This includes vAppliance, CAN and CloudSelect® infrastructure.
- h. 24 x 7 Monitoring & Support Contractor's NOC will monitor and manage Customer's data center solution. Engineers respond 24x7 to replication errors and failures.
- i. Annual DR Tests. Contractor's Disaster Recovery on Demand includes the ability to perform an annual Disaster Recovery test. Contractor has included in the fee for annual test the ability to bring up two servers isolated from the Customer network with the ability to VPN into the temporary network to test the configuration and data integrity. This test can be expanded to the entire environment for additional fees.

2. Customer Responsibilities:

- a. LAN and WAN connectivity from the Customer location and equipment. This includes bandwidth required and defined in the Appendix B, for each service.
- b. Provide Contractor access to Customer devices.
- c. Site cabling, power, and access.
- d. Software and Licensing outside the scope of this Agreement.
- e. For non-managed backup options, it is the responsibility of the Customer to monitor the backup jobs and verify the data is being placed into the Cloud target. Disaster Recovery Declaration.
- f. Contractor's DRonDemand provides multiple solutions for service restoration and recovery. Solutions range from a web-based self-service portal for on-demand service restoration using the CloudSelect® infrastructure. Simply place a ticket to have the managed services team restore service for your server in the CloudSelect® infrastructure. The declaration fees have been outlined in Appendix B as well as the costs to keep the infrastructure running in the CloudSelect® environment. At the point of declaration for disaster recovery on demand all time spent provisioning and restoring the environment will be billed on a time a materials basis.

VII. Service Level Agreements (SLAs)

D. General SLAs

The following identifies the various levels of CloudSelect® SLAs. Note that any customization to the SLAs are noted in the next section “custom SLA terms” specific to this contract. If no such custom SLAs are included by default the following SLAs will be adhered to for any CloudSelect® delivered aaS offering.

Change & Incident Ticketing –	Data Retention	CloudSelect® APPaaS		* Customer Managed App BYoAPP	99.8 %
		CloudSelect® OS		* Customer Managed OS BYoOS	99.95 %
		Hypervisor VMWare	Hypervisor Hyper-V	Hypervisor KVM	99.99 %
		CloudSelect® Compute, Network/Fabric, Storage			99.995 %
		Facilities Includes Power, Humidity, HVAC			99.999 %

* Excluded from Service Level Targets

E. SLA Measurement Methodology

Sentinel CloudSelect® services are measured as set forth below:

- “Planned or Scheduled Maintenance” is defined as an outage from a planned and communicated event in which Sentinel will notify the customer via email no less than 5 business days prior to the event.
- “Event” is a material disruption or material unavailability of service not meeting committed SLAs. All events must be reported to Sentinel and an event report completed and signed by Sentinel’s CloudSelect® management team and brought to the attention of the executive board scheduled for weekly meetings and service delivery review.
- “Monthly Availability” is calculated by subtracting from 100% the percentage of minutes during the month in which the CloudSelect® service was unavailable due to an unplanned outage and due to factors within Sentinel’s control. This availability excludes downtime resulting directly or indirectly from any Sentinel CloudSelect® SLA exclusions.
- “Regional Unavailability” is defined as a disruption of service that is distributed over multiple sites for regional redundancy purposes.
- “Unavailable” or “Unavailability” is defined as when all CloudSelect® central services are unavailable from any form of connectivity included within the final solution design and access to the share or private virtual data center instance and not resulting from any SLA exclusions. This excludes scheduled agreed to and announced maintenance windows.

- "Credit" is defined as the calculated monthly amount to be put on credit for additional Sentinel services in the future as a result of a missed SLA within this Cloud Agreement. Credits are calculated on the actual monthly amount that would have otherwise been invoiced specific only to the service disrupted within the defined event.
- "Manual Tickets" is defined as a ticket placed by calling into Sentinel Customer Service Center or using Sentinel's Get Service Now™ Web Portal.
 - Minor Outage – Incident which is not SLA impacting, response times listed below based on the priority set when opening tickets.

Ticket Severity	Notification Time	Response Time	Mean Time to Repair(Based on Monthly Tickets)
Severity 1	15 Minutes	1 Hour	8 Hours
Severity 2	15 Minutes	2 Hours	Next Business Day
Severity 3	48 Hours	48 Hours	Two Business Days

- Change Request – Request to add additional/remove items example (user, job, server creation).

Change Severity	Notification Time	Implementation Time
Emergency	30 Minutes	2 Hours
Urgent	1 Hour	8 Hours
Planned	48 Hours	Will be implemented within 2 business days if needed. Otherwise, the change will be scheduled during the weekly maintenance window or an alternate, agreed upon maintenance window approved by the Customer.

F. SLA Financial Commitment

Sentinel CloudSelect® services not meeting measured SLAs require a written request from the customer for financial remediation which will include an incident report and review by the Sentinel executive board. Once agreed to mutually by both parties the following credits will be applied on account for additional Sentinel services (excluding equipment, licensing or other purchase). This written request must come within 30 days of the end of month reporting post SLA miss:

Any event confirmed via the Sentinel NOC which is the system of record will be paid as follows:

Below Agreed SLA	Credit Allowance for Outage Longer than Target
0%-2.5%	5% of monthly fee of specific service for affected devices
<2.5%-5%	10% of monthly fee of specific service for affected devices
<5% to 10%	20% of monthly fee of specific service for affected devices
>10%	30% of monthly fee of specific service for affected devices

G. General SLA Exclusions

This Service Level Agreement applies to unplanned outages of the CloudSelect® Storage Network in standard operating conditions. Exclusions include, but are not limited to, the following:

- Planned service outages.
- Any availability or outage impact related to Customer-side security breaches or compromised service credentials.

- Errors associated with improper use of the system (credentials, call sequence, method formats, etc.).
- Any external factor affecting Customer from making use of Sentinel services.
- Any physical or logical disruption occurring in the Customer environment.
- All SLA exclusions identified in connection with individual service offerings noted elsewhere within this Agreement.

VIII. Specific CloudSelect® Services Contracted

The following offerings are included under the CloudSelect® SLAs specific to this Agreement:

- CloudSelect® Infrastructure as a Service (IaaS)
- CloudSelect® Backup as a Service (BaaS)
- CloudSelect® Disaster Recovery onDemand (DRonDemand)

IX. Standard Terms & Conditions

Please review and refer to the Termination, Limitation of Liabilities, Indemnifications, Warranties, Confidentiality, Export Control, Force Majeure, Governing Law & Jurisdiction, Termination Fees, and Internet Acceptable Use Policy Provisions located at <http://www.sentinel.com/Products/CloudStandardTerms>, which are incorporated by reference herein as fully set forth.

In addition to the core competencies, certifications and extensive training regimens required of its engineers and technicians, Sentinel Technologies has also achieved SSAE 16 Service Organization Control ("SOC") 2 Type II attestation. Assessed by independent auditors from the nationally renowned auditing firm Plante Moran, PLLC, this "seal of approval" demonstrates Sentinel's commitment to the highest standards of operational excellence for its customers. The SSAE 16 attestation process is a standard that recently was created by the American Institute of Certified Public Accountants ("AICPA") to replace the SAS 70 certification process and expand into the realm of reporting on the effectiveness of a service organization's controls relating to operations and compliance. The independent attestation of Sentinel's operations, including but not limited to its CloudSelect® platform, verifies the strength of our controls in the three Trust Principle areas of Security, Availability and Confidentiality. The SSAE 16 Report is available for inspection upon Customer request.



CUSTOMER:
 Village of Hanover Park
 Signature: *[Signature]*
 Printed Name: JULIANA A. MAUER
 Title: Village Manager
 Date: 11/28/16

CONTRACTOR:
 Sentinel Technologies, Inc.
 Signature: *[Signature]*
 Printed Name: Robert Lenartowicz
 Title: COO
 Date: 11/3/2016 | 10:58 AM PDT

APPENDIX B (CS002-DS)

Customer Name: Village of Hanover Park

Street Address: 2121 Lake Street

City, State, Zip: Hanover Park, IL 60133

The Master Services Agreement (MSA) entered by and between Sentinel Technologies, Inc., ("Sentinel" or "Contractor") with principal offices at 2550 Warrenville Road, Downers Grove, Illinois 60515, and Village of Hanover Park ("Customer") with principal offices at 2121 Lake Street, Hanover Park, IL 60133 is hereby appended to include the following:

X. PROJECT SCHEDULE

Customer agrees to pay Contractor for services in accordance with the following schedule and the Initial Contract Term of 12 months:

The Initial Contract term shall commence on the date the Cloud Service is fully functional for the Customer's use. For the purposes of this Agreement, the respective Cloud offering(s) selected by Customer herein will be considered fully functional when the following occur(s):

- IaaS Compute - Server is provisioned, OS installed, and powered on.
- BaaS - First successfully completed backup job to Sentinel Cloud.
- DRoD - Network pre-provisioned and successful backup job to Sentinel Cloud.

CloudSelect® - BaaS & DRoD		
Assumes 12 Month Contract Commitment		
	MRC TOT	NRC TOT
CloudSelect® - Backup as a Service with DR on Demand		
VPN to CHI Data Center - Chicago - VPN Service using existing ISP (50Mbit circuit)	\$ 382.80	\$ 500.00
Backup as a Service - Fully managed backup of all servers and all data	\$ 716.82	\$ 750.00
DR on Demand - Recovery for all servers and data - includes 24-hour recovery SLA	\$ 713.00	\$ 500.00
<i>All PVDCs Include within Base Price Tenant Space Routing Including:</i> <ul style="list-style-type: none"> • Routing: RIP, BGP, EIGRP, OSPF, IS-IS, GRE, IPv6, VRF-Lite • Addressing: DHCP, DNS, NAT, 802.1Q VLAN, EVC • Basic Security: ACL, AAA, RADIUS, TACACS+ • High Availability: HSRP, VRRP, GLBP • Management: SSH, Telnet, SNMP, Syslog, NetFlow, EEM 		
Per-Use Service Fees - These fees are only charged upon formal declaration of a disaster or DR test - These fees are not included in the TOTAL PRICE below		
DR Declaration - Disaster is declared and failover begins; T&M rates may also apply	\$ -	\$ 1,671.68
DR Weekly Fee - Charged for each week in DR mode	\$ 891.25	\$ -
DR Test Request - Periodic on request	\$ -	\$ 1,000.00
	MRC	NRC
TOTAL PRICE	\$ 1,812.62	\$ 1,750.00
ONE TIME DISCOUNT	\$ (294.00)	\$ -
DISCOUNTED TOTAL PRICE	\$ 1,518.62	\$ 1,750.00

Definitions & Assumptions:

MRC - monthly recurring charge

NRC - non-recurring one time charge

All contracts assume 36 month commitment unless otherwise noted

All pricing valid for 30 days

IaaS

CloudSelect® IaaS PVDC Chicago	348.00	Monthly
\$	500.00	NRC

CloudSelect® DC & Connectivity	Description	Unit	Qty	COMMENTS
Public	Internet Metered			public IP Metered beyond min use @\$0.06/gb
IPv4 Public IP Addressing - beyond PVDC inclusions	Additional IP Addresses (one per VM)	IP/VM		
Private Virtual Data Center (PVDC)	Internet Allocation	Mpbs	50	(unlimited usage)
	VPN Tunnels (standard is 1)		1	
	Sentinel Provided VPN Router	VPN router		Assumes customer provided IPSEC device

REMOVE FROM ROUTER REDUNDANT BANDWIDTH	Description	Unit	Qty	COMMENTS
Use this to remove non active link from CSR sizing and cost	Cloud router inactive traffic capacity for calculation	- Mbps		

CloudSelect® PVDC	Silver	50	Mbps total bandwidth Expected
-------------------	--------	----	-------------------------------

BaaS

CloudSelect® EMC BaaS - Summary Totals		
EMC CloudSelect® BaaS MRC (monthly recurring costs)	\$	651.66 Fully Managed
CloudSelect® Setup Fees NRC (non-recurring one time costs)	\$	750.00
Appliance Purchase NRC (non-recurring one time costs)	\$	- Appliances include 36 months maintenance & support

CloudSelect® EMC BaaS Solution Overview - Customer Environment		
Premise Target	Premise Appliances Data Domain	Not Applicable
	Premise Appliances Avamar	Not Applicable
	Premise Appliances VEEAM	Not Applicable
What is being backed up?	How many VMware VMs will be backed up by this solution?	0
	How many Hyper-V VMs will be backed up by this solution?	8
	How many other VMs will be backed up by this solution? (ie - KVM, Oracle, other)	0 If applicable please note
	How many physical servers will be protected by this solution	0
	How many desktops/laptops will be backed up by this solution	0
	Does this solution require desktop or laptop backup services and what will be proposed?	Not Included
Cloud Target(s)	How will you be using Data Domain backup/archive target in CloudSelect®?	Yes for VEEAM CloudConnect
	If yes to above, which CloudSelect® region?	Chicago
Licensing	Who will provide the backup software for this solution?	Sentinel CloudSelect
	Who will monitor and manage the backup solution?	CloudSelect Managed
	What software will be used for this backup solution, or select other if not listed?	VEEAM
Misc Items	Will this solution be combined with DRaaS or DRonDemand?	Yes DRoD
	Does this design require any virtual machine in the cloud for management, sync of backup workstation/DB or other?	Yes IaaS Allocated
	Do you have a Mitrend completed of the customer's current backup solution?	No
	How did you complete the backup system sizer for this solution?	Customer Input
Special Notes	Any Special Requirements or Notes?	No

Capacity Information	Replication Out Information - Worst Day	Read Information
Total Backup Environment Size (Today): 1.10 TB	Day: Monday	Schedule
Total Backup Environment Size (1 Year): 1.14 TB	Capacity with Reduction: 0.03 TB (1.11 TB saved)	Start Time (hrs.):
Total Incoming Replication: 0.00 TB	Capacity without Reduction: 1.14 TB	Window (in hours):
Total Logical Backup Retained: 24.63 TB	Speed: 560.00 MB/s	Speed per Day per System:
Physical Capacity Required: 1.29 TB	Time Required (hours): 12.00 hrs.	Capacity per Day per System:
Physical Capacity Recommended: 1.62 TB	Replication Out Window: 24.00 hrs.	Time Required (hours):
Physical Capacity Configured: 4.03 TB	Bandwidth with Reduction: 4.22 MB/s (147.24 MB/s saved)	
Maximum Physical Capacity: 4.60 TB (32.97% used)	Bandwidth without Reduction: 151.46 MB/s	
Maximum Logical Capacity: 76.77 TB	WARNING [Replication]: Max line speed is 120 MB/s (960 MB/s) per system; calculations will use the max.	

Configurations	Data Sets	Enable None	+ Add	- Delete	Copy	View	Edit	Link	Import Batch	Export Batch	More Actions...																																										
Capacity Replication Read Period of Interest: 1 Year Input Protocol: DD Boost-DSP (Win) Additional Discretionary Storage: 0 TB Percentage Overhead Buffer: 0 % <input type="checkbox"/> Overlapping Backups Enabled?	<table border="1"> <thead> <tr> <th>Enable</th> <th>Rep. Out</th> <th>Rep. In</th> <th>Read</th> <th>Name</th> <th>Type</th> <th>Protocol</th> <th>Max MB/s Req.</th> <th>Growth %</th> <th>Raw Full TB</th> <th>Raw Incr. TB</th> <th>Total Retained TB</th> <th>Data Changed TB</th> <th>Reduction</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>DB</td> <td>VMDK:Content is..</td> <td>DD Boost-DSP (Win)</td> <td>11.82</td> <td>3.00%</td> <td>0.59</td> <td>0.00</td> <td>16.99</td> <td>0.76</td> <td>22.40:1 (85.64%)</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Files</td> <td>VMDK:Content is..</td> <td>DD Boost-DSP (Win)</td> <td>14.58</td> <td>5.00%</td> <td>0.65</td> <td>0.00</td> <td>7.65</td> <td>0.64</td> <td>14.07:1 (82.83%)</td> </tr> </tbody> </table>	Enable	Rep. Out	Rep. In	Read	Name	Type	Protocol	Max MB/s Req.	Growth %	Raw Full TB	Raw Incr. TB	Total Retained TB	Data Changed TB	Reduction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DB	VMDK:Content is..	DD Boost-DSP (Win)	11.82	3.00%	0.59	0.00	16.99	0.76	22.40:1 (85.64%)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Files	VMDK:Content is..	DD Boost-DSP (Win)	14.58	5.00%	0.65	0.00	7.65	0.64	14.07:1 (82.83%)										
Enable	Rep. Out	Rep. In	Read	Name	Type	Protocol	Max MB/s Req.	Growth %	Raw Full TB	Raw Incr. TB	Total Retained TB	Data Changed TB	Reduction																																								
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DB	VMDK:Content is..	DD Boost-DSP (Win)	11.82	3.00%	0.59	0.00	16.99	0.76	22.40:1 (85.64%)																																								
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Files	VMDK:Content is..	DD Boost-DSP (Win)	14.58	5.00%	0.65	0.00	7.65	0.64	14.07:1 (82.83%)																																								

EMC Cloud Target (Storage Only No Licensing) Pricing		QTY
Data Domain CloudSelect® Target (see backup system sizer)	Est #Gb	1290
Data Domain & Avamar CloudSelect® Target (see backup system sizer) - this adds in the cloud allocation for Avamar metadata node(s)	Est #Gb	
IaaS Compute - Example any VM for backup, DR, advisor or other needs - Note Sentinel's licensing provided includes allocation for DPA and VM allocation		Please use IaaS Compute to Allocate

*if region propose is both the estimated TB included is across both locations and not proposed each.

CloudSelect® BaaS VEEAM CloudConnect Backup & Replication Enterprise	QTY	Note
VEEAM CloudConnect "bring your own" Licensing	# VMs	
VEEAM CloudConnect with VEEAM Licensing for VMware	# VMs	
VEEAM CloudConnect with VEEAM Licensing for Hyper-V	# VMs	8

CloudSelect® BaaS Managed Backup Services	QTY	Sentinel Cloud Managed
Desktop Avamar - Managed backup services desktop to cloud	# Managed Desktops	
Server - Managed backup services premise to cloud or cloud to cloud	# Svrs Mgd	8
		Fully Managed

DRoD

Sentinel CloudSelect® DR Sub-Totals		
	Monthly	One Time
Sentinel CloudSelect® DR	648.18	500.00
Sentinel CloudSelect® DR Weekly Fee	810.23	Weekly
Annual DR Test		1,000.00
Disaster Recovery Declaration:	One Time Fee plus T&M rates	1,671.68

Customer Environment	Answers	Comments
Which CloudSelect® DR Solution is being proposed?	DRaaS	
	DR on Demand	X
What backup solution is/will be implemented?	baas	Sentinel BaaS is required
How long will the contract be?	12	

	Qty	Comments
DR on Demand	< 24 hours RTO	Virtual Servers
	< 24 hours RPO	
	Quantity (VM's)	8
	Storage (GB)	1024
	DRAM (GB)	168

DR Infrastructure Components				
Misc Items	Domain Controller for AD Replication		1	1 vCPU, 4GB RAM, 50GB HD
	VEEAM Proxy Server		1	1 vCPU, 4GB RAM, 50GB HD
	Disaster Recovery Mode - VPN users		10	
	Annual DR Test		Y	
	DR Weekly Fee	Per Week	Y	
	Disaster Recovery Declaration	Per Client	Y	* T&M rates apply

Usage Charges

All non-recurring charges set forth in this Appendix B, if any, shall be payable on or before the date of the initial Customer kick-off meeting between the Parties. All recurring charges for each CloudSelect® product shall be billed on a monthly basis, based on average daily usage and shall be due and payable net thirty from receipt of invoice. A minimum monthly recurring charge for each CloudSelect® product will be based on the amount listed in the Contract.

Snapshot Backups

CloudSelect® Snapshot storage is based on the amount of space your data consumes, taken every (8) hours and retained for (3) days. A Snapshot is a copy of the Customer's volume at a specific moment in time. Restoration services are performed on a Time and Materials basis. Snapshots are not intended to be a complete backup solution. For full application awareness and retention beyond (3) days, please contact a Sentinel Account Representative for additional details.

Terms: Net 30 days. **This quote is valid for 30 days from 11 / 03 / 2016.**

CUSTOMER:

Village of Hanover Park

Signature: 

Printed Name: JULIANA MALLER

Title: Village Manager

Date: 11/28/16

P.O. #: _____

CONTRACTOR:

Sentinel Technologies, Inc.

Signature: 

Printed Name: Robert Lenartowicz

Title: COO

Date: 11/3/2016 | 10:58 AM PDT



Agreement/Contract Routing Form

Contract Name/Title: Jed Gerstein, CIO

Check if contract had: Resolution Ordinance

Date of Board Approval: 11/17/2016 Agenda Item #: 6.A.9

Contract Amount Board Approved (if applicable): \$19,973.44

Department (check one):

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Administration | <input type="checkbox"/> Clerk's Office | <input type="checkbox"/> Community Dev. | <input type="checkbox"/> Engineering |
| <input type="checkbox"/> Finance | <input type="checkbox"/> Fire Department | <input type="checkbox"/> Human Resources | <input checked="" type="checkbox"/> Information Tech |
| <input type="checkbox"/> Police Dept. | <input type="checkbox"/> Public Works | | |

SIGNATORIES

All contracts should be routed to Mayor/Manager for signature first, and then the Village Clerk.

Authorized Signature (check all that apply, as listed in agenda item motion):

- Village Manager Mayor Village Clerk Other _____

Additional Instructions/Notes:

ORIGINAL COPIES

Please note that the Village Clerk's office **MUST** receive all **original** agreements and contracts for their records.

- Village Clerk to keep original for records and return duplicate copies to department
 Village Clerk to return originals to department and original provided to Clerk at a later date.

RECORDING OF DOCUMENT

Please note that the Village Clerk will record any documents if stated in the Ordinance or Resolution.

This document needs to be recorded: Yes No

Person to record: _____ Recording Date: _____

Mayor/Manager's Office

Date Received: 11-15-16
Date forwarded to Clerk: 11/30/2016

Village Clerk

Date Received: 11/30/2016
Date forwarded to Dept.: kept Original

