

Savvis Hosting Carrier & Meet-Me-Room Services Guide

HOS-20130621-External-SSG-GL-Carrier Node Room

Table of Contents

Service Guide Description	3
Savvis Hosting Carrier Service (SHCS)	3
Colocation Installation Standards	
Power	5
Power Standards	6
Converting from AC to DC Power	6
Data Center Entrance Facilities	7
Types of Entrance Facilities supported in Savvis Locations	7
Cross-Connects	8
Types of Customer Access Extension (cross connects)	9
Telco (Hosting Carrier) Cross Connects	9
Intra-Data Center Cross-Connects	9
Inter-Data Center Cross-Connects	9
Included with Each Cross-Connect	10
Technical Information Required per Cross Connect	11
Definitions	13
Service Delivery Management	13
Additional Services	13
Gold Support Services & Structured Cabling Services	
Gold Support Services	13
Structured Cabling Services	16

Service Guide Description

This Savvis Service Guide ("SSG") describes Savvis' Hosting Carrier Service ("SHCS"), Savvis Meet-Me-Room Services ("SMMRS", together with SHCS collectively referred to hereinafter as the "Services") and Additional Services. The Savvis Hosting Carrier Service and Meet-Me-Room Service are offered on an individual-case-basis (ICB); pre-approval by the Savvis Colocation Product Management team is required in order to purchase the Services. Customer must have either an executed Savvis Master Services Agreement (MSA) or a Savvis affiliate service agreement (e.g., CenturyLink Wholesale Service Agreement (WSA) in place prior to requesting review and approval. The specific details of the Hosting Carrier Service or Meet-Me-Room Service ordered will be on the Service Order.

Savvis Hosting Carrier Service (SHCS)

Savvis Hosting Carrier Service allows a Customer to install its fiber network interconnection into a Savvis data center location via an Entrance Facility and to physically establish a point-of-presence within a Savvis data center colocation facility. SHCS enables network interconnectivity of the Customer's network services, via cross-connects, to other Savvis- colocated customers within the Savvis data center facility.

SHCS is not offered in all Savvis locations. Customer's equipment will be physically located within a defined area of the Savvis data center facility called a Carrier Node Room. Only Customer may place their equipment within this area of the facility, which is segregated from other Savvis colocated customers within the Savvis data center.

SHCS includes space, power and Entrance Facilities. Savvis does not guarantee that network facilities are available to support SHCS at a given location. All requests for SHCS are subject to Savvis' approval, at Savvis' sole discretion.

Savvis Meet-Me-Room Service (SMMRS)

The Savvis Meet-Me-Room Service allows Customer to install its fiber network interconnection into the Savvis meet-me-room ("Meet-Me-Room" or "MMR") within a Savvis colocation data center ("Data Center") via an Entrance Facility and to establish a physical point-of-presence within the Savvis operated Meet Me Room and place their equipment. Once in the MMR, Customer may interconnect to other carrier /telecommunications companies within the MMR or to the building tenants who reside within other areas (suites and floors) of the Data Center.

Customer shall not interconnect directly with building tenants; as such tenants must establish a point-of-presence within the MMR and work with Savvis to place their own colocation equipment. Customer shall interconnect with any tenant or occupant of the Data Center through a Savvis requested cross-connect. Savvis performs all cross-connects within the MMR.

There is no guarantee that facilities are available to support SMMRS at a given location and it is not a requirement of Savvis to build or offer SMMRS at any given location. All requests are subject to availability and technical feasibility as determined by Savvis in its sole discretion.

Sites that are eligible to support SMMRS are listed below:

Location	SMMRS available
HK2	✓

Colocation

Data Centers	Power Allocation	Secure Cabinet Dimensions (Footprint)	Inclusions	Exclusions
North America				
AB3 AT1 BO1 BO2 BO3 BR1 CH2 CH3 CH4 CL1 DC2 DC3 DC4 DC5 DC6 DC7 DN1 DN2 DN3 DL1 DL2 LA1 MP1 NJ1 NJ2 NJ2X NJ3 NJ4 NJ5 MR1 OC2 SC4 SC5 SC8 SC9 SE2 SE3 SE4 SL1 SN1 SN2 TP1 TR1 VC1	2 kW	Single Secure Cabinet with front and rear locking doors 600x800mm Approximately 23.5" x 31.5"	 Power Allocation One (1) 600 x 800 mm cabinet Two (2) cabinet keys Four (4) shelves Two (2) vertical wiring channel locks Installation and bolt-down of cabinet Seismic bracing (where required) Project management during installation phase 	 Power distribution is purchased for an additional fee Not an available option in a vault Customer is responsible for their own equipment installation and wiring Customer is responsible for setting up and monitoring alarms or events generated by Internet Control Messaging Protocol ("ICMP") Ping Monitoring Additional shelves and vertical wiring channels must be purchased separately Gold Support may be purchased for an additional fee Power strips may be purchased for an additional fee Structured Cabling may be purchased for an additional fee
LO1				
LO3				

LO4 L05 LO6		
Asia		
HK2 TY6 SG2 SG8		

Secure Cabinets that provide a high strength steel frame structure and are available to Customer, subject to availability, within the Savvis Meet-Me-Room or Carrier Node Room which are common areas that are shared by other Savvis customers in a Data Center. The Secure Cabinet provides a front and rear locking door and is designed to house computer and networking equipment located in a common space area within the Data Center.

Installation Standards

- Customer must receive prior written approval from Savvis with regard to hot and cold aisle layout configurations and adhere to those requirements prior to equipment installation.
- Customer must obtain prior written approval for their cabinet or rack layout from Savvis' Facilities Operations prior to installation and adhere to those requirements.
- Customer must obtain prior written approval for special venting configurations which will incur additional set-up costs.
- Customer must close any void in rack space with a blanking panel. Periodic compliance audits may be conducted by Savvis. Customer will be notified of blanking panel management violations and is close any rack or cabinet void with a blanking panel within three (3) business days of notification.
- Customer personnel shall not modify in any way a Savvis owned cabinet.
- Customer provided cabinets or racks must be:
 - Reviewed on a case-by-case basis in advance by Savvis, subject to availability and technical feasibility.
 - Installed, seismically braced, if necessary, and bolted down and grounded solely by Savvis for an additional fee to be paid by Customer.
 - Seismically compliant for the Data Center in which they are to be installed.
 - In geographic areas that are seismically active, installation of Savvis owned cabinets or racks will include additional seismic bolt-downs to meet all building and safety codes.
- Customer personnel must be escorted to the Savvis Meet-Me-Room or Carrier Node Room.
 Customer shall be responsible for the payment of Gold Support hours charged to Customer for the time it takes to monitor Customer's activities in the Savvis Meet-Me-Room or Carrier Node Room.

Customer shall ensure that all Customer Equipment complies throughout the term of the Agreement, and for as long as such equipment is located in any Savvis facility, including the Data Center, with all applicable manufacturer specifications, regulations and industry standards, including those relating to proper installation, power consumption and ventilation/heat dissipation. Specifically, all Customer Equipment must be UL-listed and comply with the any national or jurisdictional electrical codes. Savvis may require that Customer provide a current, written list of all Customer's equipment located in the Savvis Meet-Me -Room or Carrier Node Room and/or affix an asset tag on any Customer equipment placed within the Customer's colocation.

Power

Savvis Data Centers are designed to provide uninterruptible power in-line with UPS and diesel generator backup in the event of a utility power failure. To conform to the National Electrical Code (NEC) for maximum power use, each power circuit is limited to 80% of the circuit breaker rating.

Customer may order a variety of standard primary power circuits. Power circuit types are country specific. Customer may also order primary only or primary/redundant power circuit pairs. In the case of a redundant power configuration, the primary circuit will be loaded up to the designated capacity of the circuit, with no load on the redundant circuit until such time that the primary circuit may fail, or distribute the load between the two circuits (usually a 50/50 mix) so long as the total potential draw between the two circuits is below the capacity of primary circuit. All redundant pair circuits require single-circuit load capacities compliance across the pair.

Customer's total power associated with the Services shall not exceed the purchased allocated kilowatts and shall not exceed the total watts per square foot as set forth in the Savvis Customer Information and Handbook and Information Guide, or other applicable Data Center information guide ("Customer Guide"). Savvis may, in its sole discretion, conduct periodic audits to determine Customer's compliance with the allocable power usage.

For safety considerations, the Data Center only supports NEMA (or equivalent) locking receptacles power strips. All power circuits will terminate in a female locking receptacle unless they are to be hard wired into the hardware. Power for rack or cabinet mounted equipment must be dedicated to that rack or cabinet. Internally connecting power between adjacent racks or cabinets is not allowed.

Savvis provided power strips are the property of Savvis. In the event a power strip fails, Savvis will replace with equal or equivalent replacement power strip at no expense to the Customer. All Customer provided power strips must be the metered display type.

Power Standards

- Savvis, in its sole discretion, may audit Customer circuits upon installation and randomly verifies
 power and circuit usage. If more power is needed beyond the Customer's current configuration,
 Customer shall purchase additional power as required by Savvis. Purchasing additional space may
 also be required.
- The daisy chaining, or other similar combination, of power strips is strictly prohibited per fire code requirements. When an additional outlet is needed, Customer must purchase additional power circuits and power strips.
- Customer shall not lift floor tiles or access to the plenum within the Data Center. Such action is strictly prohibited and a breach of this Agreement.
- Customer acknowledges and agrees that any non-standard power configuration not listed in this SSG requires a custom part number and will be treated as a product deviation.
- A power setup fee is required for every power circuit.

Converting from AC to DC Power

Savvis Data Centers offer protected AC power. Within the United States, Savvis offers both 120V and 220V primary and redundant feeds with twist lock receptacles and in Europe and Asia offers 230V primary and redundant feeds with IEC receptacles. If the equipment of a Customer operates on -48 DC power, such Customer shall need to place their own cabinet-mounted rectifier and convert the offered AC power to a DC configuration. Customer shall include all such power conversion during the request process which shall be submitted to Savvis Data Center Operations for review. Savvis Data Center Operations, in its sole discretion, must approve any and all power conversion in advance of installation. Customer shall not place, or allow to be placed, wet cell batteries within its colocation space.

Site Access

Access to Savvis Node Room or Meet Me Room is limited to Customer and its Authorized Representatives. Customer and its Authorized Representatives shall:

(a) comply with all applicable rules and procedures for the relevant Savvis Premises, including without limitation, the Savvis Customer Information Guide and Handbook;

(b) not to physically access any of Savvis' Managed/Utility Hosting area within the Savvis Premises for any reason, unless approved in writing by Savvis and accompanied by a Savvis escort at all times.

Data Center Entrance Facilities

An Entrance Facility allows the Customer to build to a Data Center from an identified man-hole or hand-hole arrangement outside the Data Center ("Entrance Facility"). Customer is required to either install its fiber through an assigned inner-duct or via a fiber splice to the Customer's meet cable onto a Savvis fiber access cable. Savvis in its sole discretion determines the type of Entrance Facility that can be offered and the defined demarcation points.

An Express Entrance allows Customer to pull its fiber directly through an Entrance Facility via a dedicated inner-duct, assigned to Customer by Savvis, directly into the Customer's designated colocation space within the Carrier Node Room. Subject to availability and technical feasibility, as determined by Savvis in its sole discretion, a maximum of one 1 ¼" inner-duct may be granted per Entrance Facility on the initial install request. If determined during feasibility discussions that the entrance inner-duct have been exhausted, Savvis, in its sole discretion, may offer to Customer a Shared Entrance Facility. Only an Express Entrance facility is available for Customer's building into a Savvis Meet-Me-Room arrangement.

A Shared Entrance Facility allows Customer to install its fiber to either a Savvis/CenturyLink handhole (HH), man-hole (MH) or splice vault arrangement. Savvis will splice the Customer's meet-me fiber to a Savvis/CenturyLink fiber access cable. This fiber access cable will then be terminated onto a Savvis controlled fiber distribution panel (FDP) within the Savvis facility and Savvis Data Center Operations will run fiber jumpers to the Customer's colocation area in the Carrier Node Room. The Customer is fully responsible for terminating the fiber jumpers to Customer colocation equipment.

Types of Entrance Facilities supported in Savvis Locations

Site ID	Express Entrance	Shared Entrance	Other
AB3		х	
AT1	Х		
BO1	Х		
BO2	Х		
BO3	Х		
CH2	n/a	n/a	TELEX meet- me-room
CH3	Х		
CH4			TELEX meet- me-room
CL1		х	
DC2	Х		
DC3	Х		

Site ID	Express Entrance	Shared Entrance	*Other
SC5	Х		
SC8	Х		
SC9	Х		
SN1	n/a	n/a	SN1 Fiber tie
SN2	Х		
SE2	х		
SE3	х		
SE4	n/a	х	
TP1	Х	х	
SG2			building meet-me- room
SG8	Х		

DC4	х			TY6	х		
DC4	^			110	^		
DC5		Х		LO1	Х		
DC6	n/a	n/a	DC5 Fiber tie	LO3			
DC7	Х			LO4	Х		
DL1	Х			LOND (LO6)	х		
DL2	Х			TR1	X		
DN1	Х			1101	^		
DN2			vault room through DN2	MR1	х		
DN3	х	х		V04			building
LA1	Х			VC1	n/a	n/a	meet-me- room
BR1	Х	х					
NJ1	Х			BLR2			Airtel meet-me-
NJ2	Х				n/a	n/a	room
NJ2X	х				X - for		
NJ3					both Savvis		
NJ4	х		NJ3 Fiber tie	HK2	Carrier Node		
NJ5	n/a	n/a	9th floor meet-me- room		Room & Meet-Me- Room		
OC2	Х						
SC4	х						

^{*}Other, Not all Data Centers can support and offer SHCS. At Data Centers where SHCS is not available, Customer must meet in alternate 3rd party meet-me-room locations to support interconnection arrangements to alternate telecommunication providers.

Cross-Connects

Savvis Hosting Carrier (SHCS)-cross connects

A Savvis Customer with Savvis Collocation Services may request a connection by submitting a cross-connect order to Savvis. CAT5 and CAT6 connection requests are subject to review by Savvis Data Center Operations and are offered subject to distance limitations and are subject to technical feasibility. No electrical signal repeaters are supported in Savvis facilities.

Cross-connects, or Customer Access Extension (CAE), are physical media or connections, not private line circuits, that Savvis Data Center customers use for a variety of purposes, including, directly connecting to other customers within the Savvis Data Center, connecting to the Savvis Data Center network, or connecting to Customers providing WAN services. The Customer can choose the speed

and media type based on their needs. Cross-connects are established with their choice of five media types:

- 1. Coax
- POTs(CAT3)
- 3. T1/Ethernet (CAT5E)
- 4. Single-Mode Fiber
- 5. Multi-Mode Fiber

CAT5 and CAT6 connection requests are subject to review by Savvis Data Center Operations and are offered subject to distance limitations and are subject to technical feasibility. No electrical signal repeaters are supported in Savvis facilities.

Savvis Data Center Operations provisions and controls all cross-connects, initiated by a cross-connect order. Telecommunication companies and building tenant customers are strictly prohibited from running any cross-connections within the MMR.

Types of Customer Access Extension (cross connects)

Telco (Hosting Carrier) Cross Connects

Telco cross-connects are used to extend a Customer's services from the Carrier Node Room to the Savvis customer's colocation area. Telco cross connects are split into two options:

- Telco without Private Entrance
 - Cross connect from a Customer to a Savvis customer's colocation area where the Customer's entrance facilities are installed by the Customer and they own and provide CFA/LOA for circuits on the Entrance Facilities.
- Telco with Private Entrance
 - Cross connect from a Customer to a Savvis customer's colocation area where the Customer's entrance facilities are installed by the Customer. However, certain circuit types are leased by Savvis and Letter of Authority/ Carrier Facility Assignment (LOA/CFA) for circuits on the Entrance Facilities are assigned by Savvis. An entrance sur-charge (bundled into the cross-connect charge) is applied to private entrance for Savvis to provide CFA/LOA.

Intra-Data Center Cross-Connects

Intra-Data Center cross-connects are used to extend cross-connects between the Customer's Data Center environment or between the Customer and another customer within a Savvis Data Center.

Inter-Data Center Cross-Connects

Inter-Data Center cross-connects are available at select Savvis Data Centers as either a campus environment, or inside a carrier hotel facility. An inter-Data Center Cross-Connect is either a cross-connect that extends between Savvis Data Centers within a campus that have dark fiber interconnectivity, or an interconnection from a Savvis Data Center suite to a building or third-party meet -me-room within the same building allowing Savvis customers to connect to other customers within the same building. This cross connect type can be used to connect Customer's colocation environments together, or as a method of connecting to Customers in another data center or in a building meet me room.

For Savvis Data Centers within a campus, the inter-Data Center cross-connect includes the fiber between Savvis Data Center and the extension in each Savvis Data Center to the respective termination point.

Savvis provides connectivity to a panel in the Building Meet Me Room. The Meet Me Room operator provides the final connection from the panel to the provider panel.

For an additional fee, in addition to Savvis' standard inter-Data Center cross-connect fees, Savvis can order the final connection within the building or third-party meet me room to another customer's demarcation point.

Please refer to the table below for inter-Data Center cross connect availability.

Data Center	Madia Tura
Data Center	Media Type Available
	Available
BO1/BO2	SM/MM Fiber
CH2/CH4	SM Fiber
DC2/DC3	SM/MM Fiber
DC2/DC4	SM Fiber
DC3/DC4	SM Fiber
DL1/DL2	SM Fiber
LO3/LO4	SM Fiber
LO1/LO5	SM Fiber
NJ2/NJ2X	SM Fiber
NJ3/NJ4	SM Fiber
SC4/SC5	SM/MM Fiber
SC8/SC9	SM/MM Fiber

Included with Each Cross-Connect

Cross Connect Type	Physical Cable	Telco CFA/LOA	Data Center Network Port & VLAN	3 rd Party Cross Connect
Telco without Private Entrance	✓			
Telco with Private Entrance	✓	✓		
Intra-Datacenter	✓			
Inter-Datacenter	✓			√ *
Financial Access Extension	✓	✓		

^{*}Available at select facilities. See Inter-datacenter cross connect matrix for location(s)

Technical Information Required per Cross Connect

When requesting a cross-connect to a chosen carrier Data Center customer, or to the Savvis Data Center Network, the ordering entity shall provide all necessary information based on the matrix below.

Detail	Telco cross connect to Telco	Intra/Inter datacenter cross connect (non-Telco)
customer A-side Cage/Cabinet/Demarcation point	✓	√
customer Z-side Cage/Cabinet/Demarcation point		~
Customer - Carrier / Telecommunication provider Cage/Cabinet/Demarcation point	✓	
Media Type	✓	✓
Connector Type	✓	✓
CFA/LOA	✓	
Circuit ID	✓	
FOC Date	✓	✓

Savvis Meet-Me-Room- Cross-connects

Customer may request a connection by submitting a cross-connect order to Savvis. Electrical based, low bandwidth connection requests are subject to review, and prior approval, by Savvis Data Center Operations and are offered subject to distance limitations and are subject to technical feasibility. No electrical signal repeaters are supported in MMR facilities.

Cross-connects, or Customer Access Extension, are physical media connections, not private line circuits. The Customer can choose the speed and media type based on their needs. Cross-connects are established with their choice of five media types:

- 1. Coax
- 2. POTs (CAT3)
- 3. T1/Ethernet (CAT5E)
- 4. OS1/OS2 Single-Mode Fiber

5. OM3/OM4 Multi-Mode Fiber

• Electrical based, low bandwidth connection requests are subject to review, and approval, by Savvis Data Center Operations and are offered subject to distance limitations and are subject to technical feasibility. No electrical signal repeaters are supported in Savvis facilities.

Type(s) of Customer Access Extension (cross connects):

Cross-Connects: Utilizing the "Cross-Connect" option within CAE today (traditionally used for Canadian Data Center), Savvis can perform interconnections between telecommunication company and telecommunication company, telecommunication company and building tenants who are colocated in the Savvis Meet Me Room, or building tenant to building tenant.

Cross Connect Type	Physical Cable
Cross Connect	√

Technical Information Required per Cross Connect: When requesting a cross-connect to a chosen telecommunication company or building tenant customer residing within the SMR; please provide all necessary information based on the matrix below.

Detail	cross connect to Telco	cross connect (non-Telco)
Customer A-side Cage/Cabinet/demarcation point	~	~
Customer Z-side Cage/Cabinet/demarcation point		~
Customer Carrier / Telecommunication company Cage/Cabinet/demarcation point	✓	
Media Type	✓	✓
Connector Type	√	✓
CFA/LOA	√	
Circuit ID	✓	
FOC Date	✓	√

Definitions

<u>Customer Cage/Cabinet/Demarcation point</u>: For cross-connects to Customer circuits, this is the demarcation information for where the Customer has identified the circuit is being delivered.

Circuit ID: For Customer circuits, enter the Customer provided Circuit ID.

<u>Connector Type</u>: Type of connector required. Typically there is only one type used, however for fiber cross connects there are several available connector options [e.g., SC, LC].

<u>Customer A Side Cage/Cabinet/Demarcation point</u>: Demarcation information for where the Customer wants the circuit delivered within their data center environment.

<u>Customer Z Side Cage/Cabinet/Demarcation point</u>: For cross connects to other cages/cabinets with the data center (either the same customer or another customer, this is the demarcation information for where the end Customer wants the circuit delivered within their data center environment.

<u>FOC Date</u>: Firm Order Commitment Date – the date Customer will have the circuit ready for connection.

<u>Media Type</u>: Type of physical cable being request for the cross connects. [e.g., Coax, Cat5, SM fiber, MM fiber].

Service Delivery Management

As part of the installation service the Customer will be assigned a Project Manager to coordinate and manage the installation process. The Savvis Project Manager works closely with Customer personnel throughout installation. The tasks performed by the Project Manager include:

- Developing the installation plan
- Designing space layout plan
- · Coordinating space build out
- Coordinating the installation of Customer's equipment
- Collecting key Customer data including contacts and operating procedures to be supported by Savvis
- Customer setup in the Savvis Network Control Center for on-going monitoring and technical support

Additional Services

The additional services described below are available to the Customer at an additional cost. Additional Services may be ordered via Savvis Service Order. The following technical details, terms and requirements for the additional services described below, if ordered by the Customer, shall be subject to and incorporated into the Master Services Agreement.

Gold Support Services & Structured Cabling Services

Gold Support Services

Gold Support Service provides Network and Systems remote or on-site ("hands-on") support for designated Customer environments within Savvis' Data Centers.

Gold Support Service is purchased in three forms:

- Prepaid Gold Support-Monthly Recurring Option is for a fixed block of support hours purchased each month. Support hours provided at Customer's request during a calendar month are subtracted from the number of hours purchased. Unused hours may not be carried into successive months. Customer shall remit payment for all hours billed regardless of whether hours are used.
- Prepaid Gold Support-Non Recurring Option is for a fixed block of support hours purchased and consumed over several months. Support hours provided at Customer's request are subtracted from the number of hours purchased until exhausted.
- <u>No Commitment or Ad hoc</u> Gold Support is purchased for those instances where there are unplanned events and are not purchased in advance.

Each plan provides 24/7/365 support by Savvis Support Engineers.

Gold Support Overage Hours and Pricing

Prepaid Gold Support-Monthly Recurring Option

- Gold Support can be purchased in hourly increments for a calendar month as determined by Customer, during a minimum of twelve (12) months (Monthly Recurring Charge).
- All Gold Support charges are billed in 15-minute increments and are rounded up to the next
 15 minute increment
- If Gold Support usage exceeds the prepaid amount of hours purchased in a given month, the additional hours worked will be charged at the <u>Ad-Hoc</u> Gold Support rate. Unused hours may not be carried into successive months.

Prepaid Gold Support-Non Recurring Option

- Gold Support can be purchased in hourly increments as determined by Customer. Unused hours are carried over month to month until they are consumed and are billed as a nonrecurring charge when consumed.
- All Gold Support charges are billed in 15-minute increments and are rounded up to the next 15 minute increment.
- Once Gold Support usage exceeds the prepaid amount of hours purchased the additional hours worked will be charged at the <u>Ad-Hoc</u> Gold Support rate. Customers will continue to be billed at the ad-hoc rate until their hours are replenished.

Ad Hoc Gold Support

- Ad Hoc Gold Support option requires a 15-minute minimum purchase.
- Ad Hoc Gold Support Service may not be scheduled ahead of time.
- Ad Hoc Gold Support is subject to availability.

Types of Options offered with the Purchase of Gold Support

Reboot

Reboot means simple shutdowns and startups performed on the Customer's server or application are considered Gold Support and are charged as such unless otherwise noted in the Customer's Service Order.

Telco Support

Gold Support provides onsite Telco support, troubleshooting, and coordination to assist Customer in establishing clean circuits from their colocation area to remote sites. Technicians are capable of interfacing with Customers and performing head-to-head testing, noise and signal tests, loop-back tests and testing for framing, pattern synchronization, as well as cycle redundancy check (CRC) errors on various types of circuits.

Provisioning

The installation and/or replacement of Customer provided computer systems and network devices; including but not limited to, SCSI cards, video cards, Ethernet cards, power supplies, fans, CD-ROMs, Floppy drives, hubs, switches, port cards, supervisor cards, route switch modules, uplink modules and software patches.

Other Gold Support Tasks

- Rack and stack
- OS Loads
- Cable Management
- Cage Visio drawings
- General Network and System Troubleshooting
- Work with customer third party vendors
- Tape backups
- Server equipment builds
- Oversight and compliance of third party vendors
- Note: this is not an exhaustive list of included services

Not Available via Gold Support Service

- Web site content development
- Backup system design
- Use of loaner or test equipment
- Spares or loaner equipment
- InterNIC registration by customer initiated change request (other than assistance listed above)
- Note: this is not an exhaustive list of excluded services

Minimum Term for Gold Support Service

A twelve-month Initial Term on the Service Order is required for Prepaid Gold Support. Customer is responsible to define how Gold Hours are to be utilized provided they are within the scope of the Service description as stated herein. Savvis reserves the right to limit Service to SAVVIS approved products.

Ordering Gold Support

A signed Service Order is required to request Prepaid Gold Support. Ad-Hoc Gold Support may be requested by Customer by contacting the Savvis Support Center and Customer agrees to pay the relevant charges subsequently billed by Savvis related to such requested Support. In the event Customer requests Support from Savvis but does not have the applicable Service Order in place, Savvis may elect to perform the work in advance and in good faith subject to Customer payment of the Ad Hoc rate for any Gold Support Services rendered and as invoiced by Savvis.

Additional Terms

Savvis Support Engineers will be on-call 24/7/365 basis with a targeted thirty (30) minute response time from notification by Savvis support personnel. Savvis requires a sixteen (16) day ramp-up period after services are ordered before Gold Prepaid Blocks of Hours may be used (does not apply to Ad Hoc Support).

Structured Cabling Services

Savvis offers complete design and installation services associated with Structured Cabling Systems (SCS) and Information Transport Systems (ITS) ("Structured Cabling Services"). The Structured Cabling Services include the physical connectivity associated with Customer Service Delivery to the Customer cage and also the design and installation associated with infrastructure builds within the Customer's cage environment.

The standard phases of Structured Cabling Services are:

Phase	Tasks
Analysis	Review of Customer's IT requirements and data assets.
Documenting the Design	Floor plan design provisioning and controlled revision schedules for modifications. Provision and review of Rack/Cabinet elevation design and controlled revision schedules for modifications.
Requirements Gathering	Perform site survey.
	Establish Scope of Work.
Articulate Design & Engineering Requirements	Render pricing against scope.
Engineer and Install	Develop SCS project plan.
	Develop pull schedules and labeling schemes.
	Develop rack and stack requirements.
	Stage and deploy solution.
	Perform certification testing.
Document and Certification	Document solution and provide as-built drawings.
	Provide Test Results.
	Issue Certificate of Warranty.

Structured Cabling Services include a manufacturer's installation and product warranty. Structured Cabling Services is performed by industry and manufacturer trained installers in accordance with Savvis mandated standards.

Savvis Structured Cabling Services Standards and Requirements

Savvis Data Center and Facilities Teams are engaged early in the design process to maintain Savvis standards:

- Perform feasibility on the Colocation space and power requirements
- Establish the required cage space footprint
- Establish the rack and cabinet layout
- Establish the support structure requirements
- Establish the "hot and cold aisle" containment requirements
- Identify Customer rack and cabinet elevation requirements
- Identify Customer connectivity requirements
- Establish the performance requirements the Structured Cabling System is to support
- Create labeling schemes and run lists for the Structured Cabling System
- Establish testing parameters with the customer for the Structured cabling System
- Establish the quality assurance and hand-off documentation requirements with the customer
- Provide detailed technical specification documents on all products
- Provide SOW requirements based on the design and associating design/estimate
- Establish project plans and installation schedules
- Achieve and acquire all detail associated with the Savvis "Layer1 Design Package" (See Layer1 Design Package Sample")

Use of Third Party Cabling Vendors - "Non-Approved Installers"

Savvis requires the Customer to follow an established and formalized set of processes for all Structured Cabling Services. Prior to Savvis granting Customer's third party cabling vendor ("Cabling Vendor") permission to perform cabling installation within a Savvis Data Center, the Cabling Vendor's foreman must pass the Savvis Facilities Work Rules test and the Structured Cabling Contractor Exam with a score of at least 80%. In accordance with Savvis' cabling standards, Customer shall be responsible for the payment of a compliance and oversight fee ("Compliance and Oversight Fee") which will be charged to Customer in the form of Gold Support hours throughout the duration of the Cabling Vendor's provisioning of structured cabling. The Compliance and Oversight Fee will appear on the Customer invoice as Gold Support.

In order to maintain Savvis' strict cabling standards, Savvis will levy a compliance and oversight fee in the form of Gold Support hours for the duration of the provisioning of Structured Cabling Services should a third party structured cabling vendor be chosen to provide the Structured Cabling Services. The Compliance and Oversight fee will appear on the Customer invoice as Gold Support. Compliance and Oversight tasks of the Structured Cabling Services include:

- All items outlined in the above Service Standards and Requirements
- All Items provided in the Savvis Non-Approved Installer Criteria Document
- Pre-installation review and approval of all engineering diagrams
- Proactive consultation and recommendation of changes to design
- Oversight of third party installation.