SGI Remote Services

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General Overview Questions and Answers

Q: What is SGI Remote Services?

- **A:** SGI Remote Services provides our customers a secure connection to SGI Customer Support. We help ensure business continuance with our systems management and optimization. Primary capabilities include:
 - 24x7 Remote monitoring and reporting for customer systems:
 - Alerts and notifications on changes and failures
 - Log files immediately available
 - Configuration fingerprint
 - Secure file transfer
 - Secure remote Access to customer systems (optional)

Q: What are the customer benefits of SGI Remote Services?

A: Benefits of SGI Remote Support are:

- Improved uptime and system availability
 - Proactive identification of issues before they create an outage
 - Increased system stability by monitoring hardware and software version compatibility
 - Reduced time to resolve support cases
- Greater operational efficiency
 - Less involvement of the customer's staff during troubleshooting
 - Faster support for case resolution
- Improved productivity
 - Maximized use of the customer's resources for non-SGI tasks
- Improved customer satisfaction and loyalty
 - Proactive potential problem identification and customer notification resulting in higher system availability
 - Automated Alerts and, in some instances, Case Opening results in faster problem resolution time and less direct involvement required by Customer Support Teams

Q: What are the components of SGI Remote Services?

A: Components of SGI Remote Services are:

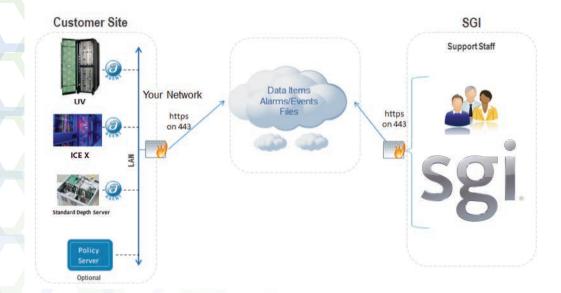
Monitoring Agent – Monitors health and operating parameters of the SGI system and securely communicates only with a designated Cloud Server

Cloud Server – Collects, processes, and stores monitoring data. Processes rules to detect trouble conditions and notify SGI Support

Policy Server – Optional application operated by the customer to set Agent communication policy and record local audit log of SGI Remote Services interactions

Global Access Servers - Cloud Servers used to support Secure Remote Access Sessions

Describe SGI Remote Services



Key functionality:

- · An Agent runs on each SGI system to affect remote system monitoring and secure communication
- · Basic Hardware and Software configuration information is captured and stored in the Cloud daily
- Select Event Logs are automatically reviewed throughout the day and night (currently every five minutes) to identify potential failure information
- If a critical Event is detected, the Cloud will notify SGI

Beginning with Release 1.1, these Events will trigger, in some instances, Alarms resulting in the automatic opening of a Case with SGI Support and email notification to the customer.

If the diagnosis and/or repair of a system problem requires that SGI gather further customer system hardware or software information, SGI personnel have the capability of viewing and, if necessary, uploading this information from the customer's system.

The customer has complete control of what, if any, access they will allow. All communication between the customer's system and SGI Support is initiated at the customer's location and with the customer's permission.

SGI Remote Services can also provide customers with essential insights into the overall health and efficient utilization of their hardware and software. Degraded performance due to system configuration or insufficient resources can be identified and resolved using the combination of Remote Monitoring and Remote Access.

Security Questions and Answers

Q: Can you tell me about SGI Remote Services security?

- **A:** SGI Remote Services is designed to address security concerns with features that maintain existing network security policies at the customer's site.
 - SGI Remote Services leverages the customer's existing security infrastructure, utilizing firewall-friendly communication
 - · All communication between SGI and the customer is kept secure using Secure Socket Layer (SSL) encryption
 - All communication is initiated outbound from the customer site using HTTPS protocol on port 443
 - All data at rest is encrypted at the source, and decrypted at SGI
 - If the SGI Remote Services Agent is switched off, no communication is possible to SGI
 - The SGI Remote Services Cloud Servers are operated in ISO 27001:2005-certified data centers built on state-of-the-art equipment, technology investments, and operational expertise

Q: Are any changes to my IT or Security Infrastructure required?

A: No changes to the IT Security infrastructure are required to support SGI Remote Services. The service only requires the ability for the monitoring Agent to post HTTPS messages outbound on port 443 to a small list of server addresses.

Q: Does SGI Remote Services create security risks for my network and computers?

A: Not that SGI is aware of. SGI will work closely with the customer's IT department to integrate SGI remote Services into the existing network security infrastructure. We use a patented firewall-friendly technology that allows components to be protected behind the customer's firewalls.

Access, Authentication and Audit Questions and Answers

Q: Who can use SGI Remote Services to access SGI systems at my site and how is access controlled?

A: Access to the SGI Remote Services system is limited to SGI employees, is centrally controlled and requires password authentication. Once authenticated, user access is limited to the products for which the SGI employee is responsible and the information and actions appropriate to their roles. Call Center TSE's, for example, will have basic permissions while engineers in SGI Escalation Teams (GTS and GPS) will have a different set of permissions. All access to the customer's system is controlled by the customer.

SGI Remote Services requires each SGI user to have a unique user ID and password to access the system. Passwords are changed on a regular basis.

Using the optional Policy Server application, customers can set very granular permissions on what, if any, remote activities can be performed. Activities can be set to always allow, never allow, or wait for approval. Approvals can be given per request, for a time period, or by an SGI user.

Q: What data is captured and reviewed by SGI?

A: SGI Remote Services only collects specific maintenance feedback, diagnostic, and status information that is necessary for troubleshooting and reporting. SGI Remote Services never collects customer-sensitive data.

Q: What will SGI do with my data?

A: System Log and Configuration data is used by SGI Support Personnel to analyze customer or SGI Remote Services reported problems. Rules are executed against the incoming data to automate the problem detection and notification process. No customer data is accessed by SGI Support.

Q: How are SGI Users authenticated when remote access is permitted?

A: SGI Remote Access Users authenticate through system SSH keys that are unique to the customer. Access to these keys is centrally controlled at SGI.

Q: What Permissions does the SGI Remote Access User have on my system?

A: The Remote Access User is a regular user with a few very specific privileged features enabled via sudo.

Q: What Permissions does the SGI Remote Services Agent have on my system?

A: The Agent runs as a non-root daemon using a locked account. The account has a few very specific privileged features enabled through sudo.

Q: What control do I have over what SGI does on my system?

A: Customers can further restrict what privileged actions can be taken by editing the sudo configuration file. This is a root-owned file and not modifiable by SGI.

Q: How do I know what SGI is doing on my system?

A: All user actions with customer devices are fully audited for traceability. Each interaction initiated by SGI produces a record in the audit log. This information includes the date and time of the command or remote session, which SGI system was accessed, identification of the User and what command was performed. These records are available to the customer.

Q: What audit records are available?

A: All user actions with customer devices are fully audited for traceability. Each session with SGI produces a detailed audit log. This information includes the date and time the remote session took place, which SGI system was accessed, identification of the engineer and what tasks were performed. These records are available to the customer.



Connectivity and Installation Questions and Answers

Q: Which SGI servers are supported?

A: Release 1.0 will support the Daily Monitoring and Reporting, and Remote Access to: UV[™], UV SMN, ICE[™] X clusters and Rackable[®] standard-depth servers.

Q: How will I install SGI Remote Services?

A: The software is installed via a single rpm.

Q: How will SGI Remote Services connect to my SGI infrastructure?

A: SGI Remote Services installs a software Agent on the SGI hardware at the customer's site. The SGI Remote Services Agent continuously monitors the operational parameters and diagnostic information for each SGI system. It then manages the secure communication of selected parameters to the Cloud Server. SGI users will log into the Cloud Server to view system status and to issue commands as needed.

Q: How is communication initiated between my site and SGI?

A: All communication is initiated by the SGI Agent on the customer's equipment. A small heartbeat message is sent to the Cloud Server every two minutes. If a user request has been made, the command will be sent with the heartbeat acknowledgement. This method of firewall-friendly communication enables two-way interactions while maintaining the integrity of your network.

Q: What do I need to do to set up and install SGI Remote Services?

A: The SGI Agent will post HTTPS messages to the Cloud Server. You will need to provide a network connection capable of allowing this communication to occur. The network connection can be routed through proxy servers or VLANs if necessary.

Q: How long does installing SGI Remote Services take?

A: Roughly 30 seconds on Rackable standard-depth systems. For UV, the Agent needs access to the CMC via SSH and a file needs to be edited to provide this information. For UV and ICE X we need to know how the system is cooled and this is provided by editing another file. On update of the rpm these files are preserved, hence this input is a one-time event. Roughly a minute once the information is available.

Q: Will SGI Remote Services have any impact on my network or system's performance?

A: Customer testing has shown it to have no impact.

Q: What changes do I need to make to my network infrastructure?

A: No changes are required as long as the SGI Agent can send HTTPS messages to the Cloud Server and Global Access Servers.

Q: Do I need to make changes to my firewall?

A: No, SGI Remote Services communicates through existing access points in the customer's firewall for outbound communications.

Q: Does SGI Remote Services work with proxy servers?

A: Yes. SGI Remote Services supports proxy server configuration (PAC or HTTP or SOCKS).

Q: Will SGI Remote Services communications tie up my network?

A: No, the software messaging protocol is designed to deliver small, efficient messages to minimize bandwidth utilization and the impact to your network.

Availability and Warranty Questions and Answers

Q: When will Remote Services be available?

A: SGI RS 1.1 will be available via Supportfolio August 2014. Visit https://support.sgi.com/login for more information.

Q: When are the subsequent releases and what key functionality will be available?

A: Capabilities and availability are listed below:

Capability/Phase	Availability
SGI RS 1.0 Basic Monitoring/Remote Access (currently in Beta)/Phase I	June 2014
SGI RS 1.1 Events and Basic Alerts, additional Monitoring/Phase II	August 2014 (est.)
SGI RS 1.2 Enhanced Monitoring and Alerts, Automated Case Opening & Parts, Security Enhancements/Phase III	November 2014 (est.)

Q: Where will SGI Remote Services be available?

A: The rpm will be available as a downloadable patch via Supportfolio. Visit https://support.sgi.com/login for more information.

sgi.com/remoteservices

Q: Where will Remote Services be available?

A: The rpm will be available as a downloadable patch via Supportfolio.

Q: Who can participate in receiving SGI Remote Services?

A: SGI Remote Services is available to all Contract or Warranty customers on the supported platforms.

Q: How much does SGI Remote Services cost?

A: It comes standard with the SGI Warranty and Support Contracts.

Information Questions and Answers

Q: Where can I find more information about SGI Remote Services?

A: Visit www.sgi.com/remoteservices to learn more about SGI Remote Services.

Q: Who can I contact if I have additional questions?

A: Please contact Mike Wade (mwade@sgi.com) or Marlene Wedge (mwedge@sgi.com).

About SGI

SGI is a global leader in high performance solutions for compute, data analytics and data management that enable customers to accelerate time to discovery, innovation, and profitability. Visit sgi.com for more information.

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