



Proactive Monitoring & Reporting

Table of Contents

Introduction	3
Monitoring and Reporting Service Overview	4
Logistics	4
Two Styles of Service Delivery	4
How We Monitor	5
Self-spares/Software	5
What We Monitor	5
First Steps	6
Initial Startup	6
Implementation	6
Customer Communication	7
Notification	7
Escalations	7
Monitoring in a Single Portal	8
How It Works	8
Customizable Dashboards	8
Custom Graphs	9
Interactive Trending Graphs	9
Top 10 Overview Graphs	9
Support from SCTG Is Not Just Availability	10
Reaching Support	10
What Existing Customers Say	10
Conclusion	11

Introduction

If you've ever tried installing, configuring, and maintaining monitoring tools across your devices, services, and applications, you know what a daunting task it is. For each device in your network, you have to know:

- What needs to be monitored
- How to collect the right data
- How to display that data in a useful, visual form
- What alert thresholds should be set at
- How to setup escalating alert chains, remediation, etc.

It is increasingly difficult to keep up with all the change that happens in today's increasingly complex IT environments.

Everything's always fine if you have no idea what's wrong

To achieve maximum business continuity, where employees don't call wondering why they can't access their email, or where your website doesn't suddenly take forever to load causing visitors to leave, costing you in revenue/reputation, you need ServerCentral Turing Group Managed Monitoring and Reporting to deliver.

Be alerted to issues before they cost you in revenue or reputation

With maintenance-free hosted architecture, SCTG dramatically reduces the complexity and staff time required to achieve—and maintain—effective monitoring.

- Whether you spin up a new virtual machine, add 100 cloud instances, add a new volume to a SAN, or a database instance, you'll have peace of mind knowing they will be automatically detected and monitored without adding to your workload
- You have less to manage, and pay for
- Greater convenience
- No backup or availability worries
- Few companies implement high availability monitoring with disaster recovery internally
- Want to add another 100 production systems? Another 1000? Scaling your monitoring just became simple

Monitoring and Reporting Service Overview

In the IT world, uptime is the name of the game—and SCTG Monitoring and Reporting keeps you in it. SCTG offers customized monitoring solutions that ensure optimal functionality of computing systems and network devices.

Logistics

Our Network Operations Center (NOC) checks system health using industry-standard monitoring software, which detects any changes to your environment and alerts them of potential service-impacting conditions. System events are immediately processed by the NOC, who immediately contact individuals as specified by the customer, and follow prearranged workflows to isolate, contain, and restore service long before reaching critical status.

- Device, service, and application monitoring
- Network Operations Center primary point of contact and triage
- Portal-based reports, trending, and analysis
- Customer-defined event response and remediation
- Monitoring system implemented
- Event escalates to NOC technicians for analysis and remediation
- Proactive response to warnings before they reach critical status
- Detailed trending graphs pinpoint recurring fault causes for any service on any platform

Two Styles of Service Delivery

1. Hands off: “We received this alert. Want us to help?”
2. Hands on: “We received this alert and are fixing the problem using on-site parts.”

How We Monitor

Managed products are monitored by in-house monitoring applications as well as offsite products. We monitor all the vital components of hardware and software to ensure smooth functionality. In general, we can monitor anything that has an IP address, whether the system is behind a firewall or not, and whether it's a custom application or obscure hardware. Our monitors receive data via industry-standard SNMP trap, SNMP poll, agent push, and agent poll. This allows us to see when a customer might need to consider upgrading to a higher model device or adjust the way they handle traffic as we keep historical data for trending. Monitor alerts are dispatched to the NOC for triage and appropriate escalation.

Self-spares/Software

We maintain cold spare hardware for every managed product we sell. Should a device under management exhibit symptoms that suggest a hardware fault, systems administrators will work with the NOC and the customer to swap the hardware out during a maintenance window. Similarly, should a device fail unexpectedly, replacement hardware is on-site, ensuring quick service restoration.

All hardware we sell, lease, or provide in managed services is supported by our monitoring solutions.

What We Monitor

Some, but not all, of the things we can also monitor, track performance details, generate reports, and offer customers graphs to visualize performance trends:

- **Application:** Java Application: Tomcat
- **Application:** Zookeeper
- **Application:** Microsoft Exchange
- **Application:** Postfix Mail Server
- **Application:** Memcached
- **Application:** Apache web server
- **Application:** nginx/lighttpd web server
- **OS:** Microsoft Windows Server family
- **OS:** Unix: AIX, FreeBSD, Linux
- **OS:** Microsoft Clustering
- **Network:** Cisco product line (switches, routers, firewalls)
- **Network:** Juniper product line (switches, routers, firewalls)
- **Network:** Netscreen, SonicWall firewalls
- **Database:** MongoDB
- **Database:** MySQL
- **Database:** Postgres
- **Database:** Microsoft SQL Server
- **Storage:** EqualLogic
- **Storage:** HP SAN/NAS
- **Storage:** NetApp filers
- **Storage:** Promise/PERC host RAID controllers
- **Load Balancers:** F5 BigIP
- **Load Balancers:** Kemp LoadMaster
- **Load Balancers:** Netscaler
- **Load Balancers:** Barracuda Networks
- **Virtualization:** VMware
- **Virtualization:** Xen
- **Operating Systems:** Windows, Linux, UNIX, others
- **Hardware:** HP, Dell, IBM, Hitachi, Cisco, Juniper, EMC, EqualLogic, NetApp, others

First Steps

SCTG provides 24/7/365, multi-site, redundant monitoring with options for customized event resolution in addition to custom-developed probes for customer specific applications.

Initial Startup

- Scope of systems and services to be monitored
- Baseline performance metrics established

Implementation

- SCTG engineers develop probes and monitors for customer-specific applications which continuously check to determine current status: OK, warning, critical
- The customer is informed of any service-impacting conditions immediately according to the following pre-defined rules:

Alert delivery methods: Options include e-mail, SMS text message, phone call, or viewable in web portal.

Alert routing: Create escalation rules based on type of device, severity of issue, or even time of day.

Alert escalation: If specified recipients don't acknowledge an alert within a given time period, alerts can be escalated to the next level in an escalation chain.

Alert management: You have the option to manage

Customer Communication

SCTG's NOC are first responders to incidents and alerts. Depending on the nature of the occurrence, remediation will be managed by the NOC, systems administration, or IP engineering team.

Notification

Notification to the customer will be in form of:

1. Direct phone call to the technical contact(s) on the customer list, which is the first method of communication after it is determined a device is unresponsive
2. Email notification from our ticketing system after a new ticket is opened by Operations to all the contacts on the customer contact list
3. On critical issues, updates are provided within 1 hour after initial contact to the customer

Escalations

As managed services are run by a dedicated group of system administrators, nearly all tickets related to managed services are immediately escalated to the Managed Services team. Any issue of critical importance is immediately escalated via telephone or in a manner predetermined by the customer. Non-critical questions or change requests are handled by the NOC team or escalated during business hours as appropriate. SCTG's escalation tree includes various members from the technology and executive management teams:

1st Level

- Systems Administration Team
- IP Networking Team

2nd Level

- *Chris Grahn*, Director of Data Center Services
- *George Nelson*, VP, Tech Ops

3rd Level

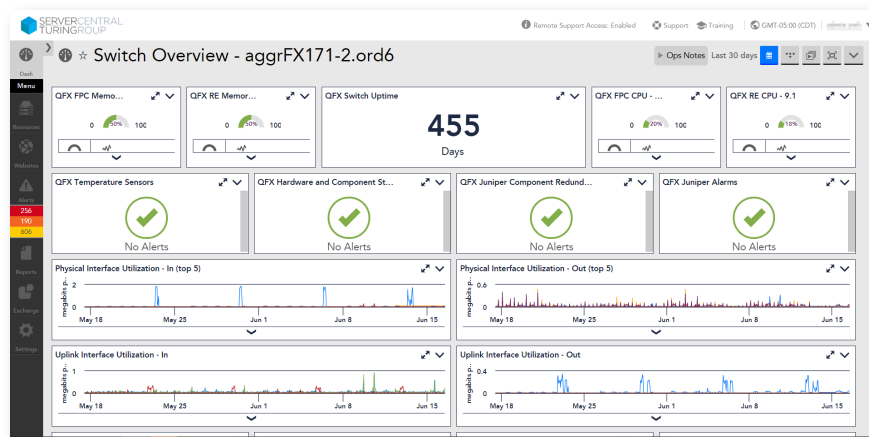
- *Daniel Brosk*, Co-founder and COO
- *Jordan Lowe*, President and CEO

Examples of escalated situations

- All alerts, alerts matching specific conditions, or alerts contained within certain operational groups
- Ongoing denial of service attacks
- Systems are not 100% operational
- Customer reports packet loss, a network issue, or high ping times
- Customer cannot access their equipment or has been locked out during an outage
- System or network configuration issues on managed or unmanaged hardware

Monitoring of Networks, Servers, Applications, Storage, and Cloud in a Single Portal

With all the interaction between layers in today's increasingly complex infrastructures, trying to troubleshoot performance issues with a hodgepodge of point solutions that don't talk to each other is inefficient, and ineffective. Our monitoring and reporting services provide a complete picture of your entire infrastructure from a single console, making it easy to pinpoint the cause and resolve your issue faster. This end-to-end view simplifies management and troubleshooting.



How It Works

Even though our Monitoring and Reporting is a hosted service, you do not need to allow our servers any access through your firewalls. A small collector running inside your enterprise's firewall collects and sends data via encrypted SSL to SCTG servers running in our secured data centers for processing and alerting.

Performance graphs are viewable from your portal, which you access from any browser. Notifications to you (or our NOC technicians) of any alerts that need attention generate from our servers so that even if your network goes down, you will still receive alerts (as opposed to premise-based monitoring where if the network goes down, so does your monitoring system).

Customizable Dashboards

Our Monitoring and Reporting lets you easily create and share custom views that show what matters to you. Users can create their own dashboards, which can be shared, or kept private. With role-based access control, administrators define which users can see which dashboards. Dashboards can display a variety of objects individual host graphs, custom graphs which show multiple hosts on the same graph, flexible widgets, even video. A NOC Widget even offers colored indicator lights that give an at-a-glance health status of all host groups, along with a summary of all alerts for each host group.

Custom Graphs

Whether you wish to see storage usage of all business units in your enterprise, across multiple data centers or other necessary reports, our Monitor and Reporting allows you to create custom graphs to plot desired information quickly and easily.

Interactive Trending Graphs

Our Monitor and Reporting utilizes interactive trending graphics to provide faster troubleshooting, quicker problem resolution through the following capabilities:

- Zoom in or out to see trends over different time frames, from 1 year to the last 10 minutes
- Add or remove lines from the graph, to help you isolate the data you are interested in
- Automatically rescale with the displayed data
- Mouse-over to see the exact value of any data point at any time
- Download the data underlying a graph with a single click

Top 10 Overview Graphs

Trying to identify performance issues on hosts with multiple objects (interfaces, volumes, VIPS, etc.) is difficult and time-consuming if you can only view each object individually. Our Monitor and Reporting automatically generates overview graphs allow you to view the top 10 objects on a single graph, making it much easier to spot issues. Overview graphs are commonly used to provide at-a-glance information about volume performance on a SAN, VIP performance on load balancers, memory usage on virtual machines, etc. They can also be split into multiple graphs and grouped. And like all of our Monitor and Reporting configurations—they update automatically as objects are added to or removed from your data center. This provides simple at-a-glance views of multiple objects so that you can easily see which volume, interface, or virtual IP needs attention.

Support from SCTG Is Not Just Availability

One of the advantages of a hosted solution from SCTG is access to continuous support. We provide much more than 100% availability uptime—we provide our responsibility for your environment. We will monitor your environment; prevent problems by performing active preventive maintenance, manage the backup and recovery procedures and disaster recovery procedures if applicable.

Reaching Support

Phone: +1 (312) 829.1111


Email: support@servercentral.com

Support Hours: 24/7/365

Response Time: We typically respond to trouble tickets in under fifteen minutes.

What Existing Customers Say


We encourage all of our customers to get to know one another and share their knowledge and experience.

 *If your data center is an office closet, then you have to ask, "Who's monitoring my power and cooling at 1:00 AM on New Year's Eve?" Because it might be nobody. One of the many reasons that we work with SCTG is that they answer these questions, and many more, for us.*

 **DEPAUL UNIVERSITY**

 *@servercentral was instrumental in our mitigation / response today. Thanks guys.*

 **Basecamp**

 *Our only problem with SCTG is holding everyone else to their standard.*



Conclusion

If you calculate the cost of the staff time required to deliver the level of monitoring, graphing, alerting and reporting that SCTG provides, you could have covered SCTG's managed service cost for a full year — if not several. And that's not taking into account the often-overlooked cost of ongoing system maintenance — backups, patches, upgrades, etc.

Every time there's a change within your infrastructure — a database instance is added, a volume added to a storage array, a virtual machine provisioned — the configuration files must be manually updated. The reality is, that doesn't always happen, which leads to the big reason why SCTG is essential for maintaining a trouble-free infrastructure.



SERVERCENTRAL TURINGROUP

111 W. Jackson Blvd.
Suite 1600
Chicago, IL 60604

www.servercentral.com
Toll-Free: (888) 875.4804
Worldwide: +1 (312) 829.1111
sales@servercentral.com



Rev. 06.2020