

SAS® Data Center Overview



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Overview

SAS provides a hosting model with the flexibility to meet your business needs. By using SAS data center spaces and making full use of our relationships with third-party hosting providers, we are able to provide global hosting.

SAS offers a range of hosting services to meet your business needs:

- **Infrastructure.** SAS offers raised-floor data center space, with three locations in the US and one in Europe. Redundancy of power, cooling and Internet service provides a highly reliable data processing infrastructure, with 99 percent or greater availability. Electronic card readers with PIN numbers or biometrics provide secure access. Secured cabinets or cages are also available. Digital surveillance cameras provide a record of activity in the facilities. Dry-pipe, pre-action fire suppression systems are in all facilities. Automated building management systems for monitoring the infrastructure are in place.
- **Managed services.** The network operations center (NOC) is staffed 24 hours a day, 365 days a year. NOC personnel act as first responders for any problem. They assess the situation and resolve or engage other support teams for a rapid resolution.
- **On-site support.** Both IT technicians and security personnel are available for problem resolution 24 hours a day, 365 days a year. System backup and off-site media storage are also available. Multiple vendor contracts are in place to provide infrastructure and systems support.
- **Continuity of business (COB).** This term refers to an organization's plans and procedures aimed at protecting its key assets and continuing its critical business functions in the event of threats such as natural disasters, pandemics, power outages, computer viruses or terrorist attacks. SAS developed its COB program to meet industry best practices.

Cary 1 (US) Facility Specifications

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| General Facility Information | <ul style="list-style-type: none"> • 30,000-square-foot, raised-floor environment of concrete reinforced with steel. • Flywheel UPS. • Leak detection system. • No external doors or windows. |
| Power | <ul style="list-style-type: none"> • N+1 design. • 2.4-Megawatt IT power capacity. • Diesel fuel on-site for up to 48 hours continuous run time with multiple vendors available for refueling. • Monitoring and alerting through an automated building management system. |
| Cooling | <ul style="list-style-type: none"> • N+1 design. • Air distributed under the raised floor through perforated tiles. • Monitoring and alerting through an automated building management system. |
| Fire Protection | <ul style="list-style-type: none"> • Conventional smoke sensors. • Data-center-safe fire extinguishers. • Clean agent fire suppression system. • Pre-action, dry-pipe fire suppression system. |
| Network | <ul style="list-style-type: none"> • More than 10Gbps of Internet bandwidth. • Multiple Internet service providers. • 40Gbps connectivity in network core. • 1Gbps and 10Gbps connectivity available for hosting systems. • Layer 2 redundancy available for hosted systems. |
| Security | <ul style="list-style-type: none"> • Physical access provided through electronic card access and PIN code. • Digital video devices at entry points. • 24/7 on-site technicians and SAS security personnel. |
| Professional Services | <ul style="list-style-type: none"> • Operations specialists on-site 24/7. • IT support staff on call 24/7. • SAS security on-site 24/7. • Operations engineers on call 24/7. • Off-site tape storage available. |
| Certifications | <ul style="list-style-type: none"> • SOC 2. • SOC 3. |

Cary 2 (US) Facility Specifications

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| <p>General Facility Information</p> | <ul style="list-style-type: none"> • 10,000-square-foot, raised-floor environment. • Pre-cast concrete. • Hurricane wind-rated roof. • Leak detection system. • No windows. • Designed to gold-level LEED standards: <ul style="list-style-type: none"> - Reclaimed water. - Water-side economizer. • Flywheel UPS. • Uptime Tier II certified. |
| <p>Power</p> | <ul style="list-style-type: none"> • 1.7-megawatt IT power capacity. • Diesel fuel on-site for up to 48 hours continuous run time with multiple vendors available for refueling. • Monitoring and alerting through an automated building management system. |
| <p>Cooling</p> | <ul style="list-style-type: none"> • N+1 design. • Air distributed under the raised floor through perforated tiles. • Monitoring and alerting through an automated building management system. |
| <p>Fire Protection</p> | <ul style="list-style-type: none"> • VESDA - very early smoke detection apparatus. • Data-center-safe fire extinguishers. • Clean agent fire suppression system. • Pre-action, dry-pipe fire suppression system. |
| <p>Network</p> | <ul style="list-style-type: none"> • More than 10Gbps of Internet bandwidth. • Multiple Internet service providers. • 40Gbps connectivity in network core. • 1Gbps and 10Gbps connectivity available for host systems. • Layer 2 redundancy available for host systems. |
| <p>Security</p> | <ul style="list-style-type: none"> • Physical access provided through electronic card access and PIN code. • Digital video devices at entry points and throughout the facility. • 24/7 technicians and SAS security personnel available on campus. |
| <p>Professional Services</p> | <ul style="list-style-type: none"> • Operations specialists available 24/7. • IT support staff on call 24/7. • SAS security available 24/7. • Operations engineers on call 24/7. • Off-site tape storage available. |

Charlotte 1 (US) Facility Specifications

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| General Facility Information | <ul style="list-style-type: none"> • Masonry, brick and steel construction. • Hurricane wind-rated roof. • Leak detection system. |
| Power | <ul style="list-style-type: none"> • 2N design. • Redundant (1.5-megawatt diesel generator provides emergency power). • Five days of fuel on-site. |
| Cooling | <ul style="list-style-type: none"> • N+1 design. • Air distributed from under the raised floor through perforated tiles. |
| Fire Protection | <ul style="list-style-type: none"> • Data-center-safe fire extinguishers. • Pre-action, dry-pipe fire suppression system. |
| Network | <ul style="list-style-type: none"> • Multigigabit network backbone with more than 5.6Gbps bandwidth. • Multiple providers to deliver Internet access. • Burstable bandwidth from 1Mbps to 1,000Mbps. |
| Security | <ul style="list-style-type: none"> • Physical access provided through electronic badge card and PIN access. • Motion-activated digital security cameras (interior and exterior). • 24/7 on-site technicians and security personnel. |
| Professional Services | <ul style="list-style-type: none"> • Technicians on-site 24/7. • IT support staff on call 24/7. • Security personnel on-site 24/7. • Off-site tape storage available. |
| Certifications | <ul style="list-style-type: none"> • SOC 1 • SOC 2 • HIPAA • GLBA • PCI |

Toronto 1 (Canada) Facility Specifications

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| General Facility Information | <ul style="list-style-type: none"> • Concrete with concrete floors. |
| Power | <ul style="list-style-type: none"> • N+1 design. • Two utility feeds. • 30 hours of fuel on-site. |
| Cooling | <ul style="list-style-type: none"> • Centrifugal chillers and air handling units. |
| Fire Protection | <ul style="list-style-type: none"> • VESDA - very early smoke detection apparatus. • Double-interlocked, pre-action (dry pipe) fire suppression system. |
| Network | <ul style="list-style-type: none"> • 400Mbps of redundant (active/active) internet connectivity. • Multiple internet service providers. • Multi-gigabit network backbone. |
| Security | <ul style="list-style-type: none"> • Mantrap entry. • Security personnel on-site 24/7. • Biometric readers, CCTV and recorders, motion detection, fiber vault. |
| Professional Services | <ul style="list-style-type: none"> • Technicians on-site 24/7. • IT support staff on call 24/7. |
| Certifications | <ul style="list-style-type: none"> • ISO 27001. • SSAE16/ISAE3402 SOC 1 Type II. • SOC 2 Type II. |

Frankfurt 1 (Germany) Facility Specifications

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| General Facility Information | <ul style="list-style-type: none"> • Concrete with steel-clad external walls. |
| Power | <ul style="list-style-type: none"> • N+1 design. • Two utility feeds. • Five days of fuel on-site. |
| Cooling | <ul style="list-style-type: none"> • Screw compressor and turbo compressor chillers. |
| Fire Protection | <ul style="list-style-type: none"> • VESDA (Very Early Smoke Detection Apparatus). • Argon Gas Fire Suppression System. • Optical fire detectors. |
| Network | <ul style="list-style-type: none"> • Multi-gigabit network backbone with more than 5.6Gbps bandwidth. • Multiple providers to deliver internet access. • Burstable bandwidth from 1Mbps to 1,000Mbps. |
| Security | <ul style="list-style-type: none"> • Mantrap entry. • 24/7 security officers. • Card readers, biometric readers, CCTV with recorders, motion detection. |
| Professional Services | <ul style="list-style-type: none"> • Technicians on-site 24/7. • IT support staff on call 24/7. • Security personnel on-site 24/7. |
| Certifications | <ul style="list-style-type: none"> • ISO 9001. • ISO 27001. • PCI DSS. • SSAE16/ISAE3402 SOC-1 Type II. • FACT. |

Summary of Features and Benefits

Physical Infrastructure

- High-bandwidth network connectivity.
- Support for multiple ISPs.
- Raised-floor data center.
- Redundant power, cooling, internet service.
- Multiple locations in US and Europe.
- Electronic card readers with PIN numbers and biometrics.
- Secured cabinets or cages.
- Digital surveillance.
- Fire suppression.
- Automated building management for monitoring.
- Shareable and scalable - designed for the solution at hand.
- System backup and media storage available.

Fast and Reliable

- High-bandwidth network ensures optimal response time.
- 99 percent or greater availability means no unplanned downtime for business operations.
- Disaster recovery and continuity of business (COB) plans and procedures for protection of assets and continuation of critical business functions in the event of threats - enabled by redundancy, failover across multiple locations, etc.

Secure

- Secure infrastructure ensures integrity and confidentiality of data.

Flexible

- Deployment flexibility - multiple hosting options, including software as a service (SaaS) and enterprise hosting, as well as the ability to deploy on-site or host through another provider.
- Geographic flexibility - ensures low-latency support (fast response time) and the ability to address regulatory requirements (e.g., restrictions about where data resides).
- Ability to accommodate growth and peak periods - shareable and scalable approach allows for flexible capacity.

Fast, Responsive Support

- Support staff with SAS knowledge in addition to infrastructure knowledge results in rapid resolution.
- 24/7 support for rapid issue resolution.

Certification and Experience

Certification

- Certified by third-party organizations.
- Ensures that SAS uses industry best practices.
- SOC 2, SOC 3 and ISO 20000 certified.

To contact your local SAS office, please visit: sas.com/offices

