# Simplex

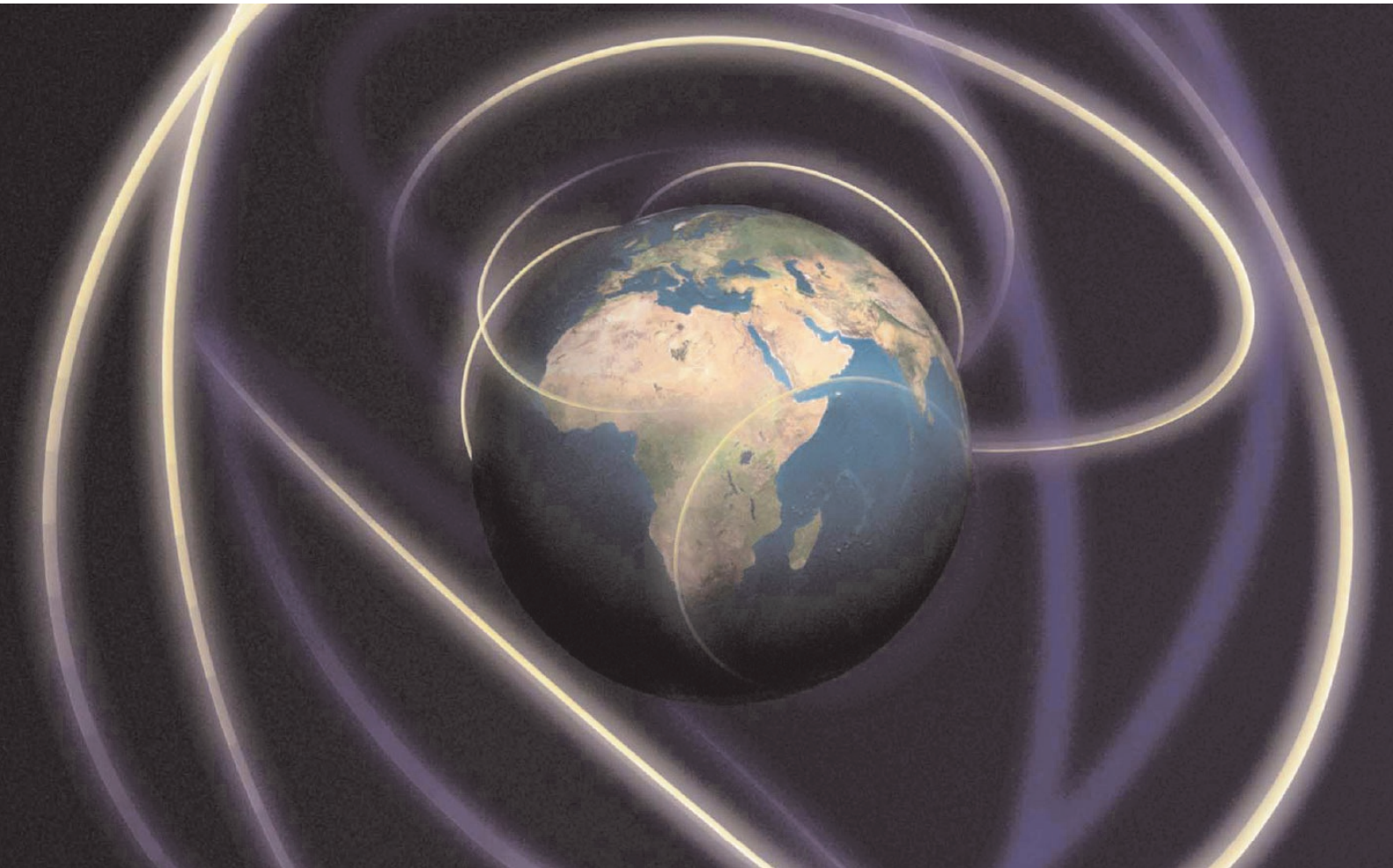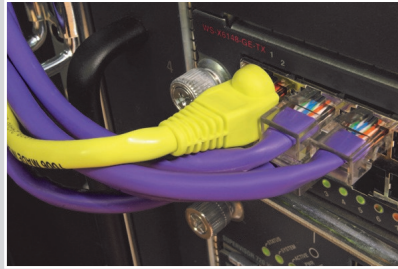## Data Center Operations

# The Company

*Simplex Software & Internet Services Ltd. (Simplex)* is a company registered in the Republic of Cyprus (company registration no. C165621) and was established in January 2003. As of March 2007 Simplex operates from privately owned offices which feature a state of the art data center.

Simplex provides a wide range of services in the areas of Information and Communication Technologies (ICT):

- **Consulting Services**: ICT consulting in the areas of enterprise systems (servers and storage), networks, physical and network security and data center, including solution design, audit, compliance, procurement and recruitment.
- **Web & Internet Services**: services such as web design and development, e-Commerce solutions, online payments, cloud applications, digital SSL certificates, shared hosting and domain name services.
- **Data Center Services**: services related to our own data center, including colocation facilities, disaster recovery and business continuity, remote backup solutions, managed services, etc.
- **Advanced Infrastructure Services**: design and implementation of advanced solutions in the areas of voice and data communications, physical and network security, server rooms and data centers, enterprise systems (servers and storage), high availability and virtualization technologies.

With a huge experience in various technologies, the company has so far offered its services to private and public companies from Cyprus, Europe, the Middle East, U.S. and Australia as well as Cyprus Government and Semi-government organizations. Simplex's staff has been extensively involved in large banking and government projects as well as big projects in Europe and the Middle East.

In order to offer the best possible services to its customers, Simplex has established strategic partnerships with international leaders such as HP, Cisco, VMware, Microsoft, Symantec/ VeriSign, APC, etc. All our partnerships ensure that our customers get world-class solutions in all aspects, including security, reliability, availability and scalability.

The name of our company, *Simplex*, does not come from nowhere: *Simplex* is an optimization method in the area of *Operations Research* which is used to solve complex optimization problems by reducing them to simpler ones; this is our target: optimize the way in which our customers operate by providing to them simple, yet powerful and scalable solutions in order to compete and grow in the new e-Business and cloud computing era.

After all, it might be difficult for companies to follow the technology evolution so leaving their e-Strategy to the experts allows them to focus on their core business.

## Data Center Operations

Recognizing the challenges that most organizations face today especially in regards of the cost for IT infrastructure, reliability and availability of network/bandwidth, hardware, power, security and in-house human expertise, in 2007 Simplex built its own data center, strategically located in Cyprus. From this facility, Simplex provides cloud IT services including web hosting, colocation, application hosting and management, remote data backup and disaster recovery, business continuity, IT security consulting, remotely managed IT services and many other services that allow an organization to completely outsource its IT needs to Simplex.

With a world-class data center, state-of-the-art infrastructure and technical expertise hard to find elsewhere Simplex can be the IT partner that gives you the freedom to focus and succeed in your core business.

## Why Cyprus

Cyprus has a strategic location, being at the crossroads of Europe, Asia, Africa and Middle East. The island shares the same time zone as other major centers in the area and is also within easy travelling distance to and from the rest of Europe, CIS countries and the Middle East with daily flights to and from all major destinations.

Cyprus is an independent state, financially and politically stable, and member of international organizations like the United Nations and the European Union (E.U.). The highly-educated workforce, the favourable tax system, low operating costs, the modern banking and professional services networks and of course, the high standard of living, all contribute towards an attractive environment for doing business. The Euro (€) is Cyprus' currency since 2008, acting as an additional incentive to do business on the island without currency surprises.

Although Greek and Turkish are the official languages of the country, English is the main language in business and is widely spoken; Russian is widely spoken as well.

Finally, the country has one of the most advanced telecommunications infrastructures in Europe while the telecoms industry is fully liberalized.

# The Data Center

Simplex's data center, the ONLY carrier neutral on the island, is located in the heart of Limassol, the international business center of Cyprus and features 205m$^2$ (approx. 2207 sq.ft.) of combined server space and office space. The data center features state-of-the-art facilities in all aspects which are formalized through Service Level Agreements (SLAs) guaranteeing 99.99% availability.

### Racks

Branded, industry standard (48U, 42U and 36U, 19"/60cm wide, 1m deep with RETMA rails and square holes) lockable racks allowing mounting of various IT equipment. Floor stabilized and bayed with each other for protection in case of earthquake activity and independently grounded for user safety. Maximum airflow (see *Climate Control*), security, fast and easy equipment installation and cable management.

### Cabling

All power and data (CAT6, CAT6A and fibre) cabling is laid in separate trays either under the raised floor or overhead, guaranteeing maximum quality and flexibility.

### Network and Bandwidth

Redundant/dual fibre backbone connectivity coming to the data center from different routes. Backup high-speed satellite connectivity available on demand.

Bandwidth distributed via fully redundant Gigabit Ethernet CISCO catalyst switches and dedicated patch panels. Isolated Virtual LAN (VLAN) dedicated for each customer with a minimum of a /30 subnet (4 real/Internet IP addresses). Shared or dedicated bandwidth options.

Network monitored on 24/7 basis.

## The Data Center (ctd.)

### Power

Two 230V/16A independently powered (A+B) Power Distribution Units (PDUs) with C13 (10A) and C19 (16A) outlets in each rack provide reliable, redundant power to servers and equipment with dual power supplies. Optional Static Transfer Switch (STS) sockets can provide redundant power to equipment with a single power supply. IEC309 (industrial type) 1-phase (230V) or 3-phase (415V) power feeds at 16A or 32A are available as well.

Independent, redundant (N+1) UPS units provide power and surge protection for each power circuit; each UPS is powered from a separate power feed and protected by a separate breaker. Hot swappable battery and electronic modules for zero downtime during UPS maintenance.

A stand-by diesel generator with auto-start guarantees continuous power supply to the Data Center, in the unlikely event of utility power outage. The generator is frequently checked and tested to ensure readiness.

### Fire Detection and Suppression

Fully redundant fire detection system incorporating optical/laser HSSD (high sensitivity smoke detectors) as well as thermal/heat detectors both underneath and above floor. Local and remote monitoring of fire alarm system on a 24/7 basis with redundant wired and wireless connectivity/signalling and backup battery power to ensure proper operation in all cases.

Fully automatic, environmental friendly, non hazardous to human gas-based fire suppression system with automatic HVAC cut-off for more efficient suppression. Automatic trigger only if both HSSD and thermal/heat detectors indicate a fire, thus minimizing the possibility of false triggering and site disruption. Manual triggering possible as well.

Two-hour fireproof walls, glasses and floor to ensure minimal disruption in the unlikely event of fire.

### CCTV (Closed Circuit Television)

Full coverage of entry ways and site's interior with vandal resistant, infrared colour cameras. High quality time lapse video with recordings stored on UPS powered digital hard drive and retained for a minimum of 30 days.

## The Data Center (ctd.)

### Access Control

Multi-zone/multi-level access control with proximity cards and access codes and redundant battery power.

Full event recording and monitoring for all doors when opening/closing. Access records, door access transactions, incident reports and access requests all indefinitely retained.

Full crosscheck of visitors' identity against customer-defined access lists.

### Security Breach Alarm and Motion Sensors

Alarm system for all entry ways and motion detectors across all the facility create complex electronic perimeters to detect any intruder.

Local and remote monitoring on 24/7 basis with redundant wired and wireless connectivity/signalling and backup battery power, ensuring proper operation under all circumstances.

Patrol service by external security firm during night hours.

### Environmental Control

Fully redundant overhead ducted HVAC system by Mitsubishi Heavy Industries with separation of cold and hot air flows (blows cold air in front of racks and sucks hot air at the rear) for maximum efficiency, guaranteeing best possible cooling for all equipment.
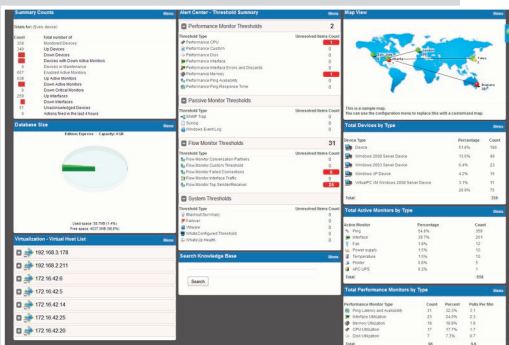
Room temperature and relative humidity maintained at 23 ºC (±2 ºC ) and 50% (± 20%) respectively, fully complying to the 2011 ASHRAE Thermal Guidelines for Data Processing Environments; environmental conditions are monitored on a 24/7 basis.

Fan kits of 6 fans are used in high density racks for hot air extraction and blanking panels are used in all racks to optimize air flow.

### Facility Management

All Data Center systems and facilities, such as cooling equipment, electrical systems, fire control systems and other security equipment, are monitored around the clock.

All events are controlled and procedures are in place to react to every possible incident 24 hours a day, 7 days a week, all the year round.

# The Data Center (ctd.)

### Office Space
46m$^2$ (approx. 495 sq.ft.), accommodating up to 12 people, of isolated office space to use as a remote office in case of a disaster or as required. Fully air-conditioned, fully furnished (desks, chairs, etc.) and equipped as per client needs with PCs, phone system, fax, printer, copier, etc. Private LAN provides fast direct access to your servers/data in the data center and along with high speed Internet connectivity allow you to resume fundamental operations within 24hrs after a disaster.

A 25m$^2$ (approx. 270 sq. ft.) conference room with 8-people conference table, 47" high definition (HD) screen, white board, multi-party HD video conference facility, VoIP phone and A/C also available.

Larger office spaces in terms of people capacity available at remote locations upon request.

### Storage and Staging Areas
Secure facility for storing the equipment you ship to the Data Center.

Staging area with desks, Internet access and private VLAN access for comfortably configuring your equipment before setting it up on the data center's racks. This way the data center is always clean and tidy and with minimum human interference.

### Technical Expertise
In-house expertise extends your organization's reach and footprint without being necessary to invest in expensive and hard to obtain skilled engineers. Highly skilled engineers available to support your operations from design and building your solution to maintaining your systems to full productivity. Should a fault occur, the rapid response of our engineers is available on a 24/7 basis and within a guaranteed response time of two hours maximum.

For simple equipment fixes and tasks such as racking up your equipment or more complex installations, configuration and troubleshooting, we have the in-house skills to quickly, reliably and cost-effectively satisfy your requirements.

# Services

Based on the core facilities provided by the Data Center (rack space and bandwidth) along with the high level of technical expertise, Simplex offers the following services allowing a company to outsource its main or disaster recovery infrastructure and/or applications to Simplex, partially or fully.

### Colocation / Equipment Housing (Rack Space)

Customers can choose whole rack, half rack or per U space along with generator backed power and redundant UPS/PDU facilities. Various options available such as STS sockets for redundant power to single corded equipment and IP KVM ports for remote access to your servers.

### Bandwidth

Provision of bandwidth for equipment housed in the data center and any type of application such as web hosting, email, database, CRM, etc. Bandwidth can be dedicated or shared.

Being a carrier independent Data Center, customers with high bandwidth requirements can even choose to have dedicated direct fiber connectivity from their preferred ISP.

Satellite connectivity, high speed point to point (wired or wireless) connections, VPN or MPLS connectivity are also available.

Dedicated real/Internet IP addresses available as per customer needs along with DNS services.

### Web & Application Hosting

Hosting of your website or application, whatever this is (email, CRM, ERP or other business software, etc.), on private/ dedicated equipment, virtual servers or shared plans, all housed in our data center.

Virtual desktop solutions using Terminal Services/Remote Desktop, VMware View or Citrix are quite popular and allow clients to host all their systems and store all their data in the data center so that they can securely access it remotely from anywhere.

### Data Backup

For complete data safety/protection, backup your data (SQL Server, Oracle, Exchange, files of any type, etc.) in a remote location relative to your offices. Use your own backup servers, storage area network (SAN) and tape drives/libraries or backup with full security and privacy on our equipment.

# Services (ctd.)

### Disaster Recovery

According to research, two out of five businesses that experience a major disaster that causes data loss and which do not manage to recover essential operations within ten days go out of business within five years. If you do not want to take the odds then disaster recovery is for you.

Disaster recovery offers a higher resiliency level than data backup, achieved by having redundant equipment and applications physically located in our data center. These can be accessed remotely or even be physically moved wherever you want should your primary servers fail or become inaccessible. Consolidation and virtualization technologies facilitate lowering the cost for a disaster recovery infrastructure.

Disaster recovery facilities in affiliated data centers out of Cyprus are available if you choose to use our site as the primary location for your applications/servers.

### Business Continuity

Offering a resiliency level even higher than Disaster Recovery, Business Continuity does not only include hosting/colocation of redundant servers in our data center but also a fully equipped private office space in our facility which will allow you to resume fundamental operations of your business very quickly should a disaster hit your primary location.

Arrangements for larger office spaces outside of our facility along with secure remote access to your servers/applications hosted in our data center can be made.
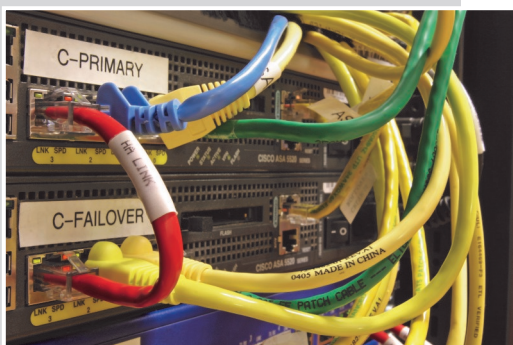
### Consulting

Help in building a new solution or improving an existing one to meet security, reliability, compliance and other requirements. Included in this service is infrastructure audit, solution design and components procurement.

### Managed Services

For your entire infrastructure, whether designed by us or not, whether located in our data center or another location, our Managed Services offering ensures that your systems run smoothly 24/7, 365 days a year. Systems monitoring and management, including preventive action such as upgrades/ patches and re-configuration as per your needs to achieve maximum system and data security, reliability and availability.

Managed services are offered for network and security devices such as firewalls, switches and routers, IP telephone systems, operating systems, web and application servers, databases, high availability clusters and virtual infrastructures.

We also provide Managed Backup and Restore and even management of third-party data centers and server rooms.

## Services (ctd.)

### Remote Hands & Eyes

Sometimes you need someone to press a button for you, read logs, check a cable or replace a disk. With Remote Hands & Eyes you have 24/7 access to your servers and guaranteed response times.

Included in this service is visual inspection of your servers, support for replacing equipment and parts, machine restarting and accompanying of third party engineers to work on your systems as per your instructions.

As part this service we will also receive and safely store your equipment until you are ready to deploy your solution. In addition, we can help you rack up and configure your equipment as required.

### Virtual Office

Get your dedicated telephone number, fax number and office and postal addresses in Cyprus. You can even have your own business-card website.

The telephone is answered at your company's name and your address can be used on business cards, letterheads, other stationery and on your website. Mails and parcels arriving for your company can either be kept in our office for collection, scanned and send to you electronically (in case of mails), or forwarded to you by post.

Telephone calls can be forwarded to any number worldwide via regular telephony or IP lines. Voice mail will be forwarded automatically as a sound file attachment to an email address you specify and faxes will be delivered directly to your mailbox as emails.

## Why Simplex

- Single point of contact for all your IT needs
- Strategic location
- Workforce expertise
- Partnership with world leading vendors such as HP, Cisco, VMware, Microsoft, APC, Symantec/Verisign, etc.
- State-of-the-art data center
- Physical and network security
- Fully redundant reliable environment
- High bandwidth connectivity
- Scalability
- Operational Support
- Unprecedented 99.99% Service Level Agreement (SLA)

## Advantages of Using Simplex

- Focus on core business thus increasing efficiency and most importantly profitability for your organization
- Reduce IT-related capital expenditure and running costs
- Enjoy the advantages of IT expertise while not incurring the cost and effort to manage, maintain and operate an in-house IT department which cannot ever be fully fledged anyway
- Peace of mind via higher levels of availability, reliability and security
- Reduced time to market and lower costs of IT products and services
- High customer service standards

# *S***i***mplex*

Data Center Operations

Office Address:
4th Floor, Zenios Center
72 Thessalonikis Street
Limassol 3025, Cyprus

Mailing Address:
P.O.Box 58058
Limassol 3730, Cyprus

Tel.: +357 25 822 100
Fax: +357 25 878224

Email: info@simplex.com.cy
Website: www.simplex.com.cy