



CORPORATE MAGAZINE

ANNIVERSARY EDITION

BETTER NETWORK, NOT JUST A BIGGER ONE

CONTENTS

Our history	4
About us	6
Global partnership	10
1-Stop-IT-Shop	12
A-Z Infrastructure	13
Managed services	14
Managed Security Services	15
IPTP Pentest	15
Global Network and Points of Presence Map	16
Managed Connectivity Services	17
Internet Exchanges and peering facilities	19
Low Latency Routes Map	20
Map of Cable Systems	21
Data Centers	24
Managed Datacenter Services	24
Dedicated Hosting	25
Colocation service	26
Matrix 4 Datacenter (the Netherlands)	28
Kermia 1 Datacenter(Cyprus)	30
Communication	32
Managed Unified Communication Services	32
Managed Mobile Communication Services	33
Hardware & Software Development	34
IPTP DDoS Mitigation Solution	35
IPTP ERP & CRM	38
Wherr GSM Tracking Solution	46
IPTP Video Surveillance	52
Smartspaces Home, Office and Motor Vessel Automation Solution	56



Better network, not just a bigger one!



I was born in the southeastern part of the former Soviet Union, to a very average family consisting of my mom a college teacher, and my dad, an electrical engineer who worked for the railways. My childhood years were filled with college books and hands-on experience with electronics and chemistry.

While in the fourth grade, I had been accepted to the young tech geeks club. After an experiment blew up in our faces when we flipped on the power, I was kicked out of the club, with a recommendation to come back a few years later.

When I was 10 years old, my father answered a knock on our door. They were holding a TV in need of repair. They TV was a foreign brand and no one in the entire city, but Vladimir could fix it, they said. After I repaired it, they thanked me with some cash, which I promptly spent on electronics or components.

A little later, in the 7th grade, I have made my first digital controller for my room, and two years later made my first PC based on an Intel 8080 processor. I had a lot of fun coding in assembler hex code, not realizing that it can be written in text and then compiled.

After school, a bunch of college mates and I founded a profitable coop-type venture, making some hefty cash at that time. In 1989, I established an R&D-focused venture called RESONANCE, which later became JSV BATA in 1991. That same year, I pointed my rudimentary web browser to Altavista.com; this was my first experience with the internet.

One year later I started my own ISP with a 9600bps uplink, my very first Cisco router and USRobotics modems. It only took 60 seconds for the Altavista.com front page to load!

In the mid-1990s, when the political climate in Russia made it difficult to sustain growth, I moved to Cyprus. Trying to make a living as a freelance engineer and provide for my family turned into the challenge of a lifetime. Clients doubted my expertise at every turn and my less-than-perfect grasp of the English language didn't help either.

With persistence and loyal friends, the IPTP team defied the odds and began to expand. Bit by bit, a small bunch of enthusiastic geeks grew into a major international company. Along with the unwavering support of my wife, my close friends and colleagues helped build a world-class organization that always puts the customer first. And we never stop innovating, creating exclusive solutions in IP video surveillance and smart home solutions areas to name a few. In 2004, IPTP ventured into software development, building a custom ERP and CRM system from scratch. 2006 marked another turning point for our company when we bought our first data center and got our range of IP addresses and autonomous system assignment.

Today, we are a Tier 2 Internet Service Provider (AS41095), system Integrator and software Development company, providing a wide range of truly global solutions. We are an international company with offices in Hong Kong, Limassol, Moscow, Amsterdam and many remote teleworkers in Africa, Latin America, Australia and New Zealand.

Over the years, the IPTP team has helped over 3,000 corporate clients around the globe on their digital transformation journey by streamlining their businesses, lowering costs, expanding and securing their infrastructure and staying ahead of the competition. Since its founding, the company carried on with consistency, hard work and innovation.

On behalf of our company I would like to thank our clients and trusted partners, for their collaboration and support, and for helping us build a business that runs like clockwork.

Vladimir Kangin,
CEO and Co-founder at IPTP Networks.

TWENTY YEARS OF

INNOVATION EXPERIENCE TEAMWORK

2005

- Controller of Automatically-Driven Devices released.
- ITP Video Surveillance Software released.
- ITP Triple Play Middleware released.

2004

- ITP Networks brand name registration.
- Our website, www.iptp.net, is launched.

2006

- Company funded and established in The Netherlands.
- The first data center(Matrix 3) acquisition.
- Company funded and established in Russia.
- ITP Networks becomes RIPE NCC member.
- AS number 41095 assigned to ITP Networks.

2007

- Company funded and established in the U.S.A.
- ITP ERP & CRM system released.

2008

- First Point of Presence in the U.S.A.

1996

- Company funded and established in Cyprus.



"ITP has been a reliable infrastructure partner for our global video CDN. Because we provide low-latency live streaming services to major brands, we often need to scale up to manage the influx of new viewers – and we can always count on ITP for additional capacity."

Vlad Ruban, Tech Client Services Manager, Advection.NET



IPTP SOLUTIONS

- Managed hosting service
- Managed distributed storage
- Managed Wireless LAN
- WAN Acceleration
- DDoS mitigation (DMMS)
- Access control
- Video surveillance
- Cisco unified communications
- Managed mobile communication
- Cisco Telepresence
- IPTP Pentest
- Global tracking
- SmartSpaces (building automation)
- Internet of Things (IoT)
- ERP & CRM

TELCO SERVICES

- IP Transit • IX Transit • MPLS • IPLC
- EPL Ethernet • Dedicated hosting
- Private cloud • Private CDN
- IaaS • NaaS

INFRASTRUCTURE

- Datacenters (3 owned & 134 leased)
- Dark fibers
- Satellite links
- Radio terrestrial links
- Submarine IRU capacities
- Cable ducts



XAAS (Anything as service)

- IaaS (Infrastructure as service)
- NaaS (Network as service)
- PaaS (Platform as service)
- SaaS (Software as service)
- MSaaS (Managed software as service)
- SECaaS (Security as service)
- DaaS (Desktop as service)
- MVaaS (Managed video as service)
- MBaaS (Mobile backend as service)

HARDWARE/SOFTWARE

- | | |
|---------------------------|------------------------|
| • In-house development | • In-house development |
| • Cisco | • Cisco |
| • EMC ² /RSA | • Microsoft |
| • Schneider Electric/ APC | • VMware |
| • Hewlett-Packard | • RedHat |
| • Seagate | • Citrix |
| • Supermicro | • Kaspersky |
| • Kingston | |



ISO 9001

The ISO 9001 quality management system helps to develop, maintain, promote and facilitate industry standards as well as improve the efficiency and effectiveness of operations, enhancing customer satisfaction. ISO 9001:2008 certification demonstrates the company's ability to consistently deliver top-quality products and services.



PCI DSS

Attestation of Compliance for Service Providers - 'Payment Card Industry Data Security Standard' (PCI DSS) for certified locations and points of presence is dedicated to companies involved in handling and storing cardholder information for all major debit/credit card companies.

OUR PORTFOLIO

RELIABILITY

We provide Service Level Agreements with up to 99.99% availability for N+1 redundant solutions, backed up by management, monitoring and maintenance. Our meticulously-maintained standard of quality and reliability provides a rock-solid foundation upon which over a thousand clients have based their services. Our team of technicians and engineers is highly experienced in networking and communications technologies and keeps up to date with the latest developments by continually engaging in strategic partnerships and collaboration with leading companies in the ICT sector. This enables our company to provide an unparalleled level of service and support.

FLEXIBILITY

For your convenience IPTP Networks operates on a 24/7 basis, delivering unique custom-made solutions. Our solutions are designed to provide high-level, non-packaged services specifically adapted to your individual business model. We serve as a 1-Stop-IT-Shop for all your IT-related needs, and can offer design, delivery, implementation and integration of all the aspects of your projects. At the moment, our Technical Support is available in Russian, English and Chinese languages.

COLOCATION AND HOSTING AT VARIOUS LOCATIONS:

the Middle East: Nicosia, Limassol (Cyprus), Dubai, Fujairah(UAE), Istanbul (Turkey) **Europe:** Amsterdam (the Netherlands), Helsinki (Finland), London, Slough (UK), Paris, Marseille (France), Kiev (Ukraine), Stockholm (Sweden), Sofia (Bulgaria), Zürich (Switzerland), Milan (Italy), Madrid (Spain), Frankfurt (Germany) **Russia:** Moscow, St. Petersburg, Novosibirsk, Vladivostok **the United States of America:** Ashburn (VA), Atlanta (GA), Dallas (TX), Denver (CO), Chicago (IL), Honolulu(HI), Miami (FL), New York (NY), Los Angeles (CA), Palo Alto* (CA), San Jose (CA), Seattle (WA), Washington (DC) **Americas:** Toronto (Canada), São Paulo, Fortaleza* (Brazil), Lima(Peru) **Asia:** Beijing, Shanghai*(China), Hong Kong, Macau*, Taipei (Taiwan), Singapore, Seoul (South Korea), Tokyo (Japan), Mumbai, Chennai* (India), Jakarta (Indonesia), Karachi* (Pakistan), Kuala Lumpur*(Malaysia), Bangkok* (Thailand), Hồ Chí Minh (Vietnam) **Africa:** Johannesburg (South Africa), Luanda* (Angola), Mombasa* (Kenya), Lagos* (Nigeria), Dar Es Salaam* (Tanzania) **Oceania:** Sydney, Alexandria (Australia), Auckland (New Zealand), Suva*(Fiji), Guam*.

* — location will be available in the near future.

CONNECTIVITY

Our network stability is provided by redundant MPLS network with a total capacity over 30 Tbps and more than 1 Tbps of uplink capacity. In addition, IPTP is presented in all of the major Internet Exchanges, averaging similar presence figures. We are a multinational company, with offices located in Africa, Asia, Australia, Europe (including Russia and Ukraine), Oceania, the Middle East and both North and South America.

COMMUNICATION

At IPTP Networks we are motivated by teamwork and open communication. We are an international company, with offices located in Asia, Africa, Australia, Europe (including Russia and Ukraine), the Middle East and both Americas. Our team communicates and cooperates seamlessly across international borders and time-zones on a daily basis. This allows us to streamline our services and ensure that you get a lightning-fast response at all times, maximizing your customers' satisfaction and your business' performance.



About IPTP Networks

IPTP NETWORKS IS A FULLY INDEPENDENTLY-OWNED, DIVERSE AND FORTIFIED BROADBAND NETWORK LINKING THE AMERICAS, EURASIA, AFRICA AND OCEANIA.

IPTP Networks is a global Tier 2 Internet Service Provider (AS41095), Systems Integrator and Software Development company. Operating a privately owned, redundant EoMPLS network it establishes secure connectivity across Europe, Asia, Russia, Africa, Oceania and the Americas. Cooperating with close to a 1000 peering partners, with access to all the major Internet Exchanges such as DE-CIX, HK-IX, Equinix, LINX, MSK-IX, Digital Realty and others, the company offers its services in 54 hosting data centers and \approx 160 data centers ON-NET, covering 30 countries and 50 cities worldwide. IPTP Networks is a One-Stop-IT-Shop, and provides custom-designed solutions, specializing in: MPLS, Internet, Dedicated Hosting, Co-location, Security, DDoS Mitigation, IP Transit, IX Transit, High Availability Clusters, Unified Communications, Mobile Communications, Private Cloud and CDN, ERP & CRM systems.

Our strategy is to provide corporate services tailored to clients who traditionally have not been able to afford such services and have had to rely on a “prepackaged” approach delivered by larger system integrators and telecommunication service providers. IPTP Networks aims to help companies streamline their business practices, reduce costs and secure business-critical data and network resources.

Unity in Diversity:

“Unity in diversity is the highest possible attainment of a civilization, a testimony to the most noble possibilities of the human race. This attainment is made possible through passionate concern for choice, in an atmosphere of social trust.”

Michael Novak, American philosopher.

At IPTP Networks we believe above all in teamwork and open communication. Our team communicates and cooperates across international borders and time zones on a daily basis. Thus, we are able to streamline our services and provide lightning-fast response times, maximizing customer satisfaction and assuring efficient performance of our corporation.

Being a strong and open team of more than 100 highly skilled professionals in 25 countries worldwide, IPTP Networks strongly benefits from cross-cultural synergy. We unite people from countries all across the globe and together they form one family. Our team currently brings people together from countries such as Austria, Burundi, Brasil, China, Cuba, Cyprus, Greece, Hong Kong, Japan, Sudan, Romania, Peru, Poland, Russia, South Africa, the Netherlands, Ukraine, the USA and Vietnam.



IPTP NETWORKS IN NUMBERS:

54
HOSTING
DATACENTERS

MORE THAN
100
LEADING
EXPERTS

OVER
3000
CLIENTS OVERSEAS ±
TRADE PARTNERS

≈ **160**
DATACENTERS
ON-NET

32
TERRESTRIAL AND
SUBMARINE CABLE
SYSTEMS

50
CITIES

30
COUNTRIES

4
SUPPORTING
LANGUAGES

TOTAL
CAPACITY
30
Tbps

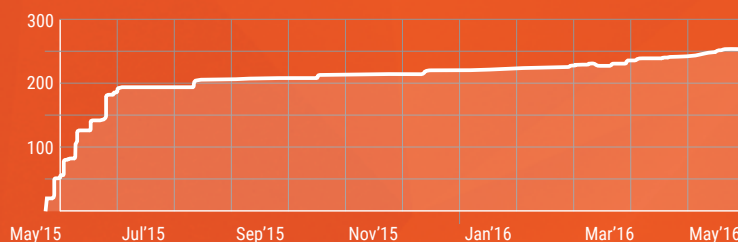
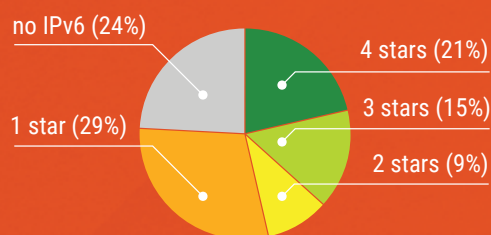
MORE THAN
1000
PORTS WITH PEERING
PARTNERS

40
INTERNET
EXCHANGES

IPv6 ready network provider:

Worldwide IPv6 RIPEness rating:

by 2016-07-22



IPTP Networks starts IPv6 deployment by customer demand in 2015.
By June 2016 the number of IPv6 peers is **252**

IPTP Networks received a rating of 4 stars in IPv6 RIPEness and rated in the top 21% of LIRs who have deployed IPv6 in their own networks. A 4-star rating means we have assigned IPv6 address space, have said address space visible in global routing, and have reverse DNS set up for this address space.

GLOBAL PARTNERSHIP

IPTP Networks cooperate with a wide range of global players in the IT-industry. Currently we have partnership agreements with the following companies:

HARDWARE/SOFTWARE DEVELOPERS



Citrix. American multinational software company that provides server, application and desktop virtualization, networking, software as a service (SaaS), and cloud computing technologies. www.citrix.com



Cisco. American corporation technology company headquartered in San Jose, California, that designs, manufactures and sells networking equipment worldwide. It is the largest networking company in the world. www.cisco.com



EMC Corporation. American multinational corporation headquartered in Massachusetts, United States. EMC² sells data storage, information security, virtualization, analytics, cloud computing and other products and services that enable businesses to store, manage, protect, and analyze data. EMC² is a parent company for VMware, Inc. and RSA Security LLC. www.emc.com



Hewlett Packard Enterprise. Multinational information technology company. It developed and provided a wide variety of hardware components as well as software and related services to consumers, SMBs and large enterprises, including customers in the government, health and education sectors. www.hpe.com



Kaspersky Lab. An international software security group operating in almost 200 countries and territories worldwide. The company is specially focused on large enterprises, and small- and medium-sized businesses. www.kaspersky.com



Microsoft Corporation. Multinational technology company that develops, manufactures, licenses, supports and sells computer software, consumer electronics, personal computers and services. www.microsoft.com



Red Hat, Inc. Software company providing open-source software products to the enterprise community. Red Hat provides storage, operating system platforms, middleware, applications, management products, and support, training, and consulting services. www.redhat.com



Schneider Electric. French multinational corporation that specializes in electricity distribution, automation management and produces installation components for energy management. It is the parent company of APC. www.schneider-electric.com



Super Micro Computer, Inc. Company designs, develops, manufactures and sells servers based on the x86-64 architectures. Offerings include rack-mount, server systems, high-end workstations etc. www.supermicro.com



Dr. Web is a Russian anti-malware company and the name of its flagship software suite. First released in 1992, it became the first anti-virus service in Russia. The company also offers anti-spam solutions and is used by Yandex to scan e-mail attachments. www.drweb.com

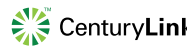
SERVICE PROVIDERS



Colt Group S.A. Multinational telecommunications, and data centre services company headquartered in London, United Kingdom. www.colt.net



Equinix, Inc. American public corporation that provides carrier-neutral data centers and Internet exchanges to enable interconnection. Equinix data centers are also home to more than 500 cloud service providers. www.equinix.com



CenturyLink (ex-Level 3 Communications) Multinational telecommunications and Internet service provider company. It operates a Tier 1 network, provides core transport, IP, voice, video, and content delivery for medium-to-large Internet carriers in Americas, Europe, and selected cities in Asia. www.level3isnowcenturylink.com



NewTelco. Carrier-neutral solution provider specialised on the telecommunication industry offering a broad array of value-added managed services worldwide. www.newtelco.de



PCCW Global. The international operating division of HKT, Hong Kong's premier telecommunications service provider. Company offering the latest voice and data solutions to multi-national enterprises and communication service providers. www.pccwglobal.com



Power-All Networks. Subsidiary of Foxconn, R&D center of Inter-Cloud computing technology. Company mission is to build the World-Wide Cloud and Inter-Cloud Eco System. It is one of the largest neutral proxy operators. www.cloudwww.com



Telecom Italia Sparkle. Rome based company offers a complete range of Data, IP, Cloud, Data Center, Mobile and Voice solutions. www.tisparkle.com



Verizon Communications. Broadband telecommunications company. Verizon offers fixed-line and mobile telephony, broadband internet services, digital television and global internet protocol backbone network. www.verizon.com

Where to get the latest version of our corporate magazine?



PDF version of our corporate magazine and other materials about IPTP Networks services available at our online library:

<https://iptp.net/cm>

GLOBAL COMMUNITY

IPTP Networks is a member of all existing regional internet registries (RIRs) in the world. Such an exclusive position makes our network truly global in scope.



“The network infrastructure of IPTP Networks spans key data centre locations in every continent. This key strength, together with their innovative and flexible approach, makes them a perfect party to resell the AMS-IX service remotely.”

Mark Cooper, CCO at AMS-IX.

IPTP Networks is the partner member of the major Internet Exchanges in the world. Currently we have peering in the following IX exchanges and locations:

 amsix amsterdam internet exchange	Amsterdam Internet Exchange Locations: Amsterdam, Hong Kong www.ams-ix.net	 franceix Convergence hub	France-IX Locations: Paris, Marseille www.franceix.net	 ptt.br	PTT Metro Location: São Paulo www.ptt.br
 BBIX Internet Exchange	BBIX Locations: Tokyo, Hong Kong, Singapore www.bbix.net	 insa	Johannesburg Internet Exchange Location: Johannesburg www.ispa.org.za	 sgix	Singapore Internet Exchange Location: Singapore www.sgix.sg
 CORESITE	CoreSite - Any2 Location: Los Angeles, California www.coresite.com	 JPNAP	JPNAP Tokyo Location: Tokyo www.jpnep.net	 SIX SEATTLE INTERNET EXCHANGE	Seattle Internet Exchange Location: Seattle (WA) www.seattleix.net
 DE CIX	DE-CIX Locations: Frankfurt, New York, Istanbul www.de-cix.net	 KINX www.kinx.net	KINX Location: Seoul www.kinx.net	 DIGITAL REALTY	Digital Realty IX Locations: New York (NY), Atlanta (GA) ix.digitalreality.com
 dtel-ix the peering company	DTel-IX Location: Kiev www.dtel-ix.net	 LINX — Est. 1994 —	LINX Location: London www.linx.net	 torix toronto internet exchange	Toronto Internet Exchange Community Location: Toronto www.torix.ca
 ESpanix	ESPANIX Location: Madrid www.espanix.net	 MIX	MIX-IT Location: Milan www.mix-it.net	 NYIIX	NYIIX Location: New York (NY) www.nyiix.net
 EQUINIX	Equinix Locations: Ashburn (VA), Chicago (IL), Dallas (TX), Hong Kong, Los Angeles (CA), Paris, Singapore, New York (NY), Zürich www.ix.equinix.com	 MSK	MSK-IX Locations: Moscow, St. Petersburg www.msk-it.ru	 HKIX	Hong Kong Internet Exchange Location: Hong Kong www.hkix.net
 FICIX	Finnish Communication and Internet Exchange Location: Helsinki www.ficix.fi	 NAPAFRICA	NAPAfrica IX Johannesburg Location: Johannesburg www.napaffrica.net	 nap of the Americas	NAP Of The Americas Location: Miami (FL) verizonenterprise.com
		 NLIX neutral internet exchange	Netherlands Internet Exchange Location: Amsterdam www.nl-ix.net	 JPix	JPix Location: Tokyo www.jpix.ad.jp
		 netnod	Netnod IX Location: Stockholm www.netnod.se		

1-STOP-IT-SHOP

IPTP Networks is a One-Stop-Shop for all your Information Technology needs. We design, deliver, implement and integrate all aspects of your projects, provide consulting on all solutions and handle all sub-contractors. As a result, you receive a complete product from a single source, have a single point of contact along the way and cover your entire IT infrastructure in just one stop.



Comprehensive solutions, fortified with management, monitoring, maintenance and 24/7 support.



A full array of services on a single invoice with a single point of contact.



SLAs guaranteed with up to 99.999% availability for N+1 redundant solutions.



A wide selection of industry-standard technologies from the leading manufacturers.



Technical support available in English, Russian, Cantonese and Chinese.



A-Z IT-Infrastructure

NAAS

Network as
a service

IP Transit
IX Transit
MPLS
IPLS
ELP
Geo DNS
BGP Anycast
Managed Wireless LAN
MPLS VPN

Managed Internet
SIP Trunking
IPSec VPN
Managed WAAS
Managed Router
High Availability Clusters
Direct Connectivity to Forex
Liquidity Pr.
Cloud/CDN Enabler

SAAS

Software as
a service

ERP & CRM
DDoS Mitigation Solution
GSM Tracking Solution

Home Automation Solution
Video Surveillance

SECAAS

Security as a
service

DDoS Mitigation Solution
Managed Firewall
Secure Router
Managed IDS/IPS
Secure Access

Video Surveillance
Home/Office Automation Solution
Access Control Solution RSA
Managed Security Services
Physical security

IAAS

Infrastructure
as a service

EMC Storage
Managed LAN
Managed WAAS
Secure Router
Managed IDS/IPS

Dedicated Hosting
Colocation
High Availability Clusters
Dark Fiber
Radio Link

PAAS

Platform as
a service

Private Cloud
Private CDN

EMC Storage
Managed Firewall

MANAGED SERVICES

MANAGED SECURITY SERVICES / PAGE 15

IPTP PENTEST / PAGE 15

MANAGED CONNECTIVITY SERVICES / PAGE 17

MANAGED DATA CENTER SERVICES / PAGE 22

MANAGED UNIFIED COMMUNICATION SERVICES / PAGE 32

MANAGED MOBILE COMMUNICATION SERVICES / PAGE 33

WHAT?

WHY?

HOW?

IPTP Managed Services offers a dynamic portfolio of complex IT skills and infrastructure capabilities, providing diversified management tailored to your specific business model.

You can select the components of your IT infrastructure and we will manage them for you, allowing you to maintain flexibility and control over your business. We can also help you reduce costs, increase productivity with useful resources, extend your business capabilities and enhance your select business strategy.

Our certified staff are dedicated to helping you enhance the business value of your IT investment through improved operational efficiency and exceptional service levels.

"Deployment with IPTP significantly increased our enterprise's productivity and responsiveness, establishing a whole new level of confidence throughout our working environment."

Alexander Grekov, Sr. Account Manager at MSK-IX

MANAGED SECURITY SERVICES

CISCO SELF-DEFENDING NETWORKS' PROTECTED INFRASTRUCTURE

24/7 MANAGEMENT, MONITORING AND MAINTENANCE OF NETWORK TRAFFIC FLOW ONLINE

CUSTOMER PORTAL WITH ACCESS TO REAL-TIME PERFORMANCE REPORTS

To ensure continuous running of all business operations, every enterprise needs to be confident in the security of its assets. ITP Networks offers well-established, reliable solutions designed in accordance with defining requirements for the core security solutions in today's market. This capability helps us easily integrate into any existing infrastructure and address all market demands from the smallest businesses to the largest enterprises. Our Managed Security Services are designed to assess vulnerabilities, detect attacks and respond to suspicious activities and events.

Managed Firewall

This service provides you with Cisco's proven firewall technology solutions combined with end-to-end management, monitoring and maintenance to enhance the protection of your business infrastructure. Managed Firewall conforms to industry-best practices, and is covered by comprehensive SLAs that guarantees top level of overall performance of the service.

Managed LAN

Our managed Local Area Network service is designed specifically to provide you with remote LAN switch configuration, management and maintenance, combined with software patch management. You benefit from the reduced costs compared to an in-house IT department and a sophisticated professional management, backed by our extensive experience and capabilities. Our solution design was accurately constructed to meet your specific requirements for all levels of service performance and can be complemented by other services such as IP Telephony.

Secure Router

WAN router by ITP Networks provides you with integrated security that ensures a protected connectivity. It includes hardware-based encryption for VPN and supports numerous security features. The service is based on the Integrated Services Router (ISR) security bundles that can range from basic security to VPN for integrated security and IP communications – the highest security level.

Secure Access

Through the Managed RSA SecurID® solution, we provide you with proven two-factor authentication. This solution offers a wide range of user authentication options to help positively identify users before they interact with mission-critical data and applications, keeping your data as private as you want it to be.

Managed IDS/IPS

Proven deep-packet inspection-based technology helps to protect your business infrastructure and prevent a wide range of network attacks. The service is deployed at strategic locations across your network in order to detect and react to misuse, attacks and security policy violations.

Distributed Mitigation Managed Service against DDoS (DMMS)

Our private high-performance network allows us to provide distributed protection against volumetric DDoS on our perimeter, limiting the attacker's capability to pool attack traffic into a single target and reducing the mass of an attack by an order of magnitude. Rather than shifting traffic to a clearing center and back, all traffic is cleared directly at the border of our network, which eliminates any latency and packet loss typically involved in the clearing process and ensures a truly transparent protection. Distribution of traffic among separate, dedicated equipment on our network prevents the combined volume of attack traffic from ever targeting a single network node, making our infrastructure completely secure.

IPTP PENTEST

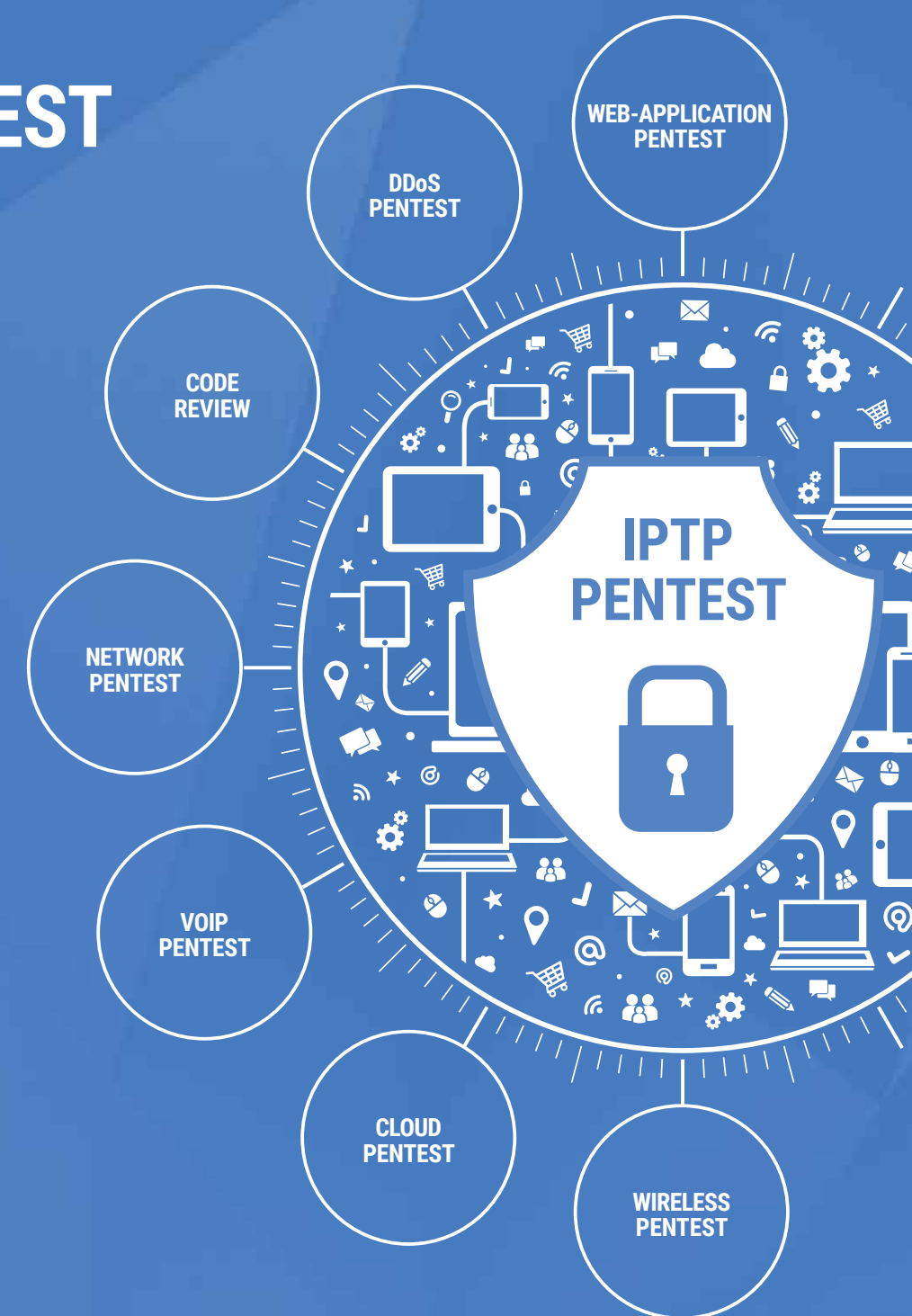
**OUR NETWORKING
EXPERTISE AT YOUR
DISPOSAL.**

ITP PenTest is a fully-fledged managed service inclusive of a cutting edge PCI Scanning Service, a corporate-grade remote vulnerability scanning and PCI Approved Scanning Vendor (ASV) validation service. ITP PenTest scans the Internet-facing IP addresses for possible vulnerabilities in networks and web applications as well as validating the compliance to the requirements of the Payment Card Industry Data Security Standard (PCI DSS).

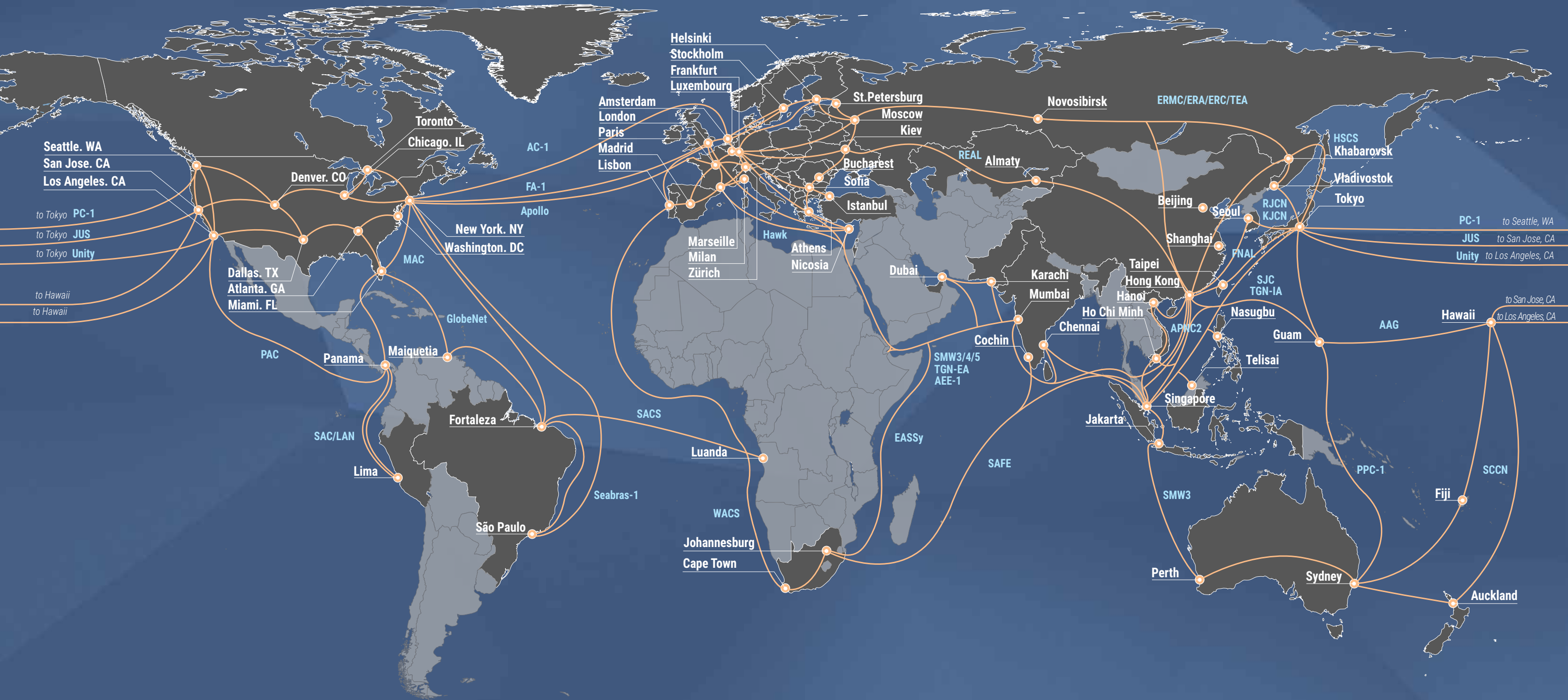
ITP PenTest is hosted in our own secure data-centers, built to industry-leading specifications and standards. We use strictly top-of-the-line equipment to ensure that you are fully aware of any possible risks to your long-term network security and mission-critical data.

IPTP PENTEST OFFERS:

- Complete scanning of perimeter IPs.
- Web application vulnerability detection: scan web-facing applications for vulnerabilities that compromise compliance.
- No additional infrastructure overhead: As a managed service, ITP PenTest requires no hardware or software installation. We perform and manage the set-up
- World-class expertise: Links to the most-trusted knowledge-base in the industry and full access to ITP's certified team of professionals
- Value-based performance: one-off fee for a complete battery of tests and a full report
- Report generation: a full report of the test's findings showing all key areas of vulnerability. Additional expert advice services are available.



GLOBAL NETWORK AND POINTS OF PRESENCE MAP



IPTP Networks is a worldwide, ultra-high bandwidth network infrastructure provider that is independently owned, diverse and secure. We operate on all major Internet Exchanges and are present in the largest financial centers, providing outstanding connectivity across Europe, the Middle East, Russia, Asia, Africa, the Americas and Oceania.

MANAGED CONNECTIVITY SERVICES

Our global network connectivity is based on specialized, tailor-made solutions designed for corporate clientele operating in Media, Finance, Gaming, Telecommunications and other sectors. We offer high-level, non-packaged services, adaptable to fit individual business models, allowing you to choose a specific service in accordance with your needs or combine it with other Managed Connectivity Services. These services can be deployed either on an infrastructure owned by us or in conjunction with a third-party infrastructure, ensuring ultimate connectivity.

MANAGED CONNECTIVITY SERVICES

Advantages

Convergence of multiple applications and traffic types onto a single network

Customer portal providing real-time statistics

Flexible connectivity service that expands simultaneously with the growth of your business requirements

SLAs for multiple classes of service

Accomplished, industry-leading infrastructure for communicating both internally and with your customers

Numerous connectivity options that meet varied business requirements

Unique transparency to customer including real time backbone load graphs

FOR NETWORK SERVICE PROVIDERS

IPLC (International Private Leased Circuit)

An international P2P leased line service provides a dedicated, reliable and secure point-to-point connectivity solution between customers' premises and locations worldwide. It supports all types of traffic (Voice, Data, Video or any other latency and jitter-sensitive multimedia applications), provides a wide range of bandwidth and offers scalability and flexibility to meet your present and future communications needs.

Geo DNS

GeoDNS is a DNS (Domain Name System) solution that can distribute load for a hostname to the nearest 'mirrors' (geographically defined; on the country/continent level). GeoDNS could be named as one of the following: geolocation load balancing, geolocation-aware DNS or GSLB (Global Server Load Balancing). The service does not require any support from the

ISP and will not break existing connections when the server selected for a particular client changes. If you have servers in multiple locations, GeoDNS provides a way to direct users to the closest server ('mirror'), which means that your visitors reach your website faster.

IP Transit

High-speed, highly resilient broadband full BGP Internet table for telecoms and data center operators, ISPs, ASPs, CPs and the corporates. Level 3 partnership helps us achieve ultimate connectivity both via HSIP and directly via peering partners, establishing sessions that bypass other autonomous systems. Extensive direct interconnections and well-established bilateral peering with numerous providers worldwide allow for load-balancing, route optimisation and excellent global and regional coverage. Available on 10M, 100M, 1G, 10G, 100G ports at major data centers around the world or at customer premises with extended local loop.

"IPTP is the first company to state that it 'simply provides proper internet', and for many years it has done just that!"

Alexey Bozrikov, The head of IT, SCF Unicom
<http://www.unicom-cy.com>

EPL (Ethernet Private Line)

A cost-effective connectivity solution that enables your organization to meet the demand of bandwidth-intensive applications with reliable, flexible, high bandwidth P2P configurations delivering high-capacity fiber connections between two sites. It enables you to connect your CPE using Ethernet interface with lower cost and allows you to use any VLANs or Ethernet control protocol across the service without coordination with IPTP. QoS-aware EPL allows you to deliver voice, data, video and any other media streams.

Cloud/CDN enabler

Our company serves as the backbone for numerous Cloud and CDN computing products and services, allowing us to build, deploy, integrate and deliver Cloud/CDN computing solutions. The service allows you to reduce IT costs for application and infrastructure, streamline operations and significantly speed up the process of accessing the market.

BGP Anycast

BGP (Border Gateway Protocol) Anycast allows for network level failover of IP Address space. This is achieved by announcing the same prefix into the global routing table from multiple locations. In an event of one location going offline, the global routing table adjusts automatically and routes traffic to the next nearest location, announcing the same prefix. As well as the failover, Anycast provides the "best path" to access content, which means that the user automatically connects to an Anycast location nearest to him, based on the network.

Multiprotocol Label Switching (MPLS)

Multiprotocol Label Switching (MPLS) is a prominent technology we maintain for numerous multi-site companies spread across wide geographies. The service is ideal for businesses that run VPN's, VoIP and business-critical programs such as credit card transactions (PCI DSS), account packages and/or stock information, which require large amounts of bandwidth and fast connectivity.

IX Transit

Service that enables you to connect to select partners of Internet Exchanges through our network and benefit from cost, latency and bandwidth. You can reach all major Internet Exchanges via a single port. List of IXs includes but is not limited to: AMS-IX, DE-CIX, Equinix Exchange, HKIX, MSK-IX, LINX, SIX, TorIX, DTEL-IX, Telx TIE, Any2.

FOR ENTERPRISE CLIENTS

MANAGED INTERNET

We offer you a service that delivers connectivity regardless of your location and access methods. Backed by comprehensive SLAs, online access to real-time and historical service-performance reports, it features top of the line quality of service, access control lists and other industry-leading practices. As a result, you receive a secure Internet connection based on Cisco's Self-Defending Network line of products supplemented by IPTP's in-house development and architecture, all built upon a highly reliable infrastructure.

SIP TRUNKING

We provide you with core connectivity, emergency services, dial plan management and operation services, as well as executing all of your local and long distance call connections. Cisco-powered managed IP Trunking service is a Session Initiation Protocol (SIP) -based trunk from us to an IP PBX or any other IP Telephony system, delivering voice, multimedia and data traffic. In addition, we provide you with an IP termination service that features PBX with a gateway, an IAD or an IP PBX. Comprehensive SLAs cover the overall performance of the service and you always have online access to detailed service-performance reports.

IPSec VPN

To ensure the smooth running of operations every enterprise requires secure site-to-site connectivity. We offer you a service that has DES, 3DES and AES encryption and can be provided together with managed Firewall. Our framework of open standards (based on RFC specifications and the IPSec protocol) delivers IPSec encryption and provides tunneling protocols, data confidentiality, data integrity, and data authentication over unprotected networks (such as the Internet), all through encrypted data streams over a private or public network.

MANAGED LAN

Our managed Local Area Network service is designed to provide you with remote LAN switch configuration, management and maintenance, combined with software patch management. You benefit from reduction in costs for an in-house IT department and sophisticated professional management – all backed by our experience and extensive capabilities. Our solution design is accurately constructed to meet your specific requirements for all levels of service performance and can be complemented by other services such as IP Telephony.

MANAGED WAAS

Through the Cisco-qualified Managed Wide Area Application Services (WAAS) we provide you with the means to deliver a powerful application acceleration and WAN optimization solution for the branch office, and improve the performance of any TCP-based application operating in a WAN environment. Your organization will be able to consolidate costly branch-office servers and storage into centrally managed data centers, deploy new applications directly from a data center and offer LAN-like application performance for your remote users. We also offer Managed WAAS with a strategic designation, that include a full suite of WAAS-enabled services that can be implemented either incrementally or immediately, and combined with other services such as Managed Router and Managed Firewall. The service includes 24/7 management, monitoring and maintenance, comprehensive SLAs and access to an online customer portal providing real-time statistics.

MANAGED ROUTER

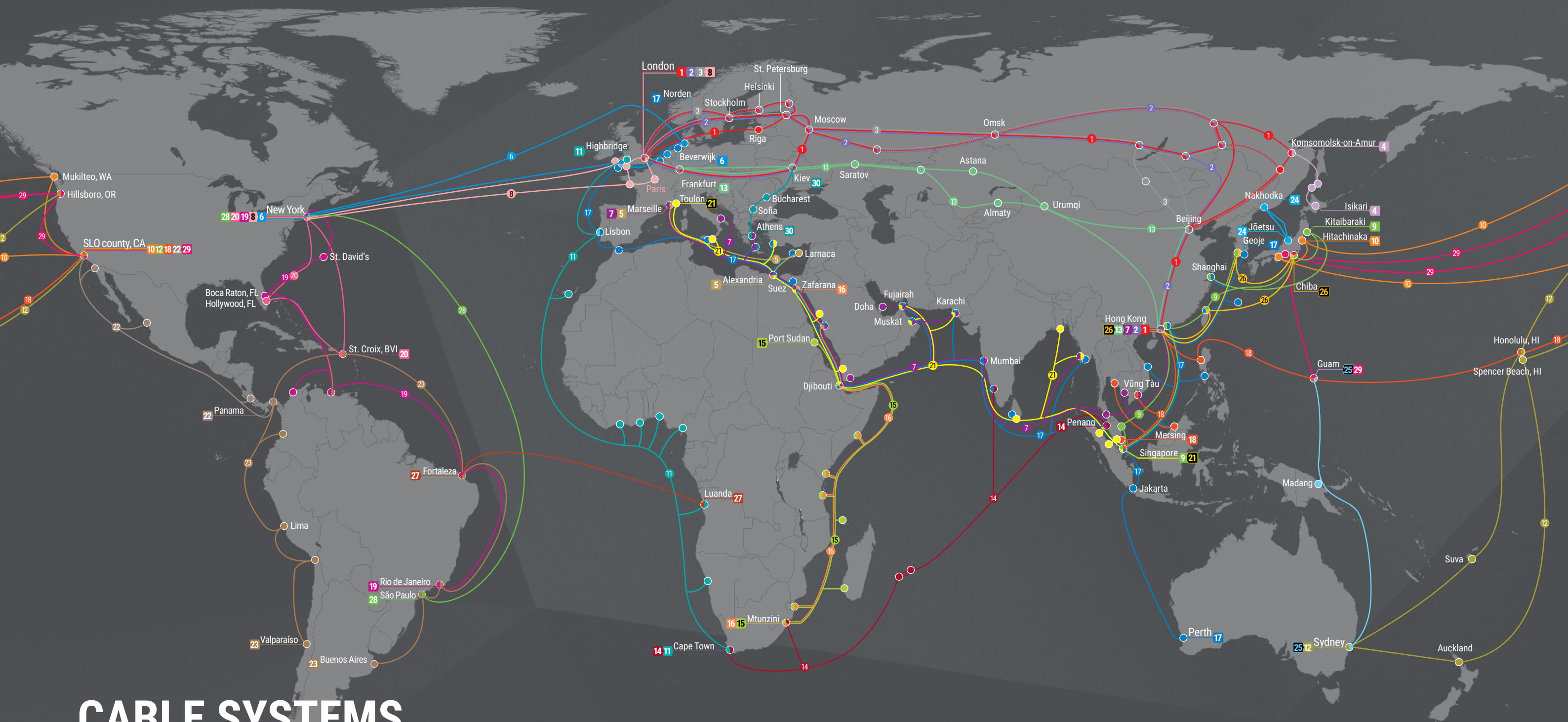
Our Managed Router service provides you with remote router configuration, management and maintenance, resulting in 24/7 supervision of your routers in a Wide Area Network. To ensure that you receive ultimate connectivity, this service is enhanced. with regular backups of router configuration and software patch management.

MANAGED METRO ETHERNET

Cisco-powered, managed Metro Ethernet provides you with high-speed site-to-site connectivity, supporting the delivery of Voice, Video and other mission-critical applications. We provide QoS functionality, including classification and prioritization techniques and deliver a variety of point-to-point and multipoint Ethernet services over Layer 1, Layer 2 and Layer 3 topologies with seamless integration.

ETHERNET OVER MPLS (EoMPLS)

Ethernet over MPLS (EoMPLS) is a Cisco solution which extends MPLS by tunneling Layer 2 Ethernet frames across a Layer 3 core. It provides more scalability because it has a Layer 3 core and provides more control over traffic. EoMPLS can deliver Transport Layer Security (TLS) for customers' Ethernet connections. From the customer's perspective, this logical connection appears as an Ethernet segment. EoMPLS supports more than 4,096 VLANs by the service provider.



CABLE SYSTEMS

- 1** **Europe-Russia-Mongolia-China (ERMC)** is one of the components of The Eurasia Terrestrial Cable Network – a valuable part of the global telecom infrastructure. ERMC is an overland telecommunications cable system linking Asia and Europe via Russia and Mongolia. It provides an alternative, shorter path to submarine communications cables with a latency of 185/195* ms on a route Hong-Kong - London and the capacity that can be increased from an as-built 40 Gbit/s to 400 Gbit/s.
- 2** **ERA or Europe-Russia-Asia** is an overland telecommunications cable system with a latency of 210/220* ms on a route Hong-Kong - London. Latency from Moscow to Amsterdam is approximately 37 ms. The consortium includes Rostelecom, NTT Communications (NTT Com), and China United Network Communications Group Co, Ltd (China Unicom).
- 3** **ERC or Europe-Russia-China** is an overland telecommunications cable system with a latency of 230/240* ms on a route Hong-Kong - London. The system is a result of cooperation between Rostelecom and China Telecom Corporation Limited (China Telecommunications Corporation or China Telecom).
- 4** **HSCS or The Hokkaido-Sakhalin Cable System** is a single span 500 km linear undersea cable system between Ishikari, Hokkaido in Japan and Nevelsk, Sakhalin in Russia, jointly built by TransTeleCom Company CJSC (TTK), Russia's leading telecommunications backbone operator, and NTT Communications Corporation (NTT Com). The commercial operation of the HSCS significantly enlarges the telecommunication capacity between Russia and Japan up to 640 Gbps. HSCS latency is 5.6 ms in theoretical value and round trip delay (actual value has not been investigated). With the seamless combination of the HSCS and the ERA, a trans-Russia terrestrial backbone of NTT and TTK, the system can offer an alternative and low-latency route for the traffic between Asia and Europe.
- 5** **ALEXANDROS** is a private cable subsystem consisting of a fibre pair between Cyprus-Egypt (7 ms latency) and a fibre pair between Cyprus-France (17 ms latency), implemented through Telecom Egypt's submarine cable system TE NORTH (TEN), connecting Egypt with France. The ALEXANDROS interconnects the Pentashinos landing station in Cyprus with Abu Talat in Egypt and Marseilles in France, each direction with total capacity of 96x10Gbps enhancing connectivity in the Mediterranean and providing international network robustness and reliability.
- 6** **Atlantic Crossing-1 (AC-1)** is an optical submarine telecommunications cable system linking the USA and three European countries. It is owned by Tyco, a security systems company and Level 3 Communications, a multinational telecommunications and Internet service provider. One of several transatlantic communications cables, it has total length of 14,000 km, design capacity of 40 Gbit/s and currently lit capacity of 120 Gbit/s. AC-1 is designed to transport speech and data traffic between the U.S., the U.K., the Netherlands and Germany, and ensures the highest reliability and the lowest latency across the Atlantic with latency between the U.S. and U.K. approximately 64/65 ms.
- 7** **Asia Africa Europe-1 (AAE-1)** is a 25,000 km consortium cable system connecting South East Asia to Europe via Egypt. It connects Hong Kong, Vietnam, Cambodia, Thailand, with Malaysia and Singapore, then onwards to Myanmar, India, Pakistan, Oman, UAE, Qatar, Yemen, Djibouti, Saudi Arabia, Egypt, Greece, Italy and France. AAE-1 cable system deploys state-of-the-art 100Gbps transmission technology, with a minimum design capacity of 40 Tbps.

8 **FLAG Atlantic-1 (FA-1)** is a city-to-city service linking New York, London and Paris with seamless connections to numerous other cities in the US, Europe, countries in the Middle East and Asia Pacific regions via the FLAG Telecom network. FA-1 is the world's first dual terabit/s transoceanic cable system and offers direct city-to-city connectivity with a combined design capacity of 4.8 Tbps using Dense Wave Division Multiplexing (DWDM) technology and Current lit capacity 320 Gbit/s. FA-1 North from Telehouse East London to 111 8th Avenue NY is RTD 67ms and FA-1 South from Telehouse 2 Paris to 60 Hudson NY is RTD 71ms.

9 **APCN-2 or Asia-Pacific Cable Network 2** is a 19,000km optical fibre submarine cable system linking Japan, Korea, China, Taiwan, Hong Kong, the Philippines, Malaysia, and Singapore in a ring configuration, with four fiber pairs connecting 10 submarine cable landing stations. Latency between Singapore and Japan is approximately 86 ms. The APCN-2 consortium members consist of 45 carriers, including 26 initial parties. The APCN-2 has a design capacity of 2.56 Tbps by operating with 64x10 Gbps DWDM technology and is the first submarine system that is built with a self-healing function.

10 **PC-1 or Pacific Crossing 1** (owned subsidiary of NTT Communications) is a submarine telecommunications cable system connecting the U.S. and Japan. Latency (RTT) from Tokyo to Seattle is approximately 83 ms and approximately 110 ms from Tokyo to Los Angeles. PC-1 offers protected trans-pacific capacity up to 10Gbps (SDH and wavelength), as well as Ethernet services up to 10G LAN PHY and 10G WAN PHY. The PC-1 network is also offering T00GE connections. 21 000 km long, it ensures the highest reliability and the lowest latency across the Pacific.

11 **West African Cable System (WACS)** submarine cable is an ultra high capacity fibre optic. This submarine cable links South of Africa and Europe, spanning through the west coast of Africa. This 4 fiber pair system with total length of 14,530 km is well complemented with 15 terminal stations forming a consortium of 17 leading international telecom carriers.

12 **Southern Cross Cable Network (SCCN)** comprises 28,000 kilometres of undersea cable and 2,000 kilometres of terrestrial cable. This cable network provides low latency, high service availability ring capacity solutions between Australia, New Zealand, Fiji, Hawaii and mainland USA. Southern Cross is an independent entity and is owned by Telecom New Zealand (50%), SingTel Optus (40%) and Verizon Business (10%).

13 **Rapid Europe Asia Link (REAL)** is a new over-land telecommunications cable system linking Hong Kong and Frankfurt via Kazakhstan, Russia, and Ukraine. REAL is the shortest link between Europe and Asia. Current lit capacity is 200 Gbit/s. RTT between Hong Kong and Frankfurt is around 161 ms. A REAL international route is organized by the Datagroup company in cooperation with partners "Kazakhtelecom" and "Kvant-Telecom" in 2014. The primary goal is to increase the share in land transit of data between Asia and Europe.

14 **SAFE (The South Africa Far East)** is 13,104 km long optical fibre submarine communications cable system linking Melkbosstrand, South Africa to Penang, Malaysia. It is built by Tyco Submarine Systems (the only independent, vertically integrated worldwide supplier of undersea communication systems and services). Together with SAT-3/WASC, it provides redundancy for other Middle East cables, with high-speed digital links between Europe, West and South Africa and the Far East. It has four fiber strands, using Erbium-doped fiber amplifier repeaters and WDM technology. The latency on the SAFE cable between Mtunzini on the South Coast of South Africa and Penang in Malaysia is estimated to be 46 ms.

15 **EASSy (The Eastern Africa Submarine Cable System)** is 10,000 km long and is deployed along the eastern and southern coasts of Africa, linking South Africa with Sudan. Owned and operated by a group of 16 African and international telecom operators and SPs it is the highest capacity system serving sub-Saharan Africa, with more than 10Tbps, 2 fibre-pair configuration. EASSy is the only system with built-in resilience end-to-end, with connectivity delivered direct to Europe, offering the lowest latency among other east coast systems, promising sub-200ms for S. Africa-London and end-to-end latency for Mtunzini (South Africa) - Port Sudan (Sudan) - 94 ms.

16 **TGN-EA (TGN-Eurasia)** is a 9,280 km multi-terabit cable system linking Europe to India through Egypt, bringing increased capacity, resilience and enhanced communications links not only to the Middle East but to the rest of the world via the Tata Global Network (TGN). TGN cable systems is the world's first round-the-world fibre optic cable network, owned by Tata Communications Limited, a global provider of managed communications services to multinational enterprises and service providers. The system offers customers speeds from 2Mbit/s to 10Gbit/s and the lowest levels of latency with RTD: India - Marseille: ~ 95 ms, India - Jeddah: ~ 60ms, India - Egypt : ~70 ms, Mtunzini (South Africa) - Zafarana (Egypt): 115 ms and Mtunzini - Mumbai: 93 ms.

17 **SeaMeWe-3 or South-East Asia - Middle East - Western Europe 3** is an optical submarine telecommunications cable linking those regions and is the longest in the world! It is led by France Telecom and China Telecom, administered by Singtel, a telecommunications operator owned by the Government of Singapore. The Consortium is formed by 92 other investors from the telecom industry. It is 39,000 km in length and uses WDM technology with SDH transmission to increase capacity and enhance the quality of the signal, especially over long distances (this cable stretches from North Germany to Australia and Japan). The cable system itself has 2 fibre pairs, each carrying 64 wavelengths of 10 Gbit/s. On 1 Jan 2015, data capacity of the submarine network is increased significantly with 100G technologies.

18 **Asia-America Gateway (AAG) Cable System** is a 20,000-kilometre long submarine communications cable system, connecting South-East Asia with the mainland of the United States, across the Pacific Ocean via Guam and Hawaii. The cable is capable of delivering up to 2.88 Tbit/s (US-Hawaii & Hong Kong-South East Asia) and 1.92 Tbit/s (Hawaii-Hong Kong).

19 **GlobeNet** is a subsea, dual ring-protected, fiber optic cable system that spans more than 23,500 km. Linking the USA, Bermuda, Colombia, Venezuela and Brazil, it has a design capacity of 1.36 Tbit/s carried over four fiber pairs of fully restorable capacity (34 x 10 Gigabit x 4 fiber pairs). It was demonstrated in 2010 that the cable system was capable of supporting 5.76 Terabits on all segments built in 2001. The cable system was initially laid and named by GlobeNet, which today is a portfolio company of BTG Pactual.

20 **Mid-Atlantic Crossing (MAC)** is a subsea, fiber optic cable system that spans more than 7,500 km. It was demonstrated in June 2000 and has design of 920 Gbps capacity. Mid-Atlantic Crossing submarine cable system is owned by Level(3) and links New York, Florida and British Virgin Islands.

21 **South East Asia-Middle East-Western Europe 5 (SEA-ME-WE 5)** is an optical fibre submarine communications cable system that carries telecommunications between Singapore and France. The cable is approximately 20,000 kilometres long and provides broadband communications with a design capacity of 24 Tbps between South East Asia, the Indian subcontinent, the Middle East and Europe via 19 landing points. The portion from France to Sri Lanka was constructed by Alcatel-Lucent and the portion from Sri Lanka to Singapore by NEC. Construction commenced on 6 June 2014 and completed in December 2016.

22 **Pan-American Crossing (PAC)** is an optical fibre submarine communications cable system that carries telecommunications between Panama, Costa Rica, Mexico and the USA. The cable is approximately 9 600 kilometres long and provides broadband communications with a design capacity of 800 Gbps.

23 **South American Crossing (SAC)/Latin American Nautilus (LAN)** is an optical fibre submarine communications cable system approximately 20,000 kilometres long. Level 3 owns three fiber pairs on the systems, which it calls South American Crossing. Telecom Italia owns one fiber that it refers to as Latin American Nautilus. Only Level 3 has capacity on the branch to Colombia.

24 **The RJCN (or Russia-Japan Cable Network)** is a 1800-km submarine cable system with diverse cable routes connecting Japan and Russia, with a design capacity of 640 Gbps. The RJCN was ready for service on September 5 2008. By interconnecting with the Transit Europe Asia (TEA) terrestrial cable, the RJCN and the TEA can offer the shortest latency (approximately 196 ms) between Tokyo and London. And 10 Gbps transparent wavelength is available on the RJCN and TEA route.

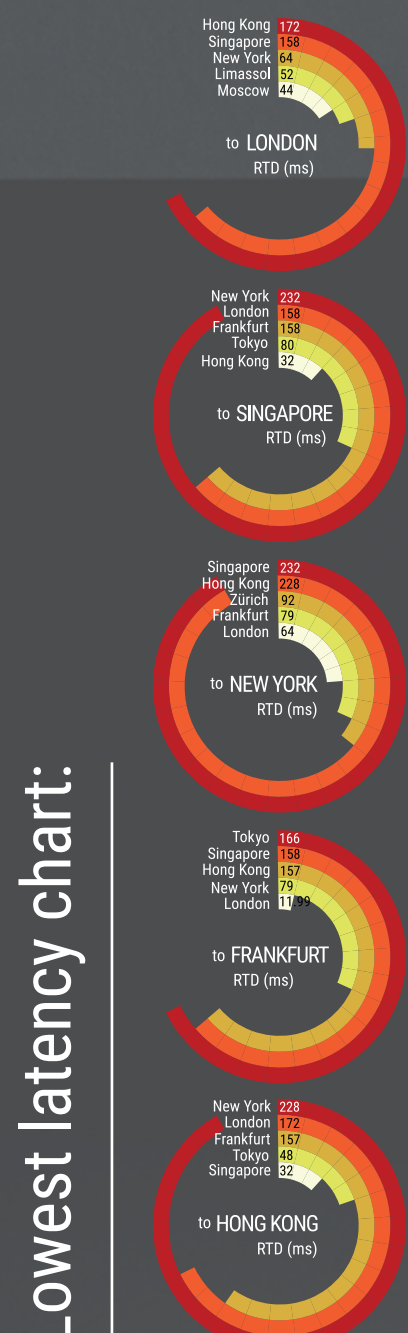
25 **PIPE Pacific Cable-1 (PPC-1)** is an international's submarine cable connecting Australia to Guam. The cable system spans 7,000 km. PPC-1 is currently equipped with 10 Gbps wavelengths and is capable of carrying 2.56 Tbps (128 x 10 Gbps wavelengths per fibre pair).

26 **FLAG North Asia Loop/REACH North Asia Loop** is the 10,000 km cable network provides intra-regional, city-to-city connectivity between Hong Kong, Seoul, Tokyo, and Taipei. The cable network was developed jointly by Reach and FLAG Telecom. Reach has constructed the eastern leg of the multi-terabit cable that connects Japan, Taiwan, and Hong Kong, while FLAG built the western leg connecting Japan, Hong Kong, and Korea. F/RNAL is a high-capacity 6-fiber-pair redundant loop system, upgradeable using DWDM. The F/RNAL is a self-healing loop cable with traffic restoration time of less than 1 second in the event of a cable fault and availability of 99.99% (about 5 minutes of downtime per year).

27 **SACS (South Atlantic Cable System)** also known as the Angola-Brazil Cable, is a submarine communications cable in the South Atlantic Ocean linking Luanda, Angola with Fortaleza, Brazil with a leg connecting the Brazilian archipelago of Fernando de Noronha as well. It is designed to provide low latency routing between Africa and Americas. Data traffic between Angola and Brazil will no longer have to pass through Europe and the US, as currently occurs. The cable measure 6,165 km in length and contain four fibre pairs, each capable of transmitting 100 wavelengths with a bandwidth of 100Gbit/s. In Fortaleza the SACS will be interconnected to Seabras-1 while the Angolan end will provide onward connectivity by the SAT-3/WASC cable.

28 **Seabras-1** is a 72Tbit/s system and will also be the world's longest system built to date using 100 Gbit/s coherent technology. The system offers carrier-class roundtrip latency POP to POP. Seabras-1's ultra-low latency SeaSpeed™ solution between Carteret & Sao Paulo and Bandwidth-on-Demand is also available exclusively from Seaborn. Seaborn was founded by successful submarine cable and wholesale carrier executives with experience in designing, building and operating many of the world's largest submarine and terrestrial networks.

29 **Tata TGN-Pacific** is a 22,800 km length cable system which forms a self-healing ring connecting the Guam island and U.S. mainland to Japan. It is designed with 96x10 Gbps DWDM over 8 fiber pairs in both routes. It offers around 1.6Tbps of lit capacity. The system was initially built, designed and operated wholly by Tyco Telecommunications, completed in December 2002.



INTERNET EXCHANGES



IPTP NETWORKS' PEERING FACILITIES

1. CoreSite - DE1
2. Denver Gas & Electric Building
3. CoreSite - LA1 - One Wilshire
4. CoreSite - LA2
5. Equinix Los Angeles (LA1)
6. Digital Realty | Telx Los Angeles
7. Equinix Los Angeles (LA5)
8. XO 600 West 7th (LA)
9. Equinix Los Angeles (LA2)
10. Equinix El Segundo (LA3)
11. Equinix El Segundo (LA4)
12. Digital Realty Trust (El Segundo)
13. Equinix San Jose (SV1)
14. Equinix San Jose (SV5)
15. Equinix San Jose (SV3)
16. 365 Data Centers San Jose (SV7)
17. Equinix San Jose (SV2)
18. Equinix Sunnyvale (SV4)
19. Equinix Sunnyvale (SV6)
20. Equinix Sunnyvale (SV8)
21. Equinix Ashburn (DC1)
22. Equinix Ashburn (DC2)
23. Equinix Ashburn (DC3)
24. Equinix Ashburn (DC4)
25. Equinix Ashburn (DC5)
26. Equinix Ashburn (DC6)
27. Equinix Ashburn (DC7)
28. Equinix Ashburn (DC8)
29. Equinix Ashburn (DC9)
30. Equinix Ashburn (DC10)
31. Equinix Ashburn (DC11)
32. Equinix Chicago (CH1)
33. Equinix Chicago (CH2)
34. Telx Chicago (600 S Federal)
35. Telx Chicago (Cermak)
36. Equinix Dallas (DA1)
37. Equinix Dallas (DA3)
38. Equinix Dallas (DA4)
39. Infomart (Dallas)
40. Digital Realty | Telx Atlanta
41. Equinix Atlanta (AT2)
42. Equinix Atlanta (AT3)
43. Colo Atl
44. Colo at 55 (Atlanta)
45. Equinix Miami (MI1)
46. Equinix Miami (MI2)
47. Equinix Miami (MI3)
48. Digital Realty | Telx New York (111 8th)
49. Equinix New York (111 8th)
50. FiberNet Telecom Group NY
51. zColo New York - 111 8th Ave
52. Equinix Secaucus (NY2)
53. Equinix Secaucus (NY4)
54. Westin Building Seattle
55. Equinix Seattle (SE2)
56. Equinix Seattle (SE3)
57. Equinix Amsterdam (AM1)
58. Equinix (AM2)
59. Equinix Amsterdam (AM3)
60. Matrix 4 (Amsterdam)
61. Matrix 3 (Amsterdam)
62. Digital Realty Amsterdam (Science Park)
63. NIKHEF Amsterdam
64. Interxion Science Park Amsterdam
65. Equinix London Slough (LD4)
66. Equinix London - Slough (LD10)
67. Equinix London Docklands (LD8)
68. Equinix London Powergate (LD9)
69. Equinix London Slough (LD5)
70. Equinix London Slough (LD6)
71. Telehouse London (Docklands N)
72. Telehouse London (Docklands E)
73. Telehouse London (Docklands W)
74. Equinix London Park Royal (LD3)
75. Equinix London City (LD1)
76. Teraco House Johannesburg JB1
77. Equinix Hong Kong (HK1)
78. Equinix Hong Kong (HK2)
79. Equinix Hong Kong (HK3)
80. Equinix Hong Kong (HK4)
81. Equinix Hong Kong (HK5)
82. MEGA iAdvantage Hong Kong
83. HKCOLO Sino Favour Center
84. Equinix Zurich (ZH1)
85. Equinix Zurich (ZH2)
86. Equinix Zurich (ZH3)
87. Equinix Zurich (ZH4)
88. Equinix Zurich South (ZH5)
89. InterXion Zurich
90. KPNQwest Milan
91. Enter Milan
92. MIX (Milan)
93. Telnor Caldera Milan
94. Netscalibur Telehouse
95. Interoute Milan
96. Equinix Singapore
97. Equinix Singapore (SG2)
98. Global Switch Singapore
99. Telehouse Paris 2 (Voltaire)
100. Interxion MRS1 (Marseille)
101. Equinix Frankfurt KleyerStr. (FR5)
102. CenturyLink Frankfurt
103. ITENOS Frankfurt
104. NewTelco Frankfurt
105. Equinix Frankfurt City (FR1)
106. Equinix Frankfurt West (FR4)
107. Equinix Frankfurt North (FR2)
108. Equinix Frankfurt South (FR3)
109. Equinix Frankfurt Gutleutstrasse (FR7)
110. Equinix Toronto (TR1)
111. 151 Front Street West Toronto
112. Cologix Toronto
113. 360/GT Toronto
114. Neutral Data Toronto
115. Telehouse Canada
116. Equinix Tokyo (TY2)
117. Equinix Tokyo (TY1)
118. Equinix Tokyo (TY3)
119. Equinix Tokyo (TY4)
120. NTT DATA Otemachi Bldg
121. Moscow M9
122. IKI (Moscow)
123. Dataspace1 (Moscow)
124. St.Petersburg, B. Morskaya 18
125. NewTelco Kiev
126. Espanix(Eurociber) Mesena 80
127. Equinix Stockholm Bromma (SK1)
128. Equinix Stockholm Sköndal (SK2)
129. Equinix Stockholm Spånga (SK3)
130. K1 (Limassol)
131. U1 (Limassol)
132. Cablenet Engomi (Nicosia)
133. Beijing POP (Yizhuang EDZ)
134. Chief LY Building Taipei
135. KINX IX Center (Dogok)
136. KINX IX Center (Gasan)
137. KINX IX Center (Bundang)
138. The Data Centre (Auckland)
139. Equinix Sydney (SY1)
140. Equinix Sydney (SY2)
141. Equinix Sydney (SY3)
142. Equinix Sydney (SY4)
143. Sofia Data Center/Sofia Teleport
144. Datamena IMPZ DC1
145. TELEPOINT Sofia
146. LuxConnect, Luxembourg
147. Equinix São Paulo (SP1)
148. Equinix São Paulo (SP2)
149. Equinix São Paulo (SP3)
150. Equinix São Paulo (SP4)
151. Century Link Lima Peru
152. Mediterranean Nautilus Greece (ATH03)
153. CMC IDC Ho Chi Minh
154. CMC IDC Hanoi
155. NXDATA-1 (Bucharest)
156. NXDATA-2 (Bucharest)
157. Equinix Dubai (DX1)
158. Equinix Dubai (DX2)



MANAGED DATA CENTER SERVICES

Space, power and network access in a specifically equipped and environmentally controlled datacenters with redundant power and network connectivity

Managed Data Center Services are carefully designed to increase efficiency and productivity of your business by creating an improved method of delivering datacenter resources, protecting business continuity and enhancing the security of your data. At IPTP Networks we adapt to current and future business demands, ensuring that your IT resources are always in sync with your business demands.

DEDICATED HOSTING

Our Dedicated Hosting solutions provide you with the opportunity to obtain and control a server or dedicated equipment, without the need to purchase and install your own equipment. Both are connected to a high-speed internet port and installed in a specially equipped datacenter. This service is designed to provide a complex hosting environment that can be managed and adjusted to your specific infrastructure requirements. This includes servers, storage and networking. Our qualified specialists will help you choose the components and select a package that will suit your individual business needs, offering options like load balancing and high-availability clusters. More information can be found via: iptp.net/dedic

COLOCATION

IPTP Networks offers colocation at various data centers in North and South America, Asia, Europe, the Middle East and Africa. Our Colocation service allow you to set up your own equipment in a specially equipped data center and connect it to high-speed Internet. More information can be found via: iptp.net/colo

MANAGED WAAS

Through the Cisco-qualified Managed Wide Area Application Services (WAAS), we provide you with the means to deliver a powerful application acceleration and WAN optimization solution for the branch office, and improve the performance of any TCP-based application operating in a WAN environment. Your organisation will be able to consolidate costly branch-office servers and storage into centrally managed data centers, deploy new applications directly from a data center and offer LAN-like application performance for your remote users.

Our Managed WAAS with a strategic destination can be combined with some of our other services such as Managed Router and Managed Firewall. The service includes 24/7 management, monitoring and maintenance, comprehensive SLAs and online access to service performance reports.

DEDICATED HOSTING

BENEFITS:

The ideal solution for mission-critical sites requiring custom server management.

The perfect solution for dedicated hosting resellers, web developers and designers.

A perfect solution for webmasters who need greater flexibility, reliability and security for their clients.

A robust server for online gaming, streaming media and web-applications.

Anything else that requires great reliability, speed and a top level of security.

Ultimate visibility and transparency to network load of global system helps reduce operational expenses.

KEY FEATURES:

Wide range of pre-tested Supermicro servers ready for service in Europe, the Middle East, North and South America, Africa, Asia and Oceania regions.

Rock-solid, 99.99% guaranteed Internet bandwidth of either 100, 1000 or 10000 Mb/s ports.

Exceptional connectivity world wide via IPTP Networks backbone.

All network equipment provided by Cisco.

24/7 Live Answer (no wait time) technical phone-based support.

Free upgrades of patches, hot-fixes, and service packs.

Highest level of security.

Free repair and maintenance of hosted hardware.

Free bandwidth utilization reports.

Full equipment remote control via IPMI v2.0 Remote power management port via APC PDU.

Fully customizable, upgradeable and configurable to your specific needs.

Free automated monitoring (Ping, Service, System, Processes) of your server 24x7, including reboots and normal maintenance of hardware and software.

Safe and secure environment - Dedicated server rooms have no public access.

OPTIONAL:

Same Day Server Setup.

GEO-DNS and BGP Anycast for optimal global geographical access commonly demanded by CDNs, cloud companies, proprietary content and distribution projects.

No need for IT-personnel or an in-house systems administrator - full administration is available for hosted equipment.

Cisco network and security appliances Dedicated Hosting available.

Wide range of Storage solutions from EMC² or inexpensive solutions based on Supermicro/iSCSI available.

Same IP address at different regions for state of the art global resource distribution.

International Private Line Circuits or EoMPLS to any location in the world for seamless connectivity available.

Custom made Virtual Private Network(VPN) available.

Available assistance and management of virtualization solutions RHEV/VMWare/Xen/Hyper-V.

COLOCATION SERVICES

"Over the time that CardPay has been working with IPTP, we have enjoyed stable and secure servers and hosting facilities, which enabled us to grow and achieve greater success, thanks to their flexible and robust business solutions."

Paul Dalziel, Business Relationship Manager at CardPay Inc.



IPTP Networks has 20 years of experience safeguarding your mission-critical data. Our Colocation Services allow you to access and host your servers remotely and ensure a high level, professionally maintained, secure installation. We connect you to a variety of telecommunication and network service providers and deliver outstanding levels of security – with minimal cost and effort on your part.

IPTP Networks Data Center Colocation Services proved to be effective for:

Automated trading platforms, streaming media and other critical, high-bandwidth applications requiring top-level security and availability

Media, financial corporations, banks, Forex markets, game developers and big data companies

PCI DSS (Payment Card Industry Data Security Standard) certified locations and points of presence, dedicated to companies involved in handling and storing cardholder information for all major debit/credit card companies

Mission-critical sites requiring custom server management

KEY FEATURES:

Rock-solid, guaranteed Internet bandwidth of either 10M, 100M, 1G, 10G, 100G ports with SLA up to 99.99% for N+1 redundant solutions

Remote power management port via APC PDU

24/7 Live technical support with zero wait time

Customer Portal allowing access to real-time performance reports and billing functions

TIER-III and TIER-IV data centers

Exceptional worldwide connectivity via IPTP Networks backbone

Professionally customizable, upgradeable and configurable to your specific business model

Industry-leading security

Redundant power supply via privately-owned generators

Free repair and maintenance of hosted hardware

All network equipment is provided by Cisco and supported by our certified engineers

Full equipment remote control port

OPTIONAL:

Seamless connectivity is provided via low-latency International Private Line Circuits or EoMPLS to any location in the world

Custom designed Virtual Private Network solutions

Assistance and management of virtualization solutions RHEV/VMWare/Xen/Hyper-V/OpenStack

Enabling CDN and Cloud networks

Private cages

Wide range of storage solutions from EMC²

Same IP address in different locations for state-of-the-art global resource distribution

Full management and administration of equipment eliminates the need for in-house IT department

Same Day Equipment Setup

High density racks





MATRIX 4 DATACENTER

AMSTERDAM SCIENCE PARK

Matrix 4 is IPTP Networks' recently constructed world-class data center, built using industry-leading solutions and technologies - APC InfraStruxure by Schneider Electric. Our scalable data center/ IT room architecture allows our clients to deploy solutions with the highest levels of connectivity, security, adaptability and reliability; all whilst being tailored and adapted to complement the individual business model of each client.



ADVANTAGES

Hot-aisle containment system (HACS) deployed with in-row cooling.

The gross floor area equals 700 m² (7500 sq.ft).

24/7 access to qualified technical support.

Improved resiliency.

Simplicity of concept, design and installation.

48U cabinets instead of the standard 42U.

High density racks with up to 70+ kilowatts per rack.

Swift and effortless planning of operations.

N+1 chiller plant.

Quick recovery from malfunction is achieved through interchangeable modules.

Complete redundancy of all systems and data center targeting compliance with ISO 27001, PCI DSS, ISO 9001, TIA-942, Tier 4+ industry standards.

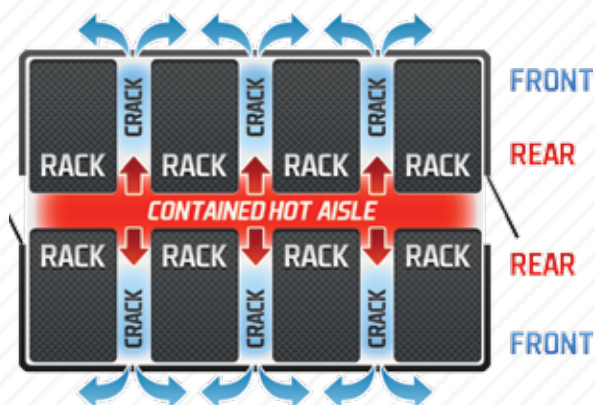
A+B UPS design.

High scalability.

**ACCESS TO 10
MAJOR DATA CENTERS
VIA DARK FIBRE**

Equinix AM1/2/3 • NIKHEF (AMS-IX)
Digital Realty • Interxion Science Park
Matrix 3/4 Science Park • Switch
• EvoSwitch Haarlem

Own and Partner infrastructure connecting major data centers in the Amsterdam Science Park area and beyond.



Hot-aisle containment system
(HACS) deployed with in-row cooling

InfraStruxure™

Matrix 4 is based on the APC InfraStruxure – an innovative, industry-leading solution for data center infrastructure with unrivalled scalability, reliability and the highest quality as well as power supply allocation per rack that by far exceeds that of competing solutions.

Power-efficiency

The industry accepted indicator of data center efficiency is PUE (Power Usage Effectiveness). This indicator provides an excellent representation of the efficiency of each data center's cooling solution as well as electrical systems and infrastructure. The approximate industry average is a PUE of 2.5 with a widespread effort among providers to reduce this figure to 1.3. The Matrix 4 datacenter is designed with the latest in power-efficient technologies to target a PUE ratio of as low as 1.08 depending on load and various environmental conditions.

Cost-efficiency

The high level of performance is achieved by the use of a cooling system solution with a 'free-cooling' feature. This allows us to minimize cooling expenses as well as to contribute to a better overall efficiency of the datacenter given climactic conditions in Amsterdam, with an average annual high of 12.8 and low of 7.5 degrees centigrade.

Power density

Our Matrix 4 data center has a dedicated power substation with a 2MW capacity, connected to the power supply grid of Amsterdam Science Park. This ensures a fully redundant supply of electricity for the facility.

Scalability

APC InfraStruxure is the pinnacle of highly scalable and adaptable data center IT room architecture. All components are pre-tested as part of a unified ultra-functional system. Our facilities are designed with corporate clients in mind, resulting in uncompromised performance, ultimate flexibility and control over your business.

Advancement

IPTP Networks implements, exclusively, state-of-the-art equipment provided by Cisco as the backbone of our data center network infrastructure. With our in-house, Cisco-certified engineering team we are able to guarantee the highest level of uninterrupted, uncompromising performance of all your network resources.

Security

Our Matrix 4 facilities are enhanced with 24/7 monitoring and maintenance and secured by advanced access systems. Our professional multilevel electronic system features cutting-edge technologies such as fingerprint and facial recognition and many other innovative solutions, ensuring that your data is stored securely at all times.

Matrix 4 is linked to numerous major datacenters in Amsterdam Science Park as well as to our facilities at Matrix 3 and the newly constructed K1 (Kermia 1 - Limassol, Cyprus), enabling them to serve as disaster recovery sites for the facility.



KERMIA 1 DATACENTER

LIMASSOL, CYPRUS



Kermia 1 is IPTP Networks' carrier-neutral facility in Cyprus - a strategic destination at the heart of the Middle East, at the crossroads of Europe, Asia and Africa. Premium-level and brand new, the K1 datacenter makes use of our established global network infrastructure and is built using innovative, industry-leading solutions and technologies, offering unparalleled scalability, reliability and security.

GLOBAL INFRASTRUCTURE

IPTP Networks operates its own worldwide network infrastructure allowing us to serve as a redundant 'bridge', connecting clients around the world to key Internet exchanges and global financial centers.

ULTIMATE SECURITY

The Kermia 1 facility is enhanced by our internally developed SmartSpaces Automation solution as well as IPTP Video Surveillance system. The combination of both allows us to ensure the complete security of all your corporate data with state-of-the-art security features such as mantrap(access control vestibule) with two-step verification access control, bulletproof materials for windows and walls of the building as well as numerous internal and external security cameras.

ADVANCED EQUIPMENT

IPTP Networks implements, exclusively, the state-of-the-art equipment provided by Cisco as the backbone of our data center network infrastructure. With our in-house, Cisco-certified engineering team we guarantee the highest level of uninterrupted, uncompromising performance of all your network resources.

COMPLETE REDUNDANCY

Kermia 1 data center is equipped with an autonomous power supply and connected to redundant communication channels. Our **Live Network Diagram** can be viewed via: iptp.net/weathermap



"IPTP Networks provided us with a reliable, robust, secure, and easily accessible network infrastructure to support our global inter-cloud platform."

Peter So, Vice President at Power-All Networks Ltd

ADVANTAGES:

Optimal network coverage and increased resilience is achieved by reserved channels

Global connectivity via our privately-owned global MPLS network infrastructure

Complete redundancy of all systems of data center, targeting compliance with ISO 27001, PCI DSS, ISO 9001, TIA-942, Tier 3+ industry standards

24/7 access to our qualified technical support, available in English, Russian and Chinese languages

A fully redundant supply of electricity for the facility is achieved by a 100KW power feed, backed up with 100KW GENSET

Redundant electricity supply via a private power generator

24/7 monitoring and maintenance of the facilities

Advanced access systems

Simplicity of concept, design and installation

Did you know?

We provide dedicated high-speed communication channels for remote equipment taking into account the construction of even the last mile to the customer's office. You can check the characteristics of the main channels by using our IPTP Looking Glass tool accessed via: iptp.net/lg

MANAGED UNIFIED COMMUNICATION SERVICES

Managed Unified Communication Services is a comprehensive suite of secure, industry-proven IP solutions that have been delivering IP Telephony to more companies than any other. Manufactured by Cisco, these solutions include Data, Voice, Video and mobility products that make communication easier.

"Thanks to ITP Networks, we unify all of our communications on a single IP-based platform. Since that our company significantly reduces communications costs while at the same time boost employees' productivity."

Chryso Panayi, KPM Consulting, Cyprus

ADVANTAGES

Designed to assist your company in deploying advanced technologies with reduced risk and lowered costs

Provide extensive capabilities that fit any kind of business, independent of scale

Connect people instead of devices

Closely integrate communications with business processes

Deliver presence and preference information which helps to ensure quick delivery of communications through the most effective medium

Business Unified Communications

Through this service, ITP Networks provides unified Voice, Video, Data and Mobility communications for your business environment. We connect you to communication devices (PCs, phones) and applications (videoconferencing, calendar) so that they can be accessed anytime and from anywhere, all while supporting open interfaces that allow other types of applications to be added. As a result, you receive a high-quality, Cisco-powered service that ensures a consistent experience and advanced security capabilities.

Hosted Unified Communications

With this Cisco-powered service, you do not need to own an IP communications network to acquire all the benefits of one. It enables you to gain revenue without additional cost, supporting extensive IP Telephony features and providing you with a unique dial plan, set of phone numbers, voicemail and other resources that help you save time and money.

Unified Contact Center

Our Cisco-powered Managed Unified Contact Center service provides a centralized, IP-based infrastructure that supports numerous distributed sites. We offer a full suite of contact management services, and administrative control options for your environment, as well as capabilities to integrate Web collaboration tools, CTI screen pops and many other useful features.

MANAGED MOBILE COMMUNICATION SERVICES

Managed Wireless LAN

Our Cisco-powered Managed Wireless LAN includes comprehensive security capabilities that protect both your device and your network with Quality of Service (QoS) availability and reliability, supporting advanced wireless capabilities such as seamless roaming. This service extends your corporate network in a secure manner, allowing your employees to conduct business anywhere, anytime and from any device.

Managed MVNO

Our Managed MVNOs (Mobile Virtual Network Operators) service provides a full suite of support starting from designing solutions, delivering all the components and managing the core infrastructure. MVNO solution is designed to help businesses launch new MVNO operations, expand and capture new revenue streams, delivering superior customer experience and increasing their competitive edge.

ADVANTAGES

Increase your enterprise's productivity and responsiveness, adapting to current and future business demands

Provide exceptionally reliable security capabilities, available at all times

Support advanced wireless capabilities such as multimedia and seamless mobility

Feature the flexibility of a wireless network with the management of a wired network



IPTP NETWORKS' IN-HOUSE HARDWARE/SOFTWARE DEVELOPMENT

IPTP DMMS AGAINST DDOS. Distributed Mitigation Managed Service against DDoS. Page 37

IPTP ERP & CRM. Enterprise Resource Planning and Customer Relationship Management software via the SaaS platform. Page 40

WHERR TRACKING SOLUTION by IPTP Networks company. Page 48

IPTP VIDEO SURVEILLANCE. Software for Home, Office and Vessel Security Systems. Page 54

IPTP SMARTSPACES. Controller of Automatically-Driven Appliances for Home, Office and Vessel Automation Solutions. Page 58

**FOR
BUSINESS**

**FOR
COVERAGE**

**FOR
GROWTH**

IPTP Software is designed and developed entirely in-house by IPTP Networks' engineers and deployed on our proprietary network infrastructure. Our software development draws on the company's extensive experience in designing and implementing business management, infrastructure and security solutions for corporate clients worldwide. It is based on scalable, custom-made solutions designed for corporate clientele that demand high-level, non-packaged services tailored to their distinct business models.

Our Multiprotocol Label Switching (MPLS) network is privately owned, highly adaptable and provides a rock-solid foundation upon which over 3000 clients and resellers have constructed their services. IPTP Networks cooperates with close to a 1000 peering partners from around the world ensuring ultimate coverage and speed at all times. Our global geographic coverage gives us access to all the key Internet Exchanges and global financial centers, contributing to a fast, smooth and uninterrupted global service.

Our staff constantly monitors the latest developments in the market for telecommunications and networking solutions accumulating the necessary tools for preserving our competitive edge. The experience and know-how of our team allows us to deliver custom-made, multi-functional software. Enhanced with 24-hour support, management and maintenance, our product is designed to boost the day-to-day operation of your enterprise and everyday life with ease of access and minimised miscommunication, streamlining the way you access your data.

IPTP DISTRIBUTED MITIGATION MANAGED SERVICE (DMMS) AGAINST VOLUMETRIC DDOS

Cyber attacks are becoming increasingly problematic for organizations that conduct business online. Of critical concern today are Distributed Denial of Service (DDoS) attacks. DDoS is a distributed type of attack that allows malicious generating traffic to congest Internet access lines, leading to denial of service and, as a result, damaging an organization's reputation and potentially leading to loss of revenue, loss of valuable customers and loss of market reputation. Every day these attacks become more sophisticated, making your corporate data vulnerable and security demands increasingly challenging.

A man in a dark suit, white shirt, and yellow tie stands holding a large black umbrella. The background is a composite image featuring a dark, stormy sky with greenish clouds and a body of water. Overlaid on the scene are vertical columns of binary code (0s and 1s) in a light green color, giving it a digital or cyber-themed appearance.

No reaction time.

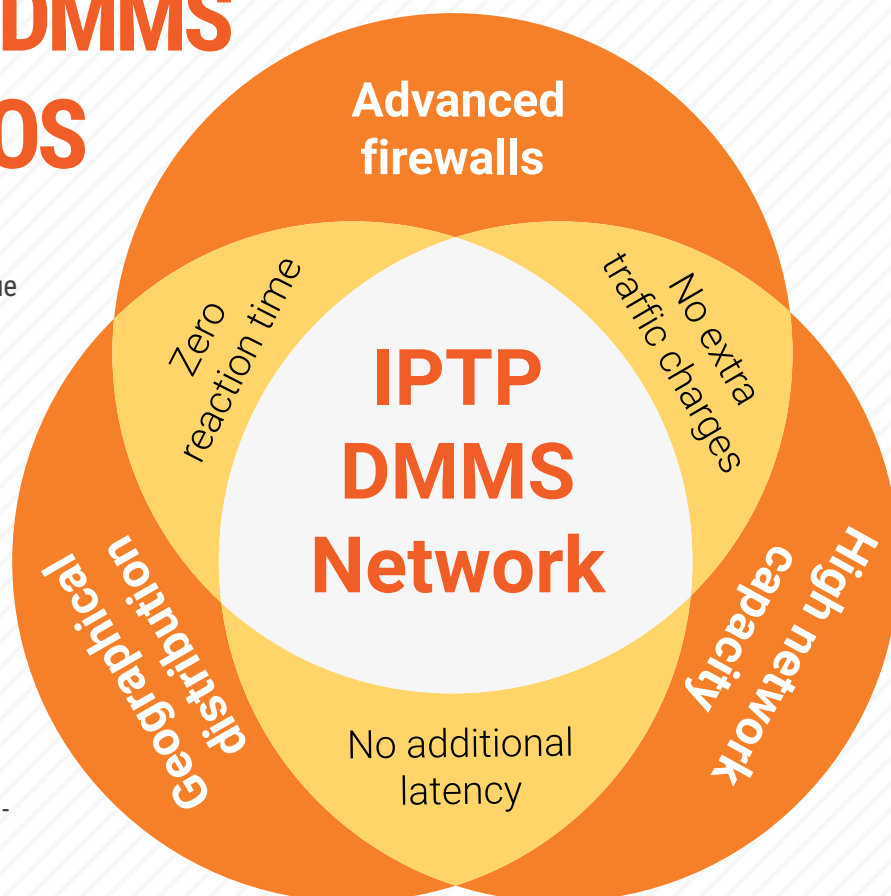
No added latency.

Bandwidth limits higher by an order of magnitude.

No extra charges for bandwidth overload.

ABOUT IPTP DMMS AGAINST DDOS

At IPTP Networks, we developed a unique way of protecting your business and customer base, designed specifically to provide unparalleled protection against volumetric DDoS and ensure continuous operation of your network. A high-performance network infrastructure owned by IPTP allows the handling of immense amounts of traffic and instant filtering out of the attacks, providing a powerful rebuff and subsequent mitigation of a potential threat. As a result, we leave your network with strictly legitimate traffic, and you in complete control over your business.



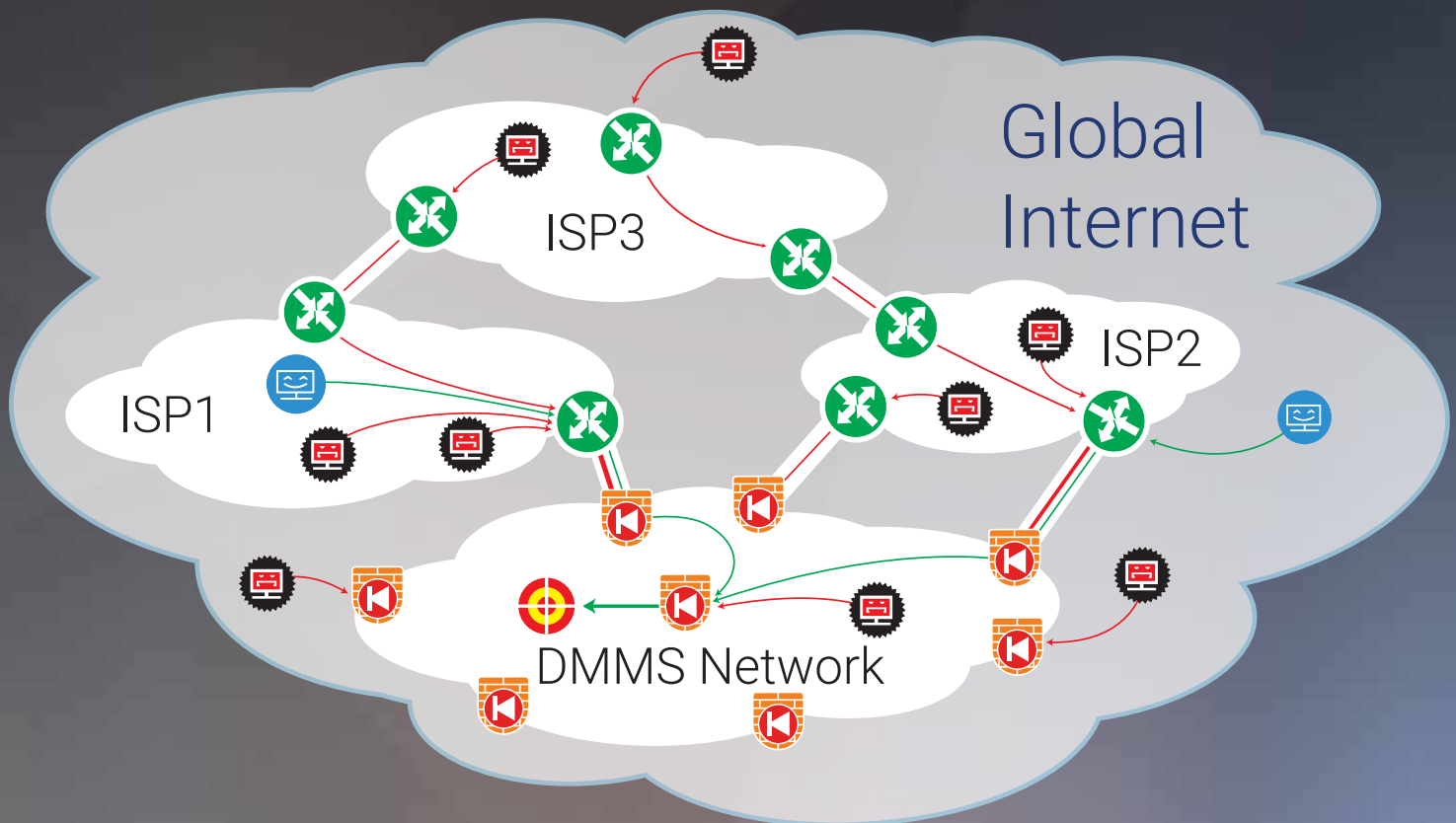
ADVANTAGES

No added latency. No reaction time. The distributed design of IPTP's DDoS mitigation defense topology allows us to clean traffic directly at the edge of our network (in under 1 ms) without shifting traffic to a clearing center and back, thus eliminating any response/activation delay and providing a truly transparent mitigation.

Bandwidth limits higher by an order of magnitude. Unlike other companies offering DDoS protection via limited Cleaning centers, we operate our own global cleaning network instead. Therefore malicious traffic never aggregated and cleaned immediately along the entire perimeter of our network. 1500 of 10 Gbps ports distributed across the globe and the total network capacity of over 30 Tb/s allows us to withstand heavy bandwidth attacks. IPTP DMMS Network is an ultimate solution for protecting your resources against most types of volumetric DDoS attacks.

No extra charges for bandwidth overload. Traffic is distributed among multiple points so no combined volume of traffic reaches a single network node. A major advantage of our solution is that malicious traffic is cleaned before it reaches our network so no extra charges will apply for extra bandwidth.

Technically advanced solution against DDoS. IPTP Networks DMMS highly customized firewalls can handle any type of protocols, starting from standard HTTP to any TCP and even proprietary UDP-based encrypted protocols used in financial sectors, making sure that each request gets serviced. The advanced firewalls within the IPTP DMMS Network can handle multi-gigabits of traffic and filter out all types of traffic floods, including but not limited to ICMP, UDP and SYN. Our qualified specialists deal with high loads of traffic on a daily basis and operate on high-end network equipment from Cisco, an industry-leading provider, to ensure that your enterprise receives the unparalleled sustained performance and continuous protection it requires.



Distributed Mitigation Managed Service (DMMS) is the technology of mitigating DDoS attacks using a network perimeter equipped with a chain of powerful fine-tuned firewalls. Our solution has four key advantages over the classic DDoS mitigation technique called "Clean Pipe" or "Cleaning Center". First is latency – traffic is mitigated directly on the network's perimeter avoiding the need to redirect traffic to the "Cleaning Center". The next aspect is reaction time – fine-tuned firewalls automatically detect most types of floods and immediately start the mitigation process making reaction time close to none. Another advantage of the IPTP DMMS service is a massive network capacity of over 30 Tb/s which allows the withstanding of heavy-bandwidth DDoS attacks without the risk of service degradation. And last, but not least, are expenses. Mitigation with the classic "Cleaning Center/Clean Pipe" approach results in the concentration of high traffic volume on a single point, which usually requires purchasing extra bandwidth. The usage of a worldwide distributed network of an IPTP DMMS firewalls helps customers avoid these unexpected expenses by distributing traffic among multiple points in our network and eliminating the combined high load on a single node.

IPTP ERP & CRM

Your corporate activities supported by a business process management software designed and developed exclusively in-house by IPTP Networks engineers.

IPTP ERP & CRM is a subscription-based, scalable and easily expandable ecosystem consisting of both software and hardware and provided via the SaaS (Software as a Service) delivery platform.

It performs a wide range of tasks from stocktaking to financial analytics, HR-management, sales order management and much more. The IPTP ERP & CRM system is a complex programming solution with over 540,000 source lines of code!

The primary goal of our system is to organize your financial data in a way that provides complete understanding of how and where the money flows in your business processes and helps you to accurately plan your income for the near future.



A complete, all-in-one package of basic ERP functions:



FINANCIAL ANALYTICS

**FINANCIAL AND
MANAGERIAL REPORTING**
PROFITABILITY ANALYSIS
CASH FLOW MANAGEMENT



HR MANAGEMENT

**EMPLOYEE
ADMINISTRATION**
TIME AND ATTENDANCE
**PAYROLL AND LEGAL
REPORTING**



OPERATIONAL ANALYTICS

**INVENTORY AND
WAREHOUSE ANALYTICS**
SALES ANALYTICS



INVENTORY AND WAREHOUSE MANAGEMENT

**WAREHOUSING AND
STORAGE**
PHYSICAL INVENTORY



PROCUREMENT

**PURCHASE REQUEST
PROCESSING**
**PURCHASE ORDER
PROCESSING**
CONTRACT MANAGEMENT
FINANCIAL SETTLEMENT



SALES ORDER MANAGEMENT

ACCOUNT PROCESSING
INQUIRY PROCESSING
QUOTATION PROCESSING
SALES ORDER PROCESSING
CONTRACT PROCESSING
BILLING
**MANAGEMENT OF
COMMISSIONS**

GENERAL INFORMATION:

Fully automates the main business processes, significantly cutting costs, systematising your work tasks and marginalising human error.

Deployment via SaaS and the subscription based nature allows you to avoid the additional costs involved in purchasing appropriate equipment, providing the most cost-effective way of supporting your corporate activities.

Ensures swift operation of all your business processes: all ERP applications share information between each other seamlessly, enhancing your business with ease of access and minimized miss-communication as a result.

Features ease of deployment and seamless integration with professional maintenance specifically tailored to your needs, all the while retaining the flexibility to accommodate your growth.

ADVANTAGES

No need to purchase costly equipment

High availability system – you have secure access to your corporate data

Real-time software generated reports

Expandable via tailor-made, business-specific modules

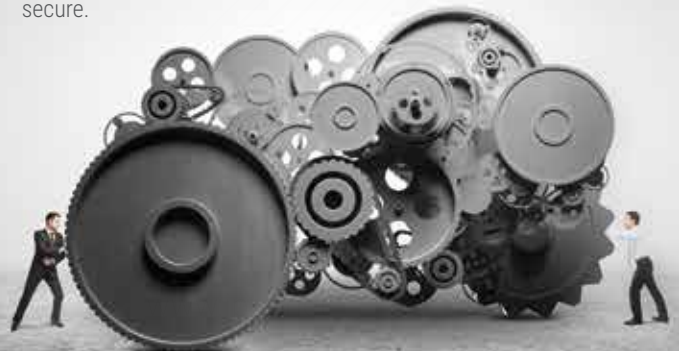
Corporate-grade security

The subscription-based nature allows for modules to be completely interchangeable and be adjusted according to individual business needs

Web Application: flexible interface can be accessed, run remotely and securely as a web application from any browser installed on any operating system

The ERP system is commonly deployed on ITP servers, which are extremely reliable and enhanced with unparalleled protection

The ERP systems' synchronisation is based on blockchain technology which make it more reliable and secure.

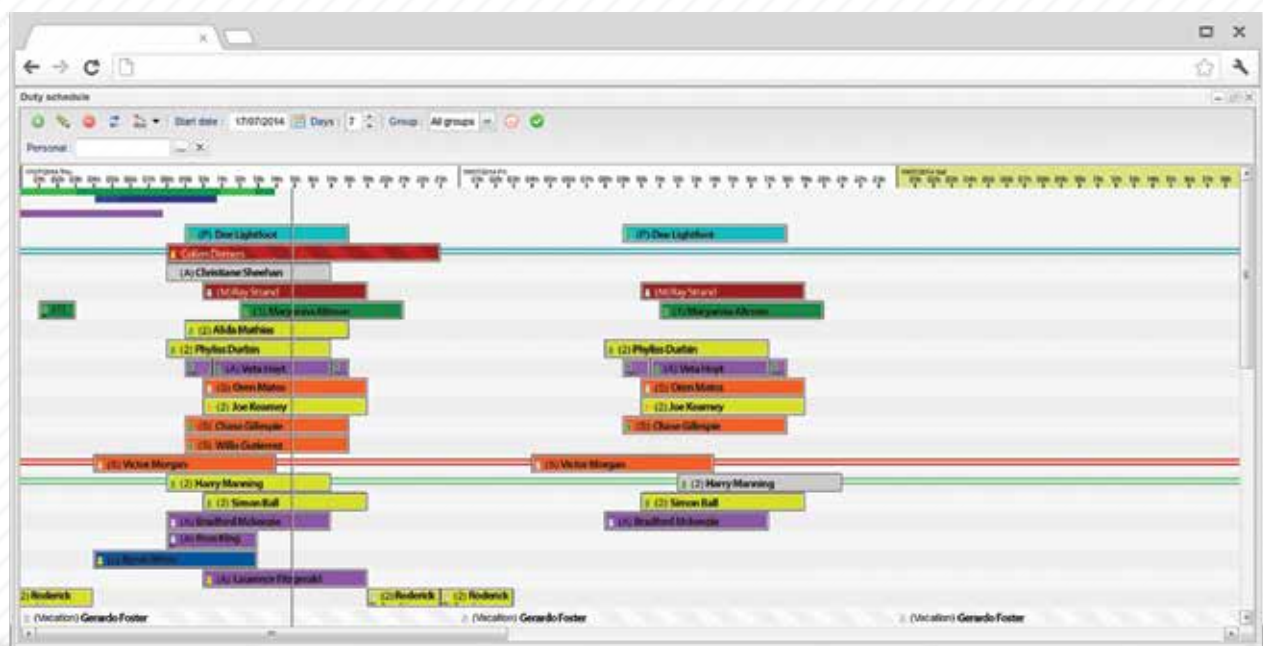


IPTP ERP & CRM FEATURES:

WORK SCHEDULING

Monitoring the work-schedule and availability of each employee can be done directly from the main interface allowing managers to plan and designate tasks easily and swiftly. The main page shows the work schedule of company employees and additional information on the current user that is displayed together with the number of hours worked per week. The information on employees that are not available is also displayed and a new document for Sick leave, Unemployment and etc. can be created in the Personal section.

Telephony system includes each employee's personal extension number which can be used in the registry on the IVR. The Registry allows to distribute duties between employees where each employee can take on a duty at the time of his/her shift. When duty is taken by the employee, he/she becomes responsible for replying to customer requests for a department that he works for (sales, technical support, accounting, logistics etc.) until his shift ends and/or the duty is taken by the next employee. This system helps to distribute duties, which in turn ensures that all the customers receive support - 24/7.



SMART BOOKKEEPING

This IPTP ERP & CRM feature allows for the tracking of settlements with customers and suppliers in an automatic mode, simplifying related processes and marginalizing human error. There is no need for an accountant to check balances or unpaid invoices - the system will send notifications to customers about delayed payments and display a report on those customers that were notified. A criteria for client selection can be configured manually, with an option to create a separate list of those clients for which exceptions can be made. The system is also designed to help its users to send automatically generated invoices for used receipts and services.

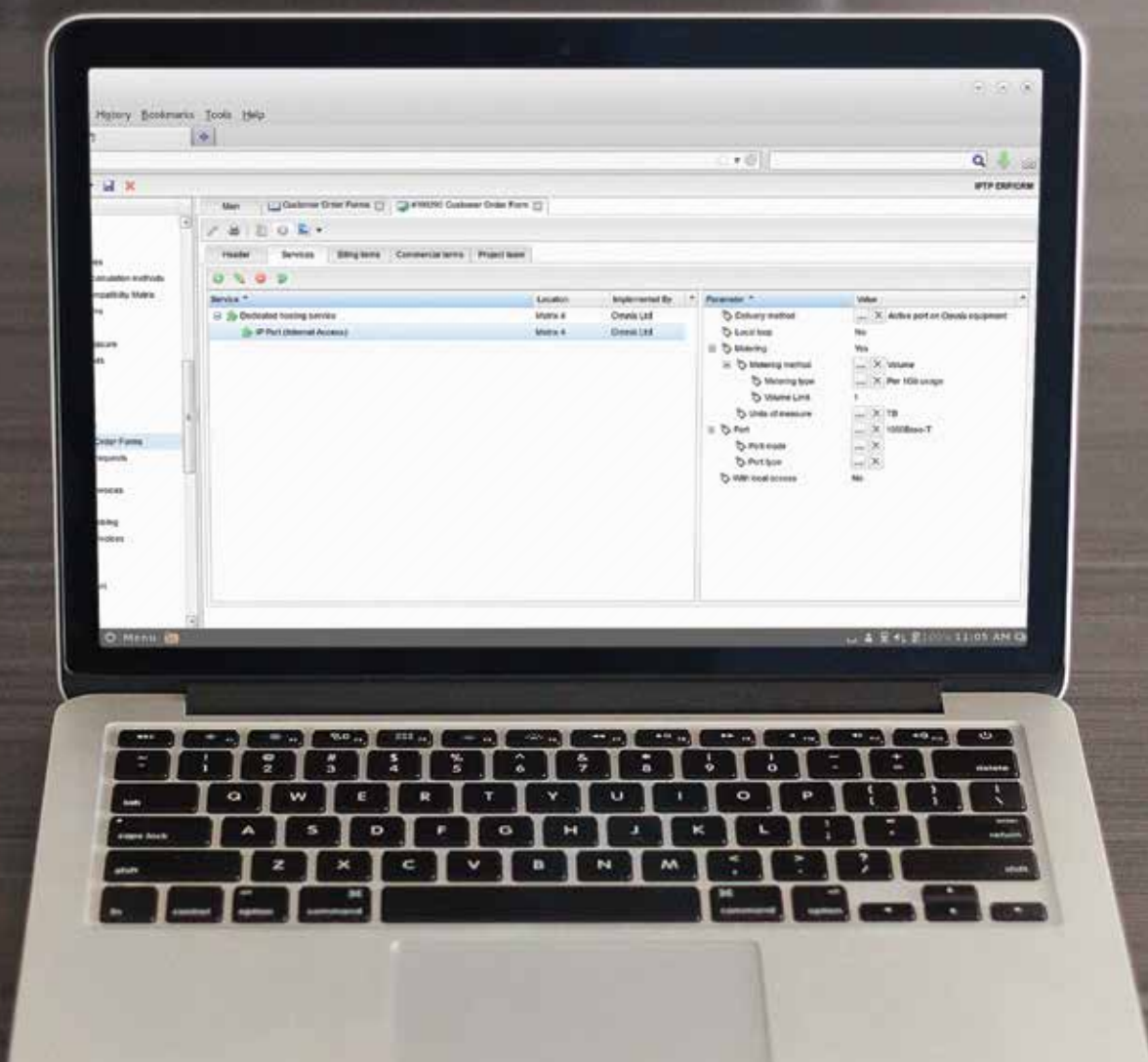
The screenshot shows the IPTP ERP CRM software interface on a laptop screen. The main window displays a financial report with the following data:

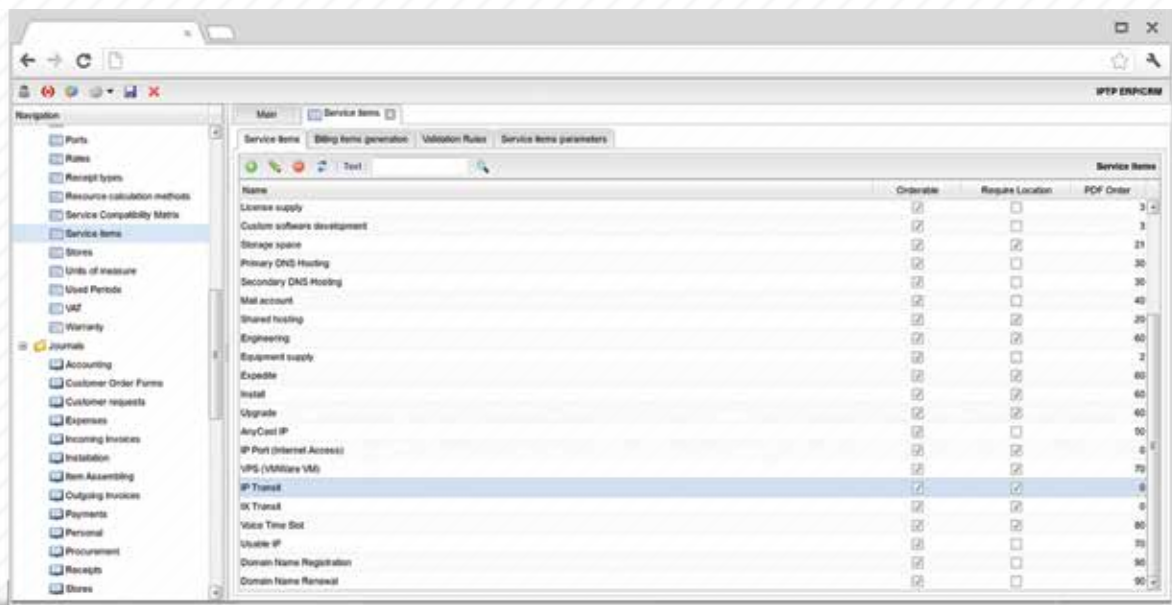
Business partner	Document	Document date	Due date	Amount	Paid	Currency
Total debt: USD: 1191.00 USD: 1191.00 USD: 1191.00 USD: 0.00						
Ene Arum Management Limited - Account Manager: John Smith, Reference Manager: David Thompson						
Explicore Trading Ltd.	#100028 Outgoing Invoice (Services)	10/03/2014	25/03/2014	28.96	0.00	EUR
Explicore Trading Ltd.	#100209 Outgoing Invoice (Services)	10/06/2014	25/06/2014	286.84	0.00	EUR
Explicore Trading Ltd.	#100088 Outgoing Invoice (Services)	10/04/2014	25/04/2014	171.38	142.80	EUR
Total debt: EUR: 337.96 EUR: 337.96 EUR: 480.76 EUR: 142.80						
Vendondant Technologies Ltd - Account Manager: John Smith, Reference Manager: William Peterson						
Explicore Trading Ltd.	#100084 Outgoing Invoice (Services)	10/04/2014	25/04/2014	186.90	0.00	EUR
Explicore Trading Ltd.	#100180 Outgoing Invoice (Services)	10/06/2014	25/06/2014	187.38	0.00	EUR
Total debt: EUR: 374.29 EUR: 374.29 EUR: 374.29 EUR: 0.00						
Evilnet LTD - Account Manager: John Smith, Reference Manager: William Peterson						
VELLINDAECAE Limited	#100685 Outgoing Invoice (Services)	10/03/2014	25/03/2014	537.00	480.00	USD
VELLINDAECAE Limited	#100799 Outgoing Invoice (Services)	10/02/2014	20/02/2014	130.90	0.00	USD
VELLINDAECAE Limited	#100634 Outgoing Invoice (Services)	10/12/2013	25/12/2013	537.00	138.87	USD
Total debt: USD: 672.90 USD: 672.90 USD: 1204.00 USD: 531.87						
Udollar Games Limited - Account Manager: John Smith, Reference Manager: David Thompson						
VELLINDAECAE Limited	#100091 Outgoing Invoice (Services)	10/04/2014	25/04/2014	1027.00	439.66	EUR
Total debt: EUR: 596.34 EUR: 596.34 EUR: 1027.00 EUR: 439.66						
Total debt: EUR: 27268.33 USD: 847804.82 HKD: 450980.94 RUB: 9724.13 EUR: 271534.20 USD: 899407.63 HKD: 449555.08 RUB: 9734.12 EUR: 21454.67 USD: 238397.39 HKD: 1347.85 EUR: 379873.07 EUR: 97854.74 USD: 1021469.00 USD: 172664.15 HKD: 633412.32 HKD: 182511.38 RUB: 9724.13 RUB: 0.00						

SERVICES

CUSTOMER ORDER FORMS

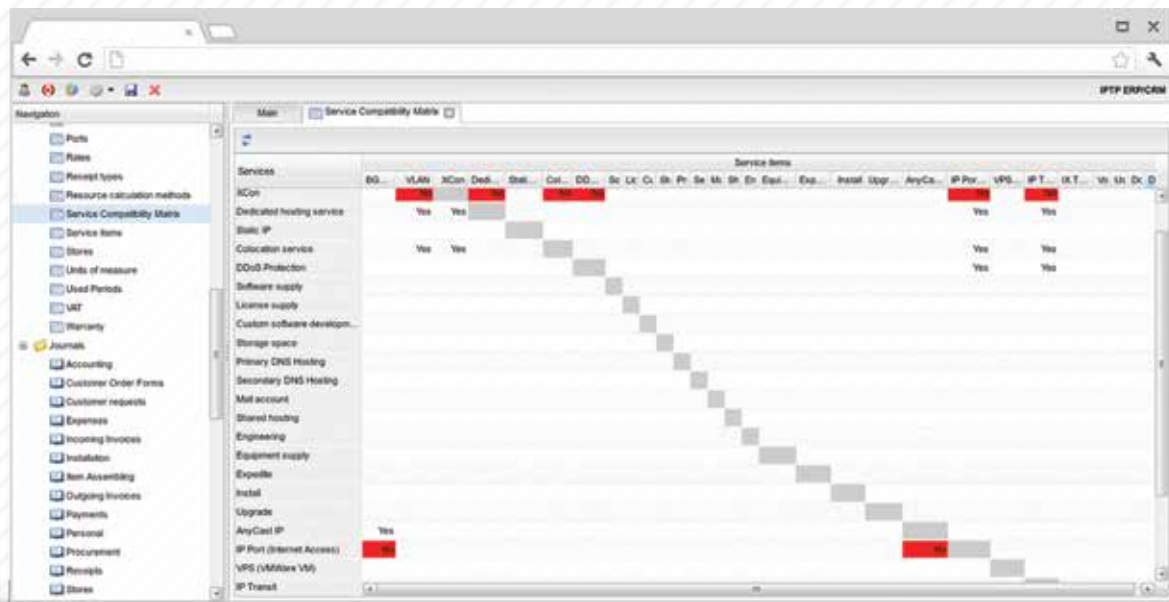
Creation of forms for customer services is a very convenient feature that helps organise all required information about customer orders and allows for flexible parameter configuration. The formation of service packages allows for the creation of custom-made combinations of options for any type of service and can be constructed based on any specifications. Package formation is designed in a way that allows for it to be customized, resulting in packages that would suit the individual requirements of every client. A set of integrated rules makes sure that all the information filled in is valid at all times. The completed form can be printed out or sent to a client, and a signed version can be attached as a file and stored in the system.





SERVICE ELEMENTS

Customer order forms can contain many kinds of different services. Every service can be fine tuned with an unlimited amount of so called Service Elements(SE). Service Elements are “smart” ERP objects which contains information about type or characteristic of service, such as geographic location, delivery option, specific type of hardware etc. Input data of every service element can be selected individually. If there are any service elements not included here that you require, you can always define a new one! SEs can also be used to control specific services and to send notifications in cases where they might have been set incorrectly.



SERVICE COMPATIBILITY MATRIX

This feature is designed to show the coherency of services and to establish their dependence on one another. This is particularly useful when it comes to combining services that can only be sold together. Parameters in the Service Compatibility Matrix can vary and combining individual services that are co-dependent allows for the formation of finalized, more complex packages which are ready to be sold.

DATA EXCHANGE & INTEGRATION

IPTP ERP & CRM operates on an open API (Application Programming Interface) which means that all the ERP features can be integrated with any third party system, allowing for data to be exchanged seamlessly and to be accessed both ways, resulting in a single, unified information system.

The screenshot displays the IPTP ERP & CRM web interface. On the left is a sidebar with a 'Test Companies' list including: Omnis Estium Ltd., Tectur Magnis Corporation, Temporens PUC, HEC CO., Ltd., OMNISCORRO CORPORATION LIMITED, Estium Europe Limited, Solene Management Services Ltd., QUA Communication Ltd., Imagint Media Corp., and Allen Hall. The main content area shows a 'Back to Summary' link and a 'Detailed Statement Request: Solene Management Services Ltd.' for 'Building Company Autopass Trading Ltd.' with a start date of 2014-01-01 and end date of 2014-07-31. Below this is a table of transactions with columns: Date, Due Date, Transaction Details, Debit, Credit, Balance, and Desc. The table shows a 'Balance Forward' of -33497.56 and lists several outgoing invoices and incoming payments.

Date	Due Date	Transaction Details	Debit	Credit	Balance	Desc
Balance Forward: -33497.56						
2014-01-10	2014-01-26	#100094 Outgoing Invoice (Services)	4266.27	0.00	-37763.83	0.00
2014-01-10	2014-01-22	#100095 Outgoing Invoice (Services)	2685.40	0.00	-40749.23	0.00
2014-01-10	2014-01-24	#100096 Outgoing Invoice (Services)	31.46	0.00	-40780.69	0.00
2014-02-05		#00000995 Incoming Payment	0.00	17639.05	-23141.64	0.00
2014-02-10	2014-02-26	#100055 Outgoing Invoice (Services)	4265.34	0.00	-27426.98	0.00
2014-02-10	2014-02-24	#100057 Outgoing Invoice (Services)	14.09	0.00	-27441.07	0.00
2014-02-10	2014-02-22	#100056 Outgoing Invoice (Services)	3610.70	0.00	-30451.77	0.00
2014-03-10	2014-03-26	#100011 Outgoing Invoice (Services)	4218.78	0.00	-34670.55	0.00
2014-03-10	2014-03-22	#100012 Outgoing Invoice (Services)	3610.70	0.00	-37661.25	0.00
2014-03-10	2014-03-24	#100010 Outgoing Invoice (Services)	147.37	0.00	-37828.62	0.00
2014-03-10	2014-03-25	#100009 Outgoing Invoice (Services)	13602.50	0.00	-49431.12	0.00
2014-03-11		#00000065 Incoming Payment	0.00	23141.64	-26289.48	0.00
2014-04-10	2014-04-24	#100073 Outgoing Invoice (Services)	31.55	0.00	-26321.03	31.55
2014-04-10	2014-04-23	#100071 Outgoing Invoice (Services)	35.70	0.00	-26356.73	35.70
2014-04-10	2014-04-17	#100070 Outgoing Invoice (Services)	5915.70	0.00	-30272.43	5915.70

ERP is a central structure that can interact with both the RT(Request Tracking) system and Cacti. Client account information can be accessed directly from Cacti with no need to create a separate account for the ERP system. Integration of the ERP system with the RT system allows employees to gain information on clients the moment they receive a request. All the client has to do is log into Cacti, go into the required ERP section and he will be able to view and modify all the necessary information. You can also export data to accounting software.

The screenshot displays a 'Comments' section for a ticket in the IPTP ERP & CRM system. The ticket is titled 'FOR INTERNAL USE ONLY AUTOMATIC HELP FROM OUR ERP' and is dated 'Thu Jul 10 08:22:05 2014'. The comment contains detailed information about a client and their business partner.

==== Duty person info for group "NCC" ====

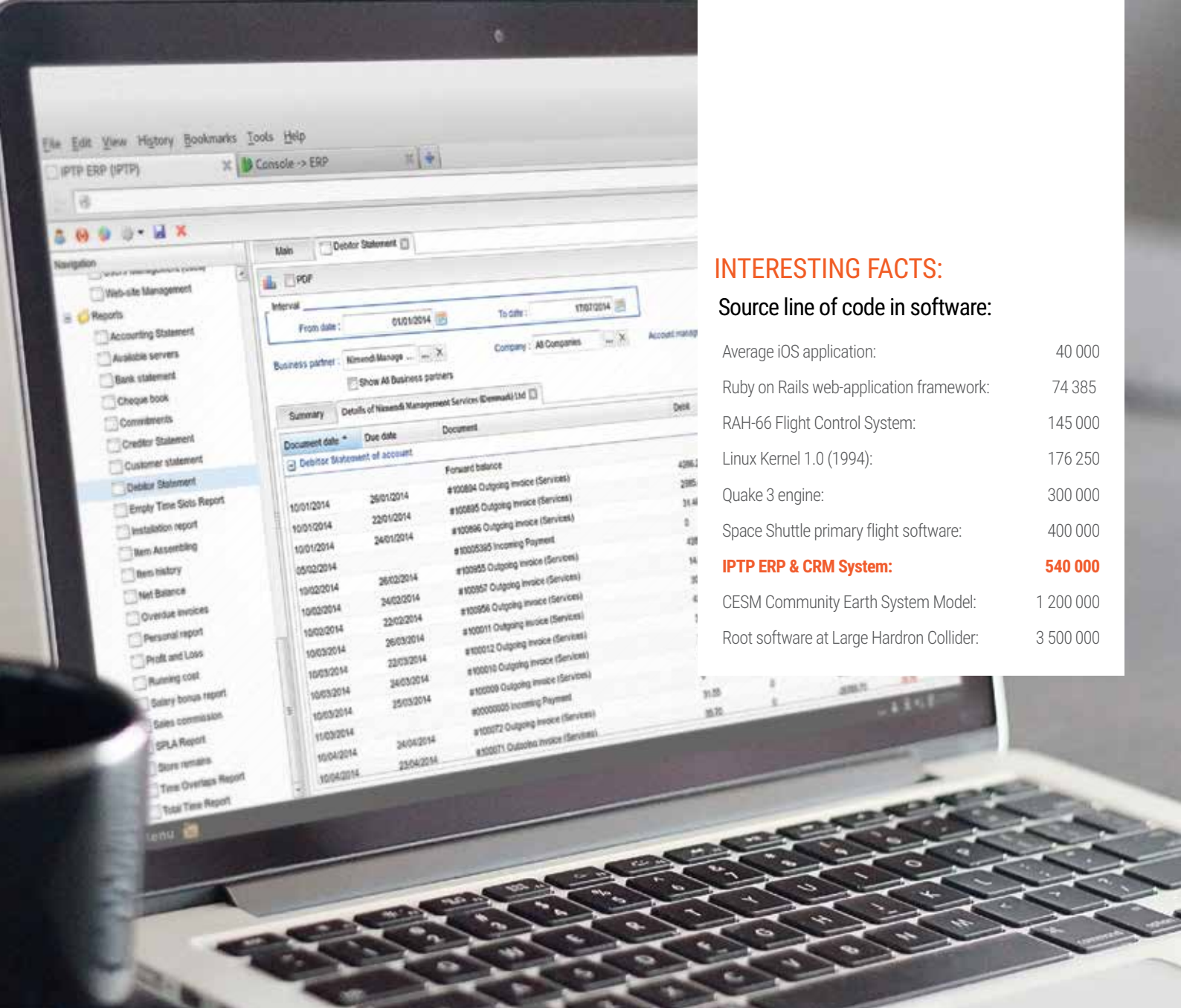
Name: John Smith
Email: john@smith.net
Ext: 2121
Jobber: john@jobber.smith.net

==== Business partner info ====

Company Name: Magnis Rehenis Ltd
RT Link: https://secure.lightbulb.net/rt/Ticket/Display.html?id=2220
Manager Name: Thomas Edisson
Manager Email: te@lightbulb.net
Manager Phone: 0775
Contact Name: David Hill
Contact Group: Accounting
Access Level: Master level access

==== Active Subscriptions ====

COF #234986: Corporate Symmetric Internet 2 Mbps
COF #234986: Installation
COF #234986: Static IP
Business Internet Connection 6Mbps over Ethernet
Business Internet Connectivity 16Mbps. Down/ 4Mbps Upload via Coaxial Cable



INTERESTING FACTS:

Source line of code in software:

Average iOS application:	40 000
Ruby on Rails web-application framework:	74 385
RAH-66 Flight Control System:	145 000
Linux Kernel 1.0 (1994):	176 250
Quake 3 engine:	300 000
Space Shuttle primary flight software:	400 000
IPTP ERP & CRM System:	540 000
CESM Community Earth System Model:	1 200 000
Root software at Large Hadron Collider:	3 500 000

BLOCKCHAIN BASED SYNCHRONISATION

Being geographically distributed system IPTP ERP & CRM manage synchronisation and encryption between its nodes with application of blockchain technology.

Benefits of such approach are obvious:

- 1) No need in central fragile node to validate transactions.
- 2) System itself is highly resistible to third-party attacks on dedicated nodes.
- 3) High availability of the system: if some nodes leave the network or become inaccessible, the system as a whole continues to work.
- 4) Once the data has been written into the blockchain, it is extremely difficult to change it back. This is great benefit in order to maintaining an immutable ledger of transactions.
- 5) All transactions on a blockchain are cryptographically secured and provide integrity.
- 6) Blockchain allow the quicker settlement of trades as it does not require a lengthy process of verification, reconciliation, and clearance because a single version of agreed upon data is already available on a shared ledger.

WHERR[®] TRACKING SOLUTION

Wherr is a state-of-the-art tracking solution that features **compact hardware** (a tracking card) and **user-friendly software** (the Wherr[®] platform). Combined together, Wherr[®] supports daily tracking of objects, assets, or people. This makes your life easier, your valuables secure, and the people you care about safe.

Wherr[®] uses wireless networks for tracking, and optional extensions of Wi-Fi and/or GPS modules are also available.

WHERR[®] TRACKING CARD

It is a state-of-the-art and easy to use tracking technology redesigned and implemented in-house by Wherr. The card serves as the core for your tracking device, establishing worldwide connectivity in locations any kind of wireless network (GSM, Wi-Fi or GPS) available.

WHERR[®] PLATFORM

is a unique monitoring software designed to complement the Wherr[®] tracking card. A flexible, user-friendly interface displays all the data collected by a tracking device in a web application that can be accessed and run remotely from any browser installed on any operating system as well as any iOS or Android client.



UNIVERSAL

The solution is designed for multi-purpose use, with virtually limitless everyday and business application.

FOR PERSONAL USE:

- Luggage and parcel tracking
- Assets safeguarding
- Monitoring of people with disabilities, elderly people or children
- Sports and active lifestyle (e.g., hiking, racing, fishing)
- Emergency services

FOR PROFESSIONAL USE:

- For transportation and logistics professionals
- Large fleet operation (vehicle, trucking, shipping)
- Forwarding operation (machines, containers, cargos, valuable shipping)
- Operators who have a dynamic workload
- Scientific research (e.g., wildlife migration pattern tracking)
- Law enforcement
- Emergency services



*global, easy,
affordable*



TRACKING

Wherr® tracking card uses one of the more widely used cellular networks globally: GSM*.

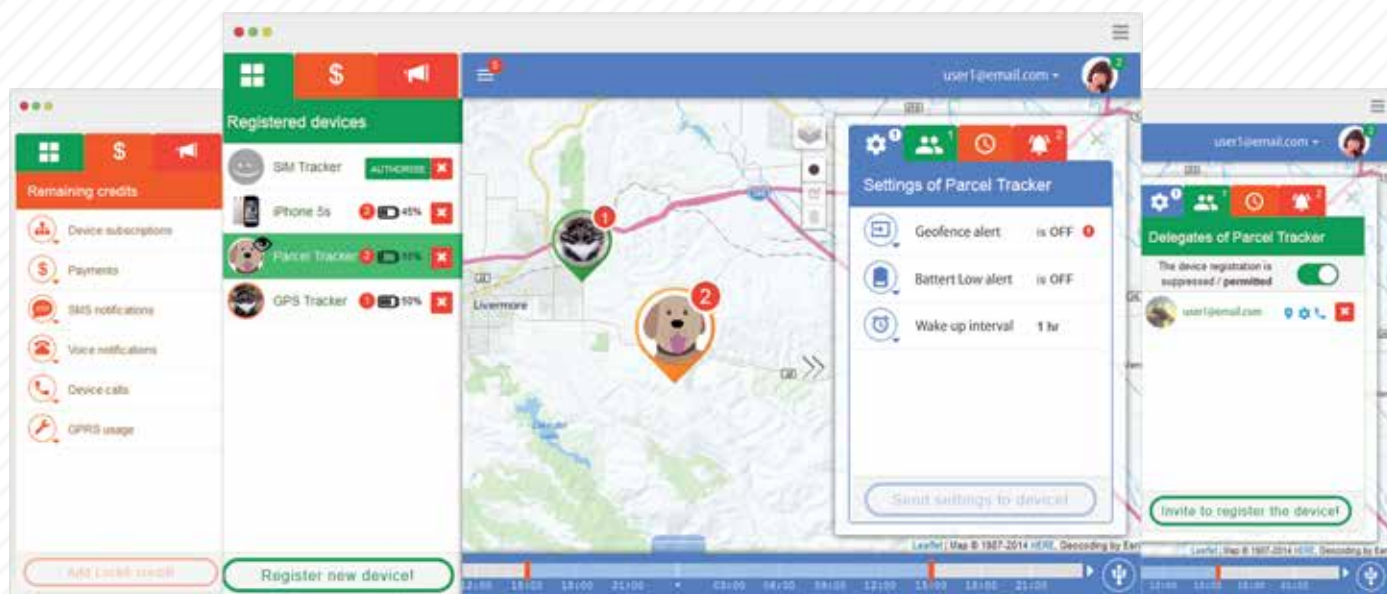
How does GSM tracking work?

1. First, it determines the card's location by scanning cellular towers in the area and determining their signal strength.
2. Then it transfers the collected data to the backend, which, in turn, delivers the card's location, allowing you to instantly track and monitor your objects, assets, or people.

* - As an additional feature, the Wherr® tracking card can also be equipped with Wi-Fi and/or GPS modules.

Range

- Location range depends on the density and proximity of the cellular towers (the distance to the nearest GSM base stations); the more towers there are in range, the more accurate the data will be.
- The range of accuracy of the Wherr® tracking card is within a radius of approximately 250 meters in case of GSM module is used and within 10-15 meters with Wi-Fi module installed. This proximity is more than enough to ensure that your luggage arrives at its destination, your parcel is on its correct route, or that your child remains within the range you allowed.



WHY WHERR?

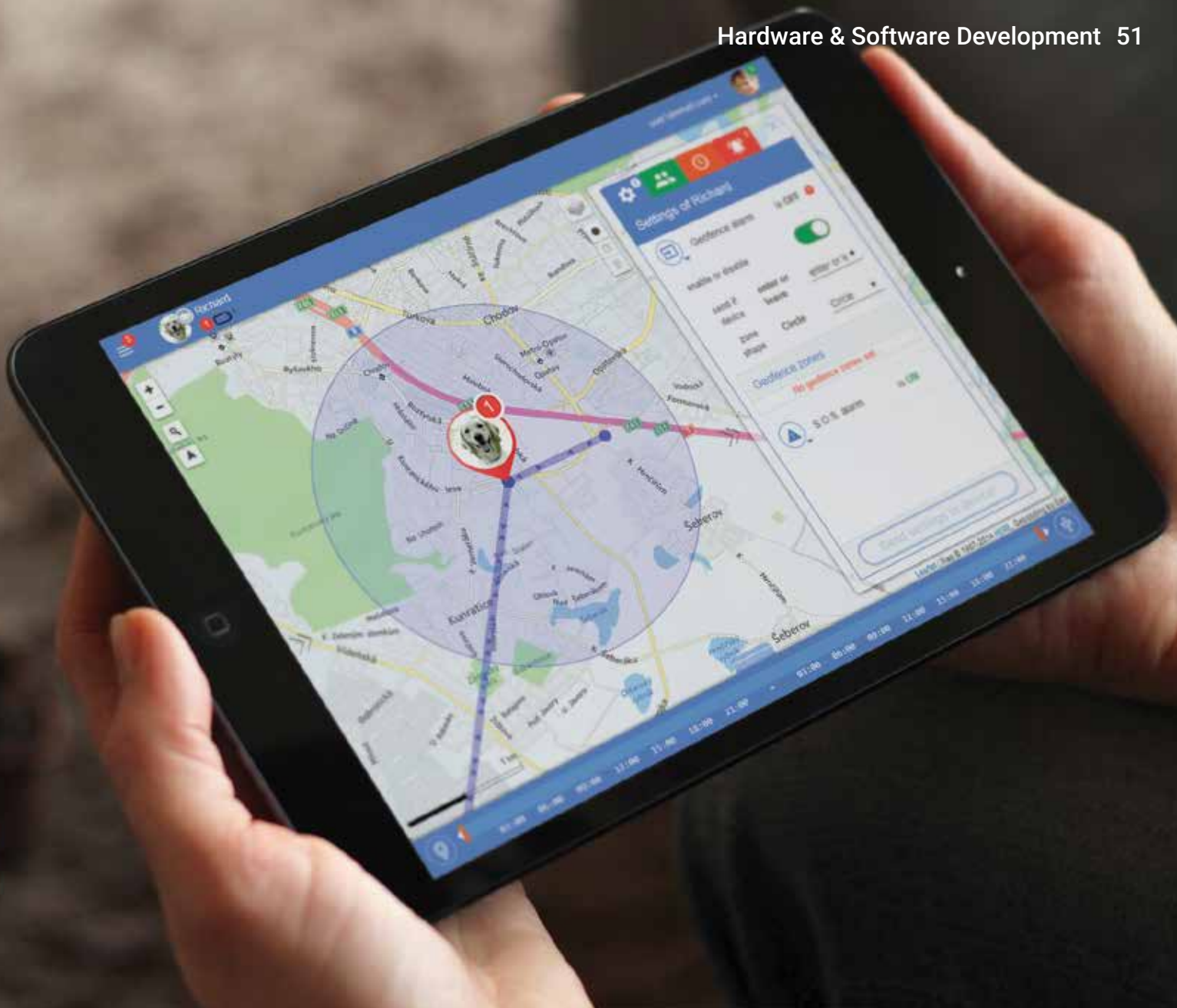
Affordable

Subscription to Wherr® tracking card includes all roaming charges, significantly reducing associated costs. Additionally, this enables Wherr to operate not only locally, when it comes to tracking within one city/area, but allows it to operate in virtually any part of the world. The price of our solution (hardware+subscription) is approximately 25 dollars, which is the lowest price on the market today.*

* Price varies depending on the subscription time period and the number of devices purchased.

Compact design

Wherr® tracking card is a practical solution. It easily fits into a wallet, the smallest parcel or a briefcase. It can also be attached to a belt, a dog's collar or simply be placed into a pocket. The card is **light as a pen** (25 g / 0.88 oz) and **small as a credit card** (86 x 54 x 5.3 mm / 3.3 x 2 x 0.17 in). The design can be modified to include a company's logo on the tracking card. The shape and/or colour of the case can be changed at the customers' demand and at their expense. Wireless charging is available on request.



Long battery life

Power consumption is an important issue when it comes to global tracking. Even the most advanced devices have a battery life that is limited to several days. Wherr® tracking card allows you to adjust how often the card should report its location, from a few times in an hour to once a day. In addition, the power saving mode* allows the device to operate from 1 month and up to 1 year without recharging the battery. The battery life longevity is adjustable, depending on the predefined settings.

** Our in-house software allows Wherr to remain in Sleep mode most of the time, allowing for minimal energy consumption and for optimal battery lifetime.*

Flexible

- Wherr® tracking card allows you to effortlessly track the location of devices on request as well as the trajectory of their movement in the past.
- The Wherr platform is available via all web and mobile interfaces and is compatible with most devices.
- Wherr® Mobile Application can be downloaded for free and is compatible with Android, Windows Phone, BlackBerry and other virtual panels. An iOS application is coming soon.

WHERR® PLATFORM

Wherr® Platform is a unique tracking software that is designed, developed and implemented in-house by Wherr®. A flexible, user-friendly interface displays all the data collected by a tracking device in a web application that can be accessed and run remotely from any operating system, as well as any iOS or Android browser.

- **Track multiple devices** with just one user account.
- Add an **unlimited number of devices to one account** and locate them on the map.
- Share your device(s) with other users who have active accounts.
- Several users can **track shared devices simultaneously**, while still having individual accounts and being able to add their individual devices.

Command types

Battery Low / Battery Empty alert:

Both alerts are used to warn the user if the device battery is low or depleted.

Geofence alert:

This feature is particularly useful when it comes to the supervision over children, elderly and people with disabilities. You can designate a radius on the map and if your device leaves that area, you will be alerted in the form of a push-notification, SMS* message or e-mail.

Motion history:

This feature allows you to observe device motion history on an interactive map within manual settings of the time period.

** – additional charges may apply.*





AVAILABLE WORLDWIDE

The Wherr® tracking card operates in 100* territories around the world. Whereas competing solutions are usually limited to roughly 30 countries.

Armenia, Albania, Australia, Austria, Azerbaijan, Belarus, Belgium, Benin, Brazil, Bulgaria, Canada, Chad, Chile, China, Congo Dem. Republic, Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Egypt, Equatorial Guinea, Estonia, Ethiopia, Finland, France, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Guyana, Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Kazakhstan, Latvia, Liberia, Liechtenstein, Lithuania, Luxembourg, Macau, Macedonia, Malta, Mexico, Montenegro, Montserrat, Mozambique, Netherlands, New Zealand, Norway, Papua New Guinea, Philippines, Poland, Portugal, Romania, Russia, Rwanda, San Marino, Sao Tome, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Thailand, Tonga Islands, Trinidad & Tobago, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, Jersey, USA, Uzbekistan, Vatican City, Vietnam, Vanuatu Republic, Western Samoa, Zambia, Zimbabwe.

* The list of countries is not final and is being updated with the aim of serving our clients across the globe, even in the most remote corners of the world.

ADVANTAGES

Operates in Europe, Asia, Africa, the Middle East, the Americas and Oceania

Wi-Fi and GPS support

GSM Networks support

SIM card pre-installed

Worldwide roaming charges are included into the subscription fee

Compatibility: PC, Mac, iOS, Android, Windows Phone, BlackBerry and other virtual panels

Battery type: Li-Pol, Non-Replaceable

Size: 86 x 54 x 5.3 mm /
3.3 x 2 x 0.17 in

Weight: 25 g / 0.88 oz

Up to 1 year of battery life*

Easy to use Web Application

Multi-user tracking



* – depends on mode of operation, environment and network conditions.

IPTP VIDEO SURVEILLANCE

IPTP Video Surveillance is a completely scalable and highly reliable integration solution that becomes a valuable element and a long-term investment in the security strategy for your office and premises. The service can be backed by management, monitoring and maintenance and our sales engineers, experienced with the latest in security & IT technology will help you choose the Surveillance package that will fit your individual security needs and align with your business, risk and value drivers.

Cost-effective,
multifunctional video surveillance
for a multitude of cameras.

IPTP Video Surveillance software.

Our in-house developed Video Surveillance software is designed specifically to cater to the needs of customers with complex technology or security requirements and is set up to meet the unique challenges of small and mid-sized businesses. Compared to relatively inexpensive video surveillance systems with limited functionality such as DVRs, and sophisticated, but often over-priced and over-licensed high-end solutions, IPTP Video Surveillance software offers a balanced and affordable alternative.

Unlike DVR systems, our software features a single archive enhanced with centralized management and can support from one up to several hundred cameras of different categories simultaneously. At the same time, compared to the high-end solutions available on the market IPTP Networks offers a significantly more competitive price point. Completely customizable to fit your business requirements, our software helps us work within your budget, adjusting to your business model and complementing your existing technology investments.





IPTP Video Surveillance Software is successfully deployed by IPTP Networks in company datacenters as well as our offices worldwide, demonstrating the solution's effectiveness as an integrated and scalable way to protect both company assets and people.

A SINGLE ARCHIVE

In alternative systems, such as DVRs and other surveillance solutions, in order to extract recordings from a number of individual archives the user needs to refer to the same number of separate DVRs. With IPTP Video Surveillance software all files from all cameras and servers can be accessed in a single place while all data is stored in an easily accessible and secure unified archive.

SUPPORT OF DIFFERENT DATA WAREHOUSING FRAMEWORKS WITH VARIOUS CAPACITIES.

Storing data in a DVR system significantly increases the risk of data-loss due to potential disk failures. IPTP Video Surveillance Software solves this issue once and for all, all the while providing the flexibility of storage and a variety of options that tailor the service to your needs. There are options to connect an external disk shelf or store video on a network share such as NFS, while iSCSI disks can be stored in a RAID configuration. Alternatively, an archive can be arranged as a collection of independent disks, which will ensure that your data remains available even in an event of one of the disks' failure to respond. Video can be recorded on fast local storage, and then archived to a large capacity network storage. An archive can also be stored on a network share or, in case an archive is not needed, there is an option to set up a diskless server.

AN UNLIMITED NUMBER OF OPERATOR SEATS.

The operator's position is normally bound by a number of restrictions. Some video surveillance systems require licensing of every position and apply various other restrictions, such as having a monitor connected to a DVR in order to survey cameras. IPTP Video Surveillance software requires only one operator in order to survey cameras from all servers, providing a centralized way to monitor your assets. A total number of operator positions depends on customers requirements and can be virtually limitless.

RECODING AN ARCHIVE VIDEO

Recoding establishes the ultimate quality/capacity ratio for the archive, enabling the system to store a year-long archive in only 2 - 3 hard disks. If the video is being recorded at a high resolution and takes up too much space, recoding it allows for conversion into a lower resolution, keeping your archive in sync with your capacity demands and capabilities.

Features:

Monitor your shop, office or vessel using your PC, Pocket PC or TV with a Network Camera

The data is delivered to you via an Internet Connection, allowing you to survey your premises from any location

We work with IT, Security, Facilities, and other departments to designate the scope of the project and plan installation

View either the full stream video, or images of motion when it happens, from multiple locations, thus minimizing the bandwidth/traffic

CCTV to IP Video Migration

Mobile / Remote Viewing

Images are uploaded to the Web Server and can be delivered to your TV screen, a PC, Pocket PC or Cisco IP Phone

Wired and Wireless Network Design

Integration with Cisco phones is enabled by extraction of separate frames from a video stream and storing them in a separate archive

Integration with IP-enabled Access Control & Alarm Systems

IPTP Video Surveillance can be configured to interface with any other IT or Security systems, employing camera systems to their maximum potential. Based on the clients' individual requirements, the solution can be delivered either on the basis of IPTP's in-house developed Video Surveillance Software and deployed on any hardware, e.g. entirely Cisco or based on the Cisco Video Surveillance.

Cisco Video Surveillance

Security cameras are intended to enhance safety and security of staff, the general public and facilities. There are three characteristics that define good video surveillance: high resolution, long-term retention and reliability. Cisco has developed a system that significantly boosts the deployment of its video surveillance solution, increasing flexibility and scalability while lowering operating costs and creating a reliable risk-managing environment.

ADVANTAGES:

Access to video; anywhere, anytime and with a wide range of devices via your IP network

Faster incident response, investigation and resolution

Motion detection and tampering detection system allows the triggering of alerts through communication with a central server

Multi-vendor interoperability for Best of Breed Video Surveillance Systems

Simplified deployment and control of new security applications

The cost savings of using the IP network for both voice and data

Cisco video surveillance solutions support video transmission, monitoring, recording, and management. You can enhance your safety and security operations by using these products with your existing analog video surveillance equipment and smoothly migrate to a network-based physical security system. As a user of networked physical security and as a trusted advisor, Cisco is constantly developing its network and continues to gain expertise in order to guarantee ultimate security. Cisco Video Surveillance was designed to assist you with building an impressive networked physical security operation that maximizes the value of your investments and video information while allowing you to focus on the safety of your people and the security of your assets.

IPTP SMARTSPACES AUTOMATION SOLUTION

A 1-stop integration solution, designed to provide centralized control and automation of all motorized or manageable appliances on your premises, office or motor vessel.

IPTP Networks' in-house development - Controller of Automatically-Driven Appliances or CADA provides a single interface for control of all electronics in your home, office or vessel, eliminating the need for multiple switches, control panels and remote controls. IPTP SmartSpaces solution is compatible with LinuxMCE, a free modular software platform that seamlessly integrates media and entertainment, home automation and security, telecommunications and computing. The interface can be accessed from any type of hardware: PC, smartphone, Cisco Phone, TV, tablet or other device of your choice, giving you complete remote control over the solution from every corner of your premises and the world.



IPTP CADA

(Controller of Automatically-Driven Appliances)

CADA is IPTP's in-house developed software and one of the main components of the IPTP SmartSpaces Automation Solution. Pooling data from all Sensors/Detectors in your premises, IPTP CADA processes it and responds accordingly, attending to your day-to-day tasks through pre-set automatic settings. Based on equipment of the type "LinCon-8000" by ICP DAS, CADA is an independent component of the solution with an automated operating mode for the purposes of failure-resistance, providing a basic level of automatization in extreme situations.

Functions:

LIGHTING

All the lighting on the premises is controlled by and accessed from any available connected device. Depending on your preferences, the lighting can be either pre-regulated or simply controlled with an "on/off" switch. Every switch on the premises can control any lamp or a group of lamps with any required logic; i.e. the switch automatically sends a signal to the system, which, in turn, carries out the required task. This way, switching certain lights on and off can be combined with responses from other appliances.

ADAPTATION

To maximize your comfort even further, the solution is designed to recognise your everyday habits and adapt to them automatically. It uses smoke detectors, infrared/ultrasound, humidity/light intensity, inside/outside temperature, pool/hot water tank temperature, opening and closing of gates/doors/windows, weather (wind intensity/rain) sensors, sound sensors that react to commands and many other features that make your everyday life more comfortable.

TELEPHONE

A phone subsystem can be organized as an independent system, or be an extension of an existing office system, even if the office is located abroad. If necessary, the phone subsystem can be organized in a way that certain phone numbers from another country can be connected to the premises telephone system. It is also possible to provide a free-of-charge phone connection with another location which has the same equipment, i.e. with an office or another home. If stationary phones have a sensor panel, they can be used to control any element of the solution. Wireless WiFi phones can also be connected.

SECURITY

With a wide variety of sensors, we are able to provide an exceptional system for safety and fire prevention that can be integrated with an automatic fire extinguishing system and placed under maintenance of a security company.

REMOTE SURVEILLANCE

The remote surveillance subsystem allows integration with a wide range of surveillance facility systems for internal and external observation. This subsystem also carries out the function of an intercom at every entrance of the premises, allowing for communication via any camera, similar to a video phone. The remote surveillance subsystem can also operate and be controlled from any corner of the world via the Secure Communications Channel.

COMMUNICATIONS LINE

A communication network can be set up on the premises, connecting the Secure Communications Channel to other premises, offices or vessels, providing a safe connection with a remote system through the Internet. This gives you transparent access to another network, which would be useful for creating, for example, identical network surroundings with an office.

INTERACTIVE TELEVISION

The television subsystem allows ordinary television, as well as a selection of additional elements that transform it into a multi-media system. Among these elements are: access to a library of movies, music, karaoke, video clips, an option of recording TV programmes for later viewing, importing blue-rays into the library and much more. You have complete control of the premises directly from the TV via an on-screen menu. Video-phone mode and volume control from every corner of the premises are also available.

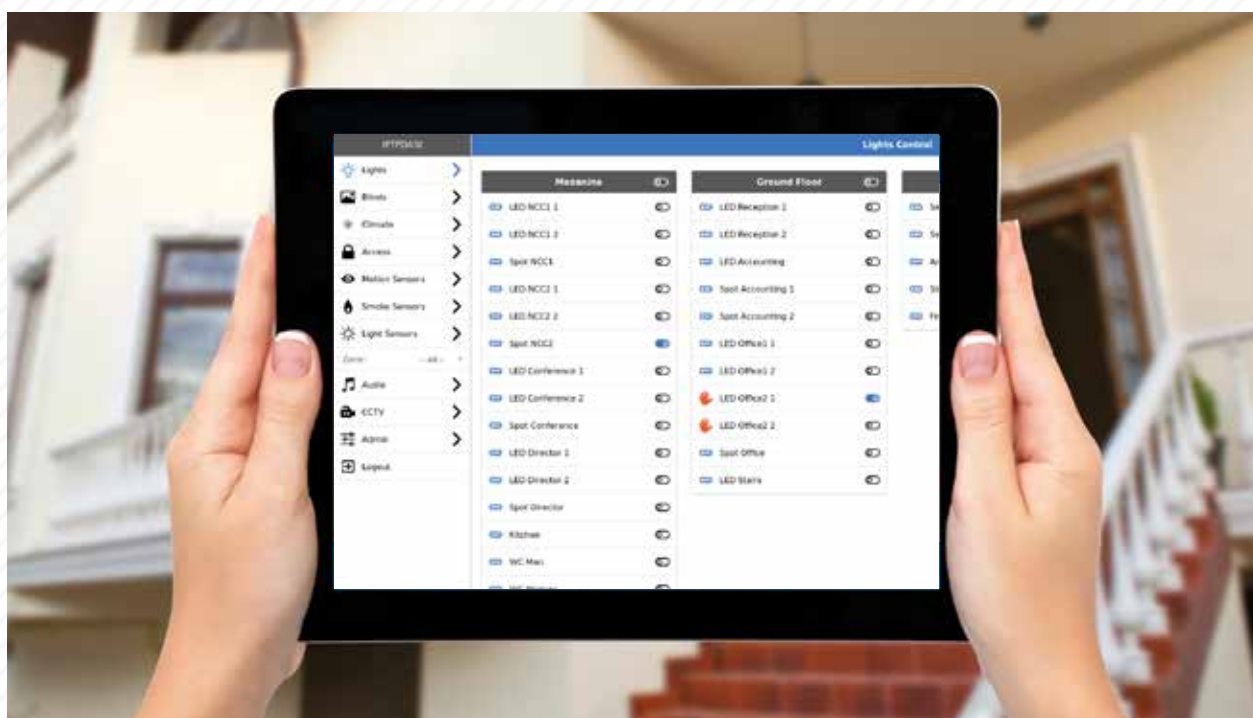
ELECTRICALLY-DRIVEN APPLIANCES

All the electrically-driven appliances and other power generators (automated opening of gates, pump motors, electrical door locks, electrically-controlled taps, heating/air conditioning, pool/sprinkler control systems, etc.) can be controlled from any connected device.

SmartSpaces Automation Solution integrates various appliances in your home, office or vessel into a seamless digital environment via a unified control system.

For Office.

SmartSpaces is a flexible integration solution that turns the office space into an automated, multifunctional ecosystem with an unified control panel that does not require a single switch. The solution makes use of centralized technology for control over lighting, air-conditioners and electrical appliances; it also integrates with other systems, such as security, video surveillance and telephony, enhancing the office space with sustainable performance, operational efficiency and improved convenience.



How does it work?

The entire office space is covered by multiple light, movement and temperature sensors as well as Wi-Fi. Depending on the time of day, weather conditions and settings preset by employees, lighting is adjusted automatically via dimmers and electric shutters that move either up or down according to time of day and amount of sunlight. The system also constantly updates information on external factors in order to maintain temperature in the office at an optimal level so employees never feel too hot or too cold.

Access control is enhanced by two-step verification: fingerprint recognition that is programmed to be used by every employee and the code to be entered on a panel. Fingerprint authentication is also required to be able to leave the office; if unauthorised entry occurs, the trespasser will not be able to exit.

The system is also programmed to set and disarm alarms and control other parts of the system from anywhere in the world, so even during holidays a designated employee

can adjust the system settings remotely. Bulletproof materials can be used for windows, doors and walls of the building, keeping all the assets under lock and key. When the office has visitors, and the doorbell rings, the alert can be adjusted to be sent to any or all the devices in the office, be that a TV, a stationary phone or a tablet. An employee responsible for the system can use any of the aforementioned devices to open doors and monitor visitors via multiple cameras installed inside and outside of the office.

For Home.

The Smart Spaces solution allows for sustainable control over the premises, automating the processes of all electrical appliances, utilising them in the most efficient way.

How does it work?

When the occupant approaches his premises, smart home already detects his arrival and opens the gate or door automatically. A phone or a tablet can also be used to control doors or gates.

A weather station is set up on the roof in order to measure humidity, temperature, wind speed, cloud density and other external factors and set to recognise, memorise and apply patterns accordingly. All in-house systems including irrigation and lighting of surrounding areas are adjusted to work according to these patterns. For example, if the system considers clouds to be too dense and the humidity level too high, the irrigation system would not switch on that day. If on the contrary it is too

sunny of a day, the water tank will not be heated by the system, as the solar panels will heat it instead throughout the day. So that water is preheated in advance, the owner may also adjust the settings as to be able to shower as soon as he wakes up.

The solution also covers security of the house: all windows and doors have sensors detecting movement and breakage. The 'Laser curtain' feature is also applied for security purposes; if anyone is detected entering or exiting a doorway in the absence of the occupant, an alarm will go off and all doors will be locked. If unauthorised entry occurs, the system will take pictures of the intruder and call the owner and the police.

For Vessel.

The SmartSpaces solution can be delivered to vessels, providing automated entertainment, communication and information collection via a single system, no matter how far from shore you are.

How does it work?

The yacht is equipped with two redundant data connectivity links for voice use, Internet and remote control. In order to provide reliable data connectivity on-board, a pair of tracking satellite transmit/receive systems were installed.

The owners of the yacht can stay in touch with their office and friends at no extra cost via Internet telephone; the system uses dozens of telephone lines to onshore numbers simultaneously. The owners also have the ability to make free calls from and to registered mobiles within the vessel.

Fast Internet connection enables permanent availability of any of the Internet services, at no extra cost; high speed wireless connections are available all over the vessel. The owners of the yacht can watch and record their favourite TV programs at any time, even when they missed them on air. They also have a wide choice of blue-ray and MP3 files available among thousands of titles found in the media library.

The Television Interactive Entertainment System makes possible the sending and receiving of messages among all the system's users. The flexibility of the system allows for the recognition of ranks, which helps avoid unauthorised dialogue between crew members and both owners and visitors of the yacht. At the same time, this enables all authorised users of the yacht to dis-

patch text messages to all cabins in case of an emergency. In this scenario the inactive television screens become active, and the viewing of the current channel or any other activity will be interrupted by the text message.



Additional Appliances

As a software developer, we can adapt to any demands of our clients and implement additional appliances. In other words, any device that you own can be integrated into the SmartSpaces Solution and controlled through a single interface.

RACK

The rack is used to hold components such as Uninterruptible power supply block, the Core, Router, LAN switch, Controller of Electrically-Driven Appliances, cable distribution panel and other additional devices.

CLIMATE/POOL/IRRIGATION CONTROL

Thermoregulators are used for climate control on the premises and automating the processes using set parameters.

LAN SWITCH

An essential part that provides an interrelation between the components through a TP cable, delivering the vital amount of ports connecting them. For a wireless connection, WiFi access points can be used.

UNINTERRUPTIBLE POWER SUPPLY BLOCK

An uninterruptible power supply block is strongly recommended for mitigating adverse effects of electro-supply failures on components. Depending on the quantity of components, more than one sustained power-supply block may be necessary.

POOL CONTROL

The solution also supports the pool control system by Jandy Aqualink. Pool temperature, cleaning, solar panels for warming up the water, etc. can be controlled with this system.

Compatibility with LinuxMCE

Home theatre system with LinuxMCE installed

The main components of the solution are supported by IPTP Networks' in-house development and are compatible with the LinuxMCE project.

LinuxMCE (Linux Media Center Edition) is a free and open source software platform with a 10-foot user interface designed to allow a computer to act as a home theatre PC (HTPC) for the living-room TV, personal video recorder, and home automation system. It allows control of everything in the home, from lighting and climate to surveillance cameras and home security.

ROUTER

One of the main components of the solution, responsible for providing a gateway for the telephone subsystem, a safe Internet connection or VPN, as it supplies the solution with crucial network functionality.

THE CORE

Nucleus of the system, necessary to carry out tasks more complex than elementary automatisation. The core is software run on a highly reliable professional server. It can be configured to suit individual requirements (the amount of disks and their sizes, the amount of RAM, the number of processors and their models, the amount and types of DVB and RAID cards), all determined at the design stage. It is possible to add other components and improve system parameters at any time after implementation.

MEDIA CONTROLLER

The Media controller is used to regulate audio/video devices.

WIRELESS ORBITER

The main remote for the solution that connects you to the Media controller via a wireless network, using tablets, androids, Cisco Phones and other devices.

AUDIO PLAYER

Wireless devices can play a wide variety of music files in any room, connected to an existing Wi-Fi system or simply to powered speakers. The use of wireless networking leaves you unrestricted by cables or connectors. In addition, Audio Player includes a directory of thousands of radio stations and connects you to online music databases that analyse your musical tastes and create playlists accordingly.

THANK YOU!

IPTP Networks Corporate Magazine is published annually and is available in seven languages: English, Chinese (simplified and traditional), Japanese, Russian, Vietnamese, Spanish and French.

Special thanks to:

Vladimir Kangin, Dmitry Fantalin, Ivan Soldatov, Alexandra Goncharuk,
Vladimir Sporykhin, Cristina Silverio and Dmitry Dubishkin – Text

Artur Norman and Yury Alimov – Photos

Yury Alimov and Kirill Makarov – Artwork

Photo backgrounds and artwork sources on pages:

1,4,5, 15, 17, 18, 19, 23, 60, 61 designed by Pressfoto - Freepik.com
and are free for commercial use with attribution
(visit www.freepik.com for details).

Any questions?



For fastest response with our clients we have a simple and easy to use web service available 24/7. Join our “live chat” by scanning this QR code and speak directly to our network support, sales or accounting department.



Erasmus+

IPTP Networks is a part of the Erasmus International Internships programme. The European student exchange programme established in 1987 offering university students a possibility of studying or working abroad in another European country. Erasmus programme offers networking opportunities across Europe, allowing aspiring professionals to cooperate with qualified experts, enriching the period of studies through practice in the field, gaining knowledge, improving language and enhancing communication skills. Our company always welcomes students for training through the Erasmus International Internships programme, becoming a valuable experience and an important first step in your future career.

CONTACTS



/IPTP Networks

AMERICAS REGION

IPTP LLC

130 7th Avenue, Suite
119, New York, NY
10011, USA
email: us@iptp.net
phone: (302) 407 4023
fax: (302) 407 4023

IPTP Networks S.A.C

Calle de las aguilas 293,
Surquillo, Lima, Peru
email: bd@iptp.pe
phone: +51 1 642 00 63

RUSSIAN FEDERATION

IPTP Ltd

117342, 17B, Butlerova street,
Moscow, Russia
email: ru@iptp.net
phone: +7 495 983 0023
fax: +7 495 983 0023

EUROPEAN UNION

Fredonia Trading Ltd

P.O.Box 54761, Limassol
CY-3727, Cyprus
email: cy@iptp.net
phone: +357 25 878860
fax: +357 25 878862

IPTP Networks

Science Park 404 BG,
1098 XH, Amsterdam,
The Netherlands
email: nl@iptp.net
phone: +31 207 147400
fax: +31 207 147498

ASIA REGION

IPTP LIMITED

2602A, 26/F, Goodman Global
Gateway, 168 Yeung Uk Road,
Tsuen Wan, Hong Kong
email: hk@iptp.net
phone: +852 24383217
fax: +852 24383218

IPTP Networks Company Limited

03, lầu 06, 4A/167A Đường
D1, Phường 25, Quận Bình
Thạnh, Thành phố Hồ Chí
Minh, Việt Nam
email: vn@iptp.net
phone: +84 2871099858
fax: +84 2871099859