CORPORATE MAGAZINE 2015

BETTER NETWORK

NOT JUST A BIGGER ONE

Highlights of 2014

New Data Center

IPTP Networks established its carrier-neutral facility in Cyprus - Kermia 1. The facility was built using innovative, industry-leading solutions and technologies and relies on our privately-owned redundant global network infrastructure.

All systems are completely redundant, targeting compliance with ISO 27001, PCI DSS, ISO 9001, TIA-942, Tier 3+ industry standards. Kermia 1 is powered by a 100KW power feed and backed up with 100KW GENSET, ensuring fully redundant supply of electricity for the facility. Enhanced with 24/7 monitoring and maintenance and secured by advanced access systems, the facility offers continuous scalability, reliability and security our clients have come to expect.

Expansion of company infrastructure

As a result of our company's continuous growth, IPTP Networks is planning to expand its presence in the Asia region with a Mainland China subsidiary, its office to be established in Shenzhen. In 2014, our operations in Cyprus have been relocated to a more spacious, modern and comfortable office, located in Limassol. New facilities are enhanced with IPTP SmartSpaces Automation Solution, biometrical authentication access system, CCTV, intelligent lighting, temperature control and numerous state-of-the-art technologies.

IPTP Networks acquired a major stake in Polaris Telematics Ltd

Polaris Telematics is a young, rapidly growing company that specialises in telecommunications and global positioning services. Founded in Hong Kong, by a group of professional enthusiasts, its focus is designing, developing and implementing one the most advanced and easy to use systems of global monitoring for customers, worldwide – the Lock8 Tracking Solution.
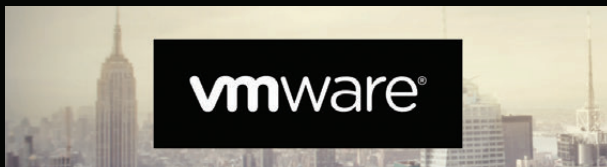
Joined The VMware Service Provider Program (VSPP)

As a company offering hosted services to third parties such as Infrastructure as a **Service (IaaS) Providers**, **Cloud Service Providers**, **Internet Service Providers (ISPs)** and **Platform as a Service (PaaS) Providers**, we find the VSPP to be an ideal solution.

Partnership with Citrix and PCCW Global.

Contents

About IPTP Networks

IPTP is an independent, multi-functional and redundant **broadband network**. We are a global **Tier 2 Internet Service Provider (AS41095), System Integrator** and **Software Development company** approaching 20 years of experience in delivering specialized, custom-made and truly integrated network solutions. Our company utilises ultra-fast Trans-Atlantic, Trans-Pacific and Trans-Eurasian assets, connecting clients to key Internet Exchanges and global financial centers as well as providing outstanding connectivity solutions across Europe, the Middle East, Russia, Asia, Africa and the Americas.

43
HOSTING
DATA CENTRES

OVER
100
INDUSTRY-LEADING
EXPERTS

OVER
3000
CLIENTS WORLDWIDE
+ RESELLERS

119
DATA CENTERS
ON-NET

35
CITIES

18
COUNTRIES

4
LANGUAGES
SUPPORTED

ALMOST
2%
OF THE TOTAL TRAFFIC
AND CAPACITY
OF AMS-IX

TOTAL CAPACITY
IS MORE THAN
5.5
Tb/s

ALMOST
1000
PEERING
PARTNERS

Level 3 Communications. Level 3's official Master Reseller Program is designed for industry-leading resellers and experts in either geographic or vertical industry markets. IPTP Networks succeeded in passing the stringent requirements (their list can be found on Level 3's official website) imposed on prospective affiliates and thus qualified for the prestigious title.

Verizon Business. IPTP Networks has a long and well-established relationship with Verizon Business allowing wholesale purchase, telephony and channels of top-level quality sourced from the provider.

COLT. IPTP Networks has been the company's long-standing Carrier Partner allowing us to use the full portfolio of Colt's services and facilitate optimal delivery of connectivity services to our partners and clients.

Cisco. IPTP Networks has qualified for the title of Cisco Systems' Select Certified Partner. This capability offers our company an increased level of support from Cisco and a variety of other benefits, the full details of which can be found on Cisco's official website.

PCCW Global. Covering more than 3000 cities and 130 countries, the PCCW Global network offers us a portfolio of integrated global communications solutions. These solutions include Ethernet solutions, IP solutions, fiber and satellite transmission solutions, managed services and solutions, and Voice over IPX (VoIPX) services.

Microsoft Corporation. IPTP Networks not only resells the company's software licenses but is also Microsoft's official SPLA Partner.

EMC Storage. IPTP Networks gains great benefits from EMC Storage partnership. From simple and efficient unified storage, to powerful, reliable and sophisticated enterprise storage, EMC storage solutions comply with corporate or regulatory requirements all while reducing costs and data storage complexity.

RSA SecurWorld of EMC. IPTP Networks has a well-established relationship with RSA as an Access Partner, allowing us to source and resell licenses and RSA SecurID systems to our clients to cater to their security needs.

APC. The status of APC's Reliability Partner allows us to install the company's easily scalable and adaptable server room architecture, dramatically reducing the costs and complexity of such installations.

Supermicro. IPTP Networks is a Wholesale Distributor of Supermicro's products, allowing for significantly more competitive pricing in addition to an unprecedented level of support and ease of RMA procedures.

Red Hat, Inc. Our collaboration with Red Hat allows us to obtain tools and resources that are designed to help our customers implement innovative, long-term, flexible solutions that respond to individual business needs in a cost-effective way.
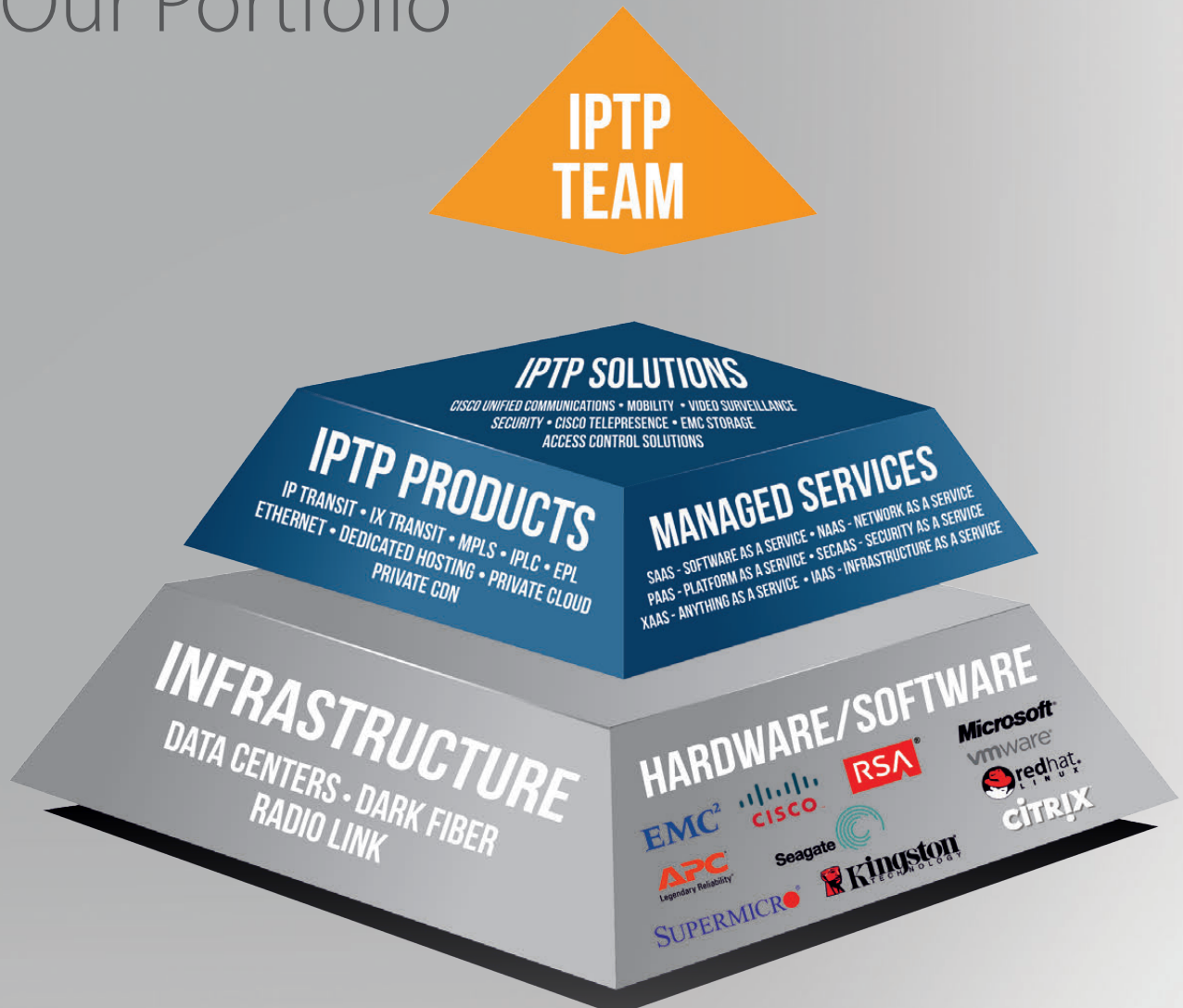
VMware. As VMware Solution Provider Partner we have the ability to deliver to our customers a wide range of VMware virtualization products and cloud management solutions. IPTP also has the benefits of The VMware Service Provider Program (VSPP) - the ideal solution for us as a company that offers hosted services to third parties, such as Infrastructure as a Service (IaaS) Providers, Cloud Service Providers (CSPs), Internet Service Providers (ISPs) and Platform as a Service (PaaS) Providers.

Citrix. As Citrix Solution Advisor our company receives substantial sales and marketing support, which in turn, allows us to serve as a trusted expert in cloud solutions to our customers.

Our Portfolio

IPTP TEAM

IPTP SOLUTIONS
CISCO UNIFIED COMMUNICATIONS • MOBILITY • VIDEO SURVEILLANCE
SECURITY • CISCO TELEPRESENCE • EMC STORAGE
ACCESS CONTROL SOLUTIONS

IPTP PRODUCTS
IP TRANSIT • IX TRANSIT • MPLS • IPLC • EPL
ETHERNET • DEDICATED HOSTING • PRIVATE CLOUD
PRIVATE CDN

MANAGED SERVICES
SAAS - SOFTWARE AS A SERVICE • NAAS - NETWORK AS A SERVICE
PAAS - PLATFORM AS A SERVICE • SECAAS - SECURITY AS A SERVICE
XAAS - ANYTHING AS A SERVICE • IAAS - INFRASTRUCTURE AS A SERVICE

INFRASTRUCTURE
DATA CENTERS • DARK FIBER
RADIO LINK

HARDWARE/SOFTWARE
Microsoft • vmware • RSA • redhat LINUX • EMC² • CISCO • CITRIX • APC Legendary Reliability • Seagate • Kingston TECHNOLOGY • SUPERMICRO

Colocation and hosting at various locations:

Ashburn (VA), New York (NY), Seattle (WA), Atlanta (GA), Los Angeles (CA), San Jose (CA), El Segundo (CA), Sannyvale (CA), Palo Alto (CA), Denver (CO), Chicago (IL), Miami (FL), Dallas (TX), Sao Paulo, Amsterdam, Milan, Madrid, Frankfurt, Bromma, London, Slough, Paris, Marseille, Zurich, Vienna, Moscow, St. Petersburg, Kiev, Nicosia, Limassol, Hong Kong, Beijing, Toronto, Singapore, Tokyo, Johannesburg.

ISO 9001 2008 quality certfication

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 company's ability to consistently deliver top-quality products and services.

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.

RELIABILITY

We provide Service Level Agreements with up to 99.999% 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.

CONNECTIVITY

Our network stability is provided by redundant EoMPLS network with a total capacity of more than 5.5Tb/s and 1Tb/s uplink capacity. The company currently operates almost 2% of the total traffic and capacity of AMS-IX - the world's largest Internet Exchange. In addition, IPTP is present in all of the major Internet Exchanges, averaging similar presence figures. We are pleased to offer our network infrastructure, the platform of data centers and the power of our server equipment for your projects all around the globe.

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.

COMMUNICATION

At IPTP Networks we are motivated by teamwork and open communication. We are an international company, with offices located in Asia, Europe, Russia, the Middle East and the US, and all 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.

Our Global Coverage

IPTP Networks is an independent, multi-functional, redundant broadband network and a global Tier 2 Internet Service Provider (AS41095) with industry-leading network stability guaranteed by a network backbone with a total capacity of more than 5.5Tb/s.
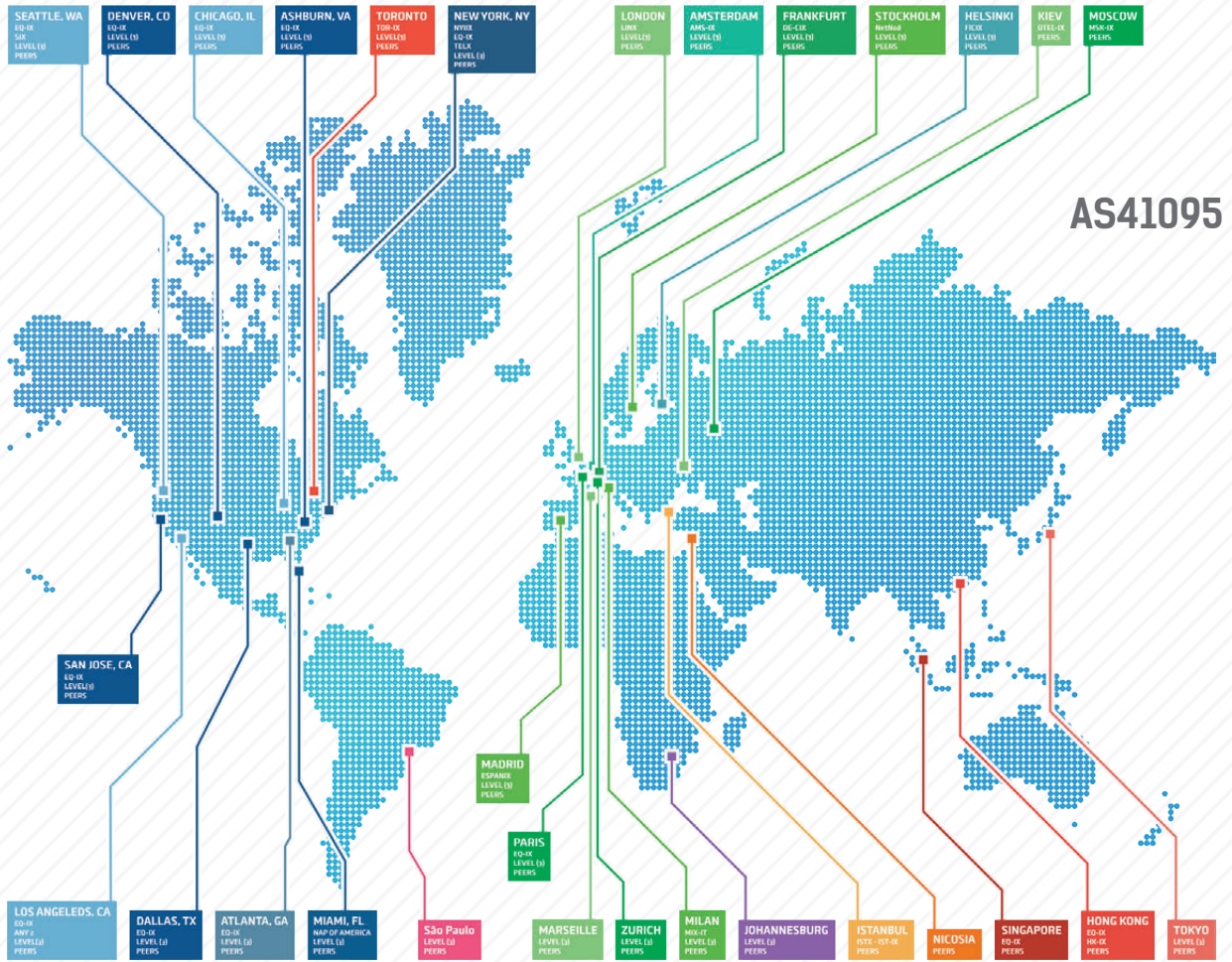
Private Peering Facilities include:

151 Front Street West Toronto
360/GT Toronto
Beijing POP
CoreSite - DE1
Denver Gas & Electric Building
Cablenet Engomi, Nicosia
Colo Atl
Colo at 55
Cologix Toronto
CoreSite - LA1 - One Wilshire
CoreSite - LA2, Enter Milan
Digital Realty Trust (LA)
Digital Realty Trust (CH)
Electric and Power Denver
Enter Milan
Equinix Amsterdam (AM1/AM2/AM3)
Equinix Atlanta (AT2/AT3)
Equinix Ashburn (DC1-DC11)

Equinix Chicago (CH1/CH2)
Equinix Dallas (DA1/ DA3/ DA4)
Equinix El Segundo (LA3/LA4/LA5)
Equinix Frankfurt City (FR1)
Equinix Frankfurt West (FR4)
Equinix Frankurt North (FR2)
KleyerStrasse (FR5)
Equinix Hong Kong (HK1-5)
Equinix London City (LD1)
Equinix London Park Royal (LD3)
Equinix London Slough (LD4)
Equinix London Slough (LD5)
Equinix Los Angeles (LA1)
Equinix New York (111 8th)
Equinix San Jose (SV1-8)
Equinix Singapore (SG2)
Equinix Seattle (SE2/SE3)
Equinix Tokyo (TY1-4)

Equinix Toronto (TR1)
Equinix Zurich (ZH1-5)
Espanix Mesena 80
FiberNet Telecom Group New York
(111 Eighth Ave)
Global Switch Singapore
IKI Moscow
Infomart
Interoute Milan
InterXion Zurich / Glattbrugg
InterXion MRS1 (SFR Netcenter Marseille)
Itenos Frankfurt
K1, Limassol
KPNQwest Milan
Level(3) ex-Global Crossing Frankfurt
Matrix 3
(Amsterdam Science Park)
Matrix 4 (Amsterdam Science Park)

MEGA iAdvantage Hong Kong
Hong Kong
MIX, Moscow M9
MIX, Milan
Netscalibur Milan
Neutral Data Toronto
NewTelco Frankfurt
NewTelco Kiev
NIKHEF Amsterdam
SARA Amsterdam
SFR Netcenter Marseille
Saint-Petersburg, Bolshaya Morskaya 18
TelecityGroup
Amsterdam 1 (Scienc Park)
TelecityGroup London (HEX67)
TelecityGroup London 2 (HEX89)
TelecityGroup Stockholm 1
Telehouse Canada

Telehouse London
(Docklands North)
Telehouse London
(Docklands East)
Telehouse London
(Docklands West)
Telehouse Paris 2 (Voltaire)
Telnet Caldera Milan
Telx Atlanta
Telx Chicago (Cermak)
Telx Los Angeles
Telx New York (111 8th)
Teraco House Johannesburg JB1
Terremark Miami
U1, Limassol
XO 600 West 7th
Westin Building Seattle
zColo New York - 111 8th Ave

Level 3 Communications is an American multinational telecommunications and Internet service provider company that builds, operates and maintains a global communications network to deliver managed solutions for enterprises, carriers and governments.

The African Network Information Center (AfriNIC) is the Regional Internet Registry (RIR) for Africa, responsible for the distribution and management of Internet number resources throughout the African region. AfriNIC is a non-government, not-for-profit, membership-based organization, based in Mauritius, that serves the African Internet Community.

The American Registry for Internet Numbers (ARIN) is a nonprofit organization and the Regional Internet Registry for Canada, the United States as well as numerous Caribbean and North Atlantic islands.

The Réseaux IP Européens (European IP Networks) Network Coordination Center (RIPE NCC) is an independent, non-profit membership organisation and the Regional Internet Registry for Europe, Russia, the Middle East and Central Asia.

Asia–Pacific Network Information Center (APNIC) is a non-profit, membership-based organization and the Regional Internet Registry for the Asia Pacific region, which comprises 62 economies in total.

The Amsterdam Internet Exchange (AMS–IX) is based in Amsterdam, the Netherlands. It interconnects close to 700 IP networks and its business traffic has a peak of over 3 Terabit per second, making it the largest Internet Exchange in the world.

Hong Kong Internet Exchange (HKIX) is the largest Internet Exchange in Asia, transferring around 200Gbit to its 160 ISP, Carrier and Content networks. HKIX is fundamental to the local Hong Kong ISP Market, with every provider in Hong Kong connected, as well as excellent regional coverage with networks from Thailand to Japan to Australia.

The London Internet Exchange (LINX) is situated in London, UK and is one of the global leaders of Internet Exchange Points (IXP) with over 566 members connected from over 62 countries worldwide.

The Telx Internet Exchange (TIE) is a neutral, privately-owned and managed packet and Internet Exchange Point in the United States with locations in Atlanta (GA), New York (NY), and Phoenix (AZ), providing a high performance Internet peering fabric for participants and helping them maintain stable connections.

Deutscher Commercial Internet Exchange (German Commercial Internet Exchange) (DE–CIX) is a carrier- and data center-neutral Internet Exchange Point situated in Frankfurt, Germany and the largest exchange point worldwide in terms of peak traffic with a maximum throughput of more than 3.4 terabit per second.

Equinix, Inc. is an American public corporation and one of the most reputable IBX data center and colocation providers in the world. Equinix offers a digital ecosystem for financial, content or rich-media, enterprise and cloud networks.

The CoreSite Any2 Exchange® for Internet peering **(Any 2)** is owned and operated by CoreSite. With more than 600 members it is the second largest IX in the United States and the largest Internet exchange on the West Coast. Most of their switch fabrics feature a dual-core, dual-edge setup for increased reliability and improved network disaster recovery configuration.

Network Access Point (NAP) of the Americas is an Internet exchange point and a large data center based in Miami, Florida, run by Verizon Terremark. It hosts one of the instances of the K-root of the Domain Name System.

Our 1-Stop-IT-Shop

IPTP Networks is a 1-Stop-IT-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, allowing you to receive a finalized product from a single source, with a single point of contact, helping you cover your entire IT infrastructure.

Stop-IT-Shop approach was designed for companies that choose to avoid having an in-house IT department as well companies that wish to entrust their IT-related issues to a reliable professional organization, allowing them to concentrate on their core business.

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

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

A complete product, fortified with management, monitoring, maintenance and 24/7 support.

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

Helps to streamline your business, reduce costs and stay ahead of the competition.

Being a single point of contact for the product, we accept 100% final responsibility for our projects.

Managed Services

A comprehensive portfolio of complex capabilities for your IT infrastructure, backed up by all-round management. Our Managed Services allow you to enhance your individual business strategy and extend your business potential by reducing costs and increasing efficiency of your projects with helpful resources. You can select specific components of your IT infrastructure, and we will manage them for you, allowing you to have ultimate flexibility and complete control over your projects at all times. *Page 12*

Managed Connectivity Services

Our company provides global network connectivity through top-level, non-packaged services that are adapted to fit and complement individual business models. We allow you to choose a specific service in accordance with your needs or combine it with other Managed Connectivity Services that can be deployed either on an infrastructure owned by us, or in combination with third-party infrastructure, ensuring ultimate connectivity for your business and your clients. *Page 14*

Unified Communications

Reduce the total cost of ownership, increase the efficiency of communication systems and add numerous innovative features and applications. With the Cisco Unified Communications solution, we maintain and support ONE converged Network for Data, Voice & Video. Cisco's end-to-end solution offers embedded integration capabilities and collaboration between the data network infrastructure (switches, routers, security devices) and Unified Communications components (IP Phones and Applications). *Page 20*

Hosting/Colocation Services

Enhance your business with secure dedicated server hosting and related Internet connectivity. Our scalable solution provides the customer with a number of options ranging from basic colocation, whereby the equipment is owned by the customer, to traditional dedicated server hosting – whereby the provider owns and manages servers and all related equipment. *Page 27*

Distributed Mitigation Managed Service against DDoS

Enhance the security of your data with our unique, in-house developed methods of protecting your business and customer base. IPTP DMMS was designed specifically to provide unparalleled protection against volumetric DDoS and to ensure uninterrupted operation of your network. A high-performance, redundant network infrastructure owned by our company is capable of handling immense traffic, achieving instant mitigation of attacks. With this service we provide the connectivity, the servers and the maintenance. Depending of the service type being protected, transparent protection can be applied. *Page 31*

IPTP ERP & CRM

Support your corporate activities by a business process management software, designed and developed exclusively in-house by IPTP Networks engineers and provided via the SaaS platform. The subscription-based nature of the system allows for completely independent modules that can be adapted to fit your individual business needs. IPTP ERP & CRM streamlines the way you approach your corporate data with ease of access, minimized miss-communication and numerous other benefits for your day-to-day business affairs. *Page 34*

Managed Services

WHAT?

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

WHY?

You can select the components of your IT infrastructure and we will manage them for you, allowing 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.

HOW?

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

"All our facilities are designed to ensure maximum convenience for our clients. IPTP Networks provides a foundation of the highest standards for constructing sophisticated, custom-made managed solutions designed to fit each client's individual business model. Combined with other services, such as System Design, Implementation and Integration, we have the expertise necessary to allow you to remain focused on running your business while we run your Information Technology."

Vladimir Kangin, CEO & Co-Founder of IPTP Networks.

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. IPTP 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 IPTP 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.

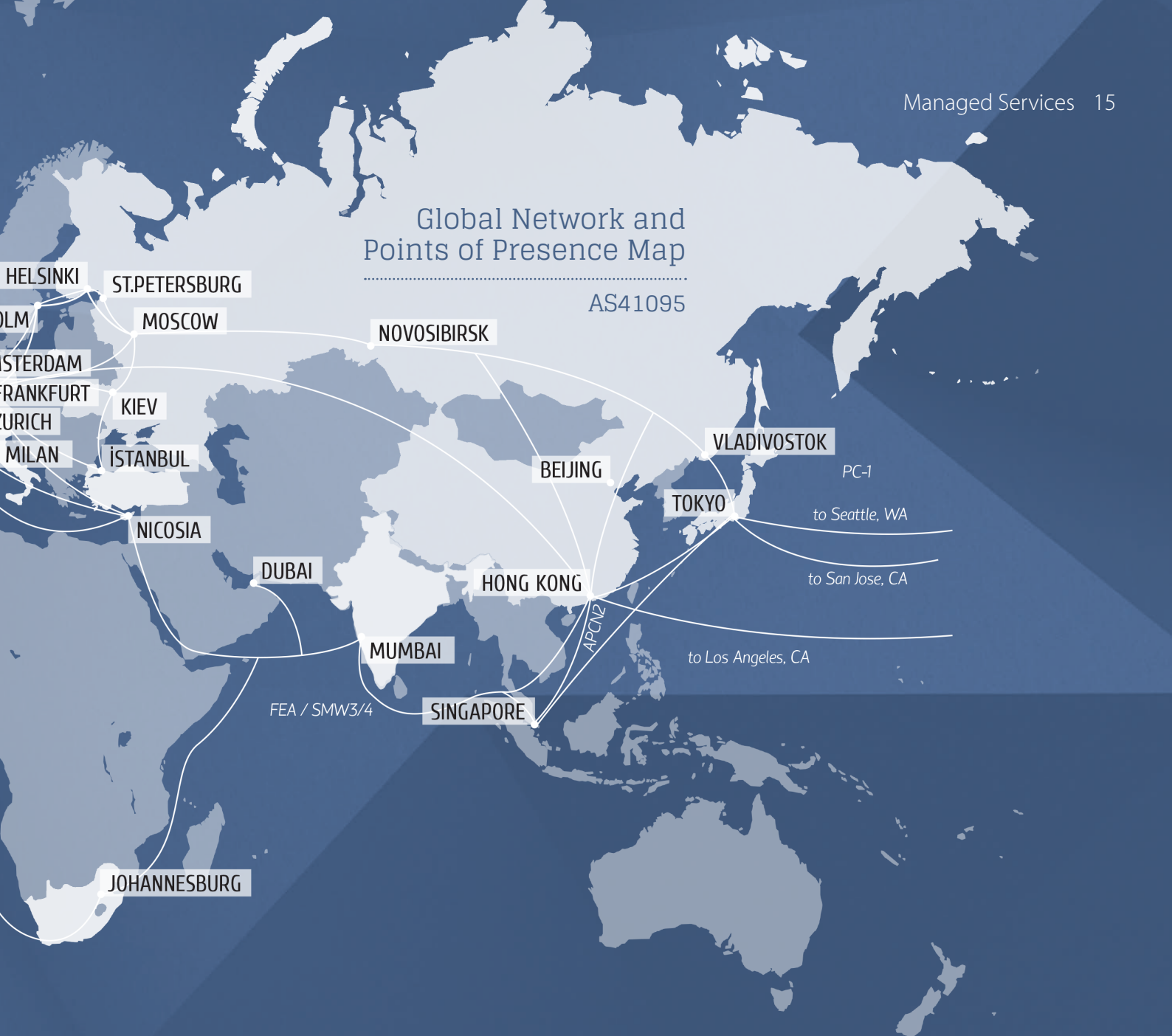## Distributed Mitigation Managed Service against DDoS (DMMS)

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.

SEATTLE, WA

SAN JOSE, CA

CHICAGO, IL

TORONTO

NEW YORK, NY

DENVER, CO

WASHINGTON, DC

LOS ANGELES, CA

DALLAS, TX

ATLANTA, GA

MIAMI, FL

SÃO PAULO

to Tokyo

PC-1

to Tokyo

to Hong Kong

AC-1

STOCKHO

LONDON

AM

PARIS

F

MARSEILLE

Z

MADRID

Managed Connectivity Services

IPTP Networks is a worldwide ultra-high bandwidth network infrastructure provider that is in-dependently 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 and the Americas.

Our global network connectivity is based on specialized, tailor-made solutions designed for cor-porate 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. The services can be deployed either on an infrastructure owned by us, or in combination with third-party infrastructure, ensuring an ultimate connectivity.

Global Network and Points of Presence Map

AS41095

HELSINKI
ST.PETERSBURG
OLM
MOSCOW
NOVOSIBIRSK
STERDAM
FRANKFURT
KIEV
ZURICH
MILAN
İSTANBUL
VLADIVOSTOK
BEIJING
PC-1
NICOSIA
TOKYO
to Seattle, WA
DUBAI
HONG KONG
to San Jose, CA
APCN2
MUMBAI
to Los Angeles, CA
FEA / SMW3/4
SINGAPORE
JOHANNESBURG

Advantages

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

Convergence of multiple applications and traffic types onto a single network

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

Customer portal providing real-time statistics

SLAs for multiple classes of service

Numerous connectivity options that meet varied business requirements

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.

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.

Frame Relay & ATM

Our managed Frame Relay/ATM service delivers Layer 2 site-to-site connectivity over a Frame Relay or ATM network, and we provide you with 24/7 management, monitoring and maintenance of your site routers in a Wide Area Network. The service also includes regular backup of router configuration and software patch management.

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 the content, which means that user automatically connects to an Anycast location nearest to him, based on the network.

Multiprotocol Label Switching (MPLS) VPN

A private IP network is enhanced with secure, high-quality connectivity that classifies and prioritizes traffic flows - end to end. Low levels of latency, jitter, and packet loss ensure a successful, concurrent handling of multiple types of traffic. In addition, you can select a full mesh VPN option to pass traffic directly site to site, and select the design configuration that suits your needs.

IX Transit

Service that enables you to connect to selected 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, on-line 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 on-line 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 tunnelling 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 of costs for in-house IT department and a 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.
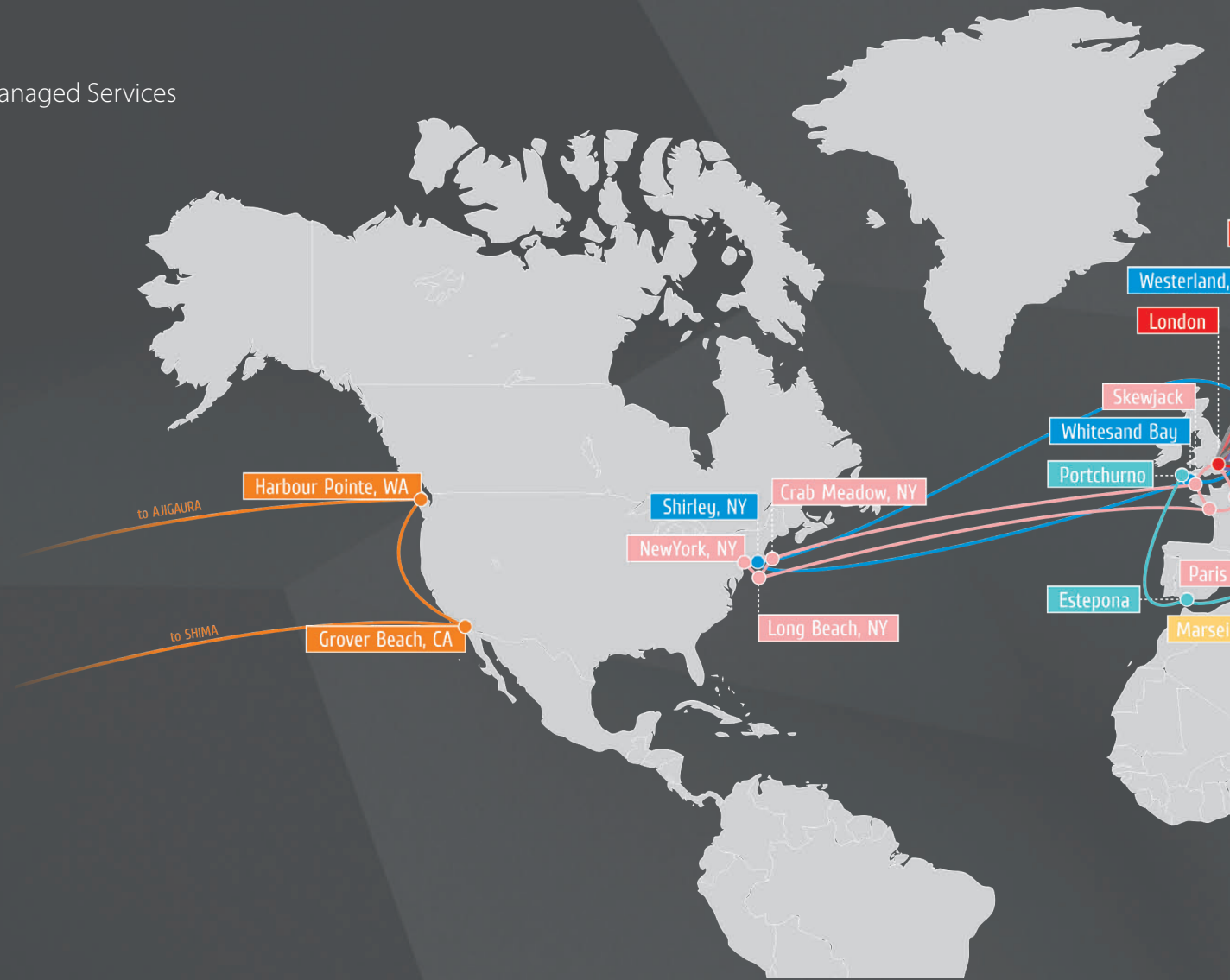
We also offer Managed WAAS with a strategic designation, that include a full suite of WAAS-enabled services that can be implemented either incrementally or immediately, and combined with other services such as Managed Router and Managed Firewall. The service includes 24/7 management, monitoring and maintenance, 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 an 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.

Westerland,
London
Skewjack
Whitesand Bay
Portchurno
Paris
Estepona
Marsei

Harbour Pointe, WA

to AJIGAURA

to SHIMA

Grover Beach, CA

Shirley, NY

Crab Meadow, NY

NewYork, NY

Long Beach, NY

back up route

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.

The ownership of the system is distributed between: Rostelecom (Russia's largest long-distance telecommunications services provider), TransTelekom (a major Russian telecommunications company that owns one of the largest networks of fiber optical cables in the world), NTT Communications and KDDI Corporation (two of the largest telecommunications companies in Japan), China Unicom (the world's third-largest mobile provider) and China Telecom (China's leading telecommunications operator).

back up route

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 37ms. The consortium includes Rostelecom, NTT Communications (NTT Com), and China United Network Communications Group Co, Ltd (China Unicom).

back up route

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).

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 5.6ms 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.

ALEXANDROS is a private cable subsystem wholly owned by Cyta (the national telecommunications provider of Cyprus) consisting of a fibre pair between Cyprus-Egypt (7ms latency) and a fibre pair between Cyprus-France (17ms latency), implemented through Telecom Egypt's submarine cable system TE NORTH (TEN), connecting Egypt with France, and through Pan-European networks, connecting to the rest of the Europe and beyond. The ALEXANDROS Subsystem interconnects the Pentaskhinos landing station in Cyprus with Abu Talat in Egypt and Marseilles in France, each direction with total capacity of 96x10Gbps, providing a bridge between the East and the West, enhancing connectivity in the Mediterranean and providing international network robustness and reliability.
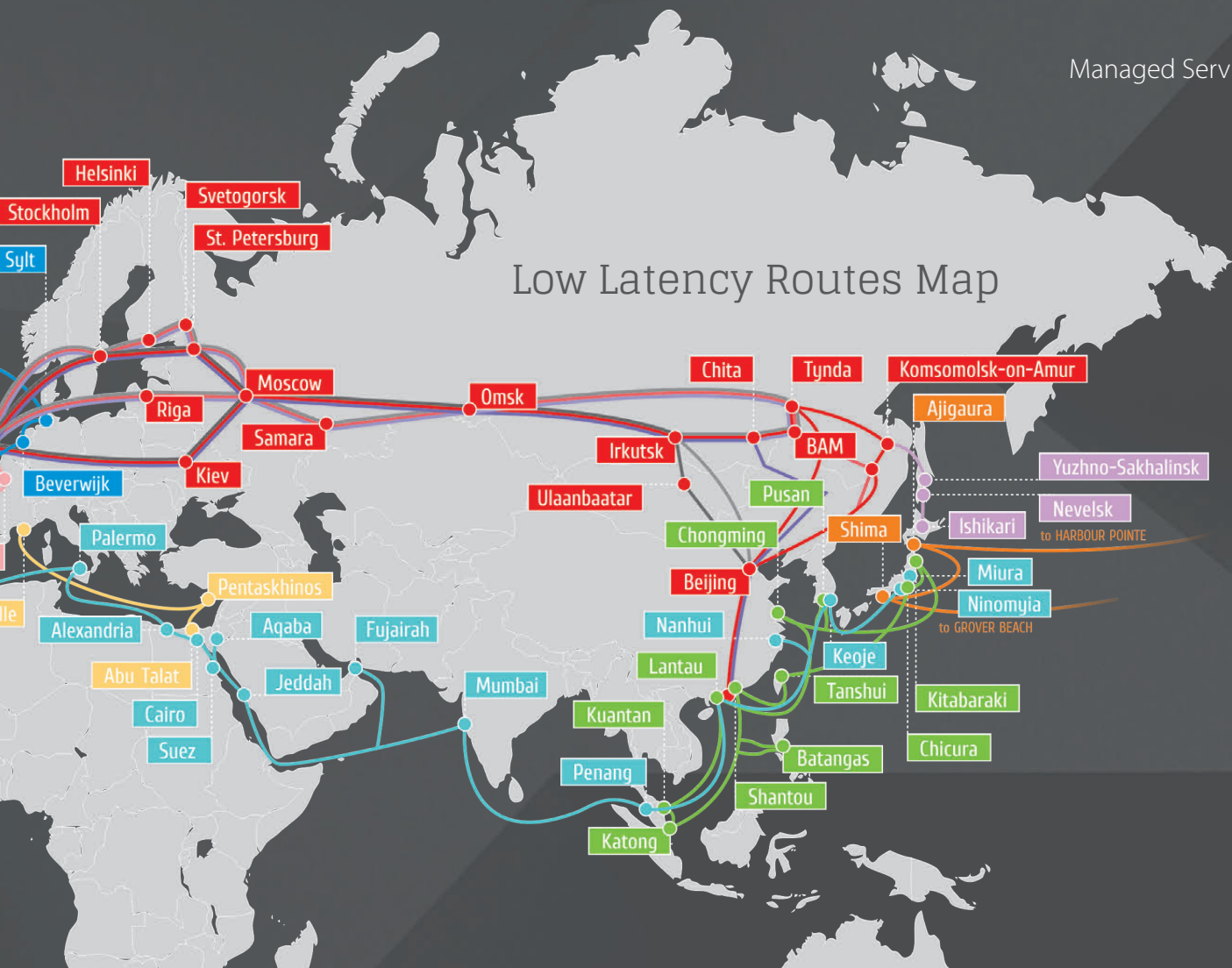
Low Latency Routes Map

APCN-2 or **Asia-Pacific Cable Network 2** is a 19,000km optical fiber 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 in the Asia region. Latency between Singapore and Japan is approximately 86ms in theoretical value. The APCN-2 consortium members consist of 45 carriers in the Asia Pacific region, 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.

PC-1 or **Pacific Crossing 1** (a wholly owned subsidiary of NTT Communications) is a submarine telecommunications cable system connecting the U.S. and Japan. Latency from Japan (Tokyo) to US (Seattle) is approximately 83ms and an approximate from Japan (Tokyo) to US (LA) 110ms, both for the round trip relay. 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. In July 2013, the PC-1 network was upgraded with 100G coherent technology, offering 100GE connections. 21,000km long, it ensures the highest reliability and the lowest latency across the Pacific.

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.

FLAG Europe Asia (FEA) was the first segment of FLAG opened for commercial use on 22 November 1997. Operated by Global Cloud Xchange, it is the longest operational private cable system in the world. It stretches over 28,000 kilometres from the UK to Japan and comes ashore at 16 operational landings in 13 countries, linking the telecommunications markets of Western Europe and Japan through the Middle East, India, Southeast Asia and China. FEA is a two fibre pair, multi-sectioned point-to-point system with a capacity of 20 Gbps on many segments. FEA from Telehouse East London to Mega-I Hong Kong is RTD 192ms. Latency from Cyprus to HK is 150ms. Since coming into operation in 1997 FEA has a proven record of reliable operational service, and has attracted a customer base of over 100 international carriers and ISPs.

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.

*back up route

Managed Data Center Services

Space, power and network access in a specifically equipped and environmentally controlled data centers 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 to deliver data center resources, protecting business continuity and enhancing the security of your data. At IPTP we adapt to current and future business demands, ensuring that your IT resources are always in sync with your business demands.

Our comprehensive Hosting/Colocation services are designed to provide top-class infrastructure for Internet of Things companies. We offer a scalable solution where the customer has a number of options ranging from basic colocation, whereby the equipment is owned by the customer, to traditional dedicated server hosting – whereby the provider owns and manages servers and all related equipment.

Dedicated Hosting

Our Dedicated Hosting packages provide you with the opportunity to obtain and control a server or dedicated equipment, without the need to purchase and install your own equipment. Either is connected to a high-speed Internet port and installed in a specially equipped data center. 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: **http://www.iptp.net/en/dedicated.php**

Colocation

IPTP Networks offers colocation at various data centers in North and South Americas, Asia, Europe, the Middle East and Africa. Our Colocation packages 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: **http://www.iptp.net/en/colocation.php**

"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

Advantages

Equipment, data and online platforms available at all times

24/7 technical service and support, system backup resources, disaster-recovery solutions. Comprehensive system testing for redundancy and single points of failure allow to verify availability in all operating modes and identify potential system-related problems.

Long-lasting, maintenance-free operation

Precision air-conditioning system allows for the maintenance of climatic conditions (humidity, temperature and airflows) at the level optimal for the operation of equipment.

SLAs related to all key environmental and infrastructure elements of the building

The building design and systems are state-of-the-art and maintained at the highest level to avoid any downtime.

Duplication of communication channels

Allows to ensure continuous data exchange with the subscribers.

The peace of mind you need to focus on your business priorities

You can focus on your business, improving your core services for greater profitability, moving away from daily managing of IT infrastructure and problem solving.

Maintenance of a secure environment

Specialised fire extinguishing system, dust and moisture protected facilities.

Reliable protection of premises and data center computing resources from unauthorized access

Implementation of a security system (perimeter protection, Access Control System, video surveillance).

Capacity

A large area is available for both computing resources and serving equipment.

DDoS Mitigation

IPTP DMMS (Distributed Mitigation Managed Service) against DDoS is a unique way of protecting your business and customer base, designed specifically to provide unparalleled protection against volumetric DDoS, ensuring continuous operation of your network.

WAN Acceleration

Enabling powerful application acceleration and WAN optimization.

Matrix 4 Data Center
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.

Amsterdam Science Park is a leading cluster in four BSIK ICT proposals and internationally recognized for its major e-science, multimedia expertise and revolutionary new Internet development known as 'GRID'. The national network center also hosts the AMS-IX - the world's largest Internet Exchange and is the prime point of presence for state-of-the-art, ultra-high bandwidth networks.

Eco-friendly

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 data center is designed with the latest in power efficient technologies to target 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 contributing to a better overall efficiency of the data center given the climatic conditions in Amsterdam with the 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 data centers in Amsterdam Science park as well as our facilities in Matrix 3 and newly constructed K1 (Kermia 1, Limassol, Cyprus) enabling them to serve as disaster recovery sites for the facility.
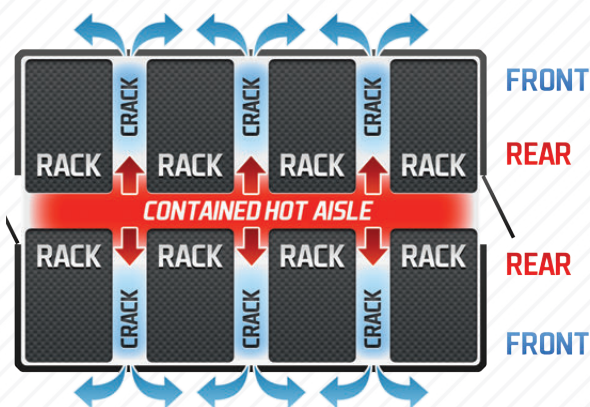
Hot-aisle containment system (HACS) deployed with row-oriented cooling

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.

Advantages

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

The gross floor area equals 7500 sq.f.

24/7 access to qualified technical support

Improved resiliency

Simplicity of concept, design and installation

48 units instead of the standard 42

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 6,300 SQF 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 8 MAJOR DATA CENTERS VIA DARK FIBRE

Equinix AM1/2/3 • NIKHEF (AMS-IX)
SARA (AMS-IX) • Telecity 1 Science Park
Matrix 3/4 Science Park

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

Colocation Services

IPTP Networks has almost 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.

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.

Media, Financial corporations, Banks and Forex companies.

Mission-critical sites requiring custom server management.

"IPTP Networks is the first company stating that it 'simply provides proper Internet' and indeed it has provided."

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

Key Features:

Rock-solid, 99.9% guaranteed Internet bandwidth of either 10M, 100M, 1G, 10G, 100G ports.

Professionally customizable, upgradeable and configurable to your specific business model.

Remote power management port via APC PDU.

Industry-leading security.

24/7 Live technical support with zero wait time.

Redundant power supply via privately-owned generators.

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

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

Exceptional worldwide connectivity via IPTP Networks backbone.

Optional:

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

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

Enabling CDN and Cloud networks.

High density racks.

Wide range of storage solutions from EMC^2.

Kermia 1 Data Center
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 data center 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 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: **http://www.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
http://www.powerallnetworks.com/views/en/index.html

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 power supply via a private electric 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 to remote equipment, including on the basis of the construction of last mile to the customer's office. You can check the characteristics of the main channels by using **IPTP Looking Glass** tool accessed via:* http://www.iptp.net/en/lg.php

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.

"Deployment of a Cisco phone system, implemented by IPTP Networks, has enabled us to significantly reduce the cost of telephone conversations. Very convenient and with no additional cost; dialling just four digits of an extension number connects you to a subscriber in Moscow office."

Anna Romanenko, MDM Investments Limited, Cyprus, member of the MDM Group

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, IPTP 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 Software Development

IPTP DMMS AGAINST DDOS. Distributed Mitigation Managed Service against DDoS. *Page 31*

....

IPTP ERP & CRM. Enterprise Resource Planning and Customer Relationship Management software via the SaaS platform. *Page 34*

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LOCK8 TRACKING SOLUTION by Polaris Telematics, IPTP Networks' subsidiary company. *Page 44*

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IPTP VIDEO SURVEILLANCE. Software for Home, Office and Vessel Security Systems. *Page 50*

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IPTP CADA. Controller of Automatically-Driven Appliances for Home, Office and Vessel Automation Solutions. *Page 54*

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 latest developments in the market for telecommunications and networking solutions accumulating competences necessary to preserve 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 it 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 DDoS

Cyber attacks are becoming increasingly problematic for organizations that conduct business online. The most critical concern today are the Distributed Denial of Service (DDoS) attacks - a distributed type of attack that allows bot-nets to cause an overload of traffic, leading to denial of service and, as a result, loss of valuable customers. Every day these attacks are becoming more sophisticated, making your corporate data vulnerable and security demands – increasingly challenging.

**No clearing centers.
No added latency.
No DDoS.**

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.

The distributed design of IPTP's DDoS mitigation defense topology allows us to clean traffic directly at the border of our network (with less than 1 ms of delay), rather than shifting traffic to a clearing center and back, thus eliminating any latency involved in the clearing process as well as eliminating any response/activation delay and providing a truly transparent mitigation.

Unlike other companies offering DDoS protection, we operate our own global network, allowing us to protect against volumetric type of DDoS on its 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. IPTP utilizes ultra-fast Trans-Atlantic, Trans-Pacific and Trans-Eurasian capabilities, providing our customers with unparalleled distributed protection.

Our global network allows for distribution of traffic among separate, dedicated equipment, preventing the combined volume of attack traffic from ever targeting a single network node. This makes IPTP's infrastructure completely redundant and allows us to guarantee that you have access to all your resources at all times.

Many botnets allow an attack to be launched at almost no cost. However, the initial costs of equipment and the knowledge required to confront a DDoS attack are significantly higher. The simplicity of running such an attack, in contrast to the complexity of protecting against it makes it highly challenging to maintain an in-house security solution. By relying on our DMMS against DDoS, your organization receives a security solution against volumetric DDoS attacks in the most cost-effective way.

Our qualified specialists operate on high-end network equipment from Cisco, an industry leading provider, and deal with high loads of traffic on a daily basis to ensure that your enterprise receives unparalleled sustained performance and continuous protection. Attacks are evolving every moment and our team is constantly busy improving our service by adding new resources, expanding our network and accumulating expertise.

CUSTOMER INFRASTRUCTURE

← DDoS Attackers
← Legitimate traffic

IPTP NETWORK INFRASTRUCTURE

DDoS MITIGATION SERVICE   DDoS MITIGATION SERVICE   DDoS MITIGATION SERVICE   DDoS MITIGATION SERVICE   DDoS MITIGATION SERVICE
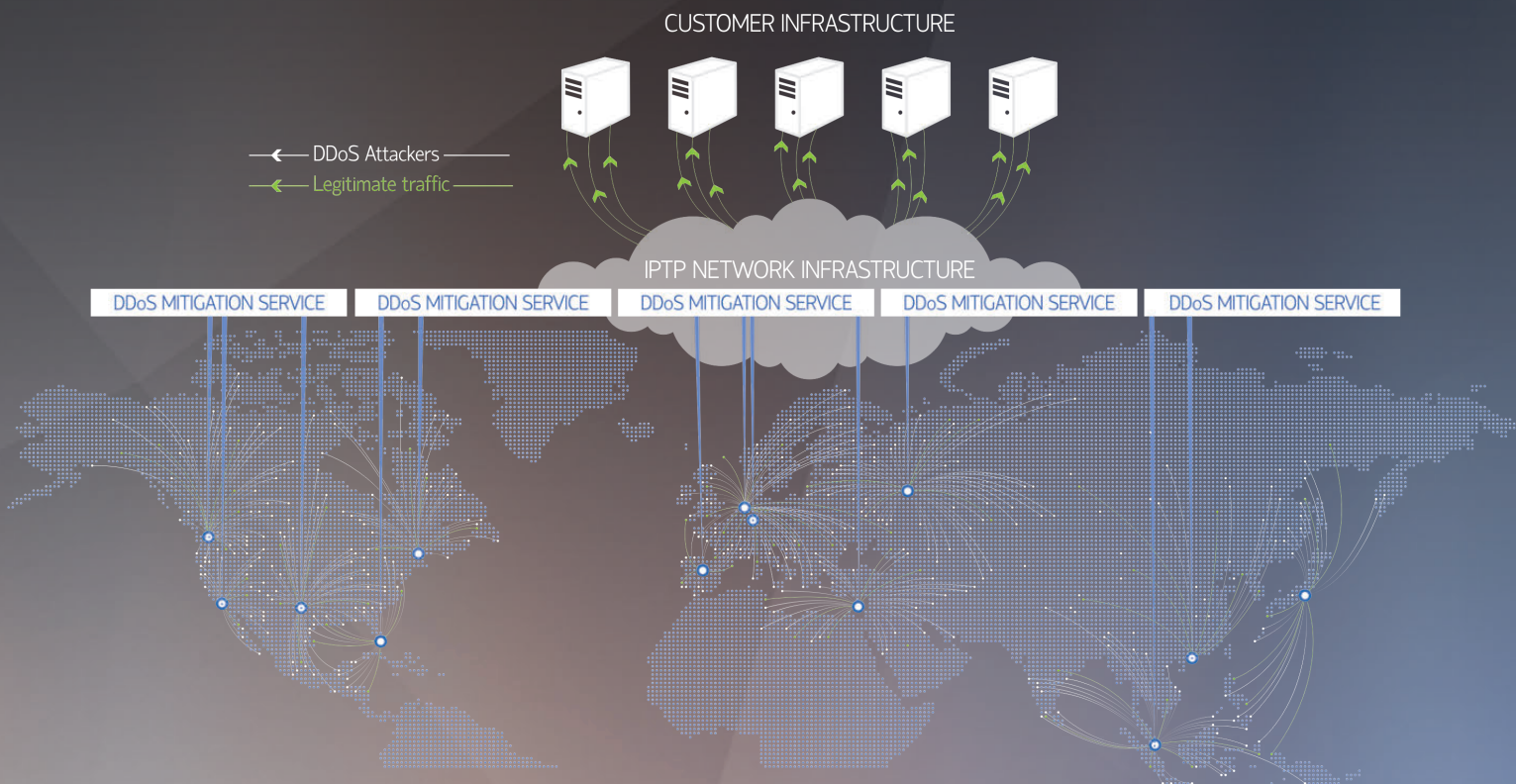
Advantages

No clearing centers limits.

No extra latency added as there are no tunnels.

Zero reaction time.

Deployment on IPTP Networks' private global network.

By using BGP Anycast methodology, we make it impossible to target any specific customer device in our network.

All traffic goes to the closest available equipment in the network and the setup is completely redundant.

Our advanced firewalls can handle multi-gigabits of traffic and filter out any types of floods including but not limited to ICMP, UDP or SYN.

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.

Fully redundant network topology allows us to carry out transparent maintenance both on the network and at the customer side with no impact to your services.

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 eco-system consisting of both software and hardware and provided via the SaaS (Software as a Service) delivery platform.

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 IPTP servers, which are extremely reliable and enhanced with unparalleled protection
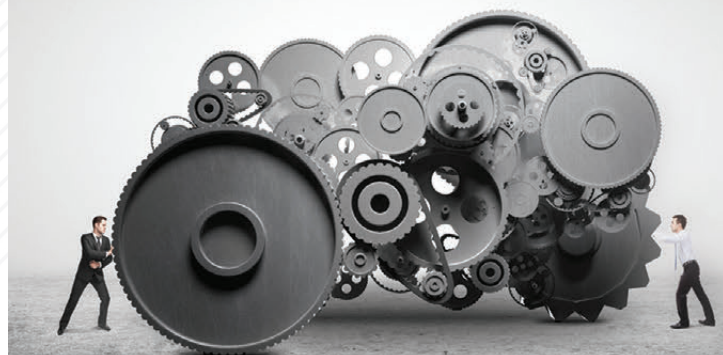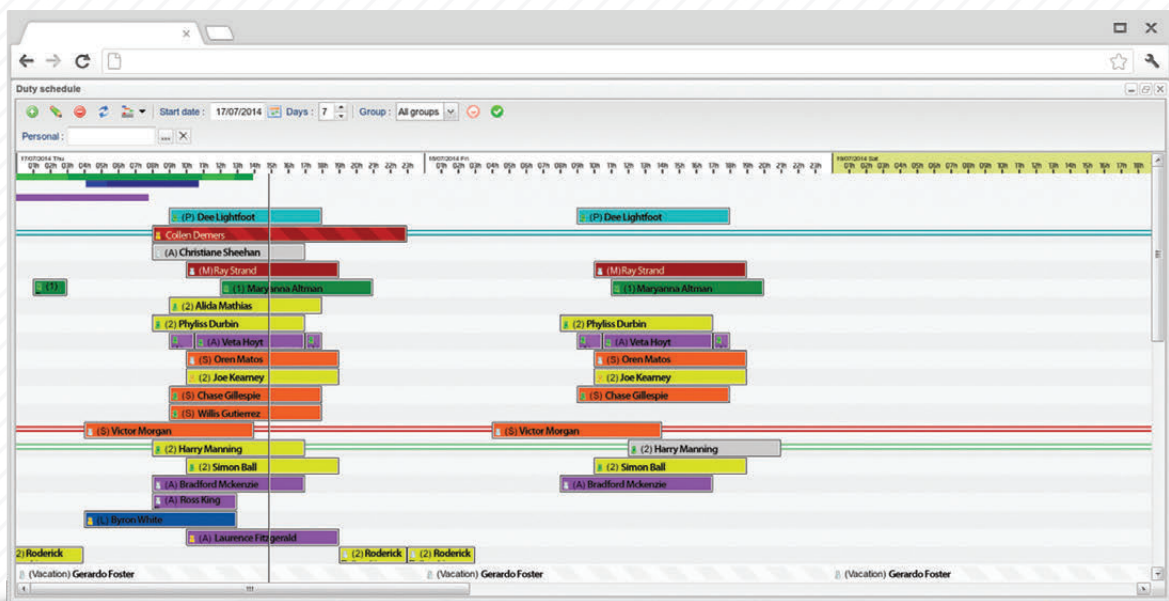
IPTP ERP & CRM FEATURES:

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 the balance and 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.
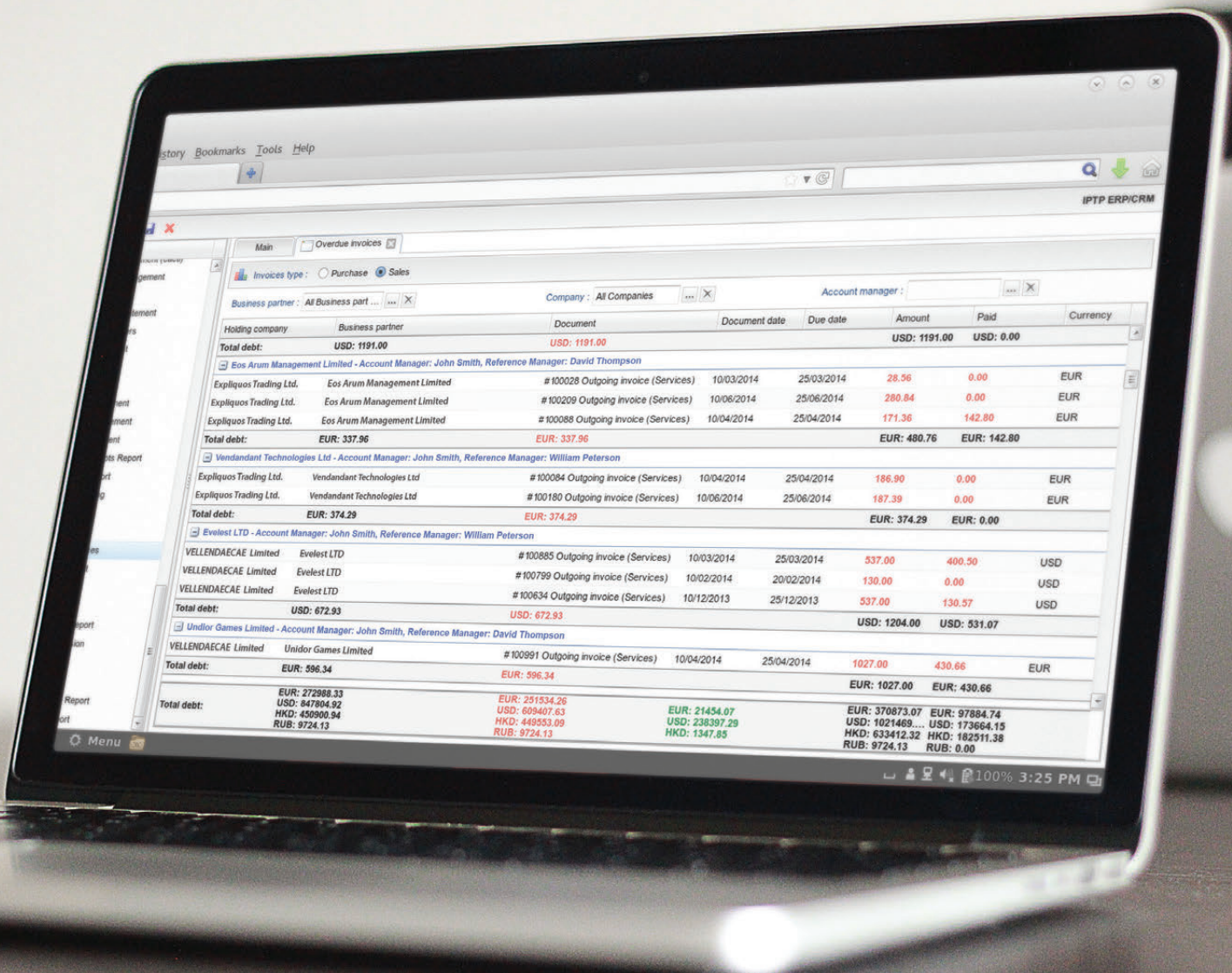
Services

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 to create a custom-made package 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.
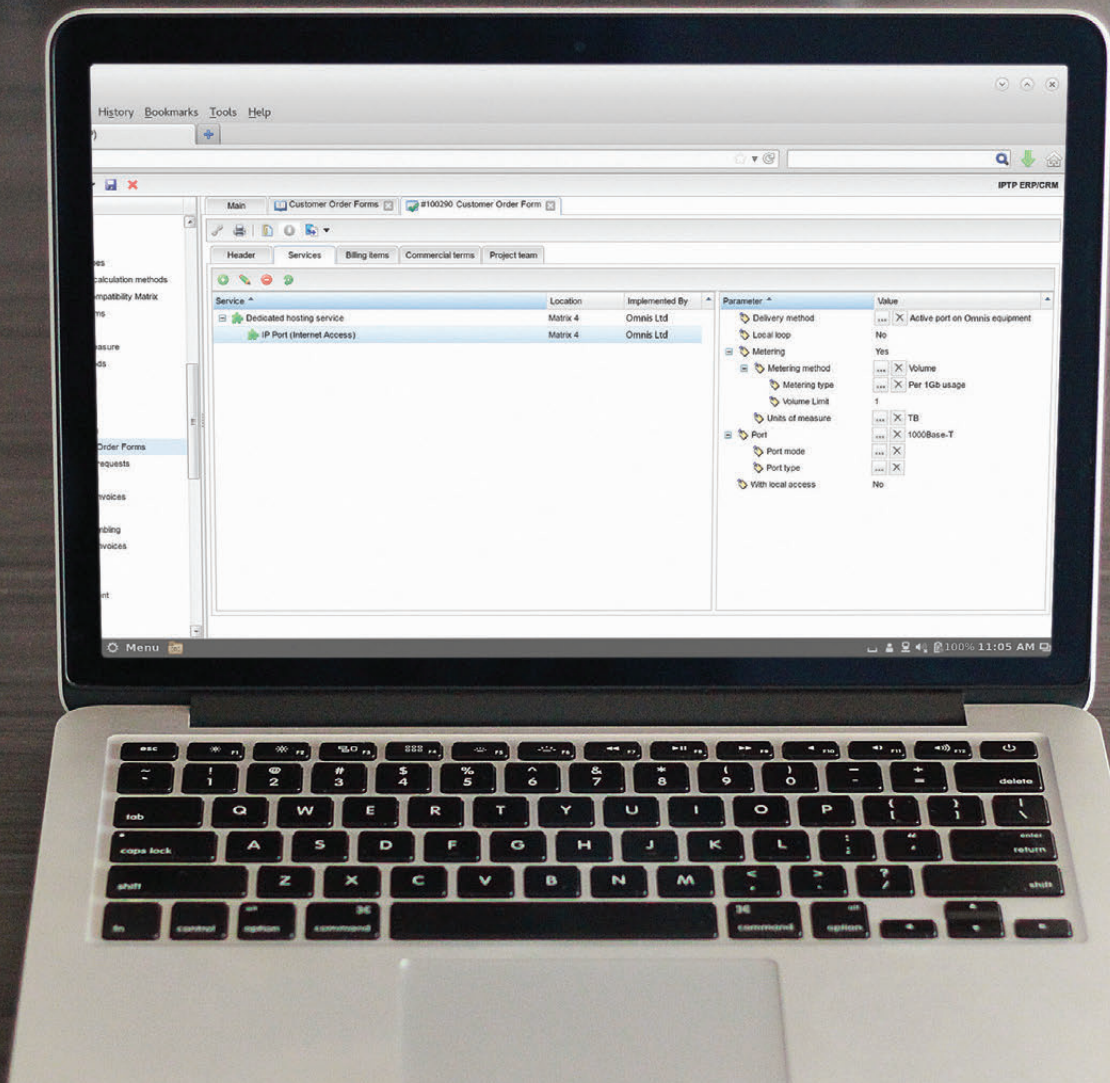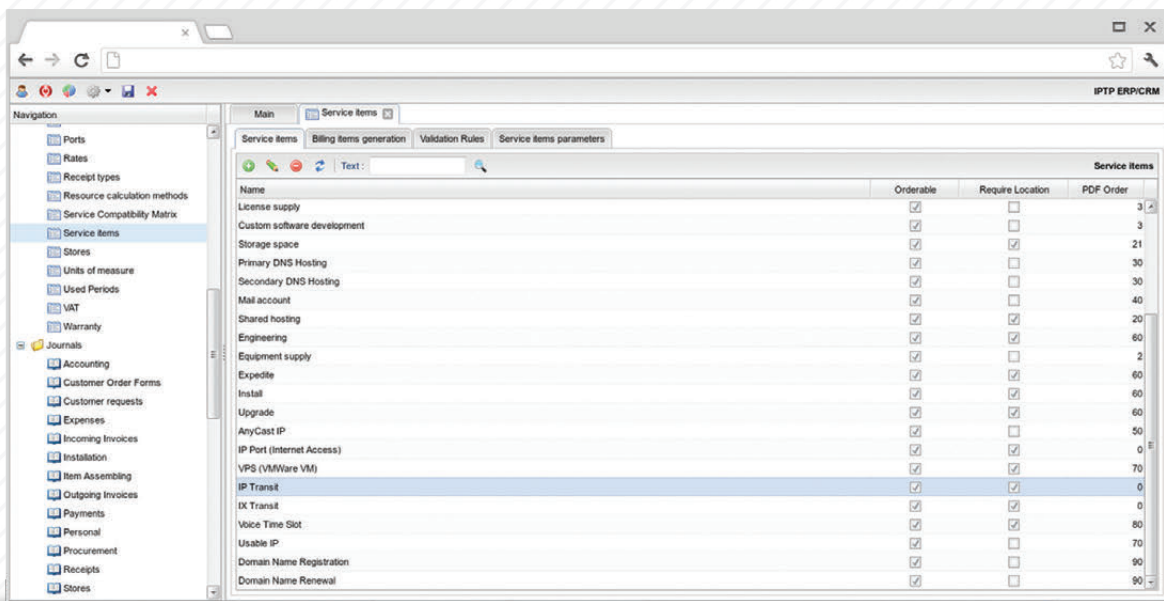
Service Item

Service Items are the elements that when combined form COFs and products. Products that can be sold (also known as service packages) therefore consist of Service Items. Service items can be ordered separately, or together as a whole package, depending on the types of items, their interdependency, and the location where the service is being provided. Characteristics of every service item can be selected individually. Methods of validation of these characteristics, depending on their application, allow to control them and notify user in cases when they were set incorrectly.
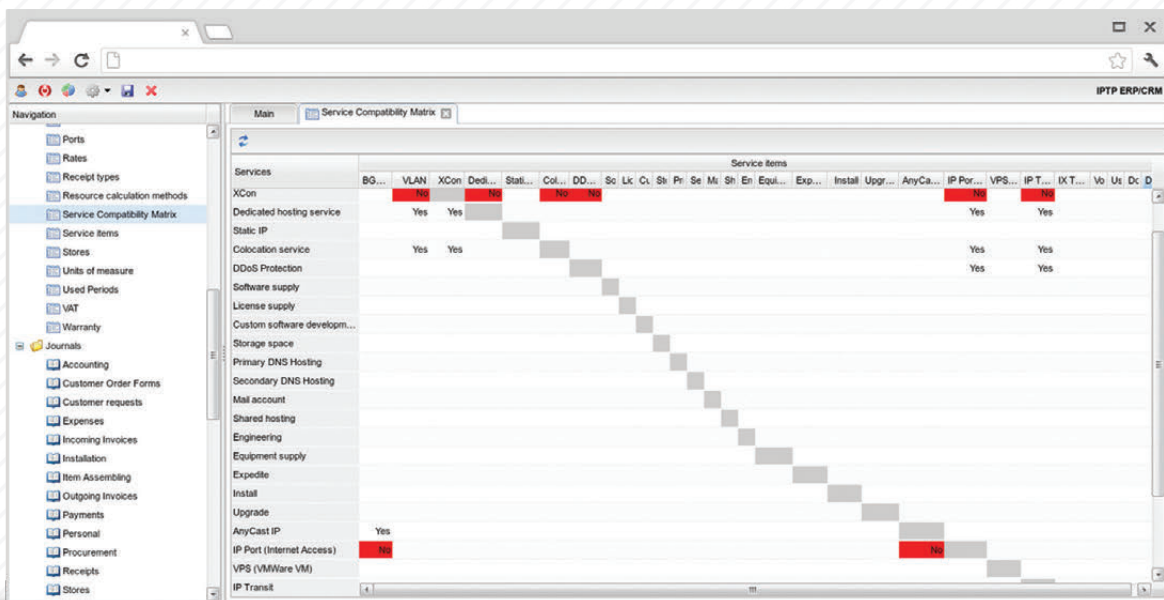
Service Compatibility Matrix

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 to form finalized, more complex packages which are ready to be sold.

Employee Motivation System

A rewarding system for employees' performance allows for them to rate each other's work performance and can be used to give out bonuses. Bonus Fund is formed from a combination of the salaries of all employees that worked for a certain amount of time on certain conditions.

The standard scheme is as follows: a percentage is added to the salary as a guaranteed bonus received per year. Bonuses are given out every quarter (four per year in total) and the amount is automatically increased by a percentage annually (applicable only for employees that have worked for minimum period of a year). When the salary is raised, the bonus percentage increase starts from the beginning. Any additional revenue depends on the rating and if rating comes out negative, the bonus can be decreased or cancelled completely.

Employees' attendance also influences both the amount of additional bonus received and the decline of a bonus amount. Therefore the Bonus Fund is formed from the standard percentage and the additional percentage (the amount depends on a graphic). Normally the bonuses are given out by the employees who communicate with clients directly, since they know what clients require and can judge the level on which the task was completed.

Graphic displays a balance between employee's contribution and company's financial result and how one correlates with the other – the more profit the contribution brings the bigger bonus is received. The system has proven that by tracking the progress of individual employees the company can enhance its overall financial result.
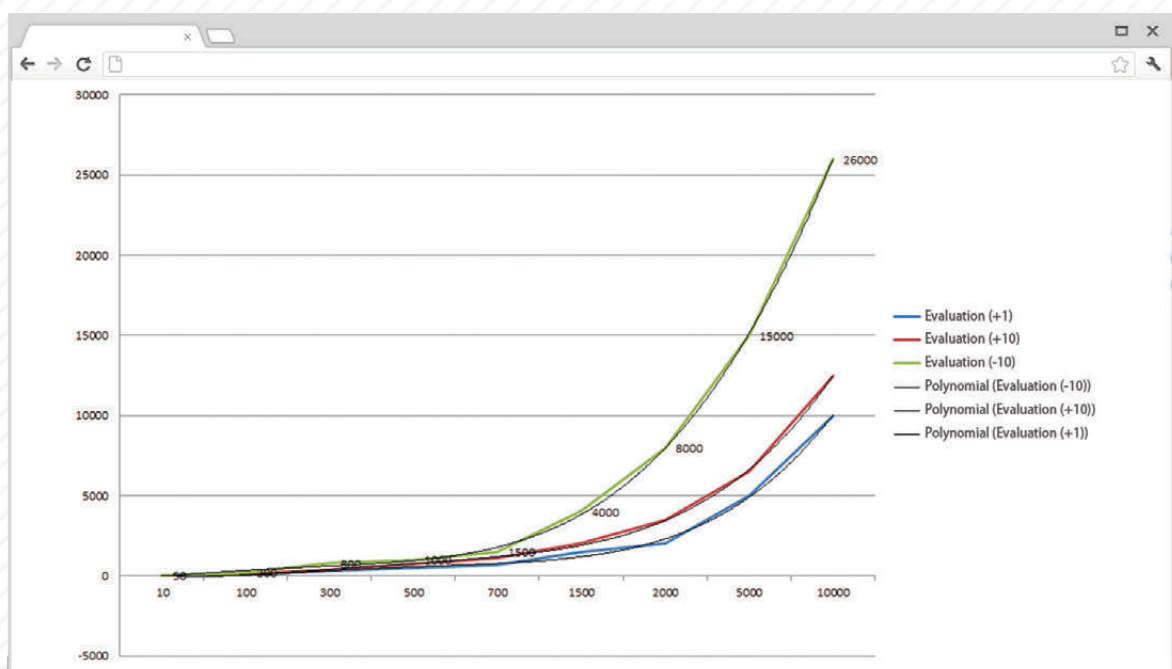
Each employee's rating is on public display which allows all system users to keep up to date with the progress of that particular employee, the tasks that he/she was assigned to and with the company's progress. This keeps employees motivated as IPTP ERP & CRM system shows not only the result of their individual work and rewards them for it but also displays outcome of their cooperation with colleagues allowing to significantly boost the company's performance.

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.
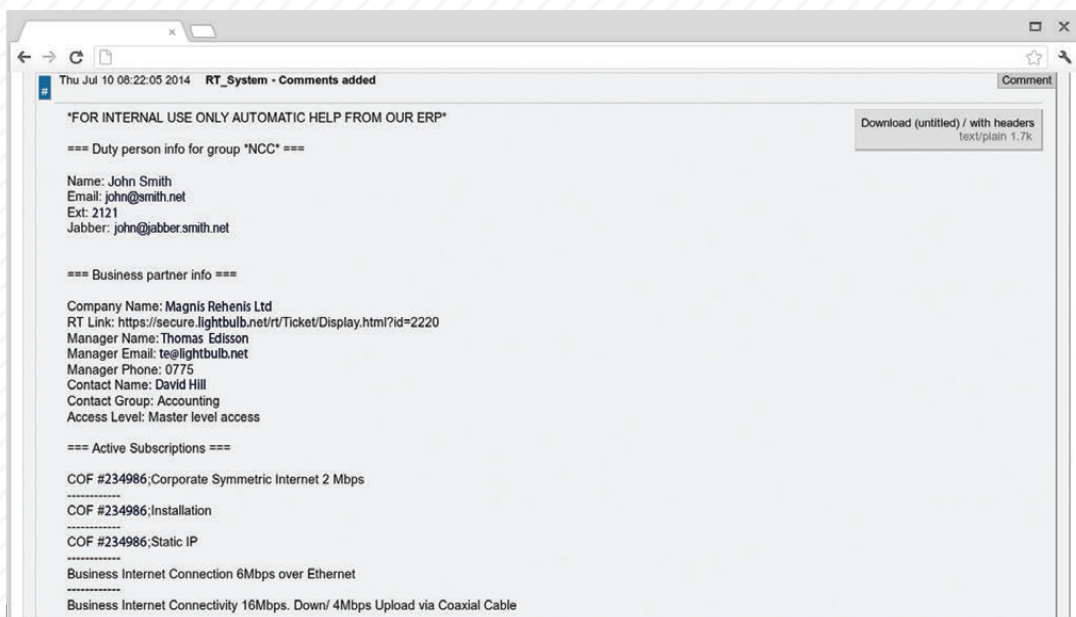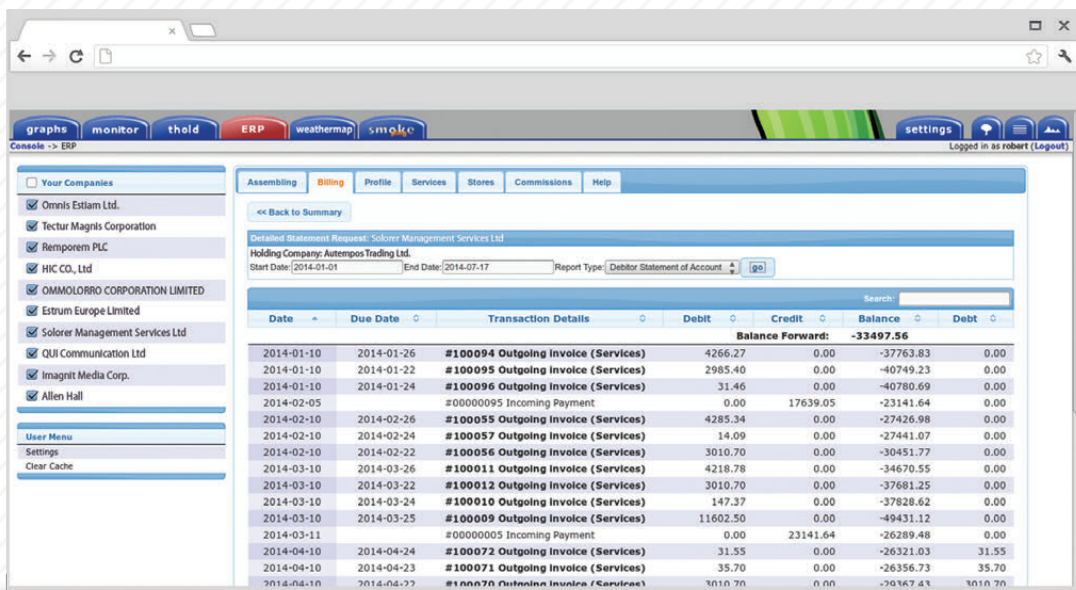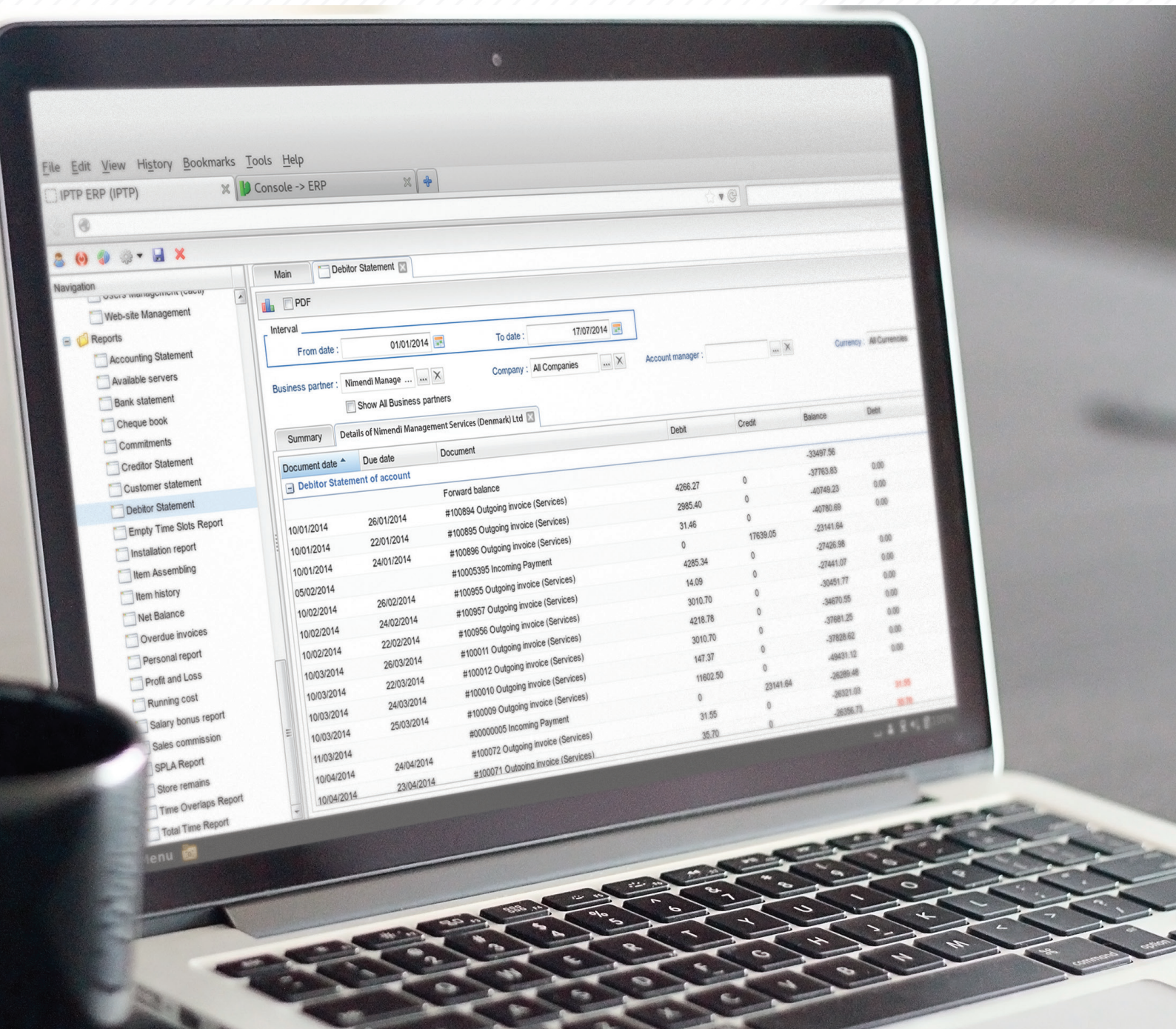
ERP is a central structure that can interact with both the RT (Request Tracking system) and Cacti. Client account information can be accessed directly from Cacti with no need to create a separate account for the ERP system. Integration of the ERP system with the RT allows employees to gain information 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.

Lock8 Tracking Solution

IPTP Networks acquired a major stake in Polaris Telematics Ltd - a young, rapidly growing company specializing in telecommunications and global positioning services.

The company has been designing, developing and manufacturing a unique solution for tracking assets, vehicles and people – the Lock8 Tracking System, one the most advanced and easy to use systems for global monitoring. Lock8 is a complete and effective solution that features hardware (Lock8 GSM SIM card) and adjustable system software (the Lock8 platform), enhanced by flexible settings, which help to save time, finances and, most importantly, give you peace of mind.

Lock8 Platform is a unique monitoring software that is designed, developed and implemented in-house by Polaris Telematics. 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.

Lock8 GSM SIM card is a state-of-the-art and easy to use tracking technology designed to complement the Lock8 Platform. The Lock8 SIM serves as the core for your tracking device, establishing worldwide connectivity even in locations with limited Internet availability.

How does it work?

The platform features one-step registration (linking a tracker to a client's account).

To use the Lock8 Platform, you will need only two things: a computer of your choice (PC, Mac, Android, Windows Phone, iOS and other virtual panels) and Internet access which allows you to connect to a worldwide network and instantly begin the tracking process.

The Lock8 SIM can be placed either into your phone or a tracking device (tracker) and is used to connect it to the server. Trackers are utilised to send alerts, receive commands and can have different operational modes. Depending on the type of tracker selected, different options are available and can be accessed via Lock8 Platform.

The system can detect third-party trackers of other systems. This option is available upon request.

The Lock8 Mobile Application can be downloaded free of charge, giving you access to the complete set of options (commands, modes and etc.) available for the smartphone. The App allows you to register a smartphone not only as a tracking device, but can also make it a client terminal for the Lock8 Platform.

The Lock8 SIM can serve as a standalone tracking solution for phones. If there is no Internet connection the SIM can be used for GSM and basic tracking functions. Unlike alternative solutions, the SIM card can be called on; it is not tied to any local provider and is not dependent on the GPRS availability in order to operate.

global, easy, affordable
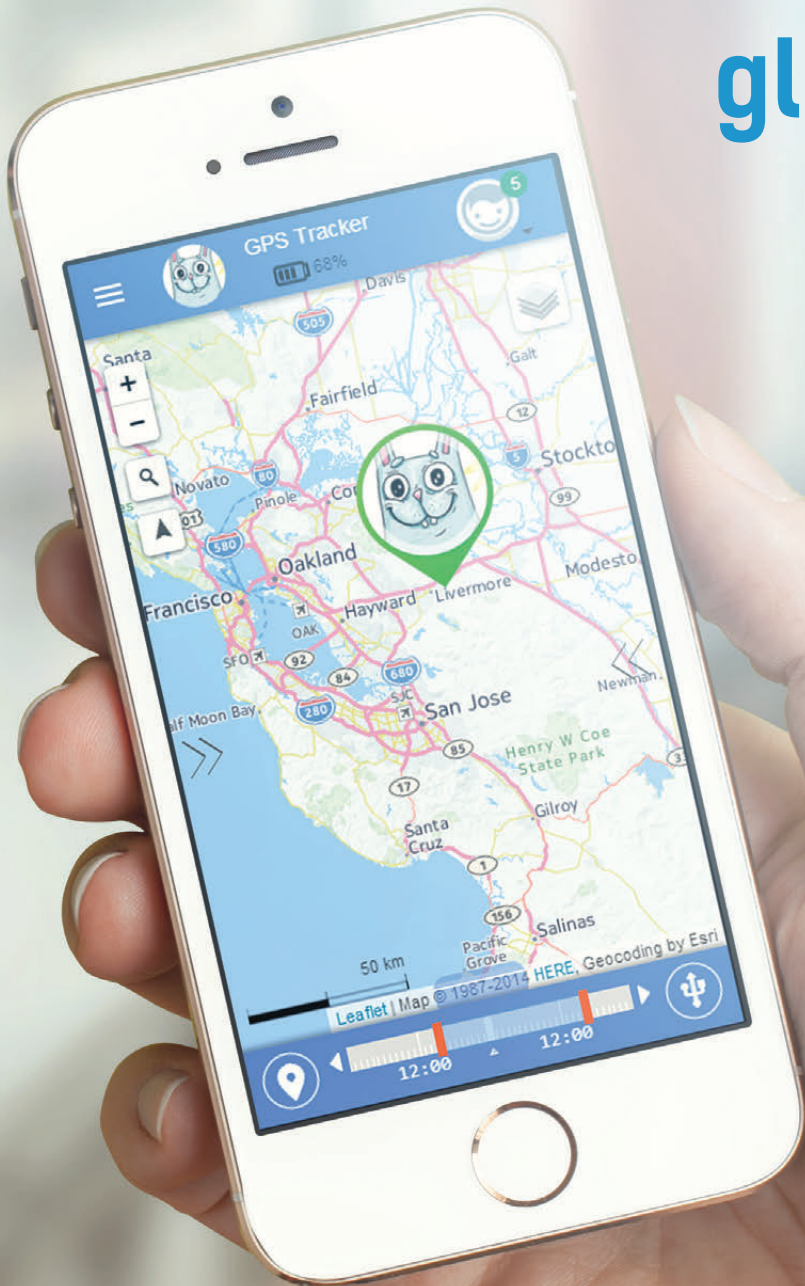
Control Panel Options

Registered devices.

An unlimited number of devices can be added to the system. By selecting one of the devices, you make it an active one, which means that all further commands will be directed to it. Alternately the active tracker can be selected on the map and its status will be displayed at the top of the main interface. The active device will always be visible on the map, while others can go out of view as the location changes.

Account control.

All subscriptions for the system can be renewed automatically. Payment history can also be available, allowing you to top up the balance as necessary.

Delegate the rights to see/control a device.

You can invite one or more people (family members, co-workers etc.) so that they can track the same devices as you do, provided they already have a separate account within Lock8 system. Once they register the device on their account, you will be able to delegate rights to track and control that device. This option is convenient as it allows a multiple number of users to track the same devices simultaneously, while still having separate accounts and being able to add their individual devices.
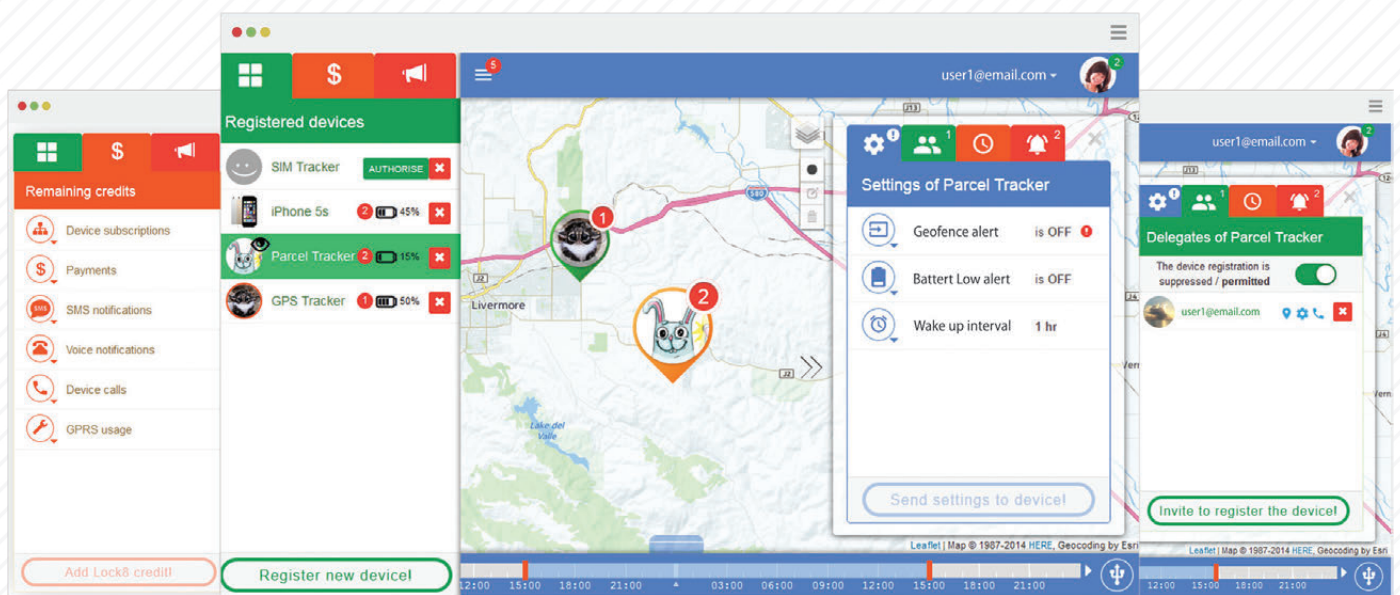
Notifications Options

Device alerts.

You can view all the new alerts that have been received from the active tracking device. Most alerts will be sent only once and then any further alerts of the same type will be blocked until the user confirms that the alert was received. This prevents multiple identical alerts coming from the same device in case the device keeps moving or the SOS button is pressed more than once.

Notification settings.

Tracking device alerts can be sent to various destinations. The user has the option to view information about received SMS/Voice notifications or calls or be informed whether the GPRS was used.

Commands Options

Pending commands.

Once a command was given to a device (for example, to update information about its location, change mode or enable/disable an alert) it will appear in the Pending commands section and disappear upon delivery to the tracker. If the tracker is online, commands will be delivered within 5-7 seconds. If the tracker is switched off or located outside of the GSM coverage, the command will remain pending until the tracker becomes on/online. User can cancel a pending command at any time, up until delivery to the device.

Command types.

Battery Low / Battery Empty alert. Both alerts are used to warn the user if the device battery is low or empty. Battery Empty alert has a threshold dependent on the device's internal settings.

Motion alert. This alert works in a way similar to the G-shock alert, the difference being the threshold levels. The G-shock alert is only triggered by sudden, intense movement of the tracker, while the Motion alert will turn on when the device is being moved.

Wake up interval. This option allows you to adjust the wake up interval for the Sleeping mode. In the Sleeping mode (the state of hibernation) the device will be unable to receive any commands from the carrier or send any alerts until it 'wakes up'.

Geofence alert. Geofences are invisible boundaries that can be set up in Lock8, alerting you in a form of calls, messages or emails as the device enters and/or leaves the designated area.

G-shock alert. Be notified about any sudden displacement or impact of the tracker, and therefore, a person, or an object it is attached to. The threshold can be adjusted manually, and varies from device to device. Once the notification is issued, further G-shock alerts from the same device are temporary disabled until the user acknowledges the alert.

Overspeed alert. Overspeed alert can be used to track the speed of a person or a moving vehicle. If the set speed limit is breached (whether the speed is too high or too low) the alert will be sent.

Why Lock8?

Combined together, the Lock8 Platform and the Lock8 GSM SIM card, inserted into a device of your choice, make a global tracking solution that makes your life easier, your valuables – secure, and the people you care about – safe.

Worldwide availability. The solution is designed for dynamic tracking, allowing to locate anything and anyone from any part of the world. Backed by comprehensive Service Level Agreements, the Lock8 GSM SIM cards operate in 99.9% of the globe without the need for an Internet connection. Compared to competing solutions that are limited to roughly 30 countries, our solution allows for a truly global coverage. Since global tracking requires global connectivity, we offer a worldwide MPLS network, established, supported and serviced by IPTP Networks, ensuring uninterrupted coverage and reliable access to the central server system.

Affordability. The Lock8 GSM SIM allows to switch tracking from country to country without roaming significantly reducing costs. Additionally this enables the Lock8 to operate not only locally, when it comes to tracking within one city/area, but allows it to operate in any part of the world. Lock8 SIM affordability allows it to be used not only for industrial applications but for various personal and commercial purposes.

Flexibility of Application.

The GSM SIM card can be placed into a phone or inserted into a tracker attached to a belt, a dog's collar, a briefcase or simply placed into a pocket, immediately allowing you to monitor it using the Lock8 Platform. Its affordable nature, ease of control and flexible settings make the application range for our solution virtually limitless: luggage and parcel tracking, emergency services, assets safeguarding, monitoring of disabled/elderly people and children, pet control, wildlife migration pattern tracking, sports, and numerous other everyday and business applications.

For Assets/Vehicle Management

Phones that have the GSM SIM placed inside can be used to monitor employees by various companies, especially those engaged in field work. Lock8 proved to be highly effective for professionals that work in industries such as: large fleet operation (vehicle, trucking, shipping), forwarding operation (machines, containers, cargos, valuable shipping), operators who have significant equipment and/or cargo/product expenses and operators who have a dynamical workload. Movement alerts, combined with the power saving mode can prevent unauthorized displacement of valuables or controlled assets.

For Personal use

Lock8 gives you the ability to effortlessly track the location of device's carriers in real time as well as the trajectory of their movements in the past. Supervision over children, elderly and disabled persons dramatically improves with options to set designated safety zones and speed limits and be notified if they have been breached. The motion thresholds allow for notifications in case of a possible impact or injury. A help request can be sent to family, friends or police, allowing a timely assistance to arrive at the carriers' exact location.

Advantages

Exceptional global coverage (99.9% of the world countries) backed by comprehensive SLAs.

Lock8 Mobile Application is free and can be available online.

Significantly reduced costs due to roaming-free switching between countries.

Power-saving mode allows to prolong the operation of certain devices for up to a year without charging.

Ultimate connectivity and service availability via a global MPLS network, established, supported and serviced by IPTP Networks.

Unlimited application: Lock8 is a flexible solution, completely adjustable to user needs and can be used for industrial, business as well as every-day purposes.

Flexible control: numerous devices can be controlled simultaneously while a device can be assigned to several users.

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

Numerous options: locate one or multiple devices on the map, explore the history of their trajectory on a timeline, assign commands and choose from many other available options.

Control over notifications: receive notifications via e-mail, call and SMS (depending on your service plan) with several alerts available depending on the tracking device.

Confidentiality: upon request the tracking information can be stored exclusively on the device and control panel so that no tracking or alert history is saved on any server or cloud storage.

Compatibility with the lightest and smallest tracking devices.

A two-way voice communication can be implemented upon request.

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.

A 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 data centers 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 ar-

chive 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.

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 material 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 a good video surveillance: high resolution, long-term retention and reliability. Cisco have 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 to trigger 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 automatisation in extreme situations.

The Main Components

The main components of the solution are supported by IPTP Networks' in-house development and are compatible with the LinuxMCE open-source project. They serve as the foundation for the system's basic functionality.

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 ran 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 WiFi system or simply, 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 to you online music databases that analyse your musical taste and create playlists accordingly.

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.

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 in 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, e.g. 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.

Remote Surveillance

The remote surveillance subsystem allows for internal and external observation, with optional recording of audio/video information to a local or remote library for safety reasons; thus saving data outside the premises, and eliminating the possibility of data loss. 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.

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.

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. All of this in combination with the option of complete control of the premises straight from the TV screen via an on-screen menu. A video-phone mode and volume control from every corner of the premises is 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 a 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 and WI-FI. Depending on time of day, weather conditions, and settings pre-set by the employees, the lighting is adjusted automatically via dimmers and electric shutters that move up or down depending on the time of the day and the amount of sunlight. The system also constantly updates information on external factors to maintain temperature in the office at an optimal level, so the employees never feel too cold or too hot.

The access control is enhanced by two step verification: finger print recognition that is programmed to be used by every employee and the code to be entered on a panel. Finger print authentication is also required to leave the office; if unauthorised entry occurs, the trespasser will not be able to come out.

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 holiday seasons an em-

ployee responsible 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 mentioned devices to open the doors and monitor visitors via multiple cameras installed inside and outside of the office.

For Home.

The Smart Spaces solution was successfully implemented in a house, allowing for sustainable control over the premises by automating the processes of all the electrical appliances, utilising them in the most efficient way. The solution allows to adjust the system according to everyday behaviour of the occupant and automate all parts of his domestic life, starting from security of the premises and ending with floor heating.

How does it work?

When the occupant approaches his premises, he can open the application from his phone or tablet, press a button and the gates will open automatically. Other devices can also be used as remote controls for all in-house systems.

Weather station was set on the roof in order to measure humidity, temperature, wind speed, cloud density and other external factors, to recognise, memorise and apply their patterns accordingly. All in-house systems, including, but not limited to irrigation, lighting of the road and surrounding areas were adjusted to work according to these patterns. For example, if the system would consider clouds to be too dense and the humidity level - too high, the irrigation would not switch on that day. If the day is, on the contrary, too sunny, the water tank will not be heated by the system, as the solar panels will heat it during the day. The owner also adjusted the settings so that the water is preheated in advance, so as soon as he wakes up, he can take a shower.

'Follow me' setting was implemented for the system to recognise the occupant's position in the premises at every moment of time and use multiple sensors to make localized decisions, enabling the system to act according to his every step. If, for example, the owner is watching TV in the living room and the kettle starts boiling in the kitchen, as he moves from one room to another, the TV switches off in the living room and switches on in the kitchen.

The solution also covers the security of the house - all windows and doors have sensors for movement and breakage. The 'Laser curtain' feature is also applied for security purposes; if any doorway of the house is passed at the occupant's absence, the alarm will go off and the 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 the 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 and without the need for wires; 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 from thousands of titles in the media library.

On the basis of Television Interactive Entertainment System the service of Text Messages between all users of the system has been introduced. The exchange of text messages between the users happens directly as well as in a "from one - to all" mode. 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 dispatch 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.

Erasmus+

IPTP Networks is a part of the Erasmus International Internships programme, a 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