ORTRONICS

奥创利

Ortronics was founded in 1966 in Connecticut, USA, focusing on integrated wiring, System development, design & production. After more than 50 years of development, it has become an international leading integrated wiring network solution brand, as well as industry-standard R&D & development companies. It is an important member of several international standards development authorities. It has a lot of research centers & laboratories around the world. Ortronics has production plants throughout the United States, Central & South America, Europe, Australia, as well as China, Singapore, Vietnam, Malaysia, etc. in Asia.

With the constant pursuit of high performance & stability of networking solutions, together with continuous development, Ortronics has established the most complete range of products in networking solution & data center system. Products cover copper & optical wiring, cable management, cabinet racks, cable tray & more. Our products is serving across all industries, including data centers, commercial & residential buildings, hotel networks, hospitals, transportation, education, Government & Military etc.

Over half century, Ortronics' products & solutions have been proved as edging networking and connectivity solution in the world. It is recognized & used by number of governments, Global MMCs & large enterprises. In order to make the network more durable, stable, energy saving, continuous R&D investment & product improvement are the goal of Ortronics

美国奥创利于1966年于美国康涅狄格州成立，专注综合布线系统的研发、设计和生产。经过50多年的发展，已成为国际顶级综合布线网络品牌，以及行业标准的研发及制定企业。是多个国际标准制定机构的重要会员。在全球拥有众多的研发基地和生产厂房，遍布美国、中南美洲、欧洲、澳大利亚、以及亚洲的中国、新加坡、越南、马来西亚等。

凭着不断追求对网络布线的高性能表现以及稳定性，美国奥创利在不停的发展中，建立了最完整的网络布线基础方案。产品覆盖了铜类、光类布线、线缆管理、机柜机架、桥架等。在数据中心、商住楼宇网络、酒店数据网络、医院、交通网络、学校、生产基地、政府和丑军方等提供世界级顶尖网络布线产品。

过半世纪的发展，美国奥创利的产品及方案，已获得世界多国政府、国际知名的大型企业所认可及使用。为了让网络更耐用、跟稳定、更少能耗，不断的研发投入和产品改良是美国奥创利不断追求的目标。

Ortronics Asia
奥创利中国

NCSA

legrand
Ortronics

C2G

Quiktron

WIREMOLD

AFCO Systems
Cabinet & Containment Solutions

electrorack

Ortronics, Inc.

1966

Ortronics began manufacturing wiring for ITT & Bell Operating Company manufactures wiring & wiring sockets for telecommunications Operating Company

奥创利 开始替 ITT® 制造接线, 以及替Bell Operating Company制造线圈及电讯用接线插座

Introduced a connector for the workstation
奥创利 推出了工作端用接线器

Ortronics opened the first office outside USA, in London, England. In the same year, the 110 Cross-Connect system was released.

奥创利 於英国伦敦开设美国以外之办事处，同年发布了 110 Cross-Connect 系统

Ortronics obtained ISO 9001 certification
奥创利 获得 ISO 9001 certification认证

Ortronics is the first Cabling manufacturer form technical R&D alliance with wire manufacturer (Berk-Tek) to produce top-level cabling Solution, & announced Mighty Mo 3 high-performance cable networks

奥创利为第一个接线系统生产商与线材制造商(Berk-Tek)组成技术研发联盟, 生产顶级布线系统，还发表了 Mighty Mo 3 高性能网线系统

Ortronics was founded by Mr. Maurice Orlando & his son. People call him Mo. He invented number of the products, mainly electric coils & internal & external wiring and accessories for IBM

奥创利由 Maurice Orlando 先生父子所创立，大部份人称呼他为 Mo, 他发明了很多奥创利产品，主要替IBM设计及生产电线圈及机内外接线及配件

1968

1985

Mr. Orlando invented the world's first module 110 wiring Block for voice and data transmission

Mo Orlando 先生发明了全球第一个模块110接线架,用於话音及数据传输

1991

1994

Ortronics is the first to introduce Cat5 to 110 patch panel. for Microsoft, who is the main customer of Ortronics

奥创利 是第一个推出5类转110之配线架 Microsoft 微软公司为奥创利主要客户

1995

Ortronics develops internationally, opens its Italian office as its European headquarters, and establishes its Asia Pacific headquarters with offices in Malaysia and operations in the Caribbean and Latin America.

奥创利 向国际发展，开设意大利办事处为欧洲区总部，成立亚太区总部，办事处位于马来西亚，以及在加勒比及拉丁美洲多地开展业务

1996

1997

Ortronics was acquired by Legrand
奥创利被法国强弱电系统生产商Legrand 罗格朗收购

1998

Momentum pre-wired fiber module system won the editorial choice CEE (Consortium for Energy Efficiency) News' Editor's Choice Award

奥创利 Momentum 预接光纤模块系统获得了编辑之选 CEE (Consortium for Energy Efficiency) News' Editor's Choice Award

2000

NCSA ORTRONICS

With more than 50 years of development, Ortronics is constantly investing in research & development, listening to customers' needs, & focus on providing the highest quality, stable, efficient & economical products & solutions to customers

超过50年的发展，不断投入研发，听取客户的需求，坚持着提供最优质的产品及方案，为网络布线需求提供最稳定、最高效、最经济的选择

Launched NCSA series cabling products to provide a quality & economical network solution

推出NCSA系列布线产品，提供优质及经济的网络方案

Quiktron

Ortronics acquired Electrorack, a well-known top cabinet manufacturer in USA

奥创利收购了美国知名的顶级机柜生产厂商 Electrorack

C2G

Ortronics is qualified as a CISCO technology development partner to jointly develop OptiMo singlemode & multimode fiber systems

奥创利 得到 CISCO 技术开发合作伙伴资格,共同开发OptiMo 单模及多模光纤系统

Technology Developer Partner

Ortronics developed the first work area wireless base station combined with wiring system

奥创利第一个布线生产商开发之结合布线系统的工作区无线基站

2018

Asia Regional Headquarters & Exhibition Center in Chaoyang District, Beijing officially opened to further strengthen customer service & technical support in Greater China

位于北京朝阳区的亚洲区域总部和展示中心正式开业，进一步加强在大中华区的客户服务以及技术支持

2015

Ortronics acquired the network solution brands C2G & Quiktron. Provide better quality copper network plug-ins & multimedia products

奥创利 收购了网络布线品牌C2G和Quiktron,提供更优质的光、铜网络插件和多媒体产品

2014

NCSA Founded in Hong Kong, the headquarters of Ortronics in the Asia Pacific region, responsible for businesses development. In the same year, Mighty Mo 10 cabinet & wiring management rack was announced, & being the dedicated solutions by most of the world's top 500 enterprises, government departments, & data centers.

艾思奥创利在香港成立，成为奥创利在亚太区的总部，负责所有业务。同年发表了先进的Mighty Mo 10 接线管理机架及机柜产品系列，获得众多世界500强企业、政府部门、以及数据中心为指定使用布线系统

2012

2009

Legrand acquires China's largest wiring brand TCL, Ortronics Integrated with TCL & relocated the China office to Huizhou, for join promotion.

Legrand 收购了中国最大布线品牌TCL，奥创利中国区域总部迁往惠州，奥创利和TCL结合管理进行综合市场推广

2007

2005

2004

Clarity 6 product is the first Cat6 solution received ETL certification, specifications TIA/EIA-568-B.2.1 Draft 10 standard

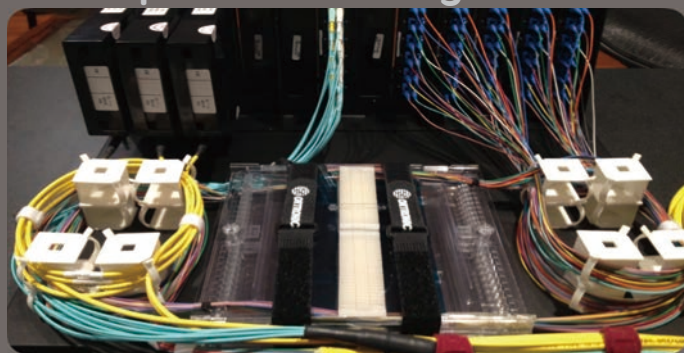奥创利 Clarity6 产品是第一个获取了ETL 认证之六类产品, specifications TIA/EIA-568-B.2.1 Draft 10 standard

2002

Copper Connectivity
铜类布线

Fiber Optic Connectivity
光纤布线

High Density Copper Connectivity
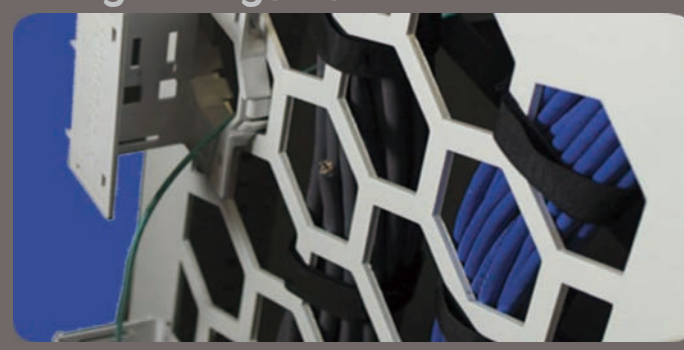高密铜配线

High Density Optical Connectivity
高密光配线

NCSA ORTRONICS

Pre-Terminated Solution
预端接系统

Wiring Management
布线管理

Overhead Patching System
桥架配线系统

Optical & Copper Cable
光铜线缆

Self Cooling Cabinet
机柜内主控空调

Server Cabinet
服务器机柜

Network Rack
ORTRONICS
网络机架

Workstation System
工作区域系统

Offer the most complete network cabling solution
提供最完整的网络布线方案

Cable Tray
585959
网络桥架

Hot Aisle System
热空气管理

Anti-earthquake Cable Ladder
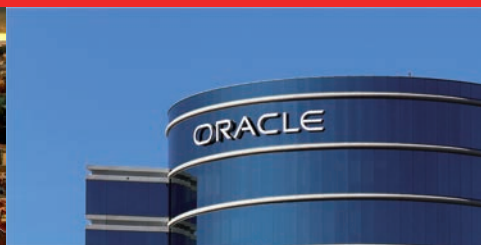抗地震桥架
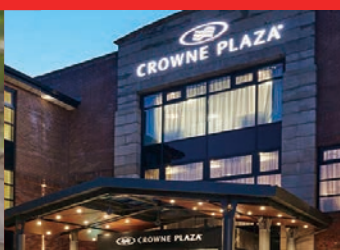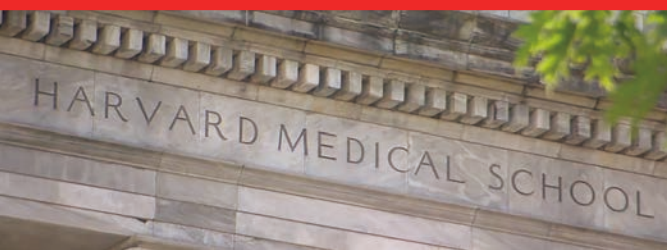
Cold Aisle System
冷空气管理

世界级用户丶及顶级数据中心，指定选择 。。。

World-class users, and top-Tier data centers, dedicated Choice. . .

NCSA ORTRONICS

世界顶级工程项目 。。。
The world's top reference projects. . .

NCSA ORTRONICS

Pentagon USA 美国五角大楼

The US Department of Defense and the major overseas military base are the highest demand on network performance. They are data centers that required extremely stable network in the world. Pentagon is the world largest network, more than 520,000 points, which designated to use Ortronics' Clarity copper, and Optimo fiber optic systems.

美国国防部和重要军工开发基地，也是全球网络效能及稳定性要求最高的数据中心，而且也是全球最大的布线网络，总共超过52万点，指定使用奥创利顶级Clarity系列铜类布线、以及Optimo系列光纤系统。

U.S. Capitol 美国国会大厦

One of the most important government agencies in the USA, places great emphasis on cyber security and stability, so it has specified the use of Clarity copper cabling, Optimo fiber optic systems, and rack systems. (over 10,000 points)

美国最重要政府机关之一，对网络安全和稳定十分重视，所以指定使用奥创利顶级Clarity系列铜类布线、Optimo系列光纤系统、以及机架系统。（全部共超过1万点）

U.S. White House 美国白宫

The President of the United States and his teams, world-class leaders designate to use Ortronics copper & Fibre wiring systems.

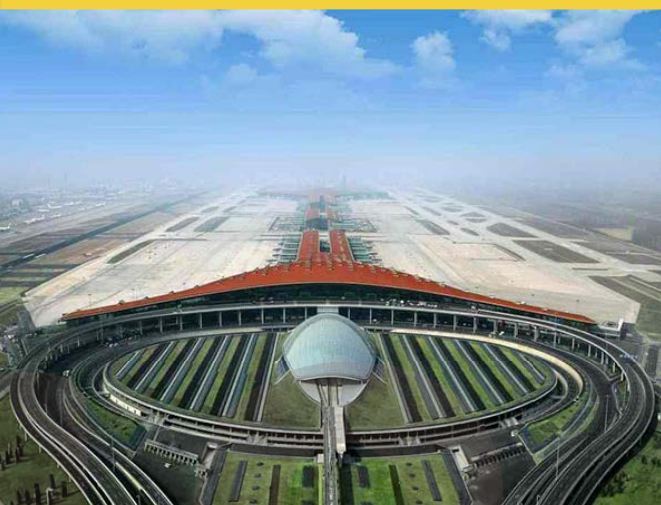美国总统和其主要官员工作的地方，世界级领导人也是指定使用Ortronics 顶级铜光类布线系统。

Shanghai World Expo China Pavilion
上海世界博览会中国馆

The entire Network of China Pavilion deployed Ortronics Modular Connectivity System, which is modular design, simple management & convenient expansion, perfectly demonstrates the scientific innovation & data stability. Using MM6 & MM10 server racks & cabinets, OptiMo fiber, more than 200,000 meters of Cat 6 unshielded cable.

中国馆整个工程由上海安装工程有限公司总承包，全部使用美国奥创利开放式综合布线系统产品，采用模块化的设计，管理简便、扩充方便，完美展现中国馆的科技创新及数据稳定的要求。使用MM6和MM10服务器机架以及刀片式机柜，Optimo光纤产品和光纤机架，再配合超过20万米高质量六类非屏蔽网线系统，卡博菲地下线缆管理系统打造最优质的数字网络，向世界展现中国馆的非凡科技。

The P.R.China State Council
中华人民共人和国国务院

China's most important government agencies, world-class leaders' office, use safe, efficient and stable Ortronics network cabling system.

中国重要政府机关，世界级领导人办工中心，使用安全、高效和稳定的奥创利网络布线系统 。

Beijing Capital Airport 中国北京首都机场

One of the world's most advanced, largest and busiest airports, need high-quality network cabling system, using the Ortronics shielded Cat 6 & fiber optic network system.

世界上最先进、面积最大、最繁忙的五大机场之一，各种系统需要高质量的网络布线系统，使用了奥创利屏蔽六类和光纤网络系统。

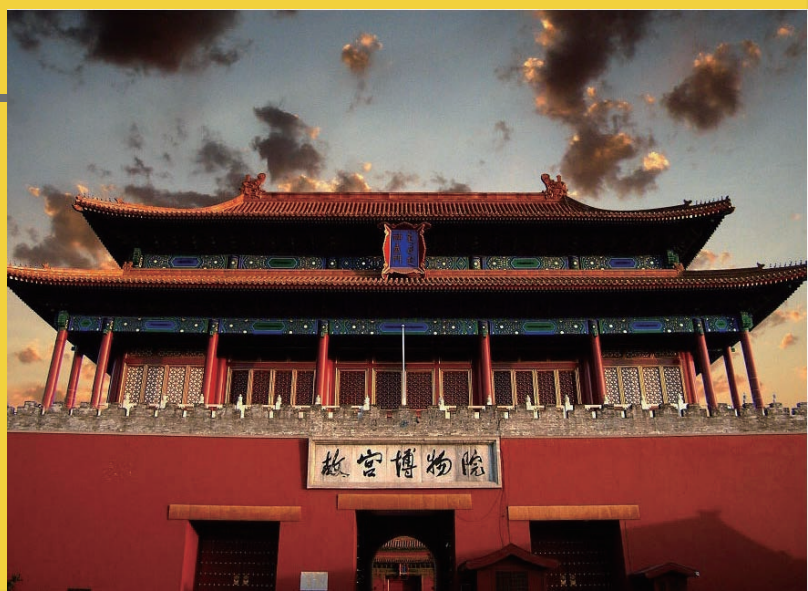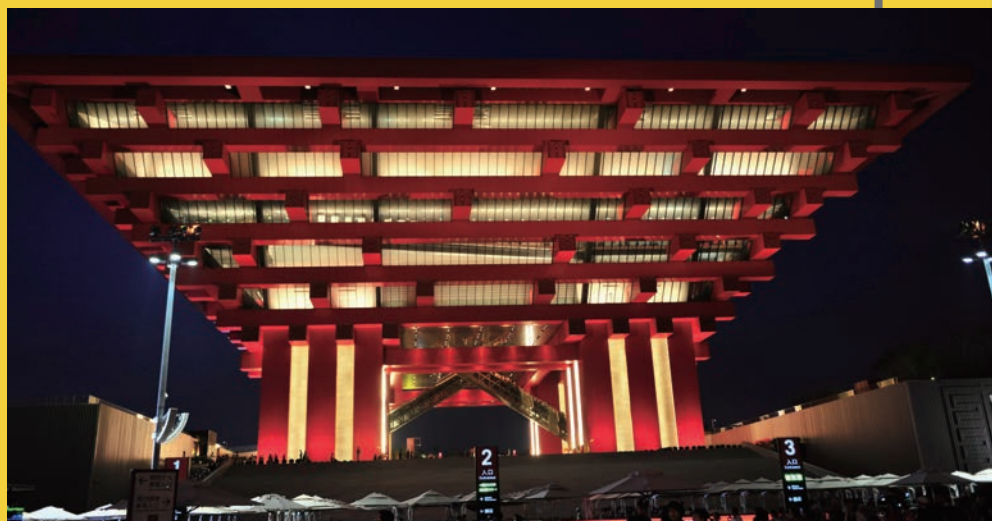## Beijing Forbidden City Museum
北京故宫博物馆

In order to ensure the preservation and digitization of precious cultural relics in China, the Beijing Forbidden City Museum has relied on Clarity and OptiMo network cabling systems.

为了确保中国珍贵文物的保存和数字化，北京故宫博物馆信赖和使用奥创利Clarity 和Optimo网络布线系统。

Vatican Holy See (Cathedral, Holy See Data Center)
梵蒂冈罗马教廷 （大教堂、教廷数据中心）

Vatican is not only the world famous Catholic cathedral, but also the data center for Catholic of the world. It's designated to use Ortronics fiber and Cat 6 networks, network more than 50,000 points.

罗马梵蒂冈不单止是世界有名的天主教大教堂，也是世界天主教教会的全球数据中心，指定使用奥创利光纤及六类网络，网络点数超过5万点。
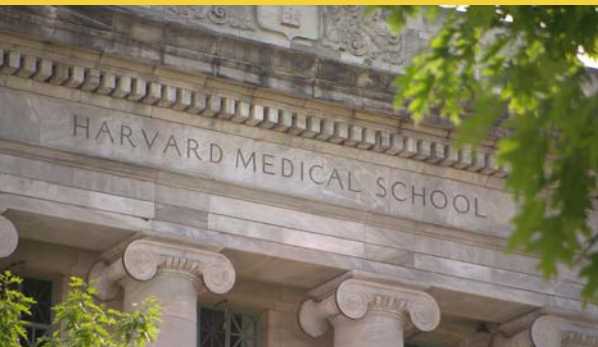
Harvard Medical School 哈佛医学院

Harvard Medical School is the world's top medical research and education institution, with the world's top research and medical equipment, designated to use Ortronics fiber & Cat 6 unshielded network.

哈佛医学院是世界最顶级的医学科研及教育机构，拥有世界顶尖的科研及医疗设备，指定使用奥创利光纤和六A类非屏蔽网络。

Microsoft Headquarter 微软总部大楼

The world's leading software company – Microsoft headquarters, choose Ortronics Clarity Cat 6A copper network, and OptiMo Fiber optic products. Technology Expert will choose Ortronics. (over 60,000 data points)

世界领先的软件公司-微软总部大楼，选择最顶尖的网络，奥创利优质的Clarity系列六A类铜线网络，以及Optimo光纤产品，懂得科技的都会选择奥创利。（全部共超过6万点）

Bill Gates House
比尔·盖茨别墅

Bill Gates, the world's richest man, is also the godfather of technology community. His home is the world's edging Intelligent home. The network is also using the Ortronics optical & copper network system.

作为世界首富的比尔盖茨，也是科技界的教父，家里是世界顶级智能家居，网络也是使用奥创利光铜网络系统。

Aircraft Carrier 美军航空母舰

The US aircraft carrier is using Ortronics anti-rust series network Solution, in order to provide durable and stable network for any mission.

美军航空母舰也是使用奥创利专用网络布线系统，独特的防锈系列，保障网络长期使用的稳定。

美军基地

Most of the overseas US military bases, including Guam, South Korea, Japan, Spain, etc., are designated to use Ortronics solutions, which provide quality & stable network to meet military needs.

全球大部份的美军基地，包括关岛、韩国、日本、西班牙等，都是指定选用奥创利网络布线产品，以提供优质及稳定的网络，来满足军事需求。

Case Study
实例探究

Critical Task
use Critical Solution
国之重器，必选贤物

Customer 客户

The appearance of the China Pavilion is dominated by the "Oriental Crown" to express the spirit and temperament of Chinese culture. The concept of the plan is summarized as: crown of the East, best of China, the granary in the world, rich people. "The traditional color, "Forbidden City Red" expresses the essence of Chinese culture, God and temperament. The total construction area of the China Pavilion

Being a Name Card, China Pavilion, for Chinese culture & Chinese dream is presented to the whole world, need to be stable & reliable network system, Ortronics connectivity offers world class stable network foundation

代表中国面向世界的中国馆，为中华文化和中国夢展现给全世界，需要稳定可靠的网络系统，Ortronics 的顶尖優質产品，为中国馆提供世界级最稳定的网络基础

is 160,100 m². The project cost 1.5 billion yuan. It consists of the China National Pavilion, Provincial and Municipal Joint Pavilion, & Hong Kong, Macao & Taiwan Pavilions. The National Pavilion of China is 63 meters high and is stacked to form a city sculpture, reflecting the iconic nature of the China Pavilion; regional pavilion 14 M high, horizontally spread, extending the urban texture, shape Stable base of building, constructing urban public life, moving space. The "Bao Guan" which is rich in Chinese architectural culture elements. The shape & theme of the surface covered with

"folding text" Thinking, will countless Chinese people to the World Expo Dreams are pinned in an unique architecture.

中国馆建筑外观以"东方之冠"的构思主题 ，表达中国文化的精神与气质，其设计理念以概括为 ： 东方之冠，鼎盛中华，天下粮仓，富庶百姓。"主色调选用传统 、沉稳的"故宫红"，表达了中国文化的精神与气质。中国馆总建筑面积16.01万平方米，工程造价15亿元，有中国国家馆，省市联合馆、以及港澳台馆三部份组成。中国国家馆高63米，层叠出挑，形成城市雕塑，体现中国馆的标志性；地区馆高14 米，水平展开，延伸城市肌理，形成建筑物稳定的基座，构造城市公共活动空间。极富中国建筑文化元素的"斗冠"造型以及表面覆以"叠篆文字"的主题构思，将无数中国人对于世博会的憧憬和梦想寄托在独特的建筑语言之中。

Challenge 挑战

Since the entire park is very large & the opening hours of the exhibition are long. Furthermore, the iconic exhibit is Electronic dynamics Version "Qingming Shanghe Map" needs very Stable and wide bandwidth network in order to operate the system. In addition, easy maintenance and management are critical for the system check out & maintenance by staffs, during the close of venue at night. Therefore simple system layout, & modular block structure is essential.

因为整个园区范围十分巨大，而且展览的开放时间长，加上园区内有一个标志性的展览品，就是着名的电子动态版"清明上河图"，需要非常稳定以及高频宽网络，以应付系统的运作。此外，易于维护和简易管理是十分重要，因为场馆只有晚上时间可以给工作人员检查系统及维护，所以简洁的系统布置，及模块化结构有着更加简易管理及维护。

Solution 方案

The entire network cabling of the China Pavilion is using Ortronics open cabling system, modular design, it offers flexibility, easy to manage & expand. Selected products are Mighty Mo 10 and Mighty Mo 6 racks and cable manager, MM Server Cabinet, Ortronics OptiMo FC Series Fiber enclosures, fiber couplers, fiber optic cables, fiber pigtails, Fiber Jumper, unshielded copper Cat6 cable, copper patch cord, patch panel, Cablofil Underfloor cable tray etc. The total length of the cable used is over 200,000 meters.

中国馆整个弱电智能化系统工程由上海安装工程有限公司总承包，全部使用Ortronics开放式综合布线系统产品，奥创利综合布线系统是一个开放的系统体系，全部采用模块化的设计，达到使用灵活、管理简便、扩充方便，实现高标准的布线系统。选用的产品有Mighty Mo 10 和Mighty Mo 6 两大系列高钢性铝合金机架和线缆管理系统、MM 四柱服务器机架和刀片式服务器机柜、Ortronics Optimo FC系列光纤配线架、光纤耦合器、光缆、纤尾、光跳线、非屏蔽铜六类线缆、铜跳线、配线架、Carbofil 地板下线缆管理系统等，使用线缆总长度约20万米。

世界顶级数据中心项目 。。。

The world's top data center project...

NCSA ORTRONICS

17

Savvis（全球最大外包数据中心）

The world's largest outsourced data center with centers all over the world, including in Asia, China, Japan, Singapore, South Korea, Australia, India, etc., Using Migty Mo Racks, Optimo fiber optic systems, & Clarity high density copper wiring system, More than 5,000 racks and Over 30,000 data points have been installed.

全球最大外包数据中心，数据中心遍布世界各地，亚洲地区包括中国、日本、星加坡、韩国、澳大利亚、印度等等，所有数据中心也是使用奥创利Migty Mo系列机架、Optimo 光纤系统、以及Clarity 高密度铜类布线系统。已安装机架超过5,000个，信息点超3万个。

China Post &Telecommunications Administration
中国邮电总局

The command center of the General Administration of Posts & Telecommunications of China, Ministry of Posts & Telecommunications, Radiotelephone Hub, Ministry of Posts & Telecommunications, Mobile Phone Software Development Center, Posts & Telecommunications. All design institutes, etc., all use Ortronics network Cabling systems, including fiber & copper products.

中国邮电电信总局旗下的指挥中心，邮电部无线电话枢纽中心、邮电部移动电话软件开发中心、邮电部邮件设计院等，全部使用奥创利网络布线系统，包括光纤和铜缆产品。

Amazon 亚马逊

The world's largest online shopping platform, all data centers around the world are designated to use Ortronics. The network system & racks purchased so far have exceeded US$50 million.

全球最大网购平台，全球所有数据中心指定使用奥创利，至今采购的网络系统及机架，已超过5千万美元

JD.com 京东

One of the largest online shopping platforms in China, using the NCSA Ortronics Series pre-termination Fiber optic products, as well as data center-specific Cat 6A copper wiring systems

中国其中最大网购平台，使用奥创利艾思系列顶级预端接光纤产品，以及数据中心专用六A类铜接线系统

世界顶级科技公司项目 。。。
The world's top technology company project...

NCSA ORTRONICS

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Apple 苹果总部

Apple's US headquarters is one of the most advanced buildings, using the most innovative, highest quality system. Ortronics & sibling such as AFCO, Raritan, provide cabinets, racks, cable tray, & network lighting system to this edging campus.

苹果美国总部大楼是全球最先进的总部大楼之一，使用最创新、最优质的设备打造。使用美国奥创利（Ortronics）及其下品牌（例如:AFCO, Raritan）等产品，由机柜、机架、桥架、以至整个网络灯光系统等。

Oracle 甲骨文

Oracle is the world's largest software company edging technology giant. Global designated use Ortronics network products, including fiber optic & Cat6A copper cabling systems, MM20 series racks etc. across many cities around the world.

甲骨文是全球最大软件开发公司，是顶级科技巨头。全球指定使用奥创利所有网络产品，包括光纤和六A铜类布线系统，MM20 系列机架。项目遍布全球多个城市，包括北京、上海、香港、东京、新加坡、澳大利亚、印度孟买、以至美国和欧洲多国。

Adobe 奥多比

Adobe is a professional software company covers image processing & word processing. Products include PhotoShop, PDF, illustrator (Ai), Flash & more. Adobe, all the offices & cloud data centers are designated to use Ortronics, including fiber optics & copper wiring system, MM series rack. Projects located in USA & Europe, Beijing, Singapore, Tokyo, Japan, India etc.

Adobe 是顶级专业软件开发公司，产品涵盖图像处理以及文字处理，产品包括为人熟悉的PhotoShop, PDF, illustrator (Ai), Flash 等等。这家国际企业，她的所有办公楼和云数据中心也是指定使用奥创利，包括光纤和铜类布线系统，MM系列机架。项目包括美国和欧洲多地、北京、新加坡、日本东京、印度等地。

IBM 国际商业机器

IBM is the first customer of Ortronics in the world. Since 1966, IBM began to use Ortronics wiring system. Including the IBM headquarters & most of the IBM data center around the world, using the Ortronics products.

IBM 是美国奥创利第一个客户，从1966年起IBM已使用奥创利布线系统，包括总部大楼和世界各地的,IBM数据中心，也是使用了奥创利产品。

Microsoft 微软

Since 1994, Microsoft had start to use Ortronics, including US headquarters, offices worldwide, & data centers are also using Ortronics solutions, such as Clarity 6 and 6A, Optimo fiber systems, Quiktron pre-term fibre, MM series racks, & NCSA Series copper cable and so on.

从1994年起，微软已经是奥创利的主要客户，包括美国总部、全球各地的办事处和数据中心，也是使用奥创利多种产品，例如Clarity 6和6A系列、Optimo光纤系统、Quiktron 预端接产品、MM系列机架、以及艾思系列铜缆等等。

LinkedIn 领英

The world's largest business social network, LinkedIn has a number of well-known online education platforms, such as Lynda.com. In 2016, it was acquired by Microsoft & became her online business. All their data centers around the world are using the Electrorack series cabinet, Clarity 6A copper & Optimo fiber products, just Singapore's data center volume exceeds 500 cabinets.

全球最大的商业人脉网络社交平台，领英拥有多个知名网上教育平台，例如Lynda.com。在2016年被Microsoft微软收购其下，成为微软网上业务重要产品。全球所有数据中心也是使用奥创利的Electrorack 机柜、Clarity 6A网络和Optimo光纤产品，其新加坡的数据中心体量超过500个机柜。

Ericsson 爱立信

As the world's leading telecommunications & equipment manufacturer, Ericsson needs quality network system. It's many R&D centers and production plants, including Beijing, Shanghai, and Chengdu, China, are also using Ortronics' fiber & Cat 6 products, the total use of Ortronics more than 10,000 data points.

作为世界顶尖电信科技及设备生产商，爱立信需要优质的网络布线系统，其多地的研发中心及生产厂房，包括中国北京、上海、成都，也是使用奥创利的光纤和六类产品，总共使用规模超万点。

Nortel 北方电讯

Nortel is the world's leading Telecom R&D & Manufacturer, leading in the fields of optical network, GSM/UMTS, CDMA, WiMAX, IMS, enterprise communication platforms, etc. Use Ortronics fiber & Cat6 network products.

加拿大北方电讯是全球领先的通讯科技研发公司，是光网络、GSM/UMTS、CDMA、WiMAX、IMS、企业通信平台等领域的世界主要供应商，一直使用奥创利光纤网络产品和六类系统等。。

Motorola 摩托罗拉

Motorola, leading developer on Telecom & wireless networking technology, including US headquarters & numerous office buildings around the world are using Ortronics fiber optic & Cat 6/ 6A network products.

摩托罗拉是全球顶尖的设计和销售无线网络设备、研发公司，包括美国总部大楼和众多各地的办公楼也是使用是奥创利光纤网络产品和六类和六A系统。

Go Daddy

Go Daddy, listed company engaging in Internet domain name registration & website hosting. Managed domain name exceeded 61 million, becoming the world's largest registrar with ICANN, serving more than 13 million customers, staff exceeds 4,000. All data centers and offices around the world are designated to use the Ortronics fiber, Cat 6/ 6A HD solutions.

Go Daddy是从事互联网域名注册及网站托管的上市公司。管理的域名超过6,100万个，成为获得ICANN认证的全球最大注册商，服务逾1,300万客户，员工总数超过4,000。全球所有的数据中心和办事处，也是指定使用奥创利光纤网络产品和六A超高密网络系统。

Seagate 希捷科技

Seagate Technology is one of the world's leading hard drive manufacturers. Sales are the world's number one. Its US headquarters & the plants in many countries are using Ortronics fiber, Cat 5/ 6 network products.

希捷科技是全球主要的硬盘厂商之一市公司。销量为世界第一。其美国总部和全球多国的厂房也是使用奥创利光纤网络产品和超五和六类网络。

Honeywell 霍尼韦尔

As a multinational company mainly engaged in the production of electronic consumer goods, engineering services and aerospace systems. Fortune 100 companies. The headquarters uses Ortronics optical & Cat 6 network products.

是美国一家以电子消费品生产、工程技术服务和航空航天系统为主的跨国性公司。《财富》杂志100强公司。总部使用奥创利光纤网络产品和六类网络产品。

Micron 美光科技

One of the 3 major manufacturers of semiconductor storage , including DRAM, flash memory & SSD etc. Its global production plants is using Ortronics fibre Optic & Cat 5/6/ 6A Networks. Including the factory in Xi'an, China.

是世界三大生产多种形式的半导体器件，包括动态随机存取存储器、闪存和固态驱动器的生产商。其全球生产基地指定使用奥创利光纤网络和超五、六类、六A类网络产品。包括中国西安生产基地。

China Telecom 中国电信

Number of office buildings & Services Center across China is using Ortronics Cat 6 cabling products, including Beijing and Shanghai, Guangzhou, Shenzhen & various cities. For some exchanges & data centers also use Ortronics Pre-term fiber & telecom dedicated switch panels.

全国多地的办公楼和营业厅也选用了奥创利六类布綫产品，包括北京、上海、广州、深圳和部分国内城市。而多个交换机房和数据中心，也使用了奥创利预端接光纤和电信专用交换机配线架。

China Unicom 中国联通

Many data center across China uses Ortronics pre-terminated fiber and Cat 6 Copper solutions.

全国多地的数据中心选用了奥创利预端接光纤和六类配线架。

Ortronics Customers – Top Technology Companies
奥创利部分客户 – 顶级科技公司

Raytheon 雷神公司　　　–US headquarters & data center 美国总部和数据中心
Raytheon is a large US defense contractor based in Waltham, Massachusetts. Raytheon is alive with 73,000 employees and a turnover of approximately US$20 billion, it is the fifth largest defense contractor in the world.
雷神公司是美国的大型国防合约商，总部设在马萨诸塞州的沃尔瑟姆。雷神在世界各地的雇员有73,000名，营业额约200亿美元，是世界第五大国防合约商

PerkinElmer 珀金埃尔默 – US headquarters & data center美国总部和数据中心
A multinational technology company with a range of business including life and analytical science, optoelectronic technology and fluid science. Listed on the New York Stock Exchange
跨国技术公司，业务范围包括生命和分析科学，光电技术和流体科学。在纽约证券交易所上市公司

3 Com
Is a global provider of enterprise and small business networking solutions, providing network switches, routers, wireless access, IP voice systems and intrusions such as prevention systems.
是一个全球的企业和小型企业联网解决方案供应商，提供网络交换机，路由器，无线接取器，IP语音系统和入侵预防系统等产品。

Tom.com TOM集团有限公司
Hong Kong listed company is a technology platform, including e-commerce, social networks, mobile internet
香港上市公司，是一个科技平台，运业务包括电子商贸、社交网络、移动互联网

Bay Network
Is a world-class network hardware supplier. 是一家世界级网络硬件供应商。

Cabletron System
It is a manufacturer of networked computer equipment covering of Layer 1 and Layer 2 networking technologies
是网络计算机设备的制造商，涵盖各种第1层和第2层联网技术。

AT&T	Shanxi Post & Telecommunications Bureau 山西邮电管理局
Telecom Italia	Changchun Post Office 長春市邮政局
TIM – Telecom Italia Mobile	Xinjiang Kashgar Telecom Building 新疆喀什市电信大楼
Siemens VDO	Xinjiang Kashi City Post & Telecommunications Bureau 新疆喀什市邮电局
Lotus	
Park 10 Data Center	Shaanxi Post and Telecommunications Administration 陕西省邮电管理局
Quarter Deck 软件公司	Nanhai Post and Telecommunications Center 南海邮电枢纽中心
EQUITAX 软件公司	
Bell 电话公司	Beijing Wukesong Telephone Bureau 北京五棵松电话局
Microsoft Shanghai 微软上海	Pingnan Telecom Building 平南电信大楼
Wang computer 王氏电脑	Telecommunications Bureau of Suqian City, Jiangsu Province
Nanjing Telecom 南京电信	江苏省宿迁市电信局

Case Study
实例探究

Setting the Stage for a 40/100G Migration in Dropbox's Data Center
在Dropbox的数据中心为40 / 100G迁移设置舞台

Customer 客户

In 2007, while Drew Houston was a student at MIT, he repeatedly forgot his USB flash drive, inspiring him and fellow student, Arash Ferdowski to create a special folder on each of their computers that synchronized their files, allowing that same file to appear identical on both of their computers. Today Dropbox, the well-known file hosting service provider, offering cloud storage, file synchronization, and client software, is headquartered in San Francisco, California, with more than 200 million users across every continent.

Gaining the utmost confidence to deliver superior solutions & unparalleled support & accommodations to unique challenges, Dropbox continues their work with Ortronics.
Dropbox获得最大的信心，为独特的挑战提供卓越的解决方案和无与伦比的支持和便利，继续与Ortronics 合作。

2007年，当Drew Houston在麻省理工学院学习时，他多次忘记了他的USB闪存驱动器，激励他和同学Arash Ferdowski在他们的每台计算机上创建一个特殊的文件夹来同步他们的文件，允许同样的文件看起来相同在他们的两台电脑上。今天，Dropbox是着名的文件托管服务提供商，提供云存储，文件同步和客户端软件，总部位于加利福尼亚州旧金山，每个大洲拥有超过2亿用户。

Challenge 挑战

With increased storage and data demands, Dropbox recognized the urgency to fund the build of three new data centers. In 2013, brand new facilities in Santa Clara, California & Ashburn, Virginia were constructed. The new facilities not only satisfy the demand for storage, but also serve as a precautionary measure from the threat of natural disasters & network failures. As a hosting service provider, Dropbox has exceptionally high bandwidth requirements and must be able to handle vast amounts of data. Looking to implement new infrastructure that was well equipped to maintain future demands, Dropbox partnered with Ortronics. Following a vendor evaluation, Dropbox realized that Legrand is designed to be better™ with superior design capabilities, creating the flexibility and efficiency required to meet their performance network needs.

随着存储和数据需求的增加，Dropbox认识到为三个新数据中心的构建提供资金的紧迫性。 2013年，在加利福尼亚州圣克拉拉和弗吉尼亚州阿什伯恩建造了全新的设施。新设施不仅满足了存储需求，还可以作为自然灾害和网络故障威胁的预防措施。作为托管服务提供商，Dropbox具有极高的带宽要求，并且必须能够处理大量数据。为了实现能够满足未来需求的新基础设施，Dropbox与Ortronics合作。经过供应商评估，Dropbox认识到Ortronics旨在通过卓越的设计能力做到更好，创造满足其性能网络需求所需的灵活性和效率。

Solution 方案

The Legrand engineering team was able to source specific fiber constructions required by Dropbox, including a combination of unique breakouts and glass type. As a company with growing density and storage demands, Dropbox considered the migration to 40G/100G as a primary concern. To prepare the company for their future requirements, Ortronics® High Density Fiber systems were implemented to set the stage for the 40G/100G migration, supporting future high speed performance demands and up to 144 LC fibers in 1RU. The differentiating factor, influencing Dropbox's decision to partner with Ortronics was the product offering that not only included copper and fiber, but physical infrastructure to support their cabling network as well. Ortronics designed a completely custom Overhead Pathway Rack to manage high density copper and fiber. The 2RU rack was built with a custom width and was

Overhead Pathway Racks. 架空衔接机架

designed to accept 14 high density copper or fiber inserts, with two openings for standard fiber cassettes.

Ortronics工程团队能够采购Dropbox所需的特定纤维结构，包括独特的分纤管和纤芯类型的组合。作为一家密度和存储需求不断增长的公司，Dropbox认为迁移到40G / 100G是首要考虑因素。为了使公司满足其未来需求，Ortronics高密度光纤系统的实施为40G / 100G迁移奠定了基础，支持未来的高速性能需求，并在1RU中支持多达144个LC纤维。

影响Dropbox决定与Ortronics合作的差异化因素是产品不仅包括铜线和光纤，还包括支持其布线网络的物理基础设施。 Ortronics设计了一个完全定制的架空衔接机架来管理高密度铜缆和光纤。 2RU机架采用定制宽度设计，可接受14个高密度铜类或光纤插件，两个开口用于标准光纤盒。这成为数据中心布局和网络的关键组件，因为这种配置提供了无缝铜和光在典型的机柜设计之外进行光纤集成，为有源设备节省宝贵的机架空间。凭借卓越的解决方案和无与伦比的支持，Dropbox将继续与Ortronics合作，因为他们目前正在德克萨斯州达拉斯实施第三个数据中心设施。

Case Study
实例探究

Data centers designed to be better
数据中心旨在变得更好

Customer 客户

In 1998, Price Waterhouse and Coopers & Lybrand merged to create Pricewaterhouse Coopers, making PwC one of the world's largest professional services firms, offering a global perspective & in-depth knowledge of local, state and US affairs. With over 180,000 employees globally, PwC provides targeted professional services in areas of human resources, audit, assurance, tax, forensics & consulting.

1998年，Price Waterhouse和Coopers & Lybrand合并成立普华永道会计师事务所，使普华永道成为全球最大的专业服务公司之一，提供全球视野，深入了解当地，州和美国事务。普华永道在全球拥有180,000多名员工，在人力资源，审计，保证，税务，法证和咨询等领域提供有针对性的专业服务。

The Ortronics Legrand solution is designed to be better, creating increased flexibility, efficiency and a superior network design Ortronics解决方案旨在提供更好的解决方案，提高灵活性，效率和卓越的网络设计。

Challenge 挑战

With increased data & storage demands in the existing Tampa, Florida data center, PwC recognized the urgency to build a new facility & purchased an eighteen acre piece of land in Lithia, Georgia. The energy efficient, 80,000ft² facility houses its own power utility & water silos for cooling. PwC's primary objective was moving from a mishmash of products, to a standardized solution. PwC was looking for a partner that not only supplied copper and fiber, but physical infrastructure to support their cabling as well.

随着现有佛罗里达州坦帕市数据中心数据和存储需求的增加，普华永道认识到建立新设施的紧迫性，并在佐治亚州的Lithia购买了18英亩的土地。能源效率高，80,000平方英尺的设施拥有自己的电力设施和用于冷却的水筒仓。普华永道的主要目标是从混合产品转向标准化解决方案。普华永道

正在寻找一个合作伙伴，不仅提供铜和光纤，还提供物理基础设施来支持他们的布线。

Solutions 方案

Strengthening an already existing relationship, PwC teamed up with Ortronics, as they had the capabilities to provide the necessary components for their high density, structured cable design. Ortronics solution is designed to be better™, creating increased flexibility, efficiency & a superior network design.

为加强已有的合作关系，普华永道与Ortronics合作，因为他们有能力为其高密度，结构化电缆设计提供必要的组件。Ortronics解决方案旨在提供更好的解决方案，提高灵活性，效率和卓越的网络设计。

Flexibility 灵活性

- Utilized mixed connectivity solutions including: Clarity® 6A copper patch panels & cords, as well as OptiMo® standard & high density cassettes & enclosures.
  利用混合连接解决方案，包括：Clarity 6A 铜配线架和电线，以及OptiMo 标准和高密度盒式磁带和外壳

- Installed Cablofil® Fiber Trough through out the entire facility, providing a dedicated path for critical cabling, customized to fit the specified size & cabinet configuration requirements.
  在整个工厂安装了Cablofil光纤槽，为关键布线提供专用路径，可根据特定尺寸和机柜配置要求进行定制。

Efficiency 效率

- Deployed 5U overhead cable pathway racks, alleviating the need to install some fiber enclosures & copper patch panels in the cabinets, resulting in the elimination of an entire pod of cabinets.
  部署5U架空电缆通道机架，减少了在机柜中安装一些光纤外壳和铜配线架的需要，从而减少了整个机柜。

Design 设计

- Utilized Mighty Mo 8' server racks & doors, in conjunction with 10" & 12" wire managers, providing additional

OptiMO standard and high density cassettes and enclosures. OptiMO标准和高密度盒式磁带和外壳。

support & space necessary for a high density application.
利用Mighty Mo 8'服务器机架和门，与10"和12"电线管理器配合使用，为高密度应用提供额外的支撑和空间

- Configured to fully support & house the Cisco Nexus 7010 switches & 9513 SAN Directors.
  配置完全支持和容纳Cisco Nexus 7010交换机和9513 SAN控制器。

Within 6 months of construction, the new data center build was complete to include a power grid, hot aisle/cold aisle containment, a chilled water plant & cabling infrastructure for three pods.

With surpassed expectations, projects with PricewaterhouseCoopers continued with the implementation of identical infrastructure, scaled down, for a 5,000ft² Disaster Recovery Center in Richmond, Virginia. Additionally, the Lithia, Georgia facility is continually evolving with frequent additions, including pre-term fiber backbone solutions & short term plans to add a fourth pod to the facility.

在建设后的6个月内，新的数据中心建设完成，包括电网，热通道/冷通道安全壳，冷冻水厂和三个吊舱的布线基础设施。

普华永道(PricewaterhouseCoopers)的项目超越了预期，继续实施相同的基础设施，缩小规模，为弗吉尼亚州里士满的一个5,000平方英尺的灾难恢复中心提供服务。此外，乔治亚州Lithia工厂不断发展，经常增加，包括预先终止的纤维骨干解决方案和短期计划，以增加第四个吊舱到设施。

世界顶级金融公司项目 。。。

The world's top financial company project...

NCSA ORTRONICS

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NYSE 纽约证券交易所

Before the merger of New York Stock Exchange & Pan-European Stock Exchange, it was the second largest stock exchange in the world. The New York Stock Exchange acquired the Archipelago & became a for-profit organization. In order to guarantee delivery Easy network stability, designated to use the Ortronics Cat 6A network & OptiMo series fiber network. (over 10,000 data points)

纽约证券交易所与泛欧股票交易所合并前是世界上第二大证券交易所。纽约证交所收购全电子证券交易所，成为一个盈利性机构。为了保证交易网络的稳定，指定采用奥创利六A网络和Optimo系列光纤网络。（全部共超过1万点）

CME 芝加哥商业交易所

CME Group is a US financial market company that operates options & futures exchanges. It leverages online trading platforms to own and operate large derivatives and futures exchanges in Chicago, New York City & London. The Ortronics Clarity series copper networks & the OptiMo series fiber optic networks are used. (over 10,000 data points)

芝商所是一家美国金融市场公司，经营期权和期货交易所。它利用在线交易平台在芝加哥，纽约市以及伦敦的交易所拥有并经营大型衍生品和期货交易。采用奥创利Clarity 系列铜类网络和OptiMo系列光纤网络。（全部共超过1万点）

Goldman Sachs 高盛

Goldman Sachs is the group of multinational bank holding companies, ranked 74th among Fortune 500 companies selected by Fortune magazine. Goldman Sachs' business covers investment banking, securities trading & wealth management. The world's designated use of the Ortronics MM series of physical support products.

高盛为跨国银行控股公司集团，为《财富》杂志评选的美国财富500强企业排名第74名。高盛的业务涵盖投资银行、证券交易和财富管理。全球指定采用奥创利MM系列物理支持产品。

Morgan Stanley 摩根士丹利

is an international financial services company established in New York, USA. It has representative offices in more than 1,300 cities in 42 countries & employs more than 60,000 people. They are designated to use Ortronics MM series Rack & Clarity copper network products. (over 20,000 data points)

财经界称"大摩"，是一家成立于美国纽约的国际金融服务公司，在全球42个国家的1300多个城市设有代表处，雇员总数达6万多人。全球指定采用奥创利MM系列物理支持和Clarity 铜类网络产品。（全部共超过2万点）

Citibank 花旗银行

Citibank is a retail bank owned by Citigroup. It is the third largest bank in the USA. It has international banks with branches in nearly 50 countries & regions around the world. It is headquartered at 390 Greenwich Street, New York City. Designated to use Ortronics Clarity Cat 6, OptiMo fiber, OptiCool & MM series self-cooling cabinet products. (more than 50,000 data points)

花旗银行是花旗集团属下的一家零售银行，为美国以资产计算第三大银行，在全球近五十个国家及地区设有分支机构的国际级银行，总部位于纽约市格林威治街390号。指定采用奥创利Clarity 六A类、Optimo光纤、Opticool和MM系列自冷机柜产品。（全部共超过5万点）
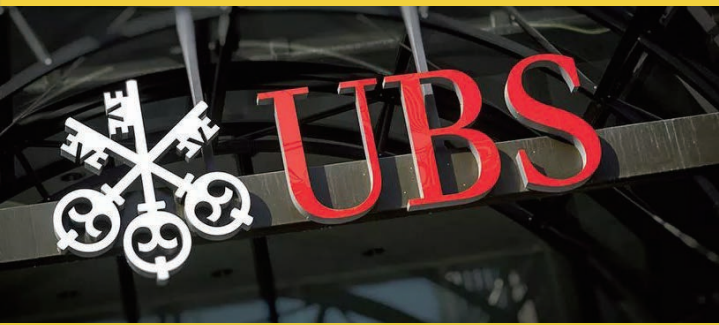
UBS 瑞银集团

is a multinational investment banking & financial services company established in Switzerland. UBS has offices around the world. Designated to use Ortronics Cat 6 , fiber, MM series cabinet products. (over 20,000 data points)

瑞银集团是一家在瑞士成立的跨国投资银行和金融服务公司。瑞银集团在全球各大金融中心城市都设有办事处。指定采用奥创利六类、光纤、MM系列机柜产品。（全部共超过2万点）

Nomura 野村控股

Nomura Holdings is Japan's largest investment bank, their offices in the world designated to use Ortronics MM series cabinet rack & physical support products.

野村控股是日本最大的投资银行，全球指定采用奥创利MM系列机柜机架和物理支持产品。

Barclays 巴克莱银行

Barclays Bank is the second largest bank in the UK with 139,900 employees worldwide. As of 2012 total Assets amounted to 26.925 billion pounds. Designated to use Ortronics Clarity network system & MM series Cabinet racks & physical support products. (more than 50,000 data points)

巴克莱银行是英国第二大银行，全球雇员达到139,900人。截至2012年总资产高达269.25亿英镑。指定采用奥创利Clarity 网络系统和MM系 列机柜机架和物理支持产品。（全部共超过5万点）

Morgan Chase 摩根大通

has 5,100 branches of the Commercial Banking Department. The size of the assets is the largest financial services institution in the USA. The headquarters & offices are designated to use Ortronics Clarity & OptiMo network systems & MM series cabinet & racks. (more than 30,000 data points)

摩根大通集团，财经界称"小摩"，商业银行部旗下分行5100家。资产规模超越美国银行成为美国最大的金融服务机构。总部大楼和多地的分部指定采用奥创利Clarity 和OptiMo网络系统和MM系列机柜机架和物理支持产品。（全部共超过3万点）

State Street Bank 道富银行

It is the second oldest bank in the USA with a global presence. The headquarters & worldwide offices are designated to use Ortronics optical & copper network system & MM series cabinet & racks. (over 20,000 data points)

是第二家历史最悠久美国银行，业务遍及全球。总部大楼和全球各地分部指定采用奥创利光铜网络系统和MM系列机柜机架和物理支持产品。（全部共超过2万点）

Fidelity 富达投资集团

is a US multinational financial services company. It is the fourth largest mutual fund company in the world & has a global presence. The headquarters building & the global offices designated the use Ortronics optical & copper network system & MM series cabinet & racks. (more than 30,000 data points)

富达投资 是一家美国跨国金融服务公司。是全球第四大共同基金公司，务遍及全球。总部大楼和全球多地分部指定采用奥创利光铜网络系统和MM系列机柜机架和物理支持产品。（全部共超过3万点）

ING

The ING Group, also known as the Dutch International Group, is an international financial services company. The headquarters & offices designated to use Ortronics optical & copper network system & MM series cabinet & racks. (more than 50,000 data points)

ING集团，亦名荷兰国际集团，是一个国际金融服务私营企业。总部大楼和全球多地分部指定采用奥创利光铜网络系统和MM系列机柜机架和物理支持产品。（全部共超过5万点）

Midland Bank 米特兰银行

The Bank of Midland was one of the four largest banking groups in the UK. It was fully acquired by HSBC in 1992. All American branches and offices were designated to use Ortronics Clarity network system & MM series cabinet & racks. (more than 30,000 data points)

米特兰银行曾经是英国四大银行集团之一。于1992年被汇丰全面收购，全美国分行及办工楼指定采用奥创利Clarity 网络系统和MM系列机柜机架和物理支持产品。（全部共超过3万点）

VISA

Visa International is a multinational financial services company headquartered in Foster, California. Branded credit & debit cards facilitate electronic money transfers worldwide. Data centers around the world, including California, Singapore, India, etc., have designated to use Ortronics ultra-high-density cabling network system & MM series racks products. (over 20,000 data points)

Visa国际组织是一家总部位于美国加利福尼亚州福斯特市的跨国金融服务公司。品牌的信用卡和借记卡促进全球的电子资金转账。全球多地的数据中心，包括美国加州、新加坡、印度等，指定采用奥创利HD超高密度布线网络系统和MM系列机柜机架和物理支持产品。（全部共超过2万点）

Standard & Poor's 标准普尔

Standard & Poor's is an authoritative financial analyst in the world & is headquartered in New York City. most of the office worldwide uses Ortronics Cat 6 cabling network system & MM series racks & physical support products. (over 10,000 data points)

标准普尔是一家世界权威金融分析机构，总部位于美国纽约市。多地办事处采用奥创利六类布线网络系统和MM系列机柜机架和物理支持产品。包括美国总部 、及中国分部。（全部共超过1万点）

Bloomberg 彭博

Bloomberg was founded in 1981 by Michael Bloomberg to provide a multinational group of news, global business & financial data. Most of the offices in the world designated use Ortronics MM series cabinet & rack together with physical support products.

彭博有限合伙企业是迈克尔·布隆伯格于1981年创立，提供新闻、全球商业和金融数据的跨国集团。全球指定采用奥创利MM系列机柜机架和物理支持产品。

Citizens Bank 公民金融集团

Citizens Financial Group, Inc. is a US bank with business & financial data, headquartered in Providence, Rhode Island, & servicing USA & around the world. most of the offices and branches is using Ortronics Cat 6 cabling network & MM series rack& physical support products. (over 50,000 data points).

Citizens Financial Group，Inc。是一家总部位于罗德岛普罗维登斯的美国银行，业务遍及全美及全球的商业和金融数据。六类布线网络和MM系列机柜机架和物理支持产品。（全部共超过5万点）。

Lloyds Bank 劳埃德银行

a British commercial bank with banking outlets throughout the UK, has 1600 Million independent savings customers. Most of the offices & branches use Ortronics Cat 6 cabling network system products. (over 10,000 data points)

劳埃德银行，是英国一家商业银行，银行营业网点遍布全国，拥有1600万独立储蓄客户。多地办事处采用奥创利六类布线网络系统产品。（全部共超过1万点）

ICBC 中国工商银行总行办公大楼

Established on January 1, 1984, ICBC was recognized as the bank with the highest market value in the world in 2015. It is headquartered in Beijing. All fiber & Cat 6 networks use Ortronics Clarity Series Solutions. Other regional Office & branches also use Ortronics including branches in Beijing, Heilongjiang, Inner Mongolia, Jinzhou, Wuhu, & Xiamen etc. (over 30,000 data points)

全部光纤六类铜网络采用奥创利Clarity 网络系统超过超过一万个信息点。其他地区工商银行使用奥创利系统包括，北京、黑龙江省、内蒙古、锦州分行、芜湖市、厦门市等。（全部共超过3万点）

China Construction Bank Corporation 中国建设银行

CCB is the second largest bank in China. most of the offices & branches uses Ortronics network cabling system, including Yunnan, Nanjing, Nantong , Taizhou, & Xinhui etc. (all over 20,000 points in total)

中国多地的建设银行也采用奥创利网络布线系统，包括云南建设银行、南京建设银行、南通建设银行、泰州市建设银行、建设银行新会市分行等。（全部共超过2万点）

Changchun Everbright Bank 長春光大銀行

China Everbright Bank, is a national joint-stock commercial bank in China & is headquartered in Beijing, under the jurisdiction of Everbright Group. The Changchun Everbright Bank Building uses Ortronics network cabling system, which uses Cat 6 & OM3 fiber systems. (over 5,000 data points)

中国光大银行是中国一家全国性股份制商业银行，成立於1992年8月，总部位於北京，隶属於光大集团。长春光大银行大楼也采用奥创利网络布线系统，使用六类和OM3光纤系统。（全部共超过5千点）

Shanghai Bank Headquater 上海银行总行

Shanghai Bank, formerly known as Shanghai City Cooperation Bank, was established on December 29, 1995. It is a joint-stock commercial bank headquartered in Shanghai. Head office adopts Ortronics Cat 6 & fiber cabling network system. (over 10,000 data points)

上海银行，原名上海城市合作银行，成立於1995年12月29日，是一家总部设立在上海的股份制商业银行。总行采用奥创利六类和光纤网络布线系统。（全部共超过1万点）

China Minsheng Bank Nanjing Branch Building
中国民生银行南京分行大楼

China Minsheng Bank is China's first national joint-stock commercial bank established by private capital. Listed on Shanghai Stock Exchange & Hong Kong Stock Exchange. The Nanjing Branch uses Ortronics Cat 6 & fiber Cabling network. (over 10,000 data points)

中国民生银行是中国第一家由民间资本设立的全国性股份制商业银行。在上海证券交易所和香港证交所上市。南京分行大楼采用奥创利六类和光纤网络布线系统。（全部共超过1万点）

Shanghai Oriental Securities Headquarters Building Phase I
上海东方证券总部大楼一期

Orient Securities is a fully licensed Chinese brokerage listed on the Shanghai Stock Exchange. The first phase of the headquarters building uses Ortronics Cat 6A & fiber cabling network system. (Over 5,000 data points)

东方证券是一家全牌照中国券商，於上海证券交易所上市。一期总部大楼采用奥创利六A类和光纤网络布线系统。（全部共超过五千点）

Guiyang Commercial Bank
贵阳市商业银行

Adopting Ortronics Cat 6 & fiber optic networks. (over 3,000 data points)

采用奥创利六类和光纤网络布线系统。
（全部共超过3千点）

Huaxia Securities Building
华夏证券大楼

Adopting Ortronics Cat 6 & fiber optic networks. (over 5,000 data points)

采用奥创利六类和光纤网络布线系统。
（全部共超过5千点）

Ortronics's customers – Finance
奥创利部分客户 – 金融

Aetna 安泰

Alliance Capital 联盟资本

AQR Capital Management
AQR资本管理

Barclays Capital 巴克莱资本

Global Equities

Putnam Investments
普特南投资

Washington Mutual, INC
华盛顿互惠

Zurich Bank 苏黎世银行

Florida National Bank
佛罗里达国立银行

Beijing Commercial Bank
北京市商业银行

Zhongyuan Oilfield Financial Building
中原油田金融大楼

Bank of Malaysia Shanghai Branch
马来西亚银行上海分行

Citibank Shanghai Branch
花旗银行上海分行

Huaxia Securities Business Building
华夏证券营业大楼

Huakang Securities Business Building
华康证券营业大楼

Beijing Everbright Securities
北京光大证券

Great Wall Securities
长城证券

Southern Securities 南方证券

Zhongminxin Securities 中民信证券

Zhongcai Fund 中财基金

Shenzhen Zhongrong Fund
深圳中融基金

Shanghai Haitong Securities
上海海通证券公司

Wuxi Financial Securities Building
无锡市财政证券大厦

Zhejiang Financial Securities Building
浙江省财政证券大厦

Zhejiang Guoxin Securities
浙江省国信证券

Case Study
实例探究

Colocation,
Disaster Recovery and
State-Of-The-Art Healthcare
主机托管
灾难恢复和最先进的医疗
保健系统

Customer 客户

Central DuPage Health System (CDH) is an independent hospital system located throughout Chicago's western

> By building the data center in a colocation facility, **CDH was able to reduce their CAPEX and OPEX costs, as well as reinvigorate the older data center facility** to have a longer life span asa disaster recovery site.
> 通过在托管设施中构建数据中心. **CDH能够降低其CAPEX和OPEX成本，并重振旧数据中心设施**，使其具有更长的使用寿命，成为灾难恢复站点。

suburbs & the surrounding region. Its primary facility is a 361-bed hospital located in Winfield, Illinois. The hospital is the focal point of a network of health services that includes a 50-physician medical group, a home health care agency, an occupational health center & several urgent care centers. It has a medical staff of more than 900 physicians & is currently ranked 11th out of Chicago Hospitals.

CDH was recently renamed Cadence Health as a result of the March 2011 merger between Central DuPage & the Delnor Community Health System, based in Geneva,

Illinois. Now Cadence Health employs more than 6,100 professionals, providing care across an interdependent network of healthcare organizations. The combined health system will service a patient population of more than 1 million in Chicago's suburbs. They specialize in technology-heavy sciences such as pediatrics, oncology, neurosciences & many others. As part of the merger & their commitment to high-quality care through state-of-the-art technology, both hospitals are upgrading their information technology platforms to improve the coordination of patient care across the region.

是位于芝加哥西部郊区及周边地区一个独立的医院系统。它的主要设施是位于伊利诺伊州温菲尔德的一家拥有361个床位的医院。该医院是卫生服务网络的据点，其中包括一个50医生医疗小组，一个家庭保健机构，一个职业保健中心和几个紧急护理中心。它拥有超过900名医生和医疗人员，目前在芝加哥医院排名第11位。由于2011年3月Central DuPage与总部设在伊利诺伊州日内瓦的Delnor社区卫生系统合并，CDH最近更名为Cadence Health。

现在，Cadence Health拥有超过6,100名专业人员，为医疗机构的相互连系网络提供医疗服务。综合医疗系统将为芝加哥郊区超过100万的患者提供服务。他们专注于技术重型科学，如儿科，肿瘤学，神经科学和许多其他科学。作为合并的一部分，他们致力于通过最先进的技术提供高质量的医疗服务，两家医院都在升级其信息技术平台，以改善整个地区患者护理的协调。

Challenge 挑战

The CDH campus is the current location of the facilities' data center & is used as the primary data center for the hospital

system. After the 2011 merger & with plans to expand further, it was determined that the system needed a disaster recovery site as well. Their research showed that using 8,000 ft^2 in a wholesale colocation facility was better suited to their needs than building their own from the ground up. Once the space was leased, CDH determined that it was actually more economical to use the colocation site as the primary data center & re-purpose the original, older facility as a disaster recovery site. This would create a fully redundant data center site, without incurring the ownership costs of generators, cooling & other operating expenses or the capital costs of building their own facility. The challenge now was to design a data center capable of supporting Cadence's expanding hospital system. It would be mostly used for MRI & other imaging, as well as record storage. There were two imperatives: provide enough storage & allow staff to quickly & easily access that storage.

数据中心设施是CDH园区的最重要原素，用作医院系统的主要数据处理。在2011年合并并计划进一步扩展之后，确定系统也需要灾难恢复站点。他们的研究表明，在众多托管设施中使用8,000英尺比从头开始建造自己的设施更适合他们的需求。租用空间后，CDH确定将托管站点用作主要数据中心并将原始旧设施重新用作灾难恢复站点实际上更为经济。这将创建一个完全独立的数据中心站点，而不会产生发电机的设施成本，减省冷却和其他运营费用或建造自己设施的资本成本。现
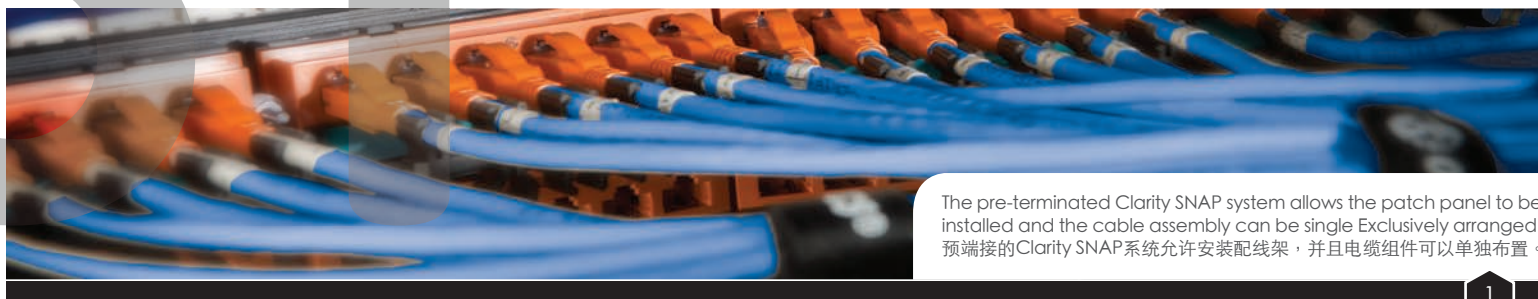
The pre-terminated Clarity SNAP system allows the patch panel to be installed and the cable assembly can be single Exclusively arranged.
预端接的Clarity SNAP系统允许安装配线架，并且电缆组件可以单独布置。

在的挑战是设计一个能够支持Cadence不断扩大的医院系统的数据中心。它主要用于MRI和其他成像，以及记录存储。有两个必要条件：提供足够的存储空间，并允许员工快速轻松地访问存储。

Solution 方案

Ortronics was able to help CDH create exactly the data center they needed today & prepare the way for the data center they would need in the future with our end-to-end connectivity & network solutions.

To prepare the data center for future growth & provide the sort of high speed performance that imaging storage required, CDH chose to install 10Gb fiber today that can be ready to migrate to 40Gb/100Gb tomorrow. 1,800 Ortronics M4 High Density 24 fiber cassettes, combined with OM3 48 & 96 strand fiber, created a quick & economical design for the core switches. It set the stage to move to 40Gb/100Gb as needed by simply replacing the pre-terminated fiber cassettes with MTP adapter panels.

A complete Category 6A copper solution was also needed at the core switch. However, with the limited space of the leased colocation site, copper cable bulk was a concern. Jacks that are pre-terminated to the cable create a large bulkhead at both sides of the trunk. This makes it more difficult to route the cable. Ortronics' modular copper products addressed the cable bulk issued while also creating an easier & quicker installation. The pre-terminated Clarity® SNAP system allows the patch panels to be installed & the cable assemblies to be laid out separately. Once the routing was completed, the patch cords were simply connected into the patch panels.

Finally, Eric Moore, the designer at CDH, wanted a secure, aesthetically pleasing solid pathway to properly route & protect the cables overhead. Cablofil® Metal Fiber Trough provided a dedicated path for the critical network cabling & was easily customized to fit the size requirements & cabinets configuration. The Cablofil product manager went the extra mile, assisting with the design & revisions during the data center build out. By building the data center in a colocation facility, CDH was able to reduce their CAPEX & OPEX costs, as well as reinvigorate the older data center facility to have a longer life span as a disaster recovery site. The new, redundant data center design is able to make the best use of a limited, leased space, using high density cable systems, as well as the real estate over the cabinets. It has been designed as a modular system that is ready to migrate to 40Gb/100Gb, is a repeatable layout and is built to significantly reduce deployment time. Using the modular, plug-and-play design, the data center is ready to support any future expansion & the storage requirements that would come with it.

Ortronics 他能够帮助CDH创建他们当前所需的数据中心，并通过我们的端到端连接和网络解决方案为将来需要的数据中心做好准备。

为了使数据中心为未来发展做好准备并提供成像存储所需的高速性能，CDH选择安装10Gb光纤，可以立即迁移到40Gb / 100Gb。 1,800个 Ortronics M4高密度24纤芯与OM3 48和96纤芯相结合，为核心开关创造了快速而经济的设计。通过简单地用MTP适配器面板替换预端接的光纤盒，它可以根据需要转移到40Gb / 100Gb。

核心交换机也需要完整的6A类铜缆解

Ortronics

Cablofil fiber optic slot installation for critical cabling
Cablofil 光纤槽安装用于关键布线。

决方案。然而，由于租用的托管站点的空间有限，铜缆索散装是一个问题。预先端接到电缆的接头在线缆两端形成一个一超大的穿线头。这使得布线更加困难。 Ortronics的模块化铜产品解决了电缆散装问题，同时也使安装变得更加容易和快捷。 预端接的Clarity SNAP系统允许安装配线架，并且电缆组件可以单独布置。路由完成后，将跳线简单地连接到接线板上。最后，CDH的设计师Eric Moore想要一个安全、美观的固体线缆保护路径，以正确布线和保护电缆架空。

Cablofil 金属光纤槽为关键网络布线提供了专用路径，可轻松定制以满足尺寸要求和机柜配置。 Cablofil产品经理在数据中心建设过程中进行了额外的设计和修改。通过在托管设施中构建数据中心，CDH能够降低其CAPEX和OPEX成本，并重振旧数据中心设施作为灾难恢复站点具有更长的使用寿命。 新的主数据中心设计能够充分利用有限的租用空间，使用高密度电缆系统以及机柜上的空间。它被设计为模块化系统，可以迁移到40Gb/100Gb，是一种可重复的布局，可以显著缩短部署时间。使用模块化即插即用设计，数据中心随时可以支持任何未来的扩展以及随之而来的存储要求。

世界顶级医疗项目 。。。

The world's top medical projects. . .

NGA ORTRONICS

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GSK 葛兰素史克

It is the third largest pharmaceutical, biological & health care company in the world. The headquarters & most of the offices uses Ortronics Cable & Cat 6 copper network. (over 10,000 data points)

是全球第三大的制药、生物以及卫生保健公司。多地总部大楼采用奥创利光纤及六类铜网络。（全部共超过1万点）

Wyeth 惠氏

Headquartered in Madison, New Jersey, USA, a pharmaceutical engineering company focused on research & manufacturing pharmaceuticals. The headquarters & most of the offices uses Ortronics Cable & Cat 6 copper network. It has included the USA, Colombia, Ireland etc. (over 30,000 data points)

总部位于美国新泽西州麦迪逊，一家以研究及制造药品为主要业务的制药工程公司。多地总部大楼采用奥创利光纤及六类铜网络。己包括美国、哥伦比亚、爱尔兰等。（全部共超过3万点）

Harvard Medical School 哈佛医学院

has many outstanding professors in the school who are engaged in teaching, research & clinical work. The College also has a number of affiliated hospitals & research units in Boston. There are 2,900 full-time & part-time professors & employees. The world's top medical schools are designated to use Ortronics fiber & Cat 6 copper networks. (over 10,000 data points)

学院有许多杰出的教授在这里从事教学、研究和临床医疗工作。学院在波士顿也有许多附属的医院和研究单位。共计有2900名全职与兼职的教授与职工。世界顶级医学院指定采用奥创利光纤及六类铜网络。（全部共超过1万点）

National Institutes of Health
国立卫生研究院

is the premier biomedical research institution in the USA. The National Institutes of Health consists of 27 different biomedical disciplines & research centers. All of them use Ortronics fiber & Cat6A network. (over 20,000 data points)

隶属于美国卫生及人类服务部，是美国联邦政府中首要的生物医学研究机构。美国国立卫生研究院由27个不同的生物医学学科和研究中心组成，负责许多科学成就。世界顶级医学院指定采用奥创利光纤及六A类铜网络。（全部共超过2万点）

Allina Health Aetna

It is a well-known health management institution in the United States and has multiple health centers throughout the United States. Designated to use Ortronics fiber & Cat 6 copper network. (over 30,000 data points)

是美国有名的健康管理机构，在全美国有多个健康中心。指定采用奥创利光纤及六类铜网络。（全部共超过3万点）

Cleveland Clinic 克利夫兰诊所

It is one of the most famous medical institutions in the world. The headquarters in Cleveland, & all branches around the world are designated to use Ortronics fiber & Cat6A network. (over 50,000 data points)

是世界最着名医疗机构之一，机构集合医疗、研究和教育三位一体，提供专业医疗和最新治疗方案的非营利性机构。本部位于克利夫兰市，在佛罗里达、内华达、加拿大和阿布扎比开设有分院。全部指定采用奥创利光纤及六A类铜网络。（全部共超过5万点）

Sanofi Genzyme 赛诺菲健赞

It is the third largest biotechnology company in the world. Genzyme distribute products in 65 countries with 17 factories & 9 genetic testing Laboratories. All of them are designated to use Ortronics fiber & Cat 6A copper network. (over 10,000 data points)

是一家位于美国马萨诸塞州剑桥的生物技术公司，是全球第三大生物技术公司。目前健赞已经分布在五大洲六十五个国家地区，拥有17个制造车间和9个遗传测试实验室，并销售到全球90多个国家。全部指定采用奥创利光纤及六A类铜网络。（全部共超过1万点）

St. Joseph Hospital 圣约瑟夫医院

is one of 51 hospitals in the Providence St. Joseph Health Center (PSJH), the third largest non-profit health system in the USA. Designated to use Ortronics fiber & Cat A copper network. (over 10,000 data points)

圣约瑟夫医院是普罗维登斯圣约瑟夫健康中心（PSJH）的51家医院之一，这是美国第三大非营利性卫生系统。指定采用奥创利光纤及六A类铜网络。（全部共超过1万点）

Sarasota Memorial Hospital
萨拉索塔纪念医院

is a medical facility in Sarasota, Florida. The hospital was founded in 1925 & is currently the only trauma center in Sarasota County, Florida. Designated to use Ortronics fiber & Cat 6 copper network. (over 8,000 data points)

萨拉索塔纪念医院（SMH）是佛罗里达州萨拉索塔的医疗机构。该医院成立于1925年，目前是佛罗里达州萨拉索塔县唯一的创伤中心。指定采用奥创利光纤及六类铜网络。（全部共超过8千点）

PerkinElmer Inc 珀金埃尔默

Is a US multinational technology company, listed on the New York Stock Exchange, whose main business include life & analytical science, optoelectronic technology & fluid science. Production of medical equipment, designated to use Ortronics fiber & Cat 6A copper network. (over 5,000 data points)

是一家美国的跨国技术公司，是纽约证券交易所上市公司其主要业务范围包括生命和分析科学，光电技术和流体科学。生产顶尖医疗设备，指定采用奥创利光纤及六A类铜网络。（全部共超过5千点）

Johns Hopkins Hospital 约翰·霍普金斯医院

Awarded the best hospital in USA for 23 years. It has created a number of first in medical history, is the world's top hospital, designated to use Ortronics fiber & Cat 6A network. (over 40,000 data points)

位于美国马里兰州巴尔的摩市的大型综合医院。连续23年获评为全美最佳医院。医院创造了医学史上的多项第一，包括第一例完全变性手术、心脏搭桥、新生儿法洛氏四联症手术、心肺复苏术、肾透析等等。是世界顶尖医院。全部指定采用奥创利光纤及六A类铜网络。（全部共超过4万点）

Central DuPage Health System 杜佩奇中心医院

It is a 390-bed hospital in Winfield, it is one of the first hospitals in the Chicago area to undergo open heart surgery & is ranked fifth in the 2017-18 US News Best Hospital. All specified use Ortronics fiber & pre-terminated network. (over 20,000 data points)

是伊利诺伊州温菲尔德的一家拥有390张床位的医院。是芝加哥地区首批进行心脏手术的医院之一，并且在2017-18美国新闻最佳医院荣誉榜上排名第五位。全部指定采用奥创利光纤及预端接铜网络。（全部共超过2万光纤点）

Beijing Children's Hospital 北京儿童医院

is a three-level comprehensive pediatric hospital, & a top hospital in China with a total of 970 of beds. All network adopted Ortronics Clarity, NCSA Series fiber & Cat 6, Cat 5E networks & MM20 Racks . (over 8,000 data points)

首都医科大学附属北京儿童医院（简称"北京儿童医院"）是集医疗、科研、教学、保健于一体的三级甲等综合性儿科医院，总占地面积7万平方米，建筑面积12万平方米，编制病床970张，是国内顶尖医院。2018年整体网络改造采用奥创利艾思光纤及铜类网络MM20机架等。（共超过8千点）

连云港第一人民医院

Lianyungang First People's Hospital is a three-level general hospital. The overall network uses Ortronics fiber, Cat 6 & Cat 5E networks. (over 5,000 data points)

连云港市第一人民医院是一所三级甲等综合医院，位于江苏省连云港市海州区通灌北路182号。整体网络采用奥创利光纤及超五、六类铜网络。（共超过5千点）

TIFT Regional Medical Center

is a non-profit hospital that serves 12 counties in south-central Georgia, USA. TRHS provides more than 30 Special Medical learning to more than 135 doctors. It designated to use Ortronics fiber & Cat 6 copper network. (over 5,000 data points)

Tift区域卫生系统（TRHS）是非营利性医院系统，为美国佐治亚州中南部的12个县提供服务。 TRHS为超过135名医生提供30多种专业知识。全部指定采用奥创利光纤及六类铜网络。（全部共超过5千点）

The Vaccine and Gene Therapy Institute 疫苗和基因疗法研究所

It is a non-profit research institution for the human immune system. It is the world's leading medical research institution. All of them are designated to use Ortronics fiber & Cat 6A network. (over 8,000 data points)

是一项非营利性研究人体免疫系统机构。专注发展新疫苗和免疫疗法，评估我们的免疫系统，特别是对疾病的反应治疗和预防艾滋病、癌症、结核病和相关疾病，以及新出现的病毒感染。是世界顶尖医疗科研机构。全部指定采用奥创利光纤及六A类铜网络。（全部共超过8千点）

Case Study
实例探究

Ready for the Future
为未来做好准备

Customer客户

One of the largest global asset management companies needed to install data communications hardware that would be ready for planned future upgrades. With hundreds of employees located in the United States, Europe, Canada & Asia, & with hundreds of billions of dollars in assets under management, the client had to be able to transmit vast amounts of data, globally & instantly.

> **The client was able to save time, money & space, as well as protect and improve network performance, by installing Legrand Data Communications products.**
>
> **通过安装Ortronics数据通信产品，客户能够节省时间，金钱和空间，并保护和改善网络性能。**

全球最大的资产管理公司之一，需要安装数据通信硬件，以便为计划的未来升级做好准备。该公司在美国，欧洲，加拿大和亚洲拥有数百名员工，管理着数千亿美元的资产，客户必须能够在全球范围内即时传输大量数据。

Challenge 挑战

As one of the largest managers of institutional and individual investments around the world, it was imperative that the company headquarters & trading floor be state of the art & able to handle huge quantities of data. In addition, there are plans in place to implement a thin client virtualized environment at their headquarters within 4 years that will require 10G ethernet. To prepare for future 10G compliance, a complete technology refresh was needed.

To accommodate these technology updates, the entire facility was gutted with the exception of only the stairs & elevators. The interior rebuild, which included a data center expansion, was 156,000 ft² & involved four floors, eight total telecommunications rooms & a 92 position trading floor.

作为全球最大的资产管理机构和个人投资管理者之一，公司总部和交易部门必须是最先进的，能够处理大量数据。此外，还有计划在4年内在其总部实施精簡型電腦虚拟化环境，这将需要10G以太网。为了准备未来的10G合规性，需要进行全面的技术更新。为了适应这些技术更新，除了楼梯和电梯外，整个设施都被改造了。内部重建包括一个数据中心扩建，占地156,000英尺，涉及四个楼层，8个总电信室和一个92个位置的交易平台。
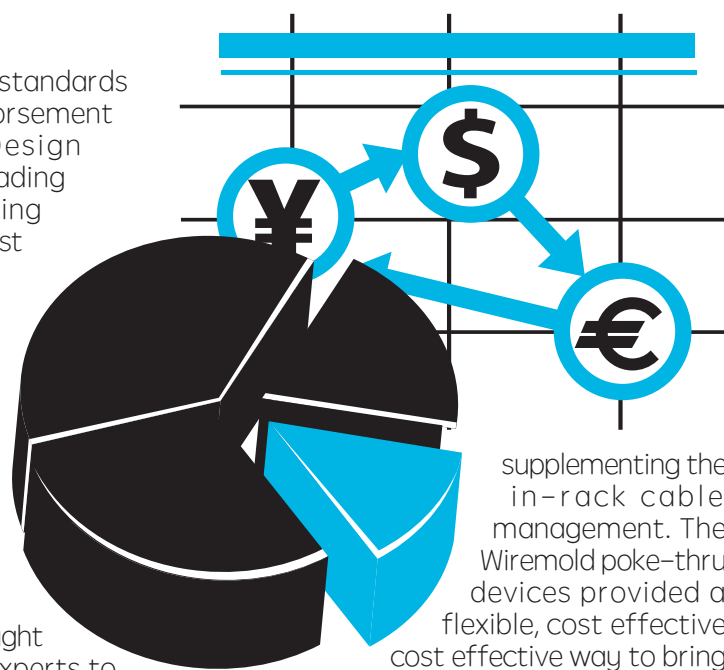
Solution 方案

Based on the client's standards & after a strong endorsement from Structured Design Associates (SDA; a leading technology engineering provider in the NorthEast region), Ortronics was chosen as the data communications manufacturer, with Cablofil®, Ortronics® & Wiremold® products being specified.

To serve the client's needs, the project brought together a panel of experts to create the most forward-thinking data design. The manufacturer's representative, architect & consulting engineer specified the structured cable system products; the Ortronics network designer collaborated with the consultant to produce AutoCad/BIM/Revit drawings of the racks to populate the telecom rooms; the distributor's services group provided special kitting by section of building, & by closet – saving valuable time & money for the contractor; the manufacturer's

representative also provided on–site 10G termination training to the union workforce prior to the start of the project.

The client was able to save time, money & space, as well as protect & improve network performance, by installing Ortronics Data Communications products. Mighty Mo racks & cable managers properly support the new IT infrastructure in the telecom rooms, protecting the cable bend radius & preventing costly future repairs. Cablofil wire mesh cable tray provided additional flexibility to the system by lifting the cables above the racks & supplementing the in-rack cable management. The Wiremold poke–thru devices provided a flexible, cost effective cost effective way to bring power, communications & A/V services to the workstation, & could be used with any floor surface.

The NetClear partnership between Ortronics and Berk–Tek, provided an end–to–end cabling system to replace the legacy Cat 5 system. The new cable system includes over 265,000 ft² of Berk–Tek LANmark–10G2 Cat 6A cable with accompanying Ortronics Clarity 6a patch panels, patch cords and panel jacks, all

backed by an industry leading 25-year'warranty. When coupled with Ortronics cable management,the 6a product set will be able to best suppor the future thin client virtualized environment. Additionally, OptiMo fiber optic patch cords & enclosures & Ortronics fiber connectors were installed in support of the new IP phone system, remoted data center, IPTV streaming video delivery of SATV & digital signage.

The company headquarters, trading floor & data center expansion were rebuilt in six months and has been deemed an absolute success. The entire infrastructure has been upgraded to handle the current trading & documentation demands. Coordinating with the architect, network designer and engineer, ensured that the upgraded network infrastructure will be more than capable of supporting the client's future data demands.

根据客户的标准，在得到Structured Design Associates (SDA;东北地区领先的技术工程提供商）的大力支持后，Ortronics被选为数据通信制造商，并指定了Cablofil，Ortronics和Wiremold产品。为了满足客户的需求，该项目汇集了一个专家小组，以创建最具前瞻性的数据设计。制造商的代表，建筑师和咨询工程师指定了结构化电缆系统产品；Ortronics网络设计师与顾问合作，生产机架的AutoCad / BIM / Revit图纸，以填充电信室；经销商的服务团队通过建筑物的部分和壁橱提供特殊的配套 - 为承包商节省宝贵的时间和金钱；制造商的代表还在项目开始之前向工会工作人员提供了现场10G端接培训。

通过安装Ortronics数据通信产品，客户能够节省时间，金钱和空间，并保护和改善网络性能。强大的Mighty Mo 机架和电缆管理架正确支持新的IT基础架构电信房，保护电视电缆弯曲半径和防止昂贵的未来维修。Cablofil电线网状电缆托架提供额外的解除系统的灵活性机架上方的电缆和补充机架内电缆管理。

Wiremold通过设备提供了一种灵活，经济的方式，可以为工作站提供电力，通信和A/V服务，并且可以与任何地台一起使用。Ortronics提供了端到端的布线系统来取代传统的5类系统。新的电缆系统包括超过265,000英尺的LANmark-10G2 6A类电缆，配有Ortronics Clarity 6a配线架，跳线和面板插孔，均享有行业领先的25年质保。与Ortronics电缆管理相结合，6A产品集将能够最好地支持未来的瘦客户端虚拟化环境。此外，还安装了OptiMo光纤光纤跳线和外壳以及Ortronics光纤连接器，以支持新的IP电话系统，远程数据中心，SATV的IPTV流媒体视频传输和数字标牌。公司总部，交易平台和数据中心扩建在六个月内重建，并已升级以处理当前的交易和文档需求。与架构师，网络设计师和工程师协调，确保升级的网络基础架构能够支持客户未来的数据需求。
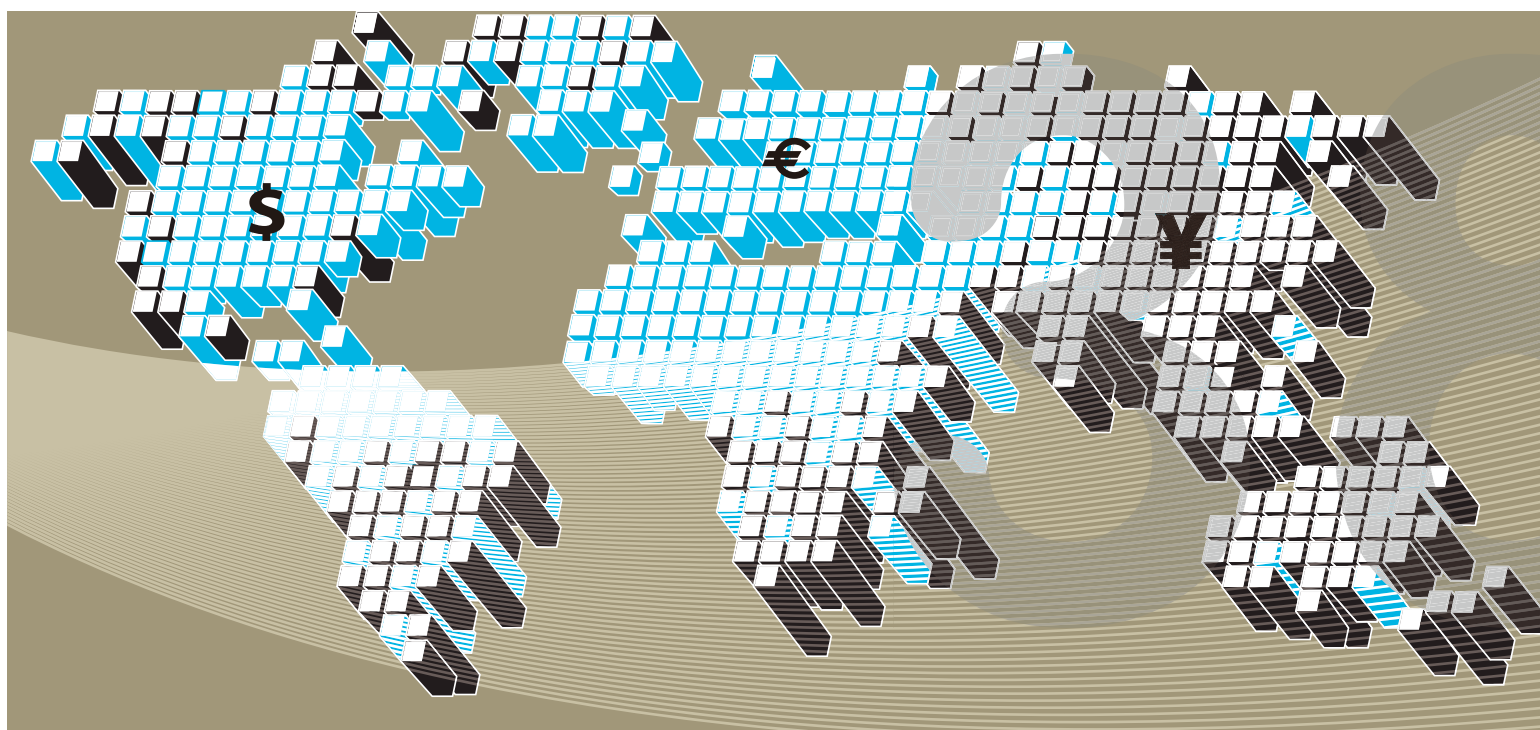
Ortronics

世界顶级教育项目 。。。

The world's top education project. . .

NCSA ORTRONICS

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Yale 耶鲁大学

It is the third oldest institution of higher learning in the USA. 5 US presidents, 61 Nobel laureates, 15 federal Supreme Court justices etc. graduated from Yale. The campus uses Ortronics fiber & Cat 6 copper network. (over 30,000 data points)

是一所坐落于美国纽黑文市的私立研究型大学。是全美第三古老的高等学府。毕业于耶鲁大学的着名人士包括了5位美国总统、15名联邦最高法院大法官、多个国家政治要员及13位在世的亿万富豪、230位罗德学者、61名诺贝尔奖得主、5位菲尔兹奖得主、3位图灵奖得主。校园采用奥创利光纤及六类铜网络。(全部共超过3万点)

West Virginia University 西弗吉尼亚大学

Founded in 1867, it is a public research university located in Morgantown, West Virginia, USA. In addition to the main campus, there is also the Polytechnic Institute in Montgomery, the Potomac College in Kaiser & the School of Medicine & Dentistry Regional Medical Center in Charleston. The campus uses Ortronics fiber & Cat 6 copper network. (over 20,000 data points)

是位于美国西弗吉尼亚州摩根敦的一所公立研究型大学、创立于1867年。除去主校区外，还在蒙哥马利有理工学院、在凯泽有波多马克学院，在查理斯顿的查理斯顿地区医疗中心有医学及牙医学院。校园采用奥创利光纤及六类铜网络。(全部共超过2万点)

University of Delaware 特拉华大学

The largest university in Delaware. Famous alumni include Joe Biden, former US vice president. The campus uses Ortronics Cable & Cat 6 copper networks. (over 20,000 data points)

美国德拉瓦州的最大的大学。着名校友包括Joe Biden，前任美国副总统，校园采用奥创利光纤及六类铜网络。(全部共超过2万点)

George Washington University 乔治·华盛顿大学

Founded in 1821, it was named after the first president of the USA, George Washington. It is a famous private university. The main campus is located in Washington, DC. It is the largest university in Washington, DC. The campus uses Ortronics fiber & Cat 6 copper network. (over 20,000 data points)

于1821年建校，以美国开国第一任总统乔治·华盛顿命名，是一所着名的私立研究型综合大学。主校区位于美国首都华盛顿特区市中心，比邻世界银行、国际货币基金组织、国务院，距白宫只有几个街区。是华盛顿特区内规模最大的大学。校园采用奥创利光纤及六类铜网络。(全部共超过2万点)

Brown University 布朗大学

Located in Providence, Rhode Island, USA, is one of the 8 famous Ivy League schools. The school was formerly founded in 1764 by the British Rhode Island Providence Colony College. Campus uses Ortronics fiber & Cat 6 network. (over 20,000 data points)

位于美国罗德岛州普罗维登斯市，是美国八所着名常春藤盟校之一。布朗大学也是美国第一所可以接受任何宗教背景的学生入学的高校。学校前身为1764年创建的美洲新英格兰英属罗德岛和普罗维登斯殖民地学院。校园采用奥创利光纤及六类铜网络。(全部共超过2万点)

The Catholic University of America 美国天主教大学

It is a private Catholic & Pontifical University. It is located in Washington, DC, and is the only higher education institution founded by the American Catholic Bishops. The campus uses Ortronics fiber & Cat 6 network. (over 10,000 data points)

是一所私立天主教大学、宗座大学，位于美国华盛顿特区，也是唯一一所由美国天主教主教团创立的高等教育机构。校园采用奥创利光纤及六类铜网络。（全部共超过1万点）

Barbers Hill High School

It is a 5A public high school in Mont Belvieu, Texas. It is part of the Barbers Hill Independent School District in the western part of Chambers County. The campus uses Ortronics fiber & Cat 6 copper network. (over 5,000 data points)

是一所位于德克萨斯州Mont Belvieu的5A公立高中。它是位于钱伯斯县西部的Barbers Hill独立学区的一部分。校园采用奥创利光纤及六类铜网络。（全部共超过5千点）

China Civil Aviation University 中国民航大学

It is the highest institution of the civil aviation industry in China, & recognized by ICAO. The campus uses Ortronics fiber & Cat 6 copper network. (over 10,000 data points)

简称中航大，位于天津滨海国际机场西南侧，是中华人民共和国交通运输部中国民用航空局直属的一所全日制普通高等学校，也是中国民航业的最高学府，还是世界范围内为数不多获得国际民航组织认定的的民航类院校之一。校园采用奥创利光纤及六类铜网络。（全部共超过一万点）

Yunnan Normal University 云南师范大学

is located in Kunming City, Yunnan, China. The school was founded in 1946 & was formerly the Teachers College of the National Southwest Associated University. The campus uses Ortronics fiber & Cat 6 network. (over 10,000 data points)

简称师大、云师大，是一所位于云南省昆明市的师范院校。该校于1946年成立，前身为国立西南联合大学的师范学院。校园采用奥创利光纤及六类铜网络。（全部共超过一万点）

Southwest Forestry College 西南林业学院

is high school engaged in forestry science in Yunnan, China, The campus uses Ortronics fiber & Cat 6 network. (over 5,000 data points)

西南林业大学，是云南省的一所以林学学科为主，生物环境学、农、理、工、文、法、管等学科交叉融合、协调发展的高等学校。位于昆明市。校园采用奥创利光纤及六类铜网络。（全部共超过5千点）

Yunnan Academy of Arts 云南藝術學院

is an art institution located in Kunming, China. It has a complete range of arts Programs. The campus uses Ortronics fiber & Cat 6 copper network. (over 5,000 data points)

简称云艺，是一所位于云南省昆明市的艺术高等学府，艺术门类齐全，同时着重培养云南独有少数民族艺术人才。校园采用奥创利光纤及六类铜网络。（全部共超过5千点）

Anzhen University of Technology 安徽工业大学

In Maanshan City, China. The campus uses Ortronics fiber & Cat 6 copper network. (over 5,000 data points)

在中国安徽省马鞍山市，是安徽省"地方特色高水平大学"、国家"中西部高校基础能力建设工程"项目实施高校。校园采用奥创利光纤及六类铜网络。（全部共超过5千点）

Jilin University 吉林大学

Located in Changchun, Jilin, China. It is a national key university built in Northeast China. The campus uses Ortronics fiber & Cat 6 network. (over 10,000 data points)

位于中国吉林省长春市，是中国共产党亲手创建的第一所综合性高等学府，是中华人民共和国教育部直属的全国重点大学，中国东北地区重点建设的一所名牌大学。校园采用奥创利光纤及六类铜网络。（全部共超过1万点）

Beijing 11th School 北京市十一学校

is one of the most famous middle schools in China. The school has a building area of 156,000 m². The campus uses Ortronics fiber & Cat 6 copper networks. (over 5,000 data points)

北京十一学校是中国大陆地区最著名的中学之一，也被称为"北京国庆日学校"。学校建筑面积15.6万平方米。校园采用奥创利光纤及超五和六类铜网络。（全部共超过五千点）

Yuxi Teachers College 玉溪师范学院

Located in Yuxi City, China, is a full-time undergraduate college based on a teacher's major. The campus uses Ortronics Cat 6 & Cat 5E networks. (over 5,000 data points)

位于云南省玉溪市，是一所以师范专业为基础，多学科共同发展的省属全日制综合性普通本科高等院校。校园采用奥创利超五和六类铜网络。（全部共超过五千点）

Tianjin Business School 天津商学院

is an business & multidisciplinary development institution, located in Tianjin, China. Campus's area is 919,400 m²,& uses Ortronics fiber & Cat 6 & 5E networks. (over 10,000 data points)

是一所以商学为主，多学科共同发展的高等学校。学校坐落于天津市北辰区津霸公路东口，占地面积91.94万平方米。校园采用奥创利光纤及超五和六类铜网络。（全部共超过一万点）

Beijing Foreign Language School 北京外语学校

is the most famous language major School in China, with area of 492,000 m². The campus uses Ortronics fiber & Cat 6 & Cat 5E networks. (over 10,000 data points)

简称北外，是中国最著名的语言专业类学府，学校占地面积49.2万平方米。校园采用奥创利光纤及超五和六类铜网络。（全部共超过一万点）

Beijing Bayi Middle School 北京八一中学

is a full-time secondary school in Beijing, ranking 24th for "Chinese high school with most graduate study in USA" in the 2016. Campus uses Ortronics Cat 6 & 5E networks. (over 5,000 data points)

是一所位于北京市的全日制完全中学，在2016年中国内地高中美国留学排行榜上位居第二十四。校园采用奥创利超五和六类铜网络。（全部共超过五千点）

Other educational institutions 其他教育机构

Quinnipiac University – CT . University Massachusetts Medical School . Universidad Oberta Catalunya (Spain) . Ministry of Superior Education (Tunisia) . Universidad Oberta Catalunya 上海田家炳中学 . 西安校校通教育网 . 上海市北初级中学 . 南京大学附属中学 . 福建省南安市教育信息网 . 晋江一中 . 泉州一中 . 福建龙岩一中 . 福建邵武一中 . 广东番禺中学 . 梅州曾宪梓中学 . 惠州华侨中学 . 东方明珠学校 . 深圳高级实验中学 . 深圳青年学院 . 深圳教育学院 . 北京西城区城域网 . 上海有机化学研究院—图书楼 .

Case Study
实例探究

Responsive to the Customer: Custom Manufacturing
对客户的回应：定制制造

Customer 客户

The Hawaii Department of Education is responsible for Hawaii's K-12 public school education. Hawaii has a single statewide school district that serves approximately 180,000 students and 13,000 teachers. There are 297 schools spread across the 7 islands of Oahu, Hawaii, Kauai, Maui, Niihau, Molokai & Lanai. Additionally, there are thirty high school Learning Centers that offer special programs in business, computer technology, international studies, marine science, agriculture, mathematics and more. Several schools offer Academy Programs that provide specific career training.

The Hawaii Department of Education has 3 statewide goals as part of their 2011 – 2018 strategic plan, the foundation of which is "Systems of Support". This requires that DOE facilities & technology systems meet 21st century education needs & standards in a fiscally responsible, innovative way. This includes providing students & employees with computer systems & broadband, as well as effective technology support to the classrooms, schools & support offices.

夏威夷教育部负责夏威夷的K-12公立学校教育。夏威夷有一个全州学区，为大约180,000名学生和13,000名教师提供服务。瓦胡岛，夏威夷，考艾岛，毛伊岛，新豪岛，莫洛凯岛和拉奈岛的7个岛屿共有297所学校。此外，还有30所高中学习中心，提供商业，计算机技术，国际研究，海洋科学，农业，数学等专业课程。一些学校提供学院课程，提供特定的职业培训。

作为2011-2018战略计划的一部分，夏威夷教育部有3个全州目标，其基础是"支持系统"。这要求能源部的设施和技术系统以一种负责任的，创新的方式满足21世纪的教育需求和标准。这包括为学生和员工提供计算机系统和宽带，以及为教室，学校和支持提供有效的技术支持。

Challenge 挑战

To ensure that students are not left behind, new and better technology based tools were needed to provide teachers & schools with feedback about student progress. Part of the strategic plan's "System of Support" is to implement projects that strengthen the tools & capacity for using data. One of the first projects executed was a VOIP (Voice Over Internet Protocol) upgrade to all public schools in Hawaii. The VOIP upgrade would enable classrooms to have voice communications & multimedia sessions via the network connection, opening up a broad range of additional teaching & research opportunities.
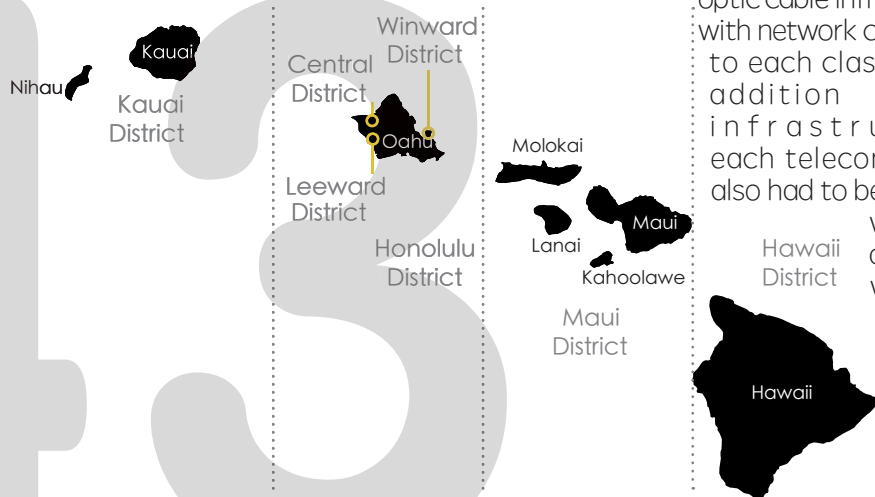
The upgrade required a new copper & fiber optic cable infrastructure, with network connections to each classroom. In addition to the infrastructure, each telecomm room also had to be upgraded with an additional wall mount cabinet.

Small modifications, big impact.
小改造，大效益

- Accept casters or levelers to allow cabinets to be placed on the floor
  接受脚轮或矫直器，以便将机柜安放在地板上
- Minimize holes to minimize the entryway for dust & pencils
  最大限度地减少开孔，以尽量减少灰尘和铅笔的掉入
- Angle top of cabinet to prevent people placing objects on top
  尖角柜顶，可防止误将物体放在上面
- Modify the type and numbers of openings for cable ingress
  修改电缆入口的类型和数量
- Create a swing deep enough to accommodate the DOE equipment
  创建一个足够深的摆动以容纳DOE设备
- Install a quieter fan to accommodate teachers' requests
  安装更安静的风扇以满足教师教学时需要安静的要求
- Include a package of screws and grommets with each cabinet
  每个机柜都包括一包螺钉和垫圈
- Pre-install grounding bars
  预安装接地棒
- Make the rear deeper to provide enough room for cables
  使后部更深，为电缆提供足够的空间
- Modify the depth on the front & rear
  修改前后深度

为确保学生不落后，需要新的和更好的基于技术的工具，为教师和学校提供有关学生进步的反馈。战略计划的"支持系统"的一部分是实施加强数据使用工具和能力的项目。执行的第一个项目之一是VOIP（互联网语音协议）升级到夏威夷的所有公立学校。VOIP升级将使教室能够通过网络连接进行语音通信和多媒体会话，从而开辟了广泛的额外教学和研究机会。升级需要新的铜缆和光缆基础设施，每个教室都有网络连接。除了基础设施外，每个电信机房还必须升级一个额外的壁挂式机柜。

Winward District

Central District

Kauai

Nihau

Kauai District

Oahu

Leeward District

Honolulu District

Molokai

Lanai

Maui

Kahoolawe

Hawaii District

Maui District

Hawaii

Solution 方案

There are hundreds of school sites located throughout the islands that required infrastructure upgrades, many of them with unique Intermediate Distribution Frames (IDFs). The manufacturer's representative, World Wide Technologies as the integrator, & the Hawaii Department of Education had a series of conversations to determine what would best suit the facilities, to accommodate the challenges posed by the IDFs. Consequently, it was decided that the existing cabinet models would not work & some customization would be required.

The Ortronics® Mighty Mo® wall mount cabinets provided the best foundation from which to address the customer's specific needs. Ortronics not only understood the need for customization, but also that the modifications could not result in a long deployment delay. Working with the integrator & the DOE Board's requirements & inputs, Ortronics was able to provide a custom solution faster than the standard product sets that were offered by other cabinet manufacturers.

The cabinets were customized to accommodate the IDFs, tackling challenges such as closets that did not allow space for a swing out cabinet or the need to be placed on the ground due to minimal wall space. By crafting the cabinets to be more specific to the installation, some of the installation labor was able

to be manufactured out. The cabinets were sized for the setting & application, including nuanced modifications that made an immense impact in the school environment. e.g , quieter fans were installed in the cabinet to accommodate teachers' requests, & the top of the cabinet was angled to discourage placing objects on top of it.

In accordance with the strategic plan through 2018, this is an ongoing project, deploying and installing the VOIP infrastructure and 2,000 supporting cabinets over the course of several years.

整个岛屿上有数百个学校站点需要进行基础设施升级，其中许多都有独特的中间分配线架(IDF)。制造商的代表，World Wide Technologies作为集成商，以及夏威夷教育部进行了一系列对话，以确定哪些最适合设施，以应对IDF提出的挑战。因此，决定现有的机柜机架不适合使用，需要一些定制改造。

Ortronics Mighty Mo 壁挂式机柜为满足客户的特定需求提供了最佳基础。Ortronics不仅了解定制的必要性，而且还认为修改不会导致长时间的部署延迟。与集成商和DOE委员会的要求和输入一起工作，Ortronics能够提供比其他机柜制造商提供的标准产品更

快的定制解决方案。机柜经过定制，可以容纳IDF，解决如空间不足够允许机柜摆动或因为墙面空间太少，需要把机柜放在地上。通过将具体安装方式空间作为机柜制作尺寸，可以制造出方便安装工作的产品。这些机柜的尺寸适合设置和应用，包括对学校环境产生巨大影响的细微修改。例如，在柜子中安装了更安静的风扇以满足教师的要求，并且机柜的顶部倾斜以防止将物体放置在其上。

根据2018年的战略计划，这是一个持续的项目，在几年的时间内部署和安装VOIP基础设施和2,000 适个支持柜。
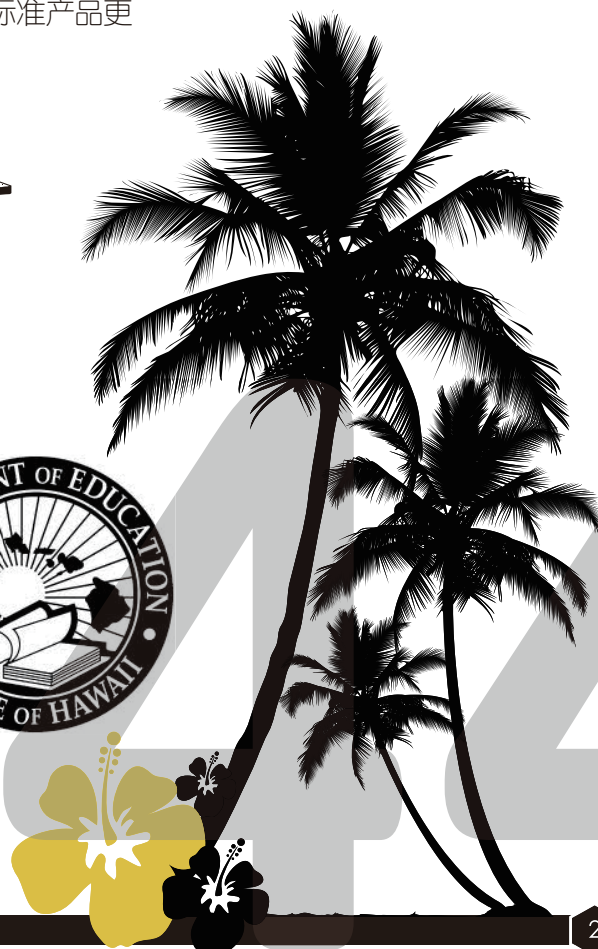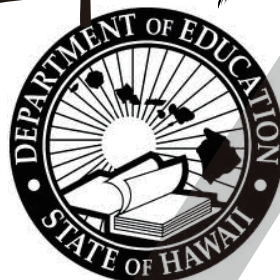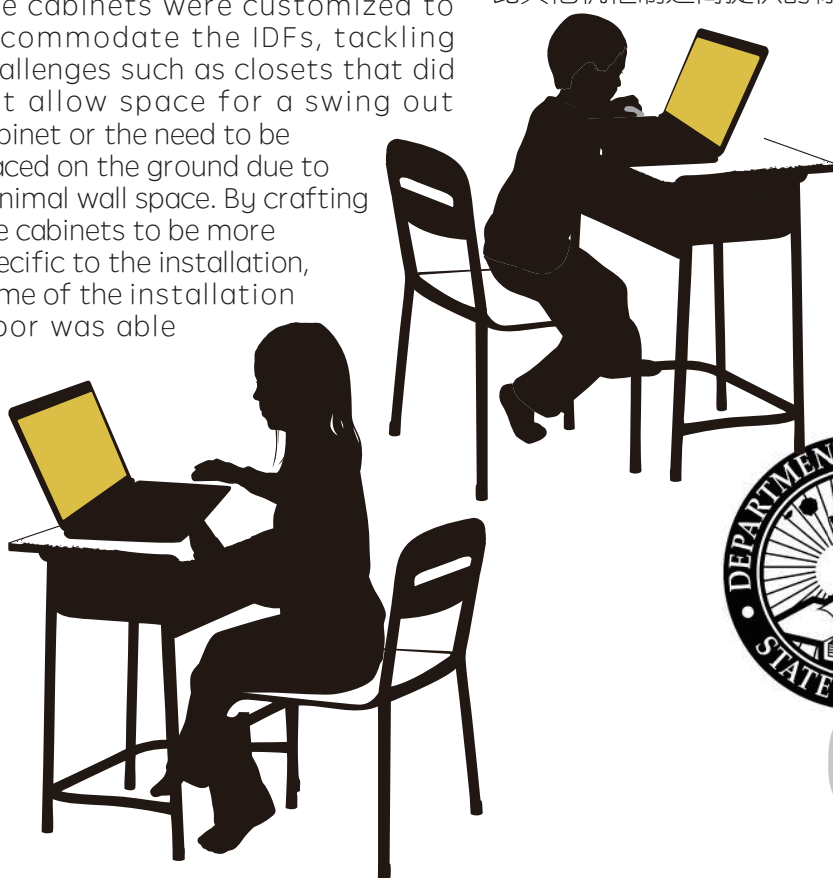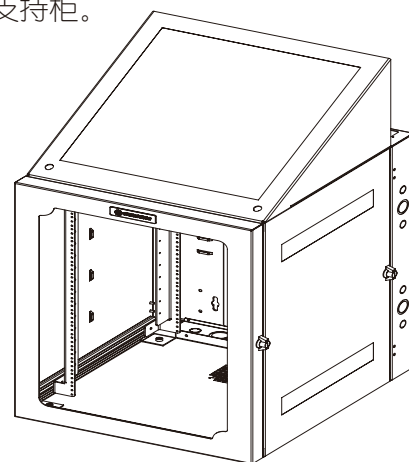
世界顶级酒店项目 。。。

The world's top hotel projects. . .

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The Westin 威斯汀酒店

A number of Westin hotels around the world use the Ortronics fiber & copper network systems, including The Westin Dallas Fort Worth Airport, The Westin Kierland Villas, The Westin San Diego and more. (Over 100,000 data points worldwide)

全球多家威斯汀酒店使用奥创利光纤及铜网络系统,包括The Westin Dallas Fort Worth Airport,The Westin Kierland Villas, The Westin San Diego等。（全球共超过10万点）

The Westin Resort 威斯汀度假村

Many Westin Resorts use Ortronics Fiber & Copper Network System, including Westin Kaanapali Ocean Resort. (over 100,000 points worldwide)

全球多家威斯汀度假村使用奥创利光纤及铜网络系统,包括 Westin Kaanapali Ocean Resort。（全球共超过10万点）

The Rite Carlton Residence Waikiki 丽思卡尔顿

Ritz-Carlton, Waikiki Beach, uses Ortronics Fiber & Copper Network System. (over 20,000 points worldwide)

顶级酒店威基基海滩丽思卡尔顿使用奥创利光纤及铜网络系统。（全球共超过2万点）

Crown Plaza 皇冠假日酒店

Many Crowne Plaza hotels around the world use Ortronics fiber & copper network system, including Crowne Plaza Hotel, Crowne Plaza Annapolis, Crowne Plaza Greenbelt – Washington DC, etc. (over 100,000 data points worldwide)

全球多家皇冠假日酒店使用奥创利光纤及铜网络系统,包括太原皇冠假日酒店丶Crowne Plaza Annapolis丶Crowne Plaza Greenbelt – Washington DC等。（全球共超过10万点）

Moxy 酒店

IKEA & Marriott teamed up to create the Moxy Hotel, fashion & technology innovation design, use Ortronics fiber & copper network system in many hotels around the world. (over 30,000 data points worldwide)

宜家与万豪联手为打造的Moxy酒店,时尚和科技创新的设计,全球多家酒店使用奥创利光纤及铜网络系统。（全球共超过3万点）

Marriott 万豪国际

Marriott, Samsung, & Ortronics have jointly developed the IOT Hotel System. Many Marriott hotels around the world adopted Ortronics' optical & copper network, including Shenzhen Marriott, Shanghai Pudong Marriott, and Milwaukee. Waltham, Rio, etc. (over 300,000 data points worldwide)

万豪国际是美国Legrand Ortronics 战略合作伙伴，与三一起，三家世界级企业共同开发IOT酒店系统.全球多家万豪酒店也采用了奥创利光纤及铜网络系统.包括深圳万豪、上海浦东万豪、Milwaukee、Waltham、Rio等，超过100家。
（全部共超过30万点）

Fairfield Inn & Suites 万豪费尔菲尔德

Many of the world's Marriott Fairfield use the Ortronics fiber & copper network systems, including DuPont, WA, Decatur, TX, etc. (over 70,000 data points worldwide)

全球多家万豪费尔菲尔德使用奥创利光纤及铜网络系统，包括DuPont, WA、Decatur, TX等，超过30家。（全球共超过7万点）

Residence Inn Marriott 万豪原住客栈

Many Marriott Residences worldwide use the Ortronics Fiber & Copper Network System, including Broomfield, etc. (over 20,000 data points worldwide)

全球多家万豪原住客栈使用奥创利光纤及铜网络系统，包括Broomfield 等，超过10家。（全球共超过2万点）

Courtyard 万怡酒店

Many of the world's Courtyard hotels use Ortronics fiber & copper network systems, including Greenwich, Shippensburg University, 34th Street New York, Pflugerville, Boston, etc. (over 70,000 data points worldwide)

全球多家万怡酒店使用奥创利光纤及铜网络系统，包括Greenwich、Shippensburg University, 34th Street New York、Pflugerville、Boston等，超过30家。（全球共超过7万点）

AC Hotel Marriott 万豪AC 酒店

Established by Marriott, the AC Hotel is dominated by young, business & leisure travelers. Most of hotels using Ortronics network system. (over 40,000 data points worldwide)

由万豪建立的AC 酒店以年轻人、商务和休闲旅客为主要客源，在奥地利，巴西，丹麦，法国，德国，意大利，葡萄牙，波兰，西班牙，土耳其，英国和北美家万酒店使用奥创利光纤及铜网络系统，超过20家。（全球共超过4万点）

Four Point by Sheraton 福朋喜來登

Many Four Points by Sheraton worldwide use Ortronics Fiber & Copper Network System, including Nashville Airport, Manhattan Midtown West, Philadelphia Airport, etc.
(over 50,000 data points worldwide)

全球多家福朋喜来登使用奥创利光纤及铜网络系统，包括Nashville Airport、Manhattan Midtown West、Philadelphia Airport等，超过20家。（全球共超过5万点）

Hotel Aloft Miami Doral

Hotel Aloft Miami is a famous fashion hotel that uses Ortronics fiber & copper network system. (over 5,000 data points)

是一家有名的时尚酒店，使用奥创利光纤及铜网络系统。（共超过5千点）

Element by Westin

A new boutique hotel under the Westin Hotel. Using Ortronics Fiber & copper network, including Element Palmdale, Manhattan Midtown West, Element New York Times Square West, etc.
(over 10,000 data points worldwide)

是威斯汀酒店其下的新型精品酒店，全球多家使用奥创利光纤及铜网络系统，包括Element Palmdale、Manhattan Midtown West、Element New York Times Square West 等，超过5家。（全球共超过1万点）

Hotel Brands using Ortronics Solutions 使用奥创利布线系统的酒店客户

Marriott

Hilton HOTELS & RESORTS

WESTIN HOTELS & RESORTS

SOFITEL LUXURY HOTELS

INTERCONTINENTAL HOTELS & RESORTS

RAMADA WORLDWIDE BY WYNDHAM

WYNDHAM HOTELS & RESORTS

Holiday Inn

世界顶级交通运输项目 。 。 。

The world's top transportation project. . .

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JFK Airport 约翰·肯尼迪国际机场

It is the main international airport of New York City, 19 KM from Lower Manhattan. It is also one of the largest airports in the world. Adopting Ortronics fiber & Cat 6 copper network. (over 30,000 data points)

是纽约市的主要国际机场，距离曼哈顿下城19公里。也是全世界最大机场之一。采用奥创利光纤及六类铜网络。（全部共超过3万点）

Beijing Capital International Airport 北京首都国际机场

It is the largest & busiest international airport in China. The T3 uses Ortronics network system. (over 20,000 data points)

是中国地理位置最重要、规模最大、运输最繁忙的大型国际航空港。T3 航站楼采用奥创利光纤及六类铜网络。（全部共超过2万点）

Gulf Air 海湾航空

It is a national airline belonging to the Middle East state of Bahrain. It is headquartered in Manama, the capital of Bahrain. The main hub airport is Bahrain International Airport. The headquarters & Bahrain International Airport use Ortronics fiber & Cat 6 copper network. (over 30,000 data points)

是属于中东国家巴林的国家航空公司，总部设于巴林首都麦纳玛，主要枢纽机场是巴林国际机场。总部大楼和巴林国际机场采用奥创利光纤及六类铜网络。（全部共超过3万点）

United States Postal Service 美国邮政总局

It is an independent institution of the US federal government & is one of the few institutions mentioned in the US Constitution. The headquarters building uses Ortronics fiber & Cat 6 copper network. (over 10,000 data points)

是美国联邦政府的一个独立机构，是少数在美国宪法中提及设立的机构。总部大楼采用奥创利光纤及六类铜网络。（全部共超过1万点）

Guangzhou Metro 广州地铁

The Guangzhou Metro has opened 13 lines with a total length of 391.7 KM & a total of 201 stations. It is the third largest urban rail transit system in China after Beijing and Shanghai. Adopting Ortronics fiber & Cat 6 copper network. (over 20,000 data points)

广州地铁已开通13条线路，总长为391.7公里，共201座车站，是大中华区仅次于京沪的第三大城市轨道交通系统。采用奥创利光纤及六类铜网络。（全部共超过2万点）

Tianjin Vehicle Management Office 天津车管所

Adopting Ortronics Cat 6 copper network.

采用奥创利六类铜网络。

Case Study
实例探究

Global Inventory & Supply Chain Management
全球库存和供应链管理

Customer 客户

The largest international e-commerce retailer & platform provider needed an overseas supplier for networking infrastructure products. The company brought in the Ortronics Enterprise Solutions Program (ESP) global management team to work with the company's forecasts in order to have

> Of utmost benefit to the customer is that Ortronics is delivering projects **on time & under budget**. Ortronics' ability to support unanticipated demand from the customer has reduced product fulfillment lead time to days instead of weeks, dramatically decreasing the transportation costs while meeting the JIT needs.
>
> **对客户最大的好处是Ortronics正按时在预算内交付项目.Ortronics 支持客户意外需求的能力已将产品完成交付周期缩短至数天而非数周，从而大大降低了运输成本，同时满足了即时需求。**

The largest international e-commerce local supplies on hand for construction. The ESP global management team is a group of dedicated business consultants responsible for organizing all resources needed for the customer. The consultant is the single point of contact for the customer, streamlining communication & procurement between the companies.

最大的国际电子商务零售商平台需要一家国际供应商提供网络基础设施产品。该公司引进了Ortronics企业解决方案计划（ESP），与全球管理团队与奥创利合作预测未来的安装需求，以便为施工方

提供当地供应。 ESP全球管理团队是一群专业的业务顾问，负责组织客户所需的所有资源。顾问是客户的单一联系点，简化了公司之间的沟通和采购。

Challenge 挑战

While the client is U.S. based, in order to successfully serve global customers, they maintain primary international locations in China, Costa Rica, France, Germany, India, Ireland, Japan, Luxembourg & the United Kingdom. To sustain their status as the premier global retailer, the company is in the midst of facilities construction in approximately 40 locations around the world. In order to advance their business & keep up with demand, they are constructing multi-use buildings, warehouses & sales offices. Each of these projects, be it new build or expansion, requires modern telecommunications infrastructure & closets. Having just-in-time (JIT) telecommunications & networking infrastructure inventory on hand & minimizing inventory costs were the primary product procurement challenges.

虽然是美国的公司，但为了成功服务全球客户，他们在中国，哥斯达黎加，法国，德国，印度，日本，卢森堡和英国设有主要的国际办事处。为了维持其作为全球首屈一指的零售商的地位，该公司正在全球约40个地点进行设施建设。为了促进业务发展并满足需求，他们正在建设多用途中心，仓库和销售办事处。这些项目中的每一个都是要求 "即时准备好"（Just In Time, JIT），包括电信和网络基础设施，所以最大限度地降低库存成本是主要的产品采购挑战。

Solution 方案

While the client is U.S. based, in order The ESP consultant assisted the company to determine that global inventory & supply chain management would make the most impact & would reduce the company's product costs. The greatest variable cost associated with product acquisition for each of these 40 global locations was transportation costs. The client's JIT inventory management dictated that the networking infrastructure equipment be on hand as needed for each stage of the construction. Shipping product from the U.S. to locations across the globe, as needed, would require air freight – significantly increasing the transportation costs of the product.

The client & the ESP consultant concluded the most effective way to implement the JIT management for unpredictable needs would be for Ortronics to provide stock based on forecast & projections, warehoused in Europe and Asia Pacific. Having

the inventory local would meet the JIT criteria. Maintaining that inventory via forecast would reduce transportation costs dramatically by allowing for boat shipments instead of air. This coordination required a partnership & close cooperation, as true JIT requires a constant adjusting of the ordering & delivering schedules.

Of utmost benefit to the customer is that Ortronics is delivering projects on time & under budget. Ortronics' ability to support unanticipated demand from the customer has reduced product
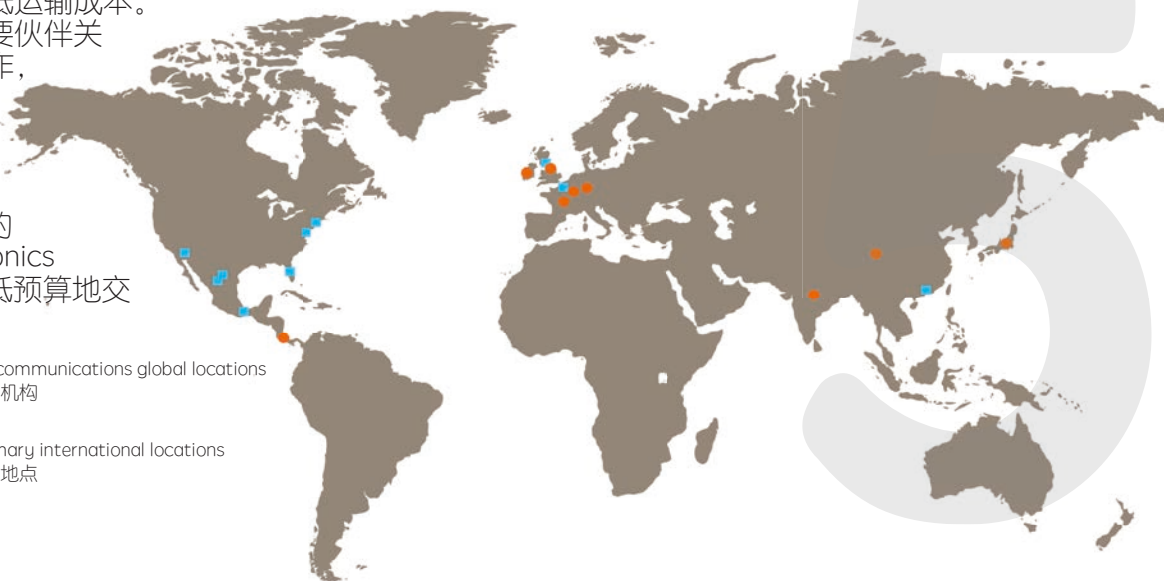
fulfillment lead time to days instead of weeks, dramatically decreasing the transportation costs while meeting the JIT needs. The ESP consultant is the contact for any and all client orders or questions. In turn he orchestrates order anticipation & advance fulfillment needs. A dedicated Ortronics representative then coordinates the product demand forecasts & balances the inventory management in European & Asia Pacific Distribution primary warehouses. By working with the customer's finance department to anticipate need based on forecasts alone, Ortronics is able to ship products to local warehouses all over Europe, Asia, Africa & India for upcoming installations. While this solutionalready provides capabilities above & beyond standard practices in the industry, the client & Ortronics continue to look for innovative ways to solve problems together, focusing on responding rapidly to global challenges.

付项目所需的产品。Ortronics支持客户不在预料之中的需求，有能力将产品完成交付周期缩短至数天而非数周，从而大大降低了运输成本，同时满足了JIT需求。 ESP顾问是客户任何问题和所有订单的联系人。他协调订单时间表并提升各地产品使用预测和船运周期，满足客户安装需求。专属的Ortronics代表随后协调产品需求预测并平衡欧洲和亚太地区分销主要仓库

的库存管理。通过与客户的财务部门合作，仅根据预测来预测需求，Ortronics能够将产品运往欧洲、亚洲、非洲和印度的当地仓库，以便进行即将到来的安装。虽然这个解决方案已经提供了超越行业标准实践的能力，但客户和Ortronics继续寻找创新的方法来共同解决问题，专注于快速应对全球挑战。

ESP顾问协助公司确定全球库存和供应链管理将产生最大好处，并将降低公司的产品运输和库存成本。客户承担的产品成本最大是运输往这40个全球地点的费用。客户的JIT库存管理决定了何时需要那些网络基础设施设备，随时可用于每个施工地点和阶段。根据需要，将产品从美国即时运送到全球各地，需要空运–这显着增加了产品的运输成本。

客户和ESP顾问总结出实施JIT管理的最有效方式，以满足不可预测的需求。Ortronics根据施工预测来提供库存，预先存储在欧洲和亚太地区。拥有本地库存将符合JIT标准。通过预测维持库存，可以通过允许船只装运而不是空运来大大降低运输成本。这种协调需要伙伴关系和密切合作，因为真正的JIT需要不断调整订购和交付时间表。对客户最大的好处是 Ortronics 正在按时，低预算地交

■ Ortronics data communications global locations
奥创利全球分支机构

● Customers' primary international locations
客户的主要国际地点

世界顶级品牌客户 。。。

Our World-Class customers. . .

NGA ORTRONICS

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Apple	BANCA D'ITALIA	BEST BUY	BOEING
C|A	CCI FRANCE	Chevron	CISCO
Coca-Cola	Columbia	DECATHLON	DELL
Deloitte.	Dropbox	ebay	EXXON Mobil
FIAT	Ford	GM	hp
IFF International Flavors & Fragrances	IKEA	Insee Mesurer pour comprendre	IVECO
KFC	KPMG	LAVAZZA	NOKIA
McDonald's	MOTOROLA	蒙牛 MENGNIU	PHILIPS
pwc	Shell	SIEMENS	SIEMENS VDO Automotive
TARGET	UNIVERSAL PARKS & RESORTS	wework	Whirlpool CORPORATION

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