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前言

信息化的潮流席卷了全世界。中国作为一个世界瞩目、蓬勃发展的大国，不可避免地要走信息化的道路。计算机与网络的发展带给人们一个又一个商机，如何利用电子化的手段来从事商务活动成为人们关注的热点问题。电子商务是一个新兴学科，这个学科所包含的知识十分丰富并且是不断发展的。作为一个电子商务专业的学生，不仅要了解计算机、网络等技术方面的知识，还要掌握市场、金融、管理、商贸、法律、税务等商务方面的知识。

网络使世界变小了，中国与世界的距离也在缩小，国际交流日益频繁。欧美等西方国家在电子商务领域是先锋，它们先进的理论与实践都是值得我们学习借鉴的。只有在虚心学习的基础上有所创新和发展，才能逐步提高学科水平。中国有句古话：“授人以鱼不如授人以渔。”著名的教育家蒋南翔也曾经讲过：“交给学生面包不如交给学生猎枪。”而电子商务专业英语对于电子商务的专业人员来讲无疑是一把能够披荆斩棘的利器。本书正是基于这个教育理念应运而生的。

本书选取了一些英文原文文章，在内容的编排上由浅入深，基本涵盖了电子商务的几个主要方面。这些文章难度适中，语言流畅，既具有很强的专业性又具有很好的可读性，既可以作为电子商务专业的专业英语教材，又可以作为电子商务专业人士的一本英语学习读物。本书选取的每一篇文章都被精心地翻译为中文，附在课文之后，这样做的目的也是为了便于读者自学。

作者相信通过这本教材的学习，不仅使您对电子商务领域的专业知识有更加广泛深入的了解，更能够提高您的专业英语水平。听说读写译，阅读是基础。通过精读课文，可以扩大专业词汇的词汇量，为阅读、翻译和写作电子商务专业的英语文章扫除障碍。作者希望各位朋友能够成为国际化的专业人才，更加希望能够通过我们的努力为您架起通往成功的阶梯。

本书由王冰老师编撰，胡桃老师给予了许多精心的指导和具体的帮助，本书的课后练习中有一部分是由王岩老师撰写的。在这里，作者还要感谢电子工业出版社的傅豫波副总编和赵建宏编辑的热心帮助。由于经验不足，一定还有许多不足之处，欢迎各位专业人士和读者朋友坦率指出。

作者

2003年7月

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U n i t

1

The Internet

第 1 单元 因特网

Knowing the Internet

■ What Is the Internet Anyway

The Internet, is a proper noun. The Internet is the name of the global communications network consisting of thousands of networks typically interconnected by fiber optic cabling. This network has people, computers and information. We are talking about networks like American OnLine (AOL), Microsoft Network (MSN), etc. When you connect to one of these Internet Service Providers (ISPs), you become a part of their network, and hence a part of the Internet. Because of the size of the Internet, no single person comprehends everything down to the nuts and bolts. The information presented here is intended to provide you with a foundation of the concept of the Internet because many people still don't understand what it is.

The Internet was not originally so called. As a matter of fact, the Internet we know today grew out of a project by the United States Department of Defense Advanced Research Projects Agency (US DoD ARPA). The DoD wanted to create a network that could facilitate communication between the military and government. ARPA started research on the subject of computer networks by providing grants to computer science departments at some US universities and private corporations. This network project was called the ARPAnet or the ARPA network. A network is the connection of two or more computers for the purpose of communication.

The ARPAnet had two parent networks whose joining began the ongoing evolution.

- Military (Tactical communication in the event of telephone downtime during wartime).
- Academics (Shared information between researchers).

In the ARPAnet, a machine used for running user applications was referred to as a host. Hosts were connected by the subnet. A subnet carries messages from host to host, hence the subnet is



the communication part of the network. We won't get too deep into subnets here as it is extremely complicated stuff. On the ARPAnet, the subnets consist of the following:

- Transmission Lines ? or circuits, channels, or trunks.
- Interface Message Processors (IMPs) ? which are the switching elements (e.g., packet switch node).

Enough of the mumbo-jumbo. Let's get back to reality. Even though the goal of the ARPAnet project was to develop one large network to connect sub-network hosts over great distances, experiences showed that a single network could not service everyone who needed to be serviced. What needed was a network of interconnected networks. This led to the idea of "internetworks" or "internet". Therefore, an internet is a network of interconnected networks. Please read that again to digest it. The Internet is the global internet that grew out of the ARPAnet.

The Internet and its concepts have been simplified by other technologies over the years. But the big push or interest didn't come until the advent of the World Wide Web (WWW) in the mid 1990's. This was due to the level of abstraction that was added by the World Wide Web to the "geek" research-oriented interconnected network we have come to know as the Internet.

■ The Internet, an internet, an Intranet and an Extranet

In this article we will also discuss the differences between the Internet and an internet, and introduce the concepts of an Intranet and an Extranet.

➤ An internet and the Internet

You may have seen the term "internet" (lowercase "i") and "Internet" (uppercase "I") used interchangeably. While, an internet differs from the Internet. An internet is the connection of various types of networks into a single large system. This large network system, because of its interconnection, is referred to as an inter-network which was shortened like most other words to "internet." The Internet is the actual global internet. In other words, an internet is an abstract concept while the Internet is the real thing.

Traditionally, people used just a dumb terminal or a personal computer with a terminal emulator software to access the Internet. For instance, in 1990 when there was no such thing as a graphical browser, I connected to the Internet via my school account. Connecting to the Internet meant connecting to a network that was a part of the Internet.

Now, people connect to the Internet via a graphical browser, graphical file transfer protocol (FTP) programs, graphical Telnet sessions, graphical this, graphical that. Everything is



represented by graphics or pictures and as the saying goes, “a picture is worth a thousand words.” Nowhere is this saying more true than on the Internet. Before there was a graphical user interface (GUI) to the Internet, not many people were interested. The great majority of people were using the Internet for research-oriented reasons (collaboration, etc.). So, typically you found military/government personnel, university professors and students, and other researchers on the Internet on an average day. Today, with this GUI abstraction to the Internet, everyone and their brothers can easily connect to the Internet. The only thing that remains a little distant for some people is all the jargon used on the Internet. Well, the more we use the Internet, the more jargons we pick up.

➤ An Intranet

An intranet is a network of networks that is contained within a company or enterprise. It may consist of many interlinked local-area networks (LANs) and also use leased lines in the wide-area network (WAN). Typically, an intranet includes connections through one or more gateway computers to the outside Internet. The main purpose of an intranet is to share company information and computing resources among employees. An intranet can also be used to facilitate group collaboration and for teleconferences.

An intranet uses Transport Control Protocol/Internet Protocol (TCP/IP), Hyper-Text Transport Protocol (HTTP), and other Internet protocols and, in general, looks like a private version of the global Internet. Companies can send private messages through the public network, using the public network with special encryption/decryption and other security safeguards to connect one part of their intranet to another.

Typically, larger enterprises allow users within their intranet to access the public Internet through firewall servers that have the ability to screen messages in both directions so that company security is maintained. When part of an intranet is made accessible to customers, partners, suppliers or others outside the company, that part is called an extranet.

➤ An Extranet

An extranet is a private network that uses the Internet protocols and the public telecommunication system to securely share part of a business’s information or operations with suppliers, vendors, partners, customers or other businesses. An extranet can be viewed as part of a company’s intranet that is extended to users outside the company. It has also been described as a “state of mind” in which the Internet is perceived as a way to do business with other companies as well as to sell products to customers. The same benefits that HTML, HTTP, SMTP and other

Internet technologies have brought to the Internet and to corporate intranets now seem designed to accelerate business between businesses. In other words, an extranet is a private network that facilitates interaction (particularly buying and selling) between businesses. Can one say “E-Commerce” ?

An extranet requires security and privacy. These require firewall server management, the issuance and use of digital certificates, secure socket layers (SSLs) or similar means of user authentication, encryption of messages and the use of virtual private networks (VPNs) that tunnel through the public network. Companies can use an extranet to:

- Exchange large volumes of data using Electronic Data Interchange (EDI).
- Share product catalogs exclusively with wholesalers or those “in the trade” .
- Collaborate with other companies on joint development efforts .
- Jointly develop and use training programs with other companies .
- Provide or access services provided by one company to a group of other companies, such as an online banking application managed by one company on behalf of affiliated banks .
- Share news of common interest exclusively with partner companies .

第 1 课 认识因特网

■ 到底什么是因特网

因特网是一个专有名词。因特网是全球通信网络的总称，它包含着成千上万通常由光缆连接在一起的网络。在这个网络中有人、计算机和信息。我们常常谈论像美国在线（AOL）和微软网（MSN）等网站。如果你连接到一个因特网服务提供商（ISPS），你就会成为它们网络的一部分，因而也就成为了因特网的一部分。由于因特网的规模庞大，所以没有一个人能够完全彻底地了解它。这里的信息旨在为你提供因特网的基本概念，这是因为许多人仍然不懂因特网是什么。

因特网最初并不叫因特网。实际上，我们今天所了解的因特网源自美国国防部高级研究计划署（US DoD ARPA）的一个项目。美国国防部想要建立一个网络，希望这个网络能够促进军



队和政府之间的通信。美国国防部高级研究计划署开始研究这个计算机网络的课题，并为此向一些美国的大学和私营公司的计算机科研部门提供资助。这个网络研究项目被称做 ARPA 网络。网络就是指两台或者更多的计算机为了通信的目的而连接在一起。

ARPA 网有两个母网，这两个母网的连接成为了网络不断进步的开端。

- 军用网（在战时电话网瘫痪的时候进行战术通信的网络）。
- 科研网（在研究人员之间共享信息的网络）。

在 ARPA 网中，运行用户应用程序的机器被称为主机。主机通过子网连接。子网从一台主机向另一台主机传递信息，因此子网是网络中的通信部分。由于子网是极其复杂的，因此我们在这不去过深地对子网进行探讨。在 ARPA 网中，子网是由下列部分组成的：

- 传输链路，或称电路、信道、中继线。
- 接口消息处理器（IMPs），也就是交换器件（如包交换节点）。

说了这么多令人费解的话，我们还是回到现实中来吧。尽管 ARPA 网计划的目标是要开发一张巨大的网络来连接相距遥远的子网主机，但经验表明单独的一个网络无法为每个需要服务的人提供服务。我们需要的是一个把各个网互相连接在一起的网络，这就引出了网际网的概念。所以，网际网是将网络互相连接在一起的网络。请再读一遍来充分理解这句话的含义，因特网是源于 ARPA 网的全球范围的网际网。

在经过数年以后，因特网和其概念曾经被许多其他的技术简化了，但是，直到在 20 世纪 90 年代中期出现了万维网以后，才有了大的进步并引起了人们极大的兴趣。我们最初所说的面向研究的相互连接的网络非常粗陋，万维网对粗陋的网络进行了精炼和优化，因此，因特网才有了极大的进步。

■ 因特网、网际网、内联网和外联网

在这篇文章中，我们还要讨论因特网与网际网的不同，并介绍内联网和外联网的概念。

➤ 网际网和因特网

你可能已经看到过“网际网”这个术语和“因特网”被人们互换地使用。然而，网际网和因特网是不同的。网际网是指将不同类型的网络连接到一个巨大的系统中。由于它的连接作用，这个巨大的网络系统被称为网际网，和许多其他单词一样被简写为“internet”。而因特网是指实际的全球范围的网际网。换句话说，网际网是一个抽象的概念，而因特网是真实的事物。

早些时候，人们只使用带有终端仿真程序软件的哑终端或个人电脑来访问因特网。例如，在 1990 年在还没有图形浏览器这样的东西的时候，我通过我学校的账号连接到因特网上。连接到因特网意味着连接到一个网络中，而这个网络就是因特网的一部分。

现在，人们通过图形浏览器连接到因特网上，图形文件传输协议（FTP）、图形远程登录会

话、图形这、图形那，所有的东西都用图形或图像来表示。正如谚语所说：“一张图片抵得上一千句话。”在因特网上这句话再正确不过了。以前也曾有过因特网的图形用户界面（GUI），感兴趣的人并不多。那时，绝大多数的人使用因特网是由于研究方面的原因（合作等）。所以，通常你在因特网上遇到的是军队人士或政府的职员、大学的教授或学生以及其他的研究人员。今天，使用因特网的图形用户界面，每个人都能方便地连接到因特网。对于有些人来说，仍有一点生疏的就是因特网上所使用的术语。然而，我们使用因特网越多，我们认识的术语也就越多。

➤ 内联网

内联网是一个公司或企业内部所包含的多个网络之中的一个网络。它可能包括互相连接的局域网（LANs），也使用广域网（WAN）中租用的链路。通常，内联网通过一台或多台网关计算机连接到外部因特网中去。建立内联网的主要目的是在员工中分享公司的信息和计算资源。内联网也可以用来促进群体间的合作和远程电信会议。

内联网使用传输控制协议/互联网协议（TCP/IP）、超文本传输协议（HTTP）和其他互联网协议。通常，内联网看上去就像因特网的专用版本。公司可以通过公共网络传送专用信息，利用公共网络特殊的加密和解密算法以及其他的安全措施将内联网的一个部分与另一个部分连接起来。

通常，大型企业都允许其内联网用户通过防火墙服务器来访问因特网，这些服务器都可以双向监测信息以维护公司的网络安全。如果公司的部分内联网允许客户、合作伙伴、供应商或其他外部人员访问，这部分内联网就构成了外联网。

➤ 外联网

外联网是一种专用网络，这种专用网络使用因特网协议和公共电信系统，以便能够使供应商、分销商、顾客及其他企业安全地共享本企业的一部分信息和操作。外联网可以被看做一个公司的内联网的一部分，这个部分延伸到了公司外部的诸多用户。因特网被看做是一种与其他公司做生意的途径，这就像是因特网将产品卖给顾客一样，这种想法一直被描述为一种“心态”。因特网和企业内部网曾经得益于超文本标记语言（HTML）、超文本传输协议（HTTP）、简单邮件传输协议（SMTP）和其他的因特网技术，现在这些技术似乎被用来促进企业间的商务活动。换句话说，外联网是一种促进企业之间互动（特别是买卖活动）的专用网络，我们能否称之为“电子商务”呢？

外联网要求安全性和私密（保密）性，这就需要管理防火墙服务器，发布和使用数字证书，使用安全套接层（SSLs）或者类似的用户认证的手段，对信息进行加密，使用穿过公共网络的虚拟专用网（VPNs）。公司可以使用外联网来达到如下目的：

- 使用电子数据交换 (EDI) 来交换大量的数据。
- 与批发商或有贸易往来的商家共享专有的产品目录。
- 与其他公司合作共同开发项目。
- 与其他公司一起合作开发和使用培训程序。
- 一家公司向其他的一组公司提供服务, 或者一组公司接受一家公司所提供的服务。例如, 一家公司代理多家联营银行的在线银行应用系统。
- 与合作伙伴公司共享共同感兴趣的专有消息。

Vocabulary & Phrases

fiber n. (=fibre) 光纤

optic adj. 眼的, 视觉的; 光学上的

cable n. 电缆, 海底电报, 缆, 索 v. 打 (海底) 电报

hence adv. 因此; 从此

comprehend vt. 领会, 理解; 包括 (包含), 由...组成

nut n. 坚果; 螺母, 螺帽; 难解的问题

bolt n. 门闩, 螺钉; 闪电; 跑掉

foundation n. 基础, 根本; 建立, 创立; 地基; 基金, 基金会

originally adv. 最初, 原先

project n. 计划, 方案; 事业, 企业, 工程
v. 设计, 计划; 投射, 放映, 射出, 发射 (导弹等); 凸出

agency n. 代理处, 行销处; 代理, 中介

facilitate vt. 使容易, 使便利

military adj. 军事的, 军用的

grant vt. 同意, 准予, 承认 (某事为真) n. 补助金, 助学金, 赠款, 津贴

application n. 请求, 申请, 申请表; 应用, 运用, 施用, 敷用; 应用, 应用程序, 应用软件

host n. 主人, 旅馆招待; 许多 vt. 当主人招待, 主机

transmission n. 播送, 发射, 传动, 传送, 传输, 转播

circuit n. 电路; 一圈; 周游, 巡回

channel n. 海峡, 水道, 沟, 路线 vt. 引导, 开导; 形成河道、信道、频道

trunk n. 干线, 树干, 躯干, 箱子, 主干, 象鼻; 中继线

switch n. 开关, 电闸, 转换 vt. 转换, 转变, 交换

element n. 要素, 元素, 成分, 元件, 自然环境

packet n. 小包裹, 小捆, 信息包 v. 包装

node n. 节点

sub-network n. 子网

service n. 服务, 服务性工作, 服役; 仪式
vt. 保养, 维修 adj. (军队) 服现役的, 服务性的; 仆人的; 耐用的

digest n. 分类, 摘要 vi. 消化 vt. 消化, 融会贯通

simplify vt. 单一化, 简单化

Internet prop n. 因特网



internet n. 网际网

Intranet prop n. 内联网, 内部网

Extranet prop n. 外联网, 外部网

lowercase n. 小写字母

uppercase n. 大写字母

interchangeably adv. 可交换地, 可交替地

abstract n. 摘要, 概要, 抽象 adj. 抽象的, 深奥的, 理论的 vt. 摘要, 提炼, 抽象化

traditionally adv. 传统上, 传说上

dumb adj. 哑的, 无说话能力的, 不说话的, 无声音的

emulator n. 仿真器, 仿真程序, 竞争者

access n. 通路, 访问, 入门 vt. 存取, 接近

graphical adj. 绘成图画似的, 绘画的

browser n. 浏览器

account n. 计算, 账目, 账户, 说明, 估计, 理由

via prep. 经, 通过, 经由

protocol n. 草案, 协议

session n. 会议, 开庭 对话(计算机专业), 通话(通信专业), 话路(通信专业),

saying n. 话, 谚语

majority n. 多数, 大半

research-oriented adj. 面向研究的

collaboration n. 协作, 合作, 勾结

personnel n. 人员, 职员

average n. 平均, 平均水平, 平均数; 海损 adj. 一般的, 通常的, 平均的

jargon n. 行话

encryption n. 加密

decryption n. 解密

security n. 安全, 安全性

safeguard n. 安全措施 vt. 保卫

enterprise n. 企业

firewall n. 防火墙

maintain vt. 维护

accessible adj. 可接入的, 可访问的

private adj. 专用的, 私人的, 专有的

telecommunication n. 通信

vendor n. 商贩, 厂商, 卖主

perceive v. 感到, 察觉, 认识

corporate adj. 社团的, 法人的, 共同的, 全体的

accelerate vt. 加速, 推进

business n. 商业, 买卖, 交易, 生意, 企业

interaction n. 交互, 互动

certificate n. 证书, 证明书 vt. 发给证明书, 以证书形式授权给...

socket n. 窝, 穴, 孔, 插座, 牙槽, 套

authentication n. 证明, 鉴定, 认证

virtual adj. 虚的, 实质的

tunnel n. 通道, 隧道

volume n. 量, 大量

catalog n. 目录, 目录册

exclusively adj. 排外地, 专有地

jointly adv. 共同地

affiliate v. (使...) 加入, 接受为会员



Notes

1. nuts and bolts **完全地，彻底地。**
2. mumbo-jumbo **混乱的复杂的行为，快速而说不清的话语。**
3. dumb terminal : A terminal with no independent processing ability of its own which can only carry out operations when connected to a computer. **一种本身不具有独立处理能力的终端，仅当与计算机相连时才能进行操作。**
4. pick up **随便地认识。**
5. but the big push or interest didn't come until the advent of the World Wide Web (WWW) in the mid 1990's. push **意思是“进展、推动”。** not ...until... **意思是“直到…才…”。** 因此，这句话译为：“但是，直到在 20 世纪 90 年代中期出现了万维网以后，才有了大的进步并引起了人们极大的兴趣”。

Exercises

1. Please translate the following phrases into English.

因特网

主机

网间网（网际网）

外联网（外部网）

因特网服务提供商

内联网（内部网）

交换设备

电子商务

子网

电子数据交换

2. Please translate the following phrases into Chinese.

fiber optic cabling

file transfer protocol (FTP)

nuts and bolts

graphical user interface (GUI)

the United States Department of Defense

local-area networks (LANs)

Advanced Research Projects Agency

wide-area network (WAN)

transmission lines

Transport Control Protocol/Internet Protocol

Interface Message Processors

(TCP/IP)

FTP

Hyper-Text Transport Protocol (HTTP)

encryption/decryption

SMTP

HTML

virtual private networks (VPNs)



3. Please translate the following sentences into Chinese.

- a) The Internet is the name of the global communication network consisting of thousands of networks typically interconnected by fiber optic cabling.
- b) As a matter of fact, the Internet we know today grew out of a project by the United States Department of Defense Advanced Research Projects Agency (US DoD ARPA).
- c) A subnet carries messages from host to host, hence the subnet is the communication part of the network.
- d) What was needed was a network of interconnected networks. This led to the idea of “internetworks” or “internet”.
- e) The Internet is the global internet that grew out of the ARPAnet.
- f) But the big push or interest didn’t come until the advent of the World Wide Web (WWW) in the mid 1990’s.
- g) An internet is the connection of various types of networks into a single large system.
- h) The Internet is the actual global internet. In other words, an internet is an abstract concept while the Internet is the real thing.
- i) An intranet is a network of networks that is contained within a company or enterprise.
- j) An Extranet is a private network that uses the Internet protocols and the public telecomm-unication system to securely share part of a business’s information or operations with suppliers, vendors, partners, customers or other businesses.

4. Please answer the following questions according to the text.

- a) What is “internet” and “the Internet” ?
- b) Can you tell the differences between an internet and the Internet?
- c) What benefits can companies get by using an extranet?
- d) Can you tell the differences between an intranet and an extranet?
- e) What do you usually do with the Internet?

The Interesting Web We Have Woven

A common terminology for the World Wide Web is simply “The Web”. The Web is an idea that grew out of other Internet resources but is often used incorrectly as a metaphor for the Internet. When you use your modem to “go-online”, you do not connect to the Web. Instead, you connect to the Internet and are then able to use your browser to access Web facilities. Also, you can access Web information within your company’s intra-network or intranet, believe it or not. I suppose that this is one of the reasons for using the word “Web” instead of “World Wide Web”. If you set up a Web server on your private internal network, users connected to the network can access information on that server in the same way we access information via the Internet. Referring to internal information accessible via internal web servers as the “Web” is a little stretch or is impractical but is actually correct. You see the breakdown of such a case if we continued to refer to the “Web” as the “World Wide Web”. After all, your little network may not even be connected to the global Internet.

Well, what is the Web then? The Web is a large system of servers that offers many kinds of information to anyone on the Internet. I would be very correct in 1995 if I gave the previous definition. However, I need to add the statement “or to a lesser extent on an inter-/intra-network” to make the definition correct now and for ever more. Access to this Web information is typically provided in many forms via a web browser. The information can be ASCII text, pictures, and sounds to name a few.

A piece of software that provides access to web information on a network is referred to as a