

الشبكات اللاسلكية وتطبيقاتها

Wireless Networks

القسم الأول: الشبكات اللاسلكية

سرعة نقل البيانات

القسم الثاني: وسط الإرسال السلكي واللاسلكي

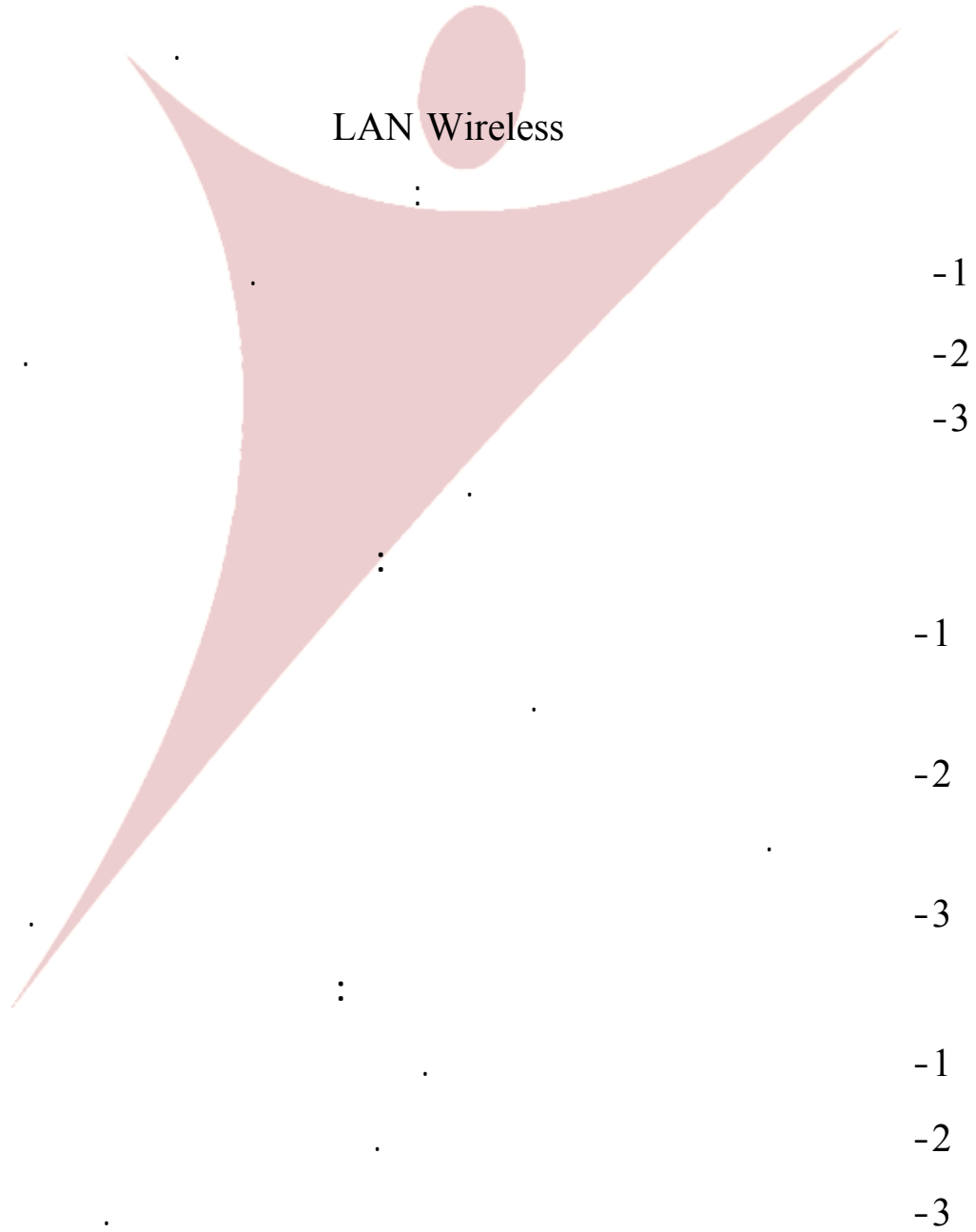
القسم الثالث: الشبكة الوهمية VPN

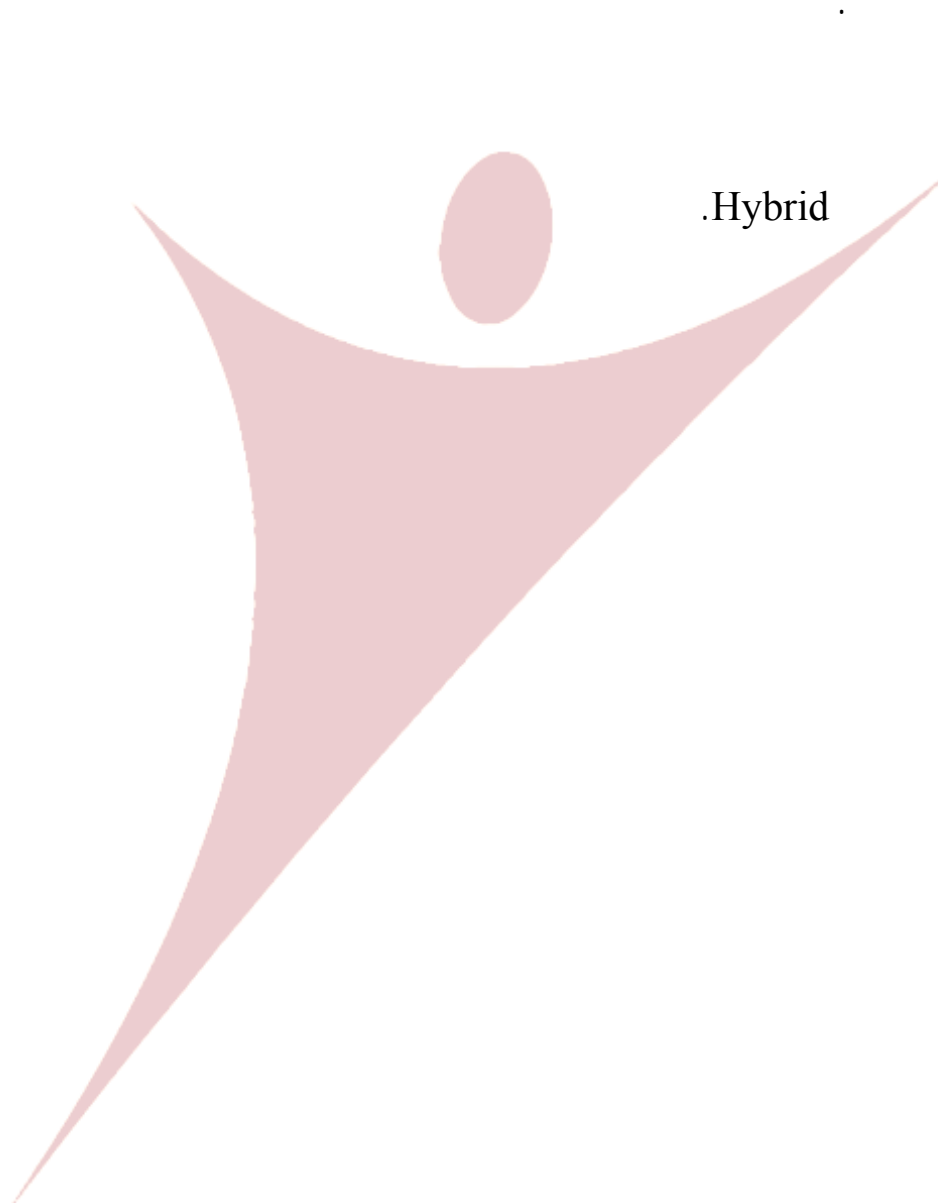
VPN

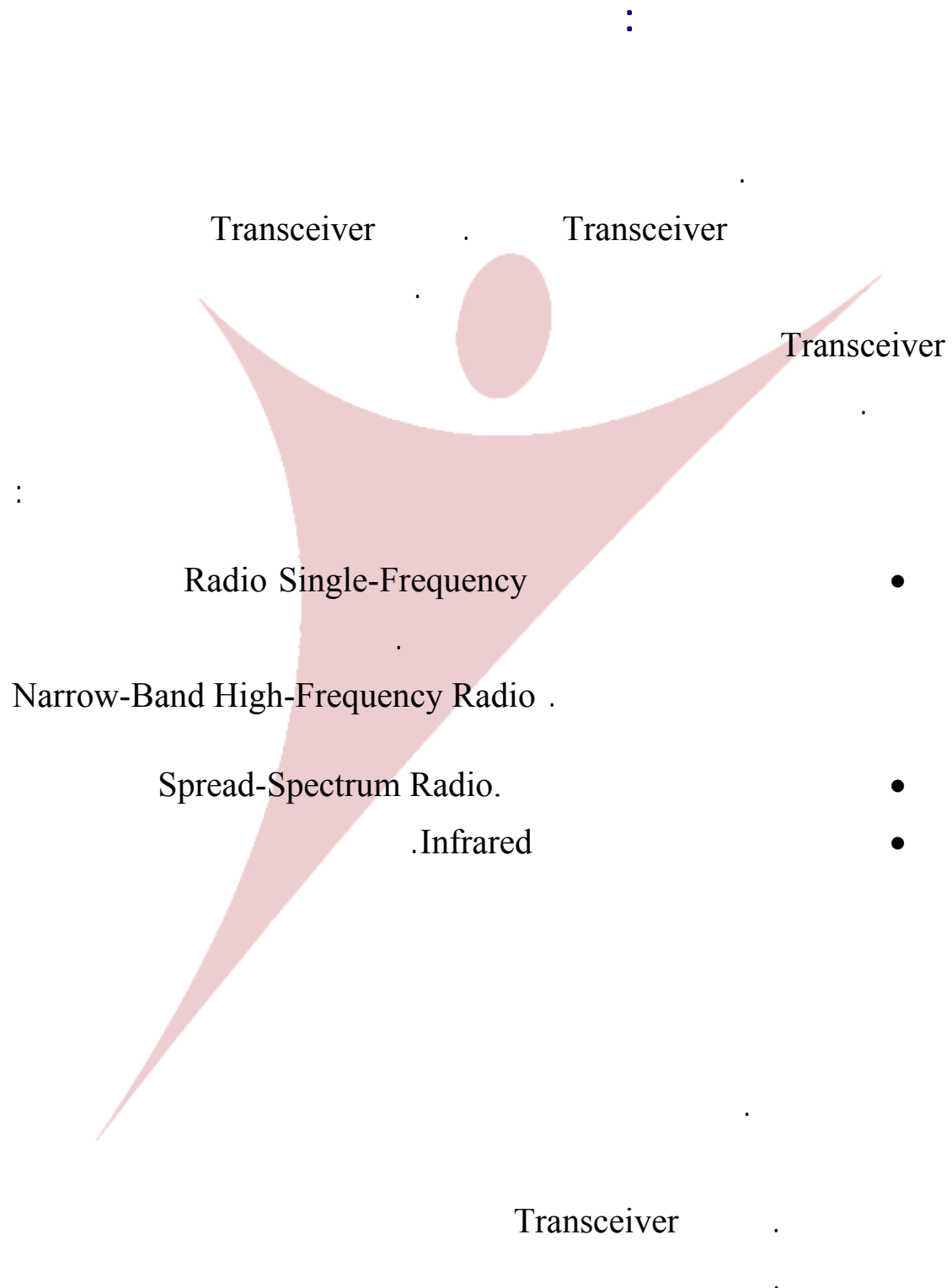
VPN

القسم الرابع: أمن الشبكات اللاسلكية

القسم الأول: الشبكات اللاسلكية

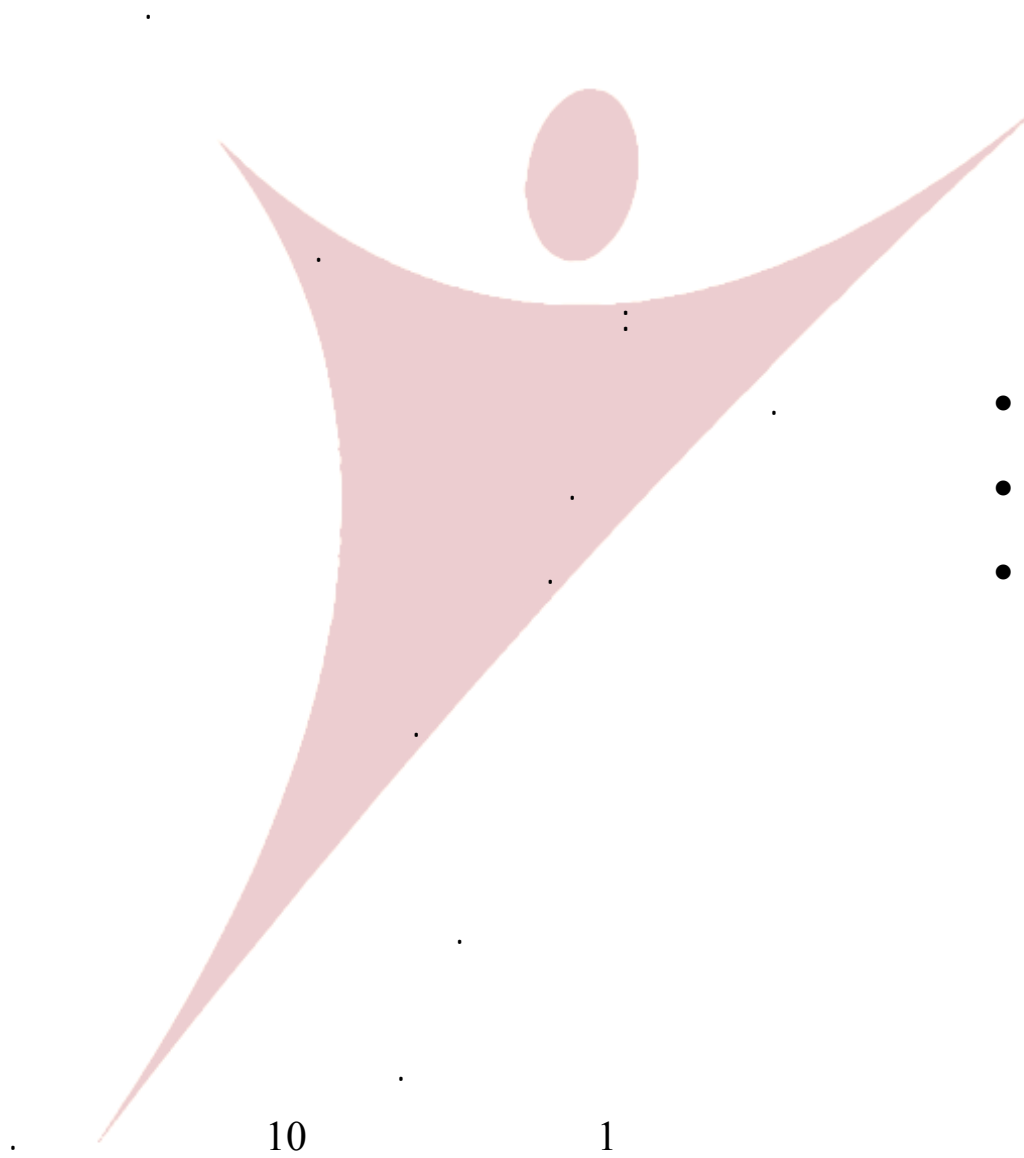




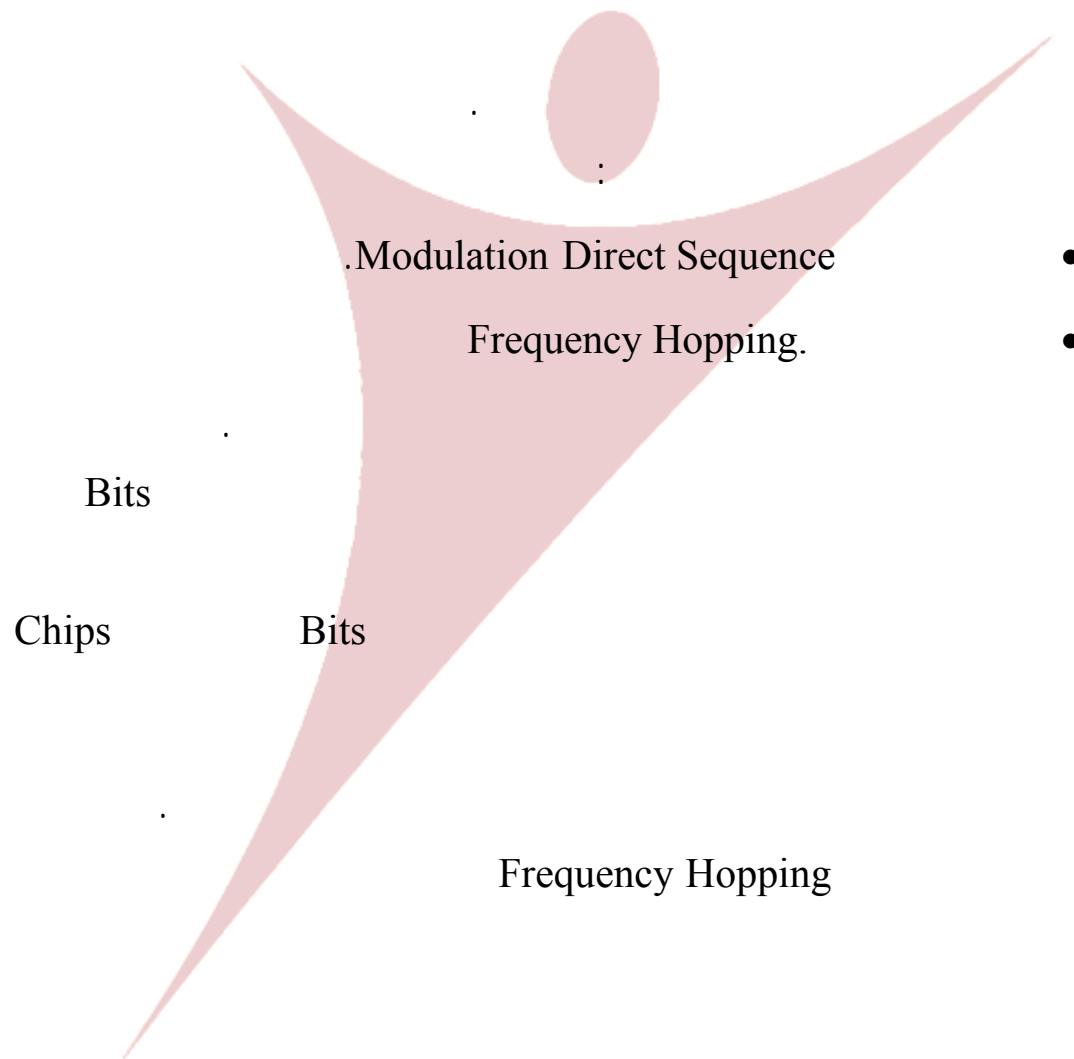


Radio Single-Frequency Radio Frequency Range

(RF)



Spread-Spectrum Radio



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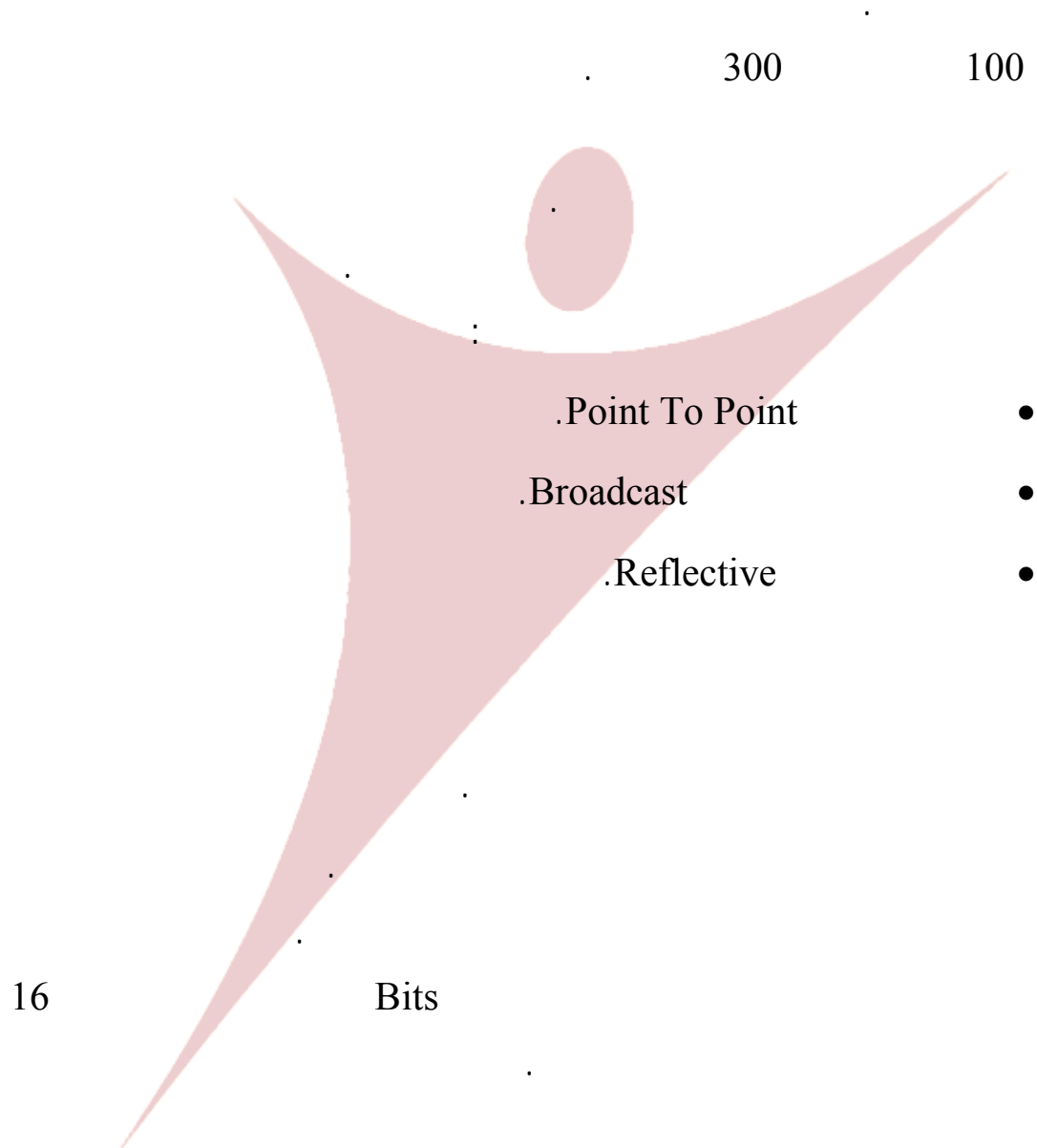
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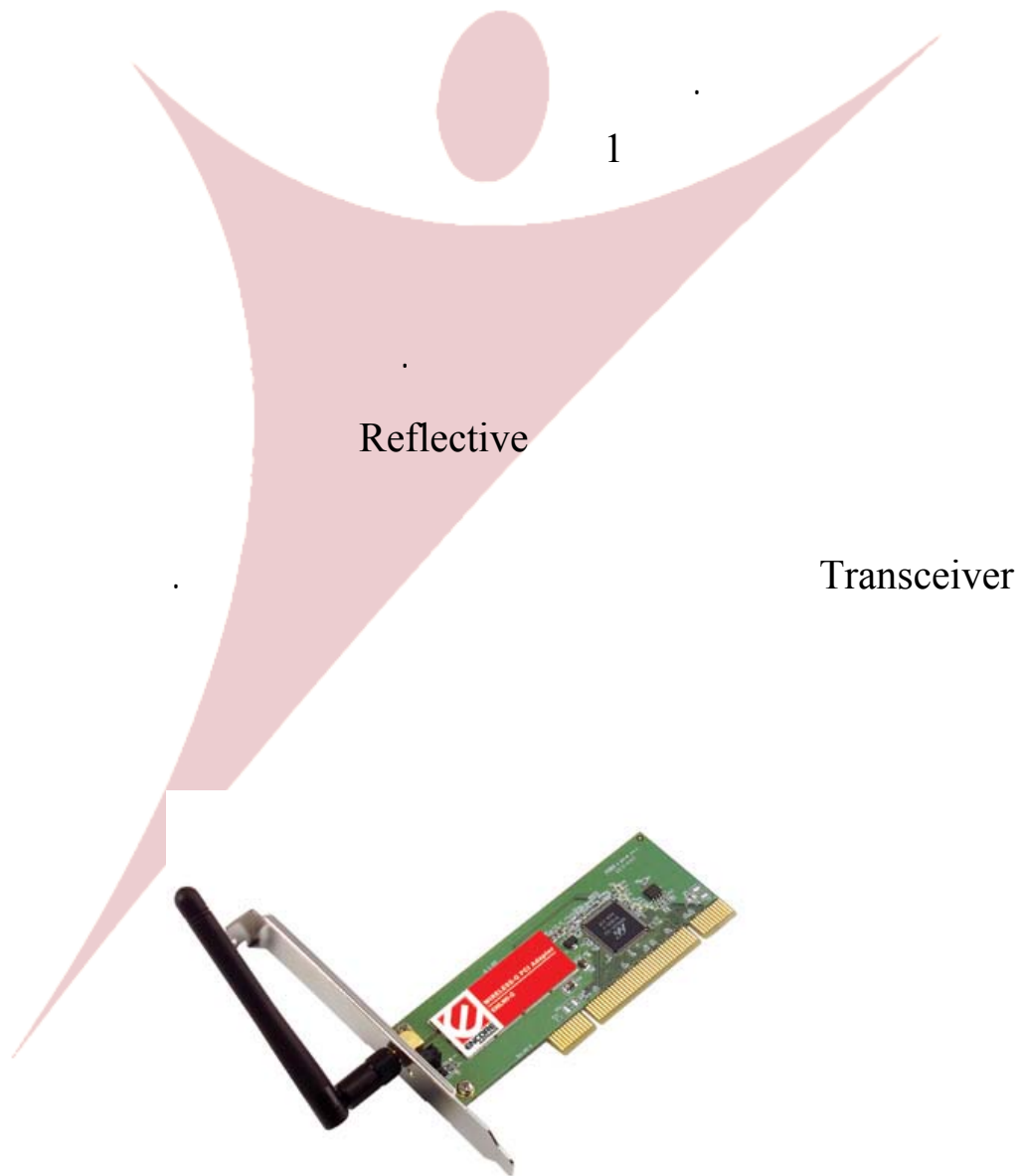
Emitting Diode (LED) Light

.Injection Laser Diode (ILD)



Scatter

.Infrared Networks



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Access

3

Point.

hub

switch

Wireless D-Link USB



:Wireless D-Link USB Adapter DWL 120,

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USB

PCI

11

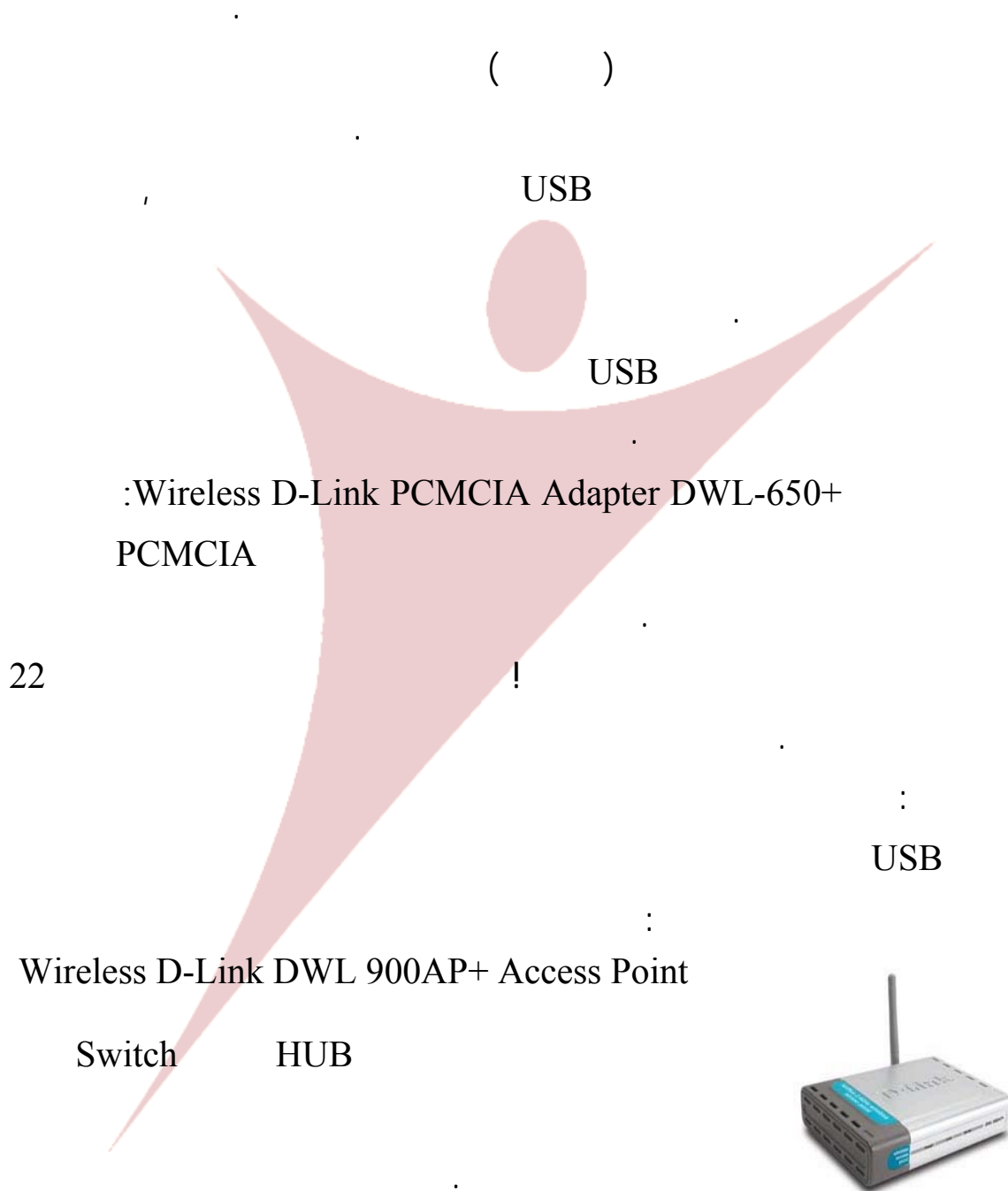
USB

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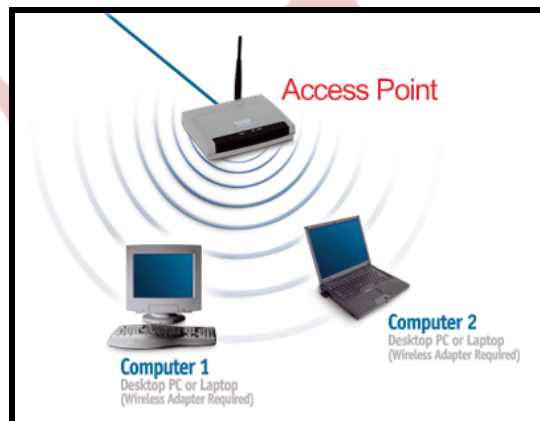
10

)

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hub

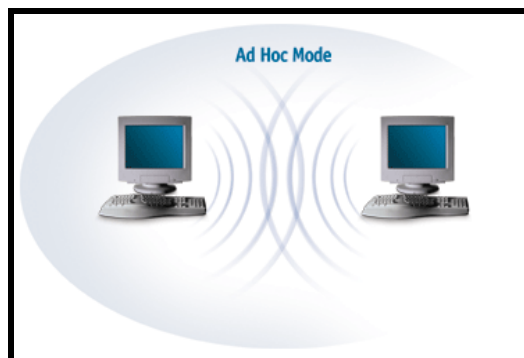


100

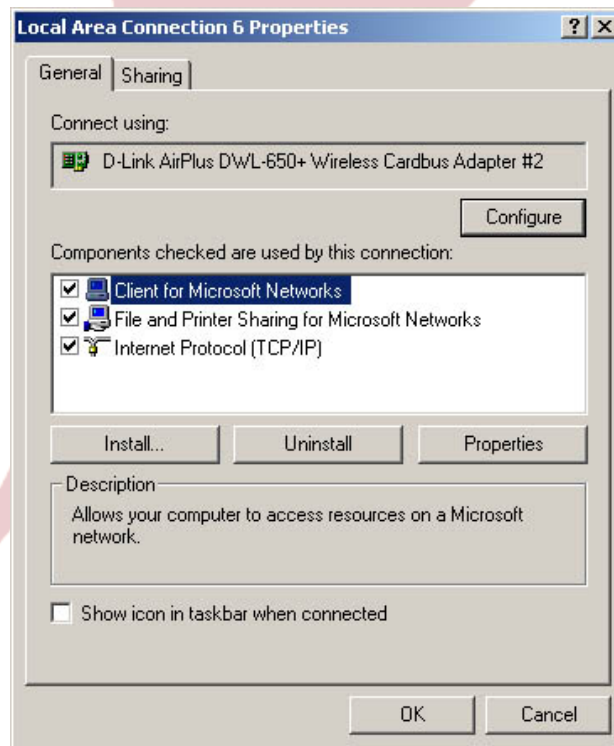
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Infrastructure Mode

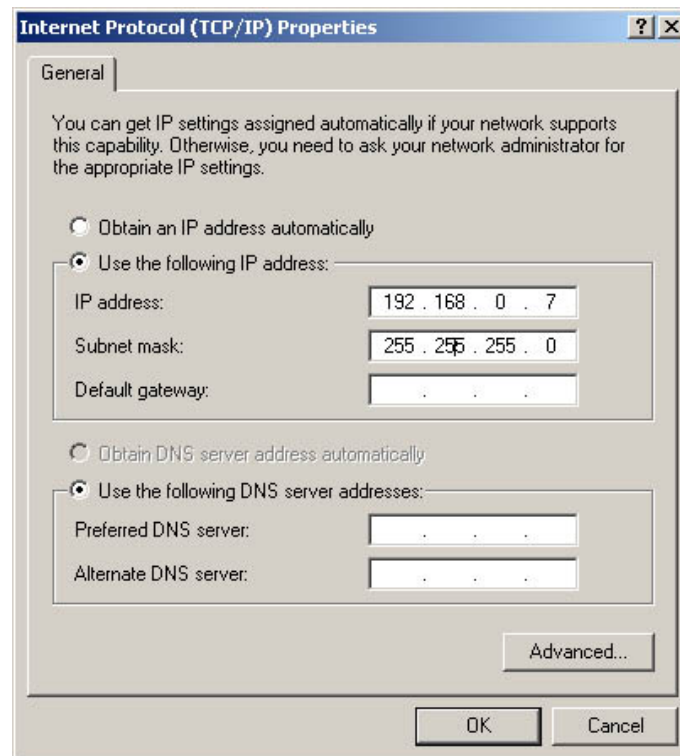
Ad Hoc



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IP (DHCP Server Address
:
IP Address
Network and dial up control panel settings start
Local Area Connection connections,



. IP Internet Protocol -TCP/IP

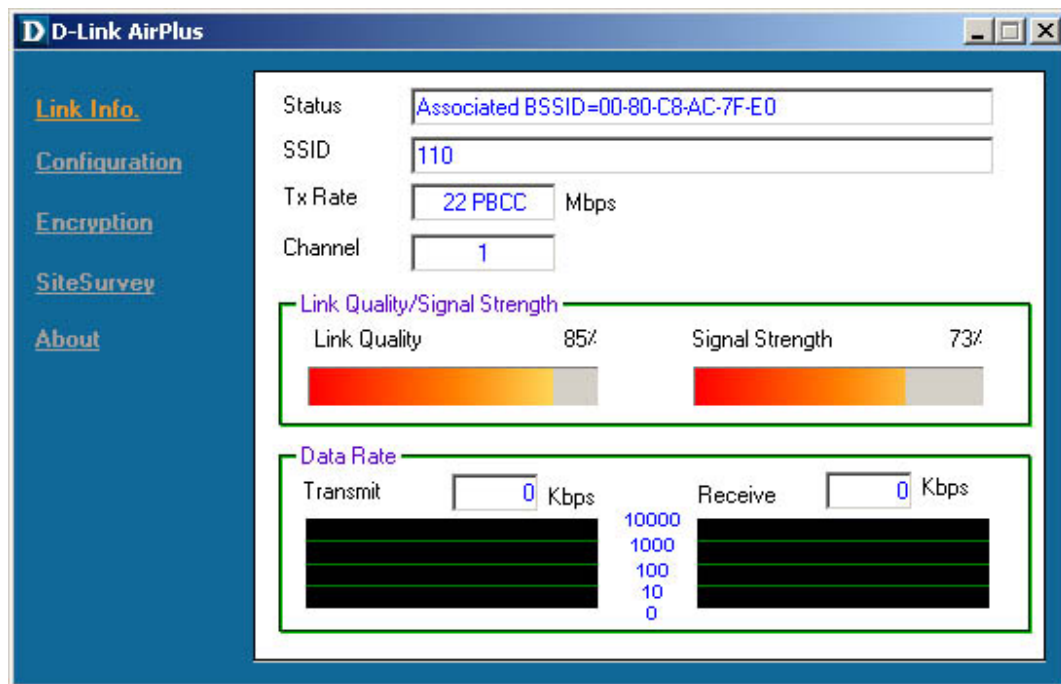


IP

OK

.192.168.0.8

IP



:

Status : Associated BSSID=00-08-C8-AC-7F-E0

00-08-C8-AC-7F-E0 : MAC Address

Media Access Control Address MAC Address

SSID

Service Set Identifier

default

D LINK

Tx Rate

Channel

.11 6 , 3 , 1

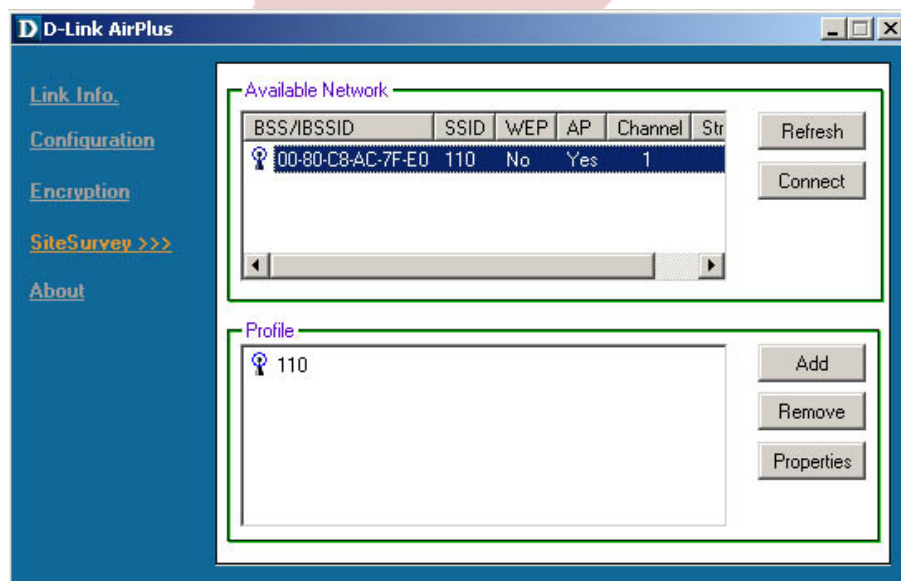
Link Quality

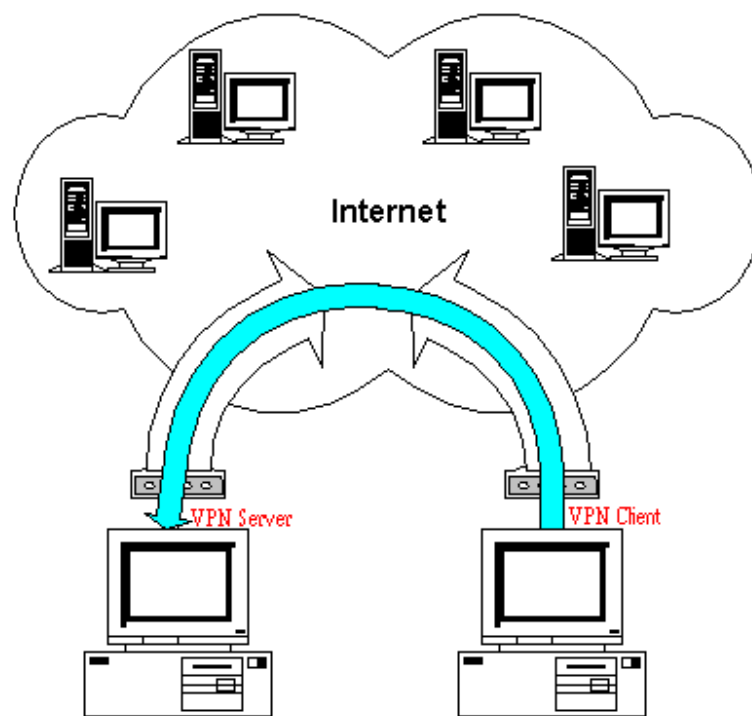
Signal Strength

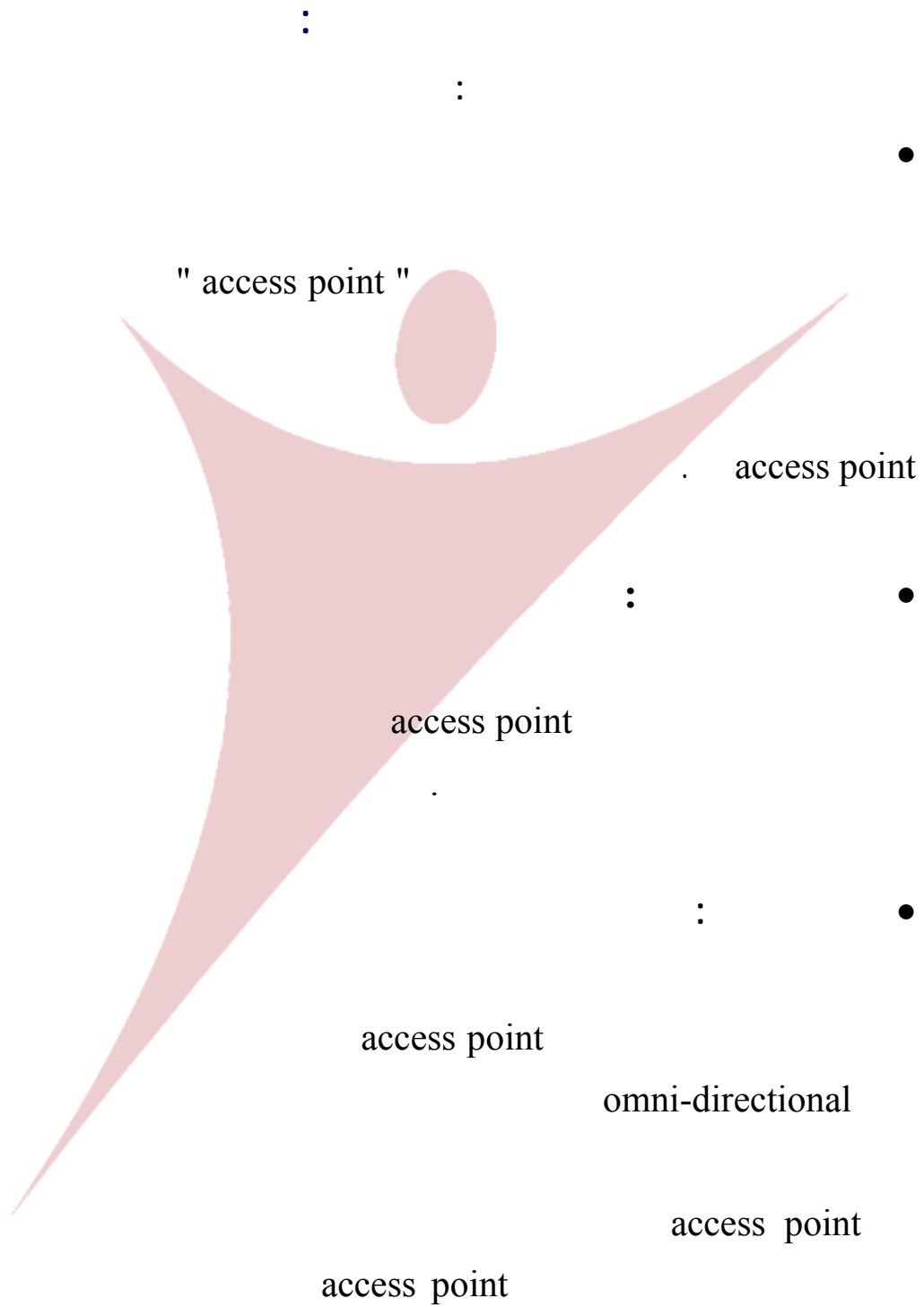
Data Rate

SiteSurvey

Connect







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: " Wireless Repeater "

Wireless Repeater

Access Point

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Access Point

Access Point

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Access Point

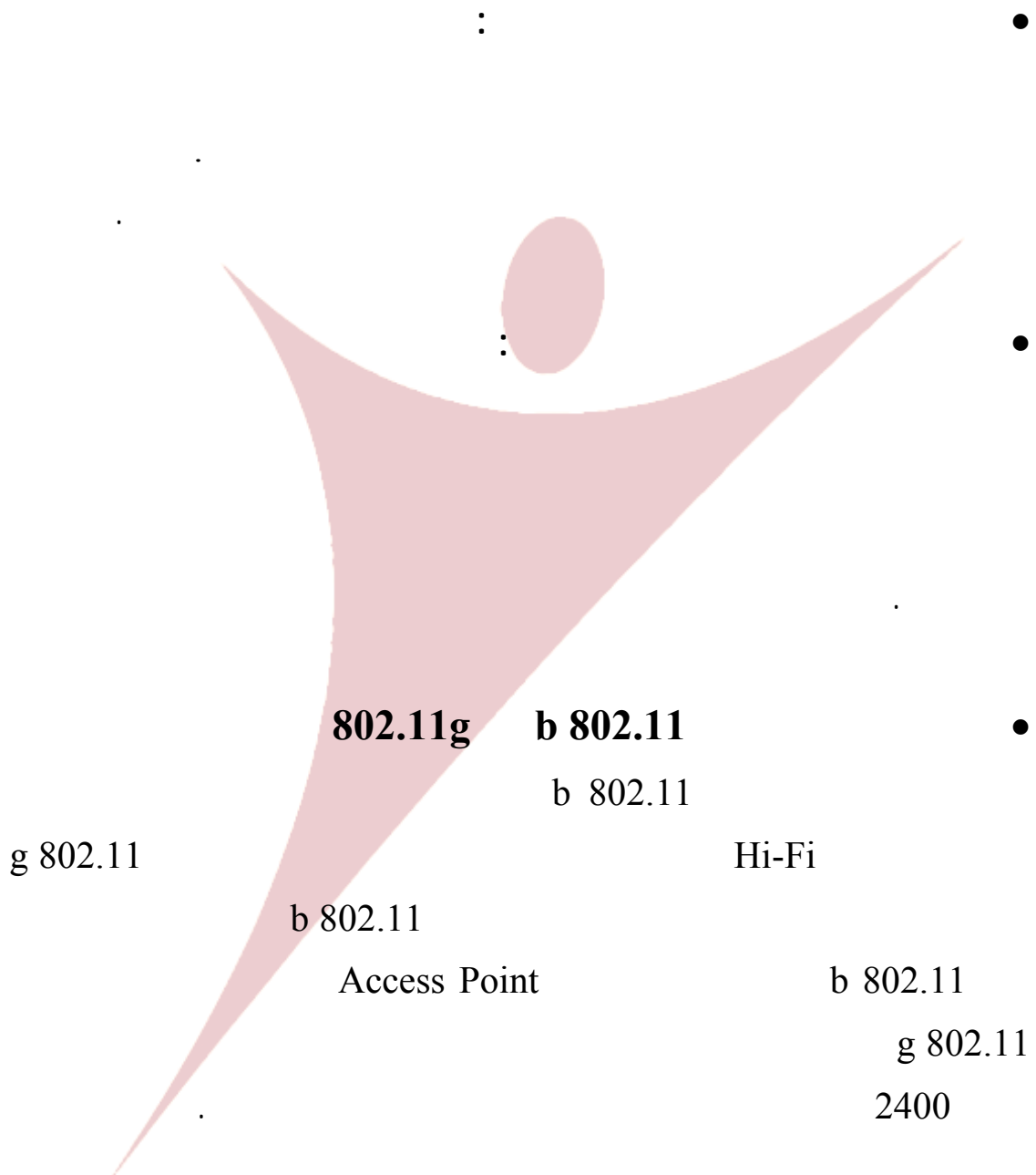
2400

5000

" noise "

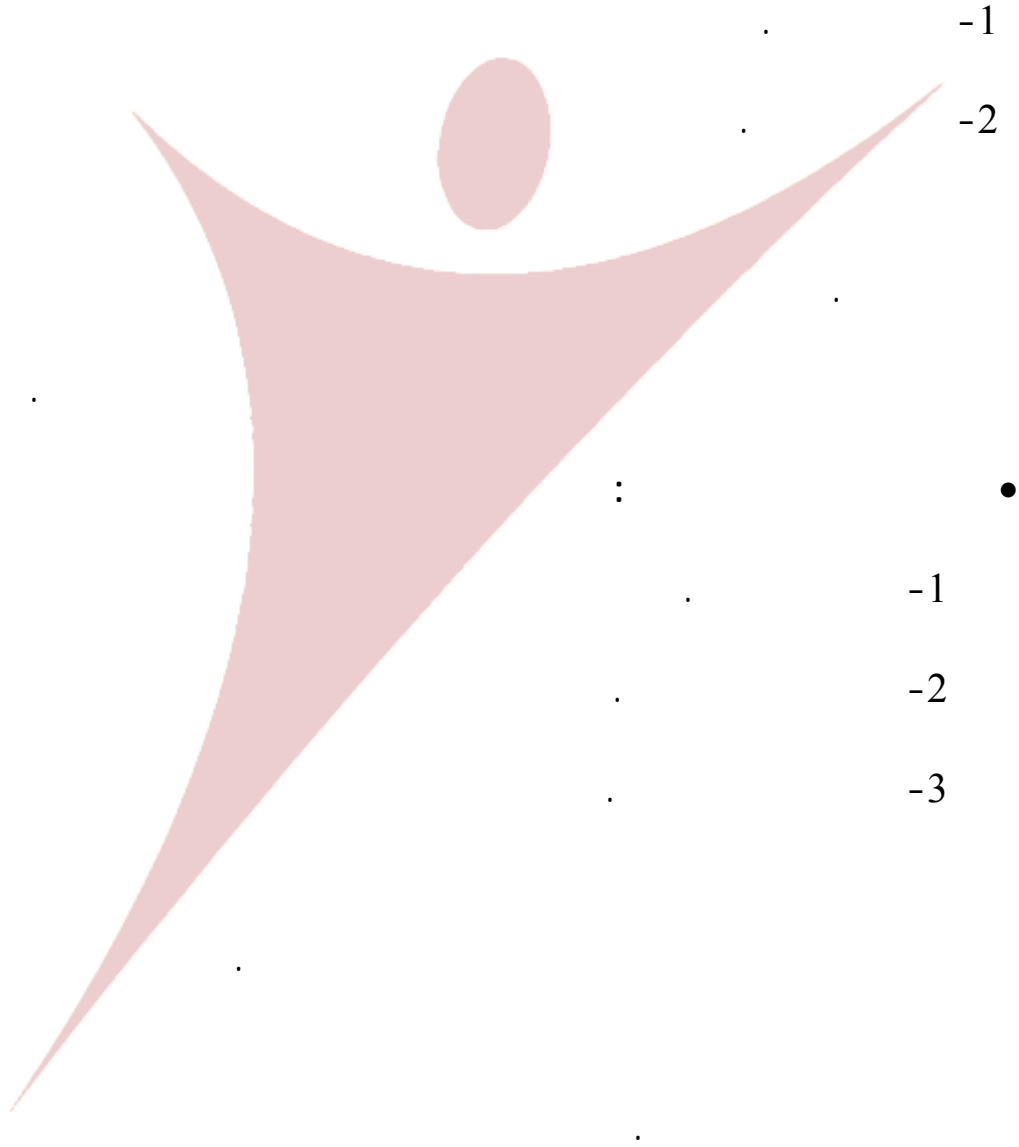
Access Point

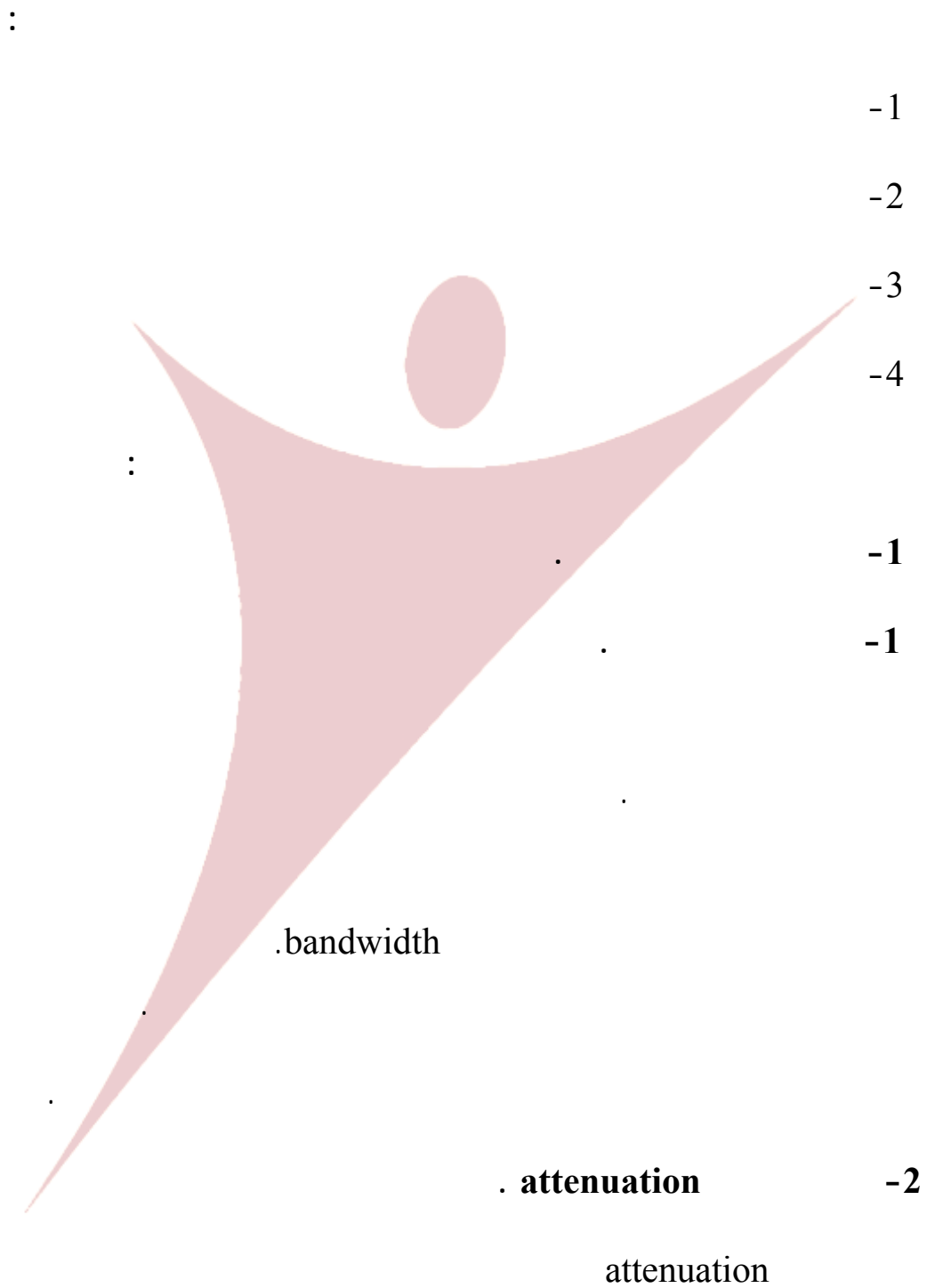
Access Point



القسم الثاني: وسط الإرسال السلكي واللاسلكي

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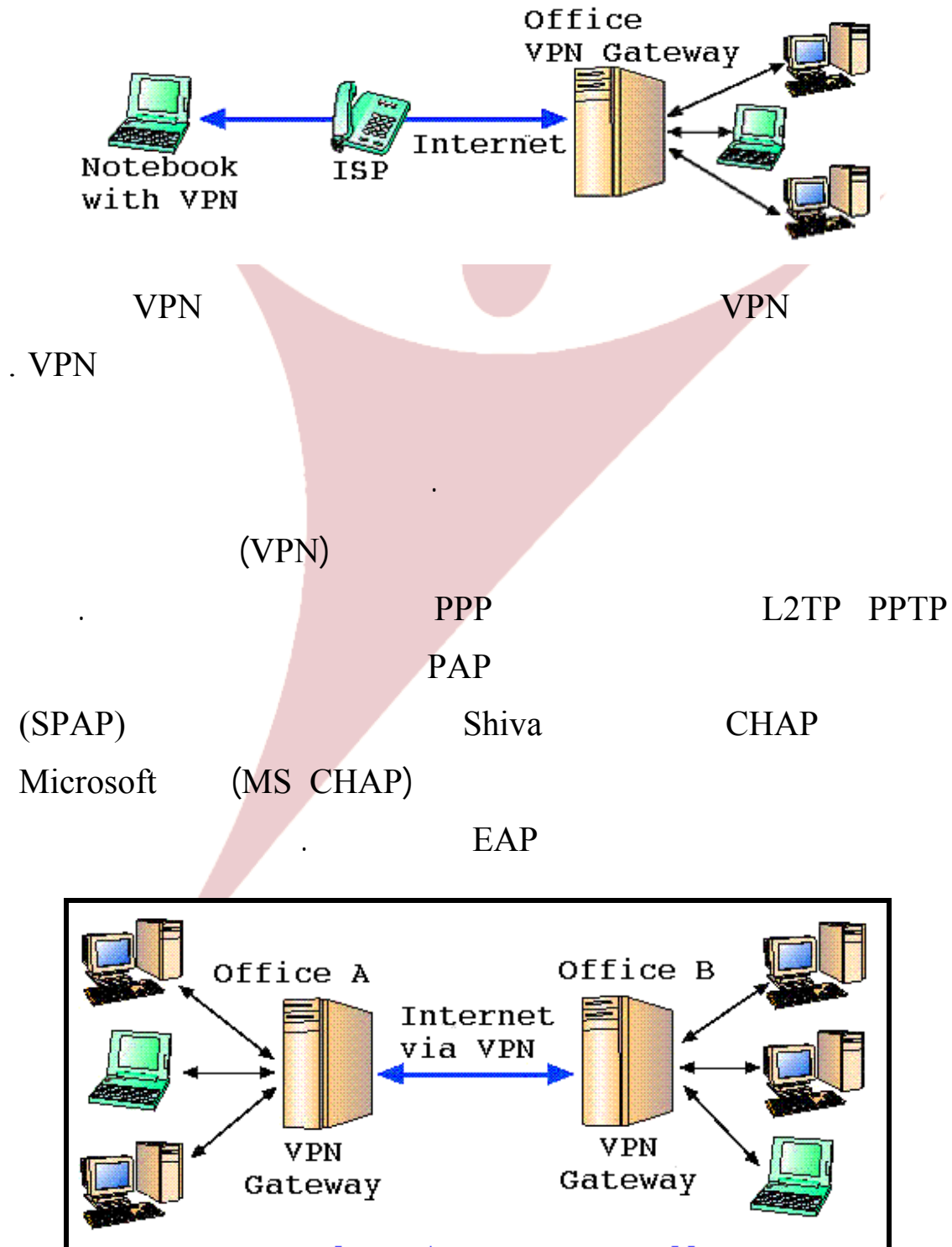


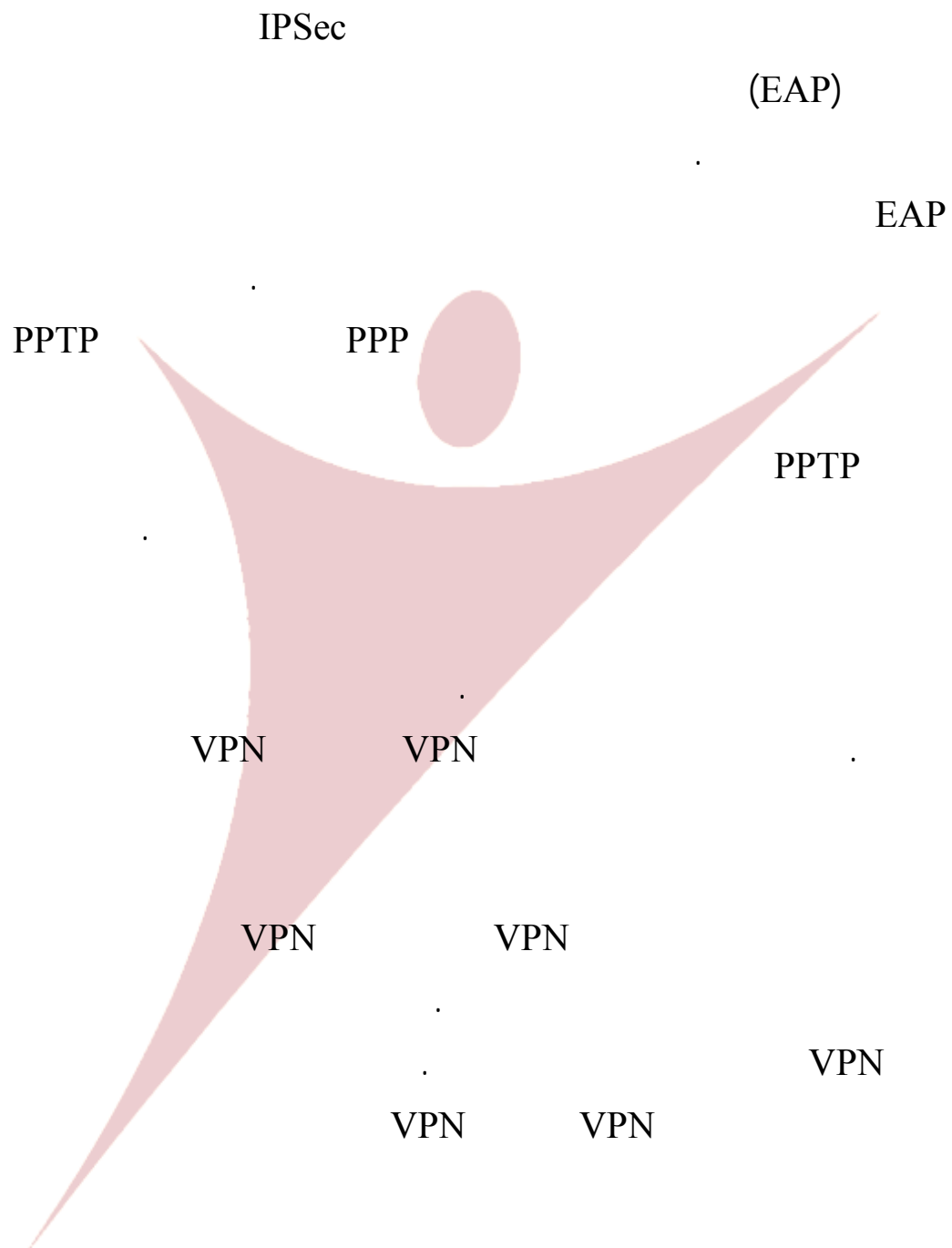


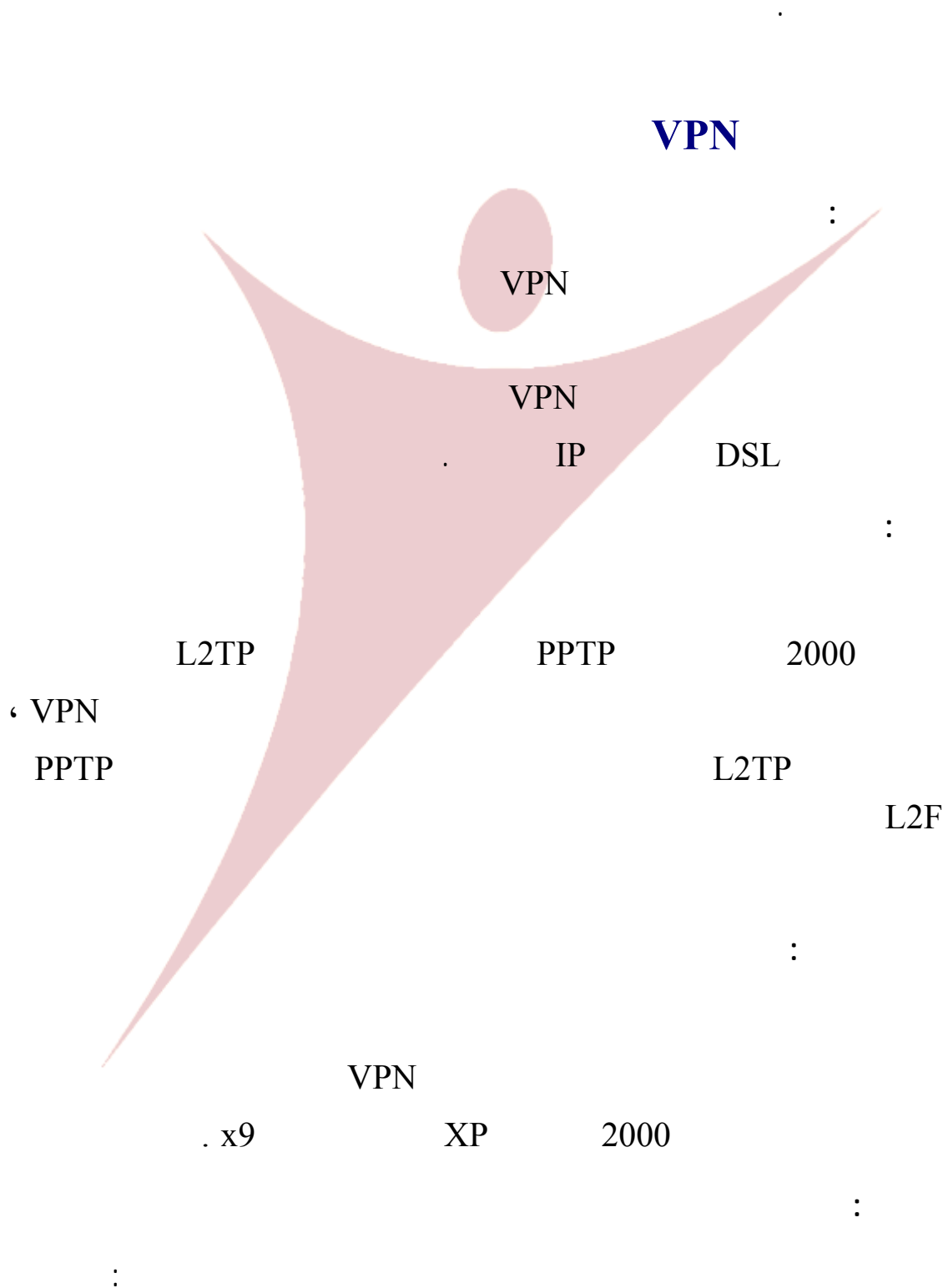
immunity from electromagnetic interference.

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القسم الثالث: الشبكة الوهمية VPN







IP

DSL

VPN

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VPN

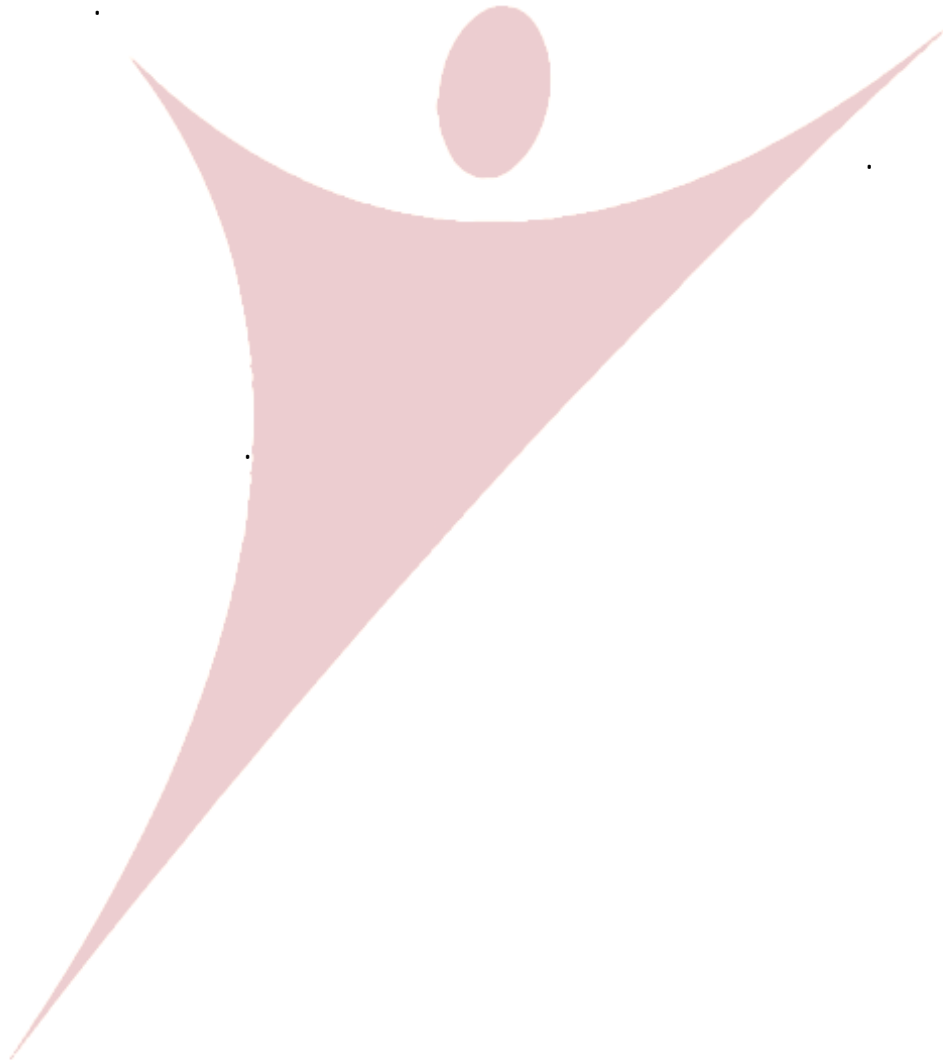
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DHCP

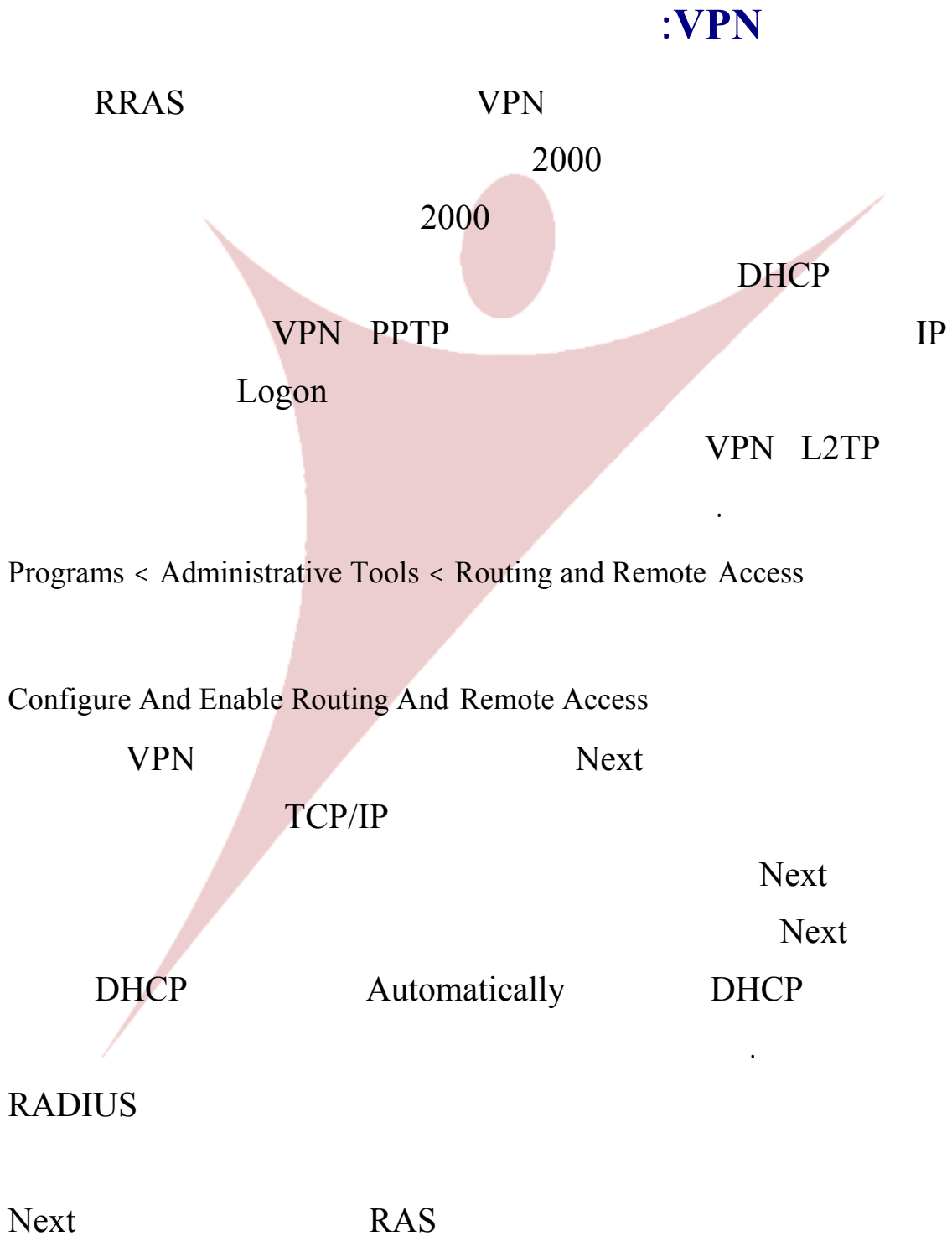
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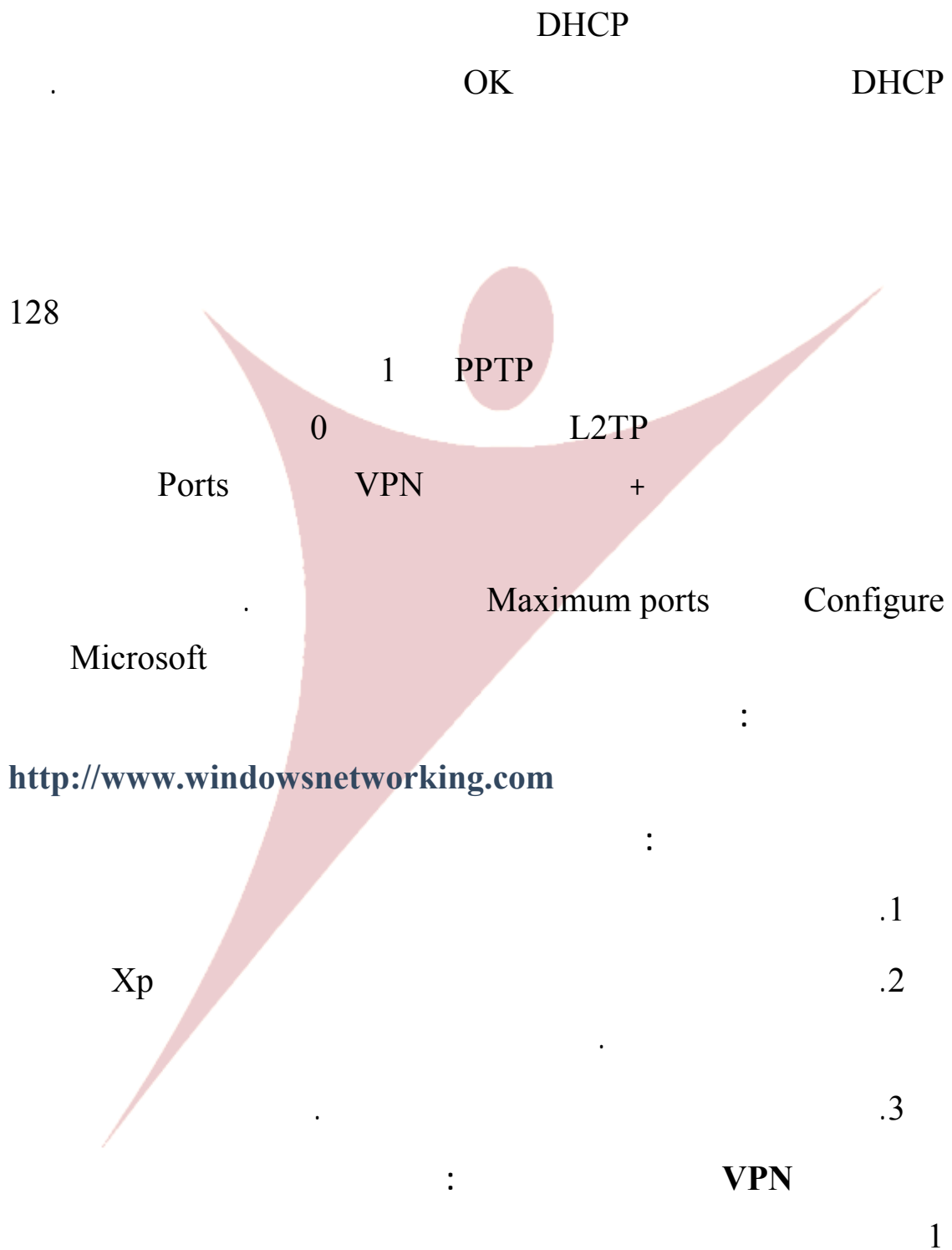
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. Tunneling







VPN





MS-DOS

MS-DOS

IP

IPCONFIG

MS-DOS

```

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Azzam>ipconfig

Windows IP Configuration

PPP adapter Azzam Al-Kasim:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 172.30.11.69
    Subnet Mask . . . . . : 255.255.255.255
    Default Gateway . . . . . : 172.30.11.69

C:\Documents and Settings\Azzam>_

```

IP

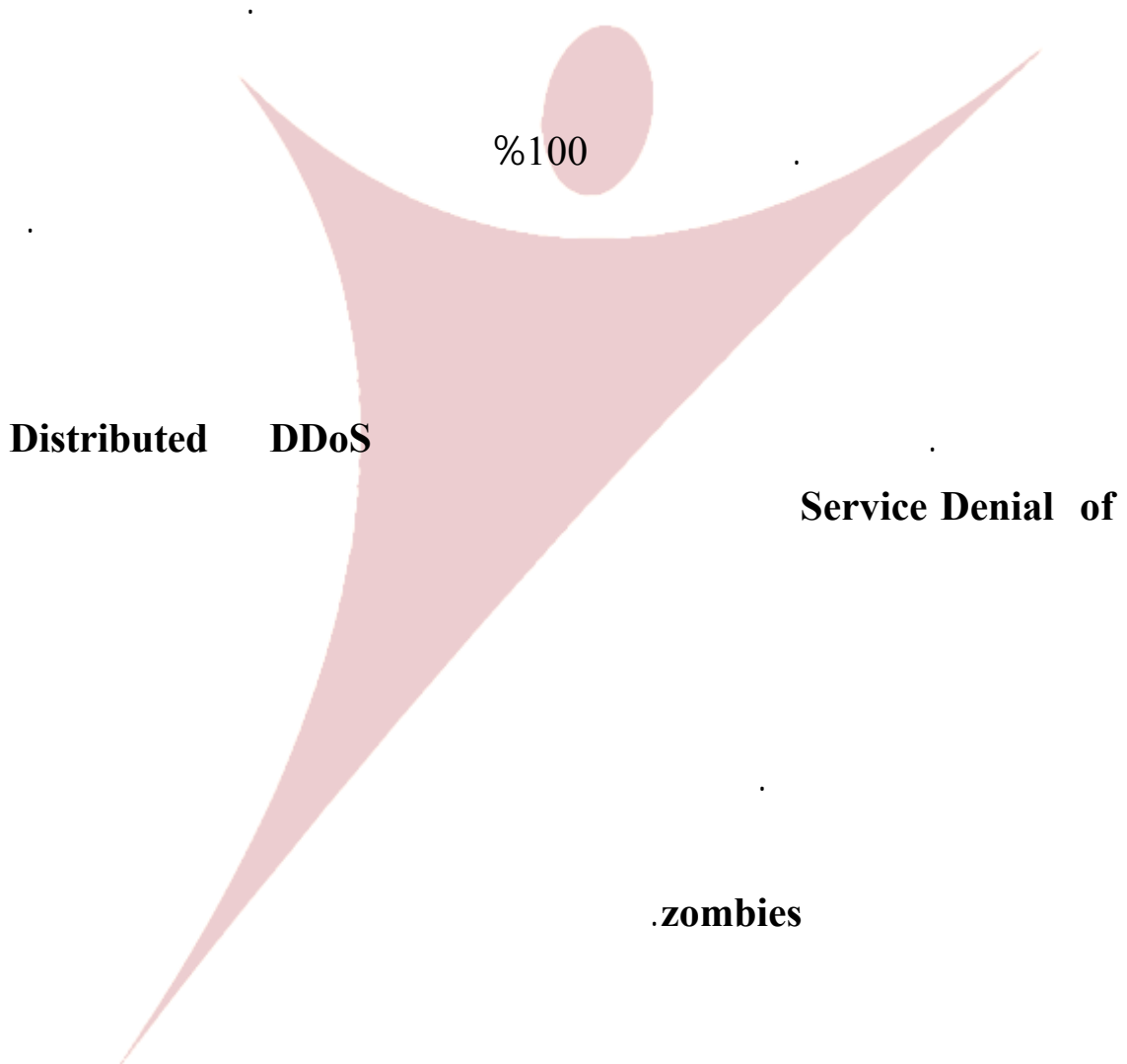


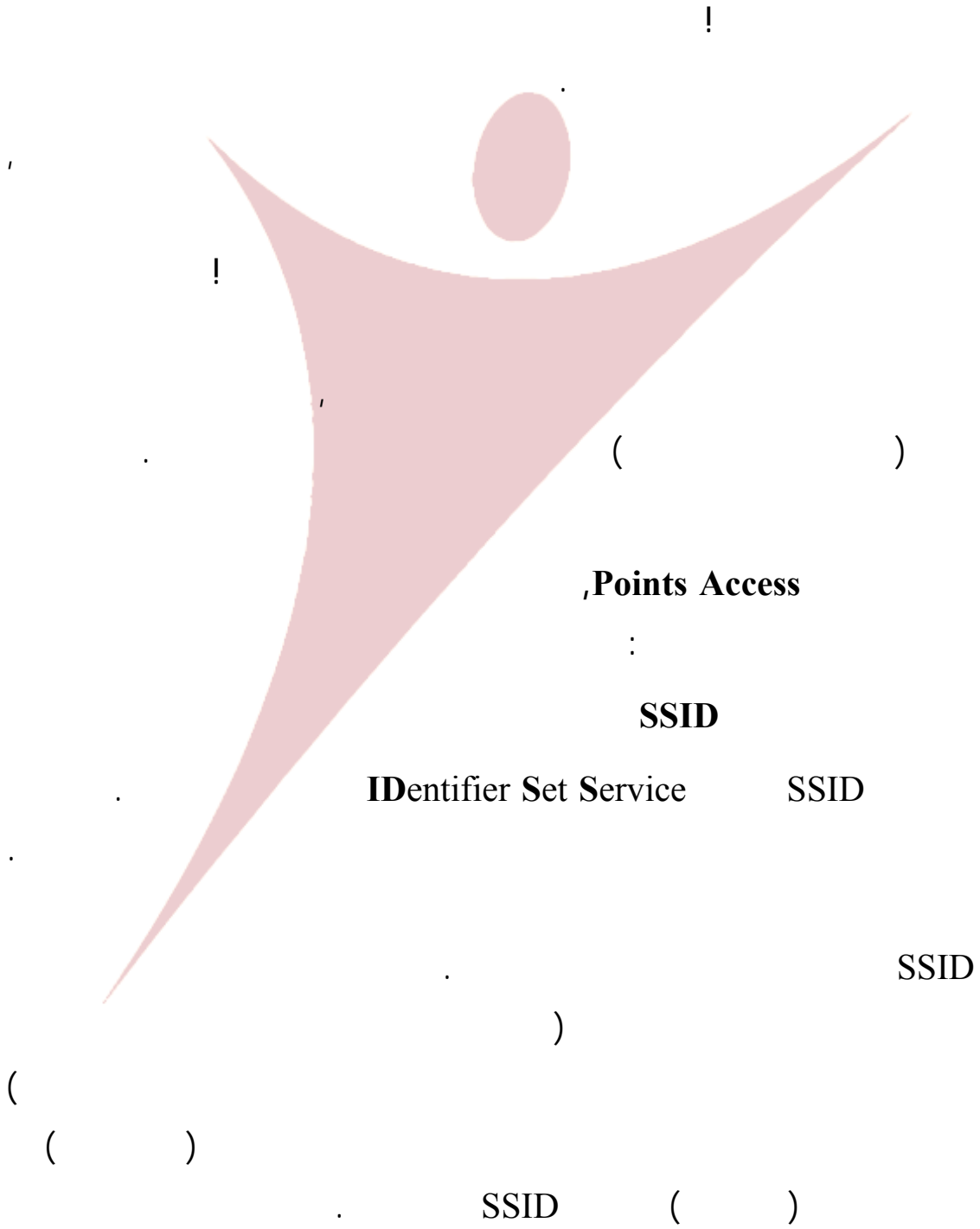
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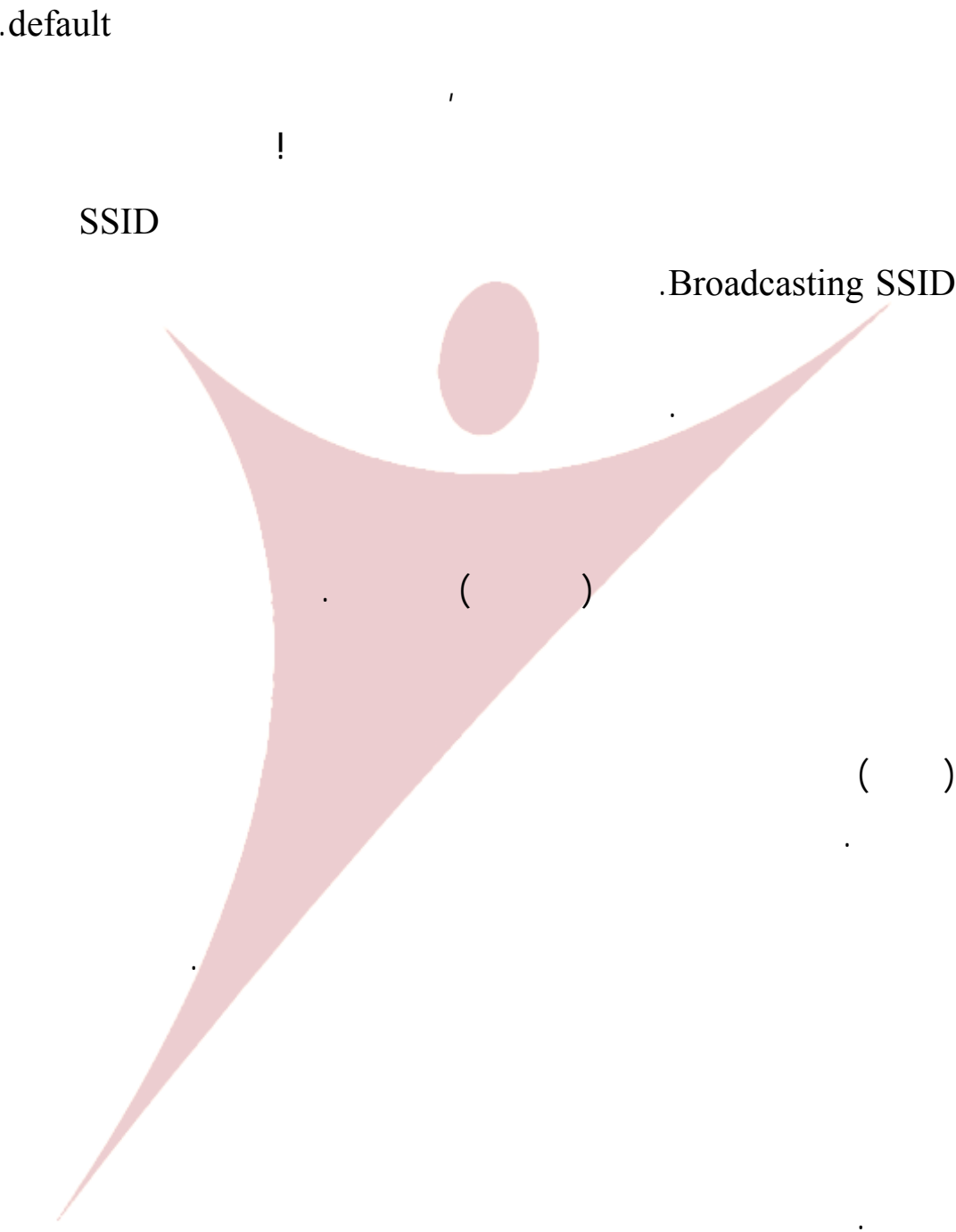
IP

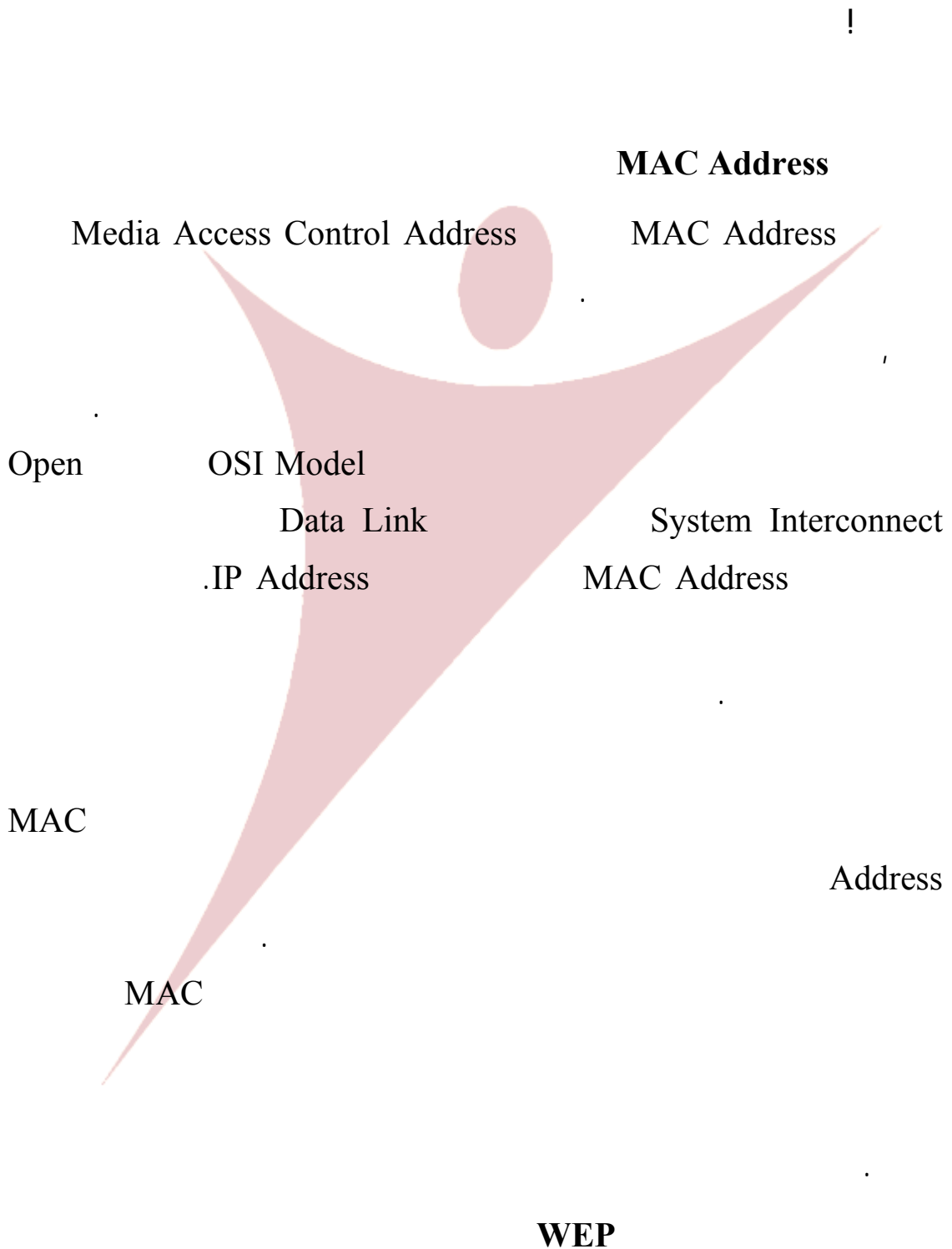


القسم الرابع: أمن الشبكات اللاسلكية









Wired Equivalent Privacy WEP

WEP

