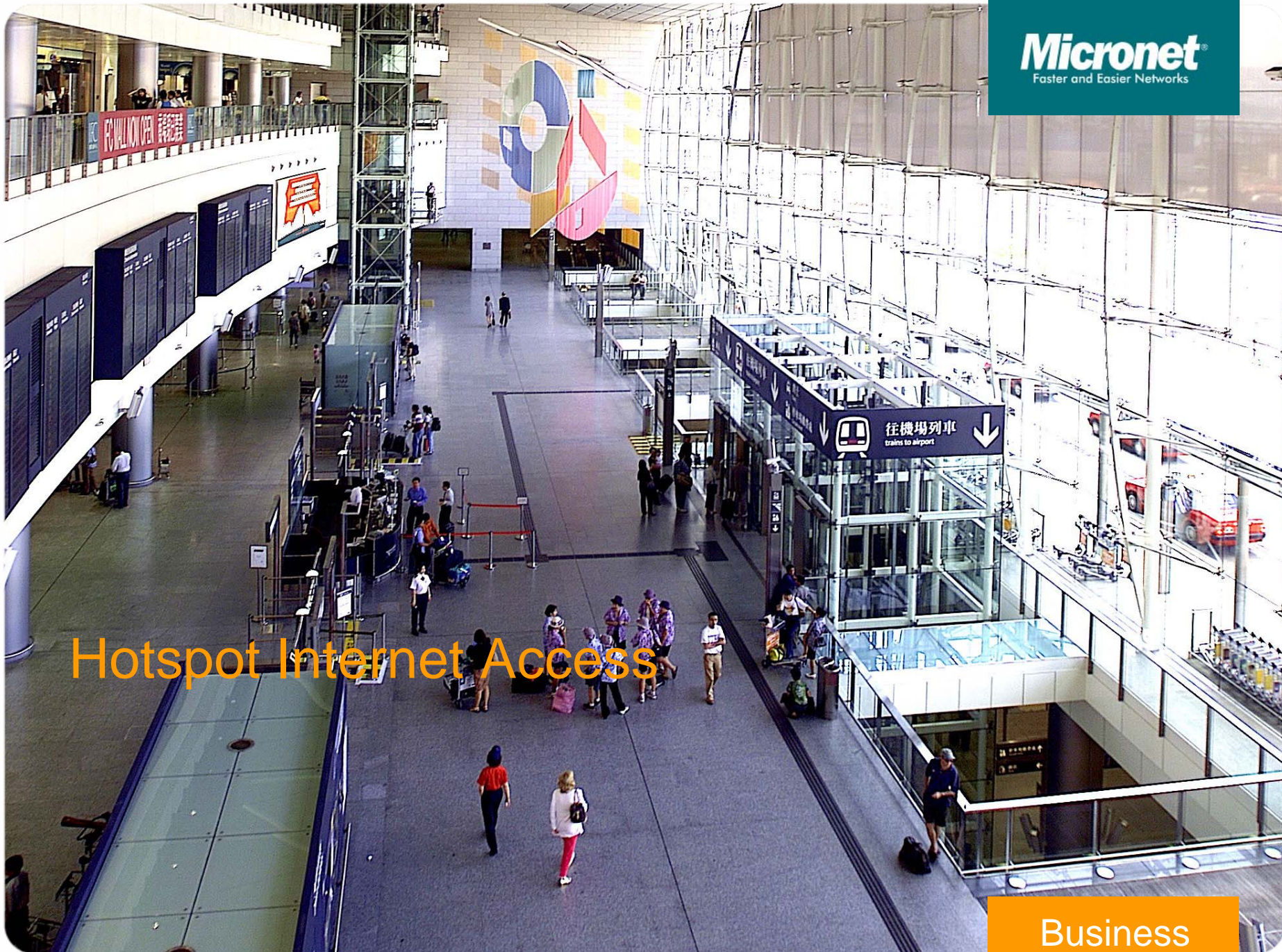


Hotspot Internet Access

Business



# Hotspot Internet Access

## Challenge

Public Internet access has become very popular in the recent years. Shop owners are providing the service as a new attraction besides its existing services (dining, café, etc) for extra revenue income to the business. Common implementation environments include Restaurant, Internet Café, Library, Subway, Airport and various other public domain. It is essential for a hotspot solution to provide complete package for customer account & billing management that is easy to maintain for moderate users.

- Solution must provide Internet access to wireless clients.
- Solution must provide account management for both permanent and temporary users.
- Security in the public domain must be confined where users are authenticated and wireless transmission protected.
- Solution must provide convenient payment methods.



SP913  
WLAN Hotspot  
Gateway  
802.11b/g



SP3361  
ADSL2+ Modem  
Router/USB+RJ-45  
Annex A & B



M913  
Ticket Printer

# Hotspot Internet Access

## Challenge

- Solution must provide billing management for accounting purpose.
- Solution must provide customizable login web page to suit business image.
- Solution must provide monitoring tools for connected devices or clients.
- Solution must prevent P2P application or malicious software from consuming the network resource.



Top 10 Countries		Top 10 Cities		Top 10 Location Types	
United States	51,736	Taipei	2,501	Hotel / Resort	37,810
United Kingdom	17,844	Tokyo	2,239	Restaurant	30,024
Germany	14,341	London	2,154	Cafe	19,738
France	11,156	Seoul	2,056	Store / Shopping Mall	16,789
South Korea	9,415	Paris	1,579	Other	14,141
Japan	6,644	Berlin	884	Pub	6,140
Taiwan	3,710	Singapore	818	Office Building	2,636
Italy	2,957	San Francisco	816	Library	2,443
Netherlands	2,825	Daegu	787	Gas Station	1,813
Australia	2,083	New York	709	Airport	1,734

## Wifi Hotspot Statistics



SP913  
WLAN Hotspot  
Gateway  
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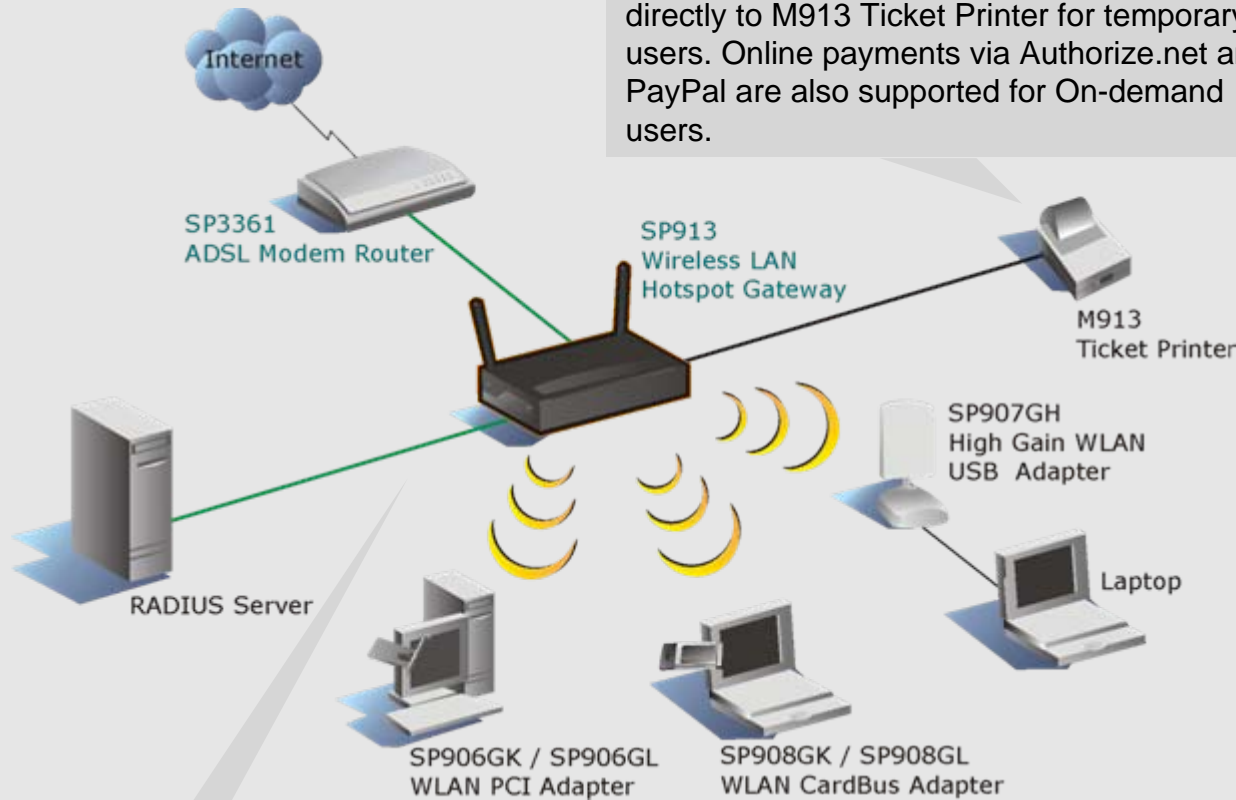
SP3361  
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M913  
Ticket Printer

# Hotspot Internet Access

SP913 sends On-demand account details directly to M913 Ticket Printer for temporary users. Online payments via Authorize.net and PayPal are also supported for On-demand users.



SP913 provides secure Internet Access in the Public Domain. Moreover, it supports Authentication and Accounting via RADIUS Server (IEEE 802.1x). SP913 is suitable to be implemented in Restaurant, Café, Library and Airport.

-  10/100M
-  Telephone Line
-  USB
-  Internet
-  WLAN



SP913  
WLAN Hotspot  
Gateway  
802.11b/g



SP3361  
ADSL2+ Modem  
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M913  
Ticket Printer

# Hotspot Internet Access

## Micronet Benefits

- Wireless Capability for Servicing Internet to Nearby Clients
  - SP913 supports IEEE802.11g wireless networks that allow connection speed of 54Mbps.
  - By connecting SP913 to SP3361 ADSL2+ Modem Router, Internet access can be shared across to wireless laptops in the public place.
- Support both Permanent Local Users and Temporary On-demand Accounts
  - SP913 contains a database for storing local users and on-demand accounts.
  - On-demand accounts are for temporary customers where a random login details will be created to allow access to Internet.
  - Local user accounts allow the administrator to specify username, password and expiry date.
  - Wall Garden List are provided for allowing accounts free access to the Internet and experience the service without authentication.



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M913  
Ticket Printer

# Hotspot Internet Access

## Micronet Benefits

- Provide Variety of User Authentication and Wireless Encryption Methods
  - SP913 provides user account authentication for local and on-demand users.
  - Alternative user authentication can be achieved via POP3, Radius Server, LDAP and NTDomain.
  - WEP & WPA are provided to encrypt wireless transmission and prevent data leakage in the public domain.
  - SP913 also supports Layer 2 (MAC Address) protections though Access List Control and Client Isolation.
- Provide Both Front Counter & Online Payment Methods
  - A ticker printer is included with every SP913 and customers can pay at the front counter for a temporary on-demand account to access Internet.
  - Alternatively in the login web page, users can chose to make payment online via Authorize.net or PayPal.



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M913  
Ticket Printer

# Hotspot Internet Access

## Micronet Benefits

- Provide Both Billing Plan and Report for Accounting
  - Administrators can set various billing plans according to time or data usage.
  - SP913 will store the billing information in its own database where user can easily recall the income information of the period.
  - Statistics will categorize income according to billing plan, time users or data users.

Report All	
Accounts sold in total	2
Plan1	2
Plan2	0
Plan3	0
Plan4	0
Plan5	0
Plan6	0
Plan7	0
Plan8	0
Plan9	0
Plan10	0
Total income	40
Income from tickets sold for time users	40
Income from tickets sold for volume users	0



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M913  
Ticket Printer

# Hotspot Internet Access

## Micronet Benefits

### ■ Customizable Login & Logout Web Pages

- The user can customized the following web interfaces: login, logout, login success and logout success.
- Template is provided with entry fields for the user to enter their details and business logo can also be uploaded.
- Alternatively, users can upload their HTML page or redirect page to external URL.
- Allow users to specify the default web page to redirect to after successful login.

### ■ Support IP Monitoring and Online Clients Management

- Administrators can specify a IP address to be monitored and a email notification will be sent if no response is detected.
- The Web UI will show the current online users and administrator has the authority to logout users if any abnormal activities have being detected.
- The interface will include connected clients traffic details: MAC ID, Packets In & Out, Bytes In & Out etc.



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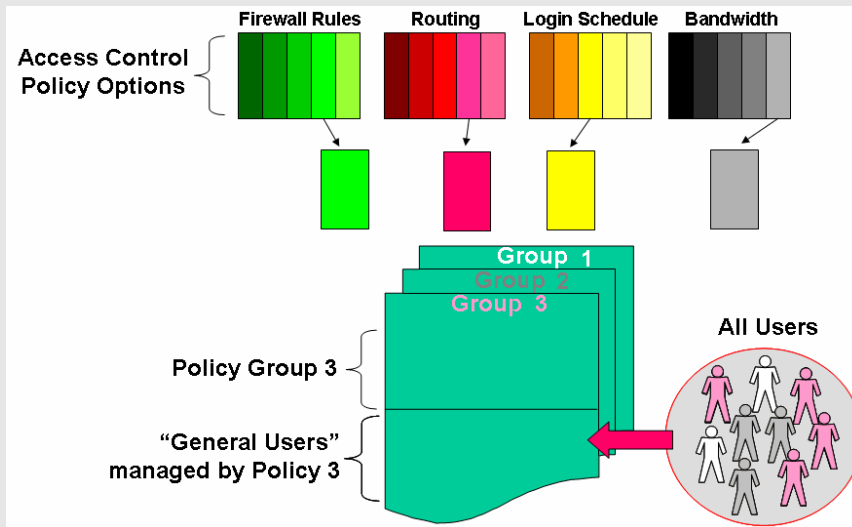
M913  
Ticket Printer



# Hotspot Internet Access

## Micronet Benefits

- Support Policy Configuration for Limiting Bandwidth & Session
  - Users can set up different policy to manage the user accounts according to firewall profile, bandwidth control and maximum concurrent sessions.
  - SP913 allows multiple policy configurations to be made and administrator can assign different policy to various account types.
  - Bandwidth control can be set for total traffic of the account type or individual user's limit.
  - Firewall profile allows administrator a tighter control on individual by limiting the destination IP and protocol they can use.



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Ticket Printer

# Hotspot Internet Access

## Micronet Solution Details

- Wireless Capability for Servicing Internet to Nearby Clients
  - Laptop PC with wireless capability has increasing becoming the essential tools carried by workers, students or travelers.
  - Modern people are juggling their life between work and personal space. Working and refreshments usually coexist together with example of Café containing majority of workers and students.
  - Internet access has become crucial in the following public domain: Restaurant, Café, Library and Airport.
  - Workers often discuss and share work related information during lunch break in restaurant with Internet access so that online information can be easily accessible.
  - Café containing students preparing for their assignments and exam where online resources are vital.
  - Workers on business trip will conduct a lot of their email replies during flight exchange in the airport.



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Ticket Printer

# Hotspot Internet Access

## Micronet Solution Details

- Support both Permanent Local Users and Temporary On-demand Accounts
  - Internet users in the public domain are usually temporary and will be different every day. Therefore a temporary account type is necessary for this type of users.
  - With simple clicks on the M913 ticket printer, an On-demand account will be created with a ticket containing random login details.
  - Once the ticket is near expiration, customers can easily renew the account with another ticket.
  - Alternatively, if the users are permanent or purchase a period of usage (week or month), administrator can create a account with a permanent login details.
  - For staff usage, administrator can create a account in the Wall Garden List where the Internet access will not expire.



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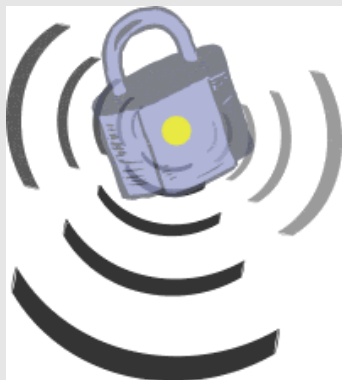


M913  
Ticket Printer

# Hotspot Internet Access

## Micronet Solution Details

- Provide Variety of User Authentication and Wireless Encryption Methods
  - The vulnerability of both Internet and wireless access will be greatly magnified in the public domain.
  - It is essential that all users are properly authenticated in order to ensure revenue stream.
  - For business with existing Radius Server, they can easily integrate the server into the authenticate process.
  - Customer's information transmitted via wireless will need to be encrypted to ensure their privacy are protected.
  - SP913 has provided complete authentication and encryption protection in order to withstand the vulnerability of the public domain.



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Ticket Printer

# Hotspot Internet Access

## Micronet Solution Details

- Provide Both Front Counter & Online Payment Methods
  - SP913 provides flexible payment methods for both cash and credit card.
  - For front counter payments in cash, a ticket containing login details will be generated.
  - Payments made online with credit card will generate login details straight on to the PC's display.
  - Merchant will need to apply an account either with Authorize.net or PayPal to allow its customer online payment option.
- Provide Both Billing Plan and Report for Accounting
  - Billing Plan is suitable for businesses to set price according to different customers or times.
  - For example, if customer orders a certain meal, they can get a discounted price for Internet access.
  - Businesses can also set a lower price for off-peak hours to attract more customers to the store.
  - Billing report will provide a summary and statistics of revenue created by the service.
  - The statistics will categorize customers into billing plan which can help business to determine whether the promotion is successful.



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Ticket Printer

# Hotspot Internet Access

## Micronet Solution Details

- Customizable Login & Logout Web Pages
  - Business image can be portrayed on the customizable Login & Logout page to suit the storefront.
  - After successful login, the page can be redirected to business website to help further promote company image or products.
- Support IP Monitoring and Online Clients Management
  - System owners can easily keep track of all connected users via the Web UI. Any users showing abnormal activities or high traffic volume can be disconnected from the network.
  - Business can use the IP monitoring function to verify Internet connection or connected servers' availability.



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Ticket Printer

Current Users List						
Item	Username		Pkts In	Bytes In	Idle	Kick Out
	IP	MAC	Pkts Out	Bytes Out		
1		guest4	12	10C8	454	<a href="#">Logout</a>
	192.168.1.107	00:D0:C9:60:01:04	12	10C8		
2		guest5	15	12E0	454	<a href="#">Logout</a>
	192.168.1.100	00:D0:C9:60:01:05	15	12E0		
3		guest6	25	21C0	64	<a href="#">Logout</a>
	192.168.1.131	00:D0:C9:60:01:06	25	21C0		
4		guest7	25	21C0	64	<a href="#">Logout</a>
	192.168.1.165	00:D0:C9:60:01:07	25	21C0		

# Hotspot Internet Access

## Micronet Solution Details

- Support Policy Configuration for Limiting Bandwidth & Session
  - P2P applications or malicious software will open multiple sessions and often consumed large quantity of the bandwidth.
  - By setting a bandwidth and session limits in the policy for each account, the network will not be vulnerable to P2P application and malicious software threats.
  - Administrators can make use of bandwidth control to help slice up the Internet usage according to types of users (web browsing, gaming, multimedia or VoIP).
  - The policy configuration will also provide scheduling tool for limiting the time each type of users can log in.
  - For example, certain account are purchased at discount rate but can only be used in off-peak time.

Profile Name:   Enable  Disable

Login Schedule Profile							
HOUR	SUN	MON	TUE	WED	THU	FRI	SAT
00:00~00:59	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
01:00~01:59	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
02:00~02:59	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
03:00~03:59	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
04:00~04:59	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



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Ticket Printer

TRACK	CASE	CONTENTS	CHANNEL
<b>TRACK BASICS:</b> Networking for Business	CASE1	SMB Ethernet Infrastructure	SI / Reseller Partner
	CASE2	Central Management Network Infrastructure in the City Hall	
	CASE3	SMB VPN Network Security	
	CASE4	Networking the home PCs with 300Mbps 11N wireless LAN	
<b>TRACK1:</b> Home Networking & Security	CASE5	Networking Home PCs via the Existing Powerline	Retailer
	CASE6	Using IP Camera for Home Security	
<b>TRACK2:</b> WISP Networking	CASE7	WISP Backbone and CPE	Golden Partner
	CASE8	WISP Point to Point Backbone Link	
<b>TRACK3:</b> Advanced Networking	CASE9	FTTx, Metropolitan Network Infrastructures	Golden Partner
	CASE10	Hotel Internet Service via VDSL & WLAN	
	CASE11	Hotspot Internet Access	
<b>TRACK4:</b> IP Surveillance & Security	CASE12	IP Surveillance PoE System Safeguards the Nation Park	Golden Partner
	CASE13	Remote Health Care via IP Camera	
<b>TRACK5:</b> Projector Server	CASE14	Hotel Internet Service via VDSL & WLAN	Reseller Partner or Office Equipment Channel
	CASE15	SOHO Network Infrastructure via Wireless Projector Server	
<b>TRACK6:</b> IP Telephony	CASE16	Main_Branch Office VoIP	Golden Partner and Telephony Channel
	CASE17	VoIP and Internet Service via an IAD	
<b>TRACK7:</b> Digital Signage	CASE18	Campus Bulletin Board by Digital Signage Network Player	Golden Partner, VAR or Installer