SMB Partner E-Seminar
Enhanced Productivity through Mobility
Welcome to the Cisco E-seminar on Enhanced Productivity through Mobility.

This seminar is designed to give sales professionals an understanding of Cisco’s solutions for mobility. As many companies have employees who are spending more time than ever away from their office, they require solutions which give these travellers mobile connectivity, so they can stay productive, any time, any place.
In this seminar, we will first look at the dynamics and trends in the industry, and explain how mobility and connectivity have become such important requirements for business travellers.

Next, we will discuss what the business needs are for companies and their employees in terms of staying productive while they are on the road.

We will then introduce the Cisco Mobile Office program and explain how it can meet these needs as well as help to accelerate the growth of public wireless LAN offerings.

Next, we will zoom into the technologies involved and discuss some typical deployment scenarios.

Finally, we will explain why selling productivity solutions from Cisco is beneficial to both your customers and your own company, as a Cisco reseller.
Business Travel

Let's begin by taking a look at how the market trends are driving the growth of Mobility.

In our global economy, many businesses are dealing with customers, suppliers and partners in different countries. As a result, more and more business professionals are spending their time away from their company offices. On the other hand, “travelling” itself has never been easier or more affordable.

Business travellers, however, spend valuable time in airports, hotels, train stations or restaurants, while waiting for their next meeting, their flight, their train. As a result, travel time in many cases unfortunately equals: lost time.

At the same time, in order to stay competitive, companies want their employees to be as productive as possible. To be really productive, many mobile professionals require communication with customers, partners or colleagues; they need access to critical resources and applications in their company network, and require connectivity to the Internet.
Growth of Travel

Take a look at the following statistics: according to IDC, on a worldwide, yearly basis, there are 363 million hotel visitors, 802 million airport visitors, 13 million air lounge visitors, 130 million convention centres visitors, 470 million highway restaurant visitors, and 12 billion railway station visitors. And these numbers keep growing every year.

Moreover, IDC estimates the number of mobile workers in Europe will more than double to 20 million between 2001 by 2005.

So what does this mean for venues associated with the travel industry? As the number of visitors continues to grow and the need for connectivity increases, these venues need to start considering new product and service offerings aimed at the business traveller.
Over the last few years, networks have become a critical infrastructure to companies. Mobile employees are increasingly equipped with laptop or notebook PCs, often with Wireless LAN connectivity. By 2004, Gartner estimates that over 80% of all notebook PCs sold will be equipped with Wireless LAN capabilities. The numbers for pure corporate-purchased laptops are even higher.

Frost and Sullivan estimate 28 million Wireless enabled devices including laptops and PDAs will be in use by 2006.

When so many mobile business people travel around with wireless LAN capabilities in their laptop PCs, demand for Internet access is created everywhere.
Remote VPN Access

A similar trend is visible in the numbers illustrating the percentage of mobile workers that are able to access their company VPN while on the road. Back in the year 2000, only about 15% of business travellers had VPN access. Today, over 65% of business travellers have this kind of intranet access, and these numbers keep growing.

Companies are clearly prepared to invest in the technology that gives their employees VPN access, and expect them to remain productive while on the road. We are starting to see a trend where employees are planning their business trips according to venues offering high speed internet access.
Business Travellers Survey

Let's have a closer look at the specific requirements of travelling business people in today's networked economy.

In a recent survey, business travellers were questioned about their high priority needs while on the road.

The true “Road Warrior” travels so much that remote access is always a problem. At the same time, keeping up-to-date is seen as a key priority. With today’s technology, this means that greater accessibility to email is critical to travelling professionals. Furthermore, they see higher bandwidth as an extra advantage.

Remote access to the Internet or their company intranet allows them to be more productive and, as a result, have more hours available in the day. They’re also able to prepare themselves better for customer meetings, and can access critical business applications within their company’s network. This could allow them, for instance, to place orders in real time.

Today, many business travellers already try to dial into their company network, for instance from a hotel room, to download email, browse the web or access internal company databases. Traditional remote networking, however, is often too slow, unreliable, expensive or inconvenient, to meet the needs of business professionals on the move. Ideally, such connectivity should be high-speed, secure, easy-to-use, flexible and low-cost.
A *Typical Day* for Business Travellers

During a travel day, business travellers could benefit from high-speed Internet connectivity at the different locations they visit. Let's have a look at a typical travel day of a nomadic worker.

It's a Monday morning and you have a customer meeting in the afternoon in Paris for which you will take a flight. You start your day working from home using VPN, sorting emails and checking whether your flight has not been cancelled or delayed. Before you go, you use your IP phone to quickly check traffic status to get to the airport.

You arrive at the airport and discover that your flight has been delayed due to weather conditions. You have an extra hour of waiting time. Luckily there is a hotspot at the business lounge so you can be productive during a time that would normally be seen as dead time. You take your laptop and use wireless access to get on the Internet, and through VPN, access key applications on your corporate network, or use Cisco SoftPhone to make and receive phone calls to and from your desk extension.

Finally, you arrive at the client site and want to demo something from your intranet. You know that this company actually offers a Public Wireless LAN in a designated area so you can access your corporate intranet to show the files.

The meeting went well and you just got new business. In the evening, you stay at a hotel offering High-Speed Internet Access. You have a fast connection in the bedroom as well as wireless capabilities in the lobby and the restaurant. So during the evening you can stay productive and complete your order administration, do e-learning, access your work files, and prepare your next day...
What is **Cisco Mobile Office** (CMO)?

Cisco Mobile Office helps drive the mobility market. It is a global programme focused on promoting secure, standards-based broadband Internet access in public spaces for business travellers. It includes a set of technologies, services and applications that enable secure, broadband Internet access and remote network computing, for business travellers.

The programme offers marketing support and collateral to the various venues to help deliver the mobility message and drive demand and recognition for the service.

This program is delivered in partnership with Cisco resellers, partners, Service Providers and key venues - such as hotels, restaurants and airports - as well as complementary technology providers who complete the public access networking solution.
The Cisco Mobile Office Program targets the various locations that are well suited to become a Hotspot that provides high speed internet access including:

- Airport waiting areas and airline lounges
- Railway stations
- Hotel lobbies, meeting centres and guest rooms
- Conference or convention centres
- Public areas at customer sites
- Other public places, such as restaurants, coffee shops, etc.

Those venues that are part of the Cisco Mobile Office Program allow travellers to stay connected while on the move.
So which products and technologies are included in the Cisco Mobile Office Program? Let's have a look at the key components and zoom into some typical deployment scenarios.

The Cisco Mobile Office program includes a set of enabling network technologies.

At the heart of the Cisco Mobile Office are proven Cisco networking products. Backed by Cisco IOS [read: I-O-S] management software, which supports network services and enables networked applications, these products provide the features and technologies needed to power advanced wired and wireless connectivity.

Wireless LAN products provide a standards-based, field proven, high-speed wireless networking solution for both in-building and building-to-building WLAN applications. These products are ideal for mobile professionals who need the security, flexibility and freedom of a WLAN to enhance productivity.

The comprehensive line of Cisco high-performance Layer 2 and Layer 3 switches delivers the scalability, flexibility, performance, and manageability required for advanced wireless and wired applications in the access hotspots. Catalyst switches cost-effectively enhance performance throughout every area of the hotspots’ distribution and core network.

Cisco Security solutions and VPN solutions, such as PIX firewalls and VPN concentrators, deliver strong, secure end-to-end access and remote site-to-enterprise connectivity. These solutions give mobile users and enterprise IT departments outstanding performance, protection, and peace of mind.

A Service Selection Gateway or a Building Broadband Service Manager Application allows mobile users to get access to the network, and provide accounting, authorisation, reporting, policy and management functionality to multi-user locations.

Finally, IP Telephony solutions enable mobile users not only to use the network for data communications, but also for voice communications, including voicemail, unified messaging and SoftPhone capabilities.

Cisco Technologies

So which products and technologies are included in the Cisco Mobile Office Program? Let's have a look at the key components and zoom into some typical deployment scenarios.

The Cisco Mobile Office program includes a set of enabling network technologies.

At the heart of the Cisco Mobile Office are proven Cisco networking products. Backed by Cisco IOS [read: I-O-S] management software, which supports network services and enables networked applications, these products provide the features and technologies needed to power advanced wired and wireless connectivity.

Wireless LAN products provide a standards-based, field proven, high-speed wireless networking solution for both in-building and building-to-building WLAN applications. These products are ideal for mobile professionals who need the security, flexibility and freedom of a WLAN to enhance productivity.

The comprehensive line of Cisco high-performance Layer 2 and Layer 3 switches delivers the scalability, flexibility, performance, and manageability required for advanced wireless and wired applications in the access hotspots. Catalyst switches cost-effectively enhance performance throughout every area of the hotspots’ distribution and core network.

Cisco Security solutions and VPN solutions, such as PIX firewalls and VPN concentrators, deliver strong, secure end-to-end access and remote site-to-enterprise connectivity. These solutions give mobile users and enterprise IT departments outstanding performance, protection, and peace of mind.

A Service Selection Gateway or a Building Broadband Service Manager Application allows mobile users to get access to the network, and provide accounting, authorisation, reporting, policy and management functionality to multi-user locations.

Finally, IP Telephony solutions enable mobile users not only to use the network for data communications, but also for voice communications, including voicemail, unified messaging and SoftPhone capabilities.
Wireless LAN networking today is an easy and secure way of getting connected to a local area network or the Internet. Using a Wireless LAN client adapter in a laptop PC, users connect to an Access Point, which is connected to the rest of the network infrastructure. As such, wireless networking is really plug and play, and permits the user to move around freely within the cell covered by the Access Point, and still remain connected to the network.

Cisco's Wireless LAN solutions are standards based and deliver levels of performance, security and reliability similar to those of wired LANs.
Virtual Private Networking

Virtual Private Networking is another key technology allowing mobile workers to connect to their company network from a Hotspot.

So what is a Virtual Private Network or VPN? A VPN is a company network deployed on a shared infrastructure, employing the same security and management policies that are usually applied in a private network.

VPN technology provides a way for using public network infrastructures, such as the Internet, to provide private, secure access to applications and company resources for employees in remote or home offices, for business partners, and even for customers.

A VPN can be established over different underlying transport networks: the public Internet, or, for instance, a managed IP VPN network provided by a service provider.

In order to carry traffic over such network in a secure and reliable way, VPN technology uses a combination of tunnelling, encryption, authentication, access control mechanisms and services.
Let's now have a look at two typical Cisco Mobile Office deployment scenarios: a connection from a hotspot in a public venue, such as an Airport or Railway station, and a connection from a Hotel Hotspot.

In either of these examples, a Service Provider is involved, to take care of the connection, from the public venue or the hotel, to the Internet. In order to deliver remote connectivity with maximum reliability, the installation and maintenance of these locations is usually ensured by Cisco Powered Network, or CPN, Service Providers.

In a public venue, travellers will typically access the Internet or their corporate network via wireless LAN adapters in their notebook computers or handheld devices. The wireless communications are picked up by a Wireless LAN Access Point or a Wireless Bridge. This in turn connects to the Service Provider’s wired network, via high-performance LAN switches, to ensure maximum bandwidth, flexibility and scalability.

Through a Gateway, which authenticates users and grants them access to the network, and a router, a connection with the Internet is established. As such, the business traveller can already make use of the public Internet, browse the World Wide Web, and so on.

Using VPN technology, the user can then be granted secure access – via the Internet – to his company network, for example to download email, use the internal company web pages, or access internal servers.
Hotels may also make use of wireless hotspots in lobby or conference areas. However, in a wired environment such as a hotel room, a mobile professional can also communicate with the network using a standard Ethernet LAN adapter.

Hotel and building owners are able to use their existing phone wiring infrastructure to bring Ethernet to the different rooms, by making use of Long Reach Ethernet technology. Long Reach Ethernet or, L-R-E for short, delivers Ethernet-speed connectivity over standard phone lines, and still allows traditional phone communications to happen over the same wires. LRE CPE devices and a POTS Splitter take care of separating the two types of communication: they send phone traffic, as usual, to the PBX, and network traffic to the LRE-switch.

As with the Public Venue scenario, from this switch, it follows a similar path, through the gateway and the router, to the Internet. And then, using VPN technology, through the Internet to the company network.

In general, for any other public location, such as train stations and convention centres, either wired or wireless scenarios are possible, or a combination of both.
Let us now have a closer look at the function of the Gateway, which is present in any CMO architecture, no matter its location.

This device functions as a “toll gate”, which enables Internet Service Providers to provide network access to subscribers. It allows the end user to do simple, plug-and-play, self-provisioning of services and it has multiple automated authentication and billing options. Examples of such systems are Cisco’s Building Broadband Services Manager, or BBSM for short or Cisco’s Service Selection Gateway, or SSG for short.

When the user tries to connect to the internet, the gateway will redirect its browser page to the venue website. At this point, the user is presented with an access screen. It lets the user identify himself, choose from different levels of service, choose a billing method, and it tracks usage information, such as connection time, billing, location, selected bandwidth, and so on. Once the user accepts the service, he or she can get access to their corporate network through a virtual private network, establishing a secure, encrypted tunnel through the Internet.

**Billing and Security**

Let us now have a closer look at the function of the Gateway, which is present in any CMO architecture, no matter its location.

This device functions as a “toll gate”, which enables Internet Service Providers to provide network access to subscribers. It allows the end user to do simple, plug-and-play, self-provisioning of services and it has multiple automated authentication and billing options. Examples of such systems are Cisco’s Building Broadband Services Manager, or BBSM for short or Cisco’s Service Selection Gateway, or SSG for short.

When the user tries to connect to the internet, the gateway will redirect its browser page to the venue website. At this point, the user is presented with an access screen. It lets the user identify himself, choose from different levels of service, choose a billing method, and it tracks usage information, such as connection time, billing, location, selected bandwidth, and so on. Once the user accepts the service, he or she can get access to their corporate network through a virtual private network, establishing a secure, encrypted tunnel through the Internet.
The Building Broadband Services Manager provides all the functionality needed to offer high speed broadband Internet access in public locations such as hotels.

The critical requirement for this solution is “plug and play”, since guests don’t want to have to reconfigure their laptops just to get an internet connection for one night.

VPN support is another key issue. While the BBSM is VPN-neutral and just lets VPN connections pass through, many hotels will deploy Internet access with private IP addresses on the internal network. This configuration requires the router to use technologies such as Network Address Translation, which prevents many VPN concentrators from working. With a BBSM, end users are able to set-up VPN connections when they need it.

Furthermore, the BBSM integrates with the hotel's property management system, supporting direct billing to the room and access from meeting rooms. It also offers a customisable connect screen, bandwidth management and supports tiered service levels.
How can Cisco Mobile Office be an attractive solution for the Small and Medium Business market? Let us have a look at the most important features and advantages and explain what the key selling points are.

The benefits of Cisco Mobile Office are compelling to any company which has travelling professionals.

First, it offers Ethernet-speed communication from typical business travel locations, such as airports, conference centres and hotels. This high bandwidth enables powerful applications and business solutions, such as Video on Demand, E-learning, Customer Relationship Management, IP Telephony, and so on.

Furthermore, instant, reliable and secure network access is ensured, either to the Internet, or to a company’s intranet through VPN. These high levels of performance, reliability and security are guaranteed, as the Cisco Mobile Office infrastructure is delivered by an ecosystem of industry-leading, certified Service Providers, systems integrators and venue partners.

Mobile networking helps increase efficiency and overall productivity of employees, while they are away from the office.

They have access to business applications and to accurate, real-time information, at any time of the day.

And finally, access and accounting is very convenient, through an intuitive interface and billing system.
In addition to benefits for end users, Cisco Mobile Office also offers a series of benefits to the venues who provide a CMO service to their customers.

First of all, this service is seen by their customers, as a value added service offering. Because of the billing aspect of the Internet connectivity service, venues are able to increase their revenue. Customers will also tend to stay longer to make use of this service, which may increase the indirect revenue from other services offered, such as food and beverages. By offering Cisco Mobile Office, venues are also able to differentiate themselves from their competition. And finally, once customers have sampled this reliable high-speed connectivity service, they will keep coming back, thus increasing their loyalty to the venue.
Hotspot Opportunities in **EMEA**

The opportunities for equipping hotels and public places with hotspots are enormous. This table from IDC shows the numbers of existing hotspots in Europe, Middle-East and Africa in 2002. By 2004, these numbers are expected to grow by a factor 3 to 5. But compared to the total number of potential, available places that are typical hotspot locations, these numbers are still very low, and as such offer significant selling opportunities to Cisco resellers.

Furthermore, Frost and Sullivan states that today, hotels and conference centres are the largest hot spot market, but predicts that eventually, after 2006, high street retail outlets will become the largest market.
How to Sell CMO

So what is the best approach to sell Cisco Mobile Office to your customers?

First of all, educate your customers the importance of mobility and potential gains in productivity for travelling business professionals and their companies. Train your teams on the technology solutions involved with Cisco Mobile Office. As CMO consists of a number of different products, you can also offer product bundles to your customers.

Take part in industry events and demonstrate that these solutions work and how they work.

Cisco offers resellers a number of sales tools and Return-on-Investment models to help in their efforts to convince venues about these solutions. Cisco also offers commercial collateral for venues, to help them market their hotspot availability to their customers.
Why Sell CMO

For Cisco resellers, there are additional benefits in selling Cisco Mobile Office solutions.

Selling CMO to venues will generate a need for additional services, such as installation and maintenance. It will also bring opportunities to sell additional products, such as wireless solutions or IP Telephony solutions and applications.

Resellers are also offered to participate in joint promotions with Cisco. And last but not least, Cisco provides a full portfolio of advanced training and support possibilities to its resellers, in order to increase their competences and augment their success.