

## VoIP over Wi-Fi Business Model

### problem

Company XYZ is an ISP provider with multiple Wi-Fi access points. Company's management is discussing alternative ways to generate incremental revenues. Market research shows that PDA are rapidly gaining acceptance among consumers and that there is a potential viable market niche for providers of services to PDA users. After discussions, the management of XYZ decides to launch a VoIP over Wi-Fi service offering.

VoIP over Wi-Fi is a relatively new business model that allows companies to capitalize on their installed Wi-Fi access points' base and expand revenues with low to moderate capital investments. The business model is based on offering VoIP telephony services to PDA and laptop users over Wi-Fi networks. Besides generating incremental revenues to service providers, the VoIP over Wi-Fi services strengthen customer loyalty, increase retention rates and improve overall profitability.

Before finalizing their decision, XYZ's management hires an outside consultant to help with equipment selection and deployment. The consultant recommends that XYZ consider purchasing a turnkey VoIP over Wi-Fi solution as potential incompatibility issues and deployment delays could add up significantly to the total cost of ownership. The consultant also recommends that XYZ select a VoIP over Wi-Fi solution that is reliable and scalable to accommodate future business growth. He further recommends that the company select a solution which is interoperable with the broadest set of VoIP equipment and one that offers advanced billing functionality to accommodate different billing models and rating plans.

### solution

Although current VoIP technology is quite advanced relative to the one that existed few years ago, VoIP implementations could still present significant challenges, especially to businesses without prior VoIP experience. VoIP over Wi-Fi providers are particularly susceptible to equipment, voice codecs and VoIP protocols incompatibility as they interface with multiple providers of call termination services. Such issues could significantly delay deployment and reduce the quality of the offered VoIP services. Service providers can easily address those implementation issues by purchasing a turnkey solution from reputable VoIP equipment manufacturer.

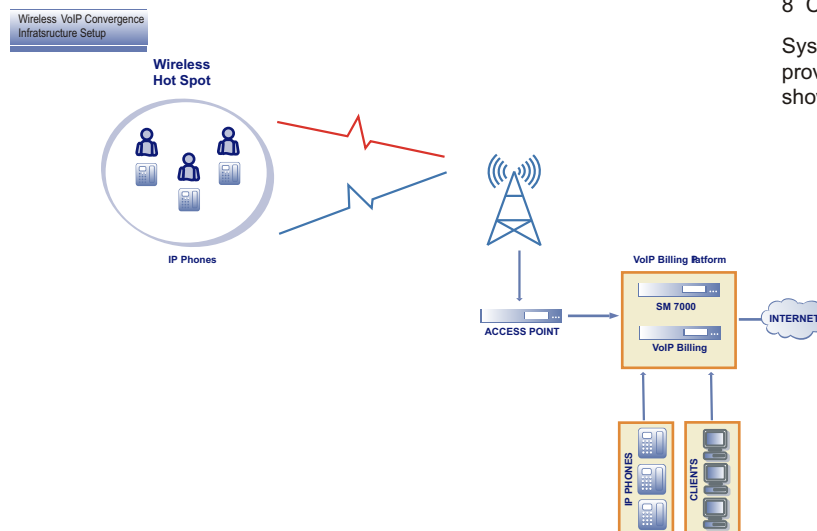
SysMaster Corporation, the global leader in turnkey VoIP equipment solutions, could offer XYZ a complete VoIP over Wi-Fi solution that addresses customer specific needs. SysMaster's solution offers easy operation and fast deployment schedule (typically less than a week). The turnkey solution eliminates the need for equipment integration, speeds up implementation and reduces operating overhead. SysMaster's solution also offers high scalability and advanced billing capabilities to support comprehensive set of billing models and rating plans.

A typical SysMaster VoIP over Wi-Fi solution has the following requirements:

- 1 VoiceMaster VoIP Billing Server
- 2 SysMaster VoIP Gateway(s)
- 3 SysMaster Softphones
- 4 Optional Modules for the Callback and Billing Servers
- 5 Remote Installation and Technical Support
- 6 High speed Internet access
- 7 Network of Wi-Fi Access Points
- 8 Contracts with VoIP Carriers

SysMaster can provide items 1 through 5 while the service provider is responsible for items 6, 7 and 8. Figure 1 below shows the SysMaster VoIP over Wi-Fi solution architecture.

### Solution Infrastructure



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## solution features

- Four Layer Billing Structure
- Managed Service Support
- Unlimited Routes
- Peak Time On/Off Billing
- Advanced Rate Switching
- FlagFall and Progressive Billing
- Intuitive and user-friendly GUI interface

## how does the solution work?

- 1 The customer purchases calling time from the service provider
- 2 The customer installs SysMaster's softphone on his PDA/Laptop
- 3 The customer accesses the Wi-Fi network of the service provider
- 4 The customer starts the softphone program
- 5 The customer dials a number
- 6 The softphone sends call request to the VoIP gateway
- 7 The VoIP gateway sends call authorization request to the billing server
- 8 The billing server verifies customer's balance and authorizes the request
- 9 Based on the destination number, the VoIP gateway searches its routing table to determine the appropriate call termination provider
- 10 The gateway sends call setup request to the call termination provider's gateway the request
- 11 During conversation the VoIP gateway converts voice to IP packets and routes them to the call termination provider's gateway and vice versa
- 12 Upon completing the call, the billing server contains CDR record of the call and bills customer accordingly

## benefits

### Turnkey Solution

SysMaster offers truly turnkey VoIP over Wi-Fi solution. SysMaster provides all equipment elements as well as remote installation and technical support. Customers secure high speed Internet access and Wi-Fi access points, and sign contracts for call termination with VoIP carriers. In a typical business scenario, the service provider signs contracts with multiple VoIP carriers and configures the VoIP over Wi-Fi solution to route calls based on least cost or best quality basis.

### High Scalability

SysMaster is probably the only VoIP equipment manufacturer that fully supports the grow-as-you-go concept. SysMaster's equipment can easily scale from 1 to 20 T1 lines per VoIP gateway (24 to 480 PSTN lines) or from 48 to 1920 VoIP channels. In addition, the billing server can scale to handle from 500 to over 20,000 concurrent calls. The company offers VoIP equipment in five capacity tiers that cover the needs of the whole spectrum of VoIP over Wi-Fi service providers.

### Rapid Deployment

SysMaster's VoIP over Wi-Fi solution has a rapid deployment schedule - in most cases the solution can be up and running in less than a week. Because of its integrated nature - the solution does not present incompatibility issues which are often the reason for extended deployment delays and additional costs.

### Fast ROI

Because of its high affordability, fast deployment, and scalability, SysMaster's VoIP over Wi-Fi solution is characterized with fast return on investment. Depending on the difference between rates that the provider charges his customers per minute, termination costs, and capacity utilization, providers can typically recoup equipment investment in less than three months (see ROI brochures for details).

### High Affordability

SysMaster's VoIP over Wi-Fi solution is highly affordable for both new users and existing customers who want to expand their capacity. In fact, it is the solution with the best features/cost ratio in the industry. As SysMaster uses a tiered capacity approach where each successive equipment tier doubles the capacity of the previous one, customers can upgrade in incremental steps without overspending for capacity that they don't immediately need. At the same time, as equipment utilization increases, fixed costs per call fall (i.e. customers pay a fixed cost for a given equipment capacity and do not pay recurring fees based on the number of calls).



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