

Sterlite Tech Wi-Fi Service Management Platform (SMP)

Enabling innovative business cases for Hotspot based Wi-Fi deployments







The evolution of wireless technologies together with exponential rise in the smart devices has grown the user demand for ubiquitous data access. In this new era of explosive mobile data growth and with the increase in the hotspots deployments worldwide, Wi-Fi has established itself as a reliable wireless access technology capable of delivering seamless data experience – giving a new meaning to the connected world.

Looking at the soaring market opportunity, Wireless Carrier Service Providers, Cable Operators, Internet Service Provider, Small and Medium Scale Enterprises (SMEs) and venue owners worldwide see great potential in leveraging Wi-Fi and are deploying solutions for Wi-Fi hotspots to deliver anytime-anywhere connectivity to their existing subscribers as well as catering to non-operator, walk-in, guest users, nomadic (casual & roaming) users through hotspots at public venues thus extending their reach to new customer segments leading to greater monetization opportunities and enhanced experience.

Sterlite Tech Wi-Fi SMP Offerings

Sterlite Tech Wi-Fi Service Management Platform (SMP) is a comprehensive & flexible solution catering to the emerging demand for a cost-efficient and readily deployable Wi-Fi Services. Sterlite Tech's Cloud-ready Wi-Fi Platform caters to the customized needs of all sort of Service Providers* as well as non Telcos including public venue owners willing to deploy Wi-Fi and increase Wi-Fi hotspot footprint by offering services portfolio to the end users through Wi-Fi enabled devices and effectively manage hotspot based Wi-Fi business.

At a Glance: Parameters to be considered for hotspot based Wi-Fi deployments

 User Type	Service Provider's existing users, non operator user, walk-in, guest users, nomadic (casual & roaming)
 Device Type	Smart phones, laptops, tablets, handheld devices and other Wi-Fi enabled smart devices
 Hotspot locations	Malls, cafes, universities, hotels, hospitals, airports, restaurants, enterprises, government institutions, retailers, transports, stadiums, events, resorts, entertainment venues and other public places
 Registration medium	Captive Portal, Mobile App, SMS based, USSD based
 Authentication	MSISDN, MAC-ID, SMS based, credentials such as voucher PIN, username & password, one time password (OTP)
 Payment Methods	Online via credit/debit card, physical voucher based, deduction from existing prepaid balance

Key Features

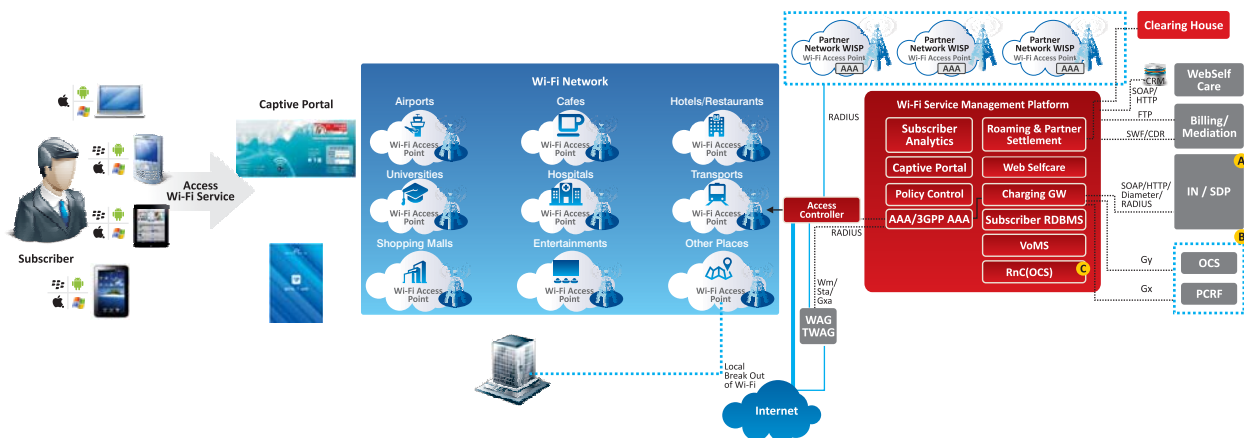
Sterlite Tech Wi-Fi SMP is a pre-integrated and modular architecture with highest number of integrations with multi vendor access ecosystem. The solution offerings for hotspot based Wi-Fi roll out include:

- **Captive Portal with Hotspot / Partner specific branding facilities:** Also known as Web-In Portal, it is a customized device agnostic portal with promotion, branding facilities and multi lingual support. It also enables rapid subscriber provisioning, prompt notifications via SMS/email and easily integrates for flexible billing and charging models.
- **Voucher Management:** Enables service providers/ wholesalers/ partners to generate web based batch wise vouchers (online e-voucher / physical) with PIN, voucher access code and validity allocation.
- **AAA for Seamless Access, Authentication and Authorization:** Enables support for validation based on MAC-ID, credentials such as username & password, voucher details, One Time Password (OTP), MSISDN, via Captive Portal and authorizes them for appropriate level of services. It also provides Proxy AAA support in case of roaming or redirection to other partner networks.

- **Dynamic Policy and Real Time Charging:** Enables differential policy application (time, volume, quota, QoS, location etc.) in real time. The platform integrates seamlessly with an existing IN-based core network for convergent services, balance management and more.
- **Pre-integration with Elite Access Controller:** Enacting as a Wi-Fi gateway, it enables redirection to Captive Portal for Web login over http and AAA for authentication.
- **Proven Interoperability:** Pre-integrated with industry leading SMS gateways, payment gateways, email servers and roaming partners like IPass & Boingo.
- **Partner Reconciliation and Roaming Settlements:** Enables partnership with different hotspot providers, venue owners, other operators, content partners, international roaming partners across the globe and reconcile based on various differential agreement models like infra sharing, revenue sharing, etc.
- **Support for Multiple Payment Methodologies:** Interoperable with leading payment gateways, the platform enables payment facilities via several methods such as online credit /debit card, physical payment, deduction from existing prepaid balance, IVR based payment over HTTP, USSD based

(Note: For detailed modules description and technical specifications, Kindly request for Techsheet)

Solution Architecture



- A Service Provider has own IN for Charging and Balance Management of services over Wi-Fi
- B Service Provider has a packet core Infrastructure in place
- C Service Provider opts for RnC for Charging and Balance Management of services over Wi-Fi

■ Service Provider's Packetcore & IT Infrastructure ■ Sterlite Tech Wi-Fi Service Management Platform

Business Cases

Wi-Fi is one of the emerging and dynamic wireless technologies and as a result a power shift has been observed in its adoption from traditional telcos to the venue owners and retailers who are also getting on the Wi-Fi game.



Complimentary Wi-Fi: Wi-Fi (limited and unlimited plans) as an Add-on service at public places



Voucher based Plans: Physical or online prepaid voucher with PIN number to access Wi-Fi



Time / Volume / Hybrid Plans: Free or paid Wi-Fi services with a specific limit for access based on time or volume or both



Login Credentials based access: OTP based authentication on the MSISDN or email or pre-registered username on the Portal, on authentication of which user is able to access Wi-Fi



Tiered Services: Dedicated bandwidth access for a specific time – throttle after reaching a specific time/volume



Fixed Rental Plan: Weekly or monthly voucher accessible at hotspots on a fixed rental basis



Pay as you Go: Access Wi-Fi and pay only for the services utilized and usage done



SMS Voucher: On registration, voucher is received via SMS and is validated on entering the details on Portal



MAC ID based authentication: Authentication is done based on MAC-ID registered, preferable in case of repeat users



OTP based authentication: Validation is done on entering the One Time Password received on the registered MSISDN on Captive Portal



Roaming: Wi-Fi Pass for roaming users, Wi-Fi plans accessible at all hotspots in partnership with iPass & Boingo



Free + Paid: Free Wi-Fi availability for a specific duration for user to experience Wi-Fi and then charge on usage basis



Ad based Model: Watch video advertisement for a specific time to avail free Wi-Fi



Shared Wallet: A single convergent data bucket (Cellular + Wi-Fi, ADSL + Wi-Fi) for existing user subscription



Bundled Plans: Service providers can offer Wi-Fi as an add-on as well as offer it as bundle Wi-Fi Services with business models such as Residential, Enterprise, Cable MSO, Community Public Wi-Fi, Location based Services – On event and many more



Analytics & Reporting: Fill the survey questionnaire displayed on Captive Portal and avail free Wi-Fi

Key Benefits

Service Provider Push

- **Extend Reach & Reduce Churn:** Supplement for carriers to their existing data services
- **Increase Monetization Opportunities:** Capitalizes on new revenue channels for service providers, cable operators and partners
- **Cost Efficient:** Reduce CapEx with more hotspot deployments as compared to cellular networks spectrum cost
- **Leverage Resource Investment:** Flexible integration of Wi-Fi networks with other IT & network elements
- **Enhance User Experience:** Offer Innovative business models and use cases to boost customer loyalty

End User Pull

- **Seamless Experience:** High speed services to subscribers with consistent data quality and seamless session continuity
- **Anytime –anywhere connectivity on the go:** Greater availability of Wi-Fi hotspots has led the user to freely move and access data services without interruption
- **Affordability & easy availability:** Enables Wi-Fi roaming plan & avoids bill shock for the business travellers
- **Reduced data usage cost:** Wi-Fi is cheaper compared to other cellular plans
- **Greater indoor experience:** At many places cellular network reach is an issue, Wi-Fi is the saviour
- **Services on the run:** Carrier-grade quality of service (QoS), security and resiliency, compared to ad hoc and unmanaged Wi-Fi hotspots, widely used for social media updates, video streaming, photos uploading etc.

About Sterlite Technologies:

Sterlite Technologies Ltd [BSE: 532374, NSE: STRTECH], is a global technology leader in smarter digital infrastructure. With a pure-play telecom focused business that develops & delivers optical communication products, network & system integration services and OSS/BSS software solutions, Sterlite Tech has sales network in six continents. The Company has manufacturing presence in India, China & Brazil, and aims to transform everyday living by delivering smarter networks. With a strong portfolio of over 130 patents, Sterlite Tech is home to India's only Centre of Excellence for broadband research. Projects undertaken by the company include intrusion-proof smarter data network for the Armed Forces, rural broadband for BharatNet, Smart Cities' development, and establishing high-speed Fibre-to-the-Home (FTTH) networks.



Delivering Smarter Networks

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