MiLife™ enhancedVPN



MiLife™ enhancedVPN allows mobile operators to offer their business customers the ability to extend the benefits of telephony Virtual Private Networks (VPN) to their mobile users. There is also the opportunity to address other markets, for example small businesses and families, with features such as sophisticated call barring, private short code dialing whilst enabling preferential call tariffs.

Benefits

- Feature rich voice services across single & multiple networks including roaming and access from different wireless technologies
- Live deployments in Europe, Asia Pacific, Latin America
- Proven Intelligent Network architecture providing high levels of scalability, reliability and a common platform for other services such as MiLife™ SurePay® (prepaid)
- MiLife™ enhancedVPN extensions including packet data and short message service capabilities for GSM based networks

Lucent Technologies
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MiLife™ enhancedVPN solution

In order to retain profitable business customers, mobile network operators must provide sophisticated solutions that minimize the mobile phone costs and maximize employee productivity. Lucent Technologies MiLife™ enhancedVPN solution enables mobile operators to provide business customers with reduced call charges for calls that are routed via their private network and call screening to bar non-authorized calling.

VPN services target high capacity markets, such as corporates, organizations and communities of users. MiLife™ enhancedVPN addresses these customers by providing an optimized global fixed-mobile convergence solution, with a best-in-class feature set, user-friendly functionality, and an evolution path that can take your customers into future generations of the MiLife enhancedVPN service, and other applications such as SHLR and MiLife™ SurePay®.

MiLife enhancedVPN capitalizes on a growing worldwide need for businesses to streamline operations. This enables the mobile operator to support their customers with a single converged service, with a common look and feel to all users, whilst gaining significant operational efficiencies, as well as securing and expanding profitable revenue and market share.

For mobile operators who want to expand the reach of their mobile phone services to children and within small businesses, MiLife enhancedVPN can be used to limit the telephone numbers that can be dialed from a mobile phone and provide short code dialing to simplify calling. In this way the family or business exposure to high mobile phone bills can be controlled.

The MiLife enhancedVPN service application runs on an Intelligent Network overlay, that interacts with the operator's network to provide a virtual network for each customer. MiLife enhancedVPN is a highly configurable solution that supports voice services for GSM, GPRS, UMTS and CDMA networks as well as ETSI fixed-line networks. It includes standards based solutions to ensure service integrity whilst roaming.

Accelerated Time to Market

MiLife enhancedVPN's "off the shelf design" can accelerate your time to market. Lucent's proven solution has a double figure customer base with deployments in most regions and market segments.

Increased profit from Business customers

MiLife enhancedVPN makes it simple for the mobile operator to offer highly competitive pricing packages to a business customer for intra-company, local, national and international calling. Through direct connection to the business' network, rather than routing calls via the fixed network interconnect, the mobile operator's call routing costs can be reduced.

Increased penetration of mobile users

With sophisticated call screening, MiLife enhancedVPN can ensure that individual users within the business are only allowed to call authorized destinations, thus allowing the business customer to extend the benefits of mobile phone usage throughout their business.

Small businesses and parents with children can also use this service to restrict the use of their mobile phones to certain telephone numbers or bar premium rate numbers.

Reduced churn

MiLife enhancedVPN allows the mobile operator to meet the sophisticated needs of the customer, increase customer satisfaction, differentiate from the competition and reduce the threat of customer churn.

Reduced administration costs

Through the enhanced Service Manager (eSM), the mobile operator can provide a single interface to their customer service representatives to provision users, maintain existing subscriptions, answer user queries, and generate reports.

For large installations initial provisioning can be achieved via upstream provisioning systems using the CORBA interface to the eSM.

Alternatively the mobile operator can reduce subscriber administration costs by providing the corporate customer with a web-based self-care capability. In this way user privileges can be dynamically changed by the corporate customer without having to wait for the mobile operator to initiate the changes.

A converged network solution

MiLife enhancedVPN offers converged VPN services across multiple networks via different protocols from a common management platform. Operators will benefit from a single interface for customer care, saving time and money in training and operations.

MiLife enhancedVPN uses a trigger-based environment based on IN technology. The solution supports multiple protocols such as the CAMEL and ANSI-41 families that enable roaming in mobile networks. ETSI CS-1 INAP is also available for 2nd generation mobile or fixed-line network implementations. MiLife enhancedVPN has the capability to support flavors of these protocols that enable operator to deploy the service in a multi-vendor switched

network. Operators can therefore deploy MiLife enhancedVPN on an individual network or across multiple network types simultaneously.

Extended capabilities

For GSM based networks MiLife enhancedVPN provides extended capabilities for packet data and short message service. Similar private numbering and call cost saving can be provided to the short message service, as for the voice service.

For GPRS packet data, the mobile operator can offer corporate customers the ability to screen users or APN addresses to allow or disallow access. This APN screening has benefits of preventing unauthorized Internet access, of simplifying remote access to the corporate Intranet by re-routing all packet calls to a Business APN with simplified updates when an alternative APN is to be used, either through changed subscription, or connection failure.

Deployment Experience, Proven Solutions

MiLife enhancedVPN has been deployed with operators world-wide in a range of multi-vendor environments. With many successful deployments completed, Lucent has extensive experience in helping mobile operators migrate existing customers to Lucent's IN solution.

Feature flexibility

The MiLife enhancedVPN service supports the standard set of VPN service features, such as private numbering plan for on-net calling, call screening, forced on-net calling for PSTN (Public Switched Telephone Network) dialing, virtual on-net, and off-net calling. The screening criteria can help businesses monitor and control usage of telephone services. The "Lite" feature set is targeted at operators with less complex end-customers, however this can be extended into the full feature rich solution which includes extensive call screening, administration and advanced routing features such as variable routing using intelligent decision trees.

Benefits to the mobile operator

- Capture corporate customer traffic
- Increase customer loyalty
- Retain customers through attractive pricing incentives to corporates, small businesses and families
- Maximizing investment in IN infrastructure
- Lower service provisioning (centralised administration) and network operations costs
- Reduced risk solution through high levels of scalability and reliability (from fifteen thousand to more than 1 million users per network with 99.999% availability)

Benefits to the business customer

- Reduced costs for on-net intra-company calls (mobile to mobile, mobile to fixed, fixed to mobile)
- Reduced costs for off-net calls (local, national and international)
- Reduced costs through sophisticated call screening based on calling party, called party and location
- Improved business communications – increasing productivity of the expanded mobile workforce
- Centralised Service Administration to reduce provisioning delays, operating costs, and manage/control costs

For GPRS networks, customers can benefit from the following extensions:

- Increased productivity through simple access to corporate Intranet through use of APN screening/routing for packet data calls
- Reduced costs and increased productivity through controlled mobile user's access to Internet

Benefits to the business end-user

- Convenient and simple access to set of VPN features
- Personalised profile – customised features to suit individuals needs

For GPRS networks, users can benefit from the following extensions:

- Ease of use - uniform way of contacting someone or accessing the business Intranet through a single access number

Benefits to the family

- Improved communications between family members
- Increased peace of mind and reassurance through improved contactability
- Ability to control monthly bill amount through sophisticated barring

Benefits to the family end-user

- Ability to communicate with the family at any time
- Simple telephone dialing through easy to remember short codes

Key Features

- Common dialing, screening and centralized billing for voice calls
- Off-net / on-net / forced on-net/ virtual on-net calling
- Abbreviated dialing
- Value added screening based on calling number, called number or location/roaming
- Variable routing / personal alternate numbering / Follow me
- Close User Groups
- Class of Services group profiles
- Security with User Authentication, PIN and Usage Management features.
- Billing with CDRs produced at the MSC/SSP or the eCS and the potential to log calls to specific account codes,
- Authorization code to override standard permissions and accounts
- Interoperability with GSM, GPRS, CDMA, TDMA networks, allowing the same MiLife™ enhancedVPN solution to be deployed in different countries where the mobile operator operates
- Support of ETSI CS1-INAP (Wireline and Wireless), GSM CAMEL I & II, CAMEL III for GPRS/data and ANSI (IS-41, IS-771, IS-826)
- Switch Vendor Independence with interfaces defined to many vendors including deployments with Lucent, Nokia and Ericsson Mobile Switching Centres (MSC)

The MiLife™ Solution for the delivery of mobile applications and services consists of:

- MiLife™ Intelligent Services Gateway (ISG)
- MiLife™ VoiceXML Gateway
- MiLife™ SurePay® charging solutions
- MiLife™ Gateway Mobile Location Centre (GMLC)
- MiLife™ Mobile Positioning Centre (MPC)
- MiLife™ Messaging Solution
- MiLife™ Short Messaging Centre (SMSC)
- Systems and application integration services through accredited partnerships

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