

Product Data Sheet

Living Systems® Connection Agent (LS/CA)



less handover between fixed-line, 3G/4G, and Wi-Fi connections and frees up cellular capacities through smart Wi-Fi offload. It provides MNOs with a flexible white-label platform to deliver a consistent, fully branded customer experience across all networks.

The GSMA Award-winning LS/CA connection manager delivers seam-

Mobile Connectivity Optimization

LS/CA helps mobile users get connected and stay connected to the Internet – be it at home, in the office, in a hotel lobby, or on a moving train.

Your subscribers consume a single, converged bundle of connectivity and enjoy maximized bandwidth without any service disruptions or interruptions.

3G/4G data traffic offload to Wi-Fi

LS/CA's intelligent connection management delivers a cost-effective way to cope with growth in data traffic volumes by optimizing network utilization and lowering congestion.

By intelligently offloading traffic from congested cells to operator-owned or third-party Wi-Fi infrastructures, *LS/CA* actively helps maintain quality of service and user experience while effectively preventing the impairment of lucrative voice services.

Seamless vertical handover with IP preservation

Due to the unique *Living Systems SmartShift Mobile IP* component, *LS/CA* can manage a completely transparent and seamless transition of all IP traffic between cellular and Wi-Fi networks. The connection manager enables reliable session continuity by preserving the device's IP address throughout network changes and thus ensures that applications such as VPN and streaming video or cloud-based services can run without a glitch.

Smart and robust connection management

LS/CA always selects the best available network based on dynamic context and on operator or user preferences.

Support for all major network technologies

LS/CA manages connections to, and seamless vertical handover between, 2G/3G/3.5G (GPRS, EDGE, UMTS, HSPA), public and private WLAN (with seamless authentication), and Ethernet. *LS/CA* is ready for WiMAX and LTE.

Seamless authentication without user intervention

Secure, automated PWLAN login is supported with EAP-SIM, WISPr, and silent browser-based authentication. Corporate Wi-Fi authentication is supported with EAP-LEAP, -PEAP, -TLS, -FAST (IEEE 802.1x).

Fully customizable, multilingual user interface

The skinnable GUI can easily be customized and extended to provide a fully branded connection manager and messaging platform right on the end-user's device. Multilingual support for English, German, French, Italian, and Arabic is available by default, with other languages available on request.

Intuitive end-user experience

LS/CA displays all relevant information about connection availability, activity, and volume statistics on an integrated dashboard.

Benefits

- ☐ Wi-Fi offload of select 3G/4G traffic preserves CAPEX
- ☐ Seamless vertical handover protects quality of user experience
- IP preservation ensures all applications to work without disruptions
- ☐ Zero-click connectivity promotes mobile broadband usage
- VPN and security features act as differentiator towards enterprise customers
- Easy deployment provides fast relief to congested networks

^{1.} GSMA Award 2005 for Best Mobile Business Application



Minimized view for One-Click Connect

Versatile communication and content delivery platform

Provide your subscribers with an integrated platform for sending and receiving SMS and use it for pushing information or advertisements to them.

Easy customization of connection preferences

An easy-to-use connection scenario editor provides simple customization of connection profiles, including network priorities, authentication credentials, VPN configuration, and web browser and printer settings.

Transparent roaming support

LS/CA lets operators and users set preferred networks and customizable spending limits for roaming traffic to prevent nasty surprises.

Integrated support for prepaid schemes

The connections manager supports subscription-based and prepaid data plans.

Broad out-of-the-box hardware support

LS/CA works with a long and growing list of PC and Express cards, USB dongles, and embedded WWAN modules from the leading global device manufacturers.

Ready for enterprise deployment

LS/CA supports a centralized deployment and management of client configurations, including security parameters such as enforcing the use of VPN or limiting access to certain networks only.

Tight VPN integration

LS/CA supports a wide range of VPN products from leading vendors, enabling off-site enterprise users to establish and keep secure connections from within the dashboard. Due to the software's seamless handover capabilities, VPN tunnels will remain intact across network changes.

Sophisticated tools for diagnostics and end-user support

A powerful diagnostics toolbox helps support staff identify and resolve issues that might interfere with the user's quality of experience.

Online software deployment and maintenance platform

This server-side component manages automatic over-the-air updates of software and firmware and provides network operator with customizable user and usage statistics.

Open software architecture

LS/CA is open to extensions with additional functionality for messaging, advertisement, contact management, location-based services, etc. An SMS module and Microsoft® Office Outlook® connector are already available.

About Whitestein Technologies

Whitestein Technologies is a pioneer of self-adaptive enterprise software. We create software that responds to changing conditions so it can optimize processes and infrastructures in real-time. To stay ahead, we are continuously advancing our innovations in the field of autonomous software agent technology. Whitestein Technologies is headquartered in Zug (Switzerland) with several global offices.

"The solution continuously delivers the best possible connection, switching seamlessly between mobile broadband, Wi-Fi hotspots, and DSL."

Torger Kjeldstad Product Manager, Mobile Broadband Telenor

Why a client-side connection manager makes more sense

The end-user device is ideally positioned to resolve connectivity options. A smart connection manager such as LS/CA can keep track of and immediately prioritize the optimal access links based on provider and user defined requirements such as quality of service, bandwidth, latency, jitter, power consumption, operator policies, etc. Leaving seamless connection management to the client eliminates the need for a central coordination entity which can become a bottle-neck or single point of failure, causing lags and service disruptions.

An end-user device based connection manager also reduces complexity at the back-end and makes it easier to integrate an existing infrastructure.

A lean central software deployment platform automatically ensures that all client software is kept up-to-date and collects valuable user behavior statistics.

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