

Session Manager

Converged network Authentication, Authorization and Accounting (AAA) Reliable service experience anywhere

The internet is everywhere! This is not only true in terms of its importance in our society, but also in terms of the ubiquity of access points. Whereas in the past subscribers could only get on the internet via fixed line, service providers now have to be capable of handling access and data transmissions from fixed mobile converging networks (FMC).

For service providers this is a blessing and a challenge. The various networks, such as 2G, 3G, LTE, Wi-Fi, DSL and the cable system enable improved access to profitable broadband offerings, but providers need to ensure that their subscribers always receive the same experience in terms of service continuity, service parity, single sign-on and security.

The Atos Session Manager is the gatekeeper that enables convergence for your subscribers, because it is the end-to-end solution for the network access control services authentication, authorization and accounting (AAA). It manages access to advanced and differentiated services across all network access technologies so you always deliver your subscribers the same experience - no matter where they are and which device they use.

Due to its flexible business logic, the session manager allows you to design and execute innovative and differentiating business models with complex, always evolving policies that are perfectly customized to meet the demands of your subscribers. And if your network is nearing congestion, Session Manager enables Wi-Fi offload through a single sign-on - your subscribers will not notice and continue to receive flawless service.

Session Manager lowers your provisioning costs by eliminating silo-based authentication infrastructures. It reduces your initial investments because it integrates into all access networks independent of their vendors and supports all standard interfaces. Due to its high scalability, Session Manager is ready to grow along with your business.



Session Manager - fast, efficient and proven

- Up to 500.000 parallel sessions in Item Store per GByte backend server memory
- Up to 3.000 transactions per second (tps) on each frontend server
- More than 20.000 transactions per second and site
- More than 30 CSP customers worldwide
- Connecting approx. 200 million subscribers

Typical values

Full access control – smooth and transparent

Session Manager is your solution for the network access control services authentication, authorization and accounting (AAA) compliant with the relevant standards of IETF, 3GPP and 3GPP2. It allows your subscribers to access your network through whatever network access technology they choose, no matter if it is 2G, 3G, LTE, Wi-Fi, DSL or the cable system, and it ensures a transparent access experience even for those moving between different network types.

Wi-Fi offload – innovative solution for network congestion

Due to the explosive growth in mobile data traffic, network congestion has become a major challenge for service providers. Therefore, Session Manager enables the Wi-Fi offload technology that redirects chunks of the traffic in urban areas through already existing Wi-Fi networks. It leverages existing data in the home location register and it ensures your subscribers a seamless experience also in this case by providing a single sign-on access. As a result, your network will be able to handle peak loads exceeding its normal capacity limit.

Flexible business logic – unique and differentiating services

Due to more dynamic marketing conditions, new business models require complex policies and their rapid evolution to meet changing subscriber demands. Session Manager features a multi-level decision logic Rules Engine that allows you to adapt its standard functionality to fit exactly to your requirements. You will be able to provide your subscribers targeted services that really differentiate you from the competition.

You can extend this capability even further with the Atos Policy Manager. It lets you manage your network resources and your subscriber policies on usage level with its decision-tree-structured Policy Engine based on a variety of criteria, including time, location, service, subscription, device, content or payment type in order to increase the Quality of Experience.

Session Storage – easy integration of third-party applications

Session Manager features the central in-memory database Item Store that helps you solve the huge demand for dynamic, real-time session data management. It gives you valuable information about each subscriber's state and identity and it enables third-party applications to retrieve subscriber session information via various standardized protocols.

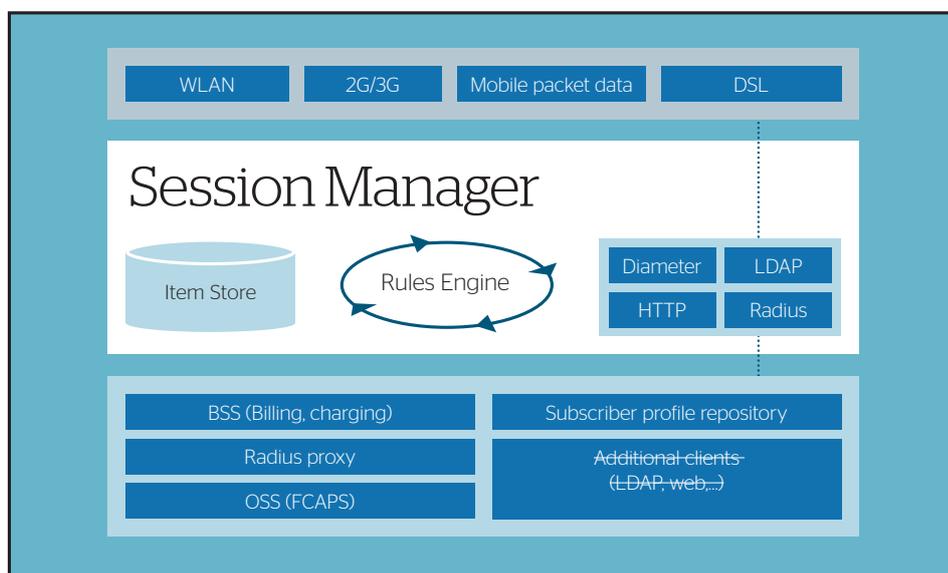
Because dynamic subscriber session info is valuable to a vast number of interested parties, for example advertisers who are now able to correlate billable identity and personalized services, it significantly improves your subscribers' service experience and it can even open up new revenue streams.

Modular architecture – secure and scalable operations

In a multi-site set-up, Session Manager always ensures data synchronization between the sites, hence when one of them fails due to a software or hardware malfunction the other is able to immediately take over. Thus, a two site set-up results in a 3-fold redundancy of each session state.

Moreover, Session Manager allows almost unlimited scalability by adding frontend servers to increase the number of transactions per second and backend servers to increase the number of concurrent active subscribers. Session Manager is extendable on a per-component basis, allowing you to meet the specific needs of your network traffic load and providing economic viability from small-scale trials to massive network-wide deployments.

Atos Session Manager is the end-to-end solution for network authentication, authorization and accounting across all network access technologies. It has powerful features to ensure that your subscribers receive flawless and differentiating service access and quality. Thanks to its modular architecture, it is highly scalable and flexible to grow along with your business and changing market demands.



For more information: [+40 268 409 400](tel:+40268409400) / info-cc@atos.net / atos.net/convergence-creators

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