

Subscriber Data Broker

Bridgewater's Subscriber Data Broker™ is a sophisticated subscriber data management product that enables service providers to open the mobile ecosystem and deliver a wide range of personalized services and applications to subscribers. It brings together rich, dynamic subscriber data with the sophisticated tools to provide that data securely to third-party application providers to capitalize on new business models and revenue sources, such as [mobile advertising](#). Proven in the most demanding Tier 1 networks and serving more than 150 million subscribers worldwide, Subscriber Data Broker is the leading vendor-neutral subscriber data management product that allows service providers to leverage their investment in existing subscriber databases, support high growth mobile data services, and enable new revenue streams.

Subscriber Data Broker is integrated into other Bridgewater Systems offerings such as the [Bridgewater® ServiceMAX 500](#), a pre-integrated system designed for small - to mid-sized WiMAX operators, and [Bridgewater's WideSpan® system](#).

▼ Subscriber Data: A Key Strategic Asset

Subscriber data represents a key strategic asset for mobile service providers that can be leveraged to build new business models and partnerships that drive alternate revenue sources such as mobile advertising and personalized content delivery. It is also a highly sensitive asset in that subscriber privacy must be protected to ensure customer loyalty. Subscriber Data Broker brings together subscriber profile, state and usage data from multiple sources in the mobile service provider network, and includes the tools to provide these data assets to network decision and enforcement functions, applications platforms, charging systems, as well as to third party providers such as content providers and mobile advertising networks. Using Subscriber Data Broker, service providers can:

- Enable dynamic service creation using an extensible data schema model to manage all subscribers and services and launch new services quickly—in weeks versus months.
- Create flexible rules that control how subscriber data is provided to network decision functions and off-portal applications to deliver a dynamic personalized mobile experience that drives customer acquisition and loyalty.
- Use governance rules to control how subscriber data can be provided to third-party content providers and to protect subscriber privacy.
- Protect investment in existing subscriber databases through data federation capabilities.

As mobile service providers migrate to 3G and 4G infrastructures, Subscriber Data Broker provides dynamic subscriber data management to power innovative services that drive differentiation, improve customer loyalty, and increase ARPU through:

- Personalized mobile services.
- Innovative service models to appeal to a broad range of subscriber preferences – pre-paid, post-paid, unlimited, casual user
- Open access and applications.
- Management of mobile data transaction growth.
- Service infrastructure transformation.

▼ Features and Benefits

- Robust software to manage unified, dynamic view of subscribers based on profile data, state data, and usage data, thereby eliminating subscriber data silos.
- Offers advantages of Relational Database Management System (RDBMS) and Directory – with excellent cost-performance and optimized transaction economic.
- Utilizes Fit-to-purpose RDBMS products to match performance requirements of data – no performance trade offs, take advantage of vendor economies of scale, optimize transaction economics.

Tier 1 Proven Performance

- Proven to meet the call path requirement of real time transactional data in tier 1 deployments.
- Five nines reliability, and redundancy enables non-disruptive software upgrades and service additions to support service velocity needs.
- Low latency range enables dynamic self-service capabilities and profile changes.
- Massive scalability – 5000 to 100M+ subscribers.
- Extensive transaction support – 100->100,000+ TPS range.

- Features application policy control function for integration with off-portal applications.
- Provides common application authorization platform that reduces provisioning points and accelerates time to market – in weeks versus months for new applications.
- Mature, robust, scalable, and highly available technology – proven in Tier 1 environments serving 70+ million subscribers.

Mature Data Schema and Modeling

- Mature data modeling capability enables easy provisioning of subscribers and service bundling across network and applications, accelerating the launch of new services and minimizing custom development.
- All subscribers are modeled in a hierarchy which includes appropriate security model so that only authorized users can change a profile.
- Features inheritance so that profiles can be inherited from the top down with overriding in the lower levels for personalization.
- Provides inherent flexibility and ability to create and launch new services quickly without millions of provisioning actions.
- Legacy subscriber data migration tool set enables deployment in weeks versus months.

Flexible Business Rules Engine

- Flexible dynamic business rules engine enables structured linkage of static, dynamic and historical subscriber usage data.
- Defines flexible rules around how subscribers can access services and networks, and under which circumstances.
- Enables rapid set up and tear down of services - service agility to keep pace with customer demand.
- Governance rules to control which types of subscriber data can be provided to third-party applications and providers and under which circumstances.

Application Policy Control

- Application policy control function that enables integration with off-portal applications - provide choice to subscribers and facilitate common authorization controls across all applications.
- Flexible dynamic business rules engine that manages how subscribers can access services and networks, and under which circumstances, as well as governance rules regarding how to provide subscriber data to third-party applications.

Broad Interoperability

- Integrates with Bridgewater policy decision functions such as Service Controller, Policy Controller, to control subscriber access to networks, network resources and services.
- Wealth of APIs to enable federation of data from existing subscriber databases, thereby protecting investment in existing database infrastructure – HLR, AAA, OSS/BSS, Applications, HSS.

▼ Why Subscriber Data Broker?

Extensible Service Creation Capabilities – Time to market advantage, Investment Protection

Subscriber Data Broker allows operators to easily model subscribers and services, and add new services without the need for incremental schema development that adds cost, time to market, and maintenance risks. It can also be deployed for dynamic service creation as a complement to the HLR, protecting this investment and minimizing operational disruption.

Dynamic Service Personalization – Service Differentiation, Improved Subscriber Acquisition and Retention Subscriber Data Broker's hierarchical approach to modeling of subscribers to services enables mass customization of service entitlements to specific subscriber groups using inheritance, while allowing for personalization down to a per-subscriber level. It provides a rich service personalization platform based on highly flexible parameters such as location, device type, previous behavior and usage.

Flexible Service Management - Support Multiple Customer Types Simultaneously

Model multiple customer types and business models – retail, enterprise, advertising networks, MVNO partners. Assign service and security entitlements to these business entities. Subscriber Data Broker features an appropriate security model so that only authorized users can change a profile. This allows for delegated administration to subscribers, enterprises, and MVNO customers to reduce operating costs. It also allows mobile operators to customize services to these different customer groups, while managing all customers from a common platform.

Intelligent Business Rule Engine – Secure Provision of Subscriber Data and Service Agility

The flexible rule engine allows the mobile operator to easily create dynamic new services based on location, time windows for sporting or other key event in minutes rather than months. It supports governance rules that control when and what types of non-personally identifiable subscriber data can be provided to third-party application providers, thereby protecting subscriber privacy.

Open Interfaces – Opens the Mobile Ecosystem

Subscriber Data Broker leverages Bridgewater's extensive interoperability experience and open interfaces to integrate with third - party application providers and mobile advertising providers, opening the mobile ecosystem for operators and providing new revenue streams. It also supports federation adaptors to push or pull subscriber data from existing databases, protecting the mobile operator's investment.

About Bridgewater Systems

Bridgewater Systems, the mobile personalization company, enables service providers to efficiently manage and profit from mobile data services, content and commerce. The company's market leading mobile personalization portfolio provides a real-time, unified view of subscribers including entitlements, devices, networks, billing profiles, preferences and context. Anchored by Bridgewater's Subscriber Data Broker™, the portfolio of carrier-grade and standards-based products includes the Bridgewater® Service Controller (AAA), the Bridgewater® Policy Controller (PCRF) and the Bridgewater® Home Subscriber Server (HSS). More than 120 leading service providers including America Movil, Bell Canada, Clearwire, Cox, Hutchison Telecom, Iusacell, Scartel, SmarTone-Vodafone, Sprint, Tata Teleservices, Tatung, Telmex, Telstra, and Verizon Wireless use Bridgewater's solutions to rapidly deliver innovative mobile services to over 150 million subscribers. For more information, visit us at www.bridgewater.com.