



Artilium MVNO Solution

Today, Network Operators and Service Providers need sophisticated underlying technology to launch Mobile Virtual Network Operators (MVNOs) rapidly and securely.

Platform layout

MVNO solution is a flexible modular, multi-tier platform solution which enables the rapid, cost-effective deployment of new services and offerings.

Based on the ARTA platform, Artilium's MVNO solution allows mobile network operators and service providers to create, view and modify information regarding the customer relationship directly in the system, creating a varied set of predefined tariff schemes, if required.

Additional features include the ability to activate/deactivate the subscriber process, features and services, and manage Number Portability interactions. Secured price-related topics are made accessible and easily managed by administrators/agents on every level via a Graphical User Interface (GUI) and a standardized Application Programming Interface (API). End-users can also get access and manage their accounts via Web, IVR, SMS and USSD. MVNOs can adapt to changing market requirements quickly and with maximum control.

Customer care capabilities enable:

- Differentiated multichannel customer service
- Streamlined customer order management
- Insight-driven segmentation and campaign management, allowing the MVNO to own the subscriber, their services and tariffs

Call control, real-time routing and rating Artilium's MVNO platform offers the ability to have full-service control and real-time

rating of the provided services by the MVNO in a way that is secure and integrated with the mobile network operator's network components including MSC and HLR.

The MVNO solution provides real-time control of the processes that take place within the infrastructure. This offers advantages in several areas: SIM activation, credit control, IVR and recharge control etc. As a result, exceeding the maximum credit on a multi-user prepaid or postpaid subscription is no longer possible. Recharge of prepaid accounts is also controlled by processing top-ups initiated from multiple channels (USSD, SMS, IVR, Web, POS, ATM etc). Costs/revenues/profits can be analyzed in real time – in fact MVNOs can be based on prepaid credit instead of on bank guarantees.

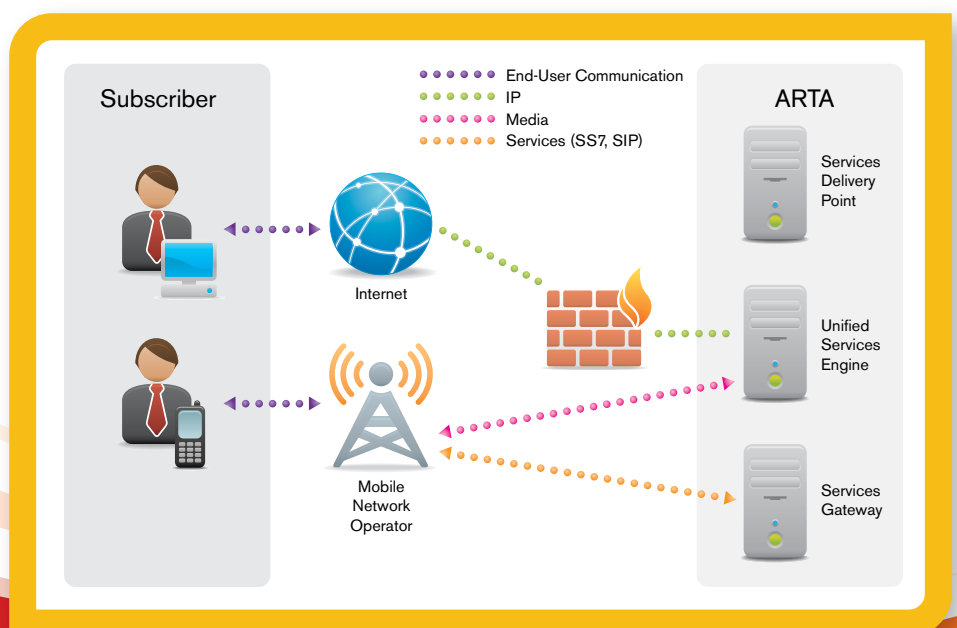
The entire real-time control and rating of the subscribed services process can be automated and broadcast via a predefined interface. Using real-time routing improves the quality and the effectiveness of termination, which in turn improves a company's market reputation as a reliable

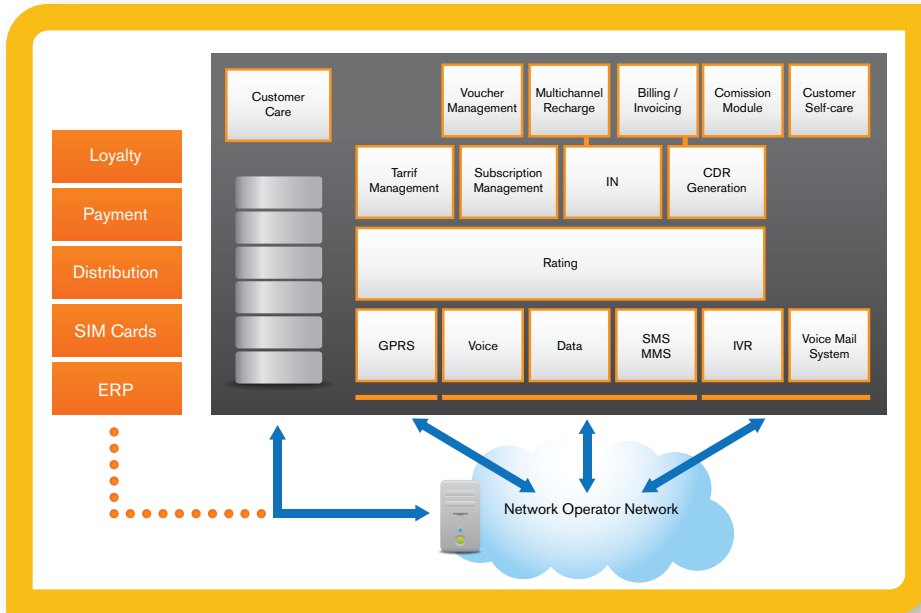
provider of high quality services at lower operational costs. Real-time routing allows operators and service providers to create a wide variety of tariffs and even enables personalization of those services to a very large extent. Lowering operational costs by managing routing parameters on a series of services increases efficiency.

Real-time routing eliminates the management of overheads by centralizing all routing data management. Real-time reporting offers the ability to supervise the entire infrastructure and to diagnose problems as they arise. The solution also offers real-time rating of current and emerging services for every type of subscriber, as well as flexible solutions for both prepaid and postpaid subscribers.

Multitenancy framework

In a multitenancy environment, securing access to the different databases is of the utmost importance. One MVNO may not be allowed to access the data of another from the location where the detailed information is provisioned and controlled by that operator/owner.





For the multi-tier platforms of telecom equipment owners who want to allow third parties to manage their own collection of MVNO databases, there will be a central system database and a number of linked system databases. Such platforms can incorporate different database servers in different domains and/or physical locations. Mobile network operators who have a number of MVNOs, can partition their system database and allow each MVNO access to the data related to the reseller databases of that MVNO, which they will then be able to manage independently of the network owner.

The Artidium MVNO solution also offers the network operator or service provider the opportunity to:

- Manage the list of MVNO databases granting or denying log-on accounts access to those databases
- Manage the list of log-on accounts access
- Manage the list of Direct Inward Dialling/Direct Dialed Numbers
- Manage the first call redirect actions for numbers that cannot be found in either of the MVNO databases
- Manage the calling party category of numbers

Features of the ARTA MVNO solution

- AAA
- Rating
- CDR Creation
- Parameters
- Regions
- Time Zones
- CLI/PIN/SIM/IMSI/ MSISDN Management
- Call History
- Fraud Table
- Traffic Type
- Call Modes
- Shortcodes
- Whitelist
- Blacklist
- Real-time Prepaid/Postpaid
- Number Portability
- Advanced Number Translation
- Services, SMS, MMS
- Lawful Intercept
- Call Back
- Intelligent Routing
- GPRS
- Reporting
- Central Monitoring System
- Voice Mail
- Interactive Voice Response
- API for Web self-care / point-of-sale Web services

Benefits

Network Operators enjoy:

- Layered Architecture – isolates the MVNOs from the core network
- Operating Cost Reduction – enables a 'Pay As You Grow' Model
- Reduced Churn – allows subscribers to connect to MVNOs
- Easy Development – enables the ability to engage a new MVNO using minimal resources and time
- Convergence – ability to handle pre/postpaid combination and wireline / wireless services

MVNOs benefit from:

- Own Tariff Plan – full control and management of the prices
- New Services – create and manage new offerings easily
- Brand Power – build a community on own conditions and speed
- Expertise – telecom and IT knowledge is separated
- Customer Ownership – independence within the offering from the underlying MNO

Mobile Virtual Network

Enabler benefits include:

- Powerful Positioning – be the technology partner for the Network
- Control of the complete database structure and platform
- Additional Service Offerings, such as sales and marketing expertise
- Easy Development – engage a new MVNO with a minimum of resource and time
- Innovation – perfect position to see new demands and opportunities

Microsoft
GOLD CERTIFIED
Partner

Artidium is the leading developer of Microsoft-based carrier-grade software for mobile networks.

Artidium's ARTA Mobile Services Platform is an open, modular, highly extensible Next Generation Service Delivery Platform built on Service Oriented Architecture principles and designed to enable rapid creation of new mobile applications, packaged as services, throughout their lifecycle.

ARTA activates the coming wave of third-party application development and innovation. By providing open and secure access to mobile network functionality and autonomous software processes, ARTA enables infinite possibilities for intelligent mashups which combine network capabilities of presence, mobility, location and telephony; with Web services including advertising, social networking and search.

artidium

Based in Belgium with offices in the United Kingdom, Artidium is a publicly listed company on the London Stock Exchange (LSE/AIM: ARTA). The company was founded in 1995 and has completed more than 40 installations serving tens of millions of end-users in 11 countries.