



Gaia Reply™: the mobile sector enters web 2.0

Abstract

In a scenario where the key enabling points to Mobile Internet (advanced mobile devices, cheaper mobile internet plans) have been realised, where new services are increasingly offered and advertising is adapting to new channels, multiple challenges need addressing.

GAIA Reply™ provides an integrated and flexible solution to customers willing to move into the Mobile Internet space or to strengthen their existing offers. GAIA Reply™ is a scalable and economical solution for developing and delivering multichannel mobile enterprise services, with tangible benefits both for consumers and corporations. Features like the Data Management and Content Adaptation allow for the leveraging of all services available in the enterprise ecosystem while expanding the range of reachable devices and users.

The platform offers expansive and specialised capabilities reinforced by a component based architecture. GAIA Reply™ supports a full range of services across the Mobile spectrum: SMS and MMS (Push and Pull); Mobile Portals & VAS; Client Applications.

Background

Social networks, blogs & microblogs, real time data, cloud computing, advanced search engines and location-aware services are expanding the scope of web 2.0 into the Mobile world. The convergence between mobile devices and web services is becoming an everyday fact.

Applying web 2.0 principles and models to smartphones allows for the creation of a new generation of services and solutions that fully leverage the potential of the always-on web: location-based marketing, location search, integrated search marketing, micro-payments and more.

The concept of usability is being redesigned for optimal ease of use on thousands of different mobile devices, pushing for separation between logic and presentation layers even more than the desktop-based web.

Mobile Services

The Mobile Internet is quickly becoming part of everyday life for millions of users around the world. Mobile phones are everywhere, an increasing number of them are connected to the web and an increasing number of users are buying and using them for Internet connectivity. This generates a great deal of potential for users. Understanding which factors are the main drivers of this expansion is an important step to leveraging it. Why now, and not five years ago? The web is moving from desktops to smart phones, underpinned by four key drivers:

- The evolution of advanced mobile devices
- The growing number of services offered
- Ever cheaper mobile internet plans
- The definition of new forms of Advertising channels leveraging Mobile Internet

EVOLUTION OF ADVANCED MOBILE DEVICES

In 2007 the first iPhone from Apple kick-started the race for better, faster and more user-friendly mobile devices and this has not stopped yet. All the key players in the value chain - manufacturers, software vendors and Telco operators - have driven the smartphone sector and doubled its share of the market year on year. Enhanced device capabilities such as touchscreens and improved web browsers have lowered the entrance barrier for new users. At the same time GPS receivers,

accelerometers, bigger screens and faster CPUs have increased the services offer of the latest generation smartphones. This broad selection of devices, the growing range of capabilities and configurations (screen sizes, touch or no-touch interfaces, connectivity plans and more) and the ability to work effectively with all of them are going to be key factors for anyone moving to the mobile internet world.

INCREASING THE NUMBER OF SERVICES OFFERED

Driven by the potential of the new mobile field, many PC-based web sites have moved or are moving to handheld accessibility both to increase their presence and to satisfy users' need to access their favourite services anywhere, anytime.

CHEAPER MOBILE PLANS

All major mobile network operators have started offering flat or semi-flat rate plans for web access through mobile phones. To increase the effectiveness of their offering, network operators are also enriching the sheer connectivity with services based on their capabilities and assets, like user information, credit or cell-based location and movement information. This opens up the field for an increasing number of services that can reach the final customer.

MOBILE ADVERTISING

The mobile advertising space has captured the attention of consumers, marketers and inventory owners. With advanced devices increasingly widespread, the sector is poised to nearly double over the next two years. In an evolving environment in which all of these factors are key considerations, GAIA Reply™ offers a best of breed solution to customers willing to embrace the Mobile channel.

Gaia Reply™: a solution for mobile enterprise services

GAIA Reply™ is a flexible, scalable and economical solution for developing and delivering multichannel mobile enterprise services, with tangible benefits both for consumers and corporations. The platform is the result of a longstanding collaboration with a global mobile operator and offers expansive and specialised capabilities reinforced by a component based architecture.

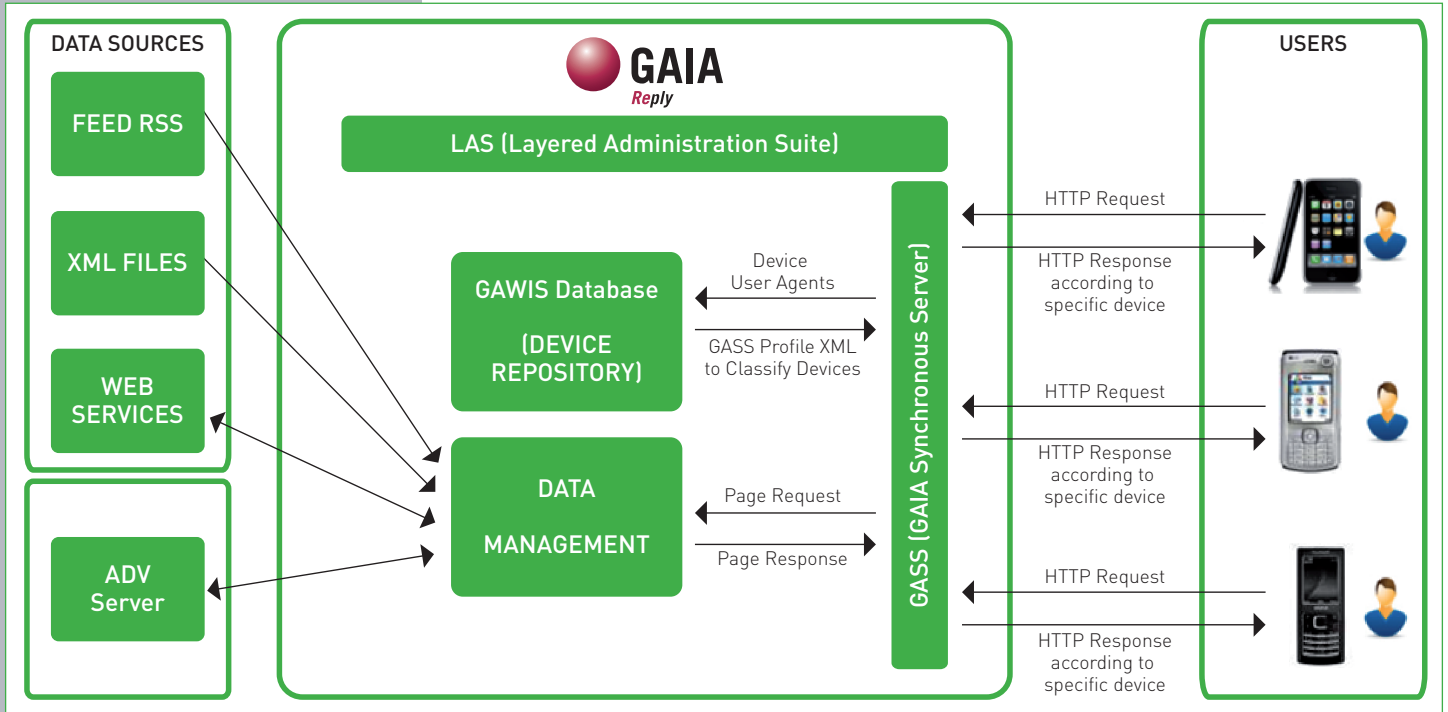
SERVICES

GAIA Reply™ offers a full range of services across the Mobile Services spectrum:

- SMS and MMS (Push and Pull) Services
- Mobile Portals & VAS (Value Added Services)
- Client Applications

FEATURES

The Services GAIA Reply™ provides are supported and enriched by features tailored to the needs of a Mobile offering.



Data Sources Management

Data can be extracted from heterogeneous sources (including ADV servers) and aggregated according to the logic required by the type of service. This enables the creation of m.sites using the existing sources of data that typically already exist if a classical web site is operating.

Authorisation & Filtering

Allow you to implement access control policies and manage content viewing according to user permissions, allowing the creation of flexible enterprise level solutions.

Devices Management

An advanced feature that GAIA Reply™ maintains using a constantly updated repository of device capabilities and characteristics based on customized data, UAProf and WURFL (covering over 5,200 mobile phones). The device types covered by GAIA Reply™ are not limited solely to phones and smartphones; GAIA Reply™ is also ready to manage new Internet-connected devices like eBook readers, Tablets and Slates, Net TVs and GPS Navigators.

Content & Service Adaptation

A capability driven directly by Devices Management: GAIA Reply™ automatically selects and adapts content and services according to the characteristics of the device that made the request. Furthermore, the framework allows for the protection of content through the use of DRM functionality.

Adaptation

This aspect is twofold:

- Content - the graphical results are always enhanced to the optimum level on the different devices: images, layouts, and media content are adapted to the screen sizes and media capabilities of the device viewing them.
- Services - every service containing a Mobile component is delivered to the user tailored specifically to the mobile device being used. The spectrum of capabilities available on the market is broad, ranging from full-options to simple web page handling: GAIA Reply™ delivers only the services it can support to each channel, adapted for the specific situation.

Telco Operator Integration and Adaptation

To provide better support for mobile users and developers, operators worldwide are offering a growing range of Open APIs to the applications running on the devices. The simplest (but at the same time game-changing) examples are payments and cell-location. GAIA Reply™ transparently exposes a view to APIs and services of the various operators, ensuring compatibility and correct functionality of GAIA Reply™ -generated applications independently of the source of Mobile Internet connectivity.

Two-level Services Management

Allows the management of GAIA Reply™ services at two different levels: Developer level and Marketing/Editorial level. The IT level usage of GAIA Reply™ allows for advanced feature development and integration of specific data sources. The technological range of GAIA Reply™ enables development using the typical set of tools of the Java world, like the Eclipse IDE. At the editorial level a user can, easily and independently from the technical users, interact with GAIA Reply™, creating m.sites and managing their content through the Administration Console.

Administration Console

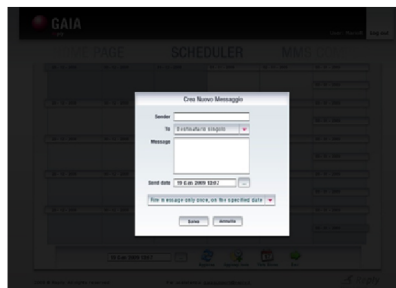
The Console provides features that a non-technical Administrator can use to manage the Mobile presence of his or her company:

- The **Message Scheduler**, for planning and managing messaging campaigns
- The **m.site Composer**, for building m.sites via a user friendly drag and drop interface. A **Real-Time Preview** function allows for in-browser verification of the resulting look&feel on all the supported devices.
- The **m.site Menu**, for managing all the m.sites hosted on GAIA Reply™.
- A set of **Reports and Stats**, for continual monitoring of the effectiveness of the services delivered through GAIA Reply™.

Main Menu



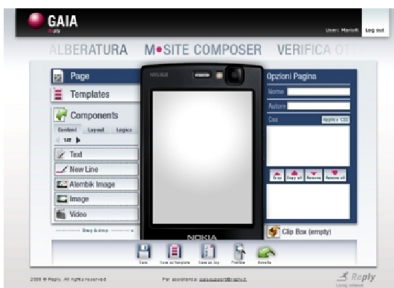
Message Scheduler



Msite Menu



Msite Composer



Real Time Preview



Reports



Integrated Advertising Networks

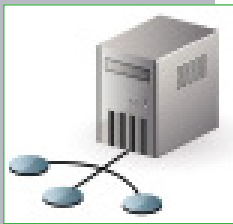
When GAIA Reply™ is integrated in an environment already equipped with an ADVERTISING Server, only configuration is required to add the ADV Server capabilities into the capabilities of the delivered m.sites. If the need is instead the connection to **international mobile advertising networks**, GAIA Reply™ comes with a framework of specific components that can be added into an m.site through the **Administration Console**, making the integration seamless.

MULTIPLE DELIVERY OPTIONS



GAIA Reply™ can be installed **On-premises**, in corporate or web data centres, providing advantages like:

- Use of company infrastructure with compliance to the corporate security guidelines
- Change management, deployment, application management executed according to company software lifecycle standards and best practices
- Comprehensive **integration** with platforms and business applications
- Inclusion in **authentication**, authorisation and profiling systems available at company or enterprise level
- High level of **customization**
- Full control of data management
- Receive GAIA Reply™ Upgrade and decide on activation and integration based on your priority and schedule



As an alternative, GAIA Reply™ can be offered **as a Service** leveraging Cloud Computing services:

- Hosted GAIA Reply™, provided across the Internet
- The software-as-a-service (SaaS) model frees up the IT department to concentrate on mission-critical or revenue-generating projects
- Fast deployment (immediate access to resources)
- No software license fees & maintenance fees. Just rent the software for a monthly fee; the only startup cost may be related to designing the service for your organisation and implementing custom features
- Automatic GAIA Reply™ upgrade. Upgrades and fixes take place transparently, so your IT department does not spend hours on maintenance and support

Case study

LA REPUBBLICA MOBILE

La Repubblica is one of the main Italian newspapers and news sites.

GAIA Reply™ delivers La Repubblica Mobile to hundreds thousands of mobile users every day.

Challenges. The creation of La Repubblica Mobile required the integration of many different services into a single m.site:

- News
- Live Sport Updates
- Search engine for Restaurants and Cinemas
- Weather Forecast
- Settings page (allows users to set news categories and local information to show)

Added to this was the need for a Premium section and Advertisement introduction. All the services required adaptation depending on the device accessing the m.site.

Solution. GAIA Reply™ hosts the La Repubblica m.site.

The Data Source Management capabilities allowed the acquisition and adaptation of the different services. The m.site is available to 5,200 different devices, with tailoring of the exposed services depending on their specific capabilities (i.e. images are shown only on high bandwidth connections). GAIA Reply™ integrated with the La Repubblica ADV server through configuration only.

RADIO DEEJAY

DeeJay is one of the main Italian radio broadcasters, and part of Gruppo L'Espresso, one of the biggest domestic information and entertainment publishing groups.

Challenges. The creation of a Mobile Internet presence for DEEJAY required the integration of many different services in a single m.site:

- Fotogallery (usually of guests at the “Deejay chiama Italia” programme)
- Write Us Live (real time textual interaction service)
- Blogs
- Wallpaper Downloads
- 50 Songs (streaming service)
- Podcast
- Hot or Not (rating service –community users)
- Advertising

All the services required adaptation and filtering depending on the device accessing the m.site. The streaming service required delivering only to WindowsMobile. The contents delivered through the m.site originated from different sources, posing an integration obstacle.

Solution. GAIA Reply™ hosts the mobile Radio DEEJAY site.

The Data Source Management capabilities allowed the acquisition and adaptation of heterogeneous content. Content and Service Adaptation capabilities make the m.site available to over 5,000 different devices, with tailoring of the services exposed depending on their specific capabilities.

Reply value

In a scenario where the key enabling points to Mobile Internet (advanced mobile devices, cheaper mobile internet plans) have been realised, where new services are increasingly offered and advertising is adapting to new channels, multiple challenges need addressing.

GAIA Reply™ provides an integrated and flexible solution to customers willing to move into the Mobile Internet space or to strengthen their existing offers. Features like the Data Management and Content and Services Adaptation allow for the leveraging of all data and services available in the enterprise ecosystem while expanding the range of reachable devices and users.

The ease of management facilitates fast and customized development of services, enabling both IT and business departments to contribute to the final product in ways aligned with their mission and objectives.

GAIA Reply™ is a flexible, scalable and economic framework that allows the distribution of content and services on different mobile devices. GAIA Reply™ makes it possible to extract data from any structured source, to aggregate them according to the logic required by the type of service in use and to make them available in a homogeneous way and on any channel or mobile device. In addition, the framework optimizes the visualization and navigation of content to render it ergonomic when compared to the characteristics of the very many different devices in use.

For further information: www.reply.eu