



# ANT Galio Suite

Delivering compelling digital media

# Who is ANT?

ANT is the leading provider of software solutions and services enabling broadcasters, telco operators and cable and satellite companies to deliver compelling digital media content to any consumer device, across any media distribution platform.

ANT enables media operators to quickly create and roll-out innovative and successful TV applications and services, such as games, music, video on demand, betting and competitions.

Our key focus is on providing flexibility without compromising performance. In essence, ANT puts the operator in control of both its digital media presentation and its brand, enabling media operators to grow their subscriber base, reduce churn and increase average revenue per user.



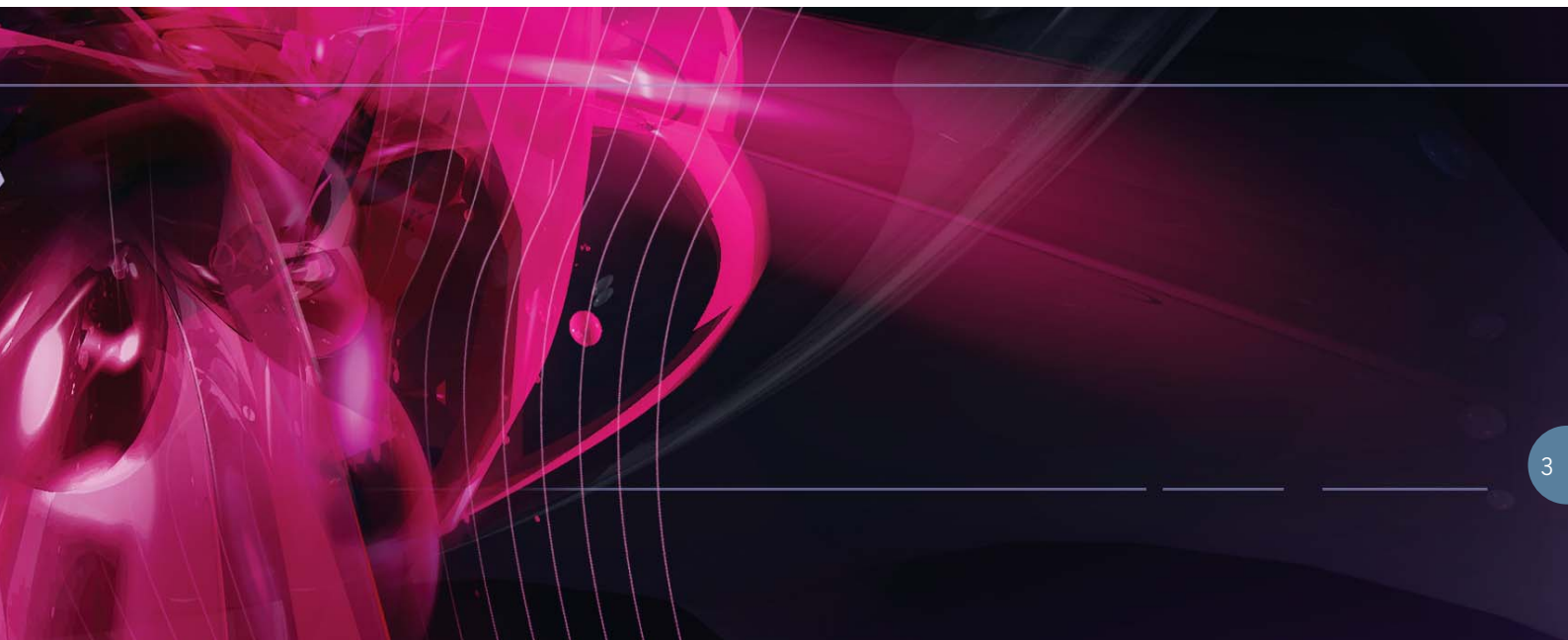
# ANT Galio Suite

## value proposition

The ANT Galio Suite is a rich, easy to use, non-proprietary platform solution for digital media delivery from ANT Software Limited. It comprises the ANT Galio Browser, an advanced, standards-based web browser engine optimised for user interfaces and portal services, and the ANT Galio Client middleware, a set of highly focused extensions for manipulating digital media.

The ANT Galio Suite is deliberately non-proprietary and focuses totally on enabling rich content development and delivery.

In developing the ANT Galio Suite, we have drawn on over 14 years of global digital media delivery experience.



# The ANT approach

ANT has extensive proven market experience in working with service providers, operators and device manufacturers to deliver some of the world's largest IPTV deployments. Working with the world's most demanding media operators has helped us understand the delivery of rich media content and the challenges associated with creating and deploying consistent UI's and navigation menus across multiple platforms.

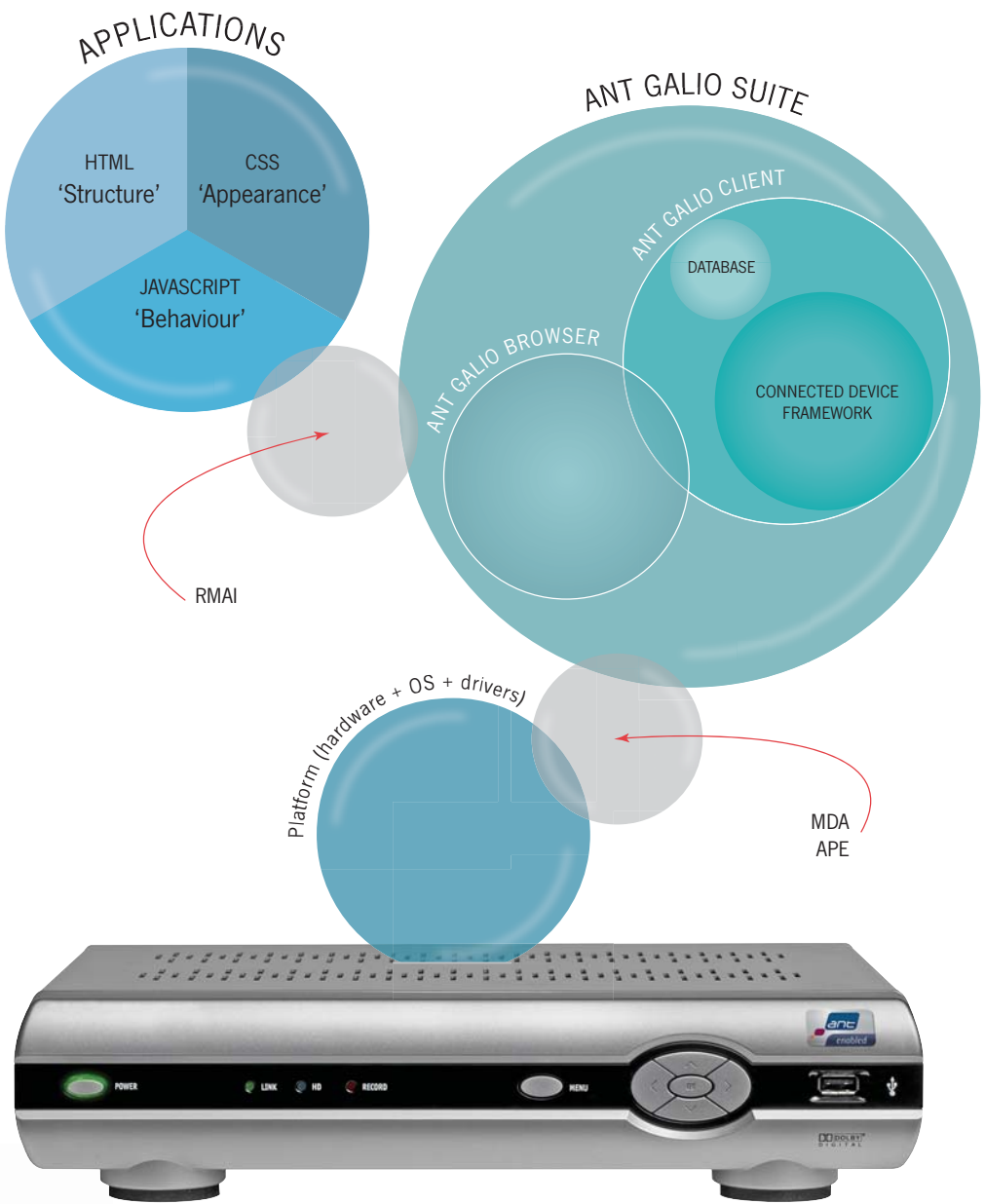
# Non-proprietary approach

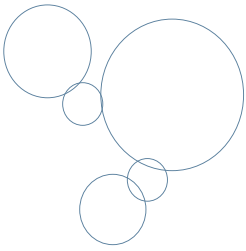
The ANT Galio Suite focuses on simplicity of application design. This is achieved by positioning the Application Programme Interface (API) between application code (JavaScript) and native code (C). ANT has developed an open API which is known as the RMAI (Rich Media Access Interface) in consultation with industry partners.

This API has been developed to be deliberately non-proprietary, providing strong insulation between the applications and the underlying platform. All of this opens up infinite possibilities for the quick and efficient roll-out of media rich TV services and applications.



# ANT Galio suite architecture





**Applications:** A feature rich set of applications such as VoD, Banners and EPG. All highly customisable and re-skinable

**RMAI:** A non-proprietary API to all the features offered by the ANT Galio Suite

**Browser:** The ANT Galio Browser features full AJAX Support, XHTML 1.0, HTML 4.01, CSS 2.1, JavaScript 1.5, DOM 2, XML 1.0

**Database:** Used by the Applications or the Connected Device Framework to deliver powerful searching and sorting capabilities

**Connected Device Framework:** Written in C for performance of key tasks controlled through the JavaScript API (RMAI)

**MDA & APE:** Common interfaces that allow easy porting of the ANT Galio Suite to new platforms. These API's enable the ANT Galio Suite to capitalise on new features of the STB without requiring changes to be made to the ANT Galio Client or its applications. MDA is used for media and APE for the browser/UI

**Platform:** The ANT Galio Suite is platform neutral, working with all major silicon companies active in the Set-Top box market



# Standards-based benefits

Operators want to roll out new services as quickly and efficiently as possible. One of the key benefits of the ANT Galio suite, is the ability to author content once only, and then target and distribute it, to a range of media services and platforms. This is a huge step forward for content developers and operators in an increasingly competitive market, where service delivery and brand loyalty are key.



The ANT Galio Suite is built on the richness and flexibility of standards such as HTML, CSS and JavaScript.

The familiarity of these standards provides immediate advantages for both operators and content developers, including the ability to quickly change/personalise/adapt the User Interface, enabling more opportunities to build brand awareness and potential revenue opportunities via targeted sponsorship and advertising.

By leveraging traditional web technologies, the ANT Galio Suite provides a simple environment to integrate existing web-based advertising services such as local cinema or restaurant adverts, merchandise offers, cars, insurance, web sites, etc, further opening revenue and promotional opportunities.

The combination of CSS and JavaScript makes it a simple matter to vary not only the visual presentation of a service, but also the features available within the applications offered. Combining this with key subscription information from the customer management and billing database, enables the development of one overall product offering and at the same time have variants of the product automatically enabled or disabled in the field.



# Rich media – revenue benefits

The ANT Galio Suite makes it easy to create a wealth of rich compelling services for your customers. With the emergence of quad-play services we have ensured that you have the solid foundation required to grow your service.

# Quad Play made easy

The ability to support 'server push events' means that true quad-play integration becomes really easy. Consider caller ID for example, in addition to displaying the phone number over the television the ANT Galio Suite, enables you to pause the video stream when the caller ID is notified, and to then restart playback when the phone call is finished, including automatically rewinding 10 seconds to provide a simple reminder for the viewer.

Quad-play integration can also be used to schedule a PVR recording while on the move from a mobile phone. This can automatically be entered in to the list of pending recordings on the PVR at home. Ring-tone browsing, preview and purchase via the TV set also illustrate how additional revenue opportunities can be generated. These examples show how the mobile can enhance TV use and the TV can enhance mobile use, thus further reinforcing the value of quad-play integration.

More sophisticated uses of the platform provided by the ANT Galio Suite incorporate features such as social networking, including colleague recommendations on VOD and EPG ('past' and 'future') items, or cross-referencing with databases such as IMDb (Internet Movie Database).

Other examples including iAds, karaoke, sports, games, online ordering of DVDs related to the program just watched, etc. are all achievable with the ANT Galio Suite.



# Dynamic re-skinning



Dynamic re-skinning is the ability to change the visual styling of the user interface at the touch of a button on the remote control or when chosen by the operator. This enables the operator to capitalise on personalised sponsorship and advertising opportunities, targeted directly at each viewer.



# Benefits and cool effects

Through the use of cascading style sheets (CSS, an industry standard), the UI designer is able to specify not just the actual image graphics used, but many aspects of the layout and navigation of the screen. Re-skinning and personalisation can also be used to maintain the freshness of the UI and the service. By updating the visuals for each TV season or for national holidays or other major events the service will never become stale.

Dynamic re-skinning opens many commercial opportunities. For example, re-skinning can be used for promotional purposes, such as advertising forthcoming live sports and music PPV events and for alerting users to the availability of new service offerings or the latest blockbuster film entering the VOD library each friday evening.

Incorporating the concept of skins within the overall development workflow can bring substantial cost and simplicity benefits when considering device variants, so SD (4:3) and HD (16:9) variants of a user interface are simply treated as different skins on the same underlying applications.

In addition to full re-skinning, simple personalisation is another effective way of keeping the UI relevant to its target audience. Other features such as a 'guest' skin that has no PVR delete function could be added when you have house visitors, so that you can be confident they won't accidentally delete that episode of *Lost* or *24* that you haven't yet watched.



# RMAI benefits

The ANT Rich Media Access Interface (RMAI) is freely available.

RMAI enables operators and developers to create just one version of a TV application, significantly reducing the time to build and deliver new and innovative services to market.

For more information on RMAI email [rmai@antplc.com](mailto:rmai@antplc.com)

# Content design without constraint

Previously, content developers have had to tailor their TV applications to each hardware platform used by the operator. This made it difficult for operators to quickly bring new TV services to market.

The consistency provided by RMAI provides strong advantages to both the operator and to independent development houses. To the 3rd party component authors, the ability to supply to multiple operators allows an amortisation of development costs that would not otherwise be available. In turn, the operator has a much wider portfolio of components to choose from, whilst benefiting from a simplified and painless integration process.





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