CPE Systems Integration Services

Services to add or augment functionality to your User Experience.

FEATURES

• Meet ever-evolving user experience demands.
• Retain customers in the face of competition.
• Preserve capital investment in CPE.
• Advanced capabilities without replacing CPE.
• Extensive resources, skillsets, partner relationships.
• Turnkey delivery, staff augmentation or managed services.

SERVICES OVERVIEW

Consumer expectations today are ever expanding. More photos! More videos! New apps! Higher quality! Easier to use! Fresh look and feel! Instant access! Rapid updates! Secure!

And, they have choices. If one provider doesn’t deliver, another will.

The challenge for service providers is to keep up with these demands without breaking the bank. Wholesale replacements or upgrades of technology are sometimes not the answer. But, it’s those subscribers using older devices for network access who are most vulnerable.

ARRIS CPE Systems Integration (CPE SI) solutions extend the life of CPE assets and preserve the capital invested in them. By offering the advanced capabilities demanded by subscribers, without replacing equipment, customer retention is achieved.
Service providers meeting the expectations of today’s subscribers need to be prepared to upgrade the user experience and service offerings without investing in a complete upgrade of their network. This may involve, but is not limited to:

- A partially or completely new User Interface
- Transitioning from traditional QAM-based video to hybrid or full IPTV architecture
- Deploying a new browser-based application (e.g. Pandora, Netflix, YouTube)
- Integrating new Set Top Box middleware to provide for more feature content or address IPR or licensing requirements
- Replace an existing MediaRoom user experience
- Enhancing security and certification procedures
- Expanding app availability to subscribers
- Expanding the app store framework
- Transitioning to RDK-based platforms
- CAS and/or DRM refresh
- Client-based integration and support of new VOD architectures
- Transitioning from a native-UI architecture to a HTML5, cloud-based, UI

**ARRIS SOLUTION**

ARRIS CPE SI services are available to support any installed base of CPE (Set Top Boxes, Gateways, Cable Modems etc.) and any existing middleware or application layer. Services include:

<table>
<thead>
<tr>
<th>Service Element</th>
<th>Description</th>
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<tbody>
<tr>
<td>Consulting</td>
<td>Architecture definition, network migration, emerging technologies, operational and deployment processes, CPE testing methodologies</td>
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<tr>
<td>CPE Integration</td>
<td>CPE Operations, maintenance and provisioning,</td>
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<td>Custom Software</td>
<td>New applications, middleware porting and capabilities, new feature introduction, UI development and migration</td>
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<td>Solution Integration</td>
<td>Recommendations, analytics, nDVR, MABR, VOD storefront, RDK integration, IPTV transition</td>
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<td>Test &amp; Validation</td>
<td>Client-network interface validation, solution validation</td>
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<td>Managed Services</td>
<td>ARRIS’s team integrated with the service providers’ to deliver CPE SI projects.</td>
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<tr>
<td>Staff Augmentation</td>
<td>Our experts at the operators disposal for CPE device development, testing, integration and deployment.</td>
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WHY ARRIS

As the provider of tens of millions of CPE devices to broadband service providers, worldwide, ARRIS is uniquely positioned to enhance the user experience across those devices. And that skillset transfers to devices from other vendors, as well – not just ARRIS. Our labs have tested over 1,000 unique CPE devices or CPE/firmware combinations. The CPE SI team consists of people with decades of experience in CPE product R&D and deployment and with deep knowledge of the ecosystems, frameworks and test libraries necessary to enhance and test the integration of CPE devices. We are leaders in cloud-TV solutions, like nDVR, with multi-vendor solutions deployed in North American, Latin America and Europe.

Having worked with a rich assortment of established, worldwide partners and systems, we can call on the right products, software and expertise to help us get the job done. A partial list of these varied systems is shown here.

ECOSYSTEMS, FRAMEWORKS, TEST LIBRARIES

<table>
<thead>
<tr>
<th>ARRIS Cloud Platform</th>
<th>EngineWare</th>
<th>.NET</th>
<th>SecureMedia</th>
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<tbody>
<tr>
<td>ActiveVideo Ecosystem</td>
<td>ThinClient</td>
<td>RDK-B</td>
<td>Playready</td>
</tr>
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<td>Minerva Ecosystem</td>
<td>KA</td>
<td>RDK-V</td>
<td>Verimatrix</td>
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<td>FIOS Ecosystem</td>
<td>KreaTV</td>
<td>HFC Access Ecosystem</td>
<td>Nagra</td>
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<td>Worldbox Ecosystem</td>
<td>Espial</td>
<td>Wireless Access Ecosystem</td>
<td>Widevine</td>
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<td>Mediaroom Ecosystem</td>
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MINI-CASE STUDIES

Back Office Integration to Existing CPE
As part of ARRIS Professional Services, the CPE SI team was engaged to support integration of Minerva’s back office solution with the ARRIS DCX4420 STB. This required the successful port of ARRIS’s KA Middleware to the DCX4420 and validation of the API interface to the Minerva solution. This was successfully delivered to Minerva and is in full deployment by the customer.

Middleware Ongoing Support
ARRIS Professional Services CPE SI was engaged by a large MSO for the continued support and enhancement of Thin Client and EngineWare middleware. This ongoing relationship has resulted in the delivery of numerous enhancements to the operator’s installed base. This allows the operator to continually update the user experience without replacing existing Set Top Box hardware, thereby avoiding considerable capital expense.

CUSTOMER CARE

Contact Customer Care for product information and sales:
• United States: 866-36-ARRIS
• International: +1-678-473-5656

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