ARRIS Network Controller Split Services

SERVICE BENEFITS:

**Benefits of a Network Controller Split**

**Targeted servicing**
Appropriate grouping of network components such as set-top boxes enables customization of services delivered to key market segments

**Increased customer satisfaction**
Improving network responsiveness and reliability leads to more satisfied subscribers

**Increased revenue**
Addressing local needs locally can improve an operator’s capability to increase revenue

**Cost efficiency**
Splitting NC operations leverages economies of scale

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**Advantages**

**Minimum downtime**
Low-risk, efficient implementation enables operators to quickly attain the benefits of a Network Controller split

**Proven experience**
In addition to 75 years of video leadership, the expert knowledge of ARRIS, experience, and proven methodology and track record in managing broadband networks provide peace of mind

SERVICE OVERVIEW:

ARRIS Network Controller Split Services enable broadband services operators to enhance operations and network responsiveness by optimizing Network Controller loading in the downstream plant. Growth within a geographical area is positive for a broadband services operator—but it can negatively affect operational efficiency and network performance when key network components exceed recommended loads.

One of the components most affected by overloading is the Network Controller (NC). The NC enables interactive sessions between digital set-top boxes (STBs) on an operator’s network and third-party application services such as video-on-demand (VOD). The NC also serves as the downstream and upstream data paths for Out-of-Band Modulators (OMs) and Return Path Demodulators (RPDs). The capacity and configuration of the NC is critical to efficient and responsive network operations.
Overloading can consume bandwidth, degrade network performance, and increase response times, resulting in dissatisfied customers and the possibility of loss of revenue.

When a Network Controller is serving the maximum number of digital STBs, OMs, and RPDs, splitting Network Controller functions across two NCs avoids overloading either one. Often, however, daily network operations leave a broadband services operator’s technical staff without the time and resources to perform NC splits before overloading occurs.

ARRIS Network Controller Split Services provide tremendous value to operators who need to optimize the efficiency of their network without the costs of hiring and training staff. Highly skilled and experienced network technicians migrate digital STBs, OMs, and RPDs to a second Network Controller, ensuring network performance remains high and providing the peace of mind that accompanies the ARRIS reputation for excellence in broadband network management.

Services Deliverables
Optimizing NC operations with minimal system downtime and greatest cost efficiencies requires the coordinated support of ARRIS personnel and customer headend and network personnel. Based on the assumptions and prerequisites noted below, ARRIS Network Controller Split Services customers can expect:

Comprehensive Project Management
An ARRIS Project Manager will coordinate planning and integration activities from project kick-off through post-launch support:
• Together with the customer’s project management team, create and maintain a project plan
• Create a detailed cutover procedure in accordance with the customer’s requirements, identifying roles and responsibilities, expectations, and exit criteria
• Track and report weekly on status and action items
• Identify risk items and mitigation strategies

Pre-Split Readiness
ARRIS personnel will perform all pre-implementation planning and configuration:
• Complete a site survey to confirm that the network and all necessary components meet minimum system requirements, and to identify potential issues
• Configure the existing and new Network Controllers
• Configure existing OMs and RPDs for the existing and new Network Controllers
• Update the SmartStream Device Manager (SDM) with the new configurations
• Perform initial testing

Network Controller Split Execution
The ARRIS team will execute all tasks associated with the split:
• Reconfigure the components
• Monitor the new configurations to verify functionality with OMs, RPDs, and VOD
• Test the digital STBs to verify field operation

Acceptance Testing and Follow-Up
ARRIS personnel will conduct acceptance testing and review the results with the customer for final acceptance.
Assumptions and Prerequisites
The following list is not intended to be exhaustive. ARRIS will inform the customer of any additional customer responsibilities necessary for the performance of the service.

Assumptions
- ARRIS and the customer will provide a single point of contact for the project.
- ARRIS personnel will have the required access to customer resources, including billing and other systems as appropriate, headend components, and Ethernet and fiber transmitters, routers, and switches.
- Customer resources will be available on a timely basis.
- Issues that are outside the scope of the deliverables described above will be handled through normal escalation methods.

Prerequisites
- Provide a list of contacts, including the technical leads, for each critical department
- Ensure that all equipment required for the split is racked and cabled
- Ensure that all VOD equipment is in place and that VOD services are ready for the NC split
- Ensure that VOD, the Electronic Program Guide (EPG) vendor, and VOD services launched to digital STBs have been verified by Acadia
- Provide the final design of and documentation for the VOD system and headend
- Provide IP addresses and routing information for provisioning headend equipment
- Prepare the physical plant for insertion of the new OM signal
- Configure network devices for communication among the VOD server, NCs, and OM, and between the Remote Addressable DANIS/DLS (RADD) and OM
- Support all post-split testing of digital STBs, data providers, queuing devices, headend equipment, etc

Network Controller Split Services
To order these services, contact your sales representative.

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<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>476666-049-00</td>
<td>Network Controller Split Services (includes one existing NC and one new NC at one location)</td>
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