E6000 Gen-2 Upgrades
Global Services

FEATURES:

• System software upgrade
• Reconfiguration with new CLI
• Replacement of Gen 1 cards
• Project management

BENEFITS:

• Leverage ARRIS expertise for seamless upgrades
• Assurance of highest quality
• Focus internal resources on business as usual
• Timely management of resources and materials

SERVICE OVERVIEW:

The Upstream Cable Access Module 2 (UCAM-2), Downstream Cable Access Module 2 (DCAM-2) and Router System Module 2 (RSM-2) are the second generation cards for the E6000 CER that provide increased capacity. The Gen 2 Hardware provides support for both Upstream and Downstream DOCSIS 3.1 operation (OFDMA). The Gen 2 hardware allows Operators to deploy both SC-QAMs and OFDMA on each physical port (i.e., each upstream service group); enabling higher throughput with greater spectral efficiency while providing backward compatibility for all currently-deployed modems.

ARRIS offers services to ensure a seamless upgrade to the Gen 2 cards for production E6000 systems. These services include upgrading system software to an ARRIS approved software version supporting the latest hardware, reconfiguration of the E6000 with new CLI settings to support additional channels, and replacement of 1st Generation cards with customer provided 2nd Generation cards.
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Project Management
ARRIS will work with you to produce a project plan which will guide the project teams. The project plan is a living document which will be updated as the project progresses and will specify: project team members and contact information; project schedule, dependencies and anticipated timeline; and detailed project activities with responsible owners. The ARRIS project team will consist of a project manager who will serve as the primary point of contact for project information as well as Subject Matter Experts (SMEs) who will be the points of contact and technical experts during the project.

Upgrade Process
The ARRIS engineer performing the upgrade will determine that the E6000 CER to be upgraded meets the pre-requisites and that all required hardware, software, tools and processes are onsite and available.

Prerequisites
Upgrading from Gen 1-2 requires a system software upgrade and hardware upgrade to all cards. The following are required to perform this upgrade:

- Existing E6000 CER running software version 5.x or later
- 2 RSM-2s, and DCAM-2 and UCAM-2 hardware inventory matching preferred deployment scenario, plus any required spares
- Engineer’s laptop/workstation with required cabling and software applications supporting telnet, FTP, etc.
- Existing E6000 configuration, tested and verified upgrade script, linked to an ARRIS secure software download site for approved E6000 Software Release
- Customer approval of MOP and maintenance window schedule

Pre-Maintenance Window Activities
- Create a configuration script to provision all slots as Gen2 cards, including any new features
- Establish serial port (rs-232) access to the E6000 CER either via a local workstation or a terminal server
- Follow the process defined in ARRIS E6000 RNLOC CAP Release 5.x to obtain the correct E6000 software image and relevant patches, transfer the image/patches to the E6000 and confirm file integrity

Maintenance Window Activities
- Power down chassis and replace all hardware with Gen 2 hardware and PICs.
- Replace Fan tray assembly with new Fan Tray II assembly
- Replace RF coax with MCX connectors on DCAM-2 PICs
- Power up chassis
- Using serial connection, execute the E6000 CER configuration script to correctly provision CAM slots
- Upgrade chassis to supported 5.x load if needed

Gen-2 Upgrade Services
To order these services, contact your sales representative.

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>612982-001-00</td>
<td>E6000 GEN1 TO GEN2 HW &amp; SW UPGRADE</td>
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