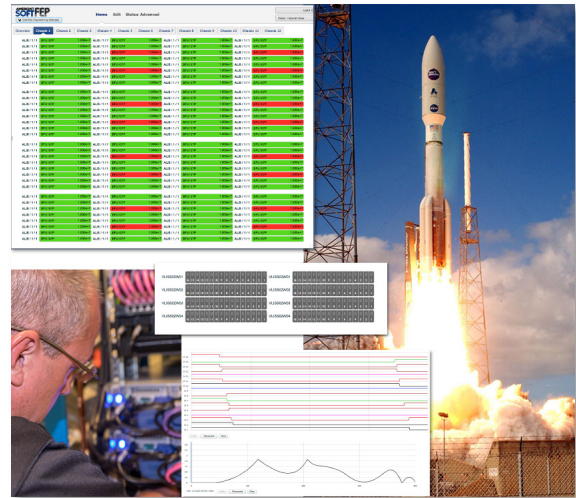
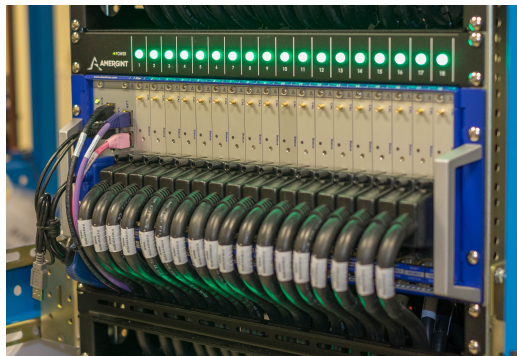


Large-Scale, Linux-Based Data Acquisition

United Launch Alliance (ULA) recently installed a new Landline Instrumentation System Data Acquisition System (LIS DAS) from AMERGINT at the Atlas V launch pad. Leveraging AMERGINT's softFEP products, the LIS DAS is a critical data collection and processing system used during assembly, checkout, and launch operations. The LIS DAS connects to several thousand sensors on ground support equipment and the Atlas V itself, sampling each sensor and commutating an aggregate telemetry stream to the voting computers that control the launch. This was the first Atlas V launch using the new LIS DAS.



“It was incredible to watch the launch and know that our softFEP product played a key role in its success,” stated Rob Andzik, AMERGINT’s Vice President and lead engineer for the project. “The LIS DAS showcases the softFEP™ product’s ability to sample, process, and display such a diverse set of critical sensor data, all in real time with very low latency.”



AMERGINT worked closely with Austria’s DEWETRON GmbH on the project, with DEWETRON providing the data acquisition front-end hardware. DEWETRON’s state-of-the-art TRION modules were key to achieving the sampling accuracy and channel density required.

Tony Guidry is another AMERGINT engineer who played a key role in the project. Tony said, “AMERGINT is both proud and excited to see this complex system perform flawlessly in its first use. The LIS DAS will support Atlas V and Delta IV launches for many years to come.”

“ULA is proud to partner with the AMERGINT Technologies and DEWETRON teams that provided this cutting-edge landline instrumentation system,” said Kurt Nelson, ULA Avionics Director. “This system provides reliable and flexible capabilities to support critical launch operations for the ULA fleet of rockets.”

The Perfect Combination

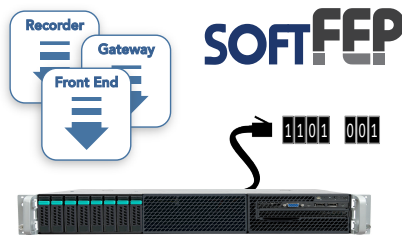
AMERGINT and Dewetron have partnered to provide industry leading capability with performance, and future flexibility at a scale never before seen in Data Acquisition.

Multi-Purpose High-Performance Hardware

Dewetron's M18 chassis holds up to 18 multi-purpose, 8 channel Analog boards. Each channel is individually configured to support everything from simple voltage and current measurements to full Bridge and RTD modes at up to 200,000 samples per second. 64-channel discrete boards are added to provide accurate and reliable sampling of thousands of discrete channels. All of this running RedHat or Centos Linux and AMERGINT's softLINK™ applications.



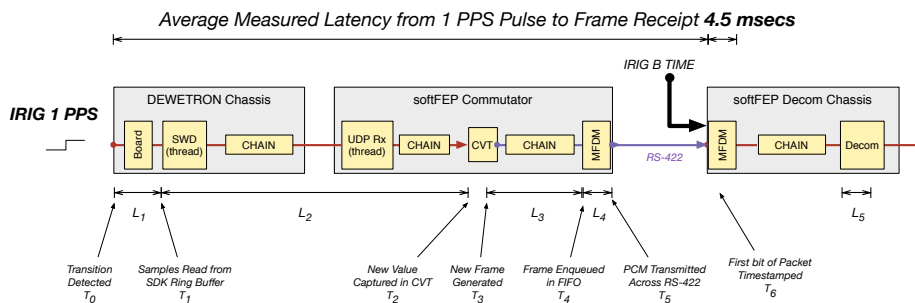
Software-Base Sample Processing



Built on the softLINK architecture, AMERGINT's industry leading softFEP applications provide real-time, low-latency sample processing directly on the Dewetron chassis as well as network-based Telemetry commutation, CH10 recording, EU conversion, and web-based data display. Multiple, self-describing applications can be seamlessly integrated to provide capabilities ranging from raw samples-to-network, and CH10 recording, to full telemetry

commutation across up to 20 Dewetron chassis. Additional features include, archive, playback, signal-routing, system automation, and even high-fidelity simulation.

Incredibly Low Latency Over Thousands Of Channels



This is part of the operational launch system. Latency and reliability are critical! Edge-to-edge the average system latency is 4.5 milliseconds – including a network hop, full commutation and decommutation. Commutation and CH10 recording can run directly on the Dewetron chassis.