SCTE® Awarded Patent to Provide Real-time Feedback on Technician Installations Using Proactive Network Maintenance

EXTON, Pa. — (January 19, 2022) —The Society of Cable Telecommunications Engineers (SCTE®), a CableLabs® subsidiary, has been awarded a patent for a system that provides feedback in real time using Proactive Network Maintenance (PNM) tools. The patent is titled "Systems and Methods for Remote Evaluation of Craft Skills." Among other uses, the system can provide the means for learners to remotely evaluate their installations with the assistance of PNM tools.

"It took a real team effort to develop this process for training, and we're thrilled with the outcome," said Chris Bastian, senior vice president and chief technology officer at SCTE. "The process represents a fantastic way to increase the granularity of the health of the network. As a network feature, this accessibility to network performance data boils down to code that is embedded on a device. Basically, it's like conducting surgery on the network with real-time feedback," he explained.

The training process provides immediate reinforcement or correction, thereby informing learners that the skills they learned will be effectively executed when they are out in the real world. They'll know instantaneously in the classroom that the skill they just performed was either done correctly or could use more practice. The patent embodies several different systems of the training process and is a real endorsement of the innovative training SCTE provides to technicians.

PNM functionality can be installed on a router, on a DOCSIS® modem, or on a wireless access point. Once PNM code is installed on the device, the feature sends telemetry back to the PNM collector. The student has a terminal and can be working on components anywhere in the network, in a Wi-Fi gateway, router, or CTMS, and will receive immediate feedback. The training process can be used by both students and technicians.

The genesis of the new training process was the standards work that SCTE develops as part of its ANSI-accredited Standards program. The SCTE PNM working group has been working on ways to enhance the PNM application, in such areas as DOCSIS 3.1 RxMER PNM Test Validation and cable network RF spectrum displays. The training process brings these concepts into the classroom, for real-time reinforcement of the craft skills students learn and apply in a hands-on situation.

PNM is also used to predictively estimate when something is going to fail, enabling network issues to be addressed proactively. SCTE offers a <u>Proactive Network Maintenance online course</u> to teach different PNM technologies, such as pre-equalization and how it addresses plant problems, how it works within DOCSIS, and how it can be used to identify and locate plant issues.

To learn more about Proactive Network Maintenance and see field demonstrations of how to use PNM tools, view the <u>PNM Live session</u> from 2021 SCTE Cable-Tec Expo®.

About SCTE®, a subsidiary of CableLabs®
SCTE is shaping the future of connectivity. Through technological leadership and innovation, SCTE has served as the applied science leader for the cable telecommunications industry for more than five decades. As a not-for-profit member organization, SCTE moves member companies forward through continuous training for the workforce of tomorrow and by putting leaders into the conversations that matter. SCTE is the force behind the annual SCTE Cable-Tec Expo®, the largest cable telecommunications and technology tradeshow in the Americas. Learn more at www.scte.org.

About CableLabs®
As the leading innovation and R&D lab for the cable industry, CableLabs creates global impact through its member companies around the world and its subsidiaries, Kyrio and SCTE. With a state-of-the-art research and innovation facility and collaborative ecosystem with thousands of vendors, CableLabs delivers impactful network technologies for the entire industry. For more information, visit **cablelabs.com**.

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