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CTOne & Saviah partner to deliver secure private 5G smart entertainment for Sanlih E-Television in Taiwan

15 March 2024

As Sanlih E-Television (SETTV) in Taiwan looked to drive better user experiences and increased efficiency with new 5G deployments, it was clear that investments in both connectivity and security would be critical to the project's success.

As a forward-looking and innovative member of the Taiwan film and television industry, SETTV chose Saviah Technologies and CTOne as partners for delivering the next generation of 5G-powered interactive content.

BACKGROUND

From 2022 to 2026, the global film and television media industry has seen significant growth, with industry revenue reaching up to $2.9 trillion USD, and the sector is currently experiencing rapid expansion at an annual compound growth rate of 4%. Among these, AR/VR and film have emerged as the primary drivers of growth.

SET 三立電視
Sanlih E-Television

As Taiwan's largest content creator, SETTV has successfully built a 5G wireless production and broadcasting environment that lowers production costs. Additionally, under the protection of CTOne`s cybersecurity, we ensure the security of information and digital content. SETTV is striving for diverse innovation in film and television content, aiming to exert even greater influence.

- Mr. Chi-Jen, Lai
Administration Dept.
Vice President of Sanlih E-Television (SETTV)

CTONE

CTOne's 5G cybersecurity solution seamlessly integrates with existing IT cybersecurity solutions in the field, providing enterprises with cybersecurity visibility and an easy-to-manage risk control platform for IT personnel. This can help SETTV create a secure 5G application environment.

- Mr. Ming-Yang, Yi
Global business development manager of CTOne

Saviah
Connecting Intelligence

The 5G core network serves as the brain of a 5G mobile network and is crucial for enabling 5G vertical application services. In smart entertainment, these all rely on the strengthening of end-to-end communication stability and the deployment of diverse applications by the 5G core network. We are pleased that Saviah's 5GC services can be deployed in the SETTV field, enhancing its capabilities.

- Mr. Jyh-Cheng, Chen
Founder of Saviah Technologies Inc.

❙ Stakeholders and Roles:

- **Sanlih E-Television (SETTV)**: End-user of the environment and project.
- **Saviah Technologies**: Providing the 5G core service and network management system.
- **CTOne**: The security architects, providing the security visibility of cellular IoT devices and at the same time, ensuring robust protection against cyber threats.
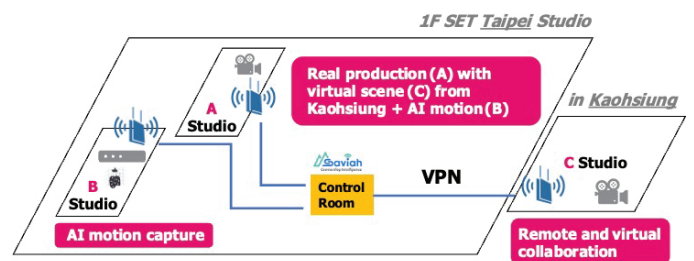
APPLICATION & USE CASE

What problem does SETTV want to solve through 5G connectivity?

- Advancing technological advancements
- Addressing labor shortages
- Optimizing content recording
- Reducing production costs

Utilizing the wide bandwidth and low latency characteristics of 5G, SETTV integrates diverse virtual and traditional program content, combining different scenarios in AB studios with audiovisual streaming technology to power remote content delivery while enriching the overall experience.

The rapid deployment of 5G communication, coupled with automation and next-generation technology, significantly reduces production costs and pre-production time (both software and hardware infrastructure), enabling better use of employee time.

The introduction of 5G technology also allows media professionals to embrace technological advancements in their work, accelerating the learning of new skills, and increasing their ability to leverage creativity in new ways for more engaging media content.

Sanlih E-Television(SETTV) private 5G application and architecture

For SETTV, the key use cases they see 5G helping with are:

- High-resolution remote broadcasting
- AI-enhanced virtual scene augmentation
- 3D dynamic tracking and recognition of AR images
- Among these, AR/VR and film have emerged as the primary drivers of growth
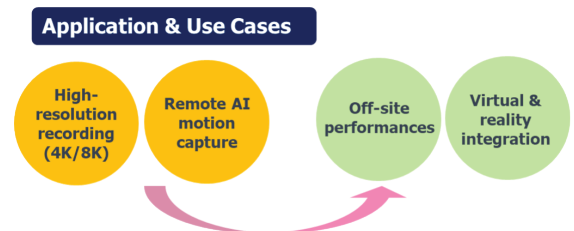
THE SOLUTION

The combination of Saviah's 5GC offering with CTOne's industry-leading private 5G security enables SETTV to realize the full value of private 5G. As illustrated below, the architecture includes all the key pieces needed for a secure private 5G deployment.
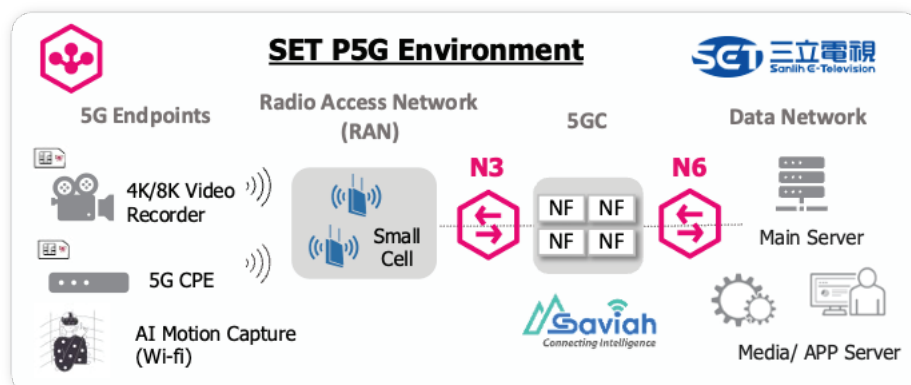
Solution architecture with Saviah's 5GC service and CTOne end-to-end 5G cybersecurity solution

Saviah Technologies *delivers* 5G connectivity

Saviah Technologies, Inc. is a 5G core (5GC) network software provider for private 5G (P5G) networks. 5GC serves as the brain of the 5G mobile network, unlocking the full potential of AIoT applications across various industries, including the smart media and entertainment industry.

Saviah 5GC offers reliable, enhanced broadband and low-latency mobile communications, supporting smart applications such as AR/VR/MR, high-speed 4K video transmission, and remote and virtual collaboration, broadening entertainment possibilities and adding business value. In this case, the Saviah 5GC service is provided alongside the Saviah network management system, which allows for real-time monitoring of the P5G end-to-end network status, thereby increasing operational efficiency.

CTOne *solves* key private 5G security challenges

Like typical IT and OT technology deployments, private 5G requires layered security to manage the risk from an expanding enterprise attack surface. Communication technologies (CT) enable organizations to realize significant benefits from increased efficiency and new applications, but risk still needs to be managed.

For this project, CTOne delivers key security value, including:
- Supporting IT professionals with a lack of familiarity with the CT environment and expertise
- Preventing attacks across the entire enterprise attack surface, including IT, OT, and CT
- Seamless integration with the existing security solutions at SETTV

The importance of having a cybersecurity-protected 5G dedicated network

- Film and television media, as digital platforms for real-time information dissemination, rely on cybersecurity for secure information transmission.
- The introduction of 5G technology not only assists in delivering higher quality content and solving enterprise pain points but also raises concerns about potential cybersecurity vulnerabilities.
- There is a risk of misinformation spreading through networks or live broadcasts due to cybersecurity gaps, leading to misinformation dissemination and possibly causing societal panic.
- With the adoption of 5G technology, businesses must consider holistic cybersecurity solutions to safeguard critical assets and sensitive data.
- Ensuring that 5G applications and infrastructure are not vulnerable to hacker attacks, and preventing malicious content substitution, or broadcast interruptions is crucial.

THE CONCLUSION

As Taiwan's leading content creator, SETTV has invested in the delivery of a cost-effective and secure 5G wireless production and broadcasting environment, powered by Saviah's 5GC system and safeguarded by CTOne's private 5G cybersecurity capabilities. Reflecting the reality that next-generation wireless deployments are not well understood by traditional IT staff, CTOne's private 5G solution seamlessly integrates with existing IT security, empowering employees to better manage and protect the overall enterprise attack surface.

ABOUT CTOne

CTOne, a global cybersecurity leader in communication technology/ a subsidiary of Trend Micro, with over 30 years of experience in information technology (IT) security inherited from Trend Micro, CTOne bridges the communication technology (CT) gap by dedicating resources to the development of enterprise cybersecurity. On top of providing the most comprehensive solution in terms of mobile network communication protection, CTOne helps enterprises integrate IT and CT technologies for digital transformation, reducing operating costs, increasing productivity, and avoiding significant losses. CTOne is constantly on guard to ensure that daily business operations are protected to keep enterprises at the forefront of the market.

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