CASE STUDY

# UREC PROVIDES KUNMING CONVENTION CENTER HIGH-VALUE WI-FI EVENT SERVICES

Relay2 helped provide a Wi-Fi solution that meets the business needs of the venue, its exhibitors, and event attendees.

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## ABOUT KUNMING CONVENTION CENTER

Located in China's Yunnan Province, the Kunming International Convention and Exhibition Center (KMICEC) serves as an important venue for hosting exhibitions and conferences ranging from regional to global focuses. The facility houses seven halls, providing a total exhibition area of 50,000 square meters, and includes two large public plazas. Every year, KMICEC hosts more than 50 events, including the China & South-Asia Expo and Kunming Import & Export Trade Show.

## SOLUTION BENEFITS

• Robust Wi-Fi access to support a large number of clients in a high-density environment

• Plug-and-play enabling rapid installation of APs within the deadline

• The ability to generate venue revenue through MVAP (Managed Virtual AP™) feature

• Built-in value-added services to boost visitor engagement over the venue's Wi-Fi networks

# THE CHALLENGE

## Dense Mix of Wi-Fi Networks Creating Significant Signal Interference

Along with the digital and social initiatives, more and more event organizers, exhibitors, and visitors require on-site wireless network service to enhance the exhibition visiting experience and marketing efficiency. As such, Wi-Fi access at convention centers has become mandatory.

In the past, the venue owner provided their own Wi-Fi network, and exhibitors self-deployed WLAN networks. This approach resulted in a dense mix of networks within the venue, leading to significant signal interference. In a crowded event hall, 100 to 200 Wi-Fi networks could be observed. Because of the resulting poor performance, the venue operator would often receive complaints about network service even though a Wi-Fi signal could be seen.

Furthermore, the current Wi-Fi equipment deployed was lacking with respect to product performance, ease of management, and the capability of value-added service development. This made it hard to meet the business requirement for the convention center to provide differentiated high-value services.



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# THE SOLUTION

## Relay2 High-Performance Wi-Wi Access and MVAP

In order to solve issues for large public event venues—including detrimental signal interference, the difficulty of wireless optimization, the complexity of network management, and the ability to support Wi-Fi-based value-added services development—Relay2 partnered with UREC, a leading SaaS service provider in the convention market. The combined solution provided an end-to-end integrated solution for offering robust event Wi-Fi within the Kunming International Convention and Exhibition Center.

After completing frequency replanning and clearance for all areas, UREC rapidly deployed 70 of Relay2's 3x3 MIMO 802.11n dual-band wireless access points (AP) inside the halls, and another eight wireless access points to cover the two outside plazas to support outdoor activities during the exhibition. "With Relay2, we easily set up a Wi-Fi network and provided managed services to KMICEC," said a UREC representative. "We rely on Relay2's high-performance APs to reliably serve high-density and heavy-traffic areas during exhibitions, where up to 85K visitors pass through per day."

To eliminate interference resulting from self-deployed exhibitor networks, the solution supports Relay2's patent-pending MVAP (Managed Virtual Access Point) function. This allows a single physical AP node to be virtualized into eight WLAN access networks. Each network tenant has independent and segmented management and provisioning capability for this virtual WLAN as if they owned the physical node.

With MVAP, UREC manages and maintains the physical radios as well as the venue-wide KMICEC networks. The venue has four WLANs: one for ordinary visitors, one for VIP visitors, one for internal network connection, and one for long-term general public service. During the event, according to the statistic, these networks reach anywhere from 9,000 to 10,000 connections per day with high performance and stability. Additionally, UREC manages the creation of tenant accounts for exhibitors.

Using the deployed network along with the MVAP capability, KMICEC is able to provide exhibitors with unified wireless access, as well as value-added services on a per-event basis. Doing so enables a best-in-class network and extremely flexible managed service. Whether in a specific area, an entire hall, or across the whole convention venue, exhibitors can set up branded WLAN networks to promote their company, products, and service and digitally engage event attendees. Exhibitors have the flexibility to name WLAN SSID as needed for the promotion of advertising as well as configuring specific networking and security policies.

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>
> — *UREC Representative*

MVAP provides exhibitors with WLAN service self-management, promotion via captive portal pages, multiscreen engagement, enterprise mobile app distribution, and social-media-account promotion. Access to such capabilities enables exhibitors to achieve enhanced engagement and analytics to improve the ROI that events hosted at KMICEC can provide.
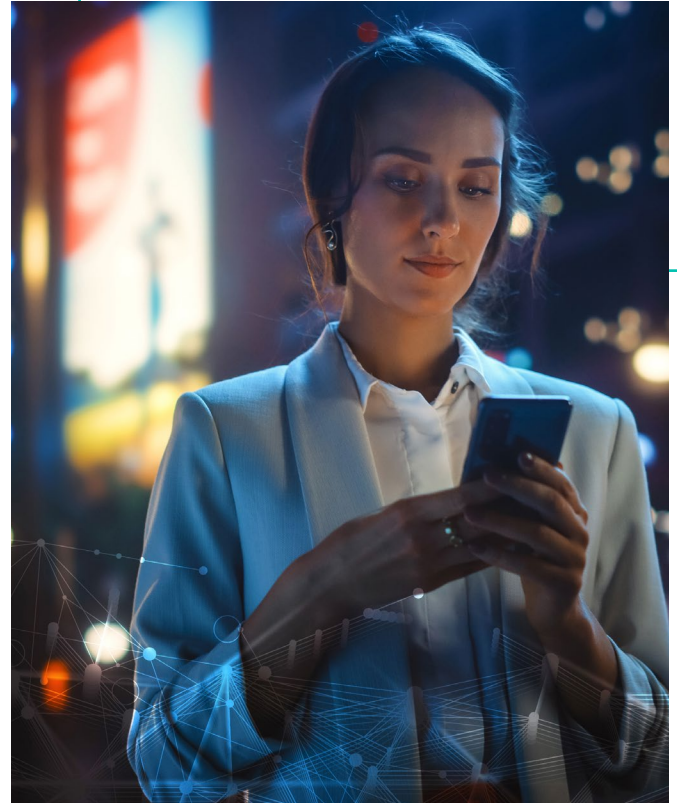
Due to the nature of exhibition events, which are time-based and change frequently, the intuitive Relay2 Cloud Service Manager offers flexible and fast management capability for all MVAP groups in a dynamic and real-time manner, including adding, changing, and removing policies or data statistics, etc. Such flexibility is ideal for meeting the convention center's business operation and daily management requirements. Commenting on the deployed solution, UREC stated, "Based on Relay2's Service-Ready Access Point™ and Managed Virtual Access Point™ solution, the Wi-Fi amenity services puzzle that convention center have struggled with for years has been solved. Beyond that, the deployment also enables more value-added services over the same platform."

For exhibitors, using MVAP can reduce the expense and complexity of duplicating and coordinating their own physical network deployment, as well as the cost and time of optimization, especially when lacking on-site IT expertise and resources. Instead, efficient and high-performance branded network access is purchased as an amenity service. If exhibitors have any special configuration requirements, staff at the venue and back at headquarters can use their own dedicated management login to access the cloud management system remotely. With MVAP, the exhibitor doesn't experience any downgrade to available features compared to owning the physical network themselves so they retain the autonomy and flexibility of business management.

As a result, KMICEC now views its high-performance wireless network as one of the principal factors for differentiating the venue and developing its event and enterprise business. Through the public Wi-Fi network, KMICEC's social media (WeChat) account has received 30,000 fan check-ins and supported live field reports through social media, with 7,000–8,000 readings per report. This provides tremendous business value to both KMICEC and its exhibitors.

After observing the impact of the network in use, UREC commented, "Using the solution, KMICEC has now provided public Wi-Fi services for over 400K visitors, meanwhile making the Kunming International Convention and Exhibition Center WeChat account the most professional with highest active usage of any in the Yunnan exhibition segment. This hugely improves the convention center's business performance and market image. Both the customer stickiness and enterprise revenue have increased as a result, making reliable network and managed Wi-Fi services one of the most critical factors for the success of the venue."



![Relay2 logo]

Relay2 is at the forefront of Wi-Fi-as-a-Service Edge Computing, powered by our patented ServiceEdge Platform. Our breakthrough device technology, Service Points, delivers unparalleled application performance, bolstering security, privacy, and scalability at the edge. Committed to revolutionizing how businesses manage, distribute, and optimize applications, content, and data, we strive to push technology's boundaries.

Built on our ground-breaking Service Points technology, our ServiceEdge Platform revolutionizes Wi-Fi-as-a-Service Edge Computing. Designed for scale and adaptability to meet diverse industry needs, our solutions provide unparalleled control, enhanced infrastructure efficiency, and optimized performance at the network edge. The ServiceEdge Platform improves application performance, simplifies your network, and reduces operational costs by streamlining computing and storage infrastructure. Our platform delivers unrivaled security and privacy, safeguarding application deployment across various networks and ensuring robust data privacy to create a cyber-resilient ecosystem.

At Relay2, we envision empowering businesses to achieve more through continuous innovation. Harnessing edge computing, our goal is to shape a seamless digital world where application performance and user experience remain uncompromised. Join us on our journey as we revolutionize the Wi-Fi-as-a-Service Edge Computing landscape, ensuring global delivery of unmatched performance, security, privacy, and scalability for applications, content, and data.