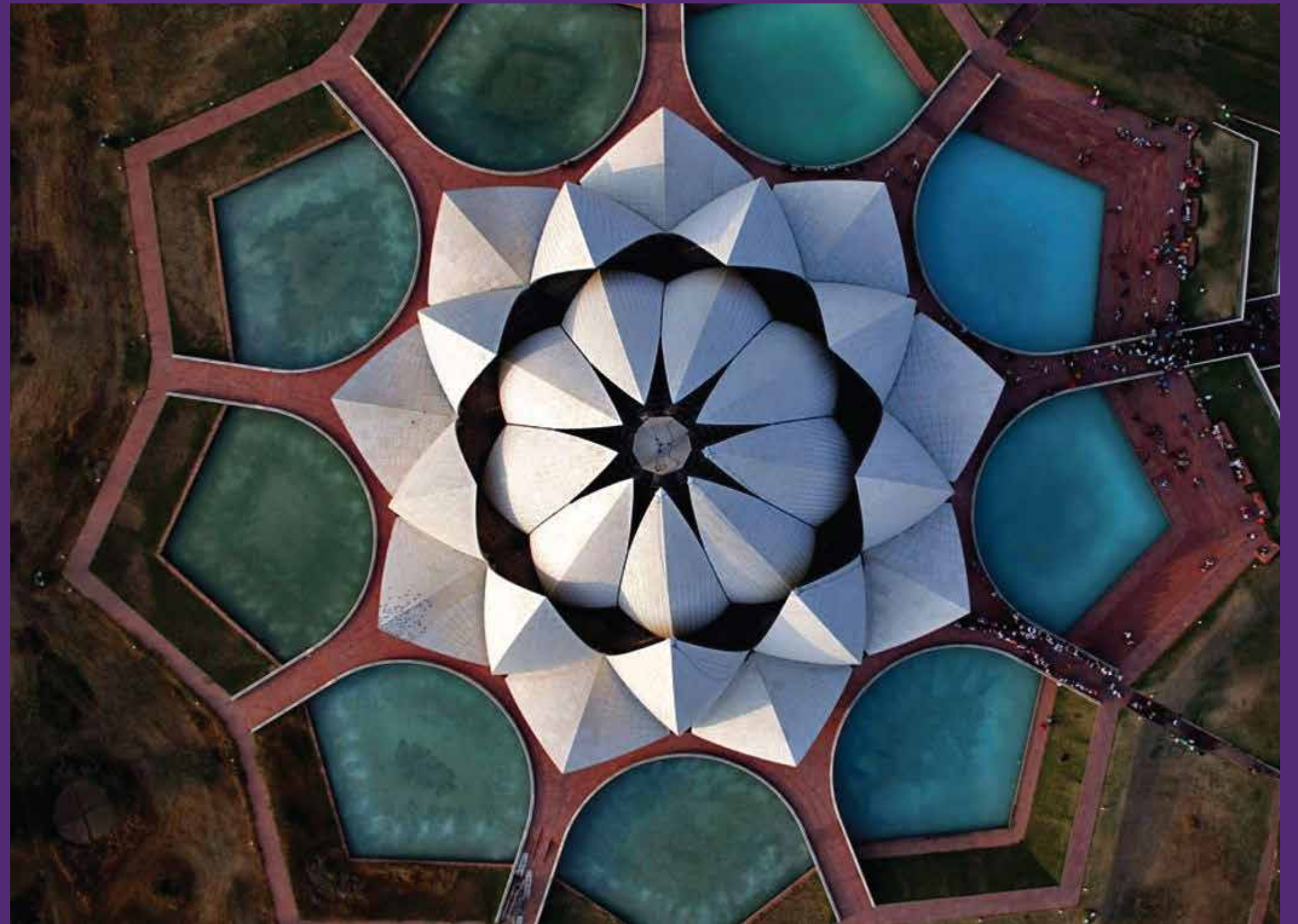


Lotus Temple

Seamless Network, Timeless Heritage

Enhancing Lotus Temple's Connectivity
with HFCL's Wi-Fi 6 Technology



Background

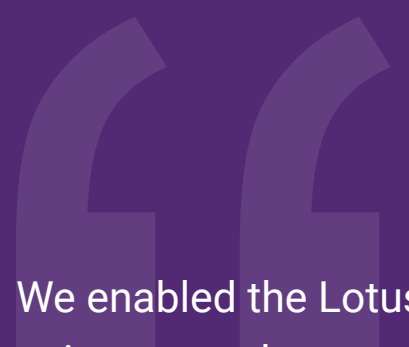
The Lotus Temple, also known as the Bahá'í House of Worship, is an architectural masterpiece and a prominent spiritual center situated in New Delhi, India. Inaugurated in 1986, this renowned structure has become one of the world's most visited buildings, drawing millions of visitors from diverse religious backgrounds each year. As a Bahá'í House of Worship, the Lotus Temple serves not only as a serene space for spiritual reflection but also functions as an administrative hub for the Bahá'í Faith in India. The temple complex houses various office spaces dedicated to managing daily operations, coordinating community services, and facilitating the logistics required to accommodate its vast number of visitors.

The multifaceted operations of the Lotus Temple present a unique array of challenges. The administration must skillfully balance preserving the site's spiritual essence while accommodating its role as a prominent tourist attraction. This balancing act necessitates effective communication and coordination among staff across various departments. Given its high-profile status, the temple also faces rigorous security requirements, including secure data management for its administrative functions. As a non-profit religious institution, the Lotus Temple must navigate financial constraints carefully, managing the need for technological upgrades within a framework of fiscal prudence.

Additionally, as a protected architectural landmark, any modifications or new installations must adhere to heritage conservation guidelines and local regulations, adding complexity to improvement projects. As the Lotus Temple evolved into both a spiritual center and a globally renowned tourist destination, its existing network infrastructure began to constrain its operations. Recognizing the need for a modern, secure, and efficient Wi-Fi solution that could cater to its diverse requirements while preserving the site's unique attributes, the temple administration took proactive measures. They partnered with HFCL Limited, a leader in 'Make in India' Wi-Fi solutions, along with system integrator M/s HDSR Innovation Pvt Ltd (HDSRi) and captive portal partner Wifitics. This collaboration aimed to deploy a cutting-edge Wi-Fi infrastructure designed to improve connectivity across office spaces, implement robust security protocols, and adhere to budgetary constraints.

The Lotus Temple attracts up to 100,000 visitors on some holidays, with annual visitor estimates ranging from 2.5 million to 5 million.¹

The Lotus Temple, hailed as the most visited building globally by CNN.²



We enabled the Lotus Temple with uninterrupted connectivity using our Wi-Fi 6 technology, ensuring reliable access while preserving its architectural integrity. Our solution has successfully met the temple's operational needs and supported high-profile events, showcasing our commitment to delivering innovative solutions that respect heritage.

Anand Kumar
Associate Vice President Communications

Challenge

The Lotus Temple faced the challenge of installing a new Wi-Fi network within its sensitive architectural framework. The solution needed to deliver secure and reliable connectivity across office spaces and support high-profile events such as the G-20 Interfaith meeting, which demanded uninterrupted internet access for delegates. Moreover, the implementation had to comply with heritage conservation guidelines, ensure robust security and user authentication, and remain within budget constraints—all while minimizing any impact on the temple's architectural integrity.

Solution

To meet the Lotus Temple's urgent need for seamless connectivity, HFCL Limited, in collaboration with M/s HDSR Innovation Pvt Ltd and M/s Wifitics India Pvt Ltd, embarked on a comprehensive Wi-Fi deployment project. With no existing network infrastructure in place, this greenfield deployment was meticulously designed to address both the temple's operational needs and its heritage conservation requirements.

Adequate number of Wi-Fi 6 based Wi-Fi Access Points (APs) were strategically installed across various office spaces within the temple complex. These APs were meticulously positioned to ensure comprehensive and seamless Wi-Fi coverage throughout the premises, allowing staff to maintain connectivity while moving between different areas. By utilizing Wi-Fi 6 technology, the Access Points provided significantly higher data rates, increased capacity, data security and enhanced performance, even in high-density environments with numerous concurrent users.

To ensure the network's security and manageability, HFCL implemented an AAA+ Captive Portal (Authentication, Authorization, and Accounting) system via the cloud. This advanced security framework guaranteed that only authorized users could access the network, safeguarding sensitive data and maintaining robust security. Additionally, HFCL's advanced controller technology was employed for centralized network management, enabling real-time monitoring, efficient control, and prompt troubleshooting, thus ensuring optimal performance and reliability.

The deployment proved especially crucial during the G-20 Interfaith meeting, where uninterrupted internet connectivity was vital for accommodating nearly 500 delegates. The new Wi-Fi infrastructure effectively supported this high-profile event, delivering the reliable connectivity required for crucial discussions on global issues.

Following the event, the Wi-Fi system continued to function seamlessly, supporting future needs such as ongoing user authentication and secure access. The project, initiated in December 2023, was completed within the allocated budget and timeline, while meticulously adhering to the temple's heritage conservation guidelines and minimizing impact on its architectural integrity.

Indoor Wi-Fi



Wi-Fi 6
Access Point

Result

- 01** Achieved comprehensive Wi-Fi coverage across the Lotus Temple, ensuring reliable connectivity throughout the premises.
- 02** Successfully provided uninterrupted internet connectivity for nearly 500 delegates during the G-20 Interfaith meeting.
- 03** Implemented AAA+ Captive Portal (Authentication, Authorization, and Accounting) over the cloud, ensuring secure network access for authorized users.
- 04** Maintained Wi-Fi connectivity post-event to support ongoing and future requirements.
- 05** Completed the deployment within the specified budget and timeline while adhering to heritage conservation guidelines.

Conclusion

The deployment of HFCL's advanced Wi-Fi infrastructure at the Lotus Temple successfully addressed the site's connectivity needs while respecting its architectural integrity. The new network not only provided seamless coverage for daily operations but also supported high-profile events like the G-20 Interfaith meeting. By integrating robust security measures and ensuring future scalability, the project enhanced the temple's ability to serve its diverse functions effectively. Completed within budget and on schedule, this initiative exemplifies a well-executed solution that balances modern technology with heritage conservation.



References

1. https://en.wikipedia.org/wiki/Lotus_Temple#:~:text=The%20Lotus%20Temple%20has%20become,2.5%20million%20to%205%20million.
2. <https://dmsoutheast.delhi.gov.in/tourist-place/lotus-temple-delhi/#:~:text=The%20Lotus%20Temple%20has%20won,is%20just%20500%20meters%20away.>

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