

# CAMPUS WI-FI DEPLOYMENT, CHALLENGES AND SOLUTIONS

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## **IITK Campus Wi-Fi Setup**

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- Started Wi-Fi deployment in 2002.**
- About 1000 APs (Mix of standalone and controller based APs)**
- Deployed in Academic Area, Residential Area and Student Hostels**

## Challenges

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- ❑ **Mix of old and new APs.**
- ❑ **A very high user density in some areas like Lecture Halls, Conference venues and Student Activity centre during events.**
- ❑ **Most of the hosts still use 2.4 GHz.**
- ❑ **Students have their own wireless routers in hostels which interfere with infrastructure APs.**

# Solutions

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- ❑ In Lecture Halls, use APs which can support high number of user connections and sessions.
- ❑ In hostels, use more number of APs but with lower user connection/sessions capacity.
- ❑ Disable lower data rates.
- ❑ In residences, use wireless router inside every house.
- ❑ Unlike Wired network, continuous redeployment and restructuring is required in wireless network