

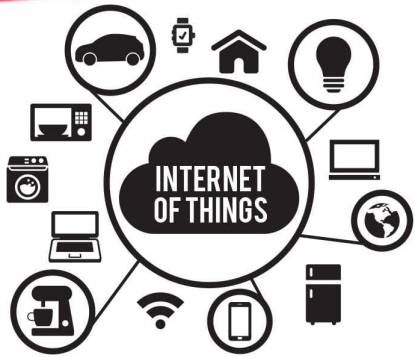


SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution



Department of Information Technology



19ITT302 - INTERNET OF THINGS

III B.Tech. IT/ V SEMESTER

UNIT V: DESIGN METHODOLOGY & FUTURE TRENDS

IoT System Management with NETCONF-YANG: Need for IoT Systems Management – Simple Network Management Protocol (SNMP) –Limitations of SNMP, Network Operator Requirements- NETCONF-YANG-IoT Systems Management with NETCONF-YANG -IoT Platforms Design Methodology - IoT Physical Devices & Endpoints - Raspberry Pi- Linux on Raspberry Pi - Raspberry Pi Interfaces - Programming Raspberry Pi with Python - Designing a RESTfulWebAPI - Amazon Web Services for IoT



Network Operator Requirements

- Network Operator Requirements
- To address the limitation of SNMP and plan for future enhancement Internet Architecture Board (IAB) provides the following requirements .
 - Ease of use
 - Distinction between configuration and state data
 - Fetch configuration and state data separately
 - Configuration of the network as a whole
 - Configuration transactions across devices



Network Operator Requirements

- Configuration deltas
- Dump and restore configurations
- Configuration validation
- Configuration database schemas
- Comparing configurations
- Role-based access control
- Consistency of access control lists
- Multiple configuration sets
- Support for both data-oriented and task oriented access control



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Thank You!