TEIN3 Internship Program Weekly Report

VinaREN

This is my final report on internship program for the week (23rd to 27th).

What I learned during this week.

1. **BGP –Border Gateway Protocol**

    - Advanced BGP Configuration and Verification
    - BGP Neighbor States
    - BGP Established and Idle States
    - BGP Active State
    - Configuring a Peer Group
    - Configuring a Peer Group Example
    - BGP Peering
    - Configuring BGP Authentication
    - Troubleshooting BGP
    - Clearing the BGP Session Hard Reset of BGP Sessions
    - Soft Reset of BGP Sessions
    - The debug ip bgp Command

2. **Selecting a BGP Path**

    - Characteristics of BGP Attributes
    - BGP Attributes
    - AS Path Attribute
    - Next-Hop Attribute
    - Origin Attribute
    - Local Preference Attribute
    - MED Attribute
    - Weight Attribute
    - Determining the BGP Path Selection
    - Selecting a BGP Path
    - Path Selection with Multihomed Connection

3. **Manipulating BGP Path Selection with Route Maps**

    - Setting Local Preference with Route Maps
    - Setting Local Preference with Route Maps Example
    - Changing the BGP Local Preference for All Routes
    - BGP Local Preference Example
    - BGP Local Preference Example (continued)

- ✓ BGP Local Preference Example (continued)
- ✓ Setting the MED with Route Maps
- ✓ BGP Using Route Maps and the MED Example
- ✓ BGP Using Route Maps and the MED Example (continued)
- ✓ BGP Using Route Maps and the MED Example (continued)

I did more labs on BGP:

1. Configuring BGP with Default Routing
2. Using the AS_PATH Attribute
3. Configuring IBGP and EBGP Sessions, Local Preference and MED
4. BGP Route Reflectors and Route Filters and some more labs.

Acknowledgement

I would like to sincerely acknowledge Royal University of Bhutan and Asian Institute of Technology for granting me to attend TEIN3 HRD Internship Program opportunity for this very particular and important Internship Program which will definitely enhance my working proficiency and skills as a whole.

My sincere gratitude also goes to Mr. Duy nm VinaREN our resource person for his valuable teaching.

Submitted by :
Sonam Dolkar
Samtse College of Education