Workshop outlines (http://www.cat.or.th/cat_ipv6_project.html)
The workshop consists 2 parts: theory and practical. Here are some main outlines of the workshop:

Intro to IPv6 for IPv4 users

- Basic IPv6
- Differences from v4
- Addressing in v6
  - The 128 bits
  - prefixes,
  - lack of broadcast
  - EUI-64
  - random (privacy) addresses
- Global Addresses
- Local addresses
- Address notation
  - Notation for scopes
- v6 DNS Issues
  - AAAA records
  - A6 records
  - PTR records and IP6.ARPA (IP6.INT)
    - 4 bit delegation points
  - Use of IPv6 transport still required
    - No IPv6 root (etc) servers yet
- v6 Registry Issues
  - Keeping track of address blocks
  - Registry Objects
  - Registry protocols

Configuring v6 nodes

- Hosts
  - Autoconfig
    - How it works,
    - DAD
    - Inverted 'u' bit in EUI-64
    - Router Solicitation/Advertisements
  - Static Config
    - Managing addresses
    - Configuring
  - DHCPv6 (?) (doesn't yet exist...)
    - Differences with DHCP (for v4)
      - multiple address assignments
      - prefix assignments
  - Other (non-address) configuration

Porting software to IPv6

- The API for IPv6
- getaddrinfo()
- Dealing with IPv4 & IPv6
  - mapped addresses
  - dual socket
- Converting Server Applications
- Converting Clients
- Dual protocol sockets

Connecting to the v6 nets

- Native connections
  - PPP for IPv6
  - Ethernet

- Tunnels
  - Principles of tunnels
  - Configuring tunnels
  - MTU effects
- 6to4
  - 2002::/16 addresses
  - Automatic tunnels
- Obtaining Addresses, addressing plans
  - Dealing with providers and registries
  - Using address space wisely
  - Renumbering

Configuring IPv6 Routers

- Access Lists (Filters)
  - Configuring IPv6 filters
  - No NAT to deal with
- Router Advertisments
  - Advertising prefixes
  - Advertising network parameters
  - Deprecating old addresses
  - Router preferences
    - effect on host router selection
- IPv6 routing & Routing Protocols
  - Static Routing
    - Default route
    - Routes to "non" numbers
    - Reject routes
  - RIP
    - Comparison with RIP and RIPv2
  - OSPF
    - Dealing with IPv6 using OSPF
  - BGP4+
    - AS numbers for IPv6
    - IPv6 prefixes, and route filtering

IPv6 Security

- No NAT (non-) security
- Firewalls
- Securing the protocols

Practical Part

Installing IPv6 host software

- Linux
- Windows

Configuring IPv6 routing

IPv6 routing & Routing Protocols

- RIP, OSPF, BGP

Practical IPv6 installation

- Configuring Linux as tunnel server
- Configuring IPv6 routing

หมายเหตุ

- ผู้เข้ารับการอบรมควรเตรียมตัวศึกษาพื้นฐานทั่วไปของ IPv4, IP Routing, DNS, เลขฐานสิบหก
- หลักสูตรอาจมีการเปลี่ยนแปลงตามความเหมาะสม