ABCs of SYSPROG

- Vol 1
  - Hardware Config
    - Processor
      - LPARS
        - z/OS
        - z/VM
        - z/Linux
        - z/VSE
    - System Console
    - DASD
    - Network

Figure 1.1 Typical IBM Configuration

  - Parallel Sysplex
    - Connected channel to channel CTC
      - Links to peer to peer P2P

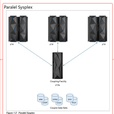

Figure 1.2 Parallel Sysplex

  - Coupling Facility
    - Parallel Sysplex
      - Higher Availability
      - Performance
      - Workload Shared
    - Processor
      - Runs CF Control Code
        - Control Blocks AKA Structures
          - used in
            - Subsystems
            - Applications
        - Known as a specialized OS
    - CF Structure Encryption
      - Transparent
      - No changes required to SUBSYS or APPs
      - All crypto done by XES
        - Cross-System Extendeded Services
        - Uses MF HD to encrypt and decrypt w/ AES protected keys
        - Encrypt data and send along to CF link in the CF
          - When APP needs data
            - The encrypted data is transported from CF to XES to be decrypted
              - and then passed back to the APP
        - No decryption is done by the CF or CF links
      - The encryption on CF Structure is controlled by CFRM
        - The Coupling Facility Resource Management
        - CFRM policy with new parm ENCRYPT
      - The minimum HD is Crypto Express 3 and CPACF
        - And minimum SW z/OS 2.3 ICFS HCR7703
        - Also the AES master Key and ICSF crypto key data-set CKDS must be the same in the entire plex.

Read

DATA OUTPUT
Plaintext
DATA INPUT
Ciphertext
z/OS
Ciphertext
Plaintext
Data in CF
Data in CF
CF Structure
Ciphertext
CF Structure
Ciphertext
CF Structure
Ciphertext