

Modes of Operation.

The four modes of operation explored in this lab (ECB, CBC, CFB and OFB) are all NIST standards. We summarize their block diagrams (from NIST SP 800-38A).

Electronic Codebook Mode (ECB).

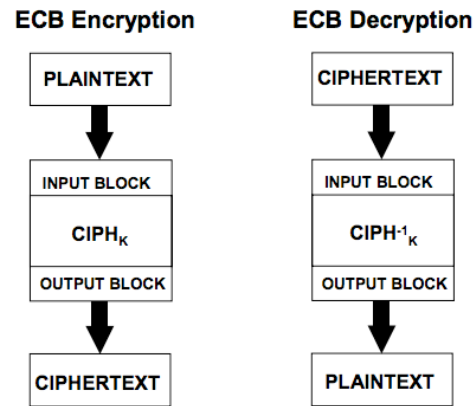


Figure 1: The ECB Mode

Cipher Block Chaining Mode (CBC).

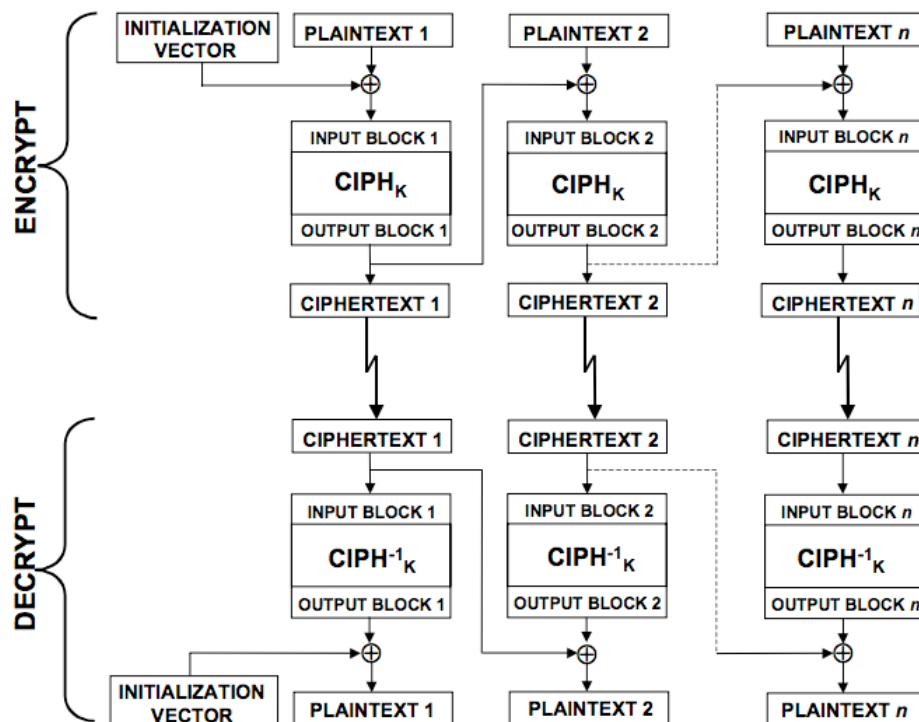


Figure 2: The CBC Mode

Cipher Feedback Mode (CFB).

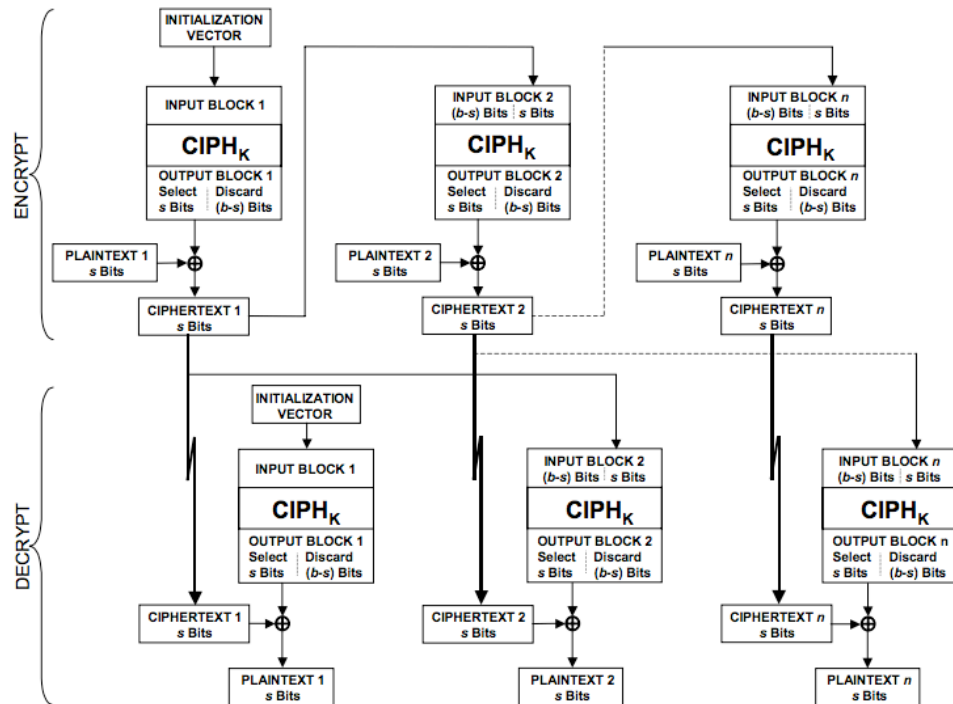


Figure 3: The CFB Mode

Output Feedback Mode (OFB).

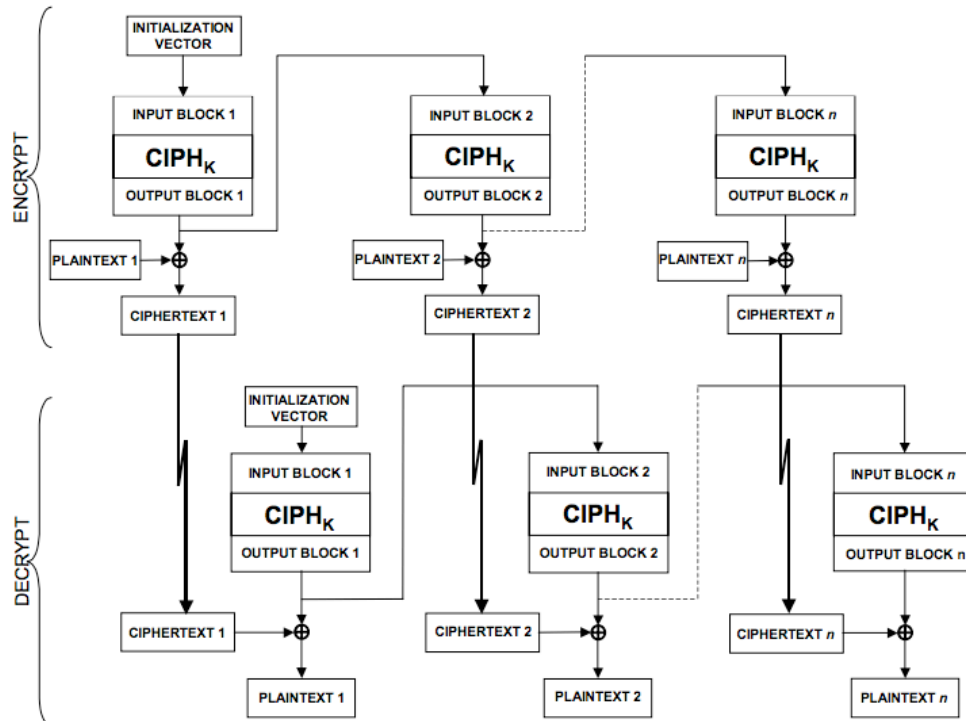


Figure 4: The OFB Mode