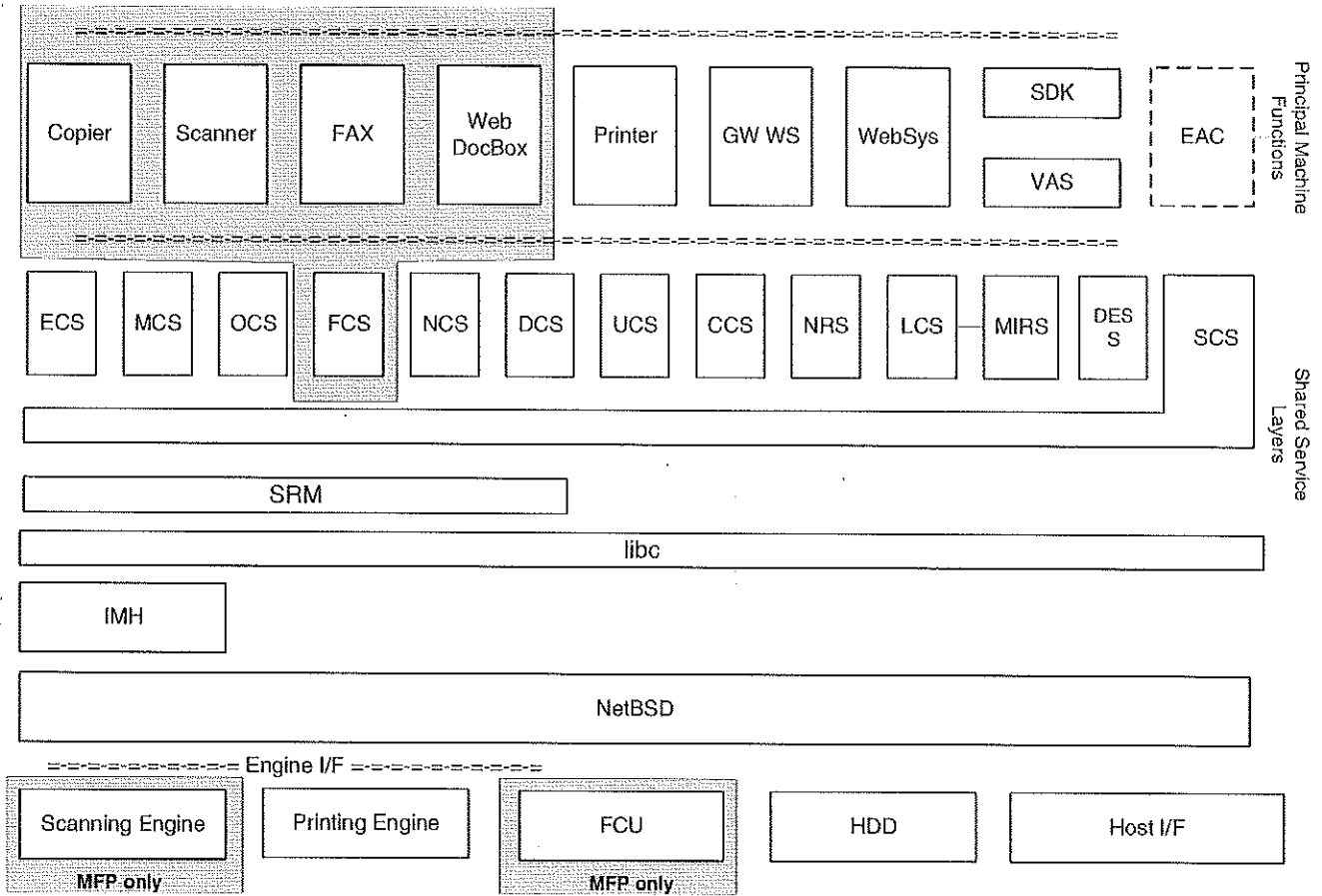


## 4-2 Software Configuration



### Software Configuration

#### 4-2-1 Shared Service Layers

- |  |   |
|--|---|
| <b>ECS</b> (Engine Control Service)          | Controls engine operations for scanning and printing.   |
| <b>MCS</b> (Memory Control Service)          | Manages the memory in the Image Memory area (incl. the HDD), as well as compression/decompression.                                      |
| <b>IMH</b> (Image Memory Handler)            | Transfers data between the controller and engine.   |
| <b>OCS</b> (Operation Panel Control Service) | Controls the panel LEDs, monitors panel keys and manages panel objects and display messages.  |
| <b>NCS</b> (Network Control Service)         | Controls host I/F and protocol control (transport, session).  |
| <b>FCS</b> (FAX Control Service)             | Exchanges data and commands with the FCU (FAX Control Unit), which manages and controls FAX communication and telecommunications lines. |

## Device Security

<b>SCS</b> (System Control Service)	Manages the status of all internal operations performed on or by the system as a whole, and controls the switching of the LCD screen as well as the operational link between SP settings and machine operations.
<b>SRM</b> (System Resource Manager)	In addition to managing hardware resources, this module mediates control of the printer engine, scanner engine and memory resources during the image creation process.
<b>DCS</b> (Delivery Control Service)	Controls all non-FAX transmission/reception of e-mail as well as the forwarding of image data to servers and folders.
<b>MIRS</b> (Machine Information Report Service)	Controls the sending of machine configuration settings by e-mail
<b>UCS</b> (User Control Service)	Manages the Address Book data.
<b>CCS</b> (Certification Control Service)	Mediates communication between the principal machine function and external charge device during the authentication process, as well as the charge-related processing (e.g. counters).
<b>NRS</b> (New Remote Service)	Controls remote correspondence with RC Gate (e.g. diagnostics, firmware update, settings changes).
<b>LCS</b> (Log Control Service)	Controls the MFP/LP's access logs (e.g. Address Book, Document Server, MFP/LP functions).
<b>DESS</b> (Data Encryption Security Service)	Controls the encryption and decryption functions.

### 4-2-2 Principal Machine Functions

<b>Copier</b>	Activates the scanning engine, which reads the original and then sends the data on to the controller to be printed out from the printing engine. Secondary data, such as that used for access control, is handled from the operation panel.
<b>Printer</b>	Receives image data through the host interface, which then sends the data to the controller. Also contains a printer language processing subsystem (e.g. RPCS) that converts the printer language into image data, which is then printed out from the printing engine. Secondary data is handled via the connection protocols between the driver UI and the host I/F. If the front SD/USB option is being used, download image files from the SD/USB memory device, convert the image data into print image data, and print it from the printing engine.
<b>Scanner</b>	Activates the scanning engine, which reads the original and then sends the data to a PC via the host I/F. Scanning can be initiated from both the operation panel and from a PC via a TWAIN driver.

## Device Security

- If the front SD/USB option is being used, store the image data scanned from the printing engine on the SD/USB memory device.
- FAX** Activates the scanning engine, which reads the original and then sends the data to the FCU to be sent as a FAX via a telecommunications line. Also receives FAX data and prints it out from the printing engine.
- Netfile (GWWS)** As a server, GWWS provides some MFP/LP functionality to specific network-connected PC utilities. This includes the ability to view and make changes to user information and machine configuration settings, as well as to print out or perform other operations on documents stored on the MFP/LP. GWWS also acts as a client to external Web services, including transferring the machine log data to specific log data collection utilities
- WebSys** A Web application that allows machine configuration settings to be viewed and changed via a Web interface.
- WebDocBox** Allows operations to be performed on Document Server documents stored in the MFP (viewing, downloading, printing, deleting) via a Web interface.
- SDK/VAS** SDK: Applications provided by third-party vendors designed to function with MFP/LP principal machine functions developed by Ricoh.  
VAS: An MFP/LP API that standardizes the meanings of simplified commands used by SDK applications when communicating with the MFP/LP.
- EAC** This module controls the TCP/IP command flow between the GW-API and external controller connected to the MFP via the Gigabit Ethernet-compatible network I/F. The EAC allows the external controller to initiate MFP operations such as print jobs and scan jobs, as well as store Printer documents to the MFP HDD. In addition, this module also makes it possible to change some of the internal settings of the external controller from the MFP operation panel.  
**Note:** This is only available on models that support an external controller.