

# Software

The heart of the computer is its software. Each major component and many housekeeping functions are managed by computers controlled by Processes dedicated software packages that relieve people of the burden of day-to-day activities.



## COMPUTER PROCESSES

The software that drives a computer is the Process. Each Process addresses a specific function and manages it within the computer.

There are three types of Processes:

**System.** The Operating System for a Computer. Every Computer requires an Operating System Process.

**Component.** The governing Process for a Component.

**Service.** A Process providing support or information.

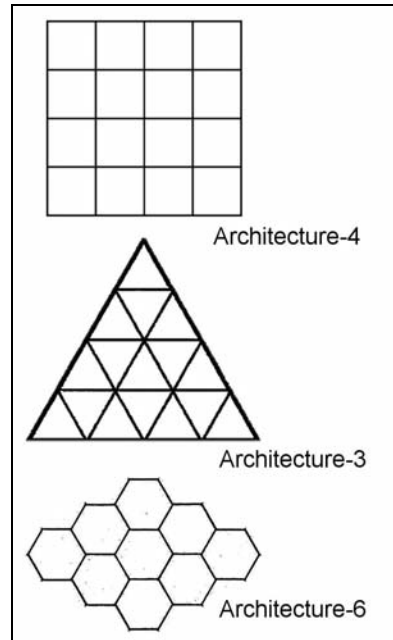
## Redundant

Three identical Processes allow a Computer to automatically ignore a computing failure by one of the three.

**Brain Tonnage.** A Brain is installed in an existing Cell, so while the Brain itself is about 1 or 2 liters, it is part of a larger Cell.

**Free Cells.** A system operates most efficiently if it has free Cells equal to installed Processes. If the Computer has fewer than one empty cell per operating Process, output is delayed one Round.

## TYPICAL COMPUTER MAPS



## SYSTEM PROCESSES

| M     | Type                    | Process | TL | KCr  | C  | S  |
|-------|-------------------------|---------|----|------|----|----|
| 3.1   | Console                 | Process | 7  | 50   |    |    |
| XP    | Console XP              | Process | 8  | 50   |    |    |
|       | Conversational          | Process | 9  | 100  |    |    |
| XS    | Expert System           | Process | 10 | 200  |    |    |
| SA    | Self Aware              | Process | 14 | 300  |    |    |
| S0    | Semi-Organic            | Brain-0 | 10 | 100  | 1  | 1  |
| S1    | Semi-Organic            | Brain-1 | 11 | 400  | 1D | 1D |
| S2    | Semi-Organic            | Brain-2 | 12 | 800  | 2D | 2D |
| S3    | Semi-Organic            | Brain-3 | 14 | 1200 | 3D | 3D |
| P0    | Positronic              | Brain-0 | 11 | 400  | 1  | 1D |
| P1    | Positronic              | Brain-1 | 12 | 900  | 1D | 1D |
| P2    | Positronic              | Brain-2 | 13 | 1500 | 2D | 2D |
| P3    | Positronic              | Brain-3 | 15 | 2000 | 2D | 3D |
| AI-16 | Artificial Intelligence | Process | 16 | 2000 | 1D | 1D |
| AI-18 | Artificial Intelligence | Process | 18 | 3000 | 2D | 2D |
| AI-20 | Artificial Intelligence | Process | 20 | 4000 | 2D | 3D |
| AI-22 | Artificial Intelligence | Process | 22 | 5000 | 3D | 3D |

Each computer (Local or Master) requires a System Process. It must be installed in the computer is controls. It occupies one Cell.

## COMPONENT AND SERVICE PROCESSES

| Process        | Type      | TL       | Cells | KCr | C   | S   |
|----------------|-----------|----------|-------|-----|-----|-----|
| Drive          | Component | =Jump    | 1     | =TL |     |     |
| Power Plant    | Component | =PPlant  | 1     | =TL |     |     |
| Sensor         | Component | =Sensor  | 1     | =TL |     |     |
| Weapon         | Component | =Weapon  | 1     | =TL |     |     |
| Defense        | Component | =Defense | 1     | =TL |     |     |
| Guidance       | Component |          | 1     | 10  |     |     |
| Life Support   | Service   |          | 1     | 10  |     |     |
| Data Base      | Service   |          | 1     | 10  |     |     |
| Accounting     | Service   |          | 1     | 10  |     |     |
| Astrogation    | Service   |          | 1     | 10  |     |     |
| Medical        | Service   |          | 1     | 10  | +2D | +1D |
| Entertainment  | Service   |          | 1     | 10  |     |     |
| Library Data   | Service   |          | 1     | 10  |     |     |
| Security       | Service   |          | 1     | 10  |     |     |
| Maintenance    | Service   |          | 1     | 10  |     |     |
| Damage Control | Service   |          | 1     | 10  | +1D | +1D |

Component Processes must be installed in the Computer which controls the Component. The System Process is the controlling software for the computer.

**Distributed Processing.** Service Processes may be installed in any available Cell in any computer.

## COMPUTER MAPS

The interior of a computer can be mapped. It shows the Computer's Cells on a grid based on the computer Architecture.

**Architecture-N.** Architecture is the number of connections between cells. Architecture-4 connects a cell to 4 adjacent cells; Architecture-9 indicates connections to 9 adjacent cells.

Architecture-3 is triangles; Architecture-4 is squares; Architecture-6 is hexagons. Many possible architectures exist: for example, Architecture-9 wrapped to a cylinder; Architecture-5 mapped to a sphere.

Standard Imperial Computer Architecture is a compact bounded flat plane with a square grid (Architecture-4).