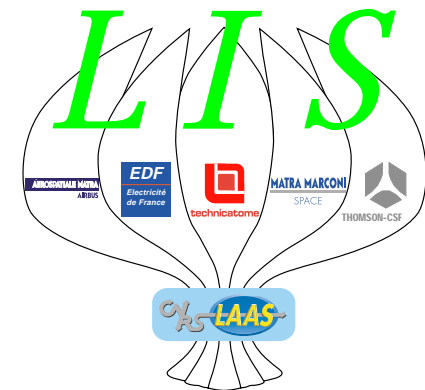


# Open Source: Why ?

- Impossibility of relying only on specific developments ...
- Integration of **COTS** (*Commercial-Off-The-Shelf*) components not always possible...

*« Composants logiciels et sûreté de fonctionnement  
- Intégration de COTS »  
(Hermes Science Publications 2000)*

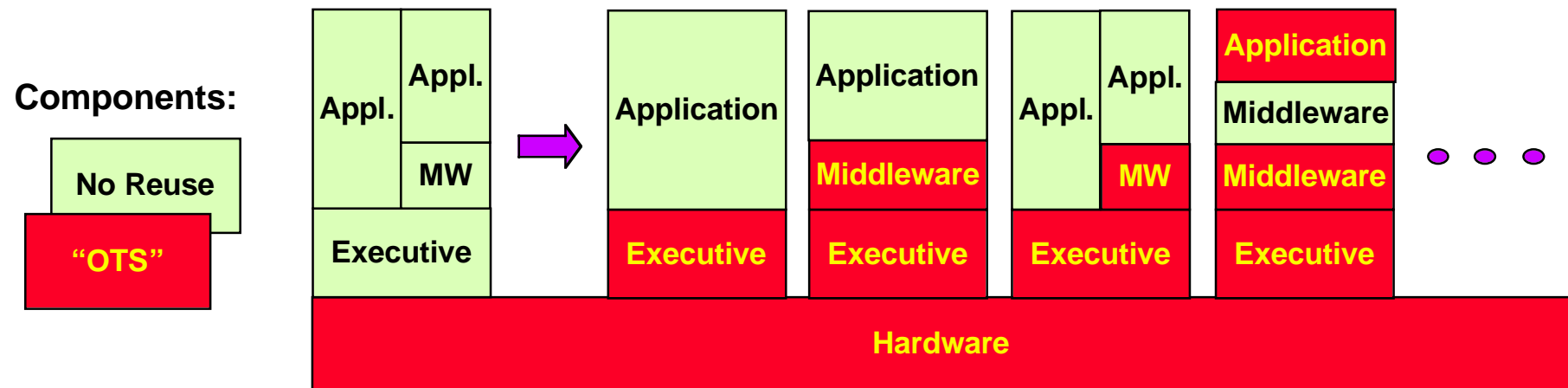


- **Alternative? : Open Source Solutions !!**
  - ✓ Access to source code -> better observability and controlability
  - ✓ Motivated and competent developer community -> responsiveness and quality
  - ✓ Application standards -> guaranties wrt interoperability
  - ✓ But critical systems have stringent requirements and rigorous development processes

# Components and Systems Concerned

## ➤ Components of a computer system

- **Application:** Oracle, Flight Control,...
- **Middleware:** CORBA, DCOM, OLE,...
- **Operating System:** Unix, Windows, Linux,...
- **Microkernel:** Chorus, LinxOS, PalmOS,...
- **Processor:** Pentium, PowerPC, LEON,...



- Embedded control systems
- Large-scale distributed systems: Web servers, ground stations, etc.
- SW development tools (simulators, compilers, etc.)