

Discussion Forum

Architecture Based Development

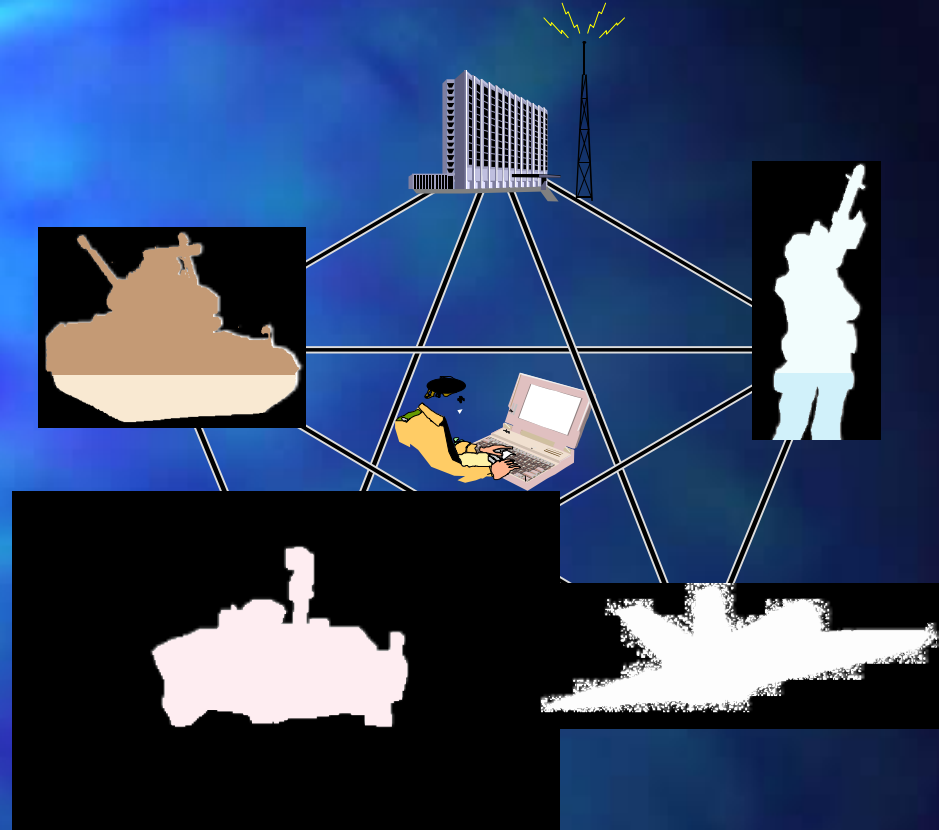
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Principal Consultant
Certified Architect

Without Concepts, you can't create an architecture

- Zero-Latency Concept
- Zero-Maintenance Concept
- Zero-Dependency Concept
- Actor-Based Security Concept

Statement: The Zero-Latency Concept is the critical success factor in all systems

Zero-Latency Concept



- (near) real-time information
- concurrent availability of information



CAP GEMINI

Ideas People Technology

Architectural Design Principle

Zero-Latency Concept

Example:



.20	HEI	49.00	0.55	HGM	32.50	1.00	HO	24.00	0.95	ING	51.00	0.35	KLM	23.40	0.60	KPN
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Your success on the stock market is strongly related to the availability of the right information on time at the right location

Statement: The Zero-Maintenance Concept is Key for all (Ground) systems

Zero-Maintenance Concept



- Automatic error detection & alarm
- Self healing functionality
- Component replacement (Hardware & Software)



Zero Maintenance Concept

Example:



Maintenance: Component Replacement



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Ideas People Technology

Architectural Design Principle

Zero Maintenance Concept

Example:



Maintenance: sometimes not possible.

Statement: The Zero-Dependency Concept is the foundation for all CBD Systems

Zero-Dependency Concept



- high level of independency (Functional and technical)
- 'graceful degradation' (minimum of interfaces, maximum of functionality at the end-user)

Zero-Dependency Concept

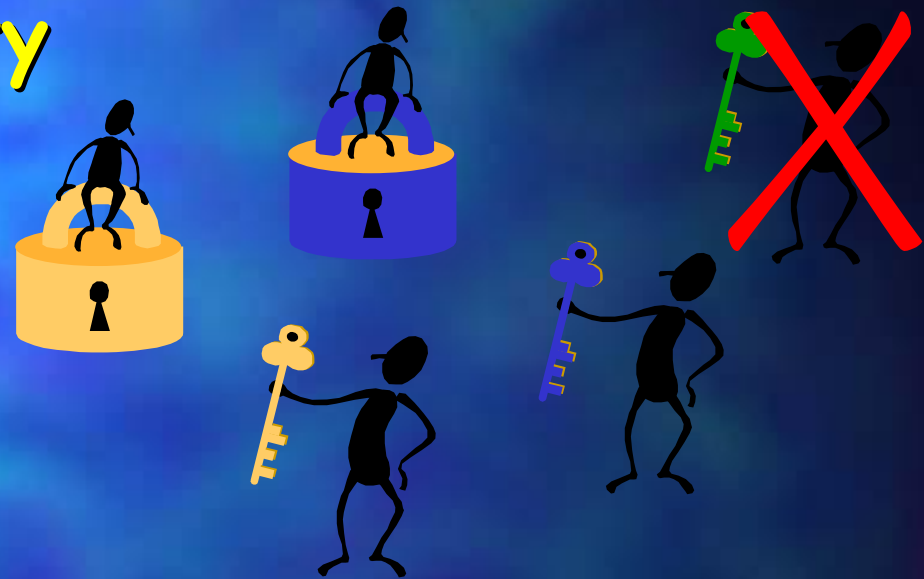
Example:



Spaceshuttle has several independent onboard computer systems

Statement: Actor Based Security is the only way to implement Zero -Maintenance

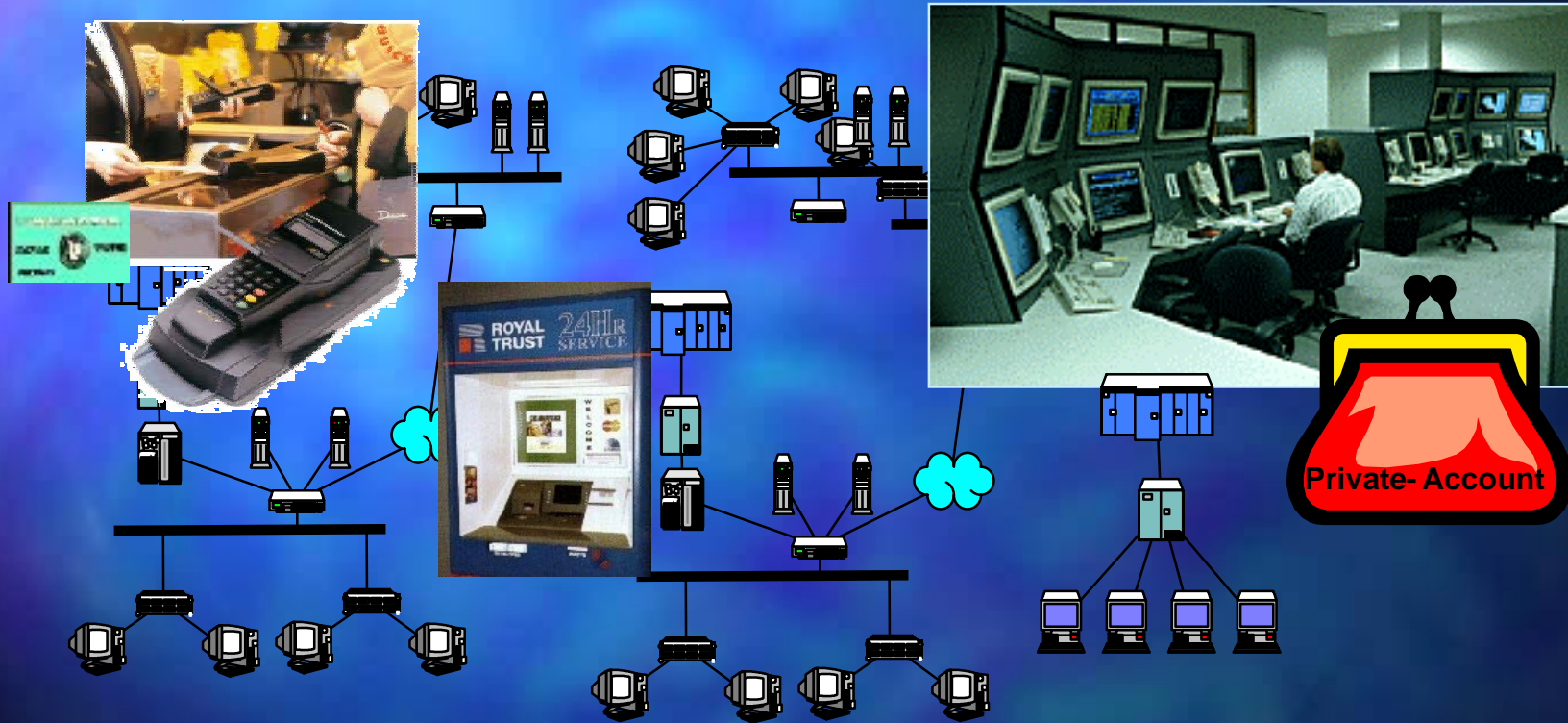
Actor-Based Security Concept



- 'actor' has a role identification (knowledge)
- 'actor' has a physical token (property)
- Key personalized standard workstation

Actor Based Security Concept

Example:



Electronic Payments



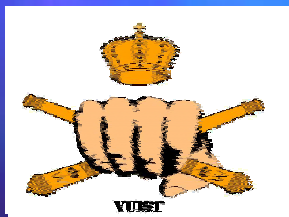
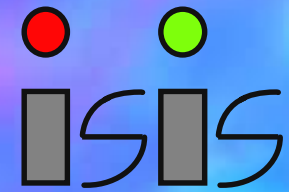
Architecture Concepts

Statement

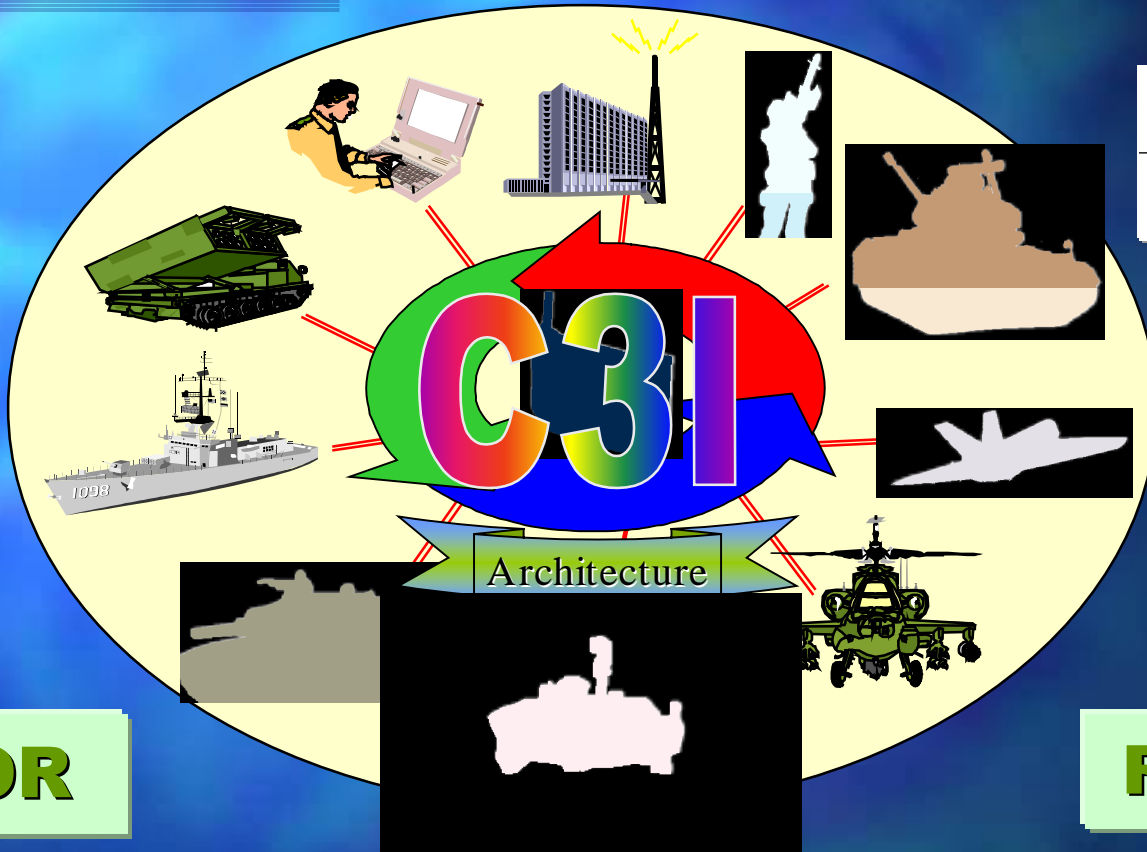


For a thing to operate as **one** system,
it must be designed as **one** system.

Example:



CONDOR



RPV/INOS

For an organisation to operate as **one** system, it must be designed as **one** system.