

SAVE ORCA



Self-organising Resource-Flow Systems

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Outline



- System class: self-organising Resource-Flow Systems
- Benefits over traditional Resource-Flow Systems
- Short Demo
- Summary

System class: Resource-Flow Systems



Production Automation

Characteristics:

- resources
- communication infrastructure
- potential resource-flows
- distributed capabilities
- different components

Logistics



Business Process Orchestration

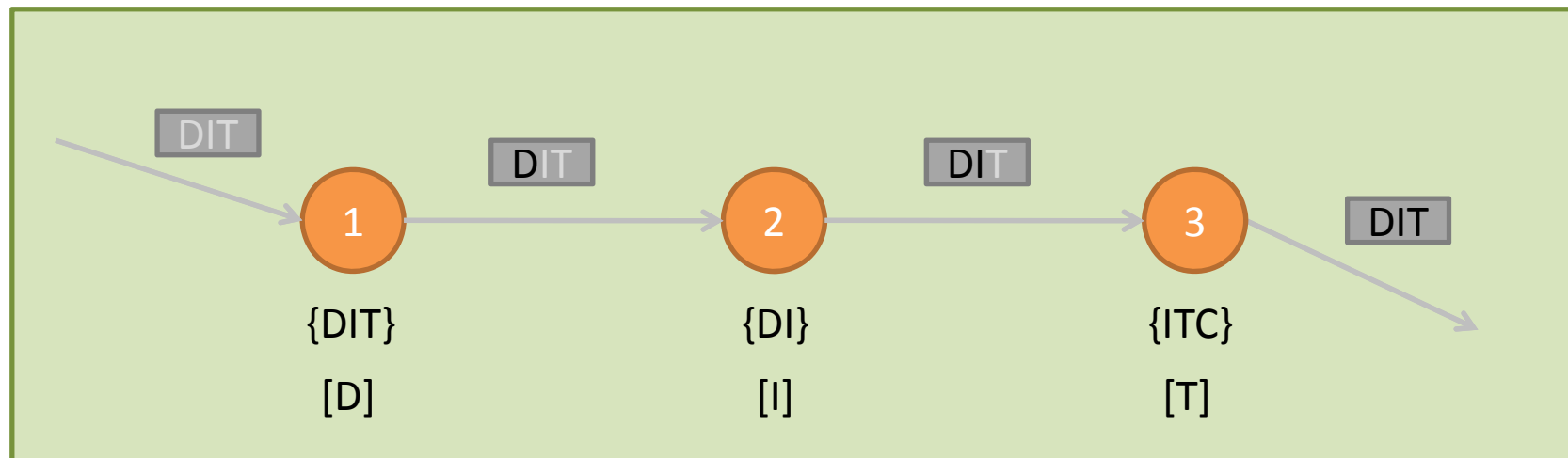


Benefits over traditional Resource-Flow Systems



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- Self-configuring

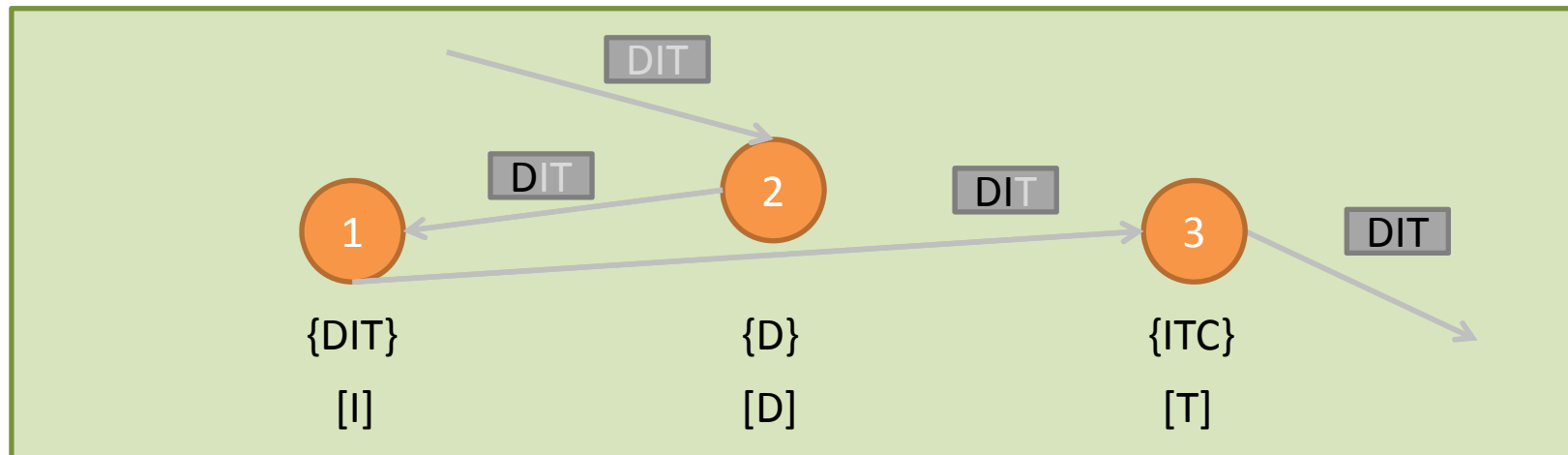
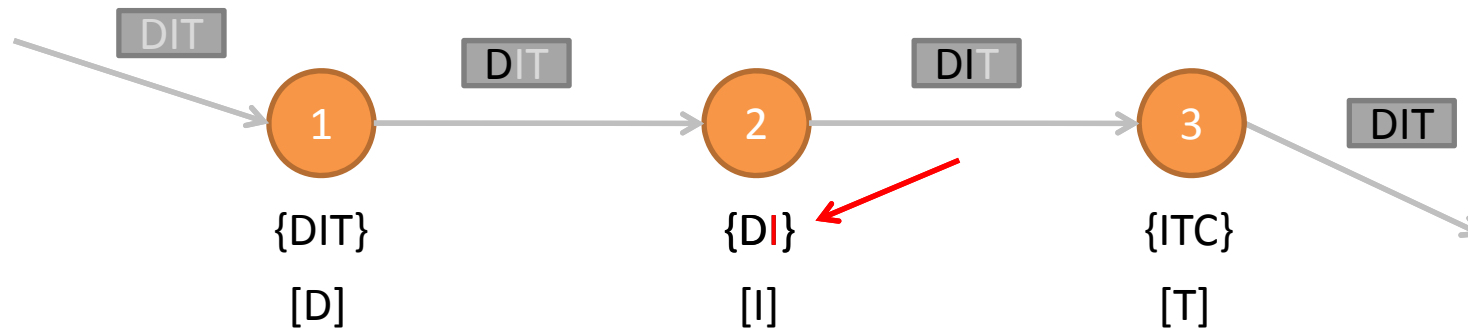


Benefits over traditional Resource-Flow Systems



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- Self-healing

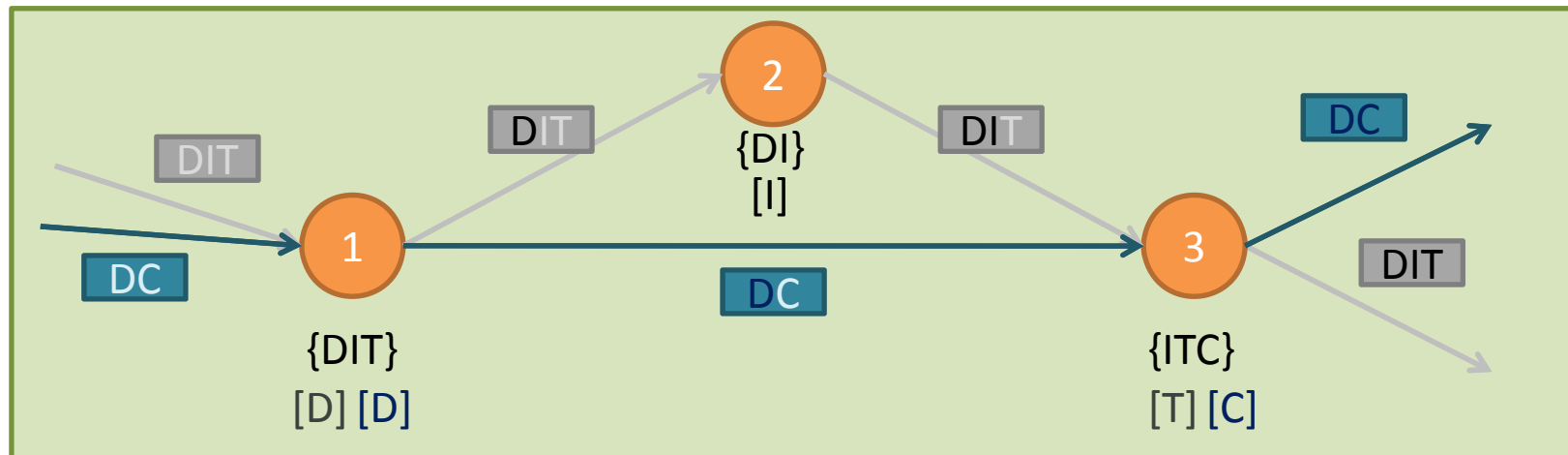
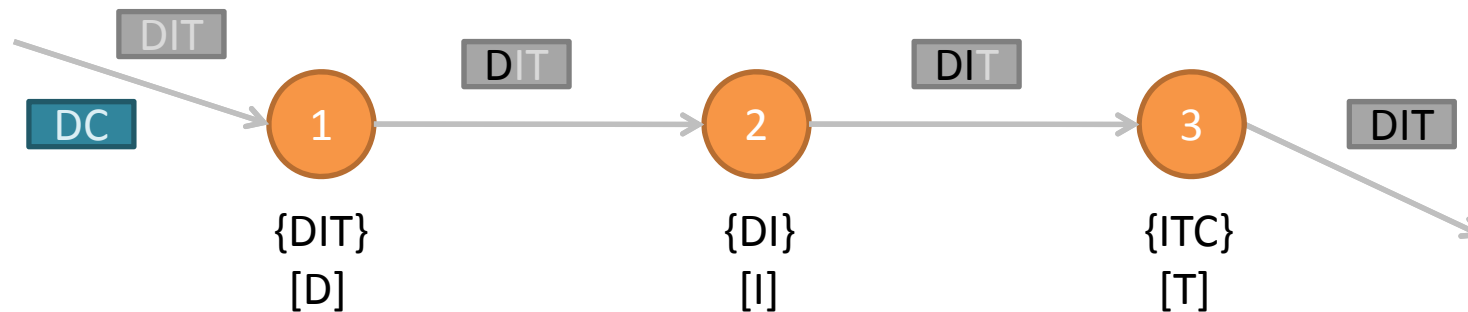


Benefits over traditional Resource-Flow Systems



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- Self-adapting



Benefits over traditional Resource-Flow Systems

- Despite self-organisation we give **behavioural guarantees**
- Within a defined corridor the systems are free to change!

Demo



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- [Video!](#)

- Self-organising Resource-Flow Systems differ from traditional ones by:
 - self-configuration
 - self-healing
 - self-adaptation
- Despite self-organisation guaranteed behaviour



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Thanks for your attention!