

Workshop on Product Intelligence (Benefits)

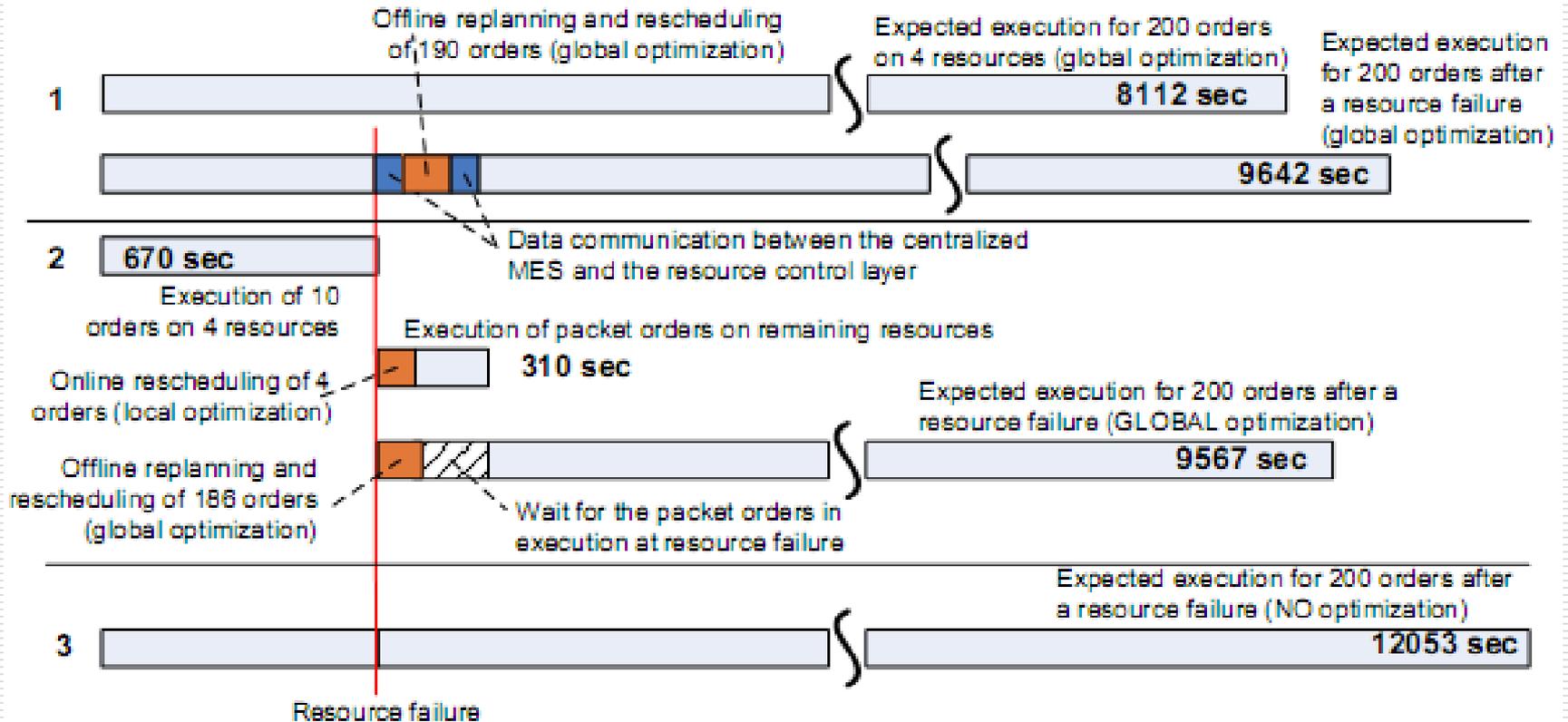
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Experiments



- ✓ Robustness at perturbations [resource breakdown / recovery]
- ✓ Agility
- ✓ Sustainability [IP considers history of resource behaviour / performance / costs (incl. power)]

Conclusions

- ✓ **Definition of a the IP concept and of a generic service oriented control architecture for supporting its operation**
- ✓ **Proposition of an implementation framework which includes intelligent products and agentified resources**

Advantages of IP:

- ✓ **Adaptive, reactive [CNC, robot] machining and easy (re) configuring:** intelligence embedded in digital shape description of complex items to be manufactured
- ✓ **Agility, scalability and sustainability:** cooperation between agents embedding product data and manufacturing resource behaviour
- ✓ **Product driven:**
 - ✓ Automation of manufacturing;
 - ✓ Quality control
 - ✓ Surface generation (extends trajectory generation) in dexterous robotic material processing