

# Mastering Systems Integration; Impact of Change

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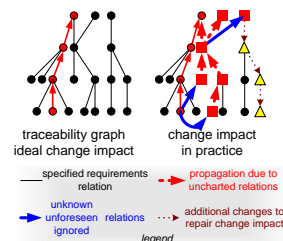
## Abstract

This presentation explains the impact of change. A frequent problem is that people do not foresee the impact of changes they make to the system. A naive assumption is that traceability or dependency graphs will show them such impact. Reality then hits them during systems integration.

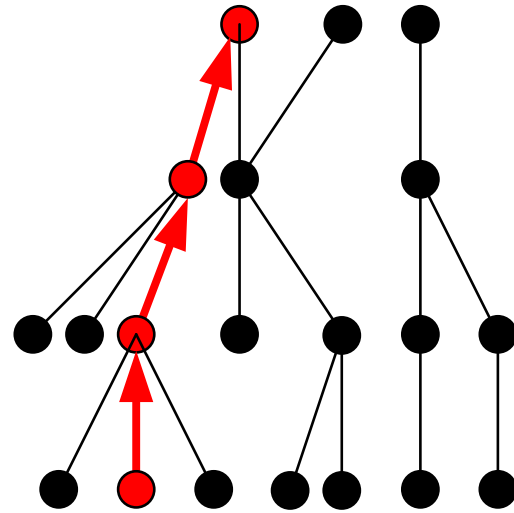
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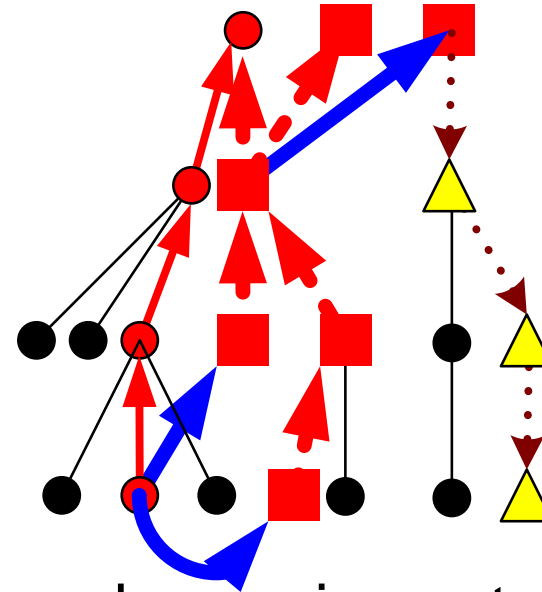
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# Impact of Change due to Unforeseens



traceability graph  
ideal change impact



change impact  
in practice

— specified requirements relation

→ unknown unforeseen relations ignored

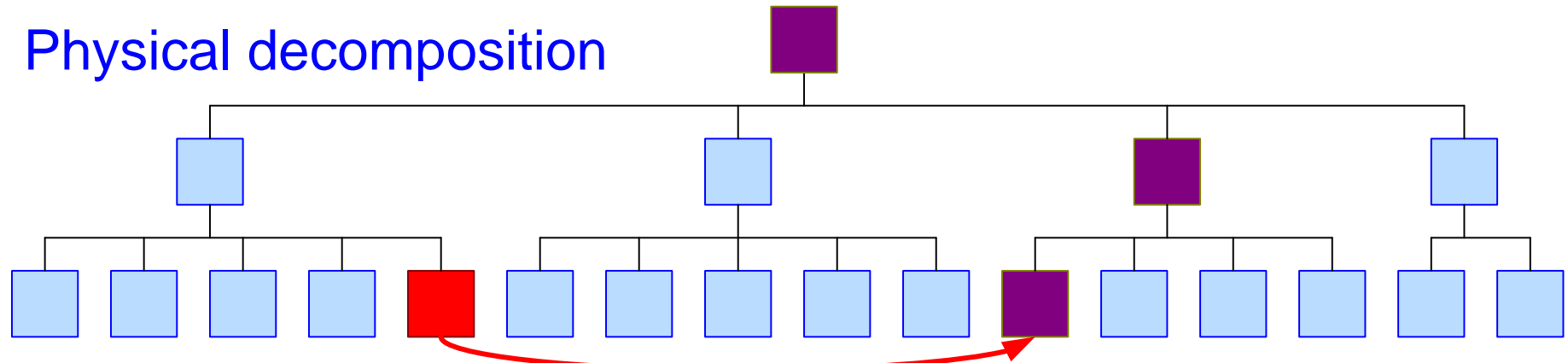
- → propagation due to uncharted relations

... → additional changes to repair change impact

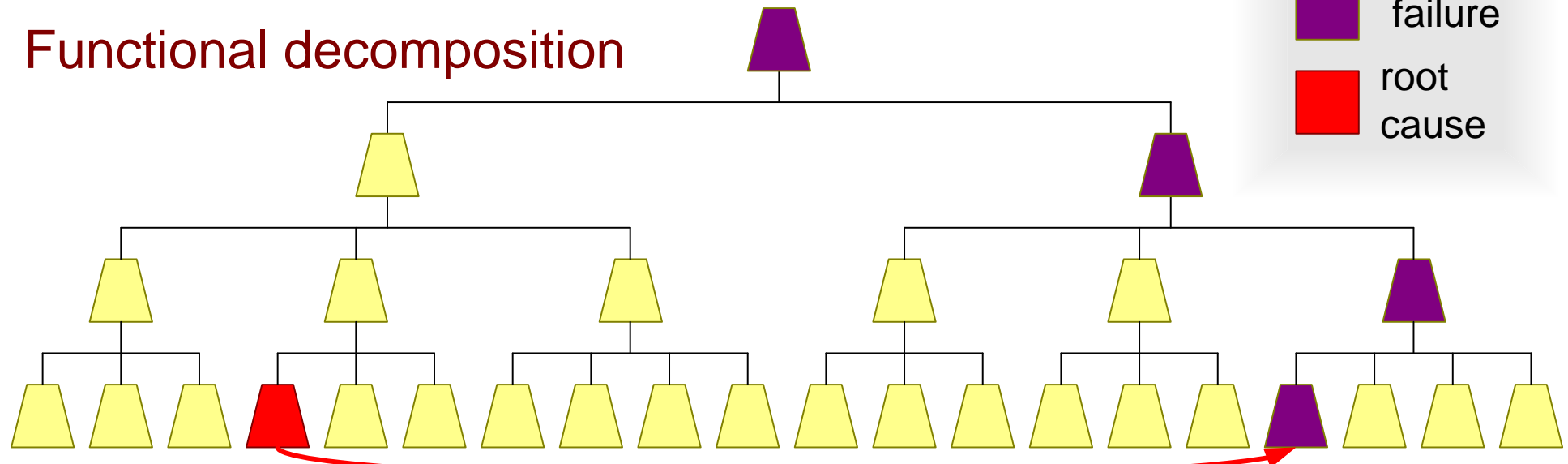
legend

# Root Cause is Often Elsewhere



## Physical decomposition



## Functional decomposition



### legend

-  failure
-  root cause

unknown or unexpected relation

# “Nothing has been changed...”

