# Visualization of Quality Attributes on Software Architectures
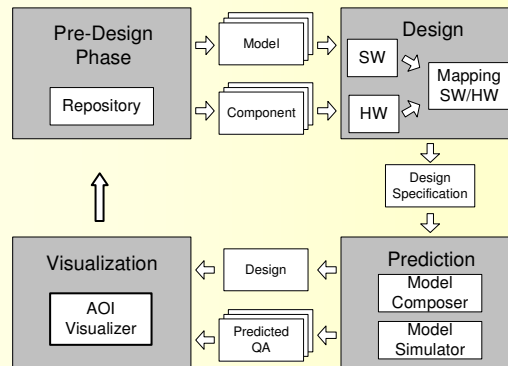
## H. Byelas    A. Telea

rijksuniversiteit groningen

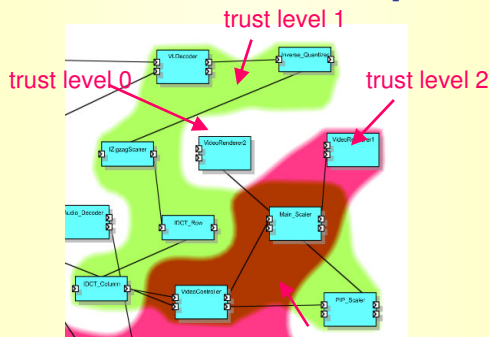TU/e technische universiteit eindhoven

## Analysis/Visualization Framework

- supports the visualization of the component-based software system architecture combined with the quality attributes of its components

- is integrated with software system design and analysis tools to complete the design/refactoring process
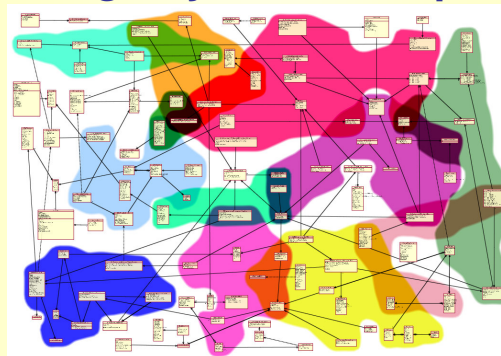


## Trust Levels Example



trust level 1
trust level 0
trust level 2
trust level 1 & 2
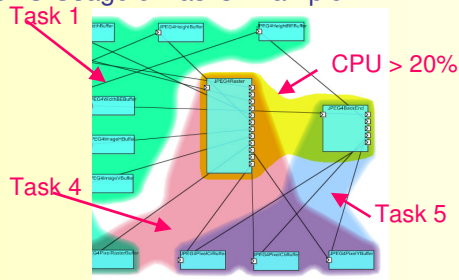
(shows the division of the system on the trust levels)

## Large System Example
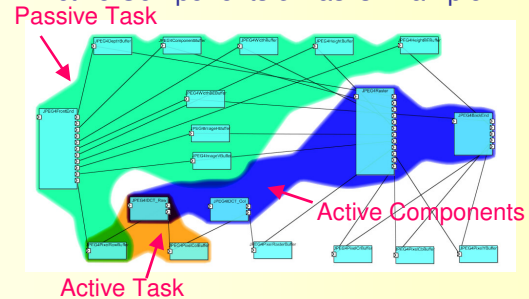


(an extraction from the industrial C++ source code)

## JPEG Decoder Case Study

### CPU Usage & Tasks Example



Task 1
CPU > 20%
Task 4
Task 5

(shows which tasks require more than N % of the CPU usage)

### Active Components & Tasks Example



Passive Task
Active Components
Active Task

(shows which components in the tasks are active)