Dependable Computing in 2031?

An astrological prediction question!

The future is not what it used to be!

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50th IFIP 10.4 meeting

- ❖ Where were we? (retrodictive exercise)
  - ➢ 1982: 1st IBM PC, 8088 based (~50 kTtrans)
  - ➢ 1st January 1983 ➙ TCP/IP
  - ➢ 1984: *World Wide Web* coined
- ❖ Hardware technology in 2031?
  - ➢ ITRS roadmap for 2014-2020
    - ✓ < 15 nm gate length, 450 mm wafers
    - ✓ 34 Gbits DRAM in 2010
  - ➢ Moore's law end or, rather, continuation? ➙ billions of billions of transistors per chip

- ❖ Dependability
  - ➢ We were used to 5 9s, we are living with 2 9s
  - ➢ Functionality sophistication vs dependability (Citroen DS model metaphor)
  - ➢ Sall we take off from the plateau? When?
- ❖ Long lasting notions
  - ➢ Algorithms and protocols (e.g., IP)
  - ➢ Abstractions: which abstractions will emerge? (from current constructions?)
- ❖ Education
  - ➢ Chartered, or certified, engineer in dependability

- ❖ WG meeting format