Test design methodology with TTCN3, using data bases and complex PIXITs

TELEFÓNICA I+D

Date: June 2008

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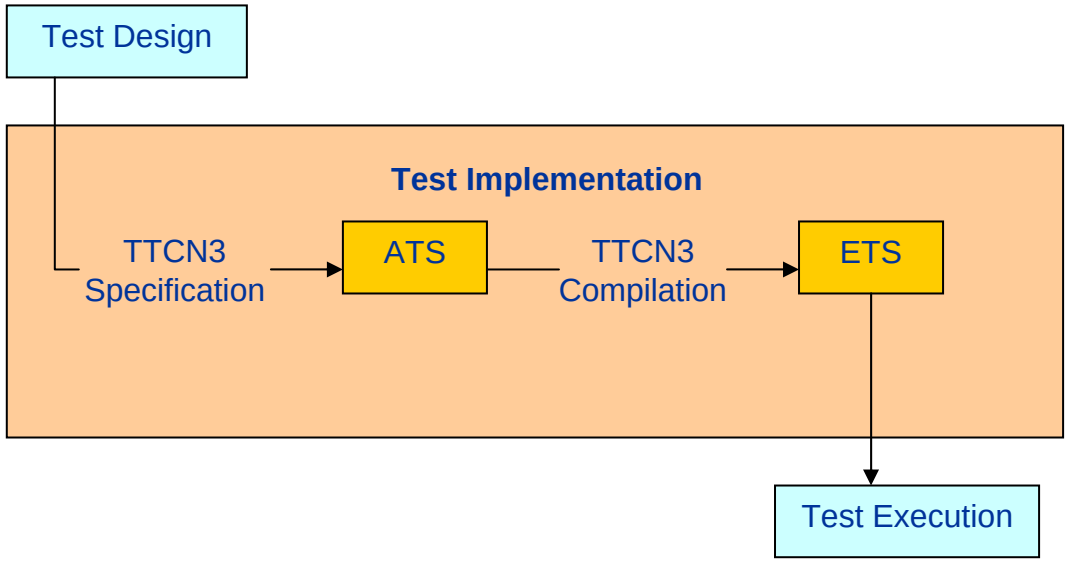
01 Testing Processes

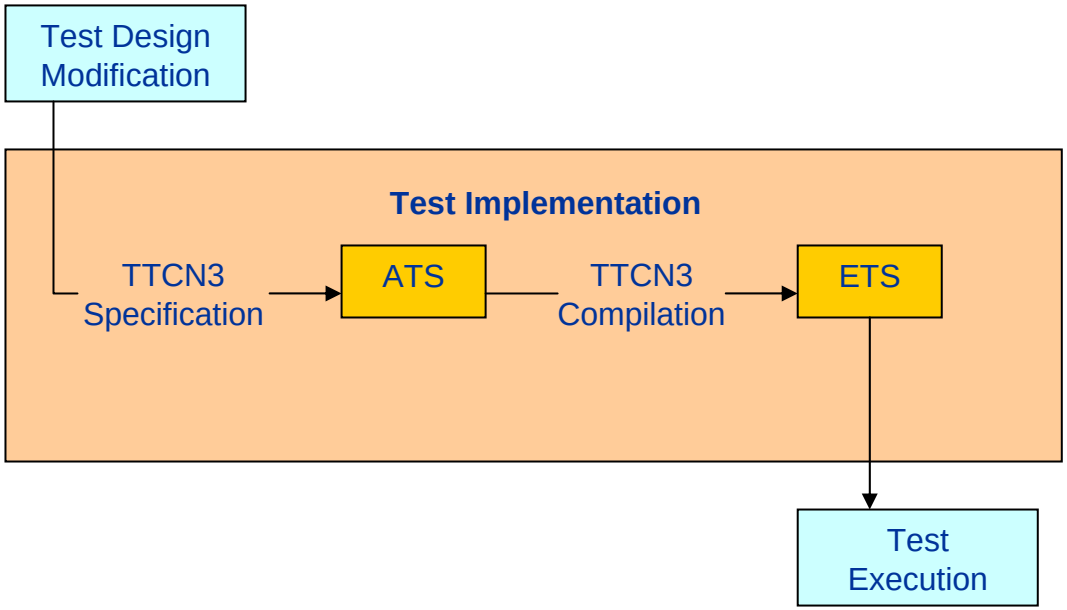
- According to the ISTQB, it can be distinguished the following testing processes:
  - Planning & Control
  - Analysis & Design
  - Implementation & Execution
  - Evaluating Exit Criteria & Reporting
  - Test Closure Activities

02 Testing Processes and TTCN3



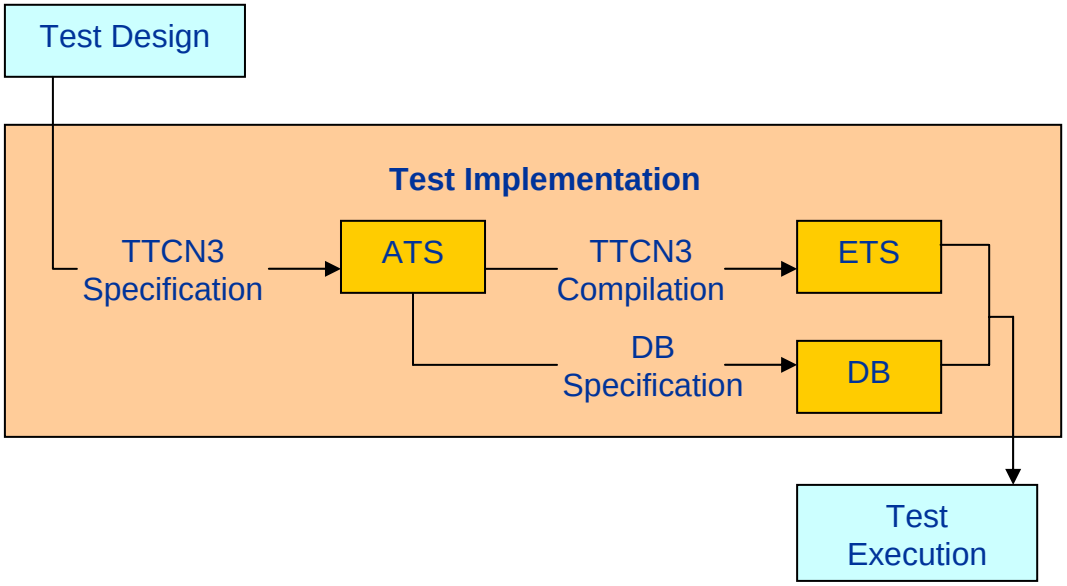
03 TTCN3 and test design modifications

Traditional methodology



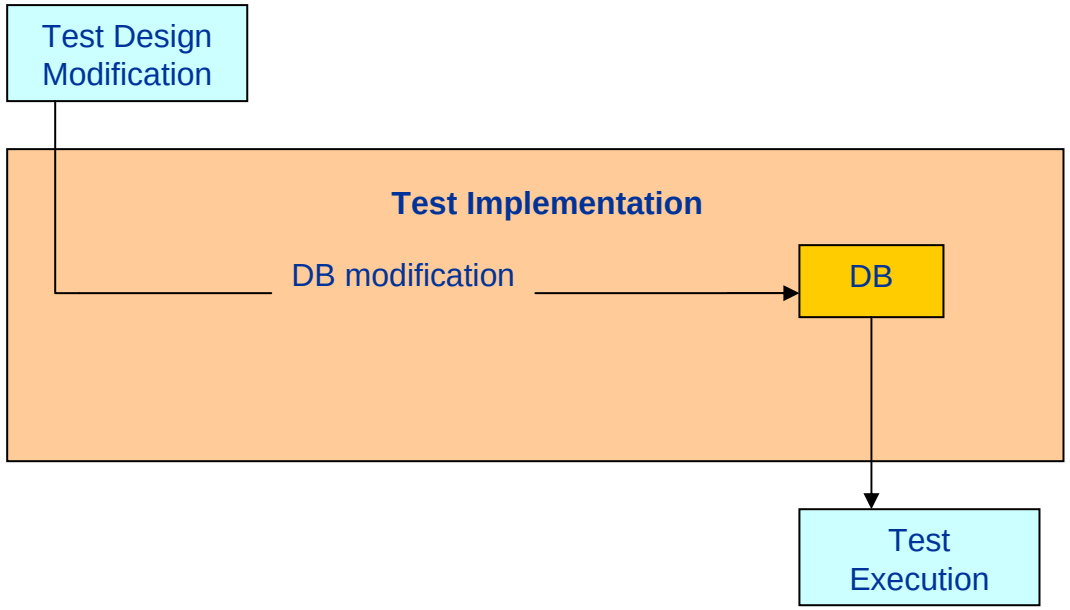
03 TTCN3 and test design modifications

Telefónica I+D methodology (I)



03 TTCN3 and test design modifications

Telefónica I+D methodology (II)



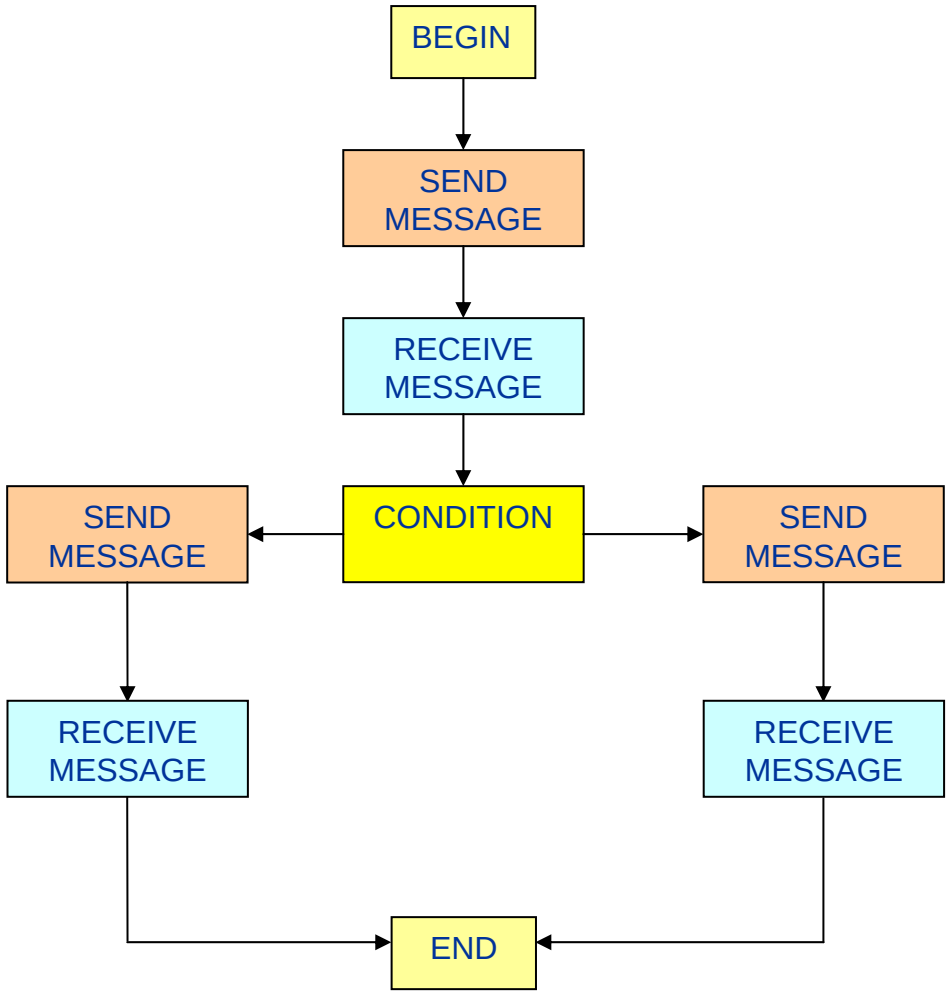
03 TTCN3 and test design modifications

Telefónica I+D methodology (III)

- Benefits
  - Data-driven approach applied to TTCN3
  - Reduction of development costs
  - Version control and defect probability minimization
  - Test specification does not imply TTCN3 skills
  - Test specification can be automated
  - Lower impact of SUT updates in test implementation
  - Reusability of test cases

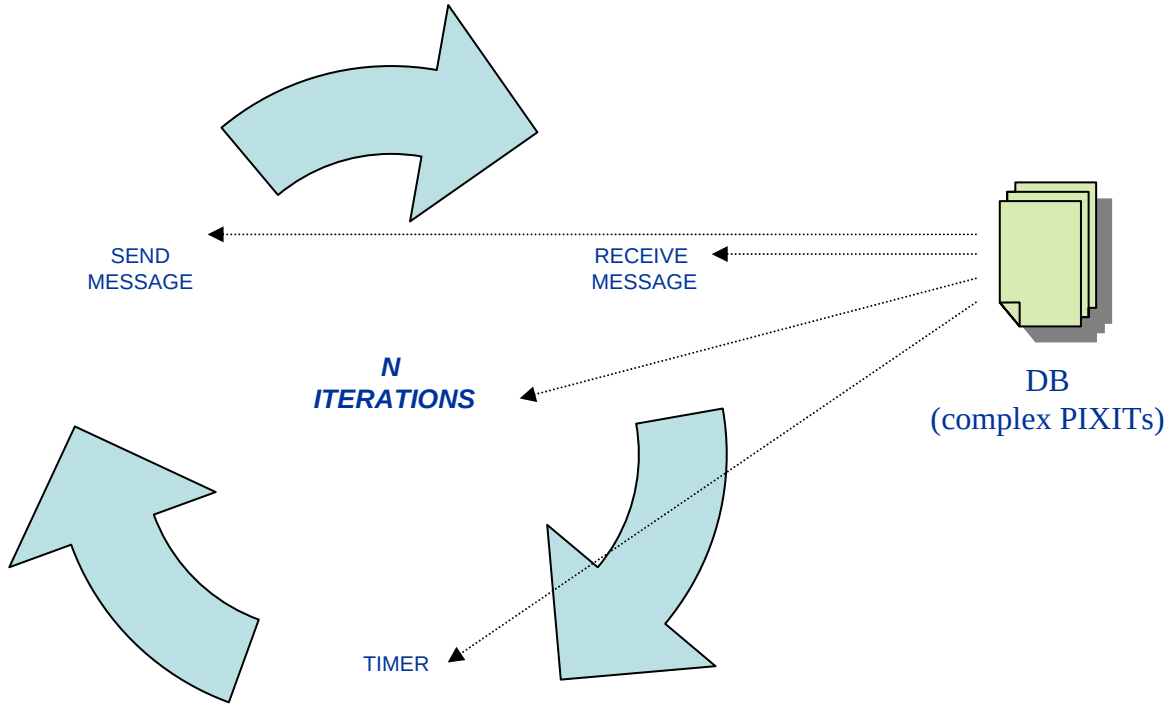
04 TTCN3 test case

Traditional methodology



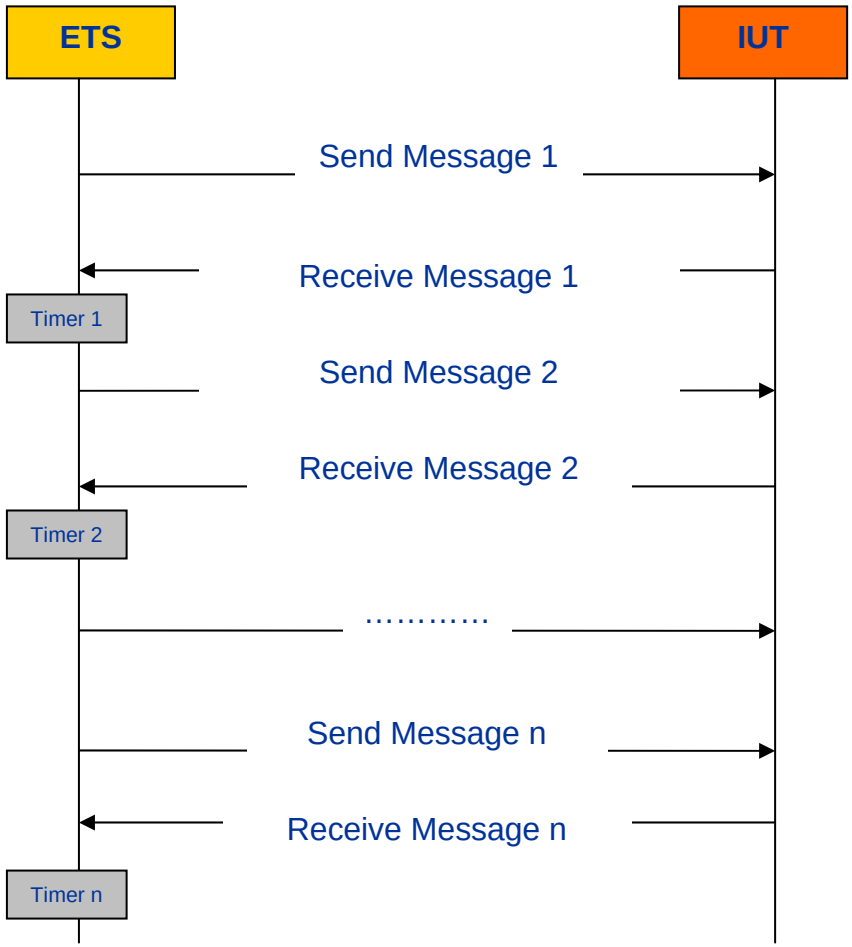
04 TTCN3 test case

Telefónica I+D methodology (I)



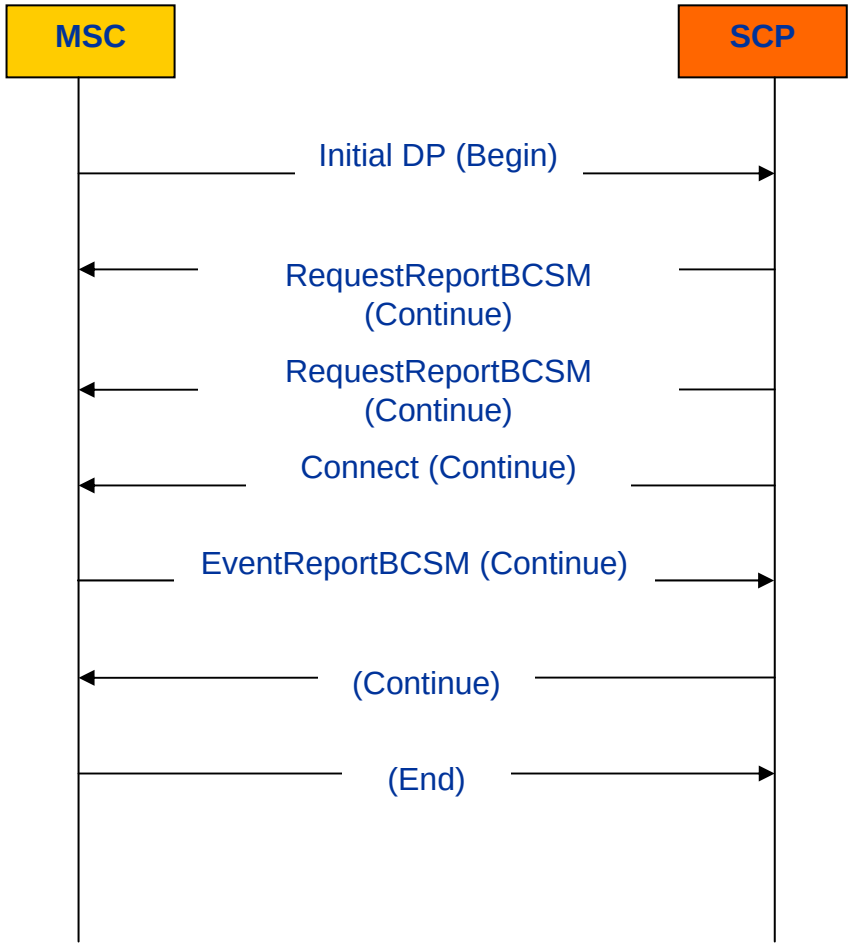
04 TTCN3 test case

Telefónica I+D methodology (II)



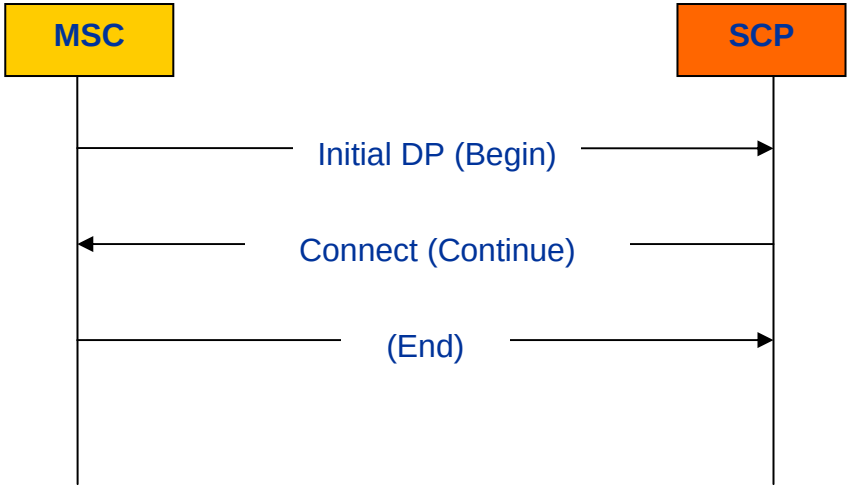
05 Practical application

CS1+ (I)



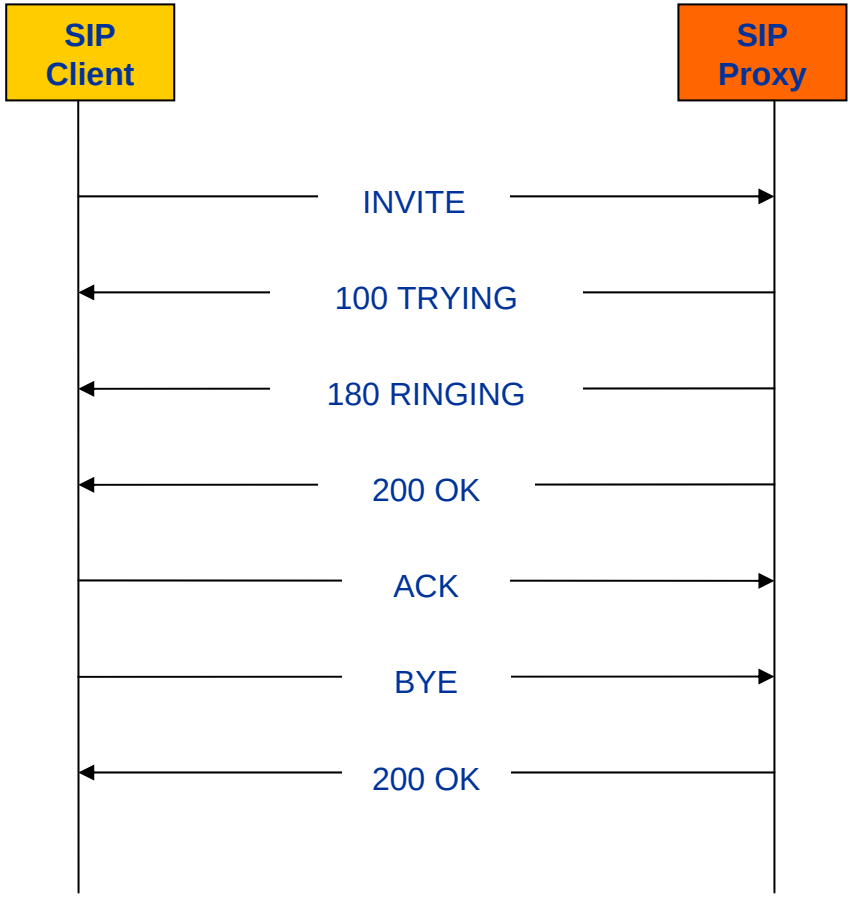
05 Practical application

CS1+ (II)



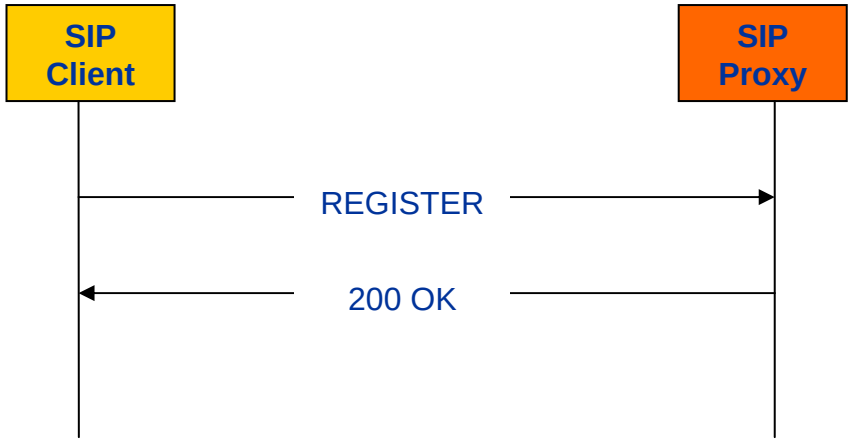
05 Practical application

SIP (I)



05 Practical application

SIP (II)



Thank you for your attention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