

Spirent TTtwo2three

Full Translation Service from TTCN-2 to TTCN-3 Technology

Spirent services

Spirent Global Services provides a variety of professional services, support services and education services—all focused on helping customers meet their complex testing and service assurance requirements.

For more information, visit the Global Services website at www.spirent.com or contact your Spirent sales representative.

With TTtwo2three we seamlessly migrate your TTCN-2 to TTCN-3 technology via one run, saving time and costs. Your previous investments in TTCN-2 test suites are saved and can be followed up with the powerful and standardized test language TTCN-3.

What can be migrated?

- Test suites
- TTCN-2 types and data
- ASN.1 types and data
- Behavior (test cases, test steps, defaults)

Reasons for migration

- Your current test suite is not powerful enough to meet latest demands
- Your test suite shall be maintained or extended while reducing costs
- New test configurations using existing technologies shall be created
- Your favorite test platform ceases the support of test devices

Benefits

- Efficient test suites design
 - Dynamic configuration
 - Distributed, load and scalability testing
 - Synchronous communication
- Graphical presentation format
- Extended variety of applications
 - Mobile, broadband technologies, WLAN
 - Middleware platforms and internet protocol testing
- Little effort to integrate test devices or other third applications
- Modularization into type, component and test behavior modules for easy reuse of generated TTCN-3
- Detailed translation information and statistics

Automatic translation

Translating a TTCN-2 test suite can be done manually or automatically by using a migration tool. In most cases, size and complexity of test suites have grown to a level where manual translation is not well invested time (3-5 test cases per day).

TTtwo2three translates via one run, saving time and costs. Users of TTCN-2 can take advantage of Spirent's migration service. Our analyzing tool parses the volume and complexity of test cases etc. and sends back this fingerprint. That way we are able to give customers a clear picture and a fixed quote on the effort of migration.

Standards

- ISO/IEC 9464-3: Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular combined Notation (TTCN), 1996
- ITU-T Recommendation X.680: Information technology - Abstract Syntax Notation One (ASN.1), 1997
- ETSI TR 100 666 V1.0.0: Information technology - Open Systems Interconnection Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation (TTCN) (Edition 2++), 1999-05
- ETSI TR 101 874 V1.1.1 TTCN-2 to TTCN-3 Mapping, 2000-12
- ETSI ES 201 873-4 V3.2.1 TTCN-3 Operational Semantics, 2007-02
- ETSI ES 201 873-1 TTCN-3 Core Language V3.2.1, 2007-02

Requirements

- Java 5.0 (Sun, IBM or BEA)
- Microsoft Windows Vista and XP, x86-32
- Red Hat Enterprise Linux 5.0, x86-32 and 4.0 update 2, x86-64, GTK
- Fedora 7, x86-32 and x86-64, GTK
- SUSE Linux Enterprise Server 10, x86-32, GTK

| nr | Label | Behaviour Description | Constraints Def | Verdict | Comments | |
|----|-----------------------|--|--|---------|----------|--|
| 1 | RLC_RLC_CONFIGURATION | RLC_Configuration | TSC_m1 TSPX_m1_1st TSPX_m1_2nd TSPX_m1_3rd TSPX_m1_4th TSPX_m1_5th TSPX_m1_6th TSPX_m1_7th TSPX_m1_8th TSPX_m1_9th TSPX_m1_10th TSPX_m1_11th TSPX_m1_12th TSPX_m1_13th TSPX_m1_14th TSPX_m1_15th TSPX_m1_16th TSPX_m1_17th TSPX_m1_18th TSPX_m1_19th TSPX_m1_20th TSPX_m1_21st TSPX_m1_22nd TSPX_m1_23rd TSPX_m1_24th TSPX_m1_25th TSPX_m1_26th TSPX_m1_27th TSPX_m1_28th TSPX_m1_29th TSPX_m1_30th TSPX_m1_31st TSPX_m1_32nd TSPX_m1_33rd TSPX_m1_34th TSPX_m1_35th TSPX_m1_36th TSPX_m1_37th TSPX_m1_38th TSPX_m1_39th TSPX_m1_40th TSPX_m1_41st TSPX_m1_42nd TSPX_m1_43rd TSPX_m1_44th TSPX_m1_45th TSPX_m1_46th TSPX_m1_47th TSPX_m1_48th TSPX_m1_49th TSPX_m1_50th TSPX_m1_51st TSPX_m1_52nd TSPX_m1_53rd TSPX_m1_54th TSPX_m1_55th TSPX_m1_56th TSPX_m1_57th TSPX_m1_58th TSPX_m1_59th TSPX_m1_60th TSPX_m1_61st TSPX_m1_62nd TSPX_m1_63rd TSPX_m1_64th TSPX_m1_65th TSPX_m1_66th TSPX_m1_67th TSPX_m1_68th TSPX_m1_69th TSPX_m1_70th TSPX_m1_71st TSPX_m1_72nd TSPX_m1_73rd TSPX_m1_74th TSPX_m1_75th TSPX_m1_76th TSPX_m1_77th TSPX_m1_78th TSPX_m1_79th TSPX_m1_80th TSPX_m1_81st TSPX_m1_82nd TSPX_m1_83rd TSPX_m1_84th TSPX_m1_85th TSPX_m1_86th TSPX_m1_87th TSPX_m1_88th TSPX_m1_89th TSPX_m1_90th TSPX_m1_91st TSPX_m1_92nd TSPX_m1_93rd TSPX_m1_94th TSPX_m1_95th TSPX_m1_96th TSPX_m1_97th TSPX_m1_98th TSPX_m1_99th TSPX_m1_100th | | 1) | |
| 2 | START TAC | RLC_CM_Indication_pos1 | RLC_CM_Indication_pos1 | 2) | | |
| 3 | START TAC | RLC_CM_Indication_pos2 | RLC_CM_Indication_pos2 | 3) | | |
| 4 | START TAC | RLC_CM_Indication_pos3 | RLC_CM_Indication_pos3 | 4) | | |
| 5 | TS01 | RLC_Assoc_Req (TSC_m1, TSPX_m1_1st, TSC_m1, TSPX_m1_2nd, TSC_m1, TSPX_m1_3rd, TSC_m1, TSPX_m1_4th, TSC_m1, TSPX_m1_5th, TSC_m1, TSPX_m1_6th, TSC_m1, TSPX_m1_7th, TSC_m1, TSPX_m1_8th, TSC_m1, TSPX_m1_9th, TSC_m1, TSPX_m1_10th, TSC_m1, TSPX_m1_11th, TSC_m1, TSPX_m1_12th, TSC_m1, TSPX_m1_13th, TSC_m1, TSPX_m1_14th, TSC_m1, TSPX_m1_15th, TSC_m1, TSPX_m1_16th, TSC_m1, TSPX_m1_17th, TSC_m1, TSPX_m1_18th, TSC_m1, TSPX_m1_19th, TSC_m1, TSPX_m1_20th, TSC_m1, TSPX_m1_21st, TSC_m1, TSPX_m1_22nd, TSC_m1, TSPX_m1_23rd, TSC_m1, TSPX_m1_24th, TSC_m1, TSPX_m1_25th, TSC_m1, TSPX_m1_26th, TSC_m1, TSPX_m1_27th, TSC_m1, TSPX_m1_28th, TSC_m1, TSPX_m1_29th, TSC_m1, TSPX_m1_30th, TSC_m1, TSPX_m1_31st, TSC_m1, TSPX_m1_32nd, TSC_m1, TSPX_m1_33rd, TSC_m1, TSPX_m1_34th, TSC_m1, TSPX_m1_35th, TSC_m1, TSPX_m1_36th, TSC_m1, TSPX_m1_37th, TSC_m1, TSPX_m1_38th, TSC_m1, TSPX_m1_39th, TSC_m1, TSPX_m1_40th, TSC_m1, TSPX_m1_41st, TSC_m1, TSPX_m1_42nd, TSC_m1, TSPX_m1_43rd, TSC_m1, TSPX_m1_44th, TSC_m1, TSPX_m1_45th, TSC_m1, TSPX_m1_46th, TSC_m1, TSPX_m1_47th, TSC_m1, TSPX_m1_48th, TSC_m1, TSPX_m1_49th, TSC_m1, TSPX_m1_50th, TSC_m1, TSPX_m1_51st, TSC_m1, TSPX_m1_52nd, TSC_m1, TSPX_m1_53rd, TSC_m1, TSPX_m1_54th, TSC_m1, TSPX_m1_55th, TSC_m1, TSPX_m1_56th, TSC_m1, TSPX_m1_57th, TSC_m1, TSPX_m1_58th, TSC_m1, TSPX_m1_59th, TSC_m1, TSPX_m1_60th, TSC_m1, TSPX_m1_61st, TSC_m1, TSPX_m1_62nd, TSC_m1, TSPX_m1_63rd, TSC_m1, TSPX_m1_64th, TSC_m1, TSPX_m1_65th, TSC_m1, TSPX_m1_66th, TSC_m1, TSPX_m1_67th, TSC_m1, TSPX_m1_68th, TSC_m1, TSPX_m1_69th, TSC_m1, TSPX_m1_70th, TSC_m1, TSPX_m1_71st, TSC_m1, TSPX_m1_72nd, TSC_m1, TSPX_m1_73rd, TSC_m1, TSPX_m1_74th, TSC_m1, TSPX_m1_75th, TSC_m1, TSPX_m1_76th, TSC_m1, TSPX_m1_77th, TSC_m1, TSPX_m1_78th, TSC_m1, TSPX_m1_79th, TSC_m1, TSPX_m1_80th, TSC_m1, TSPX_m1_81st, TSC_m1, TSPX_m1_82nd, TSC_m1, TSPX_m1_83rd, TSC_m1, TSPX_m1_84th, TSC_m1, TSPX_m1_85th, TSC_m1, TSPX_m1_86th, TSC_m1, TSPX_m1_87th, TSC_m1, TSPX_m1_88th, TSC_m1, TSPX_m1_89th, TSC_m1, TSPX_m1_90th, TSC_m1, TSPX_m1_91st, TSC_m1, TSPX_m1_92nd, TSC_m1, TSPX_m1_93rd, TSC_m1, TSPX_m1_94th, TSC_m1, TSPX_m1_95th, TSC_m1, TSPX_m1_96th, TSC_m1, TSPX_m1_97th, TSC_m1, TSPX_m1_98th, TSC_m1, TSPX_m1_99th, TSC_m1, TSPX_m1_100th | | 1) | | |
| 6 | TS02 | TIMEOUT TAC | | (F) | 5) | |
| 7 | TS03 | TIMEOUT TAC | | (F) | 5) | |
| 8 | TS04 | TIMEOUT TAC | | (F) | 5) | |

TTCN-2 Source



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1  @purpose
2  Check, that the IUT sends periodically the RLC_ASSOCIATION message.
3  /-
4  testcase TC_AP_ACF_RA_CA_000() runs on TCType system TS1Type
5  /-
6  var TComp_Record_Type TComp_Records;
7  TComp_Record_Type := system;
8  TComp_Record.AP_DUAL := self;
9  TComp_Record.AP := self;
10 TComp_Record.HT_DUAL := self;
11 TComp_Record.HT := self;
12 TComp_Record.AP1_P := Tctype.create;
13 TComp_Record.AP2_P := Tctype.create;
14 TComp_Record.AP_P := Tctype.create;
15 TComp_Record.HT2_P := Tctype.create;
16 TComp_Record.HT_P := Tctype.create;
17 TComp_Record.PTCL_P := Tctype.create;
18 TComp_Record.AP := Tctype.create;
19 map(TComp_Record.AP_or_HT1_lic_sap, system:rlc_sap);
20 var ASP_RLC_CM_INDICATION ASP_RLC_CM_INDICATION_Localvar;
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22 /-
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Translated TTCN-3

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