Proposal for Mapping Pattern Files into STDF Records

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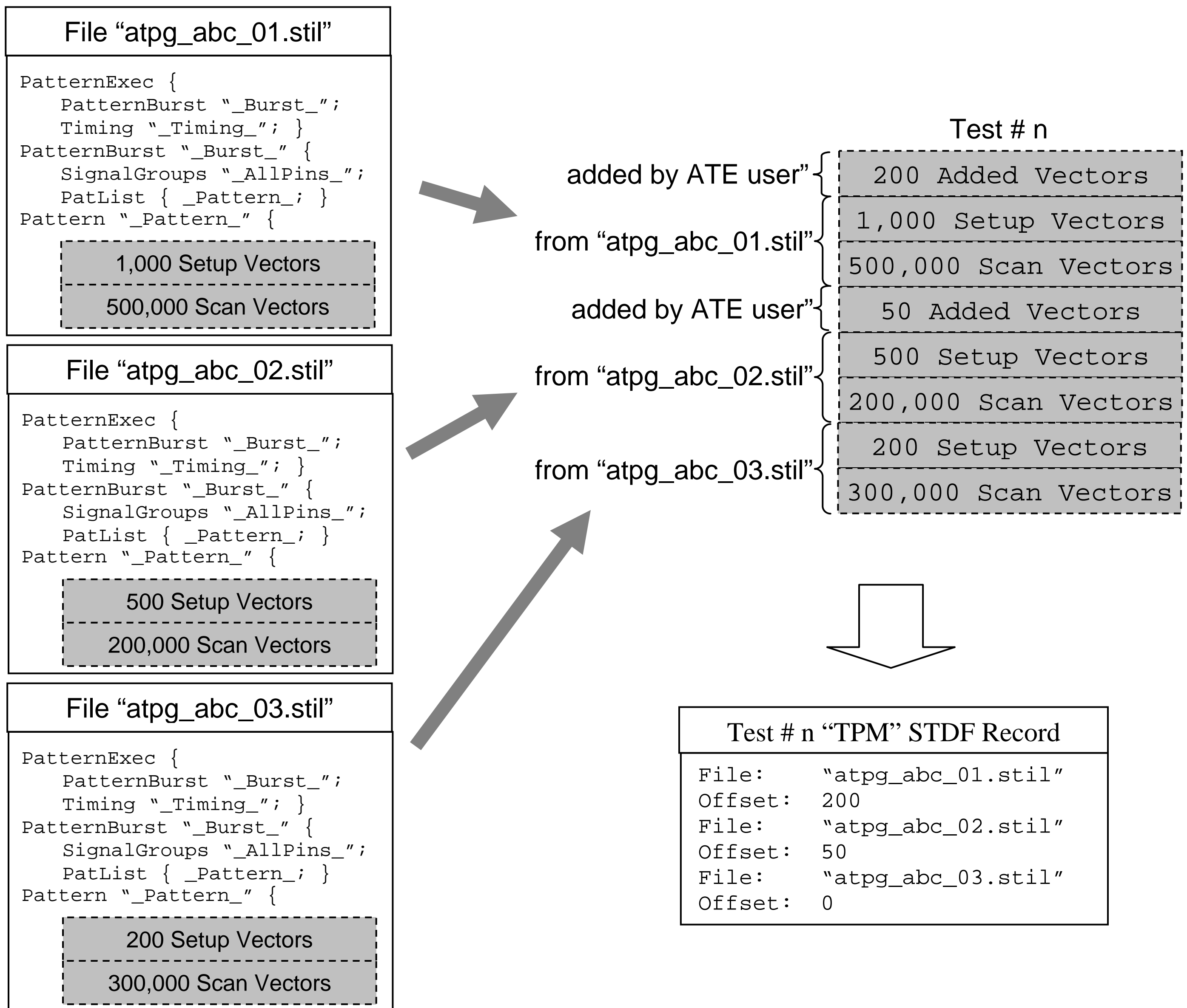
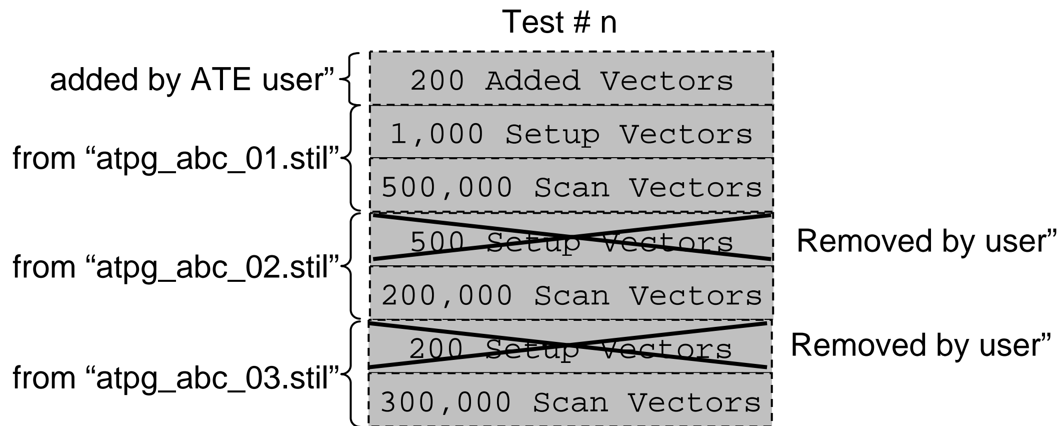
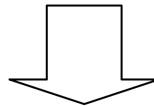
To address the requirement of how to "map" ATPG pattern files to a single test execution on the ATE, the scenario depicted below is considered. A single test in the test program was derived from three ATPG generated STIL files. The test engineer added 200 additional vectors in front of the ATPG generated vectors from file "atpg_abc_01.stil", and 50 vectors between that ATPG pattern set and the start of the 2nd ATPG pattern set file ("atpg_abc_02.stil"). No vectors were added between the 2nd and 3rd ATPG pattern set ("atpg_abc_03.stil"). Depicted is a structure for a "TPM" (Test Pattern Map) STDF record (using either a GDR or DTR) that would represent this test implementation.



For the sole purpose of looking whether this structure facilitates other scenarios, let's assume that the user wants to remove the ATPG setup vectors from the 2nd and 3rd files because they were already executed in the first pattern set. In this scenario they could enter a negative number in the TPM offset fields for those patterns as depicted below.

file





Test # n "TPM" STDF Record

```
File:     "atpg_abc_01.stil"
Offset:   200
File:     "atpg_abc_02.stil"
Offset:   -500
File:     "atpg_abc_03.stil"
Offset:   -200
```

Each applicable test in the test program would need to have one "TPM" record. The record could be left out after the first incidence of it in an STDF file as its contents would be persistent for all subsequent logs from the specific test.