

Computer Algebra Independent Integration Tests

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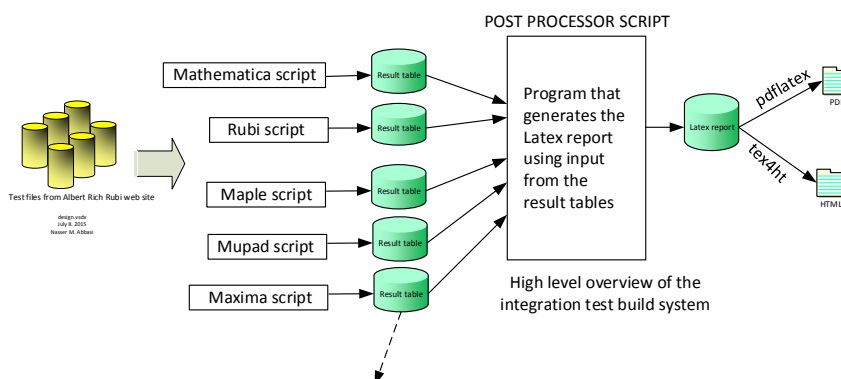
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These reports and the web pages themselves are written in $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ using TeXLive distribution on Linux and compiled to HTML using TeX4ht.

1. Mathematica 11.1, Rubi 4.11, Maple 2016.2, Mupad 7.0, Sympy 1.0 [63,648 integrals (not completed yet)]
2. Mathematica 11.0, Rubi 4.9.8, Maple 2016 and Mupad 7.0 (Matlab 2016a) [58,469 integrals]
3. Mathematica 10.4, Rubi 4.9, Maple 2016 and Mupad 7.0 (Matlab 2016a) [58,469 integrals]

1 Note on build system

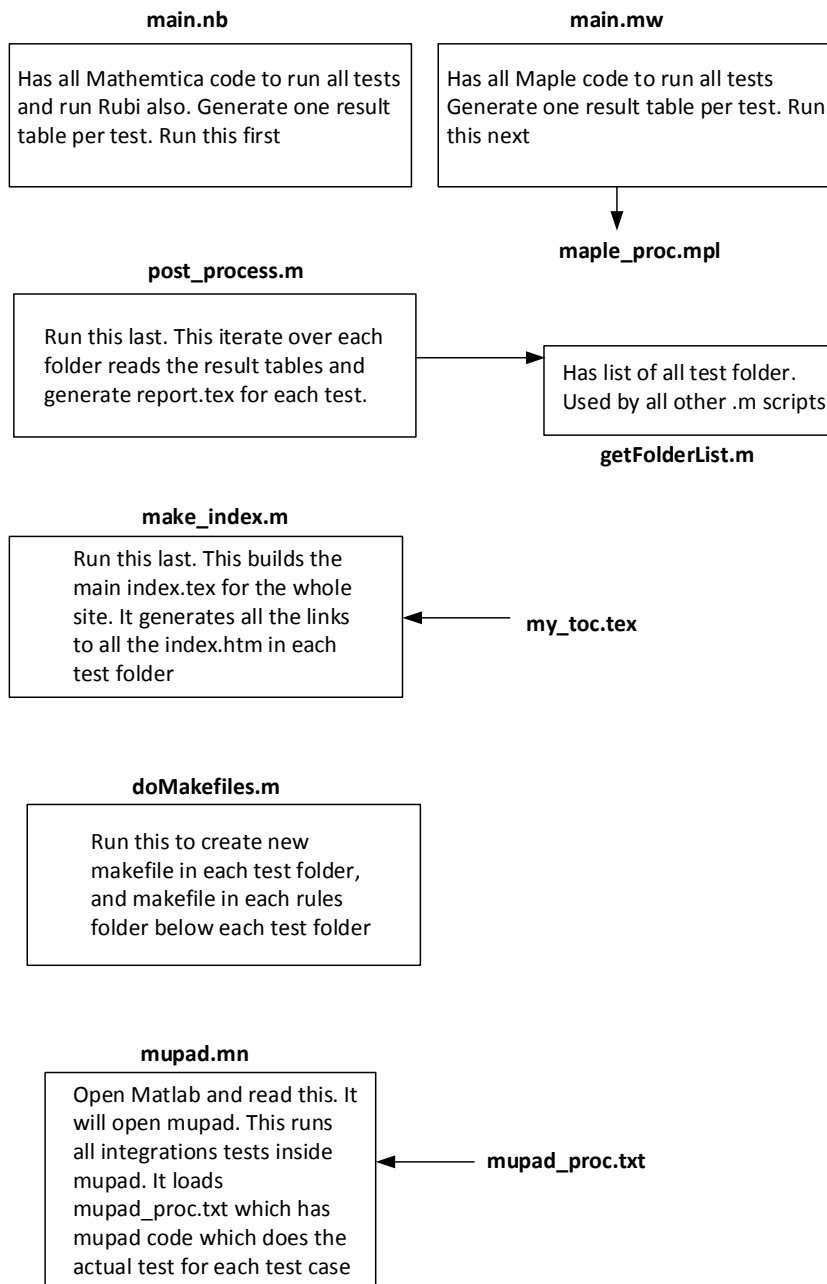
The following diagram gives a high level view of the current test build system.



One record (line) per one integral result. The line is comma delimited. It contains 12 fields. This is description of each record (line)

1. integer. the problem number.
2. integer. 0 or 1 for failed or passed. (this is not the grade field)
3. integer. Leaf size of result.
4. integer. Leaf size of the optimal antiderivative.
5. number. CPU time used to solve this integral. 0 if failed.
6. string. The integral in Latex format
7. string. The input used in CAS own syntax.
8. string. The result (antiderivative) produced by CAS in Latex format
9. string. The optimal antiderivative in Latex format.
10. integer. 0 or 1. Indicates if problem has known antiderivative or not
11. String. The result (antiderivative) in CAS own syntax.
12. String. The grade of the antiderivative. Can be "A", "B", "C", or "F"

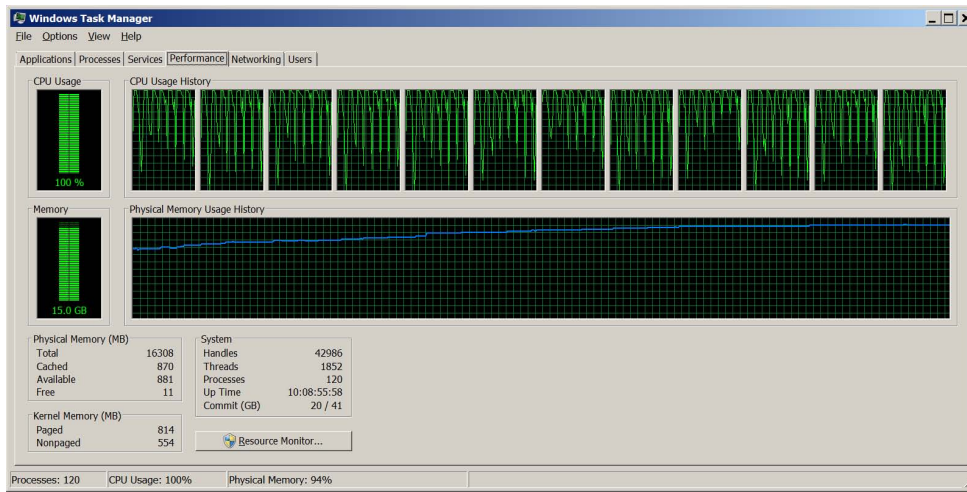
Main Files used



Main files and scripts used in the build

2 My PC during running the tests

I really need a faster PC with much more RAM !



This below shows example of CAS suddenly consuming all RAM in PC, and I had to terminate the process, since it did not time out as instructed, and just hanged.

