

# Software Test Optimization

## (Test Advisor)

Discover which tests matter most

In today's world of agile development, frequent code changes are not only expected, but also encouraged. Because code changes only account for roughly 10% of the total code, 100% testing isn't always warranted. The Synopsys Software Test Optimization tool enables organizations to minimize risk and time to market by facilitating efficient and effective testing.

## Shrink test cycles and get to market faster

By mapping the impact of code changes to business risk, our Software Test Optimization tool provides intelligent test recommendations that provide the maximum risk coverage in the least amount of time.

### 1. Objectively measure testing completeness

Test smarter and faster by focusing testing efforts on new, modified, or critical code instead of unreachable, debug, log, or dead code. By detecting testing deficiencies, our Software Test Optimization tool provides test coverage knowledge that help organizations prioritize valuable resources on testing efforts with the greatest impact.

### 2. Define and manage organizations policies for consistent testing across projects

Using code characteristics such as modification date, impact of code change, complexity, location, and code construct, organizations can enforce testing requirements. When policies are violated, issues are automatically flagged and managed through workflows and reporting. By enforcing a standard for testing, the Synopsys Software Test Optimization eliminates guesswork and organizations **know** that their code is properly tested.

### 3. Maximize coverage without compromising time to market

Our Software Test Optimization tool identifies test gaps by correlating functionality or code changes to business risk. Using this model, our Software Test Optimization tool accurately forecasts the impact potential changes have on your test plans.

Our intelligent forecasting engine also carefully monitors the time required to run each test to provide recommendations on the shortest test sets that most effectively verifies your code and functionalities changes. Now, organizations are empowered to optimize on tight release schedules.

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Write and run only the security tests that matter most

#### 4. Enhance collaboration between development and QA teams

The Synopsys Software Test Optimization tool brings development and QA teams closer through a single platform that provides intelligence on manual and black box testing. By evaluating testing needs from a developer and QA perspective, our Software Test Optimization tool improves communication and aligns objectives across teams.

#### 5. Integrate in-depth testing without slowing down productivity

Our Software Test Optimization tool not only integrates into your existing tools and framework, but also operates silently in the background as you code, minimizing disturbances and enhancing productivity.

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## We have the expertise, tools, and services you need

Synopsys offers the most comprehensive solution for building security and quality into your SDLC and supply chain. Consider our other services and products that may be a fit for you:

- **Static Analysis (Coverity):** Shorten test cycles by catching security and quality defects and weaknesses throughout development.
- **Interactive Application Security Testing (Seeker):** Enhance your testing capabilities by incorporating runtime security testing in QA efforts.

## The Synopsys Difference

Synopsys offers the most comprehensive solution for integrating security and quality into your SDLC and supply chain. Whether you're well-versed in software security or just starting out, we provide the tools you need to ensure the integrity of the applications that power your business. Our holistic approach to software security combines best-in-breed products, industry-leading experts, and a broad portfolio of managed and professional services that work together to improve the accuracy of findings, speed up the delivery of results, and provide solutions for addressing unique application security challenges. We don't stop when the test is over. Our experts also provide remediation guidance, program design services, and training that empower you to build and maintain secure software.

For more information go to [www.synopsys.com/software](http://www.synopsys.com/software).

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