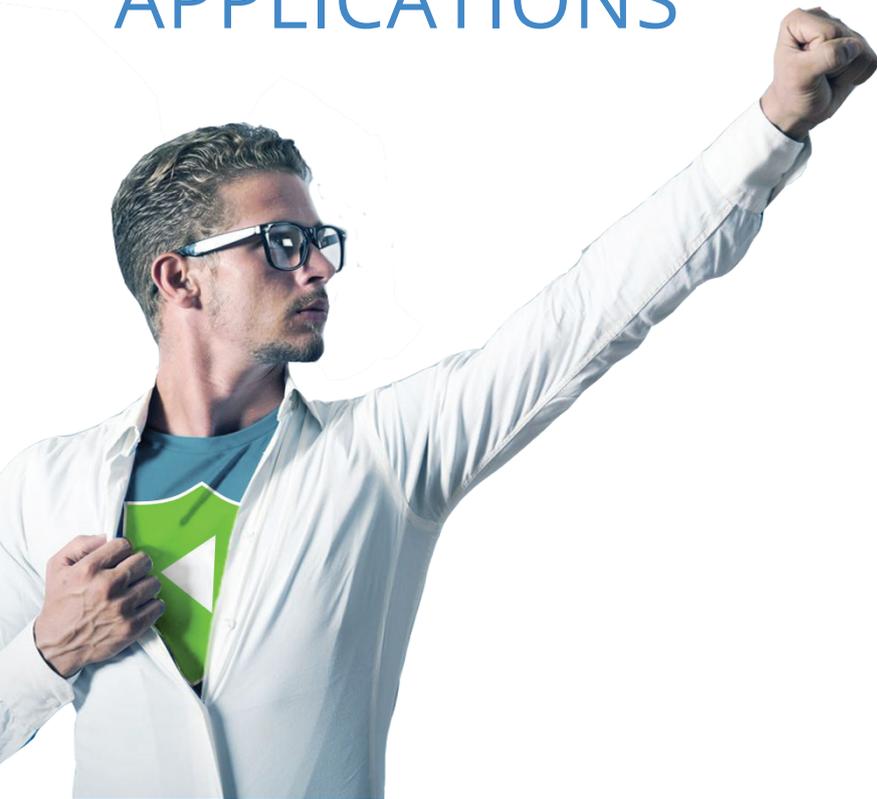# Typemock™
The Unit Testing Company

TERMA ⓣ

TERMA ADOPTS TYPEMOCK ISOLATOR TO DEVELOP ITS MISSION CRITICAL APPLICATIONS

INDUSTRY

Aerospace, defense, and security

CHALLENGES

- Low confidence in code released to QA

- Legacy platform made it hard to unit test

FACTS AND FIGURES

- From 2-3 developers in the old platform to 20 developers doing unit testing

- 70% more code coverage

RESULTS

Adoption of unit testing grew by
x10

70%
more code coverage

THE COMPANY

Danish-owned Terma develops and markets high-tech solutions, systems, and products for civilian and military applications. Terma's high-tech solutions and products are developed and designed for use in extreme mission-critical environments and situations, where human lives and valuable material assets are at stake. Among others, the company is involved in the development and manufacture of aerostructures, airborne systems, integrated command and control systems, radar systems, and systems for space applications. The company's headquarters are located in Lystrup near Arhus, Denmark.

THE CHALLENGE

In preparation for building its next-generation .Net 3.5-based framework for the development of mission-support applications, unit testing became a cardinal issue in Terma's development strategy. Not having unit and automatic testing in their old platform, the number of unit tests conducted was small, which made the work of Terma's developers more time consuming. The company began looking for a tool that would mock component interfaces/base classes, easily supporting the development of loosely coupled testable components.

"Our old platform was not designed with automated unit testing in mind and therefore the number of tests were small. We do find Typemock an attractive package."

Morten Hoffmann Sørensen,
Software Architect,
Airborne Systems, Terma

THE SOLUTION

Terma uses Typemock Isolator Enterprise Edition in their build servers, and the Community Edition for its developers. They are particularly interested in the concept of natural mocks (rather than reflective mocks), and in mocking events. While Terma's developers follow stringent software process models, it is however a choice within the development teams to practise TDD or not. They do not swear to any particular discipline, but do recognize the value of TDD where appropriate. They find that TDD is the best method when the design is upfront, not too detailed, and they need to prototype to make classes and interfaces *"fit"* with each other.

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DISCOVERING TYPEMOCK ISOLATOR

After working with the solution for several months, Terma's developers find that Typemock Isolator drastically reduces the complexity of they unit testing. As a result, the company is now evaluating whether to provide Enterprise licenses to all its developers.

> **"We went from near zero coverage on our old platform to an average of 70% on our new platform. We're striving for higher percentages with a critical eye on cost-benefit ratio."**
>
> *Morten Hoffmann Sørensen, Software Architect,*
> *Airborne Systems,Terma*

BENEFITS

Today, Terma's developers can mock any class or interface without writing tedious stub code and proving unprecedented results. Moreover, the company's code integrity has increased, making developers much more confident on the quality of the code they deliver to QA. Terma strongly relies on Typemock's professional support and expertise for any problem they face.

SUMMARY

Terma's managed to deliver high quality code to their QA team. As a result, the company is has now implemented Typemock to all its developers.

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