

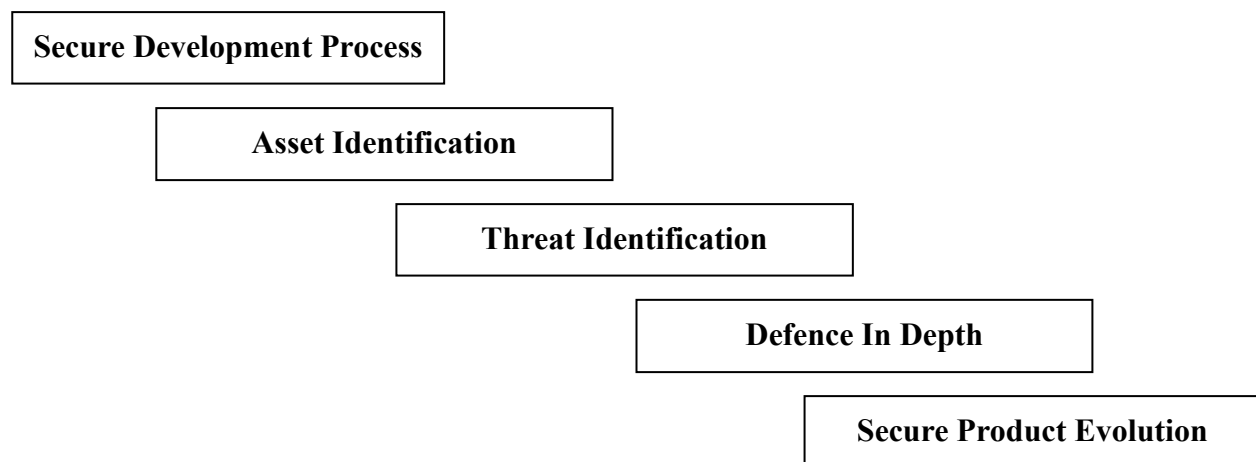
Weaving Security throughout Your .NET Application Development

Using Security APIs from .NET & Windows C AP, DPAPI, Partially trusted callers, Strong Naming, ASP.NET Core Authentication, Role-based Authorization, ACLs

Overview

Clipcode's Secure .NET Project Kickstart is an on-site consultancy engagement whereby a highly experienced .NET security software architect from Clipcode works alongside your software development team to do whatever is necessary to turn your .NET project into a secure .NET project. Your .NET software developers probably already have a good knowledge of .NET and a clear appreciation of the fundamentals of security. Your team can leverage this kickstart to very quickly raise the overall level of security within your software applications.

Five-Stage Strategy



- **Secure Development Process** – Buy-in from senior management, security for development as part of larger security picture, need to consider security from beginning of project, secure design / coding guidelines, security-specific code walkthroughs; developer focus & resources
- **Asset Identification** – What we value includes a company's reputation, financial resources, users' identity, company knowledge, inter-company messaging of all types, reliability of online services and opportunity cost of personnel dealing with security issues
- **Threat Identification** – Can websites be hacked? Can principals' credentials be discovered? Can knowledge be stolen (e.g. via SQL injection or cross-site scripting or canonicalisation attacks)? Can messages be overheard? Can denial of service attacks occur? What about social engineering? How do we prevent cross-site request forgery (XSRF)?
- **Defence in Depth** – Input chokepoint, least privilege, minimum exposed attack surface, correct use of cryptography, secure communication, role-based authorisation, throttling, outer and inner perimeter defences, application defences, security tokens, monitoring and user education.
- **Secure Product Evolution** – Effort invested in security in initial release should not be wasted in subsequent updates. Learning from mistakes we (and others) make. Old security bugs should not creep back into the project. How to respond to attacks. What to do when a security vulnerability is discovered?

Features & Benefits

Secure Development Process	Security is the responsibility of everyone in the software lifecycle. By adapting the development process to the needs of security we ensure code is more secure when first written.
Asset Identification	By identifying what we value, we clearly understand what we need to defend. Some assets are more important than others.
Threat Identification	By understanding how what we value can be threatened, we gain a sense of the potential attacks we will need to counter. Also, a careful risk analysis shows us how likely certain types of attacks could occur and the damage potential – which helps us decide what to counter first and how to assign our defensive development resources.
Defence in Depth	For each identified threat, we counter with as many defences as possible. We are not happy with the motto “attackers only have to be lucky once, defenders have to be lucky all the time”. By providing multiple independent layers of defence against each threat, we even up the odds. If one layer is breached, we have additional protection. Secure auditing heightens visibility of “interesting” system events.
Secure Product Evolution	By thinking of security as an ongoing process rather than a singular event, the software development team can maintain a high awareness of security as the software evolves. By having clear plans how to react to emerging threats, we can deliver rapid effective responses.

Target Market

This service offering is aimed at software engineering teams who truly value security. They may well have some security functionality already in their software applications, but they realise they need to significantly improve it within a short timeframe. This is exactly what this kickstart will deliver.

Secure .NET Software Architect From Clipcode

The .NET Software Architect from Clipcode will have at least 10 years of experience at all levels of .NET and have deep security experience.

Who Should Participate From The Client

The client decides which of its people are members of the development team. Participants should be experienced .NET developers and should have received some security training beforehand.

How To Proceed

If you would like to arrange a Secure .NET Project Kickstart on-site in your company’s offices, please contact Clipcode below. We need to discuss arrangements further, agree goals for the engagement and set a tentative schedule.



www.clipcode.net

If your dev team is starting an important project and needs help, please contact us via email at sales@clipcode.com to discuss how we can be of assistance.