

## Penetration Testing expertise relieves security concerns for SharpCloud



### BACKGROUND

SharpCloud is a visual communication software for businesses. SharpCloud compiles visual stories from data, videos, feedback and presentations which can then be used to engage with executives and stakeholders in a clear and concise manner to aid with the following:

- Business Roadmapping
- Project Controls & Portfolios
- Digital Workshops & Customer Engagements

As an existing user of Microsoft's Silverlight to provide an application framework for writing and running rich Internet applications, SharpCloud recently made the decision to embrace newer technology by way of a move to the open standard, HTML5. SharpCloud were aware that they needed to ensure their applications were secure and as such, sought a testing partner with specific experience to highlight any security issues to support their application security development.

“ Having partnered with Mandalorian on previous security audits, it was a no-brainer that we would use them again for this project. In all our dealings with Mandalorian, we've found them to be keen to ensure **they understand our goals** in undergoing testing, and are always willing to **tailor their services** to meet our requirements. I'd have **no hesitation in recommending** Mandalorian to any company looking for application assessments. ”

Russell Johnson  
CTO, SharpCloud

### PROJECT SCOPE

SharpCloud required an application security assessment for their internally developed legacy Silverlight framework as well as for the new HTML5 application as there were concerns that this application may be exploited in order to attack the SharpCloud infrastructure, end-users or data. The focus was to specifically target the back end of the application rather than the application itself.

In addition, one of the primary drivers for the test was a recent upgrade from Openrasta to WebAPI. It was essential SharpCloud ensured the service was still secure having made significant changes to the system and therefore required thorough testing to assess if this was the case.

The application security assessment was to include various elements including the following:

- Decompile the Silverlight and HTML5 applications to conduct a code audit.
- Thoroughly check all authentication and session management mechanisms.
- Check all access controls and inputs for vulnerabilities.
- Test for logical and vulnerable-by-design faults of the applications themselves.

## WHY MANDALORIAN

SharpCloud essentially chose Mandalorian to perform the test having successfully worked in partnership with them previously. For this specific task however, the following aspects were significant:

- Value – Mandalorian are fully aware of the financial pressures facing businesses today and run activities concurrently to reduce costs. Only the Consultants time is billed for without being charged for time used on automated tools.
- Support –Mandalorian focus on high-end expertise, tailored/customised report writing, wash-up workshops, through-life support and thorough communication throughout. Some providers deliver little more than an automated scan and a boilerplate report. Mandalorian understand that this isn't sufficient in today's complicated world.
- Personnel & Expertise - For this penetration test, SharpCloud specifically required testers who had proven experience performing the tasks detailed in the project scope. Mandalorian had this skillset. The Mandalorian team includes an internal ex-Government gateway security consultant and TigerScheme technical panel and management committee members.

## THE RESULT

By performing these rigorous application security assessments, Mandalorian did discover some vulnerabilities within SharpCloud's new beta html5 application and updated server side applications. At the request of SharpCloud, Mandalorian disclosed details of these vulnerabilities during the assessments immediately upon discovery and offered essential remediation advice as the vulnerabilities were found. This allowed SharpCloud to provide urgent fixes to ensure their users safety and security.

Post engagement, a final report was compiled to clearly explain the work that Mandalorian consultants carried out. This report included:

- A summary of the methodology Mandalorian consultants refer to whilst carrying out their work.
- A prioritised summary of findings.
- A list of detailed technical findings consisting of full explanations of each finding.
- Remediation's recommended by the consultant.

Advice on long term strategies was also given to ensure a high level of security is maintained beyond the timescales of these services being carried out.