



**“Solutions that Empower your Workforce”**

**Organization:** Enterprise IT – Public Sector  
**Project:** IT Security – External Penetration Test and Data Correlation Analysis  
**Technologies:** Penetration Test and Data Correlation Analysis

**With a Mentoring investment of \$42,000 the organization saved approximately \$161,148, by not outsourcing. Visit our blog: <http://thesagegrpmentoring.com/> to see ROI Data**

### **Background Project**

A large organization approached The Sage Group with the request to provide expert-level mentoring in security penetration testing and associated data correlation analysis. The organization provided the Sage Group with the specifications and tools utilized by the existing IT Security team for performing on premise external penetration tests. The in-house security team needed to become proficient with these security tools: Maltego, Rapid 7, Nessus, Metasploit, and Wireshark.

### **Planning and Mentoring Solution**

After discussing and understanding the full requirements for the project, Sage Group Mentoring proposed a comprehensive and innovative solution to mentor on all aspects of penetration testing to tighten security.

The expert mentoring process was divided into two focused segments. The first focused on penetration tests with the client’s actual tools. The second focused on data correlation and analysis of the penetration test results.

A month prior to the mentoring a list of set-up requirement was sent to the organization to ensure the environment was in place to effectively perform penetration tests.

### **Results**

Enhancing the IT security skills of in-house IT staff by an expert mentor proved to be an excellent investment for the organization. With a mentoring investment of \$45,000 in security penetration testing and analysis, the IT team learned how to successfully run penetration tests on their own and to correctly interpret, understand, and respond to analysis of the data results.

The team currently runs its own tests, analyzes results, and applies security measures on-demand. The money saved by insourcing these services can now be allocated to other key organizational initiatives to purchase hardware, software, services and additional mentoring.

With a mentoring investment of \$42,000 the organization saved approximately \$161,148 by not outsourcing. (This analysis assumes two months of testing per year.)

**IT Security Penetration Testing Cost Savings and Return on Investment**

Management entered the following data in the calculation.

		Insource	Outsource
1	Primary Resources	2	2
2	Project timeline (months)	2	2
3	Average Hours per Week	40	40
4	Resource Cost Rate	\$60	\$250
5	Mentoring Costs (insource)	\$42,500	\$0
6	Support Resource Costs	\$32,640	\$136,000
7	Labor Burden Costs (insource)	\$21,312	\$0
8	Maintenance/Assurance (outsource 1 year)	\$0	*\$0
	Total Costs	\$134,852	\$296,000
	<b>Cost Savings using insourced team</b>	<b>\$161,148</b>	

\*Software Maintenance/Assurance of up to 20% may be required in future years.