

**GENERAL DYNAMICS**  
Fidelis Cybersecurity Solutions

Cyber Nightmares: Shamoon &  
Red October

**Fidelis XPS Advanced Threat Defense**

# Agenda

- Shamoan Demo
- Red October Demo
- Bonus - based on time
  - “njRAT” Demo
- References
- Contact Info

# Shamoon Demo

- Last year, the Shamoon malware affected an Oil company in the Middle East and “wiped” around 30,000 computers in their network
- This section will focus on a live demonstration of how Shammon propagates, wipes system, how you can rebuild the file system structure, and how you can analyze this type of samples to find encoding keys, decode data in the carrier file, etc in order to generate a malware analysis report
  - Tools: VMware, Wireshark, Filemon, Regmon, WinHex, CryptTool, IDA, and OllyDbg

## Red October Demo

- Red October was a cyberespionage malware discovered in October 2012 and uncovered in January 2013
- Red October was an advanced cyberespionage campaign intended to target diplomatic, governmental and scientific research organizations worldwide
- The attack was mainly performed through Spear Phishing attacks with weaponized carrier files (MS Word, and Excel docs) exploiting the “CVE-2009-3129”, “CVE-2010-3333”, “CVE-2012-0158” vulnerabilities and the “CVE-2011-3544” java vulnerability
- This section will focus on a live demonstration similar to the previous Shamoan one

# References

- <http://www.threatgeek.com/2012/11/fidelis-threat-advisory-1007.html>
- <http://threatgeek.typepad.com/files/fta-1007---shamoon-1.pdf>
- <http://www.threatgeek.com/2013/06/fidelis-threat-advisory-1009-njrat-uncovered.html>
- <http://threatgeek.typepad.com/files/fta-1009---njrat-uncovered-1.pdf>
- [http://www.securelist.com/en/blog/208193834/Shamoon\\_The\\_Wiper\\_further\\_details\\_Part\\_II](http://www.securelist.com/en/blog/208193834/Shamoon_The_Wiper_further_details_Part_II)
- [http://www.securelist.com/en/blog/208193786/Shamoon\\_the\\_Wiper\\_Copycats\\_at\\_Work](http://www.securelist.com/en/blog/208193786/Shamoon_the_Wiper_Copycats_at_Work)
- [http://www.securelist.com/en/blog/785/The\\_Red\\_October\\_Campaign\\_An\\_Advanced\\_Cyber\\_Espionage\\_Network\\_Targeting\\_Diplomatic\\_and\\_Government\\_Agencies](http://www.securelist.com/en/blog/785/The_Red_October_Campaign_An_Advanced_Cyber_Espionage_Network_Targeting_Diplomatic_and_Government_Agencies)
- [http://www.securelist.com/en/analysis/204792265/Red\\_October\\_Detailed\\_Malware\\_Description\\_1\\_First\\_Stage\\_of\\_Attack](http://www.securelist.com/en/analysis/204792265/Red_October_Detailed_Malware_Description_1_First_Stage_of_Attack)

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