



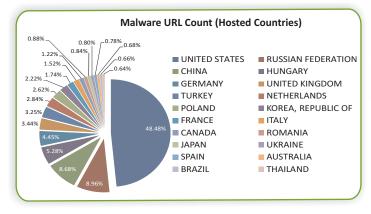




Anti-Virus & Content Security

Malware Report - December

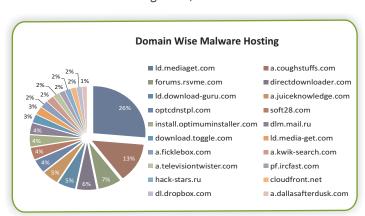
This month has all been about the hunt for 'Red October'. No, this isn't the movie we are referring to but an all-out large scale computer espionage



that was recently uncovered. If you thought Stuxnet was a game changer within the malware community, think again. The Red October hack is one of the largest and fiercest hacks till date, surpassing the discovery of Stuxnet, Duqu, Flame and Gauss. The scale of this attack is so huge that it spans across the globe, targeting Eastern /Western Europe, North America, Russia and countries in Asia.

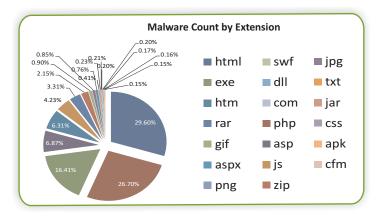
In operation since 2007, the Red October hack is said to have stolen terabytes of data. Targets include, diplomatic and government agencies of various countries across the world with the primary focus on Eastern European countries. Aspects include, Research Institutions, Energy and Nuclear groups, Trade and Aerospace firms. The objective however matches that of Duqu, built solely on gathering information on sensitive documents from compromised machines.

With that being said, little is known about the



people or organization behind the operation. While most of the coding and explanations have been done in Russian, a handful of exploits used in the hack were developed by hackers based in China. The uniqueness of the Command and Control server lies in its ability to receive stolen data from over 60 domain names. Each domain is used to funnel data to a number of proxy servers which are believed to send across all collected information to the main primary server. The overall infrastructure is so technically sound that it is independently capable of shielding the identity of the attackers, whilst resisting takedown efforts.

Moreover, this particular malware also comes in as a multiplatform malware that is capable of infecting not only PCs and workstations but mobile phones too. This would include iPhones, Windows Mobile Smartphones and Nokia



handsets. What makes it even more potent is in its ability to recover deleted data from hard drives as well as removable disk drives.

And just like how you and I would index page reads, the malware comes with the ability to index each machine or mobile infection using a unique ID. This is done to keep a tab on the type of attacks carried out on particular victims. Everything from luring the user into clicking to siphoning off data has been carried out with utmost concern. For instance, each attached document is specifically customized keeping the target in mind thus making them appealing to the victim (this is where the unique ID comes into play). Once infected, the machine is then tagged with a unique ID which then allows the hackers to keep a tab on the type of modules injected and backdoors used.

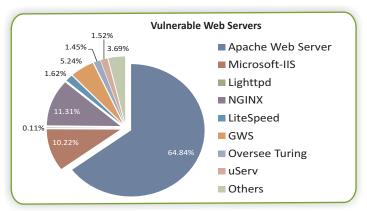




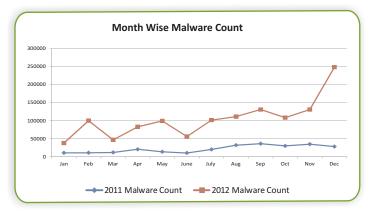


Anti-Virus & Content Security

One would ask why? Why would anyone go to such an extent of linking each and every machine with a unique ID? Why wouldn't you, especially



when half the world has been targeted. The scale of this attack is huge, from Governments to Diplomats to Nuclear / Energy Research to oil and gas companies have been targeted. Let's not leave out Military, Aerospace, Research Institutions have also been under the scope of this malware for the last 5 years where terabytes of data have been stolen. With that said, the information stolen is of the highest value and can be sold to the highest bidder in various underground forums.



The discovery of Red October has clearly shown us that malware has in fact progressed to much higher standards and methods of infection. The very fact that it's taken 5 years to detect the distribution of Red October itself shows that we are continuously a step back at detecting APT based threats. However, the success of infecting a user's system thoroughly depends on how vulnerable he or his system is. Both the user and his system go hand in hand as a system without the regular updates act as an open invitation to

malware and a user who opens every known email is bound to get infected.

We have said this before and we will say it again, APTs or Advanced Persistent Threats are only going to increase with time. These threats are extremely specific in nature and targeted towards a defined set of audience. But who knows, wouldn't this also be the best way to siphon off millions of credit card numbers and personal details over a set period of time? Having said that, Red October is by no means small but at the same time it cannot be concluded as a state sponsored attack, it will probably take us months to come to a final conclusion.

000000







Anti-Virus & Content Security

Disclaimer

The above report is based on malware URL collected for the month of December, 2012 and is a representation of the growth in malware infected URLs in the span of 1 month. The domains mentioned were found infected at the time of report creation. However, the domain/site/URL might be safe now as the infection may have been removed by the host. MicroWorld Technologies Inc. is not liable to any party for any direct, indirect, special or other consequential damages caused.

All artwork and content is property of MicroWorld Technologies Inc. and cannot be used or reproduced by any person or company without the written consent of MicroWorld Technologies Inc. Any unauthorized reproduction of artwork or content is subject to legal action. The information is provided by MicroWorld Technologies Inc. without any assurance or guarantee of its correctness, be it express or implied. Neither do we make any implied affirmations regarding the negotiability, the suitability for certain purposes or the nonviolation of laws and patents.

Any concerns as to the legality of reproduction should be directed to:

The Marketing Department MicroWorld Technologies Inc. 31700 W 13 Mile Rd, Ste 98 Farmington Hills, MI 48334, USA.

Tel: +1 248 855 2020/2021 Fax: +1 248 855 2024. Web site: www.escanav.com E-mail: marketing@escanav.com

All other trademarks, registered trademarks, company names, product names, domain names and brand names are the property of their respective owners, and MicroWorld Technologies Inc. disclaims any ownership in such third-party marks. The use of any third party trademarks, logos, or brand names is for informational purposes only, and does not imply an endorsement by MicroWorld Technologies Inc. or vice versa or that such trademark owner has authorized MicroWorld Technologies Inc. to promote its products or services.

Our Offices

USA:

MicroWorld Technologies Inc. 31700 W 13 Mile Rd, Ste 98 Farmington Hills, MI 48334, USA.

Tel: +1 248 855 2020/2021 Fax: +1 248 855 2024. TOLL FREE: 1-877-EZ-VIRUS (USA Only)

E-mail: sales@escanav.com Web site: www.escanav.com

Malaysia:

MicroWorld Technologies Sdn Bhd. (722338-A) E-8-6, Megan Avenue 1, 189, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia.

Tel: +603 2333 8909 / 8910 Fax: +603 2333 8911

E-mail: sales@escanav.com Web site: www.escanav.com

ndia:

MicroWorld Software Services Pvt. Ltd. Plot No.80, Road No.15, MIDC, Marol, Andheri (E), Mumbai- 400 093, India.

Tel: +91 22 2826 5701 Fax: +91 22 2830 4750

E-mail: sales@escanav.com Web site: www.escanav.com

South Africa:

MicroWorld Technologies South Africa (Pty) Ltd. 376 Oak Avenue, Block C (Entrance at 372 Oak Avenue), Ferndale, Randburg, Gauteng, South Africa.

Tel: Local 08610 eScan (37226) International: +27 11 781 4235 Fax: +086 502 0482

E-mail: sales@escan.co.za Web site: www.escan.co.za

Germany:

MicroWorld Technologies GmbH Drosselweg 1, 76327 Pfinztal, Germany.

Tel: +49 72 40 94 49 0920 Fax: +49 72 40 94 49 0992

E-mail: sales@escanav.de Web site: www.escanav.de

Brasil:

eScan Brasil Ltda Rua Augusta, 1836 - 7o Andar CEP 01412-000 - São Paulo - SP Brasil.

Tel: +55 11 4063 6500

E-mail: vendas@escanbr.com.br Web site: www.escanbr.com.br

