

BOOK CHAPTER | *“Keeping up Using Really Simple Syndication”*

Smartphone RSS Traces For Forensic Analysis

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ABSTRACT

This paper's topic is on Smartphone RSS traces for Forensic analysis; RSS represents Really Simple Syndication whereas smartphone RSS traces refers to a small software program that collects and displays RSS feeds. It allows you to scan headlines from a number of news sources in a central location and has the ability to suggest information of interest to you based on the criteria of your search. RSS feed has been in existence for many years but has never been as widely used as it is today, the term syndication refers to publishing information on the Internet that can be used by other sites as well as by stand-alone reader applications. The introduction of blogs hyped content syndication before, the syndicated content, known as feeds, was typically found on news sites only. Once blogs began proliferating on the Internet, content started being shared left and right, and users began using readers and aggregators to track their favorite blogs. In addition, those who subscribe to podcasts are actually using technology built on RSS. Whether providing a feed for a blog, providing a feed of changes for some software you may be writing, or doing your own podcast, the applications for content syndication are almost endless, and its usage is growing at a phenomenal rate every day.” Robert Richards, January 2006- Article on “RSS feed and content Syndication”. Forensically, Smartphone RSS feed gives the forensic examiner a fair idea about the conception of the individual whose phone contains the analyzed feed. This is because the feed usually contains information of interest to the user which helps you think like the user in order to get the needed information you are looking for. This paper will also identify gaps with smartphone RSS feed users and suggest solutions/recommendations to mitigate them in order to be safe even after subscribing to certain RSS feeds.

Keywords: RSS, Forensics, Syndication, Tracing, Cybersecurity, Feeds

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1. INTRODUCTION

RSS stands for Really Simple Syndication which is an easy way for you to keep up with news and information that is important to you, and also helps you avoid the conventional methods of browsing or searching for information on websites. Now the content you want can be delivered

directly to you without cluttering your inbox with e-mail messages, this content is called a "feed." RSS is written in the Internet coding language known as XML (eXtensible Markup Language). An RSS reader is a small software program that collects and displays RSS feeds. It allows you to scan headlines from a number of news sources in a central location. Some browsers, such as the current versions of Firefox and Safari have built in RSS readers thus If you're using a browser that doesn't currently support RSS, there are a variety of RSS readers available on the web; some are free to download and others are available for purchase.

How Do I Use RSS Feeds?

The first step is to choose an RSS reader. Each reader has a slightly different way of adding a new feed, also called a "channel." Follow the directions for your reader but, in most cases, here's how it works:

- Click on the link or small XML button near the feed you want. For example, GH.gov Updates: News and Features. You'll see a page displaying XML code.
- From your web browser's address bar, copy the URL (web address). For example, the URL you would copy for GH.gov Updates: News and Features is: <http://www.gh.gov/rss/updates.xml> Visit disclaimer page.
- Paste that URL into the "Add New Channel" section of the reader. The RSS feed will start to display and regularly update the headlines for you.

1.1 Background to the Study.

Smartphone RSS traces for Forensic Analysis deals with the process of obtaining information/data for analysis to enable the forensic examiner follow the trend and know the way the user reasons, understands things, his/her likes and dislikes by going through his/her feeds. Smartphone RSS feed has its advantages and disadvantages. Some of the advantages are it is time Saving because information of your interest is always at your disposal with just a flip instead of surfing the internet for hours, it is free of spam, Unsubscribing Is Easy, Alternate Communication Channel and Expands Audience Through Syndication.

2. RELATED LITERATURE.

In other research papers and articles such as " **Coming Ready or Not RSS**" by Belinda Weaver in January 2003 where she stated that RSS-style syndication a lightweight XML format designed for sharing headlines and other Web content and has evolved into a popular means of sharing content between sites. RSS solved a myriad of problems webmasters commonly face, such as increasing traffic, and gathering and distributing news. RSS can be the basis for additional content distribution services.

Umakant Mishra also published an article with the title **The Mechanics of Implementing RSS - Really Simple Syndication** in December 2011 where He also spoke about RSS feed and its relevance. Robert Richard wrote an article on **RSS feed and content syndication** and why it is being widely used now in January 2006. Jorris Evers published an article in August 4th 2006 on **Popular RSS and Atom feeds could carry malicious JavaScript code that would compromise a PC, an expert warned**. This article spoke about the negative impact of Smartphone RSS feed.

3. RESEARCH GAPS/FINDINGS.

It was observed that although Smartphone RSS feed usage for news, entertainment and the like was been helpful but it could also be of harm. This is so in the sense that attackers could send malicious code to mailing lists that offer RSS feeds and commandeer vulnerable systems that way. Feeds are popular because they let people consolidate information streams from multiple sites, such as blogs, in one application, called a feed reader, removing the need to surf to multiple sites. Also, many of the popular feed reading applications are faulted because the designers have failed to add valuable security checks. Particular, the applications should not allow JavaScript that is included in feeds to run. Instead, it should be filtered out for security reasons.

Forensically, it was observed that cyber safety in Africa as well as implication from infiltrations on infrastructure and data breaches to spear phishing and brute force. Online threats are varied and they don't discriminate organizations from individuals when looking for a target. What is real, however, is the intent of the attacker as well as the potential impact. While many cyberattacks are mere nuisances, some are quite serious, even potentially threatening human lives. <https://preyproject.com/blog/en/what-are-cyber-threats-how-they-affect-you-what-to-do-about-them/>

4. CONCLUSION.

In conclusion Smartphone RSS traces for Forensic Analysis is very useful and essential because data/information about a user's lifestyle, likes, dislikes can be obtained from the RSS feeds from his/her smartphone which can aid in the analysis of a case.

5. RECOMMENDATION FOR POLICY AND PRACTICES.

As protection, people could switch to a non-vulnerable reader. Also, feed publishers could ensure that their feeds don't include malicious JavaScript or any script at all, Auger said. Some services, however, rely on JavaScript to deliver ads in feeds, he noted. Your phone's web browser requires occasional cleanup no matter the kind of browser that you use to surf the internet, this can be achieved by clearing your phone history or visited sites and activities done.

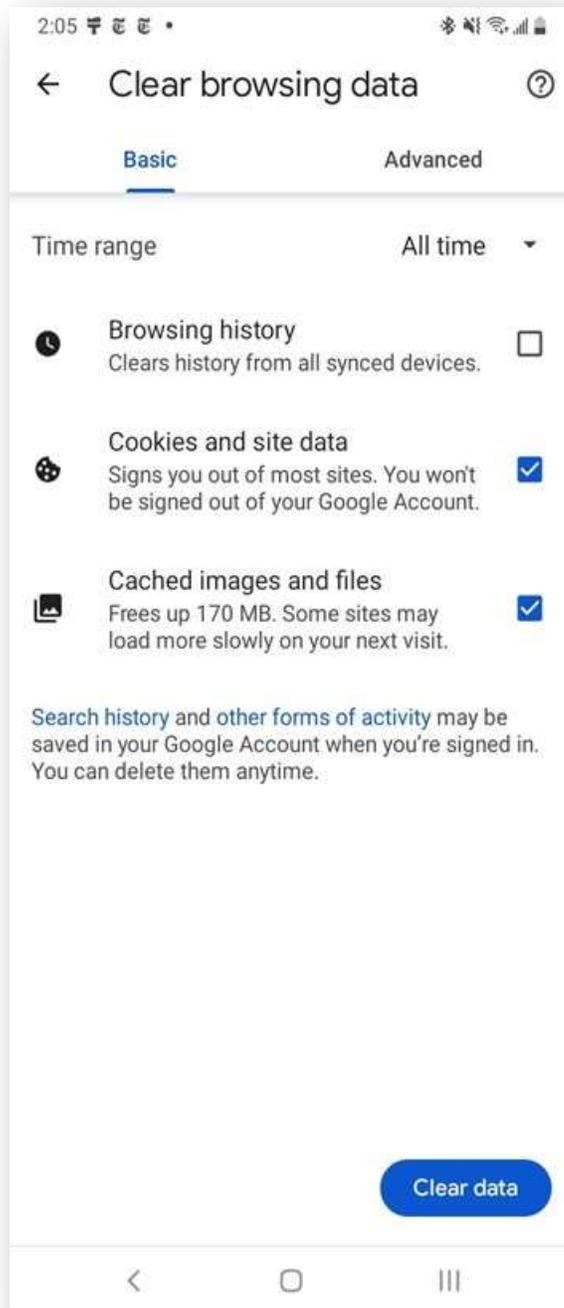


Fig 1: Sample Feed Features



Fig 2: Clearing Phone cache

Source: <https://www.cnet.com/news/please-clear-android-phones-cookies-cache/>

Every so often, it's good practice to clear the cache of your phone's web browser and remove cookies

6. DIRECTION OF FUTURE WORKS.

The direction of future works will be on how to make smartphone RSS feed secure for usage without thinking of been attacked by a malicious program which can steal your data or feed.

REFERENCES.

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2. Robert Richards, January 2006- Article on “RSS feed and content Syndication”.
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Links:

1. <https://www.acf.hhs.gov/what-rss>
2. https://www.researchgate.net/publication/228280366_The_Mechanics_of_Implementing_RSS_-_Really_Simple_Syndication
3. <https://www.cnet.com/news/please-clear-android-phones-cookies-cache/>
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