



實戰派教學Linux Device Driver



深入程式開發關鍵技術,一人一套A9開發板搭配周邊模組實作

(i) X

HOME TECHNOLOGY SECURITY NEWS > INTERNET > LAWS AND LEGALITIES GADGETS > SCIENCE

YOU ARE AT: Home > Security news > Researchers hack Vizio Smart TVs to access home network



Researchers hack Vizio Smart TVs to access home network

20

BY VIJAY PRABHU ON NOVEMBER 13, 2015

SECURITY NEWS, TECHNOLOGY





New Vizio hack reveals company shares your data whether you accept its privacy policy or not

New research from Avast reveals just how easily compromised many so-called "smart" TVs actually are, as well as how little your consent to being tracked actually matters. It is apparent that Vizio's Smart TVs track users' viewing habits by default and this information is sold to third parties who can then

use it to deliver targeted ads to other internet-connected devices that share an IP address or other identifier with the Smart TV). Avast researchers have found out that Vizio Smart TVs are also vulnerable to man-in-the-middle attacks that can result in attackers harvesting data that is sent from the TV to the server that collects it, as well as to attacks that could lead to attackers taking over control of the smart device and/or the entire home network.

Avast researchers tested Vizio's Smart TV by hooking to a wireless access point on a test network, and took a look at the traffic going out and coming in. Among the various online services that the devices was sending requests to, was one (encrypted) to *tvinteractive.tv*.

This service is run by a service called Cognitive Networks, which identifies what the user is watching (via





## SUBSCRIBE NOW

Your e-mail address

Subscribe

## READERS CHOICE



Stopping Microsoft from tracking your eve move on Windows 10



OmniRAT: - \$25 tool to hack into Windows
OS X and Android devices



How to log in to administrator account on Windows PC Image Tutorial

a "fingerprint") and sends "an event trigger to the content provider or advertiser", and they send back a link to the [Active Content Recognition] and to display onscreen.

/SUS (intel) Avast said tha 指数型操作 即至 四至 HTTPS conne Intel Inside® 外享強動動力

TV doesn't check the certificate of the

"This means we can man-in-the-middle the connection, watch the requests, repeat them to the server, and serve our own fake (static) content back to the TV," the researchers explained.

"As it turns out, the TV is not checking the certificate of the connection, but it is checking the checksum at the end of the data before it will use the data," they shared. "We can serve this control data to the TV from our fake web server, but we cannot change the data without breaking the checksum. The checksum is md5, and we assume the control data is combined with a secret to generate the checksum. In the field of cryptography this type of secret key is referred to as 'salt'."

Unable to brute-force it, the researchers wanted to see if they can get the salt from the device. They forced their way in via a local command injection into a screen for configuring a hidden wireless network ID, found a way to list the commands, "owned" the TV, and found the salt. This allowed them to use a checksum that will make the sent data be accepted by the TV.

"At this point, we have a possible attack vector into the home network or office through the Smart TV, which can be accomplished by hijacking DNS and serving malicious control data to the TV. Because the TV calls out to a control server by default and does not verify the authenticity of the control server, it allows an attacker in without the need for any incoming ports to be opened," they concluded.

After Avast researchers discovered these holes they notified Vizio which promptly issued patches for the flaws. The update with the patch will be pushed to all the devices in the next few days, and those TVs who have automatic updating on and are online will update themselves.



**ABOUT AUTHOR** 



VIIAY PRABHU

Live as if you were to die tomorrow. Learn as if you were to live forever. - Mahatma Gandhi



Sponsored by Revcontent

**Trending Today** 







A Hack That Turns The Square Card Reade 🕯 Into A Credit Card Data Skimmer



Worried about privacy, forget Google and these search engines

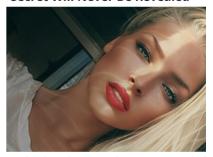
**Trending Today** 



Millionaires in Taiwan Pushing to Get this Video Banned - Must Watch!



**Taiwan Millionaires Hope Their** Secret Will Never Be Revealed



Taipei, Taiwan: Discover a Weird Trick To Make Over \$3,500 Today



10 Apps You Probably Didn't Kno Can Earn You Extra Money



**Dad Discovers Unique Method to** 



Millionaires in Taiwan Pushing to Get this Video Banned - Must



Dad Discovers Unique Method to Regrow Hair (Do This Daily) #Taipei From The Web



Taiwan Millionaires Hope Their Secret Will Never Be Revealed



5 Real Ways to Actually Make Money Online



Use This 1 Tip To Make Millions in Taiwan -Watch This Video!



This Is Why You Should Never Drink Coke Again But Use It Instead

Sponsored Links by Taboola D

The Most Luxurious Private Jet Interior Designs
AwesomeTips

Shadow IT Doesn't Have to be So Scary CIO for Plex Systems

New Mexico's Unique Architectural Style

How to Improve Operations through Cost Measurement Cambium Networks

The Most Exciting MMORPG You've Ever Played. Don't miss this! Sparta Online Game

Why 'Pan' Movie Has Been An Utter Flop Financial Times

## RELATED POSTS



Prison phone service hack reveals that it recorded private lawyer-inmate calls



Calls made on Samsung Galaxy S6, S6 Edge and Note 4 can be intercepted say researchers



Actor accused of using others viral videos to promote himself on Facebook

0 Comments

Sort by **Top ▼** 



Add a comment...

Facebook Comments Plugin

LEAVE A REPLY

Your Name

Your Email		
Your Website		
Your Comment		
		POST COMMENT

## **ABOUT US PAGES** Copyright © **Techworm** is a Security News Platform that centers About Us Techworm around Infosec, Hacking, Xero-days, Malware, Contact Us All rights reser Vulnerabilities, Cyber Crime, DDoS, Surveillance and Privacy Issues and to keep you Informed and Secure. Home Page The Authors' opinions may not necessarily reflect Privacy Policy official position of TechW Techworn Security Researcher Acknowledgments Submission Guidelines