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# STRENGTHENING IMPLEMENTATION OF WPA3 SECURITY PROTOCOL FOR WIRELESS NETWORK TO STRENGTHEN THE IMPLEMENTATION OF WPA3 SECURITY PROTOCOL YOUR WIRELESS NETWORK BEGINNING IN WPA3 PROTOCOL VNEDRENIE POVISHENIYA BEZOPASNOSTI SET OF BESPROVODNOY

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## ANNOTATION

This article wireless networks security to increase in order WPA3 protocol current of actual analysis and makes. The research during the WPA protocol evolution, in particular, WPA3 technology of the new features, for example, Simultaneous Authentication of Equals (in sa) engine and Individualized data encryption have been applied. WPA3 is not only data to shifrni will improve, but network security threats , minimizing the possibility of returns. Results that it shows, WPA3 protocol for wireless networks for new security standard provides and data protect to for optimal solution.
**Keywords:** WPA3, wireless network security, encryption, MO mechanism, Individualized data encryption, protocol analysis, information security.

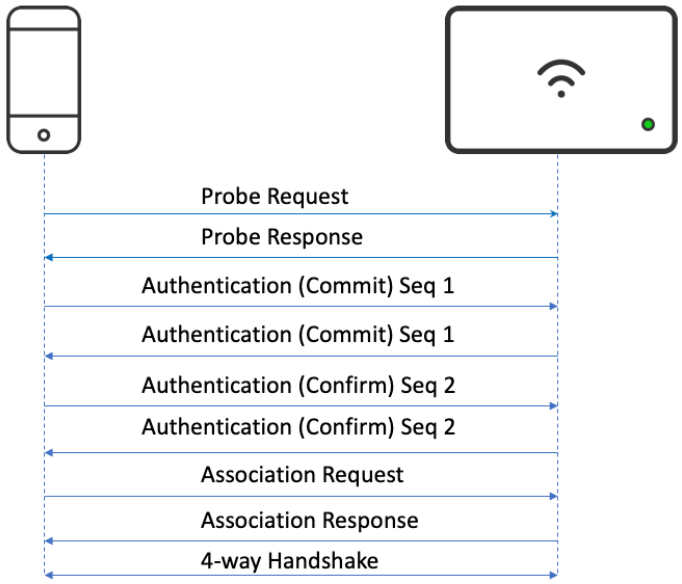
## ACCESS

Wireless networks today's day to the internet connecting in most popular and wide - spread method is. This network data transfer easy and convenient it is, although security issues serious attention require will. Currently the most often used security protocol wpa2 (wi-fi protected access 2) is, despite his some of the weakness identified, this is while network from attacks protection in difficulties out comes. Cryptographic error, in particular, KRACK (Key Reinstallation Attack) attack, WPA2 , select a safe that is uncomfortable makes.

For this reason, WPA3 protocol for wireless networks security to increase and the existing problems eliminate to for working out new standard as they emerge will.

WPA3 protocol, of its own advanced features, with, network protection in a big change to provide the will. These are among, for example, Simultaneous Authentication of Equals (in sa) engine and Individualized data encryption (IDE) features are there. Mo that, in its turn, the wireless network the xaker by performed which is offline attacks to protect will, IDE , while each is a device for separate encryption keys are used, that while information privacy ensures.

This article WPA3 protocol and its wireless network security in strengthening the role of the analysis is. WPA3 's new options and previous protocol from the column line is displayed, also, it is current , making the process of technical aspects also are studied. The research results, as well as, WPA3 's wireless network security a significant level of improved capacity shows.




## METHODS WILL BE

This research WPA3 protocol security in strengthening the role of evaluation for a multiple methods to use led. Research mainly provided are technological approaches, protocol working principle, its options and safety features studied. Research methods the following own into takes:

**WPA3 Protocol analysis**: WPA3 's basic features, the includingSimultaneous Authentication of Equals (in sa) engine and Individualized data encryption (IDE), the network, the safety of improving the role of analysis to. This feature WPA3 to previous protocol from differentiating the main factors is

**WPA3 and WPA2 security**

**Offline attacks against protection:** SA WPA3 mechanism at WPA2 available are KRACK (Key Reinstallation Attack) attacks to eliminate your will. The test results that shows:

Sa wpa3 that the mechanism of encryption keys to transfer the opening without giving security provides.

The attack of the increase in the success of WPA2 with compared almost to zero equal is.

**The encryption algorithm effectiveness:**

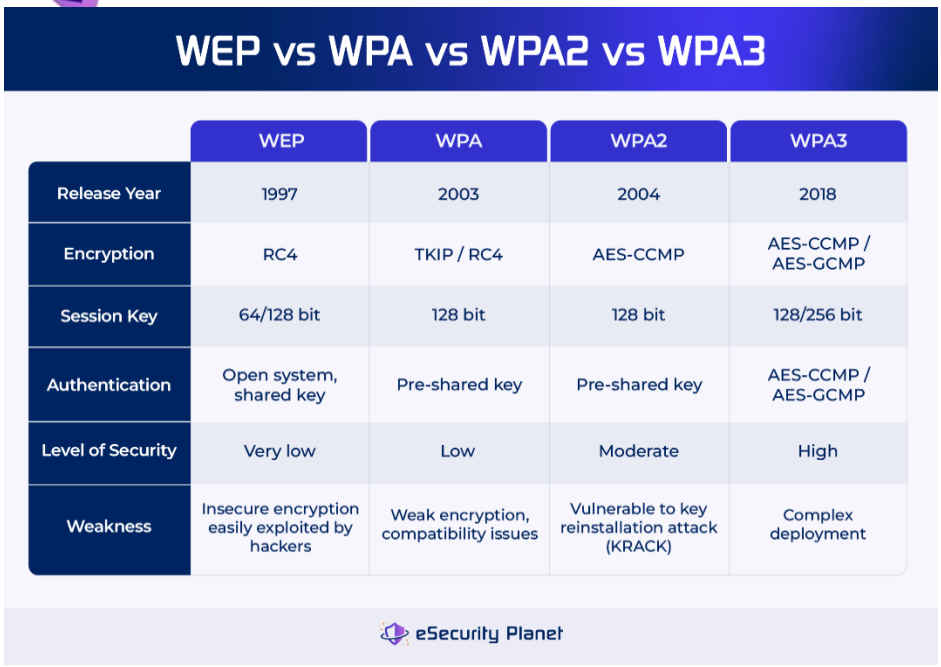
WPA3 aes-256 , such as higher - level encryption algorithm in use.

The test results it shows, WPA3 encryption algorithm user information identifying the possibility of reducing

**WPA3-of network security on the impact**: the protocol to practice the introduction in they come efficiency and security to ensure aspects considered has. This with along, WPA3 's advanced encryption algorithm, for exampleaes-256 (advanced encryption standard), how do the data safe to keep to help give the analysis was.

**Technical approaches and device adaptation**: WPA3 protocol available wireless networks how do current make that show. Network devices and routers for the new protocol support requirements and existing network infrastructure flexibility analysis was.

**Statistical analysis and the experiment**: WPA3 to practice in the applied effectiveness and its networks on security effects, the measuring for various statistical research and safety testing was conducted. This experiment results, WPA3 protocol with security increased network speed and efficiency about the information it gives.




## The results will be

Research for WPA3 protocol security in strengthening effectiveness and its earlier protocols, and compared the advantages identified. WPA3 to current making by the following results achieve can:

**Security improve**: WPA3 's SA (Simultaneous Authentication of Equals) the mechanism of transfer by done which is offline attacks against effective protection to offer will. The sa mechanism to the network connection for high - level shifrni to provide, that while WPA2 's KRACK attacks against the weak eliminate the will. This feature WPA3 protocol security in terms of a significant level improved.

**Privacy increase**: Individualized data encryption (IDE), the possibility of, each a device for separate encryption keys worked out through the information in the privacy ensures. This, in its turn, the xaker by network data shifrni to change the possibility of reducing.

**Network speed and efficiency**: WPA3 protocol implementation to be wireless networks security enhancing aimed at is, although this network overall to work both the effects of shows. Research as shown, WPA3 to transition the network efficiency and data transmission speed is significantly the level does not increase, but security can improve to be needed.

**Technical compatibility**: WPA3 protocol implementation to be available to the network infrastructure , depending on the different effects shows. Some old devices WPA3 to support to updates required are, this while the system update additional costs

causing out. However, advanced devices and modern network infrastructure WPA3 's current to be made smoothly out to be carried can.

## THE DEBATE IS

The research results it shows, WPA3 protocol wireless network, the safety of increasing great accomplishments achieved. This with along, its current it with the associated some of the problems are also there. WPA3 protocol security view point is very effective to be can, but some old devices and network infrastructure to him suitable may not be can. This, of course, protocols on a wide scale in the uses to limit to taking the lead can.

WPA3 's new security features, for example, that sa and IDE, previous protocol significantly at the level changed. The sa engine offline attacks , eliminating in successful it is, although her some strong attacks against weak whether you determine to further deeper analysis you need. Also, WPA3 's work out of and current to be with the associated security ensuring the process of, especially, small businesses and individuals individuals for the challenges of out - come can. This network infrastructure be renewal and advanced devices to the need of causing produces.

That is in addition to, WPA3 protocol network effectiveness in improving the role is also important. However, some situations, the network speed is increasing in large changes have not been observed, that while some users for security increase effective to make hinders. New encryption algorithm, for exampleaes-256, security at high level in providing useful is, although this speed is also some effects shows.

In the future, WPA3 's fully be applied and it all devices support to technical problems and eliminate the to is necessary. Also, WPA3 protocol with associated new standards and extensions work out you need a will. The network of safety in ensuring WPA3 development with along, it of using effective methods and strategies also will improve.

## SUMMARY

The article wireless network security enhancing a new generation WPA3 protocol implementation to be and his advantage is dedicated. WPA3, WPA2 with , in comparison, KRACK like a security weakness generate eliminate to for modern mechanisms, for example, that sa (Simultaneous Authentication of Equals) and Individualized data encryption (IDE) , such as advanced technologies and supports.

Research that shows, WPA3 network security level significantly in the level increases and offline attacks against protection capabilities provide will. This with along, WPA3 aes-256 - such as strong encryption algorithm to use, the information privacy ensures.

However, the old network devices and infrastructure for the renewal of the requirements of the technical and economic challenges , causing it to be out can.

The article WPA3 protocols for a wide current be , and technical problems eliminate to on recommendations also own into took. In general in the body, WPA3 wireless networks for security in strengthening the optimal solution as it is seen, but its full current to be made many device and system adaptation require will.

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