

## Retiring use of Weak Encryption

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None

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Product - Action Required	Deadline	Who May Be Affected
PJM will supply a list of IP addresses/user ids using weak encryption ciphers/protocols by company. PJM requests that each company update the encryption on the source devices to use an acceptable level of encryption.	May 31 2021 for browser based  October 31 2021 for browserless systems	<ul> <li>Any member who uses PJM's internet facing tools and uses weak encryption cipher suites on their source devices.</li> <li>94% of encrypted sessions are already strong and are not affected.</li> </ul>
•	systems	already strong and are not affected.









## 2020/2021 Roadmap for Elimination of Weak Encryption



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- 3DES was deprecated by the National Institute of Standards and Technology in 2017. An
  established reference can be found here:
  - https://csrc.nist.gov/news/2017/update-to-current-use-and-deprecation-of-tdea
- TLS 1.0 and TLS 1.1 were released in 1999 and 2006 respectively. Security flaws in design of TLS 1.1 lead to the release of TLS 1.2 in 2008.
  - In October 2018, Apple, Google, Microsoft, and Mozilla jointly announced they would deprecate TLS 1.0 and 1.1 in March 2020.
  - An overview of TLS can be found here:
    - https://en.wikipedia.org/wiki/Transport Layer Security
- TLS\_RSA\_\* Site describing method to attack this cipher suite can be found at <a href="https://robotattack.org/">https://robotattack.org/</a>.



- PJM will no longer support the TLS 1.0 or TLS 1.1 protocols.
- PJM will no longer support the 3DES cipher and the TLS\_RSA\_\* ciphers in TLS 1.2.
  - Members need to upgrade the encryption used on systems that connect to PJM externally facing systems.
  - Browser support will stop on May 31 2021
  - Support for browserless tools will stop on Oct 31 2021 as upgrading tools is expected to take more time
- These encryption mechanisms are no longer secure.



- PJM will issue reports to each member negotiating weak encryption on PJM sites.
   The target date is December 31 2020.
- Members should contact PJM's <u>member relations</u> to discuss their next steps to stop using this encryption. The target date for this activity is February 28 2021.
- Questions or feedback can be sent to: <u>TechChangeForum@pjm.com</u>.