



Tools Security Roadmap

As of August 19, 2021

- Updated SSO Upgrade dates
- Updated MSRS Opt-in dates

Product - Action Required	Dates	Who May Be Affected
<p>Single Sign On (SSO) System maintenance - Production</p> <ul style="list-style-type: none"> - Performance improvement patch 	<p>August 24 5 p.m. to 7 p.m.</p>	<ul style="list-style-type: none"> • All single sign on(SSO) tools
<p>Single Sign On (SSO) System upgrade - Production</p> <ul style="list-style-type: none"> • Any code parsing SSO Authentication response based on length will need to change. Use JSON parser or other methods 	<p>September 7 5 p.m. to 7 p.m.</p>	<ul style="list-style-type: none"> • Any browserless code that depends on knowing the length of the token will need to change



Product - Action Required

MSRS Browser-less/API 2 Factor Authentication (opt-in)

- Obtain valid PKI certificates from approved Certificate Authorities
- Rewrite Browserless/API authentication code OR use PJM provided command line interface(CLI)
- Make sure 2-Way SSL Connections, Client Certificates & Connection Renegotiation are enabled at Firewall & Security devices for outgoing PJM SSO traffic

Dates

September 7
3 p.m. to 4 p.m.
(Train)

September 28
4 p.m. to 5 p.m.
(Production)

Who May Be Affected

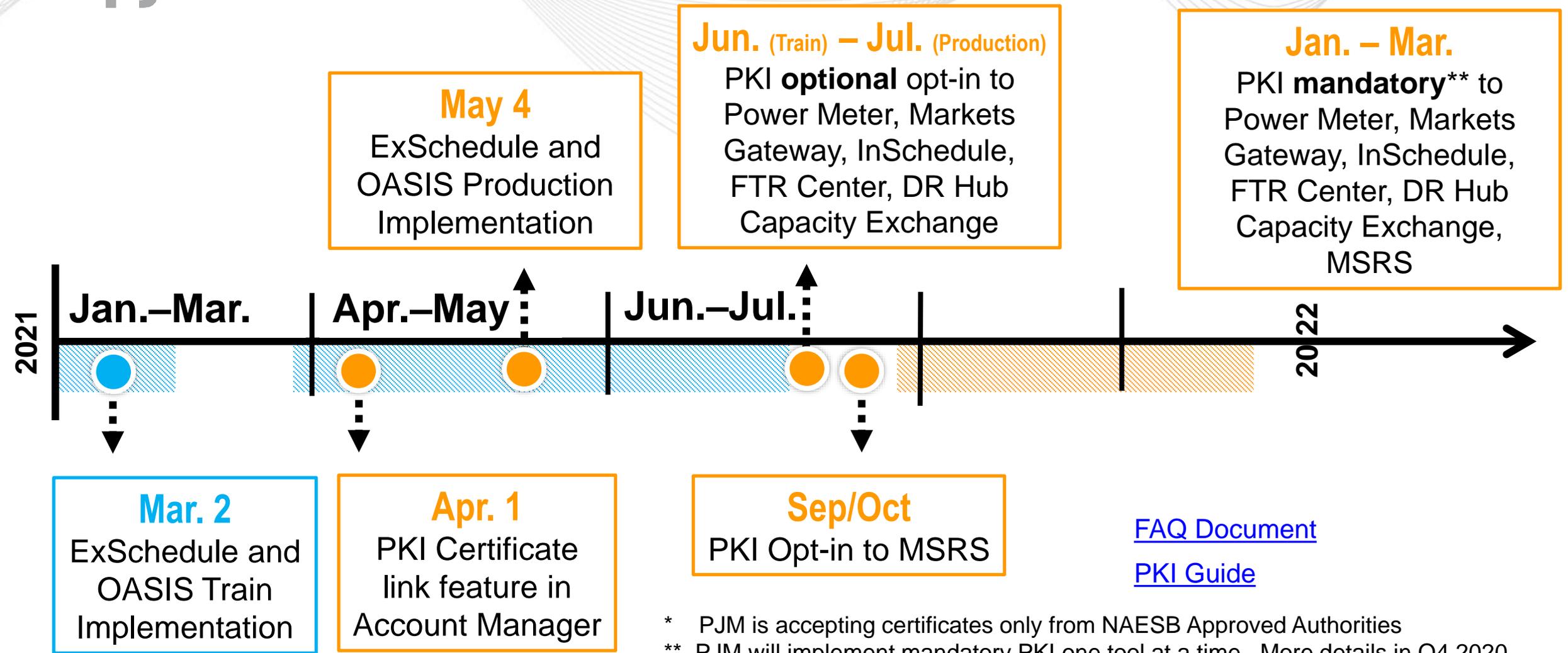
- Browserless users of MSRS





Legend

- Start Date
- ◆ End Date



* PJM is accepting certificates only from NAESB Approved Authorities
 ** PJM will implement mandatory PKI one tool at a time. More details in Q4 2020

- Single Sign On (SSO) System upgrades
 - When:
 - Train: Completed
 - Production: September 7
- Impacts
 - SSO Token length is changing with upgrade and not going to be a fixed value
 - Any code parsing SSO Authentication response based on length will need to change. Use JSON parser or other methods

```
{"tokenId":"yRQ9EqYG_1XpUXYE2C3yFDPPE9A.*AAJTSQAtDIA1NLABw2Y0N0ZjerZUh30GY4M2JjV29wc3BueWZweE09AAJT  
MQACMDc.*", "successUrl":"/access/console", "realm":"/"}
```

- FAQs for PKI Certificates and Two-Step Verification Browserless/API: <https://www.pjm.com/-/media/etools/security/pki-faqs.ashx?la=en>
- PKI-Based Authentication Guide: <https://www.pjm.com/-/media/etools/security/pki-authentication-guide.ashx?la=en>
- Exporting public keys from pfx/p12 : <https://www.pjm.com/-/media/etools/security/pki-export-public-keys.ashx?la=en>

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Tool Security Changes



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