



# Tools Security Roadmap

As of March 18, 2020

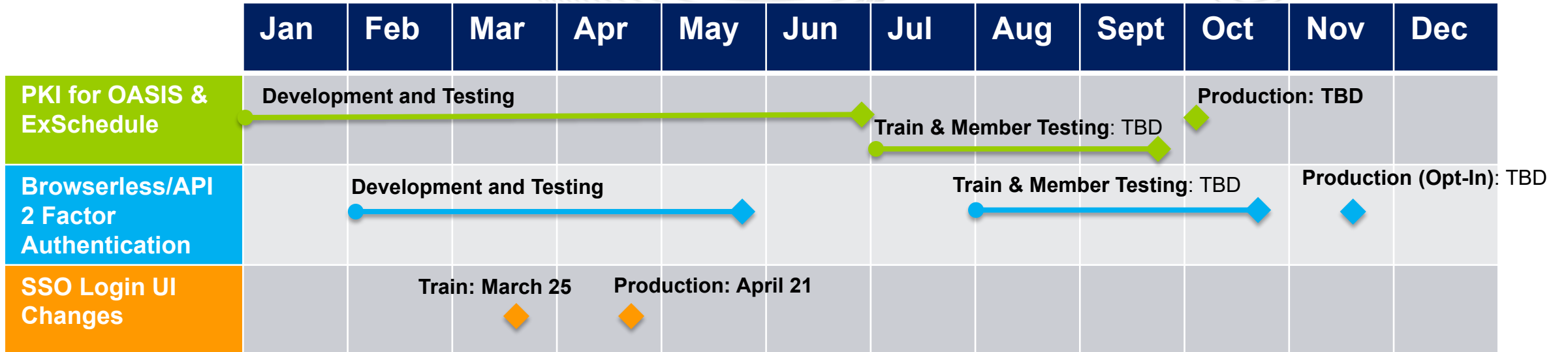
- Added Single Sign On Login UI Changes

Product - Action Required	Dates	Who May Be Affected
Single Sign On(SSO) - Delete book marked SSO Login URL	<b>April 21</b> <b>5 p.m.</b>	All Users of Single Sign On Tools



Product - Action Required	Dates	Who May Be Affected
<p>ExSchedule &amp; OASIS</p> <ul style="list-style-type: none"> <li>Obtain valid PKI certificates from approved Certificate Authorities</li> <li>Rewrite Browserless/API authentication code</li> <li>Use PJM provided command line interface (CLI)</li> </ul>	<p>Q3, 2020</p>	<ul style="list-style-type: none"> <li>Users of ExSchedule and OASIS</li> <li>3<sup>rd</sup> party Vendors for ExSchedule and OASIS</li> <li>Developers of ExSchedule and OASIS Browserless/API code</li> </ul>
<p>Account Manager</p> <ul style="list-style-type: none"> <li>Associate valid PKI certificates with user account in Account Manager</li> </ul>	<p>Q3, 2020</p>	<ul style="list-style-type: none"> <li>Users of ExSchedule and OASIS</li> </ul>





ExSchedule &  
OASIS Public  
Key Infrastructure  
(PKI)

Browser-less/API  
2 Factor  
Authentication

Login UI  
Changes

- PKI
  - On February 4, 2020 FERC issued an order to comply with NAESB 3.2 changes
  - Implement PKI to provide secure access to
    - OASIS
    - E-Tagging applications (ExSchedule)
  - Existing certificates that meet NAESB requirements will be accepted
  - When:
    - Train: Q3, 2020
    - Production: Q4, 2020

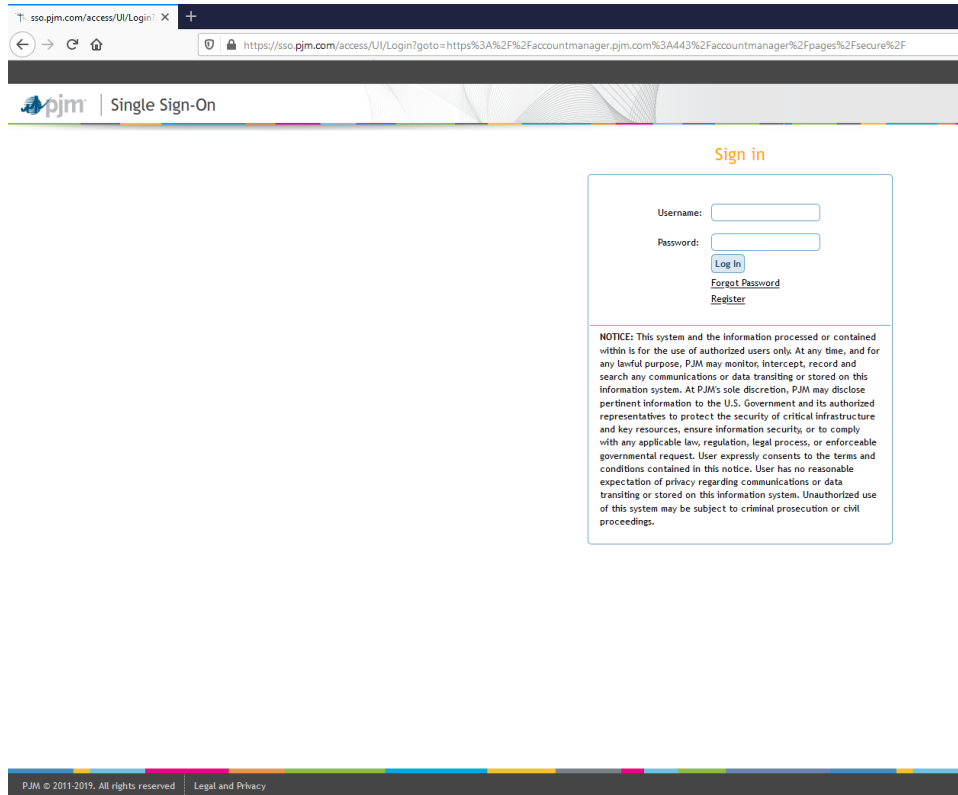
- Browserless/API 2 Factor Authentication
  - Leverage PKI solution
  - Scope
    - Included: All PJM Tools that are part of Single Sign On and have Browserless APIs
    - Excluded: ExSchedule and OASIS
  - When:
    - Optional in Q4, 2020
    - Mandatory in 2021




- <https://www.pjm.com/-/media/etools/security/pki-faqs.ashx?la=en>

- SSO Login UI Changes
  - UI framework change
  - Login URL changed from <https://sso.pjm.com/access/UI/Login> to <https://sso.pjm.com/access/XUI/#login/>
  - Delete SSO Login URL bookmarks
  - Bookmarking of Application URL is preferred
  - When:
    - Train: March 25
    - Production: April 21

## Old Page



Browser address bar: <https://sso.pjm.com/access/UI/Login?goto=https%3A%2F%2Faccountmanager.pjm.com%3A443%2Faccountmanager%2Fpages%2Fsecure%2F>

Page Header:  Single Sign-On

Section: Sign in

Form fields:

- Username:
- Password:

Buttons:

- [Log In](#)
- [Forgot Password](#)
- [Register](#)

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Browser address bar: [https://sso.pjm.com/access/XUI/?goto=https://accountmanager.pjm.com:443/accountmanager/pages/secure/sunwCDSSORedirectURI?nonce%3DgfrDSygyPC932\\_eGZoKPUBKMI](https://sso.pjm.com/access/XUI/?goto=https://accountmanager.pjm.com:443/accountmanager/pages/secure/sunwCDSSORedirectURI?nonce%3DgfrDSygyPC932_eGZoKPUBKMI)

Page Header:  Single Sign-On

Section: Sign In

Form fields:

- Username
- Password

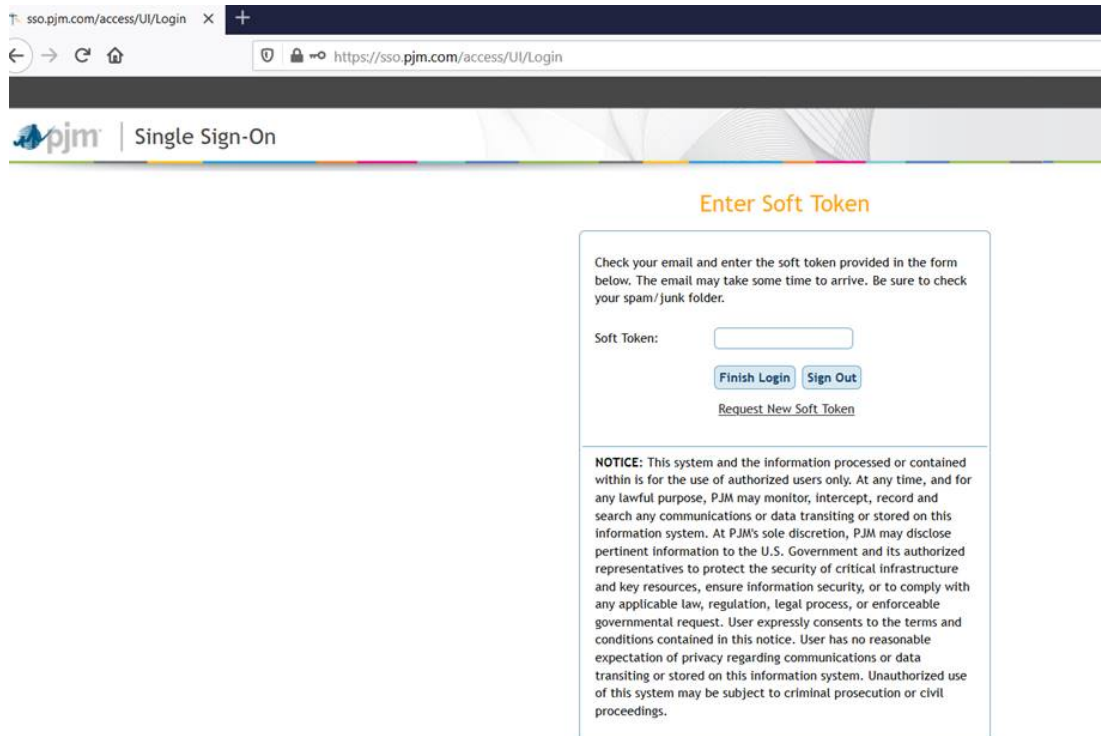
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Browser address bar: <https://sso.pjm.com/access/UI/Login>

Header:  Single Sign-On

### Enter Soft Token

Check your email and enter the soft token provided in the form below. The email may take some time to arrive. Be sure to check your spam/junk folder.

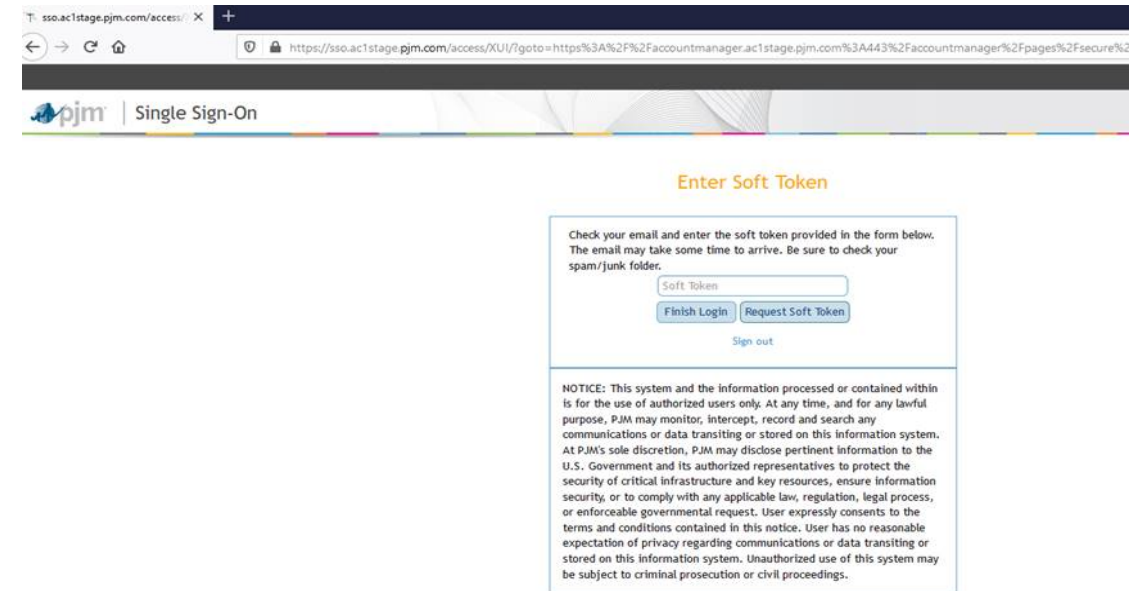
Soft Token:

[Finish Login](#) [Sign Out](#)


[Request New Soft Token](#)

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Browser address bar: <https://sso.ac1stage.pjm.com/access/XUI/?goto=https%3A%2F%2Faccountmanager.ac1stage.pjm.com%3A443%2Faccountmanager%2Fpages%2Fsecure%2>

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