



# PJM Tools Security Enhanced Security Update

Foluso Afelumo  
Project Manager

*OC Meeting*

- Cybersecurity is important to PJM.
  - Security of member data
  - Security of member interaction
- PJM is working to implement industry best practices around security.
- We are making changes toward a long-term solution that will make it easier to do business with PJM more securely.

- Implement strong access controls
  - User credentials
  - User privileges
  - System accounts
  - Self-service enhancements
  - Geo-location adaptive security
  - Multi-factor authentication

- Implement enhanced security for PJM Tools
  - Implement enterprise-wide single sign-on capability
  - Provide enhanced user identity and access management
  - Provide one location to apply security policies across applications

Access Control Feature	Preliminary Sandbox/Training Availability	Preliminary Production Availability
Disable Inactive Accounts	8/11/2015	9/15/2015

- **Details**
  - User and system accounts will be disabled after 90 days of inactivity.
- **What you need to do**
  - Ensure all needed accounts are used every 90 days.

Access Control Feature	Preliminary Sandbox/Training Availability	Preliminary Production Availability
System Account Designation/Creation	8/11/2015	9/15/2015
System Account Access Restriction	10/27/2015	1/18/2016

- **Details**

- Accounts can be designated or created for system-to-system interaction.
- System-to-system accounts will only have access to browserless features (phase 2).

- **What you need to do**

- CAMs must designate existing system-to-system accounts.
- CAMs must create desired system-to-system accounts.

Access Control Feature	Preliminary Sandbox/Training Availability	Preliminary Production Availability
Stronger User Credentials	8/27/2015	10/29/2015

- **Details**

- Passwords for non-system accounts will expire after 126 days.
- Minimum password length for all accounts will be increased to 10 characters.
- Notifications will be sent before passwords expire.

- **What you need to do**

- Update passwords for all accounts to meet password length requirements.
- Change non-system account passwords at least every 126 days.

<b>Access Control Feature</b>	<b>Preliminary Sandbox/Training Availability</b>	<b>Preliminary Production Availability</b>
Self-service Enhancements	9/30/2015	11/4/2015

- **Details**
  - Users will be able to retrieve user IDs and reset passwords by answering predefined security questions.
- **What you need to do**
  - Set up security questions and answers.



Access Control Feature	Preliminary Sandbox/Training Availability	Preliminary Production Availability
Forced Logouts	10/27/2015	12/15/2015

- **Details**
  - PJM will require users to re-authenticate after 30 minutes of inactivity.
  - PJM will require users to re-authenticate every 24 hours regardless of length of activity.
  - PJM.com will not be impacted.
- **What you need to do**
  - Nothing

Access Control Feature	Preliminary Sandbox/Training Availability	Preliminary Production Availability
Geo-Location Adaptive Security	2/24/2016	3/30/2016

- **Details**
  - PJM will require users logging in from outside the U.S. to answer two security questions.
- **What you need to do**
  - Set up security questions and answers.

Access Control Feature	Preliminary Sandbox/Training Availability	Preliminary Production Availability
Multi-Factor Authentication	12/2/2015	2/17/2016

- **Details**

- CAMs will be required to use multi-factor authentication when logging into Account Manager only.
- Other users can opt in to this feature.
- PJM will define the supported authentication factors.

- **What you need to do**

- CAMs should obtain/set up the identified authentication factors.
- Users can opt in to the multi-factor authentication feature.

## Current state

- Refreshed, Legacy and PJM.com applications are on different single sign-on groups.

## Upgrade will be done in phases

- Applications will be migrated between single sign-on groups.
- After the upgrade, all applications will be part of the same single sign-on group.

- Single sign-on across different groups will be non-functional during the upgrade.
- Users will continue to perform separate logins for applications in different single sign-on groups as is the case today.

- Update PJM browserless utility
  - It will work with both versions of the single sign-on solution.
- Update any custom code to handle new authentication feature:  
<http://www.pjm.com/~media/etools/pjm-browserless-authentication-guide.ashx>



# Single Sign-On – Preliminary Timeline

Phase	Application Group	Sandbox/Training Availability	Production Availability
Phase 1	<ul style="list-style-type: none"><li>Bulletin Board</li><li>Gas Pipeline</li><li>Messages</li></ul>	7/30/2015	9/1/2015
Phase 2	<ul style="list-style-type: none"><li>Account Manager</li><li>Billing Line Item Transfer</li><li>Data Miner</li><li>Emergency Procedures</li><li>Post Contingency Local Load Relief Warning</li><li>Voting</li></ul>	8/15/2015	9/15/2015
Phase 3	<ul style="list-style-type: none"><li>Data Viewer</li><li>ExSchedule</li><li>InSchedule</li><li>Power Meter</li></ul>	8/30/2015	9/30/2015



# Single Sign-On – Preliminary Timeline

Phase	Application Group	Sandbox Availability	Production Availability
Phase 3	<ul style="list-style-type: none"><li>Resource Tracker</li><li>Salesforce Member Community</li></ul>	8/30/2015	9/30/2015
Phase 4	OASIS	10/5/2015	11/16/2015
Phase 5	<ul style="list-style-type: none"><li>eCredit</li><li>eDataFeed</li><li>eDART</li><li>eFTR</li><li>eLRS</li><li>eGADs</li><li>eMKT</li><li>eRPM</li><li>MSRS</li></ul>	10/20/2015	12/1/2015
Phase 6	PJM.com	Not Applicable	2/26/2016



Please contact the tools security team at [tools-security@pjm.com](mailto:tools-security@pjm.com) with questions.