



# Maintaining PJM Tool Availability

Foluso Afelumo



# Concurrent Sessions

- Limit the number of concurrent authenticated sessions (tokens)

# Usage Rates

- Limit the request rates against the PJM tools

## 1. Deny access

- 26<sup>th</sup> attempt is unsuccessful

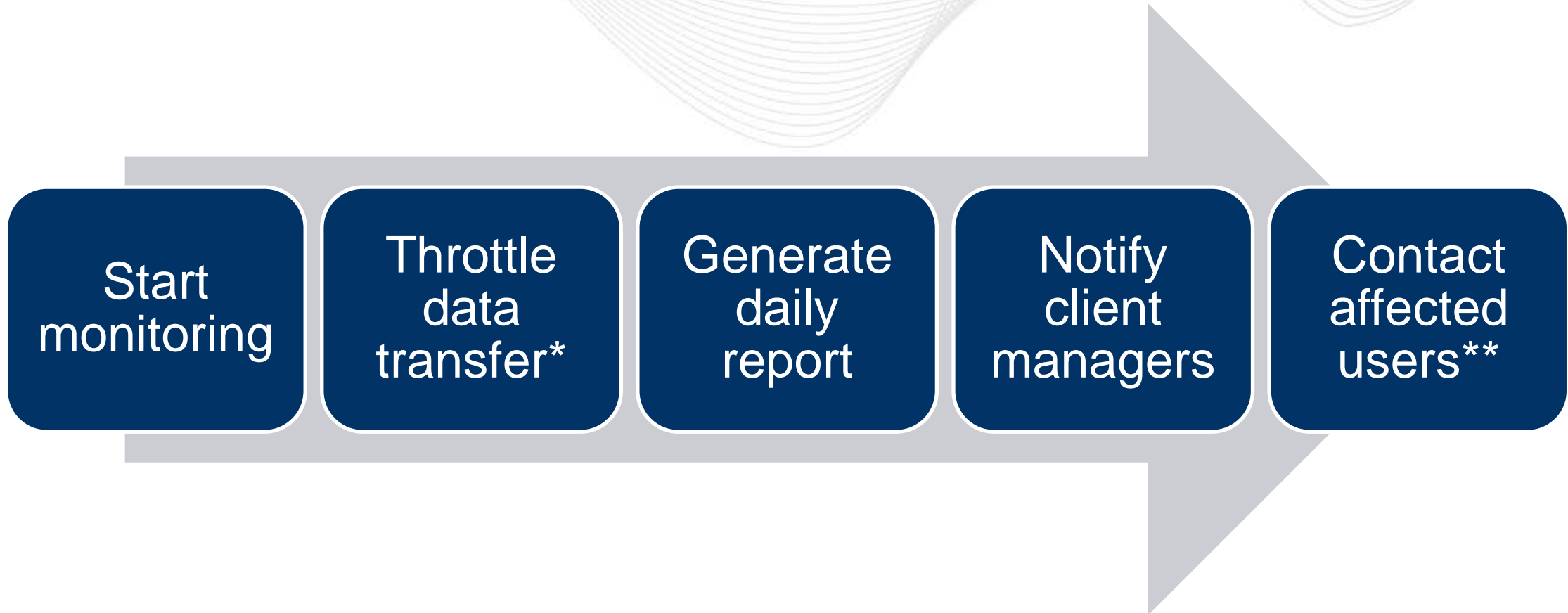
## 2. Invalidate next expiring session

- Session with longest inactivity time is destroyed on 26<sup>th</sup> attempt

## 3. Invalidate oldest session

- 1<sup>st</sup> created session is destroyed on 26<sup>th</sup> attempt

- March
  - Production implementation



\* Whenever a user goes over the maximum request rate, the response will be an http-503 error

\*\* We will contact affected users when we are able to identify them

- Monitoring will be for a request rate of 10 requests/ half-second
- Data transfers throttled for excessive requests
- The impact of throttling will be a response code of HTTP-503 instead of the expected data
- Data transfer will resume once the throttling period (half-second) is completed.

- **December**
  - December 19<sup>th</sup> – Production implementation

- If you have questions, please call your client manager and provide the exact error you're seeing – it will help determine if you're being throttled by the system or not.