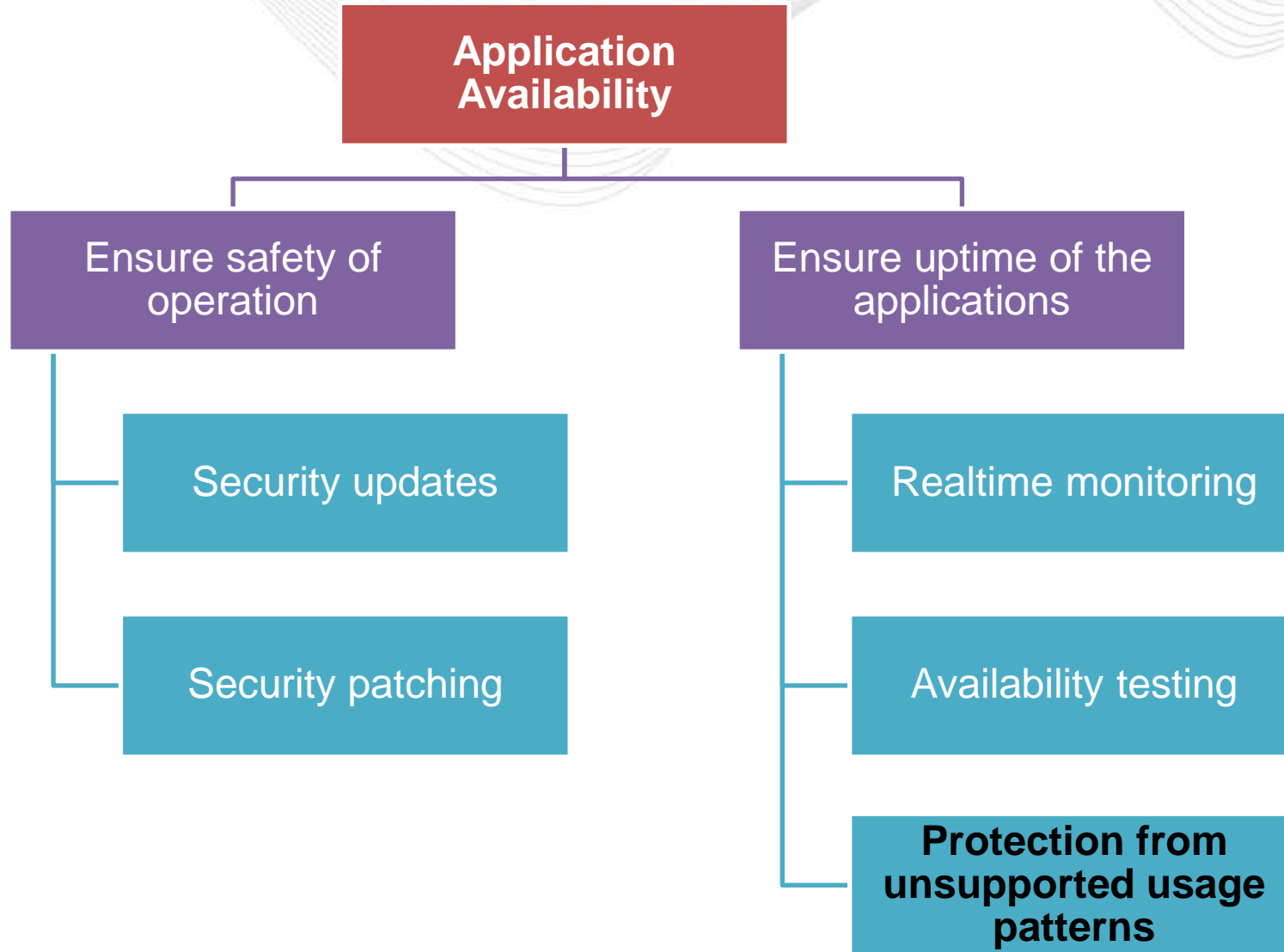




Maintaining PJM Tool Availability

Foluso Afelumo
Tech Change Forum



Why

- Ensure equitable access to PJM systems
- Allow users to address potentially unauthorized account usage

Concurrent Sessions

- Limit the number of concurrent authenticated sessions (tokens)

Usage Rates

- Limit the request rates against the PJM tools

Concurrent Sessions

- **Limit the number of concurrent authenticated sessions (tokens)**

Usage Rates

- **Limit the request rates against the PJM tools**

Details

- User sessions limited to 25 sessions per user

Impact

- Automated processes/scripts/tools that create sessions

Action required

- Log out of sessions when not in use
- Re-use existing sessions

1. Deny access
 - **26th attempt is unsuccessful**
2. Invalidate next expiring session
 - **Session with longest inactivity time is destroyed on 26th attempt**
3. Invalidate oldest session
 - **1st created session is destroyed on 26th attempt**

- October
 - Connect with users who are over threshold
 - Mid-October – enable in sandbox
 - Finalize approach – communicate at October TCF
- November
 - Implement on 11/21

- **Covered now**

Account Manager, Billing Line Item Transfer, Bulletin Board, Data Miner, Emergency Procedures, ExSchedule, FTR Center, Gas Pipeline, InSchedule, Markets Gateway, Messages, Planning Center, Post Contingency Local Load Relief, Power Meter, Resource Tracker, Voting

- **Covered in the future**

eCredit, eRPM, MSRS, OASIS

- **Not in scope**

eDataFeed

Concurrent Sessions

- **Limit the number of concurrent authenticated sessions (tokens)**

Usage Rates

- **Limit the request rates against the PJM tools**

Details

- Request rates to tools to be enforced.

Impact

- Automated scripts that interact with APIs
- Screen scrapers

Action required

- Adjust usage pattern to meet published usage rates

Applications allowing 600 requests per minute

Applications with APIs

Data Miner

EdataFeed

ExSchedule

Gas Pipeline

InSchedule

Power Meter

Applications without APIs

Account Manager

Billing Line Item Transfer

Bulletin Board

Planning Center

Post-Contingency Local Load Relief

Resource Tracker

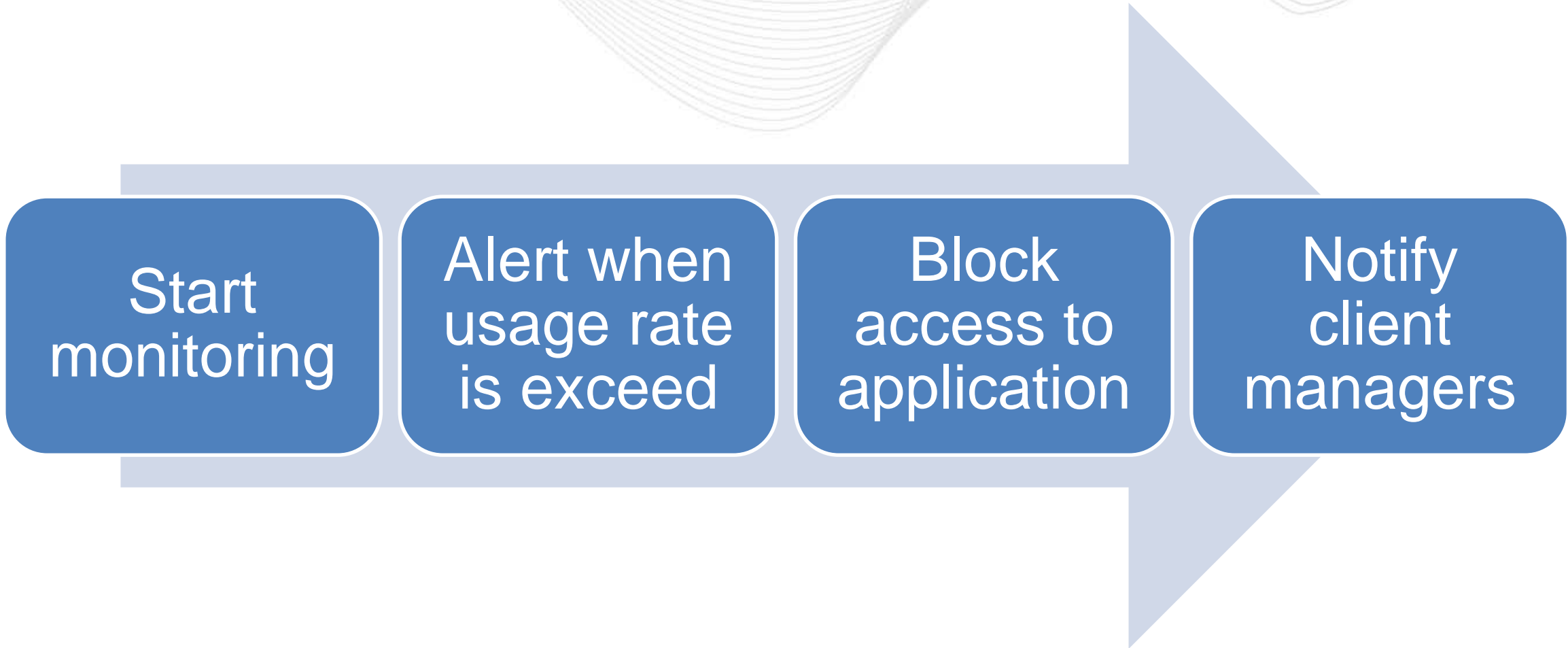
Voting

Applications allowing greater usage

Application	Requests/minute
Emergency Procedures	1200
oasis.pjm.com standalone pages	1200
Markets Gateway	1800

- oasis.pjm.com standalone page restrictions cover
 - http://oasis.pjm.com/doc/linesout_new.txt
 - <http://oasis.pjm.com/drate.html>
 - <http://oasis.pjm.com/system.htm>
 - <http://oasis.pjm.com/doc/projload.txt>

- September / October
 - Reach out to users currently exceeding threshold
 - Identify usage rates for other applications
- November
 - Communicate next steps



- If you believe your access is being blocked, please contact your client manager OR PJM's customer service hotline.

