eDART XML May 2020 Enhancements

eDART XML Forum Meeting
05/06/2020

- General Discussion Topics

- May 2020 Enhancements

- Future Enhancements

- Question and Answer Resolution

General Discussion Topics

Browserless

- Phase 1: PJMCLI Integration

- Phase 2: New browserless functionality (Q1 & Q2 2021)

  – Refreshed endpoints and new functionality will be delivered incrementally

- Parallel Production/Training (Nov 2020 thru Q4 2021)

- Production "Go-Live" (Q4 2021)

  – Retire filetransfer jar file

With the eDART refresh, management of eDART accounts will be migrated to Account Manager.

In preparation for that:

- Use Account Manager User ID for new eDART account requests.
- Update email addresses for existing accounts.
- Clean up dormant and invalid accounts.

Emails to edarthelp@pjm.com and eDART team members now used to create Salesforce cases.

- Enables better tracking of open eDART help requests.

- Email responses and status updates will be sent via Salesforce (from e2cp… .salesforce.com).

- More information available in the Member Community.

Salesforce Case Status Flow
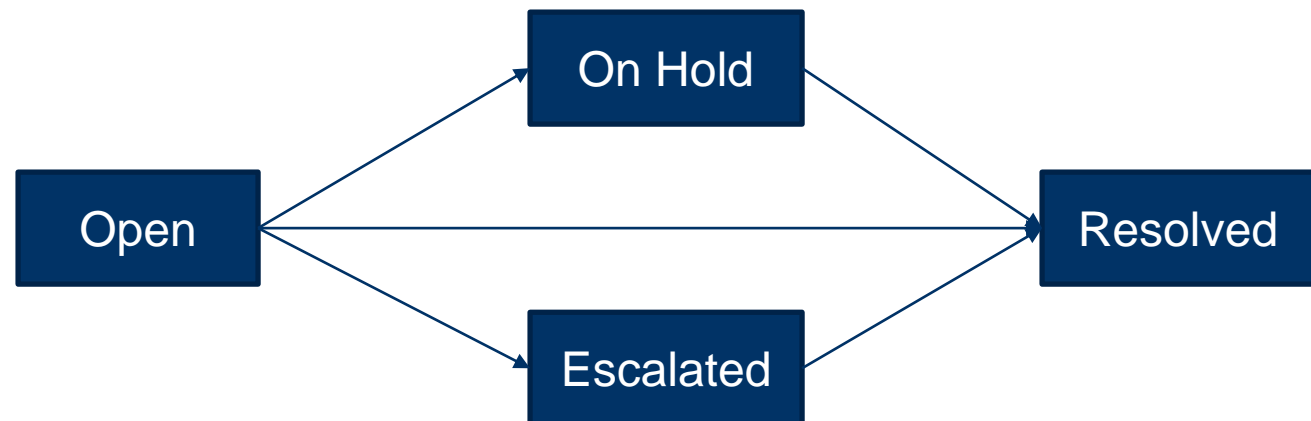
Model Build Date: Wednesday, May 27th

eDART Advance Model Build Date: Wednesday, May 13th

- – Download updated equipment lists in eDART
- – Download updated Equipment List/Complete Descriptions file: https://edart.pjm.com/reports/equiplist.csv
- – Transmission Tickets can be created or updated for future equipment

May 2020 Enhancements

Production release of May enhancements scheduled for Thursday, May 28th.

- eDART unavailability will be announced at least 3 business days prior.

Sandbox release scheduled for May 14th.

As discussed during the March 2020 eDART Forum meeting, the GO Survey XML functionality is being retired.

- XML functionality is rarely used
- No valid XML responses since 2017; few uploads with mixed quality

The .TXT upload functionality remains available to respond to surveys for multiple units at a time.

If you have any questions, concerns, or feedback please contact EdartGOSurvey@pjm.com.

Voltage Control Philosophy information, which was populated and updated based on GO feedback, is no longer the primary method for communicating the nature of a unit's Voltage Schedule to PJM.

As a result, the <voltageControlPhilosophy> tag is being removed from generators and generators4trans downloads.

Updated XML Documents available at
https://pjm.com/pub/etools/edart/xmldocs/xmldoc.html

Text & CSV files auto-generated by eDART are not opening up properly in Notepad.

- Carriage returns not being handled properly leading to a block of text.

Files have been fixed to properly handle carriage returns and display line breaks.

Before

After

Model Sharing Non-Disclosure Agreement is currently signed monthly in eDART by transmission users.

– Available as XML upload

Issues:

- No validation on name and email address submitted.

- PJM manually deleting invalid signoffs & users needing to re-sign the NDA

Enhancements:

- Check for valid email addresses.

- Non-corporate email addresses (e.g. Gmail, Yahoo) not allowed.

Future Enhancements – August 2020

The linesout (https://edart.pjm.com/reports/linesout.txt) and linesout_new (https://edart.pjm.com/reports/linesout_new.txt) files were designed to be easily read by users but it has been observed that several users are now using programs to scrape the data from the files.

The information in the files is available via XML downloads in eDART (emsoutage/ems_outage and toimwg) and anyone with an automated download process should utilize the eDART XML download option.

August 2020 Updates:

- Attempts to download the linesout and linesout_new files will be throttled.

- Throttling being extended to other external eDART files
  - Files are available when new data is available or after throttle time; whichever is sooner.

- External files will also be available via the Transmission Tickets Menu in eDART.
  - Option to select which files to download.
  - Zip file will be downloaded with selected files.

File	Update Frequency	Throttle time (minutes)
Voltage Limits	Daily	30
Equipment List/Complete Descriptions	Quarterly	30
Linesout	5 minutes	5
Linesout_new	5 minutes	5
Ratings	Twice a Day	30
Temporary Ratings	Twice a Day	30
NERC Alert Ratings Changes	Twice a Day	30
TERM Reasons List	Daily	30
RTEP Tickets	5 minutes	5
NERC Alert Linesout	Daily	30

Current State

- There are cut-in tasks that if not completed, can hold up the energization of cut-in equipment. e.g. Monitored Priority, Ratings, Contingency, Connectivity, SE Override, Telemetry
- There is limited TO visibility to current statuses of the cut-in tasks.

Future eDART enhancement to provide the status of the cut-in tasks on the transmission tickets.

New <cutInInfo> section will be added to Transmission Tickets downloads to display the cut-in details and tasks status.

```
<cutInInfo>
  <cutInTitle>New Transformer</cutInTitle>
  <cutInStatus>Complete</cutInStatus>
<cutInTask>
    <name>Rating</name>
    <status>Complete</status>
 </cutInTask>
<cutInTask>
    <name>Connectivity</name>
    <status>Complete</status>
 </cutInTask>
<cutInTask>
    <name>Telemetry</name>
    <status>Complete</status>
 </cutInTask>
</cutInInfo>
```

New download called 'cutinreport' will return a list of transmission tickets and their <cutInInfo>.

Parameters:

- start date

- end date

- ready (T/F)

- not ready (T/F)

- includenotify (T/F)

```
<cutInReport>
 <cutInInfo>
    <ticketId>1</ticketId>
    <cutInTitle>New Transformer</cutInTitle>
    <cutInStatus>Complete</cutInStatus>
    <cutInTask>
     <name>Rating</name>
     <status>Complete</status>
    </cutInTask>
 </cutInInfo>
 <cutInInfo>
    <ticketId>2</ticketId>
    <cutInTitle>Retire CB2</cutInTitle>
    <cutInStatus>Sufficient</cutInStatus>
    <cutInTask>
     <name>Rating</name>
     <status>Near Term</status>
    </cutInTask>
 </cutInInfo>
<cutInReport>
```

Equipment for switching (takeout/restore) are usually out for a short duration at the beginning or the end of an outage ticket.

Currently, TOs are either

- noting these in the description of work,

- adding the equipment to the ticket with staggered dates or

- adding the equipment to the ticket for the duration of the outage.

Future eDART functionality to clearly identify the equipment for takeout and/or restore only.

New Equipment Status will be available to identify equipment for takeout and/or restore only on Transmission Ticket uploads:

- T ➔ Takeout Only
- TR ➔ Takeout & Restore
- R ➔ Restore Only

New <takeout_restore> section will be added to transmission ticket downloads for takeout and restore equipment.

```
<takeout_restore>
    <equipment ta_id="12345">
        <status>T</status>
    </equipment>
    <equipment ta_id="54321">
        <status>TR</status>
    </equipment>
</takeout_restore>
```

Current State

- SVCs must be in a separate transmission ticket.

- Other equipment out as part of the SVC job must be in a separate transmission ticket; including the SVC breaker.

Future enhancement to allow users to create transmission tickets with mixture of SVCs and non-SVCs

SVCs (equipment type = GEN) can be included on the same transmission ticket as other equipment types.

- SVC can be O (open) if out of service or C (closed) if in service.
  - Min and Max MVAR values not required.
- SVC can be used for takeout and restore.

New Equipment Status will be available to identify if ticket is for a reduction in SVC output: RE ➔ Reactive.

- Min and Max MVAR values required.
  - <min_var> changed to <min_mvar>
  - <max_var> changed to <max_mvar>

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