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EBS Transition – Access Validation

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March 2013

Access Validation Phase

A reminder;

- Will only start after all external test phases completed
- Will not start until a defined period before cut-over
- Is a validation phase **not** a test phase
- Will only incorporate production architecture – at both National Grid and MP sites
- Any configuration change required to enable access validation will be 1) easily reversible 2) identical to changes required for go-live

Access Validation Phase

Purpose;

- To demonstrate that EBS & MP production EDL & EDT systems can connect at the application level
- Allows National Grid to observe behaviour when EBS physically connects to all EDL stations
- Allows National Grid to rehearse transition activity

Mitigates two main risks;

1. Firewalls/ACLs have been changed since successful circuit connectivity tests
2. Applications unable to connect even though the firewalls & ACLs have been programmed

Access Validation Phase

Limitations and restrictions;

- Limited data exchange possible (to be clarified)
- Only validates application to application connectivity – not data and/or message transfers
- Practical limitation on the time available for EDL (as during AV, control rooms communicate by telephone)
- More flexibility may exist for the timing of EDT access validation
- Can only be completed using participant production EDT and EDL

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EDL Access Validation Proposals

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EDL Access Validation Proposals

- Performed in the context of an outage to production EDL service on BM
- There will be the familiar backup telephone instruction capability throughout
- There will not be an interruption to EDT services during EDL access validation
- Propose three cycles of EDL AV – the third as a contingency only
- After the EDL AV cycles, only a small acceptable number of understood issues should remain

EDL Access Validation Proposals

- EDL Outage will be notified to the market in the normal manner & with reasonable notice
- The EBS EDL back-end processing will be switched off – instructions can't be sent, redecs can't be processed
- The production EDL configuration will be loaded into the EBS system
- At the published start-time National Grid Control Room give go-ahead & revert to telephone instructions
- The BM EDL service is ceased
- National Grid perform verification checks

EDL Access Validation Proposals

- The EBS EDL Communication Server (ECS) processes are started
- *The EBS EDL application processes (which provide responses) are NOT started*
- Participants can expect
  - A connection attempt from EBS ECS
  - To respond with a VERSON
  - To complete handshaking to the delivery of PATH / NOPATH responses
- Any submission will not receive a response
- EDL clients should recognise a failed submission

EDL Access Validation Proposals

- National Grid will verify the successful connections against the attempted list of Control Points
- National Grid gather appropriate log files for subsequent analysis
- The EBS ECS processes are stopped
- Participants should see a primary disconnect
- The BM EDL Service is restarted
- Participants should see a connection attempt and a return to full service
- The EBS EDL production configuration is removed

EDL Access Validation Proposals

- National Grid will provide feedback to nominated participant email accounts

Remedial action;

- Depends on the number and nature of failures
- A large number of failures will result in a repeated access validation attempt (after corrective action)
- A small number or individual failures
  - May require repeated individual connectivity tests
  - Options may be available to do individual access validation attempts by reverting to telephone instructions for single control points

EDL Access Validation Proposals

What is a successful outcome?

- Over 95% of EDL connections to EBS are successful
- The remaining failures are understood and the corrective action is known and achievable

Highly desirable

- Different resilient states/sites are validated
- Failover of EBS EDL services are validated in second EDL Access Validation
  - EBS EDL connections are established
  - Partial EDL failure is simulated
  - Full EBS EDL connectivity re-established

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EDT Access Validation Proposals

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EDT Access Validation Proposals

- Will not require any outage of BM production EDT services
- Will require the production EBS FTP login credentials to be known (and used) by participants (for all options)
- Once validation is successful for a TA, they will not need to participate again
- Two windows (with a third for contingency) are anticipated
- A mutual decision to be made regarding the length of each window – could be over several days

EDT Access Validation Proposals

- Three main options are being proposed for discussion
- The options need not be exclusive
- We can consider a possible choice of option for individual TAs

EDT Access Validation Proposals

Option 1 – Manual FTP connection

- Requires the use of (e.g.) command line FTP or a 3rd Party FTP utility
- From the participant production EDT server
  - Participant makes manual FTP connection to EBS using login credentials provided
  - Ensures that submission and notification folders are seen
  - Ensures a (dummy) file can be copied to submission folder
  - Ensures a (dummy) file can be read from notification folder

EDT Access Validation Proposals

Option 1 Pros & Cons

- Pros:
  - Participants have control over checks performed
- Cons:
  - No consistency of checks performed across participants
  - Participants need to be able to carry out manual FTP from their production EDT server

EDT Access Validation Proposals

Option 2 – Scripted FTP File Transfers

- A plain text file containing a series of FTP commands & dummy EDT file distributed to participants
- Participants accept script & use to
  - Establish an FTP connection (with input credentials)
  - Transfer a (supplied) dummy file to submissions folder
  - Retrieve a dummy file from notification folder
  - Close the connection
  - Output a summary report of the connection session

EDT Access Validation Proposals

Option 2 Pros & Cons:

- Pros:
  - Consistent checks are made across participants
  - Ensures a minimum level of checks performed
  - Evidence provided
- Cons:
  - Possible FTP command inconsistencies between differing operating systems and FTP utilities
  - Possible security concerns on Participant server?

EDT Access Validation Proposals

Option 3 – production system EDT submission

- Uses the participant production EDT software on the production system
- Software re-configured to use EBS credentials
- One or more submissions made to EBS EDT server
- Acknowledgement/notification files read from EBS
- Great care to be taken by participant to ensure
  - sequence numbers of production files not impacted
  - Validation and production submissions not confused

EDT Access Validation Proposals

Option 3 Pros & Cons

- Pros:
  - Closest possible validation of production configuration
  - Involves application to application processing
- Cons:
  - Highest risk option
  - Possible disruption to participant production submissions
  - Possible confusion to participant business users

EDT Access Validation Proposals

- Options choice – either;
  - One option for all
  - Best fit by participant choice
- Scheduling/timing options
  - Validation in pre-scheduled slots
  - Validation at participant's own timing
  - How long should we allow for each participant?
  - How long should we allow for each EDT AV window?

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EBS Transition – EDT Migration Schedule Discussion

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EDT Migration Schedule Discussion

Previously agreed at EBSIT(3) that

- Migration of Participants' EDT should not be a 'big bang'
- Migration of Participants' EDT should involve a 'once-only' configuration change
- EDT migration will be over a period of several days post go-live of EBS
- Migration of participants' EDT will be according to a pre-agreed schedule drawn up by National Grid
- Approximately two hours should be allowed for each participant migration

EDT Migration Schedule Discussion

Previously agreed at EBSIT(3) that

- The schedule will take into consideration participant requirements and resource constraints
- EDT Migration will take place during office working hours only
- Support will be available from National Grid IS and their network partner to support any migration issues
- Fall-back to BM EDT submissions would be available in the short-term

EDT Migration Schedule Discussion

Agreement sought by discussion today;

- What process is followed to draw up the schedule?
- What major criteria need to be considered?

Possible view;

- First few migrations should be those most likely to succeed & those with most support/resource available
- Is that reasonable?
- What criteria do we use to pick these?
- How do we schedule the rest?