GUIDE TO POC TRANSITION TOOL

ASEXML FILE TRANSFORMATION

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AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

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GLOSSARY

Abbreviations and Symbols

Abbreviation	Abbreviation explanation
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
CUST	Customer Data (Transaction Group)
EMMS	[wholesale] Electricity Market Management System; software, hardware, network and related processes to implement the National Electricity Market (NEM)
MACK	Message Acknowledgment
MSATS	[retail electricity] Market Settlement and Transfer Solution
MTRD	Meter Data (Transaction Group)
NEM	National Electricity Market
NER	National Electricity Rules; also often just called the Rules
NMI	[electricity] National Metering Identifier
OWNP	One Way Notification (Transaction Group)
PoC	Power of Choice
SITE	Site Data (Transaction Group)
SORD	Service Orders (Transaction Group)

Special terms

Term	Definition
.ack	Acknowledge file extension
.ac1	Hub Acknowledgement file extension for FTP
Market time	Australian Eastern Standard Time
Participant ID	Registered participant identifier
Rules	National Electricity Rules

INTRODUCTION

Purpose

This guide describes the setup, configuration, and operation of the Power of Choice (PoC) Transition Tool.

Audience

This document is relevant to registered NEM Retailers' technical and software development staff who are responsible for systems implementation.

This guide assumes you have knowledge of:

- The Java application environment.
- The operating system your organisation is using.
- How the NEM systems operate.

How to use this guide

- The references listed throughout this document are primary resources and take precedence over this document.
- Text in this format, indicates a reference to a document on AEMO's website.
- This document is written in plain language for easy reading. Where there is a discrepancy between the Rules and information or a term in this document, the Rules take precedence.
- Glossary Terms are capitalised and have the meanings listed against them.
- *Italicised terms* are defined in the Rules. Any rules terms not in this format still have the same meaning.
- For an explanation of abbreviations or special terms, see the Glossary.

What is in this guide

- Chapter 1 "Introduction" describes what the guide is about, the intended audience, and pre-requisite knowledge.
- Chapter 2 "Overview" explains the PoC Transition Tool's features and functions.
- Chapter 3 "Setup" explains how to setup and configure the PoC Transition Tool as a batch file application or Windows Service.
- Chapter 4 "Configuration options" explains how to customise the PoC Transition Tool's file directory structure, filter masks, and properties file.
- Chapter 5 "Operations" describes the process to transform aseXML files, tool maintenance, and troubleshooting information.
- Chapter 6 "Needing Help" provides guidance for requesting assistance from AEMO.
- Appendix A "Properties file parameters" lists configurable parameters in the PoC Transition Tool's properties file.
- Appendix B "Transaction Type validation" maps r32 and r36 aseXML Transaction Types for translation.

- Appendix C “Transformation rules” describes the mapping rules for transforming r32 files to r36 files and vice versa.

Conventions

Directory and file path examples in this guide use “\” to denote UNIX and Windows path separators, even though the UNIX convention is to use the “/” separator. Where applicable, substitute the “\” separator for the “/” separator.

Related Resources

- PoC Transition Tool
- Java SE download
- Business-to-business procedures

OVERVIEW

What the software is for

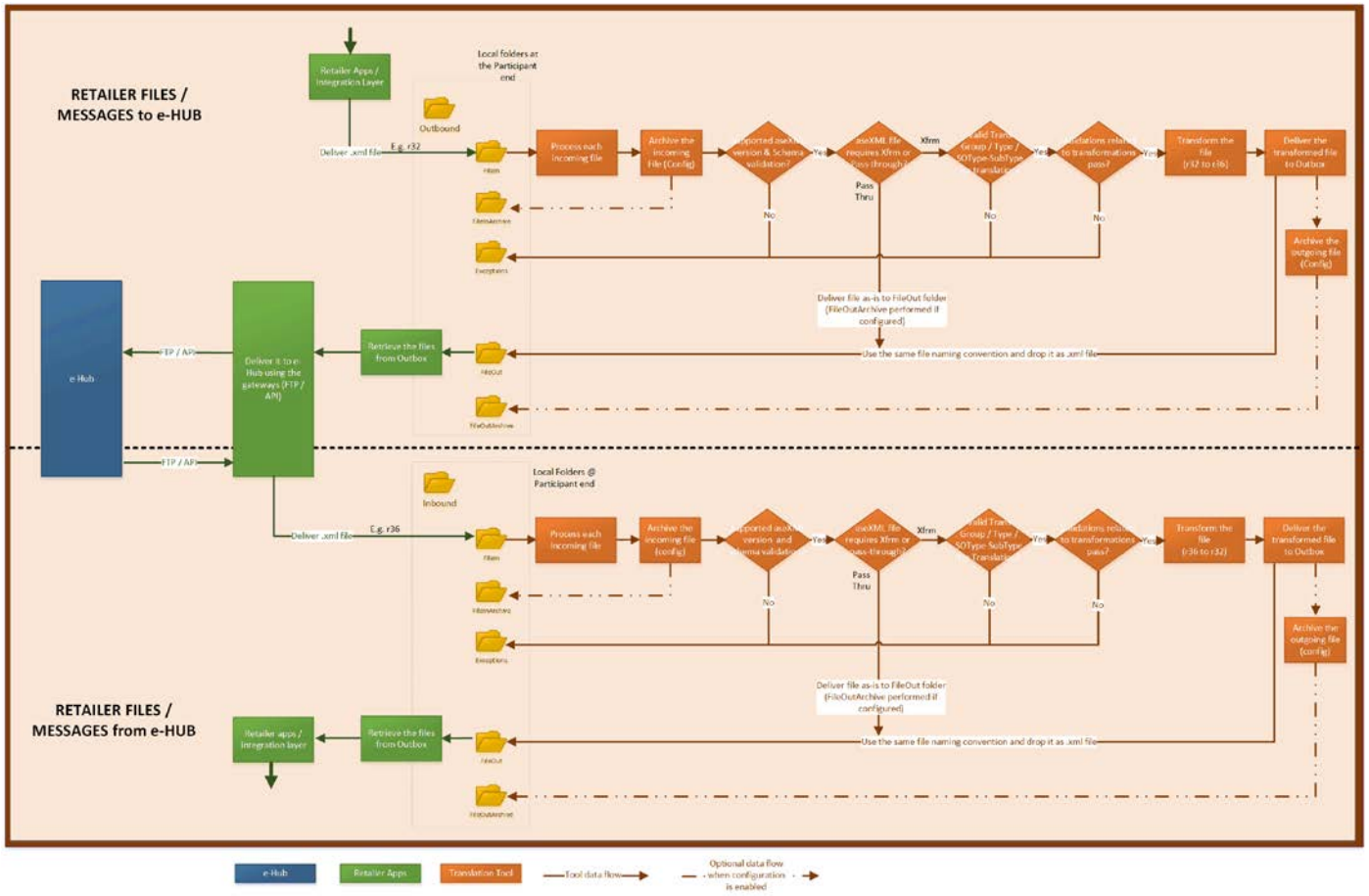
aseXML schema version r36 introduces a number of changes from version r32. AEMO have produced the PoC Transition Tool to help transition to schema version r36. If your systems are compliant with aseXML schema version r36, including the ability to send and receive B2B transactions, this application is not required.

The PoC Transition Tool is a standalone application that translates and transforms aseXML files in .xml or .ack format - B2B r32 files to r36 files to send to the *e-Hub*, and converting B2B r36 files received from the *e-Hub* to r32 files. Transformations are limited to the most commonly used Transaction Types.

The application is designed to be deployed within the participant's system prior to their gateway as shown in Figure 1. You should ensure the participant gateway is r36 compliant to send and receive r36 files, and manage MACK and cleansing of .zip and .ack files.

The e-Hub will not support transformation between r36 and superseded versions, and vice-versa from 1 December 2017.

Figure 1 PoC Transition Tool context diagram



The application can run multiple threads, and allows each thread to be configured to move a subset of aseXML files between directories in local directories.

The software provides the following functions:

- XML schema validation.
- Translate and transform B2B Transaction Groups: Customer Details (CUST), Site Details (SITE), Service Orders (SORD), and Meter Data (MTRD).
- Translate and transform Inbound B2B Transaction Groups: Service Order Response, Amend Meter Route Details, Customer Details Request, Meter Data Notification, Message Acknowledgement, and Transaction Acknowledgement.
- Translate and transform Outbound Transaction Types: Meter Data Missing Notification, Meter Data Verify Request, Customer Details Notification, Service Order Request, Amend Meter Route Details, Message Acknowledgement, and Transaction Acknowledgement.

Note, the application does not:

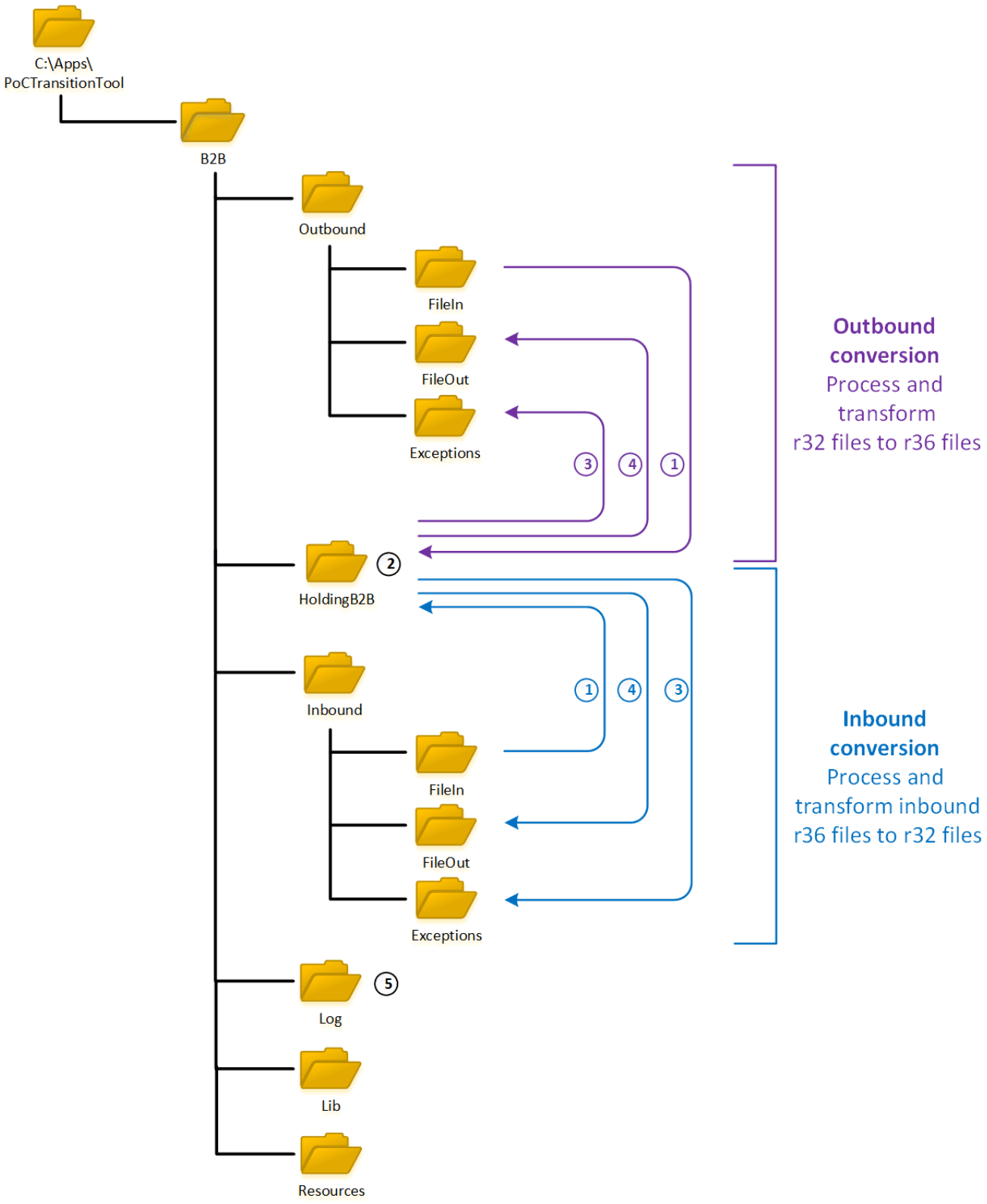
- Generate message acknowledgements of inbound aseXML files.
- Generate transaction acknowledgements of inbound aseXML files.
- Remote file transfers to *B2B e-Hub*.
- Perform file validation that the e-Hub applies.
- Support r25 to r36 transformation or r36 to r25 transformation.

How do you use the software?

The PoC Transition Tool provides and operates in a local directory structure “B2B”, and includes the following subdirectories:

- HoldingB2B - a shared directory for storing and processing temporary Outbound and Inbound source aseXML files.
- Inbound - input and output directories, file archive directories, exceptions directory, and error log files for r36 to r32 file transformation, and r25 and r32 file schema validation.
- Lib - configuration files and the executable files to run the application.
- Log - Inbound and Outbound log files.
- Outbound - input and output directories, file archive directories, exceptions directory, and error log files for r32 to r36 file transformation, and r36 file schema validation.
- Resources – stores aseXML schemas and stylesheets.

Figure 2 PoC Transition Tool directory



An example of the PoC Transition Tool transforming r32 files to r36 files and vice versa is shown in Figure 2 and described below:

1. Polls and searches for .xml, .ack file format — r32 files in the Outbound `FileIn` input directory, and r36 files in the Inbound `FileIn` input directory.

2. Source files are temporarily copied to a `HoldingB2B` directory for validation and processing.
3. If the source file fails validation tests, the Inbound source file is moved to the `Exceptions` directory with a `TT_Error_Inbound.log` file generated in the `Inbound` directory, or Outbound source file is moved to the `Exceptions` directory with a `TT_Error_Outbound.log` error message in the Outbound directory. The previous day's log files are automatically renamed using the filename format `TT_Error_Outbound-YYYY-MM-DD.log` and `TT_Error_Inbound-YYYY-MM-DD.log.`
4. If the source file passes transformation validation tests, r32 files are transformed to r36 files (Outbound), and r36 files are transformed to r32 files (Inbound). r36 transformed files move to the Outbound `FileOut` directory, and transformed r32 files move to the Inbound `FileOut` directory. Source files are deleted from the `FileIn` directory.
5. Root logger files are located in the Log subdirectory as `PoCTT.log` for the current day's log file, and PoCTT-YYYY-MM-DD.log format for previously generated files.

The PoC Transition Tool can also perform schema validation on other aseXML versions. r36 files can be validated by moving the files in the Outbound `FileIn` input directory; r25 and r32 files can be validated by moving the files to the Inbound `FileIn` input directory. The tool can manage these aseXML versions by passing the file as-is (after validating the XML schema) from the input directory to the output directory.

You can configure the application to suit your requirements, including modifying the directory structure, adding multiple threads and filters to prioritise file translation and transformation. For more details, see Configuration options.

System requirements

The recommended system requirements to run the PoC Transition Tool are listed below.

Operating system

- Microsoft Windows Server 2012 or later, or
- UNIX operating system.

Software

- Java Development Kit (JDK) 8 or later.
- Java Runtime Environment (JRE) 8 or later.

System environment

- Connectivity to local file directories.

SETUP

Download and configure the PoC Transition Tool

The following procedure explains how to download and set up the application on Windows and UNIX operating systems. Please ensure all Window directory names not include spaces.

1. Download the PoC Transition Tool from http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Power-of-Choice/TransitionTool.
2. Extract the zip file contents into a local directory. A directory (`B2B`) is created with five subdirectories: `Holding B2B, Inbound, Lib, Log, Outbound, and Resources`.
3. Edit the `B2B\Lib\pocTTEnvironment.bat file` (Windows) or `B2B/Lib/pocTTEnvironment.sh` file (UNIX) to ensure the JRE path variable references the directory path where the JRE executable file is installed on your system. For example, in `pocTTEnvironment.bat`:

```
set JRE=C:\Program Files\Java\jre1.8.0_101\
set PATH=%JRE%\bin;%PATH%
```

4. For UNIX, in all `.sh` files, change Windows line endings (\r\n) to UNIX line endings (\n) in in order to execute the .sh file as a bash script.
5. Edit the `poc_log4J_TransitionTool.xml` configuration file, and check the installation-directory parameter specifies the B2B directory location. For example:

```
<Property name="installation-directory">C:/apps/PoCTransitionTool/B2B</Property>
```

6. Edit the `B2B\Lib\pocTransitionTool.properties` file and if required, customise the directory structure and other properties. For more information, see Configure global and thread properties.
7. For UNIX operating systems, request a system administrator to create a daemon process to call the `pocTransitionTool.sh` shell script in `PoCTransitionTool/B2B/Lib`.

For UNIX operating systems, the shell scripts provided are samples and not a recommendation or requirement. The design and implementation of the application is dependent upon your system and business requirements.

Lib directory contents

The `Lib` directory contains the following files to run the PoC Transition Tool:

- Required JAR files.
- Two properties files (`pocTransitionTool.properties, pdr_log4j-TransitionTool.xml`) that provide parameters for the running instance.
- `pocTransitionTool.bat file` to run the application in Windows.
- `pocTransitionTool.sh` file to run the application in Unix operating systems.
- `pocTTEnvironment.bat` file and `pocTTEnvironment.sh` containing the required environment variable definitions to run the application.
- Five files (`pdrServiceInstall.bat, pdrServiceUninstall.bat, WinRun4J.jar, WinRun4J.exe, WinRun4J64.exe` and `WinRun4J.ini`) to support the running of the application as a Windows service.

- Other .bat files, (for example, `pdrPasswordEncrypt.bat`), .sh files, and property files to manage keys and passwords when file transfers are used instead of mapped directories (an additional feature of the tool).

Remove the application

To remove the application, delete the `\apps\PoCTransitionTool` directory.

Windows service setup

There are a variety of commercial and open source solutions allowing Java applications to run as a Windows service. The application includes a configuration for an open source solution to demonstrate how running the PoC Transition Tool as a Windows service is achieved. The example software is 32-bit, and therefore requires 32-bit Java. Participants need to adapt this example to their choice of software.

The distribution includes five files to run the application as a Windows service:

- `pdrServiceInstall.bat` installs a Java application as a Windows service.
- `pdrServiceUninstall.bat` removes a Java application running as a Windows service.
- `WinRun4J.exe` is a 32-bit Windows wrapper for the 32-bit JRE.
- `WinRun4J64.exe` is a 64-bit Windows wrapper for the 64-bit JRE.
- `WinRun.ini` is a configuration file that defines parameters for creating the Windows service.

Install the application as a Windows service

To install the PoC Transition Tool as a Windows service:

1. Edit the `PoCTransitionTool\B2B\Lib\WinRun4J.ini` file, define the Windows service name in the `service.id parameter`, and update the `vm.location` parameter with the `jvm.dll` file location. For example:

```
service.id=pocTransitionTool
.
.
.
vm.location=C:\Program Files\Java\jre1.8.0_101\bin\server\jvm.dll
```

2. Edit the `pdrServiceInstall.bat` file and update the `HOME` and `JRE` environment variables to suit your environment. For example:

```
set HOME=C:\apps\PoCTransitionTool\B2B
set JRE=C:\Program Files\Java\jre1.8.0_101
```

Note: Check that you have specified an absolute file path otherwise the application will not operate.

3. From the command line in the `PoCTransitionTool\B2B\lib` directory, run the `pdrServiceInstall.bat` file including a name for the Windows service. For example:

```
pdrServiceInstall.bat pocTransitionTool
```

4. Check the Windows service for the pocTransitionTool service. From the **Start** prompt, run the **Services** program and check if the pocTransitionTool is listed. If it is listed, right-click and click **Start** to run the tool.

Uninstall the Windows service

To uninstall the PoC Transition Tool as a Windows service:

1. Check the `pocTTServiceUninstall.bat` file references the correct file path for the PoC Transition Tool. For example:

```
set HOME=C:\apps\PoCTransitionTool\B2B
```

2. Run the `B2B\lib\pocTTServiceUninstall.bat` file from the command line including the name of the Windows service (defined in `service.name` parameter in the `WinRun4J.ini` file). For example:

```
pdrServiceUninstall.bat pocTransitionTool
```

3. Check the Window service console to ensure the tool is uninstalled. From the **Start** prompt, run the **Services** program and check if the process pocTransitionTool is unlisted.

CONFIGURATION OPTIONS

Configure the directory structure

You can modify the directory structure to suit your requirements. For example, adding Exceptions subdirectories to filter files by transaction group or participant ID, or adding archive directories for input and output files.

Modify the directory structure location

The PoC Transition Tool directory location is pre-configured in the `\apps` directory. You can change the B2B directory location. However, for the application to run, you must also update the following parameters in the `B2B\lib\pdrBatcherB2B` properties file with the applicable directory:

- `batcher_local_dir`
- `batcher_holding_dir`
- `batcher_thread_{N}_source_dir`
- `batcher_thread_{N}_dest_dir`
- `batcher_thread_{N}_source_archive_dir` (optional)
- `batcher_thread_{N}_exception_dir`

Add subdirectories

You can create subdirectories in the Exceptions directory to categorise exception files and archiving source and input aseXML files as shown in Figure 2.

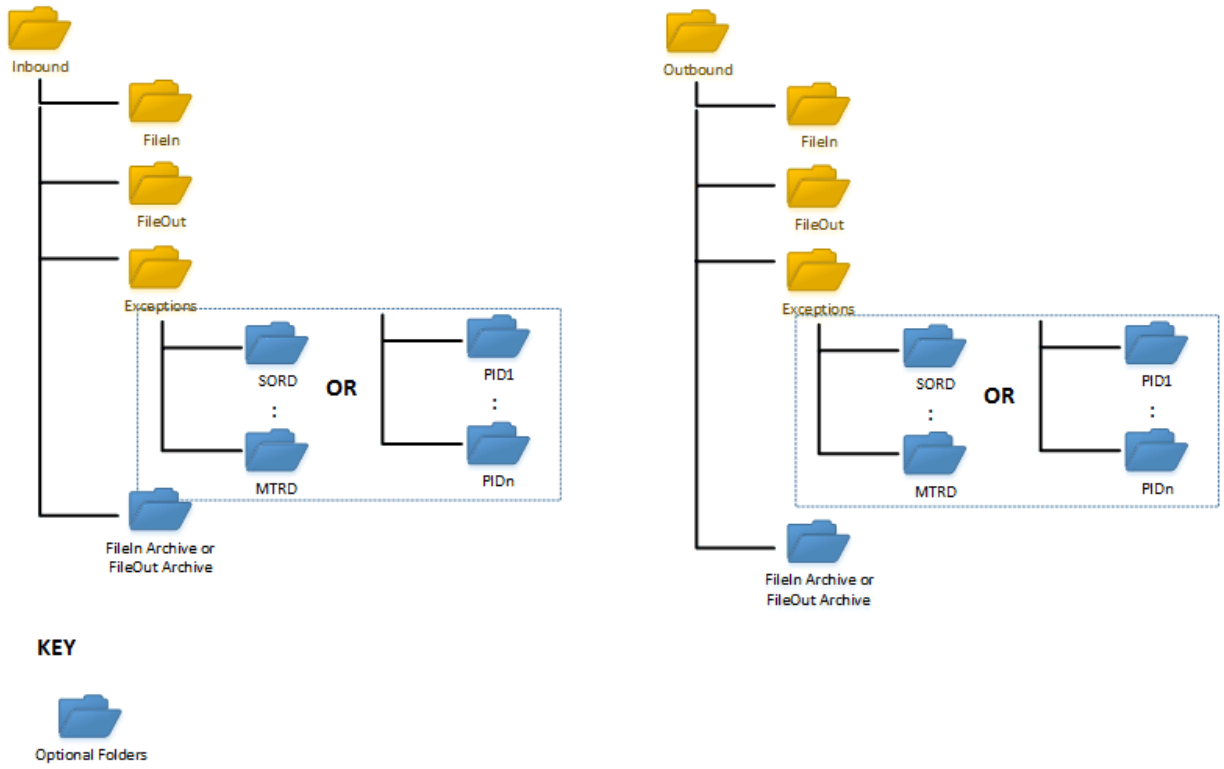
In the Exceptions directory, you can create directories based on:

- Transaction Group, for example SORD and MTRD, or
- ParticipantID, for example PID1 and PIDn.

When the PoC Transition Tool is running, it manages exceptions in the following manner:

1. Checks the Transaction Group directory exists under the Exceptions directory. The incoming aseXML file is scanned for the Transaction Group from the tag location *ase:aseXML/Header/TransactionGroup*. If the tool is unable to derive the Transaction Group from the aseXML file, it takes the Transaction Group as the first four characters of the filename. If the Transaction Group subfolder is available, the exception files are moved into the transaction group subfolder.
2. If there is no subdirectory with the Transaction Group in the Exceptions directory, the tools checks for a subdirectory with the PID name in the Exceptions directory. The PID is obtained in the incoming aseXML file from the tag location *ase:aseXML/Header/From* for Inbound transactions, and from the tag location ase:aseXML/Header/To for Outbound transactions. If the PID subfolder is available, the exception files are moved into the Transaction Group subfolder.
3. If there is no subfolder with the PID in the Exceptions folder, files are allocated to the default Exceptions directory path defined in the properties file.

Figure 1 Optional subdirectories



Configure the logging framework

The PoC Transition Tool's logging system utilises the log4J logging framework to customise logging behaviour. The log4j framework uses a DailyRollingFileAppender that generates a log file for each calendar day.

The log4j framework is configured in the `B2B\lib\poc_log4jTransitionTool` properties file which is beyond the scope of this guide. For more information, see https://logging.apache.org/log4j/2.x/javadoc.html.

Configure global and thread properties

The PoC Transition Tool is preconfigured to suit basic operation suitable for most circumstances. However, the PoC Transition Tool is highly configurable to address your requirements.

The properties file (`B2B\Lib\pocTransitionTool.properties`)contains parameters for global configuration and for each thread. Each parameter is structured in a name-value pair format.

By default, two sets of thread parameters are provided for an Inbound r36 to r32 file transformation, and an Outbound r32 to r36 file transformation. However, you can add and configure any number of threads.

Configuring the properties file enables the PoC Transition Tool to manage a variety of scenarios including:

- Files from different source directories or destination directories.
- Multiple threads to process files based on Transaction Groups, file masks, or other classifications.
- Identify `FileIn` and `FileOut` archive directories to archive files.

The PoC Transition Tool reads the properties file at the start of the application and caches the values. Any parameters defined for a thread override the global properties.

After editing and saving changes to the properties file, restart the application for the changes to take effect.

Many factors affect end-to-end performance, so tuning various properties can deliver improvements for selected file types versus other file types. For a complete listing, description, and examples of property file parameters, see Appendix A.

Configure file masks

Each thread can process files based on filters (known as file masks) specified by the participant. The multi-threading capability combined with the file mask feature provides higher priority handling of selected file types, and concurrent file translation and transformation.

An include file mask is available for each thread. It is defined in the `PoCTransitionTool\B2B\Lib\pocTransitionTool.properties` file in the `batcher_thread_{N}_inc` parameter. A file mask is a comma-delimited list of strings including no strings. The filter is the logical order of the strings. Each string excludes leading and trailing spaces, and includes asterisks (*) and question marks (?) behaving as wildcards. Each asterisk is a series of non-specific characters, and each question mark represents a single non-specific character.

If the `batcher_thread_{N}_inc` parameter is empty or not defined, the include filter is applied to all files in the thread. For more details, see Properties file parameters.

Be careful not to over-specify filters to prevent reducing a file type priority, or not allocating a file to a thread. For each process, it is best practice to also create a thread with no filters.

OPERATIONS

Run the application

1. Add aseXML files to the B2B\Inbound\FileIn directory, or \ B2B\Outbound\FileIn directory.
2. Start the application:
   - In a Windows environment, double click on the `PoCTransitionTool\B2B\Lib\pocTransitionTool.bat` file. Alternatively, from the command prompt, navigate to the Lib directory and start the `pocTransitionTool.bat` file.
   - In a Windows service environment, run the **Services** program as administrator. Search for the pocTransitionTool, right-click and select **Start**. To stop the service, right-click and select **Stop**.
   - In a UNIX environment, run daemon thread mapped to the `PoCTransitionTool/B2B/Lib/pocTransitionTool.sh` shell script.

Troubleshoot application problems

This section provides a general overview of troubleshooting PoC Transition Tool problems, including installation and translation errors in aseXML files.

Table 1 describes solutions to issues during Windows service installation and starting the application.

Table 1 Installation troubleshooting

Problem	Cause	Action
Window Service installation fails.	Using a 64 bit JRE with the 32 bit service wrapper.	1. Run the application interactively (using the bat file in the Lib directory) and if it runs correctly, it confirms the cause. 2. Install a 32 bit JVM or use the 64 bit service wrapper. You can run the application on a 32 bit JVM as the memory footprint is small.
The Windows service application cannot start.	Administrator privileges are required to run the Windows service.	Ensure you select “Run as administrator” option when starting the Windows service.

Resolve translation errors

A file translation error occurs when the PoC Transition Tool processes an aseXML file and identifies XML schema errors, invalid file versions or Transaction Groups, or fails transformation rules for r32 file to r36 file conversion and vice versa. The aseXML file processing errors table provides a general list of translation errors and solutions.

Generally, if the aseXML file is processed but cannot be found in the `PoCTransitionTool\B2B\Inbound\FileOut` or `PoCTransitionTool\B2B\Outbound\FileOut` directory:

1. Look for the aseXML file in the Exceptions directory.
2. Review the log files to identify the translation error:
   1. `TT_Error_Inbound` file in the `PoCTransitionTool\B2B\Inbound` directory or `TT_Error_Outbound` file in the `PoCTransitionTool\B2B\Outbound` directory. The previous

days' error log files use the filename format `TT_Error_Outbound-YYYY-MM-DD.log` and `TT_Error_Inbound-YYYY-MM-DD.log`.

2. Root logger files are located in in PoCTransitionTool\B2B\Log subfolder as PoCTT.log for the current day's log file, and PoCTT-YYYY-MM-DD.log format for previous files.

3. Edit the aseXML file and rectify the error(s).
4. Add the file to the `FileIn` directory for processing.

For PoC Transition Tool running on Windows services, refer to PoCTT.log files first to identify the errors.

The appendices contain reference tables for configuring the application's properties, valid Transaction Types, and transformation rules for schema mapping r32 files to r36 files, and r36 files to r32 files. Refer to these tables to help resolve translation errors in aseXML files.

Table 2 aseXML file processing errors

Cause	Action	Example error message
Outbound r32 to r36 file processing		
aseXML version or format is not supported	▪ Review errors in the log files. ▪ aseXML file versions earlier than r32 are not supported. The application only accepts .xml, .ack, or ac1 file formats	
XML schema validation fails or XSD Schema is not available.	▪ Review errors the log files. ▪ Fix the aseXML according to the error listed in the log file.	[ERROR] 2017-09-12 14:05:23.217 [CONSUMER_1] B2BOutboundTransformer - Error translating file mtrdmbpmccbrma050637306071ihubmdp_Invalid_Body.xml: Error loading XML document from file: The element type "Party" must be terminated by the matching end-tag "</Party>".
The aseXML file contains unsupported Transaction Group(s).	▪ Review errors in the log files. ▪ Check the aseXML file contains the Transactions Groups as configured in the properties file. Other Transaction Groups are not supported, and the file is not transformed.	
The aseXML file contains unsupported Transaction Type(s).	▪ Review the log files. ▪ Refer to the list of Transaction Types as configured in the properties file.	
The file fails the transformation rules.	▪ Review errors in the log files. ▪ Update the aseXML file to comply with the transformation rules as described in Appendix C2 Outbound transformation rules.	[ERROR] 2017-09-11 17:20:34.320 [CONSUMER_1] B2BOutboundTransformer - Error translating file sordhbpmccbrma373462310583powcp Re-en Blank.xml: Error applying

Cause	Action	Example error message
	▪ Move the file to the PoCTransitionTool\B2B\Outbound\FileIn directory for processing.	additional transformations: Comment Line 1 of Special Instructions should contain Life Support Pattern for Transaction ID BPM-ODMRS-CCBRMA373462310583
Inbound r36 to r32 file processing		
The application cannot determine the aseXML version or the aseXML version is not valid.	▪ Review the log files. aseXML file versions earlier than r25 are not supported.	
The aseXML schema is not valid.	▪ Review errors in the log files. ▪ Fix the aseXML file according to the error listed in the log file. ▪ Move the file to the PoCTransitionTool\B2B\Inbound\FileIn directory for processing.	
The aseXML file contains unsupported Transaction Types.	▪ Review errors in the log files. ▪ Refer to the list of transaction types as configured in the properties file.	
The file fails the PoC Transition Tool's transformation rules.	▪ Review the log files. ▪ Update the aseXML file to comply with the transformation rules as described in Appendix C1. ▪ Move the file to the PoCTransitionTool\B2B\Inbound\FileIn directory for processing.	[ERROR] 2017-09-11 22:19:52.889 [CONSUMER_2] B2BInboundTransformer - Error translating file sordm_solarisp_PCGT 3 but 3 spl notes.xml: Error applying additional transformations: Comment Line 3 already exists for Transaction ID SORESP_20170809155919_100100831965. Cannot populate additional Product Codes.
General configuration errors		
FileOut Archive directory is not configured	▪ Review the PoCTT.log file ▪ Configure the FileOut Archive directory path in the pocTransitionTool.properties file.	pdrBatcherHandlerBase - Error destination directory [C:/apps/PoCTransitionTool/B2B/Inbound/FileOut, C:/apps/PoCTransitionTool/B2B/Inbound/FileOutArchive] does not exist: Error changing to non-existent local directory C:/apps/PoCTransitionTool/B2B/Inbound/FileOutArchive java.lang.Exception: Error changing to non-existent local directory C:/apps/PoCTransitionTool/B2B/Inbound/FileOutArchive at au.com.nemmco.Pdr.Batcher.Transport.pdrConnectionLocal.changeDir(pdrConnectionLocal.java:73) ~[AppPdrBatcher.jar:?]

Maintenance

To keep the PoC Transition Tool running smoothly, implement a file purging process so archive directories do not consume free disk space on your local machine. The PoC Transition Tool provides a file purging feature that is configured in the `PoCTransitionTool\B2B\Lib\pdrBatcherB2B.properties` file. Details on file purging parameters are described in Appendix A.

> **Note: Do not configure the B2BHolding directory path to any of the file purging parameters as it impacts the application's operation.**

In addition, you should regularly archive or delete log files in `PoCTransitionTool\B2B\Log` directory to avoid the application consuming storage memory.

It is also recommended to download and use the latest release of PoC Transition Tool at http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Power-of-Choice/TransitionTool. AEMO also provides support for the application for six months from 1 December 2017. For more information, see AEMO's Support Hub.

NEEDING HELP

Service period

The PoC Transition Tool is supported for six months from 1 December 2017, or until the next change to the *B2B* schema and B2B Procedures. This includes changes to the content or additional B2B transactions.

The transformation source code can be provided to Participants to extend the transformation logic to other schema versions if required. AEMO will not provide support related to:

- Delivering design document related to the functionality of the source code.
- Answering queries related to the source code logic.
- Issues resolution when the source code or the delivered JAR is modified.

To request the transformation source code, please send an email to poc@aemo.com.au.

Web portal requirements

The resources listed in this section contain additional related information that may assist you.

- **AEMO's Information and Support Hub**: phone: 1300 AEMO 00 (1300 236 600), and follow the prompts; email: supporthub@aemo.com.au.
- **National Electricity Rules (NER)**: see the Australian Energy Market Commission (AEMC) website http://www.aemc.gov.au.

AEMO's Support Hub

Contacting the support hub

Assistance is requested through AEMO's Support Hub using one of the following methods:

- Phone: 1300 AEMO 00 (1300 226 600) and follow the prompts.
  For non-urgent issues, normal coverage is 8:00 AM to 6:00 PM on weekdays, Australian Eastern Standard Time (AEST).
- Email: supporthub@aemo.com.au
- The Customer Portal, http://helpdesk.preprod.nemnet.net.au/nemhelplite/ allows you to log your own requests for assistance. For access credentials, see your organisation's IT security contact or participant administrator.

Please note that AEMO recommends participants call AEMO's Support Hub for all urgent issues, whether or not you have logged a call in the Customer Portal.

Information to provide

Please provide the following information when requesting assistance from AEMO:

- Your name
- Organisation name
- Participant ID
- System or application name

- Production environment
- Problem description
- Screenshots

For AEMO software-related issues please also provide:

- Version of software
- Properties or log files
- Transaction files in error.

Feedback

Your feedback is important and helps us improve our services and products. To suggest improvements, please contact AEMO's Support Hub.

APPENDIX A. PROPERTIES FILE PARAMETERS

Table 3 lists properties file parameters to configure transformation threads and file purging.

Note that if you create multiple threads for Inbound or Outbound transformation, you must define the parameters for each using the convention {1} for Thread 1 and {2} for Thread 2.

Table 3 pocTransitionTool.properties file parameters

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
Global properties						
1	batcher_data_sources (DS)	Specifies a comma-delimited list of data sources that the software can transfer files. The data source names are labels used to associate other configuration properties with each data source. The software is designed to operate from the local directory or mapped directories but is extensible to FTP servers.	Y	1. local 2. remote	local	batcher_data_sources=local
2	batcher_{DS}_mode i.e. batcher_local_mode	The communication protocol that is used to transfer information to or from a data source. Remote mode communicates using the FTP protocol, and LOCAL mode performs local filesystem operations (including remote-mounted filesystems such as a mapped network drive).	Y	1. local 2. remote	local	batcher_local_mode=local
3	batcher_{DS}_dir	The local data source's home directory path. The home directory can be overridden based on the thread number using batcher_thread_{N}_source_dir or batcher_thread_{N}_dest_dir properties.	Y	<local directory path>	C:/apps/PoCTransitionTool/B2B	batcher_local_dir=C:/apps/PoCTransitionTool/B2B

Properties file parameters

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
4	batcher_threads_active	A comma delimited list of threads to implement. By default, two threads are configured: Thread 1: Process outbound r32 files to r36 files Thread 2: Process inbound r36 files to r32 files	Y	Thread numbers separated by commas	1,2	batcher_threads_active=1,2
5	batcher_holding_dir	The local directory where the software can place files during processing. The holding directory needs to be local to the software instance for performance and reliability.	Y	<local directory structure>	C:/apps/PoCTransitionTool/HoldingB2B	batcher_holding_dir=C:/apps/PoCTransitionTool/HoldingB2B
6	batcher_polling_interval	The duration in seconds between successive searches for new files (when the thread is not otherwise occupied). This property is overridden by batcher_thread_{N}_polling_interval property in a thread.	Y	Any integer	60	batcher_polling_interval=60
7	batcher_fail_interval	The waiting period in seconds before attempting to reconnect after a connection failure.	Y	Any integer	60	batcher_fail_interval=60
8	batcher_timeout	The duration in seconds to translate a file. If file translation takes longer than specified in this property, the thread aborts the transfer.	Y	Any integer	200	batcher_timeout=200
9	pocTransitionTool_resources_dir	The directory path for XML schema and stylesheets.	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Resources	pocTransitionTool_resources_dir=C:/apps/PoCTransitionTool/B2B/Resources
10	application_extension_class	Extension class referring to the translation logic to be executed	Y	au.com.nemmco.transform.B2BExtension	au.com.nemmco.transform.B2BExtension	application_extension_class=au.com.nemmco.transform.B2BExtension

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
Thread 1: Outbound r32 to r36 file transformation						
9	batcher_thread_1_description	A description for this thread.	N	Text	Outbound Retailer Files	batcher_thread_1_description=Outbound Retailer Files
10	batcher_thread_1_source	The data source where files are retrieved for this thread.	Y	1. local 2. remote	local	batcher_thread_1_source=local
11	batcher_thread_1_source_dir	The home directory path where the software looks for files for this thread. This property overrides the batcher_{DS}_dir property, i.e. batcher_local_dir	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Outbound/FileIn	batcher_thread_1_source_dir=C:/apps/PoCTransitionTool/B2B/Outbound/FileIn
12	batcher_thread_1_dest	The destination data source for files processed for this thread.	Y	1. local 2. remote	local	batcher_thread_1_dest=local
13	batcher_thread_1_dest_dir	Specifies the home directory path where the software transforms and writes output files. This property overrides the batcher_{DS}_dir property, i.e. batch_local_dir. If the transformed file is to be archived, an archival directory must be created and listed.	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Outbound/FileOut,C:/apps/PoCTransitionTool/B2B/Outbound/FileOutArchive	batcher_thread_1_dest_dir=C:/apps/PoCTransitionTool/B2B/Outbound/FileOut,C:/apps/PoCTransitionTool/B2B/Outbound/FileOutArchive
14	batcher_thread_1_file_translator	Specifies the transformation algorithm when a file is processed.	Y	B2B_TRANSFORM_OUTBOUND_R32R36 B2B_TRANSFORM_INBOUND_R36R32	B2B_TRANSFORM_OUTBOUND_R32R36	batcher_thread_1_file_translator=B2B_TRANSFORM_OUTBOUND_R32R36
15	batcher_thread_1_inc	Specifies a comma-delimited list of strings to use as include masks.	Y	Any masks	*.xml, *.ack	batcher_thread_1_inc=*.xml,*.ack
16	batcher_thread_1_polling_interval	Specifies the duration in seconds between new file searches. The default value is the batcher_polling_interval property value. A defined	N	Any integer	60	batcher_thread_1_polling_interval=60

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
		value for this property overrides the batcher_polling_interval property value.				
17	batcher_thread_1_process_limit	Specifies the number of files to process before the application thread re-reads the source directory to process additional files. A value of "0" or no defined value means re-reading the list of files from the source directory occurs when the current list is processed. The batcher_thread_1_process_limit property is used in conjunction with the batcher_thread_1_process_order property.	N	Any integer	100	batcher_thread_1_process_limit=100
18	batcher_thread_1_process_order	Specifies the processing sequence of files in the source directory. The batcher_thread_2_process_order property is used in conjunction with the batcher_thread_2_process_limit property. The allowed values are: 1. NAME - processing filenames in alphabetical order. 2. NEWEST - processing filenames in descending date order with the most recent file first. 3. OLDEST - processing filenames in ascending date order, with the oldest file first.	N	1. NAME 2. NEWEST 3. OLDEST	OLDEST	batcher_thread_1_process_order=OLDEST
19	batcher_thread_1_source_archive_dir	Specifies the source archive directory. The processing thread moves processed input files to the source archive directory instead of deleting those files.	N	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Outbound/FileInArchive	batcher_thread_1_source_archive_dir=C:/apps/PoCTransitionTool/B2B/Outbound/FileInArchive
20	batcher_thread_1_exception_dir	The exceptions directory path for files failing validations or transformation rules.	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Outbound/Exceptions	batcher_thread_1_source_archive_dir=C:/apps/PoCTransitionTool/B2B/Outbound/Exceptions

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
21	batcher_thread_1_check_file_integrity	Attribute to disable integrity check for .csv or .xml files. By turning it off, the aseXML validation against XSD will not move incorrect formed aseXML messages to the Exceptions directory. Note: Do not set the value of this attribute to 'Y'.	Y	Y, N	N	batcher_thread_1_check_file_integrity=N
22	batcher_thread_1_lifesupport_pattern	Defines how life support information is sent in the special instruction field. If this property is not set, the application assumes that the Special Instruction field contains life support information in the pattern $LS:<V>$, where <V> is Y or N. For example, if batcher_thread_1_lifesupport_pattern is set to |LifeSupport - <V>|, the first CommentLine of SpecialInstructions in the r32 file must contain |LifeSupport - Y| OR |LifeSupport - N| as the prefix.	N	User-defined	N/A	batcher_thread_1_lifesupport_pattern=$LS:<V>$ batcher_thread_1_lifesupport_pattern=|LifeSupport - <V>|
23	batcher_thread_1_b2b_transform_outbound_supported_versions	Supported outbound aseXML file versions. Multiple versions are comma-delimited. If this property is not set; the tool assumes the values of r32 and r36.	Y	Valid aseXML version	r32, r36	batcher_thread_1_b2b_transform_outbound_supported_versions=r32,r36
24	batcher_thread_1_b2b_transform_outbound_supported_transforms	aseXML file versions for transformation. The first file version and transformed file version are separated by a pipe character '|'. If the aseXML version is listed in batcher_thread_1_b2b_transform_outbound_supported_versions but not in the transformation, such versions are not transformed. For example, if the value is r32|r36, r32 file versions are transformed to r36. If r36 file is received, it is delivered as a r36 file. If this property is not set, the tool assumes the value of 'r32|r36'.	Y	User-defined	r32|r36	batcher_thread_1_b2b_transform_outbound_supported_transforms=r32|r36

Properties file parameters

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
25	batcher_thread_1_b2b_transform_outbound_transform_supported_transgroups	Supported transaction groups for transformation. For no defined value, all transaction groups are transformed. If defined, only files with the listed transaction groups are transformed. Files with other transaction groups are sent to the Exceptions directory. If this property is not set, the tool assumes the value of 'SORD'.	N	Valid aseXML transaction groups	SORD, CUST, SITE, MTRD	batcher_thread_1_b2b_transform_outbound_transform_supported_transgroups=SORD,CUST,SITE,MTRD
26	batcher_thread_1_b2b_transform_outbound_transform_supported_transtypes	Supported transaction types for transformation. If defined, only the listed transaction types are transformed. Files with other transaction types are sent to the Exceptions directory. If this property is not set, the tool assumes the values of 'ServiceOrderRequest', 'MessageAcknowledgement', and 'TransactionAcknowledgement'	Y	Valid aseXML transaction types	ServiceOrderRequest, AmendMeterRouteDetails,CustomerDetailsNotification,MeterDataMissingNotification,MeterDataVerifyRequest,MessageAcknowledgement,TransactionAcknowledgement	b2b_transform_outbound_transform_supported_transtypes=ServiceOrderRequest,CustomerDetailsNotification

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
27	batcher_thread_1_b2b_transform_outbound_transform_so_type_subtype_mapping	Each property value comprises of four variables separated by a pipe character '|': 1. r32 service order type 2. r32 service order sub type 3. r36 service order type to be mapped to 4. r36 service order sub type to be mapped to For example: De-energisation|Remove Fuse (Non-Payment)|De-energisation|Remove Fuse If the incoming r32 Service Order Request is 'De-energisation' and sub-type is 'Remove Fuse (Non-Payment)', the file is transformed to r36 file, and service order type is set to 'De-energisation', and sub-type set to 'Remove Fuse'. If the incoming r32 Service Order Type is 'De-energisation' and sub-type is not 'Remove Fuse (Non-Payment)' (OR) the r32 Service Order Type is not 'De-energisation', the file is moved to the Exceptions directory. If multiple values are to be configured, they must be commas separated. For example: De-energisation|Remove Fuse (Non-Payment)|De-energisation|Remove Fuse, Special Read|Check Read|Special Read|Check Read If this property is not set; the tool assumes the mapping values are related to De-energisation, Re-energisation and Special Read service order types.	Y	User-defined	Refer Mapping Sheet; sheet 'SO-Sub Type Mapping'	batcher_thread_1_b2b_transform_outbound_transform_so_type_subtype_mapping=De-energisation|Remove Fuse (Non-Payment)|De-energisation|Remove Fuse, Special Read|Check Read|Special Read|Check Read

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
Thread 2: Inbound r36 to r32 file transformation Note: If multiple threads are configure for Inbound; then the following attributes need to be defined for each of the threads. E.g. The thread# will be {1} for Thread 1 of Inbound and {2} for Thread 2 of Inbound.						
28	batcher_thread_2_description	A description for this thread.	N	Any Text	Inbound Retailer Files	batcher_thread_2_description=Inbound Retailer Files
29	batcher_thread_2_source	The data source where files are retrieved for this thread.	Y	1. local 2. remote	local	batcher_thread_2_source=local
30	batcher_thread_2_source_dir	The home directory path where the software looks for files for this thread. This property overrides the batcher_{DS}_dir property, i.e. batcher_local_dir	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Inbound/FileIn	batcher_thread_2_source_dir=C:/apps/PoCTransitionTool/B2B/Inbound/FileIn
31	batcher_thread_2_dest	The destination data source for files processed for this thread.	Y	1. local 2. remote	local	batcher_thread_2_dest=local
32	batcher_thread_2_dest_dir	Specifies the home directory path where the software transforms and writes output files. This property overrides the batcher_{DS}_dir property, i.e. batch_local_dir. If the transformed file is to be archived, an archival directory must be created and listed.	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Inbound/FileOut , C:/apps/PoCTransitionTool/B2B/Inbound/FileOutArchive	batcher_thread_2_dest_dir=C:/apps/PoCTransitionTool/B2B/Inbound/FileOut,C:/apps/PoCTransitionTool/B2B/Inbound/FileOutArchive
33	batcher_thread_2_file_translator	Specifies the transformation algorithm when a file is processed.	Y	B2B_TRANSFORM_OUTBOUND_R32R36 B2B_TRANSFORM_INBOUND_R36R32	B2B_TRANSFORM_INBOUND_R36R32	batcher_thread_2_file_translator=B2B_TRANSFORM_INBOUND_R36R32
34	batcher_thread_2_inc	Specifies a comma-delimited list of strings to use as include masks.	Y	Any masks	*.xml, *.ack	batcher_thread_2_inc=*.xml,*.ack

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
35	batcher_thread_2_polling_interval	Specifies the duration in seconds between new file searches. The default value is the batcher_polling_interval property value. A defined value for this property overrides the batcher_polling_interval property value.	N	Any integer	60	batcher_thread_2_polling_interval=60
36	batcher_thread_2_process_limit	Specifies the number of files to process before the application thread re-reads the source directory to process additional files. A value of "0" or no defined value means re-reading the list of files from the source directory occurs when the current list is processed. The batcher_thread_2_process_limit property is used in conjunction with the batcher_thread_2_process_order property.	N	Any integer	100	batcher_thread_2_process_limit=100
37	batcher_thread_2_process_order	Specifies the processing sequence of files in the source directory. The batcher_thread_2_process_order property is used in conjunction with the batcher_thread_2_process_limit property. The allowed values are: 1. NAME - processing filenames in alphabetical order. 2. NEWEST - processing filenames in descending date order with the most recent file first. 3. OLDEST - processing filenames in ascending date order, with the oldest file first.	N	1. NAME 2. NEWEST 3. OLDEST	OLDEST	batcher_thread_2_process_order=OLDEST
38	batcher_thread_2_source_archive_dir	Specifies the source archive directory. The processing thread moves processed input files to the source archive directory instead of deleting those files.	N	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Inbound/FileInArchive	batcher_thread_2_source_archive_dir=C:/apps/PoCTransitionTool/B2B/Inbound/FileInArchive

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
39	batcher_thread_2_exception_dir	The exceptions directory path for files failing validations or transformation rules.	Y	<local directory structure>	C:/apps/PoCTransitionTool/B2B/Inbound/Exceptions	batcher_thread_2_source_archive_dir=C:/apps/PoCTransitionTool/B2B/Inbound/Exceptions
40	batcher_thread_2_check_file_integrity	Attribute to disable integrity check for .csv or .xml files. By turning it off, the validation of aseXML against XSD will trap aseXML messages that are not well formed. Note: Do not set the value of this attribute to 'Y'.	Y	Y, N	N	batcher_thread_2_check_file_integrity=N
41	batcher_thread_2_b2b_transform_inbound_supported_versions	Supported inbound aseXML file versions. Multiple versions are comma-delimited. If this property is not set, the tool assumes the values of r32 & r36.	Y	Valid aseXML version	r32,r36	batcher_thread_2_b2b_transform_inbound_supported_versions=r32,r36
42	batcher_thread_2_b2b_transform_inbound_supported_transforms	aseXML file versions for transformation. The first file version and transformed file version are separated by a pipe character '|'. If the aseXML version is listed in batcher_thread_1_b2b_transform_inbound_supported_versions but not in the transformation, such versions are not transformed. For example, if the value is r36|r32, r36 file versions are transformed to r32. If a r32 file is received, it is delivered as a r32 file. If this property is not set; the tool assumes the value 'r36|r32'.	Y	User-defined	r36|r32	batcher_thread_2_b2b_transform_inbound_supported_versions=r36|r32
43	batcher_thread_2_b2b_transform_inbound_supported_transgroups_for_processing	Supported transaction groups for transformation. If defined, only files with the listed transaction groups are transformed. Files with other transaction groups are sent to the Exceptions directory.	Y	Valid aseXML transaction groups	SORD, CUST, SITE, MTRD	batcher_thread_2_b2b_transform_inbound_supported_transgroups_for_processing=SORD, CUST,SITE,MTRD

Properties file parameters

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
		If this property is not set, the tool assumes the values of 'SORD' ,'MTRD'.				

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
44	batcher_thread_2_b2b_transform_inbound_transform_supported_transgroups	If the file or aseXML version is eligible for transformation (based on batcher_thread_2_b2b_transform_inbound_supported_transforms), this property determines if the transaction group is eligible for transformation or pass-through. This enables Retailers to receive r36 files for certain transaction groups (pass-through) and r32 transformed files for other transaction groups. For example: batcher_thread_2_b2b_transform_inbound_supported_transgroups_for_processing=SORD,CUST,SITE,MTRD,OWNP batcher_thread_2_b2b_transform_inbound_transform_supported_transgroups=CUST,SITE,MTRD,OWNP With the above configuration: 1. r36 MRSR, PTPE will be rejected because it is not configured in batcher_thread_2_b2b_transform_inbound_supported_transgroups_for_processing. 2. r36 SORDs are not transformed and is a pass-through because SORD is a valid transaction group in batcher_thread_2_b2b_transform_inbound_supported_transgroups_for_processing, but not configured in batcher_thread_2_b2b_transform_inbound_transform_supported_transgroups. c. r36 CUST is transformed to r32 file because CUST is configured in batcher_thread_2_b2b_transform_inbound_transform_supported_transgroups and	Y	Valid aseXML transaction groups	SORD, CUST, SITE, MTRD	batcher_thread_2_b2b_transform_inbound_transform_supported_transgroups=SORD,CUST,SITE, MTRD

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
		batcher_thread_2_b2b_transform_inbound_supported_transgroups_for_processing. If this property is not set, the tool assumes the values of 'SORD', 'MTRD'.				

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
45	batcher_thread_2_b2b_transform_inbound_transform_supported_transtypes	If the file and transaction group is eligible for transformation (based on the value of batcher_thread_2_b2b_transform_inbound_supported_transforms & batcher_thread_2_b2b_transform_inbound_transform_supported_transgroups), this list will determine if the transaction type is eligible for transformation. If this property is not set, the tool assumes the values of 'ServiceOrderResponse', 'MeterDataNotification', 'MessageAcknowledgement','TransactionAcknowledgement'.	Y	valid aseXML transaction groups	ServiceOrderResponse,AmendMeterRouteDetails,CustomerDetailsRequest,MeterDataNotification,MessageAcknowledgement,TransactionAcknowledgement	batcher_thread_2_b2b_transform_inbound_transform_supported_transtypes=ServiceOrderResponse,SiteAcessNotification
Purge holding and archive directories (To be configured by Participants. The following configurations will not be active in the default property file)						
46	file_purge_configurations	Specifies a comma-delimited list of configurations in the configuration properties file. A NULL value means there are no file system purging configurations.	N	User-defined	N/A	file_purge_configurations=OutboundArchive, InboundArchive
47	file_purge_OutboundArchive_directory	Specifies the local directory for file purging.	N	<local directory structure>	N/A	file_purge_OutboundArchive_directory=C:/apps/PoCTransitionTool/B2B/Inbound/FileOutArchive
48	file_purge_OutboundArchive_retention_time_mins	The maximum age of files in minutes to be retained in the directory.	N	User-defined	N/A	file_purge_OutboundArchive_retention_time_mins=60
49	file_purge_OutboundArchive_purge_frequency_mins	The frequency in minutes the purge operation is run. The default is once every 24 hours.	N	User-defined	N/A	file_purge_OutboundArchive_retention_time_mins=1440

Properties file parameters

S.No	Parameter	Description	Mandatory Value	Allowed Values	Default configured value in the properties file	Example
50	file_purge_InboundArchive_directory	The local directory to purge files.	N	<local directory structure>	N/A	file_purge_InboundArchive_directory=C:/apps/PoCTransitionTool/B2B/Inbound/FileInArchive
51	file_purge_InboundArchive_retention_time_mins	The maximum age of files in minutes to be retained in the directory.	N	User-defined	N/A	file_purge_InboundArchive_retention_time_mins=60
52	file_purge_InboundArchive_purge_frequency_mins	The frequency in minutes the purge operation is run. The default is once every 24 hours.	N	User-defined	N/A	file_purge_InboundArchive_retention_time_mins=1440

APPENDIX B. TRANSACTION TYPE VALIDATION

B.1 Outbound file Transaction Types

Table 4 provides a detailed listing of source file Transaction Types that are validated for Outbound communication. Refer to this table to help resolve validation errors in your files.

Table rows highlighted in red indicate the Transaction Type is not valid and must be removed from the source file so the PoC Transition Tool can successfully transform the file.

Table 4 Transaction Types validation in Outbound source files

Transaction Type (Input to the tool)	Transaction Sub-type	Applies to			PoC Transition Tool				Remarks
		r32	r36	Retailer's Sending aseXML version	Mapping Required	1:1 Mapping	Involves Translation	Result	
Service Order Request	Re-energisation	Y	Y	r32	Y	N	Y	If transformation rules are met, the file is moved to the FileOut directory. Refer to the Transformation Rules table.	
Service Order Request	De-energisation	Y	Y	r32	Y	N	Y		
Service Order Request	Special Read	Y	Y	r32	Y	N	Y		
Service Order Request	Miscellaneous	Y	Y	r32	Y	N	Y		
Service Order Request	Allocate NMI	Y	N	r32	N	n/a	n/a	Default properties file configuration is to move file to the Exceptions directory.	You can edit the property file to allow transformation for these service order types. Note: If you enable transformation for these service order
Service Order Request	New Connection	Y	N	r32	N	n/a	n/a		
Service Order Request	Supply Abolishment	Y	N	r32	N	n/a	n/a		

									types, no specific transformations or validations will be implemented for these service order types. Transformations for Re-en, De-en, and special reads will apply to these service order types as well.
Service Order Request	Adds and Alts	Y	N	r32	N	n/a	n/a	Default properties file configuration is to move file to the FileOut directory.	You can edit the property file to allow transformation for these service order types. If you allow transformation for these service order types, no specific transformations or validations will be implemented for these service order types. Transformations for Re-en, De-en, and special reads will apply to these service order types as well. For example, ProposedTariff is mandatory for 'Install Meter' &
Service Order Request	Meter Reconfiguration	Y	N	r32	N	n/a	n/a		
Service Order Request	Meter Investigation	Y	N	r32	N	n/a	n/a		

									'Exchange Meter' but the tool will not enforce this validation for this service order type/sub-type.
Customer Details Notification	n/a	Y	Y	r32	Y	Y	N	Transformed file is moved to FileOut directory.	
Site Access Notification	n/a	Y	Y	r32	Y	N	Y	Transformed file is moved to FileOut directory.	
One Way Notification	Meter Exchange Notification	Y	Y	r32	N	n/a	n/a	File is moved to the Exceptions directory.	
Provide Meter Data Request	n/a	Y	Y	r32	Y	Y	N	Transformed file is moved to FileOut directory.	
Verify Meter Data Request	n/a	Y	Y	r32	Y	N	Y	Transformed file is moved to FileOut directory.	
Message Acknowledgement	n/a	Y	Y	r32	Y	Y	N	Transformed file is moved to FileOut directory.	
Transaction Acknowledgement	n/a	Y	Y	r32	Y	Y	N	Transformed file is moved to FileOut directory.	
Any aseXML Document	n/a	Y	Y	r36	N	n/a	n/a	If file passes schema validation, the file passes through and sent to the FileOut directory. If file fails schema validation, the file is moved to the Exceptions Directory.	
Any aseXML Document	n/a	Y	Y	r25 and older	N	n/a	n/a	File is moved to the Exceptions directory.	

B.2 Inbound file Transaction Types

Table 4 provides a detailed listing of source file Transaction Types that are validated for Inbound communication. Refer to this table to help resolve validation errors in your files.

Red table rows indicate the Transaction Type is not valid and must be removed from the source file so the PoC Transition Tool can successfully transform the file.

Table 5 Transaction Types validation for Inbound source files

Transaction Group	Transaction Type (Input to the tool)	Transaction Sub-type	Applies to		Received file version from market	r36 Pass-through (configured at Transaction Group level)	PoC Transition Tool			
			r32	r36			Mapping required	1:1 mapping	Involves translation	Result
SORD	Service Order Response	Any	Y	Y	r36	N	Y	N	Y	If transformation rules are met, the file is moved to the FileOut directory. Refer to the Transformation Rules table.
CUST	Customer Details Request	n/a	Y	Y	r36	N	Y	Y	N	Transformed file is moved to FileOut directory.
SITE	Site Access Request	n/a	N	Y	r36	N	N	N/A	N/A	File is moved to the Exceptions directory.
SITE	Site Access Notification	n/a	Y	Y	r36	N	Y	N	Y	Transformed file is moved to FileOut directory.
OWNX	Meter Fault and Issue Notification	n/a	N	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.
OWNX	Planned Interruption Notification	n/a	N	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.

OWNP	One Way Notification	Network Tariff Notification	Y	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.
OWNP	One Way Notification	Meter Exchange Notification	Y	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.
NPNX	Notified Party	n/a	N	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.
MTRD	Meter Data Notification	n/a	Y	Y	r36	N	Y	Y	N	Transformed file is moved to FileOut directory.
MRSR	Remote Service Response	n/a	N	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.
SORD SITE CUST OWNP MTRD	Message Acknowledgement	n/a	Y	Y	r36	N	Y	Y	N	Transformed file is moved to FileOut directory.
OWNX MRSR NPNX PTPE	Message Acknowledgement	n/a	Y	Y	r36	N	N	n/a	n/a	File is moved to the Exceptions directory.
SORD SITE CUST OWNP MTRD	Transaction Acknowledgement	n/a	Y	Y	r36	N	Y	Y	N	Transformed file is moved to FileOut directory.
OWNX MRSR	Transaction Acknowledgement	n/a	Y	Y	r36	N	N	n/a	n/a	Move file to Exceptions directory.

NPNX PTPE										
Configured Transaction Group	Any	n/a	n/a	n/a	r36	Y	N	n/a	n/a	If file passes schema validation, the file passes through and sent to the FileOut directory. If file fails schema validation, the file is moved to the Exceptions directory.
Any	Any Transaction Type or Acknowledgement	n/a	Y	Y	r32 and r25	N/A	N	n/a	n/a	If the switch is turned on, the file is sent as-is to the FileOut directory If switch is turned off, the file is moved to the Exceptions directory.

APPENDIX C. TRANSFORMATION RULES

C.1 Inbound transformation rules

Table 6 Header transformation rules

aseXML r36			aseXML r32			Transformation Rule
Element	Attribute	Enumeration	Element	Attribute	Enumeration	
TransactionGroup	N/A	CATS, MDMT, MSGS, NMID, FLTS, SORD, NETB, MTRD, CUST, NOTF, SITE, FLDW, OUTG, BAR, NMIF, MKTW, HSMD, OWNP, EMMS, ERFT, IAIT, MRSR, OWNX, NPNX, PTPE	TransactionGroup	N/A	CATS, MDMT, MSGS, NMID, FLTS, SORD, NETB, MTRD, CUST, NOTF, SITE, FLDW, OUTG, BAR, NMIF, MKTW, HSMD, OWNP, EMMS	If incoming Transaction Group is ERFT, IAIT, MRSR, OWNX, NPNX, or PTPE, and the transaction group is eligible for transformation (if configuration is enabled), there is no transformation and the file is an exception. Else Mapped as-is.
Market	N/A	AATELEC, ACTELEC, NEM, NSWELEC, NTELEC, QLDELEC, SAELEC, TASELEC, VICELEC, WAELEC, AATGAS, ACTGAS, NSWGAS, NTGAS, QLDGAS, SAGAS, TASGAS, VICGAS, WAGAS, NSWACTGAS	Market	N/A	AATELEC, ACTELEC, NEM, NSWELEC, NTELEC, QLDELEC, SAELEC, TASELEC, VICELEC, WAELEC, AATGAS, ACTGAS, NSWGAS, NTGAS, QLDGAS, SAGAS, TASGAS, VICGAS, WAGAS	If incoming Market like '%GAS%', no transformation and file is an exception. Else Mapped as-is.

Table 7 Site Details Notification (SDN) transformation rules

aseXML r36				aseXML r32				Transformation Rule
Element	Attribute	Procedure Attribute Reference	Enumeration	Element	Attribute	Procedure Attribute Reference	Enumeration	
Description	n/a	HazardDescription	n/a	Description	n/a	HazardDescription	n/a	If HazardDescription is 'Not Known To Initiator' in r36, set to 'Not Known to Retailer' else Map as-is

Table 8 Service Order Response (SOR) transformation rules

aseXML r36				aseXML r32			Transformation Rule
Element	Attribute	Procedure Attribute Reference	Enumeration	Attribute	Procedure Attribute Reference	Enumeration	
ServiceOrderResponse	version	n/a	n/a	version	n/a	n/a	The transformed data must contain or be defaulted to 'r17'.
ServiceOrderType	xsi:type	n/a	n/a				Service Order Type and Service Order Sub-type is not mapped.
ServiceOrderType	version	n/a	r36				Service Order Type and Service Order Sub-type is not mapped.
WorkType	n/a	n/a	n/a				Service Order Type and Service Order Sub-type is not mapped.
WorkType	workSubType	n/a	n/a				Service Order Type and Service Order Sub-type is not mapped.
NotificationData	version	n/a	n/a	version	n/a	n/a	The version in r32 must be defaulted to 'r17'.

ResponseCode	n/a	ExceptionCode	Customer On-Site, Customer Prevented, De-energisation Not Completed Due To A Re-energisation, Documentation Not Provided, Metering Problem, Meter Reading Only Undertaken Due To Prior Re-energisation, New Customer On-Site, No Supply, Other, Reading Problem, Request Submitted By Another Initiator, Initiator Cancellation, Sensitive Load, Recipient Cancellation, Unable To Access,	nResponseCode	ExceptionCode	Customer On-Site, Customer Prevented, De-energisation Not Completed Due To A Re-energisation, Documentation Not Provided, Metering Problem, Meter Reading Only Undertaken Due To Prior Re-energisation, New Customer On-Site, No Supply, Other, Reading Problem, Request Submitted By Another Retailer, Retailer Cancellation, Sensitive Load, Service Provider Cancellation, Unable To	If the value in r36 = 'Request Submitted by Another Initiator', it is mapped to 'Request submitted by Another Retailer' Else if the value in r36 = 'Initiator Cancellation' it is mapped to 'Retailer Cancellation' Else if the value in r36 = 'Recipient Cancellation' it is mapped to 'Service Provider Cancellation' Else if the value in r36 is 'Tariff Change Not Approved', 'Inadequate infrastructure', 'No Comms', 'Life Support', 'Meter Not Retrieved', 'Metering not compatible with proposed Tariff Change', 'Shared Supply Point', 'Site Already Energised', 'Unknown Connection Status' it is mapped to 'Other' Else it is mapped as-is

			Unknown Load, Unsafe, Tariff Change Not Approved, Inadequate infrastructure, No Comms, Life Support, Meter Not Retrieved, Metering not compatible with proposed Tariff Change, Shared Supply Point, Site Already Energised, Unknown Connection Status			Access, Unknown Load, Unsafe	
Code (array & unbound)	n/a	ProductCode	n/a	n/a	ProductCode1	n/a	Map to the first Product Code in r36.
				n/a	ProductCode2	n/a	Map to the second Product Code in r36.
				n/a	ProductCode3	n/a	Map to the third Product Code in r36.

SpecialNotes	n/a	n/a	n/a	n/a	n/a	n/a	If four or more Product Codes are available in r36, concatenate all remaining ProductCodes in the following format "PC=ProductCode4,ProductCode5,.....,ProductCode{N}" If the concatenated value is greater than 80 characters, the file is moved to the Exceptions directory. If CommentLine 1, CommentLine 2 & CommentLine 3 are already populated, file is moved to the Exceptions directory. If only CommentLine 1 & CommentLine 2 are populated, populate the rest of product codes in CommentLine 3, and set CommentLine 3 to PC=ProductCode4,ProductCode5,.....,ProductCoden. If only CommentLine 1 is populated, populate the rest of product codes in CommentLine 2, and set CommentLine 2 to PC=ProductCode4,ProductCode5,.....,ProductCode{N}. If CommentLine 1 is not populated, populate the rest of product codes in CommentLine 1, and set CommentLine 1 to PC=ProductCode4,ProductCode5,.....,ProductCode{N}.

C.2 Outbound transformation rules

Table 9 Service Order Request (SOR) transformation rules

aseXML r32				aseXML r36				Transformation Rule
Element	Attribute	Procedure Attribute Reference	Enumeration	Element	Attribute	Procedure Attribute Reference	Enumeration	
ServiceOrderRequest	version	n/a	n/a	ServiceOrderRequest	version	n/a	n/a	The transformed data must contain / defaulted to 'r36'
ServiceOrderType	xsi:type	n/a	n/a	ServiceOrderType	xsi:type	n/a	n/a	
ServiceOrderType	version	n/a	n/a	ServiceOrderType	version	n/a	n/a	The transformed data must contain / defaulted to 'r36'
WorkType	n/a	ServiceOrderType	n/a	WorkType	n/a	ServiceOrderType	n/a	Mapping continues if the Service Order Type / Sub Type in the aseXML file matches the configuration in SO-Sub Type Mapping. If the incoming Service Order Type / Sub Type is not configured (mapping); move incoming file is moved to the Exceptions directory. If actionType = 'Cancel' and SOType is not populated the file is not validated against the properties file. else ServiceOrder Type-Sub Type combination must exist in the properties file.

WorkType	workSub Type	ServiceOrder Sub-type	Refer SO Sub-Type Mapping sheet	WorkType	workSubType	ServiceOrderSubType	Refer SO-Sub Type Mapping sheet	If the Service Order Type or Sub-Type in the aseXML file matches the configuration in SO Sub-Type Mapping, mapping will continue. If the incoming Service Order Type or Sub-Type is not configured (mapping), the incoming file is moved to Exceptions directory. If actionType = 'Cancel' and SOType is not populated, it is not validated against the property file. Proceed else ServiceOrder Type-Sub Type combination must exists in Property File
AccessDetails	n/a	AccessDetails	n/a	AccessDetails	n/a	AccessDetails	n/a	If the value of Access Details = 'Not Known To Retailer' Change it to 'Not Known To Initiator' else Retain the value as-is
ContactDetail (Optional)				ContactDetail (Optional)				If PersonName of <ContactDetail> is populated in r32 but Telephone details of <ContactDetail> are not populated, the file is moved to the Exceptions directory. else map as-is NOTE: Do NOT implement this check if actionType = 'Cancel'. For actionType='Cancel', just map as-is without performing the above validation.
CustomerDetail (Optional)				CustomerDetail (Optional)				If CustomerConsultationRequired flag in r32 = 'true' If the details (name and/or telephone) related to CustomerDetail is not populated in the r32 file, the file is moved to the Exceptions directory. else map as-is else map as-is

								NOTE: Do NOT implement this check if actionType = 'Cancel'. For actionType='Cancel', just map as-is without performing the above validation.
RequestData	version	n/a	n/a	RequestData	version	n/a	n/a	The transformed data must contain / defaulted to 'r36'
CommentLine - 1st	n/a	Special Instructions	n/a	CommentLine - 1st	n/a	SpecialInstructions	n/a	**Perform the following logic only for actionType = 'New' or 'Replace'** The value of LifeSupport flag has to be passed in the Special Instructions.Comment1 line. Participants will be able to specify how they would (format) send the Lifesupport information in special instruction field i.e. parameter 'batcher_thread_{N}_lifesupport_pattern' will define how the participants will send the life support information. For example, batcher_thread_1_lifesupport_pattern=$LifeSupport:<V>$. In this case the Participants must send the comment1 as $LifeSupport:Y$ or $LifeSupport:N$. If this parameter is not defined in the property file, the system will default the format of how the lifesupport information must be sent. Determine if parameter 'batcher_thread_{N}_lifesupport_pattern' in the properties file is populated. If populated use LifeSupport Pattern from the Properties File (batcher_thread_{N}_lifesupport_pattern), else Use default pattern of '$LS:<V>$' Note: <V> should be Y or N. If the first few characters (prefix) of CommentLine 1 matches the Lifesupport Pattern. If the value of <V> is 'Y' or 'N'

								If CommentLine1 only contains information as stated in the pattern
								Make CommentLine1 empty in r36
								Set LifeSupport flag as 'Y' or 'N' (as populated in input)
								Else
								Remove pattern text and populate the rest of the content in CommentLine1
								Set LifeSupport flag as 'Y' or 'N' (as populated in input)
								Else
								Mapping fails; the input file is moved to Exceptions directory.
								
								Perform the following logic only for actionType = 'Cancel'
								If CommentLine 1 matches the pattern, use the above logic to derive the lifesupport flag.
								else
								no error
								do not populate lifesupport flag
								do not change the value of CommentLine1

CommentLine - 2nd	n/a	Special Instructions	n/a	CommentLine - 2nd	n/a	SpecialInstructions	n/a	Map as is. Do not look for LifeSupport information in the second comment line.
CommentLine - 3rd	n/a	Special Instructions	n/a	CommentLine - 3rd	n/a	SpecialInstructions	n/a	Map as is. Do not look for LifeSupport information in the second comment line.
NMIStandingData	version	n/a	n/a	NMIStandingData	version	n/a	n/a	The transformed data must contain or be defaulted to 'r36'.
				De-energisationReason	n/a	De-Energisation Reason	Customer Requested, Move Out, Non-Payment (DNP), Unauthorised	If actionType = 'Cancel' and De-en SOType is not populated: Do not populate De-En Reason else Where De-en SubType in r32 is 'Remove Fuse (Non-

							Usage (DNI), Illegal Usage, No Access, Safety, Defect, Site Works, Breach of Contract, Other	Payment)' or 'Pillar-Box Pit Or Pole-Top (Non-Payment)' Populate 'Non-Payment (DNP)' Else - other De-en SubTypes ('Remove Fuse' or 'Pillar-Box Pit Or Pole-Top' or 'Sticker' or blank) Populate 'Other'
				LifeSupport	n/a	LifeSupport	n/a	Populate per the transformation rules stated in SpecialInstructions.
				Co-ordinationRequired	n/a	ServiceOrderCo-ordinationRequired	n/a	Default to 'No'.

Table 10 Provide Meter Data Read (PMDR) transformation rules

aseXML r36				Transformation Rule
Element	Attribute	Procedure Attribute Reference	Enumeration	
NMIStandingData	version	n/a	n/a	If the data is in r32, it should be populated as r36 in the mapped version.

Table 11 Verify Meter Data Read (VMDR) transformation rules

aseXML r32				aseXML r36				Transformation Rule
Element	Attribute	Procedure Attribute Reference	Enumeration?	Element	Attribute	Procedure Attribute Reference	Enumeration	
VerifyRequestData	version	NA	NA	VerifyRequestData	xsi:type	NA	NA	Transform the version number to r36.
NMIStandingData	version	NA	NA	NMIStandingData	version	NA	NA	If the data is in r32, it should be populated as r36 in

								the mapped version.
InvestigationCode	NA	InvestigationCode	Confirm Reading For Vacant Site, Confirm Zero Consumption, Incomplete Data, Invalid MDFF Data, Invalid Standing Data, Missing Datastream, Require Actual Reading or Substitute, Require Final Substitute, Require Latest Version Scheduled Reading Required, Service Order Reading Required, Verify High Reading, Verify Low Reading, Customer Away, Customer Query, Customer Read, High Account, Zero Consumption, Recipient Not Responsible For The NMI, Other	InvestigationCode	NA	InvestigationCode	Confirm Reading For Vacant Site, Confirm Zero Consumption, Incomplete Data, Invalid MDFF Data, Invalid Standing Data, Missing Datastream, Require Actual Reading or Substitute, Require Final Substitute, Scheduled Reading Required, Service Order Reading Required, Verify High Reading, Verify Low Reading, Other, Verify/Missing Register, Require Estimate Data, Meter Churn	If the investigation code is 'Recipient not responsible for the NMI' OR 'Require Latest Version' OR 'Customer Away' OR 'Customer Query' OR 'Customer Read' OR 'High Account' OR 'Zero Consumption' in r32: Set the value to 'Other' else Map as-is

Table 12 Site Details Notification (SDN) transformation rules

aseXML r32				aseXML r36				Transformation Rule
Element	Attribute	Procedure Attribute Reference	Enumeration?	Element	Attribute	Procedure Attribute Reference	Enumeration	

Description	n/a	HazardDescription	n/a	Description	n/a	HazardDescription	n/a	If HazardDescription is 'Not Known To Retailer' in r32 file, set to 'Not Known To Initiator' else Map as-is

Table 13 Customer Details Notification (CDN) transformation rules

aseXML r36								Transformation Rule
Element	Attribute	Procedure Attribute Reference	Mandatory	Type	Length	Default	Enumeration	
CustomerDetailsNotification	version	n/a	N	r36	n/a	r36	n/a	The transformed data must contain or defaulted to 'r36'.