

EDW Technology Limited
ERS System Administration Guide
ERS Dataflow Transportation Administration

Version 1.02

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| Document Owner | Martin Warford |
| Version | 1.02 |
| Document Ref | IT05903 |
| Department | Client Services |
| Status | Released to client |
| Client | All |

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|--|---|
| EDW Technology Ltd | Version: 1.02 |
| ERS Dataflow Transportation Administration Guide | Issue Date: 27 th April 2010 |

1. Document Control

1.1 Revision History

| Date | Version | Description | Author |
|--------------------------------|---------|--|----------------|
| 26 th February 2010 | V0.10 | Initial Draft | Martin Warford |
| 26 th March 2010 | V0.20 | Updated following EDW internal QA review | Martin Warford |
| 29 th March 2010 | V1.00 | Released to client | Martin Warford |
| 8 th April 2010 | V1.01 | Updated dataflow folders | Tal Sembhi |
| 27 th April 2010 | V1.02 | Added DTN Bridge | Martin Warford |

1.2 Reviewers

| Name | Role |
|-------------|--------------------------|
| Graham Paul | Client Services Director |

1.3 Outstanding Issues

| Reference Number | Issue | Owner |
|------------------|-------|-------|
| | | |

1.4 Related Documents

| Reference Number | Document |
|------------------|--|
| IT059 | ERS Application Administration Guide |
| IT05902 | ERS Error & Failed Dataflows Guide |
| IT065 | ERS DTN Bridge Installation & Operations Guide |

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2. Introduction

2.1 ERS Dataflow Transport Administration Overview

This document details the, path inbound and outbound, dataflows take through various directories as they are validated before arriving at either ERS or the Data Transfer Network (DTN) Gateway managed by Electralink <http://www.electralink.co.uk/services/network-services/dts-overview>.

2.2 In Scope

The following directories are part of ERS dataflow processing and therefore the directories and their contents are the responsibility of ERS:

- ~/ers/dataflows/new
- ~/ers/dataflows/working
- ~/ers/dataflows/outgoing
- ~/ers/dataflows/error
- ~/ers/dataflows/dfv/new
- ~/ers/dataflows/dfv/working
- ~/ers/dataflows/dfv/error
- ~/ers/dataflows/dfv/in/new
- ~/ers/dataflows/dfv/in/working
- ~/ers/dataflows/dfv/in/failed
- ~/ers/dataflows/dfv/out/working
- ~/ers/dataflows/dfv/out/passed
- ~/ers/dataflows/dfv/out/failed
- ~/ers/dataflows/failedvalidation/new
- ~/ers/dataflows/failedvalidation/working
- ~/ers/dataflows/failedvalidation/error
- ~/ers/dataflows/route/new
- ~/ers/dataflows/route/working
- ~/ers/dataflows/route/error

Definition of the coding behind the ERS DTN Bridge scripting.

2.3 Out of Scope

The availability, installation and configuration of the FTP server used by the DTN Bridge is the responsibility of the client.

The DTN Bridge Control File requires variable parameter values to be configured to allow the DTN Bridge process to function. It is the responsibility of the client to ensure that this has been done completely and correctly.

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3. Dataflow Flow Diagrams

These two flowcharts in section 3.9 and 3.10 of the document clearly show the sequential movement of dataflows received or sent out by ERS.

Below is an explanation of what each of the main components to facilitate Dataflow Transportation does.

3.1 ERS Role

As part of normal use processes triggered either by an ERS user or by the receipt of an inbound dataflow may involve the creation of an outbound flow.

The data part of the flow – MPAN Core, effective dates etc – is compiled and waits for a scheduled ERS process to pick up and process that particular dataflow type – D0055, D0148 etc.

This process consolidates all of the dataflows of the same type for the same Market Participant with the same Market Role code into one flow.

The Task Engine assigned this dataflow consolidation task then sends the flow to the first outbound dataflow directory

3.2 Dataflow Engine

This engine receives all dataflow files that need to be loaded into the Interface Document Management (IDM) in ERS, it parses the files, converts them into XML, inserts them into the IDM and triggers incoming dataflow processes for each business entity identified i.e. a D0036 that contained multiple MPAN Cores.

3.3 DFR Engine

This engine receives the report dataflow files – D0018s for example – and loads them up into the Dataflow Repository (DFR) relational database. This is independent of the other flows and gives a way of reporting on some larger datasets that would be difficult to view in XML.

3.4 DFV INCOMING and OUTGOING Engines

These engines perform validation on dataflow files according to the Data Transfer Catalogue (DTC). There is one to validate inbound flows and one to validate outbound flows. Each can be configured independently allowing the suppression of some checks on one engine but not on the other.

The DFV Incoming engine also uses the currently loaded Market Domain Data for top line – Distributor ID, LLFC and MTC – combinations to ensure that they are valid.

3.5 Failures

Depending on the direction of the flow or the checking/validation being performed, failed flows are passed to these directories. The engine that determined the flow has failed also creates an error flow in the format of the exact name of the file we could not process but appended with a '.error'. The '.error' file will contain details of why it has failed the check/validation.

Known flow failures are documented in the ERS Error and Failed Dataflows Guide:

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| Document Name | ERS Error and Failed Dataflows Guide |
| Version | 1.00 |
| Document Ref | IT05902 |

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3.6 DTN Bridge

The DTN Bridge is a process that copies dataflows from one location to another i.e. from ERS to the DTN Gateway and vice versa.

These locations – the servers and file path names – as well as variable parameter values the process uses for operating are stored in a Control File.

For more detailed information on the DTN Bridge please review IT065 ERS DTN Bridge Installation & Operations Guide:

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| Document Name | IT065 ERS DTN Bridge Installation & Operations Guide |
| Version | 3.20 |
| Document Ref | IT065 |

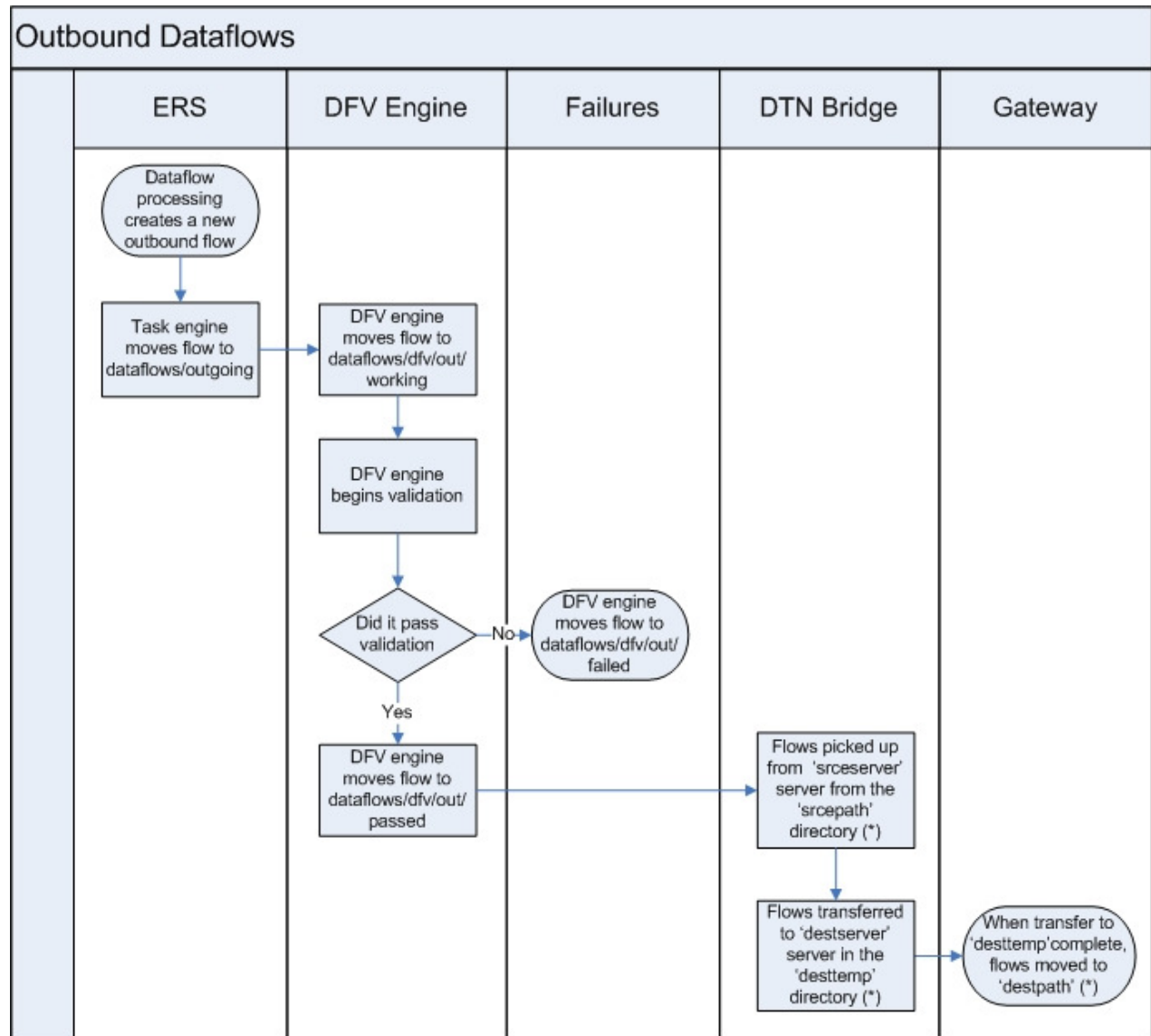
3.7 Gateway

The client owned and managed access point to the Data Transfer Network (DTN).

3.8 Routing Engine

This engine sits after the incoming DFV Incoming engine and splits – routes – the dataflow files into either the Dataflow engine or the DFR engine or both.

3.9 Outbound Dataflows Flow Diagram



(*) as specified in the DTN Bridge Control File.

3.10 Inbound Dataflows Flow Diagram

