

# **Electricity Authority**

Service Report and User Guide
December 2017

Prepared by Jade Operations



Jade Software Corporation Limited cannot accept any financial or other responsibilities that may be the result of your use of this information or software material, including direct, indirect, special or consequential damages, or loss of profits. There are no warranties extended or granted by this document or software material.

You should be very careful to ensure that the use of this software material and/or information complies with the laws, rules, and regulations of the jurisdictions with respect to which it is used. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Jade Software Corporation Limited.

The information contained herein is subject to change without notice. Revisions may be issued advising of such changes and/or additions.

© 2017 Jade Software Corporation Limited.

All rights reserved.

JADE is a trademark of Jade Software Corporation Limited. All trade names referenced are the service mark, trademark, or registered trademark of the respective manufacturer.

# **Table of Contents**

OPERATIONAL ITEMS	4
Performance Standards	
Adhoc Reporting Statistics	
Batch File Statistics	
Provider Code or agreement breach	8
Other Information	
Business Continuity Plan Test	9
Summary of Incidents	10
Software Related Fixes and Enhancements	
Data Fixes	
Schedule of Issues Raised	12
Database Transactions Production	13
Transaction Volumes	13
Database Size Production (GB)	14
Database Growth	14
Service Disruptions	15
Application Release Activities	
Other Activities	15
Backup Performance Production	
Electricity Authority Contact Information	
Automated Fault Escalation Profiles – Priority A Incidents	
Status of Functional Specification	
Status of CR's and SDA's	
Design Consultation	
Provider initiated Audits	
Breaches	
Code Changes to be considered	
User Group Meetings	18
AGREED PROCEDURES	19
Change Control	
Application Release Authorisation	
Application Restarts	19
Hardware Fault Reporting	
Anti-Virus Product	
Recovery Procedures	19
Server Integrity	
Reporting	20
Software Licences and Media Storage	20
Replication Technologies	
Personnel and Contact Details	21

# **OPERATIONAL ITEMS**

### **Performance Standards**

Measurement	Requirement	Actual	Met	Ref
Number and detail of service Provider Code or agreement breaches and details	Report delivered to Authority detailing breaches	0	Yes	Schedule 2 Non-functional requirements 5.2 table 1
Disaster recovery and backup obligations			Yes	Schedule 2 Non-functional requirements Section 7 (7.1 and 7.4)
Number and details of participant rule breaches	Report on 1 <sup>st</sup> business day delivered to Authority SFTP directory	03Jan18 at 03:06	Yes	
Maximum number of concurrent users for month		1476	Yes	Schedule 2 Non-functional requirements 2.7
During regular service hours (0730 hours to 1930 hours each day), the provider must ensure that the system is available to participants for no less than 99.9 per cent of the time in any one month. This statistic considers that planned, pre-approved, non-urgent maintenance outages are not included in the calculation of availability		100.00%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
Outside regular service hours (between 1930 hours and 0730 hours) the provider must ensure that the system is available to participants for no less than 98.0 per cent of the time in any month. This statistic considers that planned outages will not count against availability level targets.		100.00%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
The Registry must use its best endeavours to provide a service availability of 99.8 per cent or better, with nil or minimal outages.		100.00%	Yes	

Measurement	Requirement	Actual	Met	Ref
Unless otherwise approved in writing in advance by the Authority (such timely approval not to be unreasonably withheld) there must be no more than two planned outages per month, one of which is reserved for the monthly production release of software. Each planned outage must be at a time to be agreed by the parties and be no more than 2 hours in duration. Any planned outage of more than 2 hours duration must have the prior approval of the Authority, such timely approval not to be unreasonably withheld.  Approved, pre-planned outages do not count against service level targets.		1) Scheduled outage 03 Dec to complete MS patching of Web server. 2) Scheduled outage 17 Dec for application deploy	Yes	Schedule 2 Non-functional requirements 5.3
Service response time of transactions sampled at regular intervals (every 1–5) minutes as agreed between the Authority and the Provider) during regular service hours for the system at the delineation point of the system to external communications providers			Yes	Schedule 2 Non-functional requirements 5.2 table 1
96% of all sampled transactions will have a response time of less than 2 seconds for all the components managed by the system at the delineation point of the Registry network.		<2 =99.93%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
Longest time period in seconds  Percentage of transactions exceeding 2 seconds		67.77 0.07%		
90% will have a response time of less than 1 second for all the components managed by the system at the delineation point of the Registry network  Percentage of transactions exceeding 1 second		<1 =99.76% 0.24%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
Number of password lockout alerts.  Investigation of all repeated lockout alerts required.		0		Schedule 2 Non-functional requirements 25.1 (n)
Help desk available	7:30 to 19:30 hours each business day	100%	Yes	Clause 11.20
Registry reports to participants day 1 09:00	09:00 hours on the first business day of the month	31Dec17 23:04	Yes	Clause 11 of Schedule 11.1
Issuing of confirmation notices within 4 hours of receipt of information provided			Yes	Clause 11.21
Number of ICP's changing traders	16:00 on the 6 <sup>th</sup> business day of the month		Yes	Clause 11.23

Measurement	Requirement	Actual	Met	Ref
Such other information as may be agreed from time to time between the Registry and the Board	16:00 on the 6 <sup>th</sup> business day of the month		Yes	Clause 11.23
Reports to the clearing manager and systems manager by 16:00 on first business day of the month	16:00 on first business day	03Jan2018 00:28	Yes	Clause 11.24
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the ICP days report	16:00 on 4 <sup>th</sup> business day	08Jan2018 02:15	Yes	Clause 11.26
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the loss factors report	16:00 on 4 <sup>th</sup> business day	04Jan2018 00:00	Yes	Clause 11.26
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the balancing area report	16:00 on 4 <sup>th</sup> business day	04Jan2018 00:00	Yes	Clause 11.26
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the half hour identifiers report	16:00 on 4 <sup>th</sup> business day	08Jan2018 05:29	Yes	Clause 11.26
By 16:00 on 1 <sup>st</sup> business day deliver to the market administrator (Authority) a report summarising events that have not been notified to the Registry with specified time frames	16:00 on 1 <sup>st</sup> business day	03Jan2018 00:02	Yes	Clause 11.27
User requested registry reports  Longest time period for a report  Count of the number of reports exceeding 4 hours	Within 4 hours of request	26hrs 15mins 13	No	Schedule 2 Non-functional requirements 5.2 table 1
Notifications or change within the Registry to participants affected	Same day		Yes	Clause 11.29
Registry to publish Schedule of loss category code and loss factors	Within one day of notification of change		Yes	Clause 22 of Schedule 11.1
Registry to publish Schedule of mapping between NSP's and balancing areas	Within one business day of notification of change		Yes	Clause 24 of Schedule 11.1
Registry to publish Schedule of all NSP identifiers and supporting information	Within one business day of notification of change		Yes	Clause 30 of Schedule 11.1

# **Adhoc Reporting Statistics**

Report	Run	Complete	Average time (seconds)
Distributor Maintenance	1783	1783	19.6
Metering Maintenance	1132	1132	6.3
NSP Mapping Maintenance	31	31	10.9
Report - Breach Current	1051	1051	0.7
Report - Current Details	115	115	409.1
Report - Event Detail	27472	27472	94.1
Report - File Audits	10	10	0.6
Report - File Handler Status	3	3	0.3
Report - ICP List	3363	3363	365.1
Report - Loss Factor Codes	2	2	15.4
Report - Maintenance Breach	195	195	0.5
Report - Metering Installation Information	112	112	2328.7
Report - Missing Metering Data	9	9	411.1
Report - NSP Mappings	6	6	6.7
Report - Switch Breach History	123	123	41.3
Report - Trader Annual Levy Report	1	1	10366.3
Request - Notify Resend	1	1	39.1
Request - Switch Resend	97	97	5.3
Switch AC	709	709	0.5
Switch AN	9433	9433	0.5
Switch AW	2509	2509	1.6
Switch CS	10080	10080	2.5
Switch MN	365	365	1.6
Switch NT	13228	13228	0.6

Report	Run	Complete	Average time (seconds)
Switch NW	2553	2553	0.4
Switch RR	1104	1104	0.3
Trader Maintenance	1327	1327	25.7
Totals	76814	76814	55.5
Number of Reports successfully Re-Processed	12		

### **Batch File Statistics**

Total	Complete	Completed by 07:30	Not completed by 07:30
75402	75402	75402	0

Details of Batch File Reports not completed by 07:30 Report	Event Detail Participant:

# **Provider Code or agreement breach**

Date	Number and detail of Provider Code or agreement breaches and details (ref Schedule 2 Non-functional requirements 5.2 table 1)
	Nil

#### Other Information

The following reports/files are supplied to the Authority by the 6th business day of each month (unless otherwise specified) to the SFTP server:

- ICP's electrically connected, electrically disconnected, decommissioned and switched by Retailer and NSP
- ICP's electrically connected, electrically disconnected, decommissioned and switched by Retailer
- ICP's electrically connected, electrically disconnected, decommissioned and switched by Distributor
- Report PR-130 as defined in functional specification
- Details of participant rule breaches (supplied on first business day)
- Details of participant switch breaches (supplied on first business day)

#### **Business Continuity Plan Test**

The following annual tests were completed in April 2017 (Jade Tracker #637123 refers);

- 1. Testing of the phone system by enacting call plan 5 and placing a test call to the line then immediately restoring to call plan 4.
- 2. Placing 2 test calls to the people below advising them that this is a test call to confirm contactability in a Business Continuity event
- a) Grant Benvenuti Manager Market Operations 04 460 8849 or 027 652 4854
- b) Jade BCM Manager.
- 3. Have a Jade Developer log in from home to confirm connectivity.

jade<sup>\*</sup>

# **Summary of Incidents**

There were no incidents.

### **Software Related Fixes and Enhancements**

ID	Description	Response
	No release in December	

### **Data Fixes**

Number and details of incidents requiring data fixes. There were none this month.

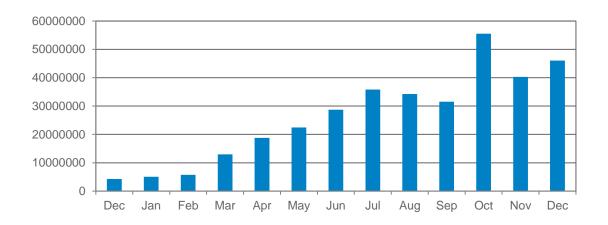
ID	Description	Severity	Response
	NIL		

### **Schedule of Issues Raised**

A summary of faults raised during the month.

ID	Description	Severity	Response
	Extend Notify Web Service to cater for multi-		Verification in
ER-741	role participants	Low	Progress
ER-740	Maintenance Breach report query	Low	In Progress
	CR 1201 - Transfer files to the Authority sFTP		
ER-739	server	Low	Submitted

### **Database Transactions Production**

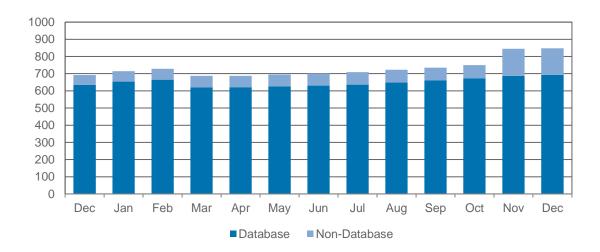


### **Transaction Volumes**

Transaction name	This Month	Last Month	Percentage Change
All Transactions	46,069,524	40,289,939	14%

### **Database Size Production (GB)**

**NOTE –** An issue with Jade "housekeeping" resulted in the number of non-database files increasing significantly. This has been resolved and will be actioned next month resulting in a reduction of the non-database size.



#### **Database Growth**

Class	This Month MB	Last Month MB	Change MB
Database	709,138	704,057	5,081
Non-database	159,248	160,700	-1,452
Total	868,386	864,757	3,629

### **Service Disruptions**

There were no recorded operational incidents during the period. Scheduled outages are excluded from the calculation of the Availability Percentage.

Performance Measure	
Availability	100.00%
Number of Scheduled Outages	2
Number of Unscheduled Outages	0
Last Unscheduled Outage	May 2017

### **Application Release Activities**

	Duration		
Day	Detail	hh/mm	Authoriser
17Dec17 03:00 – 03:31	Production deploy 17.11_1	00:31	MARCSM

### **Other Activities**

Day	Detail	Duration hh/mm	Authoriser
03Dec17 03:00 – 03:12	MS patching Web server	00:12	Grant Benvenuti

### **Backup Performance Production**

The backup requirements were met this month.

Backup Type	Run days	Run Time	Expected Duration hh/mm	Tape Restore Test Date
Disk	ALL	20:00	03:45	13Dec17
Tape	ALL	01:00	05:00	

### **Electricity Authority Contact Information**

Contact for day-to-day procedures or any unexpected events.

Contact Name / Role	Contact Details
Manager Market Operations	Grant Benvenuti
	P: 04 460 8849
	M: 027 652 4854
	E: grant.benvenuti@ea.govt.nz

### **Automated Fault Escalation Profiles – Priority A Incidents**

In the event of a "priority A incident" where the hardware or the application has an unscheduled outage the Electricity Authority has advised that escalation via email or text is not required.

However, if there is an unusually long outage impacting participants, Grant Benvenuti requires to be contacted.

### **Status of Functional Specification**

(i.e. a report on the status of the functional specification);

Version 22.22 released to Production 20 December.

### Status of CR's and SDA's

(i.e. a summary report of the status of all CRs and SDAs);

CR Identifier	Description	Status
CR-1208	Integrate EIEP 5A into the Registry	With Jade. Analysis
CR-1207	OIA switch report	With Authority. Awaiting confirmation from requestor
CR-1206	ATH installation reporting	With Authority for proposal feedback
CR-1201	Transfer EIEP files to the Authority	Solution proposal may require small rewording (removing extension wording). In development.
CR- 1197(I182)	EIEP hub access for non-participants	Authority: draft proposal stage for review
CR-1195	Distributor switching	On hold. Awaiting results of Authority consultation
CR-1194	NSP Table entry delete	On hold. Waiting on response from the Authority
CR-1192	Audit compliance reporting	With Authority auditor for further detail on requirements.
CR-1180	Switch Breach Analysis	Solution with Jade for update and pricing (delayed by CR-1202 development, qualification, implementation)

#### **Design Consultation**

This is outside the normal CRs and pertains more to design work required by market design.

#### Design consultation chargeable hours

Resource	Hours this month	Hours to date – since 01 May 2017
Project Management/Architect/Consultant/Designer		
Development		
All other roles		
Total	0	0

#### **Provider initiated Audits**

(i.e. essentially the annual audits. Also, any other audit (relevant to the registry) Jade has initiated. Does not include CRs.);

Not applicable for this month.

#### **Breaches**

(i.e. breaches of the Act, regulations, Code, or agreement made by the Provider or users - not identifying individual users);

Nil

### **Code Changes to be considered**

(i.e. events that may highlight an area where a change to the Code may need to be considered);

Not applicable this month

### **User Group Meetings**

(i.e. a summary of any user group meetings held and the items discussed);

The most recent user group meeting was on 23 November 2017.

.

#### **AGREED PROCEDURES**

#### **Change Control**

All significant changes will be notified to the Electricity Authority, and a Tracker work request will be created to record authorisation, schedule, and implementation detail.

Change requests must be approved within 1 month of the request being submitted.

In exceptional circumstances, for example where Jade Care consider server integrity to be under significant and immediate threat, changes may be applied with little or no notice.

#### **Application Release Authorisation**

Releases are automated through the Jade Care toolset. Submission and authorisation are separate functions, and the authorisation facility may be extended to the Electricity Authority, or may be applied by the Client Service Manager where the Electricity Authority chooses not to use this facility.

#### **Application Restarts**

Requests for restart of applications or servers must be made in writing. In exceptional circumstances, and where the requestor is known to Jade Care staff, a verbal request may be sufficient, provided it is confirmed in writing shortly after the request is made.

#### **Hardware Fault Reporting**

SNMP traps will be enabled for all servers. Traps will result in alerts being raised at Jade Care and Tracker incident records being created. Automated escalation can be applied to these calls to alert the Electricity Authority and third parties to the event.

Arrangements may be put in place to allow Jade Care to contact hardware service organisations directly in the event of hardware issues. Contact and call identification details will be required as a prerequisite to implementation.

#### **Anti-Virus Product**

Anti-virus product is installed on all managed servers. Engine and pattern updates are applied on receipt, and full scans are run weekly.

#### **Recovery Procedures**

#### Application Recovery

The environments are set up to perform automatic application recovery in the event of a server undergoing a non-scheduled restart.

If there is a physical failure on the hardware where the VM is hosted on, the VM will be moved to a different physical VMware host. In the event of a catastrophic site failure, an SDS takeover will occur to the DR site upon approval by the Electricity Authority.

#### Server Recovery

Server recovery should never take place unless agreed by the Electricity Authority, Jade Care and hardware service representatives.

If a server operating system needs to be rebuilt, Central Systems will assist the onsite technician in rebuilding the server configuration and operating system to a state where Jade Care access is restored. Recovery of the full configuration, the applications and other third party software will be undertaken by Jade Care.

#### **Server Integrity**

The Electricity Authority servers are configured and maintained to Jade Care standards. This configuration is critical to the operation of the process automation and monitoring software.

It is essential that all changes to the server or application software is either performed by, or with the fore-knowledge and agreement, of Jade Care.

### Reporting

#### Systems Management Report

This systems management report is to be provided by email to customer staff as advised. The target date for delivery is the 10th business day of the month following the calendar month to which the report relates.

#### **Incident Reports**

An incident report will be prepared for each unscheduled outage and will be emailed to customer staff as advised from time to time within 3 working days of any outage. These reports relate only to those items managed by Jade Care; e.g. network issues and hardware failures will not be subject to a report.

#### Jade Care Recommendations

Where Jade Care has recommendations for changes to hardware or the operating environment, these recommendations will be submitted to the Electricity Authority management. Implementation of such recommendations will be formalised through the change control process, and documented through the systems management report in summary form.

#### Software Licences and Media Storage

All software media and licences must be kept in secured storage in reasonable proximity to the servers.

#### **Replication Technologies**

The use of replication technologies such as Volume Shadow Copy Service (VSS) and VMware copy processes with JADE databases is NOT supported and must not be used. The Jade Care service provides automated scheduled backups.

#### **Personnel and Contact Details**

The Electricity Authority must advise Jade Care of changes in personnel and contacts details where individuals are named as direct contacts. Fault escalations are pre-defined and automated to individual email addresses and SMS capable devices. Leave coverage and personnel changes must be advised for these functions to be effective.