



Electricity Authority

Service Report and User Guide
February 2017

Prepared by Jade Operations



| business solutions

www.jadeworld.com

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

Performance Standards	4
Adhoc Reporting Statistics	7
Batch File Statistics	9
Other Information	9
Summary of Incidents.....	10
Development Access.....	10
Software Related Fixes	10
Data Fixes	10
Schedule Of Faults Raised	10
Server Disk Utilisation	12
Database Transactions Production	13
Database Size Production (GB)	13
Service Disruptions	13
Application Release Activities	14
Other Activities	14
Managed Components.....	15
Transaction Volumes.....	15
Database Growth	15
Backup Performance Production	15
Electricity Authority Contact Information	16
Jade Care Contact Information	16
Automated Fault Escalation Profiles – Priority A Incidents	17
Agreed Procedures	18
Change Control	18
Application Release Authorisation.....	18
Application Restarts	18
Hardware Fault Reporting	18
Anti-Virus Product	18
Recovery Procedures.....	18
Server Integrity	19
Reporting.....	19
Software Licences and Media Storage	19
Replication Technologies.....	19
Personnel and Contact Details.....	20

Performance Standards

Measurement	Requirement	Actual	Met	Ref
Number and detail of service provider rule or agreement breaches and details	Report delivered to EA detailing breaches	0	Yes	
Disaster recovery and backup obligations as set out in section 5 of operational requirements			Yes	Section 5 Operational Requirements
Number and details of participant rule breaches	Report on 1 st business day delivered to EA SFTP directory	01Mar17 at 03:01	Yes	
Maximum number of concurrent users for month		2165	Yes	
<p>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 99.5 per cent of the time in any one month. This statistic considers that planned outages will not count against availability level targets. See 4.1 (f) and 4.3 of Operational Requirements.</p> <p>NOTE;</p> <p>The actual percentage recorded is in accordance with the SPA.</p> <p>The outages recorded were planned outages as agreed with the Authority.</p>		100.00%	Yes	Operational Requirements 4.1 a
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. See 4.1 (f) and 4.3 of Operational Requirements.		100.00%	Yes	Operational Requirements 4.1 b
<p>The Registry must use its best endeavours to provide a service availability of 99.8 per cent or better, with nil or minimal outages.</p> <p>NOTE;</p> <p>The actual percentage recorded is in accordance with the SPA.</p> <p>The outages recorded were planned outages as agreed with the Authority.</p>		100.00%	Yes	Operational Requirements 4.1 c

Measurement	Requirement	Actual	Met	Ref
There must be no more than four unplanned outages in any one month		0	Yes	Operational Requirements 4.1 d
<p>There must be no more than two planned outages, undertaken only with prior approval from the Authority, per month. However, under the amendments clause 4.1(f) of the operational requirements allows the Authority to approve additional outages where necessary.</p> <p>Planned outages must be for no more than 2 hours' duration and must be undertaken outside regular service hours. Planned outages do not include necessary daily housekeeping and can be excluded from the calculation of availability.</p> <p>NOTE;</p> <p>The actual number of outages recorded is in accordance with the SPA.</p> <p>The outages recorded were planned outages as agreed with the Authority.</p>		1) Scheduled outage 26 February for production application deploy.	Yes	Operational Requirements 4.1 e
The Registry must measure service response time at regular intervals (every 1–5 minutes as agreed between the Authority and the provider) during the regular service hours			Yes	Operational Requirements 4.2 a
Response time will be measured by the provider executing a representative sample of simulated transactions from another host system, external to the Registry ISP, on the production system. The types of transaction to be used and the frequency of sampling will be agreed with the Authority			Yes	Operational Requirements 4.2 b
Service response time will be measured from the point at which a user transaction is executed to the point at which a valid response is received at the point the transaction originated			Yes	Operational Requirements 4.2 c
Ninety-five per cent of all sampled transactions will have a response time of less than 2 seconds and 80 per cent 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		<p><2 =99.77%</p> <p><1 =99.51%</p>	Yes	Operational Requirements 4.2 d
Help desk available	7:30 to 19:30 hours each business day	100%	Yes	Clause 11.20

Measurement	Requirement	Actual	Met	Ref
Registry reports to participants day 1 09:00	09:00 hours on the first business day of the month	28Feb2017 20:59	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 customers changing retailers	16:00 on the 6 th business day of the month		Yes	Clause 11.23
Such other information as may be agreed from time to time between the Registry and the Board [*3]	16:00 on the 6 th 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	01Mar2017 00:18	Yes	Clause 11.24
By 16:00 on 4 th business day deliver to the reconciliation manager the ICP days report	16:00 on 4 th business day	06Mar2017 01:59	Yes	Clause 11.26
By 16:00 on 4 th business day deliver to the reconciliation manager the loss factors report	16:00 on 4 th business day	02Mar2017 00:00	Yes	Clause 11.26
By 16:00 on 4 th business day deliver to the reconciliation manager the balancing area report	16:00 on 4 th business day	02Mar2017 00:00	Yes	Clause 11.26
By 16:00 on 4 th business day deliver to the reconciliation manager the half hour identifiers report	16:00 on 4 th business day	06Mar2017 04:40	Yes	Clause 11.26
By 16:00 on 1 st business day deliver to the market administrator (EA) a report summarising event that have not been notified to the Registry with specified time frames	16:00 on 1 st business day	01Mar2017 00:02	Yes	Clause 11.27
Copies of reports provided	Within 4 hours of request during business hours		Yes	Clause 11.28
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 21 of schedule 11.1
Registry to publish schedule of mapping between NSP's and balancing areas	Within 1 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 3 business days of notification of change		Yes	Clause 30 of schedule 11.1

Adhoc Reporting Statistics

Report	Run	Complete	Average time (seconds)
Change Network Creation Date	2	2	0.6
Distributor Maintenance	946	946	16.4
Loss Factor Maintenance	7	7	7.5
Metering Maintenance	2477	2477	21.2
NSP Mapping Maintenance	28	28	9.4
Report - Breach Current	239	239	2.2
Report - Current Details	137	137	448.2
Report - Event Detail	23329	23329	116.8
Report - File Audits	1	1	1.3
Report - File Handler Status	21	21	0.2
Report - ICP List	3284	3284	210.3
Report - Loss Factor Codes	2	2	14.9
Report - Maintenance Breach	187	187	0.7
Report - Metering Installation Information	61	61	1547.5
Report - Missing Metering Data	7	7	431.0
Report - NSP Mappings	3	3	7.4
Report - Switch Breach History	136	136	75.3
Request - Switch Resend	87	87	12.3
Switch AC	592	592	0.6
Switch AN	8624	8624	0.7
Switch AW	1761	1761	2.5
Switch CS	9418	9418	4.0
Switch MN	313	313	1281.1
Switch NT	13165	13165	0.6

Report	Run	Complete	Average time (seconds)
Switch NW	1940	1940	0.5
Switch RR	932	932	0.3
Trader Maintenance	1283	1283	16.1
Totals	68982	68982	59.9
Number of Reports successfully Re-Processed	8		

Batch File Statistics

Total	Complete	Completed by 07:30	Not completed by 07:30
67310	67310	67305	5

Details of Batch File Reports not completed by 07:30 Report	<p>Event Detail Participant: [REDACTED] Arrival: 08/02/2017 11:29:48 Start: 08/02/2017 11:30:00 End: 09/02/2017 10:01:47 Elapsed: 81107.0 seconds Processor: DFP7</p> <p>Report - Event Detail Participant: [REDACTED] Arrival: 13/02/2017 09:57:57 Start: 13/02/2017 09:58:08 End: 14/02/2017 12:29:20 Elapsed: 95472.2 seconds Processor: DFP4 Switch MN Participant: [REDACTED] Arrival: 16/02/2017 19:01:56 Start: 16/02/2017 19:01:57 End: 17/02/2017 08:05:52 Elapsed: 47035.5 seconds Processor: SFP1 Switch MN Participant: [REDACTED] Arrival: 17/02/2017 19:02:07 Start: 17/02/2017 19:02:08 End: 20/02/2017 08:07:48 Elapsed: 219939.6 seconds Processor: DFP4 Switch MN Participant: [REDACTED] Arrival: 18/02/2017 19:02:36 Start: 18/02/2017 19:02:40 End: 20/02/2017 08:08:04 Elapsed: 133524.4 seconds Processor: SFP3</p>
---	--

Other Information

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

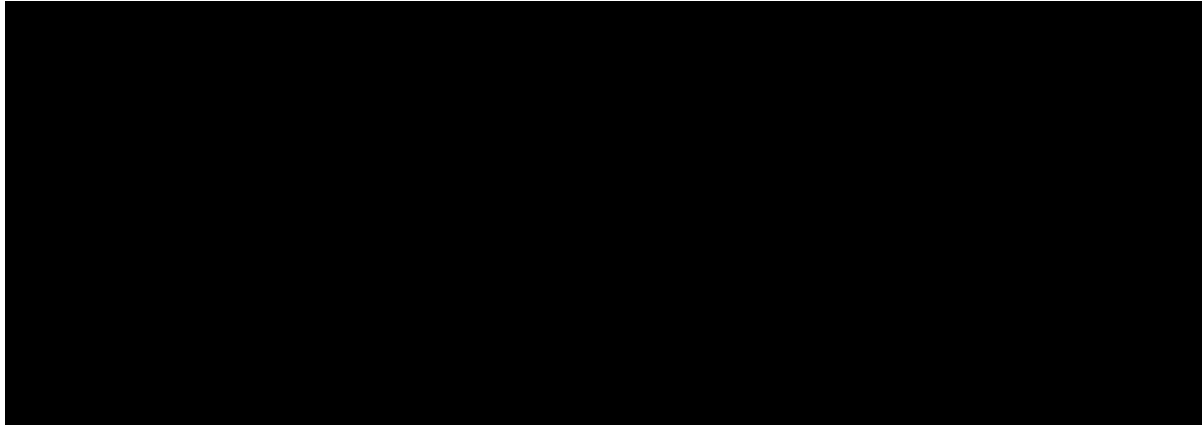
- ICP's energized, de-energized, decommissioned and switched by Retailer and NSP
- ICP's energized, de-energized, decommissioned and switched by Retailer
- ICP's energized, de-energized, decommissioned and switched by Distributor
- Report PR-130 as defined in functional specification
- Details of participant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

Summary of Incidents

There were no incidents.

Development Access

Jade Development staff have continuous access to the Production Electricity Registry System for support purposes.



Software Related Fixes

ID	Description	Response
ER-619	Email screen bubble help refers to price category codes	Patched in release 17.02 (26/02/2017)
ER-620	Clarify error message on Report submit screen when in invalid schedule date has been input	Patched in release 17.02 (26/02/2017)
ER-621	Addition of bubble help to status reason on ICP summary page	Patched in release 17.02 (26/02/2017)
ER-622	Switch menu executes its load twice (2nd load is rejected silently). No issue arises but 2nd load is unnecessary.	Patched in release 17.02 (26/02/2017)

Data Fixes

Number and details of incidents requiring data fixes.

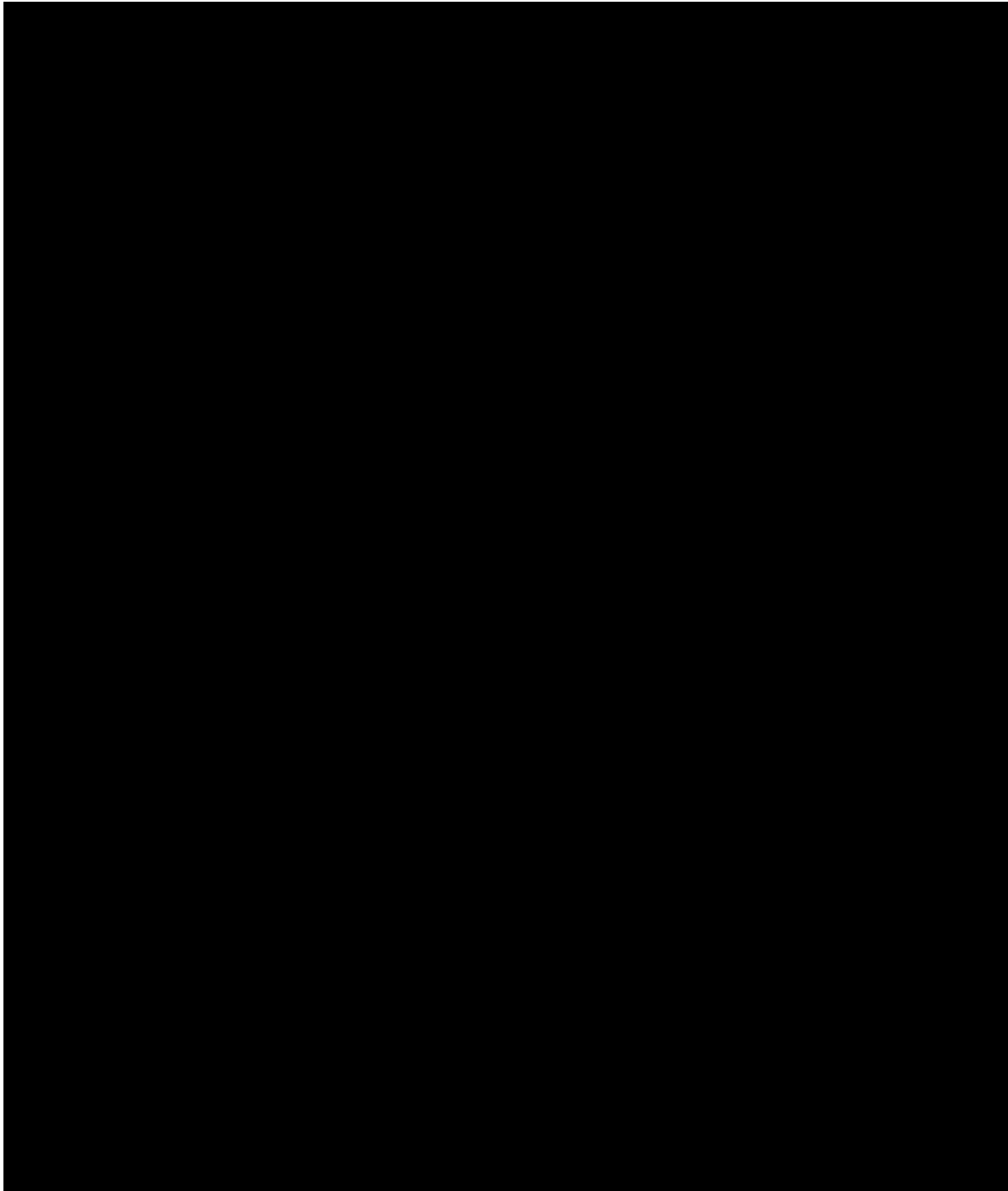
ID	Description	Severity	Response
NIL			

Schedule Of Faults Raised

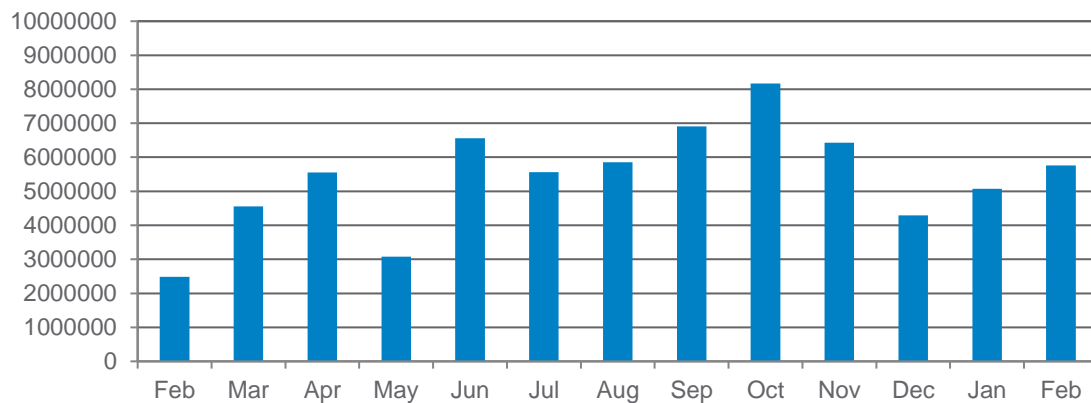
A summary of faults raised during the month.

ID	Description	Severity	Response
ER-623	Duplicated relationship reference in MN Response	Low	Fixed
ER-622	Multiple switch menu load	Low	Fixed
ER-621	Add bubblehelp to status reason on ICP summary page	Low	Fixed
ER-620	Modify error message on report submit	Low	Fixed
ER-619	Email screen bubble help references PriceCategoryCodes	Low	Fixed

Server Disk Utilisation

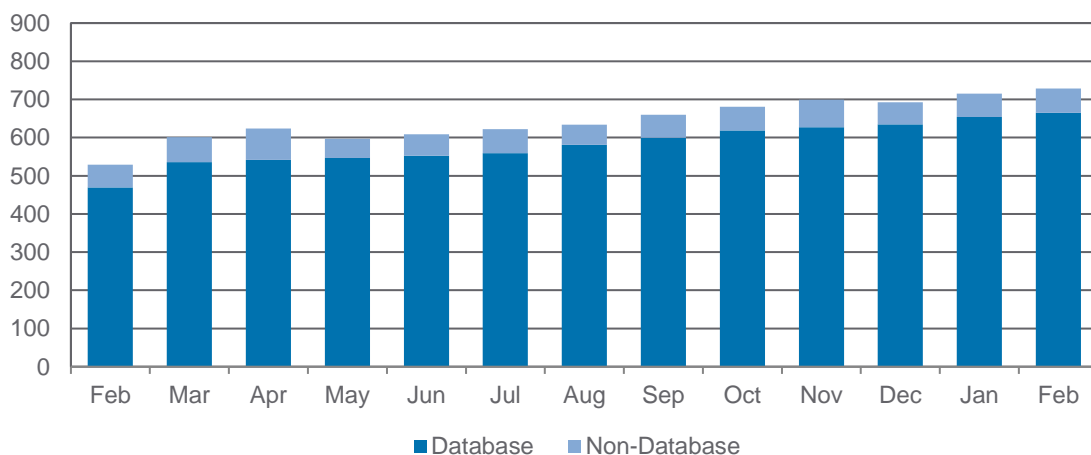


Database Transactions Production



NOTE re October increase; [REDACTED] submitted a file containing 195485 ICP's, for each of those they wanted the audits between 01/01/2014-today (almost 3 years). Output file contained 177k entries.

Database Size Production (GB)



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	1
Number of Unscheduled Outages	0

Performance Measure	
Last Unscheduled Outage	October 2016

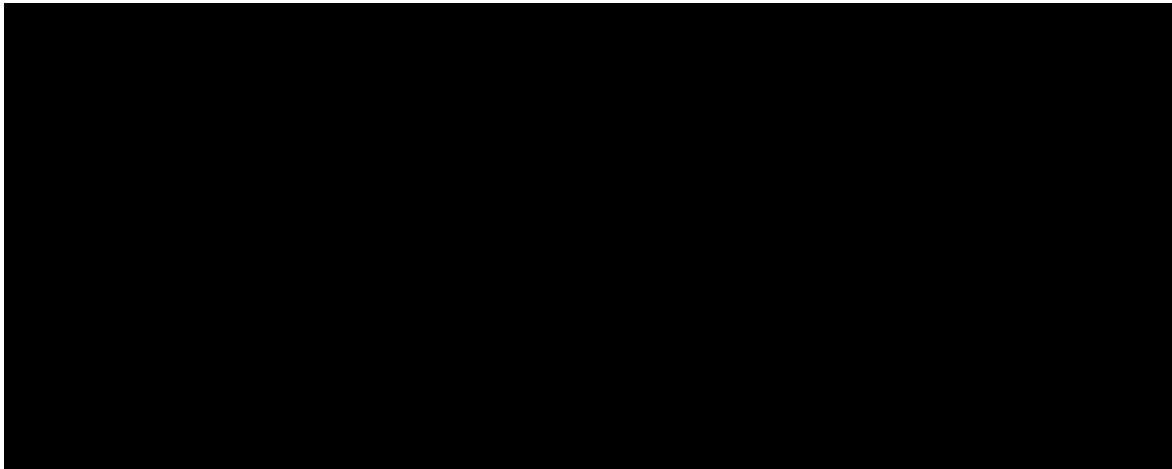
Application Release Activities

Day	Detail	Duration hh/mm	Authoriser
26Feb17 21:00-21:30	Release 17.02 to Production	00:30	Grant Benvenuti

Other Activities

Day	Detail	Duration hh/mm	Authoriser

Managed Components



Transaction Volumes

Transaction name	This Month	Last Month	Percentage Change
All Transactions	5,762,585	5,075,889	14%

Database Growth

Class	This Month MB	Last Month MB	Change MB
Database	680,980	669,298	11,682
Non-database	65,231	62,713	2,518
Total	746,211	732,011	14,200

Backup Performance Production



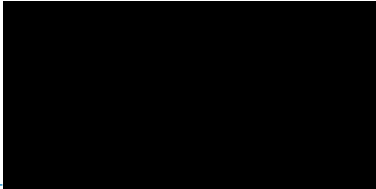
Backup Type	Run days	Run Time	Expected Duration hh/mm	Tape Restore Test Date
Disk	ALL	20:00	01:45	14Feb17
Tape	ALL	01:00	05:00	

Electricity Authority Contact Information

The customer operations contacts are for Jade Care personnel to contact the Electricity Authority staff 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

Jade Care Contact Information

Role	Contact Details
Central Systems Central Systems is the single point of contact for Jade Care. Central Systems will co-ordinate the involvement of the necessary staff from elsewhere in the Jade organisation.	 A: Jade Software Corporation 21 Sheffield Crescent P.O. Box 20159 Christchurch, New Zealand
Client Services Manager The Client Services Manager provides a more formal channel of communications between the two organisations. The Client Services Manager is responsible for scheduling non-routine activities with the customer, acts as the primary point of fault escalation and also produces the monthly reporting.	
Business Manager The Business Manager takes overall responsibility for the customer relationship with Jade.	

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, then Grant Benvenuti would like to be contacted.

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 from time to time. The target date for delivery is the 5th working 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.