



Gas Industry Company

Service Report and User Guide

May 2022

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.

© 2022 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

Current Service Status	4
Reporting and Availability SLA Achievement.....	4
Environment & Resilience Overview	5
Backup and Recovery Metrics	6
Database Transactions.....	6
Database Size (GB)	7
Service Disruptions	7
Application Release Activities	7
Maintenance Activities.....	8
Summary of Change Requests	8
Development Team Access	8
Managed Components	8
Licence Usage and Product Support	9
Transaction Volumes.....	9
Database Growth	10
Backup Performance.....	10
Contacts and Escalation.....	11
Call Recording Process.....	11
GIC Contact Information	12
Jade Care Contact Information	12
Automated Fault Escalation Profiles – Priority A Incidents	13
Agreed Procedures	14
Change Control	14
Requesting a Jade Upgrade or Hot Fix.....	14
Application Release Authorisation.....	14
Application Restarts	14
Database Refreshes.....	14
Hardware Fault Reporting	15
Anti-Virus Product	15
Recovery Procedures.....	15
Server Integrity	16
Reporting.....	16
Software Licences and Media Storage	16
Replication Technologies.....	17
Personnel and Contact Details.....	17

Current Service Status

Reporting and Availability SLA Achievement

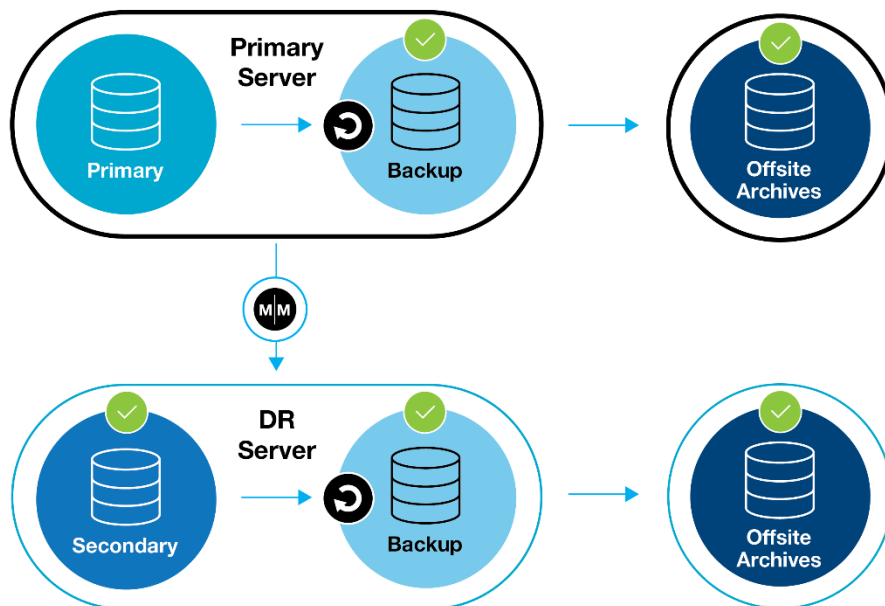
Requirement	Target	Actual	Met?
Extended business hours availability [07:00 to 19:30]	>99.5%	100%	Yes
All other hours availability	>98.0%	99.88%	Yes
Unplanned outages	<1	0	Yes
Planned outages	<2	2	Yes
Duration of each planned outage	< 2 hours	Yes	Yes
Planned outages approved by Gas Industry Co	Yes	Yes	Yes
Planned outages scheduled outside extended business hours	Yes	Yes	Yes
Internal response time for ICP-based query	>95% of WebViewICPDetails to complete within 1sec	100%	Yes
End user response time for address-based query	>95% of WebAddressSearch to complete within 5sec	100%	Yes
On demand report delivery	< 4 hours of request during extended business hours [7.00 to 19.30]	10.6 minutes maximum	Yes
Standard month end report files completed	By 09:00 on 1st business day of the relevant month	01 June 22 00:10:46	Yes

Self Review

No compliance failures were detected during the period; see further in the document for a service disruption during the month.

All obligations under the Rules, the Service Provider Agreement, and Agreed Performance Standards, were met by the Registry Operator.

Environment & Resilience Overview



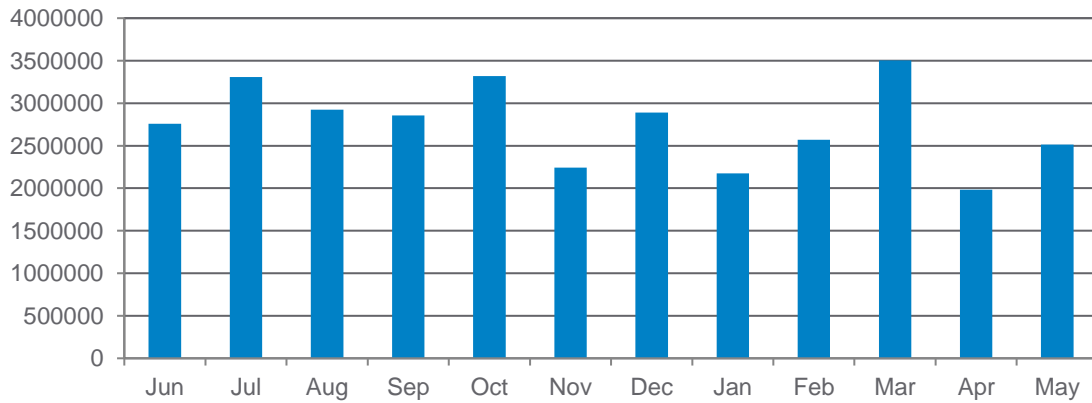
Key

	Feature Implemented		Primary Database		Offsite archives
	Feature not implemented		Secondary Database		Mirroring
	Local backup		Backups		

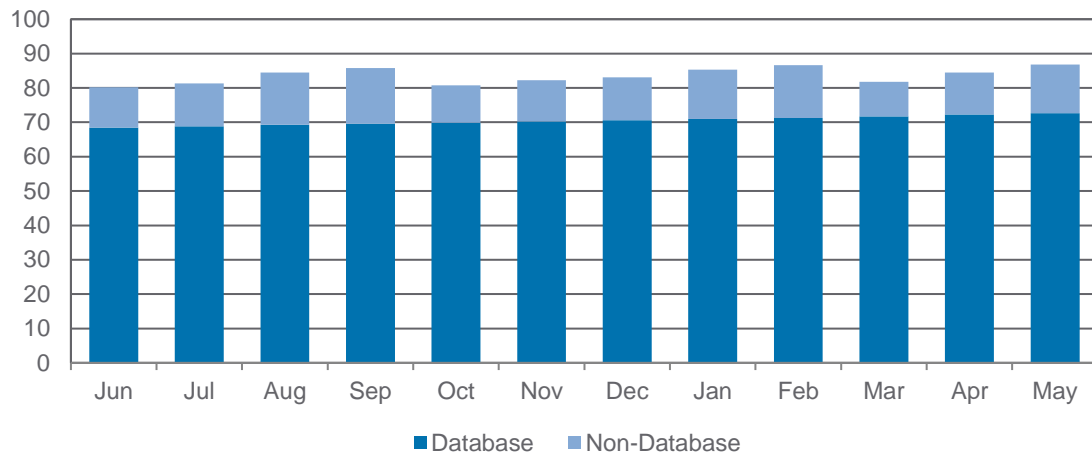
Backup and Recovery Metrics

Metric	Result	Recommendation
There is a hot-standby Disaster Recovery System	✓	
Backups are taken offsite	✓	-
At least 14 generations are kept offsite	✓	-
At least 5 days database journals kept on production server	✓	
DR cutover tested annually	✓	28 th May 2022
Offsite system backup recovered and integrity tested monthly	✓	14 th May

Database Transactions



Database Size (GB)



Service Disruptions

None

Performance Measure	
Availability*	100%
Number of Scheduled Outages	2
Number of Unscheduled Outages	0
Last Unscheduled Outage	Apr 2021

*Availability measure excludes pre-approved scheduled outages

Application Release Activities

Day	Ref	Detail	Duration	Authoriser

Maintenance Activities

Day	Ref	Detail	Duration	Authoriser
21	981672	DR Cutover to CHC	0:41	A. Walker
28	990659	DR Cutover to AKL	0:13	A. Walker

Summary of Change Requests

Day	Ref	Detail	Status
-	-	-	-

Server Patch Status

Patches are tested against the standard Jade Care tools and OS configurations, and are distributed in a controlled sequence with customer production servers being the last in the distribution cycle.

Non-critical patches are held for distribution until such time as a critical patch is released, at which point all outstanding patches are applied.

There are no patches outstanding

Development Team Access

The development team have access to the production databases. Team membership is reviewed periodically.

Accesses this month: None

Managed Components

Name	Type
CNWAKLS170	Production Database Server
CNWCHCS173	DR Database Server
CNWCHCS174	Test Database Server
GICPREG	Production System
GICTREG	Test System

Name	Type
GICUREG	UAT System
GICDREG	Development System

Licence Usage and Product Support

Full support is available for the installed releases.

Environment	Installed Release	Current Release	Licence Entitlement	Minimum Available
GICPREG	Jade 18.0.01	Jade 20.0.02	70	23
GICUREG	Jade 18.0.01	Jade 20.0.02	-	-

Transaction Volumes

Transaction name	This Month	Last Month	Percentage Change
All Transactions	2,514,294	1,984,327	27%

Database Growth

Class	This Month	Last Month	Change
Database	74,351	73,997	354
Non-database	14,577	12,515	2,062
Total	88,928	86,512	2,416

Backup Performance

Backup Type	Run days	Run Time	Expected Duration	Failed this Period	Restore Test Day
Disk	ALL	19:00	00:11	0	14 May
Tape	ALL	05:00	02:00	0	

Contacts and Escalation

Call Recording Process

Jade Care Enquiry or Incident

This process applies to the availability of the system and its related hardware and near-server networking infrastructure. It enables Gas Industry Company to contact the Jade Care operations and networking team.

- Gas Industry Company can email Jade Care or call the toll-free number on a 24x7 basis.
- For priority A issues, call Jade Care to ensure immediate escalation. In most situations a priority A incident with the managed service will have already been detected by Jade Care
- Incidents will be allocated an appropriate priority according to Jade Care's understanding of the severity and/or the customer's input.

All contacts will be responded as soon as possible and resolved within the time specified in the service level agreement.

GIC Contact Information

The customer operations contacts are for Jade Care personnel to contact GIC staff for day-to-day procedures or any unexpected events.

Contact Name / Role	Contact Details
Senior Advisor	Andrew Walker P: 04 494 6587 M: 021 053 6767 E: Andrew.Walker@gasindustry.co.nz
Senior Advisor	Grace Clapperton-Rees P: M: E: grace.clapperton-rees@gasindustry.co.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.	E: csystems@jadeworld.com P: 0800 65 22 66 or +64 3 365 22 66 or +64 21 225 8122 A: Jade Software Corporation 5 Sir Gil Simpson Drive 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 produces the monthly reporting.	Jason Trevathan E: jtrevathan@jadeworld.com P: 03 367 8267 – Office 021 328 705 – Mobile
Account Manager	Ian Hight E: ihight@jadeworld.com P: 021 963 038 – Mobile

Automated Fault Escalation Profiles – Priority A Incidents

Event	Time Delay	Contact	Type	Repeat Interval
On Open		Jade Customer Service Manager	SMS	
		Jade's GIC Client Service Manager	SMS	
		Grace Clapperton-Rees – GIC	Email	
		Andrew Walker GIC	Email	
	00:05	Jade Business Manager	SMS	
	00:15	JADE Director of Operations	SMS	
	01:00	Jade Service Delivery Manager	SMS	
	02:00	Jade Director of Development	Email	
	02:00	Jade Developer	Email	
	00:30	Jade CEO	Email	
On Update		Jade Client Service Manager	Email	
		Andrew Walker GIC	Email	
		Grace Clapperton-Rees – GIC	Email	
On Close		Jade Client Service Manager	Email	
		Jade Business Manager	Email	
		Andrew Walker GIC	Email	
		Grace Clapperton-Rees – GIC	Email	

Agreed Procedures

Change Control

All significant changes will be notified to GIC, 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.

Requesting a Jade Upgrade or Hot Fix

This process applies when GIC requires a Jade system to be upgraded with a new version or hot-fix.

To arrange installation of a new version or hot fix, GIC should contact Jade Care and copy in the Client Service Manager (CSM), preferably by email, to schedule the deployment. If an urgent deployment is required the email should be followed up by a phone call to Jade Care.

Jade Care will organise and co-ordinate the deployment.

The following minimum information should be provided:

- Environment to be upgraded (e.g GICUREG)
- Hotfix or Upgrade being requested
- Start Date/Time (24 hours' notice preferred for Production deploys)
- Time Zone (if no time zone specified local server time will be assumed)
- Required Completion deadline
- List of Contacts to notify by EMAIL on completion

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 GIC, or may be applied by the Client Service Manager where GIC 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.

Database Refreshes

This process applies when GIC requires a 'refresh', or copy, of data from one system to another (typically from Production to Test or UAT, often performed before an upgrade).

All refresh requests should be made by email to Jade Care and with a copy to the CSM contact. If urgent, please follow up with a phone call.

Unless otherwise stated the refresh will use the most recent backup of the source system. I.e. The production backup occurs at 23:00. If a refresh request is made at 21:00 it will use the 23:00 backup from the previous day, as this is the most recent backup available. If you require the most up to date data please either schedule refreshes to occur shortly after the production backup or request an ad-hoc backup as part of the refresh request.

NB Where the source system has automated or scheduled functions embedded in the system, care must be taken to ensure these settings are adjusted in the target system before the target system is started to avoid processes in test corrupting production data or interacting with external systems.

The following minimum information should be provided:

- Start Date/Time
- Time Zone (if no time zone specified local server time will be assumed)
- Latest completion date/time
- Action to take if Refresh completion time is not met
- Source (from) Environment
- Target (To) Environment
- Whether an ad-hoc backup of the target environment is required before the refresh?
- List of Contacts to notify by email on completion
- Applications to be started in the target environment after the refresh completes

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 GIC 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 server failure, immediate failover will be to the standby cluster node at the same site. In the event of a catastrophic site failure, an SDS takeover will occur to the DR site upon approval by GIC.

Server Recovery

Server recovery should never take place unless agreed by GIC, 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

GIC 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 have recommendations for changes to hardware or the operating environment, these recommendations will be submitted to GIC 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

GIC 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.