

Gemini Update

Richard Griffiths – 10th June 2008

Agenda

- Recent Outages/Incidents
- Enhanced System Security Project – Update
- Gemini Disaster Recovery Warm Standby Failover/Failback

Recent Outages / Incidents (1/4 to 31/5)

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| <p>7th, 8th, 9th and 28th April.</p> | <p>Issues with intermittent connectivity problems to Gemini</p> |
| <p>2nd, 27th and 29th May</p> | <p>These issues were due to problems with the “Ark Royal” firewall used as the primary connection route in to the Gemini application.</p> |
| | <p>Issues were due to the heavy utilisation of this infrastructure and the firewall coming to its natural end of life and being unable to cope with this load.</p> |
| | <p>A number of actions were taken by xoserve and our suppliers throughout April and May to reduce non-core business traffic. This improved service, but issues were still encountered.</p> |
| | <p>Full implementation of the new firewall was undertaken on 8th June.</p> |
| | <p>Note: The secondary firewall “Illustrious” is also due to be upgraded and consideration is being given to implementation on 15th June.</p> |

Recent Outages / Incidents (1/4 to 31/5)

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| <p>6th April</p> | <p>Gemini access issues reported by 2 Shippers (6:00am to 8:10am)</p> <p>Review of system logs during the incident was unable to identify any infrastructure errors or a root cause of this issue.</p> <p>No actions were taken by the support groups and service restoration was confirmed with the Shippers involved.</p> |
| <p>8th April</p> | <p>Gemini batch jobs failing including Auction processing (7:30am to 11:30am)</p> <p>Issue was due to file space problems on the offline batch container. A full audit was undertaken on the files contained and housekeeping undertaken to restore normal service.</p> |

Recent Outages / Incidents (1/4 to 31/5)

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| <p>10th, 12th, 13th and 17th April</p> | <p>Data not updated in Gemini (impacts as following)</p> <p>Linepack records (10th and 13th April), Measurement information (12th April), Shrinkage Factors (17th April)</p> <p>Issues encountered with source system caused delays in receiving records. The issue is due to a software bug in the source system Oracle software for which a workaround has been put in place..</p> |
| <p>10th May</p> | <p>Intermittent issues with API service (10:50pm to 04:15am)</p> <p>API requests are load balanced across two Web Cache services. One of these servers was not accepting any new connection (1 in 2 connections impacted).</p> <p>A full physical power recycle was undertaken and the normal service housekeeping activities then restored full resilience. Call raised with Oracle for analysis, who have requested additional logging information.</p> |

Recent Outages / Incidents (1/4 to 31/5)

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| 11 th May | <p>API service unavailable (10:00am to 3:00pm)</p> <p>Issues were due to failure of an air conditioning unit at the Hinckley National Grid data centre which caused a number of servers at the site to shutdown.</p> <p>On-line services were not impacted by this issue.</p> |
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Enhanced System Security Project - Update

- User Acceptance Testing approximately 90% complete with no major issues. Due for completion in next two weeks.
- Operational Acceptance Testing approximately 80% complete with no major issues. Due for completion in next two weeks.
- Shipper connectivity testing successfully completed during April with no issues. 6 Shippers carried out connectivity testing on the existing infrastructure and 2 tested on the new configuration.
- No further Shipper involvement expected or planned. Will still require an outage during the working day of approx 2 hours.
- Implementation scheduled for 18th June has been put on hold due to dependency on another National Grid project.
- Assessment on-going to establish a new implementation date, which will be communicated via UK Link Committee and Gas Operations distribution lists.

Gemini Disaster Recovery Warm Standby Failover/Failback

- Annual Disaster Recovery Test performed to prove failover of primary database and access.
- Planned for the weekend of 26/27th July
- System outages required as follows;
 - 26th July – 04:15am to 10:15am
 - 27th July – 4:00am to 10:00am
- No changes required to Shippers access as the DR is undertaken on internal infrastructure only.