



Alumni and Donor Giving (ADG): Interfaces and Batch Jobs

December 2023

Internal Audit and Services

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Objective

The objective of this review is to assess the **Interfaces and Batch Jobs** process for the Alumni and Donor System (ADG)

Scope:

- Verify that batch jobs/interfaces are scheduled on a periodic basis.
- Check that interfaces and batch jobs are sent successfully
- Validate that Interfaces and batch jobs are accessed by appropriate personnel
- Confirm that Interfaces and batch jobs are encrypted
- Ensure that Interfaces and batch jobs send notifications are activated

Distribution and Audit Team

Distribution

Audit Team

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Detailed Observations, Recommendations and Management Responses

#	Observation and Risk	Priority	Recommendation	Management Responses
1.	<p>Observation Summary: <i>The scheduling of batch jobs does not align with the details discussed in the walkthrough meeting that took place with the associate director of IT Virgile Fannon.</i></p> <p>Detailed Observations: <i>We Noted the following:</i></p> <ul style="list-style-type: none"> <i>The configuration for Merkle's batch jobs dictates a weekly execution schedule, contrary to the intended daily frequency.</i> <i>Notably, 3 out of the 5 batch jobs are executed with a 2-week interval between occurrence. Deviated from the expected flow.</i> <i>Ruffalo Cody's batch jobs are programmed for daily execution, contrary to the intended weekly schedule</i> <i>All 5 batch jobs for Ruffalo Cody exhibit unpredictable execution patterns. This shows inconsistency in their processing.</i> <p>Risk Statement: <i>Deviation from the designed batch job schedule may lead to disruptions in the workflow and workplace. This could potentially impede the timely arrival of specific files at the designated database, thereby affecting their availability for employee use. This lack of adherence to the schedule could have downstream consequences on operational efficiency and data accessibility.</i></p>	H	<p><i>Revise and verify the Oracle Batch job scheduler settings to ensure the accurate execution of batch jobs in accordance with the specified schedule.</i></p> <p><i>This involves making necessary adjustments to the configuration and validating the changes to guarantee the seamless and timely processing of batch jobs as per the intended timetable.</i></p>	<p><i>Agreed.</i></p> <p><i>Responsible Party: Virgillie Fannon, the Associate Director of IT</i></p>

<p>2. Observation Summary: <i>The ADG Batch Jobs currently generate a lack of encryption and have disabled alerts. Furthermore, there is a security concern as these batch jobs are being transmitted through an unsecured channel, posing potential vulnerabilities in the confidentiality and integrity of the data during transfer. Addressing these issues is crucial to enhance the overall security posture of the ADG Batch Jobs system.</i></p> <p>Detailed Observations:</p> <ul style="list-style-type: none"> • <i>Observations reveal the absence of encryption in the entire sample of 10 batch jobs.</i> • <i>Within this set, 2 of the 5 batch jobs from Merkle were transferred Via FTP</i> • <i>All 5 batch jobs from Ruffalo Cody underwent FTP transfer.</i> • <i>All 10 batch jobs exhibit a lack of alerts and notifications, signaling a potential oversight in monitoring mechanisms</i> • <i>Additionally 2 out of 5 batch jobs from both Merkle and Ruffalo Cody were identified as unsuccessful or incomplete in the test sample, suggesting operational challenges that warrant further investigation and resolution.</i> <p>Risk Statement: <i>The ADG Batch Jobs system faces a critical risk due to absence of encryption in all sampled jobs, combined with the use of unsecured FTP channels for transmission. This vulnerability threatens the confidentiality and integrity of data, compounded by the lack of alerts and notifications, leaving the system susceptible to undetected security breaches. The operational issues identified in the subset of jobs further accentuate the risk, necessitating immediate action to mitigate potential data compromise and operational disruptions.</i></p>	H	<p><i>Harmonize interfaces and batch jobs with existing encryption policies to guarantee the safeguarding of data both during transit and also being at rest.</i></p> <p><i>Establish protocols for periodic reviews to confirm that batch jobs adhere to secure data transfer practices, specifically utilizing a secure file transfer protocol. This proactive approach ensures ongoing compliance with security standards and enhances the overall protection of sensitive information within the system.</i></p>	<p><i>Agreed.</i></p> <p><i>Responsible Party: Virgillie Fannon, the Associate Director of IT</i></p>
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