Access controls worksheet

| | Note(s) | Issue(s) | Recommendation(s) |
|-------------------------------|---|---|---|
| Authorization /authentication | Objective: Make 1-2 notes of information that can help identify the threat: Who caused this incident? When did it occur? What device was used? | Objective: Based on your notes, list 1-2 authorization issues: • What level of access did the user have? • Should their account be active? | Objective: Make at least 1 recommendation that could prevent this kind of incident: • Which technical, operational, or managerial controls could help? |

Notes:

- 1. The threat actor was Robert Taylor Jr., a former legal attorney contractor whose employment ended on 12/27/2019, but accessed the system on 10/03/2023 at 8:29:57 AM (over 3 years after termination)
- 2. The suspicious computer name "Up2-NoGud" and IP address 152.207.255.255 were used to attempt adding a fraudulent payroll event to "FAUX_BANK"

Issues:

- 1. Failed account deprovisioning: Robert Taylor Jr.'s account remained active with full Admin privileges 3+ years after his contract ended (12/27/2019)
- 2. Excessive privilege assignment: ALL employees have "Admin" authorization regardless of their role, violating the principle of least privilege (contractors, part-time, and seasonal workers have same access as full-time)

Recommendations:

- 1. Implement automated off-boarding procedures:
 - Immediate access revocation upon employment termination
 - Automatic account deactivation on contract end dates
 - Mandatory IT/HR checklist for departing employees
- 2. Enforce Role-Based Access Control (RBAC) with least privilege:
 - Create tiered authorization levels (User, Power User, Admin)
 - Restrict Admin access to essential personnel only
 - Implement need-to-know basis for sensitive systems like payroll
- 3. Deploy Multi-Factor Authentication (MFA) for all users, especially for financial transactions and administrative functions
- 4. Establish quarterly access reviews and audit procedures:
 - Regular review of all active accounts
 - Automatic alerts for dormant accounts (30+ days inactive)
 - Immediate investigation of suspicious access patterns