# Business Continuity & Recovery Plan

Fallback procedures if the bot is unavailable (manual workaround steps, recovery time objectives)

**Purpose**: To ensure the continuity and rapid recovery of the automated processing of Off-Cycle manual paysheet.

**Critical components:**

* Automation Anywhere (AA) Control Room
* Job scheduler within AA control room
* External systems: PeopleSoft, Oracle Financial Cloud, Salesforce
* Monitoring & alerting (Datadog, AA)
* Box

**Risk Assessment:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Impact** | **Likelihood** | **Mitigation** |
| AA server failure | High | Medium | Sends alert notification to 1st tier AA support, RPA developer to restart process when server is back online. |
| External system failure | High | Medium | Alert external system owner(s) for recovery. Alert RPA developer to restart process when system is online. Email notification needs to be sent to all parties.  When failure prolongs, suspend transaction and each process owner needs to restart the process manually (see Manual Workaround Steps). |
| Cyberattack on AA control room | High | Medium | WAF, MFA, and regular security audits with AA and UCOP IAM |
| Bot task corrupt | High | Low | Daily backups using AA’s recommended best practice [Github –or- daily export of bot tasks into a Box repository] |

**Business Continuity Strategies:**

* Redundancy: All critical services are deployed in multiple availability zones.
* Automated Failover: Load balancers redirect traffic to healthy instances.
* Data Backup: Nightly backups stored in encrypted cloud storage.
* Monitoring: Real-time alerts for anomalies and failures.

**Recovery Procedures:**

Steps:

1. Identify failed job in Automation Anywhere through logs
2. Email notification to business owners with failure log.
3. Notify stakeholders of delays, and if necessary, issue an alert to process owner to re- run process manually

**Manual Workaround Steps:**

Automation run can be interrupted by single or multiple system(s) failure. At any event of failures, RPA developer required to follow checklists below:

1. **Identification of failure point**

Responsible party: RPA developer

1. Review the Automation Anywhere logs to and error messages.
2. Determine which task failed (e.g. data extraction, file upload, email notification, external system)
3. Note the time and specify error codes and messages
4. **Notify Stakeholders**

Responsible party: RPA developer

1. Inform process owner about the failure
2. Automated email notification to be sent to process owner which include:
   1. Bot name
   2. Impacted system
3. **Perform the Task Manually**

Responsible party: process owner

|  |  |
| --- | --- |
| Automated step | Manual equivalent |
| Extract data from manual entry workbook | Access manual entry workbook in Box and copy the necessary key points to begin processing |
| Determine latest page number in Peoplesoft and review paycheck | * Login to Peoplesoft and navigate to Query Viewer > UC\_PY216\_OFFCYLE\_PAGE\_NUM\_LINE * Enter Company, Pay Group, Pay Period End date. Select off cycle and retrieve latest page |
| Apply the data and create paysheet | * In Peoplesoft and navigate to Payroll for North America > Payroll Processing USA > By Paysheet * Enter Company, Pay Group, Pay Period End date. Select off cycle and click Add * Validate all input |
| Populate paysheet details and earning information | * In Paysheet Details section enter Empl ID and Employee Record * Complete Earnings and Other Earnings sections. * Validate all input |

1. **Validate Output**

Responsible party: process owner, RPA developer

1. Double-check data accuracy and completeness
2. Compare with previous successful bot runs if available.
3. **Monitor for Recurrence and Escalate**

Responsible party: RPA developer

1. Keep an eye on future bot runs
2. If AA keeps failing to run the bots, report and escalate the failure to AA support team. See communication plan for details.
3. Document the date/time of incidents and cause for lesson learned.

**Communication Plan:**

1. Internal Notification: ZOOM + email alerts to RPA developer and system administrator
2. External Notification: Status page update and email to affected process owner(s)
3. UC escalation Contacts:

|  |  |  |
| --- | --- | --- |
| Group | Name | Email address |
| Enterprise Shared Service (ESS) | - | ess-tickets@ucop.edu |
| RPA developers | Abhishek Poodi | [Abishek.poodi@ucop.edu](mailto:Abishek.poodi@ucop.edu) |
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|  | Sean Martin | [Sean.Martin@ucop.edu](mailto:Sean.Martin@ucop.edu) |
| Process owners | Carolyn Otmar | Carolyn.Otmar@ucop.edu |
| Peoplesoft Administrators |  | ~ITS-PSADMIN-Support@ucop.edu |

1. Automation Anywhere support portal: <https://apeople.automationanywhere.com/s/support>

**Resources:**

1. <https://www.automationanywhere.com/customer-support>
2. <https://docs.automationanywhere.com/bundle/enterprise-v2019/page/enterprise-cloud/topics/deployment-planning/on-prem-install/cloud-ha-dr-deploy.html>

Notes:

1. In case of Box failure to retrieve file – hard stop; next steps:
   1. email Devs, business
   2. wait until Box is accessible
2. In case of Peoplesoft login error due system down, incorrect credentials – bot retries 3 x, hard stop. Next steps:
   1. Email devs, business
   2. Wait until PS is accessible
   3. Manually run Offcycle process ??
3. In case of AA down prior to Bot run – no process is ran. Next steps:
   1. AA sends email to Devs
   2. Dev reschedule the bot run
4. In case of AA down during Bot run. next step:
   1. AA sends email to Devs
   2. Email business
   3. re-schedule the bot run -or- ?
5. region : US-EAST-1; **Automation 360 build 37468**

Automation 360 Cloud : Control Room - US East 1

Environment - DEV

Business continuity:

1. In case of EC2 crashes
2. Disaster recovery