

Process Design Document / Solution Design Document

HIT Routine System Checks

Purpose of Document

This document serves as the technology policies and procedure for Intelligent Automation Hub at Geisinger.

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1. Document Control

Applies to:	All IAH RPA Operating Model
Classification:	Highly Confidential
Owner:	Intelligent Automation Hub Team

DOCUMENT HISTORY

Version	Date	Author	Approver	Reasons for Change
1.0	11/27/2023			Initial Draft
1.1	5/2/24			Process stabilization

REVIEW/APPROVAL

Role	Name	Date
SME		
Process Owner		
Business Architect		
Developer		
IAH Director		

STAKEHOLDERS

Role	Name	Email
SME		
Process Owner		
Business Architect		
Developer		
IAH Director		

2. Document Details

2.1 PURPOSE OF THIS DOCUMENT

The Process Design Document outlines the business process chosen for automation and the technology being utilized.

The document describes the sequence of actions performed as part of the business process, the conditions, and rules of the process prior to automation and how they are envisioned to work after automating it, partly or entirely. This specifications document serves as a base for developers, providing them with the details required for applying automation to the selected business process.

3. Current State Process Description

3.1 PROCESS SUMMARY

The automation will open applications in Epic Production to test their availability. The automation will open MUSE, Tower, WebBlob, PACS, and Web Links confirming their accessibility. If testing reveals any failures, the bot will generate a SNOW incident ticket and send an email to report it.

3.2 DATA FLOW & APPLICATIONS

3.2.1 INPUT

Input	Format	Location	Is it natively digital?	Is it structured?
Test Patient	Text	Provided by Business	Yes	Yes

3.2.2 OUTPUT

Output	Format	Location	Frequency	Comment
Output Report	Excel	Emailed	Daily	Report of Bot activity
ServiceNow (SNOW) Ticket	N/A	ServiceNow	As needed	Triggered by application test failure
Outlook Email	N/A	Outlook	As needed	Triggered by application test failure

3.2.3 APPLICATIONS

Application	Version	Interface	Req Key / Operation / URL	Comment
Epic		Desktop Application	TBD	Mimic Janine West Access
Outlook		Desktop Application	TBD	
Microsoft Edge		Desktop Application	TBD	

3.3 BUSINESS RULES

Rule	Detail
Automation Frequency	Hourly, 24 / 7
Bot Start Time	12:00am, and hourly thereafter
Patient Unique Field	N/A
Excluding weekends and holidays	No
SLAs	Bot will initiate at the beginning of each hour and finish in less than 60 minutes.

3.4 CURRENT STATE METRICS

Avg. Daily Transactions	# Batches Daily	Avg. Volume / Batch	Weekly Avg. Volume	Frequency
115	23	5	805	Daily

3.5 CURRENT STATE PROCESS FLOW

High-Level Process Flow Diagram (Current state):

1. SME opens Epic in Production Mode
2. SME opens the test patient in 'Chart Review' view.
3. SME uses 'GHS MUSE Access' to open a new browser page to test MUSE Access
4. SME uses 'GHS History Patient Level Scan' to open an image to test Tower Access
5. SME uses 'Media' to open a 'Geisinger Health System' logo image to test access to WebBlob.

6. SME uses 'Imaging' to open a Radiology image to test access to PACS.
7. SME uses Epic to open two different browser pages to test access to Web Links
8. If there is a failed test, the SME generates a ServiceNow ticket to notify the EAT Application Integration (EAT AI) department.

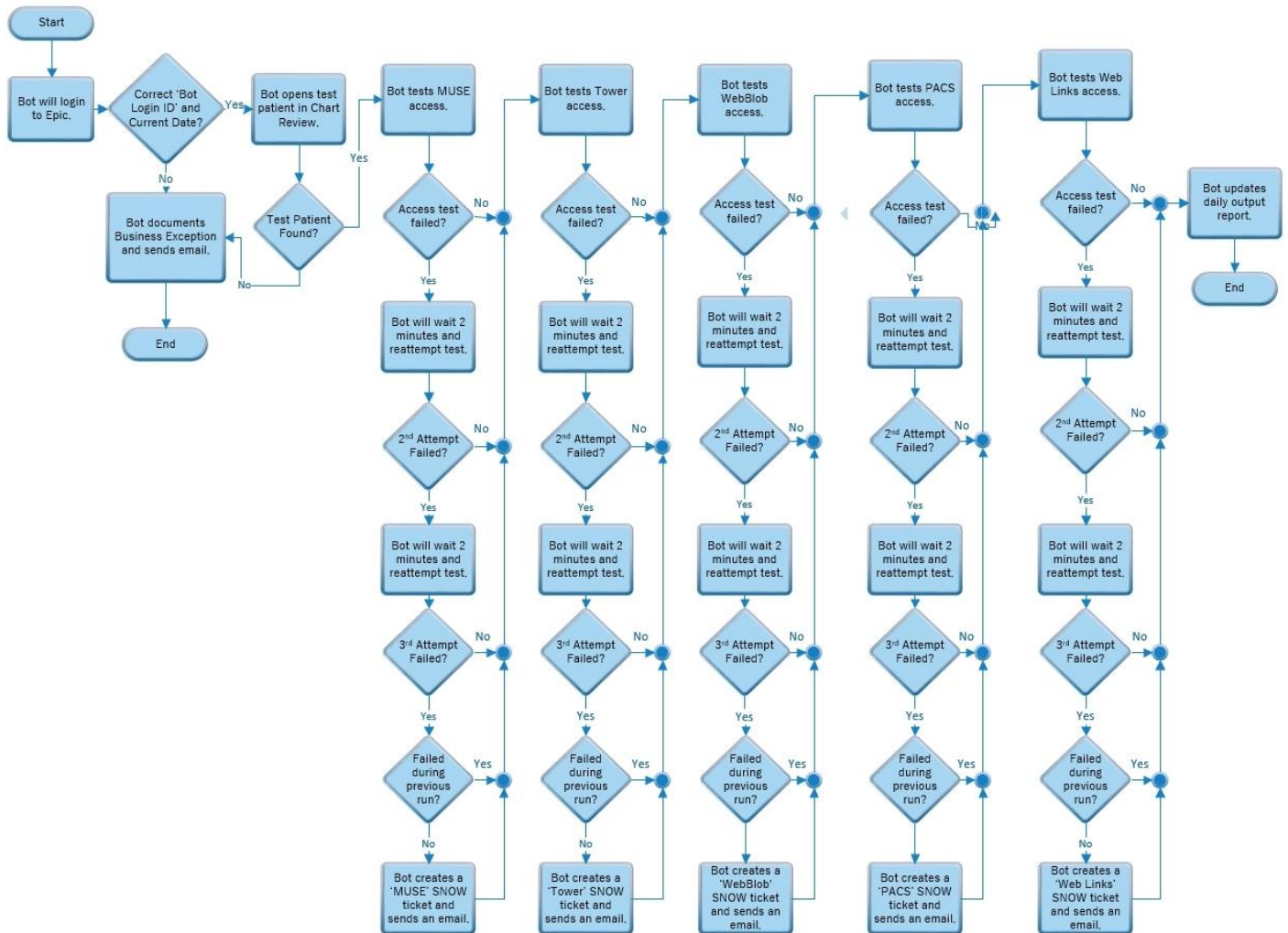
4. Future State Process Description

4.1 FUTURE STATE PROCESS FLOW

High-Level Process Steps

1. Bot will login to Epic Production.
2. Bot will verify the 'Bot Login ID' and current date using the 'Sched' tab.
3. Bot will navigate to Chart Review and open the designated test patient.
4. Bot will test MUSE access via the 'Misc' tab.
5. Bot will test Tower access via the 'Misc' tab.
6. Bot will test WebBlob access via the 'Media' tab.
7. Bot will test PACS access via the 'Imaging' tab.
8. Bot will test Web Links access via CDC and Up to Date links under the Web Links menu nested under Epic > Tools > Web Links.
9. If the bot experiences a failed test, it will employ a 2-minute delay and reattempt the test a 2nd time.
 - a. If the second attempt is successful, the bot will consider the failure resolved and continue its scheduled run.
 - b. If the reattempt also fails, the bot will again employ a 2-minute delay and reattempt the test again for a third (3rd) time.
 - c. If the third attempt is successful, the bot will consider the failure resolved and continue its scheduled run.
 - d. If the test fails a third consecutive time, the bot will generate a ServiceNow (SNOW) ticket to notify the EAT AI Department and send an email to the HIT Integration Application Team.
10. If the bot reports a failed test during its hourly run, and the same test fails during the next scheduled run, the bot will NOT generate multiple ServiceNow (SNOW) tickets for two successive failed tests.
11. The bot will generate and email a daily output report of daily activity.

Bot Automation Process & Workflow Diagram (Future State)



4.2 IN SCOPE FOR RPA

100% of current state process is in scope for RPA.

4.3 OUT OF SCOPE FOR RPA

The actions out of scope for RPA should be listed in the table below together with the reasoning.

Activity/Action	Reason Out of Scope	Future State Solution	Measures to be Taken for Future Automation
N/A	N/A	N/A	N/A

4.4 FUTURE STATE DETAILED STEPS

Module 4.4.1	Open Epic Production and Validate Login
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Step	Brief Description of Key Steps	Screenshot for reference
1.	Bot will launch Epic Production.	
2.	Bot will type its User ID.	
3.	Bot will type its password.	
4.	Bot will click 'Log In'.	
5.	Bot will click in the 'Department' field.	
6.	Bot will type "AEC Locust Court".	
7.	Bot will click 'Continue'.	
8.	If bot sees this message, it will click 'Continue'.	
9.	Bot will click on 'Sched'.	
10.	Bot will verify the 'Bot Login ID' (currently assigned bot (e.g., IAHBOTADPROD139).	
11.	Bot will verify the current date. Note: If the 'Bot Login ID' or the current date are not correct, the bot will generate a Business Exception and send an email notification. Then, bot will proceed to Module 4.4.9.	

Module 4.4.2		Open Test Patient
Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will click 'Review'.	
2.	Bot will click in the 'Name/MRN' field of the 'Search for a Patient' dialog box.	
3.	Bot will type "3173022" in the 'Name/MRN' field.	
4.	Bot will click 'Find Patient'.	
5.	Search results will display.	
6.	Bot will confirm the Patient Name is "ZGHS, NNNA".	
7.	Bot will confirm the MRN is "3173022". Note: If the Test Patient Name or MRN do not match, or there is no match within a list of multiple results, the bot will document is as a Business Exception and send an email.	
8.	If one result is displayed and the bot confirms the Patient Name and MRN, the bot will click 'Accept'. If multiple results are displayed, the bot will click the row illustrating the correct Patient	

	Name and MRN, then click 'Accept'.	
9.	Bot will confirm that the 'Chart Review' tab is selected for the Test Patient. If another tab is selected, the Bot will select the 'Chart Review' tab.	

Module 4.4.3	Test MUSE Access
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Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will click the 'Misc' tab.	
2.	Bot will click on 'GHS MUSE ACCESS'.	
3.	Bot will click 'View MUSE List' hyperlink.	
4.	The link opens an external webpage with a 'GE' logo on the browser tab (<i>may be across the top if oriented horizontally</i>) and a message in the body of the page stating, "No Tests Found for Patient ID: 003173022". <i>This is a successful test.</i> If the external webpage fails to open or the bot can't verify its correct opening, it will deem the MUSE test failed. In such a case, the bot will close the browser window (if open), wait two minutes, then retry the MUSE access test (2nd attempt) by clicking the 'View Muse List' link. If the test is successful, the bot continues to the next step. If the test fails a second time, the bot will close the browser window (if open), wait two minutes, then retry the MUSE access test (3rd attempt) by clicking the 'View Muse List' link. If the test is successful, the bot continues to the next step.	

	If the test fails for a third consecutive time, the bot will capture a screenshot, close the browser window if open, and proceed to Module 4.4.8. However, it will only create a SNOW ticket and send an email if the MUSE test did not fail during the previous scheduled run.	
5.	Bot will close the external browser window.	

Module 4.4.4	Test Tower Access
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Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will click the 'Misc' tab.	
2.	Bot will click on 'GHS HISTORY: PATIENT LEVEL SCANS'.	
3.	A 'Patient Level Scans' right-hand sidebar will open.	
4.	The bot will scroll to the bottom of the sidebar window and click on the ' Scan on 4/22/2003 by User, Epic: LIVING WILL SIGNED AT LOCUST COURT ' link.	
5.	The link opens an external webpage illustrating a scan of a Living Will document. <i>This is a successful test.</i> If the external webpage fails to open or the bot can't verify its correct opening, it will deem the Tower test failed. In such a case, the bot will close the browser window (if open), wait two minutes, then retry the Tower access test (2nd attempt) by clicking the 'Scan on 4/22/2003 by User, Epic: LIVING WILL SIGNED AT	

	LOCUST COURT' link. If the test is successful, the bot continues to the next step. If the test fails a second time, the bot will close the browser window (if open), wait two minutes, then retry the Tower access test again (3rd attempt) by clicking the 'Scan on 4/22/2003 by User, Epic: LIVING WILL SIGNED AT LOCUST COURT' link. If the test is successful, the bot continues to the next step. If the test fails for a third consecutive time, the bot will capture a screenshot, close the browser window if open, and proceed to Module 4.4.8. However, it will only create a SNOW ticket and send an email if the Tower test did not fail during the previous scheduled run.	
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Module 4.4.5	Test WebBlob Access
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Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will click the 'Media' tab.	
2.	Bot will click on the 'Filters' button.	
3.	Bot will enter "3/21/2017" in the 'From' and 'To' fields.	
4.	Bot will click on the magnifying glass.	
5.	Search results will appear on the right side of the screen. Bot will scan the search results and double-click on the results with the description "epic stress2.bmp".	

	A new window will open displaying a Geisinger Health System bitmap image file. <i>This is a successful test.</i> If the window fails to open or the bot can't verify its correct opening, it will deem the WebBlob test failed. In such a case, the bot will close the image window (if open), wait two minutes, then retry the WebBlob access test (2nd attempt) by double-clicking the 'epic stress2.bmp' result. If the test is successful, the bot continues to the next step. 6. If the test fails a second time, the bot will close the image window (if open), wait two minutes, then retry the WebBlob access test again (3rd attempt) by double-clicking the 'epic stress2.bmp' result. If the test is successful, the bot continues to the next step. If the test fails for a third consecutive time, the bot will capture a screenshot, close the browser window if open, and proceed to Module 4.4.8. However, it will only create a SNOW ticket and send an email if the WebBlob test did not fail during the previous scheduled run.	
7.	Bot will close the image window.	

Module 4.4.6		Test PACS Access
Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will click the 'Imaging tab.	
2.	Bot will scan the list under the 'Imaging' tab for the row with a date of "7/31/2017" and a test name of "RADIOLOGY EXAM – GENERAL RADIOLOGY (IMAGES ONLY, NO REPORT)". If the bot is unable to locate the specified entry, the bot will document a Business Exception, send an email, and proceed to Module 4.4.9.	
3.	Once located, the bot will click on the specified entry, opening a right-hand 'Results' sidebar.	
4.	In the 'Results' sidebar, under the heading of 'PACS Images for Remote and MAC Users', the bot will click the blue hyperlink titled, "iSite PACS Images for Remote Users and MAC Users". If the specific hyperlink is absent from the 'Results' sidebar, the bot will document a Business Exception, send an email, and proceed to Module 4.4.9.	
5.	After clicking the hyperlink, an external webpage illustrating an anteroposterior Pelvis X-ray (i.e., Pelvis AP) opens. <i>This is a successful test.</i> If the external webpage fails to open or the bot can't verify its correct opening, it will deem the PACS test failed. In such a case, the bot will close the browser window (if open), wait two minutes, then retry the PACS access test (2nd attempt) by clicking the 'iSite PACS Images for Remote Users and MAC Users' hyperlink. If	

	the test is successful, the bot will continue to the next step. If the test fails a second time, the bot will close the browser window (if open), wait two minutes, then retry the PACS access test (3rd attempt) by clicking the 'iSite PACS Images for Remote Users and MAC Users' hyperlink. If the test is successful, the bot will continue to the next step. If the test fails a third consecutive time, the bot will capture a screenshot, close the browser window if open, and proceed to Module 4.4.8. However, it will only create a SNOW ticket and send an email if the PACS test did not fail during the previous scheduled run. <i>Note: The bot will wait 60 seconds for the image or page to load before trying to validate it.</i>	
6.	Bot will close the browser window.	

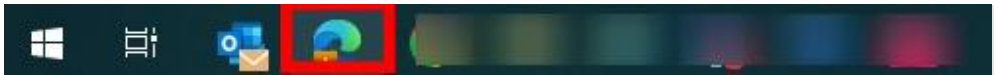
Module 4.4.7	Test Web Links Access
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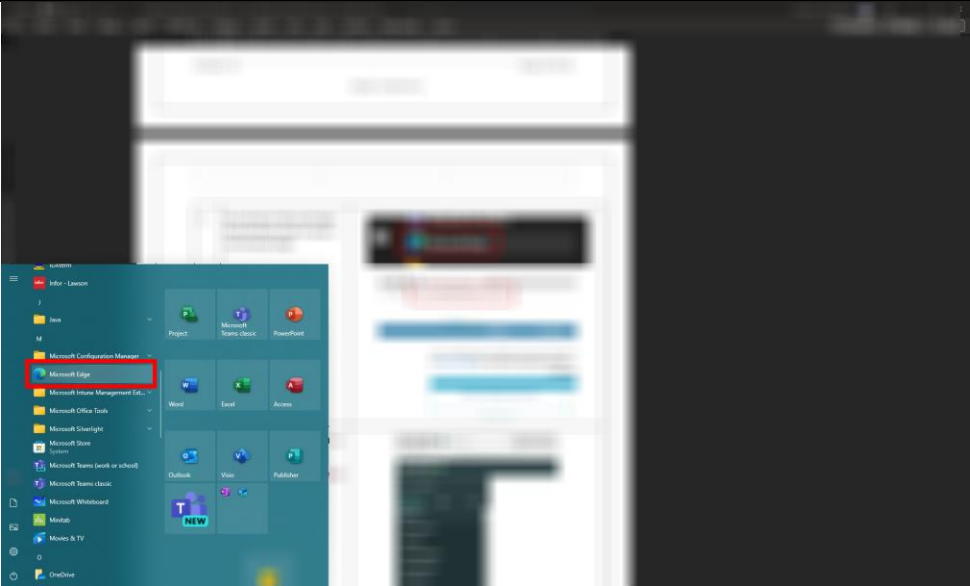
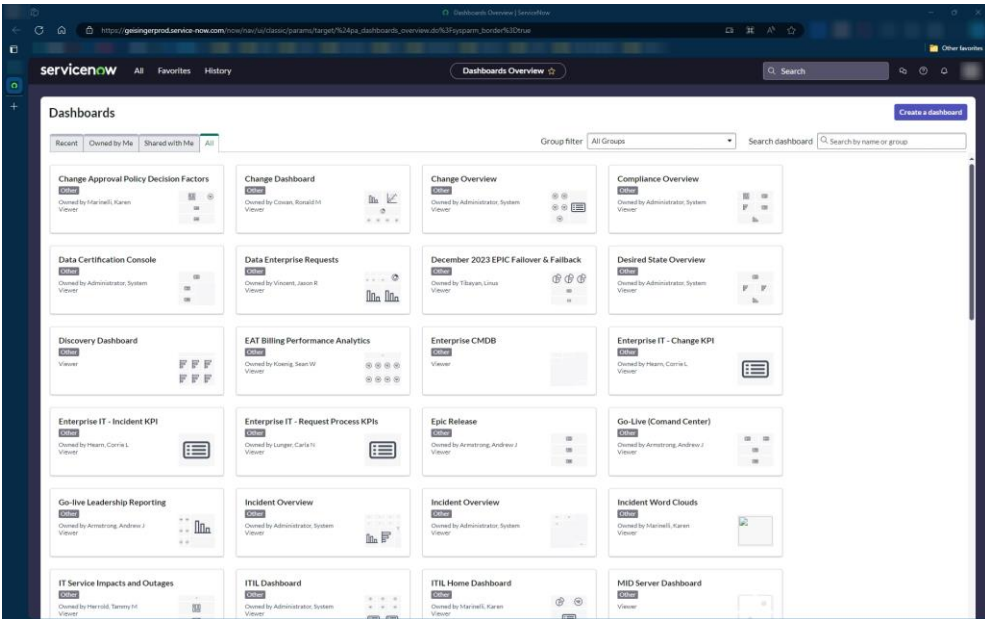
Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will click the 'Epic' menu.	
2.	Bot will click on 'Tools'.	
3.	Bot will click on 'Web Links'.	
4.	The 'Geisinger Web Links' page will open within Epic. The bot will test access to two different links on this page – 'Up to Date' and 'CDC'.	

5.	In the 'Clinical References' section, the bot will click on the link, second from the bottom, that reads 'Up To Date'.	
6.	The link opens in an external browser. <i>This is a successful test.</i> If the external webpage fails to open or the bot can't verify its correct opening, it will deem the 'Up To Date' WebLinks test failed. In such a case, the bot will close the browser window (if open), wait two minutes, then retry the 'Up To Date' WebLinks access test (2nd attempt) by clicking the 'Up To Date' hyperlink. If the test is successful, the bot continues to the next step. If the test fails a second time, the bot will close the browser window (if open), wait two minutes, then retry the 'Up To Date' WebLinks access test again (3rd attempt) by clicking the 'Up To Date' hyperlink. If the test is successful, the bot continues to the next step. If the Up To Date test fails a third consecutive time, the bot will capture a screenshot, close the browser window if open, and proceed to Module 4.4.8. However, it will only create a SNOW ticket and send an email if the WebLinks test did not fail during the previous scheduled run. <i>Note: The bot will wait 60 seconds for the image or page to load before trying to validate it.</i>	
7.	The bot will click on the 'CDC' hyperlink.	
8.	The link opens an external 'CDC' website. <i>This is a successful test.</i> If the external webpage fails to open or the bot can't verify its correct opening, it will deem the 'CDC' WebLinks test failed. In such a case, the bot will close the browser window (if open), wait two minutes, then retry the 'CDC' WebLinks access test (2nd attempt) by clicking the 'CDC'	

	hyperlink. If the test is successful, the bot continues to the next step. If the test fails a second time, the bot will close the browser window (if open), wait two minutes, then retry the 'CDC' WebLinks access test again (3rd attempt) by clicking the 'CDC' hyperlink. If the test is successful, the bot continues to the next step. If the test fails for a third consecutive time, the bot will capture a screenshot, close the browser window if open, and proceed to Module 4.4.8. However, it will only create a SNOW ticket and send an email if the WebLinks test did not fail during the previous scheduled run. <i>Note: The bot will allow 60 seconds for the image/page to load before attempting to validate.</i>	
9.	Bot will close the web browser window.	
10.	Bot will log out of Epic.	
11.	Bot will click 'x' to close Epic.	

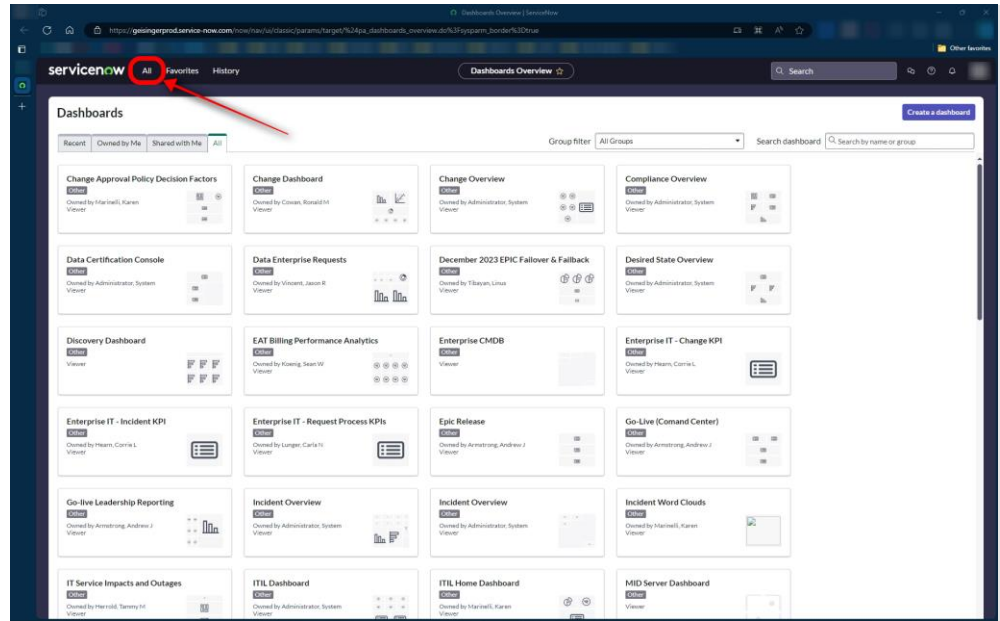
Module 4.4.8	Create ServiceNow (SNOW) Ticket
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Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will perform Steps 1 – 14 to create a ServiceNow (SNOW) ticket for all the application access checks performed.	 OR

	Bot will open Microsoft Edge. <i>Note: Detailed steps provided as a user would perform the function.</i> <i>However, bot will utilize API to create SNOW ticket.</i>	
2.	Bot will open the ServiceNow page using the link below: ServiceNow (service-now.com)	

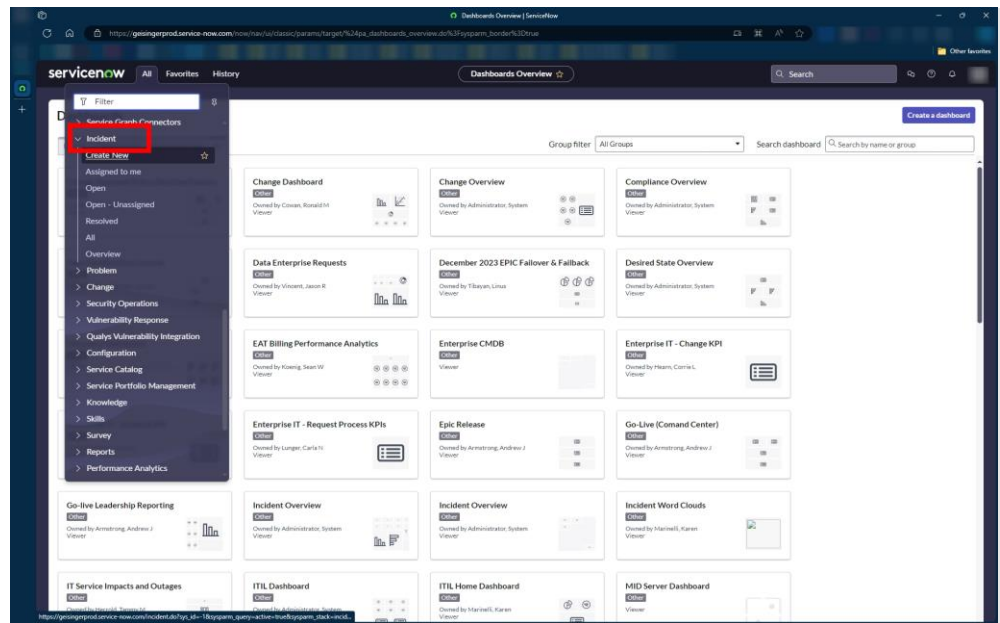
3.

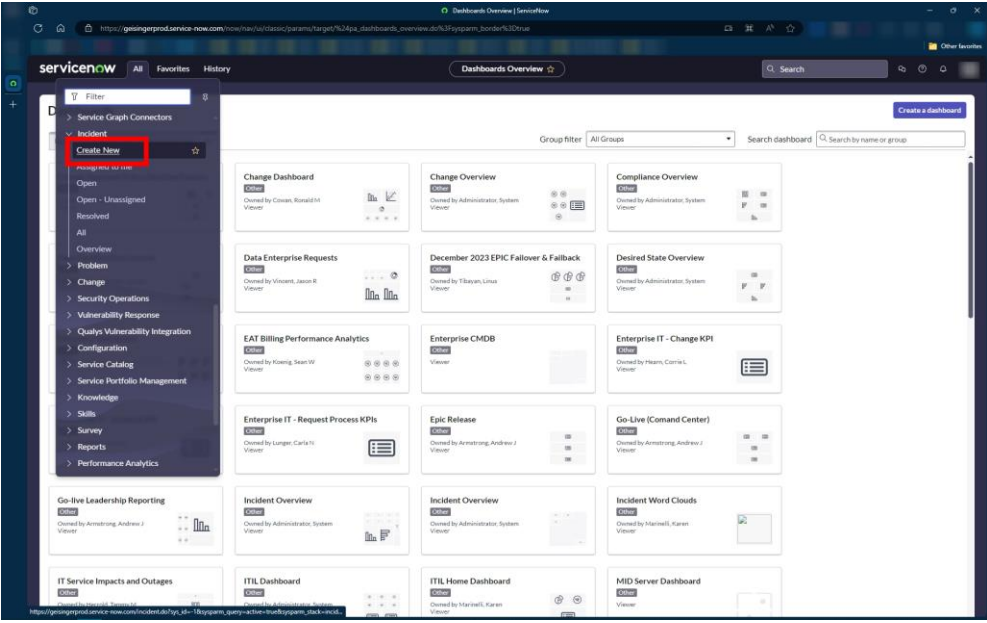
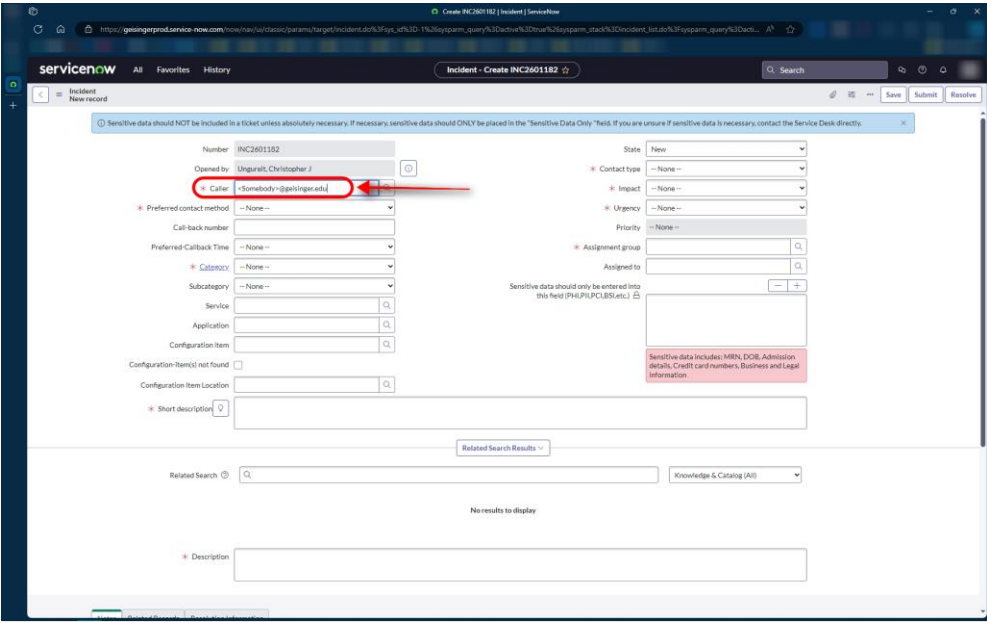
Bot will click on 'All'.



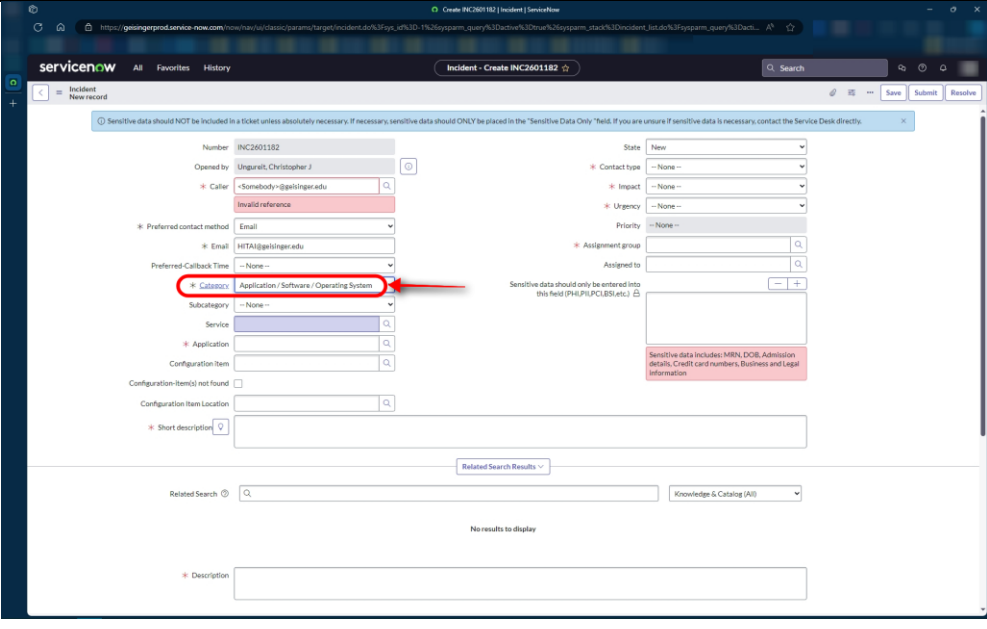
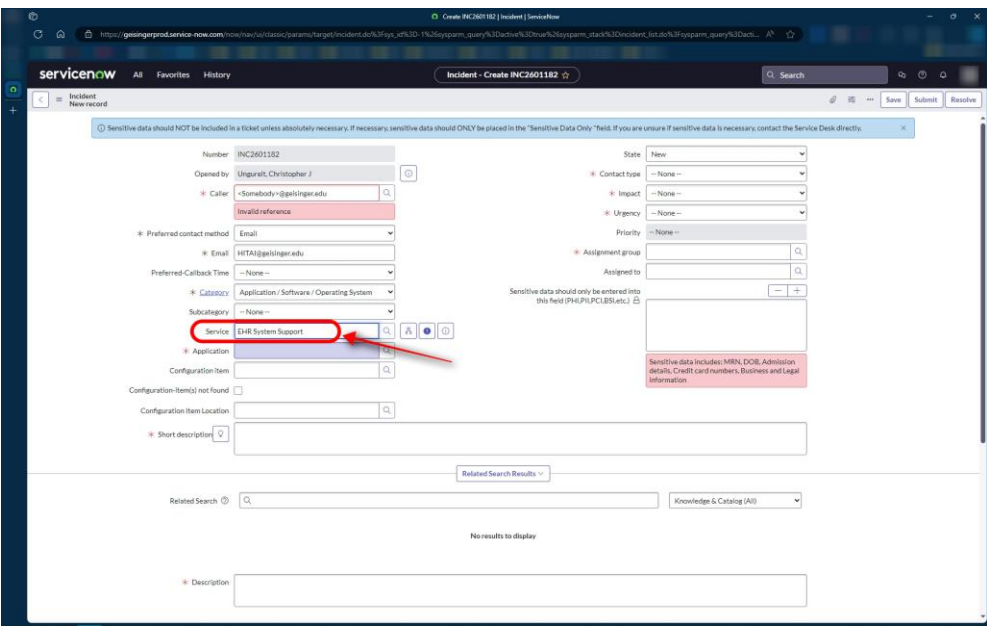
4.

Bot will scroll down through the menu and click on 'Incident'.

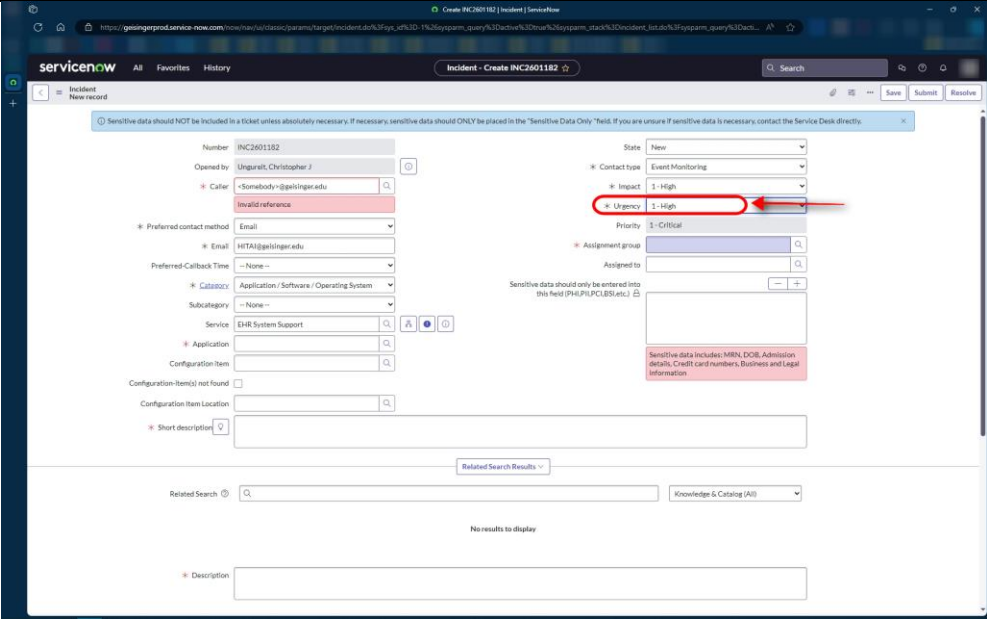
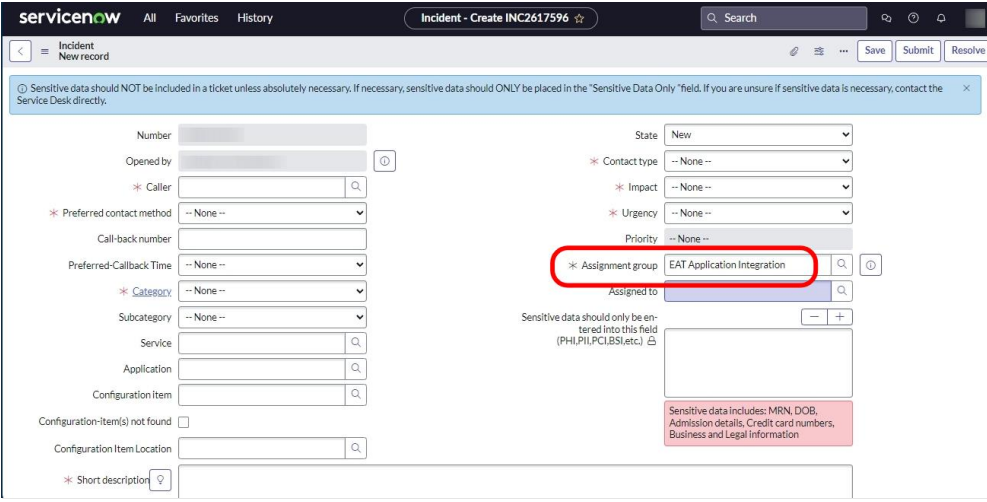


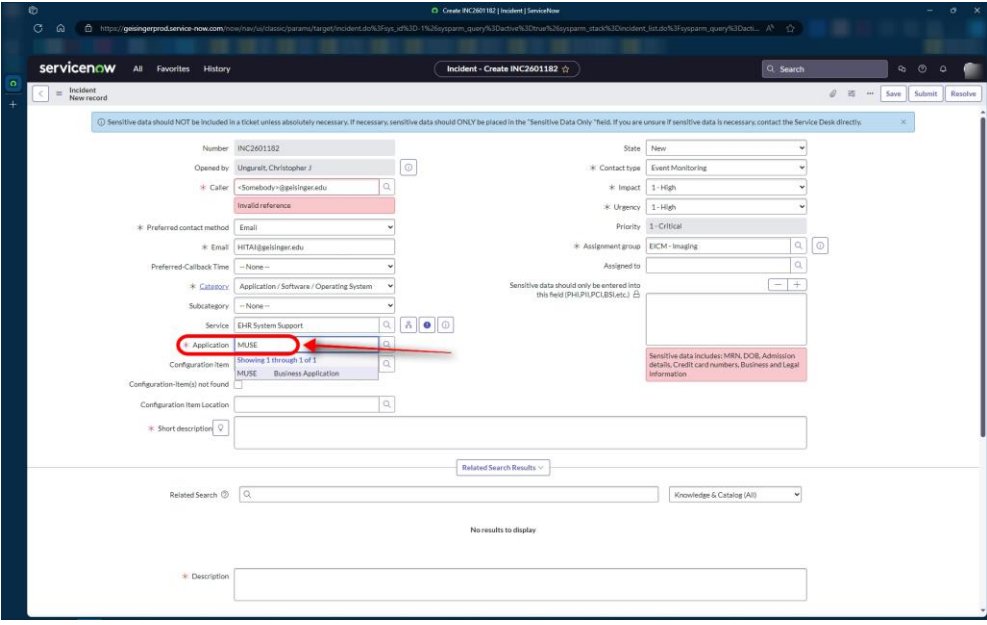
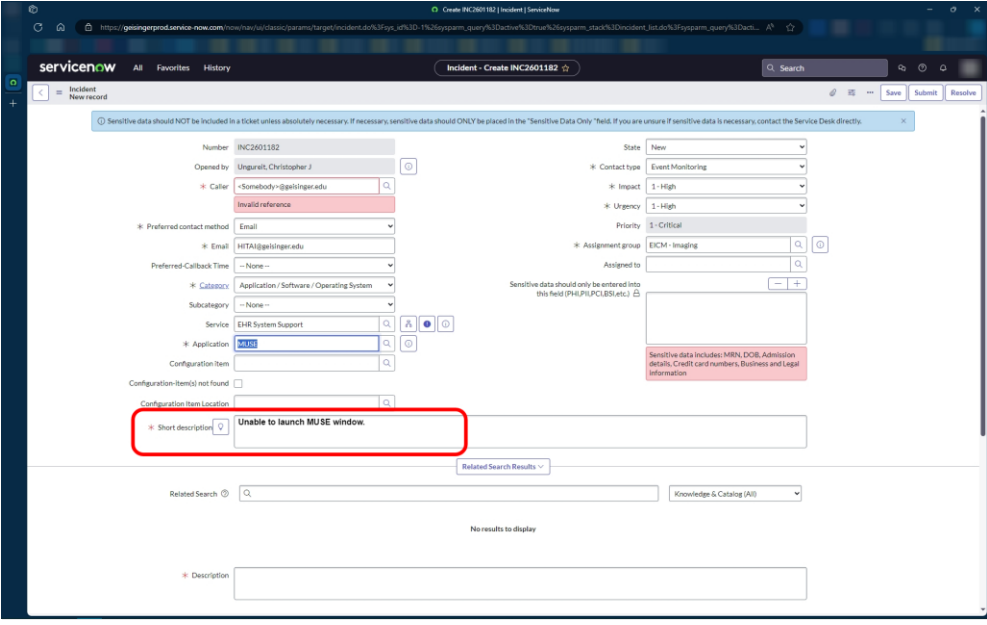
5.	When the ‘Incident’ submenu expands, the bot will click ‘Create New’.	
6.	Bot will enter an email in the ‘Caller’ field. This may have to be an email from someone on the Business Team in the system. Note: (hitai@geisinger.edu or a Bot ID is not accepted)	
7.	Bot will select “Email” from the ‘Preferred contact method’ dropdown menu.	

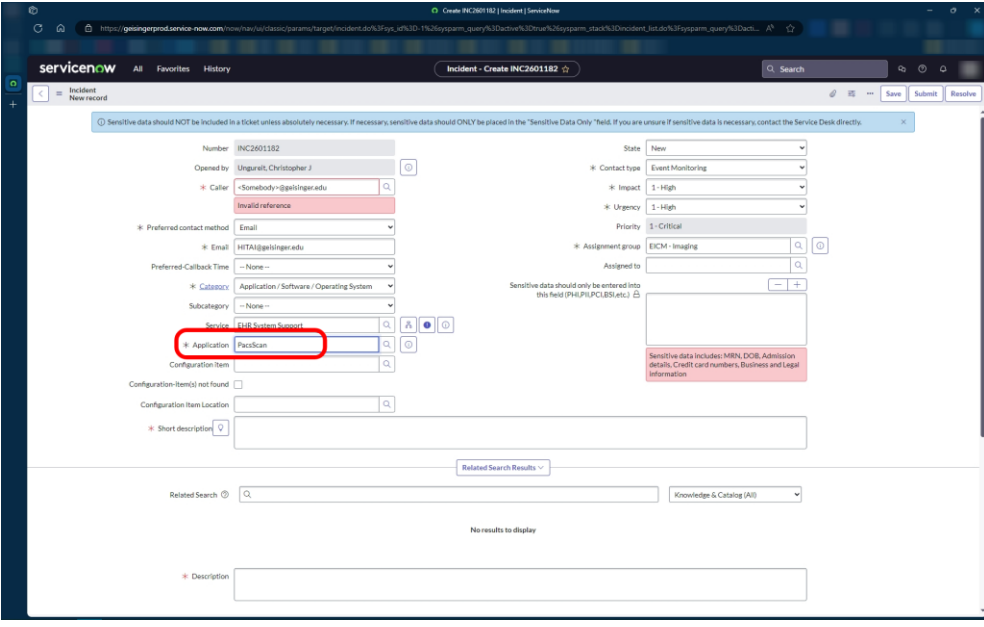
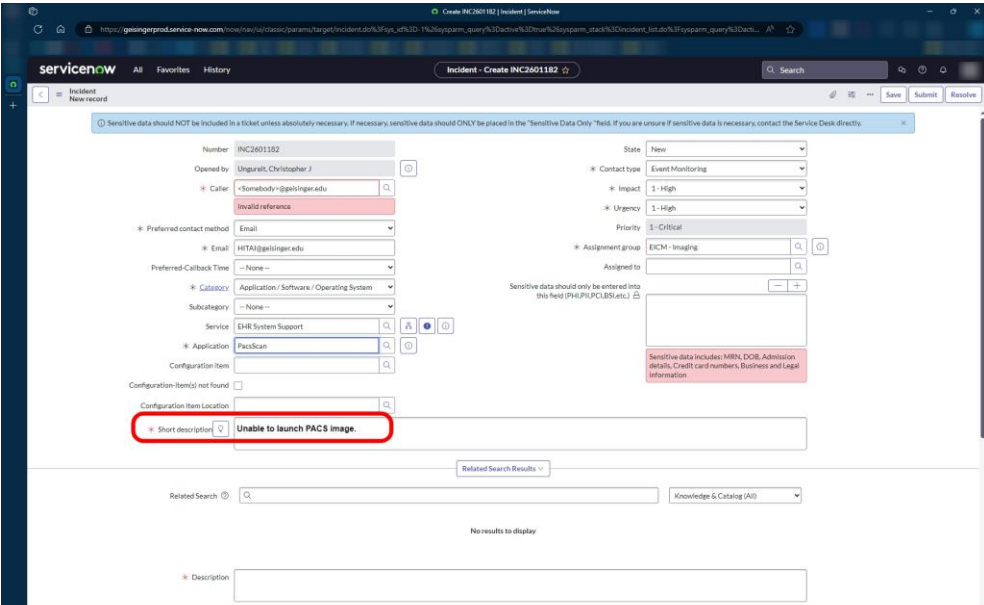
8.	Bot will enter “hitai@geisinger.edu” in the ‘Email’ field.	
9.	Bot will select “Application/ Software/ Operating System” from the ‘Category’ dropdown menu.	

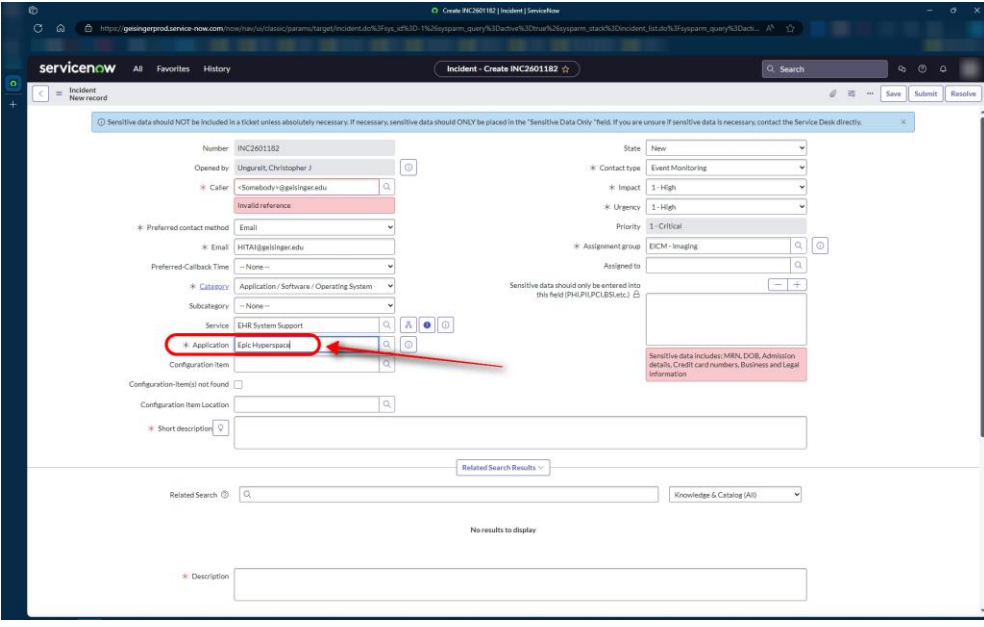
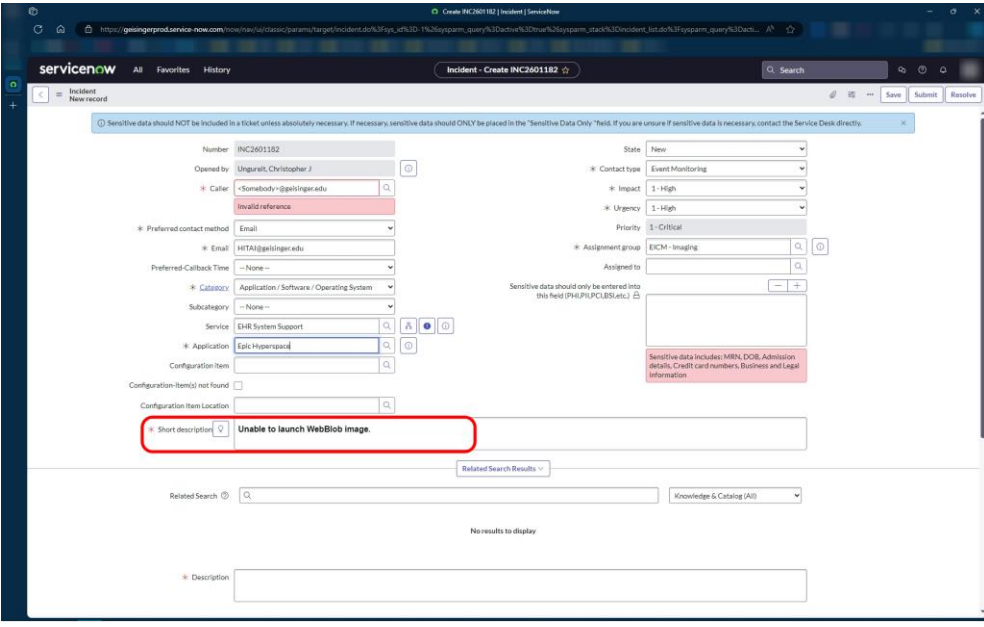
		
10.	Bot will enter “EHR System Support” in the ‘Service’ field.	
11.	Bot will select “Event Monitoring” from the ‘Contact Type’ dropdown menu.	

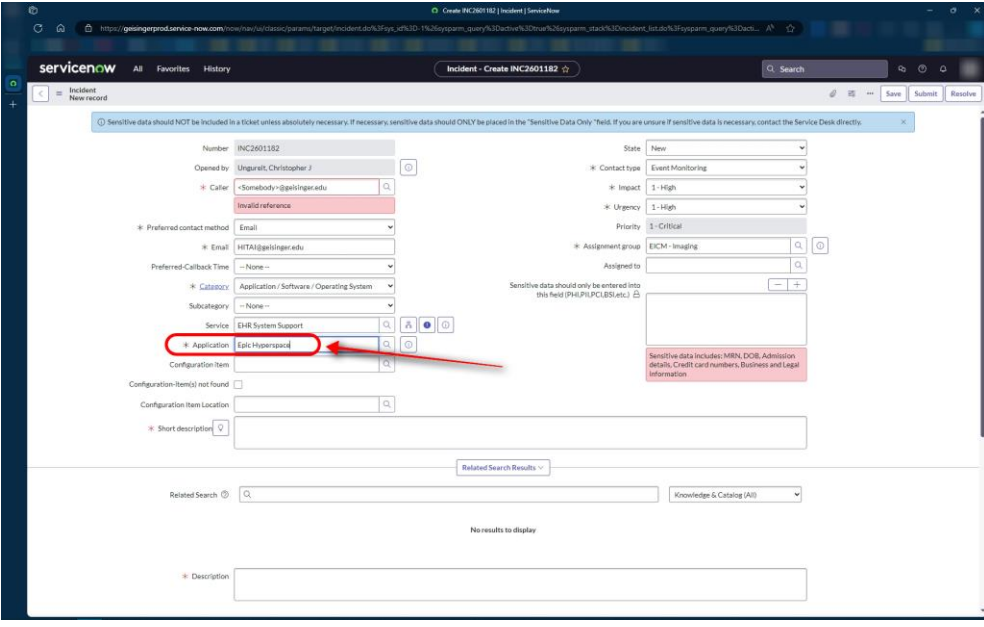
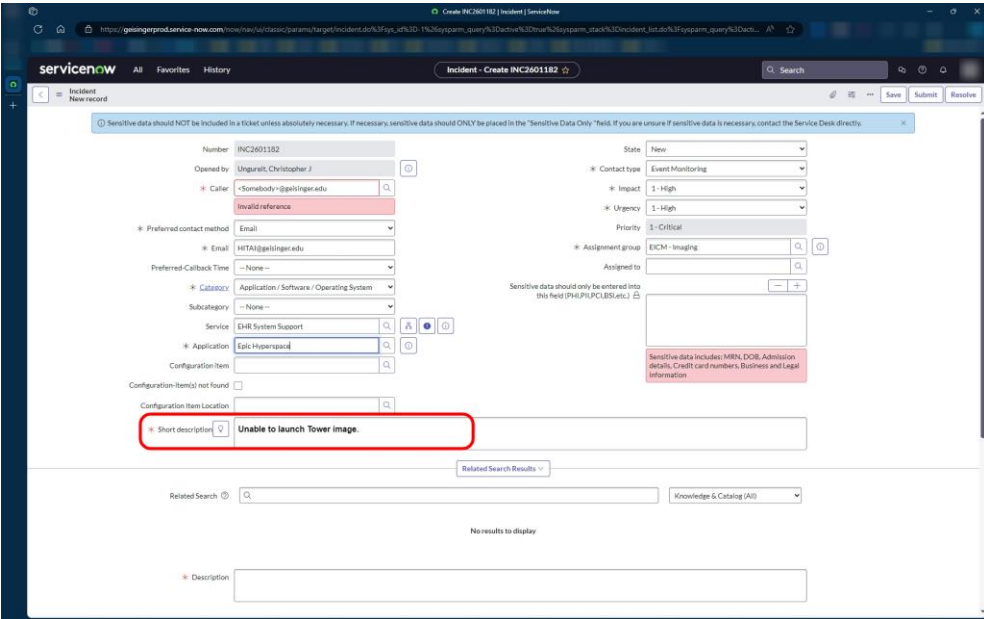
12.	Bot will select “1 – High” from the ‘Impact’ dropdown menu.	
13.	Bot will select “1 – High” from the ‘Urgency’ dropdown menu.	

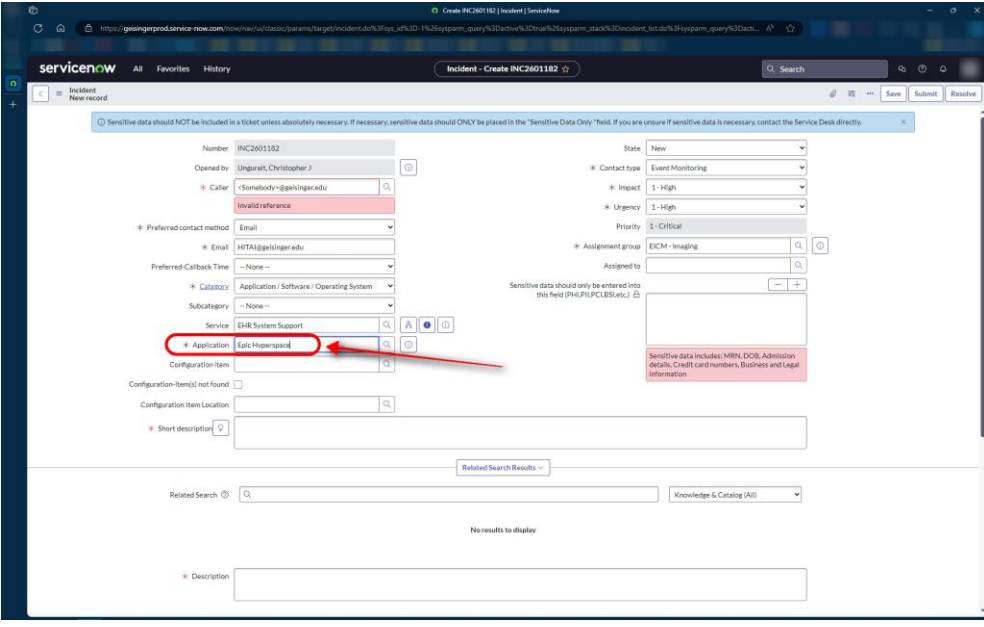
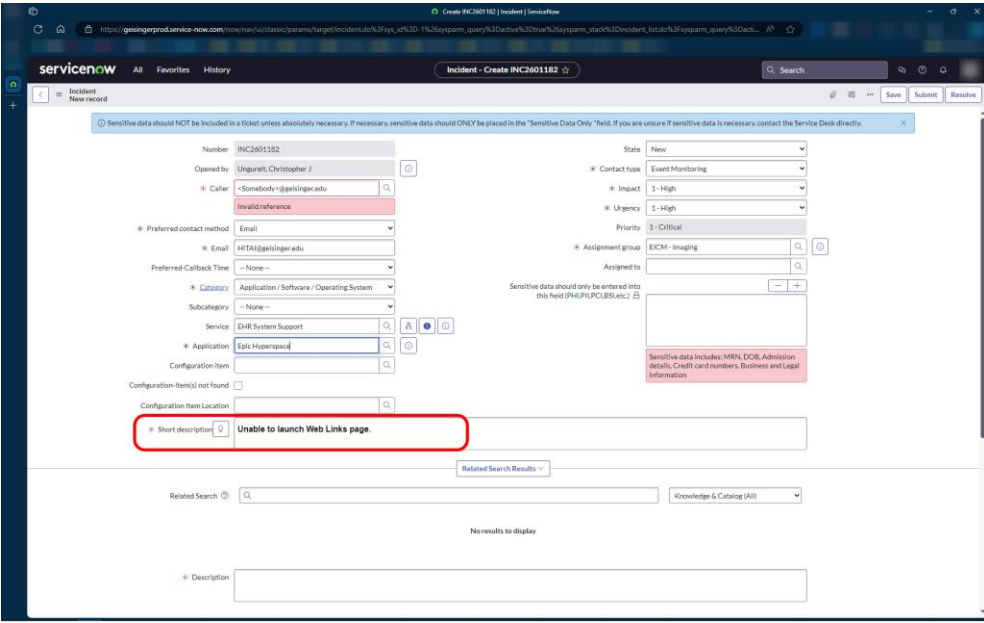
		
14.	Bot will enter “EAT Application Integration” in the ‘Assignment group’ field	
15.	Bot will perform the following 2- step sequences dependent upon the system access issue encountered.	MUSE: Steps 16 - 17 PACS: Steps 18 - 19 WebBlob: Steps 20 – 21 Tower: Steps 22 – 23 Web Links: Steps 24 – 25

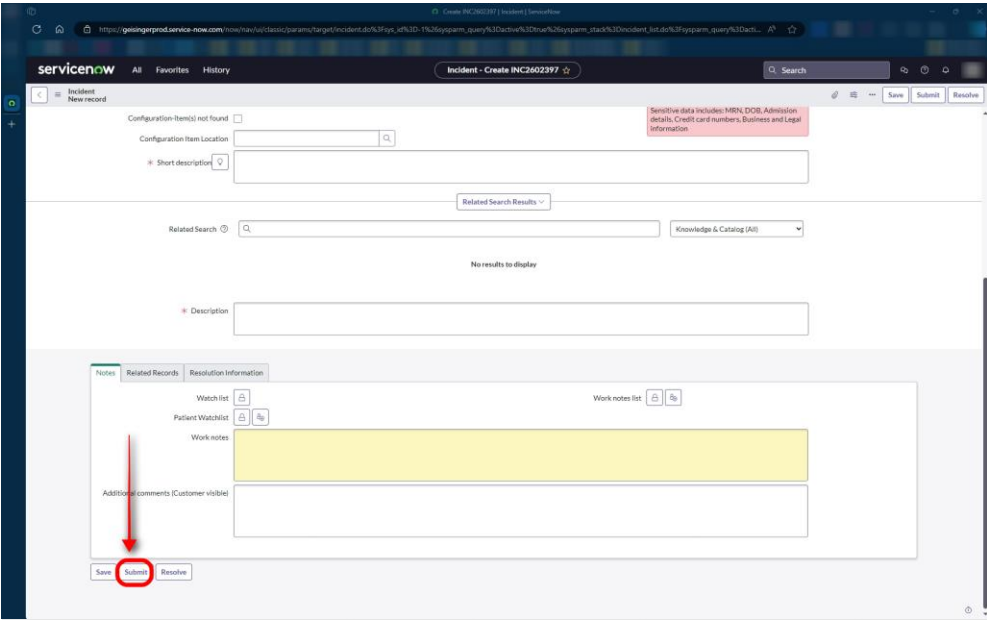
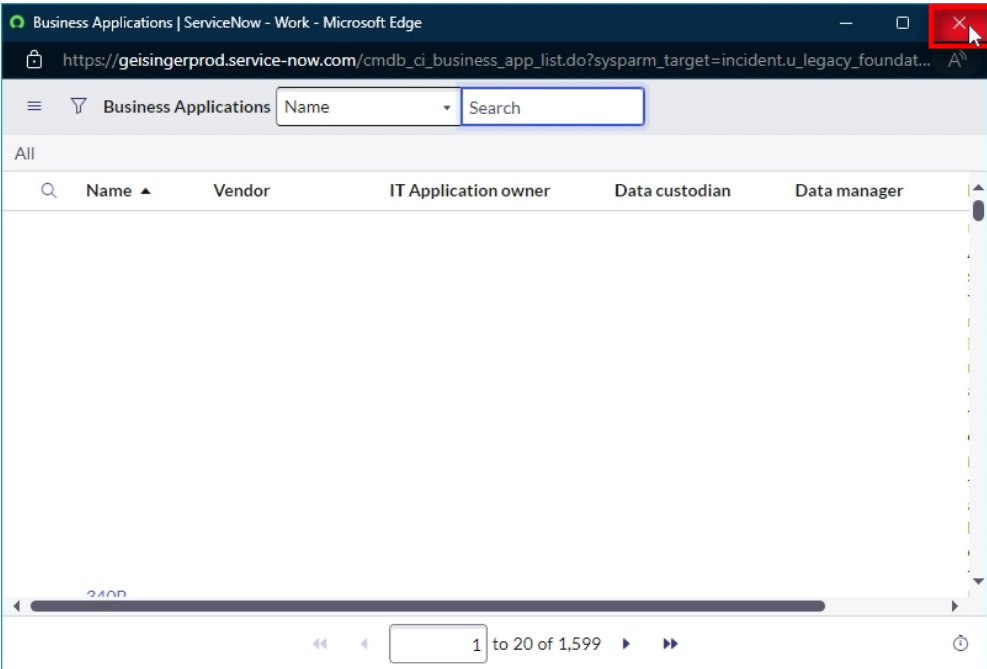
16.	MUSE access issue. Bot will enter “MUSE” in the ‘Application’ field.	 A screenshot of the ServiceNow 'Incident - Create INC2601182' form. The 'Application' field is highlighted with a red circle and a red arrow pointing to it. The field contains the text 'MUSE'. Other fields include 'Number' (INC2601182), 'Opened by' (Ungureit, Christopher J), 'Caller' (Somebody@gelinger.edu), 'Preferred contact method' (Email), 'Email' (HTAI@gelinger.edu), 'Preferred Callback Time' (None), 'Category' (Application / Software / Operating System), 'Subcategory' (None), 'Service' (EHR System Support), 'Configuration item' (MUSE - Business Application), 'Configuration item(s) not found' (checked), 'Configuration item location' (empty), 'Short description' (empty), 'State' (New), 'Contact type' (Event Monitoring), 'Impact' (1 - High), 'Urgency' (1 - High), 'Priority' (1 - Critical), 'Assignment group' (ECM - Imaging), and 'Assigned to' (empty). A warning message at the top states: 'Sensitive data should NOT be included in a ticket unless absolutely necessary. If necessary, sensitive data should ONLY be placed in the "Sensitive Data Only" field. If you are unsure if sensitive data is necessary, contact the Service Desk directly.' A red box on the right side of the form contains the text: 'Sensitive data includes: MRN, DOB, Admission details, Credit card numbers, Business and Legal information'.
17.	MUSE access issue. Bot will enter “Unable to launch MUSE window.” in the ‘Short Description’ field.	 A screenshot of the ServiceNow 'Incident - Create INC2601182' form. The 'Short description' field is highlighted with a red circle. The field contains the text 'Unable to launch MUSE window.'. Other fields are the same as in the previous screenshot. The 'Application' field is now empty. The 'Short description' field is now filled with the text 'Unable to launch MUSE window.'. The 'Description' field is empty. The 'Related Search' field is empty. The 'Knowledge & Catalog (All)' dropdown is set to 'All'.

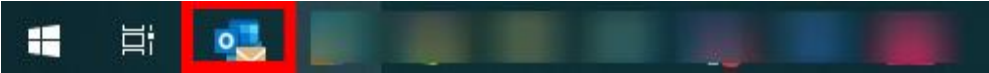
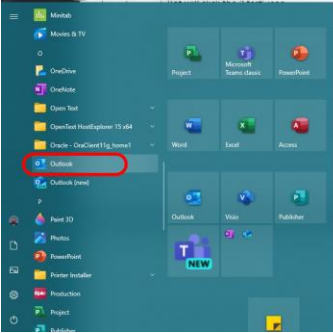
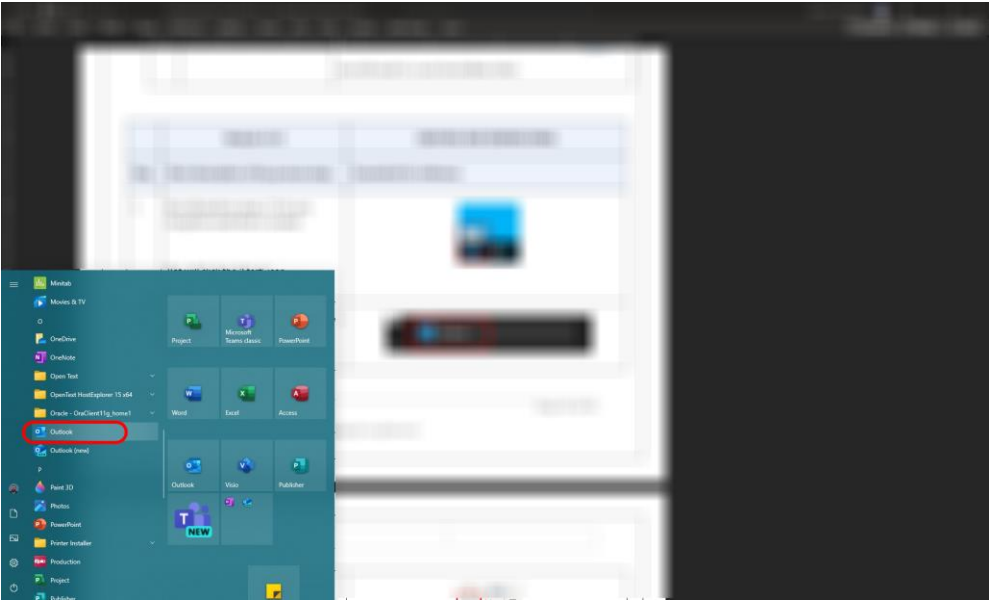
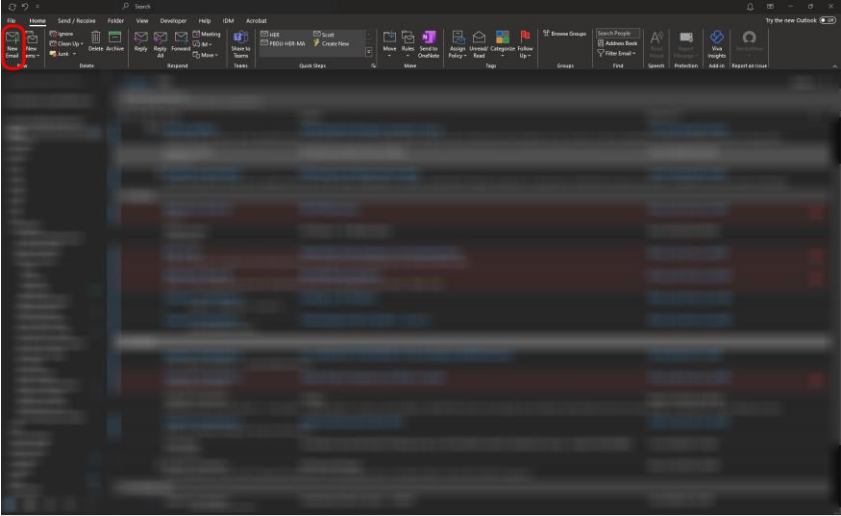
18.	PACS access issue. Bot will enter “PacsScan” in the ‘Application’ field.	 The screenshot shows the 'Incident - Create INC2601182' form in ServiceNow. The 'Application' field is highlighted with a red circle and contains the text 'PacsScan'. Other fields include 'Number' (INC2601182), 'Opened by' (Ungureit, Christopher J), 'Caller' (Invalid reference), 'Preferred contact method' (Email), 'Email' (HTAI@gsiinger.edu), 'Preferred Callback Time' (None), 'Category' (Application / Software / Operating System), 'Subcategory' (None), 'Service' (EHR System Support), 'Configuration item(s) not found' (checked), 'Configuration item location' (empty), 'Short description' (empty), 'State' (New), 'Contact type' (Event Monitoring), 'Impact' (1 - High), 'Urgency' (1 - High), 'Priority' (1 - Critical), 'Assignment group' (ECM - Imaging), and 'Assigned to' (empty). A warning message at the top states: 'Sensitive data should NOT be included in a ticket unless absolutely necessary. If necessary, sensitive data should ONLY be placed in the "Sensitive Data Only" field. If you are unsure if sensitive data is necessary, contact the Service Desk directly.' A red box on the right side of the form contains sensitive data: 'Sensitive data includes: MRN, DOB, Admission details, Credit card numbers, Business and Legal information'.
19.	PACS access issue. Bot will enter “Unable to launch PACS image.” in the ‘Short Description’ field.	 The screenshot shows the 'Incident - Create INC2601182' form in ServiceNow. The 'Short description' field is highlighted with a red circle and contains the text 'Unable to launch PACS image.'. Other fields are the same as in the previous screenshot. The 'Application' field is now empty. The 'Short description' field is now populated with the text 'Unable to launch PACS image.'. The 'Sensitive data' warning and the red box on the right side of the form are still present.

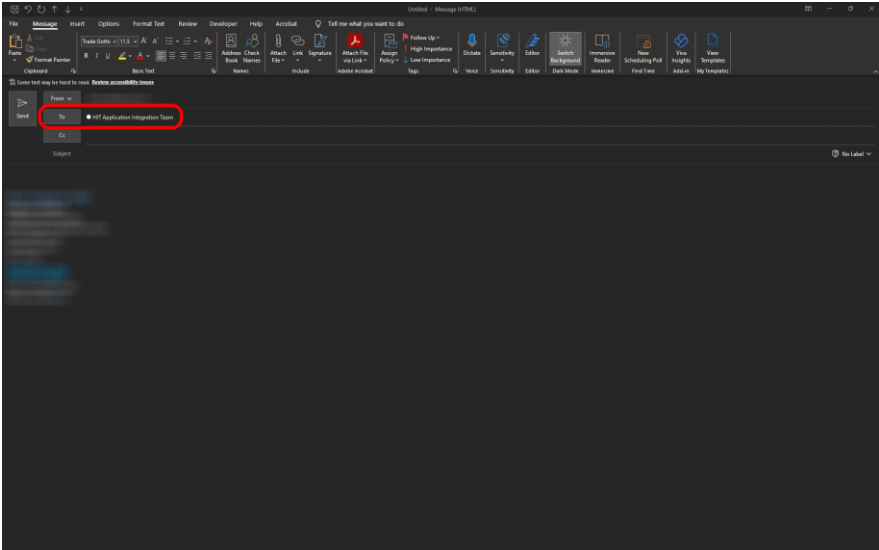
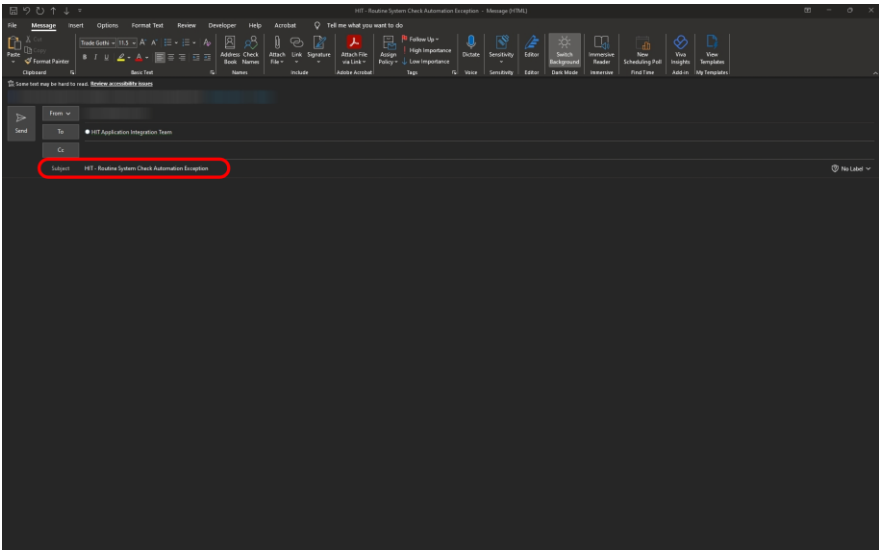
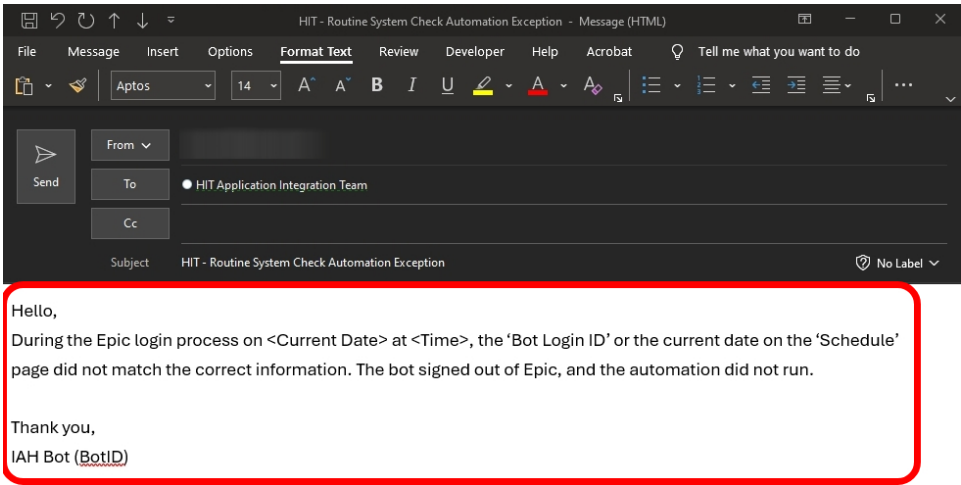
20.	WebBlob access issue. Bot will enter “Epic Hyperspace” in the ‘Application’ field.	
21.	WebBlob access issue. Bot will enter “Unable to launch WebBlob image.” in the ‘Short Description’ field.	

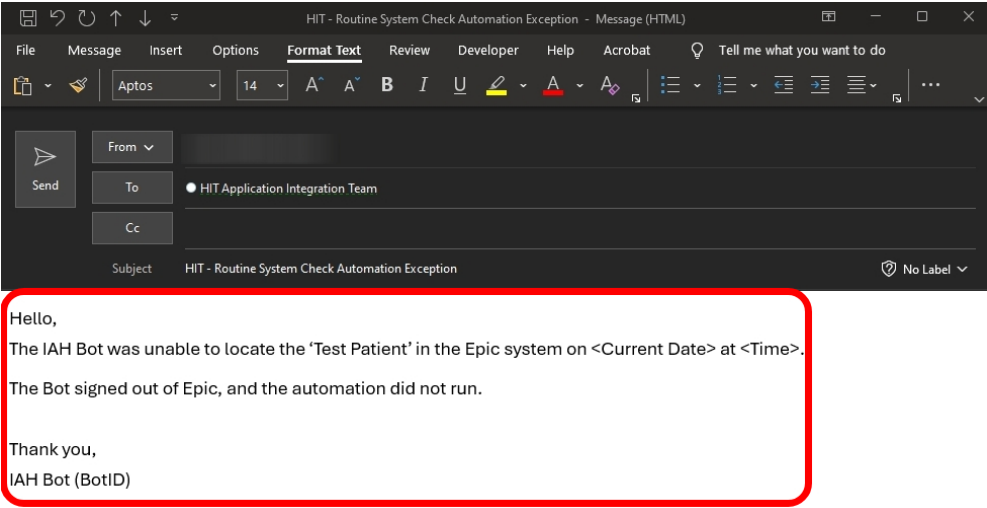
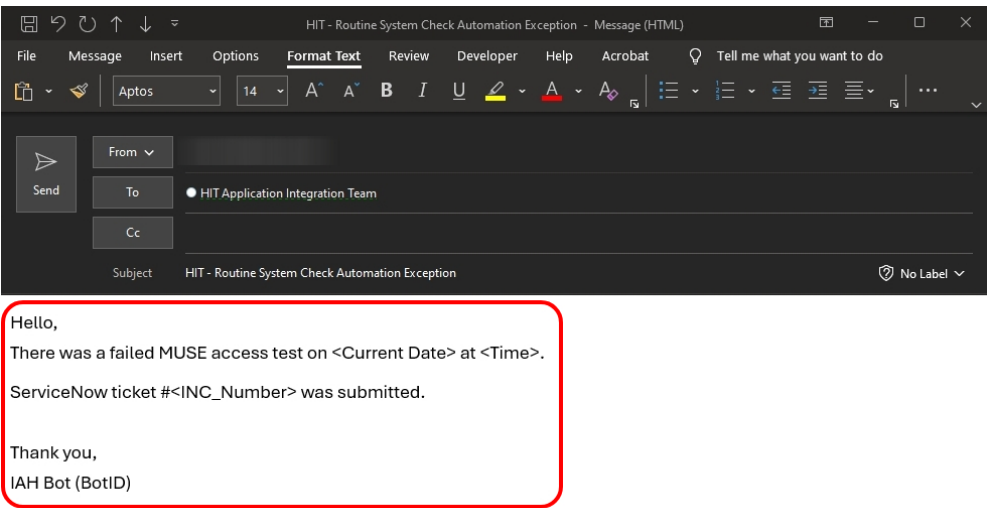
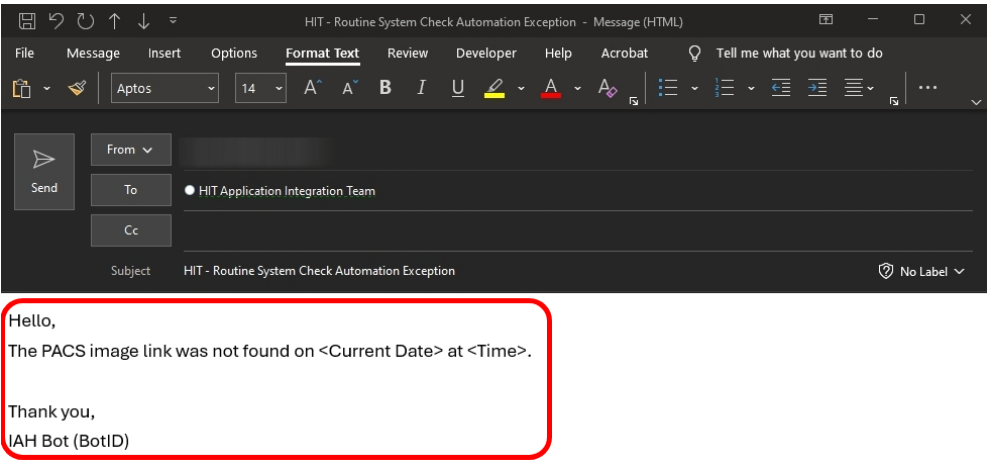
22.	Tower access issue. Bot will enter “Epic Hyperspace” in the ‘Application’ field.	
23.	Tower access issue. Bot will enter “Unable to launch Tower image.” in the ‘Short Description’ field.	

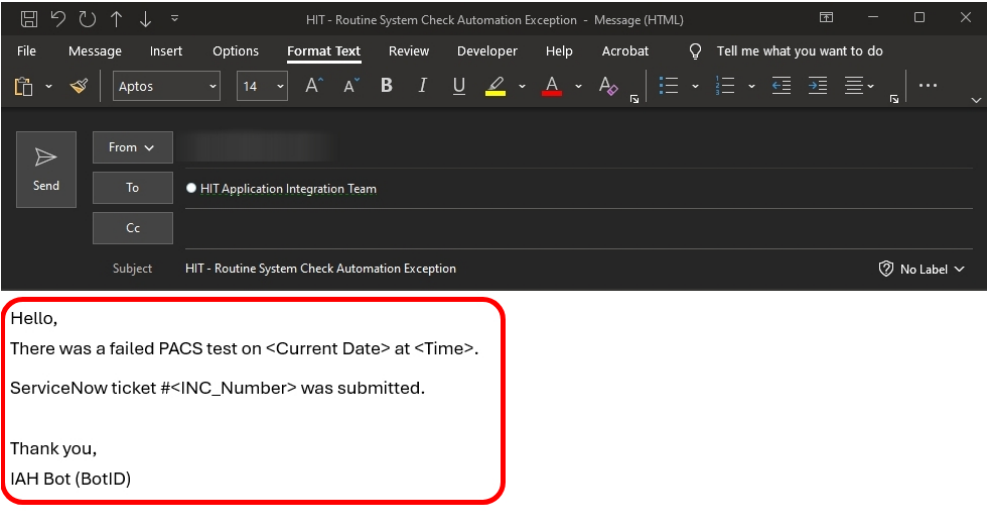
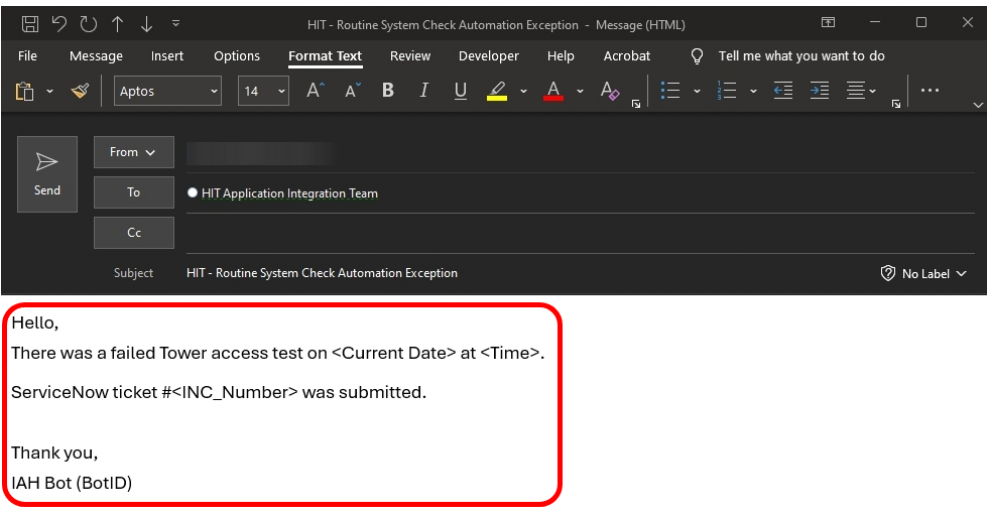
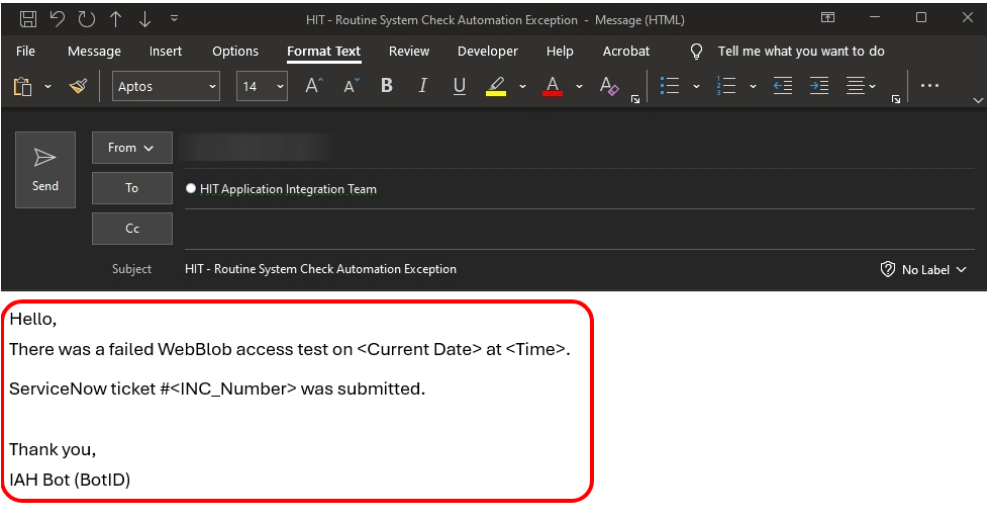
24.	Web Links access issue. Bot will enter “Epic Hyperspace” in the ‘Application’ field.	
25.	Web Links access issue. Bot will enter “Unable to launch Web Links page.” in the ‘Short Description’ field.	

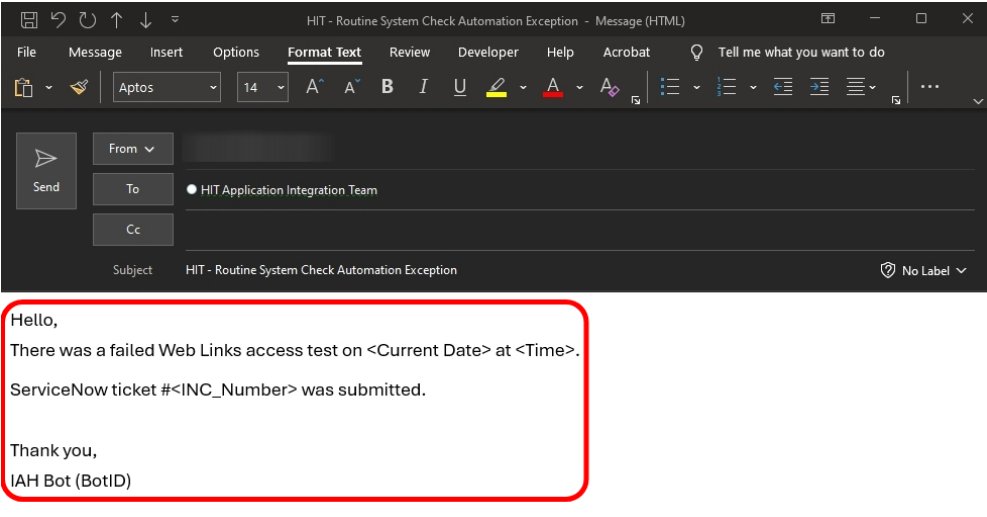
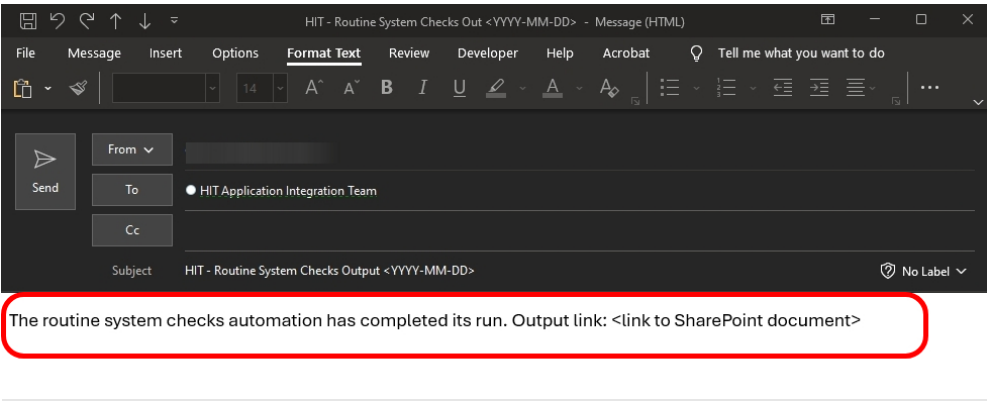
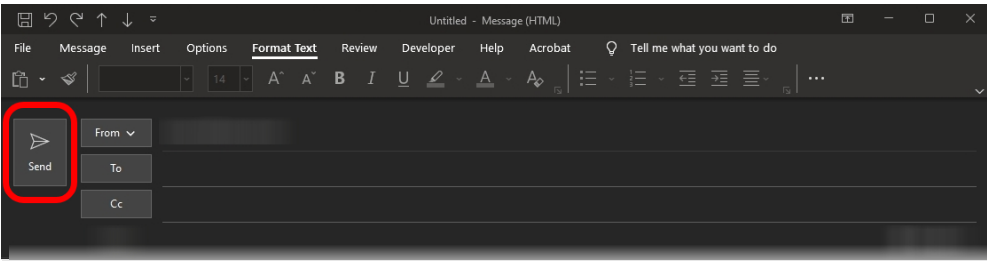
26.	Bot will scroll to the bottom of the page and click 'Submit'.	
27.	Bot will click 'x' to close the browser window.	
28.	Ticket and Exception Handling	If the bot issues a ServiceNow (SNOW) ticket for a failed test, it will not issue another ticket for the same test, until after a successful test has occurred. A successful test will 'reset' the ticket handling and allowing the next failed test to result in a new ServiceNow (SNOW) ticket.

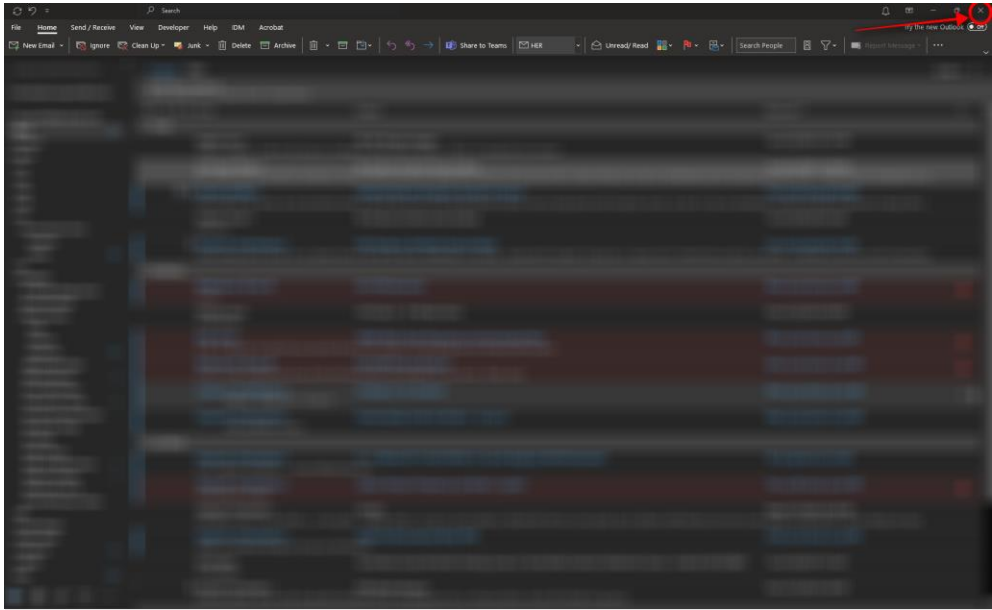
Module 4.4.9	Create and Send Outlook Email	
Step	Brief Description of Key Steps	Reference Screenshot
1.	Bot will open Microsoft Outlook. <i>Note: The bot will perform Steps 1 – 4 for all exception emails.</i> <i>Steps 5 – 13 will vary depending upon the situation being reported.</i>	 OR  
2.	Bot will click on the 'New Mail' icon to create a new email message.	

3.	Bot will enter “hitai@geisinger.edu” in the ‘To’ field	
4.	Bot will enter “HIT – Routine System Check Automation Exception” in the ‘Subject’ field	
5.	If email is addressing an incorrect ‘Bot Login ID’ or ‘Current Date’, the bot will enter the following message in the body of the email:	

6.	If the email is addressing the 'Test Patient' not found Exception, the bot will enter the following message in the body of the email:	
7.	If the email is addressing a failed access test with MUSE , the bot will enter this message in the body of the email:	
8.	If the email is addressing a <i>missing image link</i> for PACS , the bot will enter this message in the body of the email:	

9.	If the email is addressing a <i>failed access test</i> with PACS, Bot will enter this message in the Body of the email:	
10.	If the email is addressing a failed access test with Tower, the bot will enter the following message in the body of the email:	
11.	If the email is addressing a failed access test with WebBlob, the bot will enter the following message in the body of the email:	

12.	If the email is addressing a failed access test with Web Links , the bot will enter the following message in the body of the email:	
13.	If the bot is sending its daily output report, it will enter the following message:	
14.	Bot will click 'Send'.	

15.	Bot will click the 'x' to close Outlook.	
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4.5 EXCEPTIONS IN THE PROCESS FLOW

Exception	Actions	Comment
Incorrect 'Bot Login ID' and/or Current Date in Epic	Flag in output file, send email to Business, go to next application test.	Business Exception
'Test Patient' not found	Flag in output file, send email to Business, go to next application test.	Business Exception
MUSE link failed	Flag in output file, send email to Business, go to next application test.	Business Exception
Tower document link failed	Flag in output file, send email to Business, go to next application test.	Business Exception
WebBlob image link failed	Flag in output file, send email to Business, go to next application test.	Business Exception
PACS Radiology link missing	Flag in output file, send email to Business, go to next application test.	Business Exception
Pacs iSite link failed	Flag in output file, send email to Business, go to next application test.	Business Exception
Web Links link failed	Flag in output file, send email to Business, go to next application test.	Business Exception

4.6 SYSTEM ERRORS

Error	Action	Comment
Application crash	Recover and retry 3 times	Business will process manually
Epic Downtime	Pause bot if during run time	Business will process manually
Epic Upgrade	Review with business and determine what/if any action is necessary	Business will process manually

4.7 PROCESS CONTINUITY

Prevention: Establishing and defining what redundancies and protocols are in place to prevent failures in the process and maintain business continuity Detection: Defining what protocols are in place for monitoring the process to detect bugs and stop incorrect actions at all points post go-live and escalated monitoring during massive systems changes Recovery Assessing the level of risk, define strategic stakeholders to be alerted in need of a recovery and outlining the recovery plan to get back to operational state.			
Scenario	Prevention	Detection	Recovery
Expected number of input files not provided or missing.	Business reviews and confirms number of anticipated files are loaded/prepared by agreed upon date.	Bot scans/inspects for anticipated files/number of files.	- Bot sends notification email to those who are on the distribution list and IAH Prod support team. - Business to resolve the issue and notify IAH regarding next steps. - IAH team to reschedule bot run based on bot's availability.

Input file format change or input file is blank (no data).	Business to notify IAH regarding upcoming changes. IAH and Business work together to prepare and follow change management process.	Bot finds out the unexpected message format and fails to complete the process.	• Bot sends notification email to those who are on the distribution list and IAH Prod support team. • Business and IAH work together prepare and follows change management process.
Bot not completing as outlined in PDD.	N/A: What was not known was not preventable.	Hypercare Phase: Daily auditing is performed and process logs are monitored.	• IAH team adjusts bot design to improve business exceptions.
Higher than expected system exceptions.	N/A: What was not known was not preventable.	Insight Dashboards created during UAT for long term monitoring of volume and exception changes (increases or decreases).	• Alert/pulses identified and notifications sent to IAH Comm Support. • Business and IAH work together if additional phase is needed. • ServiceNOW incident reported and escalated as needed.
Output file errors (timing, format, info, reporting).	N/A: What was not known was not preventable.	Hypercare Phase: Daily auditing is performed and process logs are monitored. Insight Dashboards created during UAT for long term monitoring of volume and exception changes (increases or decreases).	• Business and IAH team adjusts bot design to identify output file errors. • Business and IAH work together if additional phase is needed.
Automated QA Bot.	Bot produces email / notification of summary indicating input matches output file/data/action results.	Bot indicates in email either success or failure of input=output comparison.	• IAH Support and/or business reviews and determines next steps.

Unknown reasons If the bot fails, how will it continue and resolve issue?	N/A: What was not known was not preventable.	Bot is unable to complete the automated process.	- Bot sends notification email to those who are on the distribution list and IAH Prod support team - The Bot Controller will then be responsible to triage the bot disruption, fix the issue(s), and either schedule ad hoc processing or resume the bot processing. - Response time confirmed by business – the goal is to complete the work by __the of the month, but ok if completed by __the of the month.
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5. Technical Details

Item	Description	Comment
Robot Type	Unattended	
Orchestrator Used	Yes	Cloud
UiPath Version	2020.10.4	

6. Reporting

Report Type	Update Frequency	Details	Distribution List
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Process Report	Daily	Report status of processed system checks. Subject: HIT Routine System Checks Output – YYYY-MM-DD Body: The routine system checks automation has completed its run. Output SP File Link: Date/Time Exception ServiceNow Ticket Created Email Sent Quantity Checks Performed Checks Passed Checks Failed Run Date	<Team_Member>@geisinger.edu
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7. Environment Details

Application	Development Stage	Environment	Access Type	Access Key/ Credential
Epic	Development	<Epic_Dev>	Username and Login Dept	Username: <User ID> Login Dept: <Dept>
	Test	<Epic_Test>	Username and Login Dept	Username: <User ID> Login Dept: <Dept>
	Prod	<Epic_Prod>	Username and Login Dept	Username: <User ID> Login Dept: <Dept>
Outlook	Development, Test, and Prod	PROD	Email account and password	Email: IAHBOTADPROD139@geisinger.edu
Microsoft Edge				

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8. Assumptions

Assumption	Impact
The entire process is automated end to end with no manual intervention.	
The distribution list, email addresses, and/or shared mailbox listed in the PDD for the purpose of process notification through email are to be maintained solely by the line of business.	

9. ADDITIONAL SOURCES OF PROCESS DOCUMENTATION

Type	Name	Link	Comments
Discovery Assessment	HIT RSC Discovery	HIT Routine System Checks Discovery Assessment Document V1.0.docx	IAH Teams Folder
Step Recording	HIT RSC Meeting	HIT - Routine System Checks 11-30-23 Meeting Recording.mp4	IAH Teams Folder
Task Capture	HIT RSC Task Capture Recording	Routine System Checks 11-20-23 Task Capture.ssp	IAH Teams Folder
Output Report		HIT-Routine System Checks - Output Report.xlsx	IAH Teams Folder
UAT Recording (video)			IAH Teams Folder
Executive Summary			IAH Teams Folder

10. Appendix

10.1 GLOSSARY

Acronym/Term	Meaning
BMP	Bitmap Image File
CDC	Centers for Disease Control
IAH	Intelligent Automation Hub
PACS	Picture Archiving and Communication System
PDD	Process Design Document – document that contains information about the process in scope for automation and about the agreed technical solution
RPA	Robotic Process Automation
SNOW	ServiceNow