Root Cause Analysis (RCA)

Incident No: INC3474062

Prepared by: Hazel Daniels

Date: 01/24/2025

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| --- | --- |
|  | **Details** |
| **Master ticket** | INC3474062 |
| **Priority** | P3 |
| **Issue Description** | Retail locations experienced issues accessing Agent Portal application from 7:25 a.m. to 7:39 a.m. (eastern) on January 24 for 14 minutes. |
| **Business Impact** | Agent experience. |
| **Issue Start Time (ET)** | 7:25 AM EST |
| **Issue End Time (ET)** | 7:39 AM EST |
| **Incident Duration** | 14 minutes |

# Configuration Item:

|  |  |
| --- | --- |
|  | **Details** |
| **Application /Software/Service /API** | Agent Portal |
| **Hostname / None / Instance Name** | wuwcc9wsagp10 |
| **IP Address** | 10.46.17.179 |
| **URL / URI / FQDN** | wuagentportal.westernunion.com |

# Quick Summary:

# Issue: Retail locations experienced issues accessing Agent Portal application from 7:25 a.m. to 7:39 a.m. (eastern) on January 24 for 14 minutes.

# Impact: Agent experience.

# Incident cause: The incident was caused by issues after Agent Portal servers upgrade deployment where one of the webservers in Chicago datacenter encountered a problem (CHG0297868).

# Corrective Actions: The impact was mitigated by moving Agent Portal application traffic to Reston datacenter (CHG0298488).

# Event Description

**Issue Description:**

Retail locations experienced issues accessing Agent Portal application from 7:25 a.m. to 7:39 a.m. (eastern) on January 24 for 14 minutes. Users were getting a ‘404 page not found’ error intermittently when trying to access the application.

**Events leading to the outage:**

**(Timelines in EST)**

**7:25 AM 1/24/2025** ETOC/WU-TSC called out in war room that users were reporting issues while accessing the Agent Portal application (Traffic was only in Chicago at this time)  
**7:39 AM 1/24/2025** Traffic was completely moved to Reston to mitigate the issue. Issue recovered immediately (Confirmed by TSC team)  
**7:55 AM 1/24/2025** Performed a health check of all the nodes and it was found that the Chicago Node 4 Webserver had an issue as there were **‘404’** errors seen in the logs

**8:05 AM 1/24/2025** Disabled the affected node in the ILAN LTM for all the 3 URLs & requested the application team to validate again. The test was successful. So, it was concluded that only one node was having issues.

**8:15 AM 1/24/2025** Replaced the main vhosts.d ‘ssl files’ and httpd.conf on the affected node with the files from a working server and the test was successful. On further comparison, the configuration mismatch in the ‘httpd.conf’ file was identified and that was concluded to be the root cause of the issue.

**8:25 AM 1/24/2025** Summary was validated and shared with ETOC  
**8:25 AM 1/24/2025** ITIO-RUN-MW-WebHosting agreed to take ownership of the ticket  
**8:30 AM 1/24/2025** Restoration was completed in the affected node, and it was enabled in the LTMs for validation. The tests were successful.

**8:45 AM 1/24/2025** Cleared the cache & performed a complete restart of the Application & Webserver instances in Chicago

**9:10 AM 1/24/2025** Sanity was performed in Chicago again by the application & TSC teams

**9:33 AM 1/24/2025** Traffic was re-balanced & monitored for some time

**9:44 AM 1/24/2025** Traffic was moved to Chicago completely

# 5 WHY’S

|  |  |
| --- | --- |
| Why were users reporting issues while using the Agent Portal application? | They were receiving intermittent ‘404 page not found’ errors while accessing the application. |
| Why was the issue intermittent & why did they see an error when accessing the application? | Only one of the 4 webservers in Chicago had an issue after the RHEL 6 to RHEL 9 cutover (CHG0297868) in Chicago. |
| Why was the webserver not able to handle the traffic? | There was a plugin related configuration entry missing in the ‘httpd.conf’ file of the server. |
| Why was the issue not identified during sanity? | Since, only one of the nodes was affected, the testing/sanity did not help us identify the issue as the requests were always served by the other healthy nodes during the testing. |

# Findings and Root Cause

**Root cause:**

Post the Agent portal RHEL 6 to RHEL 9 cutover in Chicago (CHG0297868), One of the 4 webservers in Chicago had a plugin related configuration entry missing in the ‘httpd.conf’ file of the server. This had caused an intermittent issue as three nodes were healthy and the traffic that reached the affected server threw a ‘404 page not found’ error to the users.

**Service restoration:**

The service was initially restored by moving the traffic to Reston (healthy DC) as the traffic was served only out of Chicago at the time of issue, in order to monitor the Chicago traffic post the RHEL upgrade.

As a permanent fix, the configuration files in the affected node were compared with the other working nodes and the plugin path that was not present in the ‘httpd.conf’ file of the affected server was added, and the services were restarted. A complete restart of both the application & webservers was performed in Chicago & traffic was moved to Chicago again post successful sanity.

**Mitigation/Troubleshooting Steps:**

**(Timelines in EST)**

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**Incident Resolution:**

**Short term Resolution** – Traffic movement to the healthy DC (Reston)

**Long Term Resolution** – Fixing the configuration mismatch in the affected node (Chicago Node 4 Webserver)

**Pending investigation items**:

NA, as the issue is resolved permanently.

**Limitations:**

NA, as the issue is resolved permanently.

# Corrective Action

**Short-term Corrective actions:**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Corrective action | Owned by | Due Date |
| 1 | Traffic movement to the healthy DC (Reston) to mitigate the impact. | ITIO-RUN-MW-WebHosting | January 24, 2025 |
| 2 | Fixing the configuration mismatch in the affected node (Chicago Node 4 Webserver) as a permanent resolution of the issue. | ITIO-RUN-MW-WebHosting | January 24, 2025 |
| 3 | - |  |  |

**Long-Term Corrective actions:**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Corrective action | Owned by | Due Date |
| 1 | NA, as the issue is resolved permanently. |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

# L2 Review of the Incident

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| --- | --- | --- | --- |
| No | Review Questions | Details/Action item | Comment |
| 1 | Is this a repeat occurrence of the same or issue with similar root cause? | No | This is a first-time migration of the servers from RHEL 6 to RHEL 9 operating systems. |
| 2 | Enlist Problem Ticket/’s of the similar Problems *(Incident and Problem Ticket #)* |  |  |
| 3 | What were the corrective actions for the previous incident? *(Enlist or Refer the Problem tickets)* |  |  |
| 4 | List Pending action items from previous problem tickets if any. *(Provide current Status of these items)* |  |  |
| 5 | Does L2 think this issue will not happening again? *(Substantiate)* |  |  |
| 6 | Short Term and Long-Term corrective actions *(If same as mentioned in the RCA, mention the same)* |  |  |

**Prepared by**

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| --- | --- | --- | --- |
| Name/Team: | Hazel Daniels | Date: January 24, 2025 |  |

**Approved by**

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| --- | --- | --- | --- |
| Name/Team: | Raneesh Nelliyat | Date: January 24, 2025 |  |