

# Portable Radios and Vehicle Tracking Unavailable After IMW Server Failover

Categories: Known Issue · Topics: Databases, CommsNet · Context: CommsNet · Exported: 2026-06-22 09:34

## Description

Portable radios and vehicle tracking become unavailable following a failover of IMW servers. The root cause is a misconfigured `config.yaml` in the UHF containers, where the failed-over server has insufficient retry settings, preventing connection from being established.

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## Symptoms

- Portable radios not visible in UA.
- Vehicle tracking not visible in UA.
- Only HF remains visible in UA.
- UHF crawler logs show connection errors similar to:

```
"message": "[Presence endpoint] Exception caught in connect_to_servers f
HTTPSConnectionPool(host='<IMW_HOST>', port=9031): Max retries exceeded v
/as/token.oauth2?grant_type=client_credentials&... (Caused by NewConnect
'Failed to establish a new connection: [Errno 111] Connection refused'))
```

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## Root Cause

When IMW servers fail over (e.g., from Brindisi to Valencia), the `config.yaml` of the UHF containers may still have:

1. Higher priority set for the now-unreachable servers (e.g., Brindisi priority: 0, Valencia priority: 1), meaning the active servers are deprioritised.
2. `number_retries: 0` set for the new active servers (e.g., Valencia), causing the connection attempt to fail immediately with no retries.

Both conditions must be corrected — fixing priority alone is not sufficient.

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## Affected Components

- UHF containers (Zone 1, Zone 2, Zone 3 — node 02)
- IMW servers (`config.yaml` settings)

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## Solution

### 1. Edit `config.yaml` for Zone 1 and Zone 2 containers

Update the server entries so that the currently active servers (Valencia) have the highest priority and at least one retry:

```
imw_servers:
  - token_server_host: '10.130.211.134'    # Brindisi
    token_server_port: 9031
    ...
    number_retries: 1
    priority: 1                            # Lower priority (higher number)
  - token_server_host: '10.130.81.134'    # Valencia
    token_server_port: 9031
    ...
    number_retries: 1                      # Must be >= 1
    priority: 0                            # Higher priority (lower number)
```

Key changes:

- Set Valencia priority: 0 (highest priority).
- Set Brindisi priority: 1 (lower priority).
- Set `number_retries`: 1 (or higher) for the Valencia servers.

### 2. Edit `config.yaml` for Zone 3 — node 02 only

Zone 3 on node 01 was unaffected. Zone 3 on node 02 had correct priority but `number_retries`: 0.

- Set `number_retries`: 1 for the Valencia servers.

### 3. Restart the containers

After saving changes, restart the affected UHF containers.

### 4. Verify

Check the logs to confirm the containers reconnect successfully and that radios and vehicle tracking are visible in UA.

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## Verification Commands

Use `telnet` to confirm connectivity to IMW server endpoints before and after the fix:

```
telnet 10.130.211.134 9031 # Brindisi token server
telnet 10.130.81.134 9031 # Valencia token server
telnet 10.130.211.134 65001 # Brindisi main server
```

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## Notes

- This issue was first identified on **03-04-2025** and resolved on **04-04-2025**.
  - Zone 3 node 01 was working correctly throughout and required no changes.
  - For IMW server issues, contact: **Milosz** (TBC).
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## Related

- SR: IM-1-12380361146
- WO: WO-IM-1-12381236334