



A **ZEPHYRTEL** SOLUTION

# **UltraBand™ Version 5.7.10**

Release Notes

# Copyright

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## Release Overview

<b>Release Version</b>	UltraBand 5.7.10
<b>Release Date</b>	November 13, 2018
<b>Release Type</b>	General Availability
<b>Deliverables</b>	<ul style="list-style-type: none"><li>• Upgrade package for existing UltraBand 5.7 instances</li><li>• Release Documentation (Release Notes)</li></ul>
<b>Additional Information</b>	Improvements since UltraBand 5.7.9 release: 4 customer defects 14 bug fixes

## Fixed Customer Defects Summary

JIRA ID	Zendesk ID	Description
PAUB-18219	175566 303450 370377 398703	Severe LWIP (c/o connection) leak  Please see below for more information.
PAUB-19266	408834	pang core V.5.7.7b91
PAUB-19434	430445	Standby CE keeps changing
PAUB-19243	403897	CMDB oversized and constantly growing

# Fault Analysis Report

## PAUB-18219 Severe LWIP (c/o connection) leak

Some customers reported a memory leak after some hours of operation. After a detailed and comprehensive analysis, several refactorings on the memory management logic were implemented and some verified leaks were eliminated. This issue spawned a series of fixes that further prevent this kind of issues in the future. Please read below for details.

## PAUB-19266 pang core V.5.7.7b91

A detailed investigation of this issue showed that this was an application crash, rarely reproducible only during high traffic condition. A fix was provided to prevent similar situation in the future.

## PAUB-19434 Standby CE keeps changing

A detailed investigation of this issue showed that this issue is caused in a very particular situation where the LWIP Garbage Collector runs in an erratic manner. A fix was provided to prevent similar situation in the future.

## PAUB-19243 CMDDB oversized and constantly growing

A detailed investigation of this issue showed that this was an application bug that caused the Garbage Collector mechanism for stale data to not delete files. A fix was provided to prevent similar situation in the future.

## Stability Improvements

PeerApp is constantly improving its testing methods, which allows us to detect potential stability issues before they are reported by customers. As a result of this initiative, this release includes improvements for overall stability of the product.

## LWIP Leak Issues

The PAUB-18219 leak issue spawned several subtasks that aimed to fortify the resource management subsystem. These efforts created artificial crashes in the system to verify potential real-life situation where the server could crash. Also, an older version of LWIP resource management was completely replaced with a reengineered component.

PAUB-19254 - Ultraband becomes unresponsive, increasing load

PAUB-19327 - Crash at HTTP Session component

PAUB-19349 - Crash at connection classifier module

PAUB-19350 - Crash at classifier creation

PAUB-19353 - Crash at hysteresis queue

PAUB-19395 - Remove faulty LWIP expiration mechanism

The internal R&D (Research and Development) report can be found here: [LWIP Leaks Analysis](#)

## Server Logging

Server logging is a fundamental part of any server operation. The following issues have been worked on to enhance the logging capabilities:

[PAUB-19183] - Display number of connections and packets in the system

[PAUB-19288] - Ten GB logs due to "pool is empty" (Packet pool)

[PAUB-19334] - FLOW\_MARKER HILLEL\_REQUEST debug logging

[PAUB-19304] - Log CMDDB DO\_NOT\_WRITE information for hashes

## Misc Issues

[PAUB-19177] - Webcache connection missing FIN

[PAUB-19178] - Requests get stuck in the proxy because of faulty LEG recognition

[PAUB-19180] - Cache out sessions are dropped due to cpu overload misdetection

[PAUB-19263] - Wrong IPv6 calculation for niche case

## Known Issues

[PAUB-19691] - Expiration Issues

This version contains a known issue that is still being investigated, which causes the system to allow the cache database to grow above the defined threshold. The effect of this issue is that sometimes a gradual decrease in Cache-Out is observed until the expiration job is executed again. During this time, the Disk Utilization percentages also grow beyond the configured limit. A

workaround exists for this problem, which is to simply restart the UltraBand service when several disks present above-threshold usage.

While this problem is not fixed in this version, it's planned for the official release of v5.7.12, which will bring other fixes and improvements.

[PAUB-19704] - Cache-out Port Issues on 5.7.10

This version contains a post-release issue that was fixed in version 5.7.11, which only affects customers using Cache-out Port configurations. If such configuration is not used, there is no risk of malfunctioning.