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| **Freescale Semiconductor** | Document |
| LDPAA AIOP SERVICE LAYER | Number: AIOPSLRN |
| Release Notes for LDPAA AIOP Service Layer Alpha v0.4.3 | Doc. Rev. 0.1 Aug. 21 2014 |

**LDPAA AIOP SERVICE LAYER ALPHA V0.4.3**

**Release Notes**

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1. Overview

This document describes the main updates included in the LDPAA AIOP Service Layer Alpha v0.4.3 as compared with v0.4.2.

This release supports all service routines, IP fragmentation and IP reassembly functional modules and is intended for Phase 2 Alpha release. It does not provide support in error flows. IP reassembly does not support IPv6.

This version enables one cluster, four AIOP Cores and 1 task per core by default. Multi-task per core has been disabled due to tool issues (ENGR00319165).

Applications should use the APIs in: aiopsl/src/include/

All other APIs are internal to the Service Layer and should not be called by applications.

The API may be changed in future releases.

The API may be updated in future releases to align with the latest HW specs.

This release can be retrieved from GIT:

GIT repository: ssh://gerrit/ldpaa/aiopsl/

GIT branch: branch\_from\_0.4.1\_update\_02

GIT tag: **ldpaa-aiop-sl-v0.4.3**

Please see the aiopsl/docs/AIOPCoreLib\_ChangeLog.txt and aiopsl/docs/AIOP\_ARENA\_ChangeLog.txt files for a detailed list of changes.

The API book documentation may be downloaded from Compass at:

<http://compass.freescale.net/livelink/livelink?func=ll&objId=232593254&objAction=browse&viewType=1>

Please subscribe to the AIOPSREL mailing list to receive future release notifications.

1. Compatibility List

This release is bit accurate with respect to the following docs/tools.

As such, it is suitable for running on RTL/Emulator/Simulator.

|  |  |
| --- | --- |
| **Tool/Doc** | **Version** |
| AIOP\_Archdef | 0.7.5 |
| FD\_section | 0.62.3 |
| CTLU\_AIOP\_bg | 0.7.2 |
| TMan | 0.7.7 |
| Parser\_Block\_Guide | 3.070 (spec version from 15/4/2014) |
| AIOP\_Instruction\_Additions | 1.00 |
| Compiler | Build 281 |
| CW for DPAA | 10.0.10 |
| Simulator | LS\_SIM\_f0117\_140814 |
| MC Firmware | 0.4.2.1 |
| PowerISA | 2.06 |
| AIOP\_z490\_CPU\_Specification | Rev1.2 |
|  |  |

1. New Features

No new features have been added since v0.4.2.

1. Changes

The following are changes from version v0.4.2:

* AIOP UART port change (changed from 1\_0 to 2\_0, to avoid sharing the port with Linux).

1. Quick Start with this release

Please see the README.txt file at aiopsl\build\aiop\_ sim\apps\app\_process\_packet\src\ for running instructions.

1. Contact Information

* Mail List: **AIOPSREL**
* Bug Reporting [Clear Quest](http://cq.freescale.net/cqweb/) BINs: **LS-AIOP-LOW-LEVEL** and **LS-ARENA**

1. Bug Fixes

The following bugs have been fixed since version 0.4.2:

* IPR fix for short last fragment. CQ ENGR324372.
* IPR fix: deletion of created tables upon create instance is done. CQ ENGR00326971
* IPR fix: missing initialization in concurrent mode. CQ ENGR326943
* IPF: add alignment attribute to typedef ipf\_ctx\_t and remove requirement for 32B alignment from API.

1. Known Limitations/ Issues

## General Limitations

* The fsl\_os\_print() function is limited to strings smaller than 80 characters.
* Slab creation does not support additional buffers beyond the committed number (i.e. only extra\_buffs=0 is currently supported).
* The Parser profile ID is zero by default. Other Parser Profiles can be created.
* The AIOP container must be assigned ICID 0 and Portal ID 1.

## Known problems

* The slab\_debug\_info\_get() command does not check the validity of the slab being queried.  (ENG00312975)
* Only 255 KeyID can be created instead of 256 (ENGR00326075).

## Tools known issues

The below are known simulator issues which cause limitations in the Service Layer.

* OSM:
  + scope\_enter from level 0 aborted (ENGR00324136).
* CDMA:
  + CDMA DMA Errors (ENGR00322729).
* Parser:
  + Simulator doesn't set "UDP Present" bit when UDP checksum is 0 (ENGR323148).
  + The parse result doesn't return the expected values of ip\_n\_unknown\_protocol field (ENGR00322928).
  + Parser returns truncation error when CFI field is set (ENGR00323090).
* CTLU :
  + The miss rule cannot be found while getting miss result in LPM table (ENGR00326525).
  + The miss rule cannot be found after its miss result has been replaced (ENGR00322445).
  + NORSC bit is not set as expect in table\_rule\_create\_or\_replace(0x6d) command (ENGR00326542).
  + TLUMISS test in rule query command (ENGR00321926).
  + The extraction header is random value when generic extract from the parse result (ENGR00326537).
* Multi-Core: It is not currently possible to run single-core due to tool limitation.  (When running in AIOP-MC integrated environment, aiop.num\_cores  cannot be set to 1.) (ENGR00313823)

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