Illumio® NEN

Version 2.6.30
PCE Versions: 21.5.1 – 24.x

Release Notes

Contents

Welcome

These release notes describe the new features, enhancements, resolved issues, and known issues for the Network Enforcement Node (NEN) 2.6.1 release.

The NEN is the Illumio Core switch and Server Load Balancer (SLB) interface that provides visibility and enforcement on switches and SLBs.

See the *NEN Installation and Usage Guide* for information.

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What's New In This Release

To learn what's new and changed in earlier NEN releases, see *What's New in This Release* in the *Illumio NEN Installation and Usage Guide*.

> ⚠ **Before installing NEN 2.6.30**
>
> Installing this release upgrades the existing database on the NEN to a newer version of the database software. Illumio recommends that you back up the existing NEN database before you install NEN 2.6.30 so that you can revert the installation if necessary.
>
> To back up the existing NEN database, issue the following commands on the NEN primary node:
>
> ```
> illumio-nen-ctl set-runlevel 1 -svw
> ```
>
> ```
> illumio-nen-db-management dump --file <outputfile-name>
> ```
>
> ```
> illumio-nen-ctl stop
> ```

Product Version

NEN Version: 2.6.30
Compatible PCE Versions: 21.5.1 – 24.2

Standard versus LTS Releases

For information about Standard versus Long Term Support (LTS) releases, see **Versions and Compatibility** in the Illumio Support portal (log in required).

Release Types and Numbering

Illumio Core release numbering uses the following format: "a.b.c-d+e"

- "a.b": Standard or LTS release number, for example "2.2"
- ".c": Maintenance release number, for example ".1"
- "-d": Optional descriptor for pre-release versions, for example "preview2"

Resolved Issue in NEN 2.6.30

- **ACL Generation Hangs if Switch Policy Includes Multicast Addresses** (E-117247)
  If a PCE switch policy includes a multicast address, the NEN became inoperative when trying to generate ACLs for that policy. This issue is fixed.
- **Rules referencing some protocols didn't appear in ACLs** (E-117013)
  PCE policy rules referencing certain protocols didn't appear in NEN-generated switch ACLs. This issue is fixed. With this release, the NEN now supports all PCE-supported protocols.

Known Issues in NEN 2.6.30

There are no known issues in this release.

Resolved Issue in NEN 2.6.20

- **Potential unexpected denial of some traffic flows** (E-114782)
  In NEN releases 2.6.10 and earlier, while in Selective Enforcement the NEN applied ACL deny

rules before allow rules, which could inadvertently deny flows that you want to allow. This issue is fixed. Beginning with this release, NENs now apply ACL allow rules before deny rules.

Known Issues in NEN 2.6.20

There are no known issues in this release.

Resolved Issues in NEN 2.6.10

- **In NEN HA pair SLB jobs aborted in some circumstances** (E-112912)
  In a NEN HA pair, after the Secondary Node served temporarily as the Primary Node and then returned to its normal Secondary role, an issue occured where SLB policy jobs on the Secondary Node were aborted and the database wasn't being reset to allow other SLB policy jobs to run on those SLBs. The issue stems from the timeout behavior being too agressive. This issue is resolved: the Secondary Node now gracefully returns to its normal role.
- **Unnecessary word prevented some rules from being applied in IBM AS400 integration** (E-111870)
  In an IBM AS400 integration, the ACL files generated by the NEN contained the word `permit` at the end on each rule line, which prevented Precisely from ingesting the rules. This issue is resolved: `permit` is no longer appended at the end of rules.

Known Issues in NEN 2.6.10

There are no known issues in this release.

2.6.10 Security Information

- Upgraded netaddr-1.5.0.gem to 2.0.4 or higher to address CVE-2019-17383
- Upgraded tzinfo-1.2.7.gem to 0.3.61,1.2.10 or higher to address CVE-2022-31163
- Upgraded json-1.8.6.gem to 2.3.0 or higher to address CVE-2020-10663
- Upgraded activesupport-5.2.4.2.gem to 5.2.4.3,6.0.3.1 or higher to address CVE-2020-8165 CVE-2023-22796
- Upgraded addressable-2.7.0.gem to 2.8.0 or higher to address CVE-2021-32740
- Upgraded cURL to v7.87.0 on the Illumio NEN to address CVE-2019-5443 & CVE-2019-3882

Resolved Issues in NEN 2.6.1

- **Timeout issue prevented NEN from updating SLB Policy** (E-107324)
  Due to the shortness of the default connect timeout in the CURL library (5 minutes), the NEN was susceptible to timing out when trying to connect to the PCE. This in turn prevented the NEN from updating policy on the SLB. The issue was resolved by adding the following configurable PCE runtime_env parameter:

  `pce_policy_connect_timeout_minutes`
  - Default value: 10 minutes
  - Minimum value: 3 minutes
- **Handling of SLB empty data response lead to erroneous "deletion pending" state** (E-106930)
  An issue caused an F5 SLB to return an empty data response when the NEN queried it for virtual servers, even though managed virtual servers actually existed on the SLB. This occured at a time when the NEN was programming the SLB. This in turn caused the PCE to put these existing virtual servers in a 'deletion pending' state. After the NEN was restarted, all the virtual servers were discovered and available on the PCE Web Console. This issue is resolved. The NEN will now ignore empty data responses if the SLB has managed virtual servers or is currently being programmed with policy.
- **Route domain length prevented virtual server discovery** (E-106800)
  F5 SLB virtual servers with route domains longer than two digits weren't discovered by the NEN and consequently weren't displayed on the PCE Web Console. This issue is resolved. The NEN now recognizes route domains up to five digits in length.

Known Issues in NEN 2.6.1

There are no known issues in this release.

Resolved Issues in NEN 2.6.0

- **Unable to deactivate the NEN** (E-104053)
  In a certain circumstance (described below), after using the PCE Web Console to remove all the SLBs and associated virtual servers from the NEN, users were unable to deactivate the NEN. Details are as follows:
  a. The user removed SLBs through the PCE Web Console.
  b. As the SLBs no longer existed on the PCE, the NEN couldn't inform the PCE of their state.
  c. This prevented the NEN from removing the SLBs correctly from its database.

      d. This caused the NEN to think it was still managing the SLBs.

      e. This in turn prevented the user from deactivating the NEN.

  Circumstance: At the time the user removed the SLBs through the PCE Web Console, the associated virtual servers were unmanaged.

This issue is resolved. The NEN now recognizes when the SLB is being removed and no longer tries to inform the PCE of changes in SLB state. This allows the NEN to remove SLBs from its database correctly.

- **NEN 2.5.2 Failed to Update SLB Policy** (E-103432)
  An issue caused the NEN policy process to hang while sending an SLB policy request to the PCE. The NEN issue was resolved by adding a configurable PCE policy request timeout to the NEN's code. To configure the optional timeout, use the following runtime environment variable:

```
pce_policy_request_timeout_minutes
```

  - Default value: 10 minutes
  - Minimum value: 3 minutes
- **Extraneous API call to the load balancer** (E-96324)
  The NEN made an extraneous GET API call to the AVI Advantage Load Balancer for programming the virtual server. This issue is resolved. The NEN no longer makes this extraneous API call.

Known Issues in NEN 2.6.0

There are no known issues in this release.