Oracle® Communications Cloud Native Core, Network Exposure Function Network Impact Report





Oracle Communications Cloud Native Core, Network Exposure Function Network Impact Report, Release 24.2.2

F98226-04

Copyright © 2022, 2025, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Int	roduction	
1.1	Compatibility Matrix	1
1.2	Common Services Load Lineup	1
1.3	Software Requirements	2
1.4	Orchestration	3
1.5	Resource Requirements	4
NE	EF Features	
2.1	ATS Features	1
Su	pported Upgrade and Rollback Paths	
Со	onfiguration	
4.1	Helm	
4.2	REST API	1
Ob		
	servability	
5.1	Metrics	

My Oracle Support

My Oracle Support (https://support.oracle.com) is your initial point of contact for all product support and training needs. A representative at Customer Access Support can assist you with My Oracle Support registration.

Call the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

- For Technical issues such as creating a new Service Request (SR), select 1.
- For Non-technical issues such as registration or assistance with My Oracle Support, select
 2.
- For Hardware, Networking and Solaris Operating System Support, select 3.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Acronyms and Terminologies

The following table lists the acronyms and the terminologies used in the document.

Table Acronyms

A	Bassintian
Acronym	Description
3GPP	3rd Generation Partnership Project
5GC	5G Core Network
5GS	5G System
AF	Application Function
API	Application Programming Interface
CNC	Cloud Native Core
CNE	Oracle Communications Cloud Native Environment
EG	Exposure Gateway
EFC	Exposure Function Core
FQDN	Fully Qualified Domain Name
GPSI	Generic Public Subscription Identifier
GMLC	Gateway Mobile Location Center
НА	High Availability
IMSI	International Mobile Subscriber Identity
K8s	Kubernetes
ME	Monitoring Events
MSISDN	Mobile Station International Subscriber Directory Number
NEF	Oracle Communications Cloud Native Core, Network Exposure Function
NF	Network Function
NRF	Oracle Communications Cloud Native Core, Network Repository Function
NSSF	Oracle Communications Cloud Native Core, Network Slice Selection Function
OAM	Operations, Administration, and Maintenance
PDB	Pod Disruption Budget
SBA	Service Based Architecture
SBI	Service Based Interface
SUPI	Subscription Permanent Identifier
UDM	Unified Data Management
URI	Uniform Resource Identifier
QoS	Quality of Service

What's New in This Guide

This section introduces the documentation updates for release 24.2.x.

Release 24.2.2 - F98226-04, September 2025

Updated the supported upgrade and rollback paths in the <u>Supported Upgrade and Rollback Paths</u> section.

Release 24.2.1 - F98226-03, October 2024

- Updated the release number to 24.2.1 in the entire document.
- Updated the image tag details in the <u>Common Services Load Lineup</u> section.
- Updated the compatibility matrix table with latest versions in the <u>Compatibility Matrix</u> section.
- Updated the supported upgrade and rollback paths in the <u>Supported Upgrade and</u> <u>Rollback Paths</u> section.

Release 24.2.0 - F98226-02, September 2024

Made cosmetic changes and updated stem sentences across the document.

Release 24.2.0 - F98226-01, July 2024

General Updates:

- Updated the release number to 24.2.0 in the entire document.
- Updated the image tag details in the Common Services Load Lineup section.
- Updated the compatibility matrix table with latest versions in the <u>Compatibility Matrix</u> section.
- Updated the versions for supported software in the <u>Software Requirements</u> section.
- Added overview of all the features for this release in the NEF Features section.
- Added all the Helm Parameters for this release in the <u>Helm</u> section.
- Added all the Metrics for this release in the <u>Metrics</u> section.
- Added all the Alerts for this release in the <u>Alerts</u> section.

Upgrade, Rollback, and Uninstall Updates:

 Updated the supported upgrade and rollback paths in the <u>Supported Upgrade and</u> Rollback Paths section.

Introduction

The purpose of this document is to highlight the changes made in NEF from release 24.1.x to release 24.2.x. These changes may have an impact on the customer network operations and must be considered by the customer while planning the deployment.

1.1 Compatibility Matrix

This section lists the versions of added or updated components in release 24.2.x. To know the list of all the supported versions, see *Oracle Communications Cloud Native Core Release Notes*.

Release 24.2.2

There is no change in the compatible matrix for this release.

Release 24.2.1

There is no change in the compatible matrix for this release.

Release 24.2.0

The following table lists the versions of added or updated components in this release:

Table 1-1 Compatibility Matrix

Component	Compatible Versions
ATS	24.2.x
cnDBTier	24.2.x, 24.1.x, 23.4.x
CNE	24.2.x, 24.1.x, 23.4.x
OCI Adaptor	24.2.x

1.2 Common Services Load Lineup

This section lists the versions of added or updated common services in release 24.2.x. To know the list of all the supported versions, see *Oracle Communications Cloud Native Core Release Notes*.

Release 24.2.2

There is no change in the common services load lineup in this release.

Release 24.2.1

The following table lists the versions of added or updated common services in release 24.2.1.



Table 1-2 Common Services Load Lineup

Common Service	Version
App-Info	24.2.15
ATS Framework	24.2.2
Common-Config-Hook	24.2.15
Config-Server	24.2.15
Configuration Update Service	24.2.15
Configuration INIT Service	24.2.15
Debug-tool	24.2.6
Egress Gateway	24.2.15
Helm Test	24.2.5
Ingress Gateway	24.2.15
NRF-Client	24.2.8
Perf-Info	24.2.15

The following table lists the versions of added or updated common services in this release:

Table 1-3 Common Services Load Lineup

Common Service	Version
App-Info	24.2.1
ATS Framework	24.2.0
Common-Config-Hook	24.2.4
Config-Server	24.2.1
Configuration Update Service	24.2.4
Configuration INIT Service	24.2.4
Debug-tool	24.2.1
Egress Gateway	24.2.4
Helm Test	24.2.1
Ingress Gateway	24.2.4
NRF-Client	24.2.1
Perf-Info	24.2.1

1.3 Software Requirements

This section lists the added or updated software required to install NEF release 24.2.x. For more information about software requirements, see *Oracle Communications Cloud Native Core, Network Exposure Function Installation, Upgrade, and Fault Recovery Guide.*

Release 24.2.2

There is no change in the software requirements for this release.

Release 24.2.1

There is no change in the software requirements for this release.



The following table lists the versions of added or updated software required to install this release:

Table 1-4 Software Requirements

Software	Versions
Helm	3.13.2
Kubernetes	1.29.x, 1.28.x, 1.27.x

The following table lists the versions of additional software along with the usage:

Table 1-5 Additional Software

Software	Version	Purpose
Calico	3.26.4	Logging
cert-manager	1.12.4	Logging
containerd	1.7.13	Logging
Grafana	9.5.3	Metrics
Istio	1.18.2	Logging
Jaeger	1.52.0	Logging
Kyverno	1.9.0	Logging
MetalLb	0.14.4	Logging
Prometheus	2.51.1	Metrics
Prometheus Operator	0.72.0	Metrics

1.4 Orchestration

This section provides information about orchestration changes in release 24.2.x.

Release 24.2.2

There is no change to the orchestration in this release.

Release 24.2.1

There is no change to the orchestration in this release.

Release 24.2.0

The following table provides information about orchestration changes in this release:

Table 1-6 Orchestration

Orchestration Changes	Status	Notes
Support for in-service upgrade and roll back		For information about upgrade and roll back, see Supported Upgrade and Rollback Paths.



Table 1-6 (Cont.) Orchestration

Orchestration Changes	Status	Notes
Changes in the custom- values.yaml file	Yes	NEF architecture supports the following custom values files: ocnef-custom-values.yaml occapif-custom-values.yaml For information about the custom-values.yaml file, see Helm.
Changes in the resource information for ocnef-custom-values.yaml and occapif-custom-values.yaml files	Yes	For information about changes in the resource requirements, see Resource Requirements.
Changes in the CSAR package	No	No CSAR package changes.
Changes in Role-Based Access Control (RBAC) policy	No	No new RBAC policies are added.
Changes in Life Cycle Management (LCM) Operations	No	No new LCM operations are added.
Helm Test Support	No	For information about Helm test, see the "Performing Helm Test" section in Oracle Communications Cloud Native Core, Network Exposure Function Installation, Upgrade, and Fault Recovery Guide.

1.5 Resource Requirements

This section lists the added or updated resource requirements in release 24.2.x. For more information about resource requirements, see Oracle Communications Cloud Native Core, Network Exposure Function Installation, Upgrade, and Fault Recovery Guide.



(i) Note

Changes in the resource requirements are highlighted in **bold**.

Release 24.2.2

There is no resource requirements added in this release.

Release 24.2.1

There is no resource requirements added in this release.

Release 24.2.0

The following table lists the added or updated resource requirements in this release:



Table 1-7 Resource Requirements for NEF Services

Microservic e Name	CPU Reques t and limit per POD (A)	Memor y Reques t and limit per POD (B)	Scaling Criteria CPU Usage %	Default POD Count (C)	Maxim um POD count with scaling (D)	Minimu m CPU Total for Default PODs (A*C)	Minimu m Memor y Total for Default PODs (B*C)	Maxim um CPU Total for all PODs (with full scaling and surge) (A*D)	Maxim um Memor y Total for all PODs (with full scaling and surge) (B*D)	CPU Reques t and limit for Debug Contai ner (Option al)	Memor y Reques t and limit for Debug Contai ner (Option al)
APD Manager	4	4Gi	70	2	2	8	8Gi	8	8Gi	1	2Gi
API Router	4	4Gi	70	2	2	8	8Gi	8	8Gi	1	2Gi
External Egress Gateway	4	4Gi	70	2	5	8	8Gi	20	20Gi	1	2Gi
External Ingress Gateway	4	4Gi	70	2	5	8	8Gi	20	520Gi	1	2Gi
5GC Egress Gateway	4	4Gi	70	2	5	8	8Gi	20	20Gi	1	2Gi
5GC Ingress Gateway	4	4Gi	70	2	5	8	8Gi	20	20Gi	1	2Gi
Common Config Hook	1	1Gi	1	1	1	1	1Gi	1	1Gi	1	2Gi
ME Service	4	4Gi	70	2	12	8	8Gi	48	48Gi	1	2Gi
QoS Service	4	4Gi	70	2	12	8	8Gi	48	48Gi	1	2Gi
5GC Agent	4	4Gi	70	2	12	8	8Gi	48	48Gi	1	2Gi
CCF Client	2	2Gi	70	2	3	4	4Gi	6	6Gi	1	2Gi
Expiry Auditor	4	4Gi	70	2	3	8	8Gi	12	12Gi	1	2Gi
Perf-Info	1	1Gi	1	1	1	1	1Gi	1	1Gi	1	2Gi
App-Info	1	1Gi	1	1	1	1	1Gi	1	1Gi	1	2Gi
Config- Server	1	1Gi	1	1	1	1	1Gi	1	1Gi	1	2Gi
NRF Client	1	1Gi	1	1	1	1	1Gi	1	1Gi	1	2Gi
Traffic Influence	4	4Gi	70	2	12	8	8Gi	48	48Gi	1	2Gi
Diameter Gateway	4	4Gi	70	2	2	8	8Gi	8	8Gi	1	2Gi
Device Trigger	1	1Gi	70	1	1	1	1Gi	1	1Gi	1	1Gi
Pool Manager	4	4Gi	70	1	1	4	4Gi	4	4Gi	1	1Gi
MSISDNIess MO SMS	4	4Gi	70	1	12	4	4Gi	4	4Gi	4	4Gi
Console Data Service	4	4Gi	70	1	12	4	4Gi	4	4Gi	4	4Gi





The debug container resources are optional. If you are using the debug container, then the CPU Request and Limit for Debug Container and Memory Request and Limit for Debug Container values must be included to the minimum and maximum resources for NEF services.

Table 1-8 Resource Requirements for CAPIF Services

Microservic e Name	CPU Reques t and limit per POD (A)	Memor y Reques t and limit per POD (B)	Scaling Criteria CPU Usage %	Default POD Count (C)	Maxim um POD count with scaling (D)	Minimu m CPU Total for Default PODs (A*C)	Minimu m Memor y Total for Default PODs (B*C)	Maxim um CPU Total for all PODs (with full scaling and surge) (A*D)	Maxim um Memor y Total for all PODs (with full scaling and surge) (B*D)	CPU Reques t and limit for Debug Contai ner (Option al)	Memor y Reques t and limit for Debug Contai ner (Option al)
API Manager	4	4Gi	70	2	3	8	8Gi	12	12Gi	1	2Gi
AF Manager	4	4Gi	70	2	3	8	8Gi	12	12Gi	1	2Gi
Event Manager	4	4Gi	70	2	2	8	8Gi	8	8Gi	1	2Gi
External Ingress Gateway	4	4Gi	70	2	5	8	8Gi	20	20Gi	1	2Gi
External Egress Gateway	4	4Gi	70	2	5	8	8Gi	10	20Gi	1	2Gi
Network Ingress Gateway	4	4Gi	70	2	5	8	8Gi	20	20Gi	1	2Gi
Network Egress Gateway	4	4Gi	70	2	5	8	8Gi	20	20Gi	1	2Gi
Console Data Service	4	4Gi	70	1	12	4	4Gi	4	4Gi	4	4Gi

(i) Note

The debug container resources are optional. If you are using the debug container, then the CPU Request and Limit for Debug Container and Memory Request and Limit for Debug Container values must be included to the minimum and maximum resources for CAPIF services.

NEF Features

This chapter lists the added or updated features in release 24.2.x. For more information about the features, see *Oracle Communications Cloud Native Core, Network Exposure Function User Guide*.

Release 24.2.2

No new features or feature enhancements have been introduced in this release.

Release 24.2.1

No new features or feature enhancements have been introduced in this release.

Release 24.2.0

Network Exposure Function includes the following features or enhancements:

Deployment in OCI:

Oracle Cloud Infrastructure (OCI) is a set of complementary cloud services that enable you to build and run a range of applications and services in a High Availability (HA) hosted environment. NEF can be integrated into the OCI using the OCI Adaptor.

OCI Adaptor provides a smooth integration to NEF observability and monitoring modules with OCI observability and management, enabling the users to have access of alerts, metrics, and KPIs on the OCI platform.

For more information on deploying NEF in OCI, see Oracle Communications Cloud Native Core, Network Exposure Function User Guide, Oracle Communications Cloud Native Core, Network Exposure Function Installation, Upgrade, and Fault Recovery Guide, Oracle Communications Cloud Native Core, Network Exposure Function Troubleshooting Guide and Oracle Communications Cloud Native Core, OCI Adaptor Deployment Guide.

CAPIF Integration with the CNC Console

The integration of CAPIF with the CNC Console enables you to configure and modify different services and features using the CNC Console.

For more information, see "Configuring Network Exposure Function using the CNC Console" in Oracle Communications Cloud Native Core, Network Exposure Function User Guide and Oracle Communications Cloud Native Core, Network Exposure Function REST Specification Guide.

Support for CNC Top Level MIB in NEF

There are two MIB files which are used to generate the traps. These files are packaged and shared to the user in order to fetch the traps in their environment.

For more information, see "Configuring Alert Manager for SNMP Notifier" in *Oracle Communications Cloud Native Core, Network Exposure Function User Guide.*

For more detailed information about the features, see *Oracle Communications Cloud Native Core*, *Network Exposure Function User Guide*.

2.1 ATS Features

This section lists the added or updated NEF ATS features in release 24.2.x.



There are no new NEF ATS features or enhancements in this release.

Release 24.2.1

There are no new NEF ATS features or enhancements in this release.

Release 24.2.0

There are no new NEF ATS features or enhancements in this release.

For more information about the features, see the 'ATS Framework Features' section in *Oracle Communications Cloud Native Core, Automated Testing Suite Guide.*

Supported Upgrade and Rollback Paths

This chapter lists the supported upgrade and rollback paths in release 24.2.x. For more information about upgrade and rollback, see *Oracle Communications Cloud Native Core, Network Exposure Function Installation, Upgrade, and Fault Recovery Guide.*

Release 24.2.2

The following table lists the supported upgrade paths in this release:

Table 3-1 Supported Upgrade Paths

Source Release	Target Release
24.1.x	24.2.2
23.4.x	24.2.2

Upgrade Impact

There is no upgrade impact in this release.

The following table lists the supported rollback paths in this release:

Table 3-2 Supported Rollback Paths

Source Release	Target Release
24.2.2	24.1.x
24.2.2	23.4.x

Rollback Impact

There is no rollback impact in this release.

Release 24.2.1

The following table lists the supported upgrade paths in this release:

Table 3-3 Supported Upgrade Paths

Source Release	Target Release
24.1.x	24.2.1
23.4.x	24.2.1

Upgrade Impact

There is no upgrade impact in this release.

The following table lists the supported rollback paths in this release:



Table 3-4 Supported Rollback Paths

Source Release	Target Release
24.2.1	24.1.x
24.2.1	23.4.x

Rollback Impact

There is no rollback impact in this release.

Release 24.2.0

The following table lists the supported upgrade paths in this release:

Table 3-5 Supported Upgrade Paths

Source Release	Target Release
24.1.x	24.2.0
23.4.x	24.2.0

Upgrade Impact

There is no upgrade impact in this release.

The following table lists the supported rollback paths in this release:

Table 3-6 Supported Rollback Paths

Source Release	Target Release
24.2.0	24.1.x
24.2.0	23.4.x

Rollback Impact

There is no rollback impact in this release.

Configuration

This chapter lists the configuration changes in release 24.2.x.

4.1 Helm

This section lists the Helm parameter changes in release 24.2.x. For more information about the Helm parameters, see *Oracle Communications Cloud Native Core, Network Exposure Function Installation, Upgrade, and Fault Recovery Guide*.

Release 24.2.2

There is no change in the Helm parameters in this release.

Release 24.2.1

There is no change in the Helm parameters in this release.

Release 24.2.0

The following Helm parameters are added in this release:

- global.commonCfg
- global.privilegedDbCredSecretName
- global.dbCredSecretName
- global.commonCfg.hookImage.name
- global.commonCfg.hookImage.tag
- global.commonCfg.hookImage.pullPolicy
- global.client.enable
- global.client.pollingInterval
- global.server.svcName
- global.server.port

4.2 REST API

This section lists the REST API changes in release 24.2.x. For more information about the REST APIs, see *Oracle Communications Cloud Native Core, Network Exposure Function REST Specification Guide*.

Release 24.2.2

There are no REST API changes in this release.

Release 24.2.1

There are no REST API changes in this release.



Updated the URI and Example for the following REST APIs in this release:

Table 4-1 URI and Examples

REST API	URI	Example
Fetching Logging Data	<pre>{apiRoot}/nef/nf-common- component/v1/{serviceName}/ logging</pre>	{apiRoot}/nef/nf-common- component/v1/monitoringevents/ logging
Fetch Timeout Data	<pre>{apiRoot}/nef/nf-common- component/v1/{serviceName}/ timeout</pre>	{apiRoot}/nef/nf-common- component/v1/monitoringevents/ timeout
Fetch GMLC Configuration	<pre>{apiRoot}/nef/nf-common- component/v1/monitoringevents/ gmlcconfigs</pre>	{apiRoot}/nef/nf-common- component/v1/monitoringevents/ gmlcconfigs
Fetch AF Service ID List	<pre>{apiRoot}/nef/common- component/v1/global/ afServiceIdList</pre>	{apiRoot}/nef/common- component/v1/global/ afServiceIdList
Fetch Global Configurations	{apiRoot}/nef/nf-common-component/v1/globaloptions	{apiRoot}/nef/nf-common-component/v1/globaloptions
Add Service ID List	<pre>{apiRoot}/nef/common- component/v1/global/ afServiceIdList/{afServiceId}</pre>	{apiRoot}/nef/common- component/v1/global/ afServiceIdList/334
Delete Service ID List	<pre>{apiRoot}/nef/common- component/v1/global/ afServiceIdList/{afServiceId}</pre>	{apiRoot}/nef/common- component/v1/global/ afServiceIdList/334
Fetch SCS Short Message Entity	{apiRoot}/nef/nf-common- component/v1/global/ scsShortMessageEntity	{apiRoot}/nef/nf-common- component/v1/global/ scsShortMessageEntity
Update SCS Short Message Entity	{apiRoot}/nef/nf-common- component/v1/global/ scsShortMessageEntity	{apiRoot}/nef/nf-common- component/v1/global/ scsShortMessageEntity
Fetch QoS Profiles	{apiRoot}/nef/common- component/v1/global/qosProfiles	{apiRoot}/nef/common- component/v1/global/qosProfiles

Added the following REST APIs in this release:

- Update GMLC Configuration
- Edit Service ID List
- Update QoS Profiles
- Add QoS Profiles
- Delete QoS Profiles
- Fetch PLMN ID Map
- Add PLMN ID Map
- Edit PLMN ID Map
- Delete PLMN ID Map
- Fetch TAI Map
- Add to TAI MAP



- Edit TAI MAP
- Delete from TAI Map
- Fetch ECGI Map
- Add to ECGI Map
- Edit ECGI Map
- Delete from ECGI Map
- Fetch NCGI Map
- Add to NCGI Map
- Edit NCGI Map
- Delete from NCGI Map
- Fetch GNBID Map
- Add to GNBID Map
- Edit GNBID Map
- Delete from GNBID Map
- Fetch globalRanNodeld Map
- Add to globalRanNodeId Map
- Edit globalRanNodeld Map
- Delete from globalRanNodeld Map
- Fetch geoZoneIdToSpatialValidity Map
- Add to geoZoneIdToSpatialValidity Map
- Edit geoZoneIdToSpatialValidity Map
- Delete from geoZoneIdToSpatialValidity Map
- Fetching Logging Data
- Updating Logging Data
- · Fetching Published Services from CAPIF
- Create Discovery Group
- Get Discovery Group
- Get All Discovery Group
- Delete Discovery Group
- Pre-provision the Invoker
- Get Invoker Details
- Get All Invoker Details
- Delete Invoker
- Get Access Token
- Update Access Token Expiry Time

Observability

This chapter lists the observability changes in release 24.2.x.

5.1 Metrics

This section lists the added or updated metrics in release 24.2.x. For more information about metrics, see *Oracle Communications Cloud Native Core*, *Network Exposure Function User Guide*.

(i) Note

If any specific KPI is required, create the KPI on grafana dashboard as per requirement from this metrices mentioned in the *Oracle Communications Cloud Native Core, Network Exposure Function User Guide*.

NEF 24.2.2

There are no updates to metrics in this release.

NEF 24.2.1

There are no updates to metrics in this release.

NEF 24.2.0

There are no updates to metrics in this release.

5.2 Alerts

This section lists the added or updated alerts in release 24.2.x. For more information about alerts, see *Oracle Communications Cloud Native Core, Network Exposure Function User Guide*.

NEF 24.2.2

There are no alerts added or updated for this release.

NEF 24.2.1

There are no alerts added or updated for this release.

NEF 24.2.0

The following alerts are added or updated in this release:

- OccapifTotalExternalIngressTrafficRateAboveMinorThreshold
- OccapifTotalNetworkIngressTrafficRateAboveMinorThreshold
- OccapifTotalExternalIngressTrafficRateAboveMajorThreshold



- OccapifTotalNetworkIngressTrafficRateAboveMajorThreshold
- OccapifTotalExternalIngressTrafficRateAboveCriticalThreshold
- OccapifTotalNetworkIngressTrafficRateAboveCriticalThreshold
- OccapifExternalIngressTransactionErrorRateAboveZeroPointOnePercent
- OccapifNetworkIngressTransactionErrorRateAboveZeroPointOnePercent
- OccapifExternalIngressTransactionErrorRateAbove1Percent
- OccapifNetworkIngressTransactionErrorRateAbove1Percent
- OccapifExternalIngressTransactionErrorRateAbove10Percent
- OccapifNetworkIngressTransactionErrorRateAbove10Percent
- OccapifExternalIngressTransactionErrorRateAbove25Percent
- OccapifNetworkIngressTransactionErrorRateAbove25Percent
- OccapifExternalIngressTransactionErrorRateAbove50Percent
- OccapifNetworkIngressTransactionErrorRateAbove50Percent
- OcnefTotalExternalIngressTrafficRateAboveMinorThreshold
- OcnefTotalFivegcIngressTrafficRateAboveMinorThreshold
- OcnefTotalExternalIngressTrafficRateAboveMajorThreshold
- OcnefTotalFivegcIngressTrafficRateAboveMajorThreshold
- OcnefTotalExternalIngressTrafficRateAboveCriticalThreshold
- OcnefTotalFivegcIngressTrafficRateAboveCriticalThreshold
- OcnefExternalIngressTransactionErrorRateAboveZeroPointOnePercent
- OcnefFivegcIngressTransactionErrorRateAboveZeroPointOnePercent
- OcnefExternalIngressTransactionErrorRateAbove1Percent
- OcnefFivegcIngressTransactionErrorRateAbove1Percent
- OcnefExternalIngressTransactionErrorRateAbove10Percent
- OcnefFivegcIngressTransactionErrorRateAbove10Percent
- OcnefExternalIngressTransactionErrorRateAbove25Percent
- OcnefFivegcIngressTransactionErrorRateAbove25Percent
- OcnefExternalIngressTransactionErrorRateAbove50Percent
- OcnefFivegcIngressTransactionErrorRateAbove50Percent

The following alerts are removed in this release:

- OccapifTotalIngressTrafficRateAboveMinorThreshold
- OccapifTotalIngressTrafficRateAboveMajorThreshold
- OccapifTotalIngressTrafficRateAboveCriticalThreshold
- OccapifTransactionErrorRateAbove0.1Percent
- OccapifTransactionErrorRateAbove1Percent
- OccapifTransactionErrorRateAbove10Percent
- OccapifTransactionErrorRateAbove25Percent



- OccapifTransactionErrorRateAbove50Percent
- OcnefTotalIngressTrafficRateAboveMinorThreshold
- OcnefTotalIngressTrafficRateAboveMajorThreshold
- OcnefTotalIngressTrafficRateAboveCriticalThreshold
- OcnefTransactionErrorRateAbove0.1Percent
- OcnefTransactionErrorRateAbove1Percent
- OcnefTransactionErrorRateAbove10Percent
- OcnefTransactionErrorRateAbove25Percent
- OcnefTransactionErrorRateAbove50Percent