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## Email Private Edition Guide

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Find links to all the topics in this guide.

**Related documentation:**

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Genesys Multicloud CX Email is a service available with the Genesys Multicloud CX private edition offering.

## Overview

Learn more about Email, its architecture, and how to support high availability and disaster recovery.

- [About Email](#)
- [Architecture](#)
- [High availability and disaster recovery](#)

---

## Configure and deploy

Find out how to configure and deploy Email.

- [Before you begin](#)
- [Configure Email](#)
- [Provision Email](#)
- [Deploy Email](#)

---

## Upgrade, roll back, or uninstall

Find out how to upgrade, roll back, or uninstall the Email service.

- Upgrade, rollback, or uninstall Email

---

## Observability

Learn how to monitor Email with metrics and logging.

- Email metrics and alerts
-

# About Email

## Contents

- [1 Supported Kubernetes platforms](#)

Learn about Email and how it works in Genesys Multicloud CX private edition.

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Genesys Multicloud CX Email service builds on top of IWD. It adds Email connector for IMAP/SMTP servers, Office365 Graph, and Gmail services to retrieve and send email messages. The Email service processes emails the same way as work items by classifying them into multiple categories, prioritizing, and preparing them for routing to agents. The Email service also takes care of generating auto responses.

## Supported Kubernetes platforms

Email service is supported on the following cloud platforms:

- Azure Kubernetes Service (AKS)
- Google Kubernetes Engine (GKE)

See the Email Release Notes for information about when support was introduced.

# Architecture

Learn about Email's architecture.

**Related documentation:**

- 
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The architecture diagram is common for IWD, IWD Data Mart, and Email. For illustration on a sample deployment of Email, see IWD Architecture.

For information about the overall architecture of Genesys Multicloud CX private edition, see the high-level Architecture page.

# High availability and disaster recovery

Find out how this service provides disaster recovery in the event the service goes down.

**Related documentation:**

- 
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**RSS:**

- [For private edition](#)

Service	High Availability	Disaster Recovery	Where can you host this service?
Email	N = N (N+1)	Not supported	Primary unit only

See High Availability information for all services: [High availability and disaster recovery](#)

# Before you begin

## Contents

- [1 Limitations and assumptions](#)
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Find out what to do before deploying Email.

**Related documentation:**

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## Limitations and assumptions

The current version of Email supports single-region model of deployment only.

## Download the Helm charts

Email in Genesys Multicloud CX private edition includes the following containers:

- `iwd-email`

The service also includes a Helm chart, which you must deploy to install the required containers for Email:

- `iwdem`

See Helm Chart and Containers for Email for the Helm chart version you must download for your release.

To download the Helm chart, navigate to the **iwdem** folder in the JFrog repository. For information about how to download the Helm charts, see [Downloading your Genesys Multicloud CX containers](#).

## Third-party prerequisites

Third-party services

Name	Version	Purpose	Notes
<a href="#">Redis</a>	6.x	Used for caching. Only distributions of Redis	Dedicated - one per deployment of Email

## Before you begin

---

Name	Version	Purpose	Notes
		that support Redis cluster mode are supported, however, some services may not support cluster mode.	
A container image registry and Helm chart repository		Used for downloading Genesys containers and Helm charts into the customer's repository to support a CI/CD pipeline. You can use any Docker OCI compliant registry.	

## Storage requirements

All data is stored in IWD, UCS-X, and Digital Channels which are external to the Email service.

## Network requirements

External Connections: IMAP, SMTP, Gmail, GRAPH

## Browser requirements

Not applicable

## Genesys dependencies

The following Genesys services are required:

- Genesys authentication service (GAuth)
- Universal Contact Service (UCS)
- Interaction Server
- Digital Channels (Nexus)
- Intelligent Workload Distribution (IWD)

For the order in which the Genesys services must be deployed, refer to the Order of services deployment topic in the *Setting up Genesys Multicloud CX private edition* document.

Before you begin

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## GDPR support

*Content coming soon*

# Configure Email

## Contents

- [1 Override Helm chart values](#)
- [2 Configure Kubernetes](#)
  - [2.1 ConfigMaps](#)
  - [2.2 Create the pull secret](#)

Learn how to configure Email.

**Related documentation:**

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## Override Helm chart values

The following table provides information on the IWD deployment settings that can be configured in the **values.yaml** file:

Parameter	Description	Default
<code>`deploymentType`</code>	Deployment type. Only two possible values are supported: Deployment, ReplicaSet	Deployment
<code>`replicaCount`</code>	Number of pods to be created	1
<code>`image.registry`</code>	Docker registry for iWD	pureengage-docker-staging.jfrog.io
<code>`image.repository`</code>	iWD Image name	nexus/iwd
<code>`image.pullPolicy`</code>	Image pull policy	IfNotPresent
<code>`image.pullSecrets`</code>	Specify docker-registry secret names as an array	[]
<code>`affinity`</code>	Map of node/pod affinities	{}
<code>`nodeSelector`</code>	Node labels for pod assignment	{}
<code>`tolerations`</code>	Tolerations for pod assignment	nil
<code>`priorityClassName`</code>	Priority class name	
<code>`podSecurityContext`</code>	Pod security context	{}
<code>`securityContext`</code>	Security context	{}
<code>`podDisruptionBudget.enabled`</code>	Enable or disable pod disruption budget	false
<code>`podDisruptionBudget.minAvailable`</code>	Set minimal number of pods available during the disruption	1
<code>`podAnnotations`</code>	Add annotations to pods	{}

## Configure Email

---

Parameter	Description	Default
<code>`podLabels`</code>	Add custom labels to pods	<code>{}</code>
<code>`hpa.enabled`</code>	Enable or disable Horizontal Pod Autoscaler (HPA)	<code>false</code>
<code>`hpa.minReplicas`</code>	Minimal replicas count for HPA	<code>1</code>
<code>`hpa.maxReplicas`</code>	Maximal replicas count for HPA	<code>10</code>
<code>`hpa.targetCPUPercent`</code>	Specify target CPU utilization for HPA	<code>60</code>
<code>`resources.limits.cpu`</code>	Maximum amount of CPU K8s allocates for container	<code>2000m</code>
<code>`resources.limits.memory`</code>	Maximum amount of Memory K8s allocates for container	<code>2000Mi</code>
<code>`resources.requests.cpu`</code>	Guaranteed CPU allocation for container	<code>300m</code>
<code>`resources.requests.memory`</code>	Guaranteed Memory allocation for container	<code>500Mi</code>
<code>`serviceAccount.create`</code>	Specifies whether a service account should be created	<code>false</code>
<code>`serviceAccount.annotations`</code>	Annotations to add to service account	<code>{}</code>
<code>`serviceAccount.name`</code>	Service account name	<code>""</code>
<code>`existingSecret`</code>	Specify Secret name to read application secrets from	<code>nil</code>
<code>`gauth.auth.url`</code>	URL to Authentication service	<code>nil</code>
<code>`gauth.auth.redirectUrl`</code>	Redirect URL to Authentication service	<code>nil</code>
<code>`redis.nodes`</code>	Comma separate list of Redis nodes to connect	<code>nil</code>
<code>`redis.useCluster`</code>	Redis deployment mode	<code>false</code>
<code>`redis.enableTLS`</code>	Either to use TLS on Redis connection	<code>false</code>
<code>`redis.password`</code>	Access key for Redis authentication	<code>nil</code>
<code>`nexus.url`</code>	URL to Nexus	<code>nil</code>
<code>`nexus.apikey`</code>	Nexus API key	<code>nil</code>
<code>`service.type`</code>	Service type	<code>ClusterIP</code>
<code>`monitoring.enabled`</code>	Enable or disable pod monitor	<code>false</code>
<code>`monitoring.alarms`</code>	Create PrometheusRule k8s object with alarm definitions	<code>false</code>
<code>`monitoring.dashboards`</code>	Create ConfigMap with Grafana Dashboards	<code>false</code>
<code>`networkPolicies.enabled`</code>	Enable or disable network policies	<code>false</code>
<code>`dnsConfig.options`</code>	DNS Configuration options	<code>{ name: ndots, value: "3" }</code>

---

## Configure Kubernetes

### ConfigMaps

Not applicable as all required ConfigMaps are created via Helm Chart basing on the provided values.

### Create the pull secret

Use the following code snippet as an example of how to create pull secret:

```
kubect1 create secret docker-registry mycred --docker-server=pureengage.jfrog.io --docker-username= --docker-password=
```

You can add *mycred* to Helm override values by setting **image.pullSecrets** to *[ mycred ]*.

# Provision Email

- Administrator

Learn how to provision Email.

## Related documentation:

- 
- 
- 

## RSS:

- [For private edition](#)

### Important

Provisioning must be done after deploying Email.

Workload Manager (UI) uses Roles. Agents must be assigned appropriate Roles.

All other provisioning is done through the tenant provisioning. As the provisioning steps are same as IWD, follow the instructions provided in Provision IWD.

# Deploy Email

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- [6 Validate the deployment](#)

Learn how to deploy Email into a private edition environment.

### Related documentation:

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## Assumptions

- The instructions on this page assume you are deploying the service in a service-specific namespace, named in accordance with the requirements on [Creating namespaces](#). If you are using a single namespace for all private edition services, replace the namespace element in the commands on this page with the name of your single namespace or project.
- Similarly, the configuration and environment setup instructions assume you need to create namespace-specific (in other words, service-specific) secrets. If you are using a single namespace for all private edition services, you might not need to create separate secrets for each service, depending on your credentials management requirements. However, if you do create service-specific secrets in a single namespace, be sure to avoid naming conflicts.

## Kubernetes

### Prepare

1. Create a new project using the following command:  

```
kubectl create namespace iwdem
```
2. Create a pull secret for accessing the JFrog registry. See [Create the pull secret](#).
3. Download the IWD helm chart from the JFrog repository. See [Download the Helm charts](#).
4. Email requires the Digital Channels API key. The key must be provisioned and shared via Digital Channels.

### Deploy

1. Extract parameters from chart to see multiple (default) values used to fine tune the installation.

```
$ helm show values iwdem-.tgz > values.yaml
```

For information on parameters and values in the **values.yaml** file, see Override Helm chart values. Sample override file:

```
replicaCount: 1

image:
  registry: pureengage-docker-staging.jfrog.io
  repository: nexus/iwd-email
  pullSecrets:
    - name: pullsecret

gauth:
  auth:
    url: http://gauth-auth.${GAUTH_NAMESPACE}:80

redis:
  nodes: redis://${REDIS_ADDR}:${REDIS_PORT}
  useCluster: true
  enableTLS: false
  #password: xxx #in secrets

nexus:
  url: http://nexus.${NEXUS_NAMESPACE}
  #apikey: xxx #in secrets

monitoring:
  # Deploy PodMonitor
  enabled: true
  # Create PrometheusRule k8s object with alarm definitions
  alarms: true
  # Create ConfigMap with Grafana Dashboards
  dashboards: true
  # URL to Runbook
  # runbookUrl:
```

2. Install Email using the following command (replace with applicable values):

```
helm install iwdem ./iwdem-.tgz -f override_values.yaml \
  --set redis.password= \
  --set nexus.apikey= \
  --namespace=iwdem
```

## OpenShift

### Prepare

1. Create a new project using the following command:

## Deploy Email

---

```
oc get clusterversion
oc new-project iwdem
```

2. Create a pull secret for accessing the JFrog registry. See [Create the pull secret](#).
3. Download the IWD helm chart from the JFrog repository. See [Download the Helm charts](#).
4. Email requires the Digital Channels API key. The key must be provisioned and shared via Digital Channels.

## Deploy

1. Extract parameters from chart to see multiple (default) values used to fine tune the installation.

```
$ helm show values iwdem-.tgz > values.yaml
```

For information on parameters and values in the **values.yaml** file, see [Override Helm chart values](#).  
Sample override file:

```
replicaCount: 1

image:
  registry: pureengage-docker-staging.jfrog.io
  repository: nexus/iwd-email
  pullSecrets:
    - name: pullsecret

gauth:
  auth:
    url: http://gauth-auth.${GAUTH_NAMESPACE}:80

redis:
  nodes: redis://${REDIS_ADDR}:${REDIS_PORT}
  useCluster: true
  enableTLS: false
  #password: xxx #in secrets

nexus:
  url: http://nexus.${NEXUS_NAMESPACE}
  #apikey: xxx #in secrets

monitoring:
  # Deploy PodMonitor
  enabled: true
  # Create PrometheusRule k8s object with alarm definitions
  alarms: true
  # Create ConfigMap with Grafana Dashboards
  dashboards: true
  # URL to Runbook
  # runbookUrl:
```

2. Install Email using the following command (replace with applicable values):

```
helm install iwdem ./iwdem-.tgz -f override_values.yaml \
  --set redis.password= \
  --set nexus.apikey= \
  --namespace=iwdem
```

# Google Kubernetes Engine (GKE)

## Prepare

1. Log in to the GKE cluster.

```
gcloud container clusters get-credentials
```

2. Create a new project:

1. Create a *create-iwdem-namespace.json* :

```
{
  "apiVersion": "v1",
  "kind": "Namespace",
  "metadata": {
    "name": "iwdem",
    "labels": {
      "name": "iwdem"
    }
  }
}
```

2. Create a namespace using the above JSON:

```
kubectl apply -f create-iwdem-namespace.json
```

3. Confirm the namespace creation:

```
kubectl describe namespace iwdem
```

3. Create a pull secret for accessing the JFrog registry.

```
kubectl create secret docker-registry jfrog-stage-credentials \
--docker-server=pureengage-docker-staging.jfrog.io \
--docker-username= \
--docker-password= \
--docker-email=
```

4. Download the IWD helm chart from the JFrog repository. See [Download the Helm charts](#).
5. Email requires the Digital Channels API key. The key must be provisioned and shared via Digital Channels.

## Deploy

1. Extract parameters from chart to see multiple (default) values used to fine tune the installation.

```
$ helm show values iwdem-.tgz > values.yaml
```

For information on parameters and values in the **values.yaml** file, see [Override Helm chart values](#).  
Sample override file:

```
replicaCount: 1

image:
  registry: pureengage-docker-staging.jfrog.io
  repository: nexus/iwd-email
```

## Deploy Email

---

```
pullSecrets:
  - name: pullsecret

gauth:
  auth:
    url: http://gauth-auth.${GAUTH_NAMESPACE}:80

redis:
  nodes: redis://${REDIS_ADDR}:${REDIS_PORT}
  useCluster: true
  enableTLS: false
  #password: xxx #in secrets

nexus:
  url: http://nexus.${NEXUS_NAMESPACE}
  #apikey: xxx #in secrets

monitoring:
  # Deploy PodMonitor
  enabled: true
  # Create PrometheusRule k8s object with alarm definitions
  alarms: true
  # Create ConfigMap with Grafana Dashboards
  dashboards: true
  # URL to Runbook
  # runbookUrl:
```

2. Install Email using the following command (replace with applicable values):

```
helm install iwdem ./iwdem-.tgz -f override_values.yaml \
  --set redis.password= \
  --set nexus.apikey= \
  --namespace=iwdem
```

## Azure Kubernetes Service (AKS)

### Prepare

1. Log in to the AKS cluster.

```
az aks get-credentials --resource-group --name --admin
```

2. Create a new project:

1. Create a *create-iwdem-namespace.json* :

```
{
  "apiVersion": "v1",
  "kind": "Namespace",
  "metadata": {
    "name": "iwdem",
    "labels": {
      "name": "iwdem"
    }
  }
}
```

## Deploy Email

---

```
}
```

2. Create a namespace using the above JSON:

```
kubectl apply -f create-iwdem-namespace.json
```

3. Confirm the namespace creation:

```
kubectl describe namespace iwdem
```

3. Create a pull secret for accessing the JFrog registry.

```
kubectl create secret docker-registry pullsecret \
--docker-server=pureengageuse1-docker-multicloud.jfrog.io \
--docker-username= \
--docker-password= \
--docker-email=
```

4. Download the IWD helm chart from the JFrog repository. See Download the Helm charts.
5. Email requires the Digital Channels API key. The key must be provisioned and shared via Digital Channels.

## Deploy

1. Extract parameters from chart to see multiple (default) values used to fine tune the installation.

```
$ helm show values iwdem-.tgz > values.yaml
```

For information on parameters and values in the **values.yaml** file, see Override Helm chart values. Sample override file:

```
replicaCount: 1

image:
  registry: pureengageuse1-docker-multicloud.jfrog.io
  repository: nexus/iwd-email
  pullSecrets:
    - name: pullsecret

gauth:
  auth:
    url: http://gauth-auth.${GAUTH_NAMESPACE}:80

redis:
  nodes: redis://${REDIS_ADDR}:${REDIS_PORT}
  useCluster: true
  enableTLS: false
  #password: xxx #in secrets

nexus:
  url: http://nexus.${NEXUS_NAMESPACE}
  #apikey: xxx #in secrets

monitoring:
  # Deploy PodMonitor
  enabled: true
  # Create PrometheusRule k8s object with alarm definitions
  alarms: true
  # Create ConfigMap with Grafana Dashboards
  dashboards: true
```

## Deploy Email

---

```
# URL to Runbook
# runbookUrl:
```

2. Install Email using the following command (replace with applicable values):

```
helm install iwdem ./iwdem-.tgz -f override_values.yaml \
  --set redis.password= \
  --set nexus.apikey= \
  --namespace=iwdem
```

## Validate the deployment

Watch the helm output at the end of installation. Pods must be in a *Running* state and they must pass all *READY* checks.

See the following sample output:

```
Release "iwdem" has been upgraded. Happy Helming!
NAME: iwdem
LAST DEPLOYED: Tue Jul 13 10:18:07 2021
NAMESPACE: iwd
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
Please be patient while iwd 100.0.0741322 is being deployed
```

# Upgrade, rollback, or uninstall Email

## Contents

- [1 Upgrade Email](#)
- [2 Rollback Email](#)
- [3 Uninstall Email](#)

Learn how to upgrade, rollback or uninstall Email.

### Related documentation:

- 
- 
- 

### RSS:

- [For private edition](#)

## Upgrade Email

Use the following sample command to upgrade:

```
$ helm upgrade -f ./values.yaml iwdem iwdem-900.50.165.tgz -n iwdem
```

## Rollback Email

Use **helm rollback** to rollback to the previous revision.

## Uninstall Email

Use the following command to uninstall Email:

```
$ helm uninstall iwdem -n iwdem
```

# Observability in Email

## Contents

- **1 Monitoring**
  - 1.1 Enable monitoring
  - 1.2 Configure metrics
- **2 Alerting**
  - 2.1 Configure alerts
- **3 Logging**

Learn about the logs, metrics, and alerts you should monitor for Email.

**Related documentation:**

- 
- 
- 
- 

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## Monitoring

Private edition services expose metrics that can be scraped by Prometheus, to support monitoring operations and alerting.

- As described on [Monitoring overview and approach](#), you can use a tool like Grafana to create dashboards that query the Prometheus metrics to visualize operational status.
- As described on [Customizing Alertmanager configuration](#), you can configure Alertmanager to send notifications to notification providers such as PagerDuty, to notify you when an alert is triggered because a metric has exceeded a defined threshold.

The services expose a number of Genesys-defined and third-party metrics. The metrics that are defined in third-party software used by private edition services are available for you to use as long as the third-party provider still supports them. For descriptions of available Email metrics, see:

- [Email Service metrics](#)

See also [System metrics](#).

## Enable monitoring

Service	CRD or annotations?	Port	Endpoint/Selector	Metrics update interval
Email Service	Both or either, depends on harvester	Default is 4024 (overridden by values)	/iwd-email/v3/metrics	15 sec recommended, depends on harvester

## Configure metrics

Metrics are available when requested. No additional configuration is required.

---

## Alerting

Private edition services define a number of alerts based on Prometheus metrics thresholds.

### Important

You can use general third-party functionality to create rules to trigger alerts based on metrics values you specify. Genesys does not provide support for custom alerts that you create in your environment.

For descriptions of available Email alerts, see:

- Email Service alerts

## Configure alerts

Private edition services define a number of alerts by default (for Email, see the pages linked to above). No further configuration is required.

The alerts are defined as **PrometheusRule** objects in a **prometheus-rule.yaml** file in the Helm charts. As described above, Email does not support customizing the alerts or defining additional **PrometheusRule** objects to create alerts based on the service-provided metrics.

## Logging

Logging is done to *stdout*.

# Email metrics and alerts

## Contents

- [1 Metrics](#)
- [2 Alerts](#)

Find the metrics Email exposes and the alerts defined for Email.

**Related documentation:**

- 

Service	CRD or annotations?	Port	Endpoint/Selector	Metrics update interval
Email	Both or either, depends on harvester	Default is 4024 (overridden by values)	/iwd-email/v3/metrics	15 sec recommended, depends on harvester

Metrics

Metric and description	Metric details	Indicator of
<p><b>iwdEmail_redis_connections_established</b></p> <p>Current number of established redis connections</p>	<p><b>Unit:</b></p> <p><b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 0</p>	
<p><b>iwdEmail_redis_connections_reconnecting</b></p> <p>Current number of reconnecting redis connections</p>	<p><b>Unit:</b></p> <p><b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 0</p>	
<p><b>iwdEmail_redis_connections_ready</b></p> <p>Current number of ready redis connections</p>	<p><b>Unit:</b></p> <p><b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 1</p>	
<p><b>iwdEmail_redis_duration_until_ready</b></p> <p>Duration until ready state reached</p>	<p><b>Unit:</b></p> <p><b>Type:</b> histogram <b>Label:</b> 'le', 'service', 'component' <b>Sample value:</b> 0, 1, 11</p>	
<p><b>iwdEmail_redis_errors_total</b></p> <p>Total number of redis connection errors</p>	<p><b>Unit:</b></p> <p><b>Type:</b> counter <b>Label:</b> 'service', 'component' <b>Sample value:</b> 0</p>	
<p><b>iwdEmail_iwd_getOAuth2Tokens_total</b></p> <p>The total number of the getOAuth2Tokens</p>	<p><b>Type:</b> counter</p>	

Metric and description	Metric details	Indicator of
requests	<b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 972, 56	
<b>iwdeEmail_iwd_getOAuth2Tokens_duration_milliseconds</b> The duration of the getOAuth2Tokens request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 599, 934, 972	
<b>iwdeEmail_iwd_reportConnectionStatus_total</b> The total number of the reportConnectionStatus requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 160, 2166	
<b>iwdeEmail_iwd_reportConnectionStatus_duration_milliseconds</b> The duration of the reportConnectionStatus request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 47, 124, 159, 160	
<b>iwdeEmail_iwd_bulkReportConnectionStatus_total</b> The total number of the bulkReportConnectionStatus requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 324	
<b>iwdeEmail_iwd_bulkReportConnectionStatus_duration_milliseconds</b> The duration of the bulkReportConnectionStatus request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 28, 314, 323, 324	
<b>iwdeEmail_iwd_submitWorkItem_total</b> The total number of the submitWorkItem requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 40, 21	
<b>iwdeEmail_iwd_submitWorkItem_duration_milliseconds</b> The duration of the submitWorkItem request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 3, 26, 40	
<b>iwdeEmail_iwd_reportEmailSendingStatus_total</b> The total number of the reportEmailSendingStatus requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 58015, 96	
<b>iwdeEmail_iwd_reportEmailSendingStatus_duration_milliseconds</b>		

Metric and description	Metric details	Indicator of
The duration of the reportEmailSendingStatus request in milliseconds	<b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 55661, 57730, 58008	
<b>iwdeMail_iwd_queryOutboundQueue_total</b> The total number of the queryOutboundQueue requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 20720, 103332	
<b>iwdeMail_iwd_queryOutboundQueue_duration_milliseconds</b> The duration of the queryOutboundQueue request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 13959, 20106, 20635, 20719	
<b>iwdeMail_iwd_getMailboxes_total</b> The total number of the getMailboxes requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_iwd_getMailboxes_duration_milliseconds</b> The duration of the getMailboxes request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_iwd_connection_status</b> The connection to IWD status (0-OK, 1-Failed)	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0	
<b>iwdeMail_nexus_connection_status</b> The connection to Nexus status (0-OK, 1-Failed)	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 0	
<b>datamasking_rule_timeout_total</b> Number of the timeouted datamasking rules	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_ucs_connect_total</b> The total number of the connect requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 59229, 117	
<b>iwdeMail_ucs_connect_duration_milliseconds</b> The duration of the connect request in	<b>Type:</b> histogram	

Metric and description	Metric details	Indicator of
milliseconds	<b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 59228, 59229, 3261, 117	
<b>iwdeEmail_ucs_getInteractionWOAttachments_total</b> The total number of the getInteractionWOAttachments requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 111556, 120	
<b>iwdeEmail_ucs_getInteractionWOAttachments_duration_milliseconds</b> The duration of the getInteractionWOAttachments request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 95262, 110152, 111530	
<b>iwdeEmail_ucs_findInteractionsByExternalId_total</b> The total number of the findInteractionsByExternalId requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 1218, 21	
<b>iwdeEmail_ucs_findInteractionsByExternalId_duration_milliseconds</b> The duration of the findInteractionsByExternalId request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 1087, 1200, 1218	
<b>iwdeEmail_ucs_getDocument_total</b> The total number of the getDocument requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 14	
<b>iwdeEmail_ucs_getDocument_duration_milliseconds</b> The duration of the getDocument request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 4, 8, 13	
<b>iwdeEmail_ucs_updateInteraction_total</b> The total number of the updateInteraction requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 21, 35	
<b>iwdeEmail_ucs_updateInteraction_duration_milliseconds</b> The duration of the updateInteraction request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 21, 6310, 5	
<b>iwdeEmail_ucs_insertInteraction_total</b>		

Metric and description	Metric details	Indicator of
The total number of the insertInteraction requests	<b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 40, 21	
<b>iwdeEmail_ucs_insertInteraction_duration_milliseconds</b> The duration of the insertInteraction request in milliseconds	<b>Unit:</b> milliseconds <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 18, 38, 40	
<b>iwdeEmail_ucs_identifyContact_total</b> The total number of the identifyContact requests	<b>Unit:</b> counter <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 40, 21	
<b>iwdeEmail_ucs_identifyContact_duration_milliseconds</b> The duration of the identifyContact request in milliseconds	<b>Unit:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 37, 39, 40	
<b>iwdeEmail_ucs_addDocument_total</b> The total number of the addDocument requests	<b>Unit:</b> counter <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 39	
<b>iwdeEmail_ucs_addDocument_duration_milliseconds</b> The duration of the addDocument request in milliseconds	<b>Unit:</b> milliseconds <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 26, 36, 38	
<b>iwdeEmail_ucs_deleteInteraction_total</b> The total number of the deleteInteraction requests	<b>Unit:</b> counter <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b>	
<b>iwdeEmail_ucs_deleteInteraction_duration_milliseconds</b> The duration of the deleteInteraction request in milliseconds	<b>Unit:</b> milliseconds <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b>	
<b>iwdeEmail_ucs_getIdentifier_total</b> The total number of the getIdentifier requests	<b>Unit:</b> counter <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 35, 21	
<b>iwdeEmail_ucs_getIdentifier_duration_milliseconds</b>	<b>Unit:</b> milliseconds	

Metric and description	Metric details	Indicator of
The duration of the getIdentifier request in milliseconds	<b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 30, 35, 1281	
<b>iwEmail_ucs_getContactAttributes_total</b> The total number of the getContactAttributes requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 40, 21	
<b>iwEmail_ucs_getContactAttributes_duration_milliseconds</b> The duration of the getContactAttributes request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 37, 40, 1585	
<b>iwEmail_ucs_connection_status</b> The connection to UCS status (0-OK, 1-Failed)	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0	
<b>iwEmail_inbound_emails_processed_total</b> The total number of processed inbound emails	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 8, 21, 1, 14	
<b>iwEmail_inbound_emails_failed_total</b> The total number of failed inbound emails	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwEmail_inbound_emails_to_retry_total</b> The total number of inbound emails scheduled for trying again	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 737	
<b>iwEmail_inbound_emails_blocked_attachments_total</b> The total number of blocked attachments of inbound emails	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 2, 3	
<b>iwEmail_inbound_emails_blocked_total</b> The total number of blocked inbound emails	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwEmail_inbound_emails_size_kb_total</b>		

Metric and description	Metric details	Indicator of
The total size of inbound emails in KB (approx.)	<b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 0.609375, 0.65625, 0.009765625, 0.0595703125	
<b>iwdeEmail_inbound_unread_emails_in_mailbox</b> The number of unread emails in mailbox	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 0	
<b>iwdeEmail_inbound_email_processing_duration_milliseconds</b> The duration of a single inbound email processing in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 0, 6, 8, 3577	
<b>iwdeEmail_inbound_email_waiting_time_seconds</b> The time of inbound email waiting in mailbox before processing in seconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 8, 51, 21, 294	
<b>iwdeEmail_imap_connect_total</b> The total number of the connect requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13704, 8741, 13693	
<b>iwdeEmail_imap_connect_duration_milliseconds</b> The duration of the connect request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 17961, 19512, 19549, 19564	
<b>iwdeEmail_imap_disconnect_total</b> The total number of the disconnect requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13704, 13693, 9843	
<b>iwdeEmail_imap_disconnect_duration_milliseconds</b> The duration of the disconnect request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19566, 19567, 4208, 13698	
<b>iwdeEmail_imap_openBox_total</b> The total number of the openBox	<b>Unit:</b> <b>Type:</b> counter	

Metric and description	Metric details	Indicator of
requests	<b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13704, 13693, 9843	
<b>iwdeEmail_imap_openBox_duration</b> The duration of the openBox request in milliseconds	<b>Unit:</b> <b>milliseonds</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19545, 19567, 19673, 13683	
<b>iwdeEmail_imap_closeBox_total</b> The total number of the closeBox requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13704, 13693, 9843	
<b>iwdeEmail_imap_closeBox_duration</b> The duration of the closeBox request in milliseconds	<b>Unit:</b> <b>milliseonds</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19519, 19559, 19567, 24299	
<b>iwdeEmail_imap_search_total</b> The total number of the search requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13704, 13693, 9843	
<b>iwdeEmail_imap_search_duration</b> The duration of the search request in milliseconds	<b>Unit:</b> <b>milliseonds</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 19369, 19560, 19567	
<b>iwdeEmail_imap_getPartData_total</b> The total number of the getPartData requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 8, 21, 1, 34	
<b>iwdeEmail_imap_getPartData_duration</b> The duration of the getPartData request in milliseconds	<b>Unit:</b> <b>milliseonds</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 8, 357, 21	
<b>iwdeEmail_imap_deleteMessage_total</b> The total number of the deleteMessage requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b>	

Metric and description	Metric details	Indicator of
	<b>Sample value:</b>	
<b>iwdeEmail_imap_deleteMessage_duration_milliseconds</b> The duration of the deleteMessage request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_imap_addFlags_total</b> The total number of the addFlags requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 8, 21, 1, 13	
<b>iwdeEmail_imap_addFlags_duration_milliseconds</b> The duration of the addFlags request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 8, 27, 21, 44	
<b>iwdeEmail_graph_getUserMailFolders_total</b> The total number of the getUserMailFolders requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 26911, 23070	
<b>iwdeEmail_graph_getUserMailFolders_duration_milliseconds</b> The duration of the getUserMailFolders request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 221, 6144, 26712	
<b>iwdeEmail_graph_getUserMailFoldersMessages_total</b> The total number of the getUserMailFoldersMessages requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 13501, 11903	
<b>iwdeEmail_graph_getUserMailFoldersMessages_duration_milliseconds</b> The duration of the getUserMailFoldersMessages request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 114, 2130, 13437	
<b>iwdeEmail_graph_getUserMessagesAttachmentsInfo_total</b> The total number of the getUserMessagesAttachmentsInfo requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 1502	
<b>iwdeEmail_graph_getUserMessagesAttachmentsInfo_duration_milliseconds</b> The duration of the getUserMessagesAttachmentsInfo	<b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox',	

Metric and description	Metric details	Indicator of
request in milliseconds	'service', 'component' <b>Sample value:</b> 0, 1210, 1410, 1501	
<b>iwdeEmail_graph_getUserMessagesAttachments_total</b> The total number of the getUserMessagesAttachments requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 26	
<b>iwdeEmail_graph_getUserMessagesAttachments_duration_milliseconds</b> The duration of the getUserMessagesAttachments request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 1, 22, 26	
<b>iwdeEmail_graph_deleteUserMessages_total</b> The total number of the deleteUserMessages requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_graph_deleteUserMessages_duration_milliseconds</b> The duration of the deleteUserMessages request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_graph_patchUserMessages_total</b> The total number of the patchUserMessages requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 28	
<b>iwdeEmail_graph_patchUserMessages_duration_milliseconds</b> The duration of the patchUserMessages request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 26, 27, 28	
<b>iwdeEmail_graph_getUserMessages_total</b> The total number of the getUserMessages requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 53526	
<b>iwdeEmail_graph_getUserMessages_duration_milliseconds</b> The duration of the getUserMessages request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 43690, 50108, 53415	
<b>iwdeEmail_graph_postUserMessages_total</b> The total number of the postUserMessages requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox',	

Metric and description	Metric details	Indicator of
	'service', 'component' <b>Sample value:</b> 53512	
<b>iwdeEmail_graph_postUserMessages_duration_milliseconds</b> The duration of the postUserMessages request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 52807, 53431, 53507	
<b>iwdeEmail_graph_postUserMessagesCreateReply_total</b> The total number of the postUserMessagesCreateReply requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 14	
<b>iwdeEmail_graph_postUserMessagesCreateReply_duration_milliseconds</b> The duration of the postUserMessagesCreateReply request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 12, 13, 14	
<b>iwdeEmail_graph_postUserMessagesAttachments_total</b> The total number of the postUserMessagesAttachments requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_graph_postUserMessagesAttachments_duration_milliseconds</b> The duration of the postUserMessagesAttachments request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_graph_postUserMessagesSend_total</b> The total number of the postUserMessagesSend requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 53526	
<b>iwdeEmail_graph_postUserMessagesSend_duration_milliseconds</b> The duration of the postUserMessagesSend request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 52995, 53469, 53523	
<b>iwdeEmail_graph_getUserMailFoldersMessagesCount_total</b> The total number of the getUserMailFoldersMessagesCount requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 13501, 11903	
<b>iwdeEmail_graph_getUserMailFoldersMessagesCount_duration_milliseconds</b> The duration of the getUserMailFoldersMessagesCount	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox',	

Metric and description	Metric details	Indicator of
request in milliseconds	'service', 'component' <b>Sample value:</b> 0, 114, 2615, 13430	
<b>iwdeEmail_gmail_labelsList_total</b> The total number of the labelsList requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_labelsList_duration_milliseconds</b> The duration of the labelsList request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesList_total</b> The total number of the messagesList requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesList_duration_milliseconds</b> The duration of the messagesList request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesGet_total</b> The total number of the messagesGet requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesGet_duration_milliseconds</b> The duration of the messagesGet request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesAttachmentsGet_total</b> The total number of the messagesAttachmentsGet requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesAttachmentsGet_duration_milliseconds</b> The duration of the messagesAttachmentsGet request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesDelete_total</b> The total number of the messagesDelete requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_gmail_messagesDelete_duration_milliseconds</b> The duration of the messagesDelete	<b>Type:</b> histogram	

Metric and description	Metric details	Indicator of
request in milliseconds	<b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_gmail_messagesModify_total</b> The total number of the messagesModify requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_gmail_messagesModify_duration_milliseconds</b> The duration of the messagesModify request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_gmail_messagesSend_total</b> The total number of the messagesSend requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_gmail_messagesSend_duration_milliseconds</b> The duration of the messagesSend request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> <b>Sample value:</b>	
<b>iwdeMail_outbound_emails_sent_total</b> The total number of sent outbound emails	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 21, 4, 1, 14	
<b>iwdeMail_outbound_emails_failed_total</b> The total number of failed outbound emails	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 75	
<b>iwdeMail_outbound_emails_to_retry_total</b> The total number of outbound emails scheduled for trying again	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 57987	
<b>iwdeMail_outbound_emails_size_kb_total</b> The total size of outbound emails in KB (approx.)	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 4.9833984375, 1.0009765625, 0.2275390625	
<b>iwdeMail_outbound_email_processing_duration_milliseconds</b> The duration of a single outbound email processing in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component'	

Metric and description	Metric details	Indicator of
	<b>Sample value:</b> 0, 888, 4345, 10582	
<b>iwdeEmail_outbound_emails_in_queue</b> The number of outbound emails in queue for sending	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 0, 8, 1	
<b>iwdeEmail_outbound_email_waiting_time_seconds</b> The time of outbound email waiting in queue before processing in seconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 14, 58002, 117676182008, 24	
<b>iwdeEmail_smtp_connect_total</b> The total number of the connect requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13703, 13693, 9809	
<b>iwdeEmail_smtp_connect_duration_milliseconds</b> The duration of the connect request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 18066, 19543, 19560, 19566	
<b>iwdeEmail_smtp_disconnect_total</b> The total number of the disconnect requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 13702, 13692, 9824	
<b>iwdeEmail_smtp_disconnect_duration_milliseconds</b> The duration of the disconnect request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 19567, 403, 13702, 284	
<b>iwdeEmail_smtp_sendMail_total</b> The total number of the sendMail requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 21, 4, 1, 9	
<b>iwdeEmail_smtp_sendMail_duration_milliseconds</b> The duration of the sendMail request in milliseconds	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 0, 21, 4706, 4	

Metric and description	Metric details	Indicator of
<p><b>iwdeMail_mailbox_processing_duration_milliseconds</b></p> <p>The duration of mailbox processing in milliseconds</p>	<p><b>Unit:</b> Type: histogram <b>Label:</b> 'le', 'ccid', 'domain', 'mailbox', 'service', 'component' <b>Sample value:</b> 17768, 19436, 19448, 19549</p>	
<p><b>iwdeMail_inbound_server_connection_status</b></p> <p>The connection to mail server status (0-OK, 1-Failed)</p>	<p><b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 0, 1</p>	
<p><b>iwdeMail_outbound_server_connection_status</b></p> <p>The connection to mail server status (0-OK, 1-Failed)</p>	<p><b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'ccid', 'domain', 'mailbox', 'protocol', 'service', 'component' <b>Sample value:</b> 0, 1</p>	
<p><b>iwdeMail_sleeping_threads</b></p> <p>The number of threads that are sleeping or slept right before</p>	<p><b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 5</p>	
<p><b>iwdeMail_process_cpu_user_seconds_total</b></p> <p>Total user CPU time spent in seconds.</p>	<p><b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'service', 'component' <b>Sample value:</b> 8933.324701</p>	
<p><b>iwdeMail_process_cpu_system_seconds_total</b></p> <p>Total system CPU time spent in seconds.</p>	<p><b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'service', 'component' <b>Sample value:</b> 1393.75965</p>	
<p><b>iwdeMail_process_cpu_seconds_total</b></p> <p>Total user and system CPU time spent in seconds.</p>	<p><b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'service', 'component' <b>Sample value:</b> 10327.08435</p>	
<p><b>iwdeMail_process_start_time_seconds</b></p> <p>Start time of the process since unix epoch in seconds.</p>	<p><b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 1634341667</p>	
<p><b>iwdeMail_process_resident_memory_bytes</b></p> <p>Resident memory size in bytes.</p>	<p><b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 164675584</p>	
<p><b>iwdeMail_process_virtual_memory_bytes</b></p> <p>Virtual memory size in bytes.</p>	<p><b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component'</p>	

Metric and description	Metric details	Indicator of
	<b>Sample value:</b> 1065988096	
<b>iwdeEmail_process_heap_bytes</b> Process heap size in bytes.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 256315392	
<b>iwdeEmail_process_open_fds</b> Number of open file descriptors.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 27	
<b>iwdeEmail_process_max_fds</b> Maximum number of open file descriptors.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 197178	
<b>iwdeEmail_nodejs_eventloop_lag</b> Lag of event loop in seconds.	<b>Unit:</b> <b>seconds</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 0.000274698	
<b>iwdeEmail_nodejs_active_handles</b> Number of active libuv handles grouped by handle type. Every handle type is C++ class name.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'type', 'service', 'component' <b>Sample value:</b> 5, 1, 4	
<b>iwdeEmail_nodejs_active_handles_total</b> Total number of active handles.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 10	
<b>iwdeEmail_nodejs_active_requests</b> Number of active libuv requests grouped by request type. Every request type is C++ class name.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'type', 'service', 'component' <b>Sample value:</b> 3, 2	
<b>iwdeEmail_nodejs_active_requests_total</b> Total number of active requests.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 5	
<b>iwdeEmail_nodejs_heap_size_total</b> Process heap size from node.js in bytes.	<b>Unit:</b> <b>bytes</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 86228992	
<b>iwdeEmail_nodejs_heap_size_used</b> Process heap size used from node.js in bytes.	<b>Unit:</b> <b>bytes</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component'	

Metric and description	Metric details	Indicator of
	<b>Sample value:</b> 73524752	
<b>iwdeEmail_nodejs_external_memory_bytes</b> Nodejs external memory size in bytes.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'service', 'component' <b>Sample value:</b> 3414379	
<b>iwdeEmail_nodejs_heap_space_size_total_bytes</b> Process heap space size total from node.js in bytes.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'space', 'service', 'component' <b>Sample value:</b> 262144, 16777216, 51785728, 3837952	
<b>iwdeEmail_nodejs_heap_space_size_used_bytes</b> Process heap space size used from node.js in bytes.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'space', 'service', 'component' <b>Sample value:</b> 32808, 7674904, 50405512, 2661248	
<b>iwdeEmail_nodejs_heap_space_size_available_bytes</b> Process heap space size available from node.js in bytes.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'space', 'service', 'component' <b>Sample value:</b> 0, 704744, 1067952, 814912	
<b>iwdeEmail_nodejs_version_info</b> Node.js version info.	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'version', 'major', 'minor', 'patch', 'service', 'component' <b>Sample value:</b> 1	
<b>iwdeEmail_request_total</b> The total number of all API requests received	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'service', 'component' <b>Sample value:</b> 2	
<b>iwdeEmail_success_total</b> The total number of all API requests with success response	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_errors_total</b> The total number of all API requests with error response	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'service', 'component' <b>Sample value:</b> 1	
<b>iwdeEmail_client_error_total</b> The total number of all API requests with client error response	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'ccid', 'service', 'component' <b>Sample value:</b> 1	
<b>iwdeEmail_server_error_total</b>	<b>Unit:</b>	

Metric and description	Metric details	Indicator of
The total number of all API requests with server error response	<b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_api_request_total</b> The total number of all API requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'method', 'path', 'code', 'ccid', 'service', 'component' <b>Sample value:</b> 1	
<b>iwdeEmail_api_request_long</b> Number of API requests that took long time to execute	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_api_request_closed</b> Number of API requests that expired before response was sent	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_api_request_duration_milliseconds</b> API requests duration	<b>Unit:</b> <b>Type:</b> histogram <b>Label:</b> 'le', 'method', 'path', 'code', 'ccid', 'service', 'component' <b>Sample value:</b> 1, 6	
<b>iwdeEmail_api_blacklist</b> Total number of blacklisted requests	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	
<b>iwdeEmail_cometd_connections_total</b> The current number of client cometd connections to GWS	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'type', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 2	
<b>iwdeEmail_cometd_errors_total</b> The total number of client cometd errors	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'type', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 3	
<b>iwdeEmail_cometd_request_errors_total</b> The total number of client cometd error response from GWS	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> 'type', 'name', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 4476, 72, 1173	
<b>iwdeEmail_cometd_request_current</b> The current number of client cometd requests to GWS	<b>Unit:</b> <b>Type:</b> gauge <b>Label:</b> 'type', 'name', 'ccid', 'domain',	

Metric and description	Metric details	Indicator of
	'service', 'component' <b>Sample value:</b> 0	
<b>iwdEmail_cometd_request_duration_milliseconds</b> The cometd request duration (to GWS)	<b>Unit:</b> milliseconds <b>Label:</b> 'le', 'type', 'name', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 0, 95578, 110154, 111530	
<b>iwdEmail_cometd_request_duration_milliseconds_summary</b> The cometd request duration (to GWS): summary	<b>Unit:</b> milliseconds <b>Type:</b> summary <b>Label:</b> 'quantile', 'type', 'name', 'ccid', 'domain', 'service', 'component' <b>Sample value:</b> 35, 35.56, 42.63636363636363, 52.85	
<b>iwdEmail_cometd_events_total</b> The total number of client cometd events from GWS	<b>Unit:</b> <b>Type:</b> counter <b>Label:</b> <b>Sample value:</b>	

## Alerts

No alerts are defined for Email.