

# **GENESYS**

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# Web Services and Applications Deployment Guide

Configuring GWS API Service Settings

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As part of Deploying the web application, you created the application.yaml file (or Web Services created it for you). To configure basic Web Services and Applications settings, you need to update the application.yaml file on each of your Web Services nodes. In later topics, you'll learn more about modifying this file to configure additional features and security. For now, review the contents below for details about each section in the application.yaml configuration file.

#### **Important**

As the GWS API Service is not required for OCX ONLY deployments, no configuration is necessary.

#### Logging settings

The purpose of the **logging** section is to tell Web Services where to find the **logback.xml** file you created (or Web Services created for you) as part of Deploying the web application and where to save logs.

The **application.yaml.sample** file includes the following default **logging** section:

```
logging:
   file: [ToBeChanged: Log file name, will be stored in ${LOG_FILE} which may be used in
logback.xml]
   path: [ToBeChanged: Log folder, will be stored in ${LOG_PATH} which may be used in
logback.xml]
```

See logging for details about all supported configuration settings for this section.

# Jetty settings

You use the **jetty** section of the **application.yaml.sample** file to tell Web Services how Jetty should behave. The **application.yaml.sample** file includes the following default **jetty** section:

```
jetty:
port: 8080
```

See jetty for details about supported configuration settings for this section.

#### Optional: Postgres/MSSQL Cluster settings

```
# DB Settings for local database
db:
  host: [ToBeChanged: DB_HostName|DB_IP_Address]
```

```
port: [ToBeChanged: DB_Port]
  dbType: [ToBeChanged: \overline{\ }postgres"| "mssql"] <dbType is mandatory for MS-SQL db and optional
for Postgres, Use dbtype as "mssql" for MS-SQL db>
  dbName: [ToBeChanged: DB NAME]
  schema: [ToBeChanged: SCHEMA NAME]
  username: [ToBeChanged: USER_NAME]
password: [ToBeChanged: USER_PASSWORD]
# DB Settings for connectivity to primary database (for write operations initiated from
secondary Data Center)
db-write-only:
  host: [ToBeChanged: DB HostName|DB IP Address]
  port: [ToBeChanged: DB_Port]
  dbType: [ToBeChanged: \overline{q} postgres"| "mssql"] <dbType is mandatory for MS-SQL db and optional
for Postgres, Use dbtype as "mssql" for MS-SQL db>
  dbName: [ToBeChanged: DB_NAME]
  schema: [ToBeChanged: SCHEMA NAME]
  username: [ToBeChanged: USER_NAME]
  password: [ToBeChanged: USER PASSWORD]
```

### Redis settings

```
# Redis Settings
spring:
    data:
    redis:
        cluster:
        nodes: host1:port1, host2:port2 [ToBeChanged: comma separated list of
REDIS_HOST:REDIS_PORT]
    ssl:
        enabled: ${REDIS.TLS:false}
    password: ${REDIS.PASSWORD:}
    username: <password>
    tls:
        trustStorePath: ${REDIS.TRUSTSTORE.PATH:}
        trustStorePassword: ${REDIS.TRUSTSTORE.PASSWORD:}
    verifyPeer: ${REDIS.VERIFY.PEER:true}
```

or set environment variables: REDIS\_TLS REDIS\_PASSWORD REDIS\_TRUSTSTORE\_PATH REDIS TRUSTSTORE PASSWORD REDIS VERIFY PEER

# Platform settings

```
# Platform Settings
    platformSettings:
        platformServiceUrl: http://localhost:8092[ToBeChanged:GWS_SERVICE_PLATFORM_ADDRESS]
```

8092 is the default port but could also be Load Balancer, if used.

# Server settings

This section provides the core settings Web Services needs to run your node.

The application.yaml.sample file includes the following default serverSettings section:

```
serverSettings:
  # OPS account
  opsUserName: [ToBeChanged: <OPS USER NAME>]
  opsUserPassword: [ToBeChanged: <OPS USER PASSWORD>]
  # Configuration Server credentials
  applicationName: Cloud
  applicationType: CFGGenericClient
  cmeUserName: [MatchFromEnvironment.yaml: username]
cmePassword: [MatchFromEnvironment.yaml: password]
  # Elastic Search
  enableElasticSearchIndexing: [ToBeChanged: "true"|"false"]
  elasticSearchSettings:
  enableScheduledIndexVerification: false
  enableIndexVerificationAtStartUp: false
   transportClient:
     nodes:

    host: [ToBeChanged: ES HostName|ES IP Address]

         port: [ToBeChanged: ES_Port]
  # Multi regional supporting
  nodePath: [ToBeChanged: node position in cluster, example: /<REGION>/HOST]
  nodeId: [ToBeChangedOrRemoved: unique value in cluster <NODE ID>]
  # SSL and CA (optional, can be disabled or removed if not used)
  caCertificate: [ToBeChangedOrRemoved: <CA CERTIFICATE>]
  iksPassword: [ToBeChangedOrRemoved: <JKS PASSWORD>]
  # SAML (optional, can be disabled or removed if not used)
  samlSettings:
    encryptionKevName: [ToBeChangedOrRemoved: <SAML ENCRYPTION KEY NAME>1
    signingKeyName: [ToBeChangedOrRemoved: <SAML SIGNING KEY NAME>]
    identityProviderMetadata: [ToBeChangedOrRemoved: <SAML_IDENTITY_PROVIDER_METADATA>]
    serviceProviderEntityId: [ToBeChangedOrRemoved: <SAML SERVICE PROVIDER ENTITY ID>]
    encryptionKeyPassword: [ToBeChangedOrRemoved: <SAML ENCRYPTION KEY PASSWORD>]
    signingKeyPassword: [ToBeChangedOrRemoved: <SAML_SIGNING_KEY_PASSWORD>]
    tlsKeyName: [ToBeChangedOrRemoved: <SAML TLS KEY NAME>]
    tlsKeyPassword: [ToBeChangedOrRemoved: <SAML TLS KEY PASSWORD>]
    responseSkewTime: [ToBeChangedOrRemoved: <SAML RESPONSE SWEW TIME>]
    wantAssertionSigned: [ToBeChanged: "true"|"false"]
  crossOriginSettings:
    allowedOrigins: [ToBeChangedOrRemoved: <CROSS_ALLOWED ORIGINS>]
  # Auth Settings
  auth:
        secret: [Must be configured and must match secret from environment variable]
  # Multimedia Disaster Recovery
  drMonitoringDelay: [ToBeChangedOrRemoved: <DR MONITORING DELAY>]
```

**Note**: The secret length must be at least 32 characters.

Make sure that you update all settings marked as [ToBeChanged]. You must also do the following:

• Set the applicationName to the name of the application you created in Configuring the Web Services applications — for example, WS\_Node.

See serverSettings for details about supported configuration settings for this section.

## Partitioned cookie settings

If your browser support Cookies Having Independent Partitioned State (CHIPS) and if you want to optin to use CHIPS (adding Partitioned cookie attribute), add the following configuration in the **application.yaml** file.

```
jetty:
  cookies:
   partitioned: true
```

#### **Important**

This configuration is mandatory for browsers where third-party cookies are disabled but they should be shared across domains. For more details, see How We're Protecting Your Online Privacy - The Privacy Sandbox

#### On-premises settings

Example on-premises settings:

```
onPremiseSettings:
    countryCode: US
```

The **application.yaml.sample** file doesn't include a default **onPremiseSettings** section, so you'll need to add it yourself.

See onPremiseSettings for details about all supported configuration settings for this section.

#### Tuning the Web Services host performance

Complete the steps below on each Web Services node to tune the performance of the host environment.

1. To optimize TCP/IP performance, you can run the following commands:

```
sudo sysctl -w net.core.rmem_max=16777216
sudo sysctl -w net.core.wmem_max=16777216
sudo sysctl -w net.ipv4.tcp_rmem="4096 87380 16777216"
sudo sysctl -w net.ipv4.tcp_wmem="4096 16384 16777216"
sudo sysctl -w net.core.somaxconn=4096
sudo sysctl -w net.core.netdev_max_backlog=16384
sudo sysctl -w net.ipv4.tcp_max_syn_backlog=8192
sudo sysctl -w net.ipv4.tcp_syncookies=1
sudo sysctl -w net.ipv4.tcp_congestion control=cubic
```

2. After providing for some means of starting Jetty, determine the user or group that will start Jetty and increase the file descriptors available to that user or group by adding the following to the /etc/security/limits.conf file:

```
<user_name> hard nofile 100000
<user_name> soft nofile 100000
```

Where <user name> is the name of the user or group that is starting Jetty.

#### SameSite cookies

To handle sameSite cookie attribute, you must configure options for both Jetty and CometD.

If the value of **SameSite** is set to None, Chrome browser also checks if the Secure cookie attribute is present, and if not, then warn user.

To mitigate this issue, make the following edits in application.yaml:

```
...
jetty:
...
cookies:
...
secure: true
sameSite: None
...
serverSettings:
...
cometDSettings:
...
cookieSecure: true
cookieSameSite: None
```

#### **Important**

If cookies are configured to be secure, the browser applies them to a secure connection only (https); therefore, these options take effect only if **enableSsI** is set to true.

If the value of **SameSite** is set to Lax or Strict, a secured connection is not required, for example:

. . .

```
jetty:
    ...
    cookies:
...
    httpOnly: true
    secure: false
    sameSite: Lax
...
serverSettings:
    ...
    cometDSettings:
    ...
    cookieHttpOnly: true
    cookieSecure: false
    cookieSameSite: Lax
```

However, it is important to note the following:

- If **SameSite** is set to Lax, the cookie is sent only on same-site requests or by top-level navigation with a safe HTTP method. That is, it will not be sent with cross-domain POST requests or when loading the site in a cross-origin frame, but it will be sent when the user navigates to the site via a standard top-level <a href=...> link.
- If **SameSite** is set to Strict, the cookie is never sent in cross-site requests. Even if the user clicks a top-level link on a third-party domain to your site, the browser refuses to send the cookie.

#### **Important**

You can choose an insecure connection by specifying a different type of SameSite (Lax or Strict), but this means that it will be impossible to embed Workspace Web Edition in an iframe or use it for any other cross-domain integrations. For example, applications like Genesys CRM Workspace/Adapter will not work with this configuration.

### Configuring Statistics indexing

Add nodeId: /<REGION>/HOST enableElasticSearchIndexing: true

### Configuring Configuration Objects indexing

enableElasticSearchIndexing: true
enableScheduledIndexVerification: true
enableIndexVerificationAtStartUp: true

Next step
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Configuring features