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Omni-Gen Master Data Management and Data Quality Release Guide Version 3.15

This document provides release information for Omni-Gen Master Data Management and Data Quality version 3.15. It is intended for all levels of users, including data stewards, system integrators, application developers, and administrators.

In this chapter:

- Known Issues
- Key Features and Considerations
- Resolved Cases

Known Issues

This section describes known issues in all editions of Omni-Gen version 3.15.

Invoking the Swagger API for the Omni-Gen Server Authorize Call

In all editions of Omni-Gen version 3.15, when invoking the Swagger API for the Omni-Gen Server *Authorize* call, a 401 (Unauthorized) response is returned. This occurs even if you supply the appropriate credentials. This will be resolved in a future release.

As a workaround, follow the steps below to use the Omni-Gen Controller *Authorize* call and use the token from the response for the Omni-Gen Server Swagger API.

1. Go to Controller Swagger UI. For example:

https://localhost:9500/swagger-ui.html

- 2. Click POST for the Authentication endpoint.
- 3. Click Try it out.
- 4. Set the authentication request value to the following:

{"password": "ibi00", "username": "primary/ibi"}

5. Click Execute.

You should see response code 200.

6. Copy the jwt token value.

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7. Go to Server Swagger UI. For example:

https://localhost:9514/server/swagger-ui.html

- 8. Click Authorize and then paste the jwt token value from step 6 into the text box.
- 9. Click Authorize and then click Close.

Now, you can run other endpoints besides authentication.

Key Features and Considerations

This section describes the key features and considerations in all editions of Omni-Gen version 3.15.

WSO2 Identity Server

Omni-Gen makes use of WSO2, a third-party tool, for authentication and authorization to control access to the Omni-Gen Console and the Omni-Gen Server and API. It uses the WSO2 Identity Server (*https://wso2.com/identity-and-access-management/*), an open-source solution for Identity and Access Management.

As part of the Omni installation for Version 3.15, you may choose to have a new WSO2 installed alongside of Omni, or you may configure Omni to use a pre-existing WSO2 solution. Options for specifying this are in the Omni installer.

The default Omni-Gen installation creates two default user IDs in WSO2, primary/ibi for the Omni-Gen Console, and primary/omniapi for the Server and its API. The password for both of the default user IDs is ibi00 (two zeroes). The installation also creates eight roles in WSO2, four of which are assigned to these default user IDs. These eight roles can be assigned to any newly created IDs to control access to the Omni-Gen Server and Console.

The following three roles are available for the Console:

- Application/ROLE_OMNI_CONTROLLER_ADMIN
- Application/ROLE_OMNI_CONTROLLER_OPERATOR
- Application/ROLE_OMNI_CONTROLLER_READONLY

The following three roles are available for the Server:

- □ Application/ROLE_OMNI_SERVER_ADMIN
- Application/ROLE_OMNI_SERVER_OPERATOR
- Application/ROLE_OMNI_SERVER_READONLY

Note: The ROLE_OMNI_SERVER_OPERATOR and ROLE_OMNI_SERVER_READONLY roles are reserved for future use. The ROLE_OMNI_SERVER_ADMIN role, along with the ROLE_OMNI_CONTROLLER_ADMIN role, should be given to those who administer Omni-Gen.

The following two roles provide access to REST services used to call Omni services directly:

Application/ROLE_OMNI_SERVER_API

Provides access to the Omni-Gen Server REST services. For more information, see Chapters 1 - 4 in the *Omni-Gen API Services Reference Guide*.

Application/ROLE_OMNI_CONTROLLER_API

Provides access to the Omni-Gen Controller REST services. For more information, see Chapters 5 - 7 in the Omni-Gen API Services Reference Guide.

Note:

- Each of the roles has privileges assigned to them, by default. These privileges cannot be changed.
- □ The default user IDs are assigned the following roles:
 - □ The primary/ibi user ID is assigned the roles of Application/ ROLE_OMNI_CONTROLLER_ADMIN and Application/ROLE_OMNI_SERVER_ADMIN.
 - □ The primary/omniapi user ID is assigned the roles of Application/ ROLE_OMNI_SERVER_API and Application/ROLE_OMNI_CONTROLLER_API
- ❑ You can use WSO2 to create additional users and assign them non-admin roles, such as ReadOnly or Operator.

Omni Server Console Authorization

An Administrator can provide authorization to provide limited access to the Omni Server Console to protect it from unauthorized users.

The following table outlines the privileges that are assigned to each role used by the Omni Server Console.

| Role | Admin | Operator | ReadOnly |
|--------------------------------------|-------|----------|----------|
| ROLE_OMNI_CAN_DEPLOY | Х | | |
| ROLE_OMNI_DEPLOYMENT_CHANGE_WORKFLOW | х | | |

| Role | Admin | Operator | ReadOnly |
|--|-------|----------|----------|
| ROLE_OMNI_DEPLOYMENT_RESET_SUBJECT | х | | |
| ROLE_OMNI_DEPLOYMENT_REPROCESS_SUBJECT | х | | |
| ROLE_OMNI_DEPLOYMENT_RUN_TESTS | Х | | |
| ROLE_OMNI_SERVICES_WRITE | х | х | |
| ROLE_OMNI_CONFIGURATION_WRITE | Х | | |
| ROLE_OMNI_WORKORDER_WRITE | х | х | |
| ROLE_OMNI_WORKORDER_DEBUG | х | | |
| ROLE_OMNI_WORKORDER_DISPATCHER | х | х | |
| ROLE_OMNI_OPERATIONS_DOWNLOAD_DIAGNOSTICS | х | х | |
| ROLE_OMNI_ALLOW_TESTING | х | | |
| ROLE_OMNI_CONFIG_DB_CONFIG_READ | х | | |
| ROLE_OMNI_SERVICES_READ * Reserved for future use. | X | x | х |
| ROLE_OMNI_DEPLOYMENT_READ * Reserved for future use. | x | x | х |
| ROLE_OMNI_PROCESSING_READ * Reserved for future use. | x | x | х |
| ROLE_OMNI_CONFIGURATION_READ * Reserved for future use. | X | x | х |
| ROLE_OMNI_LOGS_AND_MESSAGES_READ * Reserved for future use. | X | x | х |
| ROLE_OMNI_SYSTEM_CODES_READ * Reserved for future use. | x | x | х |
| ROLE_OMNI_CONSOLES_READ * Reserved for future use. | X | x | х |

| Role | Admin | Operator | ReadOnly |
|---|-------|----------|----------|
| ROLE_OMNI_OPERATIONS_READ * Reserved for future use. | х | Х | х |

ROLE_OMNI_CAN_DEPLOY

The following image shows the Console when the ROLE_OMNI_CAN_DEPLOY privilege is assigned.

| Deployment | | | | • | 9 🕹 |
|--------------------------------------|---------------------------------|----------|----------|-------|-----|
| 🕹 Deploy Bundle 👻 😃 Reset Environmer | nt 👻 🔊 Deployment History 👻 | | | | |
| Installed Bundle Information | | | | | 9 |
| Project Name | CustomerDQ | | | | |
| Created By | IBI Deployment Bundler | | | | |
| Created Date | 5/27/20 9:46 AM | | | | |
| Release Number | 3.15.0.RC.1 | | | | |
| Version | CustomerDQ_3_15_0_RC_1_20052709 | 94931 | | | |
| Installed Date | 2020-05-28 19:39:14.000 | | | | |
| Release Notes | | | | | |
| Subjects | | | | | 0 |
| Workflow | Name | Cleansed | Mastered | Reset | |
| ≡ ∽ 🗹 21/21 | Customer | true | false | Ċ | |
| ≡ ∽ 🗹 21/21 | SourceCodeMap | false | false | Ċ | |
| ≡ ⊷ 🗹 21 / 21 | SourceCodeMetadata | false | false | U | |
| ≡ ⊷ 🗹 21 / 21 | SourceCodeSet | false | false | U | |
| ≡ ❤ 🗹 21/21 | SourceCodeStandard | false | false | Ċ | |

When the ROLE_OMNI_CAN_DEPLOY privilege is not assigned, the three global deploy buttons are removed, as shown in the following image.

| Composition Provide America Composition Co | | | | |
|--|-------------------------------------|----------|----------|---|
| | | | | |
| Installed Bundle Information | | | | 9 |
| Project Name | CustomerDQ | | | |
| Created By | IBI Deployment Bundler | | | |
| Created Date | 5/27/20 9:46 AM | | | |
| Release Number | 3.15.0.RC.1 | | | |
| Version | CustomerDQ_3_15_0_RC_1_200527094931 | | | |
| Installed Date | 2020-05-28 19:39:14.000 | | | |
| Release Notes | | | | |
| Subjects | | | | 3 |
| Workflow | Name | Cleansed | Mastered | |
| ≡ ⊷ 🗹 21/21 | Customer | true | false | |
| ≡ ∽ 🗹 21/21 | SourceCodeMap | false | false | |
| ≡ ⊷ 🗹 21/21 | SourceCodeMetadata | false | false | |
| ≡ ⊷ 🗹 21/21 | SourceCodeSet | false | false | |
| ≡ ▼ | SourceCodeStandard | false | false | |

ROLE_OMNI_DEPLOYMENT_CHANGE_WORKFLOW

The following image shows the Console when the ROLE_OMNI_DEPLOYMENT_CHANGE_WORKFLOW privilege is assigned.

| 😥 Depl | oyment | | | C | > ± |
|--------------|------------------|-------------------------|-----------------|----------|-----|
| 🌲 Deploy Bu | Workflow Ite | ms - Customer | ✓ Save × Cancel | | |
| Installed Bu | Enabled? | Operation | - | | 0 |
| Project Nar | Enabled Disabled | RAMP_QUALITY_GATE | | | |
| Created Da | Enabled Disabled | SOURCE_TO_MODEL | | | |
| Release Nu | Enabled Disabled | CLEANSE | | | |
| Version | Enabled Disabled | MASTER_REFERENCE | | | |
| Installed Da | Enabled Disabled | MASTER_REFERENCE_RELOAD | B | | |
| | Enabled Disabled | MATCH | | | |
| Subjects | Enabled Disabled | MATCH_SET_DELETE | | 1 Reset | e |
| | Enabled Disabled | MATCH_SET_INACTIVE | | U | |
| | Enabled Disabled | FILL_RELOAD_QUEUE | | ن | |
| | Enabled Disabled | MERGE | | ٢ | |
| | Enabled Disabled | PROMOTE_MASTER | | <u>ل</u> | |
| | Enabled Disabled | REMEDIATE | | U | |
| | Enabled Disabled | AUTO_CLOSE | | | |
| | Epobled Disabled | SUBJECT GROUP PROCESS | | | |

When the ROLE_OMNI_DEPLOYMENT_CHANGE_WORKFLOW privilege is not assigned, the Workflow Items show a read-only value for the Enabled? column in place of the Enabled and Disabled buttons, as shown in the following image.

| 😧 Depl | oyment | | | 0 🛓 |
|--------------|------------|-------------------------|---------|----------|
| | Workflow I | tems - Customer | × Close | |
| Installed Bu | Enabled? | Operation | î de | θ |
| Project Nar | No | RAMP_QUALITY_GATE | | |
| Created By | Yes | SOURCE_TO_MODEL | | |
| Created Da | Yes | CLEANSE | | |
| Version | Yes | MASTER_REFERENCE | | |
| Installed Da | Yes | MASTER_REFERENCE_RELOAD | | |
| Release No | Yes | MATCH | | |
| Subjects | Yes | MATCH_SET_DELETE | | 0 |
| We | Yes | MATCH_SET_INACTIVE | | Mastered |
| | Yes | FILL_RELOAD_QUEUE | | false |
| | Yes | MERGE | | false |
| | Yes | PROMOTE_MASTER | | false |
| | Yes | REMEDIATE | | falae |
| | Yes | AUTO_CLOSE | _ | laise |
| | Yes | SUBJECT_GROUP_PROCESS | | false |
| | Yes | CDC_RECORD | - | |

ROLE_OMNI_DEPLOYMENT_RESET_SUBJECT

The following image shows the Console when the ROLE_OMNI_DEPLOYMENT_RESET_SUBJECT privilege is assigned.

| Complexity Deployment | | | | 0 | 4 |
|---------------------------------------|-------------------------------------|----------|----------|-------|---|
| 🕹 Deploy Bundle 👻 😃 Reset Environment | ▼ ¹ Deployment History ▼ | | | | |
| Installed Bundle Information | | | | | 9 |
| Project Name | CustomerDQ | | | | |
| Created By | IBI Deployment Bundler | | | | |
| Created Date | 5/27/20 9:46 AM | | | | |
| Release Number | 3.15.0.RC.1 | | | | |
| Version | CustomerDQ_3_15_0_RC_1_200527094931 | | | | |
| Installed Date | 2020-05-28 19:39:14.000 | | | | |
| Release Notes | | | | | |
| Subjects | | | | | 3 |
| Workflow | Name | Cleansed | Mastered | Reset | |
| ≡ ⊷ 🛛 21/21 | Customer | true | false | Q | |
| | SourceCodeMap | false | false | C | |
| ≡ ⊷ 🗹 21/21 | SourceCodeMetadata | false | false | C | |
| ≡ ⊷ 🗹 21/21 | SourceCodeSet | false | false | ٩ | |
| ≡ ▼ 21/21 | SourceCodeStandard | false | false | Ċ | |

When the ROLE_OMNI_DEPLOYMENT_RESET_SUBJECT privilege is not assigned, the Subjects grid does not show the last column containing the Reset Subjects buttons, as shown in the following image.

| Deployment | | | 0 | 1 |
|------------------------------|-------------------------------------|----------|----------|---|
| | | | | |
| Installed Bundle Information | | | | 0 |
| Project Name | CustomerDQ | | | |
| Created By | IBI Deployment Bundler | | | |
| Created Date | 5/27/20 9:46 AM | | | |
| Release Number | 3.15.0.RC.1 | | | |
| Version | CustomerDQ_3_15_0_RC_1_200527094931 | | | |
| Installed Date | 2020-05-28 19:39:14.000 | | | |
| Release Notes | | | | |
| Subjects | | | | 0 |
| Workflow | Name | Cleansed | Mastered | |
| ≡ ∽ 2 1 / 21 | Customer | true | false | |
| ≡ ⊷ 🗹 21 / 21 | SourceCodeMap | false | false | |
| ≡ ⊷ 🗹 21 / 21 | SourceCodeMetadata | false | false | |
| ≡ ⊷ 🗹 21 / 21 | SourceCodeSet | false | false | |
| ≡ ∽ 🗹 21 / 21 | SourceCodeStandard | false | false | |

ROLE_OMNI_DEPLOYMENT_REPROCESS_SUBJECT

The following image shows the Console when the ROLE_OMNI_DEPLOYMENT_REPROCESS_SUBJECT privilege is assigned.

| Complexity Deployment | | | | | 0 🛓 |
|-----------------------|------------------------------|------------------------------|----------|----------|-------|
| 🌲 Deploy I | Bundle 🚽 😃 Reset Environment | 🝷 🌀 Deployment History 🝷 | | | |
| Installed E | Bundle Information | | | | 3 |
| Project N | ame | CustomerDQ | | | |
| Created E | Зу | IBI Deployment Bundler | | | |
| Created D | Date | 5/27/20 9:46 AM | | | |
| Release N | Number | 3.15.0.RC.1 | | | |
| Version | | CustomerDQ_3_15_0_RC_1_20052 | 7094931 | | |
| Installed | Date | 2020-05-28 19:39:14.000 | | | |
| Release | View Example |] | | | |
| Subject: | View IDS | | | | 0 |
| | View XSD | Name | Cleansed | Mastered | Reset |
| =- | | Customer | true | false | Ċ |
| =~ | Download Documentation | SourceCodeMap | false | false | U |
| ≡∽ | | SourceCodeMetadata | false | false | ٩ |
| | Process Test Subjects | SourceCodeSet | false | false | ٩ |
| | 21/21 | SourceCodeStandard | false | false | ٩ |

When the ROLE_OMNI_DEPLOYMENT_REPROCESS_SUBJECT privilege is not assigned, the Subject menu popup does not show the Reprocess Subject or Process Test Subjects buttons, as shown in the following image.

| 😧 De | ployment | | | 0 🛓 |
|-------------|--------------------|-------------------------------------|----------|----------|
| | | | | |
| Installed E | Bundle Information | | | • |
| Project Na | ame | CustomerDQ | | |
| Created B | y . | IBI Deployment Bundler | | |
| Created D | ate | 5/27/20 9:46 AM | | |
| Release N | lumber | 3.15.0.RC.1 | | |
| Version | | CustomerDQ_3_15_0_RC_1_200527094931 | | |
| Installed I | Date | 2020-05-28 19:39:14.000 | | |
| Release N | lotes | | | |
| Subjects | View Example | | | |
| | View IDS | Name | Cleansed | Mastered |
| | View VBD | Customer | true | false |
| =- | | SourceCodeMap | false | false |
| =- | | SourceCodeMetadata | false | false |
| =• | 21/21 | SourceCodeSet | false | false |
| Ξ× | 21/21 | SourceCodeStandard | false | false |

ROLE_OMNI_DEPLOYMENT_RUN_TESTS

The following image shows the Console when the ROLE_OMNI_DEPLOYMENT_RUN_TESTS privilege is assigned.

| 😧 De | eployment | | | | 0 | 4 |
|------------|-----------------------------|------------------------------------|----------|----------|-------|---|
| 🌲 Deploy | Bundle 👻 😃 Reset Environmen | t 👻 🕲 Deployment History 👻 | | | | |
| Installed | Bundle Information | | | | | • |
| Project N | lame | CustomerDQ | | | | |
| Created By | | IBI Deployment Bundler | | | | |
| Created | Date | 5/27/20 9:46 AM | | | | |
| Release | Number | 3.15.0.RC.1 | | | | |
| Version | | CustomerDQ_3_15_0_RC_1_20052709493 | 1 | | | |
| Installed | Date | 2020-05-28 19:39:14.000 | | | | |
| Release | View Example | | | | | |
| Subjects | View IDS | | | | | 0 |
| | View XSD | Name | Cleansed | Mastered | Reset | |
| | | Customer | true | false | Ċ | |
| = ~ | Download Documentation | SourceCodeMap | false | false | Q | |
| =- | Reprocess Subject | SourceCodeMetadata | false | false | Q | |
| = v | Process Test Subjects | SourceCodeSet | false | false | Q | |
| =* | 21/21 | SourceCodeStandard | false | false | ٢ | |

When the ROLE_OMNI_DEPLOYMENT_RUN_TESTS privilege is not assigned, the Subject menu popup does not show the Process Test Subjects and Reprocess Subject buttons, as shown in the following image.

| 😧 De | ployment | | | 0 1 | | | | | |
|-------------|--------------------|-------------------------------------|----------|----------|--|--|--|--|--|
| | | | | | | | | | |
| Installed E | Bundle Information | | | 3 | | | | | |
| Project N | ame | CustomerDQ | | | | | | | |
| Created E | Зу | IBI Deployment Bundler | | | | | | | |
| Created I | Date | 5/27/20 9:46 AM | | | | | | | |
| Release I | Number | 3.15.0.RC.1 | | | | | | | |
| Version | | CustomerDQ_3_15_0_RC_1_200527094931 | | | | | | | |
| Installed | Date | 2020-05-28 19:39:14.000 | | | | | | | |
| Release I | Votes | | | | | | | | |
| Subjects | View Example | | | 0 | | | | | |
| | View IDP | Name | Cleansed | Mastered | | | | | |
| | VIEWIDS | Customer | true | false | | | | | |
| =. | View XSD | SourceCodeMap | false | false | | | | | |
| =• | | SourceCodeMetadata | false | false | | | | | |
| =• (| 21/21 | SourceCodeSet | false | false | | | | | |
| =• | 21/21 | SourceCodeStandard | false | false | | | | | |

ROLE_OMNI_SERVICES_WRITE

The following image shows the Console when the ROLE_OMNI_SERVICES_WRITE privilege is assigned.

| 📽 Managed Services | |
|-------------------------------------|--------|
| ▶ Start All ■ Stop All りRestart All | |
| | |
| Data Processing | |
| Omni Server | OFF ON |
| Data Quality | |
| Cleansing | OFF ON |
| Matching | OFF ON |
| Remediation | OFF ON |
| Ompi Ponicos | |
| Onini Services | |
| Designer Repository | OFF ON |
| Deployment Bundler | OFF ON |
| | |
| OGC Services | |
| OGC Tomcat | OFF ON |
| WS02 | 🚯 On |
| | |

When the ROLE_OMNI_SERVICES_WRITE privilege is not assigned, the Start All and Restart All buttons are removed, as shown in the following image.

| Managed Services | |
|---------------------|------|
| | |
| | |
| Data Processing | |
| Omni Server | On |
| Data Quality | |
| Cleansing | Off |
| Matching | Off |
| Remediation | Off |
| Omni Services | |
| Designer Repository | Off |
| Deployment Bundler | Off |
| OGC Services | |
| OGC Tomcat | Off |
| WS02 | 🚯 On |

ROLE_OMNI_CONFIGURATION_WRITE

The following image shows the Console when the ROLE_OMNI_CONFIGURATION_WRITE privilege is assigned.

| ¢ | Con | nfigura | ation: Ser | rvices | | | | | | | | 0 🛓 | | |
|------|--|----------|------------|----------|---|---|--|------|------------|------------|--|---|--|--|
| | | | | | | | | | | | | | | |
| Cont | roller | Server | Cleansing | Matching | Remediation | OGC Remediation | OGC Tomcat | WS02 | Repository | Deployment | | | | |
| | Setting | g | | V | alue | | | | | | | Description | | |
| | Service | e Name | | 0 | mniController | | Defines the name of this Omni-Gen service. | | | | | | | |
| | HTTP/HTTPS Listener Port | | | | 500 🗹 | | | | | | | Defines the http/https port the controller will listen for REST service calls. | | |
| | JVM Process Max Memory | | | | 024M 📝 | | | | | | | Defines the maximum memory use allowable for this service. | | |
| * | JVM Process Arguments | | | | Dserver.port=9500 Iomnigen.config.fi Dlog4j.configuratio IseGCOverheadLi | -Dserver. directory=/hi le=/home/iwayqa/omn inFile=file:conf/log4j-c mit | Defines the JVM arguments to use when starting this service. | | | | | | | |
| | JVM P | rocess (| Classpath | Л | nome/iwayqa/omr | igen/OmniServer/cmd | Defines the classpath used when starting this service. | | | | | | | |
| | Log Dir | rectory | | Л | /home/iwayqa/omnigen/OmniServer//OmniGenData/logs/controller | | | | | | | Defines the location where controller log files will be written. | | |
| | Service | e Consol | e URL | h | https://omnigenqalx.ibi.com:9500/swagger-ui.html | | | | | | Defines the REST console associated with this service. | | | |
| | Start-All at Start? | | | | false | | | | | | | Enables starting all services after Controller has started up. | | |
| | Controller external startup arguments list filename | | | 0 | omniController-start.lst | | | | | | | Filename of externalized arguments for controller's command-line | | |
| | Task scheduler thread pool size | | | | 10 | | | | | | | Task scheduler thread pool size. | | |
| | | | | | | | | | | | | | | |

When the ROLE_OMNI_CONFIGURATION_WRITE privilege is not assigned, the configuration information will be read only. The Edit icon is removed for all properties, as shown in the following image.

| 🗘 Co | onfigura | ition: Ser | vices | | | | | | | | 0 1 |
|--|-----------------------|--------------|--------------|--|--|---|--|--|--|----------------------------------|---|
| | | | | | | | | | | | |
| Controller | Server | Cleansing | Matching | Remediation OGC Remediation OGC Tomcat WSO2 Repository Deployment | | | | | | | |
| Setting | | | Valu | e | | | | | | | Description |
| Service N | lame | | omni | Controller | | Defines the name of this Omni-Gen service. | | | | | |
| HTTP/HT | TPS Liste | ner Port | 9500 | Z | | Defines the http/https port the controller will listen for REST service calls. | | | | | |
| JVM Pro | cess Max | Memory | 1024 | м 🖍 | | | | | | | Defines the maximum memory use allowable for this service. |
| JVM Pro | JVM Process Arguments | | | ver.port=9500 -C higen.config.file= 4j.configurationF iCOverheadLimit | Iserver. directory=/hom /home/iwayqa/omnige `ile=file: conf/log4j-cont | Defines the JVM arguments to use when starting this service. | | | | | |
| JVM Pro | cess Clas: | spath | /hom | e/iwayqa/omnige | en/OmniServer/cmd/O | Defines the classpath used when starting this service. | | | | | |
| Log Direc | ctory | | /hom | /home/iwayqa/omnigen/OmniServer//OmniGenData/logs/controller | | | | | | | Defines the location where controller log files will be written. |
| Service C | Console UP | ۲L | https | https://omnigenqalx.ibi.com:9500/swagger-ui.html | | | | | | | Defines the REST console associated with this service. |
| Start-All at Start? | | | false | false | | | | | | | Enables starting all services after Controller has started up. |
| Controller external startup arguments list filename | | | ents omni | omniController-start.lst | | | | | | | Filename of externalized arguments for controller's command-line |
| Task sch | eduler thre | ad pool size | 10 | 10 | | | | | | Task scheduler thread pool size. | |
| | | | | | | | | | | | |

ROLE_OMNI_WORKORDER_WRITE

Using the ROLE_OMNI_WORKORDER_WRITE privilege, you can pause or resume something that has been paused. The following image shows the Console, with the Pause button, when the ROLE_OMNI_WORKORDER_WRITE privilege is assigned.

| ≡ @mniConsole | ₩ Work Orders | | | | | | | | 0 🛓 | |
|-----------------------------|--------------------------|---------------|--|------------|----------|--------|--------|----------------------------|---------------------------|---|
| | Dispatcher 🧰 Debug 🗾 | | | | | | | | 1 - 8 of 8 | |
| 🗱 Services | Work Orders | | | | | | | | T | |
| 差 Configuration 👻 | Work order options | Subject | Batch Id | Source | Status | Result | Reason | Start Date | End Date | |
| Deployment | + = · BULK | Customer | c816a840-2d05-4e40-b21f- ec440cc9becb | TestSource | ACTIVE | | | 2020-06-05 18:18:51.937 | | |
| Processing Work Orders | Pause | Customer | 5f6b332d-e963-4d01-ac79- a33edd4a1571 | TestSource | COMPLETE | PASS | | 2020-06-05 17:23:38.815 | 2020-06-05 17:25:47.83 | 2 |
| Measures | Measures | Customer | d3873555-5f70-410c-ad6a- f25f7e5eac23 | TestSource | COMPLETE | PASS | | 2020-06-05 17:22:43.822 | 2020-06-05 17:22:49.90 | 6 |
| A Ramp Control | A Ramp Control | SourceCodeSet | dd3c4faa-6245-49d8-a1f8- 1b10cefbf2aa | | COMPLETE | PASS | | 2020-06-05 12:44:41.466 | 2020-06-05 12:44:42.12 | 1 |
| System - Testing | + = SETUP_DELETE_STALE | | | | COMPLETE | PASS | | 2020-06-05 01:00:00.448 | 2020-06-05 01:00:00.62 | 9 |
| >_ Consoles | + = · SETUP_DELETE_STALE | * | | | COMPLETE | PASS | | 2020-06-04 01:00:00.387 | 2020-06-04 01:00:00.57 | 9 |
| Operations | + = · SETUP_DELETE_STALE | × | | | COMPLETE | PASS | | 2020-06-03 01:00:00.968 | 2020-06-03 01:00:01.42 | 5 |
| Ownloads | + = SETUP_DELETE_STALE | | | | COMPLETE | PASS | | 2020-05-29 01:00:03.513 | 2020-05-29 01:00:03.98 | 8 |
| | | | | | | | | | | |

When the ROLE_OMNI_WORKORDER_WRITE privilege is not assigned:

- If the Work Order status is *Active*, the Pause button is not available.
- If the Work Order status is *Paused*, the Resume and Ignore buttons are not available.
- □ If the Work Order status is *Failed*, the Restart and Ignore buttons are not available.

The following image shows an example of the Console, when the ROLE_OMNI_WORKORDER_WRITE privilege is not assigned.

| ≡ <i>⊚</i> mniConsole | E Work Orders | 0 🛓 |
|-----------------------------|--|----------------------------|
| | | 1 - 6 of 6 |
| 😂 Services | Work Orders | Y 0 |
| 🌽 Configuration 👻 | Type Subject Batch Id Source Status Result Reason Start Date↓ | End Date |
| Deployment | + = v BULK Customer d3873555-5f70-410c- ad6a-t25f7e5eac23 TestSource PAUSED 2020-06-05 17:21:14:339 | 2020-06-05 12:44:43.841 |
| Processing Work Orders | Measures SourceCodeSet dd3c4faa-6245-49d8- a1f8-1b10cefb/2aa COMPLETE PASS 2020-06-05 12.44.41.466 <td>2020-06-05 12:44:42.121</td> | 2020-06-05 12:44:42.121 |
| Measures | A Ramp Control 2020-06-05 01:00:00.0448 | 2020-06-05 01:00:00.629 |
| A Ramp Control | + = v SETUP_DELETE_STALE * COMPLETE PASS 2020-06-04 01:00:00:387 | 2020-06-04 01:00:00.579 |
| System - Consoles | + = v SETUP_DELETE_STALE * COMPLETE PASS 2020-06-03 01:00:00:968 | 2020-06-03 01:00:01.425 |
| Operations | + = v SETUP_DELETE_STALE * COMPLETE PASS 2020-05-29 01:00:03:513 | 2020-05-29 01:00:03.988 |
| Downloads | | |

ROLE_OMNI_WORKORDER_DEBUG

The following image shows the Console when the ROLE_OMNI_WORKORDER_DEBUG privilege is assigned.

| ∛⊟ Worl | k Orders | | | | | | | | 0 | 4 |
|-------------|--------------------|---------|----------|--------|----------|--------|--------|----------------------------|--------------------|---------------|
| Dispatcher | on Debug off | | | | | | | | 1 - 1 o | f1 |
| Work Order: | S | | | | | | | | | TO |
| | Туре | Subject | Batch Id | Source | Status | Result | Reason | Start Date+ | End Da | ite |
| + = ~ | SETUP_DELETE_STALE | * | | | COMPLETE | PASS | | 2020-05-29 01:00:03.513 | 2020-05 01:00:0 | 5-29 3.988 |
| | | | | | | | | | | |

When the ROLE_OMNI_WORKORDER_DEBUG privilege is not assigned, the Debug toggle button is removed from the Work Orders screen, as shown in the following image.

| ?⊟ Wor | k Orders | | | | | | | | 0 🛓 |
|------------|--------------------|---------|----------|--------|----------|--------|--------|----------------------------|----------------------------|
| | | | | | | | | | 1 - 1 of 1 |
| Work Order | 'S | | | | | | | | T |
| | Туре | Subject | Batch Id | Source | Status | Result | Reason | Start Date | End Date |
| + = ~ | SETUP_DELETE_STALE | * | | | COMPLETE | PASS | | 2020-05-29 01:00:03:513 | 2020-05-29 01:00:03.988 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

ROLE_OMNI_WORKORDER_DISPATCHER

The following image shows the Console when the ROLE_OMNI_WORKORDER_DISPATCHER privilege is assigned.

| i Wor | k Orders | | | | | | | | 0 | 2 | 2 |
|--------------|--------------------|---------|----------|--------|----------|--------|--------|----------------------------|-------------------|---------------|---------|
| Dispatcher (| on Debug Off | | | | | | | | 1 - 1 o | of 1 | |
| Work Order | s | | | | | | | | | | 0 |
| | Туре | Subject | Batch Id | Source | Status | Result | Reason | Start Date | End D | ate | |
| + = - | SETUP_DELETE_STALE | * | | | COMPLETE | PASS | | 2020-05-29 01:00:03:513 | 2020-0 01:00:0 | 5-29)3.98 | ı 38 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

When the ROLE_OMNI_WORKORDER_DISPATCHER privilege is not assigned, the Dispatcher toggle button is removed from the Work Orders screen, as shown in the following image.

| ί≡ Work Orders | | | | | | 0 | * | | | |
|----------------|-------------------|---------|----------|--------|----------|--------|--------|----------------------------|--------------------|----------------|
| | | | | | | | | | 1 - 1 c | pf 1 |
| Work Orders | | | | | | | | | | TO |
| Ту | rpe | Subject | Batch Id | Source | Status | Result | Reason | Start Date ↓ | End Da | ate |
| + = • SE | ETUP_DELETE_STALE | * | | | COMPLETE | PASS | | 2020-05-29 01:00:03.513 | 2020-0: 01:00:0 | 5-29)3.988 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

ROLE_OMNI_OPERATIONS_DOWNLOAD_DIAGNOSTICS

The following image shows the Console when the ROLE_OMNI_OPERATIONS_DOWNLOAD_DIAGNOSTICS privilege is assigned.

| Operations | | | | | | | | | | | 0 | 4 |
|-----------------------|---------------------|-------------------|-----------|----------------|------------|---------------|-----------|--------------|--------------|----------------|-----------|---|
| Service: Controller | ∽ 🖉 Rei | fresh | | | | | | | | | | |
| 🖵 System Information | 🛢 Database Activity | I≣ Dependency Mar | nifests 🖧 | Threads al | Network | 🔒 Certificate | 🕿 Remedia | tion Summary | Systen 🖁 | n Diagnostics | | |
| 😵 Health - Controller | | | 브 Java V | rirtual Machir | ie (JVM) - | Controller | | 📋 Garba | ge Collectio | n - Controller | | θ |
| Disk Space | free | 259.82 GB | Uptime | | 355.85 | minutes | | ps_scave | nge | count | 558 | |
| | threshold | 10 MB | System Lo | bad | 0 | | | | | time | 5940 ms | |
| | total | 294.29 GB | Available | Processors | 8 | | | ps_mark | sweep | count | 4 | |
| Database | | | Classes | | current | 1 | 8084 | | | time | 602 ms | |
| System | vendor | Oracle | | | total | 1 | 8084 | 🖹 Data S | ource - Cor | ntroller | | 9 |
| | status | UP | | | unloade | d O | | Primary | (Model) | active conne | ections 2 | |
| Model | vendor | Oracle | Threads | | current | 4 | 1 | | | usage | 0.04 | |
| | status | UP | | | daemor | 1 2 | 8 | | | | | _ |
| Consumption | vendor | Oracle | | | peak | 4 | 5 | | | | | |
| | status | UP | | | total sta | arted 3 | 3348 | | | | | |

When the ROLE_OMNI_OPERATIONS_DOWNLOAD_DIAGNOSTICS privilege is not assigned, the Download Diagnostics tab is removed from the Operations page, as shown in the following image.

| Operations | ; | | | | | | | | 0 | 1 |
|-----------------------|---------------------|------------------|--------------------|---------------------|--------------|------------|----------------------|--------------|-----------|---|
| Service: Controller | ∽ ØRe | fresh | | | | | | | | |
| System Information | 🛢 Database Activity | :≡ Dependency Ma | nifests 🛛 🖨 Thread | s ull Networ | Certificate | 🔳 Remediat | ion Summary | | | |
| 😵 Health - Controller | ŕ | | 💻 Java Virtual N | Machine (J∨M) | - Controller | | Garbage Collection | - Controller | | 0 |
| Disk Space | free | 259.82 GB | Uptime | 356.1 | 17 minutes | | ps_scavenge | count | 559 | |
| | threshold | 10 MB | System Load | 0.08 | | | | time | 5950 ms | |
| | total | 294.29 GB | Available Proce | ssors 8 | | | ps_marksweep | count | 4 | |
| Database | | | Classes | curre | nt 1 | 8084 | | time | 602 ms | |
| System | vendor | Oracle | | total | 1 | 8084 | E Data Source - Cont | roller | | 0 |
| | status | UP | | unloa | ded O | | Primary (Model) | active conne | ections 2 | |
| Model | vendor | Oracle | Threads | curre | nt 4 | 3 | | usade | 0.04 | |
| | status | UP | | daem | on 3 | 0 | | 5 | | _ |
| Consumption | vendor | Oracle | | peak | 4 | 6 | | | | |
| | status | UP | | total | started 3 | 3445 | | | | |

ROLE_OMNI_ALLOW_TESTING

The following image shows the Console when the ROLE_OMNI_ALLOW_TESTING privilege is assigned.

| ≡ <a>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |
|---|
| |
| 😂 Services |
| 🌽 Configuration 🤜 |
| 🜍 Deployment |
| 🖽 Processing 🔻 |
| 🚝 Work Orders |
| 🗠 Measures |
| A Ramp Control |
| 🖵 System 👻 |
| 🕈 Testing |
| >_ Consoles |
| 😷 Operations |
| 🚯 Downloads |
| |

When the ROLE_OMNI_ALLOW_TESTING privilege is not assigned, the Testing link is removed from the left navigation menu, as shown in the following image.



ROLE_OMNI_CONFIG_DB_CONFIG_READ

The following image shows the Console when the ROLE_OMNI_CONFIG_DB_CONFIG_READ privilege is assigned.

| ≡ ØmniConsole |
|--------------------|
| |
| OR Services |
| 🔑 Configuration 🔻 |
| 📼 Runtime |
| 🛢 Databases |
| 🎄 Managed Services |
| Product License |
| 🜍 Deployment |
| 🖽 Processing 👻 |
| 🖵 System 🔻 |
| 🕈 Testing |
| >_ Consoles |
| 🚳 Operations |
| 🚯 Downloads |
| |

When the ROLE_OMNI_CONFIG_DB_CONFIG_READ privilege is not assigned, the Configuration Databases link is removed from the left navigation menu, as shown in the following image.



Using WSO2 to Create New User IDs

The following procedure describes how to use WSO2 to create new users and assign roles. You can create non-admin users, such as READONLY or OPERATOR, or additional users with administrative privileges. Note: You must be a WSO2 admin to create the users and assign roles.

1. Log in to the WSO2 Identity Server as an Administrator, as shown in the following image.

| WS | 2) Identity Server | Management Console _{Sign-in} Docs About |
|-------------|---|---|
| | User Cuide WS02 Carbon user guide. | Sign-in |
| > | Forum The Interactive message board for sharing information, questions and comments about WS02 products. | Username primary/admin Password |
| <u>Z</u> | Issue Tracker Users are encouraged to report issues & suggest improvements using the JIRA issue tracker. In addition, users can observe the status of the reported issues in progress. | Sign-in Sign-in Help |
| | Maling Lists Report issues, provide feedback & get help from our maling lists. | |

2. Under Users and Roles, click Add, then click Add New User.

The Add New User pane opens, as shown in the following image.

| | WS Identity Server | Management C Signed-in as: primary/admin@carbon.super Sign-out Doch | Onsole |
|-------|---------------------|--|---------------|
| 0 | Home | Home > Identity > Users and Roles > Add > Add User | O Held |
| | Identity 🔿 | Add New User | |
| e. | 🕌 Users and Roles | | |
| ž | 🔿 Add | Step 1 : Enter user name | |
| | List | Enter user name | |
| 5 | tuser Stores | | |
| lonit | \ominus Add | Domain PRIMARY | |
| 2 | List | User Name* omniuser1 | |
| 2 | 🐻 Claims | Password* | |
| But | 🔿 Add | Record Report | |
| Conf | List | Password Repear. | |
| | E Service Providers | Next > Finish Cancel | |
| | A 144 | | |

3. Type the user name, password, password repeat, and then click *next*.

4. In Step 2, select the Omni role or roles for the user, as shown in the following image.



5. Click Finish.

Note: If you log in to the Console with this newly created omniuser1 ID with the READONLY role, you will see the services displayed, but because it is a read-only user, you will not be allowed to change anything.

6. To view the Users and their roles, under Users and Roles, click *List*, then *Users*, and then select *View Roles*.

The following image shows the roles assigned to the default user primary/ibi.

| 1 | WS Identity Server | S S | Management Console Signed-in as: primary/admin@carbon.super Sign-out Docs About |
|--------|----------------------------|--|--|
| 0 | Home | Home > Identity > Users and Roles > List > Users > Users of Role | 🔞 Help |
| | Identity O | Role List of User : ibi | |
| Main | Users and Roles Add List | Enter role name pattern (* for all - | |
| ы | Contraction Stores | Select roles and ladate to remove them from user | |
| fonit | 🚯 Add | Roles of User ibi | |
| 2 | List | Select all on this page I Unselect all on this page | |
| figure | Claims Add | Application/ROLE_OMNL_SERVER_ADMIN | 🗭 Permissions 🛛 🗮 View Users |
| Con | List | Internal/everyone | Permissions |
| | Service Providers Add | Application/ROLE_OMIN_CONTROLLER_ADMIN | Permissions 📓 View Users |
| Tools | e List Resident | Update Finish Cancel | |

7. To change the password for a user, under Users and Roles, click *List* and then select *Change my Password*. The Change Password pane is shown in the following image.

| | WS Identity Server | See S | Management Console Signed-in as: primary/admin@carbon.super Sign-out Docs About |
|-------|--------------------|--|--|
| 0 | Home | Home > Identity > Users and Roles > Add > Add User > Change Password | A Help |
| | Identity 🔿 | Change Password | |
| ÷ | 📑 Users and Roles | | |
| ž | O Add | Enter New Password | |
| | tet List | New Password* | |
| 8 | tuser Stores | | |
| louit | O Add | New Password Repeat* | |
| 2 | Eist | Chanse Cancel | |
| 2 | Claims | Contractory Contractory | |

Authenticating Omni-Gen Console Users With Microsoft Active Directory/LDAP

As of Version 3.15, the Omni-Gen Console can use Active Directory/LDAP for authentication and authorization, by utilizing WSO2 user stores. The user store is created in WSO2 and configured with the user store manager class for LDAP.

The following topic details the procedure for configuring a WSO2 user store and configuring a WSO2-based LDAP connection allowing User ID authorizations to be obtained from Active Directory.

Note: You will need to consult with your Active Directory/LDAP administrator to obtain the information required to configure within WSO2.

In the WS02 System

1. Connect to the WSO2_IS System Administration Console, for example:

https://your-wso2hostname:port

2. Log in with the WSO2_IS administrator user name and password.

The WSO2 Identity Server Home page opens, as shown in the following image.

| WSO2 Identity Server | | | | | | |
|----------------------|--|---|--|--|--|--|
| Home | | | | | | |
| Identity 🔿 | WSO2 Identity Server Home | | | | | |
| 🕌 Users and Roles | Welcome to the W802 Identity Server Management Console | | | | | |
| 🖸 Add | menome to the move reently ponter management consults | | | | | |
| List | Server | | | | | |
| To User Stores | Host | localhost | | | | |
| O Add | Server URL | local://services/ | | | | |
| | Server Start Time | 2017-09-22 09:05:06 | | | | |
| Add | System Up Time | 3 day(s) 3 br(s) 30 min(s) 42 sec(s) | | | | |
| List | Manian Manian | 5 2 0 0 | | | | |
| E Service Providers | version | 5.3.0 | | | | |
| 🔂 Add | Repository Location | file:/C:/wso2_is/bin/./repository/deployment/server/ | | | | |
| | C A Not secure btpS://w WS@2 Identity Server Home Identity Identity Identity Identity Identity Identity Identity Identity | C A Not secure bit S://wmdm1:9443/carbon/admin/index.jsp WS@2 Identity Server Home Identity Orgon Server Home WSO2 Identity Server Home Welcome to the WSO2 Identity Server Management Server Users and Boles O Add Est User Stores O Add Est User Orgon Department Version Repository Location | | | | |

- 3. Select the *Main* tab on the left side of the Home page.
- 4. Select *Identity*, then select *User Stores*, and then select *Add*.

The Add New User Store pane opens, as shown in the following image.

| ſ | WSO2 Identity Server | Sa S | | Management Console Signed-in as:priman/admini@carbon.super Sign-out Docs About |
|------|------------------------|---|---------------------------------------|--|
| 0 | Home | Name & Identity & Liner Stores & Add | | @ Hala |
| | Identity 🔿 | A datable solution of the solution of the | | (Cheb |
| 5 | Users and Roles | Add New User Store | | |
| ž | 🔿 Add | | | |
| - | List | User Store Manager | | |
| 5 | 🔁 User Stores | 11 | org wso2 carbon user core idap.ReadWr | teLDAPUserStoreManager |
| fori | 🗢 Add | Oter Store Manager Gatt | Depending on the class properties on | eds to be defined |
| 2 | List | | | |
| | 😓 Claims | Domain Name* | | |
| 10mg | 🗘 Add | Description | | |
| Con | List | | | |
| = | Service Providers | Define Properties For | | |
| | Add | | | |
| - | List | | | |
| Ĕ | Resident | Property Name | Property Value | Description |
| | Sidentity Providers | Connection URL* | Marv// | Connection URL for the user store |
| | O Add | Connection Name* | uide oue | 7 This should be the DH (Distinguish Name) of the admin user in LDAP |
| | List | Connection Password | | Password of the admin user |
| | 🥹 Resident | User Search Based | ou=Users.dc=wso2.dc=ora | ON of the context under which user entries are stored in LDAP |
| | Entitlement | User Entry Object Class* | wso2Person | Object Class used to construct user entries |
| | 🕹 PAP | Usemame Attribute * | uid | Attribute used for uniquely identifying a user entry. Users can be authenticated using their |
| | Policy Administration | Liker Security Editer | | email address, uid and etc |
| | PDP | User List Eller* | (&(objectClass=person)(ud=?)) | Presing criteria for Searching a parocelar user entry Election orderia for Setion all the user anticias in I DAP |
| | Policy View | CONTENTION OF | (objectClass=person) | Preving unless to many an one user excites to cover |
| | St Extension | Ontional | | |
| | 🔍 Search | Advanced | | |
| | Manage ^ | (mananced | | |
| | 😉 Workflow Engagement: | Add Cancel | | |
| | 🔁 Add | | | |
| | List | | | |

- 5. Complete the Add New User Store pane by filling in the Property Value text boxes.
 - a. Change the User Store Manager Class drop-down to org.wso2.carbon.user.core.ldap.ReadOnlyLDAPUserStoreManager.

b. Type a Domain Name, for example, OMNIUSERS.

Note: This Domain Name will be used by all users logging in to the Omni-Gen Console. Users will connect as OMNIUSERS/_userid.

c. Type the appropriate information for your company's Active Directory system.

Note: All parameters on this pane are required. When completed, your pane will look similar to the following image.

| WS ldentity Server | | | Management Console Signed-in as: primary/admin@carbon.super Sign-out Docs Abou |
|---|--|--|---|
| Home Identity Add Soft Dest and Roles Add Soft Dest Stores Add Soft Dest Stores Add Soft Dest Stores Add Soft Dest Stores Dest Stores Dest Stores Dest Stores Dest Stores Soft Soft | Add New User Store User Store Manager User Store Manager Class Domain Name* Description | org wso2 carbon usercore Idap ReadOnlyLDAPUs O Depending on the class, properties reads to be ONNUSERS | ारिकल्Manager v arStoreManager v |
| Add A | Define Properties For Property Name Connection URL * | Property Value | Description © Connection (R), for the user store |
| Add Eluit Resident Entitlement PAP Policy Administration Frop | Connection Name * Connection Password * User Search Base * Username Attribute * User Search Filter * User List Filter * | CNHidspadministrator.(NHUsen, DCHdspmachne, CNHUsen, DCHdspmachne, DCHb, DCHcom RAMAccountName (&lobjectClass=user)(xAMAccountName=?)) (&jottClass=user)(xAMAccountName=?) | This should be the DN (Distinguish Name) of the admin user in LDAP This should be the DN (Distinguish Name) of the admin user DN of the context under which user entries are stored in LDAP O Attribute used for unspeely identifying a user entry. Herri can be authenticated using their enail address, ud and etc D Ribering entries for sanching a particular user entry Filtering entries for listing all the user entries in LDAP |
| Policy View B: Extension Search | Optional Advanced | | |

6. Expand the Optional section, as shown in the following image.

| Optional | | |
|--|---------------------------------------|---|
| | | |
| Property Name | Property Value | Description |
| User DN Pattern | | ⑦ The patten for user's DN. It can be defined to improve the LDAP search |
| Display name attribute | sAMAccountName | Attribute name to display as the Display Name |
| Disabled | | Whether user store is disabled |
| Read Groups | | O Specifies whether groups should be read from LDAP |
| Group Search Base | CN=Users,DC=Idapmachine,DC=ibi,DC=com | ON of the context under which user entries are stored in LDAP |
| Group Name Attribute | cn | Attribute used for uniquely identifying a user entry |
| Group Search Filter | (&(objectClass=group)(cn=?)) | ⑦ Filtering criteria for searching a particular group entry |
| Group List Filter | (objectClass=group) | Piltering criteria for listing all the group entries in LDAP |
| Role DN Pattern | | ⑦ The patten for role's DN. It can be defined to improve the LDAP search |
| Membership Attribute | member | Attribute used to define members of LDAP groups |
| Member Of Attribute | | Ø MemberOfAttribute |
| Enable Back Links | | Whether to allow attributes to be result from references to the object from other objects |
| Enable Escape Characters at User Login | | Whether replace escape character when user login |
| Advanced | | |
| Update Cancel | | |

The following parameters must be entered:

- Display name attribute Read Groups Group Search Base Group Name attribute Membership Attribute member Enable Escape Characters at User Login Selected
- 7. Click Add.
- 8. Confirm the User Stores are being Updated.

In the Active Directory/LDAP System

Once the user store is created in WSO2, log in to Active Directory. In Active Directory, you need to create groups for the roles used by Omni-Gen and assign Active Directory users to the appropriate groups.

Note: You will need to consult with your Active Directory/LDAP administrator to obtain the information for this configuration.

Creating a User

1. In Active Directory, on the Active Directory Users and Computers left pane, right-click *Users*, then select *New*, and then select *Users*.

The New Object - User dialog box opens.

2. Type the first name, last name, full name, and user logon name, as shown in the following image.

| New Object - User | | × |
|---------------------------------------|-----------------------------------|------|
| 🤱 Create in: | iwaydev.ibi.com/Users | |
| <u>F</u> irst name: | omni <u>I</u> nitials: | |
| Last name: | admin | |
| Full name: | omni admin | |
| <u>U</u> ser logon name: omniadmin | @iwaydev.ibi.com | |
| User logon name (pre | <u>W</u> indows 2000): | |
| JIWAYDEV\ | omniadmin | |
| | | |
| | < <u>B</u> ack <u>N</u> ext > Can | icel |

3. Click Next.

A second New Object - User dialog box opens, for you to set the password.

4. Type and confirm the password, as shown in the following image. Select or deselect *User must change password at next logon* and *Password never expires*, as is appropriate for your company.

| New Object - User 🛛 🔀 | | | | |
|---|--------|--|--|--|
| Create in: iwaydev.ibi.com/Users | | | | |
| Password: | _ | | | |
| Confirm password: | | | | |
| User must change password at next logon | | | | |
| User cannot change password | | | | |
| Password never expires | | | | |
| Account is disabled | | | | |
| | | | | |
| | | | | |
| | | | | |
| < <u>B</u> ack <u>N</u> ext> | Cancel | | | |

- 5. Click Next.
- 6. Click Finish.

Creating a Group in Active Directory

A special group needs to be created for the Active Directory users to display in WSO2. Groups also need to be created for the Omni roles.

The following Group names should be created:

- OGCUSERS
- □ ROLE_OMNI_CONTROLLER_ADMIN
- □ ROLE_OMNI_CONTROLLER_READONLY
- □ ROLE_OMNI_SERVER_ADMIN

- □ ROLE_OMNI_SERVER_OPERATOR
- ROLE_OMNI_SERVER_READONLY
- ROLE_OMNI_SERVER_API
- ROLE_OMNI_CONTROLLER_API
- 1. In Active Directory, on the Active Directory Users and Computers left pane, right-click *Users*, then select *New*, and then select *Group*.

The New Object - Group dialog box opens.

2. Type the group name, leave the Group scope option as *Global*, and leave the Group type option as *Security*, as shown in the following image.

| New Object - Group | 2 |
|--------------------------------|------------------------------|
| 🥵 Create in: iwaydev.ib | pi.com/Users |
| Group name: | |
| OGCUSERS | |
| Group pame (pre-Windows 2000): | |
| OGCUSERS | |
| 1 | |
| Group scope | Group type |
| O Domain local | Security |
| Global | C Distribution |
| C Universal | |
| | |
| | |
| | OK Cancel |

- 3. Click OK.
- 4. Repeat the process to create groups for the Omni roles.

Once the groups are created, users must be assigned to the appropriate groups depending on the Omni-Gen privileges they require.

Note: All Omni-Gen users must be members of the OGCUSERS group and at least one other Omni group.

Adding a User to a Group

- 1. Right-click the group name, select *Properties*, and then select *Members*.
- 2. Click Add.
- 3. Type the first name or Login ID in the Enter the object names to select field box.
- 4. Click Check Names.

| Select Users, Contacts, Computers, Service Accounts, or Grou | ips ? 🗙 |
|--|---------------------|
| Select this object type: | |
| Users, Service Accounts, Groups, or Other objects | Object Types |
| Erom this location: | |
| iwaydev.ibi.com | Locations |
| Enter the object names to select (examples): | |
| omni admin (omniadmin@iwaydev.ibi.com) | <u>C</u> heck Names |
| | |
| Advanced OK | Cancel |

Click *OK*, then click *Apply*, and then click *OK* to exit the Group Properties dialog box.
 Repeat this process to add members to all the newly created Omni groups.

The following image shows that the omniadmin user is also added to the ROLE_OMNI_CONTROLLER_ADMIN group.

| ROLE_OMNI_CONTROLLER_ADMIN Properties | ? × |
|--|--------------|
| Select Users, Contacts, Computers, Service Accounts, or Grou | ps 🤶 🗙 |
| Select this object type: | |
| Users, Service Accounts, Groups, or Other objects | Object Types |
| From this location: | |
| iwaydev.ibi.com | Locations |
| Enter the object names to select (examples): | |
| omni admin (omniadmin@iwaydev.ibi.com) | Check Names |
| | |
| | |
| Advanced OK | Cancel |
| | |
| | |
| | |
| | |
| | |
| Add Remove | |
| | |
| OK Cancel Apply H | eln |
| | |

6. Return to WSO2 and you will see that the Active Directory user, omniadmin, appears in the list of users.

| me > Users | | Hel |
|--|--|-----|
| sers | | |
| arch Users | | |
| Select Domain | ALL-USER-STORE-DOMAINS V | |
| Enter user name pattern (* for all) | * Search Users | |
| Select Claim Uri | Select | |
| < <first 1="" 2="" <="" next="" prev=""> last>> Name</first> | Actions | |
| OMNIIISERS/letewal (Read-Only) | (Arritan Dolar M View Dolar 20 Her Dollar | |
| | | |
| OMNIUSERS/Isuperal (Read-Only) | 😰 Assign Roles 🛛 💼 View Roles 🖉 User Profile | |
| OMNIUSERS/ogcuser1 (Read-Only) | 🐲 Assign Roles 🛛 🗮 View Roles 🛛 🏄 User Profile | |
| OMNIUSERS/ogcuser2 (Read-Only) | 🕼 Assign Roles 🛛 🗮 View Roles 🥻 User Profile | |
| OMNIUSERS/omniadmin (Read-Only) | 🕼 Assign Roles 🛛 🚆 View Roles 🏾 🤡 User Profile | |
| | | |

Testing the Login to the Omni-Gen Console

1. Verify that you can connect to the Omni-Gen Console with the newly created Active Directory user ID, as shown in the following image.



2. Click Sign in.

| ≡ ØmniConsole | Managed Services | |
|-------------------|------------------------------------|--------|
| | Start All 📕 Stop All 🏷 Restart All | |
| Og Services | | |
| 🌽 Configuration 🤜 | Data Processing | |
| 🜍 Deployment | Umni Server | OFF ON |
| 📰 Processing 👻 | Data Quality | |
| 🖵 System 🔻 | Cleansing | OFF ON |
| 🕈 Testing | Matching | OFF ON |
| >_ Consoles | Remediation | OFF ON |
| 🚳 Operations | Omni Services | |
| 🚯 Downloads | Designer Repository | OFF ON |
| | Deployment Bundler | OFF ON |
| | OGC Services | |
| | OGC Tomcat | OFF ON |
| | WS02 | 🚯 On |

The Omni Console opens, as shown in the following image.

WSO2 Functions

Omni provides some utilities of WSO2 for frequently utilized functions. These utilities are accessed through the omni.sh (for Linux and UNIX) or omni.bat (for Windows) script, found in the omnigen/OmniServer directory of the Omni installation.

These utilities are not meant to replace the full capabilities of WSO2. Depending on your particular needs, you may still need to access the WSO2 console to properly provision WSO2 entities. For example, if you are creating your own set of users, this work would still be performed in WSO2.

These utilities are not meant to replace the full capabilities of WSO2. Depending on your particular needs, you may still need to access the WSO2 console to properly provision WSO2 entities. For example, if you are creating your own set of users, this work would still be performed in WSO2.

| Command | Description | |
|---|--|--|
| omni.sh wso2-config-list | Displays current settings for WSO2 host name, WSO2 port, WSO2 admin user name, and WSO2 admin password. | |
| omni.sh wso2-config-host -Dconfig.value=< <i>newHost</i> > | Allows you to specify a different WSO2 host name for the machine on which WSO2 is running. For example: -Dconfig.value=localhost | |
| omni.sh wso2-config-port -Dconfig.value=< <i>newPort></i> | Allows you to specify a different WSO2 port where WSO2 is running. For example, -Dconfig.value=9503 | |
| omni.sh wso2-config-username -Dconfig.value=< <i>newUser></i> | Allows you to specify a different WSO2 admin user name. This user is used to create and update users, roles, and policies in WSO2 for use by Omni components. For example: -Dconfig.value=primary/admin | |
| omni.sh wso2-config-password -Dconfig.value=< <i>newPa</i> ss> | Allows you to specify a different WSO2 admin password. For example: -Dconfig.value=mypassword | |
| omni.sh wso2-load-entities | Causes Omni to push the WSO2 entities (users, roles, and policies) that it uses to the configured WSO2. It presupposes that a WSO2 is running at the configured host name and port, and that the admin user name and password allow access to the WSO2. The command will fail if this configuration is incorrect. | |
| | Note: If an entity already exists in WSO2, it is first deleted before being created. Any manual modification to an entity will be lost as a result of this command. | |

Note:

- **O**n Windows platforms, change *omni.sh* to *omni.bat* in the above commands.
- Omni services, including the Omni Controller, should all be stopped before running any of these commands. Omni services will load the WSO2 values at service-startup time, and changing a WSO2 value after the fact may not be reflected in a running Omni service. Issue the following command prior to running the above commands:

omni.sh stop-all

High Availability Web Services

As of Version 3.15, to support High Availability, an Omni Server can be configured to run as a backup to an active server. While waiting on standby, all activity, including work order processing and background processes, is suspended. In the event of a server failure, the backup server can be activated through a web service. A web service can also be used to stop all server activity. A system message will be written when a server is activated and when it is stopped.

The Enable/Disable Startup On Standby setting in the Omni Console, under the Configuration, Runtime tab, is used to determine if the server is in standby mode. You can enable or disable this feature through the configuration or at run time using the REST API Server Endpoint start and stop services, available in the Swagger UI Server service.

Note: The setting should be updated as part of the initial configuration of the backup server. After that the Endpoints control the state of the server.



The Server start service and syntax is shown in the following image.

The Server stop service and syntax is shown in the following image.

| GET | /api/vl/stop Server stop | |
|---|--------------------------|--|
| Stop all server processes and set standby on. | | |
| Parameters | | |
| No parameters | | |

When the Enable/Disable Startup On Standby setting is true, all server processes will be stopped until the REST API Server Endpoint start service is called to resume server processing. The default value is false.

The Runtime tab, with the Enable/Disable Startup On Standby setting is shown in the following image.

| Runt | ime Data Quality Runtime | Server Remediation | Command Line | Email Notification | |
|------|-----------------------------|--------------------|--|--------------------|---|
| | Setting | Value | Value | | Description |
| | Omni-Gen Server Mode | DEVE | DEVELOPMENT | | Used to determine if the system is in production or not. 'DEVELOPMENT' is the default. 'PRODUCTION' is the alternative |
| | Server Host Name | iwser | v28 | | Host name for the machine executing the server. |
| | Server Domain | ibi.co | m | | Domain for the machine executing the server. |
| | Server FQDN | iwser | iwserv28.ibi.com | | FQDN for the machine executing the server. |
| | Server Start Time | 2020- | 2020-06-01 21:41:39 UTC 📝 | | Specifies the time OmniServer last started. |
| U | Server Java Home | C:/Pr | C:/Program Files/Zulu/zulu-8 📝 | | Server Java Home |
| | Java Process Id | 3464 | 3464@iwserv28 📝 | | Specifies the current Java process id for the controller. |
| | Runtime Data Location | C:\og | C:\og315md\omnigen/OmniServer//OmniGenData | | nData Defines the directory where runtime data such as configuration is stored. |
| | Default Date/Time format | уууу- | yyyy-MM-dd HH:mm:ss.SSS | | Defines the default format for Date/Time data. Follows the Java SimpleDateFormat rules. |
| | Enable/Disable Startup On S | Standby false | false | | Used to determine if the server is in standby mode. |

SAML for Omni Governance Console Authorization

As of Version 3.15, SHA256 encryption is supported when using a SAML connection for Omni Governance Console authorization.

Resolved Cases

This section provides a reference for the resolved Hottrack cases. The following table lists all cases resolved in all editions of Omni-Gen version 3.15.

| IRN Number | Fixed In | Summary |
|------------|----------|--|
| 200521117 | 3.15 | Omni-Gen not working with permanent DQ license |
| 200407097 | 3.15 | Security vulnerability with Java JMX server component |
| 200331102 | 3.15 | Application startup failed, could not acquire change log lock |
| 200326058 | 3.15 | Need assistance configuring OD/DQS to SVN Repository |
| 200220062 | 3.15 | SAML connection authorization issue: need SHA-256 encryption |
| 200129039 | 3.15 | OmniGen_omniController service terminated with the following service-error: Incorrect function |
| 190403041 | 3.15 | Adding multiple Omni Console users |



Omni-Gen 3.15 Cumulative Patch 1 Release Notes

Patches are cumulative, and as such, include content from all prior cumulative patches. Installing the latest cumulative patch installs the newly resolved issues and all fixes from prior patches for version 3.15.

In this chapter:

- Patch Release Information
- Patch Installation
- Key Features
- Resolved Cases

Patch Release Information

Certified Editions:

- Omni-Gen Master Data Management Edition version 3.15
- Omni-Gen Data Quality Edition version 3.15

Certified DBs:

□ Microsoft SQL Server, Postgres, Oracle

If you require this patch for a database environment not listed above, contact iWay Customer Support for assistance. You are advised to move to the latest available release of the product, or at a minimum, to the latest available patch for the product and your environment. This enables iWay to quickly provide support and issue resolutions, in addition to you benefitting from the latest updates in the product.

Patch Installation

Download the Cumulative Patch 1 (omnigen-patch-patch-3.15-cumulative.33.jar) from the Information Builders Technical Support Center at:

https://techsupport.informationbuilders.com

- **I** Ensure that all Omni Services are stopped and no data is being processed.
- Backup the omnigen home directory.

Backup the Omni-HealthData databases.

u Run the patch installer by executing the following command:

java -jar omnigen-patch-patch-3.15-cumulative.33.jar

Key Features

This section describes the key features in Omni-Gen Version 3.15 Cumulative Patch 1.

New Retention Policy Setting for the OGC Tomcat Access Log

To cut down on disk clutter, the retention policy for the OGC Tomcat access log can now be set to the number of days the logs should be retained.

Resolved Cases

The following table lists the issues that are resolved in Omni-Gen Version 3.15 Cumulative Patch 1.

| Jira Ticket | Summary |
|-------------|--|
| 0G-6908 | Allow OmniAPI role to execute Get a Master. |
| 0G-7314 | Server Swagger API authentication shows 401 for primary/ibi user. |
| 0G-7368 | API server call POST /api/v1/server/cdc/subscribe/loopback Loopback Test fails with ERROR 400 "Required request body is missing:". |
| 0G-7369 | New install: Omni-Gen Console shows Unable to determine management port. |
| 0G-7401 | OGC Tomcat localhost access log polls for OmniDomain and /ogc/ health. |
| 0G-7402 | java.io.FileNotFoundException when installing 3.15 patch 1. |
| 0G-7412 | Server Swagger API authentication shows 401 for primary/omniapi user. |



Omni-Gen 3.15 Cumulative Patch 2 Release Notes

Patches are cumulative, and as such, include content from all prior cumulative patches. Installing the latest cumulative patch installs the newly resolved issues and all fixes from prior patches for version 3.15.

In this chapter:

- Patch Release Information
- Patch Installation
- Post-Installation Activities
- Key Features
- Resolved Cases

Patch Release Information

Certified Editions:

- Omni-Gen Master Data Management Edition version 3.15
- Omni-Gen Data Quality Edition version 3.15

Certified DBs:

□ Microsoft SQL Server, Postgres, Oracle

If you require this patch for a database environment not listed above, contact iWay Customer Support for assistance. You are advised to move to the latest available release of the product, or at a minimum, to the latest available patch for the product and your environment. This enables iWay to quickly provide support and issue resolutions, in addition to you benefitting from the latest updates in the product.

Patch Installation

□ Download the Cumulative Patch 2 (omnigen-patch-patch-3.15-cumulative.134.jar) from the Information Builders Technical Support Center at:

https://techsupport.informationbuilders.com

I Ensure that all Omni Services are stopped and no data is being processed.

Backup the omnigen home directory.

- Backup the Omni-HealthData databases.
- **Q** Run the patch installer by executing the following command:

java -Dupgrade.dq -jar omnigen-patch-patch-3.15-cumulative.134.jar

The patch will also upgrade DQ Services to version 12.6.

Post-Installation Activities

1. Materialized View for Performance Improvement

In Postgres only, the OGC 360 Viewer is impacted by the number of remediation tickets in the system. This patch provides a performance improvement by creating a materialized view for the case_doc_xref table.

The performance improvement can be achieved in one of two ways:

□ Automatically create the materialized view for performance improvement.

If you do not already have a bundle deployed, after installing the patch, run Install/ Replace bundle to reset the environment. The Remediation database objects will be recreated and the create-case-doc-xref-materialized-view.sql will be run.

Manually run the steps to create the materialized view for performance improvement.

If you already have a bundle deployed, follow the steps in the create-case-doc-xrefmaterialized-view.sql to alter the view and gain the performance benefits.

- Drop the existing view.
- □ Create the materialized case_doc_xref view.
- Create the unique index.

Note: You can download create-case-doc-xref-materialized-view.sql from the Information Builders Technical Support Center at:

https://techsupport.informationbuilders.com

Key Features

The following are the key features in Omni-Gen Release 3.15 Cumulative Patch 2.

New Runtime Configuration Tab

A new Runtime Configuration tab was added to the Omni Console to allow you to configure the polling interval for some services. This can be used in high volume environments during data loads to minimize the strain on the database.

Ramp to Source Improvements

The following are new feature enhancements to Ramp to Source functionality.

NATIVE_SQL Not Recognizing Errors in Ramp to Source

When using NATIVE_SQL, it is recommended to run the quality gate service and fix errors and warnings before processing the batch.

Use of a User-Defined Hash Function

To enhance performance, if the Database Hash Function is set on the default database, this feature allows a user-defined database function to be used to generate the hash keys, instead of the default.

This alternate hash function will be used in ramp to source processing with NATIVE_SQL, in the CODES_PROCESS workorder, which inserts codes/sets that were not preloaded, and in migration scripts that are generated on deploy.

Performance Improvements for Default Hash Function

To optimize performance, the default hash function is now defined as IMMUTABLE and STRICT.

Resolved Cases

The following table lists the issues that are resolved in Version 3.15 Cumulative Patch 2.

| IRN Number | Summary |
|------------|---|
| 200707124 | OHD 3.11 GP performance with missing Source Codes, and missing xrefs. |
| 200713064 | Error in Remediation Portal in DEV. |
| 200714060 | Omni Governance Console (OGC) 360 Viewer slow response - Postgres. |
| 200814086 | Unresponsive console processing, work orders, and measures. |
| 200820038 | Reset subjects drops DQ tables for other subjects. |

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Omni-Gen Master Data Management (MDM) and Data Quality (DQ) Release Guide

Version 3.15

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