

## **TIBCO Omni-Gen®**

### TIBCO Omni-HealthData<sup>®</sup> Upgrade Guide

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### Upgrading Omni Server and Omni-HealthData Governance Console on Windows Platforms

This chapter describes how to upgrade the primary components of Omni-HealthData version 3.1 on Windows platforms.

#### In this chapter:

- Upgrading Omni Server
- Installing a New Version of Omni-HealthData Governance Console
- Deploying Your Current Production Bundle on the Upgraded Omni Server
- Upgrading Your Current Production Bundle
- Reinitializing Your WSO2 Identity Server Configuration
- Reinitializing Your MData in Omni-HealthData Governance Console

### **Upgrading Omni Server**

This section describes how to upgrade Omni Server, which consists of the following steps:

1. Backup your MData in Omni-HealthData Governance Console.

For more information, see *How to Backup Your MData in Omni-HealthData Governance Console* on page 6.

2. Backup configuration properties updated in the Omni Console.

For more information, see *How to Backup Configuration Properties Updated in the Omni Console* on page 6.

3. Stop all services and the controller.

For more information, see How to Stop All Services and the Controller on page 7.

4. Stop Omni-HealthData Governance Console (Apache Tomcat and WSO2 Identity Server).

For more information, see *How to Stop Omni-HealthData Governance Console (Apache Tomcat and WSO2 Identity Server)* on page 8.

5. Backup the Omni-HealthData Governance Console home directory.

For more information, see *How to Backup the Omni-Health Data Governance Console Home Directory* on page 9.

6. Backup the omnigen home directory.

For more information, see *How to Backup the Omnigen Home Directory* on page 9.

7. Backup Omni-HealthData databases.

For more information, see *How to Backup Omni-HealthData Databases* on page 9.

- Create the omnihealthdata\_upgrade and omnirepo\_upgrade databases.
   For more information, see How to Create the omnihealthdata\_upgrade and omnirepo\_upgrade Databases on page 9.
- 9. Download and install a new version of Omni-HealthData.

For more information, see *How to Download and Install a New Version of Omni-HealthData* on page 9.

### *Procedure:* How to Backup Your MData in Omni-HealthData Governance Console

1. Log on to Omni-HealthData Governance Console (OHDGC) to download metadata using your browser.

For example:

http://omnihealthdata.ibi.com:9090/ogc

2. Log on using the preauthorized WSO2 Identity Server local (primary) credentials.

For example:

- Username: **primary/super\_a**
- Password: **supera123**
- 3. Click Administration in the top menu, then select Download Metadata from the navigation bar.
- 4. Save the MData.xml file in the location where you store your backups.

### Backup Configuration Properties Updated in the Omni Console

This section describes how to backup configuration properties that have been updated in the Omni Console.

### *Procedure:* How to Backup Configuration Properties Updated in the Omni Console

1. Using your browser, open the Omni Console by entering the following URL:

https://yourhost.yourdomain.com:9500

For example:

https://omnihealthdata.ibi.com:9500

**Note:** You cannot use *localhost* in the URL. You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- 2. Log on using the following credentials:
  - Username: ibi
  - Password: ibi
- 3. Make a note of any properties that were updated in the Configuration section, which can be accessed in the left pane.
- 4. Navigate to the \omnihealthdata\properties directory.

For example:

C:\omni\product\omnihealthdata\properties

- 5. Update the corresponding properties in the *og\_configurations.properties* file based on any changes to the properties identified in step 3.
- 6. Save the og\_configurations.properties file.

### *Procedure:* How to Stop All Services and the Controller

- 1. Ensure that no work orders are currently running in the Omni Console.
- 2. Navigate to the OmniServer home directory.

For example:

C:\omni\product\omnihealthdata\omnigen\OmniServer

- 3. Open a command prompt window and type the following command to stop all services: omni stop-all
- 4. Upon successful notification that all services are stopped, enter the following command to stop the controller:

omni stop-controller

# *Procedure:* How to Stop Omni-HealthData Governance Console (Apache Tomcat and WSO2 Identity Server)

- 1. If Windows services are implemented:
  - a. Open the Windows Services manager.
  - b. Stop all services created by Omni-HealthData Governance Console (OHDGC).
     For example:

iWay\_ogc\_\*\_<current\_release>

- 2. If Windows Services are not implemented:
  - a. Navigate to the OHDGC installation directory.

For example:

 $\verb"C:\omni\product\omnihealthdata\ohdgc"$ 

b. Navigate to the location of the *tomcat.bat* file.

For example:

C:\omni\product\omnihealthdata\ohdgc\ogc\bin\ibi\

c. Open a command prompt, enter the following command, then press *Enter* to stop Apache Tomcat:

tomcatstop.exe

d. When Apache Tomcat has stopped, open the WSO2 Identity Server Management Console in a browser by entering the following URL:

https://yourhost.yourdomain.com:9443

For example:

https://omnihealthdata.ibi.com:9443

**Note:** You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- e. Log on using the following credentials:
  - Username: admin
  - Password: admin
- f. Click Shutdown/Restart in the Manage section of the left navigation panel.
- g. Click Graceful Shutdown to stop the WSO2 Identity Server.

### *Procedure:* How to Backup the Omni-Health Data Governance Console Home Directory

 Navigate to the *omnihealthdata* subdirectory where your base installation is located. For example:

C:\omni\product\omnihealthdata\

2. Rename the *ohdgc* directory to:

ohdgc\_project\_revision>

### *Procedure:* How to Backup the Omnigen Home Directory

1. Navigate to the *omnihealthdata* subdirectory where your base install is located.

For example:

C:\omni\product\omnihealthdata\

2. Rename the omnigen directory to:

omnigen\_<project\_revision>

### Procedure: How to Backup Omni-HealthData Databases

Upon successful shutdown of the WSO2 Identity Server, backup the corresponding *omnihealthdata* and *omnirepo* databases for the Omni-HealthData (OHD) environment you want to upgrade.

### *Procedure:* How to Create the omnihealthdata\_upgrade and omnirepo\_upgrade Databases

- 1. If the *omnihealthdata\_upgrade* database already exists, then drop this database.
- 2. Recreate the *omnihealthdata\_upgrade* database, following the same instructions found in the *Installation Prerequisites* section of the *Omni-HealthData*<sup>™</sup> *Installer User's Guide* for the *omnihealthdata* database.
- 3. If the *omnirepo\_upgrade* database already exists, then drop this database.
- 4. Recreate the *omnirepo\_upgrade* database, following the same instructions found in the *Installation Prerequisites* section of the *Omni-HealthData*<sup>™</sup> *Installer User's Guide* for the *omnirepo* database.

### Procedure: How to Download and Install a New Version of Omni-HealthData

- 1. Download the latest binary package (ohdbinarypackage\*bin.zip) from the Information Builders Technical Support Center (*http://techsupport.informationbuilders.com*).
- 2. Unzip the *ohdbinarypackage* into the *omnihealthdata* subdirectory where your base install is located.

For example:

C:\omni\product\omnihealthdata

3. Navigate to the omnihealthdata\properties subdirectory.

For example:

C:\omni\product\omnihealthdata\properties

- 4. Ensure that the memory settings in the *og\_configurations.properties* file reflect the current production settings from the Omni Console. If not, then you must update them.
- 5. If the og\_configurations\_upgrade.properties file does not exist, then create it by copying the og\_configurations.properties file, and saving it as og\_configurations\_upgrade.properties, after updating the following entries:

```
ogs.db.url=jdbc:sqlserver://<host>/omnihealthdata_upgrade;
    sendStringParametersAsUnicode=false
dq.db.url= jdbc:sqlserver://<host>/omnirepo_upgrade;
    sendStringParametersAsUnicode=false
hv.db.url= jdbc:sqlserver://<host>/omnihealthdata_upgrade;
    sendStringParametersAsUnicode=false
```

6. Navigate to the created *omnigen* home directory.

For example:

C:\omni\product\omnihealthdata\omnigen

7. Navigate to the sample\_configuration directory and compare the og\_configurations.properties file with the existing og\_configurations.properties file in the following subdirectory:

C:\omni\product\omnihealthdata\properties

If any new properties have been added to the file with your new release, manually copy them into both the following files and save them:

C:\omni\product\omnihealthdata\properties\og\_configurations.properties

```
C:\omni\product\omnihealthdata\properties
\og_configurations_upgrade.properties
```

- 8. Navigate back to the *omnigen* home directory.
- 9. Run the following configuration command:

omnigen configure -Dconfiguration.properties=C:\omni\product\
omnihealthdata\properties\og\_configuration\_upgrade.properties

### Installing a New Version of Omni-HealthData Governance Console

This section describes how to install a new version of Omni-HealthData Governance Console (OHDGC) on Windows platforms.

### Procedure: How to Install Omni-HealthData Governance Console

1. Navigate to the *omnigen* home directory.

For example:

C:\omni\product\omnihealthdata\omnigen

2. Navigate to the *omnihealthdatagc* directory.

For example:

 $\verb|C:\omni\product\omnihealthdata\omnigen\omnihealthdatagc||$ 

3. Right-click the OHDGCInstallerWindows.exe file, and select Run as administrator from the context menu.

The InstallAnywhere window opens, as shown in the following image.

nere	
InstallAnywhere is preparing to install	
68%	
	Cancel
	ere InstallAnywhere is preparing to install 68%

When the installation is ready, the Introduction pane opens, as shown in the following image.

🕙 Omni-HealthData Governance Co	onsole Setup		_		$\times$
			In	troduc	tion
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> <li>Install Windows Services</li> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation database U</li> </ul>	InstallAnywhere will guide you through the i Omni-HealthData Governance Console ver It is strongly recommended that you quit all continuing with this installation. Click the 'Next' button to proceed to the next change something on a previous screen, cl You may cancel this installation at any time button.	nstallatic sion 3.1. program : screen. lick the 'F by clickir	on of 4 If you Previo	ore want to us' buttor	ı.
InstallAnywhere Cancel		Previous		Nex	t

4. Click Next to continue.



The License Agreement pane opens, as shown in the following image.

5. Read the License Agreement, select the *I* accept the terms of the License Agreement check box, and then click Next.

🕙 Omni-HealthData Governance Co	onsole Setup —	· 🗆 X
	Choose	Install Folder
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> </ul>	Please choose a destination folder for this installation Where would you like to install?	1.
Install Windows Services	C:\omni\product\omnihealthdata\ohdgc	
<ul> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation database C</li> <li>Create Database Tables</li> </ul>	Restore Default Folder	Choose
InstallAnywhere Cancel	Previous	Next

The Choose Install Folder pane opens, as shown in the following image.

6. In the *Where would you like to install*? field, enter the location where you want to install Omni-HealthData Governance Console (OHDGC) components.

For example:

C:\omni\product\omnihealthdata\ohdgc

7. Click Next.

🕙 Omni-HealthData Governance C	onsole Setup	87		×
	Enter Om	nniGen H	Home fo	older
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> </ul>	Please select the OmniGen home folder. Please choose a folder:			
O Install Windows Services	C:\omni\product\omnihealthdata\omnigen			
<ul> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation database C</li> <li>Create Database Tables</li> </ul>	Restore Default F	older	Choose	
InstailAnywhere Cancel	P	revious	Nex	đ

The Enter OmniGen Home folder pane opens, as shown in the following image.

8. In the *Please choose a folder* field, enter (or browse to) the location you specified for the *omnigen* home folder, and then click *Next*.



The Choose Java Virtual Machine pane opens, as shown in the following image.

9. Ensure that the Java version selected is version 1.8 or higher, and then click Next.

🅙 Omni-HealthData Governance Co	onsole Setup			×
		Verify	host n	ame
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> <li>Install Windows Services</li> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> </ul>	Provide the host name	TCMAPPSA.ibi.com		
InstallAnywhere Cancel		Previous	Nex	đ

The Verify host name pane opens, as shown in the following image.

The default host name is this machine on which you are currently installing.

10. Enter the local host name in the designated field, and then click Next.

🕙 Omni-HealthData Governance Co	onsole Setup	– 🗆 X
		Tomcat Configuration
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> </ul>	Configure Tomcat	
<ul> <li>Install Windows Services</li> <li>Get Windows Service Na</li> </ul>	Server Shutdown Port	9005
<ul> <li>Remediation Service SMT</li> <li>Select Database Type</li> </ul>	Http Connector Port	9090
<ul> <li>Enter Database driver fold</li> <li>Remediation Database C</li> </ul>	AJP Connector Port	9009
Remediation Database C     Remediation Database C	Admin User Name	admin
O Remediation database: U O Create Database Tables	Admin Password	admin
InstallAnywhere Cancel		Previous

The Tomcat Configuration pane opens, as shown in the following image.

- 11. Verify the port values that are indicated by default and modify accordingly if required.
- 12. Click Next.

🕙 Omni-HealthData Governance Co	onsole Setup — 🗌	Х
	Install Windows Serv	ices
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> <li>Install Windows Services</li> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation database I.u</li> <li>Create Database Taples</li> </ul>	WSO2 and OGC's Tomcat components can both be run as either a Windows Service or as a Standalone Windows program in a Command prompt window. To run WSO2 & OGC's Tomcat as a Windows Service, select Yes below. • Yes • No	~
InstallAnywhere Cancel	Previous	t

The Install Windows Services pane opens, as shown in the following image.

- 13. Select Yes if you would like to have WSO2 and Apache Tomcat components for OHDGC installed as Windows services.
- 14. Click Next.

🕙 Omni-HealthData Governance Co	onsole Setup	<u> </u>		×
	Get Wi	indows Service	Name F	refix
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> <li>Install Windows Services</li> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> <li>Remediation database: U</li> <li>Create Database Tables</li> </ul>	Please choose Windows Service Windows Service Name Prefix	Name Prefix iWay_ogc		
InstallAnywhere Cancel		Previous	Ne	xt

The Get Windows Service Name Prefix pane opens, as shown in the following image.

If you selected to install WSO2 and Apache Tomcat components as Windows services, then, by default, *iWay\_ogc* is the prefix that will be used. You can specify a different prefix as required.

**Note:** It is recommended to append an identifier to the *iWay\_ogc* prefix that matches your Omni-HealthData release number (for example, \_314 or \_315). Older Windows services can then be easily identified and deleted as they are retired from use.

15. Click Next.

The Remediation Service SMTP Configuration pane opens, as shown in the following image.

🕙 Omni-HealthData Governance Co	onsole Setup		<u> (                                    </u>		×
	Remediation Serv	ice SMT	P Cor	nfigura	tion
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> <li>Install Windows Services</li> </ul>	Configure Remediation Service SMTP				
Get Windows Service Na	SMTP Host				
<ul> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> </ul>	SMTP Port Email Notification From				
Remediation Database C     Remediation Database C	SMTP Username				
Remediation Database C     Remediation database: U     Create Database Tables	SMTP SSL Enabled (true or false)				
InstallAnywhere Cancel	10000	Previou	IS	Nex	t

- 16. Leave the parameter values blank unless you want to configure SMTP for your remediation service, and then click *Next*.
- 17. To configure SMTP for your remediation service, provide values for the following parameters as they apply to your SMTP email server:
  - **SMTP Host.** Host name of your SMTP server (for example, *smtp.ibi.com*).
  - **SMTP Port.** SMTP port on that server (usually port 25).
  - **Email Notification From.** Email address from which the assignment email will originate (for example, *OmniGen\_Remediation@ibi.com*).
  - **SMTP Username.** User name for accessing the email server.
  - SMTP Password. Password associated with the user name for accessing the email server.

SMTP SSL Enabled (true or false). Specify *true* if your email server supports or requires SSL authentication.

In addition, each user who will receive email notifications must have a valid email address in their WSO2 Identity Server (WSO2 IS) user profile.

- Each LDAP user with the Data Steward or Data Supervisor role, and who will receive Assignment emails, must have a valid email address in their Active Directory profile. When it makes the LDAP connection, WSO2 IS will bring back those email addresses to its Local User Store profile of the user.
- Each hardcoded user in the WSO2 IS *Primary* domain must have an email in their WSO2 IS user profile.
- 18. Click Next to continue.

The Select Database Type pane opens, as shown in the following image.



19. Select the type of database from the list that you want to use with OHDGC, and then click *Next*.

🕙 Omni-HealthData Governance Co	onsole Setup	87		×
	Enter Da	tabase	driver fo	older
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> </ul>	Please choose a folder containing Database	drivers.		
Install Windows Services	C:\omni\product\omnihealthdata\jdbcjars			
<ul> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation database C</li> <li>Create Database Tables</li> </ul>	Restore Default F	Folder	Choose.	
InstallAnywhere Cancel	P	revious	Nex	t

The Enter Database driver folder pane opens, as shown in the following image.

20. Specify the location of your JDBC .jar file(s), and then click Next.

The Remediation Database Configuration pane opens for your selected database type, as shown in the following image.

Omni-HealthData Governance Console Setup		– 🗆 X
	Remediation Database	e Configuration: SQL Server
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> </ul>	Configure Remediation Databas	e
<ul> <li>Install Windows Services</li> <li>Get Windows Service Na</li> <li>Remediation Service SMT</li> </ul>	User Name Password	
<ul> <li>Select Database Type</li> <li>Enter Database driver fold</li> </ul>	Host	localhost
Remediation Database C	Port	1433
Remediation Database C Remediation Database C	Name	OG31a
Remediation database: U     Create Database Tables	Instance	
InstallAnywhere Cancel	1000	Previous Next

21. Review the information to ensure that it matches the corresponding entry in the *og\_configuration.properties* file.

The database name should be your existing production Remediation database name, for example, *OG31a*.

22. Click Next to continue.



The Remediation database: URL verification pane opens, as shown in the following image.

23. Specify the remediation database URL string that matches the corresponding entry in the *og\_configuration.properties* file, and then click *Next*.



The Create Database Tables pane opens, as shown in the following image.

24. Select No to not create the Remediation database tables, and then click Next.

**Note:** Since the remediation tables already exist, there is no need to create them. By selecting *No*, you will also preserve your existing remediation data.

If the database URL string that you specified is correct and your database is available, the Remediation Database Connection Test Passed pane opens, as shown in the following image.



25. Click Next to continue.



The Install User Audit Logging pane opens, as shown in the following image.

26. If you select Yes and click *Next*, you must specify port values for Elastic Search and Log Stash in the Application Logging pane, as shown in the following image.

🕙 Omni-HealthData Governance Co	onsole Setup	– 🗆 X
		Application Logging
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> <li>Install Windows Services</li> <li>Cat Windows Services Na</li> </ul>	Please choose Audit Logging Po	rt
<ul> <li>Get windows service Na</li> <li>Remediation Service SMT</li> <li>Select Database Type</li> <li>Enter Database driver fold</li> <li>Remediation Database C</li> </ul>	Elastic Search Http Port	9200
<ul> <li>Remediation Database C</li> <li>Remediation Database C</li> <li>Remediation database: U</li> <li>Create Database Tables</li> </ul>	Log Stash Http Port	8500
InstallAnywhere Cancel	1000	Previous

27. Click Next to continue.



The Install WSO2 pane opens, as shown in the following image.

28. Select Yes, and then click Next.

🕙 Omni-HealthData Governance Co	onsole Setup	– 🗆 X
	Gather WSO2 Key	Store parameters
<ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose Install Folder</li> <li>Enter OmniGen Home fol</li> <li>Choose Java Virtual Mach</li> <li>Verify host name</li> <li>Tomcat Configuration</li> </ul>	In this section the parameters for using the jav collected.	a key tool are
Install Windows Services	What is the address of your host?	TCMAPPSA.ibi.con
Get Windows Service Na	What is the name of your organizational unit?	ТСМ
Select Database Type	What is the name of your organization?	IBI
Enter Database driver fold     Remediation Database C	What is the name of your city or locality?	New York
Remediation Database C	What is the name of your state or province?	NY
Remediation Database C Remediation database: U	What is the two-letter country code for this unit	?US v
Create Database Tables	<	3
InstallAnywhere Cancel	Pre	evious Next

The Gather WSO2 Key Store parameters pane opens, as shown in the following image.

29. Collect the parameters to generate the certificate for WSO2 IS.

These parameters are used to build a unique certificate to secure the communication between Omni-HealthData Governance Console (OHDGC) and WSO2 Identity Server (IS). Ensure that the address of your host is correct (not *localhost*), and then enter values for the remaining parameters.

30. Click Next to continue.



The Pre-Installation Summary pane opens, as shown in the following image.

31. Review the installation settings that you specified for OHDGC and then click *Next* to continue.

The Ready To Install pane opens, indicating that the configuration for installation is complete, as shown in the following image.



32. Click Install to proceed with the installation.

The Installing Omni-HealthData Governance Console pane opens, which displays the progress of your OHDGC installation, as shown in the following image.



The Omni-HealthData Governance Console (OHDGC) installation is complete when the Install Complete pane is displayed, as shown in the following image.



33. Click Done.

### Deploying Your Current Production Bundle on the Upgraded Omni Server

This section describes how to deploy your current production bundle on the upgraded Omni Server.

### Procedure: How to Deploy Your Current Production Bundle on the Upgraded Omni Server

1. Navigate to the OmniServer home directory.

For example:

 $\verb|C:\omni\product\omni\healthdata\omni\gen\Omni\Server||$ 

2. Enter the following command to stop the controller:

omni start-controller

3. Using your browser, open the Omni Console by entering the following URL:

https://yourhost.yourdomain.com:9500

For example:

https://omnihealthdata.ibi.com:9500

**Note:** You cannot use *localhost* in the URL. You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- 4. Log on using the following credentials:
  - Username: ibi
  - Password: ibi
- 5. Deploy the bundle by clicking *Deployment* in the left pane.

The Deployment pane opens, with the message *Deployment Bundle Not found*, as shown in the following image.

ømniConsole ≡	C Deployme	ent	0	4
	🛎 Install Bundle			
📽 Services		A Deployment Bundle Not Found		^
差 Configuration 👻		Please click the Install Bundle button above to select a bundle for deployment		
Deployment				
E Processing -				
System Logs				
7 Testing <b>0</b>				
Consoles				
Operations				

6. Click Install Bundle.

The Open dialog box is displayed.

- 7. Navigate to the location of your current production deployment bundle file.
- 8. Select your current production deployment bundle file and click Open.
A blank Deployment Progress window opens, as shown in the following image.

Deployment Pro	ogress			
Operation	Status	Start Time	Elapsed Time	1

The Deployment Progress window will start to display information and progress during the whole deployment process, as shown in the following image.

Deployment Progress			
Operation	Status	Start Time	Elapsed Time
Bundle Deployment Started	Complete	2017-08-29 15:07:01.589	0.016
Clean deployment artifacts	Complete	2017-08-29 15:07:01.605	0.235
Copy Bundle	Complete	2017-08-29 15:07:01.855	0.016
Explode Bundle	Complete	2017-08-29 15:07:01.871	0.047
Copy bootstrap files	Complete	2017-08-29 15:07:01.933	0
Generate Effective IDS documents	Complete	2017-08-29 15:07:01.949	8.956
Generate IDS documentation	Complete	2017-08-29 15:07:10.905	0.956
Generate IDS Example OID's	Complete	2017-08-29 15:07:11.877	0.156
Generate XSD Schemas for the IDS documents	Complete	2017-08-29 15:07:12.048	0.25
Generate the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:314	0.533
Compile the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:849	1.187
Weave the JPA model for IDS documents	Complete	2017-08-29 15:07:14.036	1.986
Package the Omnigen Model jar	Complete	2017-08-29 15:07:16.038	0.28
Move OmniGen Bundle	Complete	2017-08-29 15:07:16.318	0.016
Move Cleansing Configuration	Complete	2017-08-29 15:07:16:350	0.124
Move Matching Configuration	Complete	2017-08-29 15:07:16:490	0.125

When the process is completed, a *successfully installed* message is displayed, as shown in the following image.

<b>%</b> mniConsole	≡	Deployment					A <sup>1</sup> (		8
		🛓 Replace Bundle 🕃 Upo	date Bundle	😃 Reset Enviro	nment				
📽 Services		✓ The bundle was successfully	installed						
差 Configuration 👻		Project Name	Project						
Deployment		Created By	IBI Om	ni Deployment					
Processing		Created Date							
System Logs		Release Number	0.0.0.A	pha.1					
F Testing (1)		Version	Project	0_0_0_Alpha_1_	181024163902				
Consoles		Installed Date	2018-10	)-24 02:52:00.000					
		Release Notes							
Operations		Data Source Subjects							
		Name		Data Source Id	Data Source Name	Data Source State	Created	r	Мо
		RDM_DataDictionaryMar	t_Template	86441187- abd4-49b0- ab2f- 6f209ab29a60	RDM_DataDictionaryMart_Template	NEW	2018-10- 24T16:27:20.27	1Z 2	201 241

# **Upgrading Your Current Production Bundle**

This section describes how to upgrade your current production bundle with the changes that are supplied with your upgrade.

# *Procedure:* How to Upgrade Your Current Production Bundle

1. Navigate to the location of the default deployment bundle file that ships with your upgrade.

The default bundle can be found in the *omnihealthdatabundle* folder under your *omnigen* home directory. For example:

 $\verb|C:\omni\product\omnihealthdata\omnigen\omnihealthdatabundle||$ 

- 2. Save the default bundle to the location where you manage your deployment bundles.
- 3. Replace the mastering folder in the default bundle with the mastering folder from your current production bundle.
- 4. Save the bundle according to your naming conventions as your upgraded production bundle.

# *Procedure:* How to Deploy Your Upgraded Production Bundle

1. Navigate to the *omnigen* home directory.

For example:

C:\omni\product\omnihealthdata\omnigen

2. Type the following command to stop the controller:

omni stop-controller

3. Run the following command, setting the server back to your production configuration:

omnigen configure -Dconfiguration.properties=C:\omni\product\
omnihealthdata\properties\og\_configuration.properties

4. Copy (backup) the following folders:

\omnigen\OmniServer\bundle
\omnigen\OmniServer\cmd
\omnigen\OmniServer\dbms

5. Copy the permanent iWay Data Quality Center (DQC) licenses from your backup to your new implementation.

\omnigen\OmniServer\mastering\runtime\license\_keys

6. Open a command prompt and enter the following command, then press *Enter*:

omni start-controller

**Note:** When installation has completed, a BUILD Successful message appears, but the startup process continues for a few minutes. You must wait for this process to complete before proceeding to the next step.

7. Using your browser, open the Omni Console by entering the following URL:

https://yourhost.yourdomain.com:9500

For example:

https://omnihealthdata.ibi.com:9500

**Note:** You cannot use *localhost* in the URL. You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- 8. Log on using the following credentials:
  - Username: ibi

Password: ibi

9. Deploy the bundle by clicking *Deployment* in the left pane.

The Deployment pane opens, with the Update Bundle option.

10. Click Update Bundle.

The Open dialog box is displayed.

- 11. Navigate to the location of your upgraded production deployment bundle file.
- 12. Select your deployment bundle file and click Open.

A blank Deployment Progress window opens, as shown in the following image.

Deployment Pro	gress			
Operation	Status	Start Time	Elapsed Time	1

The Deployment Progress window will start to display information and progress during the whole deployment process, as shown in the following image.

Deployment Progress			
Operation	Status	Start Time	Elapsed Time
Bundle Deployment Started	Complete	2017-08-29 15:07:01.589	0.016
Clean deployment artifacts	Complete	2017-08-29 15:07:01.605	0.235
Copy Bundle	Complete	2017-08-29 15:07:01.855	0.016
Explode Bundle	Complete	2017-08-29 15:07:01.871	0.047
Copy bootstrap files	Complete	2017-08-29 15:07:01.933	0
Generate Effective IDS documents	Complete	2017-08-29 15:07:01.949	8.956
Generate IDS documentation	Complete	2017-08-29 15:07:10.905	0.956
Generate IDS Example OID's	Complete	2017-08-29 15:07:11.877	0.156
Generate XSD Schemas for the IDS documents	Complete	2017-08-29 15:07:12.048	0.25
Generate the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:314	0.533
Compile the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:849	1.187
Weave the JPA model for IDS documents	Complete	2017-08-29 15:07:14.036	1.986
Package the Omnigen Model jar	Complete	2017-08-29 15:07:16:038	0.28
Move OmniGen Bundle	Complete	2017-08-29 15:07:16.318	0.016
Move Cleansing Configuration	Complete	2017-08-29 15:07:16:350	0.124
Move Matching Configuration	Complete	2017-08-29 15:07:16.490	0.125

When the process is completed, a *successfully installed* message is displayed, as shown in the following image.

<mark>%</mark> mniConsole ≡	Deployment			A <sup>1</sup>	0	4
	🛓 Replace Bundle 🛛 😳 Update Bundle	😃 Reset Environment				
📽 Services	The bundle was successfully installed					
🗲 Configuration 👻	Project Name Project					
Deployment	Created By IBI Om	ni Deployment				
III Processing -	Created Date					
System Logs	Release Number 0.0.0.A	lpha.1				_
Testing 0	Version Project	_0_0_0_Alpha_1_181024163902				
	Installed Date 2018-1	0-24 02:52:00.000				_
V Consules	Release Notes					
operations	Data Source Subjects					
	Name	Data Source Id Data Source Name	Data Source State	Created		Мо
	RDM_DataDictionaryMart_Template	86441187- abd4-49b0- ab2f- 6f209ab29a60	NEW	2018-10- 24T16:27:20.2	271Z	201 241

13. Start Omni Server and the related services by clicking Services in the left pane and then clicking Start All.

If the memory on your system is insufficient, you can also start each service one at a time. Start from the Utilities section and work upwards, as shown in the following image.

ømniConsole ≡	© Managed Services	A <sup>0</sup> 0 å
	► Start All Stop All C Restart All	
© Services		_
Configuration	Data Processing       Omni Server       OFF	N
Processing	Data Quality	
🖹 System Logs	Cleansing OFF O	N
Festing 1	Matching OFF 0	N
Consoles	Merging OFF 0	N
Operations	Remediation OFF 0	N
	Utilities	
	Elastic Index OFF O	N

- 14. After starting the Matching service for the first time, you must navigate to the repos\_<subject>\_wgid and repos\_<subject>\_wpk tables in the omnirepo database,
   and drop their corresponding indexes, as they are not required and will impact
   performance:
  - repos\_<subject>\_wgid\_ix0
  - repos\_<subject>\_wpk\_ix0

# Reinitializing Your WSO2 Identity Server Configuration

This section describes how to reinitialize your WSO2 Identity Server configuration.

# Procedure: How to Reinitialize Your WSO2 Configuration

1. Navigate to the following directory:

 $\verb|C:\omni\product\omnihealthdata\ohdgc\ogc\bin\tools||$ 

2. Replace the following wso2\_is folder with your backup copy of the wso2\_is folder: C:\omni\product\omnihealthdata\ohdgc\ogc\bin\tools\wso2\_is

# Reinitializing Your MData in Omni-HealthData Governance Console

This section describes how to reinitialize your MData in Omni-HealthData Governance Console (OHDGC).

# Procedure: How to Reinitialize Your MData in OHDGC

- 1. If Windows services are implemented:
  - 1. Open the Windows Services manager.
  - 2. Copy the properties for the following services from:

iWay\_ogc\_<old\_release>\_\*

to:

iWay\_ogc\_<new\_release>\_\*\_

3. Start the <new\_release> services:

For example:

iWay\_ogc\_<new\_release>\_\*

- Turn off the following properties for the <old\_release> services:
   iWay\_ogc
- 5. Remove the *<old\_release>* services at your convenience.

For example:

iWay\_ogc\_<old\_release>\_\*

- 2. If Windows services are not implemented:
  - Navigate to the Omni-HealthData Governance Console (OHDGC) installation directory. For example:

 $\verb|C:\omni\product\omnihealthdata\ohdgc||$ 

- 2. Navigate to the following subdirectory:
  - C:\omni\product\omnihealthdata\ohdgc\ogc\bin\ibi
- Enter the following command in the command prompt: ogcstart.exe
- 3. Navigate to the following directory:

C:\omni\product\omnihealthdata\ohdgc\ogc\bin\ibi

4. Log on to OHDGC and load the metadata using your browser.

For example:

http://omnihealthdata.ibi.com:9090/ogc

5. Log on using the preauthorized WSO2 Identity Server local (primary) credentials, which can be used to perform other startup actions until site-specific credentials and permissions are added.

For example:

- Username: primary/super\_a
- Password: **supera123**

The Upload Metadata pane opens, as shown in the following image.

Administration	n fel en sin fersen en fel en en en sen fel en sin fel en sen et sen en en sen sen sen sen sen sen sen s	ds_a (Data Steward, group.one,
	<ul> <li>Upload Metada</li> </ul>	ta
Please uplo	ad metadata XML, file to initialize source, tables, col	lumns and other components.
	Choose File No file chosen	Upload
	Validate after upload	

6. Click Choose File and navigate to the following folder:

<OHDGCInstall\_Dir>\ogc\bin\ibi\mdata

For example:

 $\verb|C:\omni\product\omnihealthdata\ogc\bin\ibi\mdata|$ 

- 7. Select the MData.xml file.
- 8. Ensure that the Validate after upload check box is selected, then click Upload.

OHDGC opens and displays the 360 Viewer page, as shown in the following image.

360 Viewer Remed	liation Administration	a particular de la construcción de		and some	super_a (Data Super	risor, group.one, System	Admin	istrator) Lo	gout	0 -
360Viewer	CustomerMaster 👻	Advanced Search								
CustomerMaster ①									Linking	9
Showing 0 of 0 records. Num	ber of records per page 20	•							- 44	
Id 0	First Name	Last Name 0	Gender	0	Date Of Birth	Full Name	٥	Issues	A	ctions
No data available in table										
Showing 0 of 0 records. Num	ber of records per page 20	•							44.4	4 <b>F</b> IF

Omni Server and OHDGC are now upgraded and ready for use.



# Upgrading Omni Server and Omni-HealthData Governance Console on Linux Platforms

This chapter describes how to upgrade the primary components of Omni-HealthData version 3.1 on Linux platforms.

#### In this chapter:

- Upgrading Omni Server
- Installing a New Version of Omni-HealthData Governance Console
- Deploying Your Current Production Bundle on the Upgraded Omni Server
- Upgrading Your Current Production Bundle
- Reinitializing Your WSO2 Identity Server Configuration
- Reinitializing Your MData in Omni-HealthData Governance Console

# **Upgrading Omni Server**

This section describes how to upgrade Omni Server, which consists of the following steps:

1. Backup your MData in Omni-HealthData Governance Console.

For more information, see *How to Backup Your MData in Omni-HealthData Governance Console* on page 48.

2. Backup configuration properties updated in the Omni Console.

For more information, see *How to Backup Configuration Properties Updated in the Omni Console* on page 48.

3. Stop all services and the controller.

For more information, see How to Stop All Services and the Controller on page 49.

4. Stop Omni-HealthData Governance Console (Apache Tomcat and WSO2 Identity Server).

For more information, see *How to Stop Omni-HealthData Governance Console (Apache Tomcat and WSO2 Identity Server)* on page 49.

5. Backup the Omni-HealthData Governance Console home directory.

For more information, see *How to Backup the Omni-HealthData Governance Console Home Directory* on page 50.

6. Backup the omnigen home directory.

For more information, see *How to Backup the Omnigen Home Directory* on page 50.

7. Backup Omni-HealthData databases.

For more information, see *How to Backup the Omni-HealthData Databases* on page 51.

- Create the omnihealthdata\_upgrade and omnirepo\_upgrade databases.
   For more information, see How to Create the omnihealthdata\_upgrade and omnirepo\_upgrade Databases on page 51.
- 9. Download and install a new version of Omni-HealthData.

For more information, see *How to Download and Install a New Version of Omni-HealthData* on page 51.

# *Procedure:* How to Backup Your MData in Omni-HealthData Governance Console

1. Log on to Omni-HealthData Governance Console (OHDGC) to download metadata using your browser.

For example:

http://omnihealthdata.ibi.com:9090/ogc

2. Log on using the preauthorized WSO2 Identity Server local (primary) credentials.

For example:

- Username: primary/super\_a
- Password: **supera123**
- 3. Click Administration in the top menu, then select Download Metadata from the navigation bar.
- 4. Save the MData.xml file in the location where you store your backups.

#### Backup Configuration Properties Updated in the Omni Console

This section describes how to backup configuration properties that have been updated in the Omni Console.

#### *Procedure:* How to Backup Configuration Properties Updated in the Omni Console

1. Using your browser, open the Omni Console by entering the following URL:

https://yourhost.yourdomain.com:9500

For example:

https://omnihealthdata.ibi.com:9500

**Note:** You cannot use *localhost* in the URL. You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- 2. Log on using the following credentials:
  - Username: ibi
  - Password: ibi
- 3. Make a note of any properties that were updated in the Configuration section, which can be accessed in the left pane.
- 4. Navigate to the */omnihealthdata/properties* directory.

For example:

data/omni/product/omnihealthdata/properties

- 5. Update the corresponding properties in the *og\_configurations.properties* file based on any changes to the properties identified in step 3.
- 6. Save the og\_configurations.properties file.

#### *Procedure:* How to Stop All Services and the Controller

- 1. Ensure that no work orders are currently running in the Omni Console.
- 2. Navigate to the OmniServer home directory.

For example:

/data/omni/product/omnihealthdata/omnigen/OmniServer

3. Open a terminal window and type the following command to stop all services:

./omni.sh stop-all

4. Upon successful notification that all services are stopped, enter the following command to stop the controller:

./omni.sh stop-controller

# *Procedure:* How to Stop Omni-HealthData Governance Console (Apache Tomcat and WSO2 Identity Server)

1. Navigate to the OHDGC installation directory.

For example:

/data/omni/product/omnihealthdata/ohdgc

2. Navigate to the location of the tomcatstop.sh file.

For example:

/data/omni/product/omnihealthdata/ohdgc/ogc/bin/ibi/

3. Open a terminal window, enter the following command, then press *Enter* to stop Apache Tomcat:

./tomcatstop.sh

4. When Apache Tomcat has stopped, open the WSO2 Identity Server Management Console in your browser by entering the following URL:

https://yourhost.yourdomain.com:9443

For example:

https://omnihealthdata.ibi.com:9443

**Note:** You must use the appropriate protocol (HTTP or HTTPS) as specified in the server.runtime.http-protocol property of the og\_configuration.properties file.

- 5. Log on using the following credentials:
  - Username: admin
  - Password: admin
- 6. Click Shutdown/Restart in the Manage section of the left navigation panel.
- 7. Click Graceful Shutdown to stop the WSO2 Identity Server.

#### *Procedure:* How to Backup the Omni-HealthData Governance Console Home Directory

1. Navigate to the *omnihealthdata* subdirectory where your base installation is located. For example:

/data/omni/product/omnihealthdata

2. Rename the *ohdgc* directory to:

ohdgc\_project\_revision>

#### *Procedure:* How to Backup the Omnigen Home Directory

 Navigate to the *omnihealthdata* subdirectory where your base installation is located. For example:

#### /data/omni/product/omnihealthdata

2. Rename the *omnigen* directory to:

omnigen\_<project\_revision>

# Procedure: How to Backup the Omni-HealthData Databases

Upon successful shutdown of the WSO2 Identity Server, backup the corresponding *omnihealthdata* and *omnirepo* databases for the Omni-HealthData (OHD) environment you want to upgrade.

#### *Procedure:* How to Create the omnihealthdata\_upgrade and omnirepo\_upgrade Databases

- 1. If the omnihealthdata\_upgrade database already exists, then drop this database.
- 2. Recreate the *omnihealthdata\_upgrade* database, following the same instructions found in the *Installation Prerequisites* section of the *Omni-HealthData*<sup>™</sup> *Installer User's Guide* for the *omnihealthdata* database.
- 3. If the *omnirepo\_upgrade* database already exists, then drop this database.
- 4. Recreate the *omnirepo\_upgrade* database, following the same instructions found in the *Installation Prerequisites* section of the *Omni-HealthData*<sup>™</sup> *Installer User's Guide* for the *omnirepo* database.

# Procedure: How to Download and Install a New Version of Omni-HealthData

- 1. Download the latest binary package (ohdbinarypackage\*bin.tar) from the Information Builders Technical Support Center (*http://techsupport.informationbuilders.com*).
- 2. Unzip the *ohdbinarypackage* into the *omnihealthdata* subdirectory where your base install is located.

For example:

/data/omni/product/omnihealthdata

3. Navigate to the omnihealthdata/properties subdirectory.

For example:

/data/omni/product/omnihealthdata/properties

- 4. Ensure that the memory settings in the *og\_configurations.properties* file reflect the current production settings from the Omni Console. If not, then you must update them.
- 5. If the og\_configurations\_upgrade.properties file does not exist, then create it by copying the og\_configurations.properties file, and saving it as og\_configurations\_upgrade.properties, after updating the following entries:

ogs.db.url=jdbc:postgresql://localhost:5432/omnihealthdata\_upgrade
dq.db.url=jdbc:postgresql://localhost:5432/omnirepo\_upgrade
hv.db.url=jdbc:postgresql://localhost:5432/omnihealthdata\_upgrade

6. Navigate to the created *omnigen* home directory.

For example:

/data/omni/product/omnihealthdata/omnigen

7. Navigate to the *sample\_configuration* directory and compare the *og\_configurations.properties* file with the existing *og\_configurations.properties* file in the following subdirectory:

/data/omni/product/omnihealthdata/properties

If any new properties have been added to the file with your new release, manually copy them into the following files and save them both:

/data/omni/product/omnihealthdata/properties/ og\_configurations.properties

/data/omni/product/omnihealthdata/properties/
og\_configurations\_upgrade.properties

- 8. Navigate back to the *omnigen* home directory.
- 9. Run the following configuration command:

```
./omnigen.sh configure -Dconfiguration.properties=/data/omni/product/
omnihealthdata/properties/og_configuration_upgrade.properties
```

# Installing a New Version of Omni-HealthData Governance Console

This section describes how to install a new version of Omni-HealthData Governance Console (OHDGC) on Linux platforms.

#### *Procedure:* How to Upgrade Omni-HealthData Governance Console

1. Navigate to the *omnigen* home directory.

For example:

/data/omni/product/omnihealthdata/omnigen

2. Navigate to the omnihealthdatagc directory.

For example:

/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc

3. Enter the following command to run OHDGC installer in console mode:

./OHDGCInstallerLinux\*.bin

OHDGC installer starts and displays the Introduction pane, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc - 🛛 🗙
File Edit View Search Terminal Help
Omni-HealthData Governance Console (created with InstallAnywhere)
                          . . . . . . . . . . .
Preparing CONSOLE Mode Installation...
Introduction
. . . . . . . . . . .
InstallAnywhere will guide you through the installation of Omni-HealthData
Governance Console version 3.1.4
It is strongly recommended that you guit all programs before continuing with
this installation.
Respond to each prompt to proceed to the next step in the installation. If
you want to change something on a previous step, type 'back'.
You may cancel this installation at any time by typing 'quit'.
PRESS <ENTER> TO CONTINUE:
```

4. Press Enter to continue.

The License Agreement Terms and Conditions pane opens, as shown in the following image.

root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc \_\_\_\_\_ п × File Edit View Search Terminal Help agreed to parameters included on the applicable order form. In the event the Licensee is acquiring a permanent license from an authorized IBI Reseller, the conversion to a permanent license shall be authorized upon Licensee submitting to PRESS <ENTER> TO CONTINUE: Reseller and Reseller accepting a mutually agreed to order form. In such instances, Licensee understands that the license granted by Reseller is contingent upon IBI receiving payment from Reseller. The Licensee's use of a license granted by the Reseller shall be subject to the licensing parameters set forth on the applicable order form and Licensee understands that it shall be permitted to use the software solely in conjunction with the Reseller's applications. A license acquired from a Reseller shall be subject to the terms of this agreement until such time as an applicable end user license agreement is entered into with Reseller. The Reseller shall be solely responsible for providing first line maintenance support during the period Licensee subscribes to maintenance services from Reseller. DO YOU ACCEPT THE TERMS OF THIS LICENSE AGREEMENT? (Y/N): Y

- 5. Read the terms of the license agreement and continue to press *Enter* until you reach the last section of the license agreement.
- 6. Enter *Y* to accept the terms of the license agreement and then and press *Enter* to continue.

The Choose Install Folder pane opens, as shown in the following image.

root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc	-	×
File Edit View Search Terminal Help		
on the applicable order form and Licensee understands that it shall be permitted to use the software solely in conjunction with the Reseller's applications. A license acquired from a Reseller shall be subject to the terms of this agreement until such time as an applicable end user license agreement is entered into with Reseller. The Reseller shall be solely responsible for providing first line maintenance support during the period Licensee subscribes to maintenance services from Reseller.		
DO YOU ACCEPT THE TERMS OF THIS LICENSE AGREEMENT? (Y/N): Y		
Choose Install Folder		
Where would you like to install?		
Default Install Folder: /root/iWay_OGC		
ENTER AN ABSOLUTE PATH, OR PRESS <enter> TO ACCEPT THE DEFAULT : /data/omni/product/omnihealthdata/ogc</enter>		

7. Enter the desired installation location (for example, /data/omni/product/omnihealthdata/ ohdgc), and then press Enter to continue.

A prompt to confirm the path is displayed, as shown in the following image.

root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc	-	×
File Edit View Search Terminal Help		
Reseller shall be subject to the terms of this agreement until such time as an applicable end user license agreement is entered into with Reseller. The Reseller shall be solely responsible for providing first line maintenance support during the period Licensee subscribes to maintenance services from Reseller.		
DO YOU ACCEPT THE TERMS OF THIS LICENSE AGREEMENT? (Y/N): Y		
Choose Install Folder		 -
Where would you like to install?		
Default Install Folder: /root/iWay_OGC		
ENTER AN ABSOLUTE PATH, OR PRESS <enter> TO ACCEPT THE DEFAULT : /data/omni/product/omnihealthdata/ogc</enter>		
INSTALL FOLDER IS: /data/omni/product/omnihealthdata/ogc IS THIS CORRECT? (Y/N): Y		

8. Select Y to confirm and then press *Enter* to continue.

The Enter Omnigen home folder pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc _ □ ×
File Edit View Search Terminal Help

Choose Install Folder
Where would you like to install?
Default Install Folder: /root/iWay_OGC
ENTER AN ABSOLUTE PATH, OR PRESS <ENTER> TO ACCEPT THE DEFAULT
: /data/omni/product/omnihealthdata/ogc
INSTALL FOLDER IS: /data/omni/product/omnihealthdata/ogc
IS THIS CORRECT? (Y/N): Y

Finter Omnigen home folder

Please select the OmniGen home folder.
Enter the location of your omnigen home directory (Default: /root/omnigen)
: /data/omni/product/omnihealthdata/omnigen
```

9. Enter the location of your *omnigen* home directory (for example, /data/omni/product/ omnihealthdata/omnigen), and then press *Enter* to continue.

The Choose Java Virtual Machine pane opens, as shown in the following image.

10. Ensure that the Java version located is version 1.8 or higher, and then press *Enter* to continue.

The Verify host name pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc _ □ ×
File Edit View Search Terminal Help

Choose Java Virtual Machine
Please choose a Java VM for use by the installed application
->1- /usr/java/jdk1.8.0_144/bin/java
2- /usr/bin/java
ENTER THE NUMBER FOR THE JAVA VM, OR PRESS <ENTER> TO ACCEPT THE
CURRENT SELECTION: 1
Unable to install the Java Virtual Machine included with this installer.
Verify host name
Enter requested information
Enter the local host name (Default: omnihealthdata.ibi.com):
```

11. Change the local host name or accept the default value specified in the og\_configuration\_update.properties file, and then press Enter to continue.

The Tomcat Configuration pane opens, as shown in the following image.



12. Verify the default ports, user name, and password, or modify the parameters accordingly, and then press *Enter* to continue.

The Remediation Service SMTP Configuration pane opens, as shown in the following image.



- 13. Leave the parameter values blank unless you are adding an email option.
  - a. To enable the email option, provide values for the following parameters as they apply to your SMTP email server:
    - **SMTP Host.** Host name of your SMTP server (for example, *smtp.ibi.com*).
    - **SMTP Port.** SMTP port on that server (usually port 25).
    - **Email Notification From.** Email address from which the assignment emails will originate (for example, *OmniGen\_Remediation@ibi.com*).
    - **SMTP Username.** User name for accessing the email server.
    - SMTP Password. Password associated with the user name for accessing the email server.
    - SMTP SSL Enabled (true or false). Specify *true* if your email server supports or requires SSL authentication.
  - b. Press Enter to continue.

In addition, each user who will receive email notifications must have a valid email address in their WSO2 Identity Server (WSO2 IS) user profile.

- Each LDAP user with the Data Steward or Data Supervisor role, and who will receive Assignment emails, must have a valid email address in their Active Directory profile. When it makes the LDAP connection, WSO2 IS will bring back those email addresses to its Local User Store profile of the user.
- Each hardcoded user in the WSO2 IS Primary domain must have an email in their WSO2 IS user profile.
- 14. Press Enter to continue.

The Select Database Type pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc _ 🛛 🗙
File Edit View Search Terminal Help
SMTP Username (Default: ):
SMTP Password (Default: ):
SMTP SSL Enabled (true or false) (Default: ):
 Select Database Type
     . . . . . . . . . . . .
Enter requested information
    1- DB2
    2- Oracle
   3- Postgres
    4- SalServer - Microsoft Driver
   5- SqlServer - OpenSource jTDS Driver
    6- Teradata
ENTER THE NUMBER OF THE DESIRED CHOICE: 3
```

15. Select the appropriate database type, and then press Enter.

The Enter Database driver path pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc - 🛛 🗙
File Edit View Search Terminal Help
Enter requested information
   1- DB2
  2- Oracle
  3- Postgres
  4- SqlServer - Microsoft Driver
  5- SqlServer - OpenSource jTDS Driver
  6- Teradata
ENTER THE NUMBER OF THE DESIRED CHOICE: 3
Enter Database driver path
Enter requested information
Enter the location of your database driver directory (Default: ): /data/omni/pro
duct/omnihealthdata/jdbcjars
```

16. Specify the location of your JDBC .jar file(s) and then press Enter.

The Remediation Database Configuration pane opens, as shown in the following image.



17. Ensure that the Name parameter points to your omnihealthdata database connection.

The Remediation database: URL Verification pane opens, as shown in the following image.

root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc - 
File Edit View Search Terminal Help
Enter requested information
User Name (Default: ): postgres
Password (Default: ): postgres
Host (Default: localhost):
Port (Default: 5432):
Name (Default: 0G31a): omnihealthdata
Remediation database: URL verification
Test or edit the Remediation database URL
Remediation database URL (Default:
jdbc:postgresql://localhost:5432/omnihealthdata):

18. Press Enter to continue.

The Create Database Tables pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc -
                                                    0 X
File Edit View Search Terminal Help
Remediation database: URL verification
Test or edit the Remediation database URL
Remediation database URL (Default:
 jdbc:postgresql://localhost:5432/omnihealthdata):
Create Database Tables
 Do you want to create database tables?
 ->1- Yes
  2- No
ENTER THE NUMBER FOR YOUR CHOICE. OR PRESS <ENTER> TO ACCEPT THE DEFAULT: 1
```

19. Specify *No* to create the tables for the Remediation database, and then press *Enter* to continue.

**Note:** It is extremely important that you select *No* so that your existing database is preserved.

The following image shows test connection results for the specified database.

root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc \_ 🛛 🗙 File Edit View Search Terminal Help Create Database Tables Do you want to create database tables? ->1- Yes 2- No ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO ACCEPT THE DEFAULT: 1 Remediation Database Connection Test Passed Remediation Connection to jdbc:postgresql://localhost:5432/omnihealthdata succeeded PRESS <ENTER> TO CONTINUE:

20. Press Enter to continue.

The Install User Audit Logging and Install WSO2 pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc _ □ ×
File Edit View Search Terminal Help
Install User Audit Logging
Install User Audit Logging?
1- Yes
->2- No
ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO ACCEPT THE DEFAULT:
Install WS02?
->1- Yes
2- No
ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO ACCEPT THE DEFAULT:
Do you want to install WS02?
->1- Yes
2- No
ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO ACCEPT THE DEFAULT:
```

21. Specify 2 - No where prompted to install User Audit Logging, 1 - Yes where prompted to install WSO2, and then press *Enter* to continue.

The Gather WSO2 Key Store parameters pane opens, as shown in the following image.

22. Verify the default for the address of the host, populate appropriate entries for the other prompts, and then press *Enter* to continue.

The Ready To Install pane opens, as shown in the following image.

```
root@omnihealthdata:/data/omni/product/omnihealthdata/omnigen/omnihealthdatagc _ 📮
                                                                        ×
File Edit View Search Terminal Help
   jdbc:postgresql://localhost:5432/omnihealthdata
User Audit Logging Enabled
   false
Install WS02?
   t rue
PRESS <ENTER> TO CONTINUE:
Ready To Install
. . . . . . . . . . . . . . . .
InstallAnywhere is now ready to install Omni-HealthData Governance Console
version 3.1.4 onto your system at the following location:
  /data/omni/product/omnihealthdata/ogc
PRESS <ENTER> TO INSTALL:
```

23. Press Enter to begin the installation.

Allow the process to complete, at which point, the Installation Complete pane will be displayed, as shown in the following image.



24. Press Enter to exit OHDGC installer.

# Deploying Your Current Production Bundle on the Upgraded Omni Server

This section describes how to deploy your current production bundle on the upgraded Omni Server.

#### Procedure: How to Deploy Your Current Production Bundle on the Upgraded Omni Server

1. Navigate to the OmniServer home directory.

For example:

/data/omni/product/omnihealthdata/omnigen/OmniServer

2. Enter the following command to stop the controller:

./omni.sh start-controller

3. Using your browser, open the Omni Console by entering the following URL:

https://yourhost.yourdomain.com:9500

For example:

https://omnihealthdata.ibi.com:9500

**Note:** You cannot use *localhost* in the URL. You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- 4. Log on using the following credentials:
  - Username: ibi
  - Password: ibi
- 5. Deploy the bundle by clicking *Deployment* in the left pane.

The Deployment pane opens, with the message *Deployment Bundle Not found*, as shown in the following image.

ømniConsole ≡	C Deployment		0	4
	🛓 Install Bundle			
Services	A Deployment Bundle Not Fou	und		^
差 Configuration 👻	Please click the Install Bundle button above to select a bundle for dep	loyment		
Deployment				
Processing				
System Logs				
7 Testing <b>0</b>				
Consoles				
Operations				

6. Click Install Bundle.

The Open dialog box is displayed.

- 7. Navigate to the location of your current production deployment bundle file.
- 8. Select your current production deployment bundle file and click Open.

A blank Deployment Progress window opens, as shown in the following image.

Deployment Progress						
Operation	Status	Start Time	Elapsed Time			

The Deployment Progress window will start to display information and progress during the whole deployment process, as shown in the following image.

Deployment Progress					
Operation	Status	Start Time	Elapsed Time		
Bundle Deployment Started	Complete	2017-08-29 15:07:01.589	0.016		
Clean deployment artifacts	Complete	2017-08-29 15:07:01.605	0.235		
Copy Bundle	Complete	2017-08-29 15:07:01.855	0.016		
Explode Bundle	Complete	2017-08-29 15:07:01.871	0.047		
Copy bootstrap files	Complete	2017-08-29 15:07:01.933	0		
Generate Effective IDS documents	Complete	2017-08-29 15:07:01.949	8.956		
Generate IDS documentation	Complete	2017-08-29 15:07:10.905	0.956		
Generate IDS Example OID's	Complete	2017-08-29 15:07:11.877	0.156		
Generate XSD Schemas for the IDS documents	Complete	2017-08-29 15:07:12.048	0.25		
Generate the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12.314	0.533		
Compile the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:849	1.187		
Weave the JPA model for IDS documents	Complete	2017-08-29 15:07:14.036	1.986		
Package the Omnigen Model jar	Complete	2017-08-29 15:07:16.038	0.28		
Move OmniGen Bundle	Complete	2017-08-29 15:07:16.318	0.016		
Move Cleansing Configuration	Complete	2017-08-29 15:07:16:350	0.124		
Move Matching Configuration	Complete	2017-08-29 15:07:16.490	0.125		

When the process is completed, a *successfully installed* message is displayed, as shown in the following image.

Ø,	omniConsole ≡	Deployment					A <sup>1</sup>	0	4
		🛓 Replace Bundle 🛛 🕄 Update E	Bundle	එ Reset Enviro	nment				
¢\$	Services	V The bundle was successfully install	led						
p	Configuration 💌	Project Name	Project						
Ø	Deployment	Created By I	IBI Omni	Deployment					
⊞	Processing -	Created Date							
B	System Logs	Release Number (	0.0.0.Alp	ha.1					
4	Testing <b>0</b>	Version I	Project_	0_0_0_Alpha_1_	181024163902				
,	Consolos	Installed Date 2	2018-10-	-24 02:52:00.000					_
42	Consoles	Release Notes							
æ	Operations	Data Source Subjects							
		Name		Data Source Id	Data Source Name	Data Source State	Created		Мо
		RDM_DataDictionaryMart_Ter	mplate	86441187- abd4-49b0- ab2f- 6f209ab29a60	RDM_DataDictionaryMart_Template	NEW	2018-10- 24T16:27:20	.271Z	201 241

# **Upgrading Your Current Production Bundle**

This section describes how to upgrade your current production bundle with the changes that are supplied with your upgrade.

# Procedure: How to Upgrade Your Current Production Bundle

1. Navigate to the location of the default deployment bundle file that ships with your upgrade.

The default bundle can be found in the *omnihealthdatabundle* folder under your *omnigen* home directory. For example:

 $\label{eq:label_label} \label{eq:label_label} $$ data omniproduct omnihealth data omniproduct of the label{label} and the label{label$ 

- 2. Save the default bundle to the location where you manage your deployment bundles.
- 3. Replace the mastering folder in the default bundle with the mastering folder from your current production bundle.
- 4. Save the bundle according to your naming conventions as your upgraded production bundle.

#### *Procedure:* How to Deploy Your Upgraded Production Bundle

1. Navigate to the *omniserver* home directory.

For example:

/data/omni/product/omnihealthdata/omnigen/OmniServer

2. Type the following command to stop the controller:

./omni.sh stop-controller

3. Run the following command, setting the server back to your production configuration:

./omnigen.sh configure -Dconfiguration.properties=/data/omni/product/ omnihealthdata/properties/og\_configuration.properties

4. Copy (backup) the following folders:

/omnigen/OmniServer/bundle /omnigen/OmniServer/cmd /omnigen/OmniServer/dbms

5. Copy the permanent iWay Data Quality Server (DQS) licenses from backup to your new implementation.

/omnigen/OmniServer/mastering/runtime/license\_keys

6. Open a terminal window and enter the following command, then press Enter:

./omni.sh start-controller

**Note:** When installation has completed, a BUILD Successful message appears, but the startup process continues for a few minutes. You must wait for this process to complete before proceeding to the next step.

7. Using your browser, open the Omni Console by entering the following URL:

https://yourhost.yourdomain.com:9500

For example:

https://omnihealthdata.ibi.com:9500

**Note:** You cannot use *localhost* in the URL. You must use the appropriate protocol (HTTP or HTTPS) as specified in the *server.runtime.http-protocol* property of the *og\_configuration.properties* file.

- 8. Log on using the following credentials:
  - Username: ibi
  - Password: ibi
- 9. Deploy the bundle by clicking *Deployment* in the left pane.

The Deployment pane opens, with the Update Bundle option.

10. Click Update Bundle.

The Open dialog box is displayed.

- 11. Navigate to the location of your upgraded production deployment bundle file.
- 12. Select your deployment bundle file and click Open.

A blank Deployment Progress window opens, as shown in the following image.

peration	Status	Start Time	Elapsed Time

The Deployment Progress window will start to display information and progress during the whole deployment process, as shown in the following image.

Deployment Progress					
Operation	Status	Start Time	Elapsed Time		
Bundle Deployment Started	Complete	2017-08-29 15:07:01.589	0.016		
Clean deployment artifacts	Complete	2017-08-29 15:07:01.605	0.235		
Copy Bundle	Complete	2017-08-29 15:07:01.855	0.016		
Explode Bundle	Complete	2017-08-29 15:07:01.871	0.047		
Copy bootstrap files	Complete	2017-08-29 15:07:01.933	0		
Generate Effective IDS documents	Complete	2017-08-29 15:07:01.949	8.956		
Generate IDS documentation	Complete	2017-08-29 15:07:10.905	0.956		
Generate IDS Example OID's	Complete	2017-08-29 15:07:11.877	0.156		
Generate XSD Schemas for the IDS documents	Complete	2017-08-29 15:07:12:048	0.25		
Generate the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:314	0.533		
Compile the JPA Model for the IDS documents	Complete	2017-08-29 15:07:12:849	1.187		
Weave the JPA model for IDS documents	Complete	2017-08-29 15:07:14:036	1.986		
Package the Omnigen Model jar	Complete	2017-08-29 15:07:16:038	0.28		
Move OmniGen Bundle	Complete	2017-08-29 15:07:16:318	0.016		
Move Cleansing Configuration	Complete	2017-08-29 15:07:16:350	0.124		
Move Matching Configuration	Complete	2017-08-29 15:07:16.490	0.125		

When the process is completed, a *successfully installed* message is displayed, as shown in the following image.

<mark>%</mark> mniConsole ≡	Composition Compos				0	4
	🛓 Replace Bundle	😃 Reset Environment				
📽 Services	✓ The bundle was successfully installed					
🗲 Configuration 👻	Project Name Project					
Deployment	Created By IBI Omni	Deployment				
Processing	Created Date					
🖹 System Logs	Release Number 0.0.0.Alp	ha.1				_
Y Testing 0	Version Project_0	0_0_0_Alpha_1_181024163902				
	Installed Date 2018-10-	24 02:52:00.000				_
Onestiene	Release Notes					
Operations	Data Source Subjects					
	Name	Data Source Id Data Source Name	Data Source State	Created		Мо
	RDM_DataDictionaryMart_Template	86441187- abd4-49b0- ab27- RDM_DataDictionaryMart_Template 6f209ab29a60	NEW	2018-10- 24T16:27:20.2	!71Z	201 241
- 13. After starting the Matching service for the first time, you must navigate to the repos\_<subject>\_wgid and repos\_<subject>\_wpk tables in the omnirepo database, and drop their corresponding indexes, as they are not required and will impact performance:
  - repos\_<subject>\_wgid\_ix0
  - repos\_<subject>\_wpk\_ix0

## **Reinitializing Your WSO2 Identity Server Configuration**

This section describes how to reinitialize your WSO2 Identity Server configuration.

#### *Procedure:* How to Reinitialize Your WSO2 Configuration

1. Navigate to the following directory:

/data/omni/product/omnihealthdata/ohdgc/ogc/bin/tools

2. Replace the following wso2\_is folder with your backup copy of the wso2\_is folder: /data/omni/product/omnihealthdata/ohdgc/ogc/bin/tools/wso2\_is

## Reinitializing Your MData in Omni-HealthData Governance Console

This section describes how to reinitialize your MData in Omni-HealthData Governance Console (OHDGC).

### Procedure: How to Reinitialize Your MData in OHDGC

To reinitialize your MData in OHDGC:

1. Navigate to the following directory:

/data/omni/product/omnihealthdata/ohdgc/ogc/bin/ibi

2. Enter the following command in a terminal window, and press Enter:

./ogcstart.sh

3. Log on to Omni-HealthData Governance Console (OHDGC) and load the metadata using your browser.

For example:

http://omnihealthdata.ibi.com:9090/ogc

4. Log on using the preauthorized WSO2 Identity Server local (Primary) credentials, which can be used to perform other startup actions until site-specific credentials and permissions are added.

For example:

- Username: **primary/super\_a**
- Password: **supera123**

The Upload Metadata pane opens, as shown in the following image.

n na siya na manana na mangana sa na na na sa	ds_a (Data Steward, group.one,							
<ul> <li>Upload Metadata</li> </ul>								
Please upload metadata $\lambda ML$ file to initialize source, tables, columns and other components.								
Choose File No file chosen	Upload							
Validate after upload								
	Upload Me  d metadata XML file to initialize source, to  Choose File No file chosen  Validate after upload							

- 5. Click Choose File and navigate to the folder where your backed up MData was saved.
- 6. Select the <Saved\_MData>.xml file.
- 7. Ensure that the Validate after upload check box is selected, then click Upload.

OHDGC opens and displays the 360 Viewer page, as shown in the following image.

360 Viewer	Remed	ation Administ	ration					super_	a (Data Supervi	isor, group.one, S	ystem Admini	istrator) I	ogout	0
360View	ver	CustomerMas	ter 💌	Advanced Search										
CustomerMaster ①														
Showing 0 of 0 records. Number of records per page 20 •														
Id	0	First Name	0	Last Name	0	Gender	0	Date Of Bin	h °	Full Name	0	Issues	٨	ctions
No data available in table														
Showing 0 of 0 rec	ords. Numb	er of records per page	20 •										-44	4 1- 10-

Omni Server and OHDGC are now upgraded and ready for use.

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