

# Kony Fabric

# Sync Services Console User Guide

Release V8

#### **Document Relevance and Accuracy**

This document is considered relevant to the release stated on this title page and the document version stated on the Revision History page.

Remember to always view and download the latest document version relevant to the software release you are using.

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# **Revision History**

Date	Document Version	Description of Modifications/Release
09/08/2017	1.0	Document updated for release V8.
		Worked on rebranding of MobileFabric to Kony Fabric.

#### 1. Preface

*Important:* Important: Legacy Sync has been <u>deprecated from Quantum Fabric V8 SP4</u> and support for the same is not available. From Quantum Visualizer V9 onwards, you cannot create a legacy sync based client application. However, the existing legacy sync based apps will continue to work. The new applications that need offline and sync capabilities must use the <u>Offline Objects</u> feature.

Kony Fabric Sync Console provides a single point of control for monitoring and configuring the Kony Fabric Sync console creation process. It includes data integration, storage, and analysis resulting in reduced training time, manual work, and upholding standard operating procedures.

#### 1.1 Purpose

This document provides instructions for monitoring and configuring the Kony Fabric Sync Console.

#### 1.2 Intended Audience

This document is intended for Kony Fabric Sync Administrators and Report Viewers who are responsible for monitoring and configuring the Kony Fabric Sync Console. We assume that the reader of this document is familiar with diagnosing issues at run time and also monitoring the system performance.

## 1.3 Formatting Conventions

The following typographical conventions are used throughout the document:

Click here

Conventions	Explanation		
Monospace	<ul> <li>User input text, system prompts, and responses</li> </ul>		
	■ File path		
	■ Commands		
	■ Program code		
	■ File Names.		
Italic	■ Emphasis		
	■ Names of books, and documents		
	■ New terminology.		
Bold	■ Windows		
	■ Menus		
	■ Buttons		
	■ Icons		
	■ Fields		
	■ Tabs		
	■ Folders.		
URL	Active link to a URL.		
Note	Provides helpful hints or additional information.		
Important	Highlights actions or information that might cause problems to systems or data.		

# 1.4 Contact us

We welcome your feedback on our documentation. Write to us at <a href="techpubs@kony.com">techpubs@kony.com</a>. For technical questions, suggestions, comments or to report problems on Kony product line, contact support@kony.com.

# 2. Sync Console

The Sync Console provides the ability to monitor and configure Kony Fabric Sync Framework. It provides an easy-to-use web-based user interface for diagnosing issues at run-time and monitor the system performance.

#### 2.1 Modules

The following modules are available in the Sync Console.

- Login
- Analytics Dashboard
- User Management
- Role based Access
- Application Management
- Device Management
- Configuration
- Monitoring
- Scheduled Jobs

# 2.2 Pagination

If the number of applications is more than 10, you can use **Next** or **Previous** links to move to more applications. You may change the number of applications to view by selecting from the drop-down corresponding to **Page**.



# 2.3 Functional Flow

The following depicts the functional flow of Kony Fabric Sync Console:

- 1. Open Kony Fabric Sync Console.
- 2. Login as Kony Fabric Sync Administrator.
- 3. Go to **User Management** tab > **Users** > Create a user.
- 4. Go to **User Management** tab > **Groups** > Create a group.
- 5. Go back to **User Management** tab > **Users** > Assign the created group to the user.
- 6. Go back to **User Management** tab > **Users** > Assign the registered device to the user.
- 7. Go to <u>Configurations</u> > <u>Sync Configurations</u> tab > to upload SyncConfig.xml file for adding an application.
- 8. Go to **User Management** tab > **Groups** > Assign the Application to the group.
- 9. Go to **User Management** tab > **Authentication** > Add Authentication.
- 10. Go to Configurations > Sync Configuration tab > Assign Authentication to the Application
- 11. Go to **Monitoring** tab to view:
  - a. <u>Synchronization</u> tab: The time taken for each service like Upload, Download and Authenticate with respect to combination of User, Device and Application.
  - b. <u>Synchronization Performance</u> tab: The average time taken for each service like Upload,
     Download and Authenticate with respect to combination of User, Device and Application.
  - c. <u>Merge Service</u> tab: The status of the records that were merged into data source based on the conflict resolution policy (Server Wins / Client Wins) defined in SyncConfig.xml

file.

- d. Replica Service tab: The records downloaded while performing synchronization from the data source to client are stored in Replica database (Server side) when persistent sync is used as sync strategy. These records appear on this tab.
- e. <u>Upload Queue</u> tab: The records uploaded while performing synchronization from the client to data source are stored in Upload Queue database (Server side) when persistent sync is used as sync strategy. These records appear on this tab.
- f. <u>Conflicts</u> tab: The records uploaded from client may conflict with the server records, these conflicts appear on this tab. You can view Client Record, Server Record and Merged Record. The Merge is based on the conflict resolution policy (Server Wins / Client Wins) defined in SyncConfig.xml file.
- g. <u>Security Audit</u> tab: The changes that the client makes are updated at Enterprise Data Source server.
- h. <u>Change Replay</u> tab: The series of actions like insert, update that the client performs on a particular record are replayed at data source end. These series of actions per request appear on this tab.
- 12. Go to Config tab to view configuration details of the system where the application is deployed.
- 13. Go to **Schedule Jobs** tab >
  - a. Schedule Jobs To view all the default jobs mapped to your application.
  - b. **Jobs History** To view Jobs history details
- 14. Go to Logs tab >
  - a. <u>Trace Log</u> To view Request and response data between the clients and Enterprise
     Data source Server for a particular Application, User, Device, and Time combination.

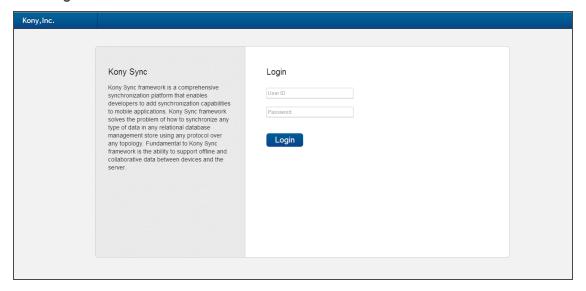
- b. <u>Sync Services Log</u> To view the various levels of Kony Fabric Sync Server Services and Kony Fabric Sync Management Console log data like DEBUG, INFO, and ERROR on UI.
- c. <u>Sync Console Log</u> To view the various levels of sync Management Console log data like DEBUG, INFO, and ERROR on UI.
- 15. Go to <u>Analytics Dashboard</u> tab To view the system performance based on various criteria for a selected duration of time interval. The Reports that you can view are:
  - a. Upload versus Replica
  - b. Sync Errors versus Conflicts
  - c. Avg Download Response Time
  - d. Avg Upload Response Time

# 3. Login

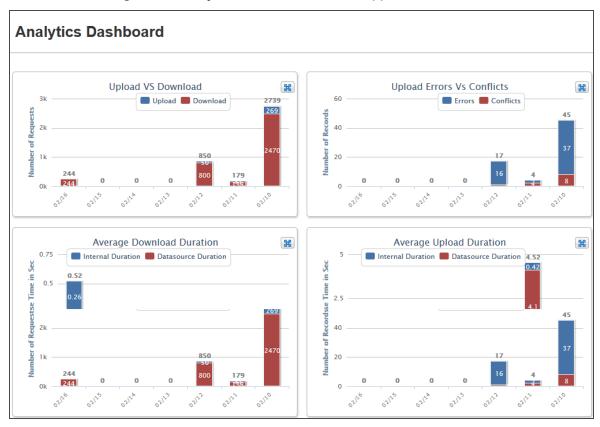
Kony Fabric Sync Console provides ability to login to the application using the credentials provided. Various users can login to the Management Console as Kony Fabric Sync Admin, User, and Report Viewer.

#### To login to the Kony Fabric Sync Console, follow these steps:

- 1. Navigate to http://<IP address of the machine on which console is installed>/syncconsole. The Kony Fabric Sync Console login window appears.
- 2. Enter the **User ID** and **Password**. These details are delivered along with the product Kony provided.
- 3. Click Login.

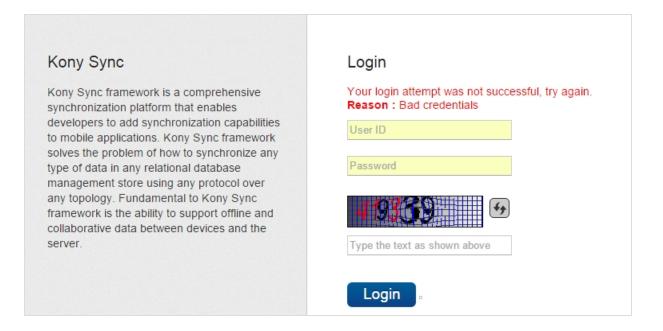


4. After successful logon, the Analytics Dashboard screen appears.



*Note:* You cannot view the graphs when the respective tabs are not populated with data.

5. **Captcha Implementation**: In Sync Console login page, a captcha image is added after three consecutive failed login attempts to avoid brute-force attack.



**Note:** By default, the size of captcha image is six letters.

#### 3.1 Role Based Access

Kony Fabric Sync Console application restricts access to the modules based on the user login. The system controls access privileges of the application features based on the login role. There are two user login roles: **Admin User** and **Report Viewer**. You can login to the application based on your role. You can categorize and assign role for each user as needed.

- Admin User: The admin user can access all the modules in the Management Console.
- Report Viewer: Report viewers can access only Monitoring Modules.

#### 3.2 Log out

Click Log out from top right corner of the screen to log out from Kony Fabric Sync Console.

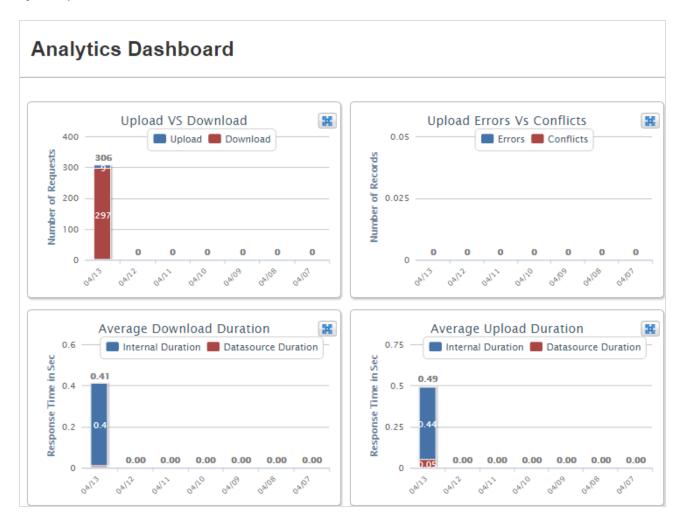


Sync Services

*Note:* The logout option is available in all the screens of the application.

# 4. Analytics Dashboard

**Analytics Dashboard** is the landing page of the application. This feature enables you to view the system performance based on various criteria for a selected duration of time interval.

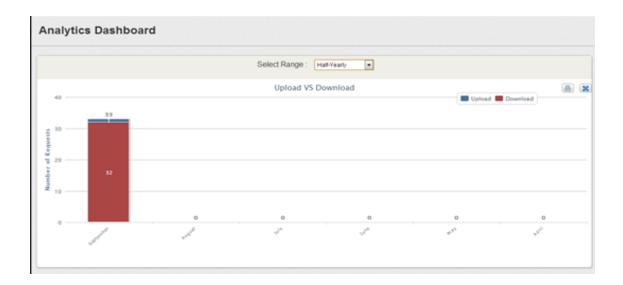


The four different reports that you can view are:

- Upload versus Replica
- Number of Sync Errors versus Conflicts
- · Avg Download Response Time
- · Avg Upload Response Time

By clicking the Maximize button on any given report, the drop-down for choosing **period** appears as shown. You can view the data on a weekly, monthly, half-yearly and yearly basis.

*Note:* You cannot view the graphs when the respective tabs are not populated with data.



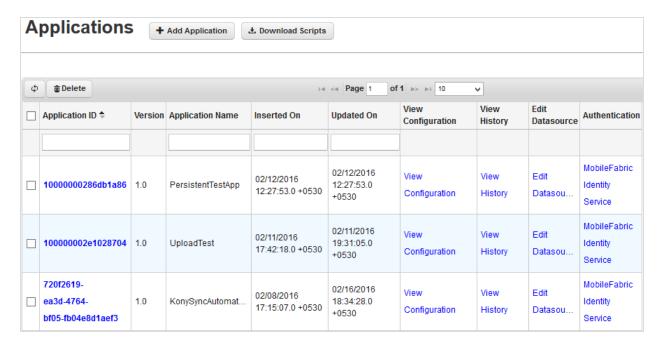
# 5. Configuration

The Configuration feature of Kony Fabric Sync Console enables you to view the configuration settings. The configuration details are divided into the following sections. Each section displays the settings related to the section.

- Sync Configurations
- Runtime Configuration
- Environment Details

# 5.1 Sync Configuration

The **Sync Configuration** section enables you to perform various tasks such as viewing an application and its configuration file, adding, editing and deleting an application.



Following actions can be performed in this screen:

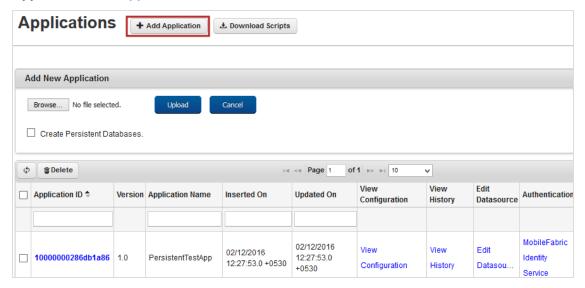
- Add Application
- View Configuration
- Change Configuration
- Delete Application
- Edit Datasources
- Assign Authentication Profile to Application
- Generate Upload and Replica DB Scripts
- Pagination

#### 5.1.1 Add Application

Kony Fabric Sync Console enables you to add an application when needed.

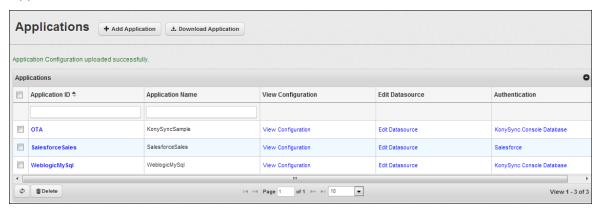
To add an application, follow these steps:

 Click Add Application to add a new application in the Applications screen. The Add New Application view appears.



Click Browse to get the configuration file and then click Upload.
 After successfully uploading the configuration file, a confirmation message, Application
 Configuration uploaded successfully appears. The added application appears under the

#### Applications list.



#### 5.1.2 View Configuration

You can view the configuration file to know about the various configurations.

Click **View Configuration** link of the Application ID column. The configuration file for the selected Application ID appears.

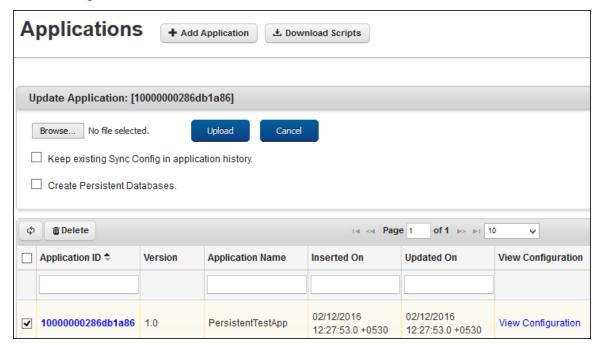
```
12:27:44" Version="5ffe50cde0ab3f4728fed9a251b51652705fb808e0918e277393cc6ec3cff154"
PersistentDBType="ORACLE">
-<SyncScopes>
  - <SyncScope Name="s1" Datasource="222" Strategy="PersistentSync">
    -< Change Tracking Policy>
       <Type>datasource</Type>
      - < Change Tracking Columns Supported>
         <LastUpdateTimeStamp>true</LastUpdateTimeStamp>
         <SoftDeleteFlag>true</SoftDeleteFlag>
       </ChangeTrackingColumnsSupported>
     </ChangeTrackingPolicy>
    -<ConflictPolicy>
       <Type>clientwins</Type>
     </ConflictPolicy>
     <Operations/>
    - SyncObject IntersectionTable="false" Generated="false" SourceName="country" GlobalName="country"
     SourceSchema="advocate">
      -<SyncAttributes>
        -<Key>
           <a href="CountryID"/>
         <SyncAttribute SourceName="CountryID" GlobalName="CountryID" Type="integer"</p>
         IsNullable="false" Length="10" Autogenerated="true"/>
         <SyncAttribute SourceName="SoftDeleteFlag" GlobalName="SoftDeleteFlag" Type="boolean"</p>
         IsNullable="true" Length="0" Autogenerated="false"/>
```

#### 5.1.3 Change Configuration

Kony Fabric Sync Console provides you an option to change the configuration file when needed.

To change the configuration file of an application, follow these steps:

 Click the desired Application ID. The Edit Application view appears with an option to browse for the configuration file.



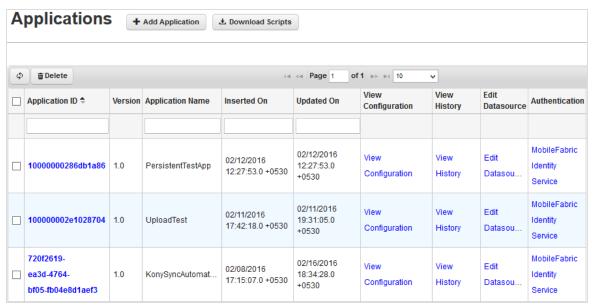
- Click Browse to browse the required new configuration file and click Upload. After the successful update, a confirmation message, Updated the Application successfully appears.
- 3. Click **Cancel** to abort the operation.

#### 5.1.4 Delete Application

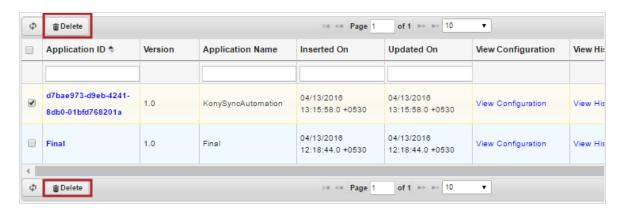
You can either delete a single application or multiple applications.

To delete an application, follow these steps:

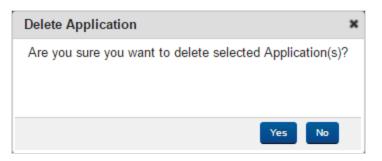
1. On Kony Fabric Sync Console, under **Configurations**, click the **Sync Configurations** tab to view the list of applications available.



2. Click an Application ID checkbox to delete and click Delete.

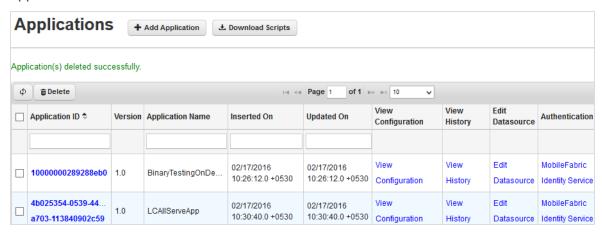


3. A confirmation message, Are you sure you want to delete selected Application(s)? appears:



4. Click **Yes** to delete the selected application.

After successful deletion, a confirmation message, **Application(s) deleted successfully** appears.

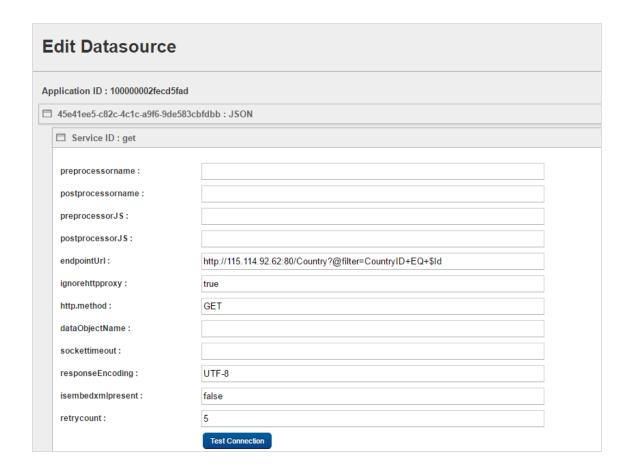


#### 5.1.5 Edit DataSources

Kony Fabric Sync Console provides you an option to edit the datasources of a sync console application.

To edit the datasources of an application, follow these steps:

Click Edit DataSources of the desired application from the list of applications displayed. The
Edit DataSource dialog appears with an option to update the connection parameters. You can
use the same page to modify all the supported datasources such as Middleware Database or
Web service Endpoint.



- You can test the latency and connectivity during customer ticket debugging by providing the valid database details and clicking on Test Connection. A message will be displayed as Test Connection Successful.
- 3. Click **Update** to update the modifications.
- 4. Click Reset to reset the updated changes.
- 5. Click Cancel to abort the operation.

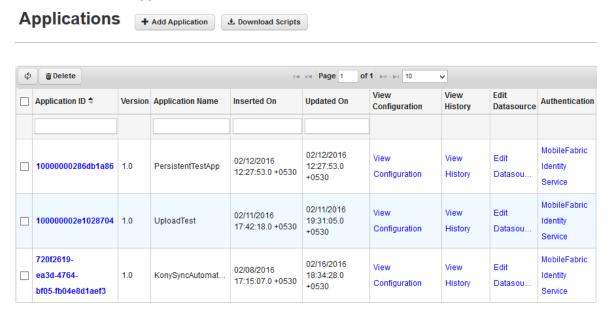
#### 5.1.6 Assign Authentication Profile to Application

Kony Fabric Sync Console provides you an option to assign Authentication profiles (created in **User Management > Authentication** tab) to an application.

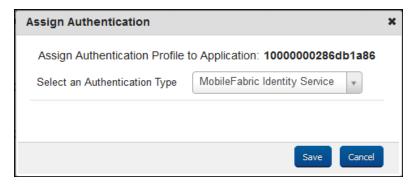
*Note:* You may refer to Authentication for detail information on authentication.

To assign or change the authentication profile of an application, follow these steps:

1. On Kony Fabric Sync Console, under **Configurations**, click the **Sync Configurations** tab to see the list of available applications.



Click the hyperlink under Authentication column of the desired application.
 The Assign Authentication dialog appears.



3. Select an authentication type from the authentication types drop-down and click Save.

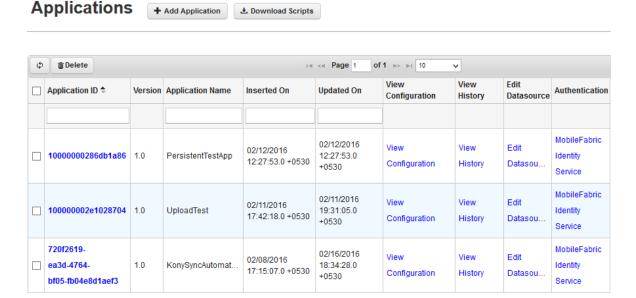
*Note:* In Kony Sync 5.0, you should assign custom authentication as mentioned in <u>Custom Authentication Manager</u>.

#### 5.1.7 Generate Upload and Replica DB Scripts

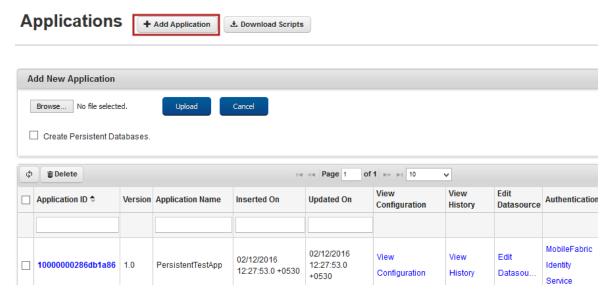
Kony Fabric Sync Console provides you an option to generate upload and replica DB scripts while adding the application itself.

To create the DB scripts, while adding the application, follow these steps:

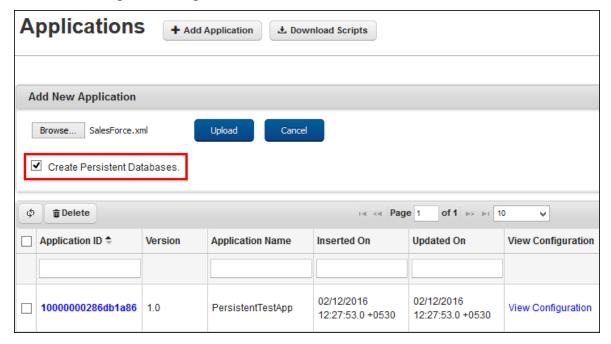
1. On Kony Fabric Sync Console, under **Configurations**, click the **Sync Configurations** tab to see the list of available applications.



2. Click Add Application to add a new application. The Add New Application view appears.

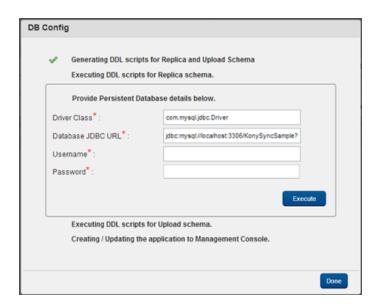


3. Click **Browse** to get the configuration file.

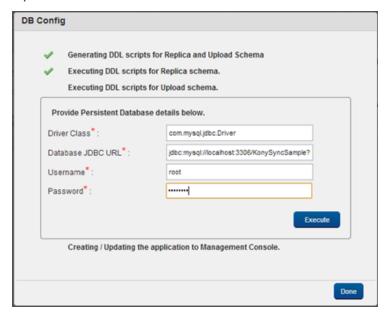


4. Select the Create Persistent Databases checkbox and then click Upload.

The next screen shows the configuration details that are captured from the configuration file:



 Enter the username and password of the database and click Execute for both Replica and Upload schema.



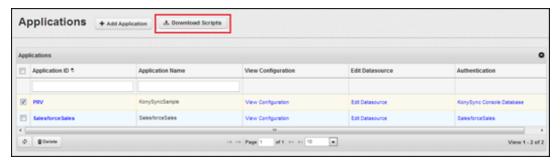
After the successful uploading of DB scripts, a confirmation message, **Updated the Application successfully** appears.

6. Click Done.

The added application appears in the grid.



7. To download DB scripts, you can select the application and click **Download Scripts**.



**Note:** You can download only those applications that are added using the **Create Persistent Databases** checkbox.

## 5.2 Runtime Configuration

The runtime configuration details of Kony Fabric Sync Console enables you to view the configuration settings. The configuration details are divided into the following sections:

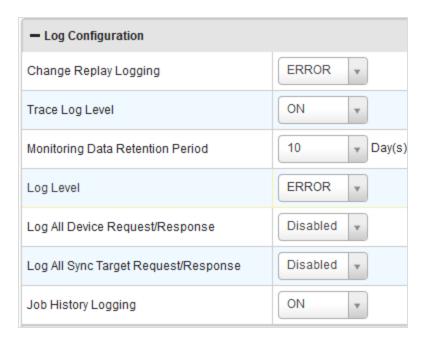
- Log Configuration
- Sync Services Properties
- Server Async Properties (Tomcat)
- Persistent Database Configuration
- Persistent Connection Pool Properties

- Enterprise Connection Pool Properties
- Scheduler Properties
- Http Proxy Properties
- Sync Console Properties

Each section displays the related settings.

#### 5.2.1 Log Configuration

The **Log Configuration** section displays the general configuration settings of an application. You can modify the settings of each feature displayed from the drop-down list using the available options. The following image displays different options in the **Log Configuration** section.



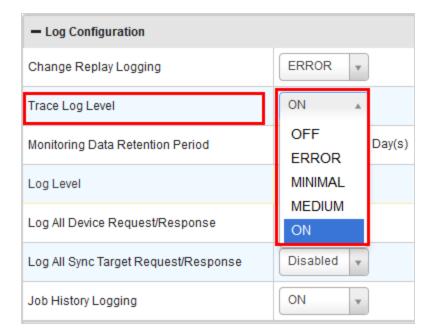
You can configure the following features in the section.

Change Replay Logging: The change replay logging allows you to configure log levels for the
 Change replay tab. The options to configure this feature are:

- ON: Select the option to log all the change replay actions.
- OFF: Select the option to disable logging on the Change replay tab.
- ERROR: Select the option to display only error logs on the Change replay tab.

Note: By default, Change Replay Logging is configured to ERROR.

 Trace Log Level: The trace log feature helps you to track logs that appear on the trace logs screen. The options to configure this feature are:

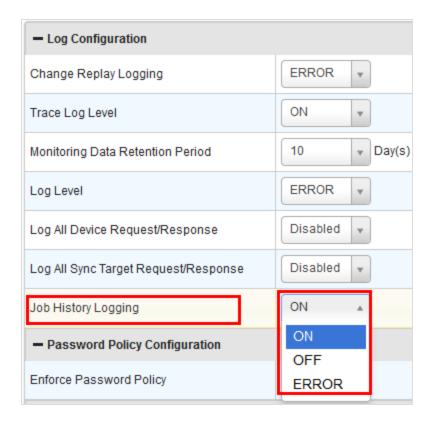


- OFF: Set the feature to OFF, to disable the application from capturing the logs.
- ERROR: When you select the option, the trace log entries are only error logs.
- MINIMAL: When you select this option, only the trace log entries only with the status (Success / Failed) are logged. The request/response headers and payloads are not logged.
- MEDIUM: When you select this option, only the trace log entries with request/response headers are logged.

ON: You can set the feature to ON from the drop-down list, to capture all the logs.

**Note:** By default, the feature is set to **OFF**. To capture the logs in the <u>Logs</u> module, you should set this feature to **ON**. For more information on Trace Logs, refer <u>Trace</u> Log section.

- Monitoring Data Retention Period: You can define the number of days to retain the data that
  appears on the Monitoring tab.
- Log Level: You can set the levels of log4j logging by selecting the following options from the drop-down list. You can also disable log level by selecting the option OFF.
  - TRACE: Select the option to set the log4j log level to log all the traces .
  - **DEBUG**: Select the option to set the log4j log level to log all the debug entries.
  - INFO: Select the option to set the log4j log level to log the "INFO" tagged logs.
  - WARN: Select the option to set the log4j log level to log all the warnings.
  - **ERROR**: Select the option to set the log4j logs level to log all the errors.
  - FATAL: Select the option to set the log4j log level to log all the fatal errors.
- Log All Device Request/Response: Set the option to Enabled to log all the device request/response. Select Disabled to disable this feature.
- Log All Sync Request/Response: This feature logs all the sync request/response by selecting
   Enabled from the drop-down. You can disable this feature by selecting Disabled.
- Job History Logging: The Job History Logging feature helps you to set the log level of the job history screen. The following options are available to set the feature from the Configuration screen.

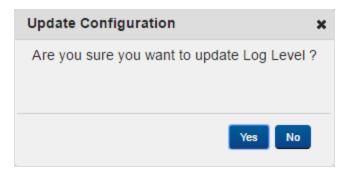


 ON: Select the option from the drop-down list to log the job history from the <u>Scheduled</u> <u>Jobs</u> window.

Note: By default, the job history logging feature is set to ON.

- OFF: Select the option to disable the job history logging.
- **ERROR**: Select the option to log the errors in the job history.

Upon updating each property the following pop-up window is displayed.



• Click Yes to auto save the property changes. Otherwise, click No.

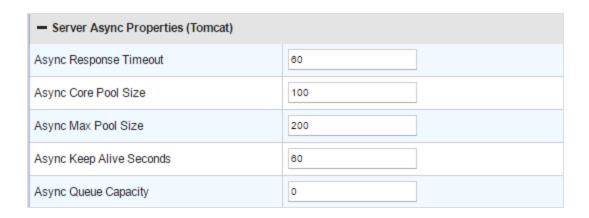
### 5.2.2 Sync Service Properties

This section displays the properties of Sync Services.



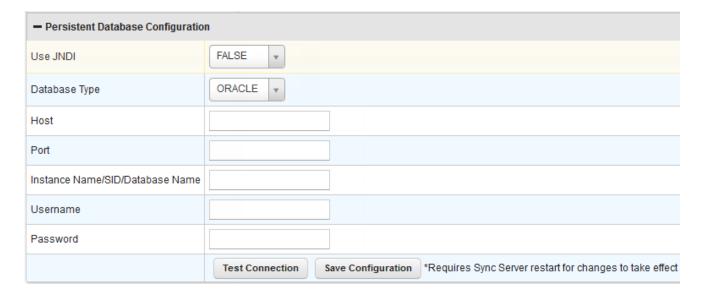
## 5.2.3 Server Async Properties (Tomcat)

This section displays the Async properties of Sync on Tomcat server.



### 5.2.4 Persistent Database Configuration

The Persistent Database Configuration section contains details about persistent database.



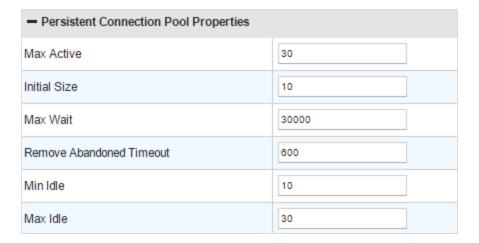
- The Use JNDI field is configured as FALSE always. To configure as TRUE, configure JNDI Datasources as jdbc/<appid>\_UploadQueue and jdbc/<appid>\_Replica for persistent sync configurations in the syncservice.properties file.
- Select the required database type, MSSQLSERVER/ MYSQLIORACLE/ DB2/POSTGRESS
  from the Database Type drop-down. Enter the required details in Host, Port, Instance
  Name/SID/Database Name (if required), Username and Password.
- Click Test Connection to verify the connection details.

• Click **Save Configuration** to save all the properties.

Note: Restart Kony Fabric Sync Server for the changes to take effect.

### 5.2.5 Persistent Connection Pool Properties

This section displays the properties of the persistent connection pool.



# 5.2.6 Enterprise Connection Pool Properties

This section displays the properties of an enterprise connection pool.

- Enterprise Connection Pool Properties	
Max Active	30
Initial Size	10
Max Wait	30000
Remove Abandoned Timeout	600
Min Idle	10
Max Idle	30

# 5.2.7 Scheduler Properties

This section displays the properties of a scheduler.

- Scheduler Properties	
JobStore Driver Delegate Class	org.quartz.impl.jdbcjobstor
Scheduler Instance Name	SyncScheduler
JobStore Class	org.quartz.impl.jdbcjobstor
Thread Class	org.quartz.simpl.SimpleThr
Thread Count	12
Thread Priority	5
Job Store Clustered	
Job Store Misfire Threshold	80000

## 5.2.8 Http Proxy Properties

This section displays the properties of Http proxy.

- Http Proxy Properties	
Enable Http Proxy	
Http Proxy Host	
Http Proxy Port	
Http Proxy Username	
Http Proxy Password	

# 5.2.9 Sync Console Properties

This section displays the properties of Sync Console.

Sync Console Properties	
Sync Service Context	syncservice
Reports Viewer Pages	
Sync Console Login Attempts	3
Sync Console Captcha Textlength	6
Mask Parameters in View Sync Config	

*Important:* For the groups which do not have the **Save Configuration** button, a pop-up window is displayed. Click **Yes** button for the property changes to be auto-saved.

Properties can also be updated directly in the database. Property value and updateTimeStamp of the property must be updated for the changes to reflect in run time.

After the changes are complete, below properties require restart of the server for the changes to get affected.

- All Persistent Connection Pool Properties Group
- All Http Proxy Properties Group
- All Enterprise Connection Pool Properties Group
- All Scheduler Properties Group
- Sync Log Location Property
- Sync Log Option Property

## 5.3 Environment Details

The Environment Details of Kony Fabric Sync Console enables you to view the details of the environment. The environment details are divided into the following sections:

- Build
- Console Database
- Java
- Kony Fabric Environment Details
- OS

Each section displays the related details.

### 5.3.1 Build

The Build section displays the current version of Kony Fabric Sync and gateway that are in use.

- Build	
Kony Sync Version	MobileFabricInstaller-QA-7.0.0_v201602080647_r172
Gateway Version	5.6.67.0

*Note:* The Build, Console Database, Java, Kony Fabric Environment Details, and OS sections have predefined information and do not allow modifications.

### 5.3.2 Console Database

The Console Database section contains details about the database configurations.

- Console Database	
Hibernate Dialect Class	com.kony.sync.console.dialect.CustomMySQLDialect
Database Product Version	5.6.23-log
Database Product Name	MySQL
JDBC Driver Name	MySQL Connector Java
JDBC Driver Version	mysql-connector-java-5.1.26
Schema Name	AutomationsyncconsoledblDEMF

### 5.3.3 Java

The Java section contains details of Java configurations.

- Java	
Java Runtime Version	1.8.0_51
Java Runtime Vendor	Oracle Corporation
Java Installation Directory	D:\MobileFabricnew\jre
Java Classpath	D:\MobileFabricnew\tomcat\bin\bootstrap.jar;

# 5.3.4 Kony Fabric Environment Details

The Environment Details section displays the environment details of Kony Fabric.

- MobileFabric Environment Details	MobileFabric Environment Details	
Environment API Version	1.1	
Environment Name	LocalDevEnv	
Environment Auth URL	http://10.10.25.227:4949/authService/100000002	
Environment GUID	6ff2c5ae-8e18-4085-b559-4a721f096fb9	
Account Auth URL	http://10.10.25.227:4949/authService/accounts	
Account GUID	d07d77ba-e75a-411f-932a-d90d02c15717	
Account ID	100000002	
Account API Base URL	http://10.10.25.227:4949/accounts	
Environment Service URL	http://10.10.25.227:4949	
Account UI Base URL	http://10.10.25.227:4949/authService/accounts	

# 5.3.5 OS

The OS section contains configuration details of the operating system.

<b>-</b> os	
Operating System	Windows 7

# 6. User Management

You can view the users of Kony Fabric Sync Console under **User Management** tab. This module consists of four sub-modules. They are **User**, **Role**, **Group** and **Authentication**.

*Note:* By default, the list of 10 users are displayed. You can change the number of users to view by selecting from the drop-down corresponding to **Page**.

### 6.1 User

The **Users** tab enables you to view the list of users and manage them. You can perform the following tasks:

- · Searching a User
- Adding a User
- Updating User Details
- Deleting a User
- · Enabling a User
- Disabling a User
- Assigning a User to Group
- Unassigning a User to Group
- Assigning a Device to the User

### 6.1.1 Searching a User

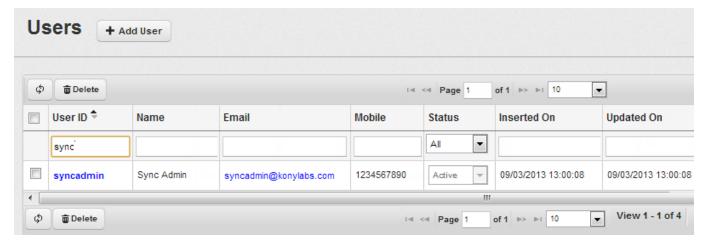
Searching a User feature enables you to search for a user. This feature displays the User ID details such as **User Name**, **Email**, **Mobile**, **Status**, **Inserted On**, **Updated On**, **Group Name** and **Device ID**. The search results displays all User IDs that start with the User ID as entered in the search field. For example: If you enter the User ID *admin* in **Search** field, the search results displays admin1, admin2, admin3 and admin4 in the ascending order alphanumerically.

To search for a user, follow these steps:

1. Go to the **Users** tab in **User Management** section. The list of users appears.



2. Enter the desired **User ID** and click **Enter**. The User ID information appears.



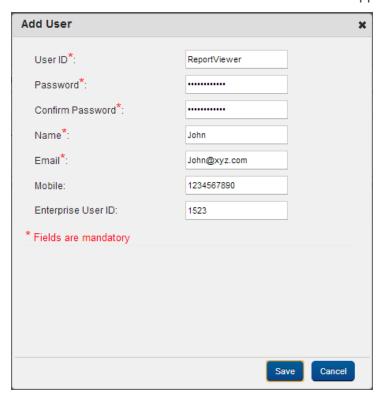
### 6.1.2 Adding a User

Adding a User feature enables you to add a user to the existing user list. Only System Administrator has the privilege to add a user. To add a user, follow these steps:

1. Go to the **Users** tab in **User Management** section. The list of users appears on the screen.



2. Click Add User to add a new user. The Add User view appears.



- a. User ID: The length of the User Id for alpha numeric characters should range from 8-100 without spaces. The special characters that you can use are Period (".") and Underscore ("\_"). The starting character for a User ID can be alphabet, number, period or Underscore.
- Password: The length of the password should vary between 8-200 characters and must contain at least one alphabetical and one numerical character without spacing.
   User ID should not be a password. The starting character for a password can be alphabet, number, period, or Underscore.
- c. **Confirm Password:** Re-enter the password.
- d. **User Name:** The length of the User Name may range from 3-1000 characters. The User Name can include alphabets and numbers.
- e. **Email:** The maximum length of email ID can be 200 characters.
- f. Mobile: Mobile Number should be numerical with length 10-15 characters.
- g. **Enterprise User ID:** Enterprise User ID length should be between 8-1000 characters. The Enterprise User ID can include alphabets and numbers.
- 3. Click **Save**. After the user adds to the existing list, a confirmation message, "User <id> added successfully" appears on the window.

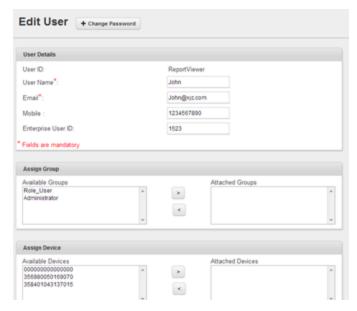
### 6.1.3 Updating User Details

Updating User Details feature enables you to view and update the details of a user. From the list of users, you can locate the User ID record manually by using **Previous** or **Next** or by using **Search** option. To update the user details, follow these steps:

1. Go to the **Users** tab in the **User Management** section. The list of User IDs appears, locate the User ID record manually by using **Previous** or **Next** options or by using **Search** option.



2. Click the **User ID**. The **Edit User** dialog appears.



- Make the desired changes and click Save. After the changes are updated, a confirmation message, "User edited successfully" appears and the changes made to the User ID are reflected on the existing users view.
- 4. In the above screen the user can also change his password by clicking **Change Password**. The **Change Password** dialog appears:



### 6.1.4 Deleting a User

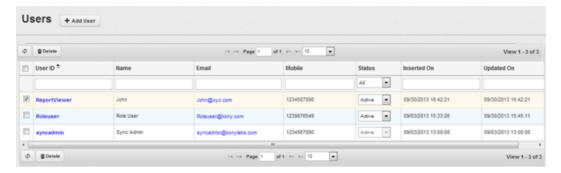
Deleting a User feature enables you to delete a single User ID or multiple User IDs from the existing User ID list. You can locate a User ID record manually by using **Previous** or **Next** options or by using **Search** option.

To delete a user, follow these steps:

1. Go to the **Users** tab in the **User Management** section. The list of users appears.



2. Select the User IDs to delete.



#### 3. Click Delete.

A confirmation message, "Are you sure you want to delete selected Users?" appears.

#### 4. Click Yes.

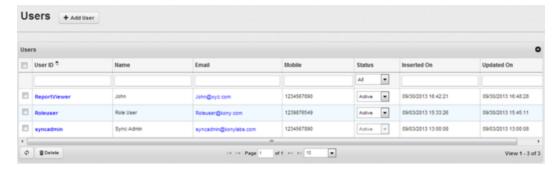
The selected User ID profiles are deleted from the existing *Users* list.

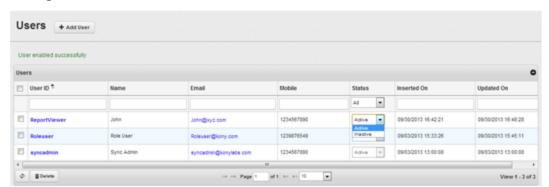
### 6.1.5 Enabling a User

Enabling a privilege to a user feature helps you to enable a single or multiple users as required. The feature enables a user to gain access to Kony Fabric Sync Console.

To enable a privilege to a user, follow these steps:

1. Go to the **Users** tab in **User Management** Section. The list of users appears.





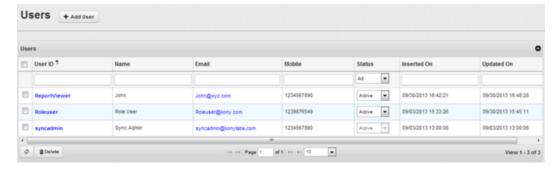
2. Change **User Status** from **Inactive** to **Active**.

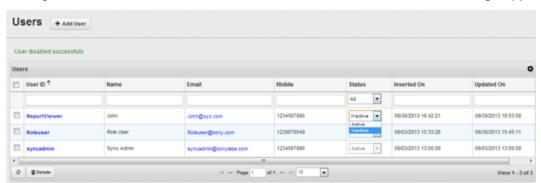
### 6.1.6 Disabling a User

Disabling a user feature allows you to disable a single user or multiple users as required. It disables a user from gaining access to Kony Fabric Sync Console.

To disable a privilege to an user, follow these steps:

1. Navigate to the **Users** tab in the **User Management** section. The list of users appears.





2. Change **User Status** from **Inactive** to **Active**. The below confirmation message appears.

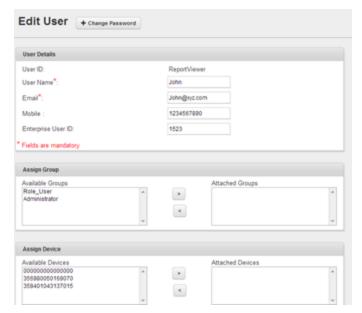
### 6.1.7 Assigning a User to a Group

Assigning a user to a Group feature enables you to assign a User ID to a Group. You can assign single or multiple groups at a single instance.

To assign a user to a Group, follow these steps:

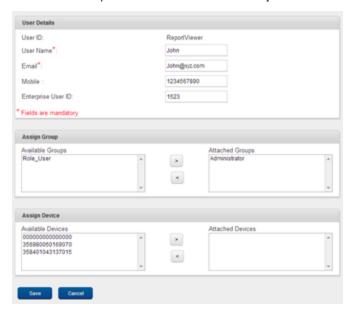
1. Go to the **Users** tab in **User Management** section. The list of users appears.



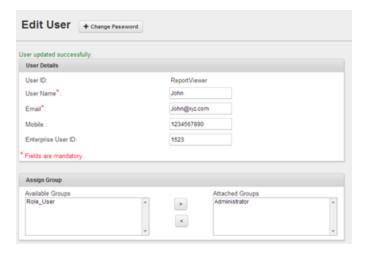


2. Click the User ID of the required User to assign. The **Edit User** dialog appears.

3. From the list of **Available Groups**, select the required group and click the right arrow. The selected Group moves to **Attached Groups** section.



4. Click **Save**. The User ID is assigned to the selected user Group and you can view the user under the Group Name of the users list.



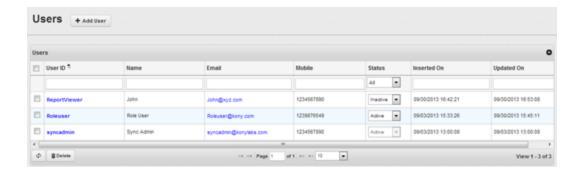
### 6.1.8 Unassigning a User from a Group

You can unassign a User ID from a Group at a single instance. To unassign a user, follow these steps:

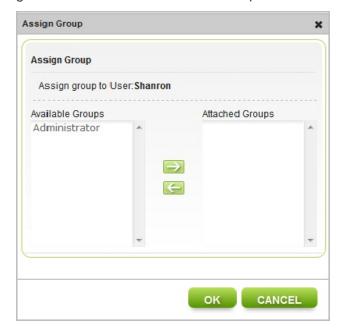
1. Go to the Users tab under User Management section.

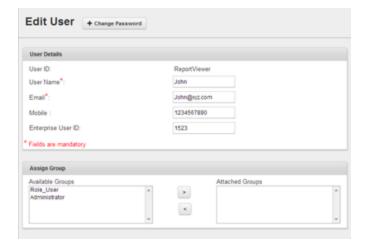


2. Click **Group Name** of the corresponding **User ID** to unassign. The below **Assign Group** dialog appears.



3. From the **Attached Groups** section, select the Group Name to undo the assignment and click green back arrow. The selected Group is removed from the **Attached Groups** section.





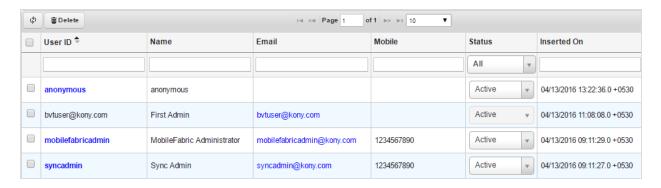
4. Click OK. As the selected User ID is unassigned from the Group, the pre-assigned Group Name disappears for the corresponding unassigned user. If no groups are assigned, the Assign Group link appears under the Group Name for the corresponding User ID.

### 6.1.9 Assigning a Device to a user

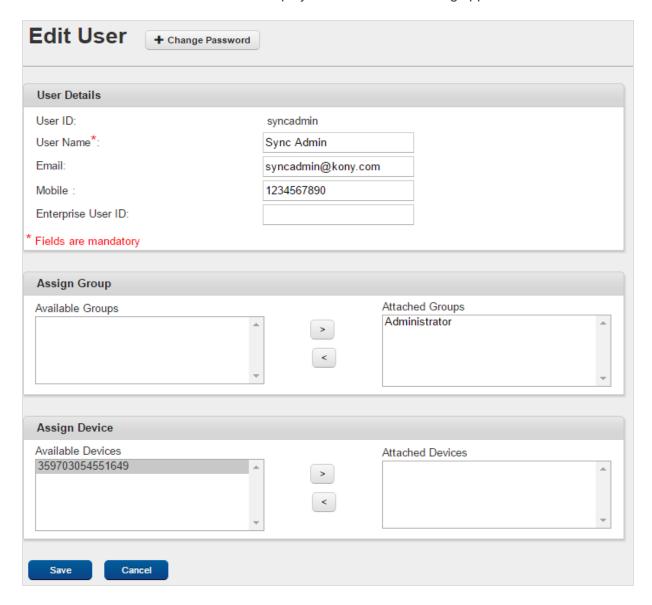
You can assign devices to the created / existing users.

To assign a device, follow these steps:

1. Click **User** tab under **User Management** section.



2. Click the User ID of a user from the list displayed. The Edit User dialog appears.



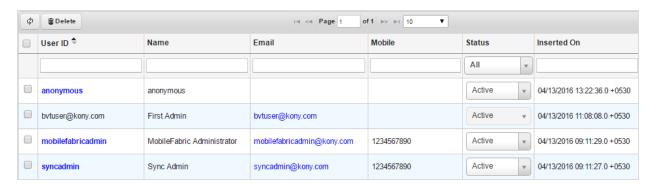
- 3. From the available devices, select a device and click to attach the device to the selected user.
- 4. The selected device will be attached to the user.

### 6.1.10 Removing Assigned Device of a User

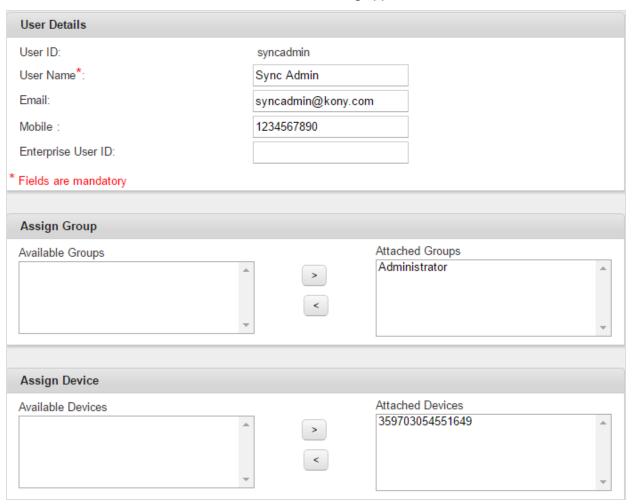
You can unassign a device to a user as required.

To unassign a device to a user, follow these steps:

1. Go to the **User** tab under **User Management** section.



2. Click the User ID for a desired user. The **Edit User** dialog appears.



3. From the **Attached Devices** section, select the device to undo the assignment and then click the arrow. The selected device is removed.

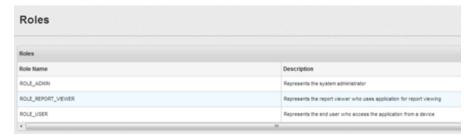
### 6.2 Role

The Roles feature enables you to view the description of the existing User ID roles in the Kony Fabric Sync Console.

### 6.2.1 Viewing the Role

To view the Roles, follow these steps:

1. Go to the Roles tab in the User Management section.



## 6.3 Group

Groups view enables you to view the list of Groups that a device and a user are assigned to and manage group. You can also create a Group and assign users and devices to that Group. The UI also provides you with an option to edit and delete a Group. If the number of Groups is more than 10, you can use the **Next** or **Previous** to move to the corresponding list of Groups. You can perform the following tasks:

- Creating a Group
- Editing a Group
- Deleting a Group
- Assigning a Role to a group
- Assigning an Application to a group

# 6.3.1 Creating a Group

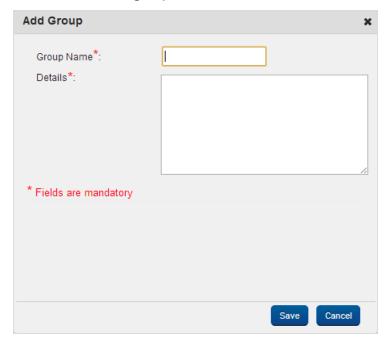
Creating a Group feature enables you to create a Group. You can enter name of the Group and its details in the respective fields while creating a Group.

To create a Group, follow these steps:

1. Go to **Groups** tab under **User Management** section.



- 2. Click **Add**. The **Add Group** dialog appears.
  - a. Enter name of the group in Group Name.
  - b. Enter details of the group in **Details**.



3. Click **Save**. A confirmation message, "Group <groupname> added successfully" appears. The created group name appears in Groups view.

### 6.3.2 Editing a Group

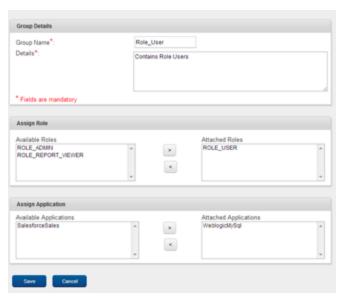
Editing a group feature enables you to edit the group name and its details.

To edit a group, follow these steps:

1. Go to the Groups tab in User Management section.



2. Click **Group Name** to edit. The **Edit Group** dialog appears.



3. Edit the details and click **Save**. After successful update, a confirmation message, "Group edited successfully" appears.

### 6.3.3 Deleting a Group

Deleting a group feature allows you to delete a group that is already available in the list of groups. If a group that is assigned to a user is deleted, the user automatically gets unassigned from the deleted group. You can either delete a single group or multiple groups as required.

To delete a Group, follow these steps:

1. Navigate to the **Groups** tab under the **User Management** section.



- Select a group name, and then click **Delete**.
   A delete confirmation message, "Are you sure you want to delete selected Groups?" appears.
- Click Yes.
   The selected group is deleted.

### 6.3.4 Assigning a Role to a Group

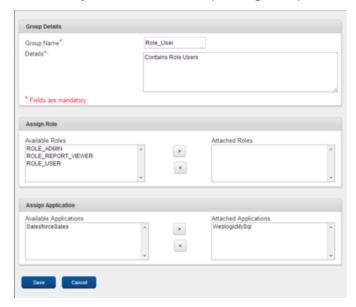
Assigning a role to a group feature enables you to assign a role or multiple roles to a group.

To assign a role to a group, follow these steps:

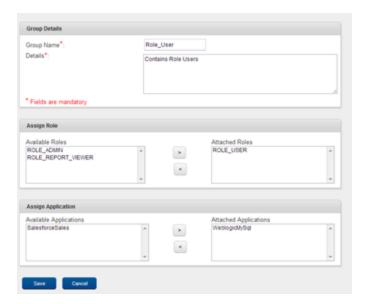
1. Go to the **Groups** tab under **User Management** section.



2. Click **Group name** of the corresponding Group. The **Edit Group** page appears.



3. Select a Role from the **Available Roles** and click the green forward arrow. The selected role appears under **Attached Roles**.



4. Click Save.

The Group is assigned to the selected Role.

### 6.3.5 Assigning an Application to a Group

Assigning an application to a group feature enables you to assign a single or multiple applications to a Group.

To assign an application to a group, follow these steps:

1. Go to the **Groups** tab in **User Management** section.



**Edit Group Group Details** Group Name\*: Administrator Details\*: This group represents Administrator \* Fields are mandatory **Assign Role** Available Roles Attached Roles ROLE\_REPORT\_VIEWER ROLE\_ADMIN ROLE\_USER **Assign Application** Available Applications Attached Applications 100000002c1014703 100000012bd8ef8f9 17b69b36-042d-4263-b981-50230717947f 1ca3a7ff-5fdf-43ec-b28c-499266941f4d 587ca0fe-b1a0-4275-8910-7f62f90cdb1f

2. Click group name of the corresponding group. The **Edit Group** page appears.

3. Select the desired application from the list of Available Applications and then click the forward arrow.

The selected application appears under **Attached Applications**.

#### 4. Click Save.

Save

Cancel

You can view the group to which the application is assigned under **Name** section on the Groups list.

# 6.4 Authentication

Authentication view enables you to create authentication profiles. Authentication profiles are assigned to applications. All device users of an application are authenticated with the assigned profile. After creating a profile, the Test Connection option validates the profile before assigning it to applications.

- Default Authentication Mode
- Creating an Authentication Profile
- Viewing errors of Authentication Profiles

### 6.4.1 Default Authentication Mode - Kony Sync Console Database

The default authentication mode is Kony Sync Console Database. Once an application is uploaded, the authentication mode is set to Kony Sync Database.



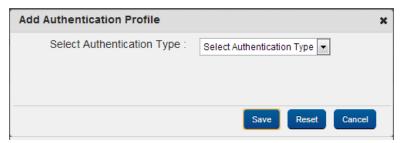
### 6.4.2 Creating an Authentication Profile

To create an authentication profile other than Kony Sync Database, follow these steps:

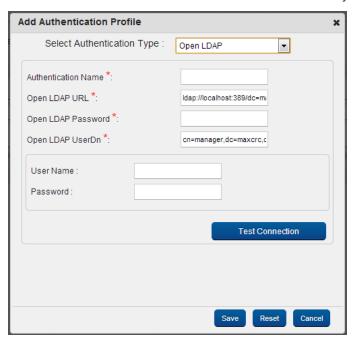
1. Click the **User Management** section > **Authentication** tab.



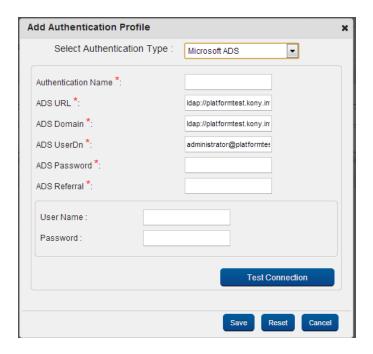
2. Click Add Authentication. The Add Authentication Profile dialog appears.



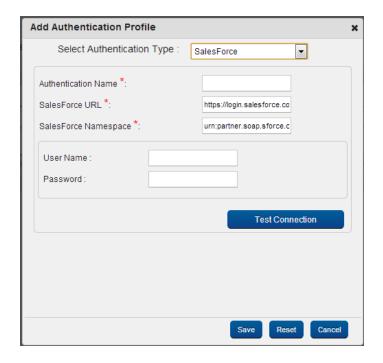
- 3. You may create any one of the below types of authentication profiles:
  - Select Open LDAP from the drop-down to create an open LDAP authentication type.
    - i. Enter LDAP details and click **Test Connection** to verify the connectivity of LDAP.



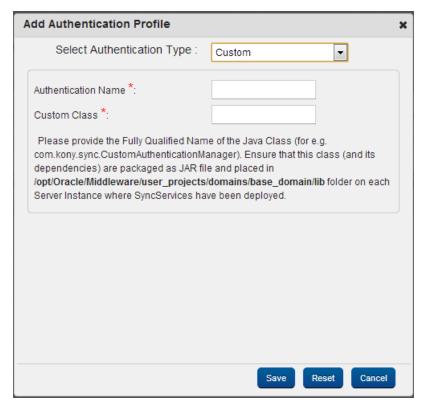
- Select Microsoft ADS from the drop-down to create a Microsoft ADS authentication type.
  - Enter Microsoft ADS details and click **Test Connection** to verify the connectivity of Microsoft ADS.



- Select SalesForce from the drop-down to create a SalesForce authentication type.
  - Enter SalesForce details and click **Test Connection** to verify the connectivity of SalesForce.



- Select *Custom* from the drop-down to create a Custom authentication type.
  - i. Enter Custom details and click Save.

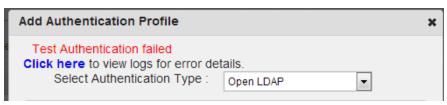


### 6.4.3 Viewing Errors of Authentication Profiles

To view the errors while adding authentication profiles, follow these steps:

- 1. Click the **User Management** section > **Authentication** tab.
- 2. In the Add Authentication Profile dialog, click Click here to view logs hyperlink to view the errors.

3. Click Add Authentication. The Add Authentication Profile dialog appears.



4. The Tracker view appears with the logged errors.

```
at com.sun.jndi.ldap.Connection.<init>(Connection.java:210)
            at com.sun.jndi.ldap.LdapClient.<init>(LdapClient.java:118)
            at com.sun.jndi.ldap.LdapClient.getInstance(LdapClient.java:1580)
           at com.sun.jndi.ldap.LdapCtx.connect(LdapCtx.java:2652) at com.sun.jndi.ldap.LdapCtx.<init>(LdapCtx.java:293)
           at com.sun.jndi.ldap.LdapCtxFactory.getUsingURL(LdapCtxFactory.java:175) at com.sun.jndi.ldap.LdapCtxFactory.getUsingURLs(LdapCtxFactory.java:193)
            at com.sun.jndi.ldap.LdapCtxFactory.getLdapCtxInstance(LdapCtxFactory.java:136)
           at com.sun.jndi.ldap.LdapCtxFactory.getInitialContext(LdapCtxFactory.java:66) at javax.naming.spi.NamingManager.getInitialContext(NamingManager.java:667)
           at javax.naming.InitialContext.getDefaultInitCtx(InitialContext.java:288) at javax.naming.InitialContext.init(InitialContext.java:223) at javax.naming.ldap.InitialIdapContext.
           at org.springframework.ldap.core.support.LdapContextSource.getDirContextInstance(LdapContextSource.java:43) at org.springframework.ldap.core.support.AbstractContextSource.createContext(AbstractContextSource.java:254)
             ... 70 more
Caused by: java.net.ConnectException: Connection refused at java.net.PlainSocketImpl.socketConnect(Native Method)
            at java.net.PlainSocketImpl.doConnect(PlainSocketImpl.java:351)
            at java.net.PlainSocketImpl.connectToAddress(PlainSocketImpl.java:213)
            at java.net.PlainSocketImpl.connect(PlainSocketImpl.java:200)
           at java.net.SocksSocketImpl.connect(SocksSocketImpl.java:366)
at java.net.Socket.connect(Socket.java:529)
            at java.net.Socket.connect(Socket.java:478)
           at java.net.Socket.<init>(Socket.java:375)
at java.net.Socket.<init>(Socket.java:189)
           at com.sun.jndi.ldap.Connection.createSocket(Connection.java:352) at com.sun.jndi.ldap.Connection.<init>(Connection.java:187)
```

### 7. Devices

Devices user interface enables you to view the list of devices that are in sync with Enterprise Data Source server. The number of devices to view is 10, by default. You may change the number of devices to view by selecting from the drop-down corresponding to **Page**.

## 7.1 Device Auto Registration

When you perform a sync operation from the handset for the first time, the device is auto registered into the console application after the authentication succeeds.



You can perform the following tasks:

- Searching a Device
- Deleting a Device
- Enabling a Device
- Disabling a Device

## 7.2 Searching a Device

The search option enables you to search a Device ID, or all the devices that are assigned to the selected User ID. There are three types for searching:

- Searching using only the Device ID: This search criteria results in displaying the corresponding Device ID and all other Device IDs that are similar.
- b. **Searching using only the** *User ID*: This search criteria results in displaying all the Device IDs that are assigned to the corresponding User ID.
- c. Searching using both *Device ID* and *User ID*: This search criteria results in displaying all the Device IDs that are assigned to the corresponding user ID.

To search a device, follow these steps:

1. Click **Devices** from the Kony Fabric Sync Console. The Devices view appears.



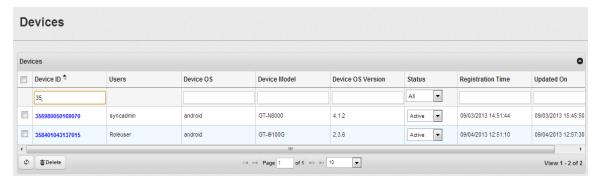
- 2. Enter the device id in **Device ID**.
- 3. Enter the user id in User ID.
- Select the registration date in Reg. Date. You can select the date if you know the range of dates.
- 5. Select the status from the **Status** drop-down menu.
- 6. Select the device operating system from the **Device OS** drop-down menu.

**Note:** The **Device ID** or **User ID** fields are mandatory. You can enter either Device ID or User ID as required.

#### **Devices**



7. Click **Search** by entering the Device ID, for example, starting with *35*. The device with the entered Device ID appears.



**Note:** The search results displays all Device IDs that start with Device ID as entered in the search field. For example, If you search for the User ID "admin", the search results display admin1, admin2, admin3, admin4 as per the ascending order alphanumerically.

## 7.3 Deleting a Device

Deleting a device feature enables you to delete a single device or multiple devices at an instance as required. From the list of records, you can navigate to the required **User ID** or **Device ID** record by using **Previous** or **Next** options or by using a specific **Search** criteria based on **Device ID**, **User ID**, **Reg. Date**, **Status** and **Device OS**. The search results displays all the records based on User ID or Device ID that match the search criteria.

To delete a device, follow these steps:

1. Click **Devices** in Kony Fabric Sync Console.

The **Devices** view appears.



2. Select a required Device ID and click Delete.

A dialog box with a confirmation message, "Are you sure you want to delete selected devices?" appears.

3. Click Yes.

The selected Device ID is deleted.

# 7.4 Enabling a Device

Enabling a device feature allows you to gain access to Kony Fabric Sync Console. You can either enable a single device or multiple devices at an instance as required. From the list of records, you can navigate to required **User ID** or **Device ID** record by using **Previous** or **Next** or by using a specific search criteria based on **Device ID**, **User ID**, **Reg. Date**, **Status** and **Device OS**. The search results displays all the records based on User ID or Device ID that match the search criteria.

To enable a device, follow these steps:

1. Click **Devices** in Kony Fabric Sync Console.

The **Devices** view appears.



Select the required Device ID and change the device from Inactive to Active from the Status drop-down.

A confirmation dialog box with a confirmation message, "Are you sure you want to enable selected devices?" appears.

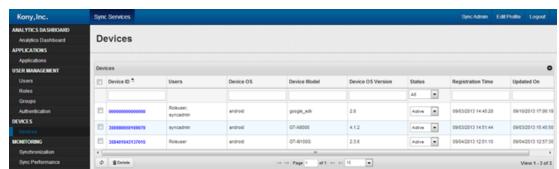
3. Click Yes.

The status of the selected device is updated as **Active**.

## 7.5 Disabling a Device

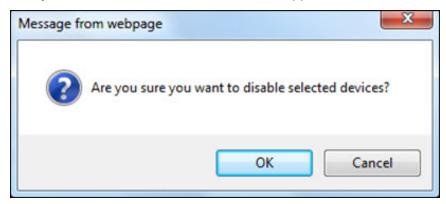
Disabling a device feature disables it from gaining access to Kony Fabric Sync Console. You can either delete a single device or multiple devices at an instance as required. From the list of records, you can navigate to required **User ID** or **Device ID** record by using **Previous** or **Next** options or by using a specific Search criteria based on **Device ID**, **User ID**, **Reg. Date**, **Status**, and **Device OS**. The search results displays all the records based on User ID or Device ID that match the search criteria.

To disable a device, follow these steps:



1. Click **Devices** in KonyFabric Sync Console. The **Devices** view appears.

2. Select a **Device ID**, and then click Disable. A dialog box with a confirmation message, "Are you sure you want to disable selected devices?" appears:



3. Click **OK**. The status of the selected Device ID appears as Disabled.

## 8. Monitoring

Monitoring feature enables you to keep track of overall changes that occur at the Client and Enterprise Data Source server. In Monitoring, you can perform the following tasks:

- Synchronization
- Synchronization Performance
- Merging Service
- Replica Service
- Upload Queue
- Persistent Databases
- Conflicts
- Change Replay
- Sync Errors
- Security Audit

## 8.1 Viewing Synchronization

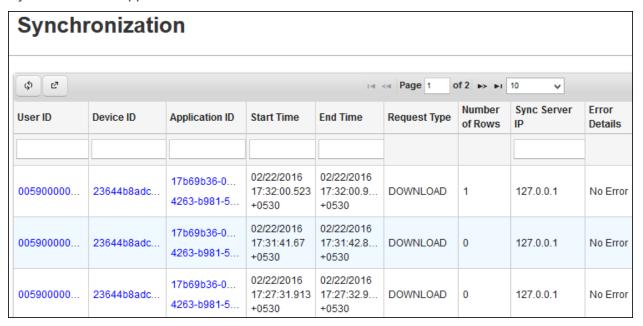
Synchronization is the process of synchronizing information between client and Enterprise Data Source. This interface enables you to view all the detailed records of the synchronization.

View Synchronization feature enables you to view the synchronization details between client and Enterprise Data Source. If the records list is big, you can navigate to the required synchronization record of a User ID by using **Previous** or **Next** options, or by using the **Search** option. The search results display all User IDs which start with the User ID as entered in the search field.

For example: If the User ID "admin" is searched, the search results display admin1, admin2, admin3 and admin4 as per the ascending order alphanumerically.

To view Synchronization, follow these steps:

1. On Kony Fabric Sync Console, go to **Monitoring** section > **Synchronization** view. The list of Synchronizations appear under the search fields.



## 8.2 Synchronization Performance

Synchronization Performance view displays the average usage of a particular service. For example, If a user uses a service at three instances with the duration of one, two, and three minutes, the average usage time would be (one + two + three) / 3 = 2.

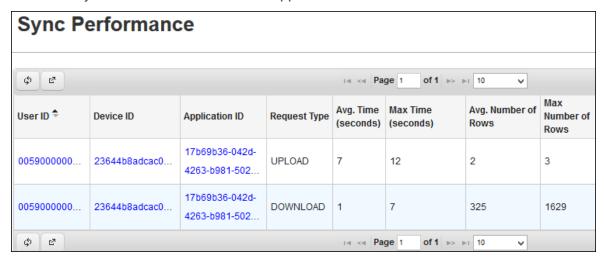
### 8.2.1 Viewing the Synchronization Performance

Viewing the synchronization performance feature enables you to view the average usage of a particular service for each User ID. If the list is big, you can navigate to the required User ID record using **Previous** or **Next** options, or use the **Search** option. The search results display all User IDs that start with the User ID as entered in the search field.

For example: If the User ID "admin" is searched, the search results display admin1, admin2, admin3, and admin4 as per the ascending order alphanumerically.

To view Synchronization Performance, follow these steps:

1. On Kony Fabric Sync Console, go to **Monitoring** section > **Synchronization Performance** view. The list of Synchronization Performances appears under the search fields.



## 8.3 Merging Service

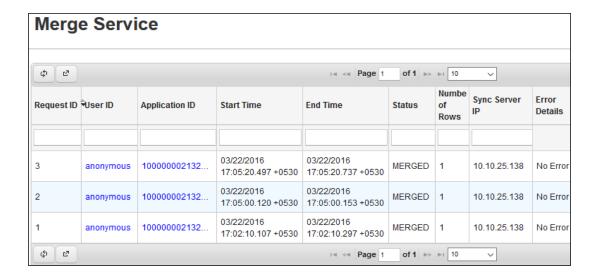
Merge Service consists of all the information between Upload Queue and Enterprise Data Source. You can monitor the merge status (Started, Processing Request, and Completed Request) per User and Application.

#### 8.3.1 Viewing Merge Service

From the list of records, you can navigate to the required **Application ID** record by using **Previous** or **Next** or by using a specific **Search** criteria based on **Start Date**, **Start Time**, **End Date**, **End Time**, **Current Status** and **Application**. The search results displays all Application ID records for each User ID that matches the search criteria.

#### To view Merge Service, follow these steps:

 On Kony Fabric Sync Console, go to Monitoring section > Merge Service view. The list of Merge Services appear under the search fields.



### 8.4 Replica Service

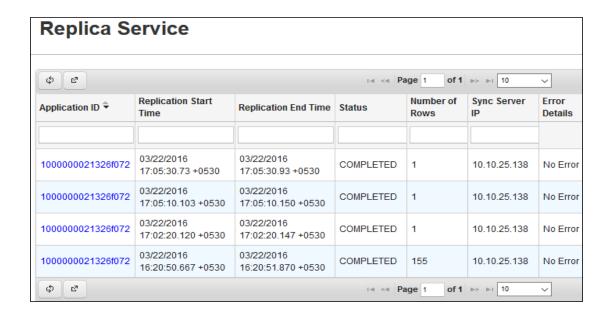
Replica service feature tracks all the changes in Enterprise Data Source that are to be sent to the Client. It exists between the Enterprise Data Source and the client.

### 8.4.1 Viewing Replica of an Application

From the list of records, you can navigate to the required **Application ID** record by using **Previous** or **Next** options or by using a specific **Search** criteria based on **Start Date**, **Start Time**, **End Date**, **End Time**, **Current Status** and **Application**. All the Application ID records that match the search criteria appear.

To view the replica of an application, follow the below step:

 On Kony Fabric Sync Console, go to Monitoring section > Replica Service view tab. The list of Replica Services appears under the search fields.



### 8.5 Upload Queue

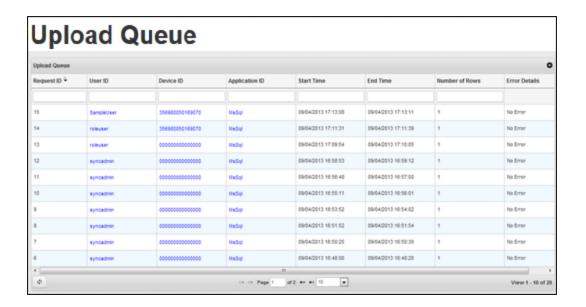
The Upload Queue is a queue that comprises of all the information from the client waiting to get updated at Enterprise Data Source server. You can add, delete or modify the information at the client side. It exists between the client and Enterprise Data Source.

### 8.5.1 Viewing the Upload Queue

From the list of records, you can navigate to the required **Device ID** record by using **Previous** or **Next** options or by using a specific Search criterion based on **Start Date**, **Start Time**, **End Date**, **End Time** and **Application**. The search results display all Device IDs that start with the ID as entered in the search field.

To view the Upload queue, follow the below step:

1. On Kony Fabric Sync Console, go to **Monitoring** tab > **Upload Queue** view. The list of upload queues appears under the search fields.



#### 8.6 Persistent Databases

Persistent Databases feature states the status (Success/failure) of the number of records merged/uploaded/downloaded. The **DB Name** lists the name (Replica/upload Queue database) of the database, **Status** lists the Success/failure status of the records, **Number of Tables** lists the number of tables, **Total Number of Rows** represent the number of rows that are uploaded/downloaded. Persistent Databases feature is applicable only for persistent configuration.

#### 8.7 Conflicts

The Conflicts view enables you to view the differences that occur due to inappropriate synchronization of the records between Client and Enterprise Data Source.

#### 8.7.1 Viewing Conflicts of a User and Device

From the list of records, you can navigate to the required User ID conflict record by using **Previous** or **Next** options or by using a specific **Search** criteria based on **Start Date**, **Start Time**, **End Date**, **End Time**, and **Application ID**. The search results displays all User IDs that start with the ID as entered in the search field.

For example: If you search for the User ID "admin", the search results display admin1, admin2, admin3, and admin4 as per the ascending order alphanumerically.

To view Conflicts, follow these steps:

1. On Kony Fabric Sync Console, go to **Monitoring** tab > **Conflicts** view. The list of upload queues appears under the search fields.



# 8.8 Change Replay

Change Replay feature of Kony Sync Console enables you to view the actions that the client performs that are updated at Enterprise Data Source based on Device ID.

### 8.8.1 Viewing the Change Replay Process

From the list of records, you can navigate to required action by using **Previous** or **Next** options or by using a specific Search criteria such as **User ID**, **Device ID**, **Application**, **Sync Object** and **Change Type**. The search results displays all User IDs or Device IDs that start with the ID that you enter in the search field.

For example: If you search for the User ID "admin", the admin1, admin2, admin3, and admin4 search results appear as per the ascending order alphanumerically.

To view the change replay process, follow the below step:

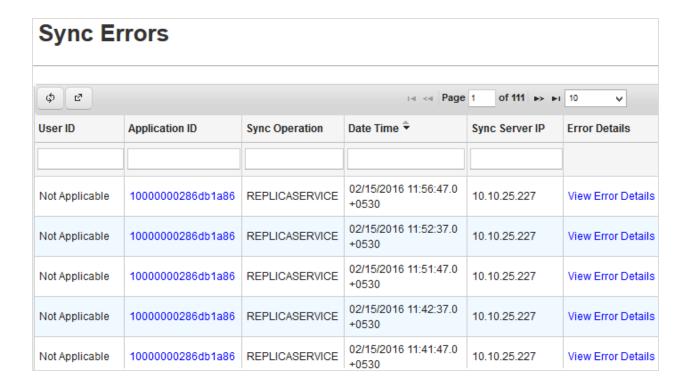
1. On Kony Fabric Sync Console, go to **Monitoring** tab > **Synchronization** view. The list of change replays appears under the search fields.



- 2. Click Clear ChangeReplay Logs to clear the logs.
- 3. Click **Show All Logs** to show all the logs.

## 8.9 Sync Errors

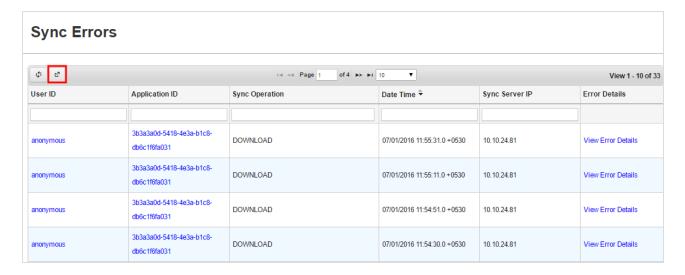
Sync Errors feature lists down all the errors that occur while you perform any sync operation (download/upload/replica merge service), Error Details list downs the details of the error. You can search by column using the User ID, Application ID, Sync Operation, Date Time and Sync Server IP.



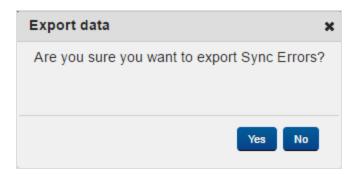
#### 8.9.1 Export to Excel

You can export the sync errors from the Console database to an Excel file format. To export the sync errors, follow these steps:

1. Click the **Export to Excel** button to export the log data to Excel.



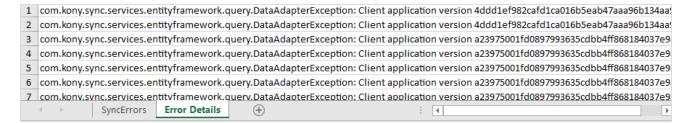
2. The following pop-up window is displayed.



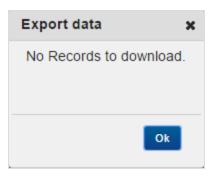
- 3. Click the **Yes** button to export the logs to Excel. Otherwise, click **No**.
- Click the Yes button. The Sync Errors Excel file is downloaded to your system. The following table describes the outcome of the data exported.



5. Click the hyperlink displayed against each field in the **Error Details**to view the complete description of the selected error message.



- If the export operation fails because of an error, the console displays a message explaining the cause of the error.
- 7. If you do not have any logs to export, the console displays a message as there are no records to export.



## 8.10 Security Audit

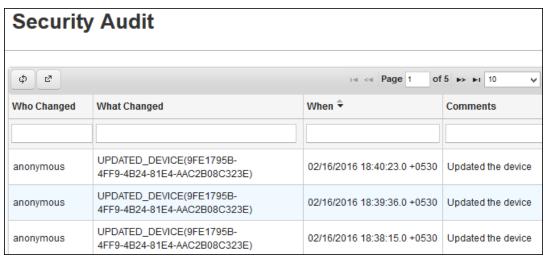
Security Audit user feature enables you to view all the changes that the client makes and that are updated at Enterprise Data Source server.

### 8.10.1 Viewing Modifications

From the list of records, you can move to the required record using **Previous** or **Next**.

To view modifications, follow below step:

 On Kony Fabric Sync Console, go to Monitoring tab > Security Audit view. The list of Security Audit appears under the search fields.



#### 9. Scheduled Jobs

Scheduled Jobs view enables you to view the list of jobs that run at specific intervals and Job History. The number of scheduled jobs to view is 10, by default. You may change the number of scheduled jobs to view by selecting from the drop-down corresponding to **Page**.

The Scheduled Jobs view enables you to review the CRON jobs that are scheduled in the system. You have flexibility to edit CRON expression. You can modify to any interval; once a week, once a month, and as on. You can have a format of adding specified interval.

For example:

0 0 12 \* \* ? Fire at 12 pm (noon) every day

0 15 10 ? \* \* Fire at 10:15 am every day

0 15 10 \* \* ? Fire at 10:15 am every day

For more information on **Triger Details**, refer to **Cron Expressions** section in <a href="http://www.quartz-scheduler.org/documentation/quartz-1.x/tutorials/TutorialLesson06">http://www.quartz-scheduler.org/documentation/quartz-1.x/tutorials/TutorialLesson06</a> and <a href="http://www.quartz-scheduler.org/generated/2.2.2/html/qtz-all#page/quartz-scheduler-webhelp/co-trg">http://www.quartz-scheduler.org/generated/2.2.2/html/qtz-all#page/quartz-scheduler-webhelp/co-trg</a> crontriggers.html%23.

# 9.1 View the Scheduled Jobs

The Scheduled Jobs feature enables you to view another list of Scheduled jobs.

To view the scheduled jobs, follow the below step:

1. On Kony Fabric Sync Console, click the **Scheduled Jobs** tab. The Scheduled Jobs view appears with details such as **Job Name**, **Application ID**, **Description**, **Status**, **Job Class**,

Scheduled Jobs i⊲ ⊲⊲ Page 1 of 1 ⇒> ⊳⊨ 10 **Previous Fire Next Fire** Sync Server Job Name Application ID Description Status Job Class Trigger Trigger Details 02/22/2016 02/22/2016 COMPLE... 0/10 \* \* \* \* ? \* 10.10.25.231 MergeSer... SampleDB com.kony... 16:32:20.0 job 16:32:00.0 +0530 +0530 02/22/2016 Replica 02/22/2016 COMPLE... 0/10 \* \* \* \* ? \* ReplicaS... SampleDB com.kony.... 16:32:20.0 10.10.25.231 cron service job 16:32:00.0 +0530 +0530 Ó i⊲ <⊲ Page 1 of 1 ▶> ▶□ 10

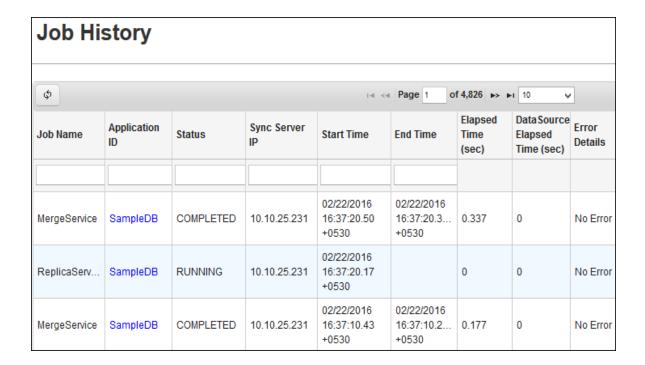
Next Fire Time, Previous Fire Time, Trigger, Trigger Details, and Server IP.

# 9.2 View the Job History

View the Job History feature enables you to view the job history of various services.

To view the Job History, follow the below step:

On Kony Fabric Sync Console home page, click Scheduled Jobs section > Job History tab.
 The Job history view appears.



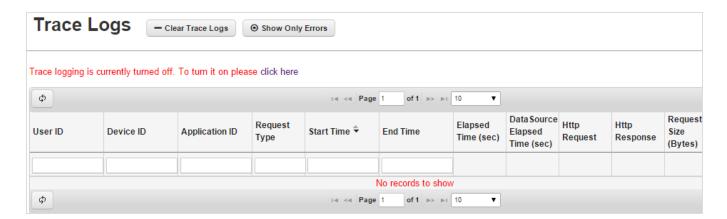
## 10. Logs

Logs section enables you to view data sync between the devices of the client and the Enterprise Datasource server.

### 10.1 Trace Log

**Note:** The **Trace Log Level** is *OFF* initially when you install Kony Sync Server. On the Trace Logs page, click the **click here** link to navigate to the **Configuration** tab. You may select *ON* from the **Trace Log Level** drop-down to turn on the trace logs.

Trace Log feature enables you to view request and response data between the clients and Enterprise Datasource Server for a particular Application, User, Device and Time combination.

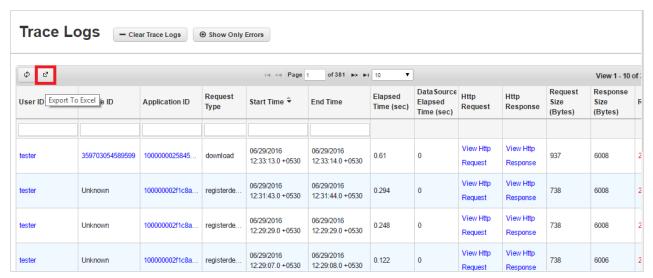


You may click **Clear Trace Logs** to clear the trace logs, and may click **Show Only Errors** to show only error logs.

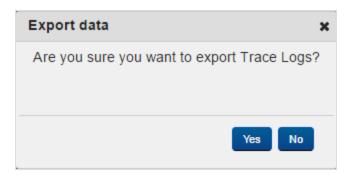
## 10.1.1 Export to Excel

You can export the logs from the Console database to an Excel file format. To export the logs, follow these steps:

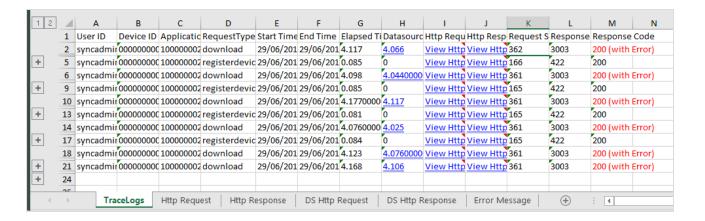
1. Click the **Export to Excel** button to export the log data to Excel.



2. The following pop-up window is displayed.



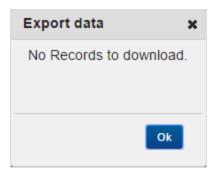
- 3. Click **Yes** to export the logs to Excel. Otherwise, click **No**.
- 4. Click on **Yes** button. The **Trace Logs** Excel file is downloaded to your system. The following table describes the outcome of the data exported.



- Click on the hyperlink displayed against each field in the Http Request, Http Response, DS
   Http Request, DS Http Response and Error Message columns to view the complete details of the selected field.
- 6. Click on the plus symbol on the right of each log displayed for additional details.



- 7. If the export operation fails because of an error, the console displays a message explaining the cause of the error.
- 8. If you do not have any logs to export, console displays a message as there are no records to export.

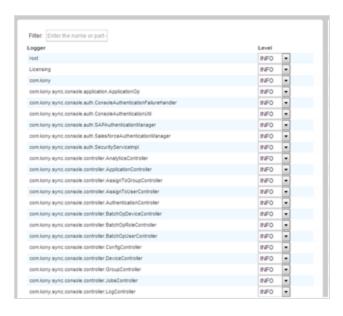


## 10.2 Kony Fabric Sync Services Log

Kony Fabric Sync Services log feature enables you to view various levels of the Kony Fabric Sync Server Services and Kony Fabric Sync Console log data like DEBUG, INFO and ERROR on UI.

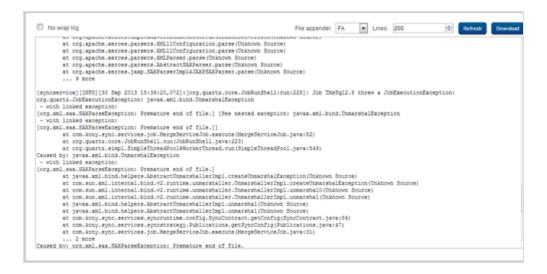
### 10.2.1 Configuration

Using Configuration UI, Administrator can configure the level data that is required to monitor the logged data on the Kony Fabric Sync services server.



#### 10.2.2 Log

Log feature enables you to download the log file, view the number of lines in the log file that helps in quickly viewing the logs from UI, especially the exceptions and followed by quick resolutions.



### 10.3 Kony Fabric Sync Console Log

Using Configuration helps you to configure the level data that is required to monitor the logged data on the Kony Fabric Sync console.

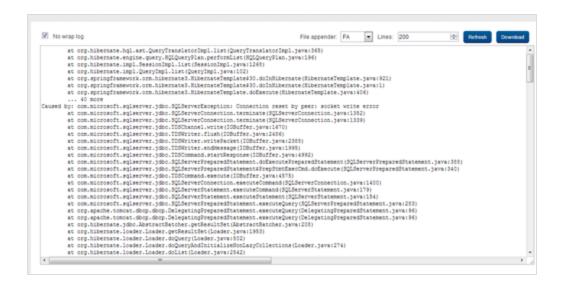
#### 10.3.1 Configuration

Using Configuration feature, an Administrator can configure the level data that is required to monitor the logged data on the Kony Fabric Sync services server.



### 10.3.2 Log

Log feature enables the Administrator to download the log file, view the number of lines in the log file. This helps in quickly viewing the logs from UI, especially the exceptions followed by quick resolutions.



## 11. Platform as a Service (PaaS)

You can view **Cloud Logs** and **Health Check** tabs on Kony Fabric Sync Console after you procure a valid PaaS license using the Accounts and Billing console.

- Checking for Kony Fabric Sync Server Side Logs
- Checking the Health of a Kony Fabric Sync Server

## 11.1 Checking Kony Fabric Sync Server Side Logs

The Cloud Logs view provided in Kony Fabric Sync Console enables to check for the Kony Fabric Sync Server side logs in PaaS (Cloud) environment. It shows a list of instances with instance id, IP address along with the links to view the Archived and Snapshot Logs. If the number of logs is more than 10, you can use the **Next** or **Previous** to move to more number of logs.

There are two types of cloud logs:

- Archived Logs
- Snapshot Logs

### 11.1.1 Archived Logs

The log files for the server instance that are archived every hour and stored for seven days. You can view and download these archived log files. If the number of archived log files is more than 10, you can use **Next** or **Previous** to move to more number of archived logs.

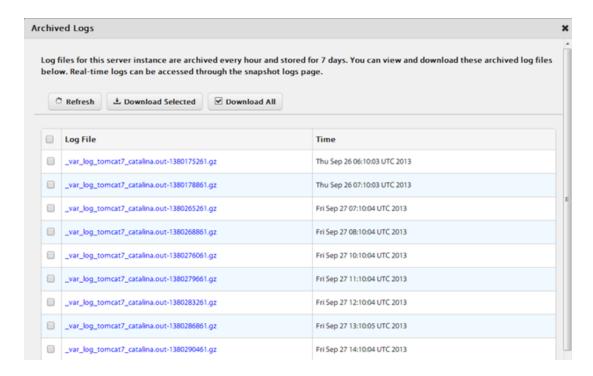
On **Cloud Logs** tab, you can view the list of archived logs and manage them. You can perform the following tasks:

- Viewing Archived Logs
- Downloading Selected Logs

- Downloading All the Logs
- Refreshing Archived Logs

#### 11.1.1.1 Viewing Archived Logs

To view the archived logs, click **View Archived Logs** under **Archived Logs**. The **Archived Logs** popup appears with all the archived log files.



#### 11.1.1.2 Downloading Selected Logs

To download the selected logs, follow these steps:

- On the Archived Logs page, select the checkbox of desired archived file that you want to download and click Download Selected.
  - A pop-up appears with the message, "Are you sure you want to download selected Log files?".
- Click OK to download the selected archived log files.
   A pop-up appears to choose the location to save the downloaded archived log files.



3. Select the location to save the downloaded archived log files, and click **OK**.

#### 11.1.1.3 Downloading all Logs

To download all the archived log files, follow these steps:

1. On the Archived Logs page, click Download All.

A pop-up appears with the message, "Are you sure you want to download all Log files?".



- Click OK to download the selected archived log files.
   A pop-up appears to choose the location to save all downloaded archived log files.
- 3. Select the location to save the downloaded archived log files, and click **OK**.

#### 11.1.1.4 Refreshing Archived Logs

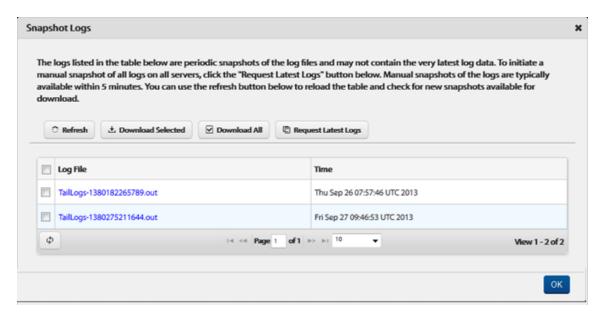
To refresh the archived logs, on the **Archived Logs** page, click **Refresh**.

The Archived Logs are refreshed.

### 11.1.2 Snapshot Logs

You can access real-time logs through the snapshot logs page. Snapshot logs comprise the last manual log snapshot fetched from the server. The logs listed in the table are periodic snapshots of the log files and may not contain the very latest log data. You can view and download these snapshot log files. If the number of snapshot log files is more than 10, you can use **Next** or **Previous** to move to more number of snapshot log files.

On Cloud Logs tab, you can view the list of snapshot logs and manage them.



You can perform the following tasks:

- Viewing Snapshot Logs
- Requesting Latest Snapshot Logs
- Downloading Selected Logs
- Downloading all the Logs
- Refreshing Snapshot Logs

#### 11.1.2.1 Viewing Snapshot Logs

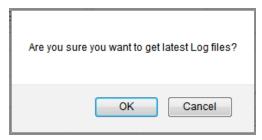
To view the snapshot logs, click **View Snapshot Logs** under **Snapshot Logs**. The **Snapshot Logs** pop-up appears with all the snapshot log files.

#### 11.1.2.2 Requesting Latest Snapshot Logs

To request latest snapshot logs, follow these steps:

- On the Snapshot Logs page, to initiate a manual snapshot of all logs on all servers, follow these steps:
- 2. Click Request Latest Logs.

A pop-up appears with the message, "Are you sure you want to get latest Log files?".



3. Click **OK** to download the latest log files.

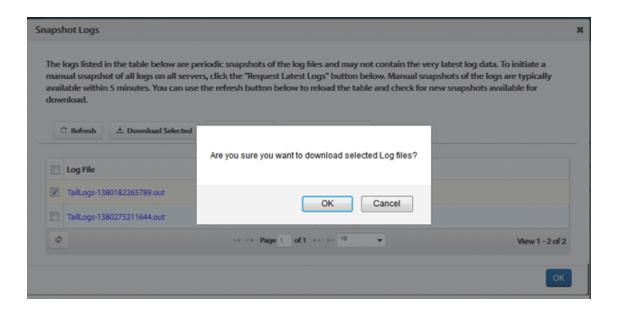
The manual snapshots of the logs are typically available within five minutes.

#### 11.1.2.3 Downloading Selected Logs

To download the selected log files, follow these steps:

1. On the **Snapshot Logs** page, select the checkbox of desired snapshot file that you want to download and click **Download Selected**.

A pop-up appears with the message, "Are you sure you want to download selected Log files?".



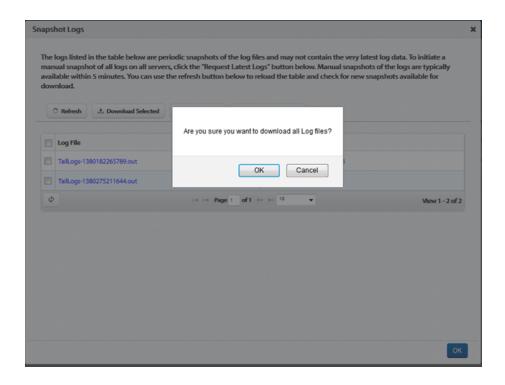
- Click OK to download the selected snapshot log files.
   A pop-up appears to choose the location to save all downloaded archived log files.
- 3. Select the location to save the downloaded snapshot log files, and click **OK**.

#### 11.1.2.4 Downloading all the Logs

To download all the snapshot log files, follow these steps:

1. On the Snapshot Logs page, click Download All.

A pop-up appears with the message, "Are you sure you want to download all Log files?".



- Click OK to download the selected snapshot log files.
   A pop-up appears to choose the location to save all downloaded snapshot log files.
- 3. Select the location to save the downloaded snapshot log files, and click **OK**.

#### 11.1.2.5 Refreshing Snapshot Logs

To refresh the snapshot logs and to reload the table with new snapshots available for download, on the **Snapshot Logs** page, click **Refresh**.

The Snapshot Logs are refreshed.

## 11.2 Checking Health of Kony Fabric Sync Server

The Health check view denotes the connection properties for Kony Fabric Sync Server in a cloud environment. It enables you to look at the health of the Kony Fabric Sync Server.

The following are the various connection properties that denote the health of a Kony Fabric Sync Server:

- Cloud Environment Identification
- Environment Information
- Access to Sync DB
- Access to Accounts API
- Access to Reporting Queue
- Security Credentials

#### 11.2.1 Cloud Environment Identification

Cloud Environment Identification parameter indicates whether the Kony Fabric Sync server runs in cloud environment or not. If the status is Success, it indicates that the Kony Fabric Sync Server runs in cloud environment.

#### 11.2.2 Environment Identification

If the Environment Identification parameter status is Success, it indicates that the environment related parameters are present.

### 11.2.3 Access to Sync DB

If the Access to Sync DB parameter status is Success, it indicates that the Kony Fabric Sync Server has access to SyncConsole database.

#### 11.2.4 Access to Accounts API

If the Access to Accounts API parameter status is Success, it has proper Kony accounts base URL and it is able to connect.

### 11.2.5 Access to Reporting Queue

If the Access to Reporting Queue parameter status is Success, it indicates that the environment has proper reporting Queue URL and it is able to connect.

### 11.2.6 Security Credentials

If the Security Credentials parameter status is Success, it indicates that the Kony Fabric Sync Server has the cloud security credentials.

#### **JSON Format Support**

The health check has JSON Format Support. To get the health check status on the JSON Format Support, you have to call the health check with output URL parameters as shown:

/healthcheck?output=json

## 12. Custom Authentication Manager

Kony Fabric Sync server supports custom authentication where you can authenticate using the custom code written in Java.

You can use custom authentication manager in the below situations.

- Data source has a login web service call that returns authentication token and you need to pass the same authentication token in subsequent web service calls.
- To authenticate the user using Single sign on, and OAuth.

#### To configure custom authentication, follow these steps:

- Write the java class by implementing spring com.kony.sync.console.auth.IAuthenticationManager interface.
- 2. Bundle the java class with dependent classes in a jar and copy the jar to the <sync.home>/apache-tomcat-7.0.26/webapps/syncconsole/WEBINF/lib folder. If you also have any other dependent third-party jars, then copy those also to the <sync.home>/apache-tomcat-7.0.26/webapps/syncconsole/WEBINF/lib folder.
- 3. Create an Authentication Profile.
- 4. Assign an Authentication Profile to an Application.
- 5. Restart Kony Fabric Sync server.

**Note:** You may have to add syncconsole classes, in classpath of the project to compile your project.

For example, <sync.home > /apache - tomcat 7.0.26/webapps/syncconsole/WEB - INF/classes.

# 12.1 Other Features of Custom Authentication Manager

The other features of Custom Authentication Manager are:

 Using the Custom Authentication Manager, you can override the ConfigParam defined under Service/ServiceConfig in the Kony Fabric Sync configuration file.

```
For example, endpointURL, and userid
```

You can also put any variable, for example, authentication token in context, and map the same
in subsequent web service calls.

For example,

 Use the below code to put the context variable into the context from custom authentication manager

```
ctxParams.put("TOKEN", <token-value>);
```

 Use the below param mapping in the Kony Fabric Sync configuration to take the mapping from the context.

```
<Param Name="token" Source="CONTEXT" SourceValue="TOKEN"/>
```

### 12.2 An Example of SalesForce Authentication Manager

```
package com.kony.sync.console.auth;
import java.net.URL;
import java.util.HashMap;
import java.util.Map;
import javax.xml.soap.MessageFactory;
import javax.xml.soap.Name;
import javax.xml.soap.SOAPBody;
```

```
import javax.xml.soap.SOAPBodyElement;
import javax.xml.soap.SOAPConnection;
import javax.xml.soap.SOAPConnectionFactory;
import javax.xml.soap.SOAPEnvelope;
import javax.xml.soap.SOAPFault;
import javax.xml.soap.SOAPMessage;
import org.apache.log4j.Logger;
import org.springframework.security.core.Authentication;
import org.springframework.security.core.AuthenticationException;
import org.springframework.stereotype.Service;
import org.w3c.dom.NodeList;
import com.kony.sync.syncconfig.IConfigConstants.SourceValue;
@Service("salesforceAuthenticationManager")
public class SalesforceAuthenticationManager implements
IAuthenticationManager {
       private static final String SALESFORCE DUMMY PASSWORD =
       "DummySalesforcePassword";
       private static Logger logger = Logger.getLogger
       (SalesforceAuthentication
       Manager.class);
       @Override
       public Authentication authenticate (Authentication arg0) throws
       AuthenticationException {
               SyncAuthentication token = (SyncAuthentication) arg0;
               String userName = token.getPrincipal().toString();
               String password = token.getCredentials().toString();
               try {
                       Authentication respToken = callLoginService(
```

```
userName, password, token);
                       return respToken;
               } catch (Exception e) {
                       logger.error("Salesforce authentication failed : " +
                       e,e);
                       token.setAuthenticated(false);
               return token;
       }
       private Authentication callLoginService(String userName,
               String password, SyncAuthentication token) throws
Exception {
               Map<String, Object> authDetails = token.getAuthContextParams();
               //ConsoleConfigProperties props = ConsoleConfigProperties
                 .getInstance();
               String propURN = authDetails.get("namespace").toString();
               //props.getPropertyValue("salesforce.namespace");
               String URN = (propURN!=null?propURN:"urn:partner
               .soap.sforce.com");
               try {
                       //Preparing the SOAP request
                       SOAPMessage message = MessageFactory.newInstance()
                       .createMessage();
                       SOAPBody body = message.getSOAPBody();
                       SOAPEnvelope envelope = message.getSOAPPart()
                       .getEnvelope();
                       Name bodyElement = envelope.createName
                      ("login", "urn", URN);
                       SOAPBodyElement loginElement = body.addBodyElement
                       (bodyElement);
                       Name user = envelope.createName("username"
                       , "urn", URN);
```

```
loginElement.addChildElement(user).addTextNode
                       (userName);
                       Name pass = envelope.createName("password"
                       , "urn", URN);
                       loginElement.addChildElement(pass)
                       .addTextNode(password);
                       //Setting the login soap action
                       message.getMimeHeaders().addHeader("SOAPAction",
                        URN + "/Soap/loginRequest");
                       //Connection to invoke the login service
                       SOAPConnectionFactory soapConnectionFactory =
                        SOAPConnectionFactory.newInstance();
                       SOAPConnection connection =
                        soapConnectionFactory.createConnection();
                       String salesforceURL = authDetails.get("url")
                        .toString();//props.getPropertyValue
                       ("salesforce.url");
                       URL endpoint = new URL(salesforceURL != null
                       ?salesforceURL:
"https://login.salesforce.com/services/Soap/u/25.0");
                       SOAPMessage response =
                       connection.call(message, endpoint);
                       connection.close();
                       //response.writeTo(System.out);
                       NodeList nodeList = response.getSOAPBody()
                       .qetElementsByTagNameNS(URN, "sessionId");
                       if(nodeList.getLength() == 0){
                               SOAPFault fault = response.getSOAPBody(
                               ).getFault();
                               throw new Exception ("Error while Salesforce
```

```
Login :" + fault.getFaultString());
                       //System.out.println(nodeList
                         .item(0).getTextContent());
                       NodeList urlList = response.getSOAPBody()
                       .getElementsByTagNameNS(URN, "serverUrl");
                       NodeList emailList = response.getSOAPBody()
                       .getElementsByTagNameNS(URN, "userEmail");
                       Map<String, Object> ctxParams = new HashMap
                       <String, Object>();
                       //Adding SessionId in context so that webservice
                         mapping can use for mapping
                       ctxParams.put(SourceValue.SESSION ID.toString(),
                       nodeList.item(0).getTextContent());
                       // Overriding the endpoint url by setting the
                          middleware config parameter
                       ctxParams.put("endpointUrl", urlList.item(0)
                       .getTextContent());
                       //USER EMAIL and USER PASSWORD are used to create
                         the user in the sync console
                       ctxParams.put("USER EMAIL", emailList.item(0)
                       .getTextContent());
                       ctxParams.put("USER PASSWORD",
                        SALESFORCE DUMMY PASSWORD);
                       //List<GrantedAuthority> authorityList
                         = new ArrayList<GrantedAuthority>();
                       //authorityList.add(new GrantedAuthorityImpl
                         ("ROLE USER"));
                       //If any context parameters need to pass to
                        sync services then create the
SyncAuthentication instance
                       SyncAuthentication responseToken =
                       new SyncAuthentication(token.getPrincipal(),
```

```
token.getCredentials(), null);
    responseToken.setAuthContextParams(ctxParams);
    return responseToken;
} catch (Exception e) {
    logger.error(e.getMessage(), e);
    throw e;
}
}
```