



# Kony MobileFabric™

Kony MobileFabric QuickStart Guide Series

Getting Started with Amazon AWS and Kony MobileFabric

Release 6.5

## Revision History

Date	Document Version	Description of Modifications/Release
09/24/2015	1.2	Document Released for Amazon AWS Kony MobileFabric 6.5.2
07/09/2015	1.0	Document Released for Amazon AWS Kony MobileFabric 6.5

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## 1. Overview

Kony MobileFabric is a leading Mobile Backend as a Service (MBaaS) that developers can leverage from any app development platform they choose using the various MobileFabric SDKs. It provides powerful API Management and Analytics capabilities along with the following set of configurable enterprise services to simplify your mobile backend and significantly reduce the time it takes to develop mobile applications.

Kony MobileFabric provides enterprise security and complex system integration services and allows developers to focus on building app experiences. This is accomplished by providing a powerful set of services to handle identity, integration, orchestration, data sync, and messaging. When these services are configured within Kony MobileFabric, they can easily be incorporated into a mobile application using any third-party app development tool using our SDKs or direct REST API interface.

MobileFabric has multiple features that can be used - Identity, Integration, Orchestration, Sync, and Messaging. These features can be accessed via a common, centralized console.

For successful authentication with users, and to access centralized features of MobileFabric, Kony recommends that you install the following MobileFabric features on premises:

- Kony MobileFabric Identity and Console
- Kony MobileFabric Integration
- Kony MobileFabric Messaging
- Kony MobileFabric Sync

The following are the five major services offered by Kony MobileFabric:

- **Identity**

Protect your enterprise data by using your existing identity infrastructure to authenticate and authorize app users. Integrate with Active Directory, Salesforce, SAP, Kony's Cloud User Repository or other standardized identity providers via OAuth or SAML.

- **Integration**

Easily mobilize your enterprise data such as Salesforce and SAP using business adaptors, or any system that provides standard REST, SOAP, XML or JSON services. These services can be further enhanced for mobile using powerful transformation and caching.

- **Service Orchestration**

Optimize the user experience by creating workflows and composite services including custom logic and data processing on the server side to reduce the workload on the device.

- **Messaging Notification**

Provide intelligent, real-time messaging by delivering targeted notifications and alerts based on user information and location to all device types. Configure automated campaigns or events you can trigger to engage with users over Push, SMS, Email or iOS Passbook.

- **Data synchronization**

Build offline apps that synchronize relational data between the device and your existing back-end systems. Configure server-side rules and policies to control data access, filtering and automatic conflict resolution.

## 1.1 MobileFabric AWS Editions and Capacity

Kony MobileFabric is offered on AWS in two separate editions:

- **Kony MobileFabric Developer Edition** is a free offering available for development, testing or small production workloads. Typically the developer edition can support an app that has up to 20,000 unique user sessions (unique visits) per month.
- **Kony MobileFabric Express Edition** is a paid offering on a larger EC2 server that typically supports up to 75,000 user sessions.

There is no built-in limit to the number of users or user sessions that each edition can support beyond what can be achieved using the memory, CPU and network capabilities of the EC2 server size. For larger scale deployments in a high availability configuration, Kony MobileFabric Standard, Professional and Enterprise editions are available as a SaaS offering on Kony Cloud or available on-premise.

## 2. AWS Marketplace and Kony MobileFabric

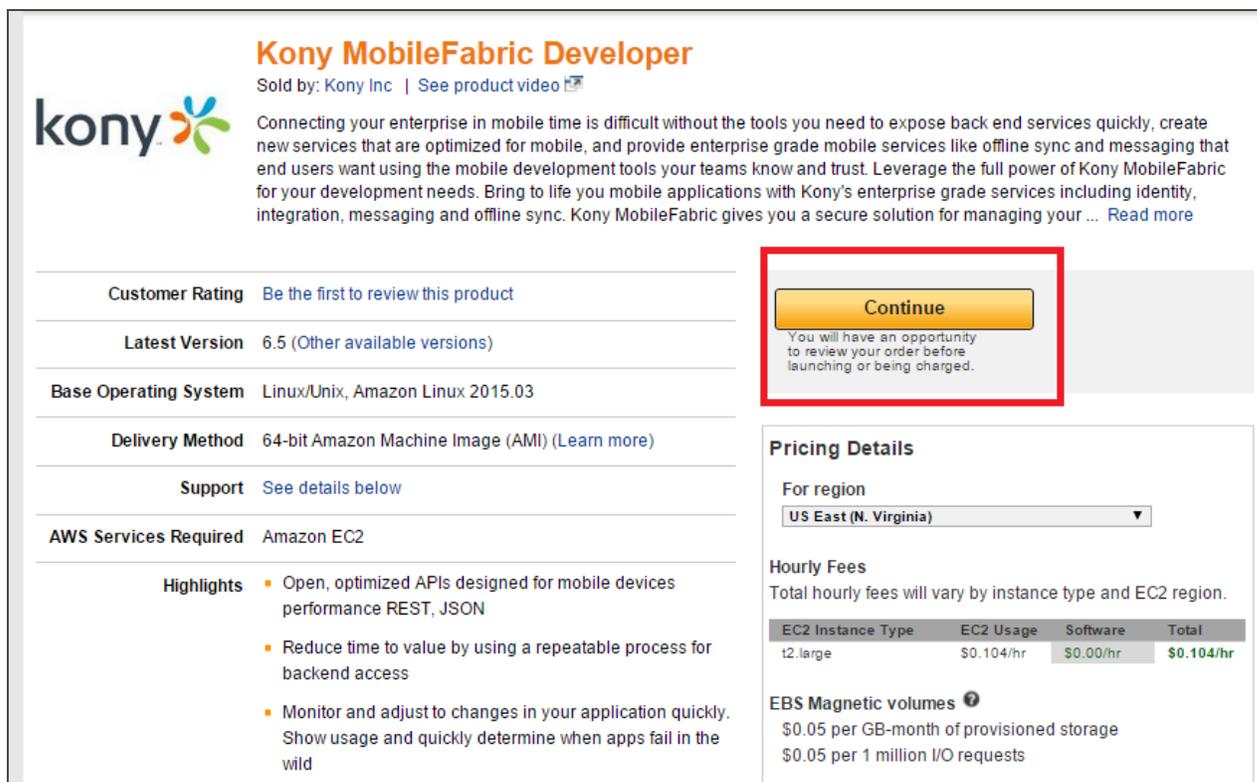
Amazon AWS Marketplace is an online store that helps Amazon customers find, buy, and immediately start using the software and services they need to build products and run their businesses. If you already have an AWS account, follow these steps to create an MobileFabric instance and launch it:

1. Configuring Kony MobileFabric as required for Developer or Express version:
  - [Configuring Kony MobileFabric Developer 1-Click Launch](#)
  - [Configuring Kony MobileFabric Developer Manual Launch](#)
  - [Configuring Kony MobileFabric Express 1-Click Launch](#)
  - [Configuring Kony MobileFabric Express Manual Launch](#)
2. [Launching the MobileFabric Instance](#)

### 2.1 Configuring AWS Kony MobileFabric Developer: 1-Click Launch

To 1-Click launch Kony MobileFabric Developer Edition , follow these steps:

1. Go to <https://aws.amazon.com/marketplace>.
2. Sign in to your AWS Account.
3. Browse to the Kony MobileFabric AWS product page.

4. Click **Continue**.


**Kony MobileFabric Developer**  
Sold by: Kony Inc | See product video

Connecting your enterprise in mobile time is difficult without the tools you need to expose back end services quickly, create new services that are optimized for mobile, and provide enterprise grade mobile services like offline sync and messaging that end users want using the mobile development tools your teams know and trust. Leverage the full power of Kony MobileFabric for your development needs. Bring to life you mobile applications with Kony's enterprise grade services including identity, integration, messaging and offline sync. Kony MobileFabric gives you a secure solution for managing your ... [Read more](#)

<b>Customer Rating</b>	Be the first to review this product
<b>Latest Version</b>	6.5 (Other available versions)
<b>Base Operating System</b>	Linux/Unix, Amazon Linux 2015.03
<b>Delivery Method</b>	64-bit Amazon Machine Image (AMI) ( <a href="#">Learn more</a> )
<b>Support</b>	<a href="#">See details below</a>
<b>AWS Services Required</b>	Amazon EC2

**Highlights**

- Open, optimized APIs designed for mobile devices performance REST, JSON
- Reduce time to value by using a repeatable process for backend access
- Monitor and adjust to changes in your application quickly. Show usage and quickly determine when apps fail in the wild

**Continue**

You will have an opportunity to review your order before launching or being charged.

**Pricing Details**

For region  
US East (N. Virginia)

**Hourly Fees**  
Total hourly fees will vary by instance type and EC2 region.

EC2 Instance Type	EC2 Usage	Software	Total
t2.large	\$0.104/hr	\$0.00/hr	\$0.104/hr

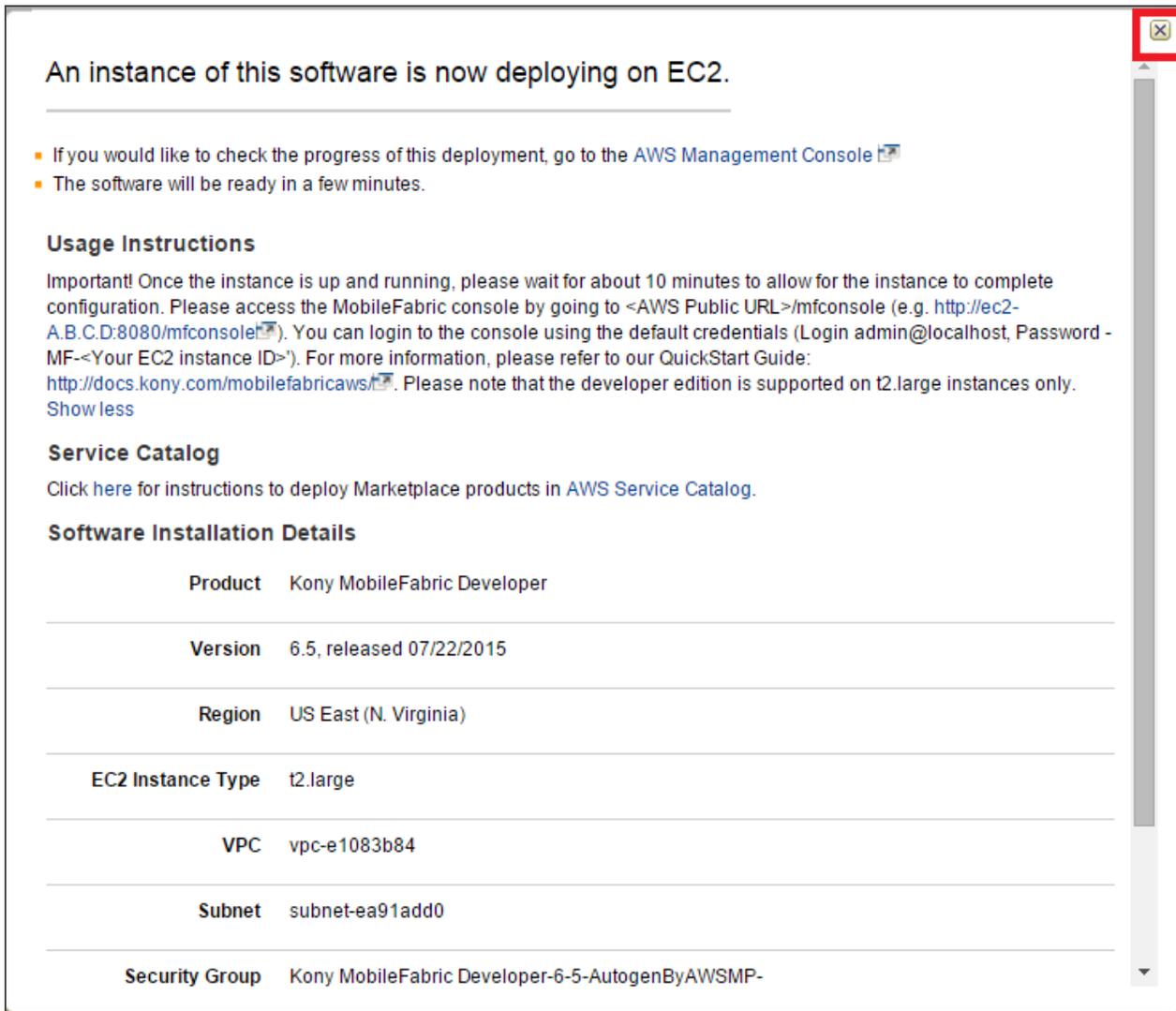
**EBS Magnetic volumes**

- \$0.05 per GB-month of provisioned storage
- \$0.05 per 1 million I/O requests

5. The **Launch on EC2** page appears. Under the **Kony MobileFabric Developer**, click the **1-Click Launch** tab:

The screenshot displays the AWS Marketplace interface for the 'Kony MobileFabric Developer' software. At the top, there's a navigation bar with the AWS Marketplace logo, user information, and links to 'Your Account', 'Help', and 'Sell on AWS Marketplace'. A search bar is present with the text 'Search AWS Marketplace' and a 'GO' button. Below the search bar, a notification banner states 'Version 6.5 of this software is now available. See release notes'. The main content area is titled 'Launch on EC2: Kony MobileFabric Developer'. It features two launch options: '1-Click Launch' (Review, modify, and launch) and 'Manual Launch' (With EC2 Console, APIs or CLI). A central instruction box says 'Click "Launch with 1-Click" to launch this software with the settings below'. Below this, there are expandable sections for 'Version' (6.5, released 07/22/2015), 'Region' (US East (N. Virginia)), and 'EC2 Instance Type' (t2.large). The 'EC2 Instance Type' section includes a table of specifications: Memory (8 GIB), CPU (2 virtual cores), Storage (EBS storage only), Platform (64-bit), Network performance (Low to Moderate), and API Name (t2.large). To the right, a 'Price for your selections:' section lists costs: \$0.10 / hour for t2.large EC2 Instance usage fees + \$0.00 hourly software fee, \$0.05 / GB / month for EBS Magnetic Storage, and \$0.05 / 1 million I/O requests for EBS Magnetic Storage. A yellow 'Launch with 1-Click' button is highlighted with a red border. Below this, a 'Cost Estimator' section shows a total of \$74.88 / month for t2.large EC2 Instance usage fees, assuming 24-hour use over 30 days. A 'Software Charges' section shows \$0.00 / month for software fees for t2.large.

6. The Instance details pop-up appears. Verify that instance information is correct and click the **Cancel** button to close the window.



An instance of this software is now deploying on EC2.

- If you would like to check the progress of this deployment, go to the [AWS Management Console](#).
- The software will be ready in a few minutes.

**Usage Instructions**

Important! Once the instance is up and running, please wait for about 10 minutes to allow for the instance to complete configuration. Please access the MobileFabric console by going to <AWS Public URL>/mfconsole (e.g. <http://ec2-A.B.C.D:8080/mfconsole>). You can login to the console using the default credentials (Login admin@localhost, Password - MF-<Your EC2 instance ID>). For more information, please refer to our QuickStart Guide: <http://docs.kony.com/mobilefabricaws>. Please note that the developer edition is supported on t2.large instances only.

[Show less](#)

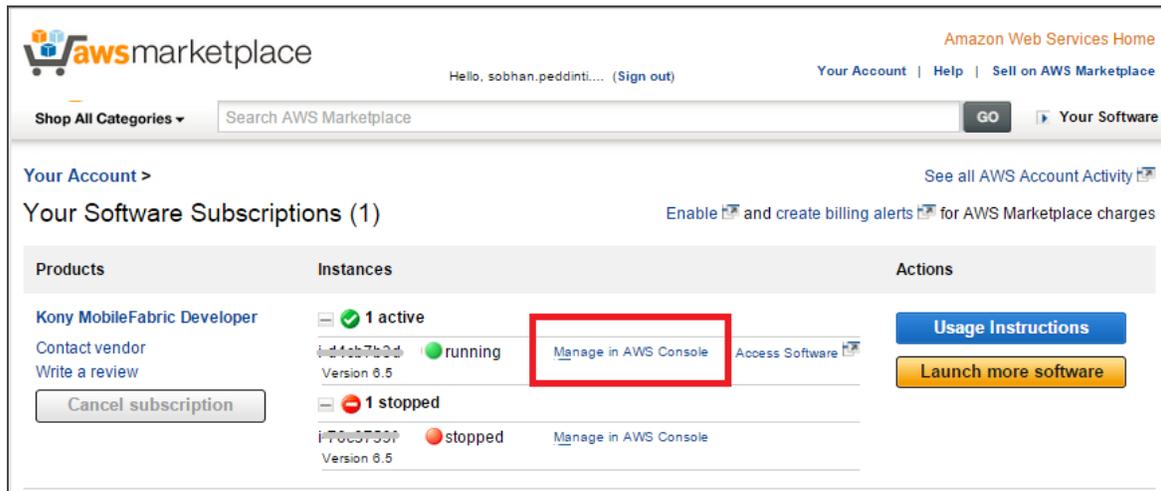
**Service Catalog**

Click [here](#) for instructions to deploy Marketplace products in [AWS Service Catalog](#).

**Software Installation Details**

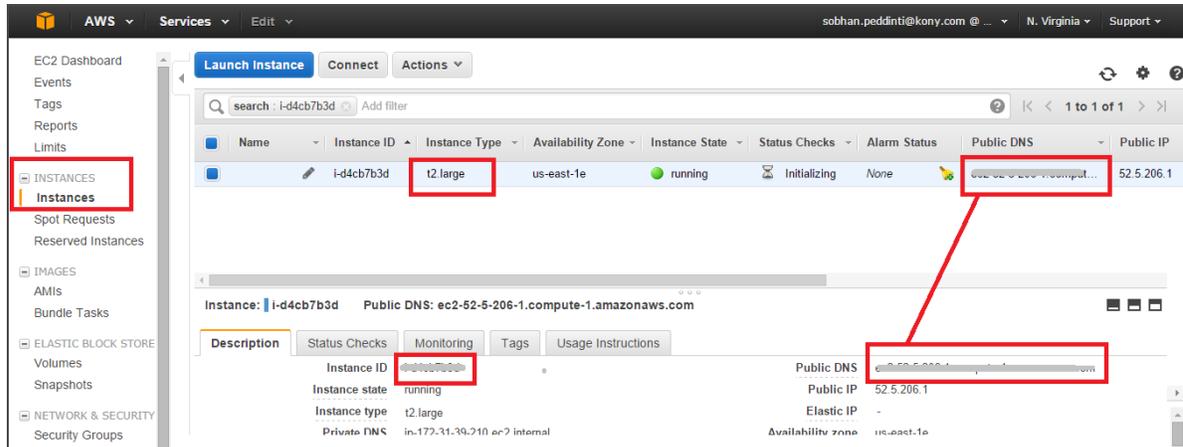
<b>Product</b>	Kony MobileFabric Developer
<b>Version</b>	6.5, released 07/22/2015
<b>Region</b>	US East (N. Virginia)
<b>EC2 Instance Type</b>	t2.large
<b>VPC</b>	vpc-e1083b84
<b>Subnet</b>	subnet-ea91add0
<b>Security Group</b>	Kony MobileFabric Developer-6-5-AutogenByAWSMP-

7. In the page that appears, click the **Manage in AWS Console** link to manage your instances, shown below:



In the **Instances**, the MobileFabric instance is created, shown below:

- **Instance Type** indicates the instance type that you have chosen.
- **Public DNS** indicates URL for the MobileFabric Console.



You can now launch the [MobileFabric Instance](#).

## 2.2 Configuring AWS Kony MobileFabric Developer: Manual Launch

To manually launch Kony MobileFabric Developer Edition, follow these steps:

1. Go to <https://aws.amazon.com/marketplace>.
2. Sign in to your AWS Account.
3. On the AWS Kony MobileFabric product page, click **Continue**.

**Kony MobileFabric Developer**  
Sold by: Kony Inc | See product video

Connecting your enterprise in mobile time is difficult without the tools you need to expose back end services quickly, create new services that are optimized for mobile, and provide enterprise grade mobile services like offline sync and messaging that end users want using the mobile development tools your teams know and trust. Leverage the full power of Kony MobileFabric for your development needs. Bring to life you mobile applications with Kony's enterprise grade services including identity, integration, messaging and offline sync. Kony MobileFabric gives you a secure solution for managing your ... [Read more](#)

**Customer Rating** Be the first to review this product

**Latest Version** 6.5 (Other available versions)

**Base Operating System** Linux/Unix, Amazon Linux 2015.03

**Delivery Method** 64-bit Amazon Machine Image (AMI) ([Learn more](#))

**Support** [See details below](#)

**AWS Services Required** Amazon EC2

**Highlights**

- Open, optimized APIs designed for mobile devices performance REST, JSON
- Reduce time to value by using a repeatable process for backend access
- Monitor and adjust to changes in your application quickly. Show usage and quickly determine when apps fail in the wild

**Continue**  
You will have an opportunity to review your order before launching or being charged.

**Pricing Details**

For region  
US East (N. Virginia)

**Hourly Fees**  
Total hourly fees will vary by instance type and EC2 region.

EC2 Instance Type	EC2 Usage	Software	Total
t2.large	\$0.104/hr	\$0.00/hr	\$0.104/hr

**EBS Magnetic volumes**

- \$0.05 per GB-month of provisioned storage
- \$0.05 per 1 million I/O requests

4. The **Launch on EC2** page appears. Under the **Kony MobileFabric Developer**, click the **Manual Launch** tab.

The screenshot shows the AWS Marketplace interface for 'Kony MobileFabric Developer'. The 'Manual Launch' tab is selected, showing options for launching the software. A red box highlights the 'Launch with EC2 Console' button for the 'US East (N. Virginia)' region. The 'Pricing Details' section shows hourly fees for EC2 instance types and EBS Magnetic volumes.

**Launch on EC2:**  
**Kony MobileFabric Developer**

**1-Click Launch**  
Review, modify, and launch

**Manual Launch**  
With EC2 Console, APIs or CLI

**Launching Options**

- You can click the "Launch with EC2 Console" buttons below and following the instructions to launch an instance of this software
- You can also find and launch these AMIs by searching for the AMI IDs (shown below) in the "Community AMIs" tab of the [EC2 Console](#) [Launch Wizard](#)
- You can view this information at a later time by visiting the Your Software page. For help, see [step-by-step instructions](#) for launching Marketplace AMIs from the AWS Console.

**Usage Instructions**

**Select a Version**

6.5, released 07/22/2015

Region	ID	Launch with EC2 Console
US East (N. Virginia)	ami-93be60f8	Launch with EC2 Console
US West (Oregon)	ami-2d838f1d	Launch with EC2 Console
US West (N. California)	ami-6fd72a2b	Launch with EC2 Console
EU (Frankfurt)	ami-00d0d51d	Launch with EC2 Console

**Pricing Details**

For region: US East (N. Virginia)

**Hourly Fees**  
Total hourly fees will vary by instance type and EC2 region.

EC2 Instance Type	Software	EC2	Total
t2.large	\$0.00/hr	\$0.104/hr	\$0.104/hr

**EBS Magnetic volumes**

- \$0.05 per GB-month of provisioned storage
- \$0.05 per 1 million I/O requests

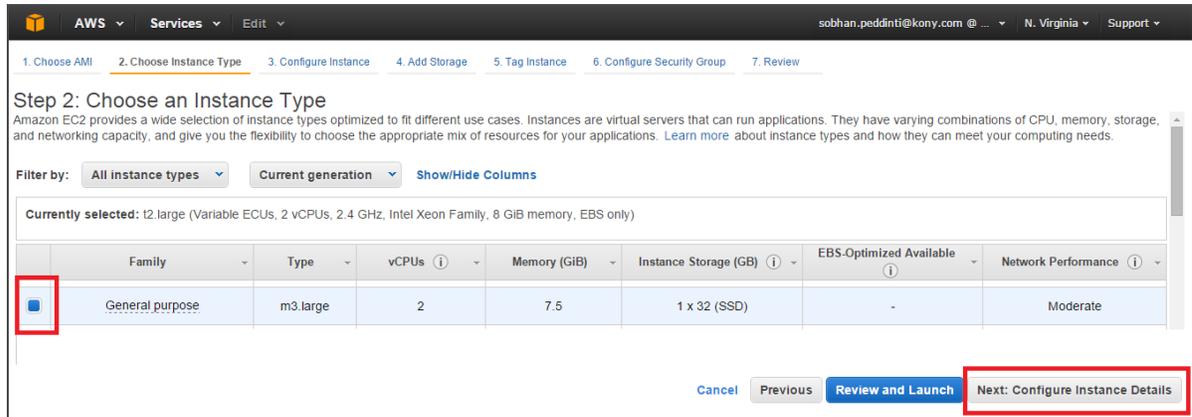
Assumes On-Demand EC2 pricing; prices for Reserved and Spot Instances will be lower. See pricing details.

Data transfer fees not included.

Learn about instance types

- In the **Manual Launch** tab, configure the required fields such as for region and version. In the **Region** section, click the **Launch with EC2 Console** button.
- In the **Step 2: Choose an Instance Type** page, click the instance for type m3.large, shown below:

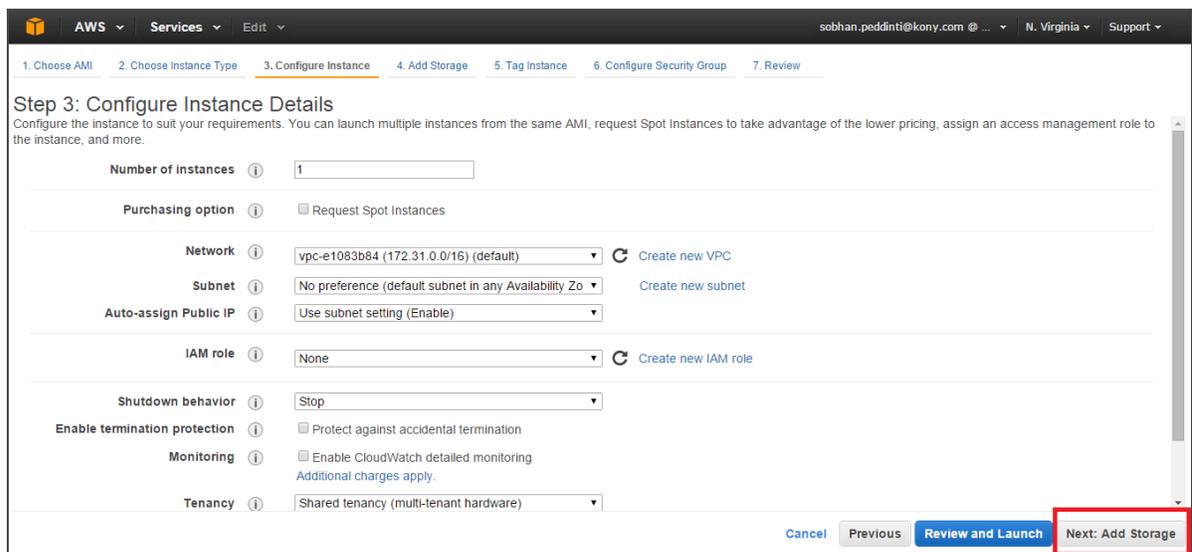
7. Click the **Next: Configure Instance Details** button.



The screenshot shows the AWS Management Console interface for Step 2: Choose an Instance Type. The breadcrumb trail includes: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Tag Instance, 6. Configure Security Group, 7. Review. The page title is "Step 2: Choose an Instance Type" with a sub-header "Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. Learn more about instance types and how they can meet your computing needs." Below the header, there are filter options: "All instance types", "Current generation", and "Show/Hide Columns". A "Currently selected:" section shows "t2.large (Variable ECUs, 2 vCPUs, 2.4 GHz, Intel Xeon Family, 8 GiB memory, EBS only)". A table lists instance types with columns: Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, and Network Performance. The "m3.large" instance type is selected, indicated by a blue square in the selection column. At the bottom right, the "Next: Configure Instance Details" button is highlighted with a red box.

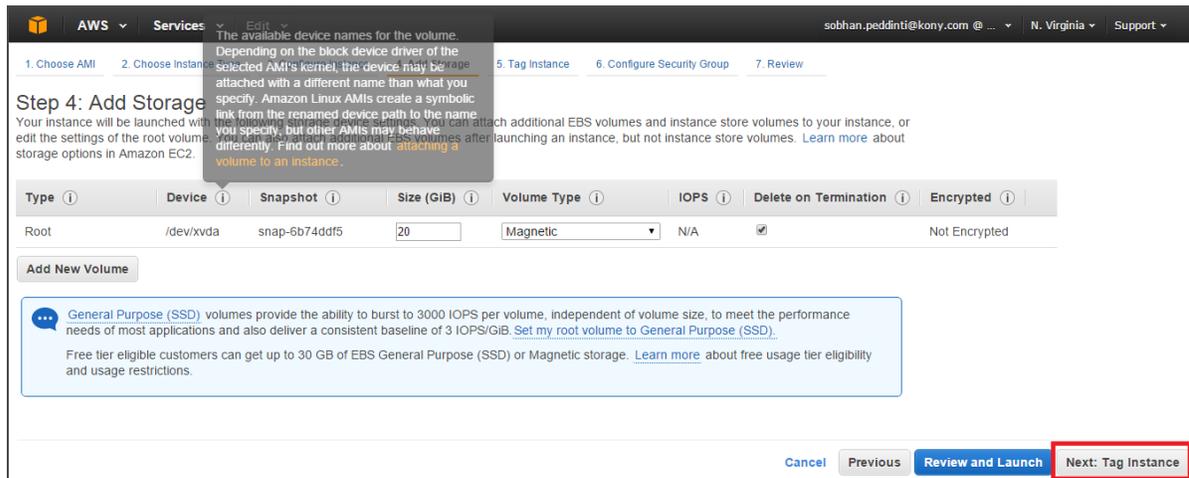
	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
<input checked="" type="checkbox"/>	General purpose	m3.large	2	7.5	1 x 32 (SSD)	-	Moderate

8. In the **Step 3: Configure Instance Details** page, leave the defaults settings and click the **Next: Add Storage** button, shown below:

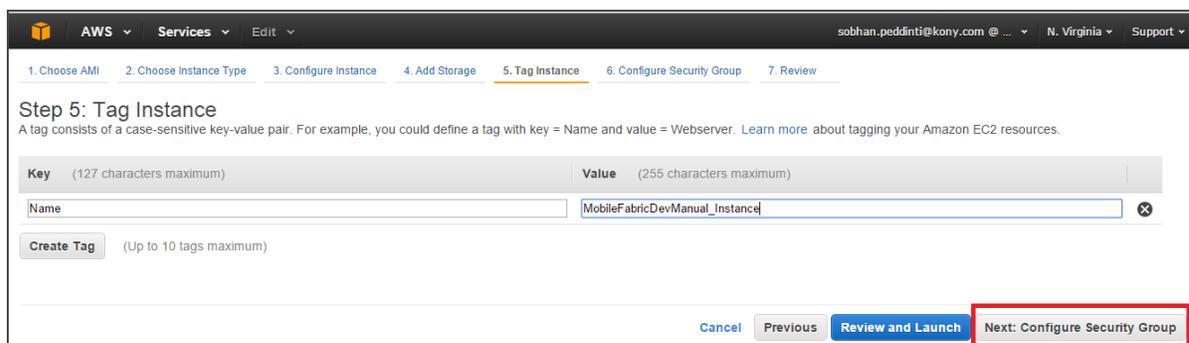


The screenshot shows the AWS Management Console interface for Step 3: Configure Instance Details. The breadcrumb trail includes: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Tag Instance, 6. Configure Security Group, 7. Review. The page title is "Step 3: Configure Instance Details" with a sub-header "Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot Instances to take advantage of the lower pricing, assign an access management role to the instance, and more." The configuration options are: Number of instances (1), Purchasing option (Request Spot Instances), Network (vpc-e1083b84 (172.31.0.0/16) (default)), Subnet (No preference (default subnet in any Availability Zo)), Auto-assign Public IP (Use subnet setting (Enable)), IAM role (None), Shutdown behavior (Stop), Enable termination protection (Protect against accidental termination), Monitoring (Enable CloudWatch detailed monitoring), and Tenancy (Shared tenancy (multi-tenant hardware)). At the bottom right, the "Next: Add Storage" button is highlighted with a red box.

9. In the **Step 4: Add Storage** page, leave the defaults settings and click the **Next: Tag Instance** button, shown below:

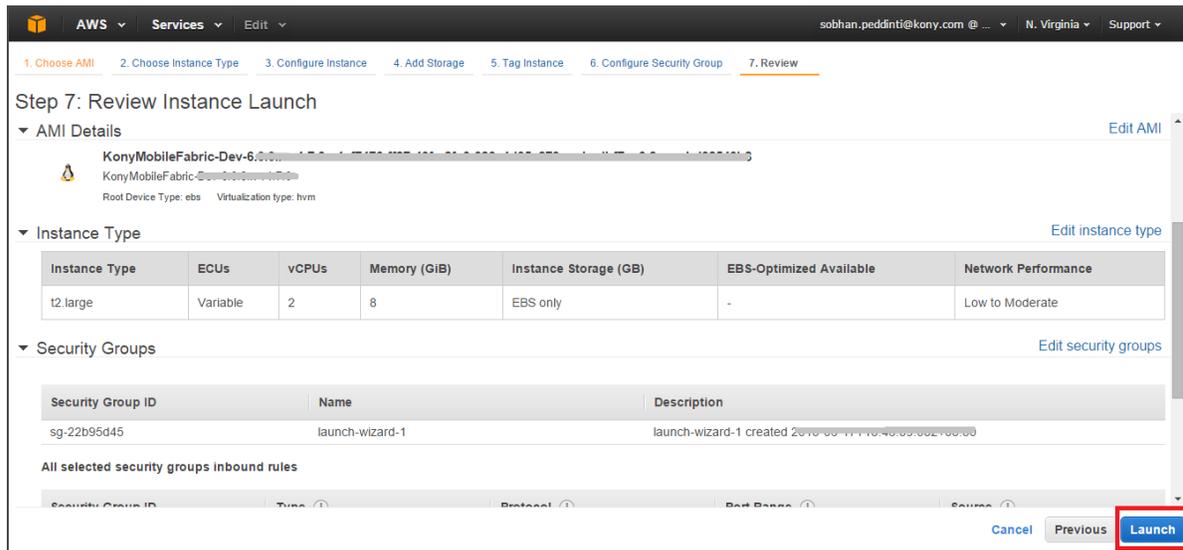


10. In the **Step 5: Tag Instance** page, enter the instance name and click the **Next: Configure Security Group** button, shown below:

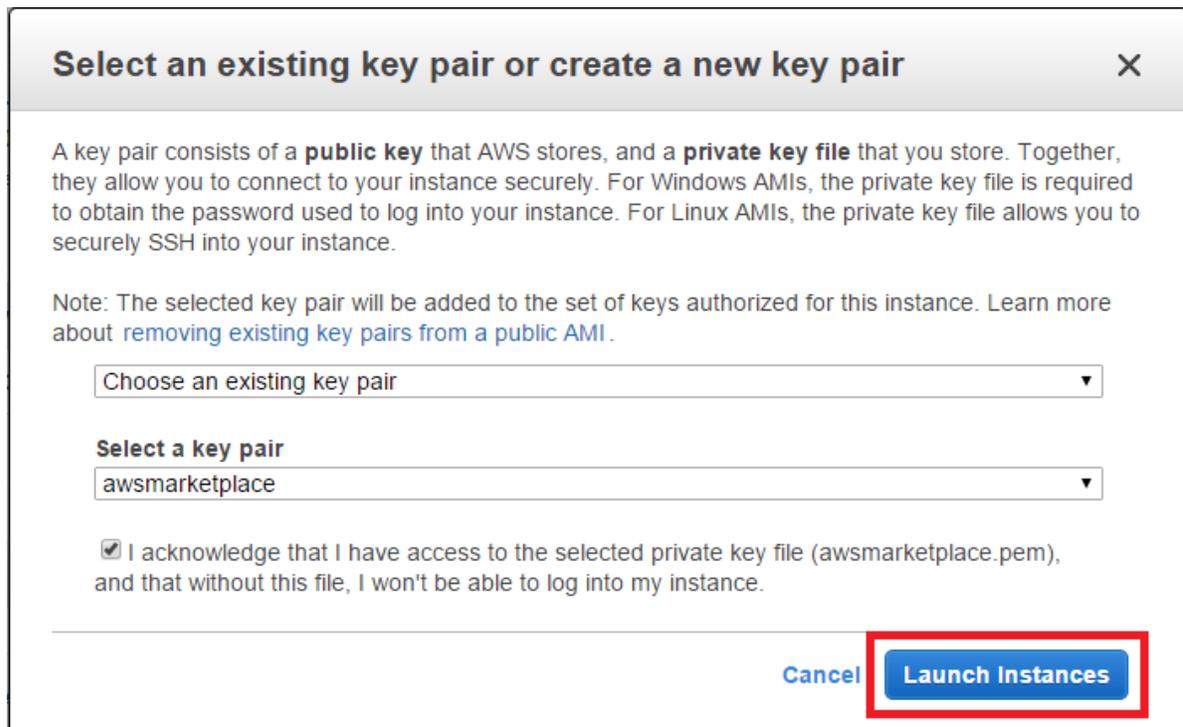


11. In the **Step 6: Configure Security Group** page, under the **Assign a security group**, click the **Select an existing security group**. Select the security option and click the **Review and Launch** button.





14. In the **Select an existing key pair or create a new key pair** pop-up, select the check box and click the **Launch Instances** button, shown below:





## 2.3 Configuring Kony MobileFabric Express: 1-Click Launch

To 1-Click launch Kony MobileFabric Express Edition, follow these steps:

1. Go to <https://aws.amazon.com/marketplace>.
2. Sign in to your AWS Account.
3. In the AWS Market place screen, in the Search text box, type **Kony MobileFabric** and press **Enter**.

https://aws.amazon.com/marketplace?

aws marketplace

Hello, [Name] (Sign out) | Your Account | Help | Sell on AWS Marketplace

Shop All Categories | Search AWS Marketplace | GO | Your Software

**NEXT-GENERATION FIREWALL FOR AWS** paloalto NETWORKS®

APPLY APPLICATION-SPECIFIC FIREWALL POLICIES  
PREVENT KNOWN AND UNKNOWN THREATS  
GAIN APPLICATION VISIBILITY

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InfoReliance Corporation  
\$0.155 to \$19,406/hr for software + Charges for EC2 with Windows  
**Free Trial**
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Trend Micro  
Starting from \$1.74/hr or from \$9,990/yr for software  
**Free Trial**
- AlienVault Unified Security Management...  
AlienVault  
\$1.00/hr or \$7,750/yr for software  
**Free Trial**

**Operating Systems**

- amazon web services Amazon Linux AMI (HVM / 64-bit)  
Amazon Web Services  
\$0.013 to \$8.14/hr incl EC2 charges
- CentOS CentOS 7 (x86\_64) with Updates HVM  
Centos.org  
\$0.00/hr for software
- ORACLE LINUX Oracle Linux 6.6  
Orbitera - Oracle  
Starting from \$0.06/hr or from \$474/yr for software

**Popular Products**

4. In the Search results, click Kony MobileFabric.

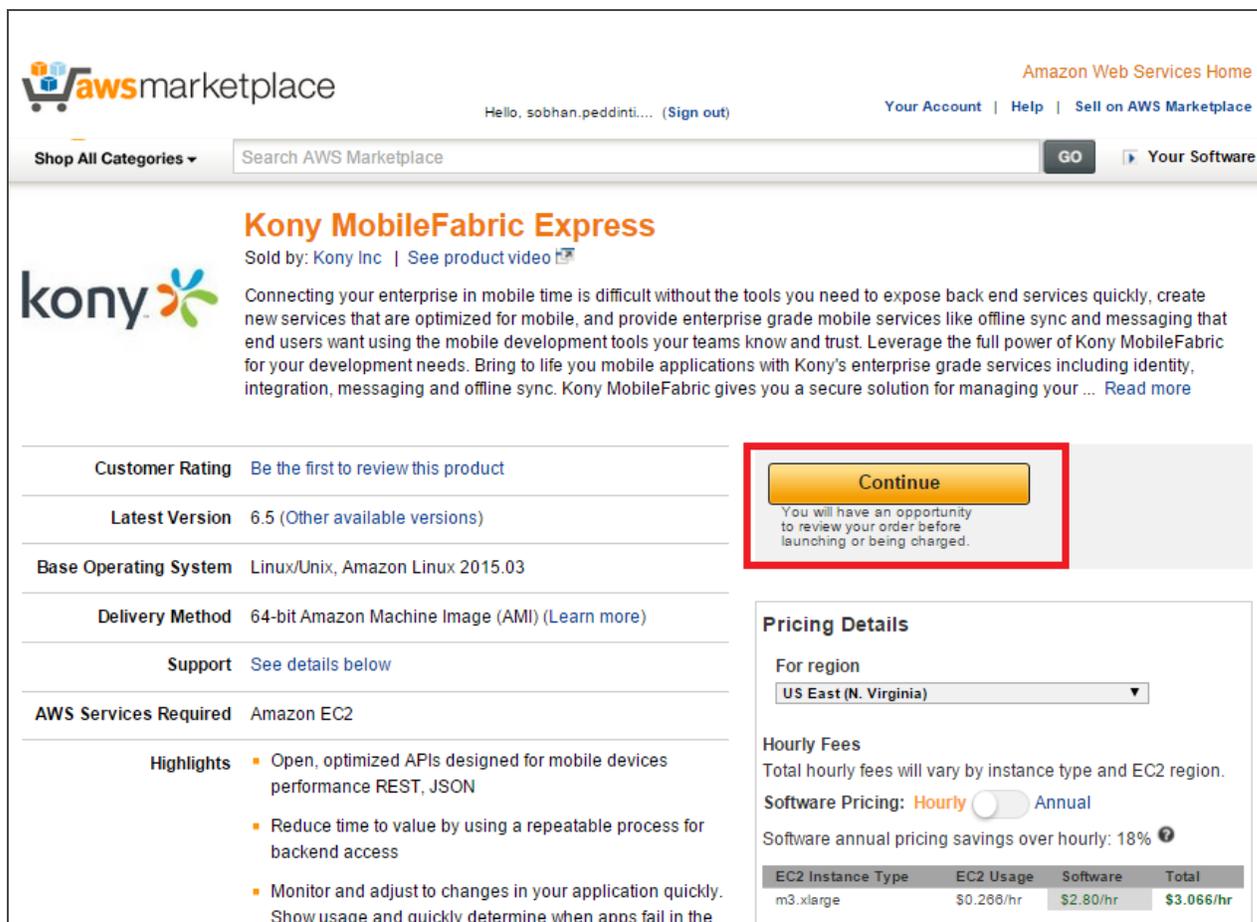
https://aws.amazon.com/marketplace/search/results/ref=gtw\_navgno\_search\_box?searchTerms=Kony+MobileFabric&search=

aws marketplace

Hello, sobhan.peddinti... (Sign out) | Your Account | Help | Sell on AWS Marketplace

Shop All Categories | Kony MobileFabric | GO | Your Software

5. Kony MobileFabric Express details page appears. Click **Continue**.



**awsmarketplace** Amazon Web Services Home

Hello, sobhan.peddinti... (Sign out) Your Account | Help | Sell on AWS Marketplace

Shop All Categories ▾ Search AWS Marketplace  Your Software

## Kony MobileFabric Express

Sold by: Kony Inc | [See product video](#)

**kony** Connecting your enterprise in mobile time is difficult without the tools you need to expose back end services quickly, create new services that are optimized for mobile, and provide enterprise grade mobile services like offline sync and messaging that end users want using the mobile development tools your teams know and trust. Leverage the full power of Kony MobileFabric for your development needs. Bring to life your mobile applications with Kony's enterprise grade services including identity, integration, messaging and offline sync. Kony MobileFabric gives you a secure solution for managing your ... [Read more](#)

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**Customer Rating** Be the first to review this product

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**Latest Version** 6.5 (Other available versions)

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**Base Operating System** Linux/Unix, Amazon Linux 2015.03

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**Delivery Method** 64-bit Amazon Machine Image (AMI) ([Learn more](#))

---

**Support** [See details below](#)

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**AWS Services Required** Amazon EC2

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**Highlights**

- Open, optimized APIs designed for mobile devices performance REST, JSON
- Reduce time to value by using a repeatable process for backend access
- Monitor and adjust to changes in your application quickly. Show usage and quickly determine when apps fail in the

**Continue**

You will have an opportunity to review your order before launching or being charged.

**Pricing Details**

For region

**Hourly Fees**  
Total hourly fees will vary by instance type and EC2 region.

**Software Pricing:**  Hourly  Annual

Software annual pricing savings over hourly: 18%

EC2 Instance Type	EC2 Usage	Software	Total
m3.xlarge	\$0.266/hr	\$2.80/hr	\$3.066/hr

6. The **Launch on EC2** page appears. Under the **Kony MobileFabric Express**, click the **1-Click Launch** tab:

aws marketplace

Amazon Web Services Home

Hello, amav.pandey@ko... (Sign out) | Your Account | Help | Sell on AWS Marketplace

Shop All Categories | Search AWS Marketplace | GO | Your Software

Version 6.5 of this software is now available. See release notes

### Launch on EC2:

## Kony MobileFabric Express

**1-Click Launch**  
Review, modify, and launch

**Manual Launch**  
With EC2 Console, APIs or CLI

Click "Launch with 1-Click" to launch this software with the settings below

The default settings are provided by the software seller and AWS Marketplace.

**Software Pricing**

Subscription Term	Applicable Instance Type
<input checked="" type="radio"/> Hourly <input type="radio"/> Annual	m3.xlarge <b>Hourly fee</b> \$0.27 / hour Find instance details in EC2 instance section below.

**Price for your selections:**

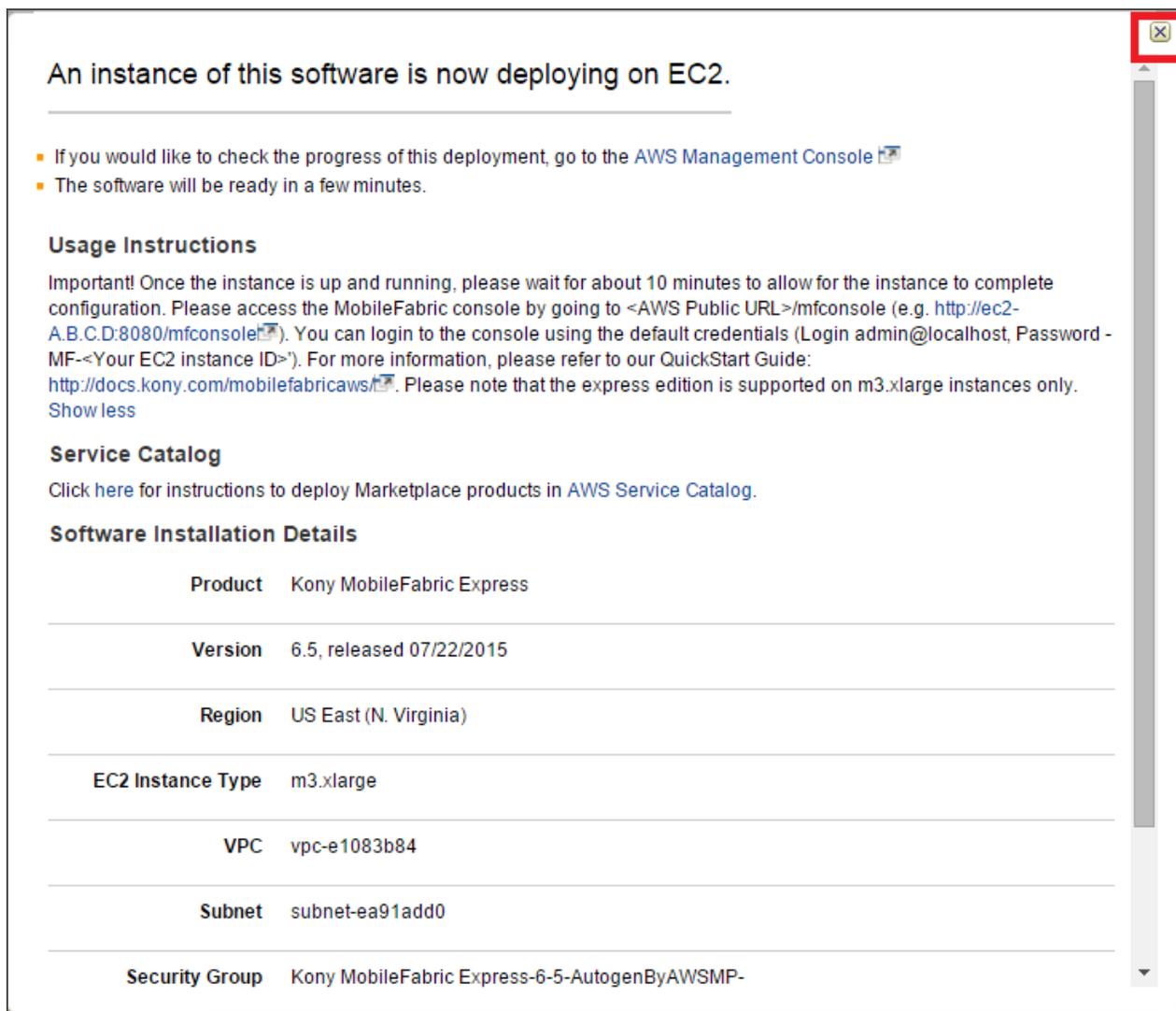
- \$3.07 / hour
- \$0.27 m3.xlarge EC2 Instance usage fees +
- \$2.80 hourly software fee
- \$0.05 / GB / month EBS Magnetic Storage
- \$0.05 / 1 million I/O requests EBS Magnetic Storage

**Launch with 1-Click**

**Cost Estimator**

- \$2,207.52 / month
- m3.xlarge EC2 Instance usage fees
- Assumes 24 hour use over 30 days

- The Instance details pop-up appears. Click the **Cancel** button to close the pop-up window.



An instance of this software is now deploying on EC2.

- If you would like to check the progress of this deployment, go to the [AWS Management Console](#)
- The software will be ready in a few minutes.

**Usage Instructions**

Important! Once the instance is up and running, please wait for about 10 minutes to allow for the instance to complete configuration. Please access the MobileFabric console by going to <AWS Public URL>/mfconsole (e.g. <http://ec2-A.B.C.D:8080/mfconsole>). You can login to the console using the default credentials (Login `admin@localhost`, Password `MF-<Your EC2 instance ID>`). For more information, please refer to our QuickStart Guide: <http://docs.kony.com/mobilefabricaws>. Please note that the express edition is supported on m3.xlarge instances only. [Show less](#)

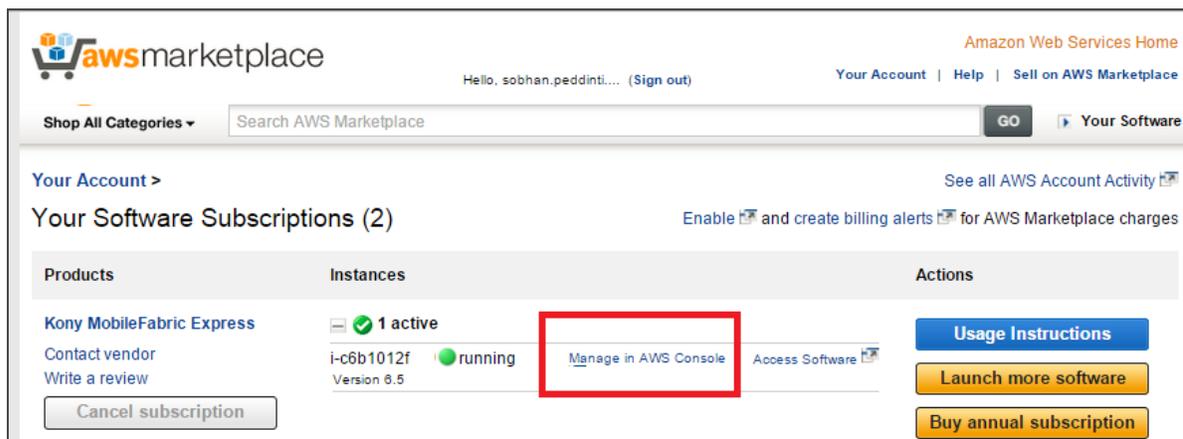
**Service Catalog**

Click [here](#) for instructions to deploy Marketplace products in [AWS Service Catalog](#).

**Software Installation Details**

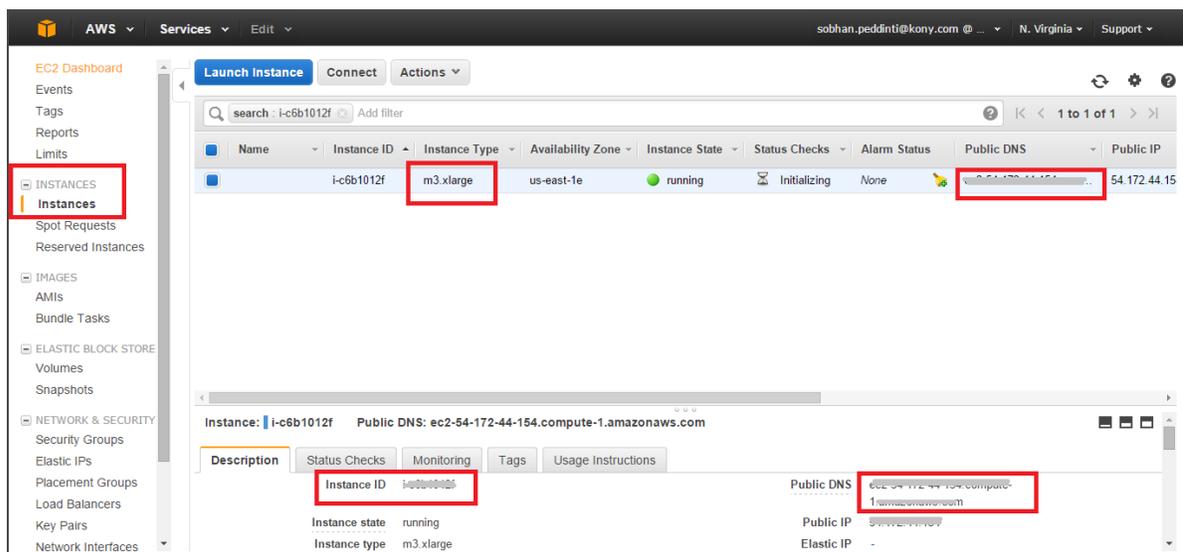
<b>Product</b>	Kony MobileFabric Express
<b>Version</b>	6.5, released 07/22/2015
<b>Region</b>	US East (N. Virginia)
<b>EC2 Instance Type</b>	m3.xlarge
<b>VPC</b>	vpc-e1083b84
<b>Subnet</b>	subnet-ea91add0
<b>Security Group</b>	Kony MobileFabric Express-6-5-AutogenByAWSMP-

- In the page that appears, click the **Manage in AWS Console** link to manage your instances, shown below:



In the **Instances** page, the MobileFabric instance is created, shown below:

- **Instance Type** indicates the instance type that you have chosen.
- **Public DNS** indicates URL for the MobileFabric Console.



You can now launch the [MobileFabric Instance](#).

## 2.4 Configuring AWS Kony MobileFabric Express: Manual Launch

To manually launch Kony MobileFabric Express Edition, follow these steps:

1. Go to <https://aws.amazon.com/marketplace>.
2. Sign in to your AWS Account.
3. On the AWS Kony MobileFabric product page, click **Continue**.

**aws marketplace** Amazon Web Services Home

Hello, sobhan.peddinti... (Sign out) Your Account | Help | Sell on AWS Marketplace

Shop All Categories ▾ Search AWS Marketplace  Your Software

## Kony MobileFabric Express

Sold by: Kony Inc | [See product video](#)

**kony** Connecting your enterprise in mobile time is difficult without the tools you need to expose back end services quickly, create new services that are optimized for mobile, and provide enterprise grade mobile services like offline sync and messaging that end users want using the mobile development tools your teams know and trust. Leverage the full power of Kony MobileFabric for your development needs. Bring to life your mobile applications with Kony's enterprise grade services including identity, integration, messaging and offline sync. Kony MobileFabric gives you a secure solution for managing your ... [Read more](#)

<b>Customer Rating</b>	Be the first to review this product
<b>Latest Version</b>	6.5 (Other available versions)
<b>Base Operating System</b>	Linux/Unix, Amazon Linux 2015.03
<b>Delivery Method</b>	64-bit Amazon Machine Image (AMI) ( <a href="#">Learn more</a> )
<b>Support</b>	<a href="#">See details below</a>
<b>AWS Services Required</b>	Amazon EC2

**Highlights**

- Open, optimized APIs designed for mobile devices performance REST, JSON
- Reduce time to value by using a repeatable process for backend access
- Monitor and adjust to changes in your application quickly. Show usage and quickly determine when apps fail in the

**Continue**

You will have an opportunity to review your order before launching or being charged.

### Pricing Details

For region:

**Hourly Fees**  
Total hourly fees will vary by instance type and EC2 region.

**Software Pricing:**  Hourly  Annual

Software annual pricing savings over hourly: 18%

EC2 Instance Type	EC2 Usage	Software	Total
m3.xlarge	\$0.266/hr	\$2.80/hr	\$3.066/hr

4. The **Launch on EC2** page appears. Under the **Kony MobileFabric Express**, click the **Manual Launch** tab.

aws marketplace

Hello, sobhan.peddinti... (Sign out) [Your Account](#) | [Help](#) | [Sell on AWS Marketplace](#)

Shop All Categories ▾ Search AWS Marketplace  [Your Software](#)

Version 6.5 of this software is now available. See release notes

## Launch on EC2:

### Kony MobileFabric Express

**1-Click Launch**  
Review, modify, and launch

**Manual Launch**  
With EC2 Console, APIs or CLI

**Launching Options**

- You can click the "Launch with EC2 Console" buttons below and following the instructions to launch an instance of this software
- You can also find and launch these AMIs by searching for the AMI IDs (shown below) in the "Community AMIs" tab of the [EC2 Console](#) [Launch Wizard](#)
- You can view this information at a later time by visiting the [Your Software](#) page. For help, see [step-by-step instructions](#) for launching Marketplace AMIs from the AWS Console.

**Software Pricing**

**Subscription Term**

Hourly  
 Annual

**Applicable Instance Type**

Software fee  
Varies  
Depends on instance type, reference pricing chart.

[Usage Instructions](#)

**Select a Version**

6.5, released 07/22/2015 ▾

Region	ID	
US East (N. Virginia)	ami-93be60f8	<a href="#">Launch with EC2 Console</a>
US West (Oregon)	ami-2d838f1d	<a href="#">Launch with EC2 Console</a>
US West (N. California)	ami-6fd72a2b	<a href="#">Launch with EC2 Console</a>

**Pricing Details**

For region  
US East (N. Virginia) ▾

**Hourly Fees**  
Total hourly fees will vary by instance type and EC2 region.

EC2 Instance Type	Software	EC2	Total
m3.xlarge	\$2.80/hr	\$0.286/hr	\$3.066/hr

**EBS Magnetic volumes**

\$0.05 per GB-month of provisioned storage  
\$0.05 per 1 million I/O requests

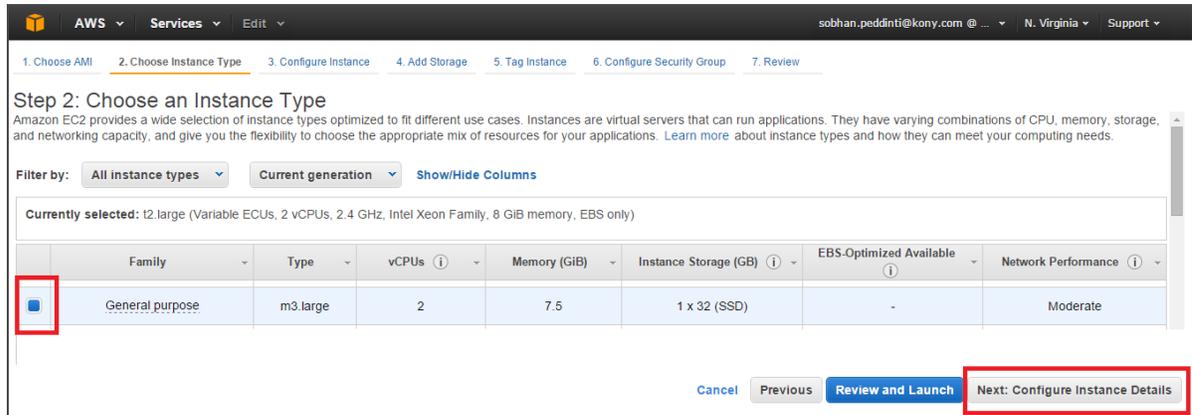
Assumes On-Demand EC2 pricing; prices for Reserved and Spot Instances will be lower. See [pricing details](#).

Data transfer fees not included.

[Learn about instance types](#)

- In the **Manual Launch** tab, configure the required fields such as for region and version. In the **Region** section, click the **Launch with EC2 Console** button.
- In the **Step 2: Choose an Instance Type** page, click the instance for type m3.large, shown below:

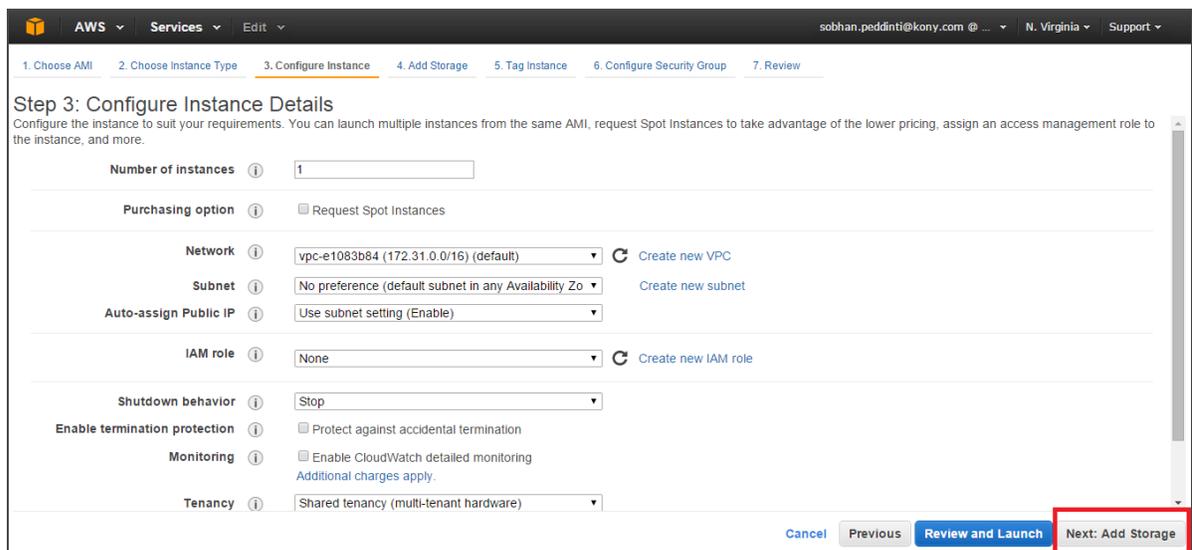
7. Click the **Next: Configure Instance Details** button.



The screenshot shows the AWS Management Console interface for Step 2: Choose an Instance Type. The breadcrumb trail includes: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Tag Instance, 6. Configure Security Group, 7. Review. The page title is "Step 2: Choose an Instance Type" with a sub-header "Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. Learn more about instance types and how they can meet your computing needs." Below the header, there are filter options: "All instance types", "Current generation", and "Show/Hide Columns". A "Currently selected:" section shows "t2.large (Variable ECUs, 2 vCPUs, 2.4 GHz, Intel Xeon Family, 8 GiB memory, EBS only)". A table lists instance types with columns: Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, and Network Performance. The "m3.large" instance type is selected, indicated by a blue square in the first column. At the bottom right, the "Next: Configure Instance Details" button is highlighted with a red box.

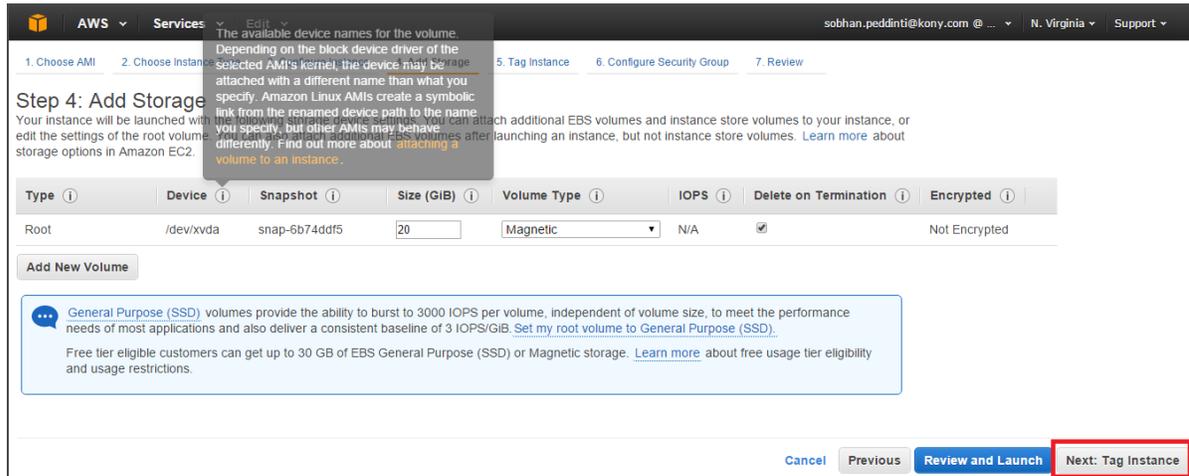
Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
General purpose	m3.large	2	7.5	1 x 32 (SSD)	-	Moderate

8. In the **Step 3: Configure Instance Details** page, leave the defaults settings and click the **Next: Add Storage** button, shown below:

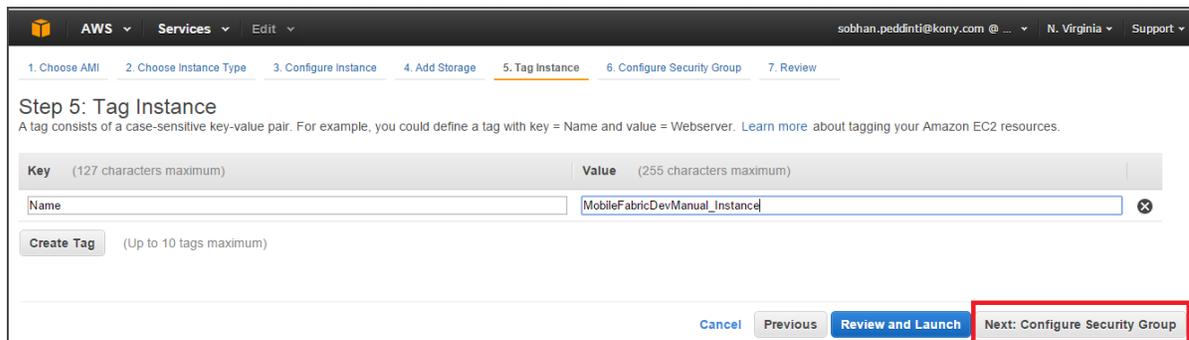


The screenshot shows the AWS Management Console interface for Step 3: Configure Instance Details. The breadcrumb trail includes: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Tag Instance, 6. Configure Security Group, 7. Review. The page title is "Step 3: Configure Instance Details" with a sub-header "Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot Instances to take advantage of the lower pricing, assign an access management role to the instance, and more." The page contains several configuration sections: "Number of instances" (1), "Purchasing option" (Request Spot Instances), "Network" (vpc-e1083b84 (172.31.0.0/16) (default)), "Subnet" (No preference (default subnet in any Availability Zo)), "Auto-assign Public IP" (Use subnet setting (Enable)), "IAM role" (None), "Shutdown behavior" (Stop), "Enable termination protection" (Protect against accidental termination), "Monitoring" (Enable CloudWatch detailed monitoring), and "Tenancy" (Shared tenancy (multi-tenant hardware)). At the bottom right, the "Next: Add Storage" button is highlighted with a red box.

9. In the **Step 4: Add Storage** page, leave the defaults settings and click the **Next: Tag Instance** button, shown below:

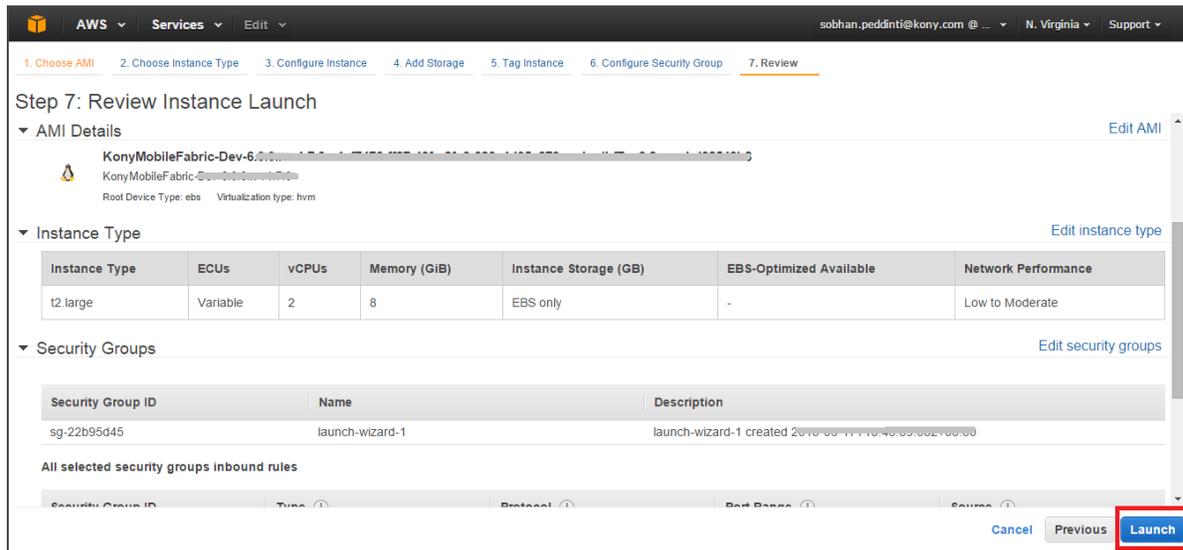


10. In the **Step 5: Tag Instance** page, enter the instance name and click the **Next: Configure Security Group** button, shown below:

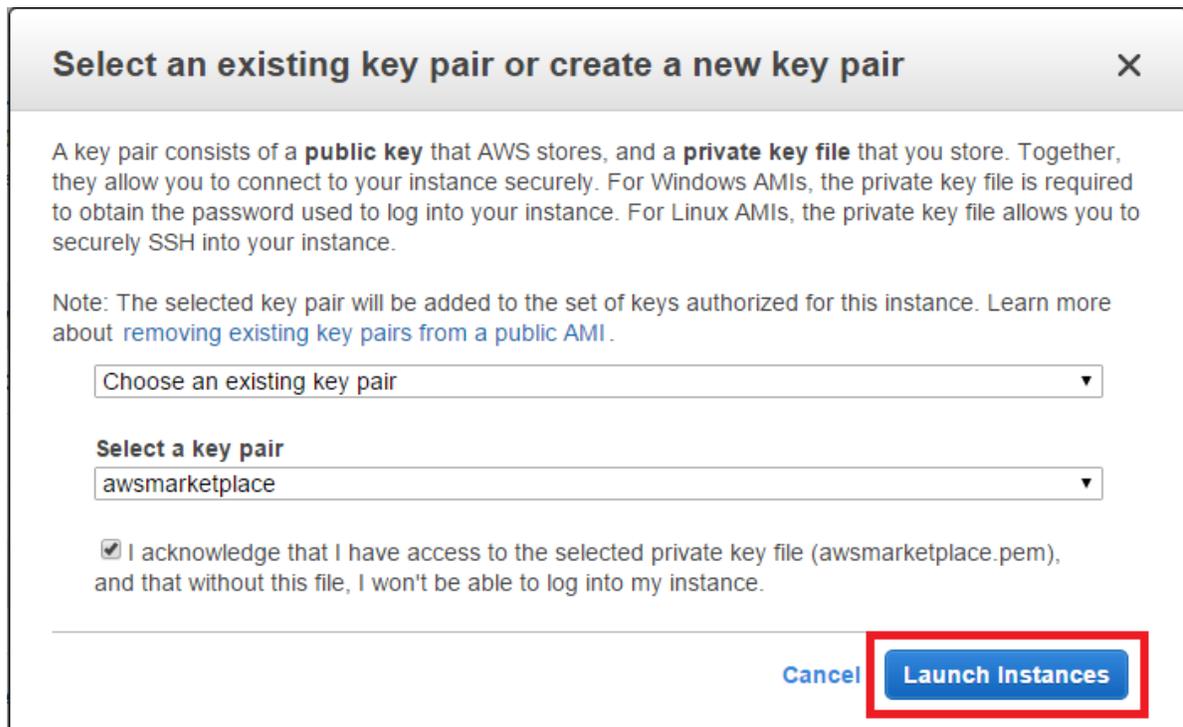


11. In the **Step 6: Configure Security Group** page, under the **Assign a security group**, click the **Select an existing security group**. Select the security option and click the **Review and Launch** button.

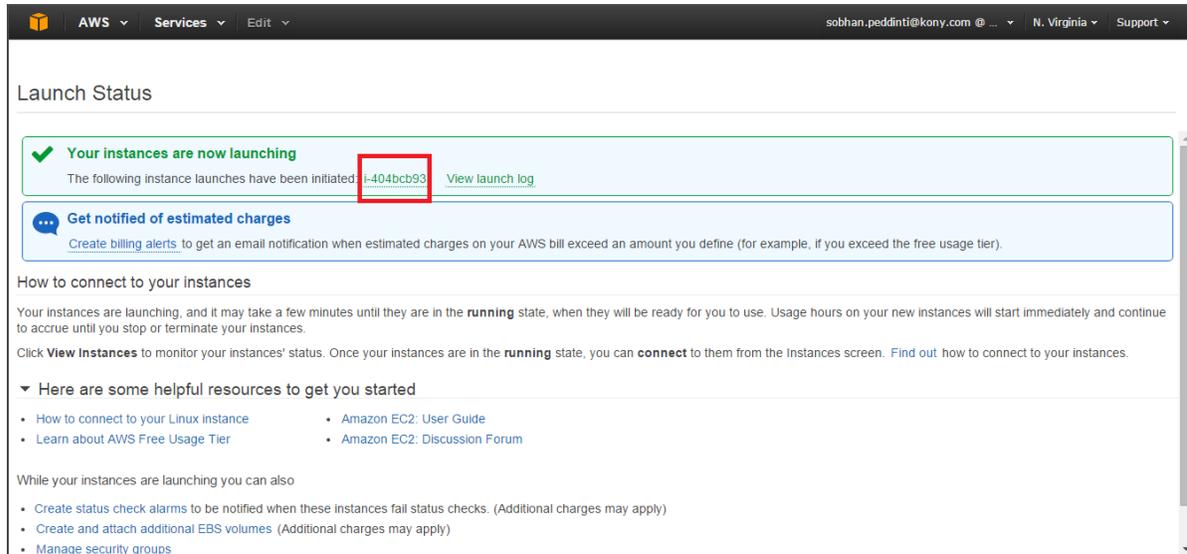




14. In the **Select an existing key pair or create a new key pair** pop-up, select the check box and click the **Launch Instances** button, shown below:



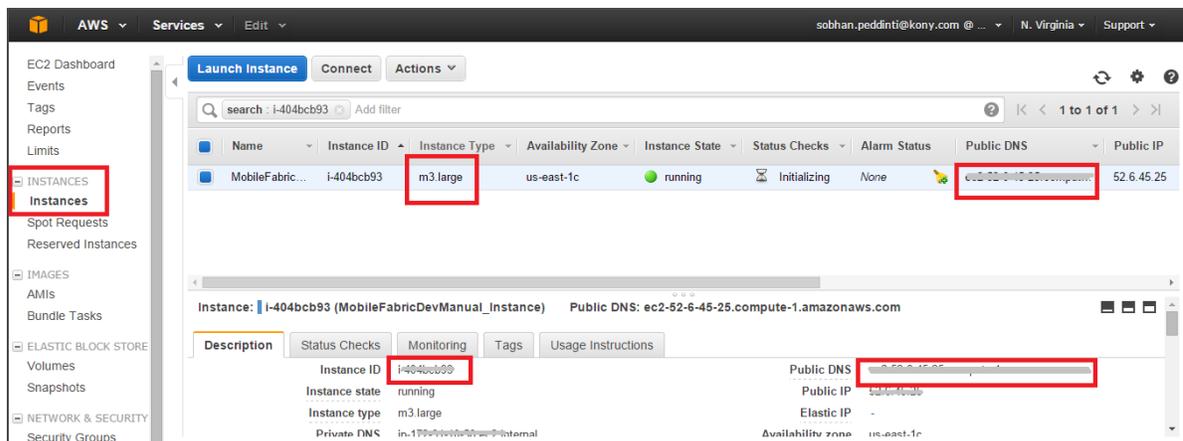
15. In the **Launch Status** page that appears, click the link to manage your instances, shown below:



16. The Instance details pop-up appears. Click the **Cancel** button to close the pop-up window.

In the **Instances**, the MobileFabric instance is created, shown below:

- **Instance Type** indicates the instance type that you have chosen.
- **Public DNS** indicates URL for the MobileFabric Console.

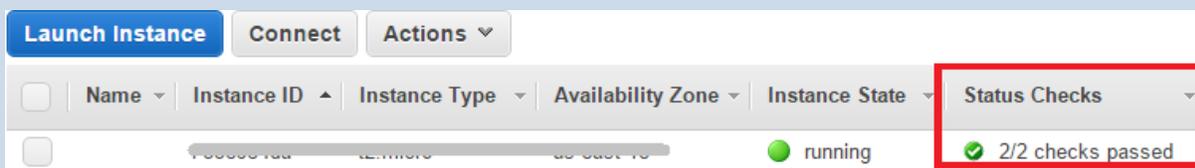


You can now launch the [MobileFabric Instance](#).

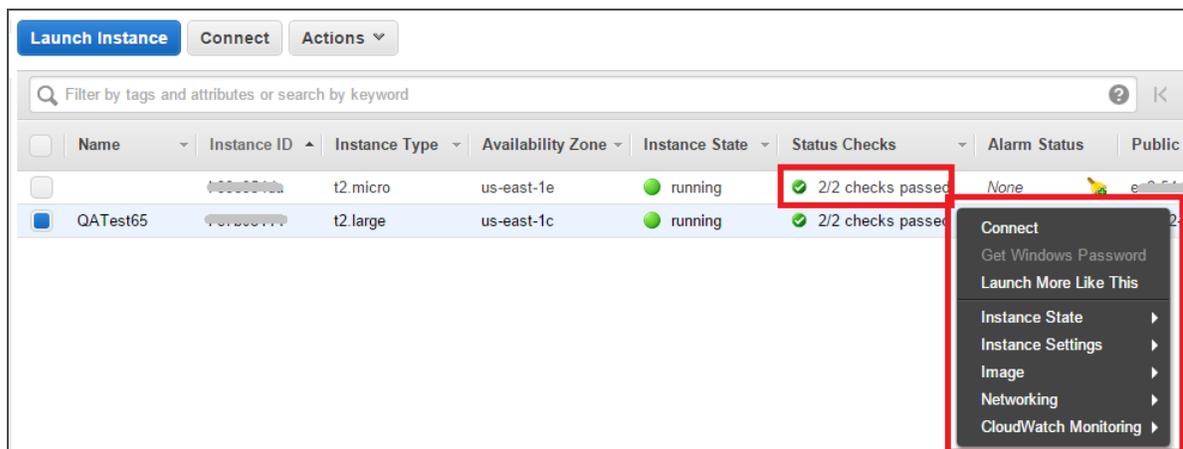
## 2.5 Launching the MobileFabric Instance

After your MobileFabric instance is created in the **Instances** section, follow these steps to launch the instance:

**Important:** Before launching your instance, wait until the status changes to **checks passed** under the **Status Checks** column, shown below:



1. [Assign a static IP to the selected instance.](#)
2. In the **Instances** page, after your instance status is checks passed, right-click on the instance and choose **Connect**.



3. In the **Connect To Your Instance** dialog, follow the instructions to launch MobileFabric instance:

### Connect To Your Instance ✕

I would like to connect with  A standalone SSH client  
 A Java SSH Client directly from my browser (Java required)

---

**To access your instance:**

1. Open an SSH client. (find out how to [connect using PuTTY](#))
2. Locate your private key file (awsmarketplace.pem). The wizard automatically detects the key you used to launch the instance.
3. Your key must not be publicly viewable for SSH to work. Use this command if needed:  

```
chmod 400 awsmarketplace.pem
```
4. Connect to your instance using its Public IP:  

```
52.5.84.233
```

**Example:**

```
ssh -i awsmarketplace.pem root@52.5.84.233
```

Please note that in most cases the username above will be correct, however please ensure that you read your AMI usage instructions to ensure that the AMI owner has not changed the default AMI username.

If you need any assistance connecting to your instance, please see our [connection documentation](#).

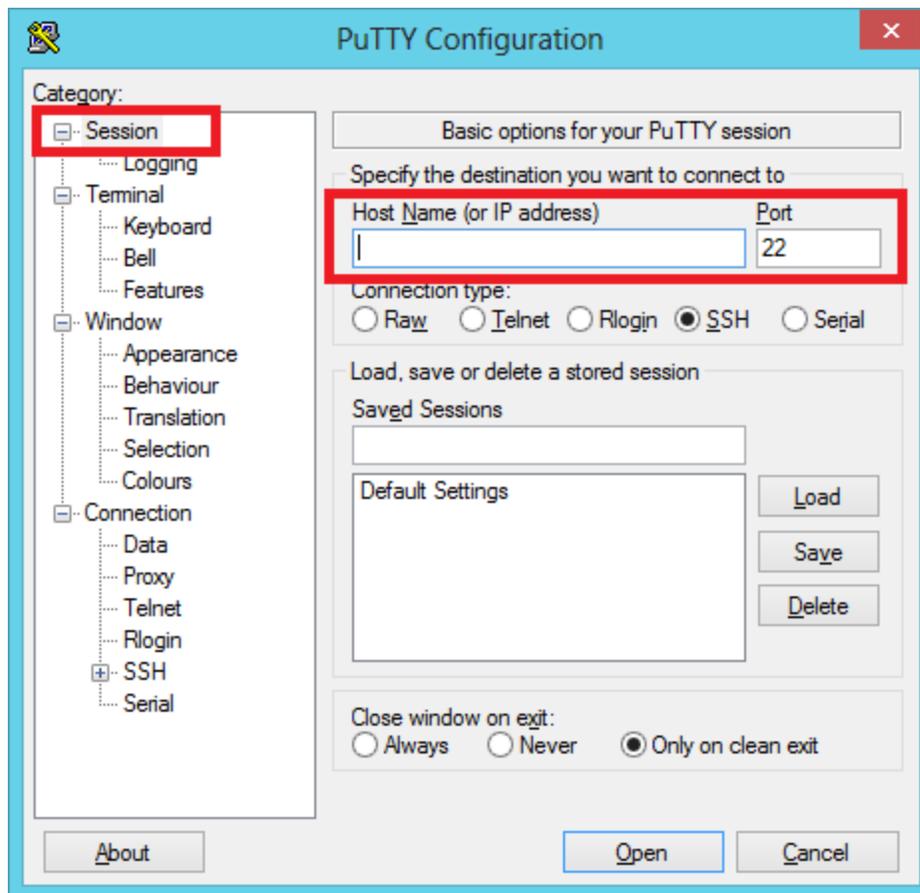
[Close](#)

For more details on connecting an instance, refer to [AWS Documentation > How to connect instances](#).

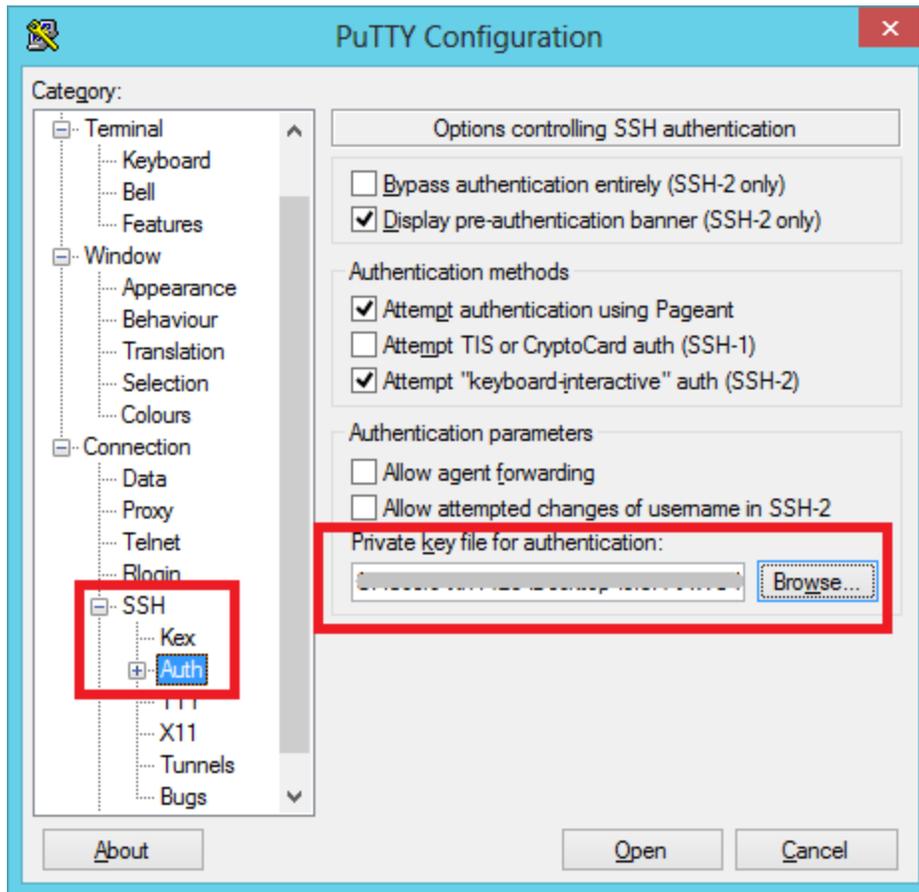
### 2.5.1 How to Launch MobileFabric instance using PuTTY

1. Open an **SSH** tool - for example, **PuTTY.exe** ([www.putty.org/](http://www.putty.org/)).
2. In the **Session > Host Name (or IP address)** text box, type the URL (Public DNS) that is generated for your instance.

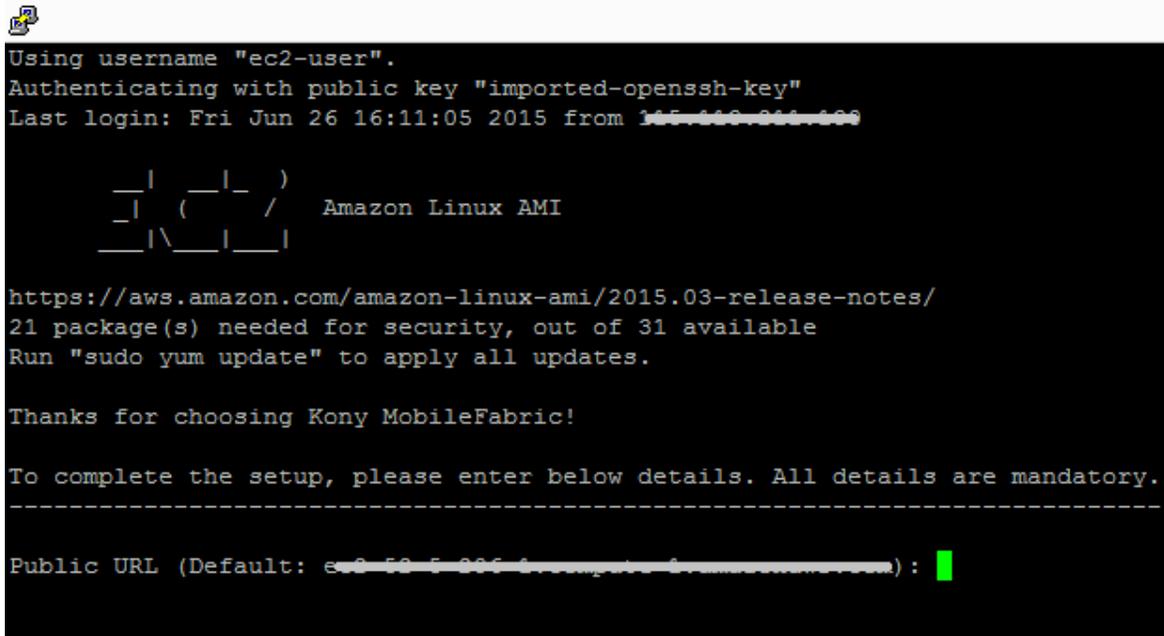
**Important:** In the **Instances**, you can find the URL under the **Public DNS** column.



3. In **SSH > Auth**, click **Browse** to upload the Private key file for authentication - for example, a .ppk file.



4. Click **Open** to start the setup process of MobileFabric components.



```
Using username "ec2-user".
Authenticating with public key "imported-openssh-key"
Last login: Fri Jun 26 16:11:05 2015 from 105.118.218.199

  _ | _ | _ )
  _ | ( _ /   Amazon Linux AMI
  _ | \ _ | _ |

https://aws.amazon.com/amazon-linux-ami/2015.03-release-notes/
21 package(s) needed for security, out of 31 available
Run "sudo yum update" to apply all updates.

Thanks for choosing Kony MobileFabric!

To complete the setup, please enter below details. All details are mandatory.
-----
Public URL (Default: ec2-52-5-235-1-compute-1.amazonaws.com): █
```

5. Provide valid DNS for the ec2 instance and press **Enter**. This setup may take a few minutes.

After you run MobileFabric on AWS Marketplace, AWS validates the user credentials and installs the MobileFabric instance. During this stage, the system completes registration with Kony MobileFabric products such as Kony MobileFabric Identity and Console, Kony MobileFabric Integration, Kony MobileFabric Messaging, and Kony MobileFabric Sync. The system creates an environment in the MobileFabric Console.

Once the MobileFabric installation is completed, you will see the message:

Congratulations! Kony MobileFabric is now ready for use in the setup complete screen, shown below:



**Note:** To access analytics and reports, connect to the database to allow access to JasperReports Server. For reporting to work JasperReports Server should be able to connect to the MySQL database residing on the EC2 instance. For this you need to connect via SSH to the instance and grant permissions to the root user to connect to this database from JasperReports Server node.

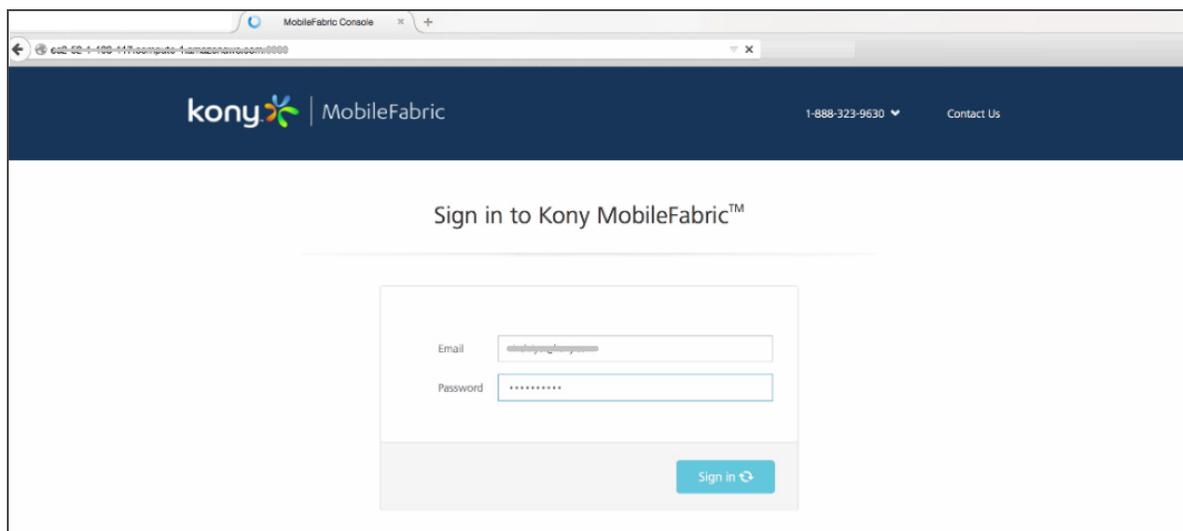
Use the following credentials to connect to the MySQL database:

- **User:** root
- **Password:** root

By default MySQL is blocked from connecting remotely. If required, you can connect to the MySQL DB on the same machine.

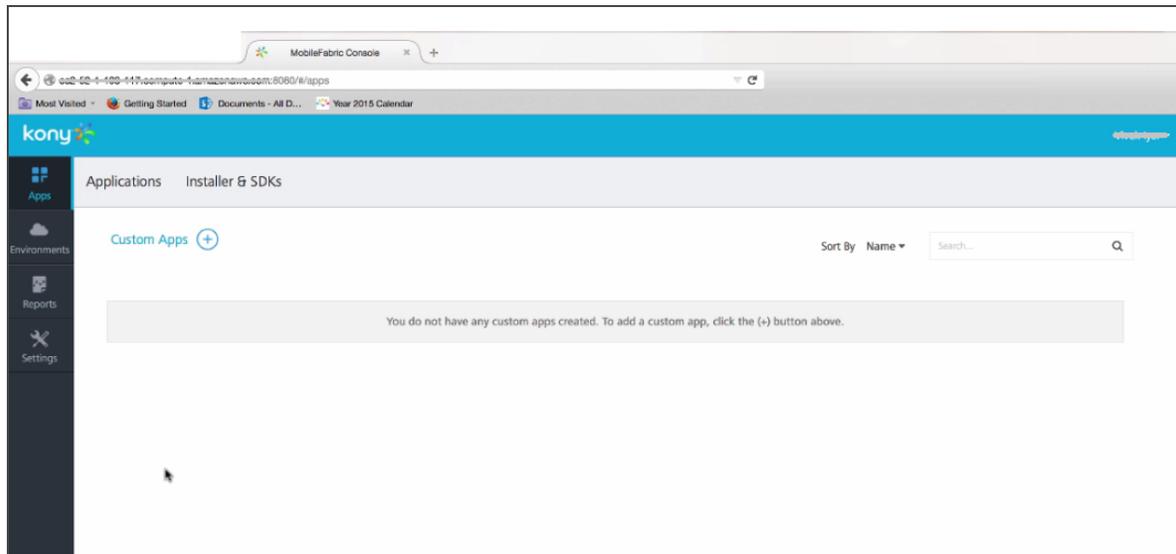
6. From the previous step, copy the `Kony MobileFabric Console URL` and paste it in a web browser's address bar and press the **Enter** key.

The **Sign in to Kony MobileFabric** page appears.



7. Provide your instance account log-in credentials that are generated in the setup complete page, and click **Sign in**.

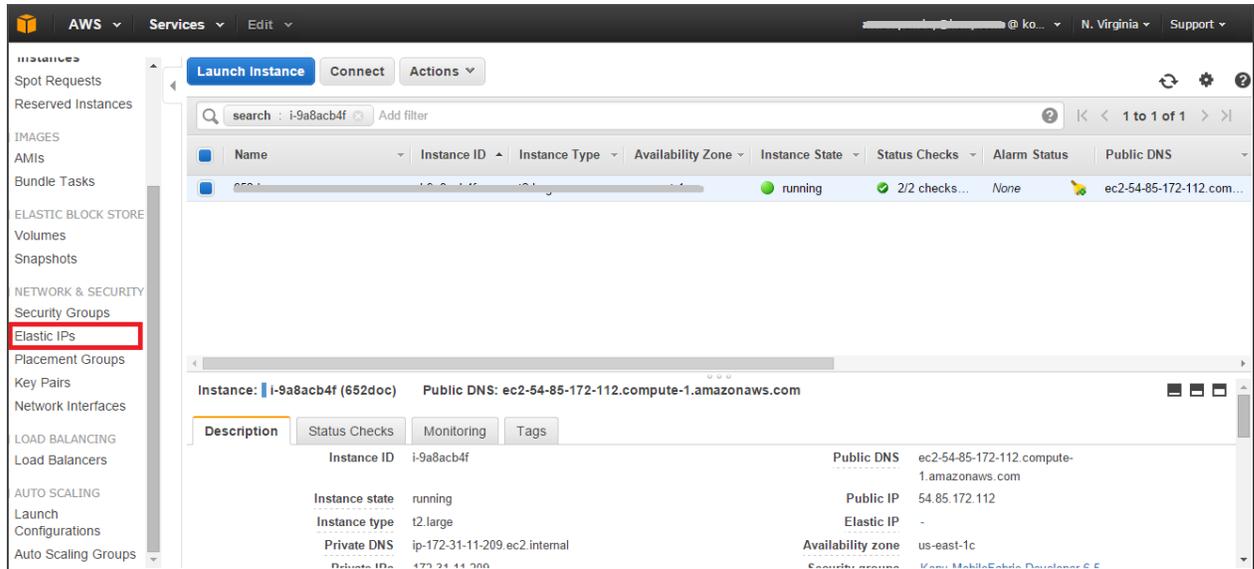
After your credentials are authenticated, you are directed to your MobileFabric account. By default, the **Apps** page appears.



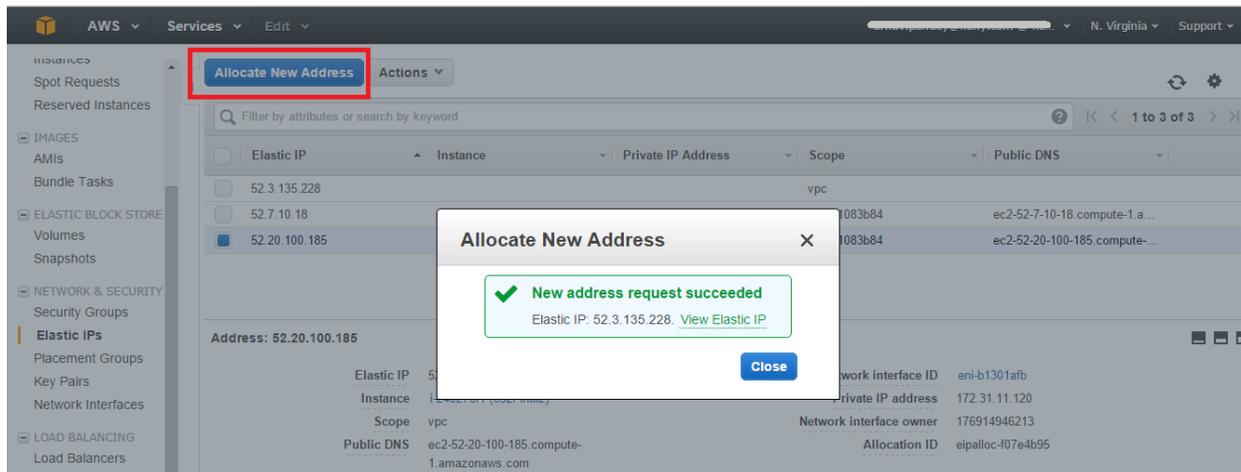
## 2.6 Assigning Static IP for EC2 Instance

To assign a static IP for EC2 instance, follow these steps:

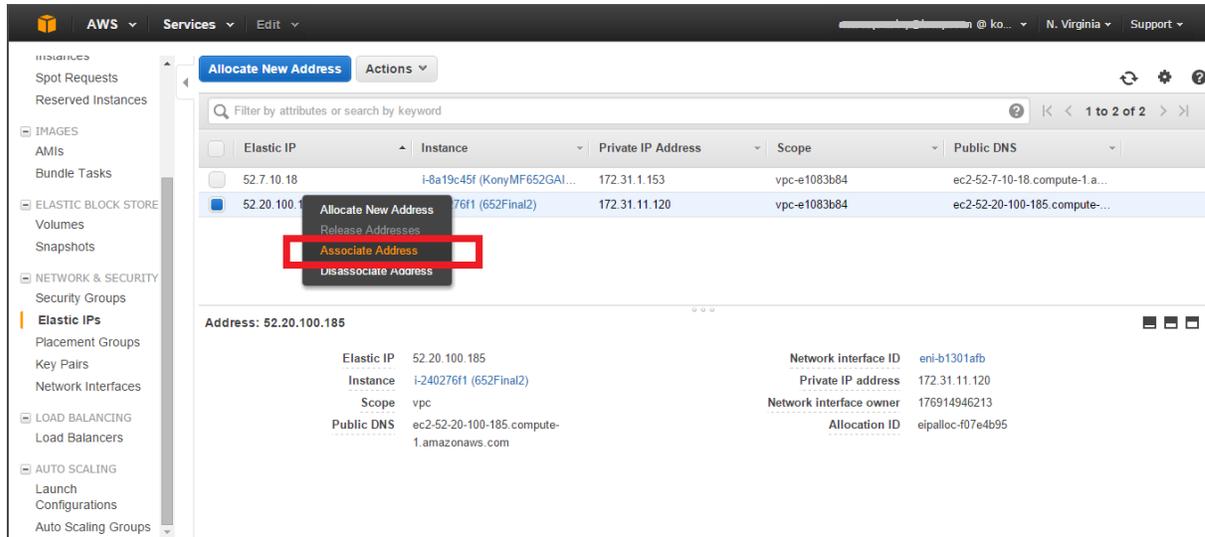
1. Log in to your AWS console and click **Elastic IPs**, shown below.



2. Click **Allocate New Address**.



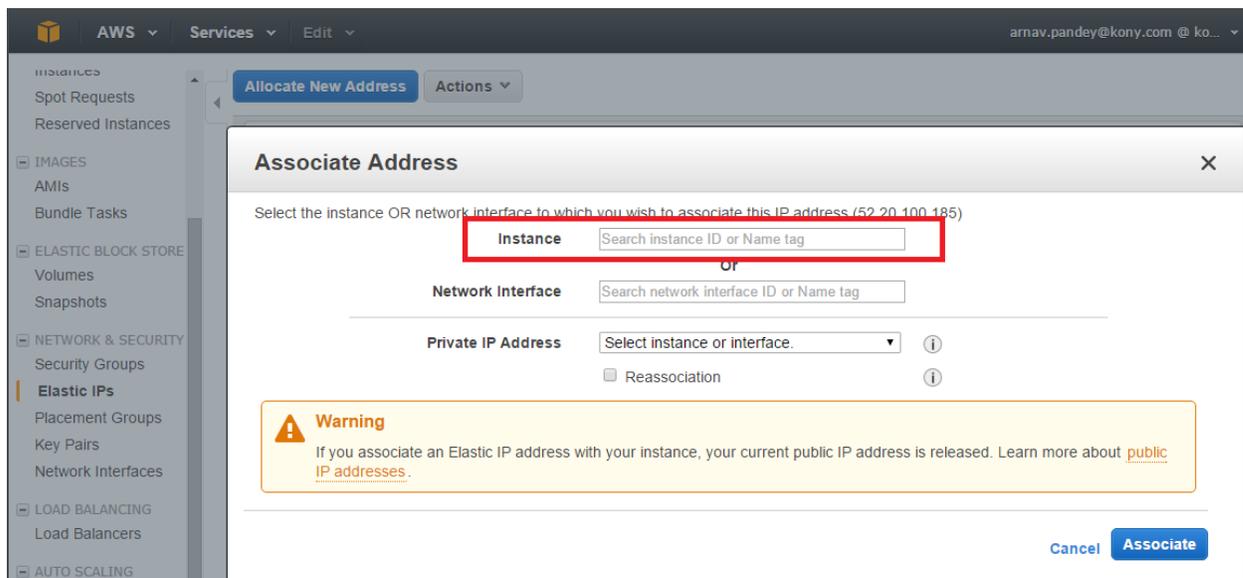
## 3. Associate this IP with your instance.



The screenshot shows the AWS console interface for managing Elastic IP addresses. A table lists Elastic IP addresses, with the selected address 52.20.100.185 highlighted. A context menu is open over this address, and the 'Associate Address' option is highlighted with a red box. Below the table, the details for the selected Elastic IP address are displayed:

Address: 52.20.100.185	
Elastic IP	52.20.100.185
Instance	i-240276f1 (652Final2)
Scope	vpc
Public DNS	ec2-52-20-100-185.compute-1.amazonaws.com
Network interface ID	eni-b1301afb
Private IP address	172.31.11.120
Network interface owner	176914946213
Allocation ID	eipalloc-407e4b95

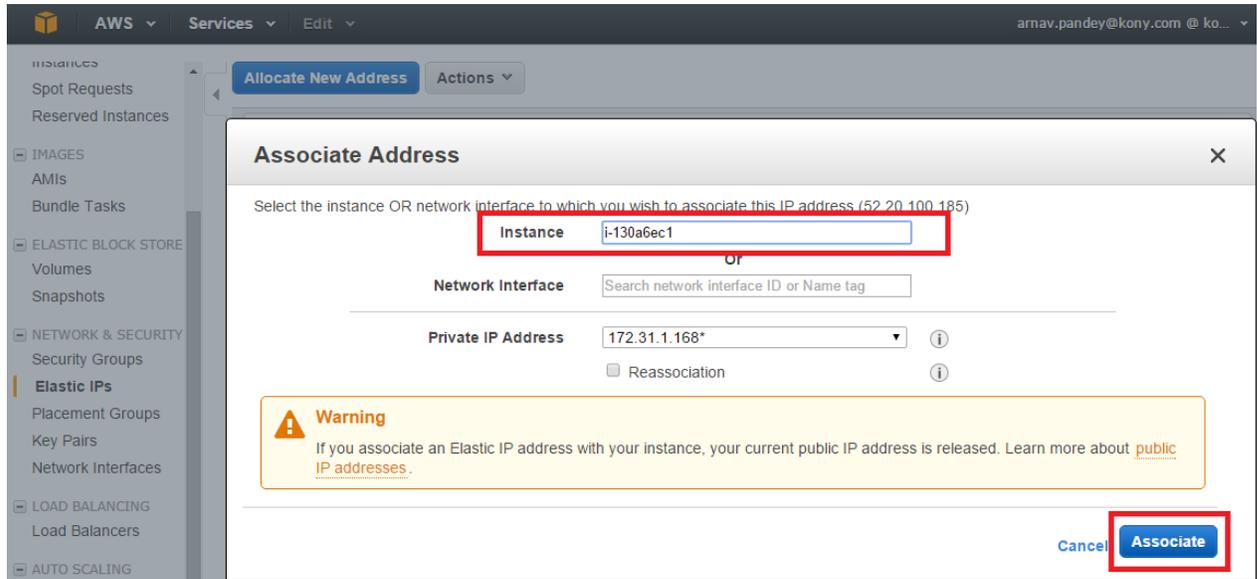
## 4. Select the instance.



The screenshot shows the 'Associate Address' dialog box in the AWS console. The dialog prompts the user to select the instance or network interface to which they wish to associate the IP address (52.20.100.185). The 'Instance' field is highlighted with a red box. Below the dialog, a warning message is displayed:

**Warning**  
If you associate an Elastic IP address with your instance, your current public IP address is released. Learn more about [public IP addresses](#).

## 5. Click **Associate**.



## 2.7 Troubleshooting

This section lists the troubleshooting tips to resolve problems that you may encounter during installation and post installation.

### 2.7.1 Location for Installed MobileFabric Components

The following are the locations for installed MobileFabric components:

- **Console and Integration:** `/home/ec2-user/KonyMobileFabric/Console`
- **Messaging:** `/home/ec2-user/KonyMobileFabric/Messaging`
- **Sync:** `/home/ec2-user/KonyMobileFabric/Sync`

### 2.7.2 Log Locations

The following are the log locations for installed MobileFabric components:

#### Console and Integration

- **Product Logs:** `/home/ec2-user/KonyMobileFabric/Console/logs`
- **Server Logs:** `/home/ec2-user/KonyMobileFabric/Console/tomcat/logs`
- **Template Logs:** `/home/ec2-user/KonyMobileFabric/templatetools`

### Messaging

- **Product Logs:** `/home/ec2-user/KonyMobileFabric/Messaging/logs`
- **Server Logs:** `/home/ec2-user/KonyMobileFabric/Messaging/tomcat/instance1/logs`

### Sync

- **Product Logs:** `/home/ec2-user/KonyMobileFabric/Sync/synclogs`
- **Server Logs:** `/home/ec2-user/KonyMobileFabric/Sync/apache-tomcat-7.0.52/logs`

## 2.7.3 How to Start MobileFabric Components

### 2.7.3.1 Starting JMS

1. To start JMS, go to `/home/ec2-user/KonyMobileFabric/Console/jboss_jms/bin` folder.
2. Execute the following command:

```
nohup ./startjms.sh &
```

### 2.7.3.2 Starting Console Manually

1. Go to `/home/ec2-user/KonyMobileFabric/Console/tomcat/bin` folder.
2. Execute the following command:

```
nohup ./startup.sh &
```

### 2.7.3.3 Starting Messaging Services Manually

1. Go to `/home/ec2-user/KonyMobileFabric/Messaging/tomcat/instance1/bin` folder.
2. Execute the following command:

```
nohup ./startup.sh &
```

### 2.7.3.4 Starting Sync Services Manually

1. Go to `/home/ec2-user/KonyMobileFabric/Sync/apache-tomcat-7.0.52/bin` folder.
2. Execute the following command:

```
nohup ./startup.sh &
```

## 3. How to Add Users

Identity is a service that validates the authentication of the users before accessing your application. Kony MobileFabric allows Kony User Repository for validations.

- [Kony User Repository](#)

You can setup an identity service based on the type of the users who are allowed to access your application. To allow access to your application to a larger audience, use Kony User Repository authentication.

**Note:** Setting up an identity service is optional. You may choose not to implement any authentication services for your application.

### 3.1 Kony User Repository

With Kony User Repository, you can create log-in credentials for app users. Typically, you use the service to restrict the number of users accessing the application.

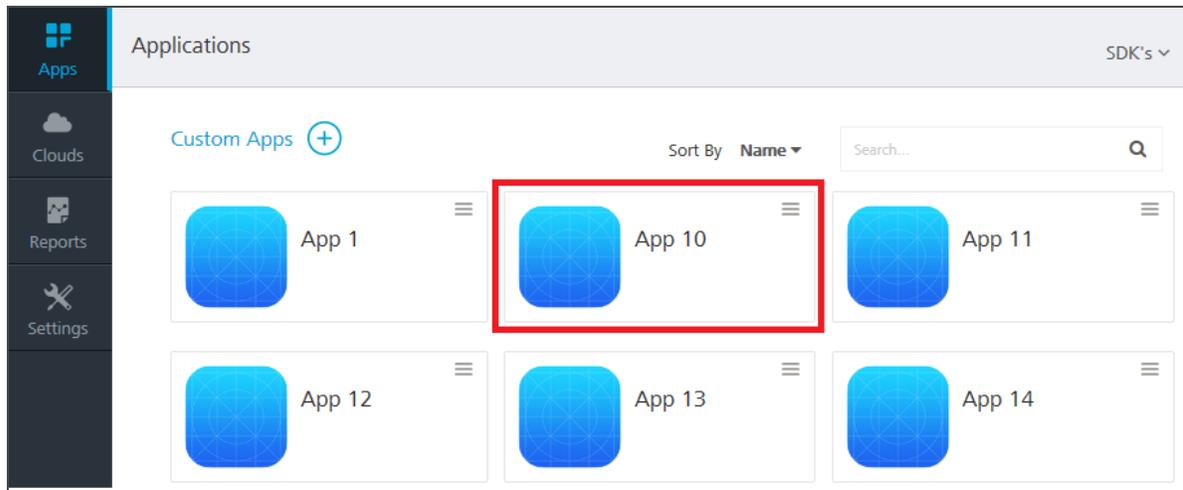
Steps to enable a user to access your application include:

- [Enabling Kony User Repository Service for Your Application.](#)
- [Adding a User to the Kony User Repository](#)

#### 3.1.1 Enabling Kony User Repository Service for Your Application

To enable users to access your application, follow these steps:

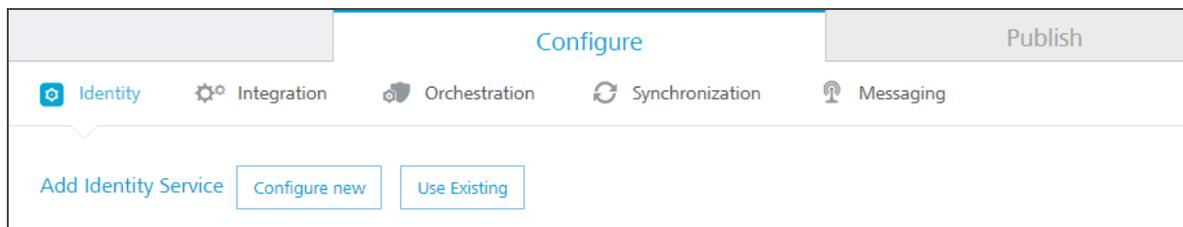
1. Create an app.
2. From the **Applications** page, click an application.



The **Identity** page appears.

**Note:** If you want to add Kony User Repository to a new app, click **Custom Apps**.

3. Click **Add Identity Services > Use Existing**.

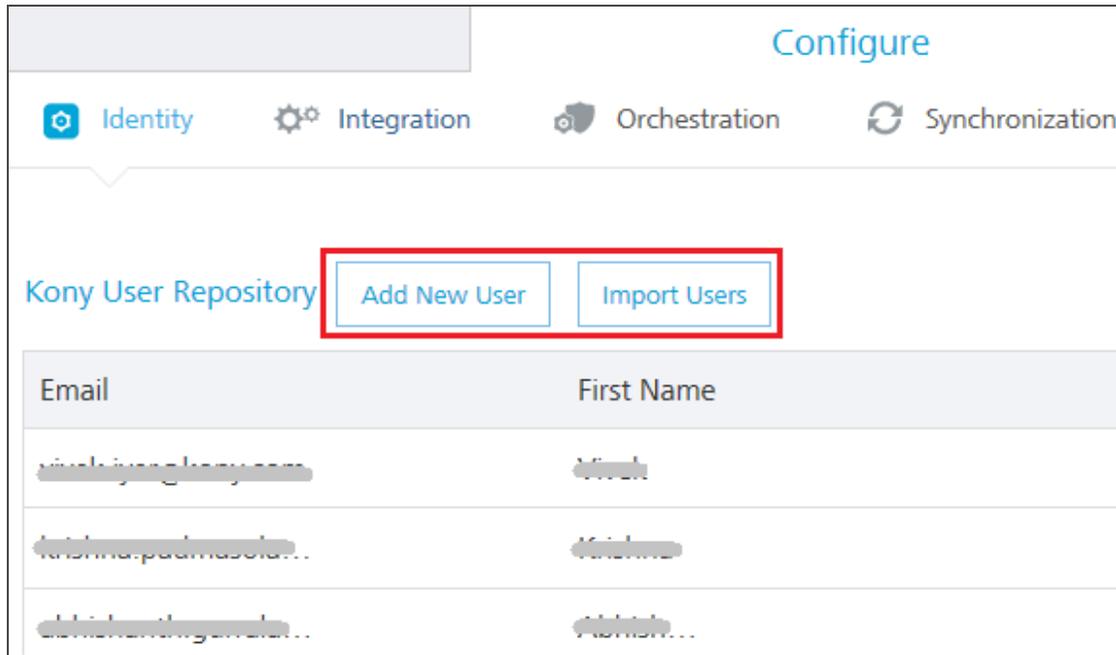


4. In the **Existing services** page, hover over the required **Kony User Repository** from the list, click the **Settings** button, and then click **Select**. The Kony User Repository is added to your app.



A list of existing users is displayed.

2. Click **Add New User**. The **Add New User** dialog appears.



The screenshot displays the 'Configure' interface for the 'Kony User Repository'. The top navigation bar includes 'Identity', 'Integration', 'Orchestration', and 'Synchronization'. Below the navigation, the 'Kony User Repository' section contains two buttons: 'Add New User' and 'Import Users', both of which are highlighted with a red rectangular box. Below the buttons is a table with two columns: 'Email' and 'First Name'. The table contains three rows of user data, with the first names partially visible as 'Vishal', 'Krishna', and 'Abhishek'.

Email	First Name
vishal.yadav@kony.com	Vishal
krishna.padmasola...	Krishna
abhishek@kony.com	Abhishek

3. Provide the required details.

The screenshot shows a dialog box titled "Add New User" with a close button (X) in the top right corner. The dialog contains the following fields and values:

Field Label	Value
Email/Username*	User@gmail.com
First Name*	User1
Last Name*	Lastname
Phone	12334343
Password*	••••••
Re-Enter Password*	••••••

At the bottom right of the dialog, there are two buttons: "Cancel" and "Add User".

4. Click **Add User**.

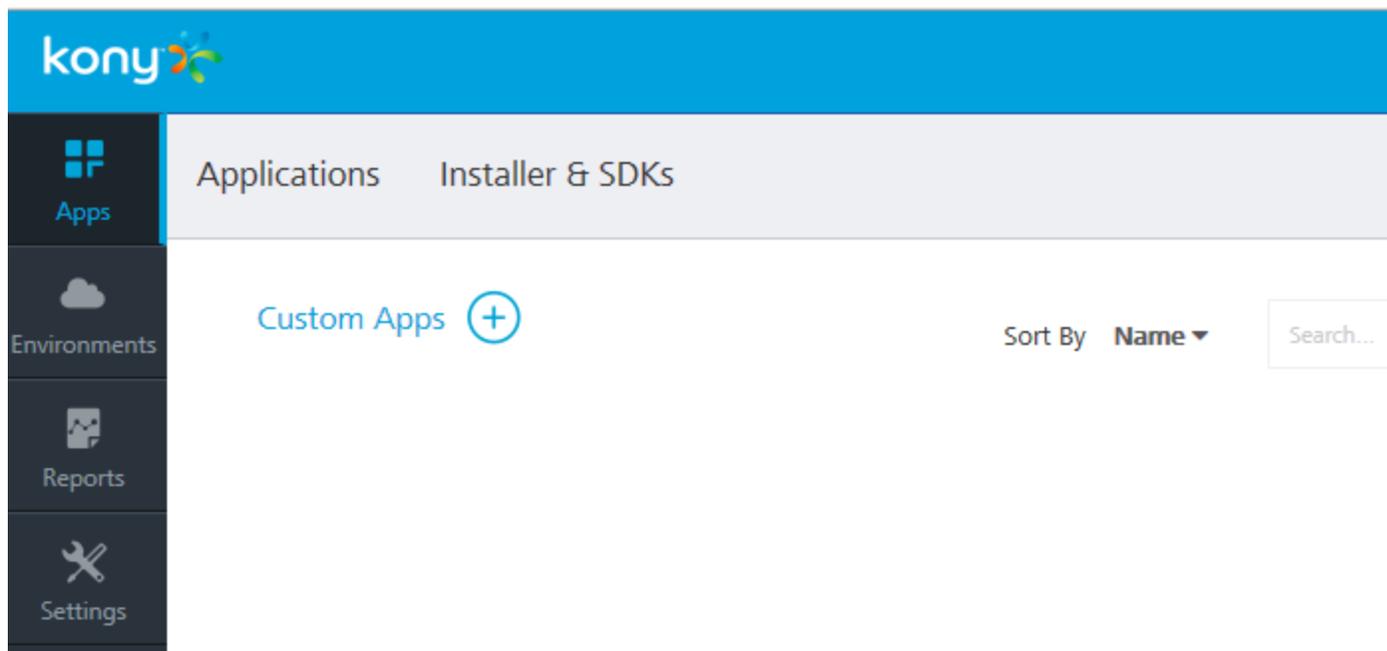
You can add another user by repeating the steps above in the procedure.

## 4. Creating Your MobileFabric App

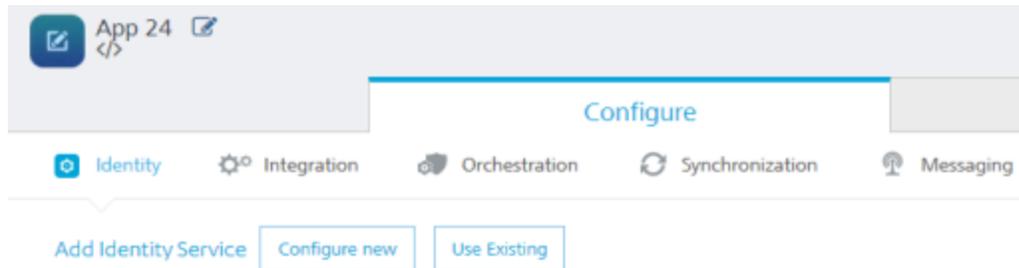
Adding a MobileFabric app to your account creates a container or a logical wrapper around all the services you want to provide for your mobile app. Once your services are published, you will receive an App Key App Secret, and Service URL, which are used within your client app development tool to securely connect to your back-end MobileFabric services. The App key, App secret, and Service URL are initialized through SDKs.

To create your MobileFabric app, follow these steps:

1. Click **Apps** from the left pane.
2. Click **Custom Apps**.



3. Rename the app and change your app icon, if required.



## 5. Creating an Identity Service

The Identity Service allows you to add a simple authentication and authorization method to your mobile app. This service can integrate with various back-end identity providers (IDP) such as Salesforce, SAP, Active Directory (direct or by Active Directory Federation Services (AD FS)) or any SAML 2.0 enabled end-point. After successfully authenticating, the back-end IDP returns a security token that is held by Kony MobileFabric. This token can be used in subsequent calls to integration or orchestration services automatically. This helps remove the burden of single sign-on token management within the client app.

For this Quick Start guide, we will use the built-in Kony User Repository provided by MobileFabric as our identity provider. For more information on integrating with other back-end IDPs, please refer to our tutorial for [integrating a sample CRM app with Salesforce](#).

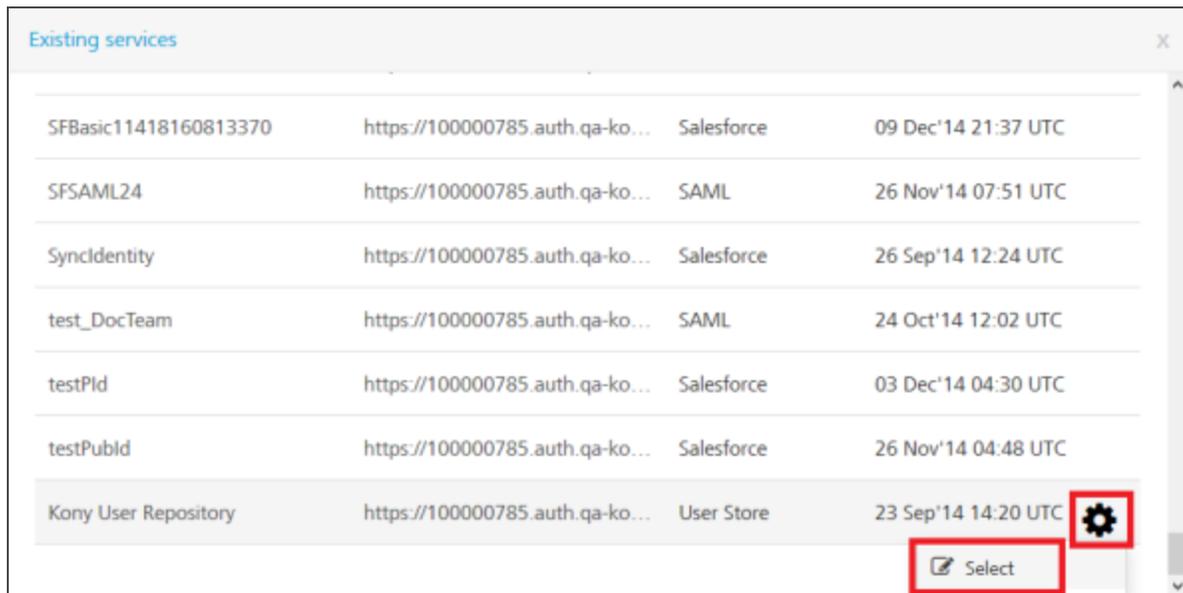
### 5.1 Configuring the Service

To configure an Identity service, follow these steps:

1. Click **Add Identity Service > Use Existing**.



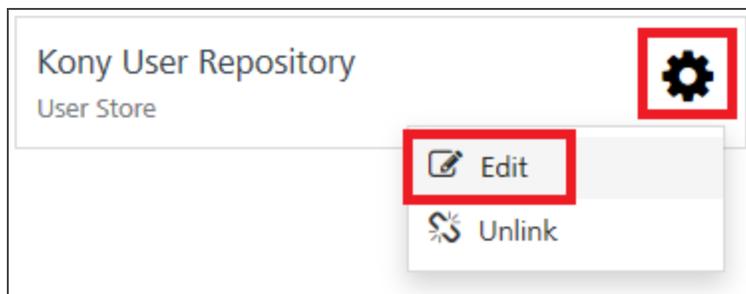
2. In the **Existing services** page, hover over the **Kony User Repository** from the list, click the **Settings** button, and then click **Select**. The user store is added to your app.



Service Name	URL	Provider	Last Updated	Actions
SFBasic11418160813370	https://100000785.auth.qa-ko...	Salesforce	09 Dec'14 21:37 UTC	
SFSAML24	https://100000785.auth.qa-ko...	SAML	26 Nov'14 07:51 UTC	
SyncIdentity	https://100000785.auth.qa-ko...	Salesforce	26 Sep'14 12:24 UTC	
test_DocTeam	https://100000785.auth.qa-ko...	SAML	24 Oct'14 12:02 UTC	
testPld	https://100000785.auth.qa-ko...	Salesforce	03 Dec'14 04:30 UTC	
testPubId	https://100000785.auth.qa-ko...	Salesforce	26 Nov'14 04:48 UTC	
Kony User Repository	https://100000785.auth.qa-ko...	User Store	23 Sep'14 14:20 UTC	 

The identity service for the Kony User Repository is now available for use.

3. Click the settings icon and then click **Edit**.



4. Click **Add New User**. The **Add New User** window appears.

5. Provide the required details, and then click **Add User**.

**Add New User** ✕

Email/Username*	<input type="text" value="User@gmail.com"/>
First Name*	<input type="text" value="User1"/>
Last Name*	<input type="text" value="Lastname"/>
Phone	<input type="text" value="12334343"/>
Password*	<input type="password" value="•••••"/>
Re-Enter Password*	<input type="password" value="•••••"/>

Cancel |

## 6. Creating an Integration Service

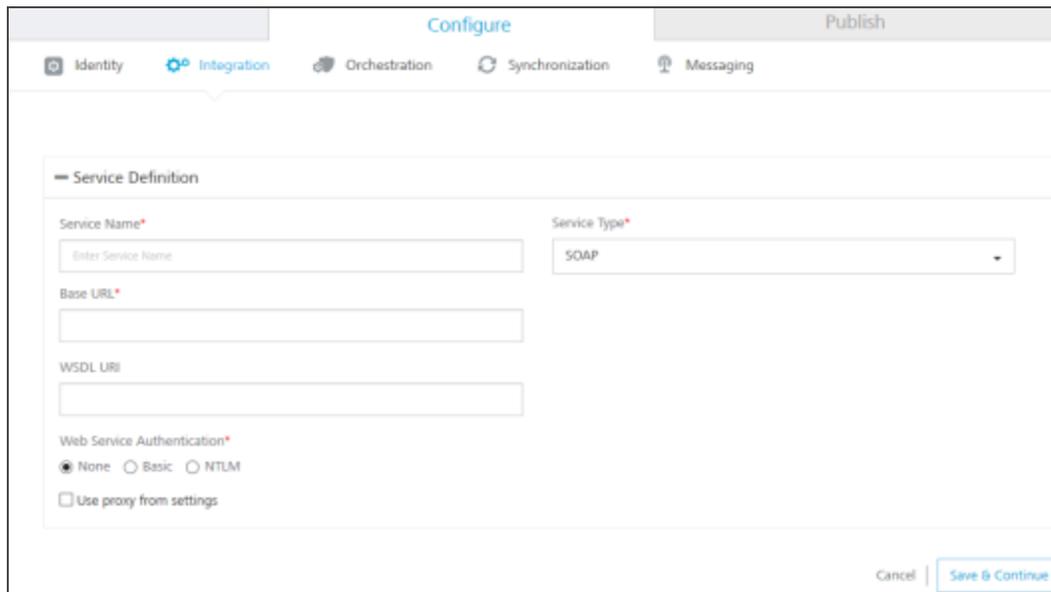
Now that we can authenticate our users, we need an easy way to retrieve data from an existing back-end system. In many cases, the back-end system does not return the data in the exact format we want, and/or it returns more data than our app needs.

The MobileFabric Integration Services can consume data from any back-end system. You can use our standard technology connectors for REST, JSON, or SOAP web services. You can also use our enterprise business connectors that make it easy to connect to enterprise back-end systems like Salesforce or SAP, and browse for the data objects and services you want to expose to your app.

For this example, we will use a publicly available SOAP web service for getting weather information. To get the current weather and the weather forecast for a ZIP code, we will have to call two separate services.

To call the weather services, follow these steps:

1. Click the **Integration** tab.
2. Click **Add Integration > Configure New**.



The screenshot shows the 'Configure' tab of the MobileFabric interface. The 'Integration' tab is selected. The 'Service Definition' section is visible, containing the following fields and options:

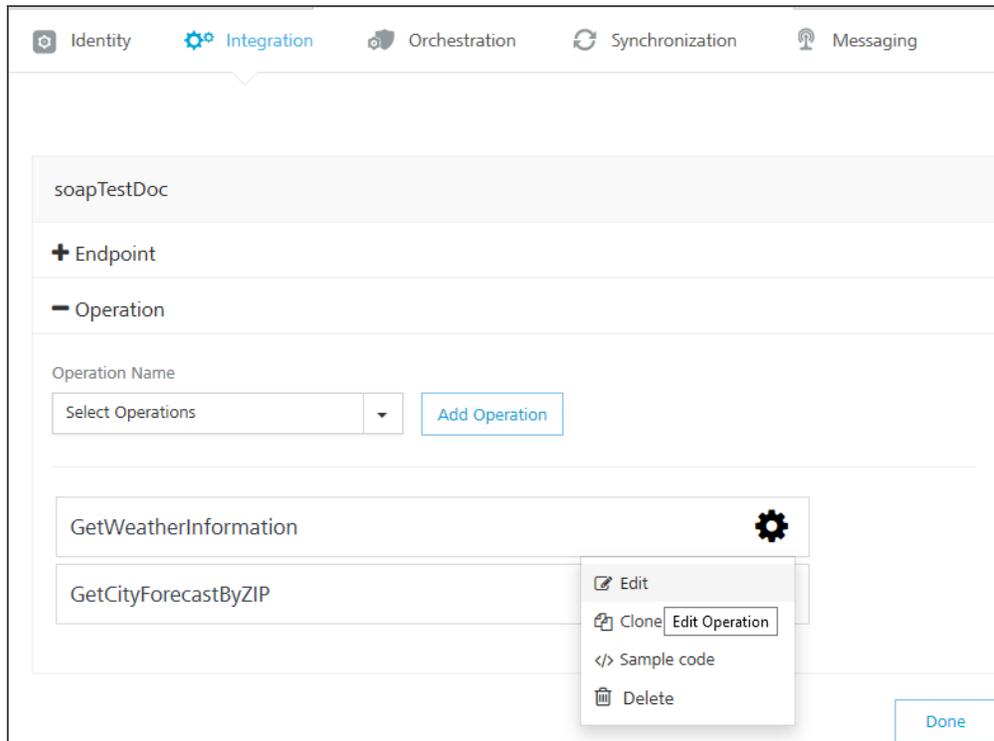
- Service Name\***: A text input field with the placeholder 'Enter Service Name'.
- Service Type\***: A dropdown menu with 'SOAP' selected.
- Base URL\***: A text input field.
- WSDL URI**: A text input field.
- Web Service Authentication\***: Radio buttons for 'None' (selected), 'Basic', and 'NTLM'.
- Use proxy from settings

At the bottom right of the form, there are 'Cancel' and 'Save & Continue' buttons.

3. Name your new service **Weather** and choose *SOAP* as the **Endpoint Type**.

4. Then enter the following URLs to complete the service definition:
  - In the **Base URL** box, type: `http://wsf.cdyne.com/WeatherWS/Weather.asmx`
  - In the **WSDL URL** box, type: `http://wsf.cdyne.com/WeatherWS/Weather.asmx?wsdl`
5. Under the **Web Service Authentication**, select one of the following modes:
  - a. **None**: Select this option if you do not want to provide any authentication for the service.
  - b. **Basic**: Provide User ID and Password if the external Web service requires form or basic authentication.
  - c. **NTLM**: Your service follows the NT LAN Manager authentication process. You are required to provide the User ID, Password, NTLM Host, and NTLM Domain.
  - d. To enable the proxy, select the **Use proxy from settings** check box. By default, the check box is cleared.
6. Click **Save & Continue** to retrieve the WSDL. Each of the available operations are listed in a drop-down box. Select the *GetCityForecastByZip* and *GetCityWeatherByZip*. Click **Add Operation**. This will create two operations under your Weather service that maps to the SOAP web service methods.

- To test and edit the *GetCityWeatherByZip*, click the settings icon and choose **Edit**.



- The operation details window opens. A sample web service request is provided showing a placeholder for any input parameters. For the *GetCityWeatherByZip*, the ZIP is the only input parameter displayed as `<ns1:ZIP>?XXX?</ns1:ZIP>` in the sample request. At this point, we could hard code a value, but since we want our app to provide the zip code, we need to provide an input variable name: `<ns1:ZIP>$zip</ns1:ZIP>`. We then need to define that variable under the input tab including a test value of *10036*.

9. You can then test the service and see the SOAP web service response.

10. On the **Output** tab, enter the following parameters and path.

*city //City*

*state //State*

*temp //Temperature*

Operation Name: GetCityWeatherByZIP

Operation Security Level: Authenticated App User

Operation Path: http://wsf.cdyne.com/WeatherWS/Weather.asmx?wsdl

Input | **Output** | Advanced

ID	Path	Scope	Data Type	Collection ID	Record ID	Format	Format Value
city	#City	response	string			None	
state	#State	response	string			None	
temp	#Temperature	response	string			None	

Default value will be used if Test value is empty.

Cancel | Save

- Click the **Test** button again and the result will be displayed as XML.

Request | Response | **Result** | Test

```
<testdata>
<city>New York</city>
<state>NY</state>
<temp>63</temp>
</testdata>
```

The result will be converted to a JSON before being sent to the device.

**Note:** This is a simple example, but it shows the power and flexibility the MobileFabric Integration Service provides to retrieve data and process it before returning an optimized JSON string to the device. You can also configure additional processing under the advanced tab including deploying custom code that executes before and after the service invocation.

12. Edit the *GetCityForecastByZip* in the same way. This service returns a repeating data structure for each day providing that day's weather forecast. This requires the use of the collection ID under the output tab to create a repeating set of JSON objects. After creating the **ZIP** input parameter the same way as the previous service, enter the following output parameters:

ID	xPath	CollectionID
ForecastList	//ForecastResult/Forecast	
date	Forecast/Date	ForecastList
desc	Forecast/Description	ForecastList
low	Forecast/Temperatures/MorningLow	ForecastList
high	Forecast/Temperatures/DaytimeHigh	ForecastList
daypct	Forecast/ProbabilityOfPrecipitation/Daytime	ForecastList
nightpct	Forecast/ProbabilityOfPrecipitation/Nighttime	ForecastList

Test your service and you will see the resulting XML showing the repeating collections of forecasts.



## 7. Creating an Orchestration Service

The following types of Orchestration Services are supported by MobileFabric:

- **Composite Services** include:
  - **Concurrent Service:** All specified integration services are called in parallel.
  - **Sequential Service:** The output of one service can be used as the input of a subsequent service. Each integration service in the chain will be executed sequentially.
- **Looping Service:** Allows you to call the same service in a loop using the same input values until you reach a break condition or you can send in a delimited set of input values and the service will loop through the inputs until it reaches the end.

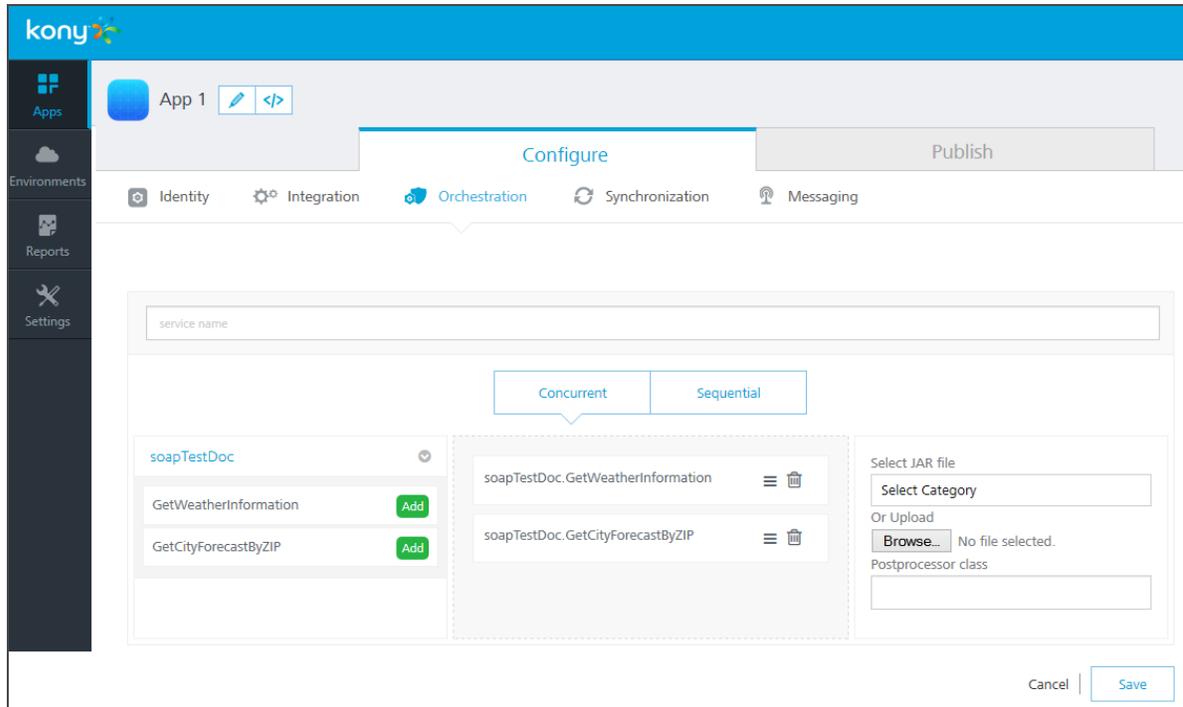
For this example, we want to return the current weather and the forecast in one service call.

Therefore, we want to create a concurrent composite Orchestration Service using our *GetCityWeatherByZip* and our *GetCityForecastByZip*. This allows our app to call one Orchestration Service using the ZIP Code and getting back all the data we need.

To execute an Orchestration Service, follow these steps:

1. On the **Orchestration** tab, click **Add Orchestration > Create Composite**.
2. Enter a name for the service as **GetCityWeatherAndForecastByZip** and choose **Concurrent** as the type of Composite service.

3. Add the *GetCityWeatherByZip* and the *GetCityForecastByZip* operations.



4. Save the service.

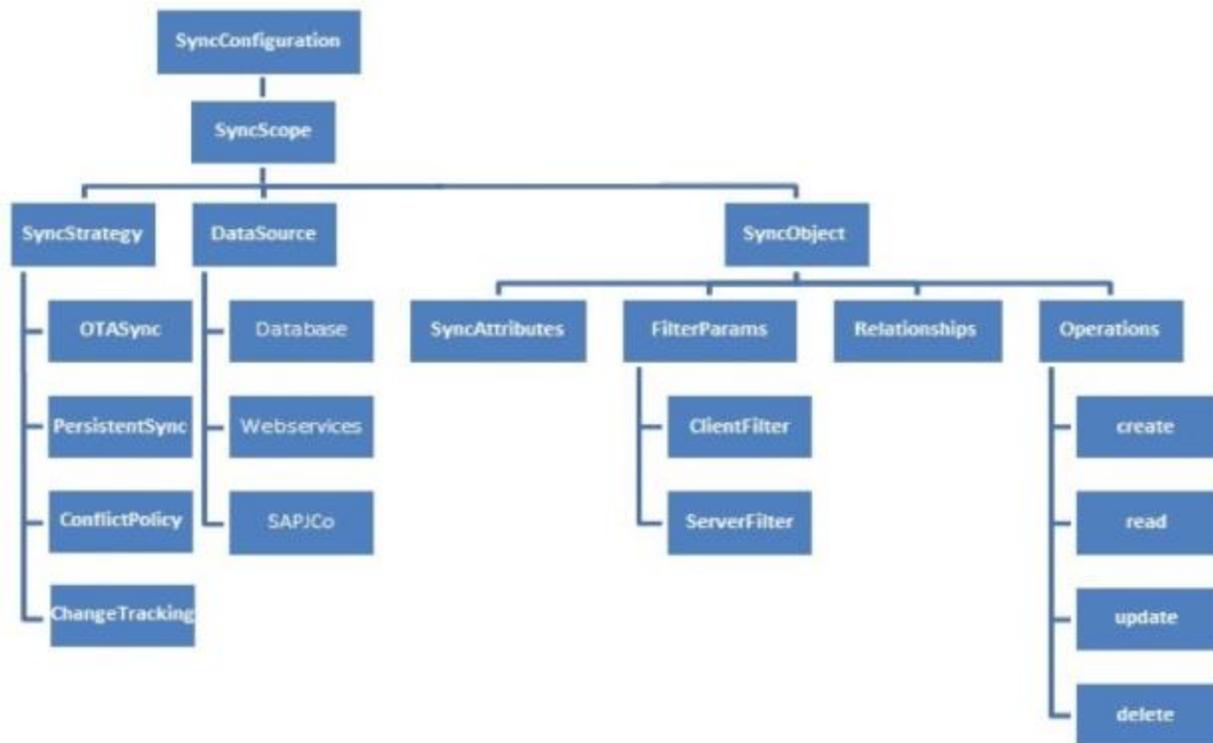
## 8. Synchronization

Kony Synchronization is a comprehensive data synchronization platform that enables developers to add synchronization capabilities to mobile applications. Fundamental to Sync Framework is the ability to support offline and collaboration of data between devices and the backend systems.

To enable synchronization capability for an app, you need to define a Sync Configuration file.

### 8.1 Sync Configuration file

A Sync Configuration captures details of the data synchronization characteristics of an application. These details are captured in a file typically referred to SyncConfig.xml (the name really does not matter) adhering to the SyncConfig.xsd schema. A SyncConfig.xml represents the below structure.



The two most important elements of this schema are:

- [Sync Scope](#)
- [Sync Object](#)

### 8.1.1 Sync Scope

A Sync Scope groups together the Sync Objects that share common synchronization characteristics like Sync Strategy, Datasource and so on.

A Sync Configuration can have multiple Sync Scopes. It is not possible to define relationships between Sync Objects belonging to different Sync Scopes.

### 8.1.2 Sync Object

Conceptually, you can consider a Sync Object as a business object that has some public attributes and some methods. The public attributes correspond to the fields visible to client devices, and they are used for synchronization. The methods correspond to the CRUD operations that map to the backend services exposed for the object. The parameter values methods /operations based on both public attribute values.

**A Sync Object is meta-data:**

- Defining the business object model of an application.
- Defining the way data is exchanged between mobile devices and backend.

**A Sync Object is data:**

Sync Object data is a business object instance exchanged between client and server.

## 8.2 Adding a New Synchronization Scope

**Note:** The following section explains setting up a Sync scope for Salesforce account.

To add a new Synchronization scope, follow these steps:

1. From the **Synchronization** page, click **Add Synchronization Scope > Configure New**.
2. Provide a name for the new Sync scope. (For example, *FSSync*)
3. Under **Sync Scope Definition**, provide the following details:

The screenshot shows the configuration page for a new synchronization scope named 'FSSync'. The page is titled 'FieldServ...' and has a 'Configure' tab selected. Below the title bar, there are navigation tabs for 'Identity', 'Integration', 'Orchestration', and 'Synchronization', with 'Synchronization' being the active tab. The main content area is titled 'FSSync' and contains a section for 'Sync Scope Definition'. This section includes several configuration options:

- Namespace:** A text input field containing 'com.kony'.
- Integration service\*:** A dropdown menu with 'KonyXMLi18nService2' selected.
- Sync Strategy:** Two radio buttons: 'OTA Sync' (selected) and 'Persistent Sync'.
- Change Tracking Policy:** Two radio buttons: 'Provided by data source' (selected) and 'Change Tracking Policy'.
- Change Tracking Columns:** Two checkboxes: 'Last Update Timestamp' (checked) and 'Soft Delete Flag' (checked).
- Change Resolution Policy:** Three radio buttons: 'Client Wins', 'Server Wins' (selected), and 'Custom'.

- a. Specify a **Namespace** for the Sync scope. The Namespace should follow a prescribed format such as *com.kony*.
- b. Select the required service from the **Integration Service** list.
- c. Select a **Sync Strategy**. The available options are **OTA Sync** and **Persistent Sync**.

**Note:** To understand which strategy to use for your sync scope, refer section [Appendix - Sync Strategy](#).

- d. Select a Change Tracking Policy (CTP) if you want to track the changes happening in the server database. Select Provided by data source, if you have a provision to track changes

in the data source. For database this would be like a timestamp column which updates for any changes made to the row. Set CTP as Kony Sync Server, if you want SyncServer to track the changes. This option will be available only if you had selected Persistent Sync as Sync Strategy.

- e. In the **Change Tracking Columns**:
    - i. Select the **Last Updated Timestamp** check box when you have column that represents the latest edited values.
    - ii. Select the **Soft Delete Flag** check box when the database has the column that represents soft deletes. Soft delete field in a record represents that a particular record is deleted by changing the status to deleted. This record will exist in the database. Thus by selecting this field Kony Sync server does not sync records whose status is set as deleted.
  - f. In case of conflicts between the data at the client and server end, specify any of the following under **Change Resolution Policy**:
    - Client Wins: The changes on the client side take precedent over the changes on the server side.
    - Server Wins: The changes on the server side take precedent over the changes on the client side.
    - Custom: Enables you to upload an Interceptor class which comprises the logic or policy for conflict resolution.
4. Expand **Sync Objects**.
  5. Under **Sync Objects**, provide the following details:
    - a. On the left pane, provide a name for your Sync object, and then click the **Plus** button.
    - b. On the **Definition** tab of the new Sync object, select an operation from the **Select Operation** list, and click **Generate attributes**.

**Note:** The list of operations available for a new Sync object depends on the Integration Service selected in the Sync Scope.

The screenshot displays the configuration interface for a Sync object. At the top, there is a text input field containing 'FSSync'. Below it, the 'Sync Scope Definition' section is expanded. Underneath, the 'Sync Objects' section is also expanded, showing a table with the following columns: Name, Is Key, Type, Is Nullable, Max Length, and Auto Generated. Two rows are present in the table, both with 'New Attr' in the Name column, 'false' in Is Key, 'string' in Type, 'true' in Is Nullable, and 'false' in Auto Generated. To the left of the table is a list of objects, with 'test' selected. Above the table, there is a 'Select Operation' dropdown menu set to 'None' and a 'Generate attributes' button. At the bottom right of the interface, there are 'Cancel' and 'Save' buttons.

6. On the **Change Tracking** tab, do the following:

- a. From the **TimeStamp Attribute for Change Tracking** list, select an attribute that denotes a particular record is modified.
- b. From the **Attribute for Identifying a soft deleted** list, select an attribute that denotes a soft delete.

**Note:** You need to select **TimeStamp Attribute for Change Tracking**, only if you have selected **Last Update Timestamp** check box under the **Change Tracking Columns** respectively.

**Note:** You need to select **Attribute for Identifying a soft delete** only if you have selected **Soft Delete Flag** check box under the **Change Tracking Columns**.

The screenshot shows the 'Sync Scope Definition' interface. Under 'Sync Objects', the 'Account' object is selected. The 'Change Tracking' tab is active, displaying the following configuration:

- Object Update Tracking(Required):**
  - TimeStamp Attribute for Change Tracking: LastModifiedDate
  - Time Format of Update Tracking: YYYY-MM-DD HH:MM:SS
  - Initial Timestamp: (empty field)
- Object Soft Delete Logic(Required):**
  - Attribute for identifying a soft delete: CreatedDate
  - Attribute value that indicates this object SHOULD be considered as deleted: (empty field)
  - OR Attribute value that indicates this object SHOULD NOT be considered as deleted: (empty field)

Buttons for 'Cancel' and 'Save' are located at the bottom right of the interface.

For non Boolean attributes, enter additional values that will be considered for soft deleting. For example, from the list if you select **BillingCity**, the system displays the following fields.

- **Attribute value that indicates this object SHOULD be considered as deleted:** if this value matches with the main attribute, the system deletes this attribute.
- **OR Attribute value that indicates this object SHOULD NOT be considered as deleted:** if this value matches with the main attribute, the system does not delete

this attribute.

### Object Soft Delete Logic(Required)

Attribute for identifying a soft delete

BillingCity

Attribute value that indicats this object SHOULD be considered as deleted

OR Attribute value that indicates this object SHOULD NOT be considered as deleted

- c. Change **Time Format of Update Tracking**, if required. By default, Salesforce time format is `YYYY-MM-DD HH:MM:SS`.
- d. In **Initial Timestamp** box, enter the date from which the records are to fetched.
- e. Click **Save**.

#### 7. On the **Relationship** tab

Sync Objects

Definition Change Tracking **Relationship** Filters Lifecycle Methods

FSSync

+

Click the **Plus** button to open **Add New Relationship** dialog.

a. Provide the following details:

The screenshot shows a dialog box titled "Add New Relationship" with a close button (X) in the top right corner. The dialog is divided into three numbered sections:

- 1 Select Target:** Contains two dropdown menus: "Target Object" and "Target Attribute".
- 2 Select Source:** Contains one dropdown menu: "Source Attribute".
- 3 Select Type:** Contains two dropdown menus: "Relationship" and "Cascade".

At the bottom right of the dialog, there are two buttons: "Cancel" and "Save".

- i. Select the required object from the **Target Object** list.
- ii. Select the required attribute from the **Target Attribute** list.
- iii. Select the required attribute from the **Source Attribute** list.
- iv. Select the type of relation between Source attribute and target attribute from the **Relationship** list.
- v. Select *True* from the **Cascade** list if you want to delete a record in the parent table and its child tables.

8. On the **Filters** tab, provide the following details:

The screenshot displays the configuration interface for FSSync. At the top, there's a header 'FSSync'. Below it, a '+ Sync Scope Definition' button is visible. A '- Sync Objects' section is also present. The main area is divided into tabs: 'Definition', 'Change Tracking', 'Relationship', 'Filters' (selected), and 'Lifecycle Methods'. On the left, a sidebar shows 'FSSync' and a '+ Sync Objects' button. The 'Filters' tab is active, showing an 'Attribute List' with two items: 'Finance' and 'http://ya...', each with a 'Select' button. Below this, there are two filter sections: 'Client Side Filters' and 'Server Side Filters'. The 'Client Side Filters' section contains a table with columns 'Filter Attribute' and 'Conditions'. One filter is added with 'Finance' as the attribute and 'EQ' as the condition. A '+ Sync Objects' button is also visible at the bottom of the 'Client Side Filters' section.

- In the **Client Side Filters**, from the **Attribute List**, select an attribute.
- For the selected attribute, provide a condition.
- To save the current filter and add another filter, click the **Plus** button.
- In the **Server Side Filters**, from the **Attribute List**, select an attribute.
- For the selected attribute, provide a condition.
- To save the current filter and add another filter, click the **Plus** button.

9. On the **Lifecycle Methods** tab, provide the following details:

- From the **Action** list, select an action.
- From the **Select Operation** list, select an operation.

- c. Click **Generate Mappings**.

The screenshot shows the AWS Kony MobileFabric interface for configuring a sync scope. At the top, there is a text input field containing 'FieldServicesSyn'. Below it, there is a section for '+ Sync Scope Definition' and a section for '- Sync Objects'. The 'Sync Objects' section is expanded to show a table with one row containing 'test1'. To the right of the table, there are tabs for 'Definition', 'Change Tracking', 'Relationship', 'Filters', and 'Lifecycle Methods'. The 'Lifecycle Methods' tab is selected. Under this tab, there is an 'Action' dropdown menu set to 'Create'. Below that, there is a 'Select Operation' dropdown menu set to 'None'. To the right of the 'Select Operation' dropdown, there is a gear icon and the text 'Generate mappings'.

**Note:** Input mapping is generated only for *Create*, *Update* and *Delete* operations.

**Note:** Output mapping is generated for all the operations: *Create*, *Update*, *Delete*, *get*, *getUpdated*, *getDeleted* and *getBatch*.

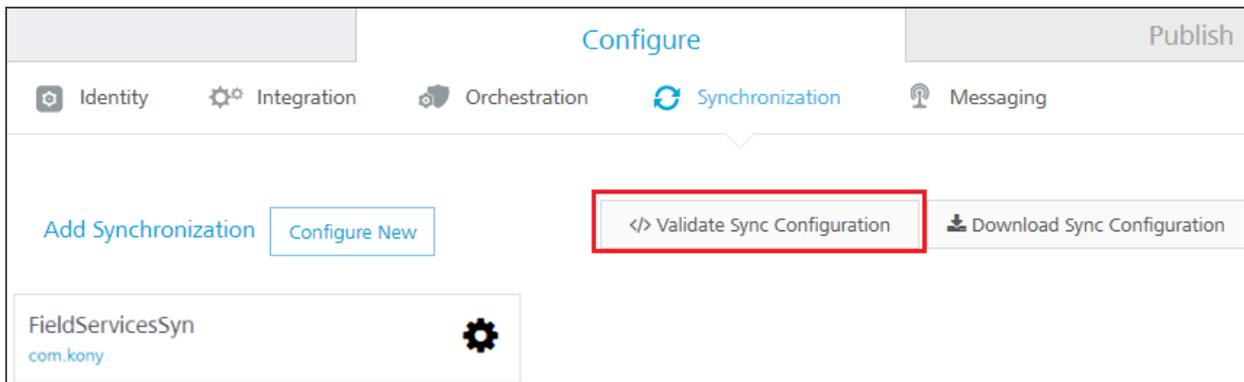
**Note:** Header Mapping needs to be added manually.

- d. Add Input parameters from the **Input Mapping** by clicking the **Plus** button. Provide the following details:
- From the **Source Type** list, select the type of the source.
  - From the **Source Value** list, select a value.
  - From the **Service Input Param** list, select an input parameter.
  - Click **Save**.

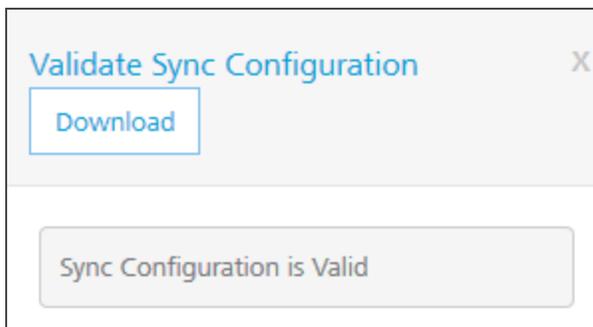
## 8.3 Validate Sync Configuration

Kony MobileFabric allows you to validate the Sync configuration before you can utilize the scope in your application.

To validate your Sync configuration, on the **Synchronization** page, click **Validate Sync Configuration**.



You receive the following message if your scope is valid:



To download the file, click **Download**. This file is useful when the Sync Scope is invalid, and you wanted to know the details of the errors encountered while validating the Sync Scope.

## 8.4 Download the Sync Configuration

Click **Download Sync Configuration** to download the Sync configuration file *Synconfig.xml* file on your computer.

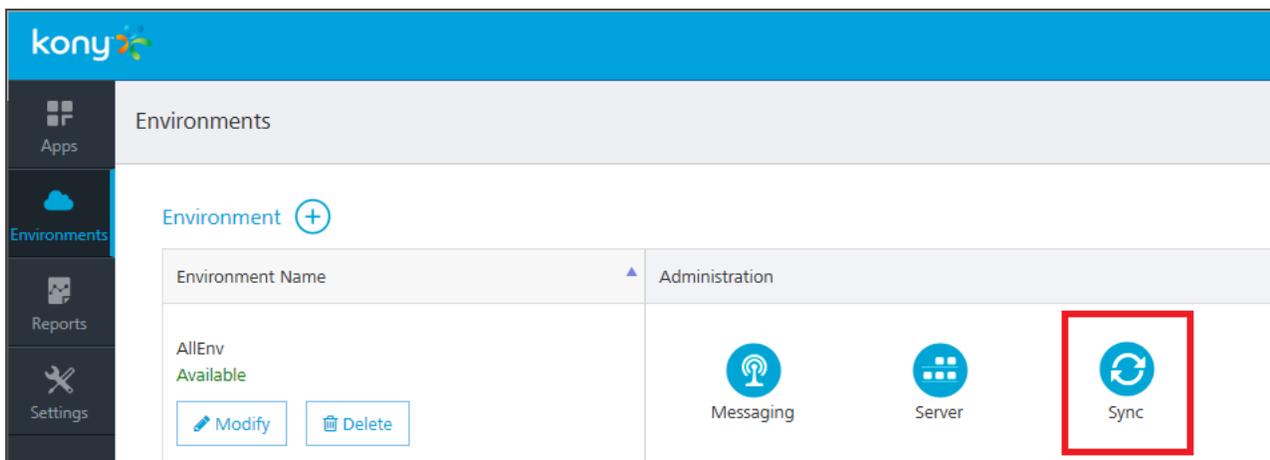


## 8.5 Sync Console

**Note:** The details of your sync scope will be available in Sync Services after you *publish* the app.

Kony Sync Management Console provides a single point of control for monitoring and configuring the Kony sync console creation process.

To view your Sync Console, click **Sync Services** from your cloud account.



For more details on Sync Console, refer to the following document:

[http://docs.kony.com/konylibrary/default.htm#../Subsystems/Kony\\_Sync\\_Cloud\\_and\\_On-Premises\\_Console\\_User\\_Guide/Content/Homepage.htm](http://docs.kony.com/konylibrary/default.htm#../Subsystems/Kony_Sync_Cloud_and_On-Premises_Console_User_Guide/Content/Homepage.htm)

## 9. Messaging

Messaging service allows you to upload push certificates for iOS, Android, BlackBerry, and Windows 8 RT platforms.

For sending messages, follow these steps:

1. Add Push Certificates
2. Access Messaging Console
3. Send a Push Message

### 9.1 Add Push Certificates

MobileFabric messaging supports the following platforms:

1. [iOS](#)
2. [Android](#)
3. [BlackBerry](#)
4. [Windows 8 RT & Pro](#)

This section details the process for adding push certificates to your application.

#### 9.1.1 iOS

**Note:** Refer to the following section for creating a push certificate:

[http://docs.kony.com/konylibrary/default.htm#../Subsystems/KMS\\_Console\\_User\\_Guide/Content/Apps/Adding\\_Platform.htm](http://docs.kony.com/konylibrary/default.htm#../Subsystems/KMS_Console_User_Guide/Content/Apps/Adding_Platform.htm)

To add iOS Push Certificates for your app, follow these steps:

1. Expand **iOS**. A list of configurable items appear.

The screenshot shows the iOS configuration screen. At the top, there is a minus sign and the Apple logo followed by 'iOS'. Below this, the 'Application Mode' section has two radio buttons: 'Production' (selected) and 'Development'. The 'iPhone Push Certificate' section features a 'Browse...' button, the text 'No file selected.', and a list of certificates. One certificate, 'newyourpush.p12', is visible with 'Download' and 'Delete' icons. The 'Reset Certificate Password' section has a password input field. The 'iPad Push Certificate' section has a 'Browse...' button and 'No file selected.' text. The 'Certificate Password' section has a password input field. At the bottom, there is a 'Delete configuration' button and a 'Save' button.

2. **Application Mode:** An appropriate application mode.
  - **Production mode:** When selected, production certificates and associated password details are entered while sending push notifications. Push notifications are delivered in real-time.
  - **Development mode:** When selected, you can still send push message notifications, but delivery of push notifications are not real-time.
3. **iPhone Push Certificate:** From here, you can upload, download, or delete a certificate.
  - Click **Browse** to upload an iPhone certificate.
  - Click **Download** to download an iPhone certificate.
  - Click **Delete** to delete an iPhone certificate.
4. **Certificate Password:** Enter the password for iPhone, and then click Save to complete the configuration process.

5. **iPad Push Certificate:** From here, you can upload, download, or delete a certificate.

- Click **Browse** to upload an iPhone certificate.
- Click **Download** to download an iPhone certificate.
- Click **Delete** to delete an iPhone certificate.

6. Click **Save** to complete the configuration process for iOS platform.

### 9.1.2 Android

**Note:** Refer to the following section for creating a push certificate:

[http://docs.kony.com/konylibrary/default.htm#./Subsystems/KMS\\_Console\\_User\\_Guide/Content/Apps/Adding\\_Platform.htm](http://docs.kony.com/konylibrary/default.htm#./Subsystems/KMS_Console_User_Guide/Content/Apps/Adding_Platform.htm)

To add Android Push Certificates for your app, follow these steps:

1. Expand **Android**. A list of configurable items appear.



The screenshot shows a configuration panel with two sections: 'iOS' (expanded with a plus sign) and 'Android' (expanded with a minus sign). Under the 'Android' section, there is a label 'GCM Authorization Key\*' followed by an empty text input field. A 'Save' button is located at the bottom right of the panel.

2. Enter the GCM authorization key, and then click **Save** to complete the configuration process.

**Note:** Google Cloud Messaging for Android (GCM) is a service that helps you to send data from servers to Android applications on Android devices. This can be a lightweight message telling the Android application that there is new data to be fetched from the server (for example, a movie uploaded by a friend), or it can be a message containing up to 4kb of payload data (so apps like instant messaging can consume the message directly). The GCM service handles all aspects of queuing of messages and delivery to the target Android application running on the target device.

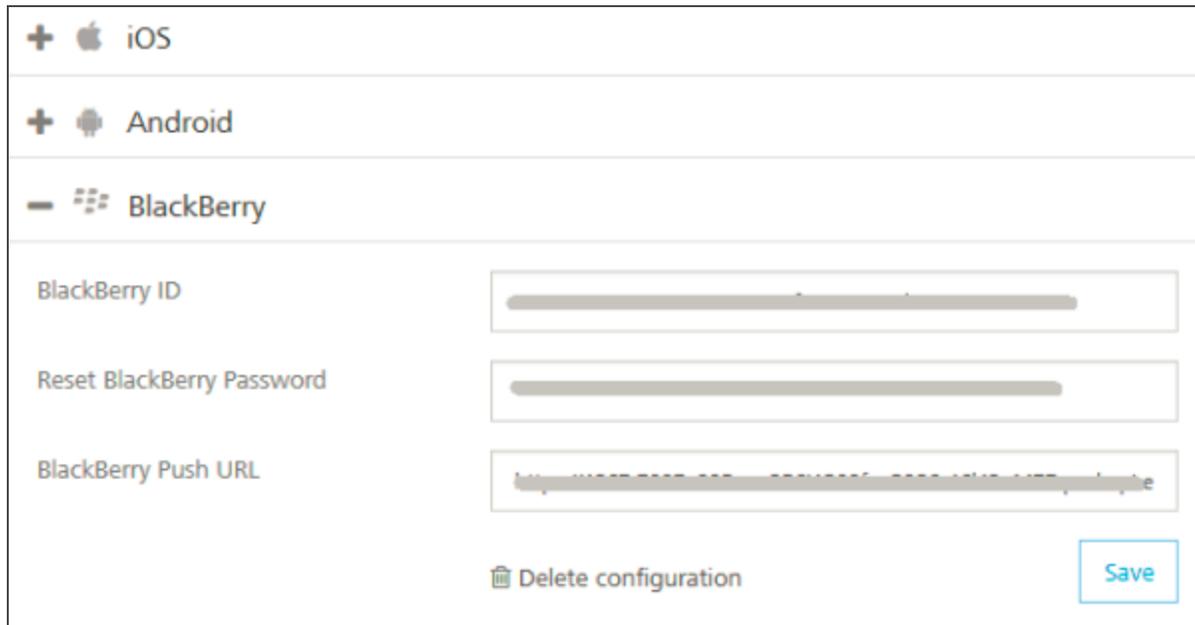
### 9.1.3 BlackBerry

**Note:** Refer to the following section for creating a push certificate:

[http://docs.kony.com/konylibrary/#../Subsystems/KMS\\_Console\\_User\\_Guide/Content/Apps/Adding\\_Platform.htm](http://docs.kony.com/konylibrary/#../Subsystems/KMS_Console_User_Guide/Content/Apps/Adding_Platform.htm)

To add BlackBerry Push Certificates for your app, follow these steps:

1. Expand **BlackBerry**. A list of configurable items appear.



The screenshot shows a configuration panel for BlackBerry. At the top, there are three expandable sections: 'iOS' (with a plus sign and Apple logo), 'Android' (with a plus sign and Android logo), and 'BlackBerry' (with a minus sign and BlackBerry logo). Below the BlackBerry section, there are three input fields: 'BlackBerry ID', 'Reset BlackBerry Password', and 'BlackBerry Push URL'. Each field contains a blurred, masked value. At the bottom of the panel, there is a 'Delete configuration' button with a trash icon and a 'Save' button.

2. **BlackBerry ID**: Enter the ID.

**Note:** BlackBerry Identity is a single, master key for BlackBerry products, sites, services, and applications, offering: Simplified access, privacy and security controls, a personalized and customizable experience.

3. **BlackBerry Password**: Enter the password.
4. **BlackBerry Push URL**: Enter the web address.
5. Click **Save** to complete the configuration process.
6. To delete configuration for BlackBerry, click **Delete Configuration**.

### 9.1.4 Windows 8 RT & PRO

**Note:** Refer to the following section for creating a push certificate:

[http://docs.kony.com/konylibrary/#../Subsystems/KMS\\_Console\\_User\\_Guide/Content/Apps/Adding\\_Platform.htm](http://docs.kony.com/konylibrary/#../Subsystems/KMS_Console_User_Guide/Content/Apps/Adding_Platform.htm)

**Note:** Windows push certificate is a purchased SSL certificate that is converted to correct format for uploading to MobileFabric.

To add Windows Push Certificates for your app, follow these steps:

1. Expand **WINDOWS 8 RT** and **PRO**. A list of configurable items appear.

+  iOS	
+  Android	
+  BlackBerry	
-  Windows 8 RT & Pro	
Secret	<input type="password" value="REDACTED"/>
SID	<input type="password" value="REDACTED"/>
	<input type="button" value="Delete configuration"/> <input type="button" value="Save"/>

2. **Secret:** Enter the secret key details.

**Note:** Windows Secret is an associated secret key that contains strings used in authentication with KMS APIs. It is used in authentication on the client side during registration.

3. **SID:** Enter the SID details, and then click Save to complete the configuration process.

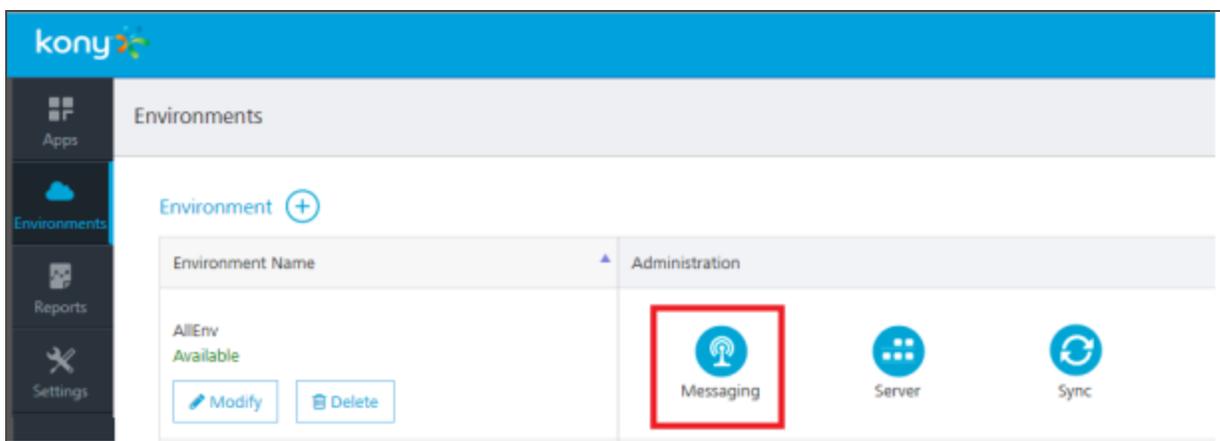
**Note:** Windows SID is a security identifier that is a unique, immutable identifier of a user, user group or other security principal. A security principal has a single SID for life, and all properties of the principal, including its name, are associated with the SID. This design allows a principal to be renamed (for example, from "John" to "Jane") without affecting the security attributes of objects that refer to the principal.

4. To delete push configuration for Windows, click **Delete Configuration**.

## 9.2 Accessing Messaging Service Console

The Messaging Service Console allows you to add and manage applications, view the stored certificates, and manage a subscribers list.

You can access Messaging Service console from your MobileFabric cloud account by clicking the **Messaging Service** in the your cloud dashboard.



**Note:** For more information on Messaging Service Console, refer to the following guide:

[http://docs.kony.com/konylibrary/default.htm#./Subsystems/KMS\\_Console\\_User\\_Guide/Content/Cover\\_Page.htm?TocPath=Kony Development Cloud|Kony Messaging Services|Kony Messaging Services Console User Guide|\\_\\_\\_\\_1](http://docs.kony.com/konylibrary/default.htm#./Subsystems/KMS_Console_User_Guide/Content/Cover_Page.htm?TocPath=Kony Development Cloud|Kony Messaging Services|Kony Messaging Services Console User Guide|____1).

## 10. Publishing the App

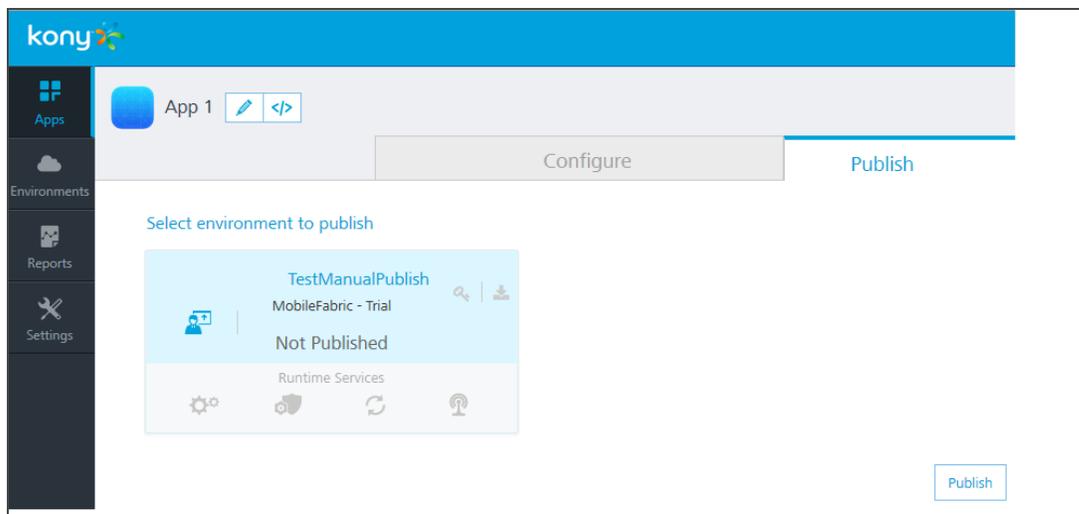
Once you have configured your demo app to use Kony User Repository identity service, you need to publish the app.

Based on environments created, Kony MobileFabric Console allows you to publish apps by using automated publish or manual publish.

- With automated publish, your apps are published to clouds or environments.
- Manual Publish is required only because of some limitations with publishing custom code associated with integration services.

To publish a service, follow these steps:

1. Click the **Publish** tab to view your available environments.
2. Select your target environment, and then click **Publish**.

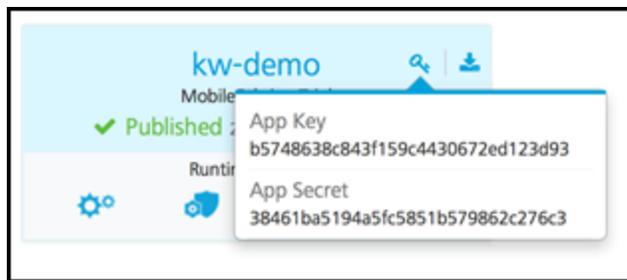


## 10.1 Testing the Service

Now that the identity service for our app has been published, we can test the service by trying to authenticate as our demo user. To do this, we need the app key, app secret, and the identity service URL of our runtime environment.

For testing the service, follow these steps:

1. From the **Publish** tab, click the key icon of our runtime environment.

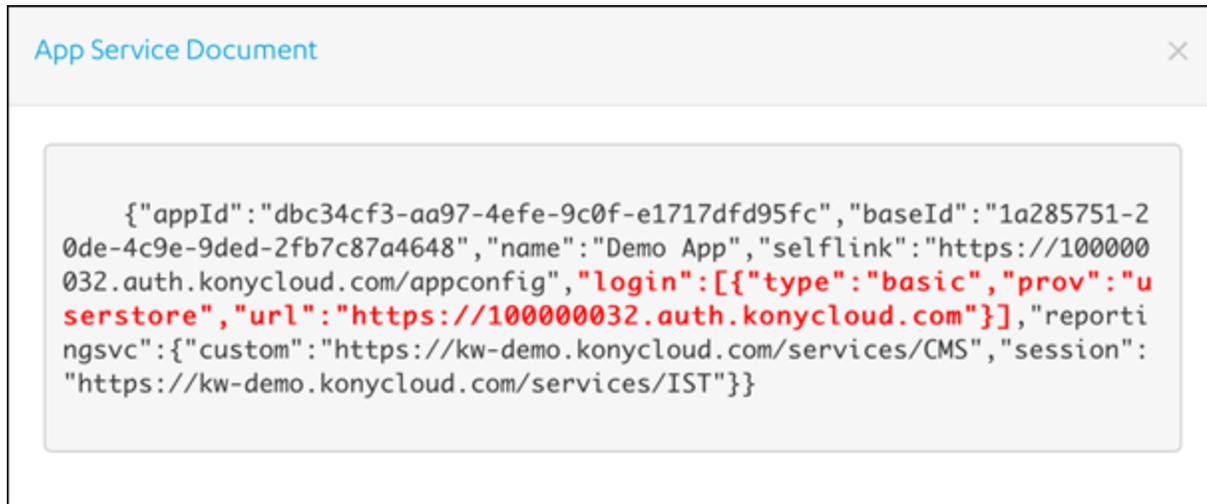


The app key and app secret are displayed.

The App key, App secret, and Service URL are used to initialize a client app to use MobileFabric services.

**Note:** App Key is unique to each environment.

2. Click the download icon, and then click **App Service Document**.



This will display a configuration JSON used by the client app to discover what services are available to this app in this environment. The configuration also contains the **login URL** to the user store (highlighted in red).

3. Test the service using the following cURL command for authenticating a user.

**Note:** cURL - a command line tool for getting or sending files using URL syntax. This guide uses the cURL command to represent a mobile device making HTTPS API calls to a Kony MobileFabric environment. cURL is typically pre-installed on Linux and Mac systems. For Windows, go to <http://curl.haxx.se/download.html>, download cURL, and the SSL libraries required to connect to HTTPS URLs.

For cURL commands and documentation, refer to <http://curl.haxx.se/docs/>

```
curl -X POST -H "X-Kony-App-Key:
24662f8e60c8a5cd2b2117e37d22fe32" -H "X-Kony-App-Secret:
75aa0fe163ace8f5c4a92245b97d95c6" -H "Accept: application/json" -
H "Content-Type: application/x-www-form-urlencoded" -d
'userid=demo%40kony.com&password=Pass1234'
'https://100000032.auth.konycloud.com/login?provider=userstore'
```

4. The JSON response contains the following elements:
  - a. **profile**: Includes user profile information. In this case, it is the user profile attributes from Kony User Repository. If this identity services were connected to an enterprise identity service provider, this would include user profile information from that system.
  - b. **provider token**: This is the security token returned from the external identity service provider such as Active Directory or Salesforce. In this case, it is the token returned from the Kony User Repository.
  - c. **refresh token**: The refresh token has a longer timeout than the provider token. The refresh token can be used to get a new provider token, but it requires the use of the app key and app secret to request a new provider token.
  - d. **claims token**: This is a Kony MobileFabric claims token that will be used for any subsequent calls to Integration, Orchestration, Sync, or Messaging services.

The token values are formatted as JWT tokens and are digitally signed by the server so they can be validated by the server on subsequent calls. They can be decoded using a JWT decoder such as <https://developers.google.com/wallet/digital/docs/jwtdecoder> to view the data it includes.

The following is a sample JSON response from the cURL command:

```
{
  "profile": {
    "email": "demo@kony.com",
    "userid": "demo@kony.com",
    "firstname": "Demo",
    "lastname": "User"
  },
  "provider_token": {
    "exp": 1412190752000,
    "value":
```





```
Y31JNmUzMHNJbKp2YkdWeklqcGJYWDAiLCAiX3B1aWQiOiAyODA4MjQ2MDQ5Nzk  
0  
NTUwODYgfQ.MC0CFQCP_1JSQe9stMYjr8P4vrgKYuTn5gIUSx6j_  
R9dbjFFCcTCL  
AiD6AOdqh0"  
,  
    "exp": 1412190752000  
  }  
}
```

## 11. Settings

Using **Settings**, a superuser can manage tasks such as adding new users, assigning roles to users, deleting users, and configuring reports server.

Settings includes the following sections:

- [Users](#)
- [Studio](#)
- [Reports](#)

### 11.1 Users

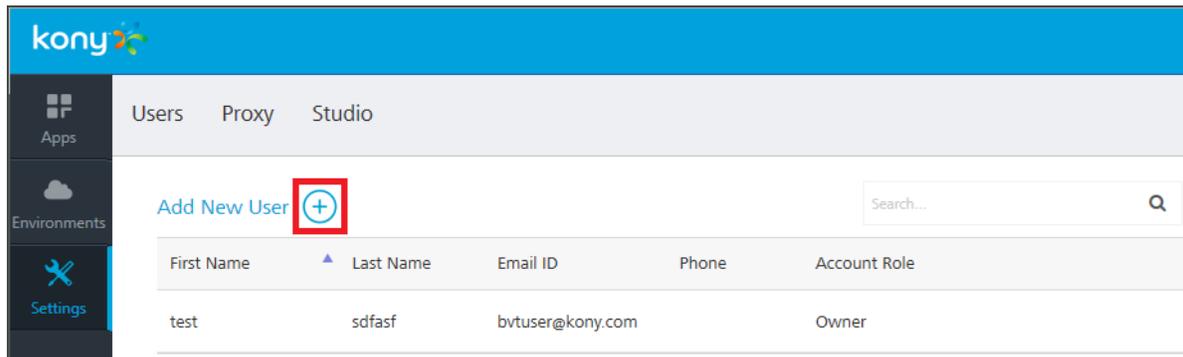
A user is an individual person. Each user needs an account to access the MobileFabric console. A superuser creates user accounts for owners, admins, and members who use the MobileFabric console.

**Important:** As a user, you must be an admin or owner to access the Users page and perform different tasks based on the role.

#### 11.1.1 How to Add a User

To add a user, follow these steps:

1. In your MobileFabric account, click **Settings**. By default, the **Users** page appears. The **Users** tab is visible to only users who are owners or admins. The page lists all owners, admins, and members of the account.



2. In the **Users** page, click **Add New User** button. The **Add New User** page appears.

The 'Add New User' form contains the following fields and options:

- First Name:** Text input field with placeholder 'First name'.
- Last Name:** Text input field with placeholder 'Last name'.
- Email ID:** Text input field with placeholder 'Email ID'.
- Phone:** Text input field with placeholder 'Phone No.'.
- Role:** A dropdown menu with options: Role (selected), Admin, Member, and Owner.
- Password:** Text input field with placeholder 'password'.
- Confirm password:** Text input field with placeholder 'password'.

At the bottom right, there are 'Cancel' and 'Save' buttons.

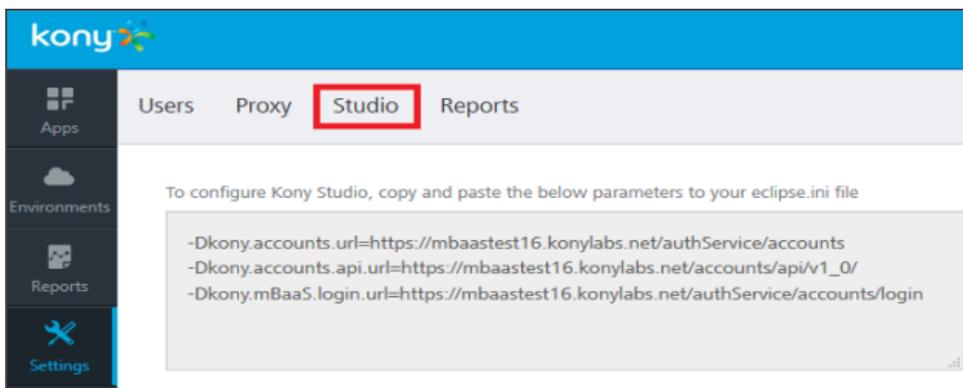
**Note:** All these fields are mandatory except the **Phone** number field.

3. Enter the details as required.
4. Click **Save** to save the user details. The system will add the new user in the grid.

## 11.2 Studio

The Studio tab lists -D parameters that you need to log in to Kony Studio (IDE.) The parameters are generated during MobileFabric installation.

**Important:** To configure Kony Studio, copy and paste the following parameters in the `eclipse.ini` or `eclipse-org.ini` file located in your Kony Studio install folder - for example, `<C:\Program Files\Kony_6.0.3QA\Kony_Studio>eclipse.ini`.



### 11.2.1 How to Configure -D parameters in Kony Studio in Windows OS

To configure -D parameters in Kony Studio (IDE) in Windows OS, follow these steps:

**Important:** If you use secured services (HTTPS), configure Java Runtime Environment (JRE) associated with Kony Studio with CA certificates. If your CA certificate is not configured, the login to Kony Studio fails.

If your CA certificate is not configured, the login to Kony Studio fails.

For details, refer to [Kony MobileFabric Install Guide > Troubleshoot with SSL Certificate Issues](#).

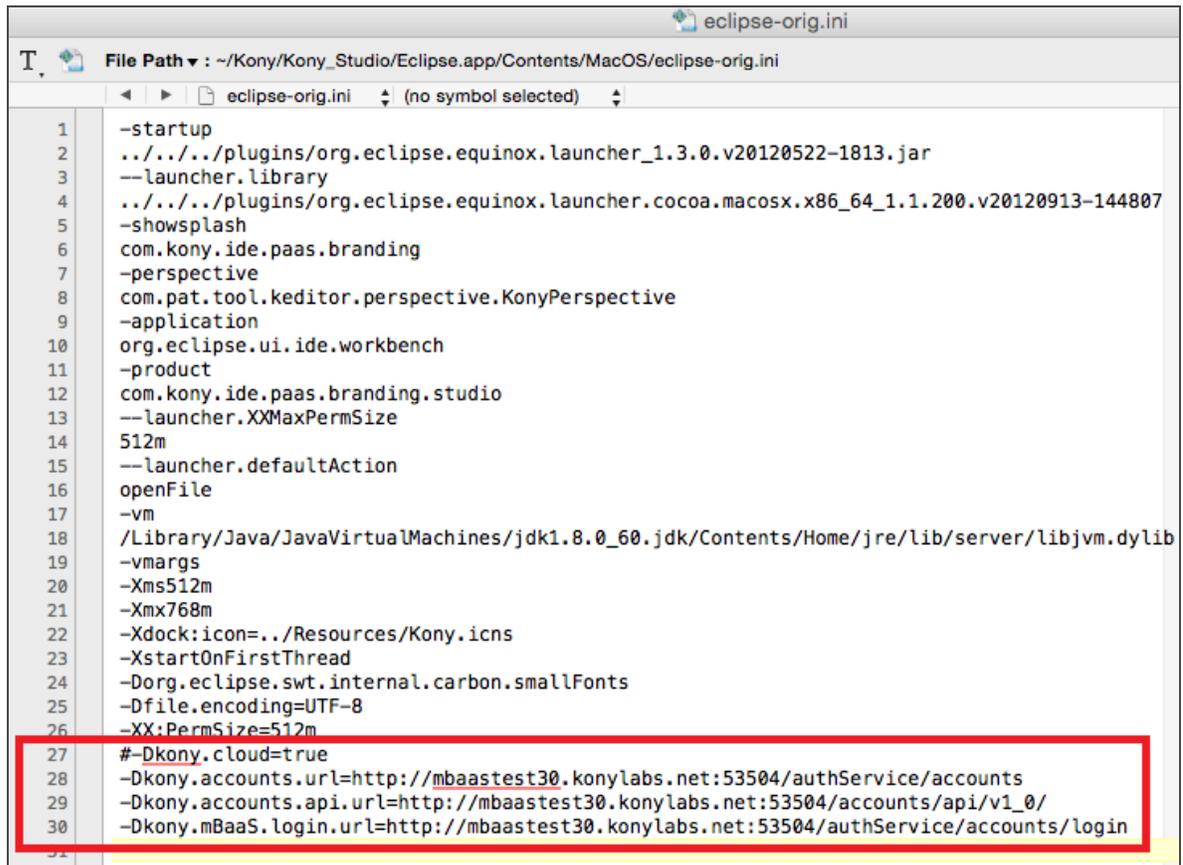
1. Open the `eclipse.ini` file located in your Kony Studio install folder - for example, `<C:\Program Files\Kony_6.0.1GA\Kony_Studio>eclipse.ini`.
2. Copy the **-D parameters** from the **Studio** tab in MobileFabric Console and paste them in the `eclipse.ini` file.
3. Save the `eclipse.ini` file and restart Kony Studio.

### 11.2.2 How to Configure -D parameters in Kony Studio in Mac OS

To configure -D parameters in Kony Studio (IDE) in Mac OS, follow these steps:

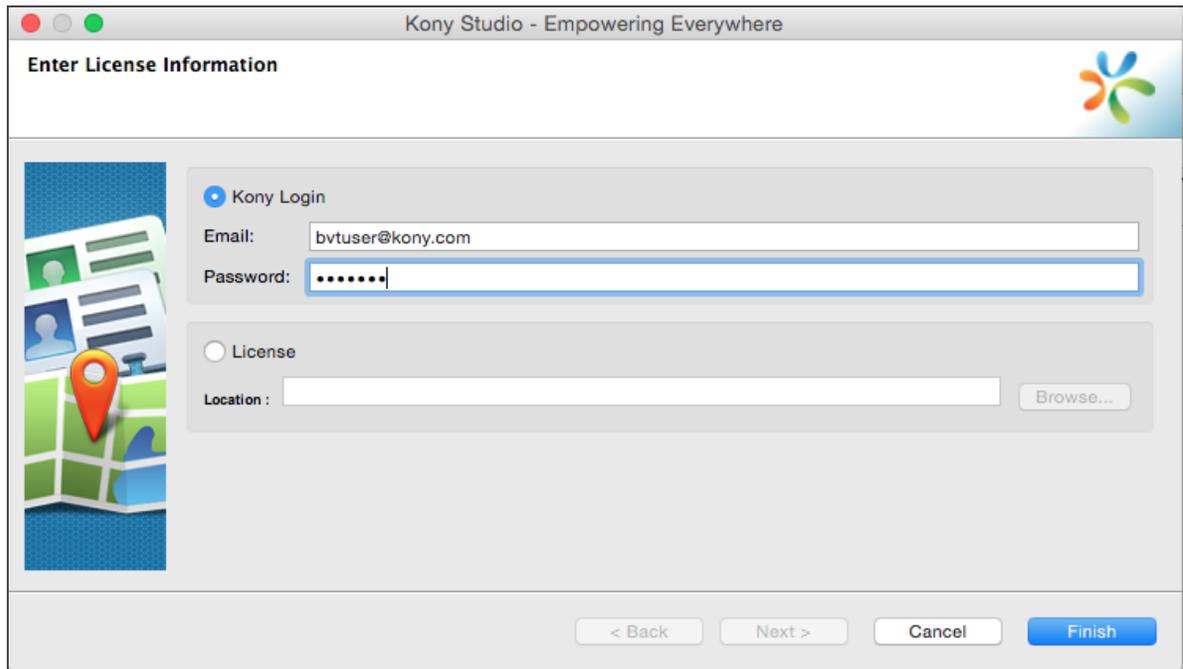
1. Open the `eclipse-org.ini` file located in your Kony Studio install folder - for example, `<Install Drive>:\Kony_Studio>eclipse-org.ini`.
2. Copy the **-D parameters** from the **Studio** tab in MobileFabric Console and paste them in the `eclipse-org.ini` file.
3. In the `eclipse-org.ini` file, comment the line for `-Dkony.cloud=true` parameter by adding an hash at the beginning of the line. For example,  `#-Dkony.cloud=true`.

Ensure that no spaces at the end of -D parameters lines that you added in this file.

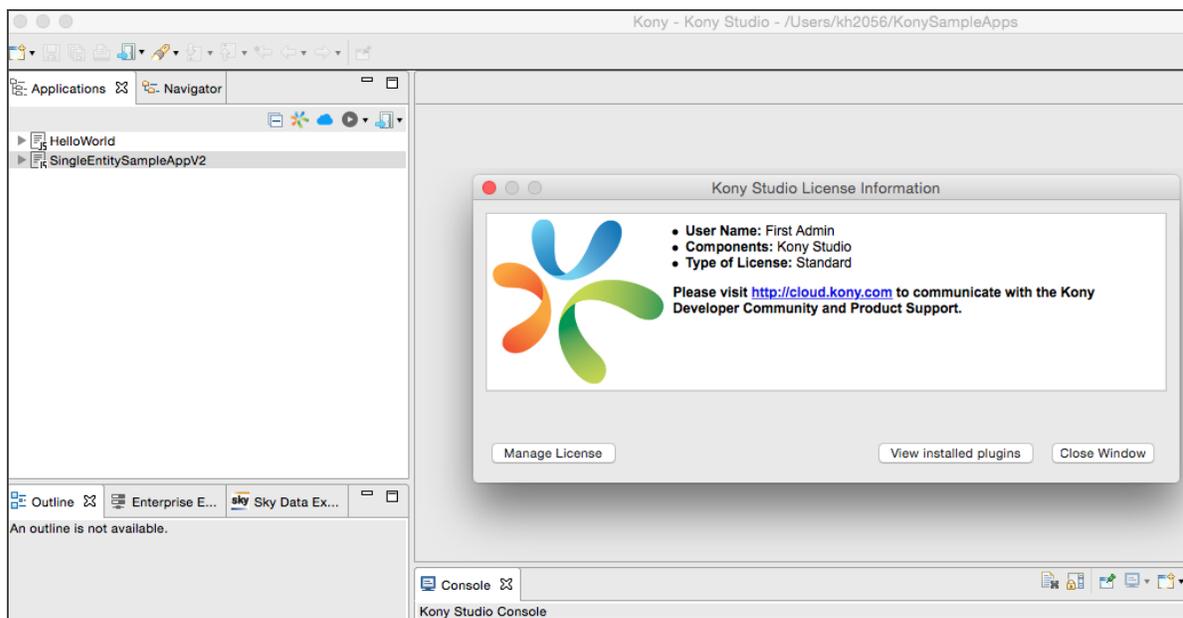


```
eclipse-orig.ini
File Path: ~/Kony/Kony_Studio/Eclipse.app/Contents/MacOS/eclipse-orig.ini
eclipse-orig.ini (no symbol selected)
1  -startup
2  ../../../../plugins/org.eclipse.equinox.launcher_1.3.0.v20120522-1813.jar
3  --launcher.library
4  ../../../../plugins/org.eclipse.equinox.launcher.cocoa.macosx.x86_64_1.1.200.v20120913-144807
5  -showsplash
6  com.kony.ide.paas.branding
7  -perspective
8  com.pat.tool.keditor.perspective.KonyPerspective
9  -application
10 org.eclipse.ui.ide.workbench
11 -product
12 com.kony.ide.paas.branding.studio
13 --launcher.XXMaxPermSize
14 512m
15 --launcher.defaultAction
16 openFile
17 -vm
18 /Library/Java/JavaVirtualMachines/jdk1.8.0_60.jdk/Contents/Home/jre/lib/server/libjvm.dylib
19 -vmargs
20 -Xms512m
21 -Xmx768m
22 -Xdock:icon=../Resources/Kony.icns
23 -XstartOnFirstThread
24 -Dorg.eclipse.swt.internal.carbon.smallFonts
25 -Dfile.encoding=UTF-8
26 -XX:PermSize=512m
27 #Dkony.cloud=true
28 -Dkony.accounts.url=http://mbaatest30.konylabs.net:53504/authService/accounts
29 -Dkony.accounts.api.url=http://mbaatest30.konylabs.net:53504/accounts/api/v1_0/
30 -Dkony.mBaaS.login.url=http://mbaatest30.konylabs.net:53504/authService/accounts/login
```

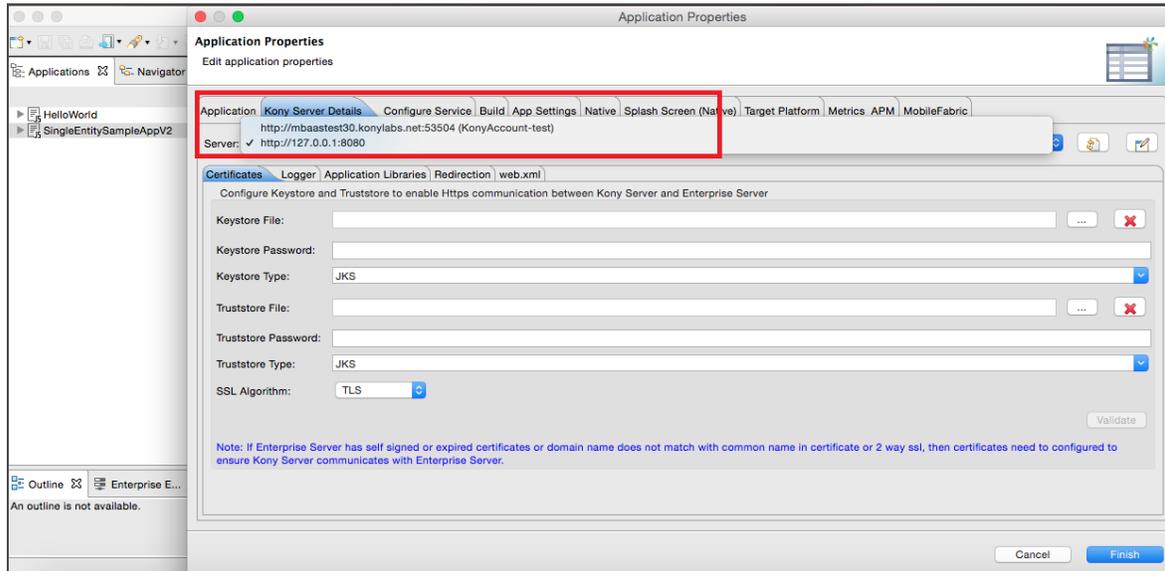
4. Save the `eclipse-org.ini` file and restart Kony Studio.
5. By default, the system asks you to log in to Kony Studio. Enter your MobileFabric login details. For example, `admin@localhost/MF-iXXXXXX`.



6. If the system does not prompt you to log in to Kony Studio by default, navigate to **Help > About Kony License**. The **Kony Studio License Information** dialog appears.
7. Click **Manage License** and enter log in details.

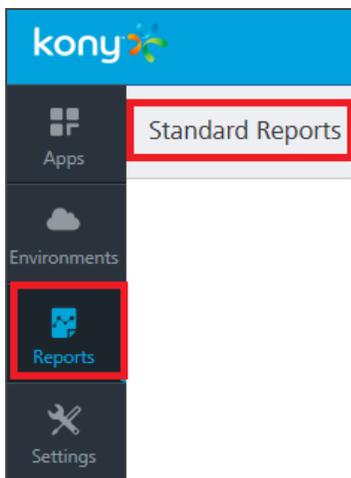


- In **Applications** view, right-click your **Project**, and click **Properties**. The **Application Properties** dialog appears.
- Click the **Kony Server Details** tab to view your MobileFabric Server is listed.



## 11.3 Reports

Under the **Settings**, the **Reports** tab allows you to configure the JasperReports Server. Once you complete JasperReports Server configuration, the **Reports** page (shown below) displays data (reports) from the JasperReports Server.



Currently, the **Reports** page displays only **Standard Reports**. To view standard reports, click the report. For more details on standard reports, refer to [Kony Reporting and Analytics - Standard Reports](#).

### 11.3.1 How to Configure JasperReports Server

**Important:** Before configuring the JasperReports Server in the Reports tab, ensure that you have installed the JasperReports Server and configured MobileFabric Console in the JasperReports Server. For more details about how to set up the JasperReports Server, refer to [Kony Analytics and Reporting Installation Guide](#).

1. In your MobileFabric account, click **Settings > Reports**. The **Reports** page appears.
2. In the **Jasper URL** text box, enter the JasperReports Server URL.
3. In the **Username** text box, type `jasperadmin`.

**Note:** Enter credentials for `jasperadmin`. The default credentials for `jasperadmin`:  
username = `jasperadmin`  
password = `jasperadmin`

4. In the **Password** box, type `jasperadmin`.
5. Click **Save** to save the JasperReports Server. The confirmation message appears.

After you configured JasperReports Server successfully, you can access the standard reports from **Reports > Standard Reports** page.

## 12. News and Weather Application

This section discusses the details of building and configuration of a sample News and Weather application by using Kony MobileFabric. Following details are included in this section for the News and Weather application:

- [Overview of the News and Weather Application](#)
- [Creating News and Weather Application in MobileFabric](#)
- [Creating the Identity Service for News and Weather App](#)
- [Creating the Integration Service for News and Weather App](#)
- [Creating the Orchestration Service for News and Weather App](#)

### 12.1 Overview of the News and Weather Application

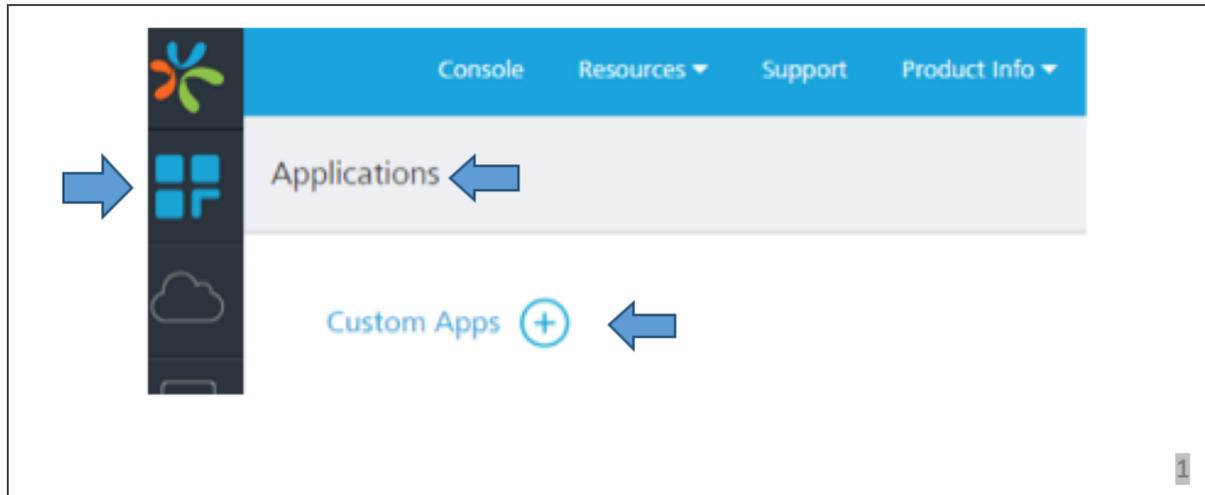
This document describes how to create a Kony MobileFabric Integration Services and Orchestration Services to get News (by category, Local News) and Weather Forecast from different Web services.

### 12.2 Creating News and Weather Application in MobileFabric

Follow the steps below to create a MobileFabric Application using the account that has been created using the Kony Cloud Portal.

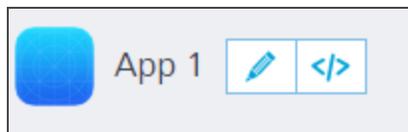
1. Log in to your Kony Cloud Portal.
2. Click **Apps** in the left menu.

3. Under the Applications, click the **Custom Apps Plus (+) button** to create a new application.



A new Kony MobileFabric Application is created, and you will be navigated to the app configuration page.

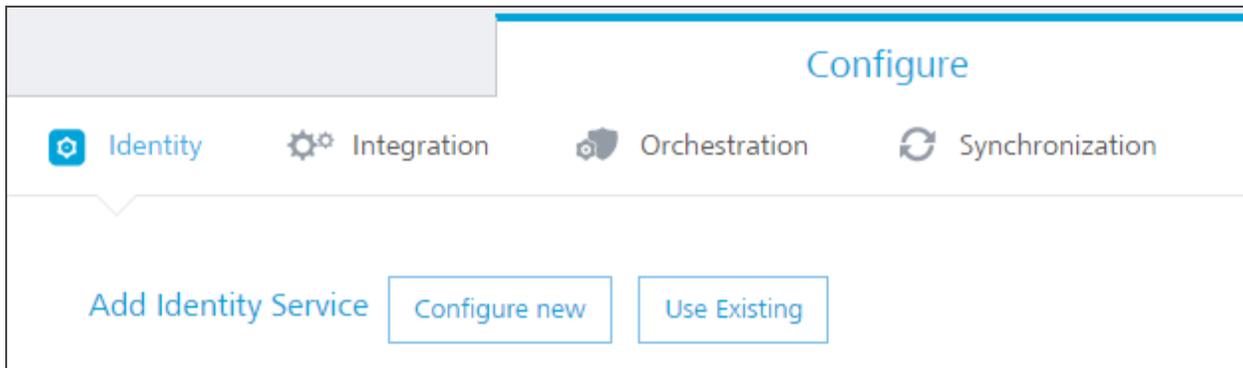
4. To change the app name, click on the pencil (edit) icon next to the app title, shown below:



## 12.3 Creating the Identity Service for News and Weather App

An identity is a service that validates the authentication of your users before they can access your application. In this application we are not configuring any identity services so that any user can access the application.

You can configure an identity service under the **Identity** tab, shown below:



The following sections help you to create a MobileFabric Application using the account that is created using the Kony Cloud Portal.

## 12.4 Creating the Integration Service for News and Weather App

The Integration tab is where you define services for your application.

A service is an application component that represents the application interaction with the external data source. A service definition comprises the meta-data or the configurations required to exchange data with the external data source. For example, the configurations can be service type, service ID, input parameters, output parameters, preprocessors and postprocessors, target URL, authentication credentials if required, and type (HTTP/HTTPS).

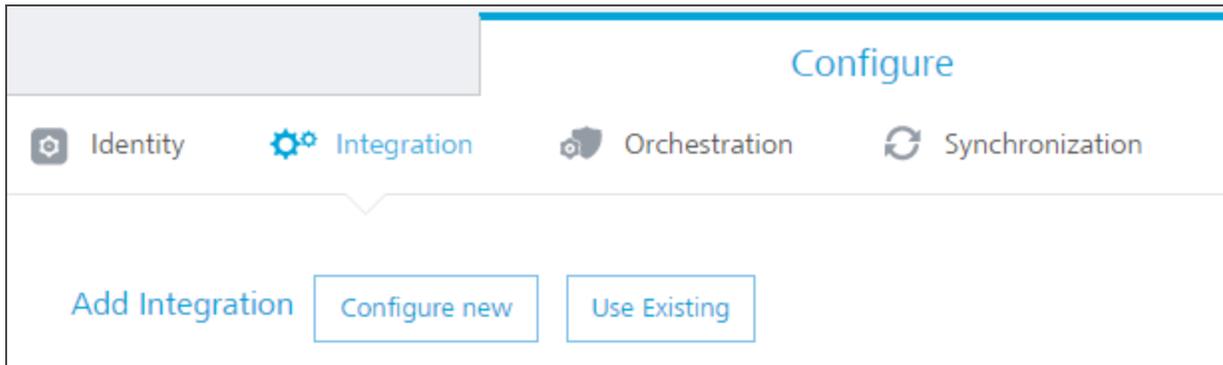
The service definition enables the application to exchange data with any external data source. The MobileFabric provides back-end for connecting to a Web service and an XML service. Even if the external data source does not expose the services to these well-known interfaces, the developer can build a Java service.

Let us create three different services for our application:

- [News Service](#)
- [Weather Service](#)
- [Location Lookup Service](#)

### 12.4.1 How to Create and Configure a News Service

We need to configure these services in **Integration** tab, shown below:



1. Click **Configure New**.
2. In the **Service Name** text box, provide a name for the integration service - for example, News.
3. From the **Service Type** dropdown, select XML.
4. In the **Base URL** box, type <https://news.google.com/news/section?output=rss&>.
5. Click **Save and Continue** to add the operations.
6. In **Operation name** field, type GetNewsForCategory, and click **Configure Operation**. You will be redirected to operation details page where you can configure the operation.

To configure the GetNewsForCategory operation, follow these steps:

1. In the **New Operation Path** field, add the value `topic=${category}`.
2. From the **HTTP Methods** drop-down, select **GET** method for this operation.
3. Now Select "Public" in Operation security Level dropdown. We are making this service public which means we don't any authentication to access this operation
4. Click on **Input** tab. In this section we will configure the input parameters for the operation.

5. Add category as input field and test value **w** which will retrieve the world news. Click the **Test** button, which is at bottom of the page. You will see the `<testdata></testdata>` in **Result** section, which is on right pane. The result will be converted to a JSON before being sent to the device.
6. Now click **Response** tab that will show the XML response from the service. To send the response to the client we have to configure the output tab.
7. Click the **Output** tab. Click the **Plus(+)** button to insert the output fields.

The following is a list of output fields you have to create. These fields will be sent to the mobile client.

ID	Path	Scope	Datatype	Collection ID	Record ID	Format	Format Value
news_list	Channel	Response	Collection			None	
news_item	Item	Response	Record	news_list		None	
Title	Title	Response	String		news_item	None	
Link	link	Response	String		news_item	None	
Description	description	Response	String		news_item	None	

8. Once you create above all fields, click the **Test** button to see the **Result** tab.

Now you will see all the data, which will be sent to mobile client.

9. Click **Save Operation**.

**To create one more operation for LocalNews, follow these steps:**

1. In the **New Operation Path** field, add the value `q=${cityName}`.
2. From the **HTTP Methods** drop-down, select **GET** method for this operation.
3. Now Select "Public" in Operation security Level dropdown. We are making this service public which means we don't any authentication to access this operation
4. Click on **Input** tab. In this section we will configure the input parameters for the operation.
5. Add `cityName` as input field and test value `New York` which will retrieve the local news. Click the **Test** button, which is at bottom of the page. You will see the `<testdata></testdata>` in **Result** section, which is on right pane. The result will be converted to a JSON before being sent to the device.
6. Now click **Response** tab that will show the XML response from the service. To send the response to the client we have to configure the output tab. The result will be converted to a JSON before being sent to the device.
7. Click the **Output** tab. Click the **Plus(+)** button to insert the output fields.

The following is a list of output fields you have to create. These fields will be sent to the mobile client.

ID	Path	Scope	Datatype	Collection ID	Record ID	Format	Format Value
news_list	Channel	Response	Collection			None	
news_item	Item	Response	Record	news_list		None	
Title	Title	Response	String		news_item	None	
Link	Link	Response	String		news_item	None	
Description	description	Response	String		news_item	None	

8. Once you create above all fields, click the **Test** button to see the **Result** tab.

Now you will see all the data, which will be sent to mobile client.

9. Click **Save Operation**.

## 12.4.2 How to Create and Configure a Weather Service

1. In the **Integration** page, click **Configure New**.
2. In the **Service Name** text box, provide a name for the integration service - for example, Weather.
3. From the **Service Type** dropdown, select SOAP.
4. Enter the following URLs to complete the service definition:
  - In the **Base URL** box, type: <http://wsf.cdyne.com/WeatherWS/Weather.asmx>
  - In the **WSDL URL** box, type: <http://wsf.cdyne.com/WeatherWS/Weather.asmx?wsdl>
5. Click **Save and Continue** to retrieve the WSDL. Each of the available operations are listed in the **Operation name** drop-down list. Select **GetCityForecastByZip** and **GetCityWeatherByZip** check boxes from the drop-down.
5. Click **Add Operation**. This will create two operations under your Weather service that maps to the SOAP web service methods.
6. To test and edit the **GetCityWeatherByZip**, click the **Settings** button and choose **Edit**.

The operation details window appears. A sample Web service request is provided showing a placeholder for any input parameters. For the **GetCityWeatherByZip**, the ZIP is the only input parameter displayed as `<ns1:ZIP>?XXX?</ns1:ZIP>` in the sample request. At this point, we could hard code a value, but since we want our app to provide the zip code, we need to provide an input variable name: `<ns1:ZIP>$zip</ns1:ZIP>`. We then need to define that variable under the Input tab including a test value of 10036.
7. On the **Output** tab, enter the following parameters and path.
  - city //City
  - state //State

- temp //Temperature
9. Click the **Test** button again and the result will be displayed as XML. The result will be converted to a JSON before being sent to the device.
  10. Edit the GetCityForecastByZip in the same way. This service returns a repeating data structure for each day providing that day's weather forecast. This requires the use of the collection ID under the output tab to create a repeating set of JSON objects. After creating the ZIP input parameter the same way as the previous service, enter the following output parameters:

ID	Path	Datatype	Collection ID
ForecastList	//ForecastResult/Forecast	Collection	
Date	Forecast/Date	Record	ForecastList
Desc	Forecast/Description	String	ForecastList
Low	Forecast/Description	String	ForecastList
High	Forecast/Temperatures/MorningLow	String	ForecastList
Daypct	Forecast/Temperatures/DaytimeHigh	String	ForecastList
Nightpct	Forecast/ProbabilityOfPrecipiation/Nighttime	String	ForecastList

Test your service and you will see the resulting XML showing the repeating collections of forecasts.

### 12.4.3 How to Create and Configure a Location Lookup Service

1. In the **Integration** page, click **Configure New**.
2. In the **Service Name** text box, provide a name for the integration service - for example, LocationLookup.
3. From the **Service Type** drop-down, select XML.
4. In the **Base URL** box, type <http://nominatim.openstreetmap.org/reverse?format=xml>.
5. Click **Save and Continue** to add the operations.
6. In **Operation name** field, type ReverseGeoCode, and click **Configure Operation**. You will be redirected to operation details page where you can configure the operation.

To configure the ReverseGeoCode operation, follow these steps:

1. In the **New Operation Path** field, add the value `&lat=$lat&lon=$lon`.
2. From the **HTTP Methods** drop-down, select **GET** method for this operation.
3. Now Select "Public" in Operation security Level dropdown. We are making this service public which means we don't any authentication to access this operation
4. Click on **Input** tab. In this section we will configure the input parameters for the operation.
5. Add **lat** as input field and test value `40.7127`. Add **lon** as input field and test value `-74.0059`, which will retrieve the location details. Click the **Test** button, which is at bottom of the page. You will see the `<testdata></testdata>` in **Result** section, which is on right pane. The result will be converted to a JSON before being sent to the device.
6. Now click **Response** tab that will show the XML response from the service. To send the response to the client we have to configure the **Output** tab.

- Click the **Output** tab. Click the **Plus(+)** button to insert the output fields.

The following is a list of output fields you have to create. These fields will be sent to the mobile client.

ID	Path	Datatype	Collection ID	Record ID
zip	//addressparts/postcode	String		
city	//addressparts/city	String		

## 12.5 Creating the Orchestration Service for News and Weather App

The Integration tab is where you define services for your application.

Orchestration is the coordination or integration of several services and exposing them as a single service. The mix of services supports the automation of business processes.

The following types of orchestration services are available in Kony MobileFabric:

- **Composite Services:** Allows you to run two or more services either concurrently or sequentially.
- **Looping Services:** Allows you to run a single service in a loop till the loop ends or exit criteria is met.

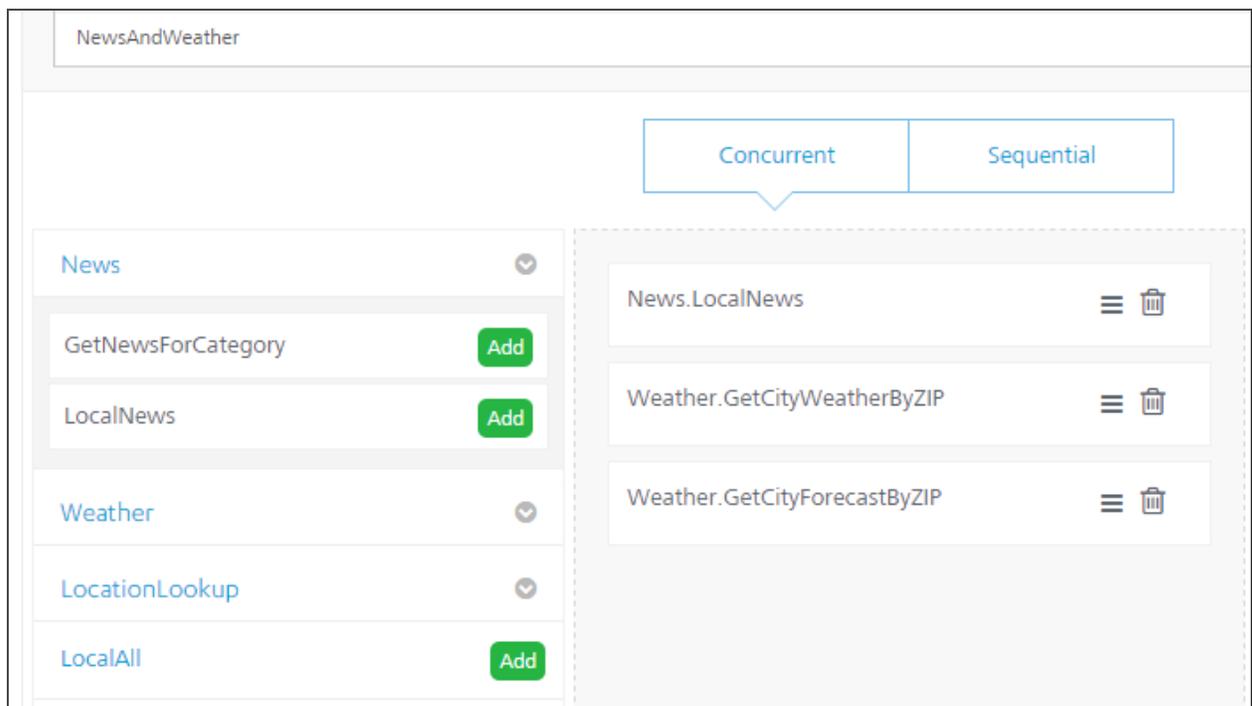
We will create the two orchestration services:

- [NewsAndWeather - Concurrent Service](#)
- [LocalAll - Sequential Service](#)

### 12.5.1 Creating News and Weather Orchestration Service

We need to configure these services in **Orchestration** tab, shown below:

1. Click **Create Composite**.
2. In the service name, enter **NewsandWeather** and click the **Concurrent** tab.
3. Now add the below integration services, by clicking the **Add** button next to each service, shown below:
  - LocalNews
  - GetCityWeatherByZip
  - GetCityForecastByZip



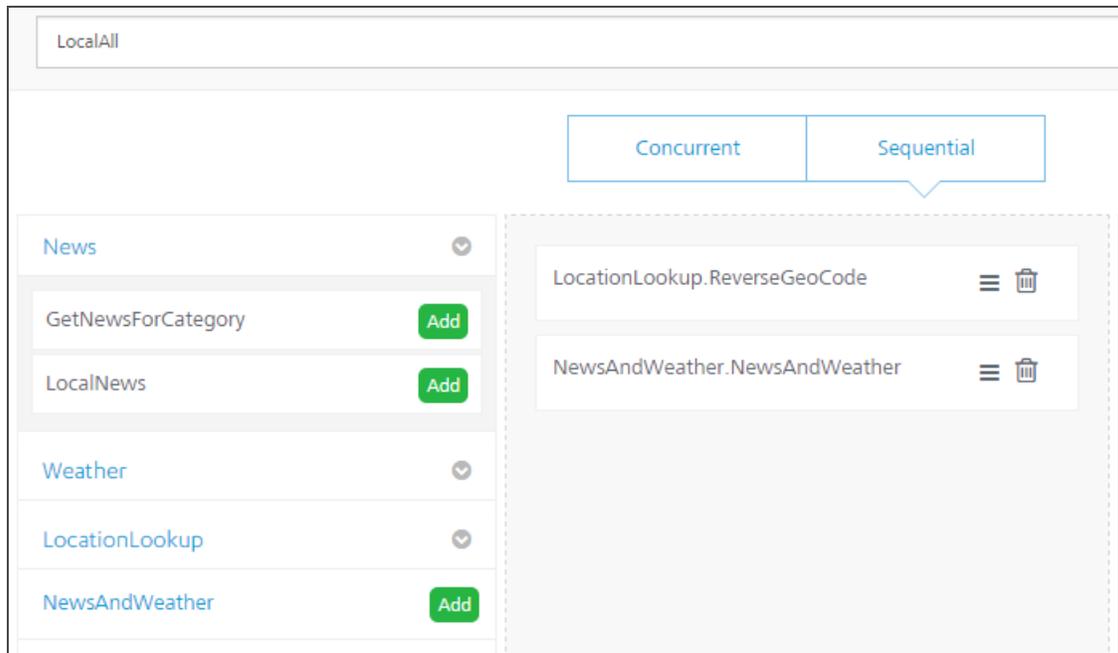
4. Click the **Save** button.

### 12.5.2 Creating LocalAll Orchestration Service

1. In the **Orchestration** page, click **Create Composite**.
2. In the service name, enter **LocalAll** and click the **Sequential** tab.

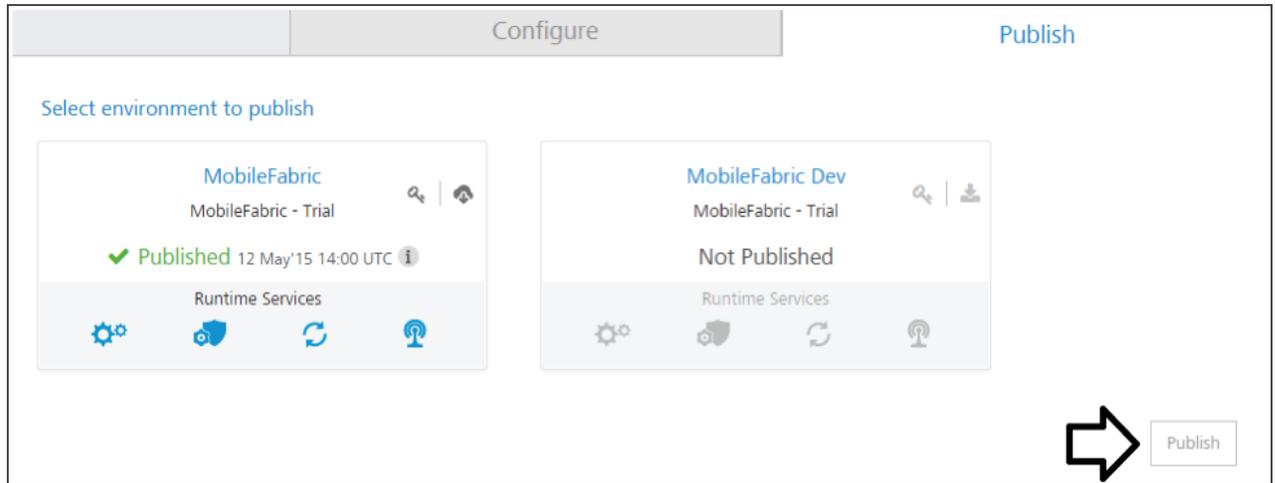
3. Now add the below integration services, by clicking the **Add** button next to each service, shown below:

- ReverseGeoCode
- NewsandWeather that you have created in the [Creating News and Weather Orchestration Service](#) section.



4. Click the **Save** button.

5. Now click the **Publish** tab (see below) to display the **Publish** page.



6. Select the environment and click the **Publish** button to publish the app into cloud.