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# **Preface**

#### This Document

This document provides detail information on the integration points required to enable the services and features of the Amole Platform within the Amole Marketplace online eCommerce site. Each service is described in detail, including the steps and sample code required by the development team to bring the Customer Journey to life.

# Intended Audience

This document is intended for stakeholders and technical staff to be able to understand the integration to Amole and services to be provided within the Amole Marketplace.

# **Living Document**

This document will be revised and grow accordingly ahead of the overall development efforts of the Amole Marketplace.

# **Revision History**

Version	Date	<b>Team Member</b>	Description
1.0	25 Feb 2021	Doug Deneau	Initial release
1.1	27 Feb 2021	Doug Deneau	Additional content release
1.2	04 Mar 2021	Doug Deneau	Added Digital Content section
1.3	10 Mar 2021	Doug Deneau	Completed Digital Content, Added Send Amole, Added options to be shown for My Amole
1.4	10 Mar 2021	Doug Deneau	Added detail for My Amole button drop-down menu



#### Overview of Amole APIs to be Utilized

The Amole Marketplace will have several integration points to the Amole Platform. There are two main APIs which will be utilized by the Amole Marketplace. The list of services from each API is shown below. Each Payment Gateway Action and Service API will be described in detail in the sections that follow at each integration point of the marketplace.

# **Amole Payment Gateway**

The Amole Payment Gateway is a rigid web service which process payments for purchases (sales), airtime and bill payment.

<b>Payment Action</b>	Description	Instructions
01	Sale	Payment for goods and services from a customer's digital wallet. Source
		account information can be the customer's Card Number (with PIN and Exp.
		Date) or Mobile Number with OTP.
20	Airtime Top-up	Purhcase PIN-Based or PINIess airtime minutes for mobile phone topup.
31	Bill Payment	Issue customer payment (bill) for an available vendor.

# Sample call to the Payment Gateway

Below is the standard format for a call to the Amole Payment Gateway. Consult the Amole Payment Gateway Reference Guide for more detailed information.

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/pay",
 "method": "POST",
 "timeout": 0,
  "headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM ",
    "HDR_IPAddress": "0.0.0.0",
                                  ← we will have to whitelist this in Amole
    "HDR_UserName": "Abishek",
    "HDR_Password": "test",
    "Content-Type": "application/x-www-form-urlencoded"
 },
  "data": {
    "BODY_CardNumber": "+251911999999",
    "BODY_ExpirationDate": "",
    "BODY_PIN": "9999",
    "BODY_PaymentAction": "01",
    "BODY_AmountX": "123.45",
    "BODY_AmoleMerchantID": "MARKETPLACE",
    "BODY_OrderDescription": "Description of transaction",
    "BODY_SourceTransID": "MarketplaceUniqueTransID",
    "BODY VendorAccount": "",
    "BODY_AdditionalInfo1": "",
    "BODY_AdditionalInfo2": "",
    "BODY_AdditionalInfo3": "",
    "BODY AdditionalInfo4": "",
    "BODY AdditionalInfo5": ""
```



# **Amole Service Integration APIs**

This web service is a collection of services which expose the core functionality of the Amole backend platform. The services to be utilized by the Amole Marketplace are listed below.

Services	Description
Customer	
AccountGet	To view detailed account information for this customer's account in the Amole system, including the last 5 transactions.
CustomerAdd	To create a new customer in the Amole system.
CustomerGet	To view current customer detailed information stored in the Amole system.
CustomerUpdate	To update any of an exposed set of fields into the Amole system.
DStvBillLookup	To retrieve a customer's bill through the integration to DStv's back office.
SendSMS	To send an SMS Text message to an existing Amole customer.
SendEmail	To send an Email to a customer for OTP, alerts or Notifications.
TransactionsGet	To query account transactions using a reference number from the last time the AccountSync operation was called. If no reference number is passed, the last 5 transactions are returned.
ValidateCard	To verify a customer exists and card information is valid and active. If an amount is included, then the account will be checked for sufficient funds.
Content	
BillLookup	To retrieve bill information hosted at ETH Switch which is integrated to various government-associated billing services.
BillServiceProviders	To retrieve the list of valid bill pay service providers available through Amole.
ContentGet	To retrieve the entire catalog of content and items available for sale.
ContentGetTypes	To lookup the types of content available for sale to customer.
ContentGetCat	To retrieve the categories (events) available for a content type.
ContentGetIcon	To retrieve the corresponding icon for the content category.
ContentGetItems	To lookup the items available for a content category (event) ID.
ContentCalc	Calculates the total payment amount for a potential content purchase.
ContentGetItem	To lookup the detail for an item that was sold.
Transaction	
AirtimeGetPIN	To lookup the PIN and Serial Number from a mobile airtime top-up purchase.
Donation	To accept a customer donation for a charitable cause.
OTPSend	To send an OTP (One-Time PIN) to a customer for verification purposes.
OTPSendEmail	To send an OTP (One-Time PIN) to a customer via email for verification.
OTPVerify	To verify an OTP that was sent to the customer.
Reversal	To process a transaction reversal within an open business day.
TransferP2P	To process a transfer from one customer account to another customer account in the Amole system.
VerifyRequest	To lookup a prior API call or posted transaction for verification of posting information.

# Sample call to the Service Integration APIs

Below is a sample call to the Amole Services. Consult the Amole Service Integration API Reference Guide for more information.

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
     "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
     "HDR_IPAddress": "0.0.0.0",
     "HDR_UserName": "Abishek",
     "HDR_Password": "Test",
     "Content-Type": "application/x-www-form-urlencoded"
```



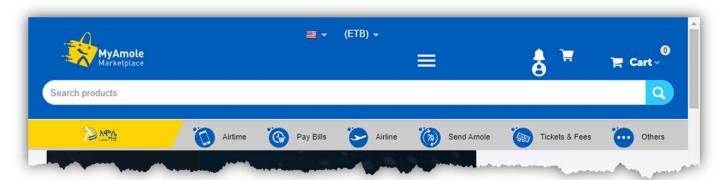


# **Integration Points**

Each section of the Marketplace will be described in separate sections in detail.

# Home Page – Amole Toolbar

The Amole toolbar exposes financial services available from the Amole platform.



When the user clicks on one of the toolbar items in the menu, we should open up a new page and handle the transactions.



#### **Send Amole**

This service will allow the customer to send money as a P2P Transfer to another customer out of their wallet balance. This is also considered a Domestic Money Transfer.

The user will enter the amount to be transferred in ETB and the recipient mobile number. The user will then click on the "Send OTP" button to request and OTP to be sent to the customer using the OTPSend service. Set the IncludeEmail flag to "Y" so that an email will also be sent if the customer has an email address on file.

How much would you like to send:	
Enter mobile number of recipient:	

# Send OTP

Enter OTP:

9999

#### Submit

<submit the request>

#### Send Amole Successful!

Amount: 100 ETB

Reference Number: 999999

Confirmation Number: 999999999

Thank you for using Amole!

# Amole Service API: OTPSend

```
var settings = {
    "url": "https://uatc.api.myamole.com:8076/amole/service",
    "method": "POST",
    "timeout": 0,
    "headers": {
        "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
        "HDR_IPAddress": "0.0.0.0",
        "HDR_UserName": "Abishek",
        "HDR_Password": "Test",
        "Content-Type": "application/x-www-form-urlencoded"
    },
        "data": {
        "BODY_ServiceRequest": "<a href="Service">Service</a>OTPSend</a>/Service><a href="Mobile Number>+251911999999</a>/MobileNumber>",
        "BODY_SourceTransID": "YourUniqueTransID"
    }
};
```



#### Amole Service API: TransferP2P

```
var settings = {
 "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
   "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
  "data": {
   "BODY_ServiceRequest": "<Service>TransferP2P</Service><MerchantID>YourMerchantID</MerchantID>
<SourceAccount>+251911654321<SourceAccount><OTP>9999</OTP><DestMobile>+251911987654/DestMobile>
<Amount>123.45</Amount>",
   "BODY_SourceTransID": "YourUniqueTransID"
 }
};
```



#### **Airtime**

We are going to break this up into two phases. For phase I we will offer PIN-Based top-up only, and for phase II we will change to pinless topup and post-paid bill payment.

# **Recipient of Airtime**

Country: Ethiopia

Telco: Ethiopia Telecom

O Myself O Someone else: 929131995

# Select top-up amount:

O 25 BirrO 50 BirrO 500 BirrO 100 BirrO 1000 Birr

Send the OTP to the customer using the OTPSend service. Set the IncludeEmail flag to "Y" so that an email will also be sent if the customer has an email address on file.

Next prompt for the OTP and account to pay from. To get the list of accounts, call the CustomerGet service and display the account name as a drop-down list selection.

# Send OTP

Enter OTP: 9999

Pay from Account: Amole Mobile Wallet ▼

# **Submit**

After hitting submit we need to show the receipt information and the airtime PIN as shown below.

# Airtime purchase successful!

Amount: 100 ETB

Reference Number: 999999

Confirmation Number: 999999999

Thank you for using Amole.



#### Amole Service API: OTPSend

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
        "HDR_Signature": "TEXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9LcxsulVuM",
        "HDR_IPAddress": "0.0.0.0",
        "HDR_UserName": "Abishek",
        "HDR_Password": "Test",
        "Content-Type": "application/x-www-form-urlencoded"
    },
        "data": {
        "BODY_ServiceRequest": "<Service>OTPSend</Service><MobileNumber>+251911999999</MobileNumber>",
        "BODY_SourceTransID": "YourUniqueTransID"
    }
};
```

# Amole Payment Gateway API: Purchase Airtime (20)

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
 },
  "data": {
   "BODY_CardNumber": "+251911999999",
                                          ← mobile wallet, current user, for payment
   "BODY_ExpirationDate": "",
   "BODY_PIN": "????",
   "BODY_PaymentAction": "20",
   "BODY_AmountX": "100",
   "BODY_AmoleMerchantID": "MARKETPLACE",
   "BODY_OrderDescription": "Airtime topup",
   "BODY_SourceTransID": "MarketplaceUniqueTransID",
   "BODY_VendorAccount": "",
   "BODY_AdditionalInfo1": "P",
   "BODY_AdditionalInfo2": "+251888888888",
                                               ← Only required if sending airtime to another person
   "BODY_AdditionalInfo3": "",
   "BODY AdditionalInfo4": ""
   "BODY_AdditionalInfo5": ""
```

# Amole Service API: AirtimeGetPIN

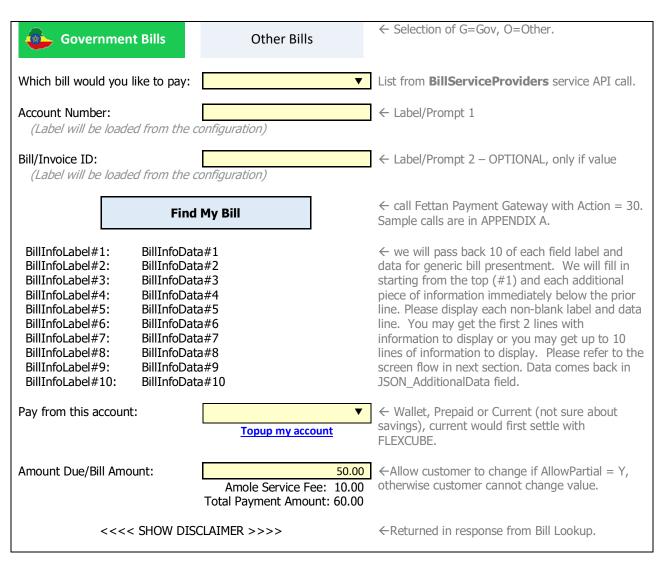
```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
      "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
      "HDR_IPAddress": "0.0.0.0",
      "HDR_UserName": "Abishek",
```





# Pay Bills

We have two types of bills: Government or Other. Please use the flow and formatting below for bill payment services.



#### **Send OTP**

Enter OTP: **9999** 

Pay from Account: Amole Mobile Wallet ▼

**Submit** 



Upon hitting Submit, call the Amole Payment Gateway with action code 31 (shown below) and receive the response. If error, please show the error information and allow to correct. If success, show the receipt information as shown below.

# **Bill Payment Successful!**

Reference Number: 9999999

Confirmation Number: 9999999999

Thank you for using Amole!

#### Amole Service API: BillServiceProviders

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
        "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9LcxsulVuM",
        "HDR_IPAddress": "0.0.0.0",
        "HDR_UserName": "Abishek",
        "HDR_Password": "Test",
        "Content-Type": "application/x-www-form-urlencoded"
    },
     "data": {
        "BODY_ServiceRequest": "<Service>BillServiceProviders</Service><Type>6</Type>", ← or "O"
        "BODY_SourceTransID": "YourUniqueTransID"
    }
};
```

# Amole Service API: BillLookup

```
var settings = {
 "url": "https://uatc.api.myamole.com:8076/amole/service",
 "method": "POST",
 "timeout": 0,
 "headers": {
   "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
   "HDR IPAddress": "0.0.0.0",
   "HDR_UserName": "Abishek",
   "HDR_Password": "Test",
   "Content-Type": "application/x-www-form-urlencoded"
 },
 "data": {
   "BODY_ServiceRequest":
"BODY_SourceTransID": "YourUniqueTransID"
};
```

# Amole Service API: OTPSend

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
```



```
"headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
    },
    "data": {
        "BODY_ServiceRequest": "<a href="Service>OTPSend</service><MobileNumber>+251911999999</mobileNumber>",
        "BODY_SourceTransID": "YourUniqueTransID"
    }
};
```

# Amole Payment Gateway API: Bill Payment (31)

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
  },
  "data": {
  "BODY_CardNumber": "+251911999999", ← mobile wallet, current user, for payment
  "BODY_ExpirationDate": "",
  "BODY_PIN": "????",
  "BODY_PaymentAction": "31",
   "BODY_AmountX": "50.00",
   "BODY_AmoleMerchantID": "MARKETPLACE",
   "BODY_OrderDescription": "Bill payment",
   "BODY_SourceTransID": "MarketplaceUniqueTransID",
   "BODY_VendorAccount": "XXXXXXXXXX",
                                        ← Value from Prompt 1
  "BODY_AdditionalInfo1": "BSP",
  "BODY_AdditionalInfo2": "123",
                                         ← Biller ID Number
  "BODY_AdditionalInfo3": "",
                                         ← Value from Prompt 2 (optional)
  "BODY_AdditionalInfo4": "10.00",
                                        ← Fee Amount
  "BODY_AdditionalInfo5": ""
 }
```



#### **Airline**

Currently we only have Ethiopian Airlines online for payments with Amole. The customer must lookup the amount they owe by providing their PNR number. We perform a Bill Lookup and then take payment.

Enter PNR: ABC123

# **Lookup My Reservation**

Reservation was found.

Amount Due: 1,234.56 ETB

# Send OTP

Enter OTP: **9999** 

Pay from Account: | Amole Prepaid Account ▼

#### Submit

# **Bill Payment Successful!**

Reference Number: 9999999

Confirmation Number: 9999999999

Thank you for using Amole!

Upon hitting Submit, call the Amole Payment Gateway to post the payment.

# Amole Payment Gateway API: Bill Lookup (30)

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
    "HDR Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
 },
  "data": {
  "BODY_CardNumber": "",
  "BODY_ExpirationDate": "",
  "BODY_PIN": "",
  "BODY_PaymentAction": "30",
```



```
"BODY_AmountX": "",
   "BODY_AmoleMerchantID": "MARKETPLACE",
   "BODY_OrderDescription": "",
   "BODY_SourceTransID": "MarketplaceUniqueTransID",
   "BODY_VendorAccount": "",
   "BODY_AdditionalInfo1": "ETAIR",
   "BODY_AdditionalInfo2": "PNR123",
   "BODY_AdditionalInfo3": "",
   "BODY_AdditionalInfo4": "",
   "BODY_AdditionalInfo5": ""
}
};
```

#### **Amole Service API: OTPSend**

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
      "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9LcxsulVuM",
      "HDR_IPAddress": "0.0.0.0",
      "HDR_UserName": "Abishek",
      "HDR_Password": "Test",
      "Content-Type": "application/x-www-form-urlencoded"
   },
   "data": {
      "BODY_ServiceRequest": "<Service>OTPSend</Service><MobileNumber>+251911999999</MobileNumber>",
      "BODY_SourceTransID": "YourUniqueTransID"
   }
};
```

# Amole Payment Gateway API: Bill Payment (31)

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
   "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR UserName": "Abishek",
    "HDR Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
 },
  "data": {
   "BODY_CardNumber": "+251911999999", ← mobile wallet, current user, for payment
   "BODY_ExpirationDate": "",
   "BODY_PIN": "????",
   "BODY_PaymentAction": "31",
   "BODY_AmountX": "50.00",
   "BODY_AmoleMerchantID": "MARKETPLACE",
   "BODY_OrderDescription": "Bill payment";
   "BODY_SourceTransID": "MarketplaceUniqueTransID",
   "BODY_VendorAccount": "",
   "BODY_AdditionalInfo1": "ETAIR",
   "BODY_AdditionalInfo2": "PNR123",
                                          ← PNR Reservation Code
   "BODY_AdditionalInfo3": "",
   "BODY_AdditionalInfo4": ""
   "BODY_AdditionalInfo5": ""
```



};

# Tickets & Fees (Digital Content)

The Amole platform has the ability to dynamically offer various digital content for sale to the consumer. The content is managed centrally by the Amole back-office team.

# **How Content is Organized**

Content is organized into three levels:

- Top Level Content Types, this level is retrieved by calling ContentGetTypes service and represents the various types of content available for sale on the Amole platform as of the time of the call. Examples would be Sports Events, Concerts, Movie Tickets, School Fees, etc.
- 2. **Second Level** Content Categories or Events for selected type of content. This level is retrieved by passing the corresponding TypeID from the type selected at the top level by the customer to the **ContentGetCat** service. For example, if Sports Events was selected you could see Team 1 vs. Team 2 and Team 3 vs. Team 4 types of events under this category. The detail returned from this call will include the event location and the event date(s).
- 3. **Third Level** Items for sale for selected Content Category. This level is the item the customer can purchase. This list is retrieved by calling the **ContentGetItems** service using the Category ID from the second level of which the customer selected. Examples of this would be the type of ticket for a sporting event, or the type of fee you are trying to pay for a selected school. All of the detail information of each item for sale is returned within the results of this service call. The price should be presented in the menu selection, and upon selection all of the detail information shown prior to the payment process.

NOTE: To retrieve the entire content catalog in one call, use the **ContentGet** service an the entire structure will be returned in one result set.

# Sample Content Structure

The customer should be able to navigate the content catalogue by first selecting the Content Type, and the application should present the Categories/Events in available from within that type. Next they should be able to select the Category or Event they are interested in purchasing. One the Category or Event is selected, then present the items for sale and the price for that item.

The customer should always be able to navigate backwards to the prior level, or even return to the top level to re-select the content type they are interested in.

Below is a sample content catalog to be delivered to Amole Customers.



Туре		Category / Event		Item (for sale)	
School Fees	5	Destiny Future Acadamy	4	Pre-Nursery and Nursery	13
				KG1and KG2	14
				G-1 to G-4	15
				G-5 to G-8	16
		MALD KINDERGARTEN TUITION	61	Nursery	328
				Kindergarten	329
				Prep	330
				Foundation	331
Premier League	19	GIORGIS YEARLY Kibur Tribune	66	St George YEARLY Kibur Tribun 13 Games	392
			66	St George YEARLY Kibur Tribun 30 Games	393
		BUNNA YEARLY Kibur Tribune	67	BUNNA YEARLY Kibur Tribun 14 Games	394
			67	BUNNA YEARLY Kibur Tribun 30 Games	395
		SEBETA Vs ADAMA	68	SEBETA – SEBETA Vs ADAMA Kibut Tribun	397
			68	SEBETA – Right Tila Fok Door 12	406
			68	ADAMA – Left Tila Fok Door 1	398
			68	ADAMA – Keman Anishe With Chair Door 2	399
			68	ADAMA -Kemananishe NO Chair Door 3	400
			68	SEBETA - DAF DOOR 4 and 5	401
			68	SEBETA – KATANGA DOOR 6 and 7 SEBETA – Mismar Tera DOOR 8 and 9	402
			68 68	SEBETA-Kemananishe NO Chair DOOR 10	403 404
			68	SEBETA – Keman Anishe With Chair DOOR 11	404
Concert Tickets	1	Culture Week Concert	69	Student Ticket	403
Concen lickers	-	Colloie Week Collceit	07	Regular Ticket	410
				VIP Ticket	411
		Bob Marley 75 <sup>th</sup> Birthday	74	Near Stage Ticket	459
		Concert	, ¬		460
		Concon			461
					462
		Concert		Regular Ticket Grass Area Ticket VIP Ticket	

# Presenting to Customer for Purchase

Once the customer has selected the item they wish to purchase, then present the item detail information as shown below:

Bob Marley 75<sup>th</sup> Birthday Concert Meskel Square 24 February 2020 at 8:00 PM VIP Ticket 250.00 ETB

Next prompt the customer for the below fields. Fields are relevant to the type of item being purchased. Some are not required but to simplify screen flow all should be presented. The backend Amole system will figure out what it needs to complete each prurchase.

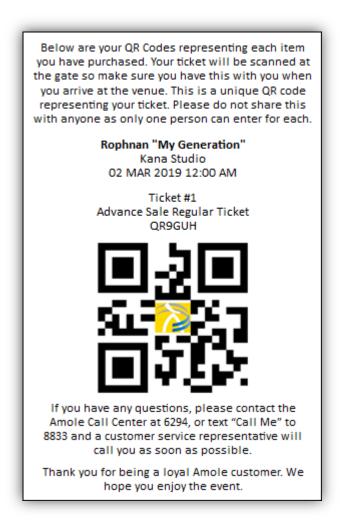
Quantity:	
Send To Mobile:	
Referral/Name:	 
Reference/Grade:	

After all information is collected then call **ContentCalc** to get final price and then take the customer through the payment process using the **Amole Payment Gateway** with **Action=31**.



# Sample QR Code and SMS Message for Customer

Below is a sample of the ticket QR code the customer should receive to be able to enter the corresponding event.



The customer will also receive an SMS message similar to the one shown below:

Thank you for your purchase of Advance Sale Regular Ticket for Rophnan "My Generation", 02 Mar 2019 12:00a at Kana Studio. Your confirmation number is 123456789

#### Display Types of Content for Sale

The first step to placing an order for digital content is to show the content types. This is the uppermost organization of the various items for sale or payment.



# ContentGetTypes → ContentGetCat → ContentGetItems → ContentGetItemPrice

Call the **ContentGetTypes** service to retrieve the list to build the screen as shown below:



# Amole Service API: ContentGetTypes

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
        "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9Lcxsu1VuM",
        "HDR_IPAddress": "0.0.0.0",
        "HDR_UserName": "Abishek",
        "HDR_Password": "Test",
        "Content-Type": "application/x-www-form-urlencoded"
   },
   "data": {
        "BODY_ServiceRequest": "<a href="mailto:service">Service>ContentGetTypes</a>/Service>",
        "BODY_SourceTransID": "YourUniqueTransID"
   }
};
```

Below is a sample from within the "BODY ServiceResponse" tag returned from the call to the API.

```
{
   "ContentTypes": [
    {
        "ContentTypeID": "3",
        "Name": "Sports Event"
    },
    {
        "ContentTypeID": "5",
        "Name": "School Fees"
    },
    {
        "ContentTypeID": "22",
        "Name": "ACCA"
    },
    {
        "ContentTypeID": "23",
    }
}
```

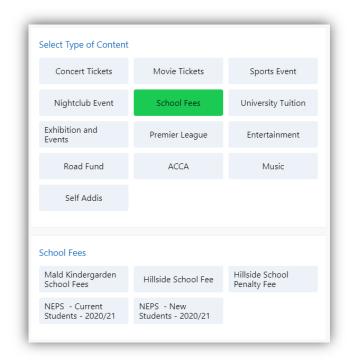


# Display Types of Content for Sale

When the user clicks or selects a Content Type, then call the **ContentGetCat** to get the list of categories for that content type. This level is retrieved by passing the corresponding TypeID from the type selected at the top level by the customer to this service. For example, if Sports Events was selected you could see Team 1 vs. Team 2 and Team 3 vs. Team 4 types of events under this category. The detail returned from this call will include the event location and the event date(s).

ContentGetTypes → ContentGetCat → ContentGetItems → ContentGetItemPrice

Below is what should be shown when the "School Fees" option is selected.



#### Amole Service API: ContentGetCat

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
      "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
      "HDR_IPAddress": "0.0.0.0",
      "HDR_UserName": "Abishek",
      "HDR_Password": "Test",
      "Content-Type": "application/x-www-form-urlencoded"
```



```
},
  "data": {
    "BODY_ServiceRequest": "<Service>ContentGetCat</Service><TypeID>123</TypeID>",
    "BODY_SourceTransID": "YourUniqueTransID"
}
};
```

Below is a sample from within the "BODY\_ServiceResponse" tag returned from the call to the API.

```
"ContentTypes": [
    "CategoryID": "61",
    "Name": "Mald Kindergarden School Fees",
    "Location": "Bisrate Gebriel",
    "EventBegin": "May 15 2020 12:00AM",
    "EventEnd": "May 15 2020 12:00AM"
    "CategoryID": "148",
    "Name": "NEPS - Current Students - 2020/21",
    "Location": "Old Airport",
    "EventBegin": "Sep 3 2020 12:00AM",
    "EventEnd": "Aug 30 2021 12:00AM"
  },
    "CategoryID": "149",
    "Name": "NEPS - New Students - 2020/21",
    "Location": "Old Airport",
    "EventBegin": "Sep 3 2020 4:44PM",
    "EventEnd": "Aug 31 2021 12:00AM"
    "CategoryID": "79",
    "Name": "Hillside School Fee",
    "Location": "yeka",
    "EventBegin": "Dec 31 2019 8:45AM",
    "EventEnd": "Dec 31 2019 8:45AM"
    "CategoryID": "81",
    "Name": "Hillside School Penalty Fee",
    "Location": "Yeka",
    "EventBegin": "Dec 31 2019 11:52AM",
    "EventEnd": "Dec 31 2019 11:52AM"
  }
]
```

# Display Items for Sale for Selected Category

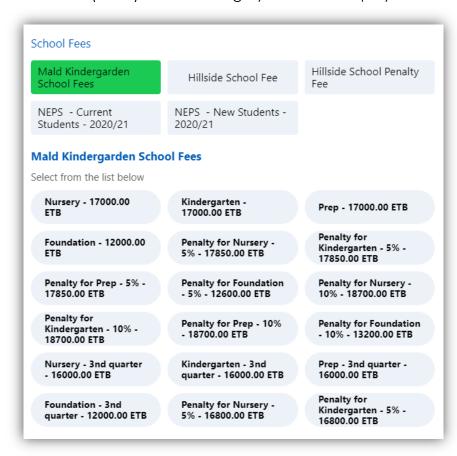
When the user clicks or selects a Content Category, then call the **ContentGetItems** to get the list of items for sale or payment within that category. This level is retrieved by passing the corresponding CategoryID from the category selected by the customer to this service. Examples of this would be the type of ticket for a sporting event, or the type of fee you are trying to pay for a selected school. All of the detail information of each item for sale is returned within the results of this service call. The price should be presented in the menu selection, and upon selection all of the detail information shown prior to the payment process.



# ContentGetTypes → ContentGetCat → ContentGetItems → ContentGetItemPrice

NOTE: To retrieve the entire content catalog in one call, use the **ContentGet** service an the entire structure will be returned in one result set.

Below is what should be shown when the "Mald Kindergarden School Fees" option is selected. The various fees (items) for that category should be displayed.



#### Amole Service API: ContentGetItems

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
      "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9LcxsulVuM",
      "HDR_IPAddress": "0.0.0.0",
      "HDR_UserName": "Abishek",
      "HDR_Password": "Test",
      "Content-Type": "application/x-www-form-urlencoded"
    },
      "data": {
      "BODY_ServiceRequest": "<a href="Service>ContentGetCat</a></a>
*BODY_SourceTransID": "YourUniqueTransID"
    }
};
```

Below is a sample from within the "BODY\_ServiceResponse" tag returned from the call to the API.



```
"ContentItems": [
    "ItemID": "902",
    "Name": "Negat Album",
    "UnitPrice": "50.00",
    "Fee1Label": "",
    "Fee1": "0.00",
    "Fee2Label": "",
    "Fee2": "0.00",
    "TotalPrice": "50.00",
    "AllowPriceChange": "Y",
    "MinimumQty": "1",
    "MaximumQty": "0",
    "QRCode": "*902"
  },
  {
    "ItemID": "990",
    "Name": "Negat Album (un-scensored)",
    "UnitPrice": "65.00",
    "Fee1Label": "Amole Service Fee",
    "Fee1": "15.00",
    "Fee2Label": "Other Fee",
    "Fee2": "12.00",
    "TotalPrice": "92.00",
    "AllowPriceChange": "Y",
    "MinimumQty": "1",
    "MaximumQty": "0",
    "QRCode": "*990"
  }
]
```

#### Display Item Selected and Payment Info

The customer will selected one of the items displayed as shown below.

```
erg. .en ....
                          10% - 18700.00
                                                    roundation - 10% -
- 18700.00 ETB
                         ETB
                                                    13200.00 ETB
Nursery - 3nd
                          Kindergarten - 3nd
                                                    Prep - 3nd quarter
quarter - 16000.00
                          quarter - 16000.00
                                                    - 16000.00 ETB
                                                    Penalty for
                         Penalty for Nursery
Foundation - 3nd
quarter - 12000.00
                         - 5% - 16800.00
                                                    Kindergarten - 5%
- 16800.00 ETB
```

ContentGetTypes → ContentGetCat → ContentGetItems → ContentGetItemPrice

Once an item is selected, call the **ContentGetItemPrice** service and display the following fields below to allow the customer to complete the information for the purchase.

#### Amole Service API: ContentGetItemPrice

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
```



```
"headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
},
    "data": {
    "BODY_ServiceRequest": "<Service>ContentGetItemPrice</Service><ItemID>359</ItemID>",
    "BODY_SourceTransID": "YourUniqueTransID"
}
};
```

Below is a sample from within the "BODY ServiceResponse" tag returned from the call to the API.

```
{
  "Name":"On-Time Quarterly Payment Q1",
  "ItemID":"359",
  "CategoryName":"Addis Ababa Equestrian Society",
  "EventBegin":"Dec   3  2019  8:32PM",
  "EventEnd":"",
  "Location":"Bisrate Gebriel",
  "UnitPrice":"65.00",
  "Fee1Desc":"Amole Service Fee",
  "Fee1":"15.00",
  "Fee2Desc":"Other Fee",
  "Fee2":"12.00",
  "TotalPrice":"92.00",
  "AllowPriceChange":"Y",
  "QRCode":"*360"
}
```

Using the information returned from the call above, format the screen as shown below. Display the detail information about the item being purchase, the price based on quantity and final payment, and additional fields as shown.

Addis Ababa Equestrian Society

On-Time Quarterly Payment Q1

Event Date: Dec 3 2019 8:32PM

CategoryName

Name

EventBegin

End Date: EventEnd (Only show if valid end date)

Location: Bisrate Gebriel Location

Unit Price: 65.00 ETB

Quantity: 1 🚖

Amole Service Fee: 15.00 ETB Fee1Label / Fee1 (Only show if Fee1 > 0)
Other Fee: 12.00 ETB Fee2Label / Fee2 (Only show if Fee2 > 0)

Total Price: 92.00 ETB Total Price is calculated as (UnitPrice \* Quantity) + Fee1 + Fee2

Override Amount: 92.00 ETB Only show if AllowPriceChange = Y

Referral Code / Other



Student Name / Grade / Other Info	
Mobile Number for Ticket/Receipt	
Send OTP	
Enter OTP: 9999	
Pay from Account: Amole Mobile Wallet	<b>V</b>
Submit	

# **Payment and Other Information Collected**

After hitting submit then call the payment gateway to process the payment. If the payment is not successful, show the corresponding error to the user. If the payment is successful, show the receipt information and the QR Code as shown below.

# Digital Content purchase successful!

Amount: 100 ETB

Reference Number: 999999

Confirmation Number: 999999999





Thank you for using Amole.

#### Amole Service API: OTPSend

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
        "HDR_Signature": "TEXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpies1VL7WH4ZtM1XRJ--ZSyMBIcX9LcxsulVuM",
        "HDR_IPAddress": "0.0.0.0",
        "HDR_UserName": "Abishek",
        "HDR_Password": "Test",
        "Content-Type": "application/x-www-form-urlencoded"
   },
   "data": {
        "BODY_ServiceRequest": "<a href="mailto:service">service>OTPSend</a></a>
MobileNumber>+251911999999
/MobileNumber>",
   "BODY_SourceTransID": "YourUniqueTransID"
   }
};
```

#### Amole Payment Gateway API: Content Lookup (30)

```
var settings = {
 "url": "https://uatc.api.myamole.com:8076/amole/service",
 "method": "POST",
 "timeout": 0,
 "headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
 },
  "data": {
  "BODY CardNumber": "",
  "BODY_ExpirationDate": "",
  "BODY_PIN": "",
  "BODY_PaymentAction": "30",
  "BODY_AmountX": "",
  "BODY_AmoleMerchantID": "MARKETPLACE",
  "BODY_OrderDescription": "",
  "BODY_SourceTransID": "MarketplaceUniqueTransID",
  "BODY_VendorAccount": ""
  "BODY_AdditionalInfo1": "CONTENT",
  "BODY_AdditionalInfo2": "1234",
                                       ← Item ID
  "BODY_AdditionalInfo3": "",
  "BODY_AdditionalInfo4": "",
  "BODY AdditionalInfo5": ""
```

### Amole Payment Gateway API: Content Payment (31)

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
```



```
"HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtM1XRJ--ZSyMBIcX9Lcxsu1VuM",
  "HDR_IPAddress": "0.0.0.0",
  "HDR_UserName": "Abishek",
  "HDR_Password": "Test",
  "Content-Type": "application/x-www-form-urlencoded"
},
"data": {
 "BODY CardNumber": "+251911999999",
                                          ← mobile wallet, current user, for payment
 "BODY ExpirationDate": "",
 "BODY_PIN": "????",
 "BODY_PaymentAction": "31",
 "BODY_AmountX": "123.45",
                                          ← Total payment, what customer agrees to pay
 "BODY_AmoleMerchantID": "MARKETPLACE",
 "BODY_OrderDescription": "Description of order",
 "BODY_SourceTransID": "MarketplaceUniqueTransID",
 "BODY_VendorAccount": "Name/Grade/Other value",
                                                        ← Name/Grade/Other value (optional)
 "BODY_AdditionalInfo1": "CONTENT",
 "BODY_AdditionalInfo2": "1234",
                                             ← Item ID
 "BODY AdditionalInfo3": "1",
                                             ← Quantity
 "BODY AdditionalInfo4": "+251929131995", ← Send To Mobile (for tickets) (optional)
 "BODY AdditionalInfo5": "Referral/Other" ← Referral Code / Other (optional)
```

#### Amole Service API: ContentGetItem

# My Amole

When the user hovers over the "My Amole" button, the following drop-down menu should appear.

- Top-up My Account
- Check my Balance
- My Last 5 Transactions

#### Top-up My Account

To top-up a customer's Amole Mobile Wallet on the Amole Marketplace the customer should enter an amount and pay using the CyberSource payment landing page.



Enter top-up amount:	
----------------------	--

counce gateway>

Once payment successfully accepted, call the Payment Gateway to record the top-up amount as a deposit.

# Amole Payment Gateway API: Content Payment (31)

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
    "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
 },
  "data": {
   "BODY_CardNumber": "+251911999999",
                                           ← mobile wallet, current user, for payment
   "BODY_ExpirationDate": "",
   "BODY_PIN": "",
   "BODY_PaymentAction": "02",
  "BODY_AmountX": "123.45",
                                           ← Total deposit
   "BODY AmoleMerchantID": "MARKETPLACE",
  "BODY_OrderDescription": "",
  "BODY_SourceTransID": "MarketplaceUniqueTransID",
  "BODY_VendorAccount": "",
  "BODY_AdditionalInfo1": "";
   "BODY_AdditionalInfo2": "",
   "BODY_AdditionalInfo3": "",
   "BODY_AdditionalInfo4": "";
   "BODY_AdditionalInfo5": ""
};
```

#### Check my Balance

To check a customer's balance, call the **AccountGet** service in the Amole Service Integration APIs.

The current balance in your Amole Mobile Wallet is shown below:

123.45 ETB

#### Amole Service API: AccountGet

```
var settings = {
   "url": "https://uatc.api.myamole.com:8076/amole/service",
   "method": "POST",
   "timeout": 0,
   "headers": {
     "HDR_Signature": "TeXbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
     "HDR_IPAddress": "0.0.0.0",
```



```
"HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
},
    "data": {
        "BODY_ServiceRequest": "<Service>AccountGet</Service><KeyValue>+251911123456</KeyValue>

<MerchantID>YourMerchantID</MerchantID>",
        "BODY_SourceTransID": "YourUniqueTransID"
};
```

### My Last 5 Transactions

To retrieve the customer's last 5 transactions, call the **AccountGet** service in the Amole Service Integration APIs.

Your last five transactions are shown below.

```
Reference #2012489
Date: Dec 31 2020 4:43PM
Trans Desc: Mobile airtime PIN purchae at Telegram Bot (Africa's
Talking)
Amount: -100.00
Reference #1907883
Date: Nov 13 2020 11:36PM
Trans Desc: Transfer to Dagim F/Mariam
Amount: -500.00
Reference #1907880
Date: Nov 13 2020 11:33PM
Trans Desc: Transfer from Doug Deneau
Amount: 600.00
Reference #1873776
Date: Nov 1 2020 4:06PM
Trans Desc: Transfer to Besufekad Yitbarek
Amount: -10.00
Reference #1873398
Date: Nov 1 2020 2:20PM
Trans Desc: Transfer to Menbere Abebe
Amount: -101.00
                                                        7:31 PM
```

#### Amole Service API: AccountGet

```
var settings = {
  "url": "https://uatc.api.myamole.com:8076/amole/service",
  "method": "POST",
  "timeout": 0,
  "headers": {
```



```
"HDR_Signature": "TexbJ8by1mZ1akDswgji4ConZBHbIzk3Hgm-aJaR9xkpieslVL7WH4ZtMlXRJ--ZSyMBIcX9LcxsulVuM",
    "HDR_IPAddress": "0.0.0.0",
    "HDR_UserName": "Abishek",
    "HDR_Password": "Test",
    "Content-Type": "application/x-www-form-urlencoded"
    },
    "data": {
        "BODY_ServiceRequest": "<Service>AccountGet</Service><KeyValue>+251911123456</KeyValue>

<MerchantID>YourMerchantID>//MerchantID>",
        "BODY_SourceTransID": "YourUniqueTransID"
    }
};
```