Budget Prepay, Inc.

MVNO API System

User Guide 3.0

Steve Thomas
1/17/2014

Table of Contents

Revision History 2
Introduction 3
Support and Feedback 3
WSDL Interfaces 3
  Verizon (3G only) 3
  TopUp (Budget Prepay) 3
  BeQuick (T-Mobile only) 3
  Security 4
Management Console 5
  Location 5
  Reports 5
  Review Requests 6
Definitions 8

Revision History

Release	Date	By	Description
1.0	11/4/2013	Steve Thomas	Device Inquiry - added Device Activation - added Device Activation Port - added Order Inquiry - added Management Console - added
1.2	11/11/2013	Steve Thomas	Update Bucket - added Delete Bucket - added Add Bucket – added Search Bucket -added Validate MDN Portability – added Change ESN – added Plan Code attribute on requests - added Management Console User Edit bug - fixed Many to many group/plan code relationship – added Types description, please see WSDL - removed
1.2	11/14/2013	Steve Thomas	Input & Output parameter for each operation - added
1.4	11/18/2013	Steve Thomas	Remove Hotline - added Activate Hotline Subscriber –added Hotline Subscriber – added WS-Security - added WDSL Documentation, annotations – updated WDSL element restrictions – updated Generic Request reporting – added
1.6.0	11/29/2013	Steve Thomas	Additional Verizon operations Ensure userId is being passed to Verizon, for compliance purposes see page 7 of CCT guide Ensure the transactionId field is left blank Disabled WS-Security due to complexity of Microsoft support, will attempt to re-enable in later releases
1.6.1	12/01/2013	Steve Thomas	Fix several bugs, write tests
1.6.2	12/04/2013	Steve Thomas	Fix several bugs, write tests
1.6.3	12/06/2013	Steve Thomas	Refactored VerizonEndpoint to reduce code redundancy, add better exception handling and client feedback, fixed changeESN operation
1.8.0	12/08/2013	Steve Thomas	Hardening Sprint, updated documentation, add C# and Java client samples
2.0.0	1/5/2014	Steve Thomas	Add Top Up operations, Enabled WS-Security
3.0.0	1/17/2014	Steve Thomas	Add BeQuick T-Mobile operations

Introduction

The Budget Prepay MVNO API System (MVNO) is an aggregator of internal and third party wireless provisioning services. It also attempts to apply Budget Prepay product branding features to the customer facing interfaces.

MVNO customer facing interfaces are built with open standards that aim to ensure ease of integration at the lowest possible labor cost. Integration developers are assumed to have exposure to open web services standard.

Support and Feedback

Please use the contact information below to submit questions, bugs, or feature suggestions.

Email: steve.thomas@softwarelikeyou.com

Phone/Text: (713) 444-3489

WSDL Interfaces

If an operation's annotated description is vague or is not included, please send feedback (see Support and Feedback).

Verizon (3G only)

http://mvno-api01.budgetprepay.com/MVNO/Verizon.wsdl

TopUp (Budget Prepay)

http://mvno-api01.budgetprepay.com/MVNO/Topup.wsdl

BeQuick (T-Mobile only)

http://mvno-api01.budgetprepay.com/MVNO/Bequick.wsdl

Security

MVNO currently implements the WS-Security standard and in the near future HTTPS.

An example of a WS-Security header with plain text password is below. For specify implementation examples, please see http://mvno-api01.budgetprepay.com/MVNO/Sampeles.zip. Current samples are C# and Java, but other client technologies can be add by request (see Support and Feedback).

```
<soapenv:Header>
 <wsse:Security
  soapenv:mustUnderstand="1"
  xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
  xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
  <wsu:Timestamp wsu:Id="TS-152">
   <wsu:Created>2013-11-14T00:56:53.524Z</wsu:Created>
   <wsu:Expires>2013-11-14T17:36:53.524Z</wsu:Expires>
  </wsu:Timestamp>
  <wsse:UsernameToken wsu:Id="UsernameToken-151">
   <wsse:Username>steve.thomas</wsse:Username>
   <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-token-profile-
1.0#PasswordText">password</wsse:Password>
  </wsse:UsernameToken>
 </wsse:Security>
</soapenv:Header>
```

NOTE: SoapUI is a good testing tool – www.smartbear.com

Management Console

The MVNO Management Console has a primary purpose of user and group management, but it can be helpful during request troubleshooting as well as, reporting on activity.

Current key features include:

- Manage Groups (Partners) – admin only
- Manage Users – admin only
- Reset of user passwords
- View raw XML of operations (filtered by user's permissions)
- View and download requests (by group)
- Support graphs of operational activity based on groups

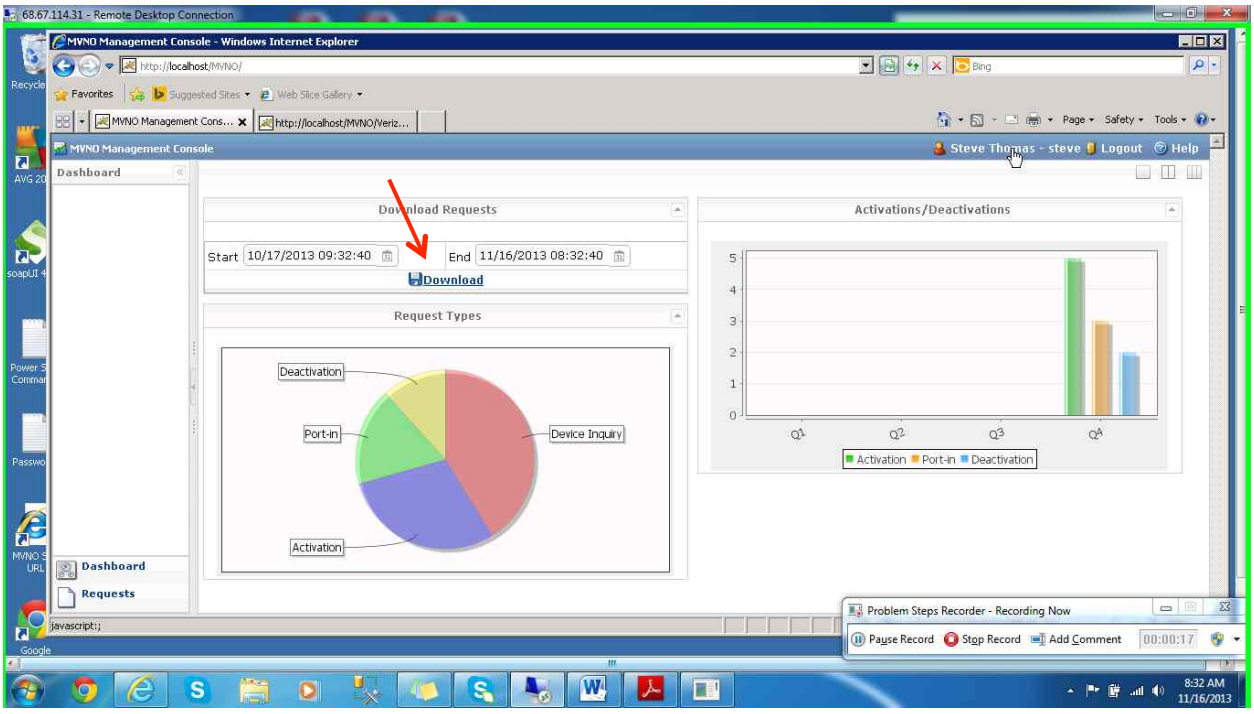
Location

http://mvno-api01.budgetprepay.com/MVNO/

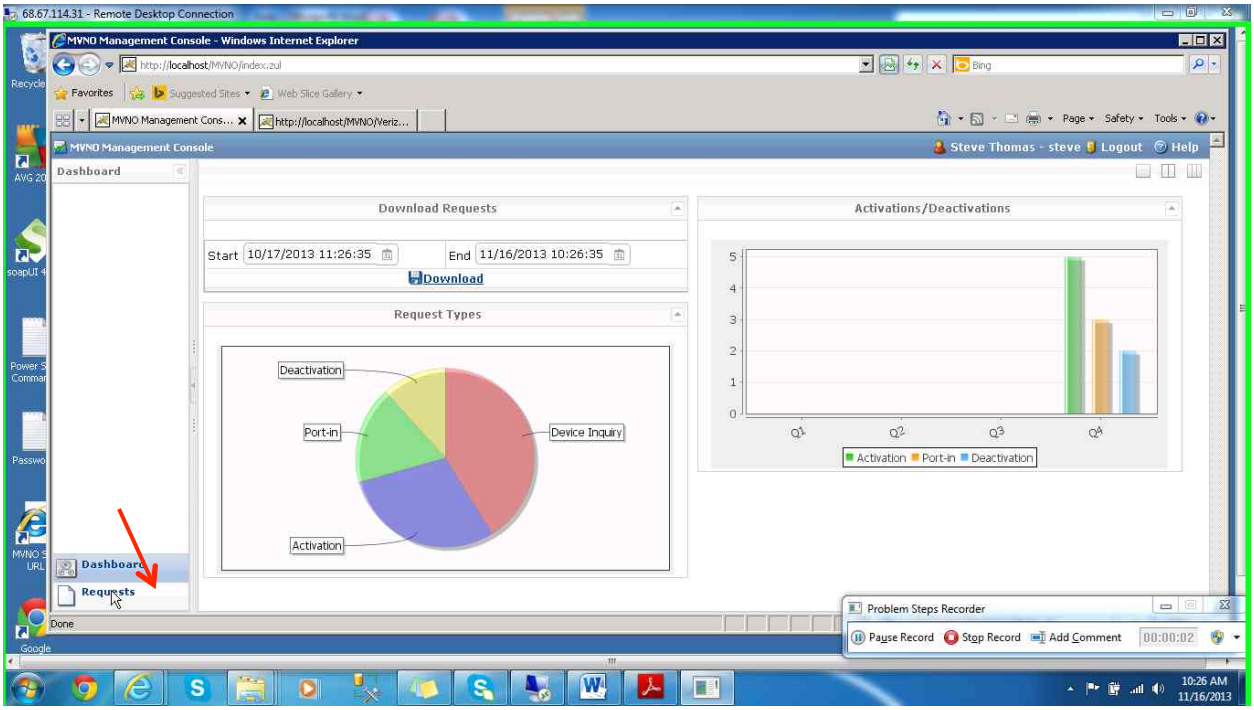
NOTE: User's login into the Management Console with plain text password. Future releases will force HTTPS.

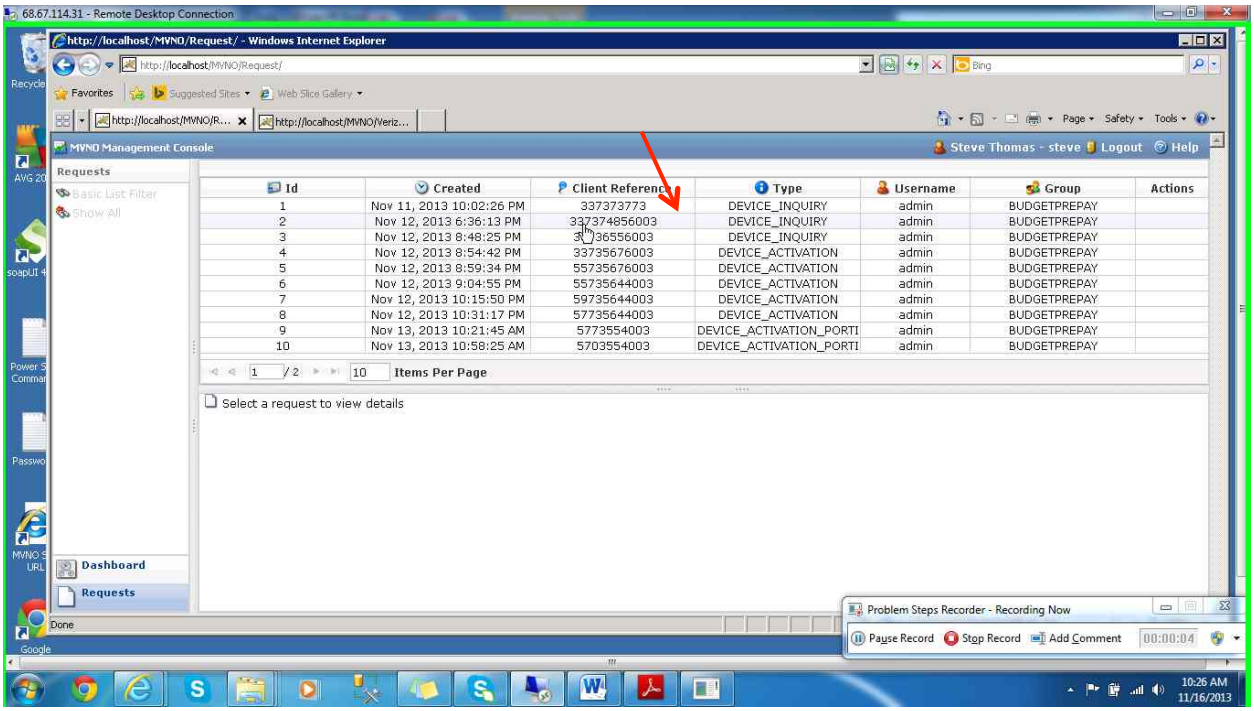
Reports

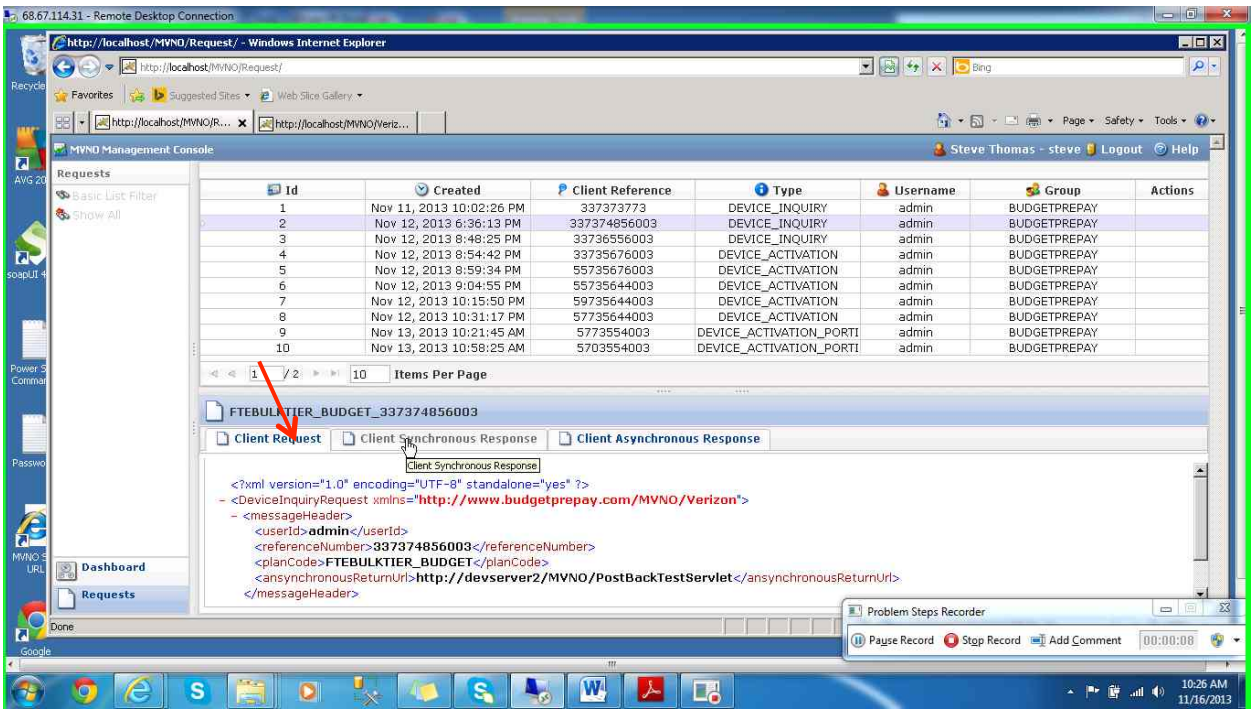
Users of the Management Console my review/download Requests based on the user's group attribute and date ranges.



Review Requests






68.67.114.31 - Remote Desktop Connection
http://localhost/MVNO/Request/ - Windows Internet Explorer
MVNO Management Console
Steve Thomas - steve Logout Help
Requests
Basic List Filter
Show All
Id
Created
Client Reference
Type
Username
Group
Actions
1 Nov 11, 2013 10:02:26 PM 337373773 DEVICE_INQUIRY admin BUDGETPREPAY
2 Nov 12, 2013 6:36:13 PM 337374856003 DEVICE_INQUIRY admin BUDGETPREPAY
3 Nov 12, 2013 8:48:25 PM 33736556003 DEVICE_INQUIRY admin BUDGETPREPAY
4 Nov 12, 2013 8:54:42 PM 33735676003 DEVICE_ACTIVATION admin BUDGETPREPAY
5 Nov 12, 2013 8:59:34 PM 55735676003 DEVICE_ACTIVATION admin BUDGETPREPAY
6 Nov 12, 2013 9:04:55 PM 55735644003 DEVICE_ACTIVATION admin BUDGETPREPAY
7 Nov 12, 2013 10:15:50 PM 59735644003 DEVICE_ACTIVATION admin BUDGETPREPAY
8 Nov 12, 2013 10:31:17 PM 57735644003 DEVICE_ACTIVATION admin BUDGETPREPAY
9 Nov 13, 2013 10:21:45 AM 5773554003 DEVICE_ACTIVATION_PORTI admin BUDGETPREPAY
10 Nov 13, 2013 10:58:25 AM 5703554003 DEVICE_ACTIVATION_PORTI admin BUDGETPREPAY
Items Per Page
FTEBULKTIER_BUDGET_337374856003
Client Request
Client Synchronous Response
Client Asynchronous Response
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<DeviceInquiryRequest xmlns="http://www.budgetprepay.com/MVNO/Verizon">
<messageHeader>
<userId>admin</userId>
<referenceNumber>337374856003</referenceNumber>
<planCode>FTEBULKTIER_BUDGET</planCode>
<ansynchronousReturnUrl>http://devserver2/MVNO/PostBackTestServlet</ansynchronousReturnUrl>
</messageHeader>
Dashboard
Requests
Problem Steps Recorder
Pause Record
Stop Record
Add Comment
00:00:08
10:26 AM
11/16/2013

Definitions

If a definition is vague or is not included here, please send feedback (see Support and Feedback).

Term	Definition
UserId	Validate user account create with the MVNO Management Console, must be submit as part of the request within the MessageHeader
RefereneNumber	A unique number generated by the reseller with a max length of 50 characters, must be submit as part of the request within the MessageHeader
AnsynchronousReturnUrl	Reseller's URL for asynchronous responses. Ex. http://companyname.com:8080/response. The total size of this field is 255 characters, , must be submit as part of the request within the MessageHeader
ReturnCode	Request Return code, example "00"
ReturnText	Return Text is the Return Message corresponding to the Return Code returned, example "SUCCESS"
AccountNo	Account Number to be used for the order
ZipCode	Zip Code in which the service/change requested
MDN	Mobile Directory Number to be activated. Ex. 4045551212
ESN	The NPA and NXX Number for selecting an MDN from the pool of available MDNs. Ex. 404555
MEID	Mobile Equipment Identifier containing 14 hexadecimal digits
FeatureCode	Billing system feature codes. Note: The reseller can add multiple features by adding more <feature> subsections into the transaction.
PlanCode	Price Plan Code based on the codes provided to the reseller. Ex. P004
MPNPoolName	The name of a valid Mobile Private Network. MPNPoolName is optional for activation, unless the MPNSIP or MPNDIP feature is added. Also, if The MPNPoolName is added one of these features must be present in the XML document.
MobileIPAddress	The mobileIPAddress element supports the Static IP or RestricteIPAddres functionalities. A Static IP or Restricted IP Address to be associated with the order. This IP Address must be 12 characters long. There can be no blank spaces or dots ('.') between digits. All characters must be digits. No alphabetic or control characters are accepted. Each segment may not exceed a value greater than 255.Each segment must consist of 3 digits.
SSN	SSN: 000000000 or 000-00-0000 (nine digits, dashes are optional)
TaxId	Company Tax ID: 0000000000 or 00-00000000 (ten digits, dashes are optional)
Make	Device manufacturer
Model	Device model
Mode	Device mode of information transmission
Iccid	ICCID i.e. Physical ID of the SIM card
BalanceType	Account Balance Type can be "primary", "secondary", or "both"
Sweep On	'true' or 'false'
reTime	Recharge Date
balanceValue	Bucket Balance
sourceId	Bucket ID
Uom	Bucket Unit of Measure
bucketValue	Bucket Value
expTime	Expiration Date

sourceValue	description
canUpdate	'false' to indicate whether a user with appropriate permissions can update the bucket.
canDelete	'true' or 'false' to indicate whether a user with appropriate permissions can delete the bucket.
numBuckets	Number of buckets returned
primaryBalance	Account balance
endDate	Date bucket expires (must use minutes or dollars by this date)
adjustmentType	INCR, DECR, or SETEXPIRATION
adjustmentValue	INCR or DECR: Integer amount by which to modify bucketValue SETEXPIRATION: MM/DD/YYYY date to which to modify expiration value of bucket
SubOrgID	A conditional element and is used with MPNPoolName, when more than one MPN is in use by a Reseller.
authorizationStatus (aStatus)	Authorization Status 'Y' if authorized; Otherwise 'N' (no quote marks)
Hotline Type	This tag can only have one of the following values: FRAUD, REGULAR, ROAMING
Hotline Number	Hotline Phone Number provided by the reseller. This is the phone number that the MDN will be hotlined to. Ex. 7175975066