

Mobile Services Platform Administration User Manual

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1 Introduction

XIUS-Mobile Services Platform (MSP) is an exhaustive Convergent Billing and Service Delivery solution built on a turnkey technology and services platform that offers an innovative business and operational model for bringing together Mobile Virtual Network Operators (MVNO) and Mobile Network Operator (MNO).

Despite MVNO having full control over the SIM card subscription, branding, marketing, billing, customer care operations and any other related services, stipulation of partial access to the Operational Support Systems (OSS) and Business Support Systems (BSS) by the incumbent mobile network operator tend to have certain processes and procedures separated and disconnected from those of the MVNO. This scenario restricts the provisioning of an intelligent and single technology (an integrated and independent platform). To surmount this pain point, XIUS has come up with MSP a technology expertise to offer a single and dynamic ecosystem, providing the increased ROI and reduced TCO for all participants.

MSP rightly addresses these complex OSS/BSS infrastructure needs in order to provide the critical customer-facing MNVO services (customer care, order management, billing, assurance) in a multi-partner / multi-network environments and independent wireless network circumstances. MSP supports the complex business process management framework that is required to support the variety of enterprise applications, 3rd party providers and business processes of multiple MVNO.

Besides providing the entire gamut of mobile billing services and promotional offerings, MSP also caters to the provisioning of VAS services to the end customers, giving them the flexibility of being both 'mobile' and 'VAS + Mobile' subscribers. However, MSP outfits to the exact MVNO needs enabling to provide a tailor-made/configurable solution (with the MVNO desired components), and thus ensures the MVNO to pay for what it requires and not for the entire platform.

MSP is a bottom-line solution, which enhances the MVNO' productivity to concentrate on its core business (brand building, customer loyalty, increase ARPU, rollout innovative customer specific services etc) rather than being entangled in network intricacies.

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2 Acronym and Definition

S.No	Acronym	Definition
1.	BSS	Business Support Systems
2.	HLR	Home Location Register
3.	IP Services	Internet Protocol (Service)
4.	LRN	Location Routing Number
5.	MMSC	Multimedia Messaging Service Center
6.	MNO	Mobile Network Operation
7.	MSP	Mobile Services Platform
8.	MVNO	Mobile Virtual Network Operator
9.	OSS	Operational Support Systems
10.	PLMN	Public Land Mobile Network – services
11.	RSCP	Reverse Service Control Point
12.	SMSC	Short Message Service Center
13.	VOIP	Voice Over Internet Protocol
14.	MSISDN	Mobile Subscriber Integrated Services Digital Network Number
15.	N/w Id	Network Identification (MVNOs Identifier)
16.	ACM	Allow Call Mode
17.	MNP	Mobile Number Portability

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3 MSP Features

Mobile Services Platform is an exhaustive and integrated web application scalable to the wide spectrum of Telecom Industry needs. This application is a one stop solution that caters to the administration of various independent network operators under a central control system. Nevertheless, the independent network operators shall be provided the freedom of exercising their operations within the sphere of their corresponding network systems.

Super Administrator is the chief of the MSP application who controls the multiple network systems; whereas a Network Administrator is the chief of his / her independent network. However, the operations of a network operator shall be based on the corresponding business scope and the choice of service offerings.

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3.1 Modules

3.1.1.1 Super Administrator

Super Administrator creates various user accounts for multiple network operators and configures their admission or right to use of MSP system based on their individual business scope and their area operations. Super user handles the entire network management through the following modules.

> Network Management

- Network Details
- System Configuration
- Manage Network Codes
- Language Configuration Details
- Manage Country / State Codes

3.1.2 Network Administrator

An authorized network operator can have access to the following modules, however, subject to the extent of admission rights (for using various modules) provided by the Super User in accordance with the Network Operator's business scope. In other words, accessibility of the MSP system by the network operator shall be limited to the area of his / her service offerings in the Telecom space.

- Public Land Mobile Network (PLMN) Services
- > Billing Management
- > User Management System
- > Inter Connect Billing Management

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3.2 Target Audience / User Types for the Product

This document is intended for the use of Administrative, Operative and Customer care departments of the XIUS mobile services clients.

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3.3 Super Administrator Login

Super Administrator login page helps the Super User logging into MSP to create and manage the user accounts of various Network Operators. Besides the creation and management of the user accounts, Super User owns the complete control of the MSP application.

Authorized Network Operators can login to the MSP application with the help of their respective Login IDs and passwords, which enable them to manage their functional operations within their independent networks.

The screen below shows Login page for the Super User.



STEP	ACTION		
1.	Super User to enter his / her valid user name and password in their respective		
	<user name=""> and <password> fields.</password></user>		
2.	On clicking the button, 'Administrator Home Page' will be displayed, enabling the Super User to access the related modules.		

The screen below shows the Super User (Administrator) Home Page.

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3.3.1 Network Details

Network Management → Network Details

'Network Details' allows the Super User (SU) creating and managing (activate, deactivate and password change etc.) the user accounts for various Network Operators.

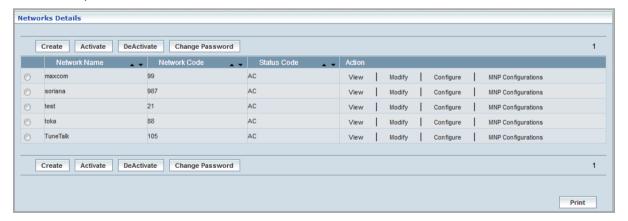
This screen further allows the user to perform following actions:

- View Network Details
- Modify Network Details
- Configure (certain) Network Details

This sub-module also helps to fetch a single record (details related to any given Network) with the help of the **'Search'** option based on the provided search criterion. The search criteria include: Network Name and Network Code.

Initially, the list of existing Networks (Network User Accounts) will be displayed in a grid.

The screen below shows the creation & management of User Accounts of the different Network Operators.



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STEP	ACTION
1.	By default, list of records for the existing Network Operators (the
	corresponding User Accounts) will be displayed in a grid. The columns
	include 'Network Name', 'Network Code', 'Status Code' and 'Action'
10	User can customize the view for the number of records to be displayed
10 20 30	each time (per page) in a grid.
40 50	Select the number of records (For Ex: 10) from the drop-down list of the
60 70	<view page="" per=""> field.</view>
80	With the effect of choosing the desired number (10) for the display of
100	records per page, the same (10 records) will be displayed in the grid.
	However, based on the total number of records, page numbers will be
	dynamically displayed at the left bottom of the screen.
	User can navigate for subsequent records (10 each time) by clicking the
	desired 'page number'
3.	User can sort the records in ascending and descending orders with the
	help of up-arrow $lacksquare$ and down-arrows $lacksquare$ respectively.
4.	'Status Code' indicates status ('Active - AC ' or 'Inactive - DA ') of the User
	Account (Network Operator).
5.	On clicking the Create button, 'Create Network' screen will be
	displayed, which enables the user to create a new Network.
6.	User can <i>activate or deactivate</i> the user account (Network Operator's
	Account) by the Super Administrator accordingly and as required.
7.	Channe Beauty and
	On clicking the button, 'Change Password' screen will
	be displayed, which enables the ${f SU}$ to change password of the user
	account (Network Operator's Account).
8.	On clicking the link of a chosen network, the corresponding details
	will be displayed in a separate screen.
9.	On clicking the link of a chosen network, the corresponding details
	will be displayed in a separate screen, which enables the SU to update /
	modify network details.
10.	
	on cheking the least link of a chosen network, comigate betails
	screen will be displayed, which enables the user to configure / update
	existing configuration related to the new / existing Network accordingly
	and as the case may be.

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11.	On clicking the MNP Configurations link of a chosen network, 'Port Out
	Configurations' screen will be displayed,
12.	User can print the list of records with the help of Print button at the
	left bottom of the screen.

Create:

The screen below shows creating a new User (Network User) Account.

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Create Network		
Please Enter the Valid Data Formats as shown in example Network name Description password confirm password Address Country, State, City, Browser Display, MSI Series, Maximum Subscribers, Max log attemp, Sublog attemp, SMB threshold Voucher prefix, Supp. charges, Supp. charge		
VCC MISSON series is positive integer Domain Name can be IP address or Domain Name. Ring Tone Alert Info URL, Ring Back Tone Alert Info URL shou URL should not end with " MISSON value length should be 8 or 10.		
e.g. Acmenet.AcmeDesc,AcmePassword,AcmeConfirm,Acm Acme Discription,111111,1111111,2,2,2,2,2,AcmeSupply 1111,2721[Yes / No][Check / Uncheck],00 (Check / Uncheck) yahoo.com(or)111.111.111,111,111,http://www.acme.cor	,Acm ,000	neSupply,AcmeSupply,AcmeSupply,2222, 0,[Check / Uncheck],1111,[Yes / No],8 or 10 ,
Network Name	1	LoopUsers
Description	ī	LoopUsers creation v
Network Chief Password	ī	•••••
Confirm Password	1	•••••
Network Address	ī	NW
Country	1	INDIA
State	ī	MAHARASHTRA V
City	ī	Mumbai
Browser Display	ī	LoopUsers
		12345
IMSI Prefix	1	<< Validate
Maximum Subscribers for this Network		
Max Operator Failed Login Attempts		5
Maximum Subscriber Login Attempts	1	5
SMS Threshold(Rs)	1	50
Voucher Prefix	1	05 << Validate
Supply Charge1 Title	1	Loop
Supply Charge2 Title	1	Loop
Supply Charge3 Title	1	Loop
Supply Charge4 Title	1	Loop
Subscriber Default PIN	1	789
Camel Node Id	1	789
Network Code	1	9 << Validate
G2 balance Retention	1	Yes v
Personal emergency call flag		₩
Personal emergency call count		5
Promo flag		
VCC MSISDN series		
Roaming Across Home Country		
VMS Number		
Status Transit Flag	1	Yes 💌
MSISDN Length	1	9
VOIP Configuration Details		
Note: Check the box for enabling VOIP configuration details.		<u> </u>
Domain Name		Network
Domain IP Address		
LRR Groupld	1	789
SIP GroupId	ī	789
RingTone Alertinfo URL	1	LoopUsers
RingBackTone Alertinfo URL	ī	LoopUsers
Low Bo	alan	ce Notification
Note: Please check the box for enabling the Low Balance Notification.		V
First Threshold		
Second Threshold		
Sit	bmit	Home

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STEP	ACTION
1.	Create User Account: On clicking the Create button, 'Create Network'
	screen will be displayed, enabling the user to create a new user account by
	entering the details of a Network Operator in the relevant fields.
2.	User must go through and follow the guidelines (provided in an example)
	before specifying the details of a Network Operator. Dynasty
	Please Enter the Valid Data Formats as shown in example
3.	User must essentially enter the details of the Network Operator (User
	Account) where it is mandatory.
4.	IMSI Prefix:
	Minimum length of IMSI Prefix must be 5 and maximum 15 digits and it must
	be unique, thus needs to be validated for duplication.
	User can enter multiple IMSI Prefix values to a network (each at a time) an
	by clicking the right arrow $lacksquare$ button, the given IMSI Prefix will be moved to
	the adjacent list box.
	To remove an IMSI Prefix value from the group: Select the IMSI Prefix
	that needs to be removed from the list box and by clicking the left arrow $lacktream$
	button, the same will be removed.
	However the proposed group of IMSI Prefix values has to be unique and thus
	needs to be validated for duplication.
	On clicking the button, it displays a message window indicating
	if the IMSI Prefix(s) is used or not in used across any other network.
	XIUS - Alert Box
	This IMSI Prefix(s) not in use across any other N/w.

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5. Voucher Prefix:

Length of Voucher Prefix must be 2 digits and unique, thus needs to be validated for duplication.

On clicking the Walidate button, it displays a message window indicating if the given Voucher Prefix is already used or not used across in another network.



6. Network Code:

Minimum length of Network Code must be 1 and maximum of 5 digits and it must be unique, thus needs to be validated for duplication

On clicking the Walidate button, it displays a message window indicating if the given Network Code is already used or not used across in other network

Used Network Code(s)
Network Code is already used across in other N/w. 5
Close
Used Network Code(s)
Network Code is not used across in other N/w. 9
Close

7. VOIP Configuration Details:

Only after selecting the check box, the 'VOIP Configuration Details' fields will be activated, enabling the user to enter data accordingly Domain IP Address:

User can enter multiple Domain IP Addresses to a network (each at a time) an by clicking the right arrow button, the given Domain IP Address will be moved to the adjacent list box

However, each Domain IP Address of the group must be unique

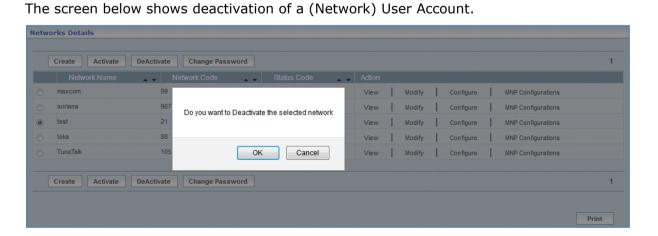
To remove a Domain IP Address from the group: Select the Domain IP Address that needs to be removed from the list box and by clicking the left arrow button, the same will be removed

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8.	Low Balance Notification:		
	Only after selecting the 🗹 check box, the 'Low Balance Notification' fields will		
	be activated, enabling the user to enter data accordingly		
	First threshold value must be less than or equal to 5 and must always be		
	greater than Second threshold value		
9.	On clicking the Submit button, the new user account will be created and		
	saved to the records grid. By default, the New Network User Account shall be		
	active		
	It automatically redirects the user to the records grid, where the New User		
	record is appended to the existing list of records. A message window will be		
	displayed to that effect		
	Create Network		
	The Network has been added successfully		
	Home		
10.	On clicking the Reset button, it clears the screen (before submitting the		
	details), enabling the user to enter the details afresh		
11.	On clicking the button, it only redirects the user back to the		
	(Network) records grid		

Deactivate:

To deactivate a network (that is active), user must select the radio option of a chosen network. By clicking the button, an alert message window will be displayed enabling the user to confirm deactivation of the network.



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STEP	ACTION
1.	On clicking the OK button of the alert message window, corresponding network details will be displayed in a separate screen, enabling the user to deactivate
2.	On clicking the Cancel button of the alert message window, it retains the network records grid without any action

The screen below shows confirming the deactivation of the chosen (Network) User Account.



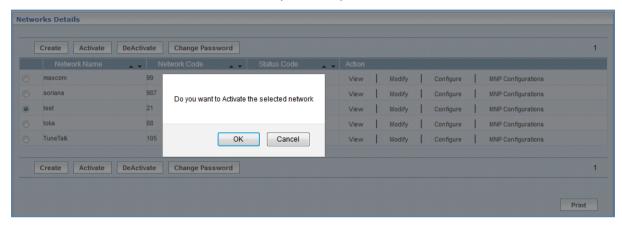
STEP	ACTION
1.	On clicking the Home button of the 'Deactivation Details' screen,
	'deactivation' shall be effective and it redirects the user back to the records
	grid. Corresponding 'Status Code' of the user (Network Operator) will be
	dynamically changed to <i>inactive</i> `DA'

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Activate:

To activate a network (that is inactive), user must select the radio option of a chosen network. By clicking the button, an alert message window will be displayed enabling the user to confirm activation of the network

The screen below shows activation of a (Network) User Account.



STEP	ACTION
1.	On clicking the OK button of the alert message window, corresponding network details will be displayed in a separate screen, enabling the user to activate
2.	On clicking the Cancel button of the alert message window, it retains the network records grid without any action

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The screen below shows confirming the activation of the chosen (Network) User Account.

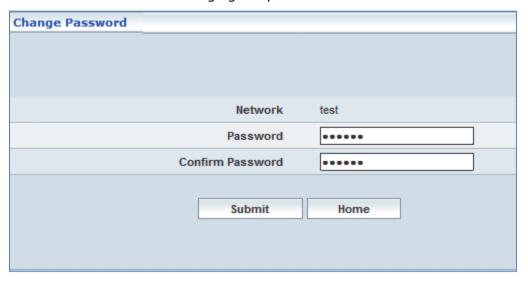


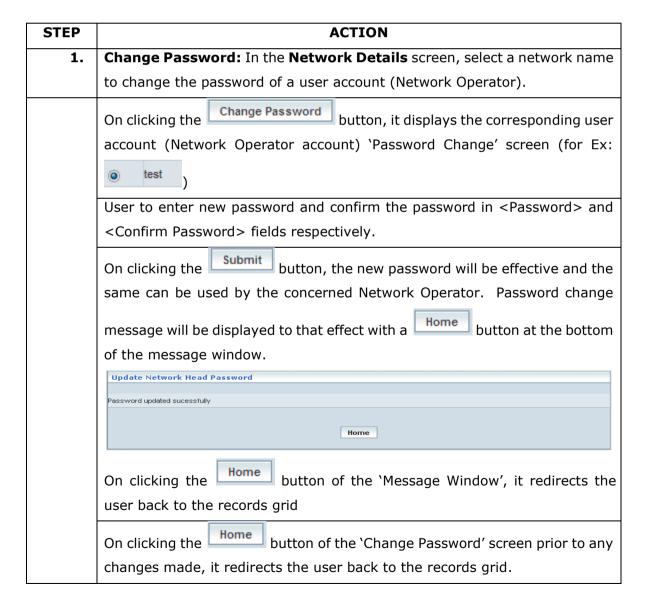
STEP	ACTION
1.	On clicking the button of the 'Activation Details' screen, 'activation' shall be effective and it redirects the user back to the records grid. Corresponding 'Status Code' of the user (Network Operator) will be dynamically changed to <i>active</i> 'AC'

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Change Password:

The screen below shows changing the password for the selected User Account.

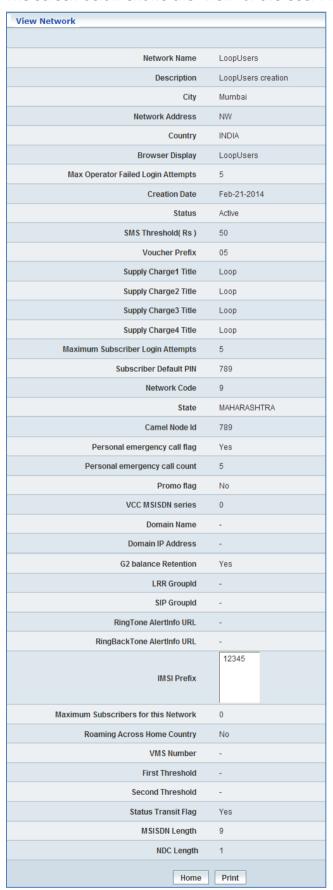




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View

The screen below shows the 'View' of the User Account details.



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STEP	ACTION
1.	On clicking the View link of a chosen Network Operator (record),
	corresponding details of the Operator will be displayed in a screen
	User can print the details with the help of Print button at the bottom of
	the screen
	On clicking the Home button, it redirects the user back to the records
	grid

Modify:

The screen below shows 'Modifying/Updating' the User Account details



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STEP	ACTION
1.	On clicking the Modify link of a chosen Network Operator (record),
	corresponding details of the Operator will be displayed in a screen
2.	User can modify or update the details related to Network Operator as
	appropriate
	On clicking the Submit button, the (Network User Account) record gets
	updated and redirects the user back to the records grid. A message window
	will be displayed to that effect
	Modify Network
	Network is modified successfully
	Network is intollined successfully
	Home
	On clicking the Home button of the message window, it directs the user
	back to the records grid
	On clicking the Home button, it only redirects the user back to the
	records grid

Configuration:

'Configuration' link helps the user configuring the following elements to the chosen network:

- Account De-Activation When the balance related to a mobile subscriber account
 pertaining to the (Network) is constantly 0 (zero) for more than 30 days, the same
 shall be deactivated
- HLR Integration Choosing an option to allow the chosen network to integrate
 with HLR or to withdraw an existing integration with HLR as the case may be and
 accordingly
- **MSISDN Activation** Select "Yes" for NPA-NXX based MSISDN configuration and "No" for NON NPA-NXX based MSISDN configuration
- **RMS Integration** Choosing an option to allow the chosen network to integrate with Roaming Management Server (RMS) or to withdraw an existing integration with RMS as the case may be and accordingly
- Optional Service Charge Flag It facilitates the network to determine the option
 of charging or not charging (charge free) the subscriber in the event of Voice Mail
 Service (VMS) activation
- **NPDB Check Flag** It facilitates the network to determine the option of allowing number portability feature
 - Number portability is a support feature provided by the network to other networks. In the event of a subscriber moving to other network and wants

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to retain the same mobile number that of the former network, if any mismatch (inconsistency) occurred / faced at/by the other network during retention of the same mobile number, former network (maintains a log / database of the entire ported numbers) sends the details of the subscriber including the mobile number to the other network. This feature is known as number portability

- Location Routing Number (LRN) Prefix Flag It facilitates the network to determine the option of allowing LRN Prefix feature
 - LRN Prefix here in this context refers to an identity code / prefix number associated with subscriber ID specific (inherent) to a MVNE. In other words, subscribers having their IDs associated with a specific LRN Prefix would be recognized as subscribers belonging a particular MVNE
- Call Type Free SMS Flag It facilitates the network to determine the option of configuring a mode of Call Type Free SMS
 - Call Type Free SMS is a promotional feature provided by the network to its subscribers. Free SMS refers SMS allowed to a subscriber for free of charge in contemplation either with the configured number of SMS (count) or fixed amount accordingly and as the case may be. Free SMS configurations shall be carried out through Billing Management module with the help of Tariff Plan creation link (at subscriber's services level). Again, Call Type Free SMS can be configured in the following two ways:
 - General mode that is nonspecific to the SMS call type In this case, only thresholds [maximum number of SMS (count) or maximum amount that could be relinquished for free of charge] are configured and irrespective of SMS call type (Local / National / International), the fixed number or amount would be decremented in accordance with the subscriber's usage of SMS
 - Mode that is specific to SMS cal type In this case thresholds [maximum number of SMS (count) or maximum amount that could be allowed to be relinquished for free of charge] are configured discretely and specific to SMS call type (Local / National / International), and the corresponding fixed number or amount would be decrement in accordance with the subscriber's usage of Local / National / International SMS respectively.
- Credit Limit Flag It facilitates the network to determine the option of configuring
 Credit Limit service provisioning by the network, which enables the Customer Care
 to configure and manage the mobile subscribers' account credit limits

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- Credit Limit service provision is an optional feature provided by the network to its subscribers. Credit Limit here in this context refers to the subscriber's account credit limit. This can be configured and managed with respect to the pre-defined credit limit features
 - By default, the Credit Limit Flag is set to <NO> for a network. However, it is at the network operator's discretion to set this option to <YES> to provide credit limit services to the mobile subscribers. With the effect of Credit Limit Flag set to <YES>, Customer Care Personnel is entitled to carry out the credit limit functionality
 - On the other hand, if Credit Limit Flag is set to <NO>, the option of managing the subscribers' accounts credit limit by the Customer Care Personnel is not possible, and hence this feature would be disabled
- Volume Based Data Call Flag It facilitates the user (network operator) to configure the provision of Happy Hours privilege on Volume Based Data services that would be eventually provided to the end users
 - By default, the Volume Based Data Call Flag is set to <NO> for a network.
 However, it is at the network operator's discretion to set this option to <YES> to provide Happy Hours privilege on Volume Based Data services to the mobile subscribers
 - On the other hand, if Volume Based Data Call Flag is set to <NO>, Happy
 Hours privilege on Volume Based Data services feature would be disabled
- ESME Flat charge (Rs) Enter a value for ESME Flat cost / charge
- SMS Expiry Notification Days To enter a time frame representing number of days that would be reckoned for sending prior notification related to subscriber's account expiry date
- Message Types Its facilitates the user to select the following three message types to enable interfacing with the network
 - IVRS Select IVRS flag for IVRS Message Type
 - USSD Select USSD flag for USSD Message Type
 - SMS Select SMS flag for SMS Message Type
- Pseudo MSISDN Flag It facilitates the user (network operator) to configure the
 provision of pseudo MSISDN to a prospective mobile subscriber instead of
 provisioning the actual mobile number at the time of registering as the network
 subscriber (end subscriber)
 - By default, the Pseudo MSISDN Flag is set to <NO> for a network. However, it is at the network operator's discretion to set this option to <YES> to provide pseudo MSISDN provisioning privilege to the mobile subscribers

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- On the other hand, if the Pseudo MSISDN Flag is set to <NO>, pseudo MSISDN provisioning privilege to the mobile subscribers feature would be disabled
- **Pseudo MSISDN Series** This series is used for Pseudo MSISDN configuration.
- Max Transfer Per Day This series is used to specify maximum number of transfers a subscriber can do in a day.
- Max Amount Per Day Transferor This is used to specify maximum amount that Transferor can do in a day.
- Max Amount Per Day Transferee This is used to specify maximum amount that
 Transferee can do in a day.
- Max Subscriber Accounts Per Id This is used to specify maximum number of accounts that a subscriber can have.
- Low Balance Notify Type: Its facilitates the user to select the following three low balance notify types to send notification
 - o SMS Select SMS to send notification about Low Balance through SMS
 - o USSD Select USSD to send notification about Low Balance through USSD
 - SMS & USSD Select SMS & USSD to send notification about Low Balance through SMS & USSD
 - o API Select API to send notifications about Low Balance through API
- Selfcare Change MSISDN Free Hours This is used to specify Selfcare Change MSISDN Free Hours.
- MSISDN Lock Max Sec for USSD This is used to specify MSISDN Lock Max Sec for USSD.
- MSISDN Allocation Allowed Max Hours This is used to specify MSISDN Lock Max Sec for Selfcare.
- IVR / VMS PIN Reset Flag It facilitates the user (network operator) to configure the mechanism of reckoning the last four digits of SIM or MSISDN by the IVR or VMS accordingly and as the case may be
 - By default, the IVR / VMS PIN Reset Flag is set to <NO> for a network and the IVR / VMS PIN reckons the last four digits of MSISDN
 - On the other hand, if IVR / VMS PIN Reset Flag is set to **<YES>** for a network, the IVR / VMS PIN reckons the last four digits of SIM
- **Subscribe Expiry Notification -** It facilitates the user to select the following three subscriber expiry notification types to send notification
 - SMS Select SMS to send notification about Low Balance through SMS
 - USSD Select USSD to send notification about Low Balance through USSD
 - SMS & USSD Select SMS & USSD to send notification about Low Balance through SMS & USSD

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- **Subscriber Level One Notification Days** It is used to configure subscriber level one notification days
- Subscriber Level Two Notification Days It is used to configure subscriber level two notification days. Subscriber Level Two Notification Days should be less than Subscriber Level One Notification Days (Except for "0")
- Maximum Trouble Tickets for Subscriber Per Day It is used to configure maximum tickets a subscriber can post per day

FNF Terminating Rate Flag

- By default, the FNF Terminating Rate Flag is set to <NO> then FNF Terminating Rate feature would be disabled
- On the other hand, if FNF Terminating Rate Flag is set to <YES> then FNF
 Terminating Rate feature would be enabled

Rating Based on LRN Flag

- By default, the Rating Based On LRN Flag is set to <NO> then Rating Based
 On LRN feature would be disabled
- On the other hand, if Rating Based On LRN Flag is set to **YES** > then Rating Based On LRN feature would be enabled

• AAA Radius Integration Flag

- By default, the AAA Radius Integration Flag is set to <NO> then to communicate with other AAA.
- On the other hand, if AAA Radius Integration Flag is set to <YES > then to communicate with own AAA.
- Ported Out EOD Max Expiry Days It is used to configure Ported Out EOD Max Expiry Days.
- Max Credit Amount Per Transfer for Subscriber It is used to configure Max Credit Amount Per Transfer for Subscriber.
- Max Days for Process PORT-IN Terminate Its is used to configure Max No of Days for Processing PORT-IN Terminating request

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• Retain Amount In Customer Group Flag

- By default, the Retain Account In Customer Group Flag is set to <NO> then accounts are retained at Customer Group on account status does not change in current Operator
- On the other hand, if Retain Account In Customer Group Flag is set to
 YES> accounts are retained at Customer Group on account status change in current Operator

Port Out Status Flag for Transit Status

- By default, the Port Out Status Flag for Transit Status is set to <NO> for port out request is not processed at Source level when the of requested Mobile Number is in Transit state.
- On the other hand, if Port Out Status Flag for Transit Status is set to **YES>** to process port out request at Source level when the of requested Mobile
 Number is in Transit state.

Port Out Status Flag for Active Status

- By default, the Port Out Status Flag for Active Status is set to <NO> for port out request is not processed at Source level when the of requested Mobile Number is in Active state.
- On the other hand, if Port Out Status Flag for Active Status is set to **YES>** to process port out request at Source level when the of requested Mobile
 Number is in Active state.

Port Out Status Flag for Grace Period I Status

- By default, the Port Out Status Flag for Grace Period I Status is set to <NO>
 for Port out request is not processed at Source level when the of requested
 Mobile Number is in Grace Period I state.
- On the other hand, if Port Out Status Flag for Grace Period I Status is set to
 <YES> to process port out request at Source level when the of requested
 Mobile Number is in Grace Period I state.

Port Out Status Flag for Grace Period II Status

- By default, the Port Out Status Flag for Grace Period II Status is set to
 <NO> for Port out request is not processed at Source level when the of requested Mobile Number is in Grace Period II state.
- On the other hand, if Port Out Status Flag for Grace Period II Status is set to <YES> to process port out request at Source level when the of requested Mobile Number is in Grace Period II state.

Tenure Plan Process Flag

 By default, Tenure Plan Process Flag is set to <NO> for not to apply the Tenure Plan Process for this selected network

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 On the other hand, if Tenure Plan Process Flag is set to **YES>** to apply the Tenure Plan Process for this selected network.

Vip MSISDN Vs Vip Order Reatin Status

- By default, Vip MSISDN Vs Vip Order Retain Status is set to <NO> to retain
 VIP MSISDN vs VIP OrderId in VIP FreePool only for this selected network
- On the other hand, if Vip MSISDN Vs Vip Order Retain Status is set to
 YES> not to retain VIP MSISDN vs VIP OrderId in VIP FreePool Only for this selected network.

• CUG Default VOICE Calendar

 Select a default voice calendar for CUG from the drop down list in order to make a call with the selected calendar.

CUG Default SMS Calendar

Select a default SMS calendar for CUG from the drop down list

CUG Default DATA Calendar

o By selecting the options provided a default calendar can set for CUG

Offnet Numbers Allowed Flag

- By default, Offnet Numbers Allowed Flag is set to <NO>
- If the Offnet Numbers Allowed Flag is set to **YES>**, the configuration is applicable to the selected network.

Max FNF Offnet Numbers Allowed

 By specifying a number it is possible to restrict the FNF offnet numbers can be allowed

• Max SMS Offnet Numbers Allowed

o By specifying a number it is possible to restrict the offnet numbers for SMS

Max Offnet Numbers Allowed

 By specifying a number it is possible to restrict the offnet numbers can be allowed

• FNF Allow SMS Flag

- By default, FNF Allow SMS Flag is set to <NO>
- If the FNF Allow SMS Flag is set to **YES>**, the configuration is applicable to the selected network

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Currency

 By specify the currency it is possible to set the currency to the selected network

Customer Name

Specify customer name

Allow Negative Balance for debit request

- By default, Allow Negative Balance for debit request is set to <NO>
- If the Allow Negative Balance for debit request is set to <YES>, the configuration is applicable to the selected network.

• Bulk benefit to subscriber notification

 By selecting a preferred channel such as SMS/USSD/SMS & USSD from the drop down list, it is possible to send a notification (through the selected channel) about subscriber's bucket subscription or bucket benefit.

GST Applicable Date

Select a date on which to apply the tax

GST Percentage

 By specifying the number it is possible to apply the respective/same percentage on tax

• Top-up Amount Tax Inclusive Y/N

- By selecting the check box, enables to include the tax amount along with the top-up amount. Hence, the left over amount (after the tax deduction) only replenished to the subscriber's account.
- By de-selecting the checkbox, enables to collect the tax amount along with the top-up amount.

Allow Calls in Unknown VLR

- Select Yes to allow the calls form an unknown VLR
- Select No to restrict calls from an unknown VLR

• Allow Calls in G2 G3 G4

- Select Yes to allow calls, when the subscriber's account status is in Grace Period2 (G2), G3 and G4
- Select **No** to restrict calls when the subscriber's account status is in G2, G3 and G4.
- Select Service Numbers to allow calls only from service numbers when subscriber's account status in G2, G3 and G4.

Allow Roaming Calls in G2 G3 G4

 Select Yes to allow roaming calls, when the subscriber's account status is in Grace Period2 (G2), G3 and G4

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- Select **No** to restrict roaming calls when the subscriber's account status is in G2, G3 and G4.
- Select Service Numbers to allow calls only from service numbers when subscriber's account status in G2, G3 and G4.

Allow Calls in G1 Status

- Select **Yes** to allow calls, when the subscriber's account status is in Grace Period1 (G1)
- o Select No to restrict calls when the subscriber's account status is in G1
- Select Service Numbers to allow calls only from service numbers when subscriber's account status in G1

Allow Roaming Calls in G1 Status

- Select Yes to allow roaming calls, when the subscriber's account status is in Grace Period1 (G1)
- \circ Select **No** to restrict roaming calls when the subscriber's account status is in G1
- Select Service Numbers to allow calls only from service numbers when subscriber's account status in G1

• Allow Calls In TR Status

- Select Yes to allow calls, when the subscriber's account is in transit (TR) status
- Select **No** to restrict calls when the subscriber's account is in transit (TR) status
- Select Service Numbers to allow calls only from service numbers when the subscriber's account is in transit (TR) status

Allow Local MT Calls In G1 Status

- Select **Yes** to allow local MT (Mobile Terminating) calls while the subscriber's account is in G1 status
- Select **No** to restrict the local MT calls while the subscriber's account is in
 G1 status

Allow Local MO Calls In G1 Status

- Select **Yes** to allow local MO (Mobile Originating) calls while the subscriber's account is in G1 status
- Select **No** to restrict the local MT calls while the subscriber's account is in G1 status

• Allow Calls In D1 Status

- Select Yes to allow calls, when the subscriber's account is in D1 status
- Select No to restrict calls when the subscriber's account is in D1 status

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 Select Service Numbers to allow calls only from service numbers when the subscriber's account is in D1

Allow Calls In D2 Status

- Select Yes to allow calls, when the subscriber's account is in D2 status
- Select No to restrict calls when the subscriber's account is in D2 status
- Select Service Numbers to allow calls only from service numbers when the subscriber's account is in D2

Max Main Account Balance Limit

 By specifying the number, it is possible to set a maximum limit for the subscriber's main account balance.

Use Bucket Level Priority

Select **Yes** to enable the bucket level priority for the subscribers. Which inturns helps the subscriber to prioritize a bucket from their multiple buckets.

Unlimited Validity Date

o Specify unlimited validity period (Date) for the buckets subscription

CSR Allowed Password Changes In a Day

 By specifying the number, it is possible to allow a CSR user in order to change his/her password in a day

Allow Ported In Number Check

Post Paid Hybrid Allowed

- By default, Post Paid Hybrid Allowed is set to <NO>
- If the Post Paid Hybrid Allowed is set to **YES>**, the configuration is applicable to the selected network

MAX lines per CA package

 By specifying the number of lines it is possible to restrict the maximum number of lines per CA Package

MAX lines per Corp CA package

 By specifying the number of lines it is possible to restrict the maximum number of lines per Corp CA Package

Number Pool Threshold (%)

By specifying Number Pool Threshold percentage, user can set up particular percentage of threshold. Upon reaching the threshold limit user gets notification of the SIMs available. Based on which the user can place a SIM request.

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The screen below shows configuring the details to a network.



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STEP	ACTION
1.	On clicking the Configure link of a chosen Network Operator (record),
	corresponding details will be displayed in a screen enabling the user to
	configure details accordingly
2.	Select the radio option YES to configure subscriber's account deactivation
	in the event of the corresponding account balance is constantly 0 (zero) for
	more than 30 days
	Select the radio option NO to disallow subscriber's account deactivation
	despite the corresponding account balance is constantly 0 (zero) for more
	than 30 days
	Select the radio option YES to specify if the chosen network is allowed to
	integrate with HLR and NO to withdraw an existing integration or to
	disintegrate with HLR as the case may be and accordingly
3.	MSISDN Activation - Select YES for NPA-NXX based MSISDN configuration
	and NO for NON NPA-NXX based MSISDN configuration
4.	RMS Integration - Choosing an option to allow the chosen network to
	integrate with Roaming Management Server (RMS) or to withdraw an
	existing integration with RMS as the case may be and accordingly – YES is
	set for RMS integration and NO is to disintegrate
5.	Optional Service Change flag - Select a radio option to specify if the network
	allows charging or not charging (charge free) the subscriber in the event of
	VMS activation
	YES is not to charge
	NO is to charge
6.	Select a radio option to specify if the network allows NPDB feature
	YES is to allow the (NPDB Look Up) feature
	NO is not to allow the feature
7.	Select a radio option to specify if the network allows LRN Prefix feature
	YES is to allow the LRN Prefix feature
	NO is not to allow
8.	Select a radio option to specify the Call Type Free SMS Flag
	YES is to set the Flag indicating Call Type Free SMS specific to call type
	NO is to set the Flag indicating Call Type Free SMS non-specific to call type

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9.	Select a radio option to specify the Credit Limit Flag to be set
	YES is to set the Flag to indicate the Credit Limit services provisioning by
	the network
	NO is to set the Flag to indicate non-provisioning of Credit Limit services by
	the network
10.	Select a radio option to specify the Volume Based Data Call Flag to be set
	YES is to set the Flag to indicate 'Happy Hours privilege on Volume Based
	Data' provisioning by the network
	NO is to set the Flag to indicate non-provisioning of 'Happy Hours privilege
	on Volume Based Data' by the network
11.	ESME Flat Charge value would be 0.0 for the first time before configuring
	any parameters to the new network
	User can enter a value for the same in <esme charge="" flat=""> field, the valued</esme>
	entered once stands good till the next change or update
	If the proposed value is a whole integer, the maximum length of value would
	be 7 digits
	If the proposed value is float, the maximum length of value would be 7
	digits prior to decimal and 2 digits after decimal
12.	User can enter a value in the <sms days="" expiry="" notification=""> field</sms>
	representing number of days that would be reckoned for sending prior
	notification related to subscriber's account expiry date
13.	Select the corresponding check boxes of various messaging systems (IVRS
	/ USSD / SMS) to enable interfacing with the network
14.	Select a radio option to specify the Pseudo MSISDN Flag to be set
	YES is to set the Flag to indicate 'Pseudo MSISDN provisioning privilege by
	the network
	NO is to set the Flag to disable the Pseudo MSISDN provisioning privilege
	feature
15.	Enter Pseudo MSISDN series in the <pseudo msisdn="" series=""> field</pseudo>
	Pseudo MSISDN series indicates the starting digits (prefix digits) for any
	potential Pseudo MSISDN number that would be allocated to a mobile
	subscriber
16.	Enter a number in the <max day="" per="" transfers=""> field to indicate the</max>
	maximum transfers (account balance transfers) to be allowed (for the
	subscriber) per day

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17.	Enter a number in the <max amount="" day="" per="" transferor=""> field to indicate</max>
	the maximum amount that a transferor (the subscriber) can transfer from
	ones' account to another subscriber's account per day
18.	Enter a number in the <max amount="" day="" per="" transferee=""> field to indicate</max>
	the maximum amount that a transferee (the beneficiary subscriber) can
	receive from a subscriber per day
19.	Enter a number in the <max accounts="" id="" per="" subscribers=""> field to indicate</max>
	the maximum number of prepaid accounts that can be held by a subscriber
	holding a valid verification ID (MY KAD / Passport)
20.	Select a radio option (SMS / USSD / SMS & USSD) to choose the preferred
	messaging element for Subscriber's account low balance notifications
21.	Enter a number in the <self care="" change="" free="" hours="" msisdn=""> field to</self>
	indicate the duration that a subscriber can avail as free hours (non-
	chargeable) at the time of changing the existing MSISDN to another (new)
	MSISDN
22.	Enter a number in the <msisdn for="" lock="" max="" sec="" ussd=""> field to indicate</msisdn>
	the duration that a subscriber's chosen MSISDN (actual mobile service
	number) through USSD message is locked for allotment to any other
	subscriber. In other words subscriber's preferred actual MSISDN shall be
	reserved for the time duration specified for this purpose
23.	Enter a number in the <msisdn care="" for="" lock="" max="" sec="" self=""> field to</msisdn>
	indicate the duration that a subscriber's chosen MSISDN (actual mobile
	service number) through Self Care is locked for allotment to any other
	subscriber. In other words subscriber's preferred actual MSISDN shall be
	reserved for the time duration specified for this purpose
24.	Enter a number in the <msisdn allocation="" allowed="" hours="" max=""> field to</msisdn>
	indicate the duration that the actual MSISDN (mobile service number) is
	commencing to be operational / functional for the subscriber
25.	Select a radio option to specify the <ivr flag="" pin="" reset="" vms="">to be set</ivr>
	YES is to set the Flag to reset last 4 digits of SIM.
	NO is to set the Flag to reset last 4 digits of MSISDN.
26.	Select a radio option to specify the <subscriber expiry="" notification=""> to be</subscriber>
	set (SMS/USDD/USDD&SMS)
27.	Enter a number in the <subscriber days="" level="" notification="" one=""> field to</subscriber>
	indicate the level one notification days
28.	Enter a number in the <subscriber days="" level="" notification="" two=""> field to</subscriber>
	indicate the level two notification days

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29.	Enter a number in the <maximum day="" for="" per="" subscriber="" tickets="" trouble=""></maximum>
	field to indicate the maximum number of trouble tickets raised for a
	subscriber per day
30.	Select a radio option to specify the <fnf flag="" rate="" terminating="">, Yes/No</fnf>
31.	Select a radio option to specify the <rating based="" flag="" lrn="" on="">, Yes/No</rating>
32.	Select a radio option to specify the <aaa flag="" integration="" radius="">, Yes/No</aaa>
33.	Enter a number in the <ported days="" eod="" expiry="" max="" out=""> field to specify</ported>
	the maximum expiry days
34.	Enter a number in the <max amount="" credit="" for="" per="" subscriber="" transfer=""> to</max>
	indicate the maximum credit amount per transfer
35.	Enter a number in the <max days="" for="" port-in="" process="" terminate=""> to</max>
	indicate the maximum days for port-in termination process
36.	Select a radio option to specify the <retain amount="" customer="" group<="" in="" th=""></retain>
	Flag
37.	Select a radio option to specify the <port flag="" for="" out="" status="" th="" transit<=""></port>
	Status>, Yes/No
38.	Select a radio option to specify the <port active<="" flag="" for="" out="" status="" th=""></port>
	Status>, Yes/No
39.	Select a radio option to specify the <port flag="" for="" grace="" out="" period<="" status="" th=""></port>
	I Status>, Yes/No
40.	Select a radio option to specify the <port flag="" for="" grace="" out="" period<="" status="" th=""></port>
	II Status>, Yes/No
41.	Select a radio option to specify the <tenure flag="" plan="" process="">, Yes/No</tenure>
42.	Select a radio option to specify the <vip msisdn="" order="" retain<="" th="" vip="" vs=""></vip>
	Status>, Yes/No
43.	Select a default CUG voice calendar from <cug calendar="" default="" voice=""></cug>
44.	Select a default CUG SMS calendar from <cug calendar="" default="" sms=""></cug>
45.	Select a default CUG data calendar from <cug calendar="" data="" default=""></cug>
46.	Enter the maximum number of lines per CA package.
47.	Enter the maximum number of lines per MAX lines per Corp CA package.
48.	Select a radio option to specify the <offnet allowed="" flag="" numbers=""> by</offnet>
10	selecting Yes/No
49.	Enter the maximum FNF offnet numbers allowed
50.	Enter the maximum offnet numbers allowed for SMS
51.	Select a radio option to specify the <fnf allow="" flag="" sms=""> by selecting</fnf>
	Yes/No
52.	Enter the Currency details

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53.	Enter the Customer Name
54.	Select a radio option to specify the <allow balance="" debit<="" for="" negative="" th=""></allow>
	request> by selecting Yes/No
55.	Enter the maximum number of Offnet Numbers which can be allowed.
56.	Select a radio option to specify the <post allowed="" hybrid="" paid=""> by selecting</post>
	Yes/No
57.	Select a channel type such as SMS/USSD/SMS&USSD from the drop down
	list, in order to notify the subscriber about their bucket subscription
58.	Select the tax applicable date.
59.	Enter percentage of the tax should applicable on the recharge transaction
60.	Check the text box to include and deduct the tax from the top-up amount
61.	Select a radio option to specify the < Allow Calls in Unknown VLR > by
	selecting Yes/No
62.	Select a radio option to specify the < Allow Calls in G2 G3 G4> by selecting
	Yes/No/Service Numbers
63.	Select a radio option to specify the < Allow Roaming Calls in G2 G3 G4>
	by selecting Yes/No/Service Numbers
64.	Select a radio option to specify the < Allow Calls in G1 Status > by selecting
	Yes/No/Service Numbers
65.	Select a radio option to specify the < Allow Roaming Calls in G1 Status >
	by selecting Yes/No/Service Numbers
66.	Select a radio option to specify the < Allow Calls In TR Status > by selecting
	Yes/No/Service Numbers
67.	Select a radio option to specify the < Allow Local MT Calls In G1 Status >
	by selecting Yes/No
68.	Select a radio option to specify the < Allow Local MO Calls In G1 Status >
	by selecting Yes/No/Service Numbers
69.	Select a radio option to specify the < Allow Calls In DA Status > by selecting
70	Yes/No/Service Numbers
70.	Select a radio option to specify the < Allow Calls In D1 Status > by selecting
74	Yes/No/Service Numbers
71.	Select a radio option to specify the < Allow Calls In D2 Status > by selecting
72.	Yes/No/Service Numbers Enter maximum limit for the main account balance
73.	
/3.	Select a radio option to specify the < Use Bucket Level Priority > by selecting Yes/No
74.	Select a unlimited validity date
/4.	Select a uniffilted validity date

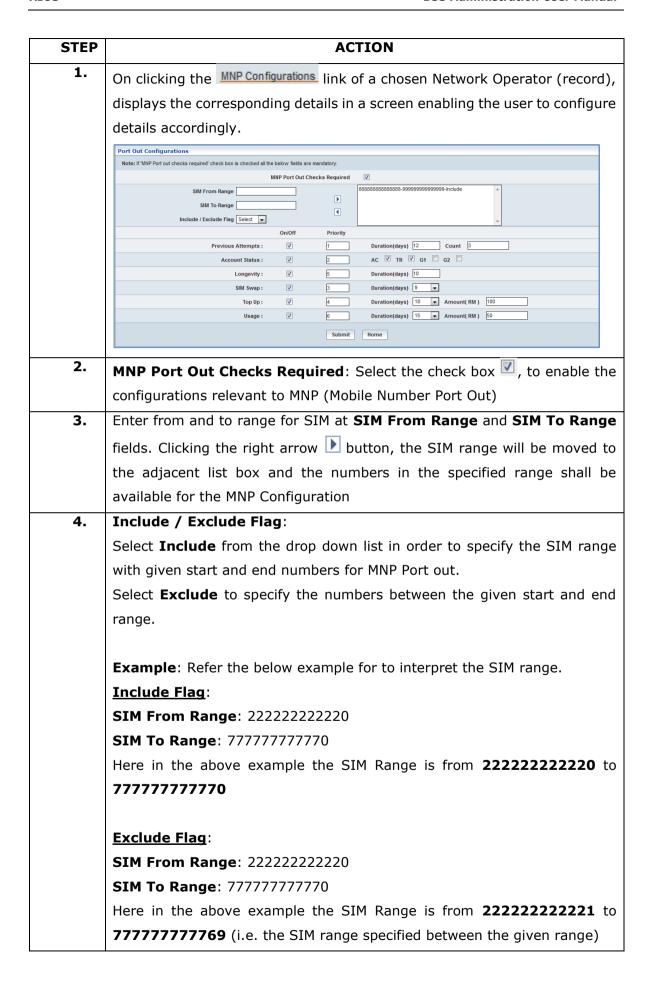
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75.	Enter a number which allowed for a CSR user in order to change their
	password in a day
76.	Select a radio option to specify the < Allow Ported In Number Check > by
	selecting Yes/No
77.	On clicking the Submit button, the (Network User Account) record gets
	updated along with the configured parameters and it redirects the user back
	to the records grid. A message window is displayed to that effect.
	Configure
	Network configuration done successfully
	Home
	On clicking the Home button of the message window, it directs the user
	back to the records grid.
78.	On clicking the Home button, it only redirects the user back to the
	records grid.

MNP Configurations:

'MNP Configuration' link helps the users to do the configurations relevant to subscriber port-out. Hence, by these configurations a user will check the all the required parameters for to proceed with the subscriber port-out.

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5. **Previous Attempts**: Select the check box to check, whether the subscriber has previously tried for the port out or not. Priority: Assign a priority level for Previous Attempts parameter while performing the port out. Hence, the parameters will be checked before the MNP port out, as per their assigned priority. **Duration (Days):** Enter the days required to attain the configured attempts for the port-out. **Count**: Enter a number of port outs attempts are required in the configured time duration (Days). 6. **Account Status**: Select the check box to check the status of the subscriber account before MNP. The status can be Active (AC), Transit (TR), GracePeriod1 (G1), and GracePeriod2 (G2). Priority: Assign a priority level for Account Status parameter while performing the port out. 7. Longevity: Select check box to enable the longevity checking. **Priority**: Assign a priority level for **Longevity** parameter while performing the port out. **Duration**: Enter longevity of the subscriber account in days. 8. **SIM Swap**: Select the check box to allow the SIM swap **Priority**: Assign a priority level for **SIM Swap** parameter while performing the port out. **Duration**: Enter the days required for the SIM swap 9. **Top Up**: Select the check box to check the top-up status of the subscriber account **Priority**: Assign a priority level for **Top Up** parameter while performing the port out. Duration: Select number of days from the drop down list, hence the subscriber's account should have recharged before MNP for the specified amount. **Amount**: Specify the amount for the top-up (before MNP) 10. **Usage**: Select the check box to check the usage of the subscriber's account. **Priority**: Assign a priority level for **Usage** parameter while performing the port out. **Duration**: Enter the days at which the subscriber is availing their account usage (such as Bundles) before MNP. Amount: Enter the amount which required to used by the subscriber before the MNP

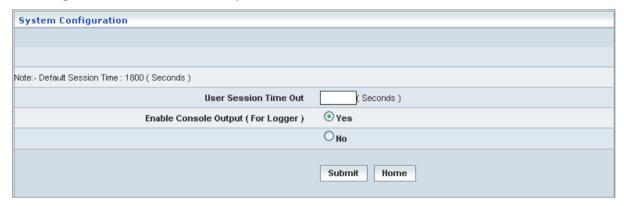
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3.3.2 System Configuration

System Configuration module allows the Super User (**SU**) to determine or fix the **MSP** Application **stand by time** when the user leaves it idle. This module also helps '**SU**' to decide on default setting activated for log generation of the user activities (series of actions performed by the user while using the **MSP** Application). This enables tracking of user activities, i.e., dynamic generation of a log (list of records) at the backend for the series of user activities while using the application.

The term 'Enable Console Output' is to depict the '**report'** that would be dynamically generated for the user activities during the usage of **MSP** Application.

The screen below shows the Super User fixing 'Session Time Out' and also enabling & disabling the 'Enable Console Output'.



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1. User to enter the time <i>in seconds</i> to fix the 'session time out duration' in the <user out="" session="" time=""> field Select the radio option 'Yes' to enable the dynamic generation of 'User activities log report' - Enable Console Output. By default, the system always indicates the selection of radio option 'Yes' and hence, it is recommended for the user User can choose the radio option 'No' to disable the dynamic generation of 'User activities log report' - Enable Console Output. However, this is not recommended for the user 2. On clicking the Submit button, the 'Session Time Out' duration stands good and effective for the 'Application Stand By Time' till the next change. 'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window</user>
Select the radio option 'Yes' to enable the dynamic generation of 'User activities log report' - Enable Console Output. By default, the system always indicates the selection of radio option 'Yes' and hence, it is recommended for the user User can choose the radio option 'No' to disable the dynamic generation of 'User activities log report' - Enable Console Output. However, this is not recommended for the user 2. On clicking the Submit button, the 'Session Time Out' duration stands good and effective for the 'Application Stand By Time' till the next change. 'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window
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User can choose the radio option No' to disable the dynamic generation of 'User activities log report' – Enable Console Output. However, this is not recommended for the user 2. On clicking the Submit button, the 'Session Time Out' duration stands good and effective for the 'Application Stand By Time' till the next change. 'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window [System Configuration]
User can choose the radio option \(\bigcirc \) \(
of 'User activities log report' – Enable Console Output . However, this is not recommended for the user 2. On clicking the Submit button, the 'Session Time Out' duration stands good and effective for the 'Application Stand By Time' till the next change. 'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window System Configuration
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On clicking the button, the 'Session Time Out' duration stands good and effective for the 'Application Stand By Time' till the next change. 'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window [System Configuration]
On clicking the button, the 'Session Time Out' duration stands good and effective for the 'Application Stand By Time' till the next change. 'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window
'Session Time Out' update message will be displayed to that effect with a 'Home' button at the bottom of the message window System Configuration
'Home' button at the bottom of the message window System Configuration
System Configuration
Session time out value updated successfully
Home
On clicking the Home button of the 'Message Window', it redirects th
user back to the Application Home Page
On clicking the Home button of the 'Session Time Out' screen prior to
any updates, it redirects the user back to Home Page

3.3.3 Manage Network Codes

'Manage Network Codes' allows the Super User (**SU**) creating (add) network codes to the chosen Network User Account.

This screen further allows the user to perform following actions:

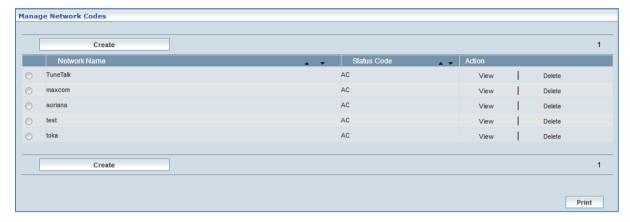
- View Network Codes of a chosen Network User Account
- Delete Network Codes of a chosen Network User Account

This sub-module also helps to fetch a single record (network codes related to any given Network User Account) with the help of the **'Search'** option based on the provided search criterion. The search criteria include: Network Name.

Initially, the list of existing Networks (Network User Accounts) will be displayed in a grid.

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The screen below shows the creation & management of network codes related to a Network User Account.



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S	TEP	ACTION
1.		By default, list of records for the existing Network Operators (the
		corresponding User Accounts) will be displayed in a grid. The columns
		include 'Network Name' 'Status Code' and 'Action'
2.	10 🔻	User can customize the view for the number of records to be displayed
	10 20 30	each time (per page) in a grid.
	40 50	Select the number of records (For Ex: 10) from the drop-down list of the
	60 70	<view page="" per=""> field.</view>
	80	With the effect of choosing the desired number (10) for the display of
	100	records per page, the same (10 records) will be displayed in the grid.
		However, based on the total number of records, page numbers will be
		dynamically displayed at the left bottom of the screen
		User can navigate for subsequent records (10 each time) by clicking the
		desired `page number' 12
3.	•	User can sort the records in ascending and descending orders with the
		help of up-arrow 🗷 and down-arrows 🗷 respectively
4.		On clicking the Create button of a chosen Network User Account,
		`Create Network Codes' screen will be displayed, which enables the user
		to create a network code
5.		On clicking the link of a chosen network, the corresponding details
6.		will be displayed in a separate screen
0.		On clicking the Delete link of a chosen network, the corresponding details
		will be displayed in a separate screen, which enables the SU to delete
		desired number of network codes
7.		User can print the list of records with the help of Print button at the
		left bottom of the screen
8.		On clicking the Home button of the 'Manage Network Codes' Grid, it
		redirects the user back to Home Page

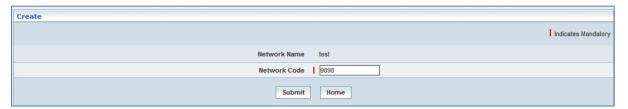
Create:

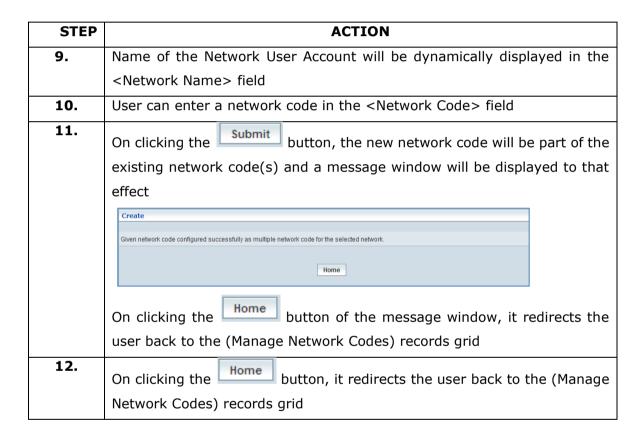
To create a network code, user must select the radio option of a chosen network. By clicking the Create button, Create Network Codes screen will be displayed enabling the user to create a network code.

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User can add multiple network codes to the chosen Network User Account, however each at a time, and thus added network codes shall become part of the network codes list.

The screen below shows creating a new 'network code' to the chosen Network User Account.

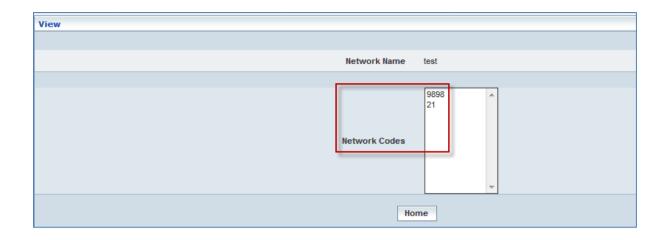




View:

The screen below shows the 'View' of the User Account details.

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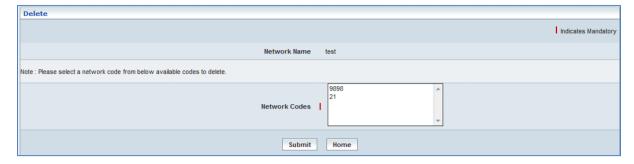


STEP	ACTION
13.	Click the corresponding radio button User Account O LoopUsers of the Network
14.	On clicking the View link of a chosen Network User Account (record), corresponding details will be displayed in a separate screen
15.	User can peruse the details accordingly
	On clicking the Home button, it redirects the user back to the (Manage Network Codes) records grid

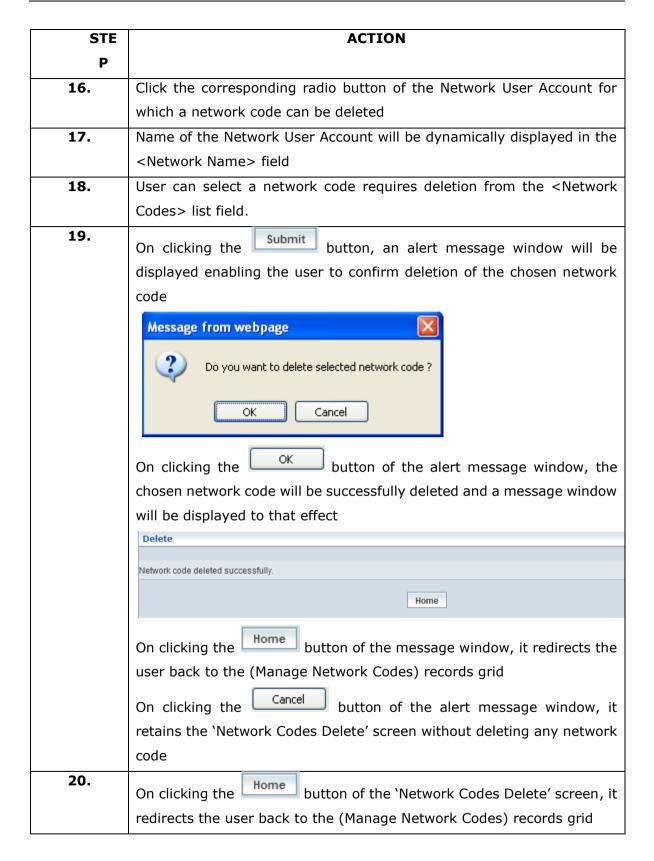
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Delete:

The screen below shows deleting the desired network codes of the chosen Network User Account.



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3.3.4 Language Configuration Details

'Language Configuration Codes' allows the Super User (**SU**) creating (add) various languages that could be used as options for any IVR services and also for setting as

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network specific default language (any one language chosen from the list) at the time of setting up the network configurations.

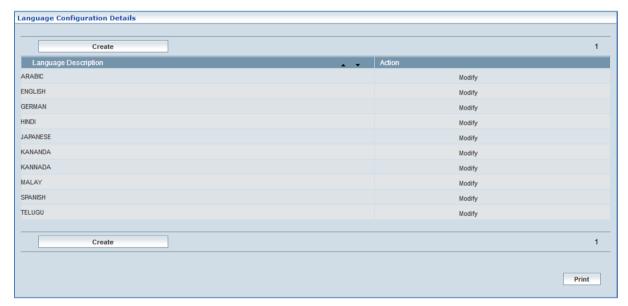
This screen further allows the user to perform following actions:

 Modify / update languages (change the existing name of the language or enter altogether a different language name)

This sub-module also helps to fetch a single record (Language) with the help of the **'Search'** option based on the provided search criterion. The search criteria include: Language Description.

Initially, the list of existing languages will be displayed in a grid.

The screen below shows the creation & management of network codes related to a Network User Account.



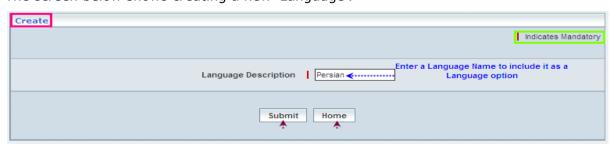
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S	TEP	ACTION
1.		By default, list of records for the existing languages will be displayed in a
		grid. The columns include `Language Description' and `Action'
2.	10 🔻	User can customize the view for the number of records to be displayed
	20 30	each time (per page) in a grid.
	40 50	Select the number of records (For Ex: 10) from the drop-down list of the
	60 70	<view page="" per=""> field.</view>
	80 90	With the effect of choosing the desired number (10) for the display of
	100	records per page, the same (10 records) will be displayed in the grid.
		However, based on the total number of records, page numbers will be
		dynamically displayed at the left bottom of the screen
		User can navigate for subsequent records (10 each time) by clicking the
		desired 'page number' 11
3.		User can sort the records in ascending and descending orders with the
		help of up-arrow ■ and down-arrows ■ respectively
4.		On clicking the Create button, 'Create' screen will be displayed, which
		enables the user to create a language as one of the options.
5.		On clicking the Modify link of a chosen Language Description (record), the
		corresponding details will be displayed in a separate screen, which
		enables the SU to modify / update the same
6.		User can print the list of records with the help of Print button at the
		left bottom of the screen
7.		On clicking the Home button of the Language Configuration Details'
		Grid, it redirects the user back to 'Administration' Home Page
L		

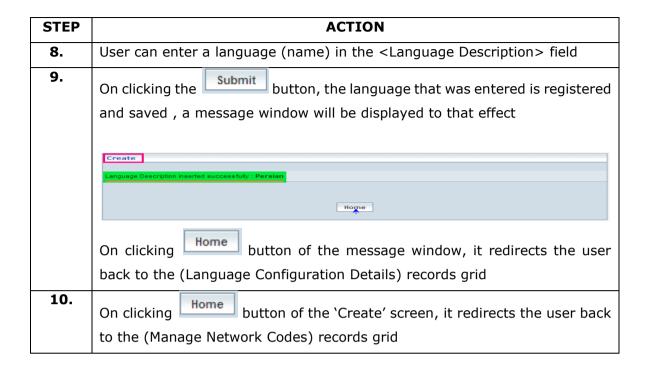
Create:

By clicking the Create button, 'Create' screen will be displayed enabling the user to create a new language.

The screen below shows creating a new 'Language'.



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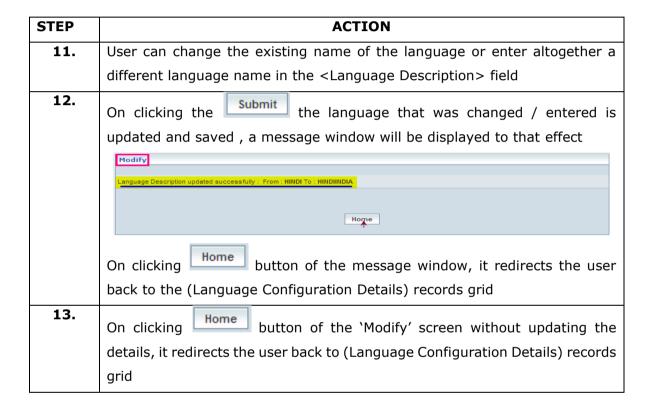


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Modify:

The screen below shows modifying or updating the chosen language.





3.3.5 Manage Country / State Codes

'Manage Country / State Codes' allows the Super User (SU) creating (add) country codes and subsequently create (ad) state codes for each of the countries.

This screen further allows the user to perform following actions:

- View Country Codes
- Modify Country Codes
- Delete Country Codes
- Manage State Codes
 - Create State Codes
 - View State Codes
 - Modify State Codes

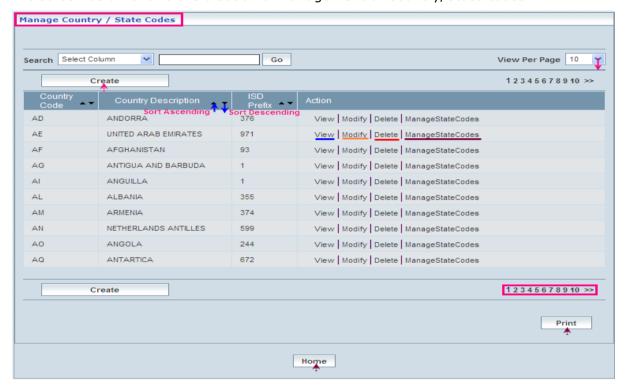
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- Delete State Codes
- o Search State Codes

This sub-module also helps to fetch the records (Country) with the help of **'Search'** option based on the provided search criterion. The search criteria include: Country Code, Country Description, and ISD Prefix.

Initially, the list of existing Country / State Codes will be displayed in a grid.

The screen below shows the creation & management of Country/State codes.



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STEP	ACTION
1.	By default, list of records for the existing Country/State Codes are
	displayed in a grid. The columns include 'Country Code, 'Country
	Description', 'ISD Prefix', and 'Action'.
2 10 🔻	User can customize the view for the number of records to be displayed
20 30	each time (per page) in a grid.
40 50	Select the number of records (For Ex: 10) from the drop-down list of the
60 70	<view page="" per=""> field.</view>
80	With the effect of choosing the desired number (10) for the display of
100	records per page, the same (10 records) will be displayed in the grid.
	However, based on the total number of records, page numbers will be
	dynamically displayed at the right bottom of the screen.
	User can navigate for subsequent records (10 each time) by clicking the
	desired 'page number' 12345678910 >>
3.	User can sort the records in ascending and descending orders with the
	help of up-arrow ■ and down-arrows ■ respectively
4.	On clicking the Create button, 'Create Country/State Code' screen will
	be displayed, which enables the user to create a Country code
5.	
	On clicking the link, the corresponding Country/State code details
	will be displayed in a separate screen
6.	On clicking the Modify link, the corresponding Country/State code details
	will be displayed in a separate screen, which enables the user to modify
	/ update the details
7.	On clicking the Delete link of a chosen network, the corresponding details
	will be displayed in a separate screen, which enables the SU to delete the
	same
8.	On clicking the ManageStateCodes link, the list of existing state codes if any
	will be displayed as records in a grid
9.	D-i-4
	User can print the list of records with the help of Print button at the
	right bottom of the screen
10.	On clicking the Home button of the 'Manage Country/State Codes'
	Grid, it redirects the user back to Home Page

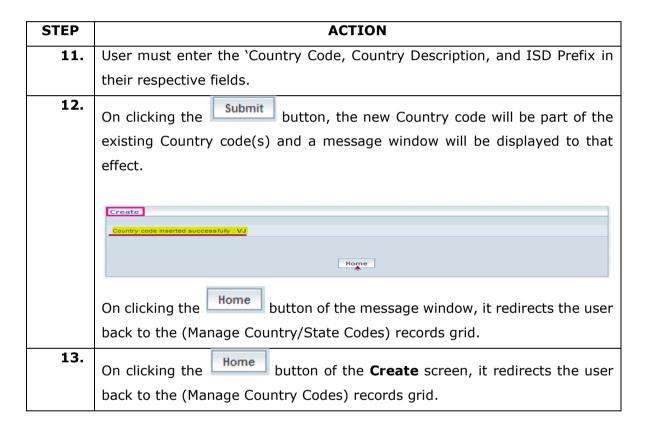
Create:

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To create a Country code, click the displayed enabling the user to create a new Country code.

The screen below shows creating a new 'Country Code'





View:

The screen below shows the 'View' of the selected Country code details.



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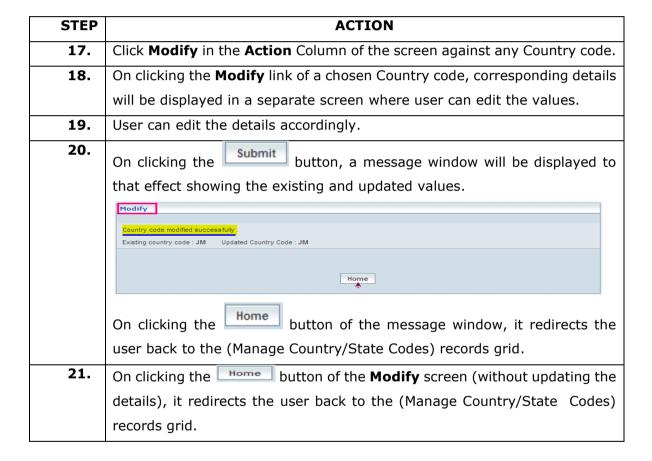
STEP	ACTION
14.	Click View in the Action Column of the screen against any Country code.
15.	On clicking the View link of a chosen Country code, corresponding details
	will be displayed in a separate screen.
16.	User can peruse the details accordingly.
	On clicking the Home button, it redirects the user back to the (Manage
	Country/State Codes) records grid.

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Modify:

The screen below shows the 'Modify' of the Country code details.



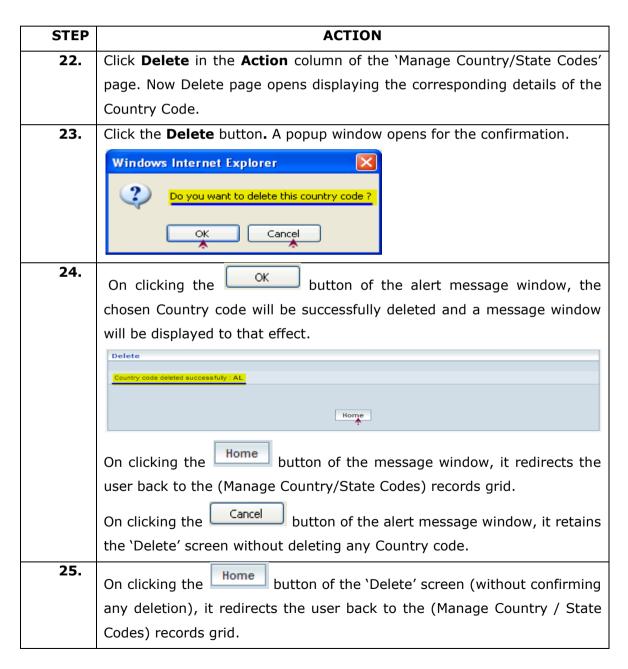


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Delete:

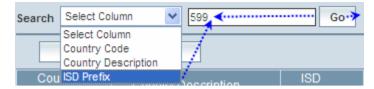
The screen below shows deleting the chose Country code.





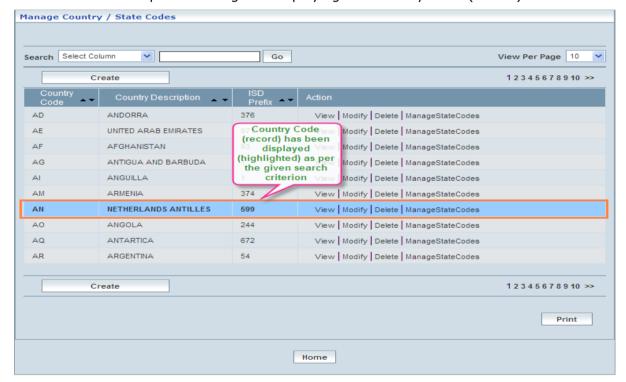
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Searching for a specific Country



STEP	ACTION
1.	Select a search criterion (Country Code, Country Description, ISD Prefix)
	from the drop-down list of the search criteria of the <search> field</search>
2.	Enter the value that corresponds with the given search criterion.
3.	On clicking the Go button, the corresponding Country/State code will be highlighted among the list of Country Code records.

The screen below depicts fetching and displaying the Country Code (record).



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Manage State Codes

'Manage State Codes' option allows the Super User (SU) creating (add) State codes to the chosen Country code.

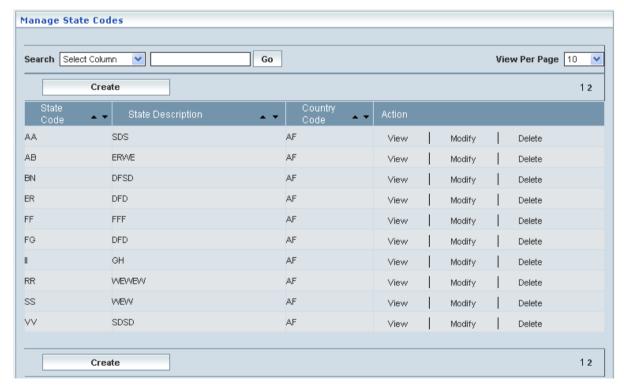
This screen further allows the user to perform the following actions:

- View State Codes and Descriptions of a chosen Country code
- Modify State Codes and Descriptions of a chosen Country code
- Delete State Codes of a chosen Country code

This sub-module also helps to fetch the records (State codes related to any given Network User Account) with the help of 'Search' option based on the provided search criterion. The search criteria include: State Code, State Description, and Country Code.

Initially, the list of existing State Codes will be displayed in a grid.

The screen below shows the creation & management of State codes related to the Country Codes.



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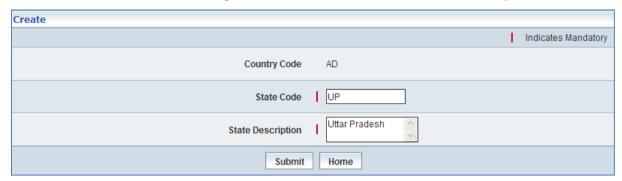
STEP	ACTION
1.	By default, list of records for the existing State Codes are displayed in a
	grid. The columns include 'State Code', 'State Description', 'Country Code'
	and 'Action'.
2 10 🔻	User can customize the view for the number of records to be displayed
10 20 30	each time (per page) in a grid.
40 50	Select the number of records (For Ex: 10) from the drop-down list of the
60 70	<view page="" per=""> field.</view>
80 90	With the effect of choosing the desired number (10) for the display of
100	records per page, the same (10 records) will be displayed in the grid.
	However, based on the total number of records, page numbers will be
	dynamically displayed at the right bottom of the screen.
	User can navigate for subsequent records (10 each time) by clicking the
	desired 'page number'
3.	User can sort the records in ascending and descending orders with the
	help of up-arrow $lacksquare$ and down-arrows $lacksquare$ respectively.
4.	On clicking the Create button, 'Create State Code' screen will be
	displayed, which enables the user to create a State code.
5.	Victor
	On clicking the View link, the corresponding State code details will be
	displayed in a separate screen.
6.	On clicking the Modify link, corresponding details will be displayed
	in a separate screen where user can edit the values.
7.	On clicking the Delete link of a chosen State code, the corresponding
	details will be displayed in a separate screen, which enables the SU to
	delete desired number of state codes.
8.	
6.	User can print the list of records with the help of Print button at the
	Right bottom of the screen.
9.	On clicking the Home button of the 'Manage State Codes' grid, it
	redirects the user back to Home Page.

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Create:

To create a State code, click the button. Create State Codes screen will be displayed enabling the user to create a State code.

The screen below shows creating a new 'State code' to the chosen country Code.

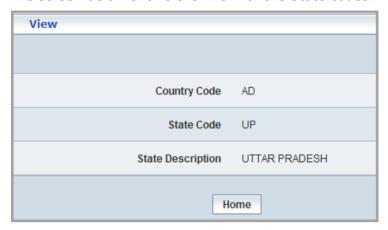


STEP	ACTION
10.	User must enter the 'State Code, and State Description'. However, by
	default, the Country Code to which you wish to add a State Code is
	displayed.
11.	On clicking the Submit button, the new State code will be part of the
	existing State code(s) of the Country Code and a message window will be
	displayed to that effect.
	Create
	State code inserted successfully: UP
	Home
	On clicking the Home button of the message window, it redirects the
	user back to the (Manage State Codes) records grid.
12.	On clicking the Home button, it redirects the user back to the (Manage
	State Codes) records grid.

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View:

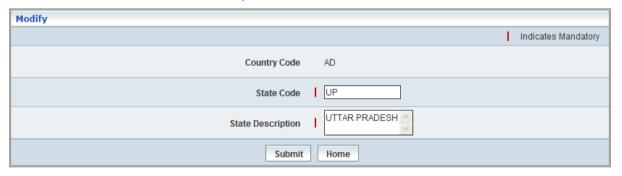
The screen below shows the 'View' of the State codes.



STEP	ACTION				
13.	Click View in the Action Column of the screen against any State code.				
14.	On clicking the View link of a chosen State code, corresponding details will				
	be displayed in a separate screen.				
15.	User can peruse the details accordingly.				
16.	On clicking the Home button, it redirects the user back to the (Mana				
	State Codes) records grid.				

Modify:

The screen below shows the 'Modify of the State Code details.

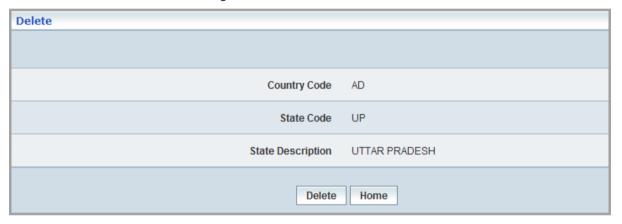


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STEP	ACTION			
17.	Click Modify in the Action Column of the screen against any State code.			
18.	On clicking the Modify link of a chosen State code, corresponding details			
	will be displayed in a separate screen where user can edit the values.			
19.	User can edit the details accordingly.			
20.	On clicking the Submit button, a message window will be displayed to that effect showing the existing and updated values.			
21.	On clicking the Home button, it redirects the user back to the (Manage			
	State Codes) records grid.			

Delete:

The screen below shows deleting the desired State codes.



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STEP	ACTION			
22.	Click Delete in the Action column of the 'Manage State Codes' page. Now			
	Delete page opens displaying the information of the State Code.			
23.	Click the Delete button. A popup window opens for the confirmation.			
24.	On clicking the button of the alert message window, the chos			
	State code will be successfully deleted and a message window will be			
	displayed to that effect.			
	Delete			
	State code deleted successfully: UP			
	Home			
	On clicking the Cancel button of the alert message window, it retains			
	the 'State Codes Delete' screen without deleting any State code.			
	On clicking the Home button of the message window, it redirects the			
	user back to the (Manage State Codes) records grid.			
25.	On clicking the Home button of the 'State Codes Delete' screen, it			
	redirects the user back to the (Manage State Codes) records grid.			

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Searching for a specific State Code



STEP	ACTION			
26.	Select a search criterion (State Code, State Description, Country Code)			
	from the drop-down list of the search criteria of the <search> field.</search>			
27.	Enter the value that corresponds with the given search criterion.			
28.	On clicking the Go button, the corresponding State code will be highlighted among the list of State Code records.			

3.3.6 MSISDN Pool Management

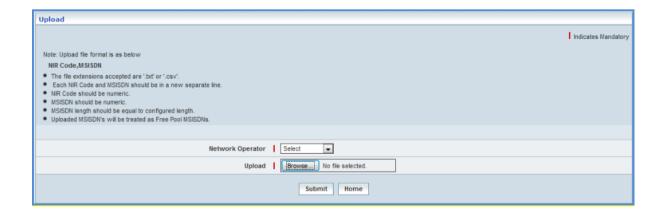
MSISDN Pool Management feature enables the user to upload bulk MSISDNs in a specified format for a defined network operator.

This screen further allows the user to perform following actions:

- Upload MSISDN
- View MSISDN

<u>Upload</u>

To upload range of MSISDNs and NIR Code of a particular network operator

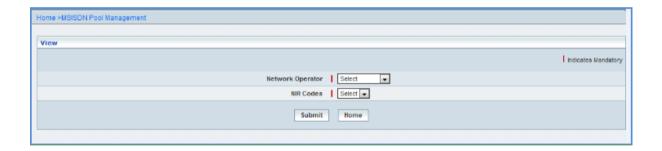


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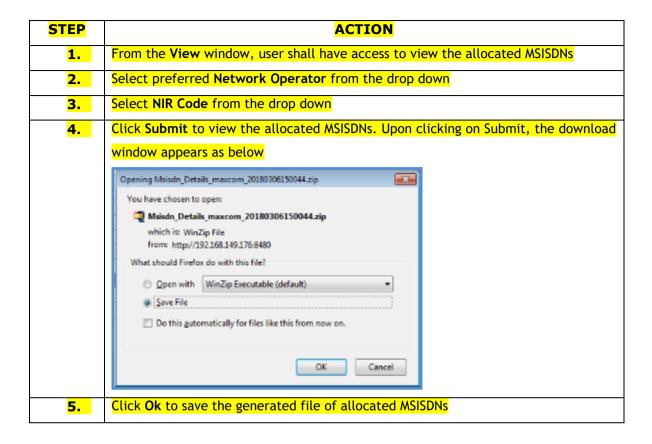
STEP	ACTION			
1.	From the Upload window, user shall have access to upload the group of MSISDNs			
2.	Select preferred Network Operator from the drop down			
3.	Click Browse to browse the file in the specified format			
	Note: Upload file format as below			
	NIR code, MSISDN			
	The file shall be in .CSV format.			
	Each NIR Code and MSISDN should be in a separate line			
	NIR and MSISDN shall be in numeric			
	Uploaded MSISDNs shall be treated as free pool MSISDNs			
4.	Click Submit to upload the MSISDNs successfully			
5.	Click Home for home page			

<u>View</u>

View MSISDNs enables to view the Number pool MSISDNs. These MSISDNs are available for allocation.



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3.4 Network Operator Login

Login page helps different users of the independent Network (Administrator, Functional Operators and Customer Personnel) logging into **MSP**.

Administrator is at the top level on the users' hierarchy. Administrator logs into **MSP** with a valid Login and Password (provided by the Super User). Admin can create user accounts for different Functional Operators and Customer Care personnel, which are normally under his/her control for assigning various roles and user permissions. Login page allows the authorized users to login to the **MSP** application with the help of their respective Login names and passwords.

The screen below shows the Login page for various Users.

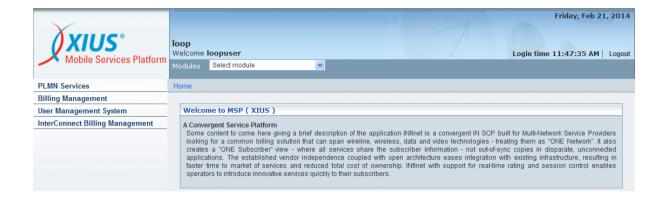


1. User to enter network name, his / her valid user name and password in their respective <Network>, <User Name> and <Password> fields

2. On clicking the Submit button, 'Application Home Page' will be displayed, enabling the User to access various application modules

The screen below shows the Application Home Page.

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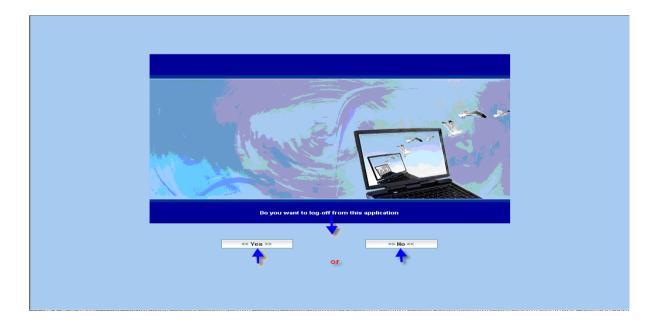
3.5 Application Logout

Users can logout of the application any time and from anywhere steering through application, with the help of the Logout link (at the right top corner of the screens).

The screen below shows the Logout link.



STEP	ACTION		
1.	On clicking the Logout link, a screen will be displayed initiating the user to confirm		
	logout.		



STEP	ACTION		
1.	On clicking the	<< Yes >>	button, user successfully logs out of the
	application and the message ('you have been logged out successfully') to that		
	effect will be disp	olayed.	

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The screen below shows the 'Logout' message.



STEP	ACTION		
1.	On clicking the	>> No <<	button, user will be directed to the home
	page of the MSP Application.		

* Logout process to the Super User is similar to that of the Network Administration Logout.

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