SMSC Gateway Server Settings

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SMSC Server Properties

Default Validity Period (in hours)

Using CLI

You can set the 'Default Validity Period (in hours)' by issuing the command `smsc set defaultvalidityperiodhours` with appropriate parameters as described below. You can verify this by issuing the command `smsc get defaultvalidityperiodhours` which will display the value set for this property.

```
Name
    smsc set defaultvalidityperiodhours

SYNOPSIS
    smsc set defaultvalidityperiodhours <default-validity-period-hours>

DESCRIPTION
    This command is used to set a value for default validity period (in hours) for
    incoming SMSC messages that do not have their own validity period value. Validity
    period is the time duration for which the SMSC Gateway will attempt to
    send the SMS. If the time period expires before the message can be delivered,
    the SMSC Gateway will drop it.

EXAMPLES
    smsc set defaultvalidityperiodhours 3
```

Using GUI

Procedure: Set Default Validity Period using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the default validity period (in hours) by entering the value in the text field 'Default validity period hours (in hours)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Maximum Validity Period (in hours)

Using CLI

You can set the 'Max Validity Period (in hours)' by issuing the command `smsc set maxvalidityperiodhours` with appropriate parameters as described below. You can verify this by issuing the command `smsc get maxvalidityperiodhours` which will display the value set for this property.

```
Name
    smsc set maxvalidityperiodhours

SYNOPSIS
    smsc set maxvalidityperiodhours <max-validity-period-hours>

DESCRIPTION
    This command is used to set a value for the maximum validity period (in hours).
    All incoming messages with a validity period set greater than the value specified
    by this parameter will either be rejected (if they are ESME originated messages)
    or the value of their validity period will be set to this value (for MO originated
    messages).

EXAMPLES
    smsc set maxvalidityperiodhours 6
```

Using GUI

Procedure: Set Maximum Validity Period using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the maximum validity period (in hours) by entering the value in the text field 'Maximum validity period (in hours)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Default Type of Number (TON)

Using CLI

You can set the 'Default type of number (TON)' by issuing the command `smsc set defaultton` with appropriate parameters as described below. You can verify this by issuing the command `smsc get defaultton` which will display the value set for this property.

```
Name
    smsc set defaultton

SYNOPSIS
    smsc set defaultton <default-ton>

DESCRIPTION
    This command is used to set a value for default TON (Type Of Number). If an
    incoming message does not have a value defined for TON, i.e. if TON is set as
    'unknown', then the value specified for defaultton will be used as TON for that
    message.

EXAMPLES
    smsc set defaultton 1
```

Using GUI

Procedure: Set Default type of number (TON) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Default type of number (TON) by entering the value in the text field 'Default type of number (TON)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Default numbering plan indicator (NPI)

Using CLI

You can set the 'Default numbering plan indicator (NPI)' value by issuing the command `smsc set defaultnpi` with appropriate parameters as described below. You can verify this by issuing the command `smsc get defaultnpi` which will display the value set for this property.

```
Name
    smsc set defaultnpi

SYNOPSIS
    smsc set defaultnpi <default-npi>

DESCRIPTION
    This command is used to set a value for default NPI (Number Plan Indicator). If an
    incoming message does not have a value defined for NPI, i.e. if NPI is set as
    'unknown', then the value specified for defaultnpi will be used as NPI for that
    message.

EXAMPLES
    smsc set defaultnpi 1
```

Using GUI

Procedure: Set Default numbering plan indicator (NPI) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Default numbering plan indicator (NPI) by entering the value in the text field 'Default numbering plan indicator (NPI)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cluster Name

Using CLI

You can set the 'Cluster Name' value by issuing the command `smsc set esmedefaultcluster` with appropriate parameters as described below. You can verify this by issuing the command `smsc get esmedefaultcluster` which will display the value set for this property.

```
Name
    smsc set esmedefaultcluster

SYNOPSIS
    smsc set esmedefaultcluster <esme-default-cluster>

DESCRIPTION
    This command is used to set a value for ESME default cluster. If the
    destination-address does not match to any ESME (any Cluster Name) the message will
    be routed to the cluster with the name specified here for esme-default-cluster.
```

You can remove an ESME default cluster by issuing a command in the below format:

```
Name
    smsc remove esmedefaultcluster

SYNOPSIS
    smsc remove esmedefaultcluster <esme-default-cluster>

DESCRIPTION
    This command is used to remove the value configured for ESME default cluster. If
    this value is removed, all unrouted messages will be routed into the GSM network.
```

Using GUI

Procedure: Set Cluster Name using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Cluster Name by entering the value in the text field 'Cluster Name'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SMPP Encoding for GSM7/UCS2

Using CLI

You can set the 'SMPP Encoding for GSM7 (DCS=0)' and 'SMPP Encoding for UCS2 (DCS=8)' value by issuing the commands `smsc set smppencodingforgsm7` / `smsc set smppencodingforucs2` with appropriate parameters as described below. You can verify this by issuing the commands `smsc get smppencodingforgsm7` / `smsc get smppencodingforucs2` which will display the value set for these

property. When GSM8 encoding type no recoding of message content is made.

```
Name
    smsc set smppencodingforgsm7
    smsc set smppencodingforucs2

SYNOPSIS
    smsc set smppencodingforgsm7 <UTF8|UNICODE|GSM7>
    smsc set smppencodingforucs2 <UTF8|UNICODE|GSM7>

DESCRIPTION
    These commands are used to set the Encoding Scheme at SMPP side for
    different GSM data coding schemas (DCS).

    For GSM7 encoding (DCS = 0) you must use the command
    smsc set smppencodingforgsm7, in order to set text encoding style.

    For UCS2 encoding (DCS = 8), you must use the command
    smsc set smppencodingforucs2, in order to set text encoding style.

    At the SMPP side, messages accept 3 different encoding schemes namely UTF8,
    UNICODE and GSM7 (8-bit), for both sending and receiving messages. The SMSC
    can be configured to accept one of them (the one that ESME supports). If this
    is not set, then the default encoding sheme is UTF8. For GSM8 encoding (DCS = 4),
    no charset encoding made in the SMSC.

EXAMPLES
    smsc set smppencodingforgsm7 utf8
    or
    smsc set smppencodingforucs2 unicode
```

Using GUI

Procedure: Set SMPP Encoding for GSM7 and UCS2 using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the encoding scheme by choosing from the values (UTF8 | UNICODE | GSM7) in the list for 'SMPP Encoding for GSM7' (DCS=0) or 'SMPP Encoding for UCS2' (DCS=8). For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Store And Forward Mode

Using CLI

You can set the 'Store And Forward Mode' value by issuing the command `smsc set storeandforwordmode` with appropriate parameters as described below. You can verify this by issuing the command `smsc get storeandforwordmode` which will display the value set for this property.

```
Name
    smsc set storeandforwordmode

SYNOPSIS
    smsc set storeandforwordmode <normal | fast>

DESCRIPTION
    This command is used to set the storeandforwordmode value.
    storeandforwordmode has two possible values:

    normal - StoreAndForward mode is used for incoming
    smpp StoreAndForward messages and all SS7 and SIP messages. All
    the incoming messages into SMSC will be persisted before trying
    for delivery.

    fast (default) - ForwardAndStore mode is used for incoming smpp
    StoreAndForward messages and all SS7 and SIP messages. This option
    can be switched without SMSC restart. All the incoming messages into
    SMSC will be tried for delivery first and only if delivery fails,
    it will be persisted for later re-try.

    Datagramm and Transactional modes will work in the same way for both normal and
fast modes.

EXAMPLES
    smsc get storeandforwordmode fast
```

Using GUI

Procedure: Set Store And Forward Mode using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Store And Forward Mode by selecting the value from the dropdown field 'Store And Forward Mode'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the

Management Console Log section below.

National language locking shift table

Using CLI

You can set the 'National language locking shift table' value by issuing the command smsc set nationallanguagelockingshift with appropriate parameters as described below. You can verify this by issuing the command smsc get nationallanguagelockingshift which will display the value set for this property.

```
Name
    smsc set nationallanguagelockingshift

SYNOPSIS
    smsc set nationallanguagelockingshift <NationalLanguageIdentifier>

DESCRIPTION
    National language locking shift table can be configured for messages
    that have come via SMPP, do not have UDHs inside and have GSM7 encoding
    (DCS==0).
    The default GSM data coding table is mostly used. Possible values:
    = 0: default GSM data coding table
    = 13: urdu (arabic) national language shift table
    This value can be also configured at ESME level.

EXAMPLES
    smsc set nationallanguagelockingshift 0
    smsc set nationallanguagelockingshift 13
```

Using GUI

Procedure: Set National language locking shift table using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the National language locking shift table by entering the value in the text field 'National language locking shift'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

National language single shift table

Using CLI

You can set the 'National language single shift table' value by issuing the command smsc set nationallanguagesingleshift with appropriate parameters as described below. You can verify this by issuing the command smsc get nationallanguagesingleshift which will display the value set for this property.

```
Name
    smsc set nationallanguagesingleshift

SYNOPSIS
    smsc set nationallanguagesingleshift <NationalLanguageIdentifier>

DESCRIPTION
    National language single shift table can be configured for messages
    that have come via SMPP, do not have UDHs inside and have GSM7 encoding
    (DCS==0).
    The default GSM data coding table is mostly used. Possible values:
    = 0: default GSM data coding table
    = 13: urdu (arabic) national language shift table
    This value can be also configured at ESME level.

EXAMPLES
    smsc set nationallanguagesingleshift 0
    smsc set nationallanguagesingleshift 13
```

Using GUI

Procedure: Set National language single shift table using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the National language single shift table by entering the value in the text field 'National language single shift'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Subscriber busy due delay (in sec)

Using CLI

You can set the 'Subscriber busy due delay (in sec)' value by issuing the command `smsc set subscriberbusyduedelay` with appropriate parameters as described below. You can verify this by issuing the command `smsc get subscriberbusyduedelay` which will display the value set for this property.

```
Name
    smsc set subscriberbusyduedelay

SYNOPSIS
    smsc set subscriberbusyduedelay <subscriber-busy-due-delay>

DESCRIPTION
    This command is used to set a value for subscriber-busy-due-delay (in seconds).
    This parameter specifies the delay time period in seconds when there has
    been a delivery failure with the cause 'subscriber busy'.

EXAMPLES
    smsc set subscriberbusyduedelay 2
```

Using GUI

Procedure: Set Subscriber busy due delay (in sec) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Subscriber busy due delay by entering the value in the text field 'Subscriber busy due delay (in sec)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

First due delay (in sec)

Using CLI

You can set the 'First due delay (in sec)' value by issuing the command `smsc set firstduedelay` with appropriate parameters as described below. You can verify this by issuing the command `smsc get firstduedelay` which will display the value set for this property.

```
Name
    smsc set firstduedelay

SYNOPSIS
    smsc set firstduedelay <first-due-delay>

DESCRIPTION
    This command is used to set a value for first-due-delay (in seconds). This
    parameter specifies the delay time period in seconds between message incoming time
    and first delivery attempt.

EXAMPLES
    smsc set firstduedelay 60
```

Using GUI

Procedure: Set First due delay (in sec) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the First due delay by entering the value in the text field 'First due delay (in sec)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Second due delay (in sec)

Using CLI

You can set the 'Second due delay (in sec)' value by issuing the command `smsc set secondduedelay` with appropriate parameters as described below. You can verify this by issuing the command `smsc get secondduedelay` which will display the value set for this property.

```
Name
    smsc set secondduedelay

SYNOPSIS
    smsc set secondduedelay <second-due-delay>

DESCRIPTION
    This command is used to set a value for second-due-delay (in seconds). This
    parameter specifies the delay time period in seconds between the first and second
    delivery attempt (i.e. if the first delivery attempt failed).

EXAMPLES
    smsc set secondduedelay 5
```

Using GUI

Procedure: Set Second due delay (in sec) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Second due delay by entering the value in the text field 'Second due delay (in sec)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Max due delay (in sec)

Using CLI

You can set the 'Max due delay (in sec)' value by issuing the command `smsc set maxduedelay` with appropriate parameters as described below. You can verify this by issuing the command `smsc get maxduedelay` which will display the value set for this property.

```
Name
    smsc set maxduedelay

SYNOPSIS
    smsc set maxduedelay <maxduedelay>

DESCRIPTION
    This command is used to set a value for max-due-delay (in seconds). This parameter
    specifies the maximum possible delay time period in seconds between delivery
    attempts.

EXAMPLES
    smsc set maxduedelay 3600
```

Using GUI

Procedure: Set Max due delay (in sec) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Max due delay by entering the value in the text field 'Max due delay (in sec)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Due delay multiplicator

Using CLI

You can set the 'Due delay multiplicator' value by issuing the command `smsc set duedelaymultiplicator` with appropriate parameters as described below. You can verify this by issuing the command `smsc get duedelaymultiplicator` which will display the value set for this property.

```
Name
    smsc set duedelaymultiplicator

SYNOPSIS
    smsc set duedelaymultiplicator <due-delay-multiplicator>

DESCRIPTION
    This command is used to set a value for due-delay-multiplicator. This parameter
    specifies the delay multiplicator value before another delivery attempt (after
    failure) is made.

    After a message delivery failure (if message validity period is not over and the
    failure is temporary), a delay period is induced before the next delivery attempt.
    This delay period is calculated as follows:

    Delay after the first delivery failure =
                second-due-delay

    Delay after every consecutive delivery failure =
                prev-due-delay * due-delay-multiplicator / 100
                    where prev-due-delay is the delay at the previous step.

EXAMPLES
    smsc set duedelaymultiplicator 200

    Lets take an example where the First due delay is 60 seconds, Second due delay is
    300 seconds, and the due-delay-multiplicator is 200, the attempts will be made
    as below:

    First attempt will be after 60 seconds (1 min)
    [delay is configured in First due delay]

    Second attempt will be after 300 seconds (5 min)
    [delay is configured in Second due delay assuming
    delivery failed not because of "Subscriber busy"]

    Third attempt will be after 600 sec (10 min)
    [delay is calculated based on Due delay multiplicator]
    Delay = 300 * 200 / 100 = 600

    Fourth attempt will be after 1200 sec (20 min)
    [delay is calculated based on Due delay multiplicator]
    Delay = 600 * 200 / 100 = 1200

    Fifth attempt will be after 2400 sec (40 min)
    [delay is calculated based on Due delay multiplicator]
    Delay = 1200 * 200 / 100 = 2400
```

Using GUI

Procedure: Set Due delay multiplicator using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify the Due delay multiplicator by entering the value in the text field 'Due delay multiplicator'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SS7 Settings

SMSC Global Title

Using CLI

You can set the 'SMSC Gobal Title' by issuing the command `smsc set scgt` with appropriate parameters as described below. You can verify this by issuing the command `smsc get scgt` which will display the value set for this property.

```
Name
        smsc set scgt

SYNOPSIS
        smsc set scgt <globalTitle> networkid <networkId>

DESCRIPTION
        This command is used to set a value for SMSC Global Title.

        networkId - a specifies Global Title for a virtual SS7
        subnetwork (this is for Multi-tenancy support). By using of
        this command with different networkIds you can specify
        Global Titles for several subnetworks.
        If this parameter is skipped - networkId will be set to "0"
        when Global Title creation (master networkId).
        When we do not specify Global Title for some networkid -
        Global Title for master networkId will be used. When we
        use "0" as Global Title value
        (like "smsc set scgt 0 networkid <xxx>") -
        this will just clear Global Title for an specified networkid.
```

Using GUI

Procedure: Set SMSC Global Title using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the SMSC Global Title by entering values into fields pair 'SMSC Gateway Global Title Indicator Network Id' and 'SMSC Gateway Global Title'. You are able to set Global Title for definite networkId. Setting of Global Title for networkId to "0" leads clearing of Global Title for networkId. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SCCP Global Title type

Using CLI

You can set the 'SCCP Global Title type' by issuing the command `smsc set gti` with appropriate parameters as described below. You can verify this by issuing the command `smsc get gti` which will display the value set for this property.

```
Name
        smsc set gti

SYNOPSIS
        smsc set gti 0001|0010|0011|0100

DESCRIPTION
        This command is used to set the value of SCCP Global Title type.
        This Global Title type will be used for SCCP outgoing messages.
        Default value for ITU-T is 0100.
        Global title 0001 - Nature of address indicator included
        Global title 0010 - Translation type included
        Global title 0011 - Translation type, Numbering plan and Encoding
                            scheme included
        Global title 0100 - Translation type, Numbering plan, Encoding
                            scheme and Nature of address indicator included
```

Using GUI

Procedure: Set SCCP Global Title type using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.

2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the SCCP Global Title type by entering the value in the text field 'SCCP Global Title'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SCCP translation type value

Using CLI

You can set the 'SCCP translation type value' by issuing the command `smsc set tt` with appropriate parameters as described below. You can verify this by issuing the command `smsc get tt` which will display the value set for this property.

```
Name
        smsc set tt

SYNOPSIS
        smsc set tt <translation type value>

DESCRIPTION
        This command is used to set the value of SCCP translation type
        value. Translation type value will be used for SCCP outgoing
        messages. Default value for ITU-T is 0.
```

Using GUI

Procedure: Set SCCP translation type value using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the SCCP translation type value by entering the value in the text field 'SCCP translation type'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SMSC Sub System Number (SSN)

Using CLI

You can set the 'SMSC SSN' by issuing the command `smsc set scssn` with appropriate parameters as described below. You can verify this by issuing the command `smsc get scssn` which will display the value set for this property.

```
Name
        smsc set scssn

SYNOPSIS
        smsc set scssn <smscSubSystemNumber>

DESCRIPTION
        This command is used to set the value of SMSC Sub System Number (SSN). Issuing
        this command in CLI will set the SSN value but you must ensure that the SSN
number
        is properly configured in the TCAP Stack in the xml descriptor file
        "mobicents-smscgateway-version/jboss-5.1.0.GA/server/default/deploy/
        mobicents-smsc-server/META-INF/jboss-beans.xml".
```

Using GUI

Procedure: Set SMSC Sub System Number (SSN) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the SMSC Sub System Number (SSN) by entering the value in the text field 'SMSC Gateway subsystem number'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

HLR Sub System Number (HLR SSN)

Using CLI

You can set the 'HLR SSN' by issuing the command `smsc set hlrssn` with appropriate parameters as described below. You can verify this by issuing the command `smsc get hlrssn` which will display the value set for this property.

```
Name
        smsc set hlrssn

SYNOPSIS
        smsc set hlrssn <hlrSubSystemNumber>

DESCRIPTION
        This command is used to set the value of HLR Sub System Number (SSN).
```

Using GUI

Procedure: Set HLR Sub System Number (SSN) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the HLR Sub System Number (SSN) by entering the value in the text field 'HLR subsystem number'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

MSC Sub System Number (SSN)

Using CLI

You can set the 'MSC SSN' by issuing the command `smsc set mscssn` with appropriate parameters as described below. You can verify this by issuing the command `smsc get mscssn` which will display the value set for this property.

```
Name
        smsc set mscssn

SYNOPSIS
        smsc set mscssn <mscSubSystemNumber>

DESCRIPTION
        This command is used to set the value of MSC Sub System Number (SSN).
```

Using GUI

Procedure: Set MSC Sub System Number (SSN) using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.

2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the MSC Sub System Number (SSN) by entering the value in the text field 'MSC subsystem number'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

MAP Application Context version

Using CLI

You can set the 'MAP Application Context version' by issuing the command `smsc set maxmapv` with appropriate parameters as described below. You can verify this by issuing the command `smsc get maxmapv` which will display the value set for this property.

```
Name
        smsc set maxmapv

SYNOPSIS
        smsc set maxmapv <version-number>

DESCRIPTION
        This command is used to set the value of MAP Application Context version. The
        version number set here will be used for SMS messages exchanged. RestComm SMSC
        Gateway supports version negotiation. So if you set this to a higher version
(say
        for example version 3, however your network only understands version 2), the
SMSC Gateway
        will automatically do the version negotiation and exchange V2 messages when V3
        exchange fails. However this causes additional messages to be exchanged and
        increases the overall load on the system. Therefore it is advisable to always
set
        the correct version.
```

Using GUI

Procedure: Set MAP Application Context version using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify the MAP Application Context version by entering the value in the text field 'MAP version supported'. For more details of this parameter, please refer to the description of the CLI

command for the same in the preceding section.

4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Max Message Length Reducer

Using CLI

You can set the 'Max Message Length Reducer' value by issuing the command `smsc set maxmessagelengthreducer` with appropriate parameters as described below. You can verify this by issuing the command `smsc get maxmessagelengthreducer` which will display the value set for this property.

```
Name
    smsc set maxmessagelengthreducer

SYNOPSIS
    smsc set maxmessagelengthreducer <max-message-length-reducer>

DESCRIPTION
    This command is used to set an integer value for max-message-length-reducer.
    The recommended value is 6. Possible values are numbers from 0 to 12.

    Empty TC-BEGIN will be used if the message length is greater than the maximum
    possible message length minus the value specified for max-message-length-reducer.

    (message-length > max-possible-message-length - max-message-length-reducer)

    Empty TC-BEGIN is used in MAP Version 2 and 3 for forwardSM and Mt-ForwardSM
    requests. In MAP Version 2 the dailog portion
    (ApplicationContextName, MAPOpenInfo primitive) and the component portion
    (forwardSM and mt-ForwardSM requests) may both together be too long to fit within
    a MTP message. In Empty TC-BEGIN case, it first sends the dailog portion in
    TC-BEGIN followed by the component portion in the next TC-CONTINUE.
    Whether empty TC-BEGIN is used or not depends on the length of a message and the
    length of SCCP addresses. This option increases the guarantee of delivery of a
    message  to some network.

EXAMPLES
    smsc set maxmessagelengthreducer 6
```

Using GUI

Procedure: Set Max Message Length Reducer using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs:

Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.

3. You can specify the Max Message Length Reducer by entering the value in the text field 'Max Message Length Reducer'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Pre-configured HLR address for SRI messages

Using CLI

You can set a pre-configured HLR address for SRI messages by issuing the command `smsc set hrhlrnumber` with appropriate parameters as described below. You can remove this pre-configured address by issuing the command `smsc remove hrhlrnumber`. You can verify this by issuing the command `smsc get hrhlrnumber` which will display the value set for this property.

```
Name
    smsc set hrhlrnumber
    smsc remove hrhlrnumber

SYNOPSIS
    smsc set hrhlrnumber <hlr GT digits> networkid <networkId>
    smsc remove hrhlrnumber networkid <networkId>

DESCRIPTION
    This command is used to set a pre-configured HLR address for SRI messages.

    In some scenarios it may be required to set a HLR address instead of a
    MSISDN address into the SCCP 'CalledPartyAddress' of 'SendRoutingInfo'
    requests issued by the SMSC GW in both mobile terminated and home routing
    modes. In such cases, you must set this parameter 'hrhlrnumber' to a
    pre-configured HLR address.

    For all other scenarios where this is not required, you may leave this
    parameter empty. When this is empty, the SCCP 'CalledPartyAddress' of
    'SendRoutingInfo' request will be set to the destination MSISDN of a
    subscriber.

    networkId - specifies a virtual SS7 subnetwork (this is for Multi-tenancy
    support). By using of this command with different networkIds you can
    specify hrhlrnumber for several subnetworks.
    If this parameter is skipped - networkId will be set to "0".
```

Using GUI

Procedure: Set Pre-configured HLR address for SRI messages using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify (set or remove) the Pre-configured HLR address for SRI messages by entering appropriate values for a specified networkID. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SRI responses Cache Time (in secs)

Using CLI

You can set a SRI responses Cache Time by issuing the command `smsc set sriresponselivetime` with appropriate parameters as described below. You can verify this by issuing the command `smsc get sriresponselivetime` which will display the value set for this property.

```
Name
    smsc set sriresponselivetime

SYNOPSIS
    smsc set sriresponselivetime <time in seconds>

DESCRIPTION
    This command is used to set a SRI responses Cache Time.

    SMSC GW can store successfull SendRoutinInfo (SRI) responses (with IMSI and
    NetworkNodeNumber data) into an internal cach for some configurable time.
    SMSC GW parameter "sriresponselivetime" specifies the minimum time value
    for storing of a response. Caching of SRI responses takes some system
    resources and is recommended only if you need it for some scenarious (like
    you send firstly only an SRI request and do not deliver a message just to
    understend IMSI / NetworkNodeNumber (this scenario is achieavable by mproc
    rules) and then send a message in short time if needed).

DEFAULT VALUE
    0 - this means no caching.

EXAMPLES
    smsc set sriresponselivetime 0
```

Using GUI

Procedure: Set SRI responses Cache Time using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'SS7 Settings' tab in the GUI.
3. You can specify (set or remove) the "SRI responses Cache Time (in secs)" by entering appropriate values. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cassandra Settings

You can manage Cassandra Settings using the CLI or GUI. Note that the modified settings will become effective only when the SMSC is re-started.

Cassandra Configuration - Host Addresses

Using CLI

You can set the 'host addresses' value for Cassandra settings by issuing the command `smsc set dbhosts` with appropriate parameters as described below. You can verify this by issuing the command `smsc get dbhosts` which will display the value set for this property.

```
Name
    smsc set dbhosts

SYNOPSIS
    smsc set dbhosts <host-ip>

DESCRIPTION
    This command is used to set the host-ip addresses for Cassandra Database access.

EXAMPLES
    smsc set dbhosts 127.0.0.1
```

Using GUI

Procedure: Set Cassandra Configuration - Host Addresses using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs:

Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Cassandra' tab in the GUI.

3. You can specify the host-ip address by entering appropriate values in the text field 'Host Address'. For more details of these parameters, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cassandra Configuration - Port

Using CLI

You can set the 'port' value for Cassandra settings by issuing the command `smsc set dbport` with appropriate parameters as described below. You can verify this by issuing the command `smsc get dbport` which will display the value set for this property.

```
Name
    smsc set dbport

SYNOPSIS
    smsc set dbport <port>

DESCRIPTION
    This command is used to set the host-ip address for Cassandra Database
    access. Pass comma separated values if Cassandra is setup in cluster
    and can be accessed via multiple IP's

EXAMPLES
    smsc set dbport 9042
```

Using GUI

Procedure: Set Cassandra Configuration - Port using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Cassandra' tab in the GUI.
3. You can specify the host-ip address and port by entering appropriate values in the text field 'Port'. For more details of these parameters, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cassandra Configuration - Keyspace Name

Using CLI

You can set the 'DB Keyspace Name' by issuing the command `smsc set keyspacename` with appropriate parameters as described below. You can verify this by issuing the command `smsc get keyspacename` which will display the value set for this property.

```
Name
    smsc set keyspacename

SYNOPSIS
    smsc set keyspacename <keyspacename>

DESCRIPTION
    This command is used to set the Keyspace name for Cassandra Database. If you use
    the script available in the distributive the name will be set to 'RestCommSMSC' by
    default.
```

Using GUI

Procedure: Set Cassandra Configuration - Keyspace Name using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Cassandra' tab in the GUI.
3. You can specify the Keyspace Name by entering the value in the text field 'Keyspace Name'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cassandra Configuration - Cluster Name

Using CLI

You can set the 'DB Cluster Name' value by issuing the command `smsc set clustername` with appropriate parameters as described below. You can verify this by issuing the command `smsc get clustername` which will display the value set for this property.

```
Name
    smsc set clustername

SYNOPSIS
    smsc set clustername <cluster-name>

DESCRIPTION
    This command is used to set the Cluster name for Cassandra Database. If you use
    the script available in the distributive the name will be set to 'RestCommSMSC' by
    default.

EXAMPLES
    smsc set clustername RestCommSMSC
```

Using GUI

Procedure: Set Cassandra Configuration - Cluster Name using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Cassandra' tab in the GUI.
3. You can specify the Cluster Name by entering the value in the text field 'Cluster Name'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cassandra Configuration - Removing Live Tables Days

Using CLI

You can set the 'Removing Live Tables Days' value by issuing the command `smsc set removinglivetabledays` with appropriate parameters as described below. You can verify this by issuing the command `smsc get removinglivetabledays` which will display the value set for this property.

```
Name
    smsc set removinglivetablesdays

SYNOPSIS
    smsc set removinglivetablesdays <value>

DESCRIPTION
    This command is used to configure the SMSC to automatically drop LIVE tables from
    the Cassandra Database. The SMSC will attempt to delete tables just after
    midnight and after every SMSC restart.

PARAMETERS
    removinglivetablesdays      - This parameter is used to specify the number
                      of days the LIVE tables should be kept before
                      attempting to drop them automatically.

                      If this value is specified as "0", the SMSC
                      will not drop tables automatically. In this case
                      you must manually drop tables.

                      You must specify a value of 3 or more. You can
                      not set this value to 1 or 2 days. This is to
                      ensure the tables will be kept for a minimum
                      of 2 days after creation date.

                      The SMSC wil attempt to delete tables for one
                      day. If the Cassandra Database keeps tables for
                      older days, then the administrator should drop
                      these manually.
```

Using GUI

Procedure: Set Cassandra Configuration - Removing Live Tables Days

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Cassandra' tab in the GUI.
3. You can specify the Removing Live Tables Days by entering the value in the text field 'Removing Live Tables Days'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cassandra Configuration - Removing Live Tables Days

Using CLI

You can set the 'Removing Live Tables Days' value by issuing the command `smsc set removingarchivetabledays` with appropriate parameters as described below. You can verify this by issuing the command `smsc get removingarchivetabledays` which will display the value set for this property.

```
Name
    smsc set removingarchivetabledays

SYNOPSIS
    smsc set removingarchivetabledays <value>

DESCRIPTION
    This command is used to configure the SMSC to automatically drop ARCHIVE tables
    from the Cassandra Database. The SMSC will attempt to delete tables just after
    midnight and after every SMSC restart.

PARAMETERS
    removingarchivetabledays    - This parameter is used to specify the number
                      of days the ARCHIVE tables should be kept before
                      attempting to drop them automatically.

                      If this value is specified as "0", the SMSC
                      will not drop tables automatically. In this case
                      you must manually drop tables.

                      You must specify a value of 3 or more. You can
                      not set this value to 1 or 2 days. This is to
                      ensure the tables will be kept for a minimum
                      of 2 days after creation date.

                      The SMSC wil attempt to delete tables for one
                      day. If the Cassandra Database keeps tables for
                      older days, then the administrator should drop
                      these manually.
```

Using GUI

Procedure: Set Cassandra Configuration - Removing Archive Tables Days

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Cassandra' tab in the GUI.
3. You can specify the Removing Archive Tables Days by entering the value in the text field

'Removing Archive Tables Days'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.

4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Scheduler Settings

You can modify Scheduler settings using the CLI or GUI. The modified settings for Fetch Period will become effective only when the SMSC is re-started. However modified settings for Max Rows and Max Activity Count will take effect immediately.

Fetch Period (in ms)

Using CLI

You can set the 'Fetch Period' value by issuing the command `smsc set fetchperiod` with appropriate parameters as described below. You can verify this by issuing the command `smsc get fetchperiod` which will display the value set for this property.

```
Name
    smsc set fetchperiod

SYNOPSIS
    smsc set fetchperiod <fetch-period>

DESCRIPTION
    This command is used to set the fetch period value in milli-seconds for the
    Cassandra database. The parameter fetch-period specifies the time
    period (in milli-seconds) of fetching messages for delivery from the database.
    The default value is 5 seconds.

EXAMPLES
    smsc set fetchperiod 5000
```

Using GUI

Procedure: Set Cassandra Configuration - Cluster Name using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Scheduler' tab in the GUI.
3. You can specify the Fetch Period by entering the value in the text field 'Fetch Period (in ms)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.

4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Max Rows

Using CLI

You can set the 'Max Rows' value by issuing the command `smsc set fetchmaxrows` with appropriate parameters as described below. You can verify this by issuing the command `smsc get fetchmaxrows` which will display the value set for this property.

```
Name
    smsc set fetchmaxrows

SYNOPSIS
    smsc set fetchmaxrows <fetch-max-rows>

DESCRIPTION
    This command is used to set the maximum message fetching count for every fetching
    step from the database.
    The default value is 100 messages.

EXAMPLES
    smsc set fetchmaxrows 200
```

Using GUI

Procedure: Set Max Rows using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Scheduler' tab in the GUI.
3. You can specify the Max Rows by entering the value in the text field 'Max Rows'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Max Activity Count

Using CLI

You can set the 'Max Activity Count' value by issuing the command `smsc set maxactivitycount` with

appropriate parameters as described below. You can verify this by issuing the command `smsc get maxactivitycount` which will display the value set for this property.

```
Name
    smsc set maxactivitycount

SYNOPSIS
    smsc set maxactivitycount <max-activity-count>

DESCRIPTION
    This command is used to set the maximum count of delivering activities that are
    possible at the same time. 'Count of delivering activities' means the count of
    messages that are in the state 'delivering' (messages that are fetched from the
    database and may be already sent or are going to be sent but
    no delivery acception/rejection has been received).
    When the delivery process of a message is in progress, field LIVE.IN_SYSTEM==2.

EXAMPLES
    smsc set maxactivitycount 500
```

Using GUI

Procedure: Set Max Activity Count using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Scheduler' tab in the GUI.
3. You can specify the Max Activity Count by entering the value in the text field 'Max Activity Count'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Revise period after SMSC restart

Using CLI

You can set the 'Revise period (in seconds) after SMSC restart' value by issuing the command `smsc set revisesecondsonsmscstart` with appropriate parameters as described below. You can verify this by issuing the command `smsc get revisesecondsonsmscstart` which will display the value set for this property. If unspecified, the default value for this parameter is 60 seconds.

```
Name
    smsc set revisesecondsonsmscstart <seconds>

SYNOPSIS
    smsc set revisesecondsonsmscstart <seconds>

DESCRIPTION
    This command is used to set the revise period (in seconds). After every restart,
    the SMSC Gateway will revise the last 'x' seconds before shutdown to ensure that
    all the arrived messages are processed; where 'x' is the value set in seconds
    for the parameter 'revisesecondsonsmscstart' using this command.
EXAMPLES
    smsc set revisesecondsonsmscstart 30
```

Using GUI

Procedure: Set Revise Period using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Scheduler' tab in the GUI.
3. You can specify the revise period in seconds by entering the value in the text field 'Revise period after SMSC restart (sec)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Cache timeout period

Using CLI

You can set the 'Cache timeout period' value by issuing the command `smsc set processingsmssettimeout` with appropriate parameters as described below. You can verify this by issuing the command `smsc get processingsmssettimeout` which will display the value set for this property. If unspecified, the default value for this parameter is 600 seconds. Generally, you may not have to modify this value.

```
Name
    smsc set processingsmssettimeout <seconds>

SYNOPSIS
    smsc set processingsmssettimeout <seconds>

DESCRIPTION
    This command is used to set the Cache timeout period (in seconds).
    Messages are cached in the SMSC until the processing is completed. In case of a
    delivery failure, these cached messages are force cleaned by the SMSC after
    waiting for the timeout period set for the parameter 'processingsmssettimeout'
    using this command.
EXAMPLES
    smsc set processingsmssettimeout 45
```

Using GUI

Procedure: Set Cache timeout Period using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Scheduler' tab in the GUI.
3. You can specify the Cache timeout period in seconds by entering the value in the text field 'Processing Sms set cache timeout (sec)'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Skipping of scheduled for the past and not yet sent messages ("In process" due_slot shifting).

Using CLI

This command will skip of processing / fetching of messages that was scheduled for delivering for the time in the past but have not yet delivered by SMSC GW because of SMSC GW was turned off or overloaded. <time in seconds> means the point of the time (actual current time - <time in seconds>) to which the point of processing / fetching of messages will be shifted. If the value "0" is provided this means SMSC GW will be shifted into an actual (current) time ("in process" due_slot will be shifted to "in time" due_slot). If the value is positive this means SMSC GW "in process" due_slot will be shifted into a some time in the past (for example if the value is 3600 - to the time before the current time ("in time" due_slot) for 1 hour). Negative values are not accepted. "In process" due_slot can be shifted only forward. It is not possible to shift "in process" due_slot backward (and resend messages that was already sent once).

```
Name
    smsc skipunsentmessages

SYNOPSIS
    smsc skipunsentmessages <time in seconds>

DESCRIPTION
    Executing of this command leads SMSC GW to switch "In process" due_slot
    forward to the current time or to some time before the current time.
    This is possible only if there is some lag in message processing by
    SMSC GW. This also leads of skipping of sending messages that were
    scheduled for time in the past but have not delivered so far.

EXAMPLES
    smsc skipunsentmessages 0
```

Using GUI

Procedure: Skipping of scheduled for the past and not yet sent messages ("In process" due_slot shifting) by the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Scheduler' tab in the GUI.
3. Set "Skip Unsent Messages (in sec) " field to 0 or positive value.
4. You must click on the button 'Save' that is below to skip scheduled messages. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Diameter Settings

You can modify Diameter settings using the CLI or GUI.

Destination Realm

Using CLI

You can set the 'Destination Realm' value by issuing the command `smsc set diameterdestrealm` with appropriate parameters as described below. You can verify this by issuing the command `smsc get diameterdestrealm` which will display the value set for this property.

```
Name
    smsc set diameterdestrealm

SYNOPSIS
    smsc set diameterdestrealm <value>

DESCRIPTION
    This command is used to set the Diameter Destination Realm for connection to OCS.
    Default value is "mobicents.org".

EXAMPLES
    smsc set diameterdestrealm mobicents.org
```

Using GUI

Procedure: Set Diameter Destination Realm using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can specify the Destination Realm by entering the value in the corresponding text field. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Destination Host

Using CLI

You can set the 'Destination Host' value by issuing the command `smsc set diameterdesthost` with appropriate parameters as described below. You can verify this by issuing the command `smsc get diameterdesthost` which will display the value set for this property.

```
Name
    smsc set diameterdesthost

SYNOPSIS
    smsc set diameterdesthost <value>

DESCRIPTION
    This command is used to set the Diameter Destination Host for connection to OCS.
    Default value is "127.0.0.1".

EXAMPLES
    smsc set diameterdesthost 127.0.0.1
```

Using GUI

Procedure: Set Diameter Host using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can specify the Destination Host by entering the value in the corresponding text field. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Destination Port

Using CLI

You can set the 'Destination Port' value by issuing the command `smsc set diameterdestport` with appropriate parameters as described below. You can verify this by issuing the command `smsc get diameterdestport` which will display the value set for this property.

```
Name
    smsc set diameterdestport

SYNOPSIS
    smsc set diameterdestport <value>

DESCRIPTION
    This command is used to set the Diameter Destination Port for connection to OCS.
    Default value is 3868.

EXAMPLES
    smsc set diameterdestport 3868
```

Using GUI

Procedure: Set Diameter Port using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can specify the Destination Port by entering the value in the corresponding text field. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Destination Username

Using CLI

You can set the 'Destination Username' value by issuing the command `smsc set diameterusername` with appropriate parameters as described below. You can verify this by issuing the command `smsc get diameterusername` which will display the value set for this property.

```
Name
    smsc set diameterusername

SYNOPSIS
    smsc set diameterusername <value>

DESCRIPTION
    This command is used to set the Diameter Username for connection to OCS.

EXAMPLES
    smsc set diameterdestusername svinu
```

Using GUI

Procedure: Set Diameter Username using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can specify the Username by entering the value in the corresponding text field. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

MO accepting and charging settings

Using CLI

You can set the 'MO (mobile originated) Charging' value by issuing the command `smsc set mocharging` with appropriate parameters as described below. You can verify this by issuing the command `smsc get mocharging` which will display the value set for this property.

```
Name
    smsc set mocharging

SYNOPSIS
    smsc set mocharging <accept|reject|diameter>

DESCRIPTION
    This command is used to set the value of the parameter 'moCharging' to
    an appropriate value. This value is set to "accept" by default.
    - accept - all Mobile Originated messages are accepted
    - reject - all Mobile Originated messages are rejected
    - diameter - all Mobile Originated messages are charged by OCS via
      Diameter, prior to being sent

EXAMPLES
    smsc set mocharging accept
```

Using GUI

Procedure: Set MO Charge using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can set 'Mobile Originated SMS Charged' value to true or false, in the corresponding list. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

ESME Charge Settings

Using CLI

You can set the 'ESME Originated SMS Charged' value by issuing the command `smsc set txsmppcharging` with appropriate parameters as described below. You can verify this by issuing the command `smsc get txsmppcharging` which will display the value set for this property.

```
Name
    smsc set txsmppcharging

SYNOPSIS
    smsc set txsmppcharging <none|selected|all>

DESCRIPTION
    This command is used to set the value of the parameter 'txsmppcharging' to none,
    selected or all.

    If this is set to 'all', all ESME Originated messages will be charged by OCS via
    Diameter, prior to being sent.

    If this is set to 'selected', only those messages originating from ESMEs marked
    with the parameter 'charging-enabled'=true at the time of ESME creation  will be
    charged by OCS via Diameter, prior to being sent.

    If this is set to 'none', none of the ESME Originated messages will be charged by
    OCS via Diameter, prior to being sent.

    The parameter 'txsmppcharging' is set to 'none' by default.

EXAMPLES
    smsc set txsmppcharging selected
```

Using GUI

Procedure: Set ESME Charge using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can set 'ESME Originated SMS Charged' value to none, selected or all, in the corresponding list. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

SIP Charge Settings

Using CLI

You can set the 'SIP Originated SMS Charged' value by issuing the command `smsc set txsipcharging` with appropriate parameters as described below. You can verify this by issuing the command `smsc get txsipcharging` which will display the value set for this property.

```
Name
    smsc set txsipcharging

SYNOPSIS
    smsc set txsipcharging <none|selected|all>

DESCRIPTION
    This command is used to set the value of the parameter 'txsipcharging' to none,
    selected or all.

    If this is set to 'all', all SIP Originated messages will be charged by OCS via
    Diameter, prior to being sent.

    If this is set to 'selected', only those messages originating from SIPs marked
    with the parameter 'charging-enabled'=true at the time of SIP creation  will be
    charged by OCS via Diameter, prior to being sent.

    If this is set to 'none', none of the SIP Originated messages will be charged by
    OCS via Diameter, prior to being sent.

    The parameter 'txsipcharging' is set to 'none' by default.

EXAMPLES
    smsc set txsipcharging selected
```

Using GUI

Procedure: Set SIP Charge using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can set 'SIP Originated SMS Charged' value to none, selected or all, in the corresponding list. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Home routing Charge Settings

Using CLI

You can set the 'Home routing Originated SMS Charged' value by issuing the command `smsc set hrcharging` with appropriate parameters as described below. You can verify this by issuing the command `smsc get hrcharging` which will display the value set for this property.

```
Name
    smsc set hrcharging

SYNOPSIS
    smsc set hrcharging <accept|reject|diameter>

DESCRIPTION
    This command is used to set the value of the parameter 'hrcharging' to
    an appropriate value. This value is set to "accept" by default. This
    option works like mocharging option but affects on SS7 messages in home
    routing mode from upper SMSC (mocharging affects on mobile originated
    SS7 incoming messages).
    - accept - all Home Routing originated messages are accepted
    - reject - all Home Routing originated messages are rejected
    - diameter - all Home Routing Originated messages are charged by OCS via
      Diameter, prior to being sent

EXAMPLES
    smsc set hrcharging accept
```

Using GUI

Procedure: Set Home Routing Charge using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Diameter' tab in the GUI.
3. You can set 'Home Routed SMS Charged' value to none, selected or all, in the corresponding list. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Home Routing Settings

RestComm SMSC Gateway supports Non Transparent Home Routing as explained in 3GPP 23.840 5.2.3. This option can be disabled by setting "hrcharging" option to "reject" (see Home routing Charge Settings). SMSC GW will accept SendRoutinInfo requests from a remote SMSC, then create a unique "correlationId" value for a requested MSISDN, then send SendRoutinInfo request to HLR, store received by HLR info into a cache and sends back to the remote SMSC SendRoutinInfo response with "correlationId" value in IMSI field and SMSC GlobalTytle (or another special configured GlobalTytle value) in LocationInfo field. Then SMSC GW will accept MtForwardSM messages from the remote SMSC, seaches in the cache for "correlationId" and HLR subscriber's and use this data for processing a message further.

Correlation table CC and MCC-MNC for home routing mode managing.

For home routing mode we may need to fill a special table for correlation between CC (CountryCodes) of incoming MSISDN address and MCC-MNC prefix of a generated correlationId value. CorrelationId value will be returned as IMSI in SRI response to an upper SMSC GW. As an extra field "smsc" field can be specified for each entry of this table. If this field is specified and not empty then this value will be returned as a LocationInfo in SRI response to an upper SMSC GW, else SMSC GW address will be returned. Correlation table is stored into "jboss-5.1.0.GA/server/<server instanse, for example 'default'>"/data" and has name "SmscManagement_cc_mccmnc.xml". The content of this should follow the following template:

```
<?xml version="1.0" encoding="UTF-8" ?>
  <CcMccmncCollection>
  <ccMccmncList>
    <ccMccmnc countryCode="0111" mccMnc="77702"/>
    <ccMccmnc countryCode="0222" mccMnc="9999999"/>
    <ccMccmnc countryCode="02" mccMnc="8888888" smsc="06060606"/>
    <ccMccmnc countryCode="" mccMnc="22323"/>
  </ccMccmncList>
</CcMccmncCollection>
```

The file structure consists on one or several instances of countryCode / mccMnc pairs. When SMSC GW reads a correlation table from the file (or when a user add new entries into the table) it sorts it so that the longer CountryCode values (more detailed "CountryCode") are put at first places of the list then shorter CountryCode values. For example "44779" will be before "44". First found "mccMnc" value will be used for correlationId generating. When SMSC GW receives a SRI request from an upper SMSC GW it looks throught the table, checks if incoming MSISDN digits start from countryCode value from a table entry. The last entry in the correlation table must be empty ("") countryCode value. This entry will be used as a default value. All MSISDN that are not fit to any other entries will use mccMnc of the entry of "". You can also add an optional extra field "smsc" into any record. This value will be used as LocationInfo field in SendRoutinInfo response.

Living time of elements in correlation cache

Using CLI

In home routing mode SMSC GW specifies correlationId for any recieved SRI requests from upper SMSC. After it this correlationId value and corresponded to MSISDN data are stored into internal cache and will be used for processing of next coming MtForwardSM messages from other SMSC. Correlationidlivetime value defines how much time minimum is correlationId in cache. You can set the 'correlationidlivetime' option by issuing the command `smsc set correlationidlivetime` with appropriate parameters as described below. You can verify this by issuing the command `smsc get correlationidlivetime` which will display the value set for this property.

Also pay attention that when Telestax SMSC delivers messages received under "home routing"

procedure SMSC GW will try to reuse location info and IMSI data that SMSC GW has obtained when request to HLR under "home routing" procedure. SMSC GW will try to reuse this info only till it is kept in correlationId cache. When ForwardAndStore and datagram modes this is usually achived in correlationidlivetime is 60 seconds. In StoreAndForward mode messages delivery can be started some time after messages have come to SMSC GW. This delay depends on both SMSC GW setting (first delivery attempt) and SMSC GW overloadload rate. For StoreAndForward mode we need to caluclate a proper correlationidlivetime value depending on othe SMSC setting. But do not make this value too big - this will waste memory and location info can occure too old.

```
Name
    smsc set correlationidlivetime

SYNOPSIS
    smsc set correlationidlivetime <digital option>

DESCRIPTION
    This command is used to set min time duration for which
    correlationId and corresponded data kept in cache. Max
    duratuion is two times more then correlationidlivetime.
    Value is in seconds.

    Default value: 60 (seconds).

EXAMPLES
    smsc set correlationidlivetime 90
```

Using GUI

Procedure: Setting of living time of elements in correlation cache using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Home Routing' tab in the GUI.
3. You can specify CDR generation option by selecting an appropriate value in the field "Correlation Id Cache Time (in secs)". For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Save' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Bypassing of SRI request to a local HLR

Using CLI

SMSC GW home routing procedure for each networkId area can be configured to send or do not send SendRoutinInfo request to a local HLR. This is configured by parameter "hrsribypass". Default

value is "false" - this means that SMSC GW will send SRI requests to local HLR before sending back SRI response.

Messageflow for home routing procedure when hrsribypass==false

SRI request: remote SMSC GW → Telscale SMSC GW

SRI request: Telscale SMSC GW → local HLR

SRI response: local HLR → Telscale SMSC GW

SRI response: Telscale SMSC GW → remote SMSC GW

MT request: remote SMSC GW → Telscale SMSC GW

MT response: Telscale SMSC GW → remote SMSC GW

Messageflow for home routing procedure when hrsribypass==true (SRI request to local HLR bypassing)

SRI request: remote SMSC GW → Telscale SMSC GW

SRI response: Telscale SMSC GW → remote SMSC GW

MT request: remote SMSC GW → Telscale SMSC GW

MT response: Telscale SMSC GW → remote SMSC GW You can set the 'hrsribypass' option by issuing the command `smsc set hrsribypass` with appropriate parameters as described below. You can verify this by issuing the command `smsc get hrsribypass` which will display the value set for this property.

```
Name
    smsc set hrsribypass

SYNOPSIS
    smsc set hrsribypass <digital option> networkid <networkId>

DESCRIPTION
    This command is used to set if SMSC GW will
    bypass a SRI to a local HLR.

    networkId - specifies a virtual SS7 subnetwork (this is for Multi-tenancy
    support). By using of this command with different networkIds you can
    specify hrsribypass for several subnetworks.
    If this parameter is skipped - networkId will be set to "0".
    If you have not specified hrsribypass parameter for a networkId
    then a master hrsribypass will be used (that was specified for
    networkId 0).

    Default value: false.

EXAMPLES
    smsc set hrsribypass true
    smsc set hrsribypass false networkid <networkId>
```

Using GUI

Procedure: Setting of living time of elements in correlation cache using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Home Routing' tab in the GUI.
3. You can specify hrsribypass option by selecting an appropriate value in the field "Bypassing of SRI request to a local HLR" for a specified networkId. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Save' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Create an entry for correlation table CC and MCC-MNC

Using CLI

In home routing mode SMSC GW we may need to specify the correlation table CC and MCC-MNC (Correlation table CC and MCC-MNC for home routing mode managing.). You can add an entry of this table by issuing the command `smsc hrccmccmnc add` with appropriate parameters as described below.

```
Name
    smsc hrccmccmnc add

SYNOPSIS
    smsc hrccmccmnc add <countrycode> <mccmnc> smscgt <smsc-gt>

DESCRIPTION
    This command is used to add an entry to the correlation
    table CC and MCC-MNC.
    mscgt parameter is optional. If it is missed will be set]
    to "null" value. For "null" value for <smsc-gt> we can
    to specify "-1" value in CLI.

EXAMPLES
    smsc hrccmccmnc add 2223 55322 smscgt 733211232342
```

Using GUI

Procedure: Creation an entry for correlation table CC and MCC-MNC using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Home Routing CC - MCC MNC Table' in the left panel.
2. You can add an entry of the table - you can specify "Country Code", "Mobile Country Code and Mobile Network Code", "Global Title" (optionally) and press "Add" button. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.

Modification of an entry for correlation table CC and MCC-MNC

Using CLI

In home routing mode SMSC GW we may need to specify the correlation table CC and MCC-MNC (Correlation table CC and MCC-MNC for home routing mode managing.). You can modify an entry of this table by issuing the command `smsc hrccmccmnc modify` with appropriate parameters as described below.

```
Name
    smsc hrccmccmnc modify

SYNOPSIS
    smsc hrccmccmnc modify <countrycode> <mccmnc> smscgt <smsc-gt>

DESCRIPTION
    This command is used to modify an entry to the correlation
    table CC and MCC-MNC.
    mscgt parameter is optional. If this parameter is missed mscgt
    value will not updated. To set "null" value for <smsc-gt> we
    need to specify "-1" value in CLI.

EXAMPLES
    smsc hrccmccmnc modify 2223 55322 smscgt 733211232342
```

Using GUI

Procedure: Modification of an entry for correlation table CC and MCC-MNC using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Home Routing CC - MCC MNC Table' in the left panel.
2. You can modify an entry of the table - you can specify "Country Code", "Mobile Country Code and Mobile Network Code", "Global Title" (optionally) and press "Update" button. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.

Removing of an entry for correlation table CC and MCC-MNC

Using CLI

In home routing mode SMSC GW we may need to specify the correlation table CC and MCC-MNC (Correlation table CC and MCC-MNC for home routing mode managing.). You can remove an entry of this table by issuing the command `smsc hrccmccmnc remove` with appropriate parameters as described below.

```
Name
    smsc hrccmccmnc remove

SYNOPSIS
    smsc hrccmccmnc remove <countrycode>

DESCRIPTION
    This command is used to remove an entry to the correlation
    table CC and MCC-MNC.

EXAMPLES
    smsc hrccmccmnc remove 2223
```

Using GUI

Procedure: Removing of an entry for correlation table CC and MCC-MNC using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Home Routing CC - MCC MNC Table' in the left panel.
2. You can delete an entry of the table you - can specify "Country Code" and press "Delete" button. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.

Displaying of an entry / full list of correlation table CC and MCC-MNC

Using CLI

In home routing mode SMSC GW we may need to specify the correlation table CC and MCC-MNC (Correlation table CC and MCC-MNC for home routing mode managing.). You can observe an entry or a full list of this table by issuing the command `smsc hrccmccmnc show` with appropriate parameters as described below.

```
Name
    smsc hrccmccmnc show

SYNOPSIS
    smsc hrccmccmnc show <countrycode>

DESCRIPTION
    This command is used to display of content of an entry
    or a full list of the correlation table CC and MCC-MNC.
    <countrycode> is an optional parameter. If you specify
    it data for only this entry will be displayed. If not
    - data for all entries of that table.

EXAMPLES
    smsc hrccmccmnc show 2223
```

Using GUI

Procedure: Displaying of an entry for correlation table CC and MCC-MNC using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Home Routing CC - MCC MNC Table' in the left panel.
2. You can view content of an entry of the table you or of all table. For viewing of one entry you need to specify "Country Code". Then press "View" button. Results will be shown in the bottom of the screen For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.

CDR

CDR generation

Using CLI

SMSC GW can store CDR records for each delivered or failed for delivering messages into log file (see [_cdr_logging_settings]). Which records will be stored is defined by 'generatecdr' SMSC option. You can set the 'generatecdr' option by issuing the command `smsc set generatecdr` with appropriate parameters as described below. You can verify this by issuing the command `smsc get generatecdr` which will display the value set for this property.

```
Name
    smsc set generatecdr

SYNOPSIS
    smsc set generatecdr <digital option>

DESCRIPTION
    This command is used to set which messages (or none) will be stored into
    CDR log file. Details of CDR log format can be found in "8.2. CDR Log"
    Options will have following bits values:
    bit 1 - records will be done for SMPP originated messages with datagramm
            mode
    bit 2 - records will be done for SMPP originated messages with
            transactional mode
    bit 4 - records will be done for SMPP originated messages with
            storeAndForward mode and for all SS7 or SIP originated messages
    Value 0 will mean store none and value 7 - store all.
    Default value: 7 (store all)

EXAMPLES
    smsc set generatecdr 7
```

Using GUI

Procedure: Set CDRs generation SMSC option using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify CDR generation option by selecting an appropriate value in the field "CDR generation". For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Archive table generation

Using CLI

SMSC GW can store CDR records for each delivered or failed for delivering messages into special archive tables of cassandra database. Names of such tables have the following format: MESSAGES_yyyy_mm_dd. You can refer to fields definitions in [_messages_yyyy_mm_dd] chapter. Which records will be stored is defined by 'generatearchivetable' SMSC option. You can set the 'generatearchivetable' option by issuing the command `smsc set generatearchivetable` with appropriate parameters as described below. You can verify this by issuing the command `smsc get`

`generatearchivetable` which will display the value set for this property.

```
Name
    smsc set generatearchivetable

SYNOPSIS
    smsc set generatearchivetable <digital option>

DESCRIPTION
    This command is used to set which messages (or none) will be stored into
    archive tables. Options will have following bits values:
    bit 1 - records will be done for SMPP originated messages with datagramm
            mode
    bit 2 - records will be done for SMPP originated messages with
            transactional mode
    bit 4 - records will be done for SMPP originated messages with
            storeAndForward mode and for all SS7 or SIP originated messages
    Value 0 will mean store none and value 7 - store all.
    Default value: 7 (store all)
EXAMPLES
    smsc set generatearchivetable 7
```

Using GUI

Procedure: Set archive table CDRs generation SMSC option using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify archive table CDR generation option by selecting an appropriate value in the field "Archive table generation". For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Generate CDR for Receipt Messages

Using CLI

You can set the 'generatereceiptcdr' value to true/false by issuing the command `smsc set generatereceiptcdr` with appropriate parameters as described below. You can verify this by issuing the command `smsc get generatereceiptcdr` which will display the value set for this property.

```
Name
    smsc set generatereceiptcdr

SYNOPSIS
    smsc set generatereceiptcdr <true | false>

DESCRIPTION
    The SMSC can be configured to generate CDR for both receipt and regular messages
    or generate CDR only for regular messages. By default the SMSC will generate CDR
    for regular messages only. However if you require the SMSC to generate CDR for
    receipt messages as well, you must set the parameter 'generatereceiptcdr' to true.
```

Using GUI

Procedure: Set 'generate CDR for receipt messages' using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Properties' tab in the GUI.
3. You can specify if the SMSC should generate CDR for receipt messages by choosing the value true for the field 'Generate receipt CDR'. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Processing

SMSC pausing

Using CLI

A user can pause SMSC for message delivering by issuing the command `smsc set deliverypause` with appropriate parameters as described below. When SMSC delivery is paused no more messages are scheduled for delivering. When SMSC is configured in ForwardAndStore (fast) mode all incoming messages will be rejected. When SMSC is configured in StoreAndForward (normal) mode datagramm and transactional SMPP originated messages will be rejected but StoreAndForward SMPP originated and all SS7 / SIP originated messages will be stored into cassandra database without delivery attempts. Use this option with extreme caution.

```
    Name
        smsc set deliverypause

    SYNOPSIS
        smsc set deliverypause <true|false>

    DESCRIPTION
        Setting to true puts SMSC GW into a pause mode and setting to false
        (default value) returns SMSC GW to a normal message processing.
    EXAMPLES
        smsc set deliverypause true
```

Using GUI

Procedure: Pause SMSC using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. You can select "true" or "false" value. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
3. You must click on the button 'Apply Changes' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Disabling of Reciepts generating

Using CLI

SMCS can generate receipts of messages delivering results (success / error). See chapter "Appendix B. Delivery Receipt Format" of "Short Message Peer to Peer. Protocol Specification v3.4." You can set the 'receiptsdisabling' value to true/false by issuing the command `smsc set receiptsdisabling` with appropriate parameters as described below. You can verify this by issuing the command `smsc get receiptsdisabling` which will display the value set for this property.

```
Name
    smsc set receiptsdisabling

SYNOPSIS
    smsc set receiptsdisabling <true | false>

DESCRIPTION
    The SMSC can be configured to generat or not delivery receipts.
     Setting of receiptsdisabling to false enables of receipts generation.
     Setting of receiptsdisabling to true disables of receipts generation.
     Default value: false (receipts will be generated).
```

Using GUI

Procedure: Disabling of Reciepts generating using the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs: Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Processing' tab in the GUI.
3. You can specify if the SMSC should disable of receipt generating by setting the value for the field 'Disable Delivery Receipt' to true or false accordingly. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Save' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.

Routing of delivery receipts

Using CLI

If this option is turned on for each generated delivery receipt networkId will be assigned to the value of networkId of an ESME via which the original message has come to SMSC. This can help for routing of receipts back to the originated ESME. If this option is turned off then the networkId of receipts will be taken from networkId of ESME / SS7 / SIP via which the original message has left SMSC GW. You can configure this option by issuing the command smsc set orignetworkidforreceipts with appropriate parameters as described below.

```
Name
    smsc set orignetworkidforreceipts

SYNOPSIS
    smsc set orignetworkidforreceipts <true | false>

DESCRIPTION

    Settings of this option will affect of which networkId will be assigned
    to a message delivery receipt.
    true: networkId of the connector via which an original message has
          left SMSC GW
    false: networkId of the connector via which an original message has
           come SMSC GW. This value is default.
```

Using GUI

Procedure: Routing of delivery receipts option update by the GUI

1. In the GUI Management Console for SMSC Gateway, click on 'Server Settings' in the left panel.
2. The main panel will display the existing Settings, segregated into eight horizontal tabs:

Properties, SS7 Settings, Cassandra, Scheduler, Diameter, Processing, CDR and Home Routing. Switch to the 'Processing' tab in the GUI.

3. You can specify routing of delivery receipts by setting the value for the field 'Delivery receipts will be routed to the origination networkId' to true or false accordingly. For more details of this parameter, please refer to the description of the CLI command for the same in the preceding section.
4. You must click on the button 'Save' at the top of the window to save your settings. If there is an error in setting the value, then you will find the details of the error in the Management Console Log section below.