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# Frequently Asked Questions

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This section provides solutions to frequently asked questions (FAQs) about the SBC Core systems.

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## How do I transfer files from one unit to the other?

You can transfer files from one unit of a HA pair to the other (this comes in handy for large files that you may have to send over a slow VPN), using SCP and port 2024.

Beginning with release 3.1, file transfers must be performed using SFTP on port 2024. Use the following steps as a guide (default login/password is sftpadmin/sftpadmin):

1. From the source SBC, login to Linux shell using sftpadmin/sftpadmin and change directory to where the file is located.
2. Connect to target SBC. In this example, SBXa is the source and SBXb is the target SBC.

```
sftpadmin@SBXa$ sftp -oPort=2024 sftpadmin@SBXb
Connecting to SBXb
sftpadmin@SBXb's password: sftpadmin
Connected to SBXb
```

3. Use the put command to transfer a file to the specified directory as shown in the example below.

```
sftp> put sbc-V03.01.00-R000.x86_64.tar.gz /opt/sonus/external
```

## How do I block certain country codes?

Create a Class of service BLOCK\_COUNTRY\_CODES. This will contain the country codes to block, and also not hit the "Non Subscriber" call blocking.

Associated this class of service with the trunk group that is originating the calls (that you wish to block calls to certain country codes)

**Example:**

```
% show profiles services classOfService
BLOCK_COUNTRY_CODES
screening {
script "";
}
blocking { service enable; entry "" 20 {
callType internationalType;
}
entry "" 27 {
callType internationalType;
}
} nonSubscriberCallTypeFiltering private,nationalOperator,localOperator,nationalType,internationalType
,internationalOperator,longDistanceOperator,ipVpnService,test,transit
,otherCarrierChosen,carrierCutThrough,userName,mobile;
set addressContext default zone zonePublicTrunking sipTrunkGroup
APBX5TEST policy services classOfService BLOCK_COUNTRY_CODES
```

## How do I display numbers in the routing table?

To display all numbers:

```
admin@DFWNBS01a> show table global callRouting route
```

To display numbers to a certain route label:

```
admin@DFWNBS01a> > show table global callRouting route routingLabel TO_BLUECARRIER
```

ELEMENT	ELEMENT	ELEMENT	ROUTING	DESTINATION	DESTINATION	CALL	DIGIT	TIME	CALL
DOMAIN	ROUTING					PARAMETER		RANGE	FILTER
TYPE	ID1	ID2	TYPE	NATIONAL	COUNTRY	TYPE	TYPE	PROFILE	PROFILE
NAME	LABEL								
trunkGroup	BLUECARRIER	BASSBC01	standard	9723014999	1	all	all	ALL	none
Sonus_NULL	TO_BLUECARRIER								
trunkGroup	BLUECARRIER	BASSBC01	standard	9723014111	1	all	all	ALL	none
Sonus_NULL	TO_BLUECARRIER								
trunkGroup	CISCOCORE	BASSBC01	standard	Sonus_NULL	1	all	all	ALL	none
Sonus_NULL	TO_BLUECARRIER								
trunkGroup	TIHO_TRK	BASSBC01	standard	Sonus_NULL	1	all	all	ALL	none
Sonus_NULL	TO_BLUECARRIER								

To display a specific number:

```

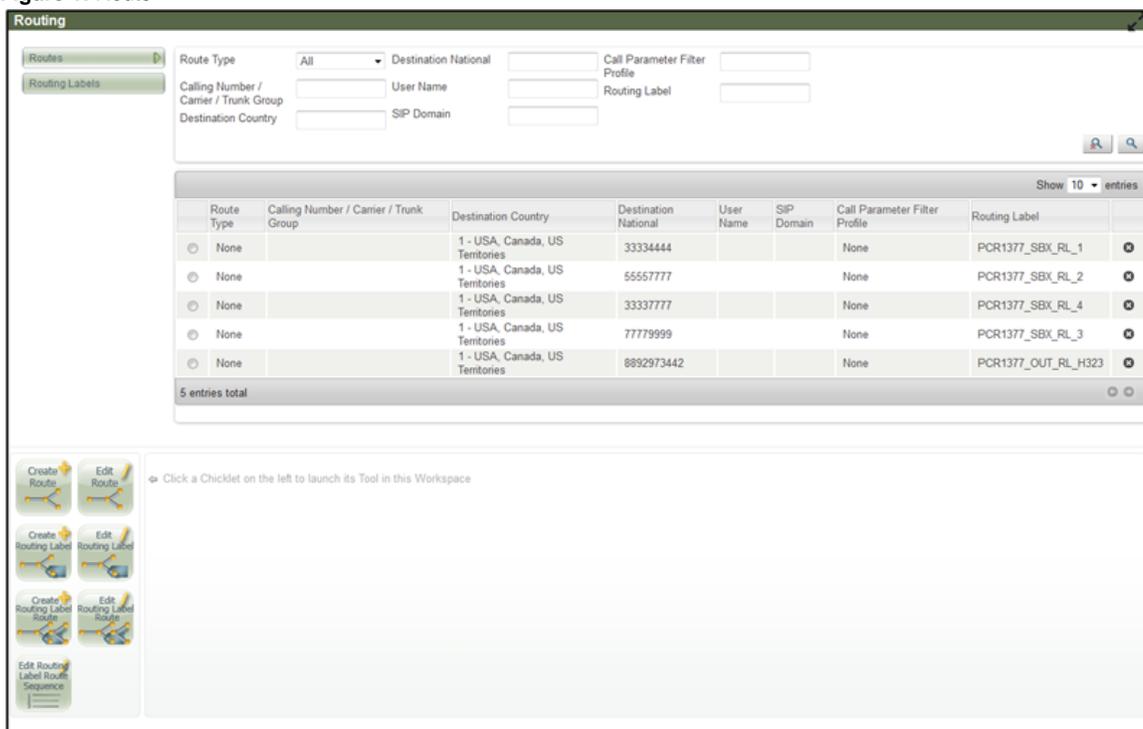
admin@DFWNBS01a> show table global callRouting route trunkGroup BLUECARRIER BASSBC01 standard
9723014999

ELEMENT          ELEMENT          ELEMENT  ROUTING  DESTINATION  DESTINATION  CALL DIGIT  TIME          CALL
DOMAIN           ROUTING                                     RANGE      PARAMETER
TYPE             ID1             ID2      TYPE     NATIONAL    COUNTRY      TYPE TYPE    PROFILE  FILTER
NAME            LABEL

-----
trunkGroup BLUECARRIER BASSBC01 standard 9723014999 1          all all    ALL     none
Sonus_NULL  TO_BLUECARRIER
  
```

You can also do a search from the EMA GUI. To view the Routing workspace, see [Call Routing: System Provisioning - Routing](#).

**Figure 1: Route**



**How do I display the status of all the trunk groups in a Zone?**

```

admin@DFWNBS01a> show status addressContext default zone zonePublicTrunking trunkGroupStatus
trunkGroupStatus APBX5TEST {
state inService;
totalCallsAvailable50;
totalCallsInboundReserved0; inboundCallsUsage0; outboundCallsUsage0;
totalCallsConfigured50; priorityCallUsage0; totalOutboundCallsReserved
0; bwCurrentLimit-1; bwAvailable-1; bwInboundUsage0; bwOutboundUsage0;
packetOutDetectStatenormal;
}
trunkGroupStatus TKSOFTWARE {
state inService;
totalCallsAvailable10;
totalCallsInboundReserved0; inboundCallsUsage0; outboundCallsUsage0;
totalCallsConfigured10; priorityCallUsage0; totalOutboundCallsReserved
0; bwCurrentLimit-1; bwAvailable-1; bwInboundUsage0; bwOutboundUsage0;
packetOutDetectStatenormal;
}

```

## How do I display trunk group configuration data?

You can view the trunk group configuration data using the CLI.

```

admin@DFWNBS01a> show table addressContext default zone zonePublicTrunking

sipTrunkGroup APBX5TEST
state enabled; mode inService; policy {
carrier0000;
country1; sipDomain""; localizationVariant northAmerica; digitParameterHandling {
numberingPlanNANP_ACCESS; ingressDmPmRule ""; egressDmPmRule"";
}
callRouting {
elementRoutingPriority DEFAULT_IP;
}
media {
packetServiceProfile pspMediaRelay;
}
services {
classOfService BLOCK_COUNTRY_CODES;
}
signaling {
ipSignalingProfile PBX_SIP;
}
}
cac {
callLimit 50;
}
signaling {
methods {
message reject;
publish reject; subscribe reject; notify reject; info reject; register reject; update reject;
}
}
media {
mediaIpInterfaceGroupName customerPublic;
}

```

## What if my video calls are not working?

Check following:

1. Video bandwidth:
  - a. Check CAC configuration
  - b. Check reduction factor
2. Passthrough calls are permitted:
  - a. Check Packet Service Profile flags (no transcode option)
  - b. No convert mode for Late Media video calls
3. Codec List Profile – check if codecListProfile manipulation results in no coded in offer/answer
4. Ingress/Offered SDP – check if video m -line is present

## How do I import a ".cli" script file from the EMA GUI?

This mechanism can be used to speed up the process of configuring the SBC. A script file can be prepared (based on specific data from other existing systems) and then imported into the SBC. For example you could create a trunk group and routable numbers for one particular customer in one script file. You then import this script, and the customer is fully provisioned and ready to go.

The ".cli" file contains CLI commands, exactly of the same format as typing in the commands from the CLI. It should be in text format only. Note that the default behavior of the system is to interpret "spaces" as a request for auto-completion, so that extra spaces in your ".cli" file will cause errors. You can turn this function off by using the CLI command:

```
> set complete-on-space false
```

### Steps:

1. Create text file with CLI commands. It is best to use Microsoft WordPad (should not use Word). This file must start with "configure" and end with "commit". Name of file must end in ".cli". Note that this is case sensitive ".CLI" will not work. Also note you may need to save the file as "text", then rename the file to end in ".cli".
2. Include the "commit" command after each five CLI commands.
3. On the SBC main screen, navigate to **Administration > System Administration > Configuration Import/Export**. The Configurations window is displayed.

For more information on upload configuration, refer to [Configuration Import/Export - Upload Configuration](#).

See example CLI script to create a new trunk group and routing information "CLI Script Creates Trunk Group and Routes" on page [Reference Configuration](#).

## How do I delete a specific routed number via CLI?

You must put in the full routing data involving the number to delete it via the CLI.

```
admin@DFWNBS01a% delete global callRouting route none Sonus_NULL Sonus_NULL standard 2144761510 1 all  
all ALL none Sonus_NULL
```

## How do I delete a Trunk Group?

The trunk group must be disabled and out of service before you can delete it.

```

admin@SBC01a% set addressContext default zone zonePublicTrunking sipTrunkGroup "PURDUERES_7655883470 "
state disabled mode outOfService
admin@SBC01a% commit

admin@SBC01a% delete addressContext default zone zonePublicTrunking sipTrunkGroup "PURDUERES_7655883470
"
admin@SBC01a% commit

```

## How do I turn Globalization (+1) on and off per trunk group

You may need to send Globalized numbers out to a carrier trunk group, while stripping the +1 off calls that are sent to PBX trunk groups. This is accomplished via the trunk groups IP Signaling Profile. Within the IP signaling profile there is a Globalization profile. On the trunk group that needs Globalization, the IP signaling profile should contain a Globalization Profile that enables globalization. On the trunk group that globalization should not occur, a different IP Signaling profile is needed (one that has a Globalization profile that disables globalization).

You can also remove the numberGlobalizationProfile from the IP signaling profile that does not need Globalization (if you did not need any of the settings).

 Using the DM-PM rule SIP\_REMOVE\_PLUS1 does not work if globalization is turned on.

### Trunk group example:

1. Associate an IP Signaling Profile which has Globalization Profile turned off to the trunk group.

```

% set addressContext default zone zonePublicTrunking sipTrunkGroup DECA_3175672646 policy
signaling ipSignalingProfile PBX_SIP
% commit

```

2. Verify change, where NO\_GLOBAL is a profile that does not globalize any numbers.

```

> show configuration profiles signaling ipSignalingProfile PBX_SIP
egressIpAttributes {
  numberGlobalizationProfile NO_GLOBAL;
  flags {
    bgcfTargetSchemeTransparency disable;
  }
}

> show configuration profiles signaling numberGlobalizationProfile NO_GLOBAL
entry calledNumber {
  digitType      all;
  countryCodeSource destination;
  globalize      disable;
}

```

(the above results are shortened for brevity)

## How do I display the status of the HA ports?

Check the states of these ports after initial system configuration to ensure the fibers are installed correctly and the two units are communicating.

```
admin@SBC01a> show status system highAvailabilityPort status DFWNBS01a haPort1 {
macAddress      00:10:1b:01:11:1c;
ipAddress       0.0.0.0;
negotiatedSpeed speed1000Mbps;
oosReason       na;
```

## How do I display registered users (Access configuration)?

The SBC can cache Registration information by turning on the Trunk Group field "Require Registration". It is often useful to display the users that have successfully Registered.

```
% show status addressContext default sipRegCountStatistics
% show status addressContext default sipActiveRegNameStatus
```

## How do I ping from various interfaces?

Sometimes it is handy to test IP connectivity from the various interfaces on the SBC platform. Use the Ping utility from the EMA:

1. Login to EMA and select Tools > Ping tab.

Platform Admin SW Install Security Statistics Logs Tools Up

Ping ifConfig Traceroute Runtime Diagnostic Tests Chassis Locator LED SBC Diff Tool TShark

Ping from Platform Interfaces

1. Enter IP address to ping.  
2. Select IP version4 or IP version 6.  
3. Select Platform interface to ping from.  
4. Press ping button.

IP Address  IPV4 IPV6 Interface  Ping IP address

Ping Results

Open BMC Open Peer Open EMA

2. Enter IP address to ping.
3. Select IPV4 or IPV6 option.
4. Select platform interface to ping from.
5. Press **Ping IP address**. Results display in Ping Results window similar to below example.

In the above example, IP addresses are intentionally blurred.

## How do I view user types and passwords?

On the SBC Application (accessed by the EMA and the CLI), various types of users are predefined. Each type of user has different capabilities. Please see [Managing SBC Core Users and Accounts](#) for details.

To add a new user or reset password from the EMA GUI, perform following:

1. On the SBC main screen, navigate to **Administration > Users and Application Management > User and Session Management**.
2. From **User and Session Management** window, select user or click appropriate Edit/Add/Delete icon.



To add a new user from CLI:

```
% set oam localAuth user <user_name> group <group_name>
```

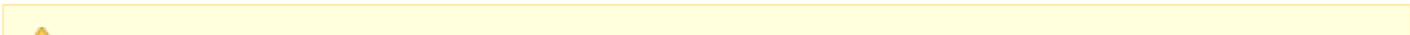
## How do I change default passwords?

Some customers may require that all default passwords are changed. The default passwords and method to change them are described at [Managing SBC Core Users and Accounts](#).

## How do I view media range (base and max)?

To check the range of ports that used for media:

```
admin@SBC01A > show configuration system media mediaPortRange baseUdpPort baseUdpPort 1024;
admin@SBC01B > show configuration system media mediaPortRange maxUdpPort maxUdpPort 65148;
```



 Port 5060 is reserved for SIP and is automatically excluded.

## How do I set up billing to transfer to SFTP server?

You can set up to transfer CDR to an off board SFTP server on a regular basis, for example once per hour.

1. Set up the cdrServer. Information needed are the IP address, user name, password, file name extension, and the path on the server where the billing files will be stored.
  - The full path should be given "/export/home/billing"
  - The file name extension can be the name of the System, for
  - example "DALNBS01"

```
admin@DALNBS01a> show table oam accounting cdrServer admin
```

2. Set up the duration for the accounting logs to rollover to the next file (for example 60 minutes).
  - Set a start time of the format "2011-08-24T18:00:00"
  - Set rollover type to "repetitive"
  - Set rollover action to "start"

```
admin@DALNBS01a> show table oam eventLog typeAdmin acct
```

3. Check the status of the transfer:

```
admin@DALNBS01a> show table oam accounting cdrServer s
```

## If I have multiple SIP Signaling Ports configured in a Zone, which is the source IP when sending a request to a peer?

As a best practice, Sonus recommends configuring one signaling port per zone. The SBC chooses a port (usually the first port) in the zone for outbound connections. However, the SBC cannot enforce the use of a specific signaling port within the zone to initiate a call on a trunk group. The trunk is assigned to a zone and not to a signaling port in the configuration model. To associate a unique source port for each trunk group, create separate zones defining a single signaling port per zone.

## How many routes per call does the ERE support?

The ERE returns up to 10 routes. If more than 10 routing label routes are created, only the first 10 in-service routes are returned.

## If I replace my CDR server but keep the same IP address, are any changes needed on SBC?

The SBC writes CDRs locally, and simply transfers them using SFTP to the CDR server (for example, DSI L0 server) based on the IP address listed in CDR server settings on the SBC. If you replace the CDR server with another server, but maintain the same IP address and user settings, no change is needed on the SBC.

## Does SBC HA use a heartbeat scenario to talk to the other box?

The SBC uses Transparent Inter-process Communication (TIPC) to monitor several processes and applications running on the opposite server.

## I am using Linux shell 'top' command and see CPU utilization over 100% for a process. What does this

## mean?

The **top** command returns the sum of CPU utilization by all threads within a process. The SBC is a multi-core system, and the process in question is utilizing more than one core. For more accurate results, use **top -H** command to see process utilization per core/thread.

## Is there a simple way to compare my CLI configuration settings against the default values?

Yes! You can view both configured values and defaults using the 'show' command. First, turn on default values setting using the following 'set' command:

```
set show defaults true
```

Next, enter your 'show configuration' command:

```
show configuration <one or more list objects>
```

 Refer to [CLI System-Level Mode](#) for details.

## Can I install custom Linux scripts or make other OS level changes?

NO! SBC Core is a closed network device. Customer modifications at the Linux level are not allowed or supported. These modifications can cause stability, update and fail-over issues on SBC platform. Customers must ONLY configure the SBC using the [supported interfaces](#)(CLI, REST, EMA, EMS).

## How may CLI 'set' commands can I commit at one time?

 As a best practice, issue a [commit](#) command after each group of approximately 10 [set](#) commands is entered.

## How do I monitor IP addresses of users logged into the SBC?

Login to the EMA and navigate to Administration > Users and Application Management > User Management window and view User Sessions table.

## What is the maximum number of DM/PM rules allowed on the ERE?

The ERE does not limit the number of DM/PM rules.

## Can I configure the SBC to send CDRs to multiple primary CDR servers?

Currently, the SBC only supports one one primary and one secondary CDR server.

## Why can I not read OIDs directly from the MIB tables?

The OIDs are indexes in the MIB tables, and indexes are not readable using SNMP GET requests. The SNMP GETNEXT requests are used to find out what indexes are currently present in the MIB tables. For more information, refer to the section [How to Retrieve Sonus Enterprise MIB OIDs](#).

