



Cisco BTS 10200 Extended Read Access Commands

For Release 4.x.

August 3, 2007

Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100



THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0601R)

Cisco BTS 10200 Extended Read Access Commands
Copyright © 2007 Cisco Systems, Inc. All rights reserved.



Preface 5

- Audience 5
- Modification History 5
- Related Documentation 6
- Obtaining Documentation 6
 - World Wide Web 6
 - Documentation CD-ROM 6
 - Ordering Documentation 6
 - Documentation Feedback 7
- Obtaining Technical Assistance 7
 - Cisco.com 7
 - Technical Assistance Center 7
 - Contacting TAC by Using the Cisco TAC Website 8
 - Contacting TAC by Telephone 8

CHAPTER 1

- Accessibility 1
- Telephone Number Resolution 1
- Strategy 1

CHAPTER 2

- Command List 1
- Command Descriptions 2
 - Account ID 2
 - Directory Number 2
 - Directory Number by Subscriber 2
 - Line Features by Directory Number 3
 - Feature Summary by Directory Number 4
 - Speed Dial Settings by Directory Number 4
 - Domestic Long Distance Blocking for a Subscriber or Account 5
 - International Long Distance Blocking Setting for a Subscriber or Account 5
 - Directory Assistance Blocking for a Subscriber or Account 6
 - Operator Assistance Blocking setting for a subscriber or account 6
 - Retrieve a List of Call Hunt Groups Associated with a Subscriber or Account 7
 - Hunting Sequence of Directory Numbers by Hunt Group 7
 - List Directory Numbers that Do Not Belong to a Hunt Group 8

Outbound Caller ID with Name Value by Directory Number	8
Command Format	9
Directory Numbers by Subscriber	9
Line Features by Directory Number	10
Subscriber Feature Summary by Directory Number	11
Speed Dial Settings by Directory Number	11
Domestic Long Distance Blocking for a Subscriber or Account	12
International Long Distance Blocking Setting for a Subscriber or Account	12
Directory Assistance Blocking for a Subscriber or Account	13
Operator Assistance Blocking setting for a subscriber or account	13
Retrieve a List of Call Hunt Groups Associated with a Subscriber or Account	14
Hunting Sequence of Directory Numbers by Hunt Group	14
List Directory Numbers that Do Not Belong to a Hunt Group	15
Outbound Caller ID with Name Value by Directory Number	15



Preface

This document describes the new targeted collated read capability commands implemented in the Cisco BTS 10200 Softswitch. These unique commands are designed to provide specific access to data that spans several tables and has a variety of rules that manages the collation of the returned rows of data.

Audience

This guide is designed for Cisco BTS 10200 Softswitch users and system administrators.

Modification History

[Table 1](#) lists the modifications made to this document.

Table 1 *Document Release Notation*

Release	Information is Noted As:
4.5.1	DN is obsolete for the SUB_DA_BLOCK, SUB_INTL_BLOCK and SUB_OPER_BLOCK commands.
Version 2	Added CNAM, VM and VMA command responseses, CFU_NUMBER is now CFU_TO_NUMBER. CFNA_NUMBER is now CFNA_TO_NUMBER. CFB_NUMBER is now CFB_TO_NUMBER. THREE_WAY_CALLING is now THREE_WAY_CALLING_FLAG. CALL_TRANSFER is now CALL_TRANSFER_FLAG. CID_ACTIVE is now CID_NAME_FLAG. SPEED_DIAL_ACTIVE is now SPEED_DIAL_ACTIVE_FLAG.
All	Not noted.

Related Documentation

Related documentation includes the following:

- *Cisco BTS 10200 Softswitch Command Line Interface Reference Guide*
- *Cisco BTS 10200 Softswitch System Description Manual*
- *Cisco BTS 10200 Softswitch Operations, Maintenance and Troubleshooting Manual*
- *Release 4.1, 4.2, 4.4, or 4.5 Release Notes*

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:
http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
<http://www.cisco.com/go/subscription>
- Nonregistered CCO users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click Feedback in the toolbar and select Documentation. After you complete the form, click Submit to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

Cisco Systems, Inc.
Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.cisco.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

<http://www.cisco.com/register/>

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.



Accessibility, Resolution and Strategy

This chapter describes the accessibility, telephone number resolution and strategy options for the Extended Read Access Commands (ERAC).

Accessibility

These commands are accessible through the following Cisco BTS 10200 Softswitch adapters:

- CLI and MAINT shells
- CORBA/XML adapters
- EPOM (uses CORBA/XML)
- SPA

Read access is not permitted in the bulk provisioning adapter. Likewise, the Simple Network Management Protocol (SNMP) adapter does not allow management of provisioning data.

Telephone Number Resolution

The directory number (DN) or telephone number (TN) refers to the same entity in the Cisco BTS 10200 Softswitch. These terms may be used interchangeably in the context of this document. To provide a consistent view, the TN is pulled from the database in the EC and NDC field of the BTS 10200 Office Code table and the DN field from the DN2 Subscriber table. This is a concatenation of 14 (or less) digits. When a command requires a TN, this is the fully qualified TN format that must be supplied. Commands will fail if a partial TN is supplied.

Strategy

The basic strategy for implementation each of these commands is to provide a static implementation of a complex read against the database using prepared SQL statements. This optimization of SQL combined with complex multitable and nested SELECT(s) yield a fast composite of data that would otherwise require several dips to the database in addition to extended back end post processing of the data.



Commands

This chapter describes the standard commands that provide specific data views into the Cisco BTS 10200 Softswitch.

Command List

Standard commands utilize the facilities of the Cisco BTS 10200 Softswitch with respect to the infrastructure. They utilize the same resources that exist for even the most basic of commands. The specific commands are:

- Retrieve a list of TNs for a given subscriber
- Retrieve a feature summary for a given DN or subscriber
- Retrieve the line features for a given DN including:
 - Call forward no answer
 - Call forward busy
 - Call forward unconditional
 - Call waiting
 - Three way calling
 - Call transfer
- Retrieve speed dial settings for a given DN
- Retrieve domestic long distance blocking settings for a subscriber
- Retrieve international long distance blocking settings for a subscriber
- Retrieve directory assistance blocking setting for a subscriber
- Retrieve operator assistance blocking setting for a subscriber
- Retrieve a list of call hunt groups associated with a subscriber
- For a given hunt group, display the hunting sequence of DNs
- Retrieve a list of TNs that do not belong to any hunt group
- Retrieve the outbound caller id with name value for a given DN

**Note**

The commands allow for standard wild card support so that when a subscriber, subscriber account code, or DN is specified, the value supplied can contain the wild card percent (%) search criteria. Use caution for these cases. A wildcard pattern can return a large pool of data and can contain data that is not relevant to the desired operation.

Command Descriptions

This section explains the standard commands and their associated parameters. Several of the components are directly associated with columns from a specific Cisco BTS 10200 Softswitch table. However, there are several parameters that are derived from multiple sources and do not map directly to a table. They may have a real database representation but may be modified here for ease of use or readability.

Account ID

An account id can be assigned to one or more subscribers. An account id is used only for identification purposes. The account id is not associated with feature grouping behavior during call processing. The account id is included in billing record. This is for operational identification purpose only.

This is an optional field of 1 to 20 text characters.

Directory Number

The directory number (DN) is a reference to the telephone number. This number is a derived value composed of the office_code.ndc, office_code.ec and the dn2subscriber.dn fields. It is a concatenation to provide a consistent view of the primary directory number for a subscriber. It consists of 1 to 14 numeric characters.

Directory Number by Subscriber

This command returns a list of all DNs associated with a specified subscriber or account id. In this command, the subscriber id field or the new account_id field determines the DN(s) to list. Each row of data represents a DN entry. The additional data is supplied to provide further information about the DN.

The command returns the following parameters. This is a specific subset of data from the actual Cisco BTS 10200 Softswitch tables.

- DN (derived value)
- SUBSCRIBER.ID
- SUBSCRIBER.NAME
- SUBSCRIBER.ACCOUNT_ID
- SUBSCRIBER.MGW_ID
- SUBSCRIBER.TERM_ID

Line Features by Directory Number

This command returns a list of all features associated with a specified DN. In this command the DN is supplied to qualify the data search. The features listed below are examples of the type of data returned. These features are determined from the subscriber who has the designated DN as the primary directory number.

- CFNA
- CFB
- CFU
- CW
- TWC
- CT
- CNAM
- VM
- VMA

The data returned is not in the form of services and service packages. This query dips into the service packages and finds the actual features associated with each service assigned to the DN and its subscriber. The resulting data is the feature list. This list is returned as keys to the Feature table. The complete list of parameters returned from execution of this command are:

- DN (derived value)
- SUBSCRIBER.ID
- SUBSCRIBER.ACCOUNT_ID
- SUBSCRIBER.TERM_ID
- SUBSCRIBER.MGW_ID
- SUBSCRIBER.COSRESTRICT_ID
- SUBSCRIBER.NAME
- SUBSCRIBER.PRIVACY
- MGW.CALL_AGENT_ID
- CFU_ACTIVE (derived value)
- CFU_TO_NUMBER (derived value)
- CFNA_ACTIVE (derived value)
- CFNA_TO_NUMBER (derived value)
- CFNA_TIMEOUT (derived value)
- CFB_ACTIVE (derived value)
- CFB_TO_NUMBER (derived value)
- VM_ACTIVE (derived value)
- VMA_ACTIVE (derived value)
- CALL_WAITING (derived value)
- THREE_WAY_CALLING_FLAG (derived value)
- CALL_TRANSFER_FLAG (derived value)

- CID_NAME_FLAG (derived value)
- SPEED_DIAL_ACTIVE_FLAG (derived value)

Feature Summary by Directory Number

This command returns the list of all features associated with a specified entity. In this command the DN, Subscriber ID or Account ID is supplied to qualify the data search. The command returns the list of all the services of the associated subscriber or DN and all features associated with each specific service package. This also includes the service profiles association.

- DN (derived value)
- SUBSCRIBER.ID
- SUBSCRIBER.ACCOUNT_ID
- SUBSCRIBER.TERM_ID
- SUBSCRIBER.MGW_ID
- SUBSCRIBER.NAME
- SERVICE_ID (derived value)
- FEATURE (derived value list)

Speed Dial Settings by Directory Number

This command returns a list of all speed dial telephone numbers by the specified DN or primary subscriber directory number. All one digit speed dial values are returned as well as the feature state of speed dial. Only a single row is returned with the complete list of speed dial numbers. If a number is not defined, it is left blank. The complete list of items returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.NAME
- SUBSCRIBER.ACCOUNT_ID
- DN (DERIVED VALUE)
- SUBSCRIBER.MGW_ID
- SUBSCRIBER.TERM_ID
- SPEED_DIAL (derived value of Y or N)
- DN1, DN2, ... DN9 (derived value)

Domestic Long Distance Blocking for a Subscriber or Account

This command returns the cos_restrict information for a specified subscriber. In this command the subscriber ID field or the new account_id field determines the subscriber. This command keys on the use of the Nature of Dial (NOD) means for restricting subscriber activity. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.NAME
- SUBSCRIBER.ACCOUNT_ID
- DN (derived value)
- SUBSCRIBER.COS_RESTRICT_ID
- COS_RESTRICT.NATIONAL_RESTRICT_TYPE
- COS_RESTRICT.NANP_WB_LIST
- COS_RESTRICT.NOD_WB_LIST
- NOD_WB_LIST.NOD

International Long Distance Blocking Setting for a Subscriber or Account

This command returns the COS_RESTRICT information for all DN(s) associated with a specified subscriber or account. In this command the subscriber ID field or the new ACCOUNT_ID field determines the subscriber. This command keys on the use of the NOD as the means for restricting subscriber activity. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.ACCOUNT_ID
- DN (DERIVED VALUE)
- COS_RESTRICT.ID
- COS_RESTRICT.INTL_RESTRICT_TYPE
- COS_RESTRICT.II_RESTRICT
- COS_RESTRICT.NOD_WB_LIST
- NOD_WB_LIST.NOD (INTL OR INTL_WZ1)

Directory Assistance Blocking for a Subscriber or Account

This command returns the cos_restrict information a specified subscriber or account. In this command the subscriber id field or the new account_id field determines the subscriber. This command keys on the use of the NOD as the means for restricting subscriber activity. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.NAME
- SUBSCRIBER.ACCOUNT_ID
- DN (derived value)
- COS_RESTRICT.ID
- COS_RESTRICT.NOD_WB_LIST
- NOD_WB_LIST.NOD (DA OR DA_TOLL)

Operator Assistance Blocking setting for a subscriber or account

This command returns the Operator assistance blocking information for a specified subscriber or account. In this command the subscriber ID field or the new ACCOUNT_ID field determines the subscriber. One row of data exists for each actual BTS 10200 subscribers. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.ACCOUNT_ID
- DN (derived value)
- COS_RESTRICT.ID
- COS_RESTRICT.NOB_WB_LIST
- COS_RESTRICT.INTL_RESTRICT_TYPE
- COS_RESTRICT.II_RESTRICT
- NOD (NAT_OPER OR INTL_OPER)

Retrieve a List of Call Hunt Groups Associated with a Subscriber or Account

This command returns the list of one or more hunt groups associated with a specified subscriber. In this command the subscriber Id field or the new account_id field determines the subscriber. Each row of data represents a hunt group membership. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.NAME
- SUBSCRIBER.ACCOUNT_ID
- DN (derived value)
- MLHG.ID
- MLHG.MAX_LINES
- MLHG.CALL_AGENT_ID
- MLHG.HUNT_TYPE
- MLHG_TERMINAL.TERM_ID
- MLHG_TERMINAL.TERMINAL

Hunting Sequence of Directory Numbers by Hunt Group

This command returns the hunt sequence as a list of telephone numbers (TNs) associated with a specified Hunt Group. Each row of data equates to a relative terminal in the hunt group. This avoids static lists with a fixed number of terminals. The actual parameters returned are:

- MLHG_TERMINAL.TERMINAL
- MLHG.ID
- MLHG_TERMINAL.TERM_ID
- DN (derived value)
- DN2SUBSCRIBER.SUB_ID
- SUBSCRIBER.ACCOUNT_ID
- MLHG.CALL_AGENT_ID
- MLHG.HUNT_TYPE
- MLHG_PREF_LIST.REL_TERMINAL (derived value)

List Directory Numbers that Do Not Belong to a Hunt Group

This command returns a list of all DNs associated with a specified subscriber and that are not associated with a hunt group. Under the present definition, the list can be long. Each row of the data indicates a TN with a free association. It is strongly recommended that some qualifications are provided to narrow the scope of the command. For example, list all free DNs in a particular account where the account ID is some specific value. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.NAME
- SUBSCRIBER.ACCOUNT_ID
- SUBSCRIBER.MGW_ID
- SUBSCRIBER.TERM_ID
- DN (derived value)

Outbound Caller ID with Name Value by Directory Number

This command returns the caller ID and NAME for a specified TN. Each row of data represents a separate subscriber TN. The read is based on the actual TN of a subscriber. The actual parameters returned are:

- SUBSCRIBER.ID
- SUBSCRIBER.ACCOUNT_ID
- DN (derived value)
- SUBSCRIBER.MGW_ID
- SUBSCRIBER.TERM_ID
- SUBSCRIBER.NAME
- CID_NAME_FLAG
- CID_NUMBER_FLAG
- CID_CALL_WAITING_FLAG

Command Format

This section defines the CLI syntax of the commands and the semantics of their usage. Included are examples utilizing different options to control the output and pagination of the data.

As a matter of consistency with the Cisco BTS 10200 Softswitch's exiting command reference, the telephone number (TN) is referred to as a DN. Please note in all cases, this is a composite value. This is in line with the present Cisco BTS 10200 Softswitch data definitions.

Directory Numbers by Subscriber

This command returns the list of all telephone numbers (DNs) associated with a specified subscriber. In this command the subscriber ID field or the new ACCOUNT_ID field determines the subscriber.

This is a specific subset of available data designed to provide germane information.

```
show sub_dn_list sub_id=foo_123;
```

or

```
account_id= ABC123456789;
```

Sample Response:

DN=4692550529

ID=foo_123

ACCOUNT_ID=ABC123456789

MGW_ID=mgw_123

TERM_ID=s0/ds1_2/3

TERM_TYPE=mgw_123

NAME=Double D

...

Line Features by Directory Number

This command returns the settings of specific features associated with a specified DN. In this command the DN, subscriber ID or account ID is supplied to qualify the data search. The command returns the feature list and feature data for the specified DN or subscriber primary directory number.

The line features are derived from the subscriber_service_profile and associated service entries. Features are pulled from the service packages. The associated sub_featrue_data is queried to get the composite data settings for the line side features.

**Note**

If a feature tracked by this command is not enabled for a particular subscriber, then the feature is not listed in the output. Only features that are part of the subscriber's service profile are displayed.

The command returns a specific single row is the TN is fully qualified. If any feature is not allowed or not configured, the fields are left blank.

```
show dn_line_feat dn=4692550529;
```

or

```
sub_id=foo_123;
```

or

```
account_id= ABC123456789;
```

Sample Response:

DN=4692550529

SUB_ID=foo_123

ACCOUNT_ID=ABC123456789;

...

Subscriber Feature Summary by Directory Number

This command returns a list of specific features associated with a specified DN. In this command the DN, subscriber ID or account ID is supplied to qualify the data search. The command returns a feature list and feature data for the specified DN or subscriber primary directory number.

The feature list is derived from the subscriber_service_profile and associated SERVICE entries. Features are pulled from the service packages. The associated sub_feature_data is queried as well. “

The command returns a specific single row if the DN is fully qualified. If a feature is not allowed or not configured, the fields are left blank.

```
show dn_feat_list dn=4692550529;  
or  
    sub_id=foo_123;  
or  
    account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789;  
...
```

Speed Dial Settings by Directory Number

This command returns a list of all speed dial telephone a specified subscriber with the primary directory number supplied in the parameters. All one digit speed dial values are returned as a single row of data.

```
show dn_sd_list dn=4692550529;  
or  
    sub_id=foo_123;  
or  
    account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789;  
...
```

Domestic Long Distance Blocking for a Subscriber or Account

This command returns the cos_restrict and nod information for a specified subscriber. In this command the subscriber id field or the new account_id field determines the subscriber. These fields are the only arguments for the command. One row of data exists for each actual Cisco BTS 10200 Softswitch subscriber. If an account id is shared among subscribers, then multiple subscribers can be returned with this command.

```
show sub_ld_block sub_id=foo_123;  
or  
account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789;  
COS_RESTRICT_ID=basic  
NATIONAL_RESTRICT_TYPE=NATIONAL_ONLY  
NAPA_WB_LIST=WHITE  
NOD_WB_LIST=WHITE  
...
```

International Long Distance Blocking Setting for a Subscriber or Account

This command returns the cos_restrict and nod information for a specified subscriber or account. In this command the subscriber id field or the new account_id field determines the subscriber. These fields are the only arguments for the command. One row of data is returned for each actual Cisco BTS 10200 Softswitch subscriber primary directory number.

```
show sub_intl_block sub_id=foo_123;  
or  
account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529 (Obsolete in Release 4.5.1)  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789;  
...
```

Directory Assistance Blocking for a Subscriber or Account

This command returns the cos_restrict information a specified subscriber or account. In this command the subscriber_id field or the new account_id field determines the subscriber. These fields are the only arguments to the command. One row of data exists for each actual BTS 10200 subscriber primary directory number.

```
show sub_da_block sub_id=foo_123;  
or  
account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529 (Obsolete in Release 4.5.1)  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789;  
...
```

Operator Assistance Blocking setting for a subscriber or account

This command returns the operator assistance blocking information for a specified subscriber or account. In this command the subscriber_id field or the new account_id field determines the subscriber. These fields are the only arguments to the command. One row of data exists for each actual Cisco BTS 10200 Softswitch subscriber primary directory number.

```
show sub_oper_block sub_id=foo_123;  
or  
account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529 (Obsolete in Release 4.5.1)  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789  
...
```

Retrieve a List of Call Hunt Groups Associated with a Subscriber or Account

This command returns a list of one or more hunt groups associated with a specified subscriber or account id. In this command the subscriber id field or the new account_id field determines the subscriber. These fields are the only arguments for the command. Normally a subscriber has only one hunt group membership defined by the mlhg_id. However, if an account id is shared across several subscriber records, then multiple entries can be returned. Each row of data represents a hunt group. One row of data exists for each actual Cisco BTS 10200 Softswitch subscriber primary directory number.

```
show hg_dn_listdn=4692550529;
or
    sub_id=foo_123;
or
    account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529
SUB_ID=foo_123
ACCOUNT_ID=ABC123456789
...
```

Hunting Sequence of Directory Numbers by Hunt Group

This command returns the hunt sequence as a list of telephone numbers (DNs) associated with a specified hunt group. The parameters returned are listed below. Each row of data equates to a relative terminal in the hunt group. This avoids static lists with a fixed number of terminals. The data to display can be qualified by either the actual hunt group id or the associated account id.

```
show hg_sequence mlhg_id=foo_123;
or
    account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529
SUB_ID=Home
CALL_AGENT_ID=CA146
MAX_LINES=5
HUNT_TYPE=NORMAL
REL_TERMINAL=3
...
```


List Directory Numbers that Do Not Belong to a Hunt Group

This command returns a list of all DN's associated with a specified subscriber and account id that are not associated with any hunt group. Under the present definition, the list can be long. The parameters returned are listed below. Each row of the data indicates a TN or subscriber primary directory number with a free association. The account id can include a wild card to further expand the scope of the search for TNs.

```
show sub_dn_find account_id=ABC1234%;  
or
```

```
sub_id=foo_123;
```

Sample Response:

```
DN=4692550529  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789  
MGW_ID=mgw_123  
TERM_ID=s0/ds1_2/3  
...
```

Outbound Caller ID with Name Value by Directory Number

This command returns the Caller ID feature value and name for a specified subscriber or account id. The parameters returned are listed below. Each row of data represents a separate subscriber TN. The read is based on the actual DN or subscriber primary directory number. Each row returned represents a specific TN with CID settings. If the search criterion contains a wild card, several entries can be returned.

```
show sub_cidsub_id=foo_123;
```

```
or
```

```
account_id= ABC123456789;
```

Sample Response:

```
DN=4692550529  
SUB_ID=foo_123  
ACCOUNT_ID=ABC123456789  
MGW_ID=mgw_123  
TERM_ID=d0/s0_123  
NAME=Double D  
PRIVACY=NONE  
...
```




A

Accessibility [1](#)

Audience [5](#)

C

Commands

command descriptions [2](#)

account id [2](#)

directory number [2](#)

command list [1](#)

directory assistance blocking [6](#)

domestic long distance blocking [5](#)

format [9](#)

directory assistance blocking [13](#)

directory numbers by subscriber [9](#)

domestic long distance blocking [12](#)

hunting sequence of directory number by hunt group [14](#)

international long distance blocking [12](#)

line features by directory number [10](#)

list directory numbers that do not belong to a hunt group [15](#)

operator assistance blocking [13](#)

outbound caller id with name value by directory number [15](#)

retrieve a list of call hunt groups [14](#)

speed dial settings by directory number [11](#)

subscriber feature summary by directory number [11](#)

hunting sequence of directory numbers by hunt group [7](#)

international long distance blocking [5](#)

list directory numbers that do not belong to a hunt group [8](#)

operator assistance blocking [6](#)

outbound caller id with name value by directory number [8](#)

retrieve a list of call hunt groups [7](#)

Command Structure [6](#)

D

Directory Number [2](#)

by Subscriber [2](#)

feature summary [3,4](#)

line features [3](#)

speed dial settings [4](#)

Documentation

CD-ROM [6](#)

Feedback [7](#)

Ordering [6](#)

World Wide Web [6](#)

Documentation, Obtaining [6](#)

F

Feature Summary by Directory Number [4](#)

Format, command [9](#)

L

Line Features by Directory Number [3](#)

O

Obtaining Documentation [6](#)

Documentation CD-ROM [6](#)

World Wide Web [6](#)

P

Preface [5](#)

R

Related Documentation [6](#)

Resolution, telephone number [1](#)

S

Speed Dial Settings by Directory Number [4](#)

Strategy [1](#)

T

TAC

 Contacting [8](#)

 Telephone [8](#)

 Website [8](#)

Technical Assistance

 Cisco.com [7](#)

 Contacting TAC by Using the Cisco TAC Website [8](#)

 Technical Assistance Center [7](#)

Technical Assistance, Obtaining [7](#)

Telephone Number Resolution [1](#)