

# Analog extension, EX

OPERATIONAL DIRECTIONS



## NOTICE

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks™ Corporation (MITEL®). Mitel makes no warranty of any kind with regards to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Mitel Networks Corporation.

## TRADEMARKS

The trademarks, service marks, logos and graphics (collectively "Trademarks") appearing on Mitel's Internet sites or in its publications are registered and unregistered trademarks of Mitel Networks Corporation (MNC) or its subsidiaries (collectively "Mitel") or others. Use of the Trademarks is prohibited without the express consent from Mitel. Please contact our legal department at [legal@mitel.com](mailto:legal@mitel.com) for additional information. For a list of the worldwide Mitel Networks Corporation registered trademarks, please refer to the website: <http://www.mitel.com/trademarks>.

© Copyright 2017, Mitel Networks Corporation

All rights reserved

# 1

## GENERAL

An analog extension is initiated by associating a directory number with an equipment position and then assigning the number category characteristics. The category characteristics can be either one or more individual categories or a common category code.

Several extensions can be initiated simultaneously. If the Customer Group feature is to be used in the system, all extensions must be assigned a customer affiliation.

Please note that an answering position for a night-switched exchange cannot be assigned categories for the Individual Do Not Disturb feature.

### 1.1

#### COMMON CATEGORY CODES

A common category code corresponds to a combination of categories and is used to make it easier to initiate extensions with standard characteristics (fewer parameters need to be stated). A common category code can be associated with an authorization code.

The common category code is displayed together with the directory number on most of the PBX operator consoles.

# 2

## PREREQUISITES

The extension number series must be initiated.

# 3

## PROCEDURE

Follow the work procedure below to initiate an extension:

1. Form common category codes for the most frequently used category characteristics.
2. Initiate the extension.

## 4 EXECUTION

### 4.1 COMMON CATEGORY CODES

#### 4.1.1 INITIATING A COMMON CATEGORY CODE

**Prerequisites**

-

**Execution**

1. Enter the command *EXCCP* to print out the existing common category codes and check if there are any free common category code to use.
2. Enter the command *EXCCS* to initiate a new common category code.
3. Enter the command *EXCCP* to verify the result.

#### 4.1.2 REMOVING A COMMON CATEGORY CODE

It is not possible to remove a common category code. Instead of removing, the categories associated with the common category code are assigned new values. For instructions, 4.1.3 Changing a Common Category Code on page 4.

#### 4.1.3 CHANGING A COMMON CATEGORY CODE

**General**

Extensions initiated with a certain common category code are not affected if the categories of the common category codes are changed.

Ongoing calls are not affected if the common category code is changed.

**Prerequisites**

-

**Execution**

1. Enter the command *EXCCP* to print out the common category codes.
2. Enter the command *EXCCS* to change the common category code.
3. Enter the command *EXCCP* to verify the result.

#### 4.1.4 PRINTING A COMMON CATEGORY CODE

Enter the command *EXCCP* to print out the common category code.

### 4.2 EXTENSION

#### 4.2.1 INITIATING AN EXTENSION

**Prerequisites**

Analog extension boards must be available.

**Note:** When the ELU34 board is used, individual 0 has to be activated (initiated) as the first individual on the board, and has to be removed as the last individual on the board.

## Execution

		Measure/Question	Observation/Comment
<p><b>Flow</b></p> <pre> graph TD     START([START]) --&gt; 1[1]     1 --&gt; 2{2}     2 -- Y --&gt; 3[3]     2 -- N --&gt; 4[4]     3 --&gt; 4     4 --&gt; 5[5]     5 --&gt; 6[6]     6 --&gt; 7[7]     7 --&gt; A((A))           </pre>	1	Enter the command <i>resource_status</i> to verify that there exist free equipment positions.	See operational directions for <i>SYSTEM RESOURCE STATUS INFORMATION</i> .
	2	Will the extension be initiated by using a common category code? If yes, go to step 3. If no, go to step 4.	
	3	Enter the command <i>EXCCP</i> to print out the common category codes. Verify that the common category code agrees with the intended categories.	
	4	Select a free directory	See section: Selection of free extension number.
	5	Enter the command <i>EXTEI</i> to initiate the extension.	
	6	If the system has the Customer Group feature, state customer number.	See operational directions for <i>CUSTOMER GROUP</i> .
	7	Verify that common public directory number has been initiated (If extensions category states that this shall be used).	See operational directions for <i>NUMBER ANALYSIS</i> .

		Measure/Question	Observation/Comment
<p><b>Flow</b></p> <pre> graph TD     A((A)) --&gt; D6{6}     D6 -- Y --&gt; R7[7]     D6 -- N --&gt; R8[8]     R7 --&gt; R8     R8 --&gt; D9{9}     D9 -- Y --&gt; R10[10]     D9 -- N --&gt; STOP([STOP])     R10 --&gt; STOP           </pre>	6	Does the extension require special purpose extension characteristics? If yes, go to step 7. If no, go to step 8.	See operational directions for <i>SPECIAL PURPOSE EXTENSION</i> .
	7	Enter the command <i>EXCAC</i> to change instrument category characteristics.	
	8	Enter the command <i>EXDDP</i> and <i>EXCAP</i> to verify the result.	
	9	Does any interception computer exist? If yes, go to step 10. If no, the procedure is complete.	
	10	Update directory information in interception computer.	Consult manual for relevant interception computer.

## 4.2.2

## REMOVING AN EXTENSION

Before removing an extension, it is necessary to verify that the extension is not:

- a day or night service position
- a common divertee position
- a message interception position/message printout position
- an answering position for a common abbreviated number
- a voice message port
- a special purpose extension
- assigned an individual authorization code

If this is the case, it is necessary to remove the extra function and then initiate it again on another extension.

**Prerequisites**

Verify that the extension is not busy.

**Note:** When the ELU34 board is used, individual 0 has to be removed as the last individual on the board.

**Execution**

1. Remove any extra functions.
  - For day or night service position, see operational directions for *ROUTE DATA*.
  - For common diverttee position, see operational directions for *CALL DIVERSION*.
  - For message interception position/message printout position, see operational directions *INTERCEPTION SERVICE*.
  - For answering position for a common abbreviated number, see *ABBREVIATED DIALLING*.
  - For voice message port, see operational directions for *VOICE MAIL*.
  - For special purpose extension, see operational directions for *SPECIAL PURPOSE EXTENSION*.
  - For individual authorization code, see operational directions for *AUTHORIZATION CODE FOR EXTENSION*.
2. Enter the command *EXTEE* to remove the extension.
3. Enter the command *EXDDP* to verify the result.
4. If there are any interception computers, update their directory information. See operational directions for *INTERCEPTION SERVICES* or manual for the computer.
5. Initiate the functions mentioned in step 1 on other extensions (optional).

## 4.2.3

**CHANGING AN EXTENSION DIRECTORY NUMBER**

Directory numbers can be changed in two ways:

- The extension is assigned a new, free directory number.
- Two extensions can change directory numbers with each other. The procedure for this is that extension A is moved to extension B and there becomes secondary. Extension B is then moved to extension A's former equipment position. When extension B has been moved, extension A becomes the primary extension.

If the extension that is changed have any extra functions, they must be removed and then initiated by the new extension's directory number. The functions are the following:

- Day or night service position
- Common or individual diverttee position
- Message interception position
- Message printout position
- Translated number for common abbreviated number
- Voice message port
- Special Purpose Extension

**Prerequisites**

Verify that the extension is not busy.

**Execution**



1. Remove any extra functions.
  - For day or night service position, see operational directions for *ROUTE DATA*.
  - For common or individual diverttee position, see operational directions for *CALL DIVERSION*.
  - For message interception position/message printout position, see operational directions *INTERCEPTION SERVICE*.
  - For translated number for a common abbreviated number, see *ABBREVIATED DIALLING*.
  - For voice message port, see operational directions for *VOICE MAIL*.
  - For special purpose extension, see operational directions for *SPECIAL PURPOSE EXTENSION*.
2. Enter the command *EXTEE* to delete the old directory number.
3. Enter the command *EXTEI* to initiate a new directory number.
4. If the extension is permitted to transmit its directory number to the public exchange, enter the command *EXCAC* to change the extension's category.
5. Enter the commands *EXDDP* and *EXCAP* to verify the result.
6. Initiate the functions mentioned in step 1 on other extensions (optional).

## 4.2.4

## CHANGING EQUIPMENT POSITION

There are two ways to change an equipment position:

- The extension is removed and initiated again at a new, free position.
- Two extensions exchange positions in that extension A is moved to a free position, B is moved to A's former position and, finally, A is moved to B's former position. Both A and B have to be removed and then initiated again at the wanted positions.

Before changing the equipment position, it is necessary to verify the same extra functions as for Removing of extension (see above).

If there is some extra function initiated, it is necessary to remove the extra function and then initiate it again on the new position.

**Prerequisites**

Verify that the extension is not busy.

**Execution**

1. Remove any extra functions. See which functions in "Removing an extension".
2. Enter the command *EXDDP* to print out existing directory numbers and equipment positions.
3. Enter the command *vacant\_number* to print out free equipment positions, see operational directions for *VACANT NUMBER*.
4. Enter the commands *EXTEE (remove)* and *EXTEI* (initiate again) to move extension A to a free position.
5. Are two extensions, A and B, to exchange their positions? If yes, enter the command *EXTEE* to remove extension A from its old position, and enter the *EXTEE* again to remove extension B from its old position. If no, go to next step.
6. Enter the command *EXTEI* to re-initiate extension A at B's former position, and enter the command *EXTEI* to re-initiate extension B at A's former position.
7. Enter the command *EXDDP* to verify the result.
8. Re-initiate any extra functions, if they shall still be valid, for both extension A and extension B.

## 4.2.5

## CHANGING EXTENSION CATEGORIES

**General**

Extension categories can be changed in one of the following ways:

- The extensions categories are changed to values in accordance with a common category code (see flows 1 and 2 in this section).
- The extension is assigned categories in accordance with individual categories (see flow 3 in this section).
- The transmission categories and/or extra categories are changed (see flow 3 in this section).

**Prerequisites**

-

## Execution, flow 1

		Measure/Question	Observation/Comment
<p><b>Flow 1</b></p> <pre> graph TD     START([START]) --&gt; 1[1]     1 --&gt; 2[2]     2 --&gt; 3{3}     3 -- Y --&gt; 7[7]     3 -- N --&gt; 4{4}     4 -- Y --&gt; 5[5]     5 --&gt; 6[6]     6 --&gt; 7     4 -- N --&gt; 7     7 --&gt; 8[8]     8 --&gt; STOP([STOP])           </pre>	1	Enter the command <i>EXCAP</i> to print out the extension's category characteristics.	
	2	Enter the command <i>EXCCP</i> (parameter CAT) to print out the common category codes.	
	3	Does the change correspond to an existing common category code? If yes, go to step 7. If no, go to step 4.	
	4	Are the new category characteristics general enough to create a new category code? If yes, go to step 5. If no, go to step 7.	
	5	Enter the command <i>EXCCS</i> to create new characteristics in a free common category code.	
	6	Enter the command <i>EXCCP</i> (parameter CAT) to verify the result.	
	7	Enter the command <i>EXCAC</i> to change the category characteristics.	
	8	Enter the command <i>EXCAP</i> to verify the result.	

**Execution, flow 2**

Changing existing categories and category characteristics for the extensions corresponding to existing common category code.

1. Enter the command *EXCCP* (parameter CAT) to print out the common category codes.
2. Enter the command *EXCCP* (parameter CCAT) to print out the extensions that are assigned the common category code.
3. Enter the command *EXCCS* to change the common category code.
4. Enter the command *EXCCP* (parameter CAT) to verify the result.
5. Enter the command *EXCAC* (parameter CAT) to change the extension category characteristics.
6. Enter the command *EXCCP* (parameter CCAT) to verify the result.

**Execution, flow 3**

The extension is assigned categories based on individual categories.

1. Enter the command *EXCAP* to print out the extension's characteristics.
2. Enter the command *EXCAC* to change the category characteristics.
3. Enter the command *EXDDP* print out the instrument category characteristics.
4. Enter the command *EXCAC* to change the instrument category characteristics.
5. Enter the command *EXCAP* and *EXDDP* to verify the result.

## 4.2.6

## CHANGING CUSTOMER NUMBERS

**Prerequisites**

-

**Execution**

1. Enter the command *EXDDP* to verify the extension's customer number.
2. Enter the command *EXCUC* to change the customer number.
3. Enter the command *EXDDP* to verify the result.
4. If necessary, change categories and other extension data.

## 4.2.7

## CHANGING RING CADENCE

**Prerequisites**

Ring cadences have a default setting per application system (market), so most customers will not need to change the ring cadences, but for specific customers, e.g. using CSI functions for "control telephony", it is possible to change the cadence for analog phones. Note that the ELUxx boards will have to be restarted.

**Note:** The function is not valid for CAS extensions.

**Execution**

1. Enter the command *ring\_cadence -p* to check the current settings.
2. Enter the command *ring\_cadence -c* with parameters appropriately set for the modified ring cadence.

3. If wanted, enter the command *ring\_cadence -p* to check the new settings.
4. Restart all ELUxx boards

#### 4.2.8 REMOVING CUSTOMER NUMBERS

1. Enter the command *EXDDP* to print out the extensions customer number.
2. Enter the command *EXCUC* to erase the extension's customer number.
3. Enter the command *EXDDP* to verify the result.

#### 4.2.9 PRINTING DIRECTORY DATA

Enter the command *EXDDP* to print out the directory data.

#### 4.2.10 PRINTING EXTENSION CATEGORIES

Enter the command *EXCAP* to print out the extension categories.

#### 4.2.11 PRINTING EQUIPMENT POSITION EXTENSION NUMBERS

Enter the command *resource\_status* to print out the extension numbers for the equipment positions.

### 4.3 MULTIPLE REPRESENTATION OF DIRECTORY NUMBER

Directory numbers may be multiple represented on digital key system telephones or on IP telephones.

See operational directions for *DIGITAL KEY SYSTEM TELEPHONE*, and operational directions for *GENERIC EXTENSION*, and operational directions for *IP EXTENSION*.

### 4.4 SELECTING FREE EXTENSION NUMBER

To select a free extension number, perform the following:

1. Enter the command *vacant\_number* to print out vacant extension directory numbers. See operational directions for *VACANT NUMBER*.
2. Select an unused number from the extension number series, see operational directions for *NUMBER ANALYSIS*.

### 4.5 SELECTING FREE EQUIPMENT POSITION

To select a free equipment position, perform the following:

1. Enter the command *resource\_status* to print out free equipment positions, see operational directions for *SYSTEM RESOURCE STATUS INFORMATION*.
2. Select an unused equipment position, 4.2.1 Initiating an Extension on page 4 .

## 4.6

## SINGLE NUMBER INDICATION

The feature Single Number Indication is used to set an additional number to an extension. This additional number is displayed on the other party's display and it means that the B-extension always receives the same directory number independent of which telephone the A-extension is using if all the telephones of A have the same additional number.

To be able to use Single Number Indication, the extension must have both a directory number and an additional number.

**Note:** Single Number Indication has some limitations in certain private network services since only one number can be conveyed in the network. For example, the features Diversion, Callback, and Call Information Logging will use the directory number, not the additional directory number.

### 4.6.1

### CHANGING ADDITIONAL NUMBER

#### General

By default, the extension's additional number is the same as the directory number. The additional number has to be changed when an extension wants to use Single Number Indication.

#### Prerequisites

-

**Execution**

		Measure/Question	Observation/Comment
<p><b>Flow</b></p> <pre> graph TD     START([START]) --&gt; 1[1]     1 --&gt; 2{2}     2 -- Y --&gt; 3[3]     2 -- N --&gt; 4[4]     3 --&gt; 4     4 --&gt; STOP([STOP])           </pre>	1	Enter the command <i>EXADP</i> to verify the additional number of the extension.	
	2	Does the extension's additional number need to be changed? If yes, go to step 3. If no, go to step 4.	
	3	Enter the command <i>EXADC</i> to change the additional number.	
	4	Enter the command <i>EXADP</i> to verify the result.	

## 4.6.2 REMOVING ADDITIONAL NUMBER

**General**

It is not possible to remove the additional number. The only possibility is to change and make the additional number the same as the directory number, 4.6.1 Changing Additional Number on page 14.

## 4.6.3 PRINTING ADDITIONAL NUMBERS

**Execution**

Enter the command *EXADP* to print out additional numbers.

## 5

# TERMINATION

If extension numbers have been added or removed, inform the department (person) responsible for directory information.

A dump to backup media should be performed if any configuration data have been changed.