



# OpenScape Office V3

HowTo  
LCR and dialling information

Version 1.0

### General information:

With OSO V3 the dialling from the application was changed.

The OSO application doesn't normalize the call numbers anymore. Every dialled number of OSO application come into the LCR like described below.

Example for Germany:

+49 89 7007 12345 canonical format

0 089 7007 12345 dialling format such as the desk phone (national calls)

0 7007 12345 dialling format such as the desk phone (city calls)

For dialling from the directories or desktop dialling the seizure Code of route 1 will be added automatically.

Dialling with canonical format additional default LCR entries are available – [see dial plan 34](#).

The additional LCR entries for OSO V3 are written in blue

### LCR default entries

#### Dial Plan

Overview of the default LCR entries:

Example with seizure code "9"

#### Dial plan 1 – 15

Emergency call numbers

| Dial Plan | Name           | Dialed digits | Routing Table | Acc. code                | Emergency                           |
|-----------|----------------|---------------|---------------|--------------------------|-------------------------------------|
| 1         | Emergency call | 9C112         | 1 ↓ →         | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2         | Emergency call | 9C999         | 1 ↓ →         | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 4         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 6         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 7         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 8         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 9         |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 10        |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 11        |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 12        |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 13        |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 14        |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |
| 15        |                |               | 1 ↓ →         | <input type="checkbox"/> | <input type="checkbox"/>            |

Dialplan 1 – 15 contains the emergency or special call numbers which must be routed via CO if it's not possible for ITSP.

These numbers are only changeable with Basic Installation and Internet Telephony Wizard by active ITSP. Routing table 1 is set to trunk route 1 by MX and to networking route by LX.

## Dial plan 16 – 31

| Dial Plan | Name       | Dialed digits | Routing Table | Acc. code                | Emergency                |
|-----------|------------|---------------|---------------|--------------------------|--------------------------|
| 16        | Standard   | 9CZ           | 1 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 17        | Standard   | 9C1Z          | 1 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 18        | Standard   | 9CNZ          | 1 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 19        | Standard   | 80CZ          | 4 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 20        | Standard   | 80C1Z         | 5 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 21        | Standard   | 80CNZ         | 5 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 22        | Standard   | 81CZ          | 6 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 23        | Standard   | 81C1Z         | 7 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 24        | Standard   | 81CNZ         | 7 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 25        | Standard   | 82CZ          | 8 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 26        | Standard   | 82C1Z         | 9 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 27        | Standard   | 82CNZ         | 9 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 28        | Standard   | 83CZ          | 10 →          | <input type="checkbox"/> | <input type="checkbox"/> |
| 29        | Standard   | 83C1Z         | 11 →          | <input type="checkbox"/> | <input type="checkbox"/> |
| 30        | Standard   | 83CNZ         | 11 →          | <input type="checkbox"/> | <input type="checkbox"/> |
| 31        | Appl-Suite | -71           | 12 →          | <input type="checkbox"/> | <input type="checkbox"/> |

- Dial plan 16 – 18 default for CO → trunk route 1 by MX - trunk route 64 by LX  
 Dial plan 19 – 21 default for 1. ITSP → trunk route 2 with overflow to CO  
 Dial plan 22 – 23 default for 2. ITSP → trunk route 3 with overflow to CO  
 Dial plan 25 – 27 default for 3. ITSP → trunk route 4 with overflow to CO  
 Dial plan 28 – 30 default for 4. ITSP → trunk route 5 with overflow to CO

Dial plan 31 call number of the voicemail changeable with voicemail or basic installation wizard

## Dial plan 32 - 34

| Dial Plan | Name       | Dialed digits | Routing Table | Acc. code                | Emergency                |
|-----------|------------|---------------|---------------|--------------------------|--------------------------|
| 32        | Standard   | 88CZ          | 1 →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 33        | IP-Network | -Z            | 13 →          | <input type="checkbox"/> | <input type="checkbox"/> |
| 34        | COInternat | 9C0044-Z      | 14 →          | <input type="checkbox"/> | <input type="checkbox"/> |
| 35        |            |               | - →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 36        |            |               | - →           | <input type="checkbox"/> | <input type="checkbox"/> |
| 37        |            |               | - →           | <input type="checkbox"/> | <input type="checkbox"/> |

Dial plan 32 default for CO route when ITSP is the preferred route – configuration the order of routes with the “CO Trunk ISDN / Analog / ITSP Wizard”

Dial plan 33 preconfigured for IP Networking -> trunk route 64 (Networking )

**Dial plan 34 preconfigured for canonical dialling from applications.**

This entry will be generated automatically from the following data:

<Seizure code route 1>C<international. Prefix><country code>-Z

Therefore Dial plan 34 must be free by update from V2.0 to V3.0 to create this entry.

If you dial a canonical number the **display** of the phone initially shows the digit string as it is sent by the application with “+” converted to <standard seizure code><international prefix> (e.g. “000”). LCR entry 34 converts this digit string to a national number format for dialling at the ISDN CO access, if the destination is located in the own country.

Example:

dialling +49 89 7007 123456

phone display 00049897007123456

dialled to CO: 0897007123456

So every international dialled number in your own country will be dialled in national format.

Remark:

The phone display afterwards may be updated depending on number information received from the far end of the connection.

The digit string conversion described above is relevant for dialling with canonical numbers at SIP phones as well.

**Dial Rules**

|   | Rule Name      | Dial rule format | Network provider's method of access | Type        |
|---|----------------|------------------|-------------------------------------|-------------|
| 1 | CO             | A                | Main network supplier               | Unknown     |
| 2 | SIP            | A                | Main network supplier               | Unknown     |
| 3 | SIP local      | A                | Main network supplier               | Unknown     |
| 4 | MEB            | E1A              | Corporate Network                   | PABX number |
| 5 | IP-Network     | A                | Corporate Network                   | Unknown     |
| 6 | Multi-Location | BA               | Corporate Network                   | Unknown     |
| 7 | Gateway call   | E1A              | Corporate Network                   | Unknown     |
| 8 | COInternat     | DOE3A            | Main network supplier               | Unknown     |

Dial rule 1 preconfigured for CO calls and dialling number format

Dial rule 2,3 preconfigured for ITSP calls

Dial rule 4 preconfigured for OSO application

Dial rule 5 preconfigured for internal networking calls

Dial rule 6 preconfigured for Multi Gateway networking

Dial rule 7 preconfigured but not used at the moment

Dial rule 8 preconfigured for canonical dialling.

Hint for dial rule 8:

The dial rule format is different for countries and depends of the national prefix of the county.

Countries without national prefix the dial rule format is E3A.

## Networking information:

**General remark: Internal numbers need to be unique all over the network under all conditions !**

For supporting the feature “Dial by public number within a node/network”) the system needs the complete Gateway Location number.

This data will be copied normally from trunk route one with the default activated flag “location number”.

PABX number incoming

- Country Code
- Local area code
- PABX number

In some countries only the Country Code is used and the configuration is mandatory in the Basic Installations Wizard.

In this case it's necessary to type in the complete data in the Gateway location.

This configuration can only be done in the Expert Mode – Basic Settings – Gateway.

## LCR settings for networking

### Internal calls from Node 1 to Node 2

for internal calls from Node 1 to Node 2 the dial plan 33 (-Z) is used.

### External calls via Node 1 to Node 2 (Node 2 is a sub node without own CO access)

To route external calls from Node 1 to Node 2 you must add additional LCR entries.

The entries depend on the type of number of the external call.

- International
- National
- Subscriber

Example for Germany

Called number 498970071234 international

Called number 8970071234 national

Called number 70071234 subscriber

Hint: Following LCR rules are also needed for feature “Dial by public number within a node/network”

LCR entries look like this:

Hint: Node 1 is connected to CO and in a network with Node 2

## 1. Scenario

All internal and DID numbers are **IDENTICAL** and the type of number send by CO is not unknown.

All call numbers with type of number unknown will be routed with Dial Plan number 34 (-Z)

### Dial plan entries

| Name          | Dialed digits  | Routing table           |
|---------------|----------------|-------------------------|
| Subscriber    | 0C7007-Z       | 16 (free routing table) |
| National      | 0C0897007-Z    | 16 (free routing table) |
| International | 0C0049897007-Z | 16 (free routing table) |

### Routing table entry table 16

| Index | Route                       | Dial Rule | min. COS | Dedicated GW | GW Node ID |
|-------|-----------------------------|-----------|----------|--------------|------------|
| 1     | Networking (trunk route 64) | Transit   | 15       | No           |            |

### Dial rule entry

| Rule Name | Dial rule format | network providers | Type    |
|-----------|------------------|-------------------|---------|
| Transit   | E3A              | Corporate Network | unknown |

## 2. Scenario

DID and internal numbers are not identical (DIDs need not to be unique) and the type of number send by CO is not unknown.

### Dial plan entries

| Name          | Dialed digits  | Routing table           |
|---------------|----------------|-------------------------|
| Subscriber    | 0C7007-Z       | 16 (free routing table) |
| National      | 0C0897007-Z    | 16 (free routing table) |
| International | 0C0049897007-Z | 16 (free routing table) |

### Routing table entry table 16

| Index | Route                       | Dial Rule | min. COS | Dedicated GW | GW Node ID  |
|-------|-----------------------------|-----------|----------|--------------|-------------|
| 1     | Networking (trunk route 64) | Transit   | 15       | forced       | 2 (Node ID) |

### Dial rule entry

| Rule Name | Dial rule format | network providers | Type         |
|-----------|------------------|-------------------|--------------|
| Transit   | D49897007E3A     | Corporate Network | Country Code |

## Canonical / Public Dialling

### General information:

It's now possible, to call internal stations within Node / Network in international or national number format.

Example for Germany:

Public number to dial with application +4989700732323

Gateway Location:

Country code: 49

Local area code: 89

PABX number: 7007

Station number internal 1234

Station number external 32323

In this example the public number is normalized by gateway location data and the station **DID** is called.

If the customer has limited CO DIDs or unique 8 or 10 digit dialing please delete the not used DIDs of the stations that do not match the external numbering plan of the customer.

Otherwise the public number of an external call number can collide with a DID and you cannot call the external number.

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