

Externally Controlled Call Distribution Service

DESCRIPTION



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 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

This document describes the feature Externally Controlled Call Distribution Service.

When the extension directory number is called and it has the Externally Controlled Call Distribution service active, the call will enter the offered state and wait for the external application for a distribution request. The external application shall use the CSTA PhaseIII interface.

The extension directory number can be configured for external distribution by I/O commands, in the extension service profile.

A CSTA "Offered event" is sent to the external application when the call is put in Offered state so that the external application knows that it should start the call distribution.

The external application can send CSTA Accept request to accept the call to the called extension or it can send CSTA Deflect request to distribute the call to some other destination. The new deflected-to destination can be internal, or in the private or public network.

The application can clear the call at any point of distribution by sending a CSTA Call Clear request.

If the application does not respond in the offered state then after timeout the call is distributed to the called extension number. The application loses the control after this and it cannot control the call any more.

It is possible to configure services like follow-me, diversion, personal number list, parallel ringing on the directory number. When the external application does not respond in offered state then these services will be executed. When two or more services are configured on the directory then they will be executed as per the defined priority.

The following extensions can use the external distribution service:

- Analog extension
- Digital extension
- Cordless (DECT) extension
- CAS extension
- IP extension (both H.323 and SIP extension)
- Virtual extension

1.1

LIMITATIONS

The external distribution service is not applicable for directory numbers which are part of the groups like Group Hunt, ACD and CTI group.

This feature is applicable for the extensions that can be CSTA monitored.

1.2

GLOSSARY

For a complete list of abbreviations and glossary, see the description for ACRONYMS, ABBREVIATIONS AND GLOSSARY.

2 FACILITIES

2.1 GENERAL

The Externally Controlled Call Distribution (ECCD) service is designed to provide the possibility for the external applications to control the call distribution and distribute the call to the extensions as per their choice list. The call can be distributed to any internal/private/public numbers.

The Externally Controlled Call Distribution service has the following characteristics:

- The external application is informed about the incoming call to the extension by MX-ONE sending an offered event. The extension can be free, not-available, busy, blocked or be in any other state.
- The external application can either accept the call to the same extension number, or deflect the call to another destination or reject it.
- The external application can further deflect the call if the previous deflected-to party does not answer the call.
- If the external application does not respond due to a CSTA connection error or any other reason, within a certain period, then the call is established towards the called number.
- Services like follow-me, personal number list, parallel ringing can be configured on the extension. These services are executed when the application does not respond to the offered event.

2.2 SUPPORTED EXTENSIONS FOR EXTERNALLY CONTROLLED CALL DISTRIBUTION

Any extension type can use the Personal number service, regardless of the type of terminal assigned:

Generic:	IP extension
	Cordless (DECT) extension
	Virtual extension
Traditional:	Analog extension (only Primary extension)
	Digital extension
	CAS extension

2.3 CALL DISTRIBUTION DESTINATIONS

The call distribution destinations can be:

- Analog extensions (Primary and Secondary extension)

- Digital extensions (ODN and ADN)
- Digital POTS extensions
- ISDN extensions (all IDN)
- CAS extensions (for example, cordless handled by an external radio exchange)
- Integrated cordless extensions
- Remote extensions (mobile or fix)
- IP extensions (H.323 and SIP)
- Destinations in the private network
- Destinations in the public network (including LCR codes)
- A group hunting group
- A common bell group
- Individual PBX operators or PBX operator group
- Voice mail systems
- An Interception Computer System
- Virtual generic extensions

If the application tries to deflect to an extension which is not-available or busy or blocked, then the deflect request is rejected and the application can request deflect to another position.

2.4

PRIORITY OF EXTERNALLY CONTROLLED CALL DISTRIBUTION SERVICE

An order of priority is defined to select the proper service when several services are activated for a personal number. Basically, the order of priority in which services (if they are activated) are executed is as follows:

- Externally Controlled Call Distribution
- Individual Do Not Disturb
- Message Diversion/External Follow me/Direct Diversion/Follow me
- Group Do Not Disturb
- Personal number service
- Diversion on Busy/Diversion on No Reply

2.5

EXTERNALLY CONTROLLED CALL DISTRIBUTION SERVICE EXECUTION

The Externally controlled distribution service is initiated when the extension, which has the service activated, receives an incoming call. A call origin message indicating "Externally Controlled Call Distribution" is sent to the calling party, a CSTA Offered event is sent to the application and a timer is started to wait for the requests from application.

The timer is stopped as soon as a request is received from the application. The CSTA request could be either ACCEPT or DEFLECT or CLEARCALL.

If the call offer timer expires, the Externally controlled distribution service is bypassed and the call is delivered to the called extension.

2.5.1 DISPLAY INFORMATION

This section is also valid for PBX operators as calling party.

2.5.1.1 *Display information for terminal with ECCD assigned*

When the Externally Controlled Call Distribution service is active, that is, when Personal Number is initiated with a profile number then the number of the profile will be shown on the display of the terminal when in idle state.

2.5.1.2 *Display information for the calling party*

The identity of the dialed party will be presented to the calling party.

If the calling party is internal or within the private network, it can receive information that the call is being deflected and information of if the deflected-to party is ringing or answers the call.

If the deflected-to destination is public, the identity of the deflected-to party is not presented to the calling party. If the destination is internal or private, the identity of the deflected-to party is presented to the calling party.

2.5.1.3 *Display information for the connected (deflected-to) party*

If the deflected-to party is internal or within the private network, the calling number/name are presented to it.

If the deflected-to party is public, the directory number on which the service is initiated is sent to the public network (or the Common Public directory number). If the Original A-number feature is used, the calling party's number will be sent to the public network. If the calling party's number is not obtainable, the directory number on which the service is initiated will be sent.

2.6 USER INTERFACE

The activation and deactivation of the service is only possible through the I/O commands.

2.7 ADMINISTRATION FROM I/O TERMINAL

The service characteristics can be set, removed, changed and printed out by using I/O commands.

The initiation of the service is done with the below procedure:

- Generic extensions:
 - Set the Externally controlled call distribution category and the call offer timer value in the extension profile.

- Initiate the Externally controlled call distribution service using the Personal Number command and the call distribution destination position as the own directory number.
- Traditional terminals:
 - Set the Externally controlled call distribution category and the call offer timer value in the profile using the analog and digital extension commands.
 - Initiate the Externally controlled call distribution service using the Personal Number command and the answering position as the own directory number.

The service can be ended by either removing Personal Number or resetting the Externally controlled call distribution category.

2.7.1

EXTERNALLY CONTROLLED CALL DISTRIBUTION SERVICE INFORMATION

It is possible to get information whether the external call distribution category is active or not for a directory number by using a system user command (for example, by extension_profile).

3

HARDWARE

No specific hardware is required for this facility.

4

SUMMARY

It is possible to define the Externally Controlled Call Distribution service for an extension depending on its type. An external application will be offered to perform the call distribution if the service is active for the extension.