

TANDBERG MCU D3.0 Release Notes

TANDBERG

D50238, Rev 1.0

Table of Contents

1. INTRODUCTION.....	3
1.1 AUDIENCE FOR THIS RELEASE	3
1.2 SOFTWARE VERSIONS.....	3
1.3 GETTING THE SOFTWARE	3
1.4 REFERENCES / RELATED DOCUMENTS.....	3
2. IMPROVED CONFERENCE FEATURES	4
2.1 CASCADE FEATURES.....	4
2.1.1 <i>Master/Slave Negotiation</i>	4
2.1.2 <i>Request Floor in Cascade</i>	4
2.1.3 <i>Site Naming in Cascade</i>	4
2.2 NEW INDICATORS ON H.323	4
2.3 56/64KBPS DIAL OUT	5
3. VIDEO IMPROVEMENTS	6
3.1 H.264 SUPPORT	6
3.2 NEW PICTURE MODES.....	6
3.2.1 <i>Enhanced Continuous Presence</i>	6
3.2.2 <i>Traditional Continuous Presence</i>	7
3.3 DUAL STREAMS ENABLED/DISABLED PER CONFERENCE.....	7
4. AUDIO IMPROVEMENTS	8
4.1 G.722.1 ON H.323.....	8
4.2 IMPROVED G.728 SUPPORT	8
4.2.1 <i>G.728 available for 16 Sites</i>	8
4.2.2 <i>Allow G.728 Conference Setting</i>	8
4.3 H.323 VOIP CALLS ARE TELEPHONE RESOURCES.....	8
5. NETWORK.....	9
5.1 PRI DIAL IN RANGE.....	9
5.2 ONE NUMBER DIAL-IN ON ISDN	9
5.3 SIMULTANEOUS DIAL IN ON ISDN	9
6. MISCELLANEOUS	10
6.1 SNMP FEATURES	10
6.1.1 <i>Failed Login Warning</i>	10
6.1.2 <i>FTP Audit Log</i>	10
6.2 BILLING CODE SUPPORT	10
7. INTEROPERABILITY.....	11
7.1 ENDPOINTS.....	11
7.2 MCUS.....	11
7.3 GATEKEEPERS.....	11
7.4 GATEWAYS.....	11

1. Introduction

This release note is to describe the new features and capabilities included in the TANDBERG MCU software version D3.0 released on 10/20/03 .

1.1 Audience for this release

D3.0 is a major release for the TANDBERG MCU. All users are recommended to upgrade the software in accordance with their particular service plan.

1.2 Software Versions

8 + 8 Version is capable of 8 Video Sites (IP/ISDN) and 8 Telephones

16 + 16 Version is capable of 16 Video Sites (IP/ISDN) and 16 Telephones

All TANDBERG features are supported in the MCU, with no required options for Encryption, Duo Video, or Custom Video Formats

1.3 Getting the Software

Customers should contact their reseller or maintenance provider for support and assistance with their TANDBERG products.

1.4 References / Related Documents

TANDBERG Website - <http://www.tandberg.net>

See the following documents for more info on the TANDBERG MCU.:

D12911 TANDBERG MCU User's Guide

D12925 TANDBERG MCU Technical Description

D12930 TANDBERG MCU Dataport User's Guide

2. Improved Conference Features

2.1 Cascade Features

2.1.1 Master/Slave Negotiation

The new conference setting ‘Cascading Mode’ allows user’s to force Master/Slave relationships in cascaded conferences. The possible settings for this feature are ‘Auto,’ ‘Master,’ and ‘Slave.’ A Slave MCU is always set to Voice Switching mode, while the Master will be able to use any of the CP picture modes.

Aside from forcing the Master and Slave relationships, D3 also gives users the ability to leave one or more MCUs set to ‘Auto.’ The following results will take place when the ‘Auto’ feature is used.

‘Cascading mode’ settings	Result
Both MCUs are set to ‘Auto’	The dialing MCU will assume the roll of Master, and the dialed MCU will become the Slave.
One MCU is forced to Master and one is ‘Auto’	Regardless of dialing direction, the ‘Auto’ MCU will become the Slave.
One MCU is forced to Slave and one is ‘Auto’	Regardless of dialing direction, the ‘Auto’ MCU will become the Master.

Note: If Both MCUs are set to ‘Master’ strange video modes could result such as a CP image inside of a CP block. This is not a recommended method of cascading.

2.1.2 Request Floor in Cascade

It is now possible in D3 that a participant on a Slave MCU is able to request floor and the picture modes will adjust accordingly. The result is that if any participant on any MCU requests the floor, they will be seen full screen by all participants on all MCUs.

2.1.3 Site Naming in Cascade

D3 passes site names through cascade links so it is now possible to see the terminal list of all participants from any MCU and any endpoint in the cascade.

2.2 New Indicators on H.323

The following indicators have been added for H.323 connections.

- ‘Mic On/Off’ at remote location
- ‘On Air’ speaker notification
- ‘Site Naming’ to show which systems are in the conference

2.3 56/64Kbps Dial Out

It is now possible to dial out 1B or 56/64k with audio and video on H.320 and H.323.

3. Video Improvements


3.1 H.264 Support


D3 adds improved video quality at lower bandwidths by implementing the H.264 video compression standard on H.320 and H.323 connections. H.264 will automatically be used under the following conditions:

- Picture Mode must be Voice Switched or CP 4
- One conference must be active
- Duo Video must not be active
- Participants are not connected above 768kbps

3.2 New Picture Modes

D3.0 introduces two new picture modes to the TANDBERG MCU. These new picture modes are a combination of Voice Switching and Continuous Presence. CP 5+1 and CP 7+1 display a larger voice switching window, bordered by several smaller windows which display the last speakers.




CP 5+1 

CP 7+1 

These picture modes also are affected by the new conference setting 'Floor to Full Screen.' This option determines whether or not the speaker who has requested floor is broadcast full screen to other participants, or if the speaker is forced to the larger window of these two layouts. 'Floor to Full Screen' is enabled by default.

3.2.1 Enhanced Continuous Presence





This is a new automatic picture mode which includes the newly added 5+1 and 7+1 layouts. With this picture mode selected, the following picture modes will automatically adjust based on the number of participants in the conference.

# of Participants	Picture Mode
1 – 2	 Voice Switching
3 – 6	 CP 5+1
7 – 16	 CP 7+1

Note: This picture mode is the default for D3, and is also equivalent to the 'auto' picture mode in this release.

3.2.2 Traditional Continuous Presence

This is the new name for the original 'auto' picture mode from the D2 and D1 software releases. With this picture mode selected, the following layouts will automatically adjust based on the number of participants in the conference.

# of Participants	Picture Mode
1 – 2	 Voice Switching
3 – 4	 CP 4
5 – 9	 CP 9
10 – 16	 CP 16

3.3 Dual Streams Enabled/Disabled Per Conference

D3 allows for Dual Streams to be disabled in each conference. This setting turns off both DuoVideo and People + Content for the conference. Dual Stream support is 'enabled' by default.

4. Audio Improvements

4.1 G.722.1 on H.323

G.722.1 is now supported on H.323 as well as H.320. G722.1 is the preferred audio algorithm for low bandwidth calls on both H.320 and H.323.

4.2 Improved G.728 Support

4.2.1 G.728 available for 16 Sites

D3 has increased the number of possible G.728 connections from six to sixteen.

4.2.2 Allow G.728 Conference Setting

A new conference setting 'Allow G.728,' permits the MCU to use G.728 audio at low bandwidths. 'Allow G.728' is enabled by default.

4.3 H.323 VoIP Calls are Telephone Resources

D3 now treats dial-out VoIP calls as Telephone resources. So it is now possible to have 16 H.323 Video calls + 16 H.323 VoIP calls.

5. Network

5.1 PRI Dial In Range

D3 requires a dial in 'range' of numbers specified for each PRI. This range must be inclusive because the MCU can and will use any number in that range for bonding (callback) numbers.

5.2 One Number Dial-In on ISDN

Since ISDN dial-in numbers are specified outside of the PRI setup, it is possible to specify only one number for ISDN dial in.

5.3 Simultaneous Dial In on ISDN

It is now possible for the MCU to handle multiple inbound ISDN calls simultaneously by using the range of PRI numbers as bonding (callback) numbers.

6. Miscellaneous

6.1 SNMP Features

6.1.1 Failed Login Warning

There is now an SNMP trap sent when a user attempts to login to the MCU three times unsuccessfully. The user's IP Address and the service used (ie HTTP) will be sent in this SNMP trap.

6.1.2 FTP Audit Log

There is now an audit trail of FTP activity to the MCU (ie. Login, Logout, Put, Delete).

6.2 Billing Code Support

It is now possible to specify a billing code per conference. This is used by TMS.

7. Interoperability

7.1 Endpoints

Equipment	Software Revision
TANDBERG 500-8000	B1.1
TANDBERG 500-8000	B2.3
TANDBERG 500-8000	B3.4
TANDBERG 500-8000	B4.3
TANDBERG 500-8000	B5.1 / B5.11
TANDBERG 500-8000	B6.2/ E1.2
TANDBERG 500-8000	B7.3 / E2.3
Vision 5000	C4.0
Vision 2000	B4.2
Vision 600 / 770	B1.3
Polycom IPower 970	5.2.0.828
Polycom IPower 680	5.2.0.828
Polycom FX	5.1
Polycom EX	5.1
Polycom VS	7.5
Polycom MP 512	7.5
Polycom ViaVideo	5.1.2600.1106
Sony 1600	3.00
Sony 6000	4.00
VCON IP Falcon	V2.0
VTEL Galaxy	2.2.0.70
PTEL Venue 2000	1.4

7.2 MCUs

Equipment	Software Revision
Polycom MGC 100/50 MCU	5.03.91
Radvision OnLan MCU	2.2.1.0
Radvision ViaIP MCU	2.2.65

7.3 Gatekeepers

Equipment	Software Revision
Radvision ECS Gatekeeper	3.2.2.0
Cisco MCM Gatekeeper	12.2(13)T

7.4 Gateways

Equipment	Software Revision
TANDBERG Gateway	G2.0
Radvision ViaIP GW	2.0.0.61
Radvision L2W GW	2.2.3.2.5

