Emblaze-VCON Conferencing Bridge (VCB5) 5.1 SP1

Release Notes

February, 2007

Fixed Bugs

1. VCB sent wrong bandwidth for systems that connected as a lower rate than the conference rate.

2. Bad audio on Aethra in AAC-LD.

3. Broadcast viewers can't see video when systems are connected at a lower bandwidth than the conference default.

4. Wrong display of Maximum video rate on the systems.

5. When systems are connected at a higher and lower bandwidth than the acual configured conference bandwidth, the frame rate for the systems at the lower bandwidth drops.

Dependencies & Limitations

1. When setting new IP Address in the VCB properties -> network settings tab -> gatekeeper address , the new address is not updated. VCB is logged in but all its services are logged into management.

The workaround is to delete the VCB (from MXM Administrator). After few seconds it registers itself again with all services logged in. 2. When Aethra system dials in to a VS conference that is set to H.261

or H.263, in lower bandwidth than the original VCB configuration, it connects with audio only.

VCB sends lower bandwidth than configured in H.264 + 4CIF conferences. H.264 has variable bitrates output. VCB send lower bitrate in order to make sure not to exceed the maximum allowed.
 VCB sends a slightly lower frame rate than 30fps in H.261 and H.263 calls.

6. Low video quality when dialing out to Aethra system over ISDN.
7. HD3000/HD3000LT are recieving lower bandwidth than the configured bandwidth of the VCB conference. Uncheck the Automatic Bandwidth Adjustment option on the HD3000/HD3000LT will fix this.

8. Running SSH command cause wmiprsve.exe process to run.

9. Creating ~20 services via VCBconfig (one after one) cause some of them to crash. Need to delete them and re-create.

10. If VCB is configured to second channel XGA and multicast is enabled, EVC Broadcast Viewer doesn't see the data and video is freezed (for the Viewer). Changing the second channel to CIF works fine.

11. If endpoints are invited to VCB Conference through moderator, and "Mute audio to all users when another user joins" is selected, the audio channel is not opened and no audio is available. Use Mute/Unmute only from the In Progress tab.

12. VCB Config ->services layout ->there is an option to select 5*5 layout.

This layout should not be an option for SP1 (VCB doesn't support it) As a result there is no video when selecting this layout.

Same in administrator, this layout 5*5 should be removed

Emblaze-VCON Conferencing Bridge (VCB5) 5.1

Release Notes

Sept, 2006

New Features

Mute Video and Audio in for one participant or for all participants.
 Selection of different Bandwidth values for video in and video out.
 Support for High Definition 720p. 720p is one of the resolution specs used in HDTV. 720p stands for resolution of 1280x720 pixels and the magic little 'p' means that the video is in progressive format.

4. Automatic Speed Matching mechanism.

5. Frame Rate Matching mechanism.

Fixed Bugs

1. Multiple Chair Control Bug fixes

2. Crash during multiple participants disconnect.

Dependencies & Limitations

1. Data Sharing (H.239) on VCB configured to H.264. Data sharing will work only for endpoints that support data in H.264 (like HD5000 and vPointHD).

2. Cascading between Continuous Presence conference on Codian MCU and Continuous Presence conference on VCB, call connects but VCB sees the End Points that are connected to the Codian as QCIF inside a QCIF quadrant.

3. When an Endpoint connects with low video Frame Rate, the Frame Rate to all other participants in a conference drops.

4. VCB service Dual video configured to AUTO, Falcon or MeetingPoint on ISDN fail to connect(Falcon on LAN connects ok).

5. Moderator Exchange notification option doesn't work due operating system limitation.

6. When the time zone that was selected contains the option 'Automatically Adjust clock for daylight saving changes' (In the VCB server and on moderator PC) and the time zone is same on moderator\my preferences, creating a conference will display wrong time -1 hour.

In case 'Automatically Adjust clock for daylight saving changes' is not checked, time is displayed correctly.

7. Changing the time zone on the VCB server requires a restart of the server.

8. Open Moderator or VCBconfig web applications fails because it use machine name instead of IP address. To fix it you must set a new fix IP address via SSH command:

setparam ipstatic <0-3> <ip> <subnet mask> <default GW>.
9. SMTP notifications may not function due to restrictions on SMTP
Server Relay options. The message that will be sent to the MXM
event log window is "Failed sending notification! (Error=Could not
access 'CDO.Message' object)".

The error may occur whenever trying to send notifications to emails that are outside the SMTP server domain according to SMTP Server Relay restrictions.

In order to fix the problem, go to Default SMTP Virtual Server -> Properties -> Access -> Relay and grant Relay permissions as required.

VCON Conferencing Bridge (VCB5) 5.0 Release Notes July, 2006

New Features V.5

- 1. Continuous presence to show up to 16 participants at the same time
- 2. Selection of 10 different display combinations.
- 3. Dynamic layouts screen layout changes as participants join and leave the conference.
- 4. Selection of 3 dynamic layouts.
- 5. H.264 in Continuous Presence.
- 6. Different video in / video out resolutions
- 7. 4CIF video out in H.264
- 8. Data rate of up to 4M per participant with no degradation in number of ports.

VCON Conferencing Bridge (VCB 2500) 4.26

Release Notes

Sept, 2005

New Features

1. Improved jitter buffer for handling poor network connections.

Dependencies & Limitations

- 1. VCB 4.26 can only be installed on English versions of Windows 2000 or 2003.
- 2. A VCB2000 that has been upgraded to a VCB2500 will only support a maximum of 16 ports with the VCB2500 features.

Interoperability Problems

- 1. When working with ISDN Gateways and VCB service in CP mode, the VCB service should be configured to work only with G.728 audio codec and H263 video codec.
- 2. Video of Tandberg MXP when connecting to VCB via gateway is very poor for the first few seconds.
- 3. Tandberg endpoints cannot see video data channel when it is configured to H263 with resolution greater than VGA.
- 4. When closing H263 data channel Polycom endpoints will see stuck data.

- 5. Polycom endpoints do not support data at QCIF resolution.
- 6. When VCB is configured for H264 codec on the data channel, only endpoints that support 2 simultaneous H264 channels (including vPointHD and HD5000) will be able to view the both simultaneously. Endpoints that do not support 2 simultaneous channels will receive data in place of the live video up to a resolution of CIF.
- 7. Data kidnap will not always work correctly with endpoints other than vPointHD and HD5000. In these cases, in order to move the data presenter from one participant to another, the current data presenter should first closed its data channel before the next participant takes control.

Known Bugs

1. When working with legacy devices that do not support high bandwidth calls it is necessary to configure the VCB service to use either Speed Matching or Symmetric Bandwidth for all participants.

Fixed Bugs

- 1. ISDN conference participant can now be set as a fixed member via the moderator chair control interface.
- 2. Transitions from VS to CP via the moderator chair control no longer cause the video to freeze in the broadcast viewer.
- 3. QOS flags now set as configured.
- 4. Non-Latin characters now displayed correctly in the On Screen Display.
- 5. Cascading VCB services between zones now connects correctly.
- 6. Audio cuts with Cisco ATA phone no longer occur.

VCON Conferencing Bridge (VCB 2500) 4.25

Release Notes

April, 2005

New Features

- 1. Active Speaker Highlighting
- 2. On Screen Display.

Upgrading From VCB 2000

When upgrading from VCB 2000, insert the VCB 2500 Upgrade CD into the drive and follow the instructions.

Upgrading From previous version of Software VCB

- 1. When upgrading from previous version of software VCB, the MxM must also be upgraded to version 4.25.
- 2. Using the MxM installation CD choose the VCB option from the installation dialog.

Release Notes

Dependencies & Limitations

- 1. VCB 4.25 can only be installed on English versions of Windows 2000 or 2003.
- 2. A VCB2000 that has been upgraded to a VCB2500 will only support a maximum of 16 ports with the VCB2500 features.

Interoperability Problems

- 1. Tandberg endpoints cannot send or receive video data with size greater that VGA.
- 2. Polycom VSX does not support H261 in H239 or in dual video.
- 3. Polycom and Tandberg do not support simultaneous live video and video data channels in H264.
- 4. When Polycom fails to open data in a CP conference the VCB will not allow it to send CIF video data on the live video channel.
- 5. Meeting Point fails to open video when connecting via a gateway to a H263 conference due to the fact that it does not support H.263.
- 6. When Tandberg MXP 990 closes data channel all other endpoints continue to receive black video on the data channel.
- 7. When Tandberg MXP 990 connects to the VCB configured to AAC audio codec there are audio cuts.
- 8. For an H.263 CP conference Tandberg should be configured to Duo Video mode.

Known Bugs

- 1. Endpoints that do not send a video stream may be displayed as black or blue video.
- 2. AAC audio codec is not supported in multicast.

Fixed Bugs

- 1. Silence suppression mechanism no longer causes audio cuts.
- 2. Fixed issue that caused the 25th VCB service not to connect to the MXM.

VCON Conferencing Bridge (VCB 2500) 4.2

- 1. Support added for G.722.1 (24k and 32k), G.723.1, AAC-LD and G.728 audio codecs.
- 2. Support added for H.263+ and H263++.
- 3. Support added for audio transcoding between all VCB audio codecs.
- 4. Support added for Symmetric Bandwidth in CP conferences.
- 5. Support added for Speed Matching in CP conferences.
- 6. Support added for H239.
- 7. Support added for mode switching between CP and VS and dominant speaker, timer and fixed modes.
- 8. Support extended for FECC to include Annex Q of the H224 protocol.

9. Fixed an issue with G.711Ulaw that caused higher CPU consumption compared to G.711Alaw calls.

Upgrading From VCB 2000

When upgrading from VCB 2000, insert the VCB 2500 Upgrade CD into the drive and follow the instructions.

Upgrading From previous version of Software VCB

- 1. When upgrading from previous version of software VCB, the MxM must also be upgraded to version 4.2.
- 2. Using the MxM installation CD chose the VCB option from the installation dialog.

Release Notes

Dependencies & Limitations

- 1. VCB 4.2 can only be installed on English versions of Windows 2000 or 2003.
- 2. When the VCB is required to work in dual video mode the live video channel should be configured to CIF.

Interoperability Problems

- 1. vPoint 5.1 will not receive symmetric or speed matched H261 CP video.
- 2. When Polycom ViewStation is in a CP call it displays the last frame from its previous calls in the unpopulated quadrants.
- 3. When the VCB is configured to work in dual video mode and XGA video size, only the latest release of VCON products will be able to view the second video channel.

Known Bugs

- 1. When a fixed member from chair control interface exits a conference the chair control interface does not represent this correctly.
- 2. Attempting to cascade a VCB services with another MCU service that have different video codec and/or size will not succeed.

VCON Conferencing Bridge (VCB) 4.1 August, 2003

1. Added support for H.264 in Voice Switching mode for QCIF/CIF/4CIF/XGA resolutions.

2. Added support for VCON dual-stream and Tandberg DuoVideo calls. The VCB will allow for only one participant to show his data over the second video stream.

- 3. VCON Conference Moderator chair control functions are supported.
- 4. Support for up to 4MBits calls.
- 5. G.711 support could be removed so the VCB will force G.722.

VCON Videoconferencing Products VCON Conferencing Bridge (VCB) 4.0

Release Notes

August, 2003

Release Capabilities

- 1. Dial-in or Ad-hoc conferencing.
- 2. 1, 2, 4 or 8 Session configurations.
- 3. Continuous Presence -
 - Up to 384Kbps.
 - Up to 64 participants per session.
- 4. Voice Activated Switching -
 - Up to 1.5Mbps.
 - Up to 64 participants per session.
- 5. Audio mixing (G.711, G.722).
- 6. Continuous Presence (H.261).
- 7. Voice Activated Switching (H.261 and H.263).
- 8. Windows 2000 support.
- 9. Configuration setup in the Media Xchange Manager MXM (version 4.0).
- 10. Gateway support in Continuous Presence mode.
- 11. Multi sessions using one IP address.
- 12. Port range configuration.
- 13. Supports the VCON Moderator application.
- 14. Support the VCON SecureConnect products.

New features

1. Cascading between a VCB session and another VCB/MCU session.

Minimum PC Requirements

- 1. 8 Ports VCB 500Mhz PC, 128MB RAM.
- 2. 16 Ports VCB 1Ghz PC, 128MB RAM (256MB recommended).
- 3. 32 Poprts and above VCB 2.4Ghz PC, 256MB RAM.
- 4. A 100 mbps Network Interface Card.

General Requirements

- 1. The VCB $\underline{\text{must}}$ be registered to the Media Xchange Manager (version 4.0).
- 2. Above 32 ports, VCB <u>must</u> run on a dedicated computer with no other applications running.

VCB 3.1 to VCB 4.0 Upgrade Process

1. Install VCB 4.0, no need to uninstall the VCB 3.1 first.

Note - At the end of installation, VCB 4.0 will register itself to the MXM.

Continuous Presence

1. When using Continuous Presence mode, the endpoint sends a QCIF frame and receives a CIF frame. Therefore, the incoming rate may exceed the MXM bandwidth limitations for a certain endpoint.

Known issues

 When both NetMeeting and a Gateway participant are in a Continuous Presence session, when NetMeeting is the dominant speaker, the remote

video on the Gateway participant's video may become unstable.

2. Cascading between VCB (CP mode) in Zonel and Polycom MGC in Zone2 will only work if the MGC initiates the cascading.

3. Cascading between VCB1 in Zonel and VCB2 (CP mode) in Zone2: If VCB1 initiated the cascading, and if VCB1 has no other e.p.'s and VCB2 has one e.p. connected, then VCB2 will show a double picture for a few seconds.

You can see this in 2 scenarios: when VCB2 first connects to its e.p., and also if VCB1 had more e.p.'s at first and then disconnected from them.

4. Cascading between VCB1 in Zone1 and VCB2 in Zone2, where one is in CP and one is in VS (doesn't matter which is which) If VCB1 initiated the cascading, and both VCBs each have one e.p. connected, then you disconnect VCB2's e.p., then VCB1 will show a frozen picture in its e.p.

5. Calls over 768kpbs between VCB and the Tandberg endpoint in H264 connects to 2x64 kbps with no Video but with Audio.