



ribbon™

**EdgeMarc VOS**

## Release Notes

Software Release: 16.6.0  
Document Revision: 08.01  
Published: 13 September 2024

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# EdgeMarc VOS 16.6.0 Release Notes

## Table of Contents

- [About EdgeMarc 16.6.0 Release Notes](#)
  - [Related Documentation](#)
  - [Release Notes Use and Distribution](#)
  - [Problems or Questions](#)
- [About EdgeMarc VoIP Operating System \(VOS\)](#)
  - [Supported Platforms](#)
- [New Features in This Release](#)
- [How to Verify Currently Installed Software/Firmware Versions](#)
- [Upgrade Notes](#)
- [Resolved Issues](#)
  - [Resolved Issues - Severity 1](#)
  - [Resolved Issues - Severity 2/3](#)
  - [Known Issues - Severity 1](#)
  - [Known Issues - All Other Severities](#)

## About EdgeMarc 16.6.0 Release Notes

This document describes new features, the latest hardware and software requirements, known limitations, and other pertinent release information for the latest release of EdgeMarc VOS 16.6.0.

## Related Documentation

The EdgeMarc VOS 16.6.0 documentation is located at the following Ribbon Wiki space: [EdgeMarc VOS 16.6.x Documentation Home](#).

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## Problems or Questions

For problems or questions, contact the Global Support Assistance Center:

**Ribbon Support Portal:** <https://ribboncommunications.com/services/ribbon-support-portal>

**Voice:** +1-833-RIBBON1 (1-833-742-2661)

# About EdgeMarc VoIP Operating System (VOS)

The EdgeMarc is a flexible, easy-to-use session border controller that provides critical networking functions for IP-based voice and data. EdgeMarc VoIP Operating System (VOS) provides award-winning features for converged networking environments. These features enable the EdgeMarc to act as an enterprise session border controller and demarcation point for managed services.

## Release History

Release	Date	Purpose
Release 16.6.0.	 13 Sep 2024	New features, improvements, resolved issues.

## Supported Platforms

Refer to [EdgeMarc VOS Interoperability Matrix](#) for a detailed EdgeMarc VOS interoperability matrix.

The EdgeMarc 6000 has updated capacity figures. For details, refer to the [EdgeMarc datasheets](#). (Scroll to Resources, Datasheet on that page. Select EdgeMarc 6000.)

# New Features in This Release

The following new features are included in this release:

ID	Feature	Description
EM-28549	Remove "Route" header	Added a configuration parameter to enable/disable Route header insertion. Add "SIP_REMOVE_ROUTE_HEADER=on"
EM-28389	Ribbon AS Compatibility with EdgeMarc Survivability Feature	<p>EdgeMarc can now obtain subscriber data from a Ribbon Application Server". In the old behavior when "Request Subscriber Information from SIP Server" is enabled through GUI in the EdgeMarc, the allow-events header will add with "BroadWorksSubscriberData" for REGISTER message in the ALG mode.</p> <p>With this feature enabled, then EdgeMarc will include the "RibbonSubscriberData" in the Allow-events header for REGISTER message and process the received 200 OK response with Content-Type "ribbonsubscriberdata+xml" along with xml details.</p>
EM-28372 EM-28648	<p>Consolidate 1,4,7,8 auto configuration modes on the EdgeMarc</p> <p>A file downloaded via auto configuration needs to be checked against the previous download for differences</p>	<p>The EdgeMarc currently supports 7 different auto configuration modes when it comes to configuration and VOS update methods. This feature will consolidate the configuration file download and parsing, as well as VOS changing scripts for auto configuration modes 1, 4, 7, and 8.</p> <p>Auto configuration needs to add difference checking to its update process</p> <ul style="list-style-type: none"> <li>• Auto configuration downloads a configuration file</li> <li>• Parameters in the downloaded file are compared to the existing configuration</li> <li>• If no differences are found, terminate the auto configuration process</li> <li>• If differences are found, apply the changes as currently designed</li> <li>• the parameter for the download URL in auto_cfg.conf needs to be exempt from this checking</li> <li>• A configuration obtained after a restart via check-sync message in a SIP NOTIFY should ALWAYS be applied</li> </ul>
EM-28371	EdgeMarc should not clear rate-pacing register in case of a 403 response to SUBSCRIBE	When the SIP_KEEP_REG_ON_SUBSC_FAIL=on config parameter is added to the alg_defs.conf file, EM will no longer clear the rate-pacing register in the event of a SUBSCRIBE failure scenario (403 response). This feature will be disabled by default, which is the current behavior.

EM-28349	Handling authentication challenge from the server when From header user is anonymous	This new feature enables EM to independently manage authorization challenges. It achieves this by extracting the user information from either the 'Contact' header or the 'otg' parameter within the 'From' header, specifically when dealing with anonymous users. EM will solely relay the response to the client for credential input if none of these users are matched in the credential list.
EM-28324	EM300 - No Local Ringback on FXS to SIP calls	In the existing behavior, EdgeMarc doesn't generate local ringback if a 180 with SDP is received. With this feature, EdgeMarc will have a new GUI checkbox labeled "Prefer Local RingBack on 180/SDP" in SIPUA.Advanced page to force the local ringback and ignore the 180/SDP media. The checkbox will be disabled by default.
EM-28321	EdgeMarc 6000 platform support overlap receive on T1 from PBX	Enabled ISDN Overlap Receive
EM-28291	EdgeMarc doesn't work as B2BUA for session refresh	In the existing behavior when both ends (UAC and UAS) support session timer, the EdgeMarc working as a proxy mode. When this feature is enabled, the session refresh message works in B2BUA mode in EM. EM handles refresh messages separately in UAC and UAS sides. Whenever any refresh message is received from the refresher end, then EM respond 200 OK response locally without translate refresh message to other end. Also EM start to send refresh message to other side in the half of the session interval.
EM-28261	Session Refresh message doesn't comply with RFC4028	In the existing feature , EM waited to send a session refresh until the full session timer expiry interval. After this feature is added if EM does not receive a session refresh from the refresher within 2/3 of the session interval then it will initiate a new session refresh on the other leg. If the session timer comes within 2/3 of the session expiry interval then EM will respond to the session refresh on that leg, and reinitiate a session refresh on the other leg ( EM-28291 ). Also a BYE will be sent on both legs if the session timer expires on the leg where EM is a refresher.
EM-28183	Pass unknown headers in B2BUA mode	<p>In the existing behavior, EdgeMarc does not translate all the received headers of a SIP message to the other end. Only the mandatory headers will be passed. Currently, HMR has the capability to manually include specific headers (standard or non-standard) and adjust their values if necessary. This enhancement will introduce a separate feature to manage all unknown headers independently.</p> <p>When this feature is added, EdgeMarc will permit all the unknown headers in an incoming INVITE message to the other end based on three modes. We have the option to specify which headers that should be allowed or blocked, but their header values will remain unchanged. Currently the feature only supports INVITE request, and it only works in B2BUA mode. If the same header is given in the HMR and Header Passthrough sections, HMR will have the higher priority and the value will be modified as per the rule instead of just pass through. The Header Passthrough feature will not interfere with the HMR, as they operate independently. Corresponding to an "Action" rule, we can set a passthrough mode and give a set of headers accordingly.</p>

EM-28136	EdgeMarc Stripping Non-Standard Header in B2BUA Mode	EdgeMarc retains the Reason header when translating a SIP Cancel message.
EM-28058	FXS Lines: SIP INFO messages not accepted	When this feature is enabled, INFO will be added in the allow header for INVITE messages from UA . EM will send "200 OK" response for the INFO messages within a call, and "481 Call leg/transaction does not exist" for INFO message for non active calls. For the INFO messages within a call, with message body, EM will send "488 Not acceptable here". In Advanced UA a checkbox "INFO Keepalive Support:" is provided to control this feature.
EM-27959	Enable mand mutex monitor by default	Enabled existing CLI config param MAND_MUTEX_MONITOR=120 seconds by default. Added Mand Mutex Monitor Timeout in VoIP page to allow modifications.
EM-26770	EdgeMarc should support redundant TACACS servers	EdgeMarc now supports redundant TACACS+ servers



## How to Verify Currently Installed Software/Firmware Versions

Use the EdgeMarc WebUI to verify the currently installed software version.

1. Open the WebUI and click the **Admin** tab.
2. On the **Admin** page, you can see the current software version under **Software Version**.

# Upgrade Notes

This section contains specific upgrade notes for customers planning to upgrade to EdgeMarc VOS 16.6.0 EM

For details on supported releases and upgrades, see [Upgrade Firmware](#).

To download a software package from the Ribbon Support Portal, refer [Ribbon Support Portal - Download Center](#).

# Resolved Issues

## Resolved Issues - Severity 1

Issue Id	Severity	Summary	Description
EM-28323	1	EM not handling the authentication correctly, it only checks the "From" header user for authentication	If the "From" header user is anonymous or the user does not match with any AOR entry in Credentials and Registrations, EM will take "Contact" header user and compare with AOR entries. And if it is failed, checks the "otg" parameter of "From" header.
EM-28064	1	FXS Lines: Calls not fully released after bridge transfer	For 3WCC, explicitly release the call-legs for parties referred as required by the AS.

## Resolved Issues - Severity 2/3

Issue Id	Severity	Summary	Resolution
EM-28722	2	Evagent process high memory issue	Fix is to periodically clean up stale data.
EM-28496	2	HMR for Allow header	HMR can now be used to manipulate the Allow header
EM-28721	2	FXS to SIP call that receives a 181 does not get ringback Outbound calls from FXS to SIP do not generate a local ringback on the FXS side when the FXS receives a 181 message first and then a 180 message from the SIP side.	Outbound calls from FXS to SIP do not generate a local ringback on the FXS side when the FXS receives a 181 message first and then a 180 message from the SIP side. With the fix, 181/182 message handling added.
EM-28686	2	Samsung Phones unable to take calls off Hold	The Samsung endpoint places a call on hold using an 'a=sendonly' line in the INVITE's SDP and expects the EdgeMarc UA to respond with 'a=recvonly' in the 200 OK SDP. EdgeMarc UA is not including 'a=recvonly' in the 200 OK response Fix corrects the of the sendonly/recvonly attribute in the SDP offer response.

EM-286 77	2	IPv6 is not working to the site. When IPv6 is used for a period of time, it may stop responding to IPv6 neighbor requests.	<p>Some icmpv6 error packets will trigger the kernel debug message "icmp6_send: no reply to icmp error", and then the Kernel will discard them. However, some icmpv6 error packets are not recognized by the kernel. Hence causing the issue. When enough such packets accumulate, IPv6 may not work.</p> <p>The IPv6 issue appears to be caused by a flaw in the Linux kernel's IPv6 caching mechanism that causes the soft lock. The fix is to add a series of related patch sets to fix this flaw.</p>
EM-285 50	2	EM does not respond with correct crypto tag number	<p>In an outbound late-offer call scenario, the 200OK SDP from the server with two crypto keys was using tag values of 2 and 3. The EdgeMarc then responds with an ACK SDP and a crypto key tag value of 1. The EdgeMarc should have responded with a crypto key tag value that matches the tag value of the desired cipher suite that is being offered.</p> <p>Fixed the issue where the default crypto tag and crypto suite were being utilized to translate the ACK message from a client lacking SRTP and crypto attributes. This occurred in an outbound late offer call scenario, where only the server side supported SRTP.</p>
EM-284 50	2	No audio on LAN IPv4 to WAN IPv6 call	Fix is to remove additional source port checking while strict RTP disabled
EM-283 88	2	Evagent not sending TLS SNI Extension	<p>The evagent now sends the SNI in the TLS negotiation when the management host is configured by FQDN to accommodate issues incurred from certain firewall configurations.</p> <p>The evagent now sends the SNI in the TLS negotiation when the management host is configured by FQDN to accommodate issues incurred from certain firewall configurations.</p> <p>Workaround: Avoid use of firewalls which require SNI information.</p>
EM-283 83	2	EM GUI: Setting RX gain in SIPUA -> Advanced configures TX gain missing clear help page description	Make the help page more verbose to account for correlation with actual config for clarity.
EM-283 66	2	SIP ALG process does not start with WAN TLS enabled with HA and multi VLAN ALG	A recovery mechanism using MAND restart has been implemented to restore Active and Standby devices when the LAN interface goes down and comes back up later.
EM-283 50	2	Edgeview Not Storing Full Device Backup	Added the condition to handle EPOLLHUP event (checking EOF).

EM-283 30	2	EdgeMarc not using IPv6 Management IP as source for SNMP traps	<p>For the SNMP v1/v2 trap command in the snmpd.conf configuration, the trapsink/trap2sink command used before would decrypt the community string when extracting it. However, this is not the case when using the trapsess command to replace trapsink/trap2sink. This leads to the snmp trap server being unable to match the corresponding configured community string when receiving SNMP v1/v2 trap packets.</p> <p>Added the decryption function to the trapsess command to address this issue and use the trapsess instead of the trapsink/trap2sink command because of the latest version of netsnmp.</p>
EM-282 81	2	Fax fails on EM 300 platform when media line contains an additional image line with port zero	Fix is to add logic to ignore inactive media with port=0.
EM-281 61	2	EdgeMarc missing checks to detect certificate expiration for autocfg mode 4	Fix is to Set highest priority to "DM_CURL_OPTIONS", if certificates provided in "DM_CURL_OPTIONS" the use them if are valid certificates. Updated code for error handling.
EM-284 71	2	PCAP started via EdgeView could not be manually stopped.	Corrected code to run script ev_daigsnap.sh after getting PCAP_UPLOAD_CANCEL event to convert the buff data into the pcap file.
EM-283 90	2	Losing DNS after changing the LAN IP of EdgeMarc	Added temporary default DNS IP's parameters only for fetching fresh DNS IP values from DHCP server.
EM-283 74	2	EM300 ATA not allowing some special character in the password field.	Removed the restricted characters (<,&,>) check for Session Initiation Protocol User Agent (SIPUA) user passwords from the qDecoder.
EM-283 32	2	EM doesn't send out INV w/ Auth after re-routing the call	Set Authentication flag when the credential for corresponding username or default credential is added in B2BUA.
EM-283 20	2	CANCEL message has PPI header	Prevent PPI header to be added in CANCEL message.
EM-283 05	2	REGISTER refresh not occurring at half of the Expired value.	Enabled "Default Expires" and "Renew interval" config parameters when Use B2BUA Rule is enabled for Pilot Number.
EM-283 04	2	"uri" different in the Request-URI header for INVITE and REGISTER messages	With the fix "uri" will be same as Request-URI for INVITE and REGISTER messages.
EM-282 92	2	Missed some mandatory headers in the 200 OK response for the Re-INVITE message.	Added mandatory headers in the 200 OK response message

EM-282 80	2	Refresh REGISTER Timer Configuration Issue for pilot registration	"Default Expires" and "Renew interval" config parameters are not able to be configured when the B2BUA Rule is enabled for Pilot Number.  Fix is to Enable "Default Expires" and "Renew interval" config parameters when Use B2BUA Rule is enabled for Pilot Number.
EM-282 79	2	REGISTER message "Request URI" header value is not replaced with the HMR configure value.	If any B2BUA rule is added for Request URI, then Request URI update according to that b2bua rule.
EM-282 54	2	Issue with early media ,PROGRESS message with PI=8 sending 180 upstream and missing early media.	Check for PROGIND IE(PI) in PROGRESS message and if PI=8 send 183 upstream to indicate early media.

## Known Issues

### Known Issues - Severity 1

There are no known issues of high severity in this release.

### Known Issues - All Other Severities

There are no known issues of other severity in this release.

Issue ID	Severity	Problem Description	Impact/Workaround
EM-28663	3	WAN IPv6 not get enabled when autotcfg process is invoked	Manually configure IPv6 after autotcfg has completed