uniteme 19.12

February 13, 2020

Summary

eZuce is pleased to announce the General Availability of Uniteme 19.12.

This will be a fairly light update with mostly bug fixes for Uniteme. This is largely because we decided to update FreeSwitch to version 1.10 to be able to add a new enhancement. This adds additional regression testing overhead.

We've waited a little bit longer with this GA announcement to allow for some additional testing and additional community adoption of 19.12.

Highlights

uniteme New Features:

- Read the user's name for voicemail users who have not recorded a name
- Let's Encrypt Certificate support

uniteme Improvements:

- Upgrade FreeSwitch to 1.10
- Bug fixes

Notes

1. Full Release Notes with installation information are located here: 19.12 Full Release Notes
2. 19.08 and later are now released on CentOS 7 only. This will require that administrators install CentOS 7 minimal, then install Uniteme with our single line installer and then restore from a previous version backup.
3. Customers receiving faxes through AudioCodes devices will need to modify their AudioCodes configurations with the following settings changes:

    [Voice Engine Params]

    CallerIDType = 0

    FaxTransportMode = 0

    CNGDetectorMode = 0

    [SIP Params]

    CHANNELSELECTMODE = 0

    ISFAXUSED = 0

    SIPTRANSPORTTYPE = 0

    [CodersGroup0]

    CodersGroup0 0 = "g711Ulaw64k", 20, 0, -1, 0;

4. For Let's Encrypt certificates to work properly, the server must have a valid outside DNS name and have port 80 and 443 open to LE's servers.

Who Should Install?

This release is recommended for all 4.6 and later installations. If you have a patch installed to your system a new patch may be required. Please contact sa @ezuce.com if you think you may have a patch applied as that may be replaced during the update.

eZuce's software products continuously progress through an Agile based development methodology that keeps feature functionality comprehensive and up-to-date in response to evolving market and customer requirements.

New software releases are made at a rate of two to four releases a year. Releases are numbered in the <yy>.<mm>.<uu> format where <yy> and <mm> designate the year and the month, respectively, in which a release is made generally available. Where applicable, <uu> corresponds to an update release relative to a general release on which fixes are made available.

In order to ensure service continuity and stability, customers may keep their production environments unchanged for up to a 6-month period during which release updates or patches are made available. After a release is more than 6-months old, eZuce customers would have to upgrade to the latest generally available release - inclusive of all fixes to date and any new patches.

Questions

If you have questions about updating you can email sa@ezuce.com or if you need assistance with the update please contact your account manager or email sales@ezuce.com.

Software Release History

We're currently running on a 4-month release cycle.

- April release for 2018 is 18.04
- August release for 2018 is 18.08
- ...

Release Level History

- 14.04   - April 30, 2014
- 14.04.1 - June 01, 2014
- 14.04.2 - July 11, 2014
- 14.04.3 - October 24, 2014
- 14.10 - February 5, 2015
- 15.04 - April 29, 2015
- 15.05 - May 27, 2015
- 15.06 - June 30, 2015
- 15.08 - August 31, 2015
- 15.10.1 - December 9, 2015
- 15.12 - January 6, 2015
- 16.02 - March 14, 2016
- 16.04 - May 31, 2016
- 16.08 - October 6, 2016
- 16.12 - January 17, 2016
- 17.04 - April 18, 2017
- 17.08 - September 7, 2017
- 17.10 - December 7, 2017
- 18.04 - June 5, 2018
- 18.08 - September 7, 2018
- 18.12 - January 15, 2019
- 19.04 - May 28, 2019
- 19.08 - October 10, 2019
- 19.12 - February 13, 2020

System Requirements

For a reasonably performing system, we recommend the following configuration.

Minimum hardware requirements

- Pentium 4 or Xeon processor @ 2.0 GHz 64bit or higher
- Minimum 4 GB of RAM with sufficient swap space
- 40 GB disk (75 users depending on usage patterns, VoiceMail consumes ~ 1 MB per minute so scale appropriately for your user count and anticipated VM retention policy)
- As with anything server wise, more CPU/RAM/DISK = better.

Notes:

- **unite**me supports an unlimited number of voicemail boxes, the total number of hours of recorded messages is determined by the size of the hard-disk. As a rule, for every minute of recorded messages, you will need 1 MB of disk space (About 3 hours per 10 GB of disk space).

Operating System

CentOS/RHEL 7 x86_64 minimal with latest updates is required (recommended now).

Devices

Phones

- **Polycom VVX Devices** with firmware 5.9.1 (split) are recommended for new installations
- **Polycom SoundPoint IP** Devices should run firmware 4.0.14 (split)

Gateways

- **AudioCodes Gateways** are recommended for PSTN connectivity

SBCs

- **Frafos, Sangoma, Acme Packet and Ingate** SBC's are recommended for SIP Trunking and Remote Worker connectivity (commonly referred to as sipXbridge and MediaRelay services respectively).
- **NOTE:** The eZuce unite**me** - "Use built-in SIP Trunk SBC" found in Gateway Details for use with Trunking or Remote Worker solutions should be used only for lab purposes. Additionally, sipXbridge does not work in an HA environment.

Documentation

Technical Reference Manuals, User Guides, and other technical and user information can be found under the following link: Documentation Page

Installation and Upgrade Notes

Special MongoDB note

Please be aware of these Mongodb requirements http://docs.mongodb.org/manual/reference/ulimit/ **Note:** Both the "hard" and the "soft" ulimit affect MongoDB's performance. The "hard" ulimit refers to the maximum number of processes that a user can have active at any time. This is the ceiling: no non-root process can increase the "hard" ulimit. In contrast, the "soft" ulimit is the limit that is actually enforced for a session or process, but any process can increase it up to "hard" ulimit maximum.Every deployment may have unique requirements and settings; however, the following thresholds and settings are particularly important for mongod and mongos deployments:

```
ulimit -a
-f (file size): unlimited
-t (cpu time): unlimited
-v (virtual memory): unlimited
-n (open files): 64000
-m (memory size): unlimited
-u (processes/threads): 32000
```

Always remember to restart your mongod and mongos instances after changing the ulimit settings to make sure that the settings change takes effect.If you limit virtual or resident memory size on a system running MongoDB the operating system will refuse to honor additional allocation requests. After every install/upgrade please check that "cat /proc/$pid_of_mongo/limits" have the recommended value of 655350. To make this value permanent you need to create this file */etc/security/limits.d/99-mongodb-nproc.conf* and add the following lines:

```
mongodb soft nproc 64000
```

```
mongodb hard nproc 64000
```

```
mongodb soft nofile 64000
```

```
mongodb hard nofile 64000
```

Special Patch Note

If you have a patch installed to your system a new patch may be required. Please contact sa@ezuce.com if think you may have a patch applied as that may be replaced during the update.

Installing from Repository

unite**me** can be installed using the following procedure

1. Download CentOS 7 64 bit Minimal ISO from CentOS (https://www.centos.org/download/)
2. Install CentOS 7. (Installing#InstallRedHatEnterpriseLinux7.xorCentOS7.x)
3. Install **unite**me. (Installing#Installuniteme)

Upgrade from previous versions

Warning!

Make sure you **backup** your system (configuration and voicemail at a minimum) prior to installation.

Upgrade 18.12 or later and already on CentOS 7

Modify your yum repo file for Uniteme (it's in the directory /etc/yum.repos.d) for the release you'd like to use.

Adjust your /etc/yum.repos.d/openuc.repo file to point to the version of openUC you'd like to upgrade to.

For example:

```
baseurl=https://user:password@https://download.ezuce.com/openuc/19.12-centos7/CentOS_$releasever/$basearch

    to

baseurl=https://user:password@https://download.ezuce.com/openuc/19.12-centos7/CentOS_$releasever/$basearch
```

```
When you are ready to perform the actual upgrade:
```

```
yum update
or
yum update -y
```

If your system is a highly available cluster of 3 or more servers, update the secondary servers first and the primary server last. Send send all of the server profiles when done update on the primary server.

Upgrade for 18.12 or later CentOS 6 to CentOS 7

Any upgrade to CentOS 7 will require a fresh installation of CentOS 7 and then a restore of **unite**me.

Backup your System

Login to the Admin GUI and click on System -> Backup and at a minimum backup configuration and voicemail.

Download the configuration and voicemail backup archives.

Build New CentOS 7 Server

Download CentOS 7 64 bit Minimal ISO from CentOS (https://www.centos.org/download/)

Install CentOS 7. (Installing#InstallRedHatEnterpriseLinux7.xorCentOS7.x)

Install **unite**me. (Installing#Installuniteme)

Restore your System

Restore configuration and voicemail.

Remove any secondary servers restored from the Servers page.

Send Server Profile.

Reboot

Add Secondary Servers

Rebuild and re-add any secondary servers.

Modified Files Upgrade Note

If you have manually modified any system related files or some files are not as yum would expect them to be, the yum update process may not overwrite them. It will instead create 'rpmnew' or 'rpmsave' files and not overwrite the files. The administrator may have previously modified the files knowingly or as part of a patch supplied by TAC.

To check your upgrade.log and search for *.rpmnew *.rpmsave on your system check the upgrade log:

You will be responsible for merging any changes from the old file to the new or contacting Technical Support if you require assistance.

Support Tips and Contact Information

Please see the Getting Support section for support tips and support contact information

Specific Issues Addressed

Jira #	JIRA Name	RN Content	Enhancement /Fix/Known Issue	Key words
SIP X-694	Wrong settings in configuration files for Polycom phones	Polycom SPIP331 and SPIP650 phones (with 4.0.8 firmware) generate the following lines in their logs after sending profiles with SipXcom 000018.052|cfg |4|03|Prm|0004f2XXXXXX-sipx-reg-advanced.cfg: Unknown parameter "reg.1.firstLastNameLabelGen" found, ignoring. 000018.130|cfg |*|03|Prm|0004f2XXXXXX-sipx-site.cfg: Value "" for configuration parameter tcpIpApp.port.rtp.forceSend is invalid, ignoring 000018.136|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "device.enabled" found, ignoring. 000018.140|cfg |5|03|Prm|0004f2XXXXXX-sipx-site.cfg: Invalid XML syntax near usb.charging.$ignore$, some configuration parameters may be ignored. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "usb.charging.vlanId.set" found, ignoring. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "usb.charging.vlanId" found, ignoring. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "usb.charging.cdpEnabled.set" found, ignoring. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "usb.charging.cdpEnabled" found, ignoring. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "usb.charging.etherStormFilter.set" found, ignoring. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "usb.charging.etherStormFilter" found, ignoring. 000018.140|cfg |5|03|Prm|0004f2XXXXXX-sipx-site.cfg: Invalid XML syntax near poe.pse.$ignore$, some configuration parameters may be ignored. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "poe.pse.vlanId.set" found, ignoring. 000018.140|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "poe.pse.vlanId" found, ignoring. 000018.142|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "poe.pse.cdpEnabled.set" found, ignoring. 000018.142|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "poe.pse.cdpEnabled" found, ignoring. 000018.142|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "poe.pse.etherStormFilter.set" found, ignoring. 000018.142|cfg |4|03|Prm|0004f2XXXXXX-sipx-site.cfg: Unknown parameter "poe.pse.etherStormFilter" found, ignoring.	Fix	Polyc om
SIP X-800	Add latest Grandstream phones to the list of auto provisioning devices	We have multiple customers requesting provisioning options to be added for the latest Granstream models Specifically, the customer has been able to do the following: Two units in for testing that have worked quite well so far with a Uniteme generated config of a similar model. GXW4216 - config generated in Uniteme from a GXW4008 phone. HT802 - config generated in Uniteme from a HandyTone 702 phone. Here are the current generation of Grandstream gateways. Could they be added to the list of available phone models in Uniteme? I imagine the configuration options can just be copied over from the previous models. Grandstream HandyTone 801 - 1 FXS Grandstream HandyTone 802 - 2 FXS Grandstream HandyTone 812 - 2 FXS Grandstream HandyTone 814 - 4 FXS Grandstream HandyTone 818 - 8 FXS Grandstream GXW4216 - 16 FXS Grandstream GXW4224 - 24 FXS Grandstream GXW4232 - 32 FXS Grandstream GXW4248 - 48 FXS Copy the HandyTone 702 to the different HandyTone 8 series phones (and account for port differences of each model) Copy the GXW4008 to the different GXW phones (and account for port differences of each model)	Enhancement	Gran dstre am
SIP X-803	Cleanup Temp Directory on Reset	When the user runs "sipxecs-setup --reset-all" it should cleanup the /var/sipxpbx/tmp directory. Some of the files within the directory are used by other services and a cleanup is necessary to do a proper reset.	Fix	Config
SIP X-808	Cleanup snapshot script for CentOS7	Snapshot script requires some minor cleaning and updating. 1. cat /etc/issue yields some bogus output: Release (/etc/issue): \S Kernel \r on an \m I propose to: cat /etc/*release 2. cleanup of missing or moved copy items: ======= copying /etc/sendmail.cf Missing or not a file/directory: /etc/sendmail.cf ======= copying /var/log/mongo Missing or not a file/directory: /var/log/mongo ======= copying /var/log/mysqld.log Missing or not a file/directory: /var/log/mysqld.log ======= copying /var/log/tomcat6 Missing or not a file/directory: /var/log/tomcat6	Fix	Config
SIP X-809	Read back voice mailbox owner name	An administrator would like to have the voicemail system play back a user's name if the user has not recorded their name for voicemail. This can be done with mod_flite Speaking the name If the user has recorded their name, then that recording will be used when listing the matches. If they have not, the name will be read one letter at a time by default. If you would like the system to read their name as if it were being spoken, the following two files will have to be edited: [freeswitch_root]/conf/lang/[language]/dir/sounds.xml - Replace the action tag under "directory_result_say_name" with: <action function="speak-text" data="$1"/> [freeswitch_root]/conf/lang/[language]/[language].xml - Make sure that your tts engine and voice are correct in the line: <language name="[language]" say-module="[language]" sound-prefix="$${sounds_dir}/en/us/callie" tts-engine="flite" tts-voice="slt"> If you are using flite, you can find information about it here: mod_flite language is the two character language abbreviation freeswitch_root is the root of your Freeswitch installation	Enhancement	Voice mail

SIPX-811	Update Audiocodes INI file to handle fax without manual setup	As it turns out, the new Freeswitch in CentOS 7 does not handle fax properly with default Audiocodes setup. These settings are required via manual setup: https://freeswitch.org/confluence/display/FREESWITCH/Fax+on+AudioCodes+Mediant I loaded the INI generated by Uniteme, then saved the updated INI generated by Audiocodes. After, I changed the above settings and diff-ed the two files. These are the settings that were added/changed: [Voice Engine Params] CallerIDType = 0 FaxTransportMode = 0 CNGDetectorMode = 0 [SIP Params] CHANNELSELECTMODE = 0 ISFAXUSED = 0 SIPTRANSPORTTYPE = 0 [CodersGroup0] CodersGroup0 0 = "g711Ulaw64k", 20, 0, -1, 0;	Fix	Audio Codes
SIPX-812	System Timezone file /etc /sysconfig/clock missing in centos 7	sipx is reading system timezone from /etc/sysconfig/clock, which is missing in centos 7 check this: https://unix.stackexchange.com/questions/213022/equivalent-of-etc-sysconfig-clock-in-redhat-7	Fix	Config
SIPX-816	Remove obsolete FreeSwitch package freeswitch-endpoint-skypopen	We should remove obsolete FreeSwitch package freeswitch-endpoint-skypopen. This is no longer working since 2017 and prevents QA from testing newer versions of FreeSwitch. https://lists.freeswitch.org/pipermail/freeswitch-users/2017-June/126571.html	Fix	Voice mail
SIPX-817	Upgrade Freeswitch to 1.10	https://freeswitch.org/confluence/display/FREESWITCH/Installation "If you're using FreeSWITCH™ version 1.8 which is tagged End Of Life, you should upgrade to 1.10 NOW." The FreeSwitch that we are using (1.6) is preventing some new improvements such as reading user names. Upgrading to 1.10 was tested in QA and seems to work without any problems so far.	Enhancement	Voice mail
SIPX-818	Disable numa support	In grub.conf add numa=off to kernel parameters.	Fix	Config
SIPX-822	MP3 recording bit rate selection doesn't work	Freeswitch records all mp3s in 80kbit mono whereas we have a selection of 16/32/64kbits in the Admin->Services->Media Services	Fix	Voice mail
UC-4256	Tapestry conflict on CDR on active history tabs	When opening CDR records tab on two different tabs, screen darkens and error message appears. Fix tapestry components structure for the refresh form <form jwcid="@common/AutoRefreshForm""> has same id also for CdrHistory and for CdrActiveCals panel and it expects a particular PropertySelection.	Fix	Config
UC-4762	Normalize MoH and greeting uploaded filenames	Uploaded filenames are allowed to have spaces, special characters, etc. This is a enhancement request to rename such files to all lowercase, no special characters, and using underscore if there is a space so there is no possibility of failures due to the filename. Attached test of both user portal and admin portal MoH upload of C:\Users\Matt\Music\Tool\Ænima\Forty Six & 2.mp3	Fix	Config
UC-4768	Implement automatic SSL certificate with Let's Encrypt	The Admin server and the UnitemeWeb should have an automatic SSL certificate generation so when deploy in an MSP model, there is no manual management of certificate. There should be a check box on the Certificates page to use Let's Encrypt certificate. This should enable certbot-auto to be enabled and promises changed to make this work. The method to use should be well described in the Let's Encrypt web side. Otherwise, there are good example to get the mechanism done for Reach3 or Rocketchat for example (https://rocket.chat/docs/installation/paas-deployments/aws/#5-configure-nginx-web-server-with-tlsssl)	Enhancement	Certificates
UC-4813	Add sipcodes.sh output to snapshot log file	Add output of sipxcodes.sh script to snapshot log file. http://wiki.ezuce.com/display/unite/sipcodes.sh	Enhancement	Config
UC-4815	zen 8106: duplicate cdrs	Duplicate info when an admin tries to export Call History reports to CSV/	Fix	Reports
UC-4825	zen 8447: yealink custom time zones	Certain Time Zones not appearing in /Preference/Custom Time Zone Name in Yealink configuration.	Fix	Yealink
UC-4828	Siplogviewer download doesn't work	Siplogviewer download option doesn't work because siplogview.zip doesn't get created. A search for the file reveals it's not anywhere on the filesystem. The requested URL /siplogviewer/tempdata/140941671739201914198@10.3.0.99/siplogview.zip was not found on this server.	Fix	SIPLogViewer
UC-4830	Special characters in caller name	Need to be able to deal with special characters in user names.	Fix	Config
UC-4832	zen 8485: 1904.centos7 mongod. log doesn't seem to rotate	Noticed in zen 8485 and 8494 customer snapshots that /var/log/mongodb/mongod.log doesn't seem to be rotating.	Fix	Config
UC-4833	zen 8485: 1904.centos7 transparent huge page disable	If in mongod.log .. 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database. 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted. 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled is 'always'. 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] ** We suggest setting it to 'never' 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/defrag is 'always'. 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] ** We suggest setting it to 'never' 2019-08-05T09:53:25.354-0500 I CONTROL [initandlisten] .. thenhttps://docs.mongodb.com/manual/tutorial/transparent-huge-pages/#red-hat-centos-7should be followed?	Fix	MongoDB
UC-4834	zen 8494: vvx 101 group missing firmware versions in dropdown menu	Firmware version drop-down in a vvx 101 model group seems to be missing several versions that are available in other vvx groups, see attached. Customer has 5.9.4 loaded but that's not a option for version in devices files, so we used 5.2.0 as the label. 5.2.0 isn't available in vvx101 but it is for vvx 410, 310, etc.	Fix	Polycom