

# uniteme 18.12

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eZuce is pleased to announce the General Availability of Uniteme 18.12.

Please read the release notes for 18.04 if you are not on 18.04 yet. A new upgrade method was introduced and it is important to follow these steps due to the MongoDB version upgrade.

This is a relatively small update as we're continuing to work on CentOS 7 compatibility. We'll have a separate 18.12.CentOS7 release coming out shortly after 18.12 becomes available.

The one major new feature in this release is the added ability of users to be able to set their language preference in UniteWeb.

## Highlights

### uniteme New Features:

- Allow user to choose language in UniteWeb

### uniteme Improvements:

- Enhance gridsf-vocicemail-cli tool to clean up voicemails across entire database
- In UniteWeb allow users to listed to MoH and Greeting files in GUI
- Upgraded fail2ban to 0.9.6
- Added support for newer Yealink phones (thanks IANT!)

## Notes

1. Full Release Notes with installation information are located here: [18.12 Full Release Notes](#)
2. The regular release of 18.12 has the ability to upgrade from earlier versions using the upgrade script used in 18.04.

# 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](mailto:sa@ezuce.com) if 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](mailto:sa@ezuce.com) or if you need assistance with the update contact your account manager or email [sales@ezuce.com](mailto: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, 2016
- 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

## System Requirements

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

### Minimum hardware requirements

- Pentium 4 or Xeon processor @ 2.0 GHz Core 64bit or higher
- Minimum 8 GB of RAM with sufficient swap space
- 80 GB disk (75 users depending on usage patterns)

### Notes:

- **uniteme** 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 6 x86\_64 with latest updates is required.

## 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 uniteme - "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, Reach Reference Manuals, 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](mailto:sa@ezuce.com) if think you may have a patch applied as that may be replaced during the update.

# Installing from ISO image

## Download **uniteme** ISO

Download the ISO image corresponding to your hardware and write the image to a DVD.

- The ISO files are available here: <https://download.ezuce.com/openuc/ISO/>
- You will need a valid [ezuce.com](https://ezuce.com) user ID to login and download.
- We recommend the 64 bit installation in most cases. This ISO file name ends in **x86\_64.iso**

## Install **uniteme**

- Boot from the DVD created with the **uniteme** ISO image.
- Press **Enter** at the boot screen below to begin the **uniteme** installation.
- Select **Manual Configuration** under **Enable IPv4 support** and select **OK**.
- Set a static IPv4 address with the corresponding networking information and click OK.
- In certain situations, a warning of the use of indicated storage devices will be displayed.
- Select the language to be used during the installation.
- Select the keyboard layout to be used.
- Select the timezone to be used.
- Set a root password.
- Login to the system as root with the password you provided earlier and continue on to the Configure of **uniteme**.

## Installing from Repository

**uniteme** can be installed using the following procedure

- Download and install CentOS 6.x minimal ISO
- Run the following command:

```
yum update && reboot
```

- Run the following commands to retrieve and run the eZuce **uniteme** installer:

```
curl https://download.ezuce.com/openuc-setup > /usr/bin/openuc-setup
chmod +x /usr/bin/openuc-setup
openuc-setup
```

This utility will guide you through the process of installing **uniteme** from the eZuce software repository.

## Upgrade from previous versions

### New Procedure

We will be utilizing an upgrade script to ensure upgrades proceed as intended and so that customers have the appropriate warnings and information before upgrading.

### Warning!

Make sure you **backup** your system (configuration and voicemail at a minimum) prior to installation. You'll be upgrading mongodb to a new version!

## Upgrade to 18.12 for Single Server systems for 17.10 and Older

### Backup your System

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

**Do it now... before you go any further.**

### Download upgrade.sh

Login to the primary server as root.

Execute the following:

```
wget https://'USERNAME:PASSWORD'@download.ezuce.com/openuc/upgrade.sh
chmod +x upgrade.sh
```

### Run upgrade.sh

Execute the upgrade script and answer 'Yes' to continue:

```
./upgrade.sh
```

The following will be displayed:

```
Uniteme 18.12 Upgrade Script
```

```
IMPORTANT: If this is a multi-server cluster, all databases except the Primary (which must be on the configuration server) should be removed.
```

```
IMPORTANT: You should run a system backup and copy your config and voicemail backups to another system. If the upgrade fails, you will need to build a new server and restore from backup.
```

```
IMPORTANT: Ensure that you have enough disk space available for a copy of the Mongo databases. (roughly your Config + Voicemail backups).
```

```
IMPORTANT: 18.08 does not have Reachme in it, if you use Reachme on this server or in the cluster, do not continue!
```

This script will do the following:

- Back up mongo config and dbs
- Stop mongo instance and remove old mongo files
- Change 17.10 occurrences in /etc/yum.repos.d with 18.12
- Perform yum update and then reboot the machine

On sipxconfig service startup following steps are taken (in case there is a backup still on the disk):

- Restore mongo config and dbs, then remove from disk
- Reboot machine

For other cluster servers:

- Run same script
- Re-add databases that were removed.

Continue? (you must enter Yes or No as shown and press Enter):

Enter 'Yes' and press Enter to continue. The system will reboot a couple of times as part of the process.

## Upgrade to 18.12 for Multi-Server Clusters with Multiple Database Servers for 17.10 and Older

### Backup your System

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

**Do it now... before you go any further.**

### Remove All Secondary Databases from Cluster Nodes

From the Admin UI remove databases from all nodes **except** for the primary node. Click on System -> Databases do accomplish this.

### Proceed as with Single Server for Primary

Proceed as above with the 'Download upgrade.sh' section and then the 'Run upgrade.sh' section.

### Secondary Servers in Cluster

After the Primary Server has completed, repeat for each of the Secondary Servers in the cluster until all are completed.

## Add Database Nodes

After the secondary nodes are complete and done with their reboots, log in to the Admin UI and add back the database nodes that were removed.

## Send Server Profiles

Login to web interface as superadmin.

Navigate to System -> Servers page. Place checkmark next to server names and click 'Send Profiles'.

## SEC Service Upgrade Note

When upgrading **uniteme** from openUC 4.6 Update 11 or 14.4.3 to 15.06 follow these steps to ensure the SEC service is correctly running:

- 1. Upgrade from 4.6 Update 11 or 14.4.3 to 15.06.
- 2. After the upgrade is complete, perform the usual restart.
- 3. Once possible, connect via CLI and monitor processes using top. Notice that the SEC process is using a lot of CPU memory.
- 4. Perform another restart OR restart only the Siprologwatcher service.

## 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 'rpmshave' 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 \*.rpmshave 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

## Issues Sorted by Issue Number

Jira #	JIRA Name	RN Content	Enhancement /Fix /Known Issue	Key words
SIXP-759	Jitsi preferred transport velocity file	There is an error in the Jitsi velocity file with the Preferred_Transport parameter.  The correct parameter name in velocity file is: PREFFERED_TRANSPORT -> PREFERRED_TRANSPORT	Fix	Jitsi
SIXP-74	Add provisioning support for new Yealink T46S T48S ...	Add support for newer Yealink S-Series.  Old phones are not available anymore (chips will not be produced anymore).	Enhancement	Yealink
SIXP-75	Upgrade fail2ban to v0.9.6	The system is currently using an older version of fail2ban (0.8.1) which is known to be buggy and throws iptables errors in the log, such as these:  2018-11-07 14:54:56,664 fail2ban.actions.action: ERROR iptables -D INPUT -p all -j security-block iptables -F security-block iptables -X security-block returned 100	Enhancement	Fail2ban
SIXP-76	Change block size in TFTP service to 1300	Several provisioning problems were tracked to TFTP using 4096 byte UDP blocks which get fragmented and lost on the way in some network environments.	Fix	TFTP

S I P X -7 77	sipxsecurity and firewall logs not appended after rotate	Customer reported that if they put in a filter to watch IP tables for bans, but their sipxsecurity logs show no activity day after day since the last system restart.	Fix	L o g s
S I P X -7 78	Grace period is not being read properly by registrar service	The grace period in registrar options does not work as expected. Upon investigation, it became clear that the option is being written in registrar config but not being used. Registrar startup shows value being 0 in 18.04 and later regardless of the setting (SIP_REGISTRAR_EXPIRE_GRACE_PERIOD in /etc/sipxpbx/registrar-config):  "2018-10-29T14:52:59.016784Z":13:SIP:INFO:18081.iuliu.test::7f57c70c9800:sipxregistry:"RegDB::ensureIndexes existing client: no, expireGracePeriod: 0, expirationTimeIndexTTL: 0"	Fix	R e g i s t r a r
U C -4 7 61	sipx-dbutil -r not working properly on 18.04 update 1	sipx-dbutil -r is not working on 18.04 update 1, it only returns registrations on the primary.  Testing indicated that the issue only occurs on servers which are not both Mongo PRIMARY and SIPXCONFIG master. Engineering recommended that line 609 in /bin/sipx-dbutil should be changed from  client = pymongo.Connection('localhost', 27017) in client = pymongo.Connection('localhost', 27017, slaveOk=True)  To allow issuing on SIPXCONFIG master and Mongo PRIMARY or SECONDARY.  <a href="https://ezuce.zendesk.com/agent/tickets/8020">https://ezuce.zendesk.com/agent/tickets/8020</a>	Fix	T o o l s
U C -4 7 70	Allow to listen moh and greeting file from user settings	Show audio controls bellow the listen and delete button to be able to pause, change volume, download when listening to the greeting or moh file in user settings instead of opening it in new tab.	Enhancement	U n i t e m e w e b
U C -4 7 74	Conferences are automatically saved in Inbox	Conferences should be saved in conference folder	Fix	C o n f e r e n c e
U C -4 7 87	gridfs-voicemail-cli.jar Not Deleting Globally	gridfs-voicemail-cli.jar is assumed to delete voicemails globally in the same fashion as setting a retention policy on user voicemail. Using the command, java -jar gridfs-voicemail-cli.jar --voicemailCleanup 7, should delete all voicemail messages older than 7 days EXCLUDING the saved folder. This would mirror the same functionality observed within the Uniteme web interface. This would also be useful to be able to use within the new voicemail-cli script that was created recently. Does not need to be backported to 17.10-stage as long as an updated jar file can be loaded on the customers system requesting the functionality as they are only using it to cleanup database in preparation for upgrade to 18.08.	Enhancement	T o o l s
U W -4 08	Add language support	Add possibility to change language in user portal.	Enhancement	U n i t e m e w e b

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S I P X -7 75	Upgrade fail2ban to v0.9.6	The system is currently using an older version of fail2ban (0.8.1) which is known to be buggy and throws iptables errors in the log, such as these:  2018-11-07 14:54:56,664 fail2ban.actions.action: ERROR iptables -D INPUT -p all -j security-block iptables -F security-block iptables -X security-block returned 100	Enhancement	F a i l 2 b a n

S I P X -7 59	Jitsi preferred transport velocity file	There is an error in the Jitsi velocity file with the Preferred_Transport parameter.  The correct parameter name in velocity file is: PREFFERED_TRANSPORT -> PREFERRED_TRANSPORT	Fix	Ji tsi
S I P X -7 77	sipxsecurity and firewall logs not appended after rotate	Customer reported that if they put in a filter to watch IP tables for bans, but their sipxsecurity logs show no activity day after day since the last system restart.	Fix	L o g s
S I P X -7 78	Grace period is not being read properly by registrar service	The grace period in registrar options does not work as expected. Upon investigation, it became clear that the option is being written in registrar config but not being used. Registrar startup shows value being 0 in 18.04 and later regardless of the setting (SIP_REGISTRAR_EXPIRE_GRACE_PERIOD in /etc/sipxpbx/registrar-config):  "2018-10-29T14:52:59.016784Z":13:SIP:INFO:18081.iuliu.test::7f57c70c9800:sipxregistry:"RegDB::ensureIndexes existing client: no, expireGracePeriod: 0, expirationTimeIndexTTL: 0"	Fix	R e g i s t r a r
S I P X -7 76	Change block size in TFTP service to 1300	Several provisioning problems were tracked to TFTP using 4096 byte UDP blocks which get fragmented and lost on the way in some network environments.	Fix	T F T P
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U C -4 7 87	gridfs-voicemail-cli.jar Not Deleting Globally	gridfs-voicemail-cli.jar is assumed to delete voicemails globally in the same fashion as setting a retention policy on user voicemail. Using the command, java -jar gridfs-voicemail-cli.jar --voicemailCleanup 7, should delete all voicemail messages older than 7 days EXCLUDING the saved folder. This would mirror the same functionality observed within the Uniteme web interface. This would also be useful to be able to use within the new voicemail-cli script that was created recently. Does not need to be backported to 17.10-stage as long as an updated jar file can be loaded on the customers system requesting the functionality as they are only using it to cleanup database in preparation for upgrade to 18.08.	Enhancement	T o o l s
U C -4 7 70	Allow to listen moh and greeting file from user settings	Show audio controls bellow the listen and delete button to be able to pause, change volume, download when listening to the greeting or moh file in user settings instead of opening it in new tab.	Enhancement	U n i t e m e W e b
U W -4 08	Add language support	Add possibility to change language in user portal.	Enhancement	U n i t e m e W e b
S I P X -7 74	Add provisioning support for new Yealink T46S T48S ...	Add support for newer Yealink S-Series.  Old phones are not available anymore (chips will not be produced anymore).	Enhancement	Y e a l i n k