

UCS 4.4 Release Notes



**Release notes for the installation and update
of Univention Corporate Server (UCS) 4.4-2**

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Chapter 1. Release Highlights

With Univention Corporate Server 4.4-2, the second point release of Univention Corporate Server (UCS) 4.4 is now available. It provides several feature improvements and extensions, new properties as well as various improvements and bugfixes. Here is an overview of the most important changes:

- The UDM REST API is included for the first time as a stable release and is activated on all DC Master and DC Backup instances. More information can be found in an article about the API and the UCS 4.4-1 release notes.
- Improvements in error handling for license generation during initial configuration.
- In UCS Virtual Machine Manager (UVMM) the automatic start for instances and the virtual CPU type can be configured.
- With the update of the Docker Engine App maintainers get more possibilities by supporting additional features in the Docker Compose files.
- With 4.4-2 the update to Debian point release 9.11 is completed.
- Various security updates have been integrated into UCS 4.4-2, e.g. Samba, the Linux kernel and Dovecot. A complete list of security and package updates is available in Chapter 6.
- Various additional attributes have been added to the synchronization between UDM/OpenLDAP and Samba/AD user objects (*unixhome*, *employeeType*, *employeeNumber*, *loginShell*, *title*, *gidNumber*, *uidNumber*, *departmentNumber*, *roomNumber*, *jpegPhoto*, *userCertificate*, *initials*, *physicalDeliveryOfficeName*, *postOfficeBox*, *preferredLanguage*).

Chapter 2. Notes about the update

During the update some services in the domain may not be available temporarily, that is why the update should occur in a maintenance window. It is recommended to test the update in a separate test environment prior to the actual update. The test environment should be identical to the production environment. Depending on the system performance, network connection and the installed software the update will take between 20 minutes and several hours.

2.1. Recommended update order for environments with more than one UCS server

Feedback 

In environments with more than one UCS system, the update order of the UCS systems must be borne in mind:

The authoritative version of the LDAP directory service is maintained on the master domain controller and replicated to all the remaining LDAP servers of the UCS domain. As changes to the LDAP schema can occur during release updates, the master domain controller must always be the first system to be updated during a release update.

2.2. UCS installation DVD only available for 64 bit

Feedback 

Starting with UCS 4.0, installation DVD are only provided for the x86 64 bit architecture (amd64). Existing 32 bit UCS 3 systems can still be updated to UCS 4.0 through the online repository or by using update DVD. The 32 bit architecture will be supported over the entire UCS 4 maintenance period.

Chapter 3. Preparation of update

It must be checked whether sufficient disk space is available. A standard installation requires a minimum of 10 GB of disk space. The update requires approximately 4 GB additional disk space to download and install the packages, depending on the size of the existing installation.

For the update, a login should be performed on the system's local console as user `root`, and the update should be initiated there. Alternatively, the update can be conducted using Univention Management Console.

Remote updating via SSH is not recommended as this may result in the update procedure being canceled, e.g., if the network connection is interrupted. In consequence, this can affect the system severely. If updating should occur over a network connection nevertheless, it must be verified that the update continues in case of disconnection from the network. This can be achieved, e.g., using the tools `screen` and `at`. These tools are installed on all UCS system roles by default.

Univention provides a script that checks for problems which would prevent the successful update of the system. Prior to the update, this script can be downloaded and executed on the UCS system.

```
# download
curl -O https://updates.software-univention.de/download/univention-
update-checks/pre-update-checks-4.4{,.gpg}

# run script
gpgv --keyring /usr/share/keyrings/univention-archive-key-ucs-4x.gpg \
    pre-update-checks-4.4.gpg pre-update-checks-4.4 && bash pre-
update-checks-4.4

...
Starting pre-update checks ...

Checking app_appliance ...          OK
Checking block_update_of_NT_DC ...   OK
Checking cyrus_integration ...      OK
Checking disk_space ...             OK
Checking hold_packages ...          OK
Checking ldap_connection ...        OK
Checking ldap_schema ...           OK
...
```

Chapter 4. Postprocessing of the update

Following the update, new or updated join scripts need to be executed. This can be done in two ways: Either using the UMC module **Domain join** or by running the command `univention-run-join-scripts` as user `root`.

Subsequently the UCS system needs to be restarted.

Chapter 5. Notes on selected packages

5.1. Univention Directory Manager

Feedback 

The following properties have been added to the UDM module `users/user`: *initials, postOfficeBox, preferredLanguage, physicalDeliveryOfficeName, preferredDeliveryMethod*. Any extended attribute for those properties should be changed to use the same property name as the UDM *CLIName*.

5.2. Univention Directory Notifier

Feedback 

Due to a design flaw in the Univention Directory Notifier network protocol version 2 any user can retrieve information about changes to the LDAP directory. A new protocol version 3 was implemented with UCS 4.3-3 erratum 427. For backward compatibility with old UCS systems the Univention Directory Notifier still provided version 2 by default. For new installations starting with UCS-4.4 only version 3 is enabled by default. Protocol version 2 can be re-enabled by changing the Univention Configuration Registry variable `notifier/protocol/version` to 2 and restarting the Univention Directory Notifier.

5.3. Collection of usage statistics

Feedback 

Anonymous usage statistics on the use of Univention Management Console are collected when using the *UCS Core Edition*. The modules opened get logged to an instance of the web traffic analysis tool Piwik. This makes it possible for Univention to tailor the development of Univention Management Console better to customer needs and carry out usability improvements.

This logging is only performed when the *UCS Core Edition* license is used. The license status can be verified via the menu entry **License -> License information** of the user menu in the upper right corner of Univention Management Console. If **UCS Core Edition** is listed under **License type**, this version is in use. When a regular UCS license is used, no usage statistics are collected.

Independent of the license used, the statistics generation can be deactivated by setting the Univention Configuration Registry variable `umc/web/piwik` to `false`.

5.4. Scope of security support for WebKit, Konqueror and QtWebKit

Feedback 

WebKit, Konqueror and QtWebKit are shipped in the maintained branch of the UCS repository, but not covered by security support. WebKit is primarily used for displaying HTML help pages etc. Firefox should be used as web browser.

5.5. Recommended browsers for the access to Univention Management Console

Feedback 

Univention Management Console uses numerous JavaScript and CSS functions to display the web interface. Cookies need to be permitted in the browser. The following browsers are recommended:

- Chrome as of version 71
- Firefox as of version 60
- Safari and Safari Mobile as of version 12

- Microsoft Edge as of version 18

As of this release Internet Explorer is not supported by Univention Management Console anymore.

Users running older browsers may experience display or performance issues.

Chapter 6. Changelog

Listed are the changes since UCS 4.4-1:

6.1. General

Feedback 

- All security updates issued for UCS 4.4-1 are included:
 - **apache2** (CVE-2019-9517 CVE-2019-10081 CVE-2019-10082 CVE-2019-10092 CVE-2019-10098) (Bug 50060)
 - **clamav** (CVE-2019-12625 CVE-2019-12900) (Bug 50131)
 - **cups** (CVE-2019-8675 CVE-2019-8696) (Bug 50133)
 - **dovecot** (CVE-2019-11500) (Bug 50089)
 - **exim4** (CVE-2019-13917 CVE-2019-15846) (Bug 49925 Bug 50132)
 - **expat** (CVE-2019-15903) (Bug 50242)
 - **faad2** (CVE-2018-19502 CVE-2018-19503 CVE-2018-19504 CVE-2018-20194 CVE-2018-20195 CVE-2018-20197 CVE-2018-20198 CVE-2018-20357 CVE-2018-20358 CVE-2018-20359 CVE-2018-20361 CVE-2018-20362 CVE-2019-15296) (Bug 50194)
 - **firefox-esr** (CVE-2019-9811 CVE-2019-9812 CVE-2019-11709 CVE-2019-11711 CVE-2019-11712 CVE-2019-11713 CVE-2019-11715 CVE-2019-11717 CVE-2019-11719 CVE-2019-11729 CVE-2019-11730 CVE-2019-11740 CVE-2019-11742 CVE-2019-11743 CVE-2019-11744 CVE-2019-11746 CVE-2019-11752) (Bug 49886 Bug 50121)
 - **ghostscript** (Bug 49998 Bug 50149)
 - **glib2.0** (CVE-2018-16429 CVE-2019-12450 CVE-2019-13012) (Bug 50147)
 - **ibus** (CVE-2019-14822) (Bug 50228)
 - **kconfig** (CVE-2019-14744) (Bug 49992)
 - **libcaca** (CVE-2018-20544 CVE-2018-20545 CVE-2018-20546 CVE-2018-20547 CVE-2018-20548 CVE-2018-20549) (Bug 50148)
 - **libebml** (CVE-2019-13615) (Bug 50145)
 - **libgd2** (CVE-2019-11038) (Bug 50138)
 - **libreoffice** (CVE-2019-9848 CVE-2019-9849 CVE-2019-9850 CVE-2019-9851 CVE-2019-9852 CVE-2019-9854) (Bug 49890 Bug 50018 Bug 50144)
 - **libxslt** (CVE-2019-11068 CVE-2019-13117 CVE-2019-13118) (Bug 50141)
 - **linux** (CVE-2015-8553 CVE-2018-5995 CVE-2018-20509 CVE-2018-20510 CVE-2018-20836 CVE-2018-20856 CVE-2019-0136 CVE-2019-1125 CVE-2019-3882 CVE-2019-3900 CVE-2019-9506 CVE-2019-10142 CVE-2019-10207 CVE-2019-10638 CVE-2019-10639 CVE-2019-11487 CVE-2019-13272 CVE-2019-13631 CVE-2019-13648 CVE-2019-14283 CVE-2019-14284 CVE-2019-15211 CVE-2019-15212 CVE-2019-15215 CVE-2019-15216 CVE-2019-15218 CVE-2019-15219 CVE-2019-15220 CVE-2019-15221 CVE-2019-15292 CVE-2019-15538

CVE-2019-15666 CVE-2019-15807 CVE-2019-15924 CVE-2019-15926) (Bug 49888 Bug 50003 Bug 50140)

- **mariadb-10.1** (CVE-2019-2614 CVE-2019-2627 CVE-2019-2737 CVE-2019-2739 CVE-2019-2740 CVE-2019-2805) (Bug 50139)
- **nghttp2** (CVE-2019-9511 CVE-2019-9513) (Bug 50094)
- **openjdk-8** (CVE-2019-2745 CVE-2019-2762 CVE-2019-2769 CVE-2019-2786 CVE-2019-2816 CVE-2019-2842) (Bug 49889)
- **patch** (CVE-2018-1000156 CVE-2019-13636 CVE-2019-13638) (Bug 49926)
- **php7.0** (CVE-2019-11034 CVE-2019-11035 CVE-2019-11036 CVE-2019-11038 CVE-2019-11039 CVE-2019-11040 CVE-2019-11041 CVE-2019-11042) (Bug 50238)
- **postgresql-9.6** (CVE-2019-10208) (Bug 49991)
- **proftpd-dfsg** (CVE-2015-3306 CVE-2019-12815) (Bug 49968)
- **python-django** (CVE-2019-6975 CVE-2019-12308 CVE-2019-12781 CVE-2019-14232 CVE-2019-14233 CVE-2019-14234 CVE-2019-14235) (Bug 49887 Bug 49999)
- **qemu** (Bug 50059)
- **samba** (CVE-2019-10197) (Bug 49293 Bug 49935 Bug 50054)
- **sd-image1.2** (CVE-2018-3977 CVE-2019-5051 CVE-2019-5052 CVE-2019-5057 CVE-2019-5058 CVE-2019-7635 CVE-2019-12216 CVE-2019-12217 CVE-2019-12218 CVE-2019-12219 CVE-2019-12220 CVE-2019-12221 CVE-2019-12222) (Bug 50143)
- **simplesamlphp** (CVE-2017-12870 CVE-2017-12871 CVE-2017-12872 CVE-2018-6520 CVE-2018-7711) (Bug 48961)
- **sox** (CVE-2017-11332 CVE-2017-11358 CVE-2017-11359 CVE-2017-15370 CVE-2017-15371 CVE-2017-15372 CVE-2017-15642 CVE-2017-18189 CVE-2019-8354 CVE-2019-8355 CVE-2019-8356 CVE-2019-8357 CVE-2019-1010004) (Bug 50142)
- **subversion** (Bug 49948)
- **univention-kernel-image** (CVE-2018-20509 CVE-2018-20510 CVE-2019-0136 CVE-2019-9506 CVE-2019-10142 CVE-2019-11487 CVE-2019-15211 CVE-2019-15212 CVE-2019-15215 CVE-2019-15216 CVE-2019-15218 CVE-2019-15219 CVE-2019-15220 CVE-2019-15221 CVE-2019-15292 CVE-2019-15538 CVE-2019-15666 CVE-2019-15807 CVE-2019-15924 CVE-2019-15926) (Bug 50140)
- **univention-kernel-image-signed** (CVE-2015-8553 CVE-2018-5995 CVE-2018-20509 CVE-2019-1125 CVE-2018-20510 CVE-2018-20836 CVE-2018-20856 CVE-2019-0136 CVE-2019-3882 CVE-2019-3900 CVE-2019-9506 CVE-2019-10142 CVE-2019-10638 CVE-2019-10639 CVE-2019-11487 CVE-2019-13272 CVE-2019-13631 CVE-2019-13648 CVE-2019-14283 CVE-2019-14284 CVE-2019-15211 CVE-2019-15215 CVE-2019-15220 CVE-2019-15221 CVE-2019-15292 CVE-2019-15538 CVE-2019-15666 CVE-2019-15807 CVE-2019-15807 CVE-2019-15924 CVE-2019-15926) (Bug 49888 Bug 50003 Bug 50140)
- **unzip** (CVE-2019-13232) (Bug 50146)

- *vlc* (Bug 50040)
- *zeromq3* (CVE-2019-13132) (Bug 49885)
- The following updated packages from Debian 9.11 are included (Bug 50211): *base-files*, *basez*, *bio-maj-watcher*, *bird*, *bogl*, *chaosreader*, *c-icap-modules*, *corekeeper*, *dansguardian*, *dar*, *debian-archive-keyring*, *debian-installer-netboot-images*, *debian-installer*, *dosbox*, *fence-agents*, *fig2dev*, *fribidi*, *fusondirectory*, *gettext*, *gocode*, *groonga*, *gsoap*, *gthumb*, *havp*, *icu*, *koji*, *lemonldap-ng*, *libclamunrar*, *libconvert-units-perl*, *libdatetime-timezone-perl*, *libevent-rpc-perl*, *libgovirt*, *librecad*, *libsdl2-image*, *libthrift-java*, *libtkt-img*, *libu2f-host*, *linux-latest*, *liquidsoap*, *llvm-toolchain-7*, *minissdpd*, *miniupnpd*, *mitmproxy*, *monkeysphere*, *nasm-mozilla*, *ncbi-tools6*, *neovim*, *nginx*, *node-growl*, *node-ws*, *opendmarc*, *openssh*, *open-vm-tools*, *passwordsafe*, *pound*, *prelink*, *python-clamav*, *redis*, *reportbug*, *resiprocate*, *ruby-mini-magick*, *sash*, *signing-party*, *slurm-lnl*, *t-digest*, *tenshi*, *thunderbird*, *tzdata*, *usbutils*, *xymon*, *yubico-piv-tool*, *z3*, *zfs-auto-snapshot*, *zsh*
- The following packages have been moved to the maintained repository of UCS: *python-concurrent.futures* (Bug 49973), *python-mimeparse* (Bug 49973), *python-uritemplate* (Bug 50034)

6.2. Basic system services

Feedback 

6.2.1. Univention Configuration Registry

Feedback 

- Fix regression in UCS 4.4-2 erratum 221 which caused the `univention-service` files to be not installed any more (Bug 50098).
- Restarting, starting and stopping of various services has been fixed (Bug 42241).

6.3. Domain services

Feedback 

6.3.1. OpenLDAP

Feedback 

- An Error in the syntax-evaluation of the attribute `preferredDeliveryMethod` has been fixed (Bug 49930).

6.3.1.1. Listener/Notifier domain replication

Feedback 

- Fix `univention-translog stat` check for index (Bug 49872).

6.3.2. DNS server

Feedback 

- The maximum number of open sockets can now be set using the Univention Configuration Registry variable `dns/max-socks` (Bug 49493).

6.4. Univention Management Console

Feedback 

6.4.1. Univention Management Console web interface

Feedback 

- Traceback dialogs may now hide the button to directly send the traceback to the vendor. Instead, only the mail button is shown (Bug 46790).
- The detail page of UDM objects failed to open sometimes (Bug 49768).
- The progress bar interval is now configurable via the backend of modules. Error handling of progress bars has been enhanced (Bug 48002).

- Added SuggestionBox widget (Bug 48811).
- It's now possible to search for users based on group membership (Bug 42607).
- The new type interface of UDM is used in the UDM REST API (Bug 50047).
- The new binary package ***univention-directory-manager-rest*** provides a Univention Directory Manager REST HTTP service (Bug 50034).

6.4.2. Univention Portal

Feedback 

- The portal server is restarted after the initial system setup. (Bug 50235)

6.4.3. Univention Management Console server

Feedback 

- Fix regression in UCS 4.4-2 erratum 230 which caused the `univention-service` file to be not installed any more (Bug 50169).
- The error message when connecting to a module process fails is now mentioning the actual module name (Bug 43225).
- Multiple parallel authentication requests are now correctly handled by the UMC web server (Bug 47106).
- It is now prevented that the UMC web server creates multiple new connections for a session after the connection to the UMC server was closed and multiple parallel requests from the old session are requested (Bug 49929).
- The progress bar interval is now configurable via the backend of modules (Bug 48002).
- The security for authentication requests has been improved (Bug 44602).

6.4.4. Univention App Center

Feedback 

- A problem in the update from `docker` to `docker-compose` Apps has been fixed (Bug 50196).
- Simplified the way the App Provider and the App Vendor are presented in the UMC module (Bug 50106).
- The data directory of the Prometheus App had a change in its group ownership due to the new docker version, which handles things differently (Bug 50113).
- Removing old docker images may have caused a traceback (Bug 50113).
- Old docker images are now removed after an App upgrade (Bug 49486).
- Fixed the reinitialize command on non-Master roles (Bug 50082).
- Docker Apps can now be reinitialized when necessary. This copies the current settings into a new container. To be used internally by App Providers (Bug 50057).
- Multi Container Apps may now use the App Settings to control their `docker-compose` file (Bug 50030).
- Multi-container Apps now use a subnet managed by the App Center instead of creating arbitrary networks. This caused problems with firewalls and existing networks. The network can be configured by the Univention Configuration Registry variable `appcenter/docker/compose/network`, which defaults to `172.16.1.1/16`. This change takes effect with new App installations (Bug 49055).
- Due to privacy concerns, the App Center does not send the domain UUID and system UUID in the tracking information of 'search' actions anymore (Bug 49955).

Univention Directory Manager UMC modules and command line interface

- An errata update caused the App Tab in the Users UMC module to not be visible. This update re-synchronizes the listener so that the App Tab is visible again (Bug 49832).
- A new App Setting *DockerUcrStyleEnv* was added to be able to deactivate passing environment variables into docker containers that are not in the format of capital letters and underscores (Bug 49647).
- The app badges icons in the App Center are replaced with new versions (Bug 49284).
- Docker has been updated to version 18.09 and docker compose to version 1.24 (to allow compose format version 3.7, Bug 50166).

6.4.5. Univention Directory Manager UMC modules and command line interface

[Feedback](#) 

- The new binary package ***univention-directory-manager-rest*** provides a Univention Directory Manager REST HTTP service and is installed on Domaincontroller Master and Domaincontroller Backup Systems by default (Bug 50171, Bug 27816).
- The syntax classes *IStates*, *AllowDeny*, *AppActivatedOK*, *AppActivatedTrue*, *OkOrNot*, *TrueFalse*, *TrueFalseUp*, *TrueFalseUpper*, *booleanNone* and *ddnsUpdates* now correctly validate input values (Bug 40731).
- A new type interface has been introduced. Every syntax class and property may now specify a data type, which is used in the UDM REST API (Bug 50047).
- The fallback language for extended attribute translations is now based on the primary language of the locale. Austrian German will then be translated in German instead of English (Bug 47961).
- The UDM module *users/user* properties *departmentNumber* and *roomNumber* have been changed to be multi-value, as allowed in the LDAP schema. This change has been made to support synchronization with Samba/AD (Bug 49092).
- The following properties have been added to the UDM module *users/user*: *initials*, *postOfficeBox*, *preferredLanguage*, *physicalDeliveryOfficeName*, *preferredDeliveryMethod*. The UDM module *users/user* has been prepared for adding the following properties: *st* (state) and *c* (country). Any extended attribute for those properties should be changed to use the same property name as *CLIName* (Bug 49092).
- The printer objects are now created again in the printer default containers instead of the shares default container (Bug 49826).
- The combobox syntax class has been added (Bug 48811).
- An error in the creation of *container/ou* objects has been fixed (Bug 49478).
- It is now checked if containers are movable before moving them to avoid having to revert the changes in case the move failed (Bug 49234).
- Nagios objects are created again in their default containers (Bug 49594).
- Searching for users in a certain group is now possible (Bug 42607).

6.4.6. Modules for system settings / setup wizard

[Feedback](#) 

- Make the local appliance package cache readable for the user *_apt* to fix an error with the *Acquire::GzipIndexes=true* option set for apt (Bug 49799).

6.4.7. License module

- Errors that happen in the appliance wizard are now shown. The user may send a mail with the traceback to Univention (Bug 46790).

6.4.8. System diagnostic module

- New plugin to check *univentionServerRole* for Windows computer objects (Bug 49958).
- Adapt file permission check for `/var/cache/univention-system-setup/` (Bug 49799).
- Plugins taking longer than 10 minutes do not cause timeout errors anymore (Bug 48002).

6.4.9. Other modules

- The binary package ***univention-management-module-udm*** has been moved into the source package ***univention-directory-manager-rest*** (Bug 50034).
- Fix regression in UCS 4.4-2 erratum 216 which caused the *univention-service* file to be not installed any more (Bug 50169).
- In multi edit mode it is now possible to enable or disable apps and options individually (Bug 49829).
- The detail page of UDM objects failed to open sometimes. This issue has been resolved (Bug 49768).
- *SuggestionBox* has been added to the mapping of syntax classes (Bug 48811).
- It's now possible to search for users based on group membership (Bug 42607).

6.5. Univention base libraries

- The UCR templates for LDAP ACLs on DC Slave systems have been split from `60univention-ldap-server_acl-slave` into `60univention-ldap-server_acl-slave` and `70univention-ldap-server_acl-slave-end`. The rule which allows read access for every user to every object is contained in the later one. This increases security for templates which are installed on the DC Master and DC Slaves where the same behavior is now present (Bug 49734).
- Attaching UMC policies during rejoin failed because the machine account credentials were used. Now the Administrator credentials are used again (Bug 49592).
- Situations where operations are performed during a restart of the OpenLDAP server will trigger a reconnection in the `uldap.py` utilities (Bug 47926).

6.6. System services

6.6.1. PostgreSQL

- The *univention-service* definition has been corrected and split into two services for PostgreSQL 9.4 and PostgreSQL 9.6 (Bug 42241).

6.6.2. SAML

- Invalid default values for the pre existing service provider LDAP entries have been repaired (Bug 50177).
- The package has been adjusted for the update to *simplesamlphp* version 1.16.3 (Bug 48961).

Dovecot

6.6.3. Dovecot

Feedback 

- Fix UCR template for SSL certificate Univention Configuration Registry variable `mail/dovecot/ssl/cafile` (Bug 50105).

6.6.4. Postfix

Feedback 

- The postfix service can be managed via the System Services UMC module again (Bug 42241).

6.6.5. RADIUS

Feedback 

- Fix that the listener module wasn't shown as initialized (Bug 48886).
- Improve warning for missing `sambaNTPassword` attribute (Bug 49499).
- Use UCR port configuration for IPv6 RADIUS-server (Bug 49858).
- The radius authentication performance has been improved. This should be especially noticeable in large environments (Bug 50006).

6.6.6. Kerberos

Feedback 

- `pam_krb5` now strips passwords at 1024 characters. This prevents denial of service attacks when authenticating with very long passwords when `pam_krb5` would hang in the hash generation of the password (Bug 49740).

6.6.7. PAM / Local group cache

Feedback 

- `pam_unix` now strips passwords at 512 characters. This prevents denial of service attacks when authenticating with very long passwords when `pam_unix` would hang in the hash generation of the password. <https://github.com/linux-pam/linux-pam/issues/118> (Bug 49741).
- Disable PAM module `systemd` by default. It can be re-enabled by setting the Univention Configuration Registry variable `pam/session/systemd` to `true` (Bug 49910).
- A locking mechanism for `ldap-group-to-file.py` has been implemented so that it is ensured the process only runs once at a time (Bug 35173).

6.6.8. Other services

Feedback 

- The new Univention Configuration Registry variable `appcenter/docker/compose/network` is now included in the firewall rules; MySQL connections are allowed from this subnet. It is used by the App Center when installing certain Apps (Bug 49055).
- Restarting, starting and stopping of various services has been fixed (Bug 42241).

6.7. Virtualization

Feedback 

6.7.1. UCS Virtual Machine Manager (UVMM)

Feedback 

- The error handling in case of connection loss has been enhanced. The amount of log messages has been reduced to decrease log size (Bug 49737).
- The CPU model can now be configured for each Virtual Machine (Bug 49695).

- It is now possible to always start Virtual Machines automatically on host startup via the UMC module (Bug 28771).
- The LDAP attribute *univentionVirtualMachineProfileCPUModel* has been added to the schema and the UDM module *uvmm/profile* (Bug 49695).

[Feedback](#) 

6.8. Services for Windows

6.8.1. Samba

[Feedback](#) 

- The package now uses *dh_python2* instead of *python-support*. Therefore python modules are installed into */usr/lib/python2.7/dist-packages/univention/* (Bug 49177).
- The Samba 4 service can now be managed via the System Services UMC module (Bug 42241).

[Feedback](#) 

6.8.2. Univention AD Takeover

- Fixes GPO link synchronization during AD-Takeover (Bug 44278).

[Feedback](#) 

6.8.3. Univention S4 Connector

- Fix regression in UCS 4.4-2 erratum 239 which caused the *univention-service* file to be not installed any more (Bug 50098).
- Fix a traceback observed in CI tests, where a computer object had already been purged in OpenLDAP and the connector tried to apply the echo operation for a prior modification in OpenLDAP (Bug 49959).
- Avoid a traceback in case GPO deletes get synchronized to Samba/AD and the *entryUUID* of a sub-object is unknown (Bug 49956).
- Fixed typo in log message (Bug 49918).
- Stop adding an unlimited number of lock entries for the same object (Bug 49459).
- The file */etc/univention/connector/s4/localmapping.py* is now included in *mapping.py* to allow adjusting the mapping dynamically. It may contain a Python function *mapping_hook(s4_mapping)* which can return a modified mapping (Bug 48410).
- Unused code has been removed (Bug 43068).
- Fixed access to undefined variable in the *sync_krbgt* script (Bug 36633).
- A reject is prevented when trying to add a group which is already removed in UCS (Bug 49850).
- Samba 4.9 no longer allows the removal of the *dBcspwd* (NTLM hash) attribute. The S4 connector now respects this (Bug 49905).
- These additional attributes are now synchronized between UDM/OpenLDAP and Samba/AD: *unixhome*, *employeeType*, *employeeNumber*, *loginShell*, *title*, *gidNumber*, *uidNumber*, *departmentNumber*, *roomNumber*, *jpegPhoto*, *userCertificate*, *initials*, *physicalDeliveryOfficeName*, *postOfficeBox*, *preferredLanguage* (Bug 50033, Bug 49092). The synchronization of user attributes can now be switched on and off via the new Univention Configuration Registry variable *connector/s4/mapping/user/attributes/ignorelist*. The synchronization of these attributes is deactivated for updates.
- Objects containing a ? character in their DN could not be synchronized due to a decoding error. The synchronization works now (Bug 49865).

- The script `remove_ucs_rejected.py` has been repaired. It has been broken via UCS 4.4-2 erratum 155 (Bug 26501).

6.8.4. Univention Active Directory Connection

[Feedback](#) 

- Update links in the UMC to UCS 4.4 documentation (Bug 48027).
- The scripts `remove_ucs_rejected.py` and `remove_ad_rejected.py` now escape SQL syntax (Bug 49640).

6.9. Other changes

[Feedback](#) 

- Update package dependencies (Bug 49978).