

## UCS 4.3 Release Notes



**Release notes for the installation and update  
of Univention Corporate Server (UCS) 4.3-4**

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## Table of Contents

1. Release Highlights .....	4
2. Notes about the update .....	5
2.1. Recommended update order for environments with more than one UCS server .....	5
2.2. UCS installation DVD only available for 64 bit .....	5
3. Preparation of update .....	6
4. Postprocessing of the update .....	7
5. Notes on selected packages .....	8
5.1. Collection of usage statistics .....	8
5.2. Scope of security support for WebKit, Konqueror and QtWebKit .....	8
5.3. Recommended browsers for the access to Univention Management Console .....	8
6. Changelog .....	9
6.1. General .....	9
6.2. Basic system services .....	11
6.2.1. Linux kernel and firmware packages .....	11
6.2.2. Univention Configuration Registry .....	11
6.2.2.1. Changes to templates and modules .....	11
6.3. Domain services .....	12
6.3.1. OpenLDAP .....	12
6.3.1.1. Listener/Notifier domain replication .....	12
6.4. Univention Management Console .....	12
6.4.1. Univention Management Console web interface .....	12
6.4.2. Univention Management Console server .....	12
6.4.3. Univention Directory Manager UMC modules and command line interface .....	12
6.4.4. Modules for system settings / setup wizard .....	13
6.4.5. Domain join module .....	13
6.4.6. System diagnostic module .....	13
6.4.7. Filesystem quota module .....	13
6.4.8. Other modules .....	13
6.5. Univention base libraries .....	13
6.6. Software deployment .....	14
6.7. System services .....	14
6.7.1. SAML .....	14
6.7.2. Dovecot .....	14
6.7.3. Printing services .....	14
6.7.4. Nagios .....	15
6.7.5. PAM / Local group cache .....	15
6.8. Virtualization .....	15
6.8.1. UCS Virtual Machine Manager (UVMM) .....	15
6.9. Services for Windows .....	15
6.9.1. Samba .....	15
6.9.2. Univention S4 Connector .....	15

# Chapter 1. Release Highlights

With Univention Corporate Server 4.3-4, the forth point release of Univention Corporate Server (UCS) 4.3 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:

- A new Univention Directory Notifier protocol version has been added. Directory replication metadata is now additionally stored in the LDAP Database `cn=translog`.
- Support to configure multiple certificates for Server Name Indication (SNI) has been added to the package ***univention-mail-dovecot***.
- Various improvements have been implemented for the UCS Virtual Machine Manager (UVMM): CPU and RAM usage of virtualization hosts is now displayed. Hyper-V Enlightenment is configured for Windows virtual machines. RAM overcommitment protection can now be configured with Univention Configuration Registry variable `uvmm/overcommit/reserved`.
- It is now possible to modify the entry of the LDAP base again, for example modify references to policies.
- Various security updates have been integrated into UCS 4.3-4, e.g. *Apache2*, the Linux kernel and *Samba4*. A complete list is available in Chapter 6.

# 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.

# 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. 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`.

## 5.2. 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.

## 5.3. 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 37
- Firefox as of version 38
- Internet Explorer as of version 11
- Safari and Safari Mobile as of version 9

Users running older browsers may experience display or performance issues.

# Chapter 6. Changelog

Listed are the changes since UCS 4.3-3:

## 6.1. General

[Feedback](#) 

- All security updates issued for UCS 4.3-4 are included:
  - **apache2** (CVE-2018-17189 CVE-2018-17199 CVE-2019-0196 CVE-2019-0211 CVE-2019-0217 CVE-2019-0220) (Bug 49236)
  - **apt** (CVE-2019-3462) (Bug 48513)
  - **cups** (CVE-2017-18248 CVE-2018-4700) (Bug 48772)
  - **curl** (CVE-2018-16890 CVE-2019-3822 CVE-2019-3823) (Bug 48786)
  - **dovecot** (CVE-2019-3814 CVE-2019-7524) (Bug 48774 Bug 49205)
  - **firefox-esr** (CVE-2018-12405 CVE-2018-17466 CVE-2018-18356 CVE-2018-18492 CVE-2018-18493 CVE-2018-18494 CVE-2018-18498 CVE-2018-18500 CVE-2018-18501 CVE-2018-18505 CVE-2018-18506 CVE-2019-5785 CVE-2019-9788 CVE-2019-9790 CVE-2019-9791 CVE-2019-9792 CVE-2019-9793 CVE-2019-9795 CVE-2019-9796 CVE-2019-9810 CVE-2019-9813) (Bug 48319 Bug 48589 Bug 48779 Bug 49068)
  - **freerdp** (CVE-2018-8786 CVE-2018-8787 CVE-2018-8788 CVE-2018-8789) (Bug 48775)
  - **ghostscript** (Bug 48415 Bug 48537)
  - **glibc** (CVE-2017-15670 CVE-2017-15671 CVE-2017-15804 CVE-2017-16997 CVE-2017-18269 CVE-2017-1000408 CVE-2017-1000409 CVE-2018-11236 CVE-2018-11237) (Bug 48778)
  - **intel-microcode** (CVE-2018-3639 CVE-2018-3640) (Bug 48781)
  - **libapache2-mod-perl2** (CVE-2011-2767) (Bug 48785)
  - **libarchive** (CVE-2016-10209 CVE-2016-10349 CVE-2016-10350 CVE-2017-14166 CVE-2017-14501 CVE-2017-14502 CVE-2017-14503 CVE-2018-1000877 CVE-2018-1000878 CVE-2018-1000880) (Bug 48408)
  - **libemail-address-perl** (CVE-2015-7686 CVE-2018-12558) (Bug 48777)
  - **libgd2** (CVE-2019-6977 CVE-2019-6978) (Bug 48614)
  - **liblivemedia** (CVE-2019-6256 CVE-2019-7314 CVE-2019-9215) (Bug 49021)
  - **libphp-phpmailer** (CVE-2018-19296) (Bug 48306)
  - **libreoffice** (CVE-2018-16858) (Bug 48592)
  - **libvirt** (Bug 47617)
  - **libvirt-python** (Bug 47617)

## General

- ***libvncserver*** (CVE-2018-6307 CVE-2018-15126 CVE-2018-15127 CVE-2018-20019 CVE-2018-20020 CVE-2018-20021 CVE-2018-20022 CVE-2018-20023 CVE-2018-20024) (Bug 48591)
- ***linux*** (CVE-2017-18249 CVE-2018-1128 CVE-2018-1129 CVE-2018-5848 CVE-2018-12896 CVE-2018-13053 CVE-2018-13096 CVE-2018-13097 CVE-2018-13100 CVE-2018-14610 CVE-2018-14611 CVE-2018-14612 CVE-2018-14613 CVE-2018-14614 CVE-2018-14616 CVE-2018-16862 CVE-2018-17972 CVE-2018-18281 CVE-2018-18690 CVE-2018-18710 CVE-2018-19407) (Bug 48782)
- ***ntfs-3g*** (CVE-2019-9755) (Bug 49070)
- ***openjdk-8*** (CVE-2019-2422) (Bug 49075)
- ***openjpeg2*** (CVE-2017-17480 CVE-2018-5785 CVE-2018-6616 CVE-2018-14423 CVE-2018-18088) (Bug 48951)
- ***openssh*** (CVE-2018-20685 CVE-2019-6109 CVE-2019-6111) (Bug 48780 Bug 48949)
- ***openssl1.0*** (CVE-2018-0732 CVE-2018-0734 CVE-2018-0737 CVE-2018-5407) (Bug 48388)
- ***php-pear*** (CVE-2018-1000888) (Bug 48590)
- ***php7.0*** (CVE-2018-14851 CVE-2018-14883 CVE-2018-17082 CVE-2018-19518 CVE-2018-19935 CVE-2019-9637 CVE-2019-9638 CVE-2019-9639 CVE-2019-9640 CVE-2019-9641) (Bug 48309 Bug 48950)
- ***policykit-1*** (CVE-2018-19788) (Bug 48307)
- ***python-django*** (CVE-2019-3498) (Bug 48464)
- ***qemu*** (Bug 47617)
- ***qtbase-opensource-src*** (CVE-2018-15518 CVE-2018-19870 CVE-2018-19873) (Bug 48593)
- ***rdesktop*** (CVE-2018-8791 CVE-2018-8792 CVE-2018-8793 CVE-2018-8794 CVE-2018-8795 CVE-2018-8796 CVE-2018-8797 CVE-2018-8798 CVE-2018-8799 CVE-2018-8800 CVE-2018-20174 CVE-2018-20175 CVE-2018-20176 CVE-2018-20177 CVE-2018-20178 CVE-2018-20179 CVE-2018-20180 CVE-2018-20181 CVE-2018-20182) (Bug 48776)
- ***samba*** (CVE-2019-3880) (Bug 49214)
- ***sox*** (CVE-2014-8145) (Bug 48783)
- ***spice*** (CVE-2019-3813) (Bug 48594)
- ***systemd*** (CVE-2018-1049 CVE-2018-15686 CVE-2018-16864 CVE-2018-16865 CVE-2018-16866 CVE-2019-3815 CVE-2019-3842 CVE-2019-6454) (Bug 48463 Bug 48499 Bug 48759 Bug 49261)
- ***univention-directory-notifier*** (CVE-TMP48466) (Bug 49200 Bug 49211)
- ***univention-kernel-image-signed*** (CVE-2017-18249 CVE-2018-1128 CVE-2018-1129 CVE-2018-5848 CVE-2018-12896 CVE-2018-13053 CVE-2018-13096 CVE-2018-13097 CVE-2018-13100 CVE-2018-14610 CVE-2018-14611 CVE-2018-14612 CVE-2018-14613 CVE-2018-14614 CVE-2018-14616 CVE-2018-16862 CVE-2018-17972 CVE-2018-18281 CVE-2018-18690 CVE-2018-18710 CVE-2018-19407) (Bug 48782)

- *uriparser* (CVE-2018-19198 CVE-2018-19199 CVE-2018-19200) (Bug 48784)
- *vlc* (Bug 48462)
- *wayland* (CVE-2017-16612) (Bug 48773)
- *wget* (CVE-2019-5953) (Bug 49241)
- *wireshark* (CVE-2018-12086 CVE-2018-18225 CVE-2018-18226 CVE-2018-18227 CVE-2018-19622 CVE-2018-19623 CVE-2018-19624 CVE-2018-19625 CVE-2018-19626 CVE-2018-19627 CVE-2018-19628 CVE-2019-5716 CVE-2019-5717 CVE-2019-5718 CVE-2019-5719 CVE-2019-9208 CVE-2019-9209 CVE-2019-9214) (Bug 48409 Bug 49067)
- *zeromq3* (CVE-2019-6250) (Bug 48500)
- The following updated packages from Debian 9.6 are included (Bug 48278): *wpa*, *base-files*, *ca-certificates-java*, *dnspython*, *erlang*, *espeakup*, *gnupg2*, *ibus*, *libdatetime-timezone-perl*, *libgpod*, *libssh*, *openvpn*, *postfix*, *postgresql-9.6*, *postgrey*, *tzdata*, *xapian-core*, *ansible*, *arc*, *astroml-addons*, *c3p0*, *chkrootkit*, *chromium*, *compactheader*, *coturn*, *courier*, *debian-edu-config*, *debian-installer*, *debian-installer-net-boot-images*, *debian-security-support*, *drupal7*, *egg*, *flatpak*, *ganeti-os-noop*, *glx-alternatives*, *gnulib*, *golang-1.7*, *golang-1.8*, *graphite-api*, *grokmirror*, *icinga2*, *ikiwiki*, *isort*, *jdupes*, *kmmp*, *libapache-mod-jk*, *libapache2-mod-auth-mellon*, *libb2*, *libemail-address-list-perl*, *libextractor*, *libu2f-host*, *linux-igd*, *lttng-modules*, *mistral*, *monkeysign*, *mosquitto*, *mpqc*, *mumble*, *netatalk*, *neutron*, *nvidia-graphics-drivers*, *nvidia-modprobe*, *nvidia-persistenced*, *nvidia-settings*, *nvidia-xconfig*, *openni2*, *parsedatetime*, *passenger*, *pdns*, *pdns-recursor*, *photocollage*, *putty*, *pylint-django*, *python-acme*, *python-arpv*, *python-certbot*, *python-certbot-apache*, *python-certbot-nginx*, *python-hypothesis*, *python-josepy*, *pyzo*, *r-cran-readxl*, *rssh*, *rtkit*, *ruby-loofah*, *ruby-rack*, *ruby-sanitize*, *sl-modem*, *sogo-connector*, *spip*, *ssh-agent-filter*, *superollider*, *sympa*, *thunderbird*, *tmpreaper*, *tryton-server*, *twig*, *twitter-bootstrap3*, *uglifyjs*, *vm*, *vulture*, *waagent*, *wicd*, *wordpress*, *wvstreams*, *xen*, *xkeycaps*, *xmltooling*, *yosys*, *z3*
- The following packages have been moved to the maintained repository of UCS: *fail2ban* (Bug 47566), *libmaxminddb* (Bug 48409)

## 6.2. Basic system services

Feedback 

### 6.2.1. Linux kernel and firmware packages

Feedback 

- Always set Univention Configuration Registry variable `update/reboot/required` when a new kernel is installed (Bug 48349).

### 6.2.2. Univention Configuration Registry

Feedback 

#### 6.2.2.1. Changes to templates and modules

Feedback 

- The script `univention-policy-update-config-registry` now has a new option to specify the LDAP server from which to get the policies (Bug 49044).

## 6.3. Domain services

Feedback 

### 6.3.1. OpenLDAP

Feedback 

#### 6.3.1.1. Listener/Notifier domain replication

Feedback 

- Add `univention-translog check --fix` command to check (and fix) inconsistency between the files `/var/lib/univention-ldap/notify/transaction`, `/var/lib/univention-ldap/notify/transaction.index`, `/var/lib/univention-ldap/listener/listener`, and `/var/lib/univention-ldap/last_id` (Bug 49202).
- Since Erratum 427 the Univention Directory Notifier (UDN) writes transactions both to the file `/var/lib/univention-ldap/notify/transaction` and the `cn=translog` database in OpenLDAP. A failed write to the later can make UDN abort, in which case UDN is restarted automatically and writes the pending transactions to said file again. This leads to inconsistency. The order has been swapped to prevent this issue from happening again. The transaction file might require manual corrections if UDN fails to start up properly. Details of this procedure will be provided by a future update (Bug 49199).
- Implement new Univention Directory Notifier Protocol Version 3, which does not transmit Distinguished Names over an unencrypted and unauthenticated channel (Bug 48427).
- The new script `univention-replicate-many` can be used to re-replicate multiple objects at once (Bug 41262).

## 6.4. Univention Management Console

Feedback 

### 6.4.1. Univention Management Console web interface

Feedback 

- The UMC for UCS Core Editions shows a dialog that informs about the Univention Summit 2019 (Bug 48372).

### 6.4.2. Univention Management Console server

Feedback 

- The LDAP connections are reestablished in the UMC web server after a server password change. This causes that the correct portal entries for authenticated users are shown again (Bug 48990).
- The SAML identity provider is not configured in the UMC web server anymore if it is disabled via the Univention Configuration Registry variable `umc/web/sso/enabled` (Bug 48985).
- The errors from `pam_cracklib` were evaluated again when changing the password via Univention Management Console. The old behavior has been restored later on. Therefore password changes do not require strong passwords anymore if no password policy is defined in the domain (Bug 48684, Bug 49039).
- The design of the Univention Summit 2019 dialog has been slightly adjusted (Bug 48470).
- The Univention Management Console for UCS Core Editions shows a dialog that informs about the Univention Summit 2019 (Bug 48372).

### 6.4.3. Univention Directory Manager UMC modules and command line interface

Feedback 

- It is now possible again to modify the LDAP base, for example modify references to policies. This was broken since UCS 4.3-0 (Bug 49018).

## 6.4.4. Modules for system settings / setup wizard

- Fixed a special case for the initial domain join, the master domain controller hostname may now differ from the value read from the DNS server (Bug 48986).
- Make the software components for Univention Corporate Server available during installation when it is run in French (Bug 44162).

## 6.4.5. Domain join module

- Having multiple (virtual) network interfaces with the same MAC address caused the domain join to fail (Bug 48475).
- Copy `cn=translog` database for transaction log to backup domain controller while joining (Bug 48427).

## 6.4.6. System diagnostic module

- Use new Univention Directory Notifier Protocol Version 3 for check (Bug 48427).
- Fixed error in Check well known SIDs system diagnostic test (Bug 48477).
- Added command line tool `univention-run-diagnostic-checks` which can be used to execute the diagnostic checks (Bug 47650).
- A typo has been fixed in the error output of the Kerberos DDNS update check (Bug 48385).
- The proxy server test has been fixed (Bug 48385).

## 6.4.7. Filesystem quota module

- Quotas on XFS file systems are shown again on the Univention Management Console (Bug 48315).

## 6.4.8. Other modules

- A crash in the Univention Management Console module is prevented if widget definitions are configured via Univention Configuration Registry variables (Bug 48494).

## 6.5. Univention base libraries

- Fix regression in `cn=translog` setup, which reset the LDAP index. If an UCS-4.3 system was updated to Erratum 426 before this erratum was made available, the list of indexed LDAP attributes was reset to the default on master and backup systems. This may lead to slow LDAP searches. If other attributes were added manually to the Univention Configuration Registry variables `ldap/index/eq`, `ldap/index/sub`, `ldap/index/pres`, they must be restored manually. The old values might be recovered from the log file `/var/log/univention/config-registry.replog`. After a manual change of these Univention Configuration Registry variables, the LDAP server index need to be updated by stopping the `slapd` service, then running the script `/usr/share/univention-ldap/ldap_setup_index` and starting the `slapd` service again (Bug 48970).
- Support activation of the `cn=monitor` backend for statistical information. To activate this, set the Univention Configuration Registry variable `ldap/monitor=true` and restart the LDAP server service (`slapd`) (Bug 41213).
- Add `cn=translog` database for transaction log (Bug 48427).

- During the update, a resynchronization of the listener module `ldap_extension` is performed on backup domain controller and slave domain controller systems to correct possible inconsistencies in LDAP ACLs (Bug 48530).
- Enabled `cn=config` backend, accessible via LDAPI only (Bug 43515).
- Add ***univention-lib*** implementation of `die()` function to `ldap.sh` (Bug 47424).
- Due to a logic error it could happen that not all LDAP ACL registered in LDAP were active on newly installed backup domain controller systems. This could lead to information disclosure or replication errors. The error is now fixed and when updating the ***univention-ldap-server*** package, missing LDAP ACLs are automatically activated (Bug 48530).
- Do not send cron mails for a successful `ldap-backup` cron job (Bug 48014).

## 6.6. Software deployment

Feedback 

- The repository tools `univention-repository-addpackage`, `univention-repository-delpackage` and `univention-repository-merge` are deprecated and will be removed with UCS-4.4 (Bug 29505).
- The packages index files under `dists/` are now also mirrored. This is required for the PXE network installer (Bug 46600).
- Added the Univention Configuration Registry variable `update/debug/level` for changing the debug level of the UCS updater (Bug 47913).
- The error message complaining about the missing `postmirror.sh` file is no longer displayed (Bug 27761).
- When mirroring distributions the default architecture was not detected correctly and URLs were scheduled for download multiple times (Bug 48424).

## 6.7. System services

Feedback 

### 6.7.1. SAML

Feedback 

- The ***univention-saml*** Apache VirtualHost configuration can now be extended by placing `.conf` files in the directory `/etc/apache2/sso-vhost.conf.d/` (Bug 48348).

### 6.7.2. Dovecot

Feedback 

- Add SNI Support to ***univention-mail-dovecot***. Additional FQDNs and certificates can be configured with Univention Configuration Registry variables `mail/dovecot/ssl/sni/$fqdn/certificate=$path_to_certificate` and `mail/dovecot/ssl/sni/$fqdn/key=$path_to_certificate_key` (Bug 49064).
- Prevent creation of empty mailboxes in `/var/spool/dovecot/private/` by unsuccessful login attempts of users without a primary mail address (Bug 48628).

### 6.7.3. Printing services

Feedback 

- The CUPS configuration in `/etc/cups/cupsd.local.conf` is applied again. Since Erratum 149 the CUPS Include directive has been removed. Changes in the `/etc/cups/cupsd.local.conf` configuration require a ucr commit `/etc/cups/cupsd.conf` now (Bug 49197).

- Allow switching to None or smb (raw) printer model (Bug 47843).
- Ensure /usr/share/cups/model is a link to /usr/share/ppd (Bug 47435).

## 6.7.4. Nagios

Feedback 

- Fixed a local root exploit in the SUID wrapper for the Nagios check univention\_ldap (Bug 48616).
- Fixed an uncaught type error in the *nagios-server* listener (Bug 43426).

## 6.7.5. PAM / Local group cache

Feedback 

- An open SSH connection will now properly get closed when shutting down a system (Bug 49045).

## 6.8. Virtualization

Feedback 

### 6.8.1. UCS Virtual Machine Manager (UVMM)

Feedback 

- Add RAM overcommitment protection through Univention Configuration Registry variable uvmm/over-commit/reserved (Bug 48098).
- Normalize CPU utilization of host and update error and migration status atomically (Bug 48340).
- Show CPU usage in tree of virtualization hosts (Bug 35196).
- Fix tooltips preventing button clicks (Bug 45498).
- Add Hyper-V Enlightenment for Windows VMs (Bug 48024).
- The target hosts for live migration can now be configured even when the virtual machine is running (Bug 48199).
- Fix parsing memory and disk capacity (Bug 36661).
- Fix file permissions of backup directory (Bug 47741).
- Add support for post-copy migration (Bug 47617).

## 6.9. Services for Windows

Feedback 

### 6.9.1. Samba

Feedback 

- The samba-tool ntacl sysvolcheck didn't map owner LA to DA properly while checking, leading to irritating, unnecessary error messages (Bug 44282).

### 6.9.2. Univention S4 Connector

Feedback 

- Moving objects in UCS with a LDAP base different in UCS and Samba has been fixed (Bug 48362).