



## Release Notes scVENUS 2.5.6 August 2016

Upgrade of scVENUS certificates  
What's new in scVENUS 2.5.6?  
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Training

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# 1. Upgrade of the scVENUS certificates

The scVENUS master and client certificates are required for secure communication between master and clients. During upgrade of scVENUS to version 2.<version> or installation of scVENUS 2.<version> certificates were generated with a validity of 10 years. As scVENUS 2.0 was released more than 10 years ago, it is important that you check the validity of your scVENUS certificates!

A description of how to check the validity of your certificates and how to upgrade them is given in the document `certificate_upgrade_scVENUS_25_en.pdf` on the DVD or after installation in `~<manager>/Documentation/scVENUS`.

# 2. What's new since scVENUS 2.5?

The following lists contain the most important new features and revisions (bugfixes, improvements) in scVENUS. For bugfixes, the bug is described.

## scVENUS 2.5.1

### New:

- Perl installation by `scbootstrap`: Command installs Perl on all Unix clients.
- hook in `venusbootstrap.agent` of Client Installation (VIIP): hook to configure a site-specific command which will be run automatically after the client bootstrap of Client Installation (VIIP)
- simplification of upgrade process:

For each file of a meta package it must be decided which version shall be stored in the configuration depot. This merge process is now simplified by the following new features:

- option `--accept-proposals` for `scmetamerge`: Command option to reduce necessary user decisions. It automatically uses the proposed options without asking for further confirmation. Excluded from this are the proposed options `merge` and `skip`, they always ask for confirmation.
- option `--e` for `venus-upgrade-004`: The upgrade script now executes `scmetamerge --accept-proposals` as default. To confirm all merge decisions manually, `venus-upgrade-004 -e` must be executed.
- decisions are reduced for `scmetamerge`: Irrelevant file changes are no longer presented to the user.

scVENUS software fixes and improvements as well as new architectures are now installed on the scVENUS master by the basic upgrade procedure. Additional architectures are still installed by the architecture update installation script. For details, see `architecture_installation_scVENUS_251_en.pdf` in the documentation directory.

- option `-u` for `scmetalock`: command option to delete locks of active versions of files contained in a meta package
- support of autofs for SSSD configuration
- support of ipnodes map on Solaris SUN
- method `sc.venus.client.clientdrestart.vbs` on Windows: method to restart `clientd` on Windows clients
- 3rd party software: new versions are available of
  - Python: Python-2.7.6
  - OpenSSL: openssl\_1.0.1g
  - SQLite: sqlite3-3.8.4.2
  - Kerberos: krb5-1.12.1
  - OpenLDAP: openldap-2.4.39
  - Apache Portable Runtime: apr-1.5.0, apr-util-1.5.3
  - Apache HTTP Server: apache-2.4.9, scvcproxy-2.4.9
  - PostgreSQL: postgresql-9.2.8

### Revised:

- `scbootstrap`: Command handles file `.ssh/authorized_keys` incorrectly.: fixed
- `scsnapshot`: Command adds too many values to postinstall script if Windows registry entries were deleted.: fixed
- configuration of manpages and binaries path at Client Installation (VIIP): Configuration of the path storing manpages and some binaries is now also automatically enabled at client bootstrap of Client Installation (VIIP).: improved
- `sc.venus.client.upgrade`: Method upgrades a Windows client even if the scVENUS client software upgrade version is already installed on it.: fixed
- simplification of software depot upgrade: Software depots are now upgraded like scVENUS clients only by the method `sc.venus.client.upgrade`.
- `venus_add_package`: Function handles options in Perl methods incorrectly.: fixed
- `sc.venus.cron.conf`: Method sends error "command line too long" on Windows.: fixed
- error "file system full" at file import: Error thrown when the file system is full is not recognized reliably when importing files from the configuration depot.: fixed
- variable lookup in Perl: performance of Perl methods that execute variable lookups: improved
- `VENUS_HOSTLIST_USE_NIS`: Different defaults of the context variable are used by master commands in Shell and Python.: fixed
- `scchuser`: Command handles passwords containing double quotes incorrectly.: fixed

- `sc.venus.client.access`: Method sets empty permissions for directories on a Windows client in some cases.: fixed
- `amdls`: Command does not show all relevant directories in some cases.: fixed
- `screxd`:
  - Start script returns 0 even if `screxd` cannot be started because the port is already in use.: fixed
  - Error messages from the clients sent by `screxd` can be lost if `scinstall` on the master is interrupted by ^C.: fixed

## scVENUS 2.5.2

### New:

- option `noError` for `venus.load_module` (Python): Function returns `None` if the module was not found. The corresponding error message can be suppressed by option `noError=True`.
- `scmonROD_sysreadBUFSIZE`: Context variable in context `sc.report.inst` defines network buffer size for communication between `scmonROD` and `scmonBlackboardDaemon`.
- `gvenus-rcp`:
  - Client Management offers installation and uninstallation of software packages as well as method execution.
  - A task can be cloned. A clone is a new task that contains the same values as the source task at the time being cloned.
  - Task editors in status "in preparation" are restored when reopening `gvenus-rcp`.
  - Ubuntu 14.04 (LTS) is reference target operating environment.
- 3rd party software: new versions are available of
  - OpenSSL: `openssl_1.0.1h`
  - Python: Python 2.7.7

### Revised:

- `ntpqpath`: Format and default value of the context variable of context `scmon.sensor.ntpd.inst` are changed to a colon-separated list: improved
- queueing mechanism: To prevent clients from queueing, the differentiation between master block and pull block is not made any more.: improved
  - `gvenusRCP`: In module Client Management, the view Update Clients Blocks offers only one blocking element.
- quick reference card: content and structure: improved
- functions (Perl): examples for using shortcut and registry functions when programming methods in `/domain/arch/win/methods/example.venuscom.*` : improved

## scVENUS 2.5.3

### New:

- `VENUS_CONFIGURE_NETWORK` in context `network`: context variable to define whether the submethods `routes`, `resolver` and `tcpip` change the network configuration
- simplification of upgrade process:  
For each file of a meta package it must be decided which version shall be stored in the configuration depot. This merge process is simplified by reasonable default settings and enhanced by the following new options of the command `scmetadoall::`
  - `--expert`: command option to set full interactivity for merge decisions
  - `-d <dir>`: command option to define an empty working directory for the merge process
- client installation by MSI package (Windows):  
`sc-client` package is also available as MSI package.
- NIS configuration improved by new variables in context `nis`:
  - `NIS_DOMAIN_NAME`: defines a name of the NIS domain
  - `NIS_MASTER_NAME`, `NIS_MASTER_IP`: define a NIS master for a NIS slave
  - `NIS_PASSWD_SOURCE_FILE`, `NIS_SOURCE_FILE`: define the NIS source file location for the NIS master
- map entry synchronization improved by the following new parameters of `scdirsync`:
  - `-attribute=<attribute>`: command option to synchronize only a specific attribute.  
If you want to synchronize `n` specific attributes, use this argument `n` times.
  - `<identkey>=<identvalue>`: command argument to synchronize a specific map entry
- configuration of boot server and PXE environment of Client Installation (VIIP) improved:
  - `scviipadmin`: new command to configure the boot server. It allows to e.g. adapt the entries in the non-graphical boot menu (`viip.msg`).
  - boot server update uses site-specific header (`default.head`, `viip.msg.head`) and footer (`default.tail`), if they are available in the directory `/viip/tftpboot/X86PC/viip/pxelinux.cfg/`.
  - PXELINUX software is packaged separately. scVENUS 2.5.3 includes the PXELINUX versions 3.86 (default) and 6.02.
- documentation of task scheduler functions (Windows)
- 3rd party software: new versions are available of
  - Apache: apache 4.2.10-static

- Bash: bash 4.2.53-1
- PostgreSQL: postgresql-9.2.9
- Python: python 2.7.8
- SSL: openssl 1.0.1j

### Revised:

- SSL communication:  
Because of the POODLE exploit, SSLv3 is completely disabled for communication in the scVENUS network.: improved  
To be able to upgrade scVENUS clients of version < 2.5, SSLv3 must be temporarily enabled as follows:
  - `VENUS_SCPREX_SSL_COMPAT_MODE=yes`: configuration variable in `/etc/sc-acctrl` enables the SSL communication between an scVENUS master with a version  $\geq 2.5$  and scVENUS clients with a version < 2.5.: new
- Bash version:  
Because of the Shellshock exploit, the Bash version released with scVENUS is updated.: improved
- accessing configuration depot :  
Client requests of the configuration depot are secured by secret access.: improved
- Wiki system of Report Viewer in Monitoring:  
The Wiki system TWiki underlying the Report Viewer of the Monitoring module is replaced by FosWiki. After upgrade, backups of the Twiki topics are located in the directory `/var/venus/scmon/log/wiki/data` in the files `twiki_pub_backup.tar` and `twiki_data_backup.tar`.: improved
- variable lookup in Shell:  
performance of Shell methods that execute variable lookups: improved

## scVENUS 2.5.4

### New:

- gvenusRCP:
  - Softwaredepot Management: module to manage the content of the software depot. Software packages can be added, changed and removed. A filter allows to select e.g. package with the same requires which can be changed altogether in one step. Software installation on clients can be now initiated by first selecting the software
  - Inventory: module to gather, display and edit host-specific data of the clients. Predefined views and a comprehensive filter allow to display selected information. Individual filter settings can be stored and thus re-used. These data can be exported as csv file.

- gvenusRCP is independent from systems's Java and uses bundled internal Java 1.8.
- Configuration Monitoring: module to monitor properties of clients by comparing their target and actual value. A gvenusRCP interface is available.
- `scdepotserverlist`: master command to display all clients that are configured as softwaredepot servers.
- `scbootstrapwin2`: master command to install the scVENUS software – compared with `scbootstrapwin` – also on Windows 8(.1) and Windows Server 2012(R2) clients.
- `venus_replace_in_file` (Perl) and `venus.replace_in_file` (Python): functions to replace character strings by others in a file.
- 3rd party software: new versions are available of
  - RRD: RRDtool is also available for AIX and 64-bit.  
Note: When upgrading a Monitoring master on AIX, the RRD files are converted. RRD files are converted by the methods `sc.report.inst/sc.report.config`, which takes time.
  - Apache: apache 2.4.12
  - Kerberos: krb5 1.13.1
  - LDAP: openldap 2.4.40
  - Python: python 2.7.9
  - SSL: openssl 1.0.2c
- comprehensive documentation of scVENUS queueing: additional chapter in the manual *Installation, Upgrade and Configuration* describing how to manage scVENUS queueing itself and how to manage the jobs. The reference documentation of the queueable commands and the queueing commands are revised accordingly.

### Revised:

- variable lookup in Python: performance of Python methods that execute variable lookups: improved
- communication between client and master via `scprex2`:
  - logfiles from client to master use SSL: improved
  - number of connections from client to master: improved
 Enable communication via `scprex2` as follows:
  - `VENUS_SCPREX=scprex2`: configuration variable in `/etc/sc-acctrl` enables communication via `scprex2` for clients version  $\geq 2.5.4$ : new
  - `venus_import_variable -F <variable>`: value of `<variable>` lost if context is not retrieved: fixed
- Client Installation (VIIP) on Red Hat EL 7:
  - On every change of the class an extra end tag `%` is added to the packages section.: fixed

- Postboot service sometimes starts before the network is started.: fixed
- Monitoring transport layer on Windows: message database is shrunk regularly: improved
- Report Viewer in gvenusRCP:
  - In some cases displaying reports or storyboards in the editors area is not possible: fixed.
  - After adding a table to a storyboard by `AddTableToStoryboard` the table is not displayed.: fixed
- `scrdo`: deprecated command: deleted
- documentation of `<clientlist>` in commands: description of how to define the `<clientlist>` is complemented by the possible set theory operators: improved
- training handouts adapted according to scVENUS 2.5: improved

## scVENUS 2.5.5

### New:

- `sc.report-httpd.inst`:
  - **LDAP**: possible value of context variable `AUTH_TYPE` to create an LDAP file using values set in variables in the context `sc.venus.ldap.client`. Overwrite these settings in the context `sc.report-httpd.inst`.
  - `HTTPD_SERVER_ADMIN`: context variable to define the value of the directive `SERVER_ADMIN` in the HTTPD configuration file.
  - `HTTPD_SERVER_NAME`: context variable to define the value of the directive `SERVER_NAME` in the HTTPD configuration file.
- `SECURE_NETWORK_TRANSPORT` in context `sc.transport.inst`: context variable to define whether the network communication between Monitoring clients and Monitoring master is SSL-encrypted. When defined, each Monitoring client must be adapted.
- `sc.venus.perl.inst`: method to install and configure Perl. For Windows clients, the Perl version can be selected.
- `sc.retrievefile`: command reimplemented in Python with new options to define into which branch of the configuration depot a file from a client is imported:
  - `-a <arch>`: defines the branch of the architecture group `<arch>`.
  - `-g <group>`: defines the branch of the logical group `<group>`.
  - `--common`: defines the branch of the common resources.
- `venus.get_host_by_name` (Python): function to retrieve host information and provide it in `/etc/hosts` format.
- `scmon.cpubercentage.agent`: Monitoring agent to monitor the CPU utilization on a Unix or Windows client.



- comprehensive documentation of function and usage of the primary administrator and the secondary administrators: additional sections in the manual *Installation, Upgrade and Configuration*
- 3rd party software: new versions are available of
  - Apache: apache 2.4.17
  - Kerberos: krb5 1.13.2
  - LDAP: openldap 2.4.42 incl. patch for CVE-2015-6908
  - PostgreSQL: postgresql-9.2.14
  - Python: python 2.7.10
  - SASL: sasl 2.1.26 incl. patch for CVE-2013-4122
  - SSL: openssl 1.0.2d

### Revised:

- `sc-acctrl`: structure and content: improved

Note: For one time the upgrade process is more extensive.

During upgrade, the content of the existing configuration file `/etc/sc-acctrl` is automatically adapted: New variables and commands are copied from the template, deprecated variables, commands and macros are deleted. For new commands, delegation settings are inherited from your present settings. Your configuration settings are kept as they are.

Find the list of changed variables, commands and macros in the manual *Installation, Upgrade and Configuration 2.5.5*.

- performance of commands `scclientlist` and `schostlist`: improved
- `venusclients`: cached outdated version of file containing information about all scVENUS clients is sometimes used by the scVENUS lookup mechanism: fixed
- `gvenusRCP`

Softwaredepot Management:

- listing of a larger quantity of software packages causes parallelization exceptions: fixed
- performance: improved

Inventory:

- performance: improved

## scVENUS 2.5.6

### New:

- `sc.report-wiki.inst:`
  - optional context variable `WIKI_ALLOW_CREATE_USER` controls the permission to add user accounts via web interface (default: `false`, meaning it is not permitted to add user accounts via web interface).
  - scVENUS 2.5.6 comes with Foswiki 2.1.0
- `sc.report-httpd.inst:`
  - new option for configuring the Monitoring Apache.  
If a file `${SCMON_INSTROOT}/httpd/apache2/conf/customer.conf` (default: `/etc/venus/common/scmon/httpd/apache2/conf/customer.conf`) is found in the configuration depot, it is imported and added to the HTTPD configuration `${SCMON_INSTROOT}/httpd/apache2/conf/httpd_scmon.conf`  
If no such file is found, nothing happens. In this file, values of the standard configuration can be overwritten or further modules (e.g. `scVLT`) can be activated.
- `scmonAgent scmon.cpuload:`
  - context variable `normalize_load` in the context `common` of the `cpu_load` agent determines whether the measured CPU load is to be averaged over the number of vCPUs (default: `true`). Thus, you can use the same limits for different CPUs.
- `scmetadoall:`
  - option `[-- <diffOptions>]` specifies the options of the GNU command **diff**.
- `scmetadel:`
  - option `--remove-history` also removes all entries from version control.
- `venus-upgrade-004` offers the new option `-b` to use unified mode of `diff` in `scmetamerge`.
- `scmetamerge` executes syntax check for contexts (except `*.xml`) with `sccontextvalidate`.
- `scqpush:`
  - option `-N` controls that blocks are ignored
- `scqbutler:` GUI for scVENUS Windows clients that allows to postpone job execution on the client.
- 3rd party software: new versions are available of
  - Apache: `apache 2.4.23`
  - Kerberos: `krb5 1.14.2`
  - LDAP: `openldap 2.4.44`

- PostgreSQL: postgresql-9.2.17
- Python: python 2.7.12
- SSL: openssl 1.0.2h
- SSH: openssh: 7.2p2
- tcsh: tcsh-6.18.01 with patch for compatibility with NSS modules, e.g. nss\_ldap

### Revised:

- `sc-acctrl`:
  - wildcard asterisk `*` for permission allocation (delegation) to all users:
 

Example:  
`scinvlist *`  
 allows all users to execute the command `scinvlist`.
  - argument `%group` for permission allocation (delegation) to Unix groups:
 

Example:  
`scprdo -%service_desk %all_admins`  
 allows all users of the Unix group `all_admins` excluding the Unix user group `service_desk` to execute the command `scprdo`.
- Queueing: Queueing push strategy for jobs of non-reachable clients has changed. With scVENUS 2.5.6, jobs of non-reachable clients are executed as soon as the client is reachable again. For the push strategy to work for a given client
  - the scVENUS rule engine must be installed (which it is by default),
  - the client must be upgraded to 2.5.6 and
  - the context variable `push-on-ping-enabled` in the context `sc.venus.push-on-ping` must be set to `true` for the client (which is the default).
- `scqlist`:
  - The output of `scqlist` has changed: the valid flag which has one of the values `not_yet_valid`, `valid` or `expired` has been added. If you have used `scqlist` within a script and you wish the output formatted as before, you can call `scqlist` with the following option:
 

```
--format="% (host) -12s:% (id) s:% (owner) -8s:% (description) s"
```
  - Calling `scqlist` with a clientlist which expands to an empty list has the effect of showing the jobs of all clients.: fixed
- master command `scsyncpasswd`: deleted
- `scinstall`, `scaddpkg`, `scdelpkg`, `scpdistfile`, `scmethodrun`:
  - option `-N` does not turn off queueing any more. Option `-N` now only controls that blocks are ignored: revised
- `scaddkey/scdelkey/scadduser/scdeluser` can now also be used behind firewalls, i.e. they do not need arbitrary ports any more: improved

- `scchkey/scchuser`: Moving data through firewalls is now possible if configuration variable `SCREX_PORT_RANGE` (default: `MASTER_PORT_RANGE`) is activated.: improved
- `gvenusRCP`
  - Inventory: Editing of data: improved
  - Job Log Browser:
    - filter settings can be stored
    - expired jobs and jobs which are scheduled for a future point in time can be filtered
    - jobs can be filtered using a general client list expression
- Monitoring:
  - performance of Monitoring daemon `scmonPOD`: improved
- configuration variable `VENUS_HOSTLIST_USE_NIS`: deleted. See also `USE_NIS` in `scvcpsdaemon.conf`.
- `scMasterQuery -n <host>` finishes with segmentation fault, if `<host>` is added to the name services as follows: `<ip> <name>` with name containing no dot (.): fixed
- `scprex2`:
  - traceback in error messages: fixed
  - error message "Error(s) occurred! See logfile(s) and errorfile(s) in <logdir>" although `<logdir>` is empty.: fixed
- links under `/var/venus/logs/user/<user>` that refer to log directories that are cleaned up are now also deleted.: improved
- site-specific python libraries under `/etc/venus/site` can be used for user specific functions.: improved
- `venus_import_file` fails showing error message "text file busy".: fixed

### 3. Supported operating systems

AIX 6.1, 7.1

Debian 5 - 8

Red Hat EL / CentOS / Scientific Linux 4 – 7

Solaris 10, 11

SUSE/openSUSE 11.4, 12.1 -12.3. 13.1, 13.2, 42.1

SLES 10 - 12

Ubuntu 12.04 (LTS), 14.04 (LTS), 16.04 (LTS)

Windows XP\*/ Server 2003\*/ Server 2008\*/ Server 2008 R2\* / Server 2012\* / Server 2012 R2\* / Windows 7\*, 8\*, 8.1\*, 10\*

\* no support for scVENUS master and LDAP server

scVENUS Client Installation (VIIP) now also supports Debian and Ubuntu. Please find all other operating systems for scVENUS Client Installation (VIIP) in Appendix A of the scVENUS manuals

## 4. New operating system support since scVENUS 2.5

Debian 8

Red Hat EL / CentOS / Scientific Linux 7

SUSE/openSUSE 13.1, 13.2, 42.1

SLES 12

Ubuntu 14.04 (LTS), 16.04 (LTS)

Windows 2012 / 2012 R2

Windows 8, 8.1, 10

## 5. Sales

If you would like to purchase scVENUS, please contact our sales department:

[info@science-computing.de](mailto:info@science-computing.de)

## 6. Email support

If you have support requests, please contact:

[venus-support@science-computing.de](mailto:venus-support@science-computing.de)

Regarding scVENUS licensing, address questions to:

[venus-license@science-computing.de](mailto:venus-license@science-computing.de)

## 7. Web portal

Find current information about scVENUS on our homepage:

<http://de.atos.net/scvenus>

This site offers access to the scVENUS web portal (only registered customers).

## 8. Training

We frequently hold scVENUS training courses. For more information, please call us at +49 7071 9457-0 or send an email to [info@science-computing.de](mailto:info@science-computing.de)

Of course, we also offer training courses specially designed for your requirements.

## 9. Documentation

The HTML reference documentation of the scVENUS commands, methods, contexts, scomAgents, functions and configuration variables is available:

- on the scVENUS DVD in the directory `Documentation`
- after basic scVENUS master installation in the directory `~<manager>/Documentation/scVENUS`

Here you also find the scVENUS manuals and READMEs.

An online help is available for the scVENUS GUIs `gvenus` and `gvenusRCP`.