

CleverScan Software Release Notes

Version **1.10.6** released on [2022/06/21](#)

Fixes

- Fix zero dimensions when creating lateral/inlet/outlet



Version **1.10.5** released on [2022/06/13](#)

Fixes

- Fix inconsistent measurement values on a SideView (regular vs pointcloud)

Version **1.10.4** released on [2022/03/02](#)

Changes






-  Log VX version
-  Copy scanning/processing info to scan directory

Fixes

- Applying new settings in rare cases might cause application crash
- Changing depth reference or direction might cause crash when operating on old scans

Version **1.10.3** released on [2021/12/13](#)

Changes

-  Possibility to export pointcloud to shape files
-  Annotations can be hidden in visualization (scoped value, can be set independently for each launch mode)
-  Translations can be distributed independently
-  Add check for CS tools existence
-  RC versions display more information

Fixes

- Exporting pointclouds to project location is no longer reporting failure
- Secondary reference line modification will trigger manhole depth update
- Misleading OpenGL warning at the start caused by online certificate check is no longer displayed (without internet connection this is failing)
- Fix crash when changing central clock value without active scan
- EPSG export unit is selected instead of previous one (grayed out)
- Fix file based camera commands (invalid formatting)
- Fix camera update fail to distribute file to correct location
- Remove outdated camera files from local storage
- Do not auto connect when only auto capture is check
- Fix gallery with multiple file removal
- Shape editor is no longer displaying outdated shapes
- Bottom rendering is using selected option
- Hash generation is done after processing, not during first opening

Version **1.10.2** released on [2021/06/23](#)

Fixes

- Unhandled exception can be triggered after fast dragging camera positioner
- Camera positioner navigation does not modify clock
- Application is recovering from situation when scanning folder is becoming unavailable during scanning procedure (accidental removal of USB stick)











Version **1.10.1** released on [2021/06/14](#)

Fixes

- Random crashes during migration of scans attached to VX
- Migration could freeze if main picture is damaged or unreadable
- Can not remove existing layout or preset
- Do not remember option for migration is separate option and works as intended
- Migration options moved to General options page to be available in all modes that are affected
- Scan version is not update if migration is not performed
- Opening scans from paths that contains UTF8 characters might fail

Version **1.10.0** released on [2021/05/25](#)

Changes

-  Export scans to MLP format
-  Customize Unfolded View (VX Integration)
-  VX bulk import with manhole depth
-  Network Tool is signed with Certificate
-  Observation time (VX Integration)
-  General 3D Scans
-  Improved pre-scan diagnostic (covered depth sensor)
-  Simplified date filter dialog
-  Unfolded view clock refresh without scan reload
-  Tool for scan correction (not calibrated gyro sensor)

Fixes

- Reduce memory requirements for large scans
- DXF coordinates transformation
- DDMS standard integration
- Reduced CPU usage (SideView)
- Improved SideView responsiveness
- Camera connection stability improvements
- Wrong unit used with EPSG projections

Version **1.9.4** released on [2021/04/30](#)

Fixes

- Random crashes during scan processing

Version **1.9.3** released on [2021/04/26](#)

Fixes

- Invalid position of manhole exported into DXF/TAB files
- Application crash when large manholes are processed with High Quality turned on

Version **1.9.2** released on [2021/01/14](#)

Fixes

- Problems with OpenGL software switcher
- VX scans with reversed distance are crashing application
- Workspace widget is visible in VX integration modes








Version **1.9.1** released on [2020/11/02](#)

Fixes

- Can not launch network capture tool on some machines

Version **1.9.0** released on [2020/10/30](#)

Changes






-  Scan gallery supports HEIC images (Apple format)
-  Option to open a folder with scans only (not a full workspace)
-  Drag and Drop X3D file onto UI to open it
-  Show active sort mode in workspace widget
-  Add active sort mode indicator, reset sort mode
-  Application does not have to be run with elevated privileges to activate software rendering
-  Check directory accessibility before scanning

Fixes

- Association with X3D file is not working
- GPS Coordinates projections not available
- Observation and parts not visible when creating it from VX
- HDR mode is available by default (it has been deprecated)
- Manhole parts edge snap is not working in all cases
- Visibility for observations and parts send from VX is always false
- NaN values as GPS coordinates if there were no readings
- Cover photo does not have its indicator
- Wrong version is launched when updating from code and something partially matching has been already downloaded
- Faces wrapped around produces ugly artifacts on 3D view
- Problems with EULA and fresh start UI elements blocking each other
- Custom images are not visible in external gallery
- Exposure values are not save/restored to/from preset
- Observation list is refreshing only after clicking on it
- Sending null coordinates to VX









Version **1.8.1** released on [2020/08/10](#)

Changes

-  Fixed inconsistent depth value for SideView ruler and other indicators
-  Fixed timeout in scanning mode (VX integration)
-  Fix wrong version shows for "What's new" dialog
-  Open containing folder actions shows images folder if scanning is not available
-  Date filters does have valid ranges

Version **1.8.0** released on [2020/07/23](#)

Changes

-  Gallery preview reloading fix
-  QR Codes for mobile application
-  Gallery synchronization with Web
-  Texture artifacts on textures processed with out of center option selected
-  Workspace widget sorts by creation date (migration procedure triggered after start of the application)
-  Scan renaming bug fix (wrong video filenames)
-  License info
-  Sorting criterion indicator








Version **1.7.2** released on [2020/06/10](#)

Changes

-  Minor bug fixes










Version **1.7.1** released on [2020/05/29](#)

Changes

-  Gyrosensor calibration status warning
-  Interpolated shapes with invalid parameters fixed
-  Single-dot shape in mesh editor
-  NTRIP server communication issue
-  Camera no longer sends outdated pictures after failed scan
-  Random crash with red ring detection turned on
-  Shapes are validated before processing


Version **1.7.0** released on [2020/04/21](#)

Changes

-  Update dialog multi-click fix
-  Hotkey for fast unit switching
-  Manhole parts parameters are nullable
-  Manhole parts selection highlighted on a pointcloud
-  Configuration value to distinguish oval/circle and rectangle/square
-  Manhole parts can snap their boundaries to closest neighbors
-  Application can be launched without administrative privileges
-  Update dialog have a link to download webpage with older versions
-  Export archive separator fix


Version **1.6.4** released on [2020/04/15](#)

Changes

-  Fix application exception on incomplete scans








Version **1.6.3** released on [2020/02/20](#)

Changes

-  Stored measurements description fix
-




Version **1.6.2** released on [2020/02/13](#)

Changes

-  Export to STL format
 -  Crash after in application update fix
 -  Stuck in device fix
 -  Remove drafts after sending
 -  Perform network check more often
 -  Do not discard manhole dimensions from VX
 -  Laser depth and distance is not flickering
-



























Version **1.6.1** released on [2020/01/18](#)

Changes

-  Shape editor - single slices
 -  Manhole parts dimension calculation fix
 -  Misaligned clock in scans made out of center fix
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Version **1.6.0** released on [2019/11/15](#)


Changes

-  Unlock scan in simulation mode
-  Integrate Ublox GPS
-  Chinese translations
-  Fix crash when closing the application without active connection with the device
-  Add an option to save a screenshot at custom location and open containing folder after making a screenshot
-  Fix problem with connecting with the device on Windows 10 when there is a system proxy configuration
-  NTRIP configuration improvements
-  Fix scaling issues with images exported to VX reports
-  Fix issues with observation list edit mode
-  Auto/Manual select investigate image
-  Fix problems with manhole parts dialog placement/auto update size
-  Fix problem with sort index of new manhole parts created from CleverScan
-  Better user side diagnostic of EPSG codes (invalid code/location outside of projection)
-  Manhole parts recognize shape of a part based on a 3D mesh model
-  Description placement on a SideView can be reset (track position of an observation)
-  Screenshot tool for a SideView
-  Laser preview is responding more smoothly
-  Fix depth position indicator overflow
-  Fix issues with manhole parts double values input widget
-  Fix issue with editing large manholes in mesh editor
-  Dutch translations, translation improvements
-  Add prompt when depth laser reading is not stable
-  Fix unlocking drawing toolbar on processing
-  Fix synchronization of multiple observations with VX
-  Hide unneeded items on unfolded view
-  Add dialog to select which observation is edited with multi observation objects
- Fix cross point observation rendering
- Fix issues with stored measurements
- Fix problem with missing dimensions of edited manhole parts

-  Minor bugfixes
-





Version **1.5.4** released on [2019/11/02](#)

Changes

-  Fixed problem with Intel HD Graphics driver
-








Version **1.5.3** released on [2019/07/31](#)

Changes

-  Do not auto correct shapes when VX accepts new observation
 -  Fixed invalid removal of temporary observations
 -  Correct distance and clock send for lateral-like observations
 -  SideView can switch between code and description (visualization only)
-



Version **1.5.2** released on [2019/07/26](#)

Changes

-  Fixed size of buttons with dynamic content
 -  Connecting procedure will retry couple times before giving up
 -  Recalculate observation/node part size and position when reference value is changed
 -  GPS positioning corrections can be set in application settings (VX Map configuration file can be used for that purpose)
 -  GPS positioning information can be corrected after scan in PoinCloud view (pointcloud position dialog)
 -  Active scan export bug fixed
 -  Create observation without ID will create random ID.
-








Version **1.5.1** released on [2019/06/27](#)


















Changes

-  Inverse observation depth fixed
 -  Node parts for legacy version protocol fixed
-


Version **1.5.0** released on [2019/06/21](#)

Changes

-  Cover photo before scan fix
-  Export active scan option
-  No texture on depth view with overlapping slices
-  DEV camera releases
-  Fix disappearing items on canceled rename
-  Exit drawing mode with Esc key
-  Ignore SSD check for windows 7 or earlier




-  Open containing folder from workspace context menu
-  Disable diagnostic for L3 Cache on VMs - it is reported to be 0 bytes
-  UI is blocked if wizard in VX is open after attach
-  Resize dialogs to fit primary screen
-  Side view slice matching during texture processing
-  Integrate with GPS receiver, GPS connection over WiFi
-  Option to disable image auto synchronization to VX
-  Measurements are stored in project files
-  Option to choose source of primary and secondary photos
-  Labels can be resized by dragging them left or right.
-  Observation can be created from front view perspective
-  Smooth Transformation with zoom on textures
-  Double click on pointcloud fixed
-  Hiding connection status icon if no device selected
-  Fixed show measurement menu option
-  Green laser processing bug fix
-  Parallel computations.

Known Issues

-  Some cameras are showing some strange artifacts during first startup.

Version 1.4.0 released on [2019/02/27](#)

Changes








-  Basic scan controls are visible in manual scan
-  Laser preview
-  Geo referenced tab file
-  Minimum requirements diagnostic
-  Manhole shape editor
-  Amazon Web Storage
-  Unified views navigation
-  Green lasers
-  Critical exceptions are not crashing software
-  On demand updater for the camera
-  Motor speed regulation
-  Network speed diagnostic
-  Depth view distance indicator and measurement tool
-  Point cloud rotation is restored after selecting north/center/etc
-  Simulation mode warning before scan
-  VX communication improvements
-  Archive file validation
-  Synchronization of proposed laterals after importing scan to VX
-  Analyze scan before attaching to VX
-  Hovering over point cloud overlay is fixed
-  Incidental Depth View and Camera indicator flickering
-  Random crashes on some old scans
-  Connection diagnostic during manual connection
-  Observation passing 12 o'clock bug

Known Issues


-  Some cameras are showing some strange artifacts during first startup.
-

Version **1.3.11** released on [2018/12/21](#)

Changes

-  PointCloud double click bug has been fixed
-  Update timeout has been increased
-  Some fixes in translations
-  SideView image font in VX reports is more visible
-  SideView image artifacts in VX reports fix
-  ManholeNameDialog visibility on low resolution
-  GStreaime timeout has been increased

Known Issues


-  Some cameras are showing some strange artifacts during first startup.

Version **1.3.8** released on [2018/11/22](#)

Changes






-  SideView observation images are recalculated after position change
-  Measurements values are updated dynamically
-  Filter catalogs basing on status and date
-  **UI redesign**
-  Device status icon flickering between active/inactive fixed
-  Scanning mode (attach scan directly - automatically create node)
-  VX interaction status
-  Live video color corrections
-  Workspace Widget improvements (multi select, load on double click, context menu actions)
-  Multi-scans export
-  Gallery improvements
-  Improved network management (releasing interface)
-  Camera can be controlled using buttons (up/down)
-  Speedup connecting with camera
-  Preview switches between side cameras when hovering over sliders
-  Center lines in DXF files
-  Multiple observations per point
-  Post scan diagnostic
-  Manhole parts when launching from VX
-  Copy coordinates in PointCloudView and SideView
-  Auto video brightness
-  Busy indicator instead of progress dialog
-  Point cloud can be moved in ZAxis (middle mouse button)
-  Hotkeys
-  Custom colors
-  Improved Depth View slices generation (less distorted images)
-  Downgrade option
-  Improved software rendering
-  In PointCloudView cover offset and north direction can be manually set
-  North can be set on SideView
- Import scan option in context menu
- Probe diagnostic

Known Issues





-  Some cameras are showing some strange artifacts during first startup.
-

Version **1.2.13** released on [2018/08/03](#)

Changes



-  Options page with categories
-  Observation list sorting
-  Observation movement inside margin area
-  Measurement can be switched between bottom-top/top-bottom
-  Zoom is preserved between mode changes (bottom margin)

Known Issues





-  Some cameras are showing some strange artifacts during first startup.
 -  Quality of side view needs to be improved
 -  Aspect ratio for side view needs to be applied
 -  General GUI needs to be more intuitive
-

Version **1.2.11** released on [2018/07/24](#)

Changes
















-  Enable clock and depth reference change with VX synchronization
-  Application properties in Windows are supported (Version, producent)






Known Issues

-  Some cameras are showing some strange artifacts during first startup.
 -  Quality of side view needs to be improved
 -  Aspect ratio for side view needs to be applied
 -  General GUI needs to be more intuitive
-







Version **1.2.9** released on [2018/07/06](#)

Changes

-  Support for DXF (position, rotation etc.)
-  DXF - Automatic calculations of center of the cover
-  C++17 migration
-  Bug with rectangular manhole visualization has been fixed
-  Pictures encryption is supported
-  License agreement has been added
-  x3d browser protocol has been added
-  Observation list has been added
-  Minimum value for strobe has been added
-  Notes for scan have been added
-  Images verification step has been added
-  Custom depth level has been added
-  Application stability has been improved
-  Fixed bug with hanging event loop during interface release
-  Synchronization is applied only for single observation to VX





















-  Polish translations has been added
-  **Disabled clock and depth reference change from VX to avoid loss of data cohesion**
-  Enable communication with VX in light viewer mode
-  Camera versioning has been implemented
-  Side view in observation is sending to VX without additional markers

Known Issues









-  Some cameras are showing some strange artifacts during first startup.
-  Synchronization between Vx needs to be improved (**clock reference**)
-  Synchronization between Vx needs to be improved
-  Quality of side view needs to be improved
-  Aspect ratio for side view needs to be applied
-  General GUI needs to be more intuitive

Version **1.1.3** released on [2018/03/28](#)

Changes









-  Warning about invalid application directory
-  Default clock reference (center position) is customizable
-  Video recording stops at the end of the scan (bottom of the manhole)
-  Lateral autodetection is optional
-  Auto-detected laterals can be accepted, edited or discarded (buttons are displayed next to the lateral on the Side View)
-  CleverScan position in DXF file is marked
-  Manual scanning mode
-  Send feedback does not fail silently
-  UI rearranged (low resolutions compatibility)
-  Application does not crash during quick project changes
-  Context menu improvements (always displayed for selected item)
-  External images gallery
-  Project gallery
-  Rectangular manholes processing improvement
-  Camera positioner is animated
-  Measurements for manually created laterals are recalculated on measurement system change
-  Updates are available on demand (also unstable updates can be installed)
-  Release notes can be shown in the application
-  Images transfered to VX are properly aligned
-  Observations selection improvements

Known Issues








-  Auto gain has not been tested properly
-  Real time video is not very smooth
-  Images in depth view are chopped
-  If application is working few hours GStreamer is crashing
-  After few connect/disconnect operations application can crash
-  Working with network shares is not yet possible
-  Application will not restore IP address if it was set to something else than DHCP
-  Expanding of the views is problematic

Version **1.0.2** released on [2018/02/16](#)

Changes

-  Observation descriptions are movable
-  Layout management
-  Separate layout and language settings for Viewer and Light Viewer
-  Bottom rendering options
-  Paths with Unicode characters
-  Circular shapes in UI
-  Batch processing context menu options
-  Export ZIP issue

Known Issues


















-  Auto gain has not been tested properly
 -  Real time video is not very smooth
 -  Issue in synchronization connected with video recording
 -  Images in depth view are chopped
 -  If application is working few hours GStreamer is crashing
 -  Expanding of the views is problematic
 -  Display context option in visualization mode - different scan is loaded
-

Version **15 (0.9.15)** released on [2018/01/23](#)







Notes

This CleverScan release is a final version but not included in WinCan VX 12. It addresses some bugs found in testing of RC.

Changes

-  Expanding of widgets is less painful
-  SideView is scaled during resize
-  Keep aspect ratio option for visualization widgets
-  Scans are unloaded only if new scanning procedure has started
-  Status indicators false positives bug
-  Side camera preview bug
-  Camera software checksum validation during update procedure
-  Connecting to the arduino is simplified and boosted
-  Auto brightness feature has been added
-  Egg shape issues of bottom has been resolved
-  Point cloud sampling has been increased and is adjustable
-  Download progress in status bar has been added
-  Checking OpenGL version has been implemented
-  UDP problem with supervisor resolved
-  Md5 checksum for updated files has been added
-  Autoconnection and release improvements have been applied
-  Low resolution support

Known Issues



-  Auto gain has not been tested properly
-  Real time video is not very smooth
-  Issue in synchronization connected with video recording
-  Images in depth view are chopped
-  If application is working few hours GStreamer is crashing
-  Expanding of the views is problematic

Version 12 (0.9.12) released on [2017/10/18](#)

Notes

This CleverScan release is a final version included in WinCan VX 12. It addresses some bugs found in testing of RC.

Changes









-  Camera firmware update is fixed (messagebox issue)
-  Feedback dialog displays always on top

Version 0.9.11 released on [2017/10/13](#)




Notes

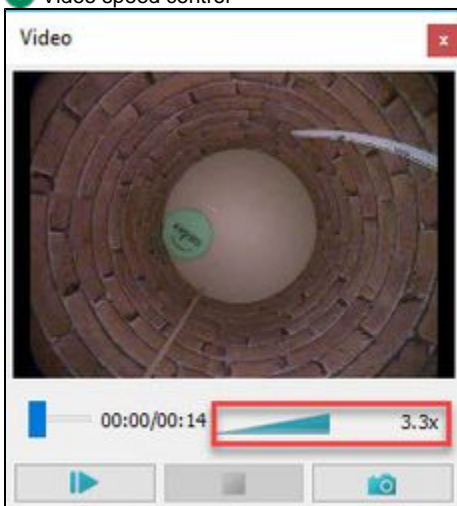
This CleverScan release is a Release Candidate version for WinCan VX 12.














Changes

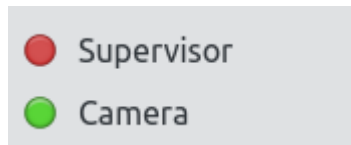
-  General Stability improvements
-  Imperial units improvements
-  Reduced scanning lag
-  Depth calculation improvements
-  Launcher merged into main application
-  Rectangle shape processing improvements
-  Screenshots can also be taken when side camera is selected
-  Icons introduced for *docked widgets*




-  Cancel feature (scanning, processing)
-  Light viewer mode (without possibility to introduce modifications into existing scan)
-  Video speed control





-  Depth calculation synchronized with VX
-  If there was any error during multi-scan processing it will be marked on the scan list
-  Context menu for scans (remove/export/rename/delete)
-  Import project option
-  Simplified mode for setting camera exposure parameters
-  Cameras can be switched from simplified mode
-  *Cancel* for closing application when camera is still connected
-  Mesh sample points distance control widget
-  Scan dialog can handle multiple cameras. More images can be added.
-  3D Mouse integration
-  Filtering scans by name on the workspace list
-  3D navigation using double click (Front view and Cloudpoint)
-  Camera/Supervisor status indicators



-  Possibility to send feedback directly from the application.

Known Issues

-  Some connectivity issues when using VirtualBox Network Adapter
-  There is no option to select installation path when CS is installed through standalone installer (not with VX) - it defaults then to C:\CleverScan

Version **0.9.10** released on [2017/08/25](#)