



DCV Release Notes

Version: **2020.0**

Last update: **April 16, 2020**

Release Notes

The following document lists notable technical changes that are included in each released DCV build. Every build includes hundreds of small improvements and changes that are not specifically listed here. If you are facing a problem with your version of DCV is recommended to always test if the newest version of the product fixes the problem, even if you do not see the fix listed here.

DCV 2020.0-8428 (Apr 16 2020)

Component Build Numbers:

- nice-dcv-server: 8428
- nice-dcv-client (Windows): 7238
- nice-dcv-viewer (MacOS): 1716
- nice-dcv-viewer (Linux): 1358
- nice-xdcv: 296
- nice-dcv-gl: 759
- nice-dcv-gltest: 229
- nice-dcv-ext-authenticator: 87

New Features:

- Stylus and touch support on Linux server
- Surround sound 7.1 playback on Windows server to Windows native client
- Hardware acceleration and stylus support on Linux native client
- New API command to set display layout on server side
- Multi-monitor web client support on the new Microsoft Edge browser (version 79.0.309 or higher)

Notable Changes and Bugfixes:

- The toolbar grip on the Windows client can now be hidden while in full-screen mode
- NTLM Proxy support on Windows native client
- Improved support for Windows headless physical hosts using NVIDIA adapters
- Support for the legacy NVIDIA NvIFR library has been removed
- Add support for Windows Graphic Capture API on latest Windows 10
- Support AWS IMDS v2 on EC2 instances
- dcv cli provides new on-client-connected/disconnected commands to detect when a client connects or disconnects from a session
- Allow to specify the host name to bind certificates for the external authenticator
- DCV-GL now leverages the GLvnd (GL Vendor-Neutral Dispatch library) on systems that support it

DCV 2019.1-7644 (Oct 24 2019)

Component Build Numbers:

- nice-dcv-server: 7644
- nice-dcv-client (Windows): 7114
- nice-dcv-viewer (MacOS): 1535
- nice-dcv-viewer (Linux): 1124
- nice-xdcv: 226
- nice-dcv-gl: 544
- nice-dcv-gltest: 220
- nice-dcv-ext-authenticator: 77

Notable Changes and Bugfixes:

- Fix an issue in the integration API used by NICE EnginFrame and other session managers.
- Fix an issue with 32bit version of the Windows native client

DCV 2019.1-7423 (Sep 10 2019)

Component Build Numbers:

- nice-dcv-server: 7423
- nice-dcv-client (Windows): 7087
- nice-dcv-viewer (MacOS): 1535
- nice-dcv-viewer (Linux): 1124
- nice-xdcv: 226
- nice-dcv-gl: 544
- nice-dcv-gltest: 220
- nice-dcv-ext-authenticator: 77

Notable Changes and Bugfixes:

- Improved security for DCV server on Windows
- Fix a rendering problem with Autodesk Maya on Linux
- Improvements and bug-fixes related to keyboard handling

DCV 2019.0-7318 (Aug 5 2019)

Component Build Numbers:

- nice-dcv-server: 7318
- nice-dcv-client (Windows): 7059

- nice-dcv-viewer (MacOS): 1530
- nice-dcv-viewer (Linux): 968
- nice-xdcv: 224
- nice-dcv-gl: 529
- nice-dcv-gltest: 218
- nice-dcv-ext-authenticator: 72

New Features:

- Multiple monitor support on Web Client
- Stylus input on Windows Server 2019
- Audio in/out in MacOS and Linux native clients
- Enhanced clipboard capability on Linux server (middle-click paste)

Notable Changes and Bugfixes:

- Touch input on Windows now respects the “pressure” value when available
- Improve behavior on systems that have heterogeneous graphic adapters on Windows
- Reduce time required to detect inactive connections, for instance in response to changes from wired to WiFi networks on the client
- Avoid excessive logging when the cursor icon cannot be captured on Linux
- Support disabling the Composite extension in the virtual sessions Xdcv component
- Allow to set a limit on number of concurrent virtual sessions
- Improve compatibility of scripts with systems that have bash5 installed
- Autodetect and use OpenGL and GLES for rendering on the Linux client
- Update DCV-GL offscreen buffer when the visibility of a GL window changes
- Fix mouse wheel detection in the Windows client on Windows 7
- Fix a problem that caused the Windows client to fail when loading libraries on some Windows 7 systems
- Improve printing on the Windows client when printing documents with landscape orientation

DCV 2017.4-6898 (Apr 16 2019)

Component Build Numbers:

- nice-dcv-server: 6898
- nice-dcv-client (Windows): 6969
- nice-dcv-viewer (MacOS): 1376
- nice-dcv-viewer (Linux): 804
- nice-xdcv: 210
- nice-dcv-gl: 490
- nice-dcv-gltest: 216
- nice-dcv-ext-authenticator: 70

New Features:

- New native client for MacOS

Notable Changes and Bugfixes:

- The Windows native client now leverages hardware acceleration for decoding and rendering, if it is available in the system
- The “dvc” command line tool now uses the same options and output format on both Windows and Linux
- The “dvc” command line tool now reports information about licenses
- Clients now show a warning to the user before disconnection due to inactivity
- Improved support for keyboard combinations that use multiple modifiers
- Interaction with the Reprise License Manager was reworked to be more robust in case of communication failure
- The “dvcusers” command line tool now defaults to saving data to the “dvc” user home directory on Linux
- Follow the same ordering used by the nvidia-smi tool when using the “nvenc” hardware encoder with multiple GPUs on Linux
- The Linux client now receives and handles printed files from the Windows DCV Printer

DCV 2017.3-6698 (Feb 4 2019)

Component Build Numbers:

- nice-dcv-server: 6698
- nice-dcv-client: 5946
- nice-dcv-viewer (Linux): 683
- nice-xdvc: 207
- nice-dcv-gl: 471
- nice-dcv-gltest: 210
- nice-dcv-ext-authenticator: 66

New Features:

- Add support Kerberos (GSSAPI) authentication
- Support touch events on Windows versions that support it
- Automatically unlock Windows sessions when using system authentication (Windows Credential Provider)

Notable Changes and Bugfixes:

- Add an option to opt-in to YUV444 encoding
- The EL6 rpm now includes the nvenc encoder module
- Windows system authentication: accept the name@domain format

- Yubikey USB devices are now whitelisted
- Improved Japanese Keyboard support
- Input authorization permissions are more fine grained. Added “pointer” permission to handle virtual cursors. Relative mouse mode depends on “mouse” (for motion injection) and “pointer” (for motion feedback). Added “keyboard-sas” permission to handle SAS on Windows (i.e. control+alt+ del). “keyboard-sas” depends on “keyboard” permission.
- Fix a problem with empty clipboard events in the Web Client on browsers that support the async clipboard API
- Fixed a race on the capture module that prevented clients to receive the first frame
- Filestorage: various improvements to how concurrent transfers are handled
- Fix NvIFR on Windows with newer NVIDIA drivers: new drivers changed behavior, we now detect automatically the driver version and perform memory handling accordingly
- Never stop retrying re-acquiring a RLM license token: this allows to recover from a “licensing error” state even after extended time periods
- Windows Client: add an option to set “fullscreen” keyboard shortcut
- Windows Client: improve auto-fit logic when dragging window across multiple monitors
- Windows Client: fix the prompt-reconnect option when disconnection is not triggered by UI
- Fix DCV-GL incompatibility with NVIDIA driver 410.xx
- Fix regressions in DCV-GL with the Matlab and Blender applications

DCV 2017.2-6182 (Oct 8 2018)

Component Build Numbers:

- nice-dcv-server: 6182
- nice-dcv-client: 5890
- nice-dcv-viewer (Linux): 503
- nice-xdcv: 180
- nice-dcv-gl: 427
- nice-dcv-gltest: 201
- nice-dcv-ext-authenticator: 58

New Features:

- Audio playback is available on Linux virtual sessions
- Improve Smart-Card performance
- The Linux viewer now supports file transfers

Notable Changes and Bugfixes:

- Improvements and bug-fixes related to keyboard handling
- Changing the log level in the configuration no longer requires a server restart
- The Windows server installer will now skip installation of Microsoft C runtime redistributable if already installed

- When running on EC2, if accessing S3 for the license fails, a notification is displayed in the user interface
- The linux “dvc” command line tool now supports “list-connections” and “describe-session” sub-commands and includes an option to emit JSON output
- Add a “cuda-devices” setting in the “display” section which configures the server to distribute NVENC encoding over different cuda devices
- Improve robustness of session creation code when handling multiple concurrent commands
- Increase the default clipboard limit to 20MB
- The Windows client now detects legacy “.dvc” files and launches the DCV 2016 Endstation (if installed).
- The DCV simple external authenticator now always uses the system Python interpreter instead of the one set in the environment
- Rework the readback strategy of DCV-GL for improved performance and robustness
- DCV-GL now checks if a window changed size also after a front buffer readback, this fixes a rendering problem with the Coot application

DCV 2017.1-5870 (Aug 6 2018)

Component Build Numbers:

- nice-dcv-server: 5870
- nice-dcv-client: 5813
- nice-dcv-viewer (Linux): 450
- nice-xdvc: 170
- nice-dcv-gl: 366
- nice-dcv-gltest: 198
- nice-dcv-ext-authenticator: 53

New Features:

- Release package for Ubuntu 18.04 Note: when working in console mode, the system must be configured to use lightdm or another alternative display manager of your choice, since gdm does not expose the required X11 display information. Virtual sessions are not affected by this limitation.

Notable Changes and Bugfixes:

- The license setting is now read at session creation, which allows the administrator to change this setting without restarting the server
- Resolve stability problem in the Windows client that caused the program to exit unexpectedly on some systems
- Avoid excessive logging in a possible error condition

DCV 2017.1-5777 (June 29 2018)

Component Build Numbers:

- nice-dcv-server: 5777
- nice-dcv-client: 5777
- nice-dcv-viewer (Linux): 438
- nice-xdcv: 166
- nice-dcv-gl: 366
- nice-dcv-gltest: 189
- nice-dcv-ext-authenticator: 51

New Features:

- Linux Client
- Support for 3D Connexion mice and USB storage devices
- Automatically lock Windows session when the last client disconnects

Notable Changes and Bugfixes:

- Performance improvements in the Linux version
- Change the default HW encoder on NVIDIA devices to NVENC to avoid problems with NvIFR in new NVIDIA drivers
- Improve Smart-Card support on Linux
- Fix file permissions for uploaded files when using Linux console sessions

DCV 2017.0-5600 (June 04 2018)

Component Build Numbers:

- nice-dcv-server: 5600
- nice-dcv-client: 5600
- nice-xdcv: 160
- nice-dcv-gl: 279
- nice-dcv-gltest: 184
- nice-dcv-ext-authenticator: 48

New Features:

- Support multi-monitor on Linux
- Windows client performance improvements
- Leverage new Clipboard API on Chrome 66+
- Add nvenc encoder for Windows

Notable Changes and Bugfixes:

- Usage on EC2 now requires ability to reach S3 from the instance running DCV server
- Performance improvements in the server frame processing and Windows client decoding
- Fix keyboard issues related to NumPad and blocked modifiers
- Avoid file descriptor leak when using an external authenticator on Linux
- Fix possible errors in Smart-Card connection

DCV 2017.0-5121 (March 08 2018)

Component Build Numbers:

- nice-dcv-server: 5121
- nice-dcv-client: 5121
- nice-xdcv: 146
- nice-dcv-gl: 270
- nice-dcv-gltest: 184
- nice-dcv-ext-authenticator: 46

New Features:

- Windows native client is now DPI aware
- Support relative mouse movement mode

Notable Changes and Bugfixes:

- Prevent hang on Ansys cfx5solve on Linux
- Fix possible agent hang in on Windows 10
- Improvements for the Web Client user interface
- Normalize Windows username when a domain is specified
- Fix the external authenticator on RHEL6

DCV 2017.0-4334 (January 24 2018)

Component Build Numbers:

- nice-dcv-server: 4334
- nice-dcv-client: 4334
- nice-xdcv: 137
- nice-dcv-gl: 254
- nice-dcv-gltest: 184
- nice-dcv-ext-authenticator: 45

Notable Changes and Bugfixes:

- Improvements on keyboard handling
- Fixed Dbus problem on RHEL6 where closing a session would not allow to create a new one
- Improved support for SOCKS5 proxy on the native client
- Prevent crash on Headwave when running on virtual sessions
- Prevent crash on Chimera when running on virtual sessions
- Improved font support on virtual sessions

DCV 2017.0-4100 (December 18 2017)

Component Build Numbers:

- nice-dcv-server: 4100
- nice-dcv-client: 4100
- nice-xdcv: 118
- nice-dcv-gl: 229
- nice-dcv-gltest: 158
- nice-dcv-ext-authenticator: 35