Desktop Cloud Visualization: the new technology to remote access 3D interactive applications in the

We would demonstrate DCV (Desktop Cloud Visualization), a novel solution that enables users to remotely access interactive 2D and 3D apps over a common network. This enables medical professionals from different locations to collaborate while also acquiring anatomical or pathological pictures and visualizing them for further research.

Both physical and virtual servers may be used as application hosts well with NICE [Desktop Cloud Visualization](#) (DCV) interface.

NICE DCV characteristics

These are some characteristics that NICE DCV provides:

- **Shares the full desktop —** use the fast NICE DCV protocols to distribute complete remote desktop control of the remote desktop.
- **Solely for transport photos** - transports rendered pictures as pixels rather than scene and geometry data. Since no confidential client information gets sent over the network, this adds another degree of protection.
- **Supports encoding based on H.264 -** uses H.264-based video encoding and compression to minimize bandwidth use.
- **Supports the compression of video at the lossless quality -** when network and CPU circumstances permit, supports lossless video compression.
- **Displays that match —** automatically changes the server's display layout and screen resolution to fit the client window's dimensions.
- **Support for multiple screens -** allows you to use up to four monitors to enlarge the session desktop. Large pixels For Windows and macOS, native clients are available that enable density monitors.
- **Adjusts compression settings -** Based on that network's available latency and bandwidth the video compression settings are automatically adjusted.
- **Facilitates cooperation -** dynamic sessions that assist several collaborating clients are offered. During the session, clients have the option to join and disconnect at every moment.
- **Per server, allows for many sessions —** To maximum cost savings, supports numerous virtual sessions on a single Linux NICE DCV server.
- **Allows for GPU share (Linux NICE DCV servers only) —** enables you to use a Linux NICE DCV servers with numerous virtual sessions to share one or even more physical

GPUs.

- **Supports gamepads, stylus input, and touch input —** allows you to use input devices connected to your local machine to communicate with a distant NICE DCV session.
- **Supports Smart Card and USB, and remote control of a stylus -** allows you to utilize your peripherals exactly as you might on your own computer during a NICE DCV session.
- **Supports copying and pasting, printing, and audio out and in —** enables you to carry out these important operations between the sessions and your local PC.
- **Enables file transfer -** allows you to move files from your local computer to the session.
- **Provides a client for HTML5 -** provides an HTML5 customer that is compatible with Windows and Linux with any current web browser.
- **Enables contemporary Linux operating systems —** supports contemporary Linux desktops, including RHEL 8's Gnome 3.

When each detail counts

[3D visualization Cloud](#) brings that information to life in situations where it counts, such as industrial facility management, design evaluation for assets (such as truck engines), preoperative surgical planning, and more. It is what enables designers, engineers, medical professionals, and students to comprehend complicated information and take the appropriate action.

3D experience without limitations

Bring high-quality, very three-dimensional models to devices you use for work and collaboration. To function on the target hardware, such as portable devices and 3d virtual headsets, you frequently need to shave off and reduce high-quality 3D models, which results in the loss of crucial detail required for vital business and design choices. Visualize the models in their original, complete, and unaltered form.

End Note

Users may remotely view interactive 2D and [3D visualisation apps](#) using NICE Desktop Cloud Visualization (DCV) across a shared network. In addition to gathering anatomical or pathological images and displaying them for future research, this enables medical specialists from many locations to collaborate. The system enables you to share one or perhaps more actual GPUs using a NICE DCV server with several virtual sessions. It supports modern Linux desktops, including Gnome 3.3d virtual headsets in RHEL 8, Smart Card, and USB, as well as a pen remote control.