ProHVM

Probus-IT Hyper-V Manager — User Manual

A complete guide to installing and using ProHVM: managing Hyper-V hosts, virtual machines, snapshots, clusters, and console sessions from a single Windows console.

ProHVM is now free. The product is no longer under active development, and the full feature set — including everything that previously required the Professional edition — is free, even for commercial use. The serial number to unlock the Pro features is included in the **Licensing** section.

Overview

ProHVM (Probus-IT Hyper-V Manager) helps you manage Hyper-V servers and virtual machines from Windows. It is particularly useful on Core installations, where the built-in Microsoft Hyper-V Manager isn't available locally.

From a single console you can manage multiple versions of Hyper-V — from **2008 R2 through 2022** (and likely newer, untested). ProHVM runs on servers, desktops and Core installations, on both 32- and 64-bit Windows.

Installation

Download the installer from the Probus-IT website and run it. On a fresh installation you should also enable remote management on the Hyper-V host and reboot it.

Start ProHVM by typing `hvm` in a Command Prompt, or by clicking the icon in the Start menu.

> **Network:** When managing a server remotely, make sure remote management is enabled and that WMI traffic is allowed through the firewall on both the server and the client.

Licensing

ProHVM is licensed **per managed host**. Managing one host from two clients counts as one license; managing two hosts requires two licenses.

Editions

Historically ProHVM shipped in two editions. Both are now free.

Feature	Standard	Professional
Create and manage VMs	Yes	Yes
VM console access (also on free Microsoft Hyper-V Server)	Yes	Yes
Connect to Hyper-V hosts across domains and workgroups	Yes	Yes
Monitor VM CPU, memory and more	Yes	Yes
Monitor host CPU, memory, disks and event log	Yes	Yes
Import VMs	No	Yes
Export VMs	No	Yes
Storage migration	No	Yes

Feature	Standard	Professional
Cluster support (live and quick migrations)	No	Yes
Hyper-V Share Nothing migration	No	Yes
Hyper-V Replica support	No	Yes

Free Pro serial

To unlock the Professional features in ProHVM, apply the following serial:

```
2YTGGJ75I3-XDNWD23SWF-RVEG67HK3Q
```

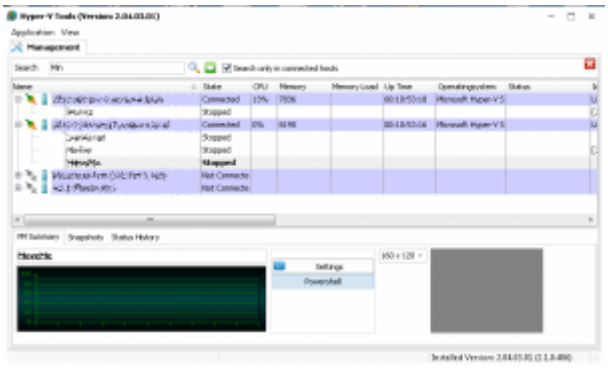
The same serial can be applied to every host you manage — there is no per-host limit.

Apply a serial

1. Connect to the host by expanding it in the server tree.
2. Right-click the server and choose `Settings` from the popup menu.
3. In the `Server` tab of the Settings dialog, click `Change serial`.
4. Paste or type the serial, then click `OK`.
5. Confirm that the `License type` field has updated to reflect the new license.

User interface

ProHVM is designed to surface as much information as possible in a single main window, so you can do most day-to-day work managing your Hyper-V servers and VMs without switching tools.



Main window — server tree on top, details panel below.

The main window is split into two areas:

- **Server tree** (top): lists the registered servers and, once you expand a server, its virtual machines.
- **Details panel** (bottom): shows detailed information for the selected server or virtual machine.

Right-clicking any server or virtual machine opens a popup menu with the actions that can be performed on it.

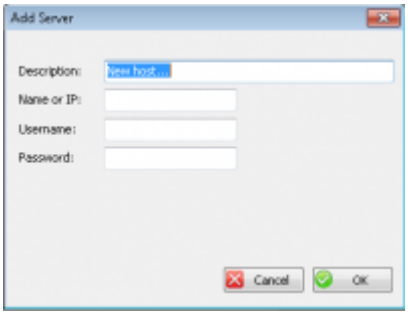
Managing servers

Connecting to the local server

When ProHVM starts, it checks whether Hyper-V is installed on the local computer. If it is, the local computer is added to the server tree automatically, with `[localhost]` appended to its name.

Connecting to a remote server

To add a remote Hyper-V host, right-click the server tree and choose `Add Server`. Fill in the dialog:



The Add Server dialog.

- **Description** — a friendly name that helps you identify the server.
- **Name or IP** — the server name or IP address (for example `192.168.1.13`, `hv01` or `hv01.domain.local`).
- **Username** — a user account with appropriate permissions on the server (`Administrator`, `computer\Administrator`, `DOMAIN\Administrator`).
- **Password** — the password for that user.

Click `OK` to add the server. Expand the server node in the tree to connect.

Server info

Selecting a server in the tree displays CPU and memory information for that server in the details panel. From here you can open the Server Settings dialog, run a remote PowerShell session, and browse the host's disks.

Server Settings dialog

Right-click a server and choose `Settings`, or click the Settings button in the Server Info tab.

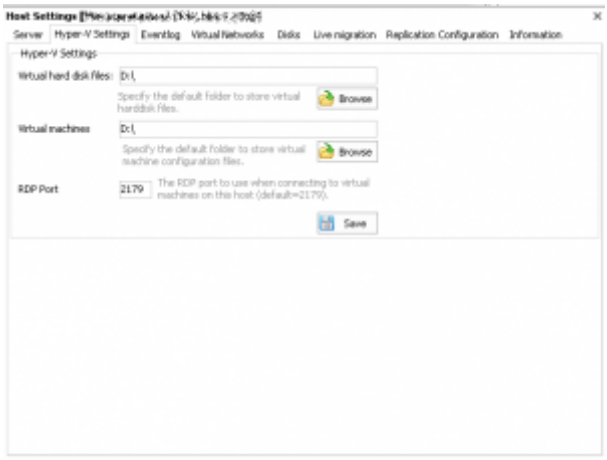
Server tab

Adjust connection settings and view licensing information. The serial for the host can also be changed here. ProHVM is licensed per host: a single license covers any number of clients connecting to that host, but each additional host you manage requires its own license.

Server tab — connection settings and license info.

Hyper-V Settings tab

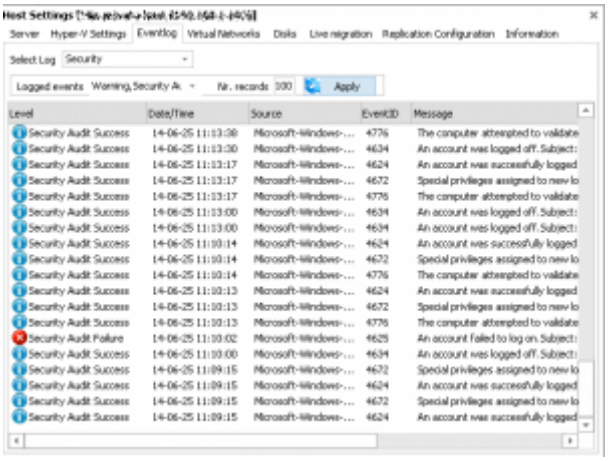
Change the default folders where Hyper-V stores virtual machines and VHD files.



Hyper-V Settings — default paths and RDP port.

Event Log tab

Inspect the event log of the remote server. Pick a log from the dropdown, then double-click a record to view its details. The toolbar lets you filter event types via `Logged Events`, change the polling cadence with `Refresh int.`, and control how many records are fetched with `Nr. records`. Click `Apply` to refresh.



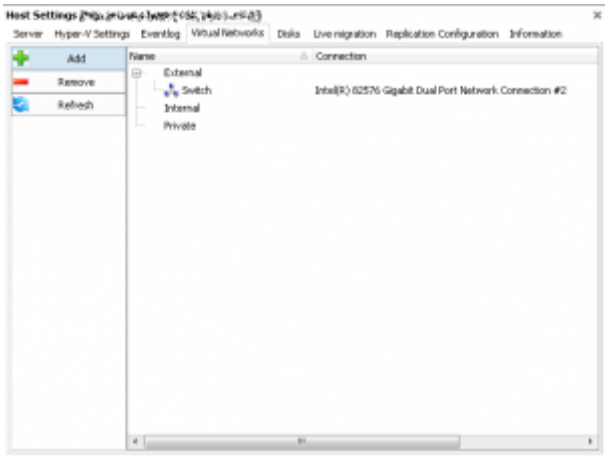
Filterable event log reader.

Virtual Networks tab

View, add and remove virtual switches on the server. Switches fall into three categories:

- **External** — VM to VM on the same host, VM to parent partition, and VM to externally located servers (in both directions).
- **Internal** — VM to VM on the same host, and VM to parent partition.
- **Private** — VM to VM on the same host only.

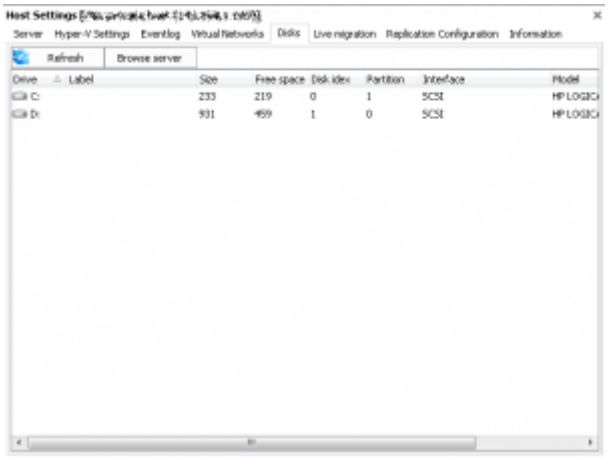
To add a switch, right-click the list and choose `Add`. Pick the switch type and — for External switches — the physical adapter to bind to.



Virtual Networks — External, Internal and Private switches.

Disks tab

Lists the disks present on the server. A `Browse` button opens a remote file browser where you can copy, paste, delete and rename files on the host's disks.



Disks tab with the remote browser.

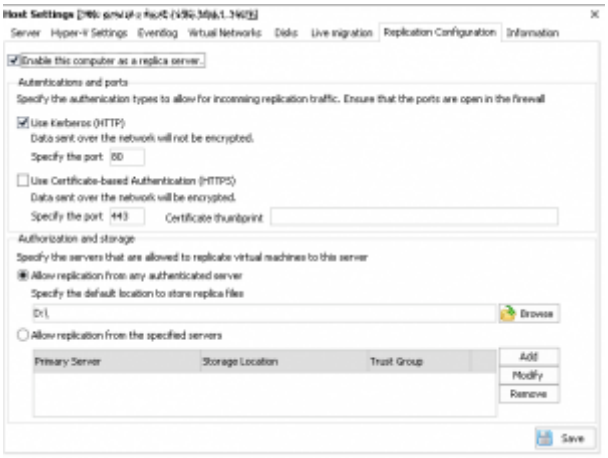
Live Migration tab

Enable or disable Hyper-V live migration and configure its settings.

Live Migration configuration.

Replication tab

Enable or disable Hyper-V Replica on the server and adjust its settings.



Replication configuration.

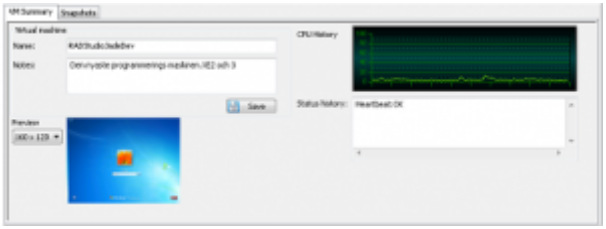
Information tab

General information about the server: OS, version, hostname, domain, CPU count, memory.

Information tab.

Managing virtual machines

Expand a server in the tree to see its virtual machines. Selecting a VM displays information about it in the details panel — a small preview of the VM screen, a CPU graph, and editable fields for name and notes.



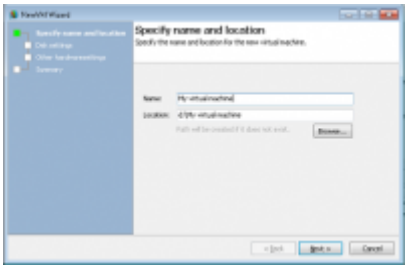
VM details panel with live preview and CPU graph.

Creating a virtual machine

Right-click the server where you want to create the VM and choose `New VM` to open the wizard.

Step 1 — Name and location

Enter a name for the VM and pick a location for its configuration files.

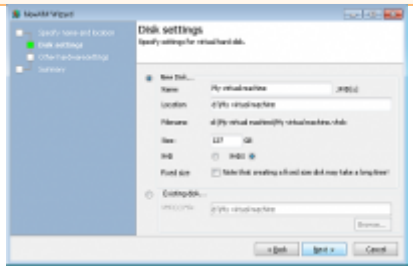


Step 1 — name and location.

Step 2 — Disk

Choose to create a new VHD or use an existing one. For new disks you can set the name, size, type and location, and optionally create a fixed-size disk.

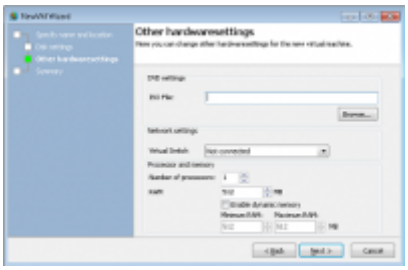
> **Heads up:** Creating a fixed-size disk can take a long time. The wizard can't attach the disk while it's being created, so you'll be offered the choice to wait or to continue. If you choose not to wait, attach the disk manually later.



Step 2 — disk settings.

Step 3 — Other hardware

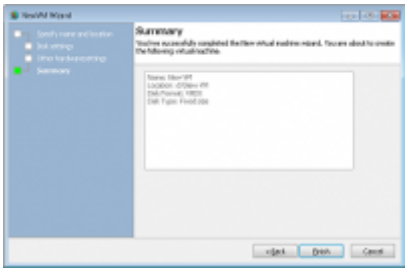
Specify the remaining hardware: an ISO file to attach to the DVD drive, the virtual switch to connect the network card to, and CPU and memory settings.



Step 3 — DVD, network, CPU and memory.

Step 4 — Summary

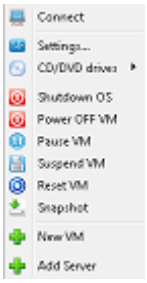
Review the summary and click `Finish` to create the VM.



Step 4 — summary.

Virtual machine actions

Right-clicking a virtual machine opens a popup menu of actions:



The VM right-click menu.

- **Start VM**
- **Shutdown OS** — gracefully shut down the guest OS (requires Integration Services).
- **Power off VM**
- **Pause VM** — the VM stops running but keeps its memory.
- **Suspend VM** — saves state and releases memory to the host.
- **Reset VM**
- **Snapshot** — captures the VM state, data and hardware configuration.

From here you can also mount ISO files and connect to the VM console.

Connecting to / controlling a VM

To install an operating system or interact with a VM you'll often need a console session. Right-click a VM and choose `Connect`, or simply double-click it. Hold `SHIFT` while doing so to open the connection in cVM

instead.

VM console — toolbar with Connect, Smart sizing and Full Screen.

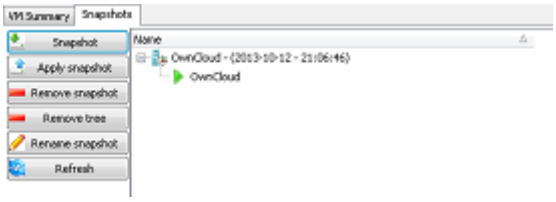
The toolbar at the top of the Control window gives you:

- **Close** — closes the connection and the window.
- **Connect** — connects or reconnects to the VM.
- **Smart sizing** — toggles smart sizing.
- **Full Screen** — switches the connection to full-screen mode.
- **CTRL+ALT+DEL** — sends the key combination to the VM. The local representation can be changed in the `Select hotkey` dropdown; while in full screen, use the chosen combination to send `CTRL+ALT+DEL` to the guest.

Snapshots

Virtual machine snapshots capture the state, data and hardware configuration of a running VM. Snapshots offer a fast way to revert a VM to a previous state, which is mainly useful in development and test environments — for example to reproduce a specific problem state during troubleshooting.

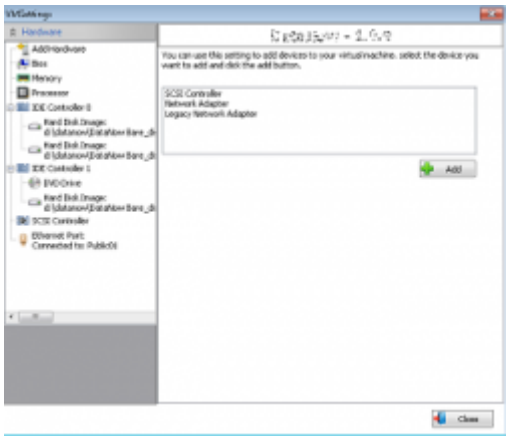
To take a snapshot, right-click a VM and choose `Snapshot`, or select the VM and use the Snapshot tab in the details panel.



Snapshot tab — create, apply, remove and rename snapshots.

VM hardware settings

To add or change VM hardware, right-click the VM and choose `Settings`. The dialog lets you add, change and remove hardware including BIOS settings, memory, CPU count, hard disks (VHD, VHDX) and network cards (including legacy adapters).



VM Settings — Add hardware on the left, configure on the right.

- To add hardware, select `Add hardware` on the left and pick the type.
- To change existing hardware, select it on the left, change the settings, then click `Apply`.

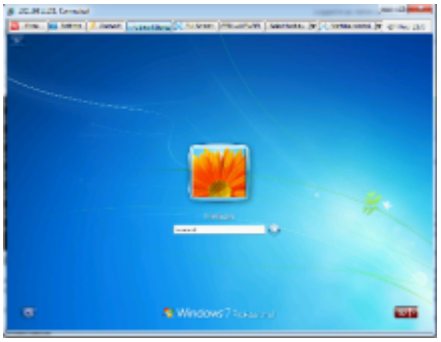
Managing clusters

From version 2.04, ProHVM supports managing clustered VMs. Operations include:

- Quick migration
- Live migration
- Take resources online and offline
- Add a VM to the cluster
- Remove a VM from the cluster

cVM — Connect VM

cVM is a separate application for connecting to virtual machines. It can be started from inside ProHVM or directly from a Command Prompt with switches. On a free Microsoft Hyper-V Server (Core), cVM is the only way to connect to a VM's console.

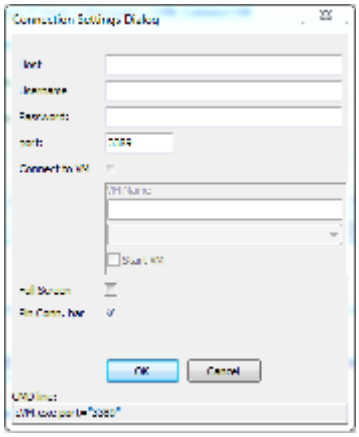


cVM showing a connected Windows guest.

> **Credentials:** cVM does not support credentials pass-through. When you connect to a local server that has no credentials stored for it in ProHVM, you'll be prompted for a username and password. Tick `Save credentials` to reuse them for all future connections to VMs on that host.

To launch cVM from inside ProHVM, hold `SHIFT` and double-click a VM, or hold `SHIFT` and pick `Connect` from the VM's right-click menu.

To launch the cVM GUI, type `cVM` in a Command Prompt — the connection dialog opens.



cVM connection dialog.

For an RDP session to a remote computer, fill in Host name or IP, username and password and click `OK`. To connect to a VM on a host, fill in the same fields, tick `Connect to VM` and pick the VM from the dropdown.

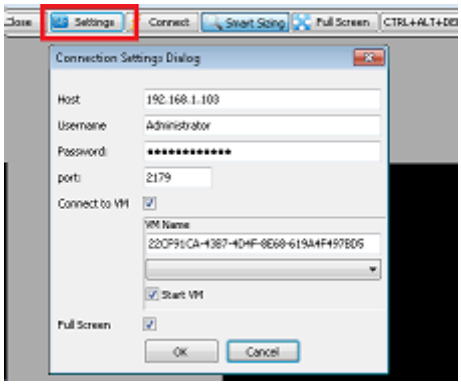
> **Local host:** When connecting to the local Hyper-V host, use `.` as the host name and leave the username and password blank.

Using cVM switches

cVM can take every setting as a command-line switch. This makes it possible to create shortcuts to specific VMs or to connect to a VM at sign-in via the Startup folder or the registry.

- **`Host`** — the computer to connect to, or the host of the VM.
- **`Username`** — the user account to connect as.
- **`Password`** — the password for that user.
- **`port`** — connection port. Typically `3389` for RDP and `2179` for VM consoles.
- **`VMName`** — the GUID of the VM (for example `13DFE6AD-BD6C-441A-8CFA-7FACBB41D702`).
- **`ElementName`** — the friendly name of the VM. `VMName` is recommended; using `ElementName` means cVM has to call Hyper-V to resolve the actual VM, which takes extra time.
- **`FullScreen`** — set to `1` to start in full-screen mode (default `0`).
- **`PinConnectionBar`** — set to `1` to pin the connection bar (default `1`).
- **`StartVM`** — set to `1` to start the VM if it isn't already running (default `0`).

The easiest way to assemble a switch line is to open `cVM.exe`, fill in the parameters in the connection dialog, and copy the contents of the `CMD line` field at the bottom. If you launch cVM from ProHVM by holding `SHIFT` while selecting `Connect`, most parameters are pre-filled.



The CMD line field at the bottom of the cVM dialog.

To access the settings during an active connection, click `Settings` in cVM.

> **Passwords:** If you copy the CMD line, the password will appear as `Password="«YOURPASS»"` — remember to replace it. If you're targeting the local Hyper-V host, also change the `Host` parameter to `.`.

Examples

Connect to a host using RDP:

```
cVM.exe Host="192.168.1.103" Username="Administrator" Password="Password"
```

Connect to a VM on the local Hyper-V server using `VMName`:

```
cVM.exe Host="." VMName="13DFE6AD-BD6C-441A-8CFA-7FACBB41D702"
```

Connect to a VM on the local Hyper-V host using `ElementName` in full-screen:

```
cVM.exe Host="." ElementName="MyVMFriendlyName" FullScreen=1
```

Connect to a remote Hyper-V server:

```
cVM.exe Host="192.168.1.103" Username="Administrator" Password="password" \
        VMName="13DFE6AD-BD6C-441A-8CFA-7FACBB41D702" FullScreen="1" PinConnectionBar="0"
```