

# EnCloudEn Virtual Desktop Infrastructure (ECN VDI)

The most comprehensive VDI-in-a-Box solution worldwide



## KEY BENEFITS

### COMMODITY HARDWARE

ECN VDI is a complete hardware agnostic solution. The software platform can convert any commodity server (even your existing hardware) to an HCI box. This enables you to provision VDIs for your users straight out of the box.

### SELF SERVICE MULTI-TENANT ARCHITECTURE

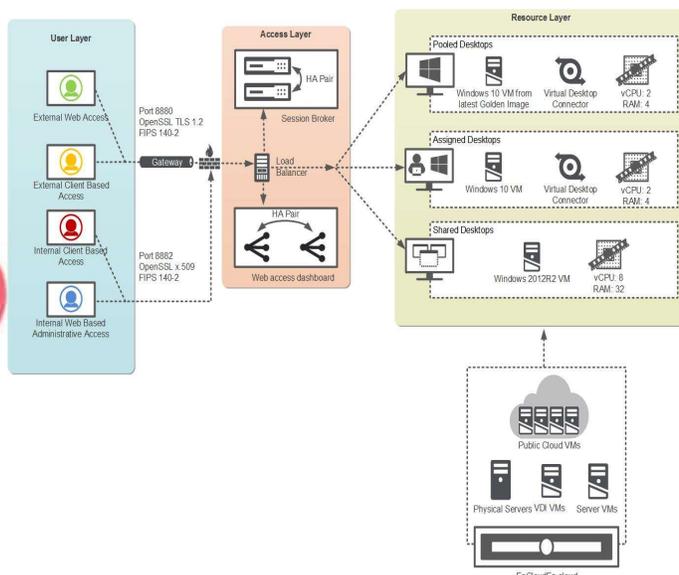
You can now run multiple projects or departments from different locations in individual environments. Each of them can be assigned a quota of resources as well as an individual network with the flexibility of self-managing and provisioning if required.

### PACKING ADVANTAGE

You can now custom build your VDI box. Depending on your application and consumptions, we design a perfect ratio and size of SSDs and HDDs to maximize your VM packing per node with custom processors.

### SUBSCRIPTION BASED PRICING

You can now get your entire VDI stack in an OpEx model. You only pay for the VDI VMs that you run and can incrementally increase your count based on your exact requirements.



## What is ECN VDI?

The advent of virtualization took the desktop landscape by storm and users were no longer restricted to their physical desk. From walk-off data security to centralized management, monitoring and provisioning, ECN VDI has now redefined how you empower your workforce.

ECN VDI is deployed on bare-metal servers and doesn't need any other software. The entire stack from the hypervisor, the virtualization platform, the orchestration & monitoring layer to the VDI session broker are a part of a single EnCloudEn solution. It is a completely scalable modular architecture where new VDI stations can be added by just adding a new node without the need for a fresh deployment.

It is an OS agnostic solution that can run a hybrid VDI environment of any operating system of your choice. It also provides you the ability to connect via the browser, through a thin client or even through a connector app on your laptop/desktop. Admins also have a centralized dashboard to centrally monitor and control the entire cluster.

## Why ECN VDI?

ECN VDI gives you a whole new way of managing your user base. It takes centralized management to a whole new level and provides the admins with a full range of tools to maximize uptime and deliver best performance without compromising security.

**OPTIMIZED WITH VERTICALLY INTEGRATED STACK:** The VDI layer sits on top of a robust cloud management platform below it. This platform has been tuned to build and support machines for VDI and as such is able to deliver the same with minimum overheads. A host of enriched capabilities like virtual networks for example, now come natively inbuilt in the VDI solution.

**TRUE CENTRALIZED CONTROL:** Managing enterprise VDIs goes way beyond just being able to centrally provision VMs for users. ECN VDI comes with a complete package of a software

and patch orchestrator. This enables an enterprise VDI admin to not only create machines on demand, but is also able to monitor and control all applications that reside in user desktops to adhere to compliance requirements.

**REDUCED SUPPORT INCIDENTS:** Riding on a proprietary analytics algorithm, ECN VDI is able to dive deep into each and every VM running in the entire cluster. It is able to proactively identify issues that are nearing criticality and highlights them for resolution before reaching any critical mass. Problematic VDI stations automatically rise to the top of the list and also highlight the resource for which it is about to suffer any loss in performance. Thereby enabling pre-emptive action for user satisfaction.

**FULLY SECURE VIRTUAL DESKTOPS:** The ECN VDI platform gives you both inbound as well as outbound security. On one hand, the micro-segmentation gives you protection and containment in case of any malware/ransomware attack and on the other, you have a full range of control on how your user accesses the organization's data. A complete secure encryption protocol also ensures that all communication is with real-time protection.

**BETTER TCOs vs PHYSICAL DESKTOPS:** ECN VDI is the only VDI solution in the market that also enables financial benefits vis-a-vis physical desktops. This is possible because of 3 main reasons.

*Inexpensive Hardware* – Working with commodity hardware that can be customized to deliver an HCI or SAN based architecture, you are able to get the best packing ratios per node.

*Affordable software* – With bundled in real time monitoring and analytics platform, you get the best of features and tools at a base price.

*Reduce Support* – With automated alerts and proactive issue resolution from a central management, ECN VDI ensures that your supports costs fall dramatically.

## Key Features & Capabilities

**HIGH AVAILABILITY:** ECN VDI provides you a high availability active-active architecture. This ensures that your cluster is up and running irrespective of any node failure.

**DATA REDUNDANCY:** You do not need to step outside of your cluster if you are looking for data safety. ECN VDI has data redundancy in-built (if you opt for the HCI architecture), so whether an individual drive fails or an entire node, you know that your data is safe on another node and drive in the cluster.

**GRANULAR QoS:** You can now set individual storage and network metrics for each VM. For example you can set the IOPs or bandwidth allocated for each VM thereby giving preferential hierarchy to individual VMs and applications based on their profile.

**THIN PROVISIONING:** BY default, thin provisioning is enabled. This allows for the creation of a virtual disk that is provisioned in full with respect to the inputted storage requirements for a VM. However, only as much storage as is needed for its initial operations is first committed. Additional storage is added on the fly, thereby eliminating under-utilization of storage space.

**LOAD BALANCING:** The intelligent allocation algorithm of ECN VDI is able to determine the best placement of VMs so that performance is maximized across nodes.

**ENVIRONMENT OPTIONS:** ECN VDI supports a hybrid environment within the same node or cluster. You can have different OSes and templates to deliver specific VDIs to specific users.

**SOFTWARE DEFINED NETWORKING (SDN):** ECN VDI comes with a full fledged SDN suite. You can enable more granular security, optimize network hardware costs and direct and automate traffic for better QoS. You have full capabilities for delivering

micro-segmentation, distributed virtual switches, Firewall as a Service and QoS controls among others as well.

**ENABLING BYoD:** With native clients for different OSes in user access-devices, ECN VDI now facilitates a BYoD culture in enterprises. Employees are free to bring any laptop of their choice and connect directly to a VDI provided by the company. The IT team only needs to maintain, update and patch this VM and does not need to worry about sanitizing the user laptop. Even the connecting networks can be isolated and secured.

**TRANSPARENT USB REDIRECTION:** USB redirection is not just limited to a small selection of printers and scanners. With transparent redirection you are now able to connect any device of your choice from mobile devices to hand-held hardware tokens and have them reflected in your VM.

**APP PUBLISHING:** ECN VDI comes with an app publishing platform. You can now gain much greater control on the way your applications are used. Moreover, ECN VDI enables published apps to be accessed both from Windows and Linux.

**AUTOMATICALLY SCALABLE:** You can now grow your VDI exactly as per your need. Start as small as your requirement with even a single node deployment. Addition of new nodes to a cluster happens automatically.

**SINGLE CONTROL PANE:** With a unified management platform, sys-admins are now able to manage their entire infrastructure from a centralized location. An overview generates all necessary alerts across any resource for immediate intervention whenever required.

**DELTA IMAGES & LINK CLONES:** Storage overheads are kept at a minimum by optimizing. Base images are a link clone of golden images as well as only the delta changes are incorporated to a copy of data whenever modified.

## What's New in This Release

**SELF-SERVICE & ROLE BASED ACCESS:** With an RBAC dashboard, users and admins can now access a control module of their own set of machines and are able to provision resources within their defined quota. You can now run your individual projects and departments and charge them based on their consumption.

**REMOTE ACCESS WITHOUT VPNs:** ECN VDI customers have now moved out of dedicated leased lines with VPN. Their users accessing from outside their local network today do so securely over a simple internet connection.

**CENTRALIZED APP & PROCESS ORCHESTRATOR:** You are now able to have a true centralized control over all your individual VMs. With the app and process orchestrator, you can not only install, uninstall and update any group of applications on any range of VMs, but you can also start, stop or schedule a process in any VM at your convenience.

**CENTRALIZED PATCH MANAGEMENT:** ECN VDI comes with a centralized patch management tool. With this you are able to create an isolated test environment within the same cluster and verify the results. Once satisfied, you can preferentially push these updates on any selected VM, ensuring that all of your systems are patched always.

**USER BASED WORKSTATION:** You can now have Persistent, Pooled, and Shared Pool workstation modes for providing the best experience for users and server efficiency for IT. The user automatically gets his particular type of virtual desktop by simply entering his credentials.

**MULTI-PROTOCOL SUPPORT:** ECN VDI is designed to operate with multiple different protocols, including one that has been developed in-house to give great performance even over lower bandwidth. This enables us to select the one that'll provide the best performance for the workload that the VDI is being used for.

For more information, please contact us at [engage@enclouden.com](mailto:engage@enclouden.com) or +91-9535091837