

## Virtual Desktop Infrastructure

### Virtual Desktop Infrastructure (VDI) Solution

VDI, or desktop virtualization, runs on Virtual Machines as a centralized server and is delivered to the end users over the network to provide a protected virtual desktop experience. VDI is customized for each user, allowing him/her to log in to the same desktop each time.

NewCytech's VDI solutions simplify the management and delivery of virtual desktops and applications on-premise, in the cloud, or in a hybrid or multi-cloud configuration through a single platform.

### 1. VDI Use Cases

NewCytech's VDI technology is applicable to several Use Cases, including:

- **Remote work:** VDI makes virtual desktops easy to deploy and update from a centralized location. This makes a large number of companies ready to implement VDI solutions for remote users on their existing infrastructure.
- **Bring your own device (BYOD):** VDI is an ideal solution for environments that allow or require employees to use their own devices. Since data lives on the server and is not retained on the end-user's device, it offers improved security. VDI also allows the use of a wider range of devices since processing is done on a centralized location / server.

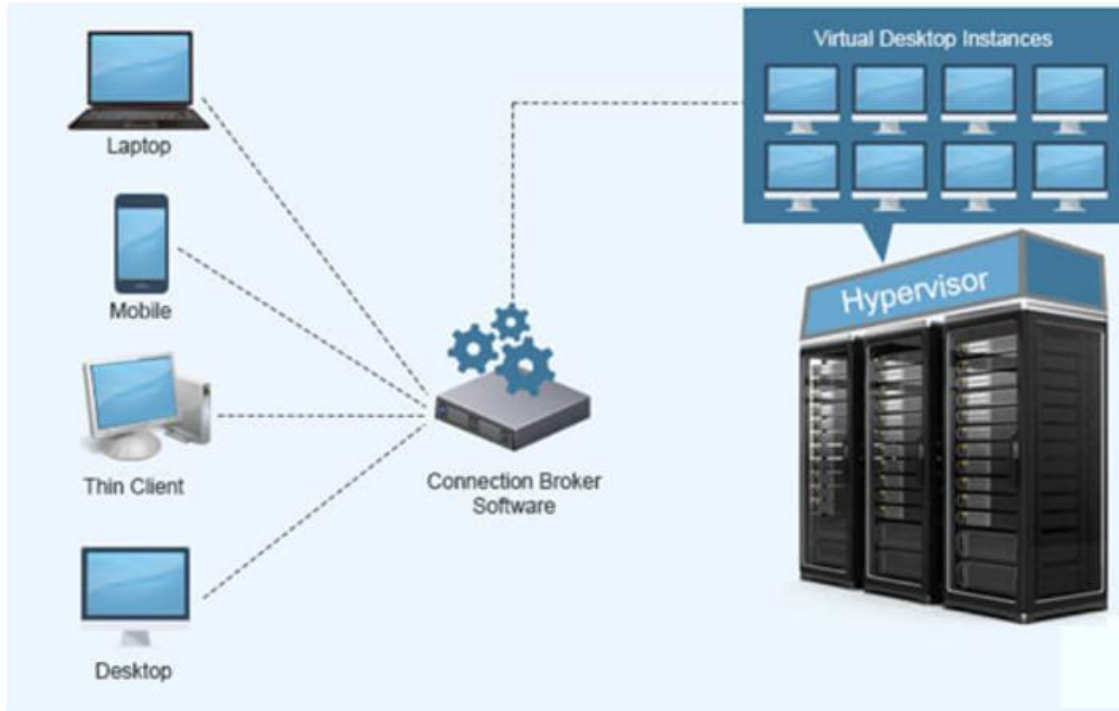
**Task or shift work:** VDI is particularly well suited to organizations that have a large number of employees who use the same software to perform limited tasks, such as call centers.

### 2. VDI Components

The following elements support the operation of VDI:

- **Hardware Infrastructure** that will host the VDI software solution;
- **Virtualization Technology** with the Hypervisor to be used for the creation of desktop instances in the VMs. Each desktop instance can act as a separate desktop and can be provisioned to the users.
- **Connection Broker** is the software program that connects the users to the desktop instances. It is also responsible for the authentication of the users and for accessing their desktop instances.
- **Desktops Pools** are a group of similar desktops that can be configured according to a specific function. For instance, company departments, such as Accounting and IT, might use desktops with different applications and configuration.

### 3. How does VDI work?



**Initially**, when users log in to their desktops using the client software, the request is accepted by the Connection Broker after it has been authenticated. Following next, the Connection Broker analyzes the request and allows the users to access their desktop in the desktop pool.

The Hypervisors installed on the servers, enable the creation of multiple VMs on which the virtual desktop solution is hosted. The High Availability features of recent Hypervisors combine the resources of various servers in order for the virtual desktops to be migrated to another server if required.

The administrators can disable certain virtual desktop instances in an ad-hoc basis in order to free valuable infrastructure resources and commit them to other users as necessary.

VDI management software, like VMware View Manager, is used to create desktop pools. The administrators can manage the desktop pools, provision new desktops, create new pools and setup access and control policies.

## 4. Typical Solution Elements

- Hardware – Desktop Infrastructure;
- Hardware – Management Infrastructure;
- VMWare vSphere Standard Edition;
- Microsoft WS Datacenter Edition 2019;
- VMWare Horizon View Standard (Concurrent Users),



## 5. Newcytech Services

- Warranty;
- Installation and Setup;
- Technical Support;
- Operational Support;
- Hardware Support;
- Corrective and Preventive Maintenance.

