

SNS COLLEGE OF TECHNOLOGY

An Autonomous Institution

Coimbatore-35



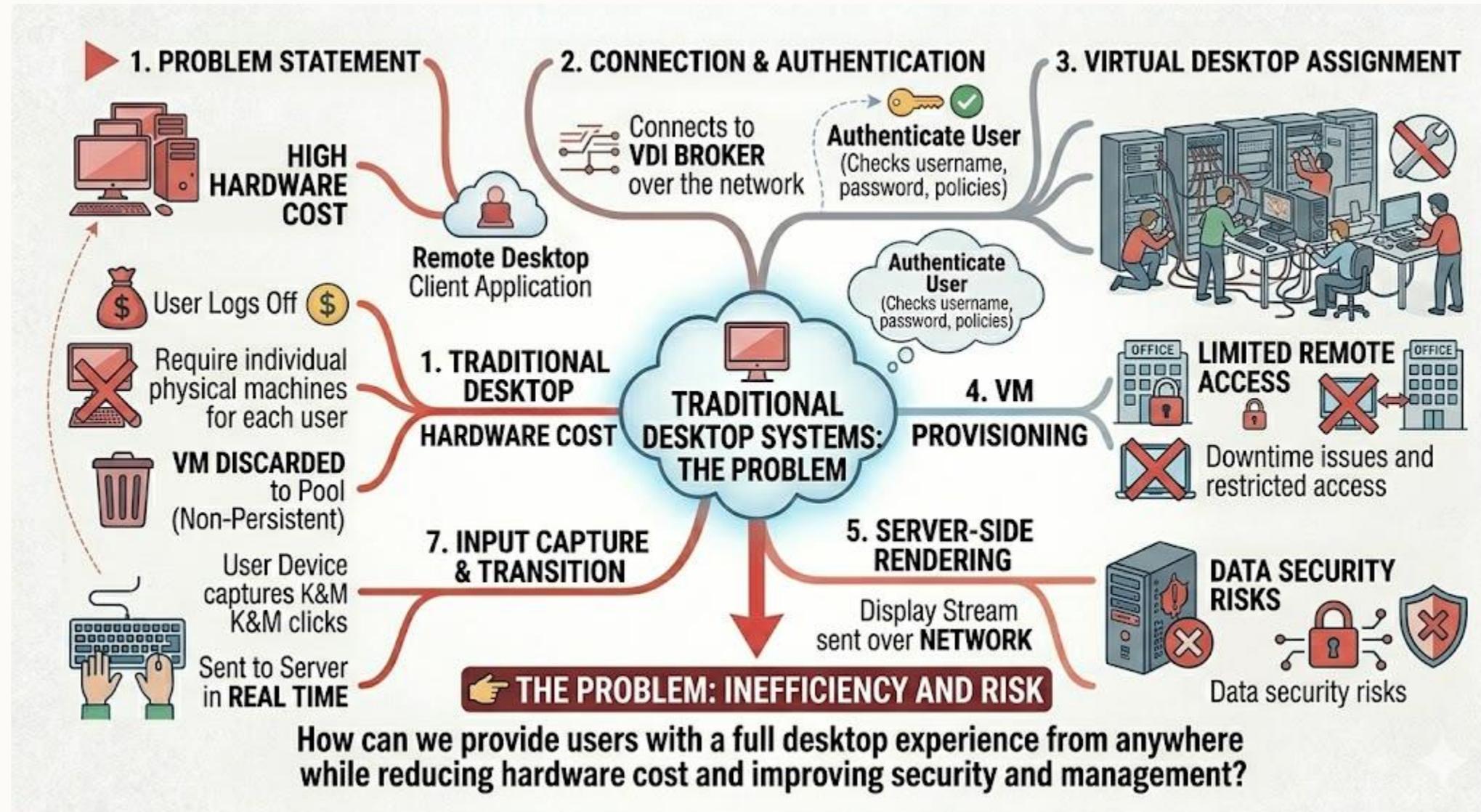
Department of Computer Science and Engineering

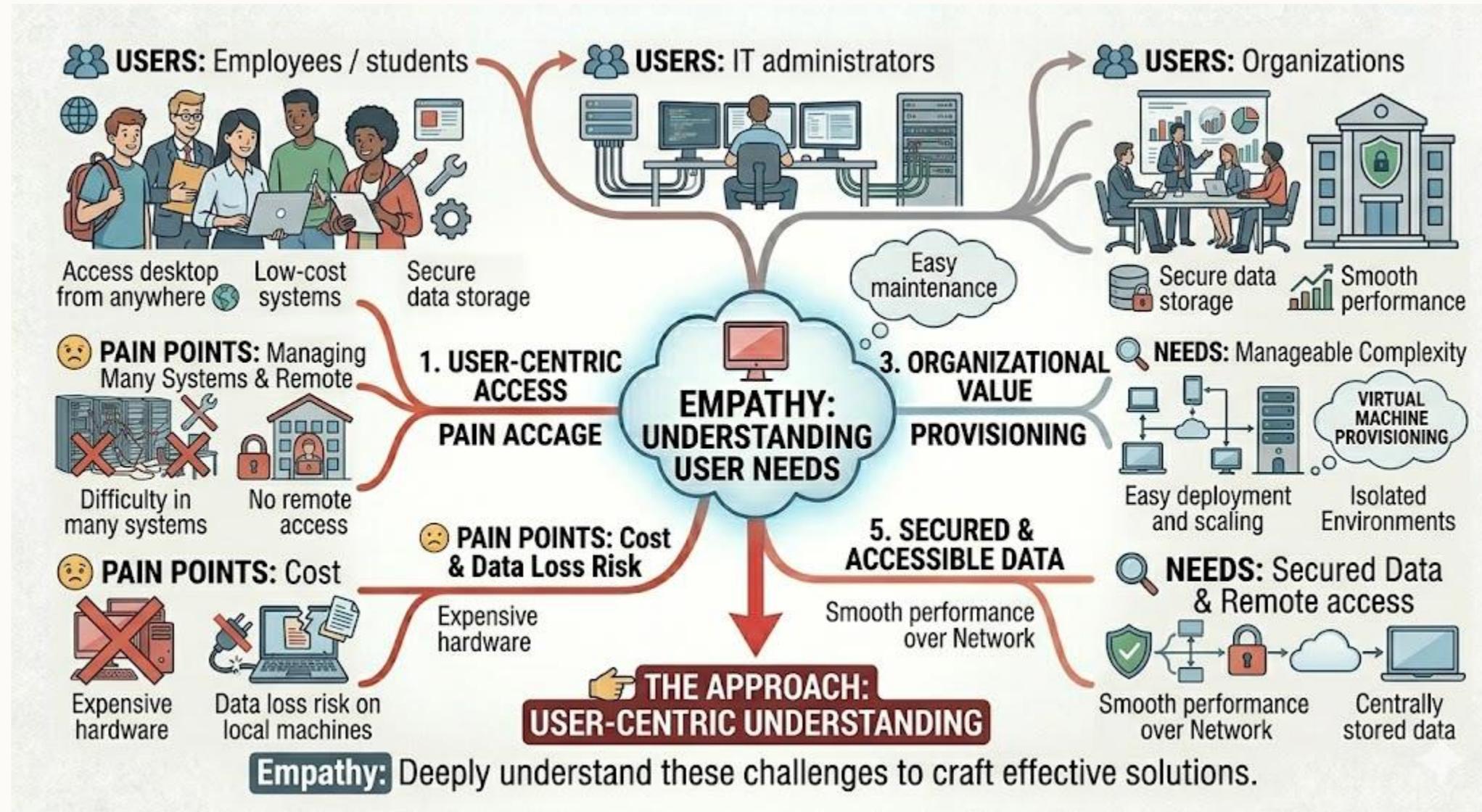
23CST206-OPERATING SYSTEMS AND VIRTUALIZATION

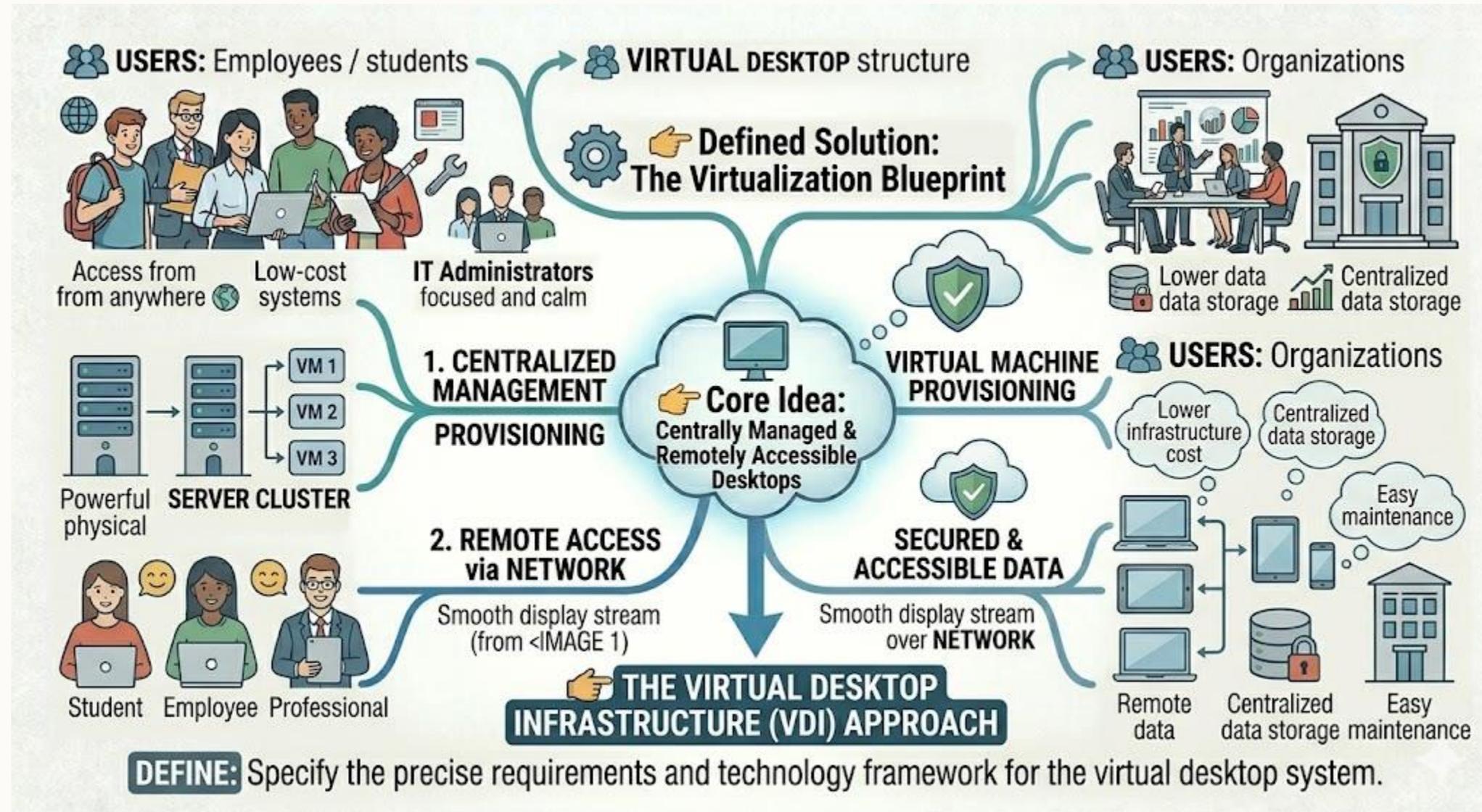
B.E- CSE /IV SEMESTER

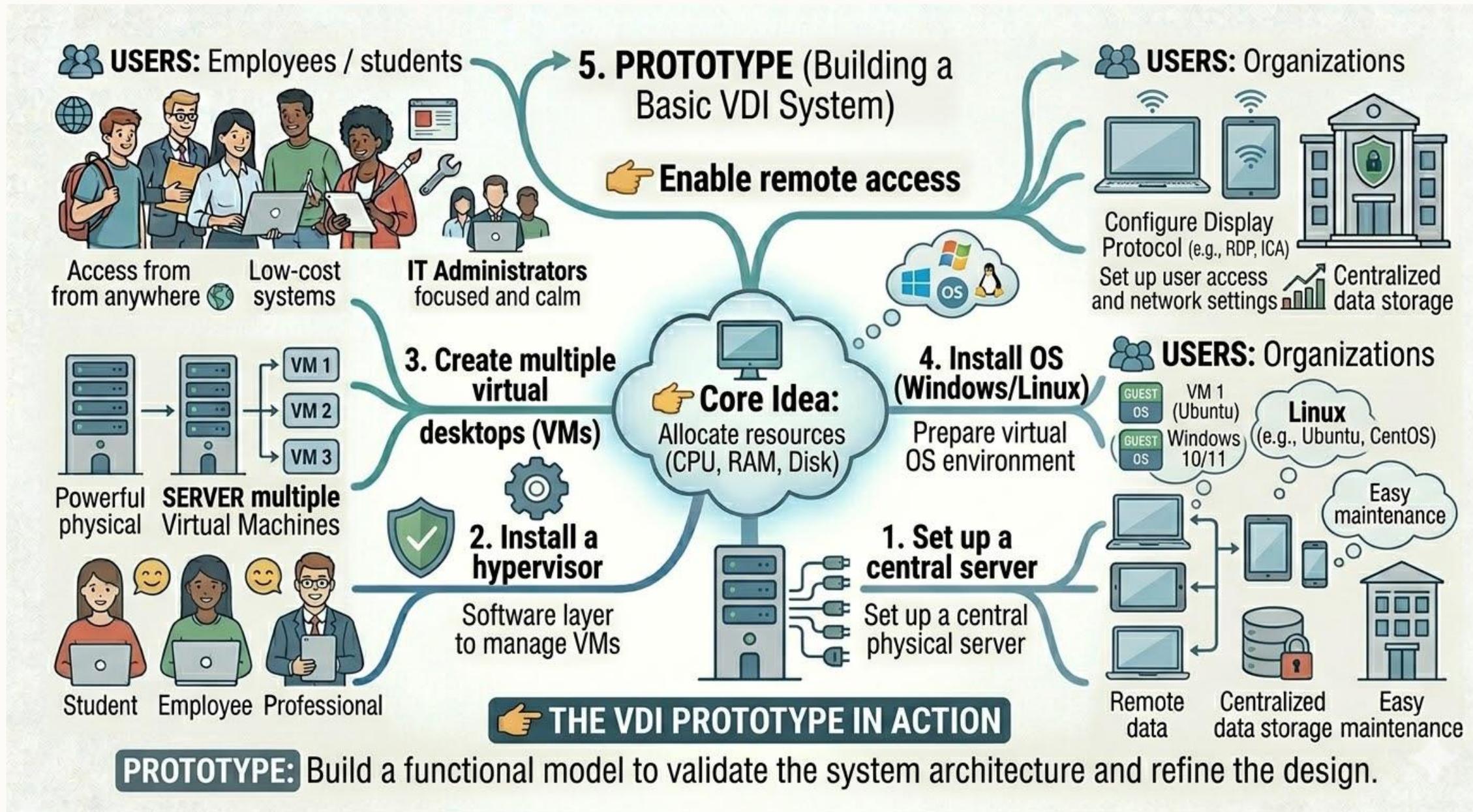
UNIT – V HYPERVISOR

Topic 4:Desktop Virtualization









Virtualization Solutions

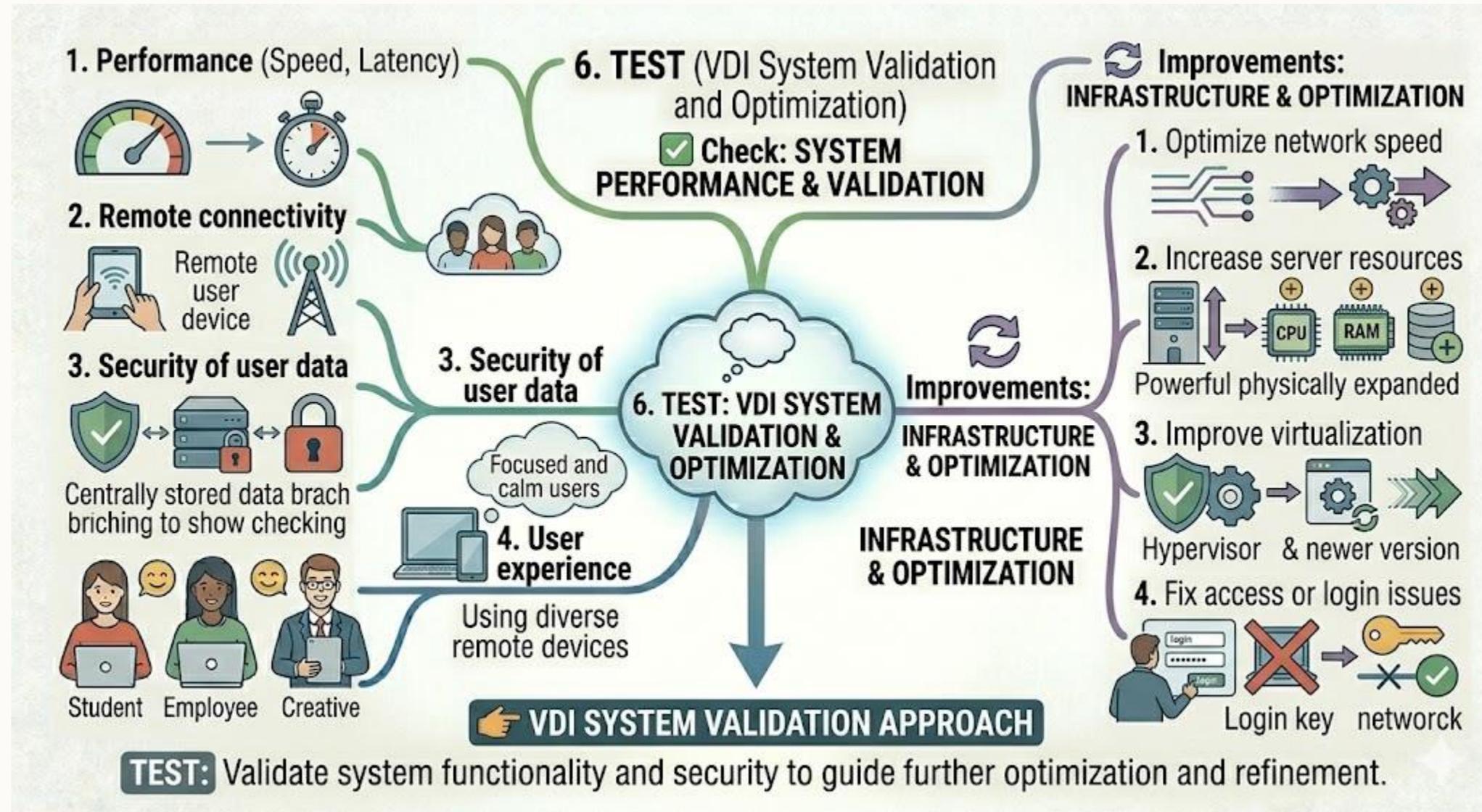


Possible Ideas:

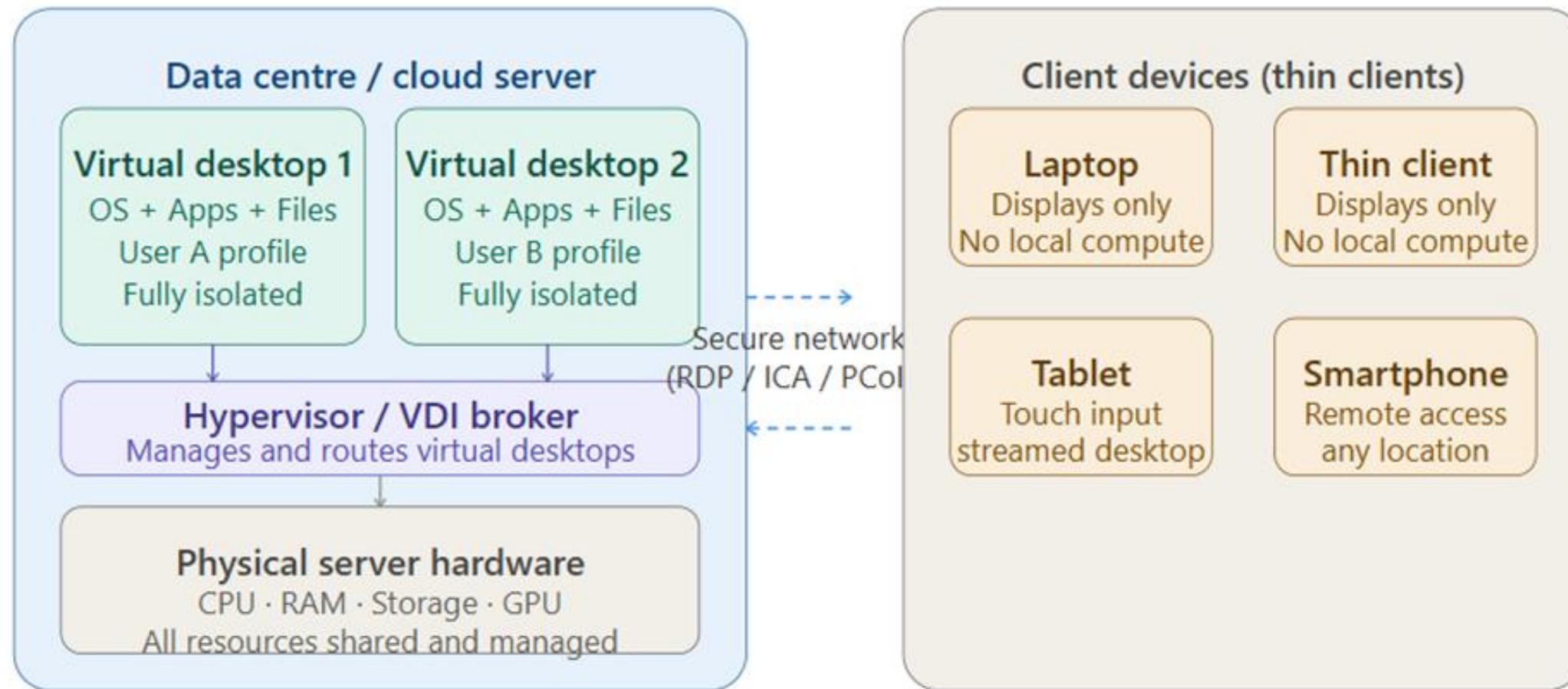
- Create virtual desktops on a central server
- Allow remote access using internet
- Store user data securely in data centers
- Use lightweight devices (thin clients)

Tools/Technologies:

-  VMware Horizon
-  Microsoft Remote Desktop



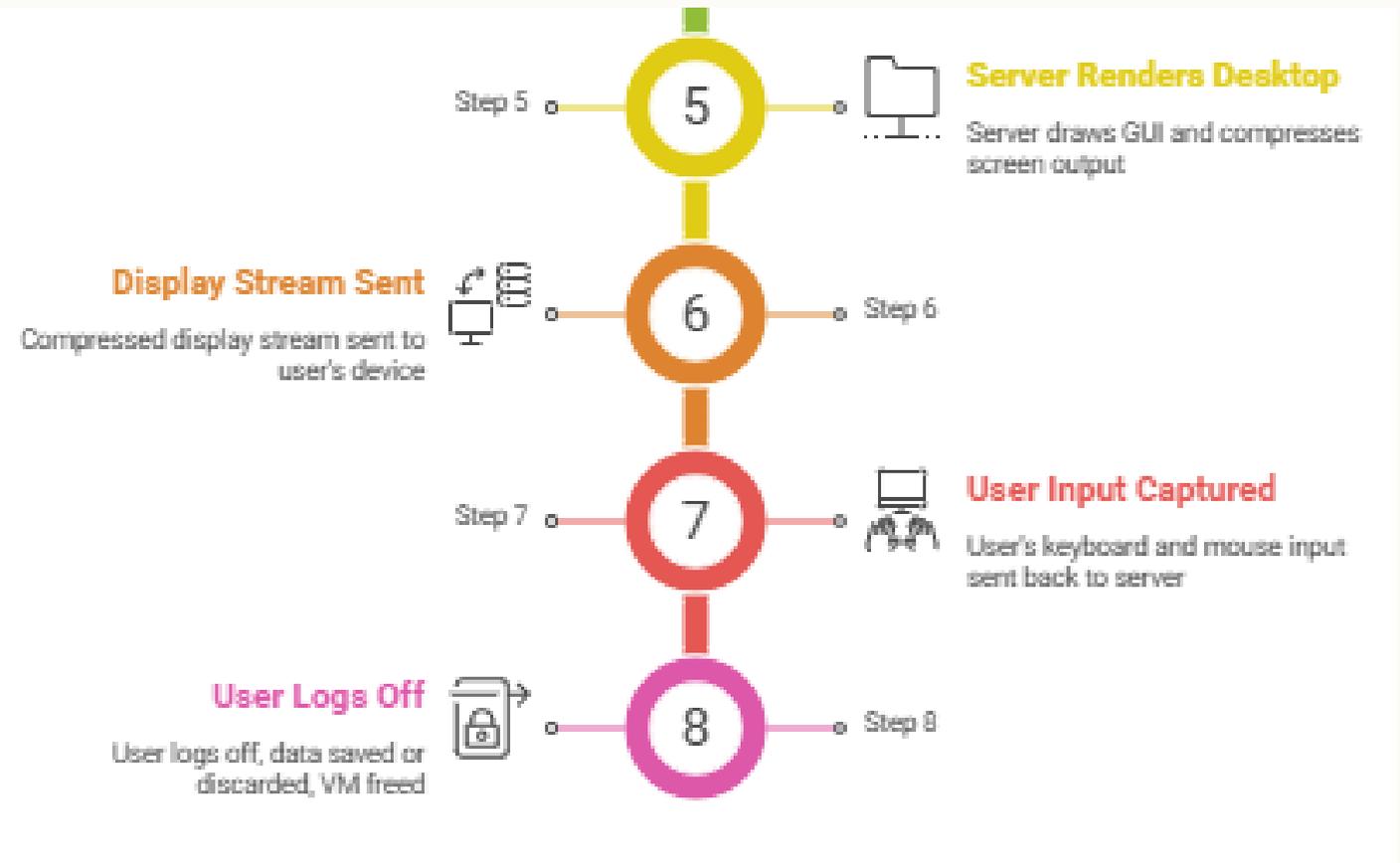
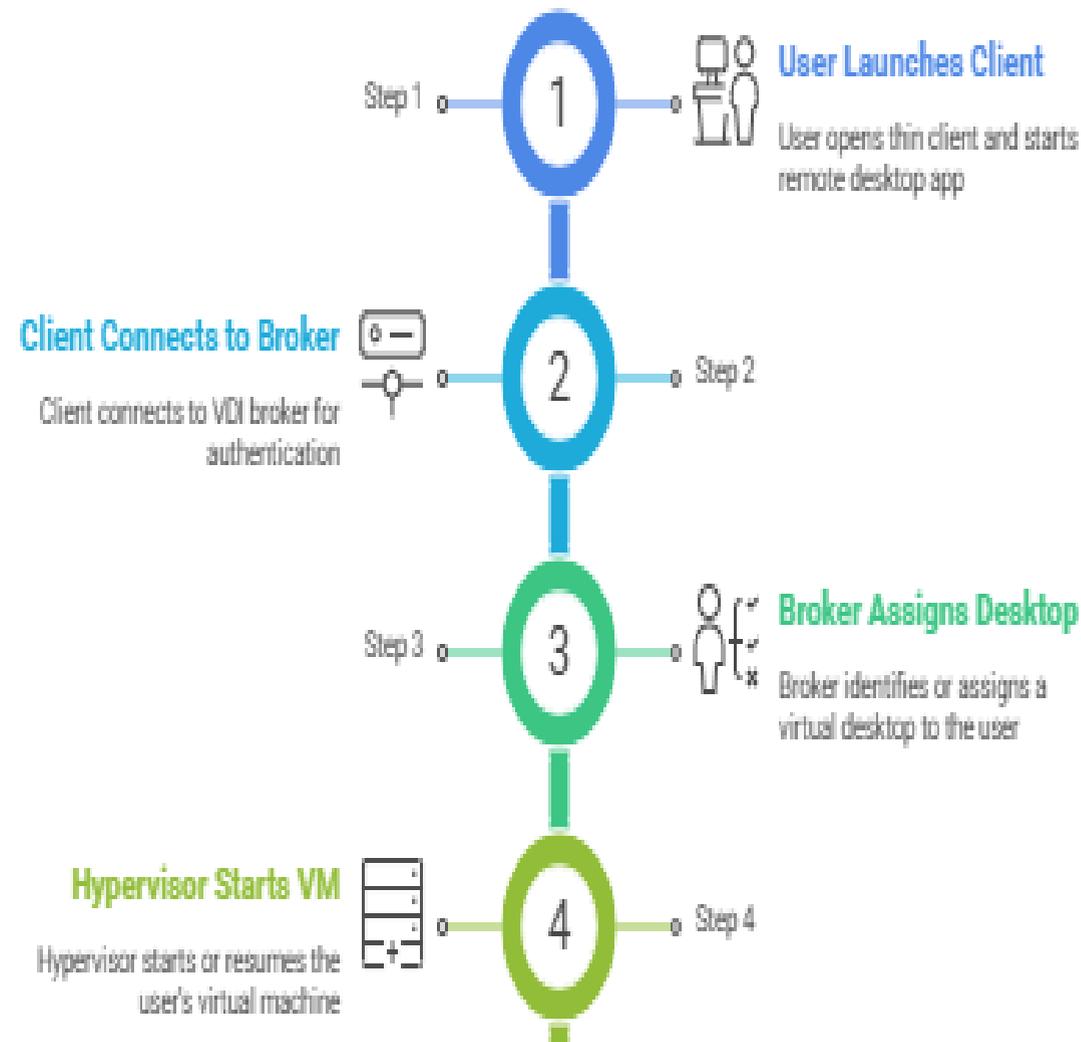
Desktop Virtualization



Key insight — the desktop runs on the server, not on the device.
Only screen pixels, keyboard, and mouse events travel across the network.

Desktop Virtualization

Virtual Desktop Infrastructure (VDI) Connection Flow



Types of Desktop Virtualization

Types of desktop virtualization

VDI

Virtual Desktop Infra.
Each user has own VM
Full OS per instance
Persistent or pooled
e.g. VMware Horizon

RDS / Session-based

Shared OS, many users
Single server OS hosts
multiple user sessions
Less resource per user
e.g. Windows RDS

DaaS

Desktop as a Service
VDI hosted in cloud
Pay per user / month
No on-prem servers
e.g. AWS WorkSpaces

Local desktop virt.

VM runs on the user's
own physical machine
e.g. VirtualBox
VMware Workstation

App virtualization

Only the application is
virtualized, not full OS
Runs in sandbox
e.g. Citrix App Layers

Hosted shared desktop

Multiple users share
one remote desktop
session simultaneously
Low cost, low isolation

