



# Sangfor VDI Solution

Seamless Experience, Secure and Efficient

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**01** ▶ **Why VDI?**

**02** ▶ **Sangfor VDI Solution**

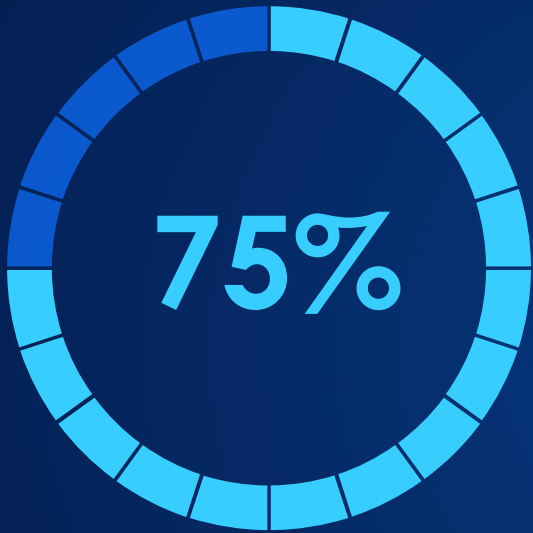
**03** ▶ **Case Studies**

# PART 1

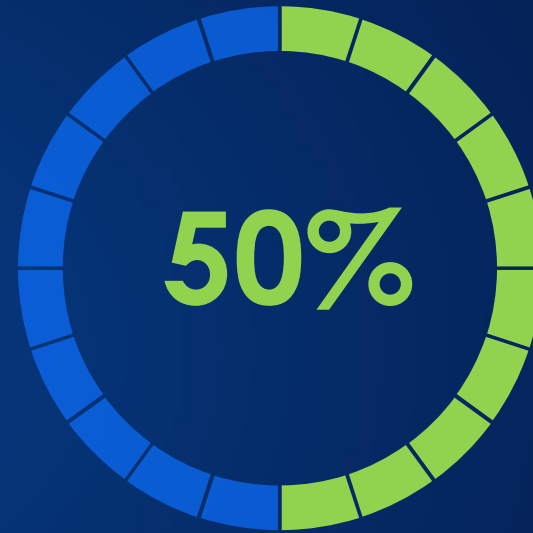
# Why VDI?



# Digital Transformation Drives Remote Work



75% of organizations are planning to convert at least a portion of their employees to roles that will permanently work remotely.



50% of employees will continue to work remotely post COVID-19.

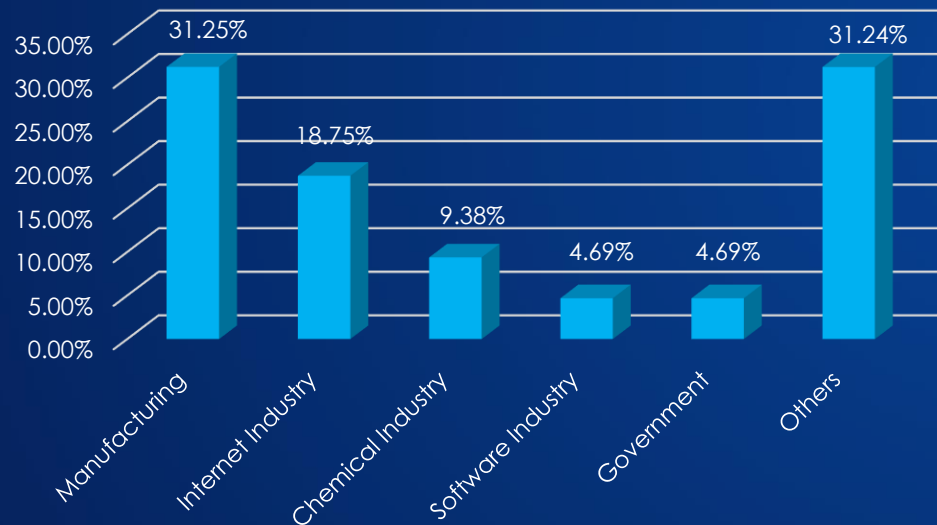
--- data from Gartner report



# Traditional PCs Are Insecure

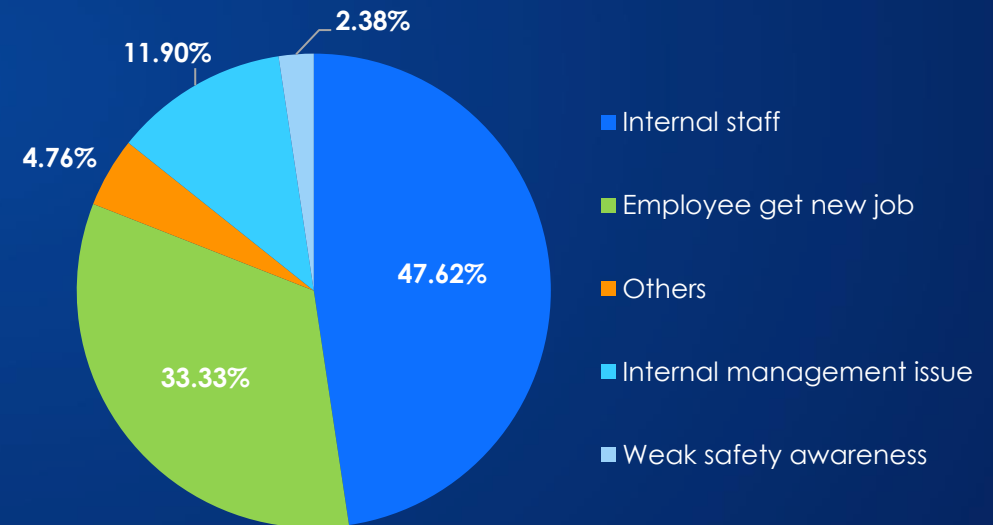
47% of PCs worldwide were infected by malware at a total cost of \$8 billion USD

Confidential Data Leakage by Industry



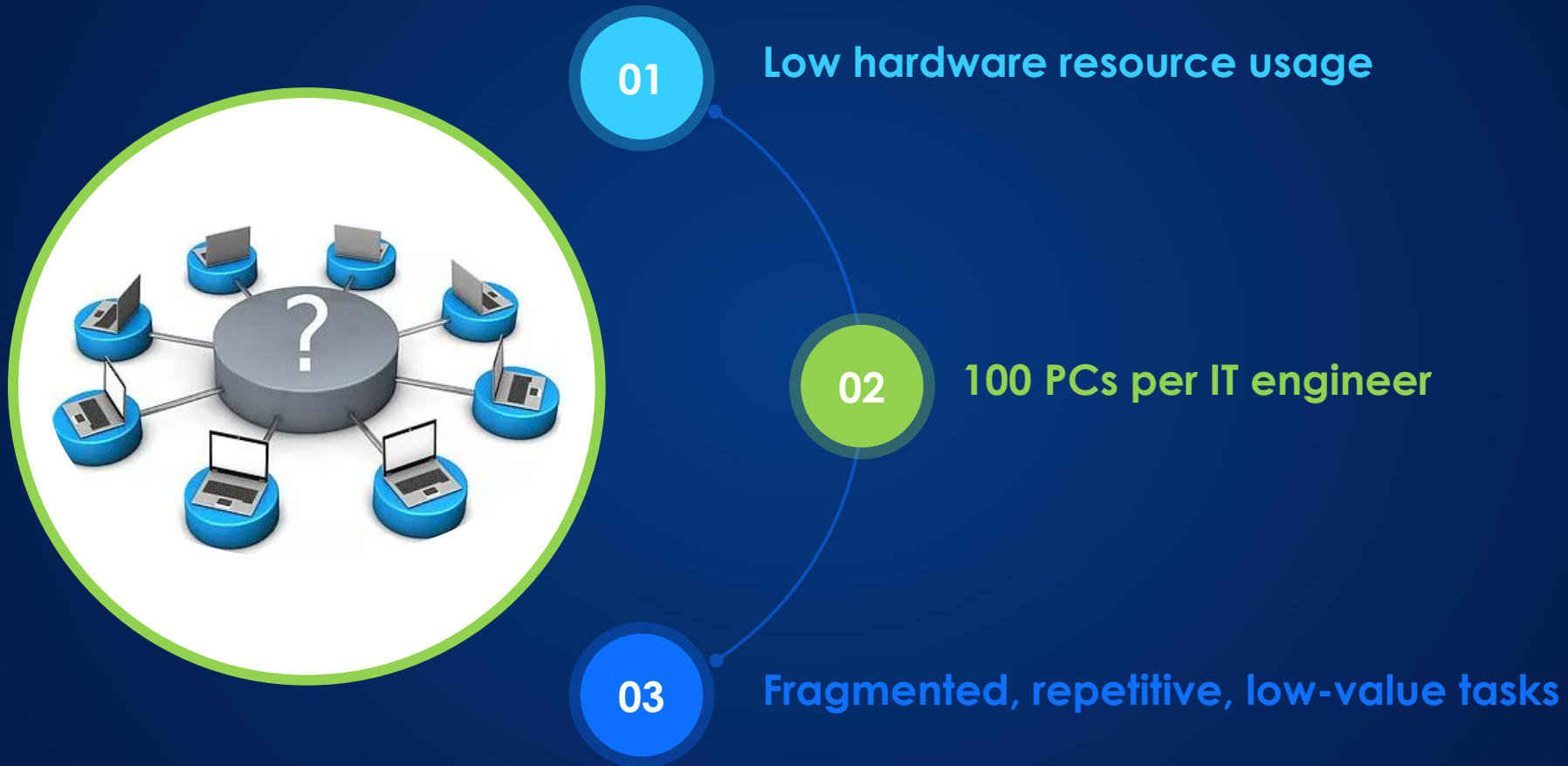
The global average cost of a data Breach is \$4.35 million USD

Confidential Data Leakage by Method





# Traditional PCs Waste Hardware & Labor Resources

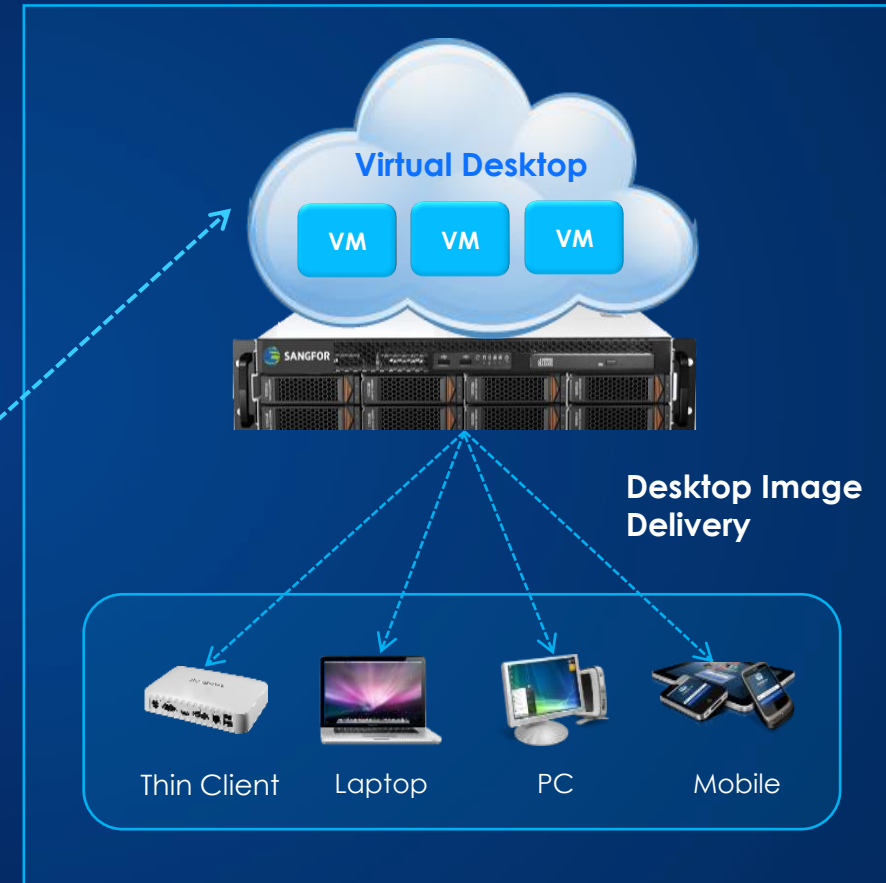




# Virtual Desktop Infrastructure (VDI) The Ultimate Solution

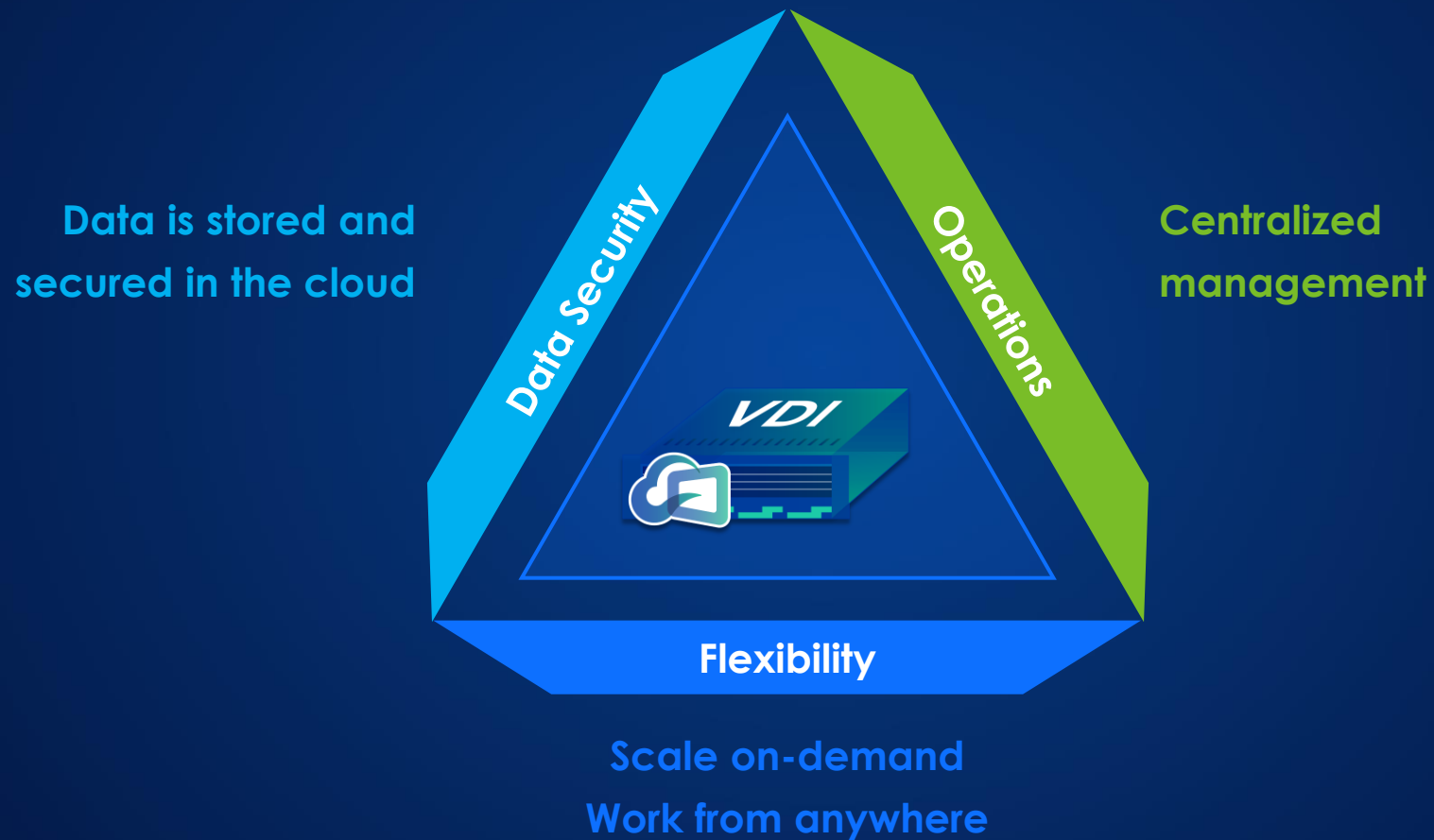


Desktop, applications, and data are migrated to cloud (data center)





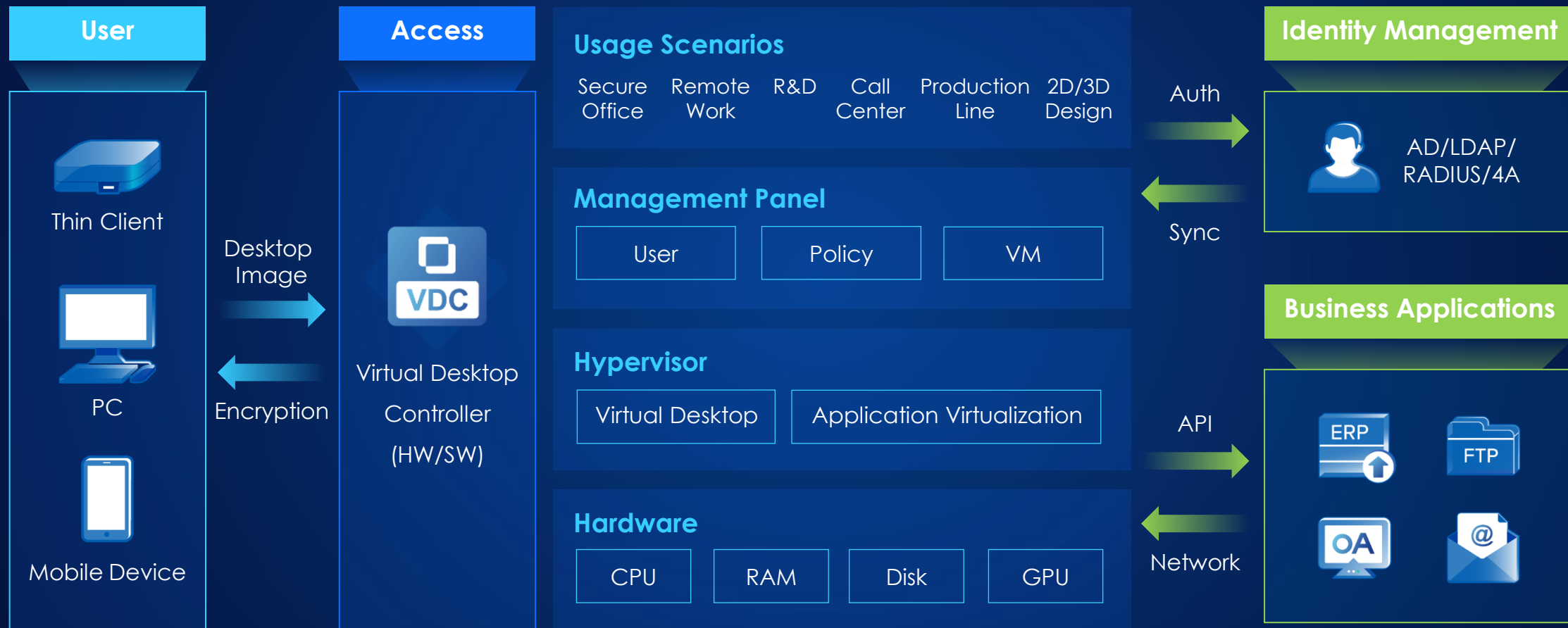
# Key Values of VDI





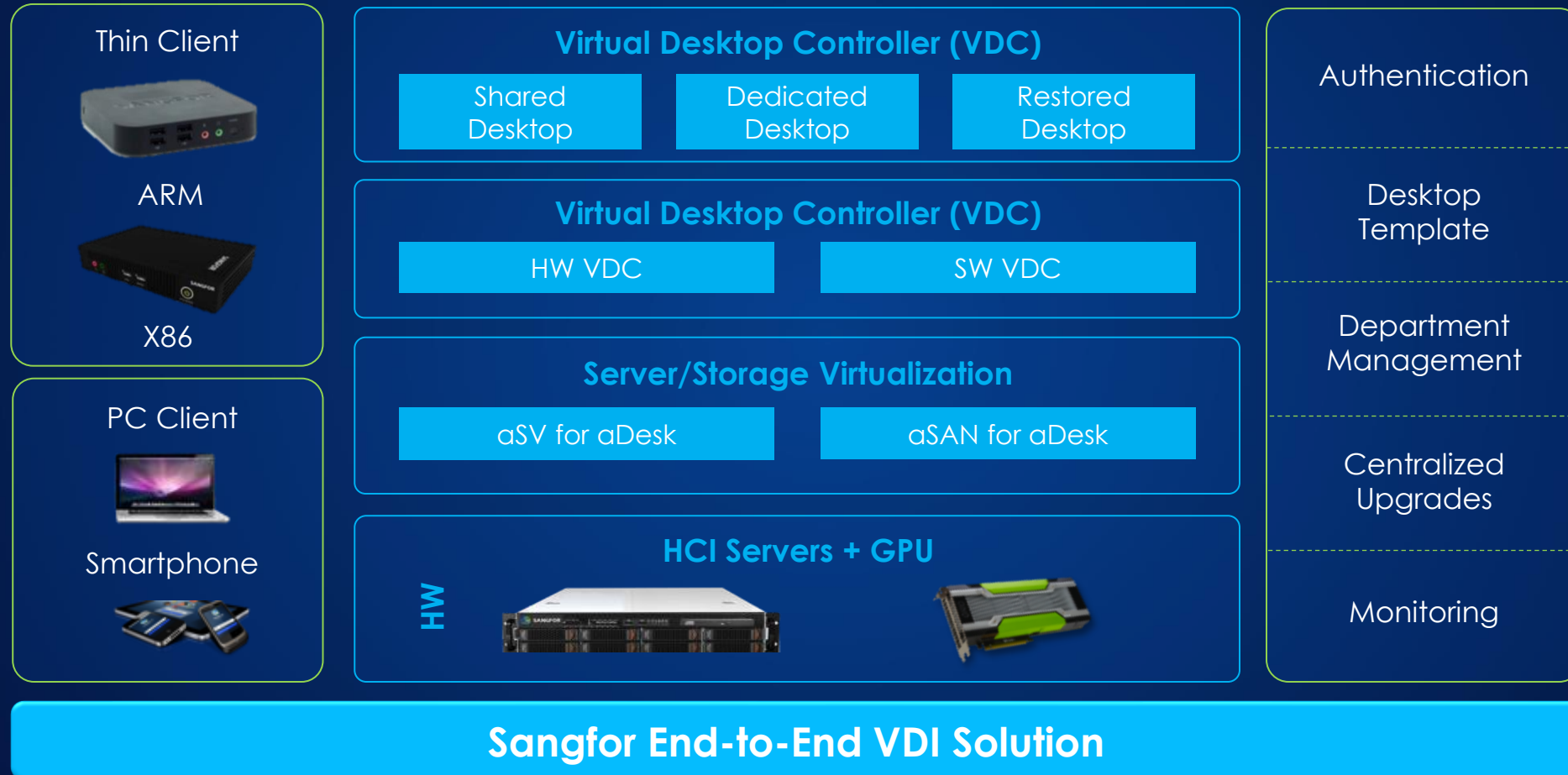
## **PART 2**

# **Sangfor VDI Solution**



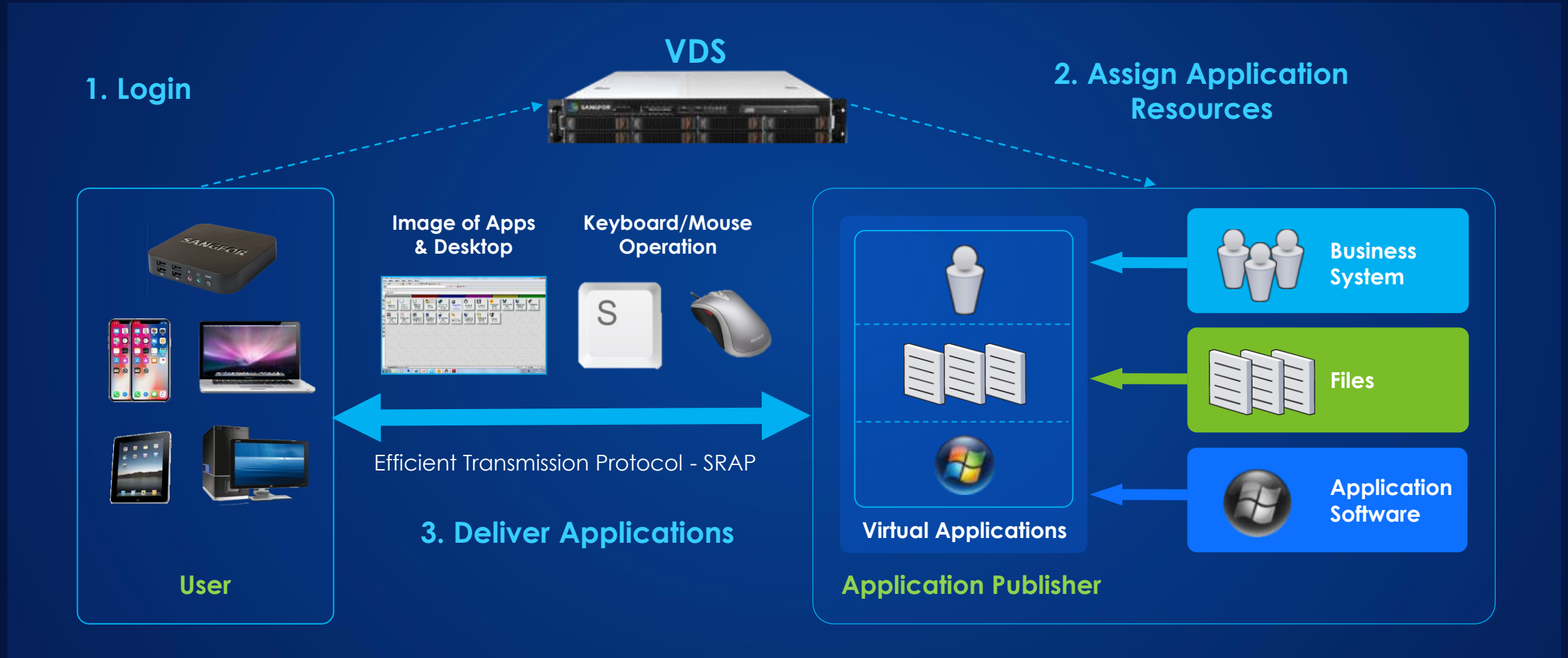


# End-to-End Virtual Desktop Architecture





# Application Virtualization Architecture





## Ultimate Security

- Access Security
- Network Security
- User Behavior Security
- Built-in Security
- Integrated Security



## Simple & Effective

- Unified Management Panel
- Converged Infrastructure
- Application Management
- Software Distribution
- User Self-Service

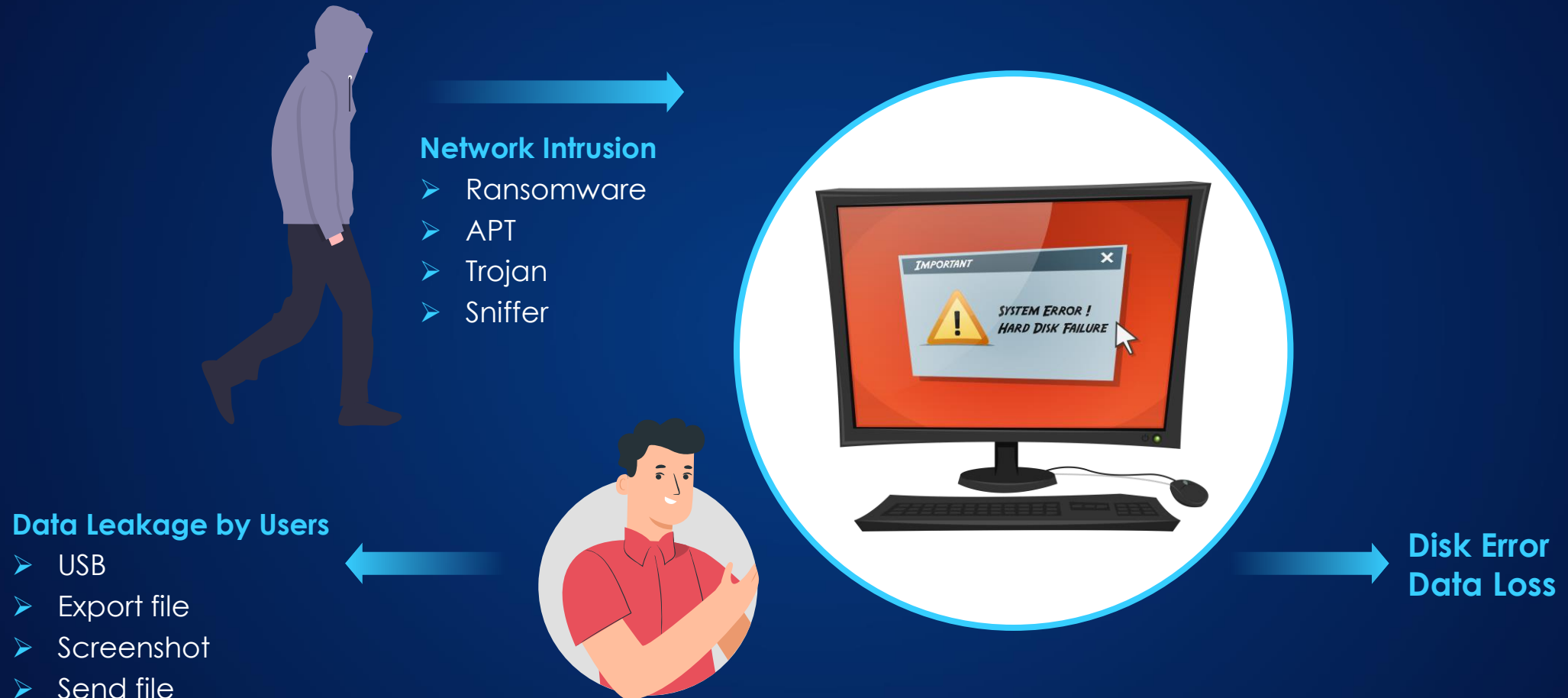


## Ultimate Smooth

- Zero Bus peripheral mapping
- HEDC Patented Technology
- HTML5 Video Redirection
- SSD Acceleration
- vGPU 3D Solution

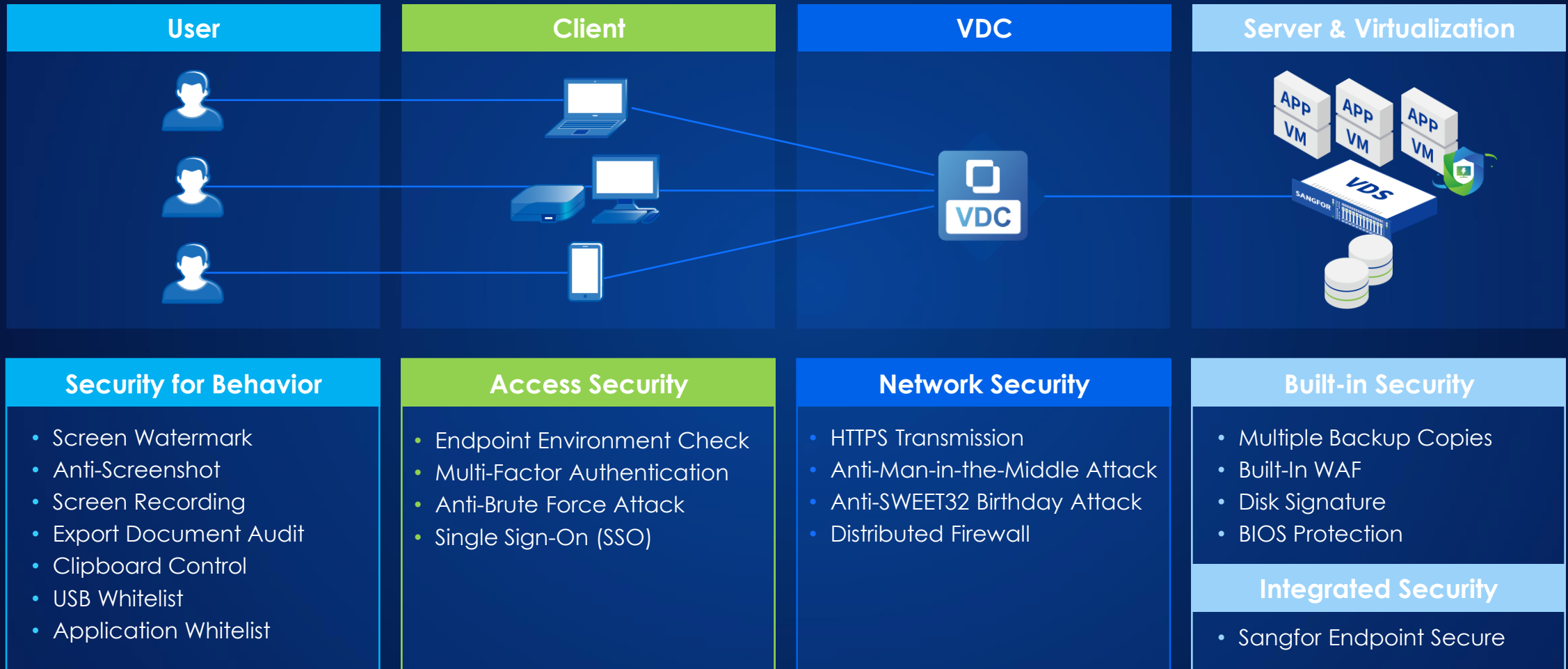


# Security Risks of Traditional PCs





# End-to-End Security Design





## *Only Sangfor VDI audits exported documents*

Secured

01

- Prohibit exporting documents from VMs

02

- Only allows exporting documents using a specific tool

03

- The system records user document export behavior and limits the size and quantity of the documents

04

- Copies of the exported documents are saved to the data center system

05

- Warning policies can be set on a user-by-user basis





## Don't Require An Advanced License Like Other Vendors

Secured

Virtual Screen

☒ Enable PC anti-screen capture (with this selected, virtual desktop cannot be windowed via Ctrl+Shift+F11 and does not support multiple monitors)

☒ Print watermark on virtual desktop (model STD-500 is not supported currently)

☒ Show VDI account ☐ Show IP address of virtual machine ☐ Show MAC address of virtual machine ☐ Show time on virtual machine ☒ Show full-screen watermarks

Watermark Text:  ⓘ

Display Style:  ▼



Core aDesk Components

Strength of Sangfor aDesk

In-depth integration of firmware, frontend and backend software, together with innovative technologies make aDesk a securer, stabler and highly efficient desktop virtualization solution providing PC-like user experience



# Sangfor VDI + Sangfor Endpoint Secure Gain Peace Of Mind With The Most Secure VDI



## Close All Endpoint Security Gaps

Ransomware APT Trojan Malware



Asset  
Management

Vulnerability  
Management

Threat Detection  
& Response

### Sangfor VDI + Endpoint Secure Promotion

- **Free 1 Year** Essential Endpoint Secure
- **30% Discount Off** Ultimate Endpoint Secure

Secured



# Utmost Simplicity and Efficiency



## Deployment

- Server, hypervisor, VDC, and thin client from a single vendor
- Support PC reutilization
- Rapid deployment (set up 100 virtual desktops in 5 minutes)
- Unified management of physical 3D workspace (from v5.5.6)

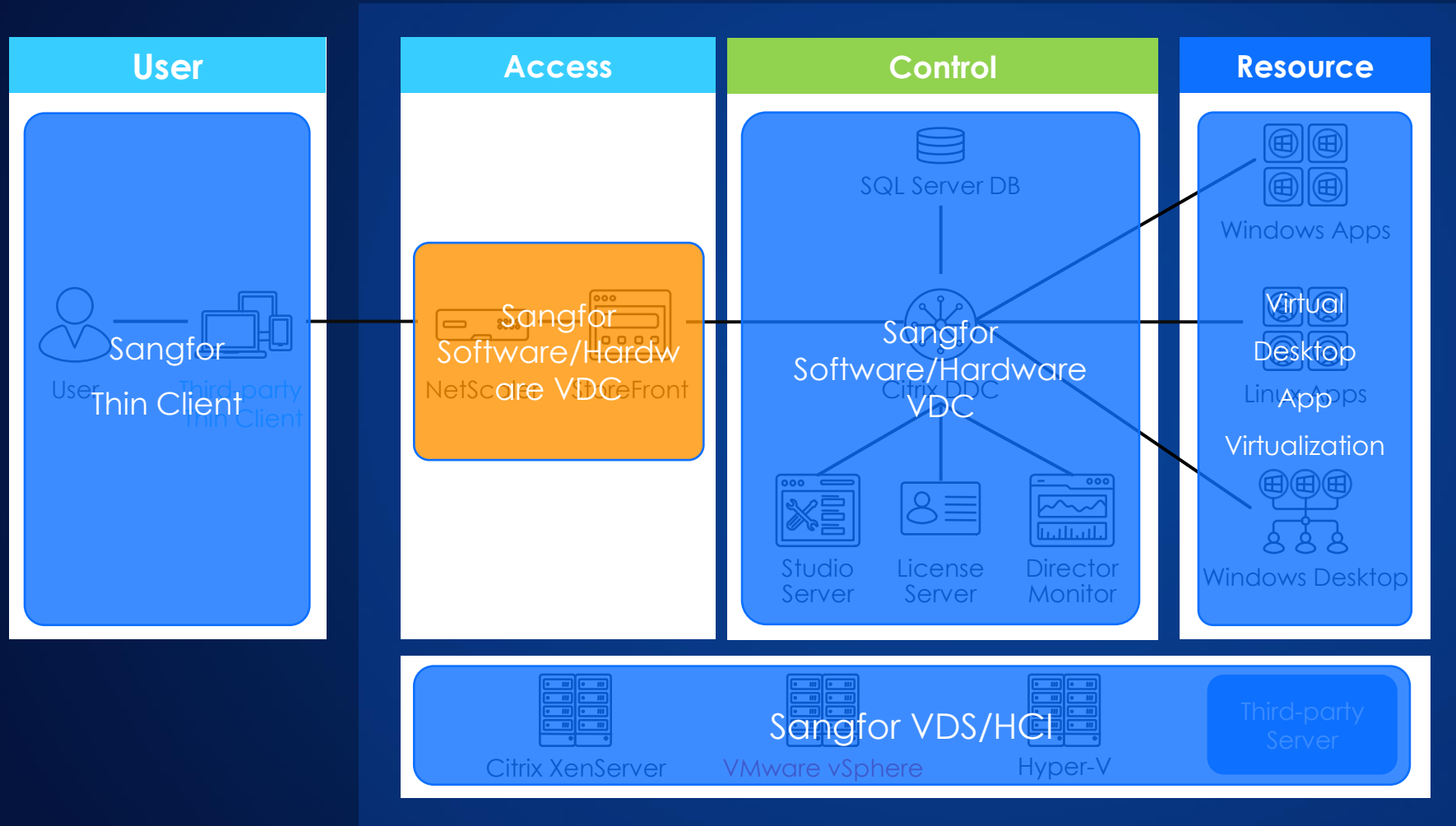


## Management

- Unified intuitive control panel
- Unified software management & application distribution
- Seamless integration with AD (Active Domain)
- Take VM snapshots by user
- Self-application for extra space



# One-Stop Solution, Simple Architecture



- ✓ **Save Money**
- ✓ **Save Concern**
- ✓ **Save Effort**
- ✓ **Save Time**



# Seamless Compatibility with Existing Resources



## PC/Server Reutilization



- Save thin client cost
- Access to Sangfor when power on

## Unified Management of Physical 3D Workspace



- Unified management
- Keep 3D user experience

(Available from v5.5.6, April 2023)



Efficient

## Deliver Pooled Model Desktop

- Reduced the quantity of VMs and resource consumption





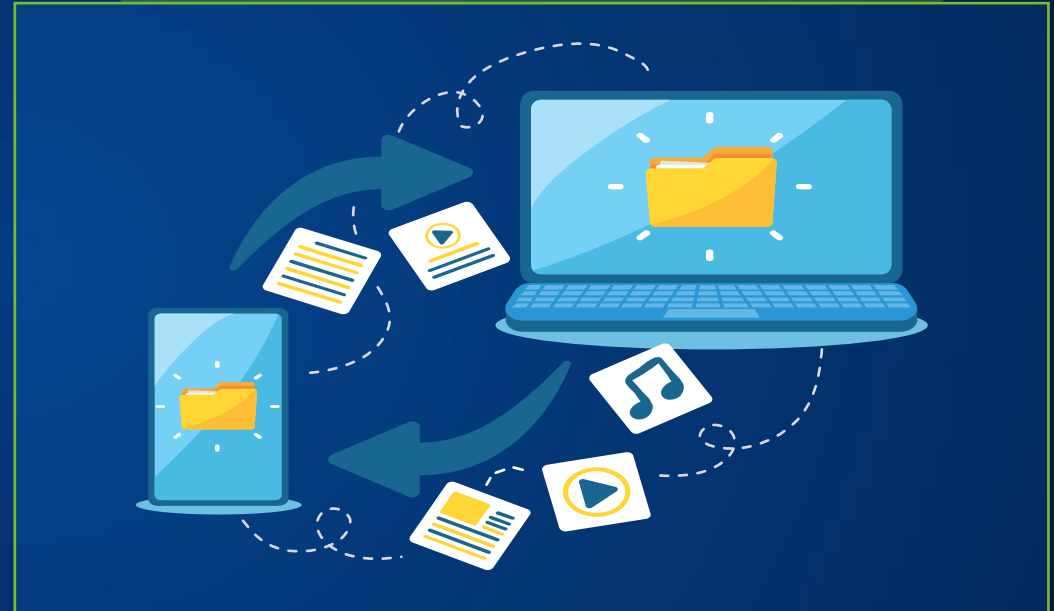
## Download & Install



**Applications only come from application containers**

- More secure
- More efficient

## Update



**Software distribution doesn't require updating template VM**

- No need to restore VMs to template to update apps
- Update applications faster

\* Suggest using from v5.5.6





# User Self-Service Liberates IT Resources



**Self-Maintenance of  
Personal Information**



**Self Snapshot**



**Self-Application  
for Space**





Zero Bus mapping provides outstanding compatibility



HEDC 2.0, video redirection, and SSD caching provide an extremely smooth user experience

## Excellent User Experience

Improve Customer Satisfaction

Continuous Linear Expansion



# Zero USB Driver Mapping Provides Outstanding Peripheral Compatibility



Smooth

Peripheral driver installation is based on the hypervisor instead of the OS. No changes to the OS are required!



## Technology:

- Converged hypervisor and hardware
- Same USB mapping design as PCs



## 6X Increase in Transmission Efficiency

Smooth



### Stream Compression

- Detect network conditions in real time.
- Innovative algorithm to choose the best method for different data.



### Intelligent Cache Optimization

- Evaluate data types.
- Cache image and bandwidth-sensitive data.
- Reduce transmission of repetitive data.



### Dynamic Image Filter

- Confirm dynamic image area using detection technology.
- Cache image data of the dynamic area.
- Reduce the quantity of data transmission.

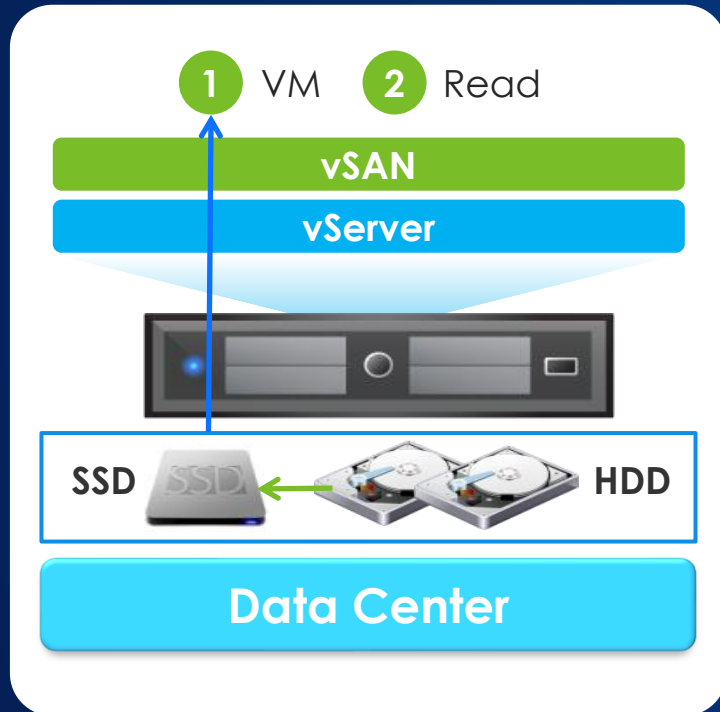


### HTML5 Redirection Technology

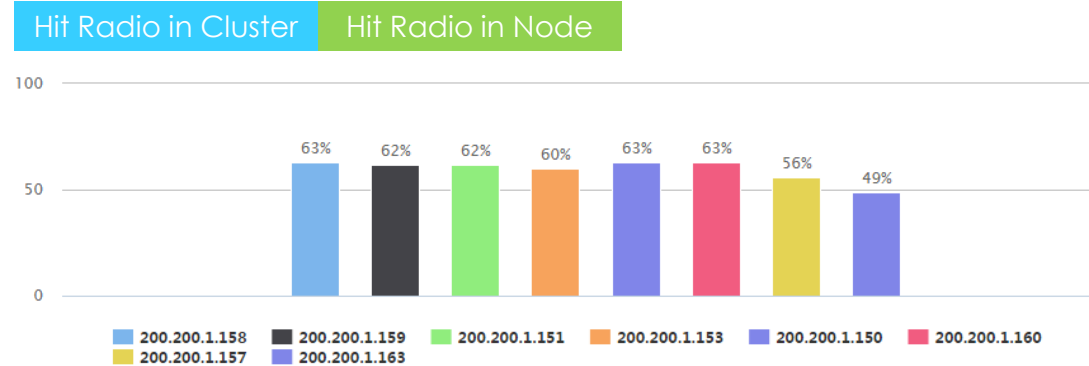
- Video flow redirection to the thin client for encoding.



# SSD Cache Acceleration Boosts VM Speed



## Hot Content Cache Algorithm Technology

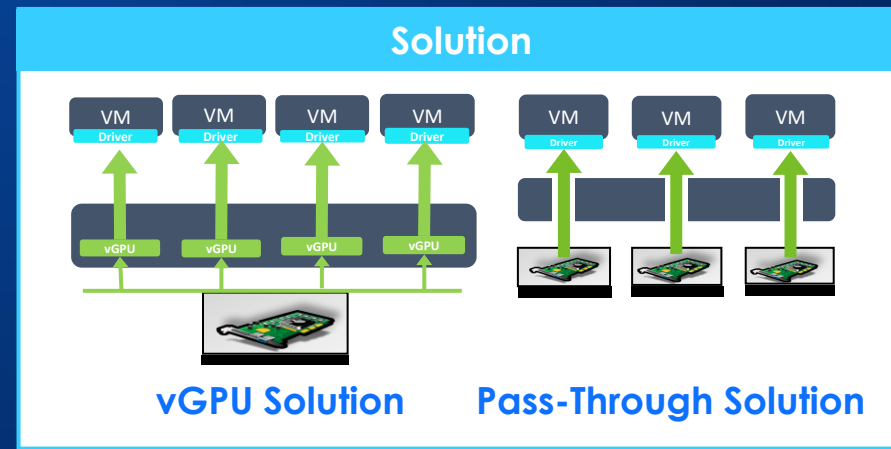
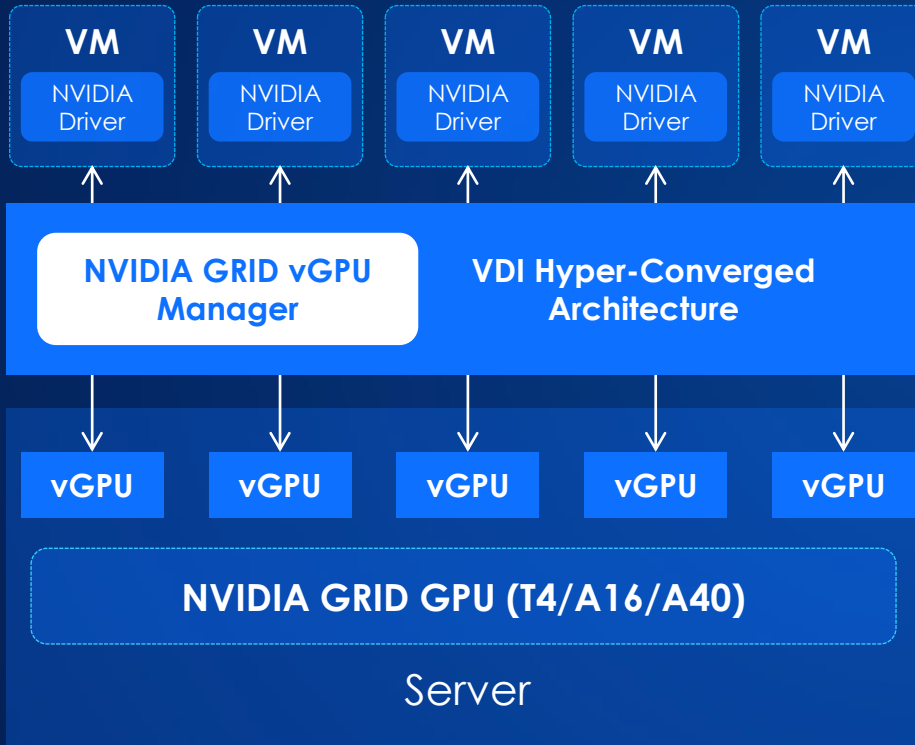


Cache hit ratio > 60%

Smooth



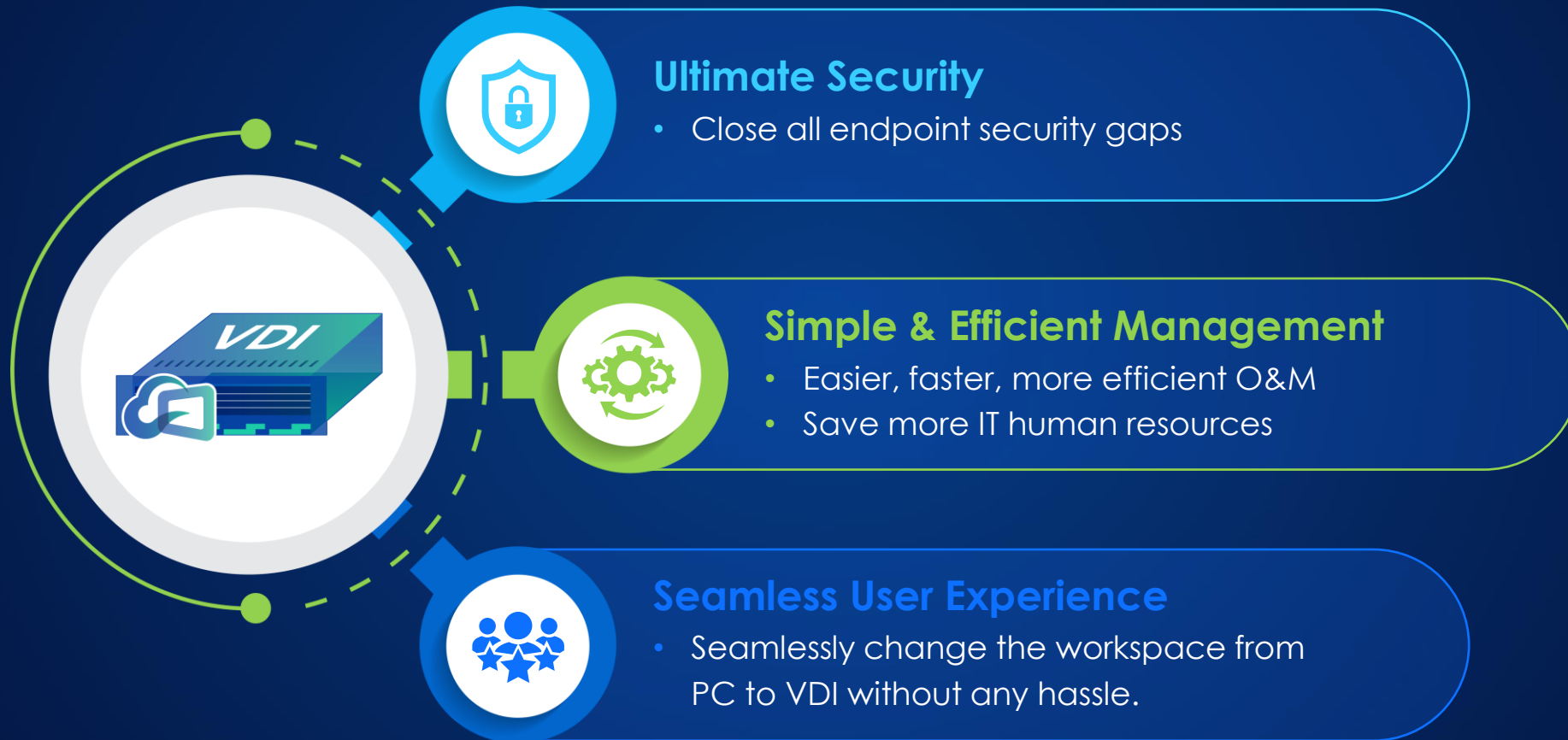
# vGPU Architecture Streamlines Design Work



\*Support unified manage current physical 3D workspace from April 2023



# Summary of Sangfor VDI Highlights

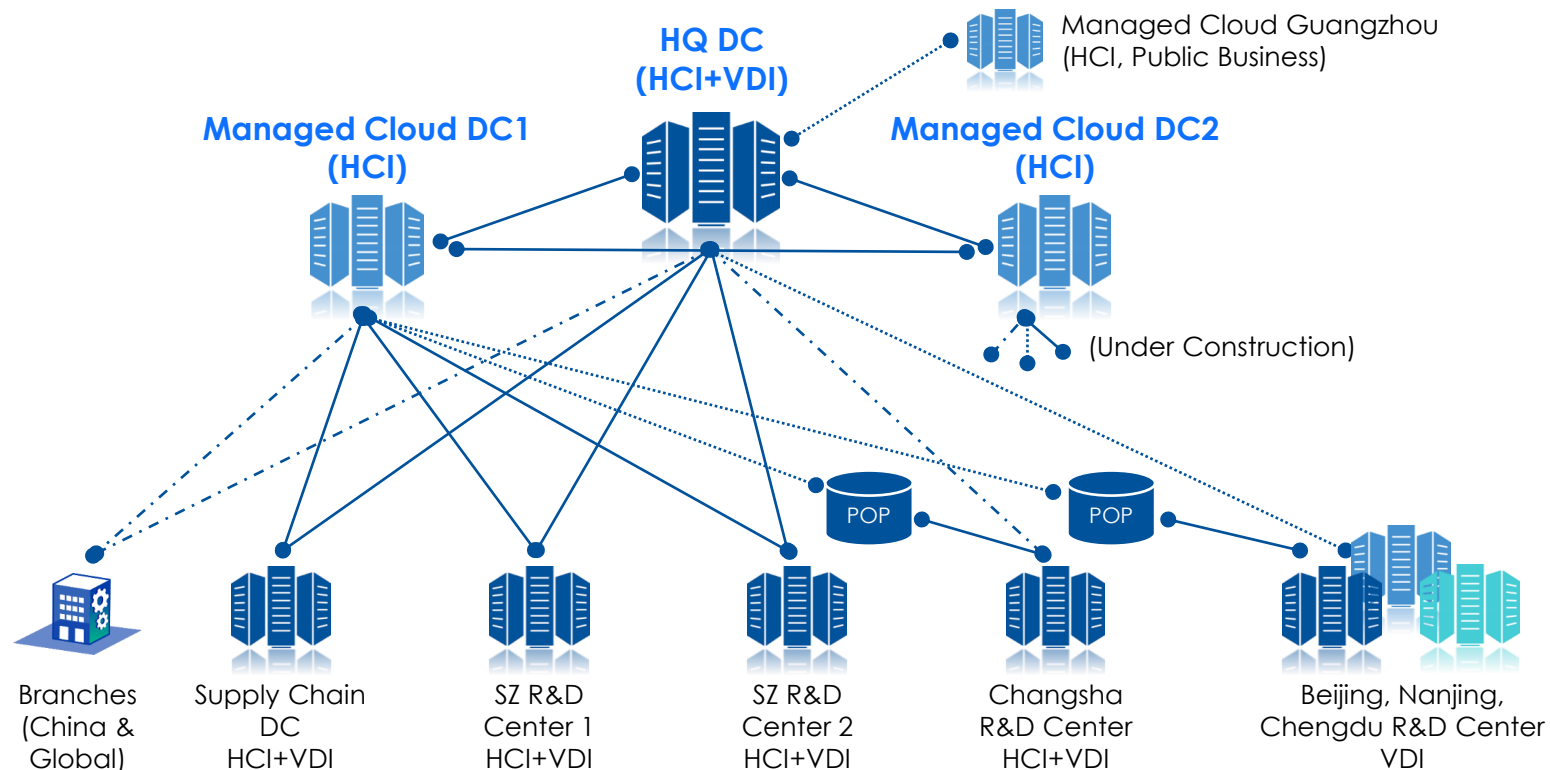


# PART 3

# Case Studies



# Sangfor Group Network Architecture



- Sangfor Users 10,000+
- Partner Users 20,000+



- 7 R&D Centers
- 70+ Chinese Branches
- 10+ Global Branches



- 60+ HCI Clusters
- 3500+ Virtual Servers
- 50+ VDI Clusters
- 6500+ Thin Clients



FC Leased Line



SD-WAN/VPN



MPLS + VPN





## Challenges

- Staff numbers are exploding; annual increase of 1,000+ staff in recent years.
- Users need to work from home or outside, especially during the pandemic.
- High IT staffing costs.
- High rate of hardware damage caused low work efficiency and high maintenance costs.
- R&D code data leakage risks.
- User security risks.

## VDI Solutions & Benefits

- Hardware resource pooling decreases hardware wastage. Supports linear expansion, hardware usage rate increased 10X.
- Set up a virtual desktop for new employees or R&D test environment in 1 minute.
- Desktop IT manager: Desktop user = 1: 1800
- Network isolation and desktop isolation for R&D and office usage.
- USB control, watermark, anti-screenshot, and file export audit prevent R&D data leakage.
- Multiple copies to prevent data loss in the event of disk failure; security events decreased by 60%.
- Self-application for space and self-maintenance of personal information decreased the number of IT issues.
- Saved 60% in electricity.

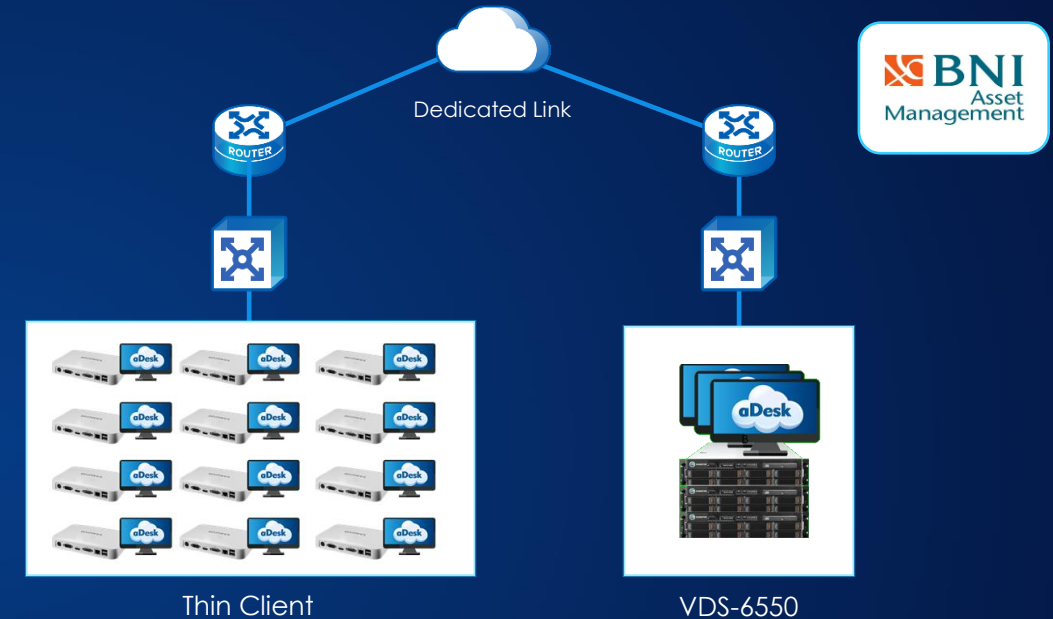


## Customer Background

- PT BNI Asset Management deals in Investment Management in Indonesia. Founded in 1995, BNI Asset Management is a subsidiary division of PT BNI Sekuritas.

## Challenges

- No control for management
- No data protection
- Desk sharing and BYOD policies



## Sangfor Solution

- **Centralized Management:** Sangfor aDesk reduced the time spent on management with a unified VMP and VDC platform.
- **Centralized Storage:** VDI ensures data is 100% protected and encrypted within the VDI system, with even the admin having restricted access.
- **Mobile Desktop:** Users can work from anywhere, at any time, and on any device. VDI makes work simpler.



## Customer Background

- City University of Macau (CityU) is a private university in Macau, formerly named Asia International Open University (Macau).

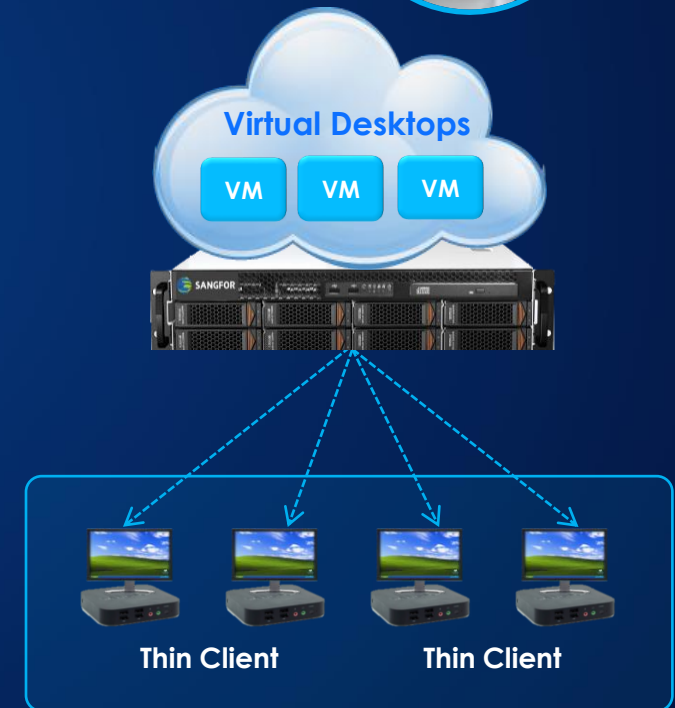
## Challenges

- A great deal of time was spent on **powering PCs on/off daily and reinstalling** the windows system.
- High failure rate and difficulty **upgrading PC performance**.
- **No Authentication** to connect to the Internet.

## Benefits

- **Schedule** daily PC power on/off and auto recover windows system disk after rebooting.
- Easily **adjust PC specs** if needed.
- Integrates with Sangfor IAG for **SSO authentication**.

University Library





## Customer Background

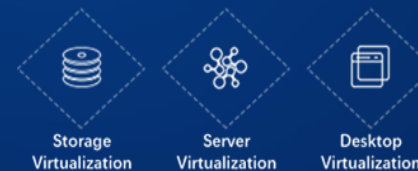
- **Illegal access**, network intrusion, virus propagation.
- USB devices and file exports caused confidential **data leakage**.
- The IT manager needed to invest a lot of time to **install and update OS and software**.
- **High electricity cost** for PC work.

## Solutions

- Yakult leveraged Sangfor's cloud security and cloud computing solutions to build the overall architecture of their factory IT. The overall solution provided Yakult with enterprise network security, high-efficiency virtual desktops, remote disaster recovery, and interconnection.

## Benefits

- Provide **robust network security protection** against external threats.
- Respond to all types of **intranet security threats**.
- Realize secure and **convenient mobile office**, providing easy connection for business and BYOD.
- **Data security, easy management, and energy-saving** solution.



VDS Server



Thin-Client





# Success Cases



Successfully Delivered **2,200,000+** Virtual Desktops  
**200+** Customers with **1,000+** Virtual Desktops

BFSI				
Manufacturing				
Education				
Government				
Healthcare				



# THANK YOU!

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