



Sangfor VDI Solution

Seamless Experience, Secure and Efficient

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01 Why VDI?

02 Sangfor VDI Solution

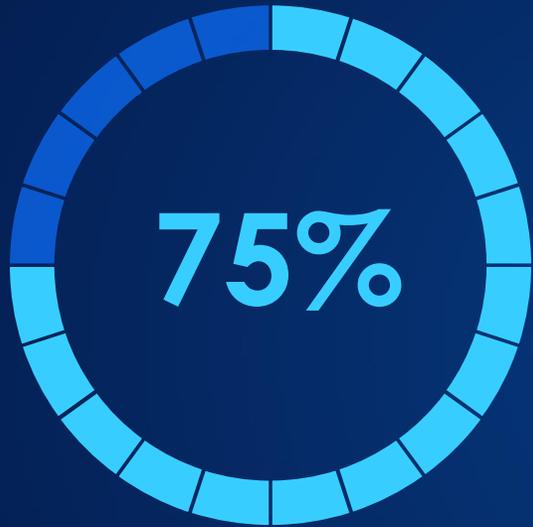
03 Case Studies

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.

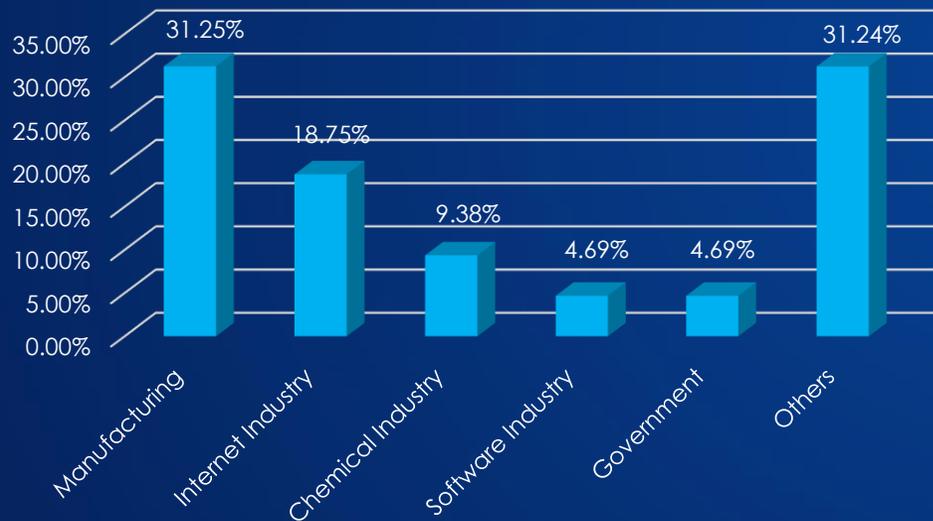
--- data from Gartner report



Traditional PCs Are Insecure

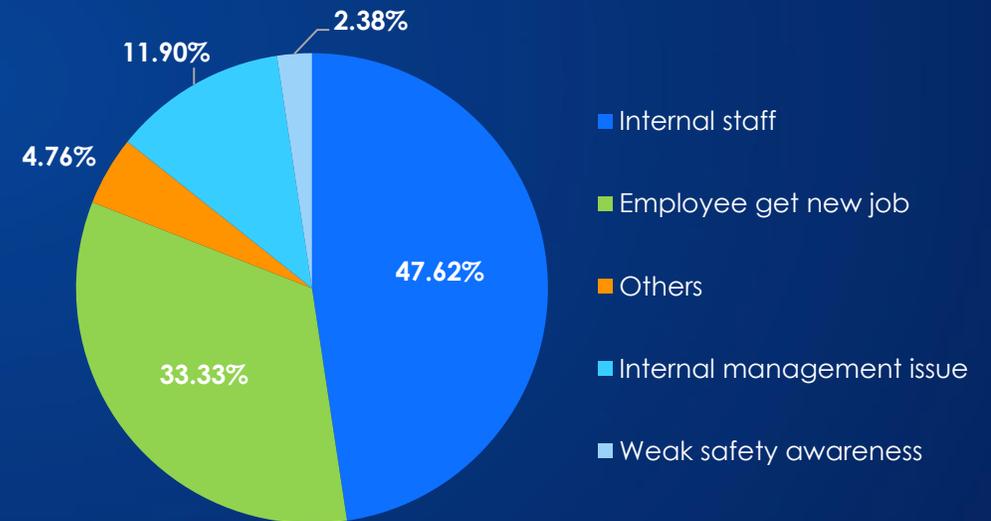
47% of PCs worldwide were infected by malware at a total cost of \$8 billion USD

Confidential Data Leakage by Industry



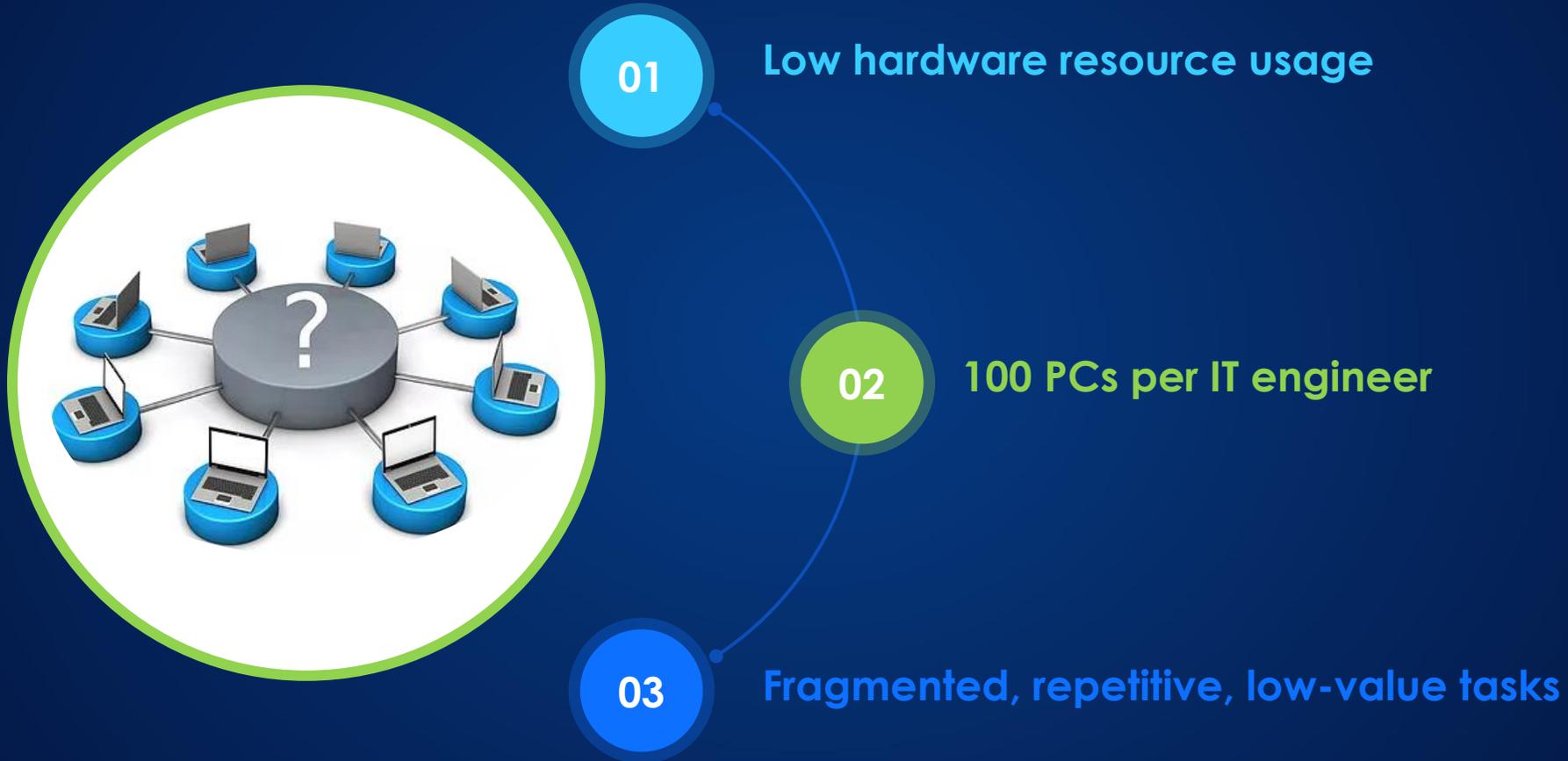
The global average cost of a data Breach is \$4.35 million USD

Confidential Data Leakage by Method





Traditional PCs Waste Hardware & Labor Resources

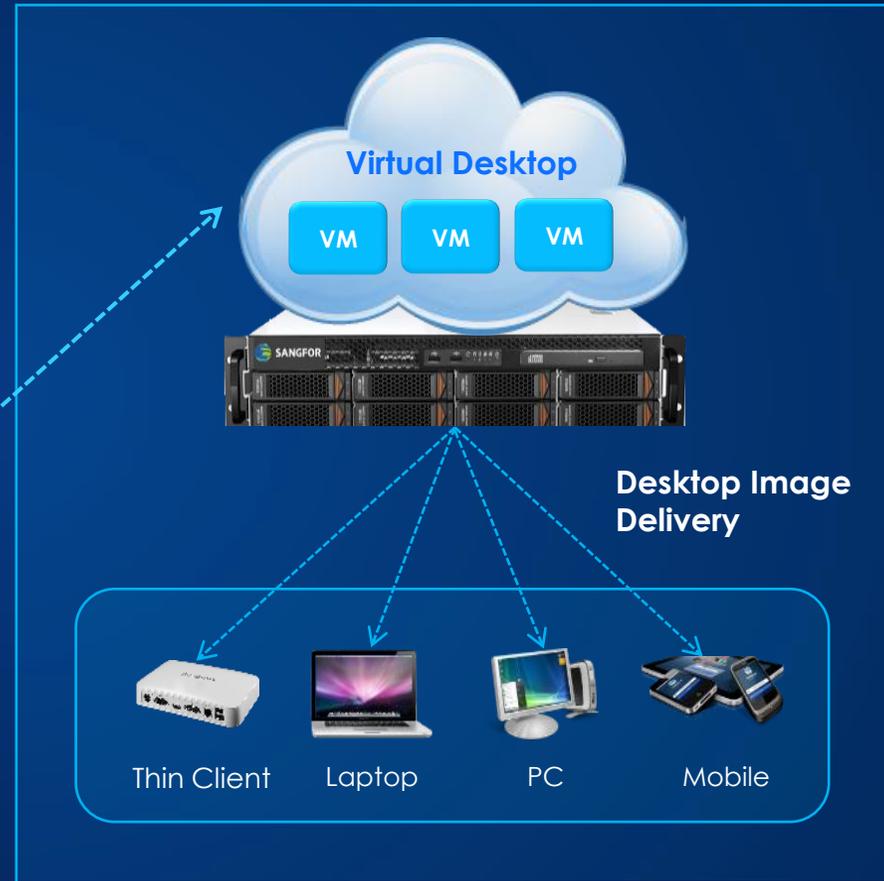




Virtual Desktop Infrastructure (VDI) The Ultimate Solution

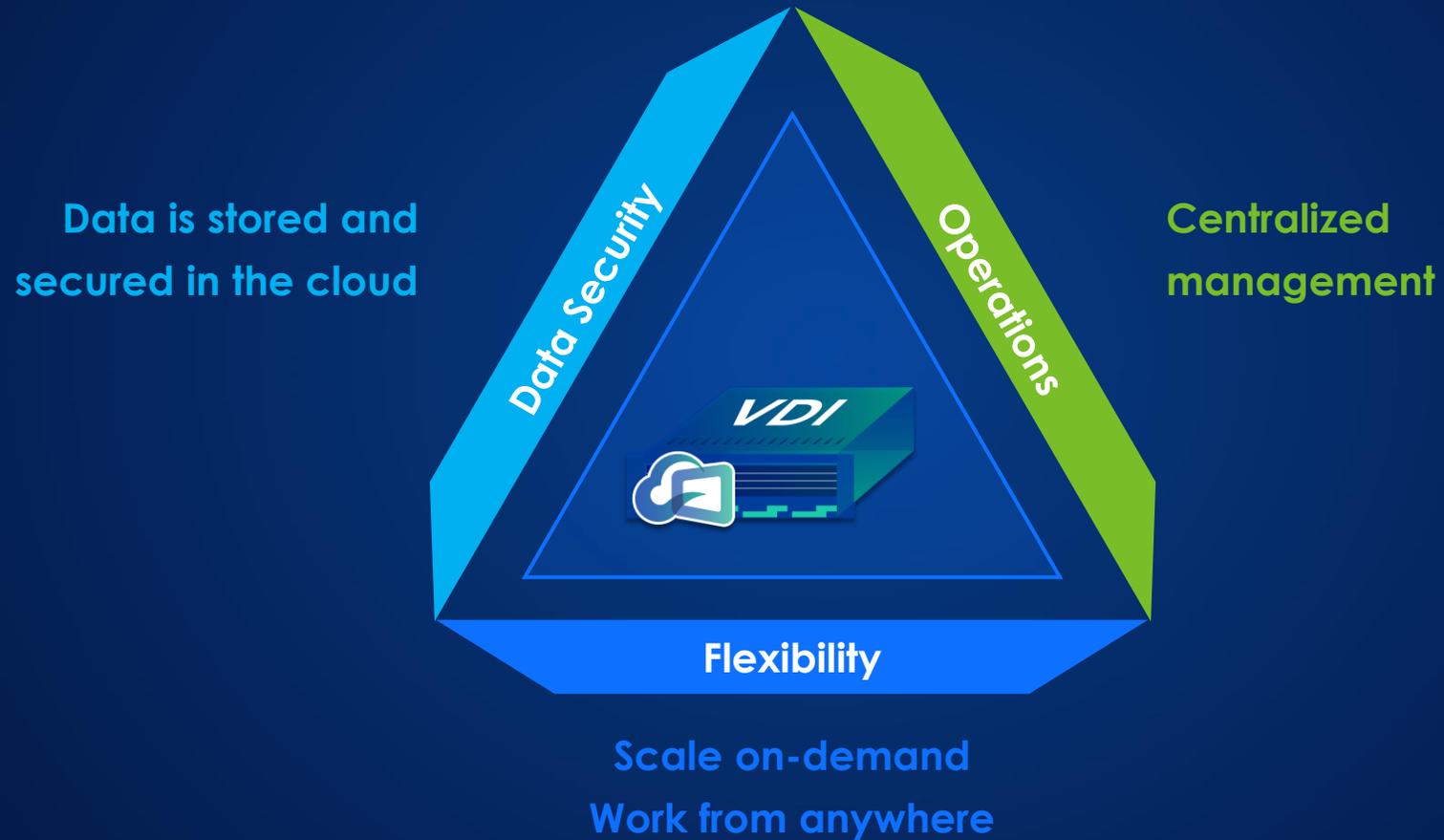


Desktop, applications, and data are migrated to cloud (data center)





Key Values of VDI

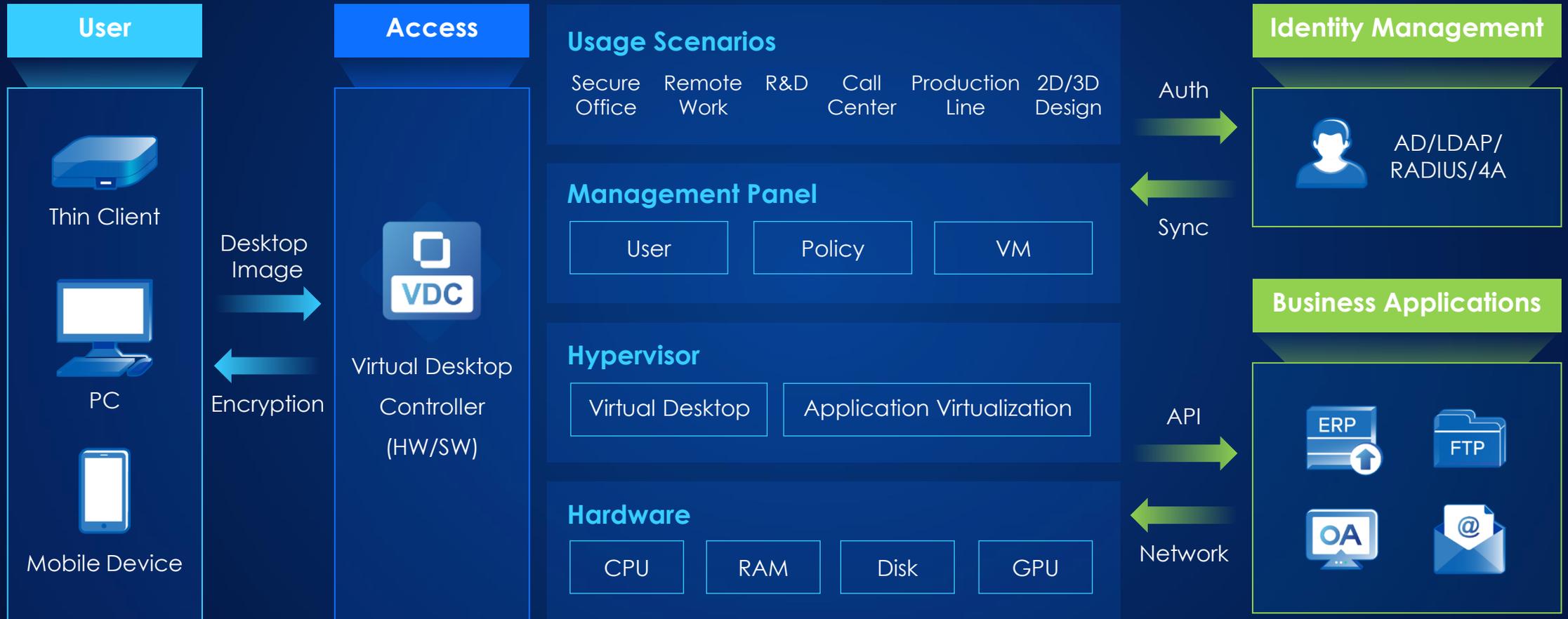


PART 2

Sangfor VDI Solution

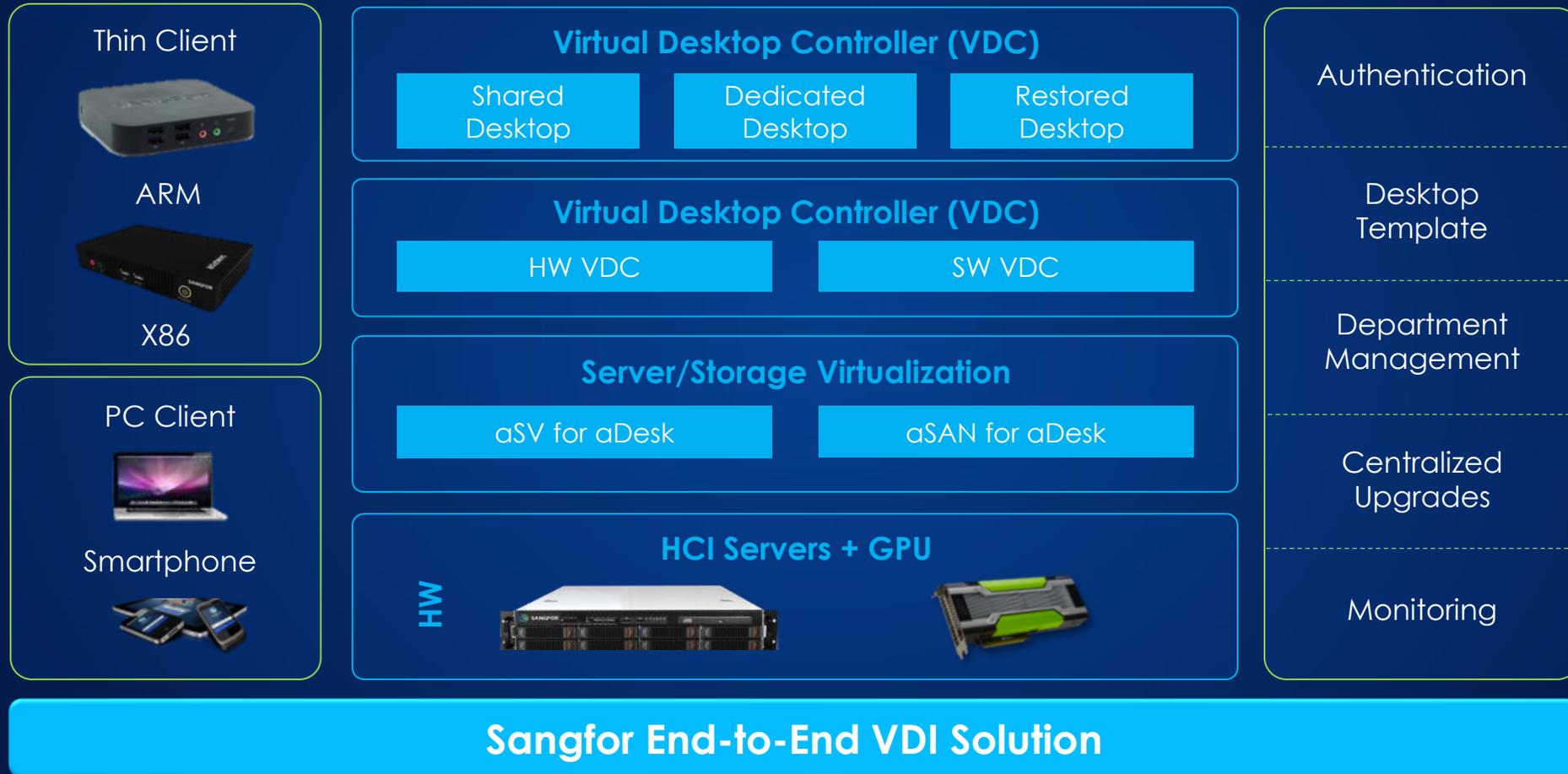


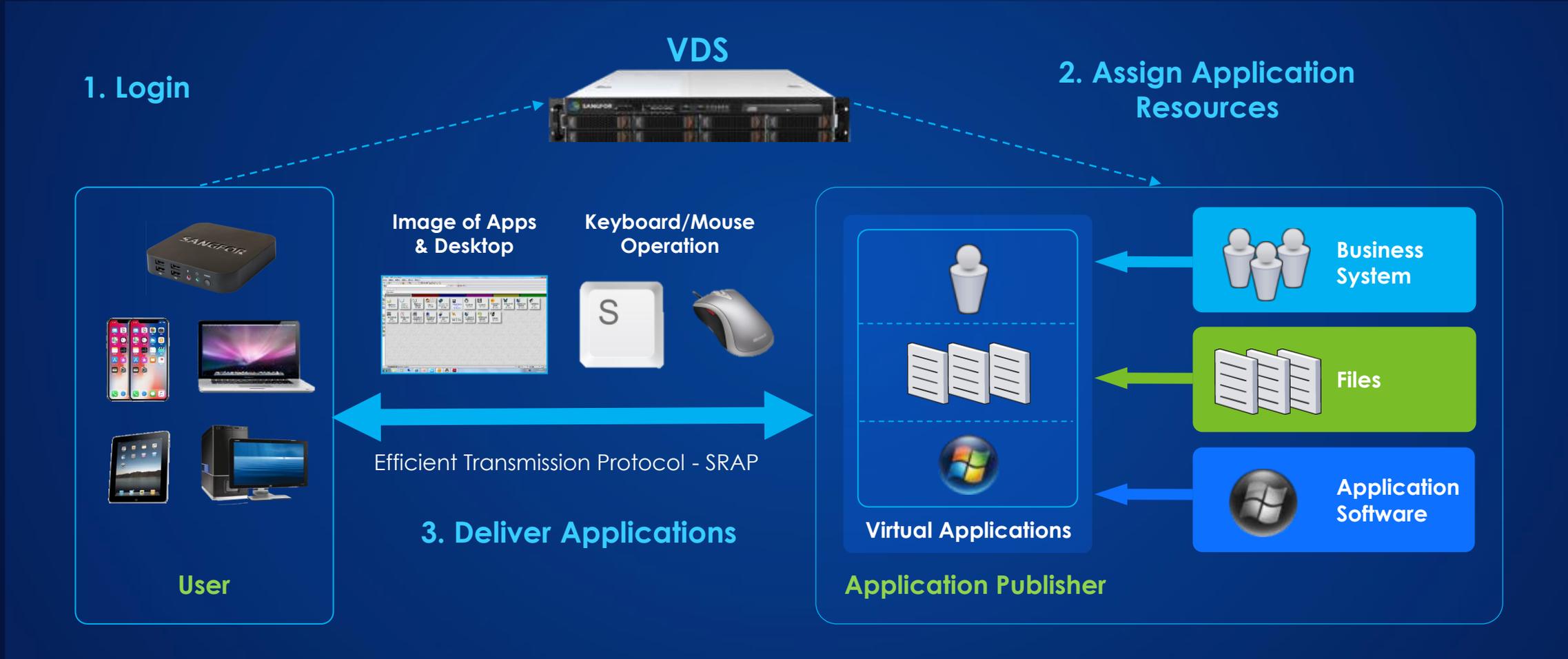
Sangfor VDI Architecture





End-to-End Virtual Desktop 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

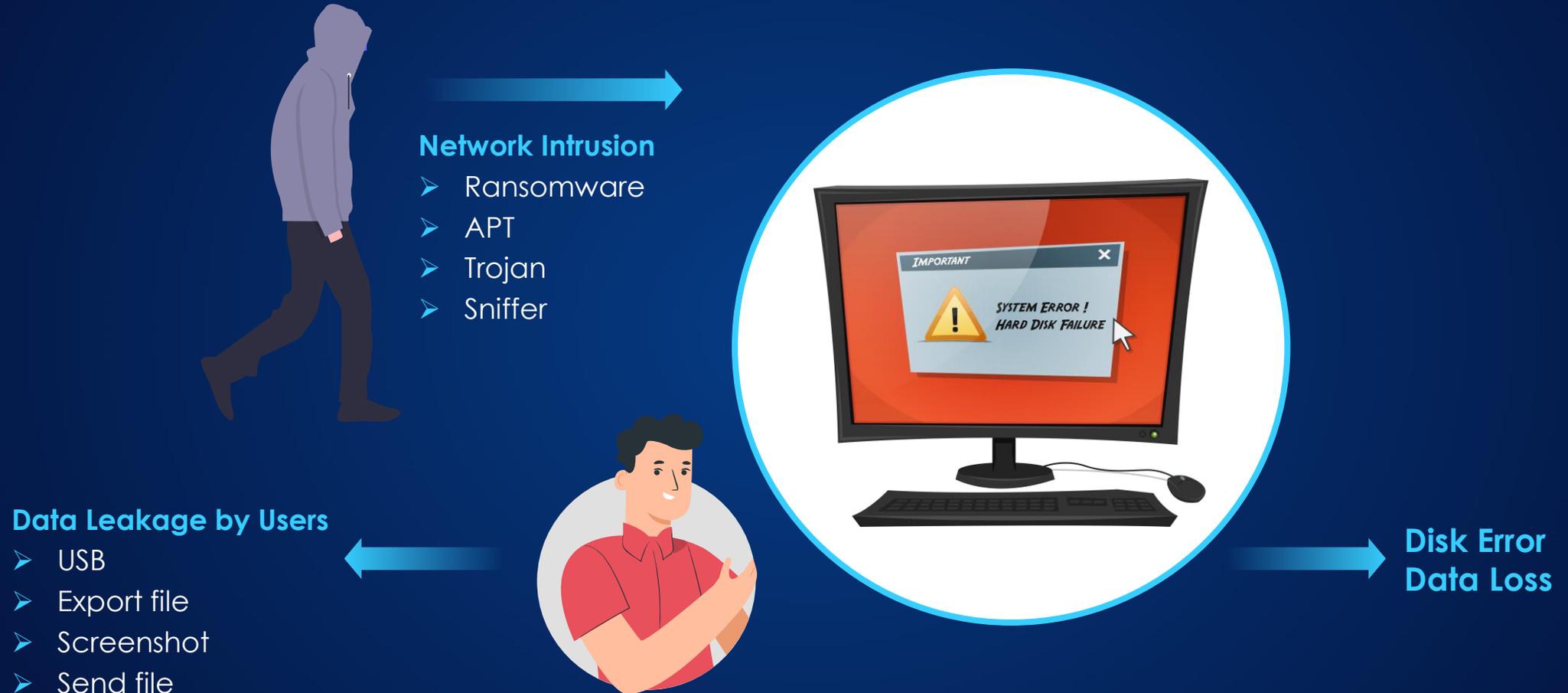


Ultimate Smooth

- 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



Security for Behavior

- Screen Watermark
- Anti-Screenshot
- Screen Recording
- Export Document Audit
- Clipboard Control
- USB Whitelist
- Application Whitelist

Access Security

- Endpoint Environment Check
- Multi-Factor Authentication
- Anti-Brute Force Attack
- Single Sign-On (SSO)

Network Security

- HTTPS Transmission
- Anti-Man-in-the-Middle Attack
- Anti-SWEET32 Birthday Attack
- Distributed Firewall

Built-in Security

- Multiple Backup Copies
- Built-In WAF
- Disk Signature
- BIOS Protection

Integrated Security

- Sangfor Endpoint Secure



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

Secured

Sangfor VDI + Endpoint Secure Promotion

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



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)

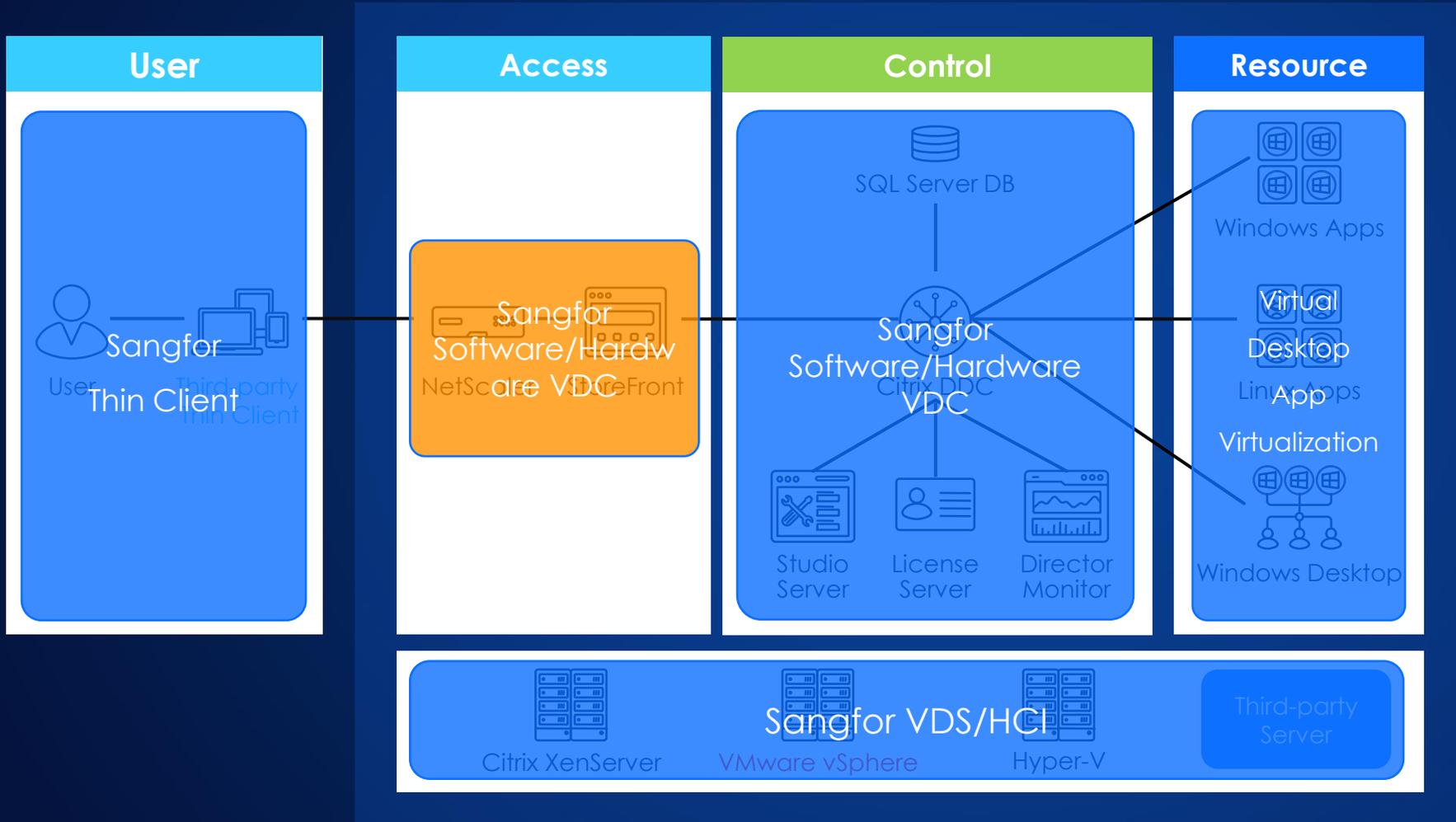


Management

- 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

Rapid Desktop Setup
Set up 100 desktops in 5 minutes ➤ and improve speed of IT response.

Simple, Unified Management
Centralized desktop control & updates ➤ reduce management complexity.



Zero Endpoint Device Maintenance
➤ Rapid recovery from endpoint errors, reduce shut-down time.

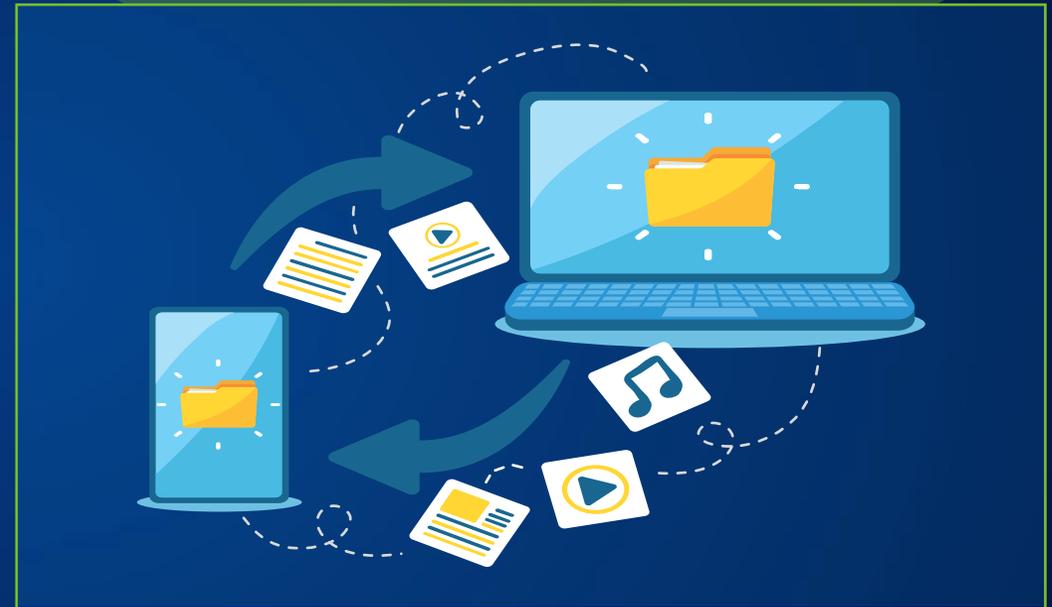
Set Different Policies for Different VMs
➤ Policies can be set for individual VMs with one user.



Download & Install



Update



Applications only come from application containers

- More secure
- More efficient

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**



Ultimately Smooth



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.

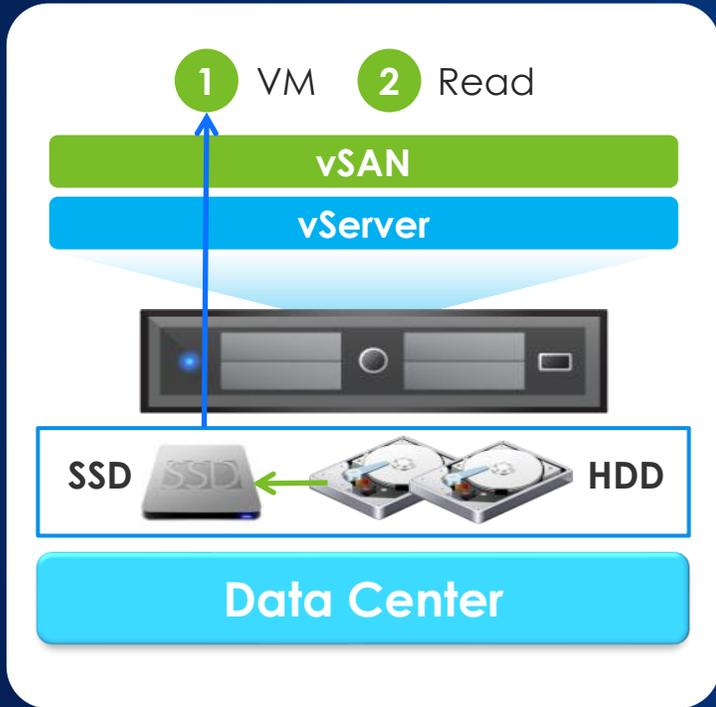
HTML5 Redirection Technology

- Video flow redirection to the thin client for encoding.

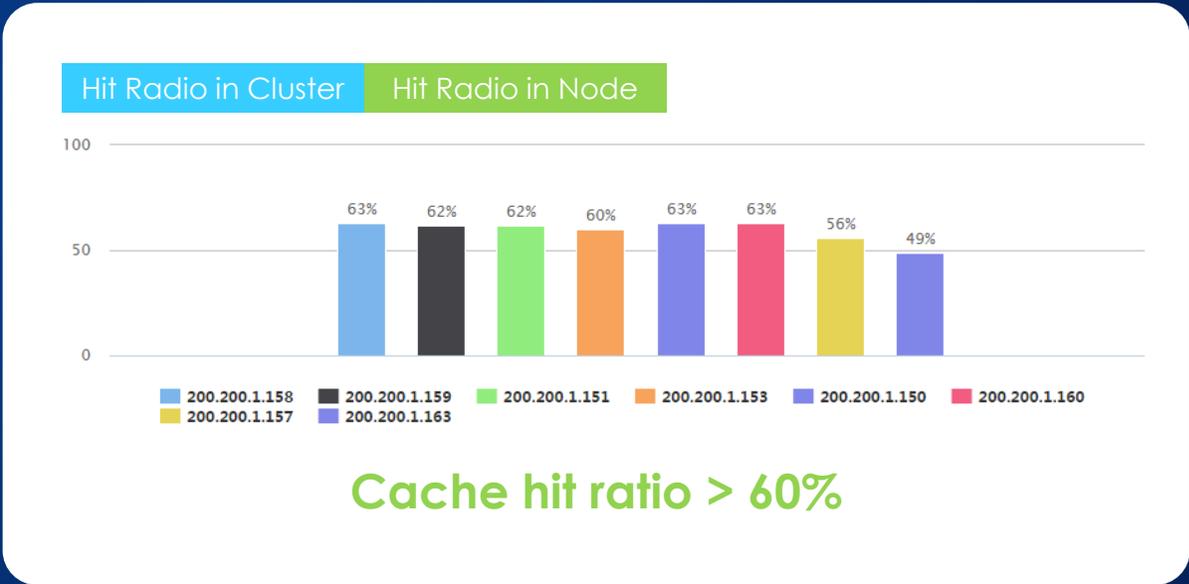


SSD Cache Acceleration Boosts VM Speed

Smooth



Hot Content Cache Algorithm Technology

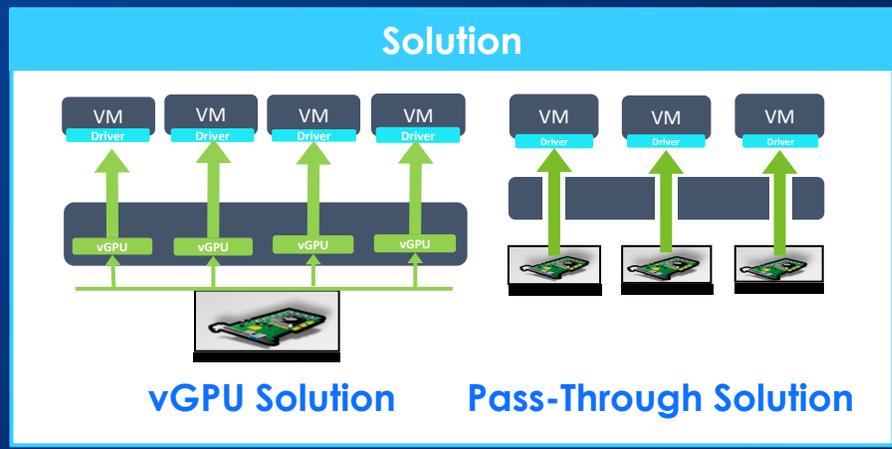
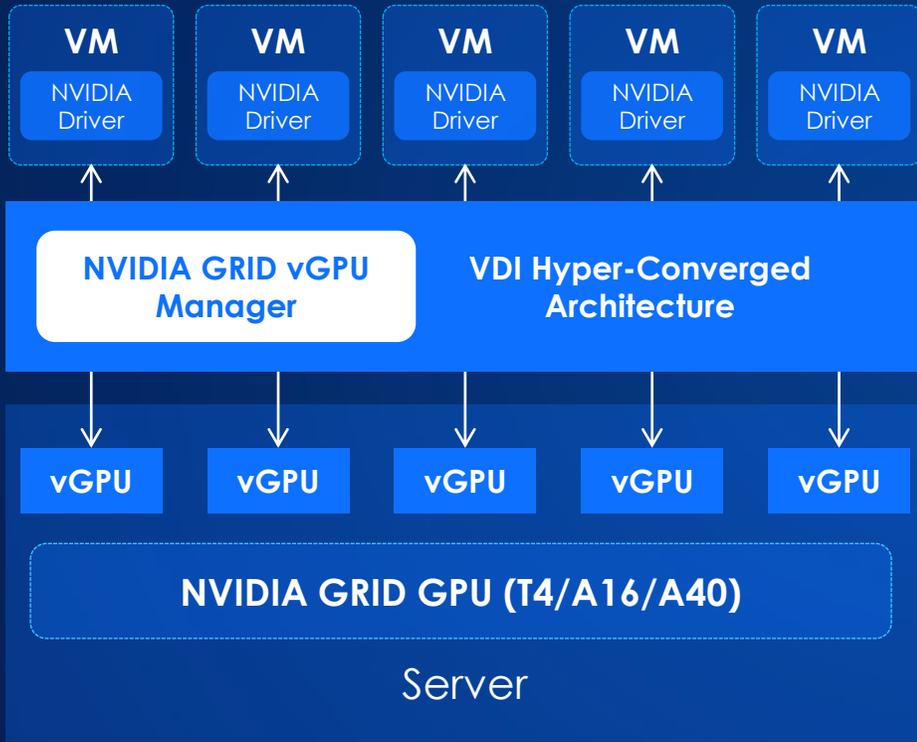




vGPU Architecture Streamlines Design Work



Smooth



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



Summary of Sangfor VDI Highlights

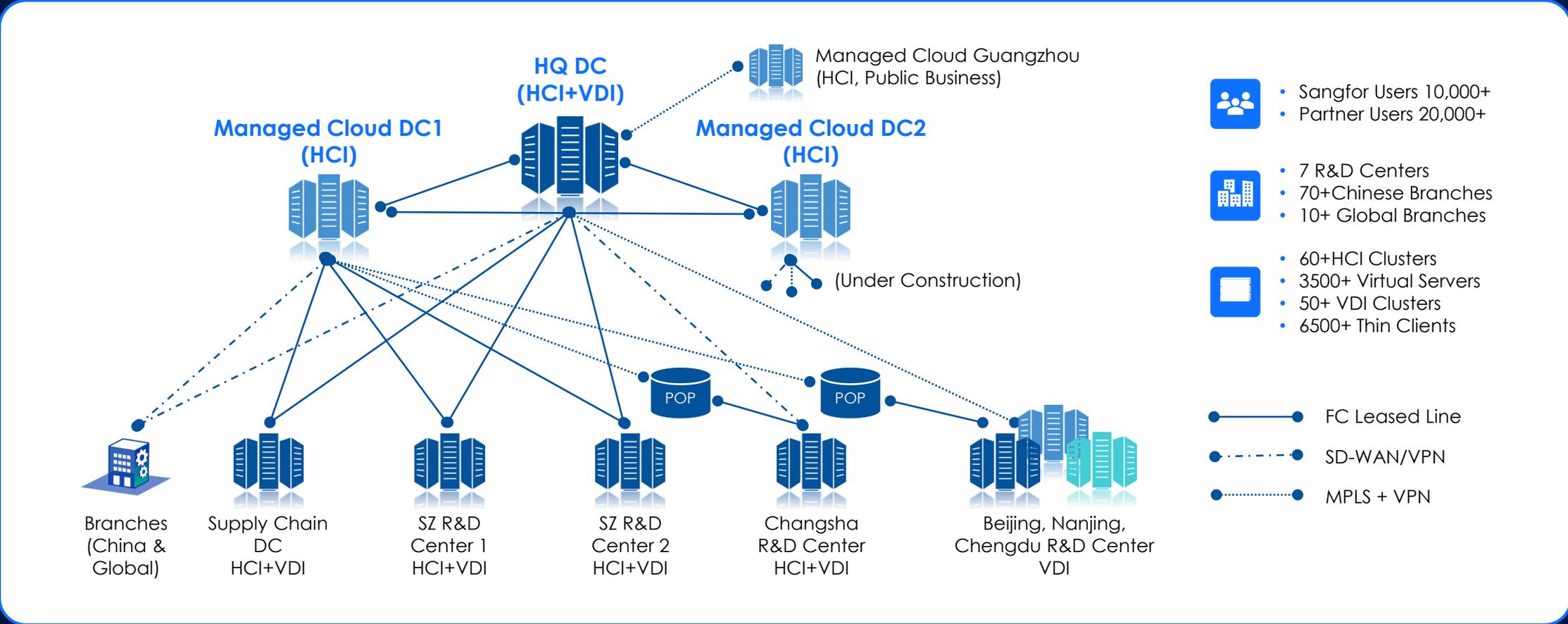


PART 3

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.

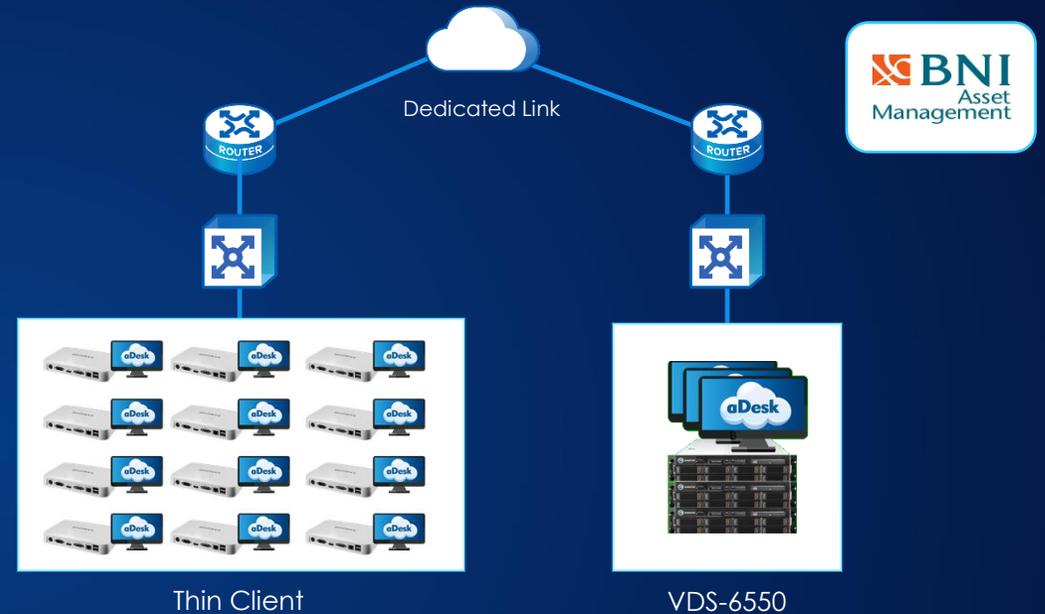


Customer Background

- 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).

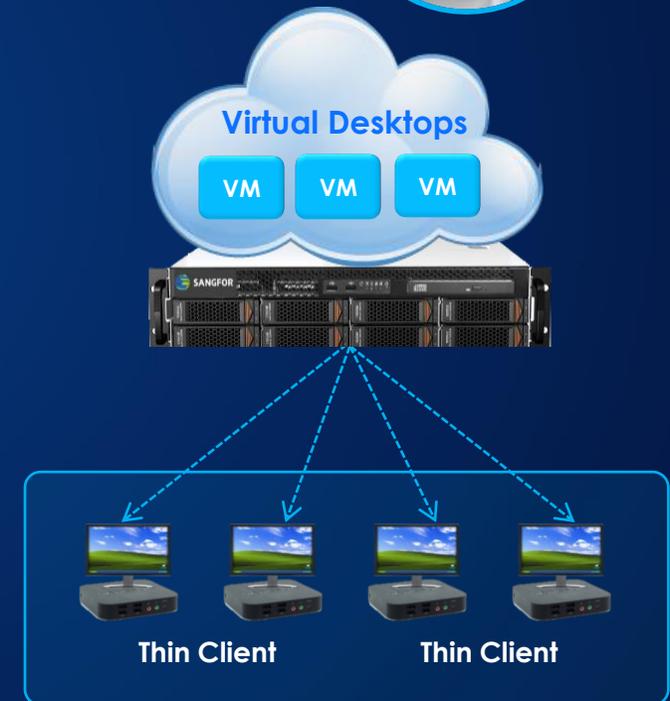
Challenges

- 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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