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The Outstanding Real Zero Client Computing Approach

A New Way to Desktop Virtualization

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Product Marketing

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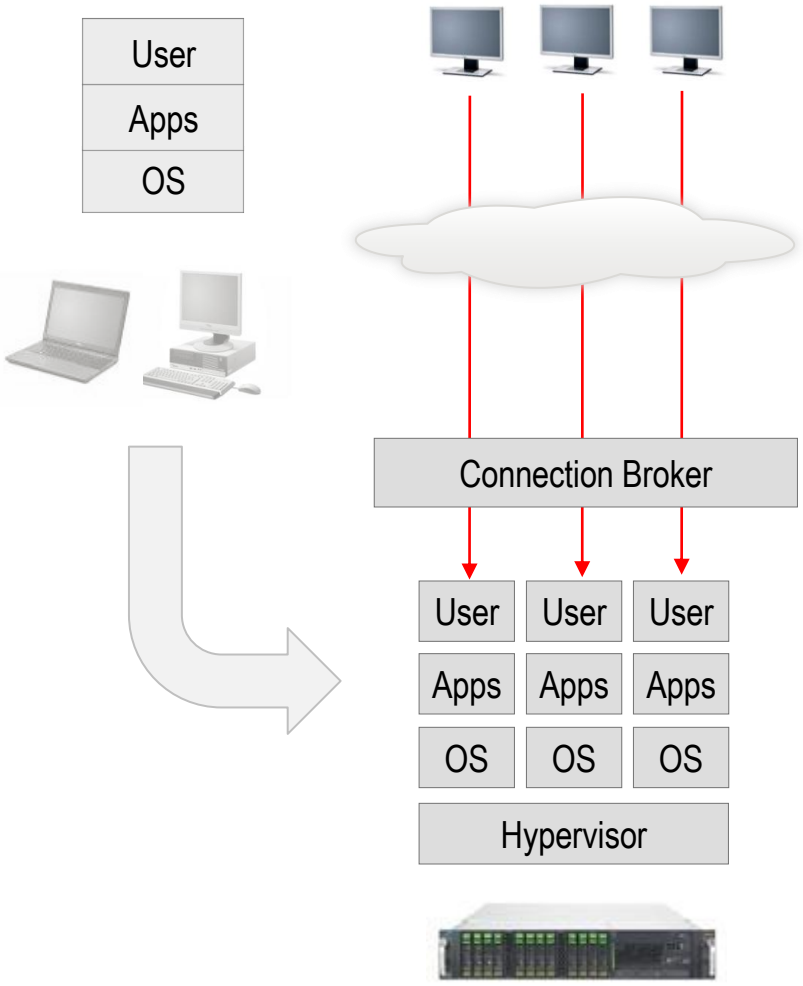
Moving desktops into the data center

- Virtual Desktop Infrastructure
  - Run individual virtual desktops in DC
- Combination of advantages
  - SBC without restrictions
  - Traditional PC
  - Server virtualization
- Benefits
  - Simplified management
  - High availability, productivity
  - Data security and compliance
  - High flexibility and speed
  - Access anywhere, device of choice
  - Reduced power consumption
  - Longer life spans
  - Reduced TCO



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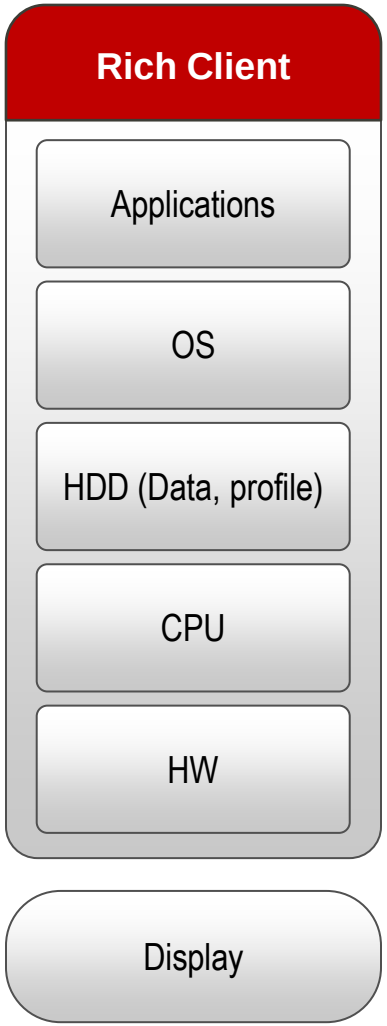
Evolution of client devices



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Evolution of client devices

FUJITSU

Rich Client

- Applications
- OS
- HDD (Data, profile)
- CPU
- HW

Display

Thin Client

- Embedded OS
- Flash (OS, settings)
- CPU
- HW

Display

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Zero Client

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Ultra-Thin Client

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Zero Client

- HW

Display

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Zero Client

- Access device for VDI
  - With integrated display
  - Stand-alone
- No processor
- No firmware
- No memory
- No local OS
- No licenses required
- No integrated storage (local data)
- No terminal-side processing
- No device management
- Power-over-Ethernet (option)

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Zero Client – Customer benefits

- Reduced device costs
  - No CPU, RAM, HDD, ODD, OS
  - Long lifecycle
- Reduced rollout costs
  - No local installation (“Plug & play”)
- No management efforts
  - No onsite service needed
- Reduced energy costs
- Improved security
  - No local data, no virus attack, no theft
- User satisfaction
  - Single cable solution (PoE)
  - Space-saving, quiet
  - Low failure rate (No moving parts)
  - Quick provisioning and replacement
  - No disturbance by updates
  - Easy roaming

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Zero Clients: Products

	Zero Client SZ500	Zero Client DZ19-2	Zero Client DZ22-2
Display size	-	19”	22”
Aspect ratio	-	5:4	16:10
USB 2.0 interfaces	4	4	4
Phone jack (in / out / combined)	1x 3.5 mm	2x 3.5 mm	2x 3.5 mm
Isochronous USB (VoIP, webcam support)	Yes	Yes	Yes
Dual display support	No	Yes	Yes
LED backlight	-	Yes	Yes
DVI out	Yes	Yes	Yes
Power-over-Ethernet			Yes

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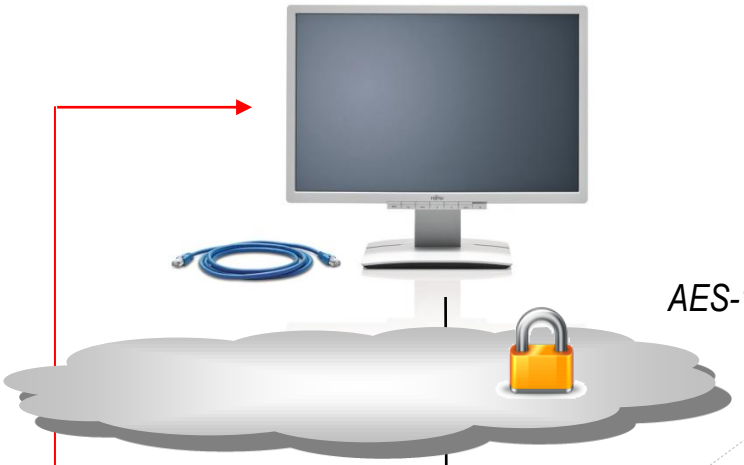
Zero Client Infrastructure



AES-128

Device Discovery, Inventory

Connection Broker

VM Management

Zero Client Controller

User	User	User
Apps	Apps	Apps
Agent	Agent	Agent
OS	OS	OS
Hypervisor		

PRIMERGY Server

ETERNUS Storage

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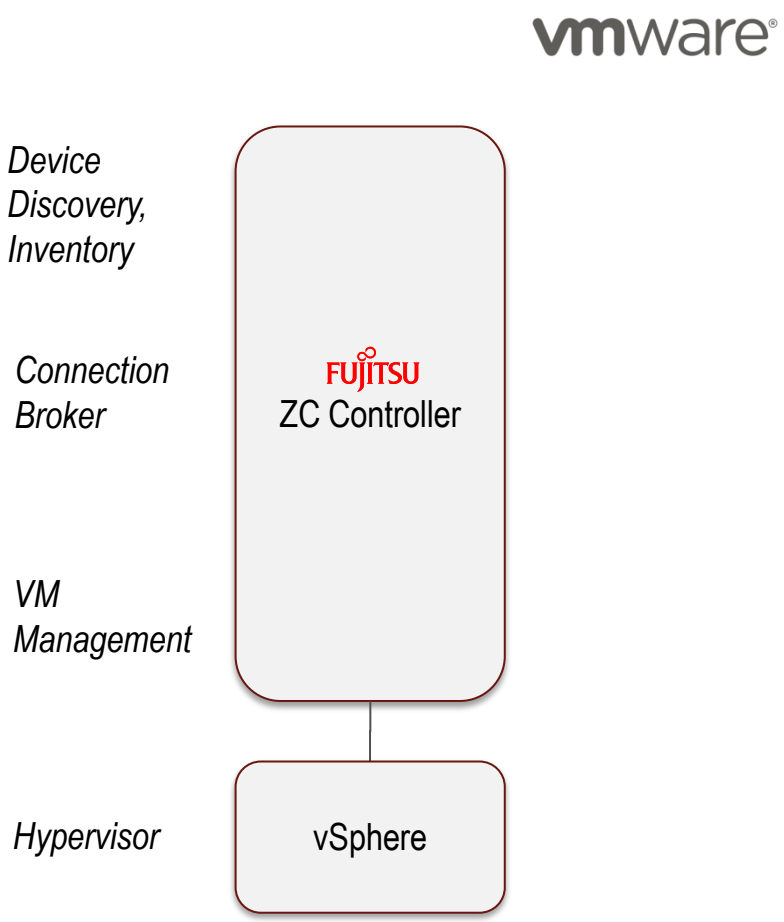
Zero Client – Seamless integration



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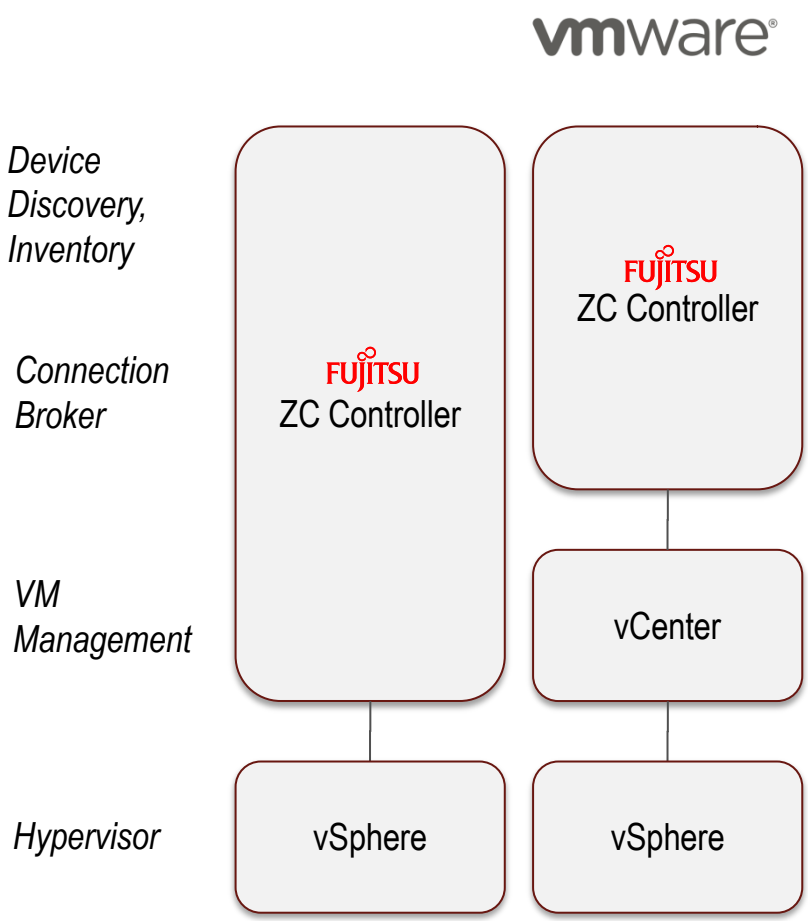

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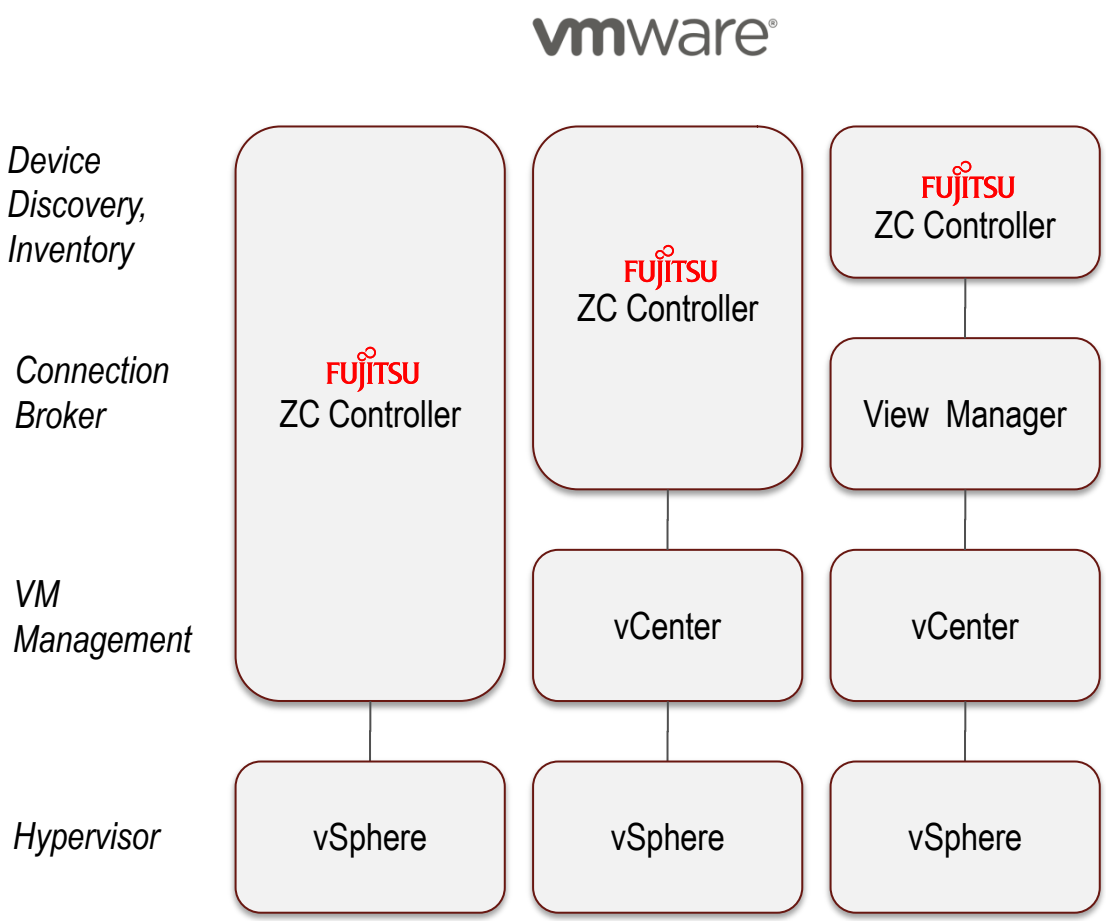

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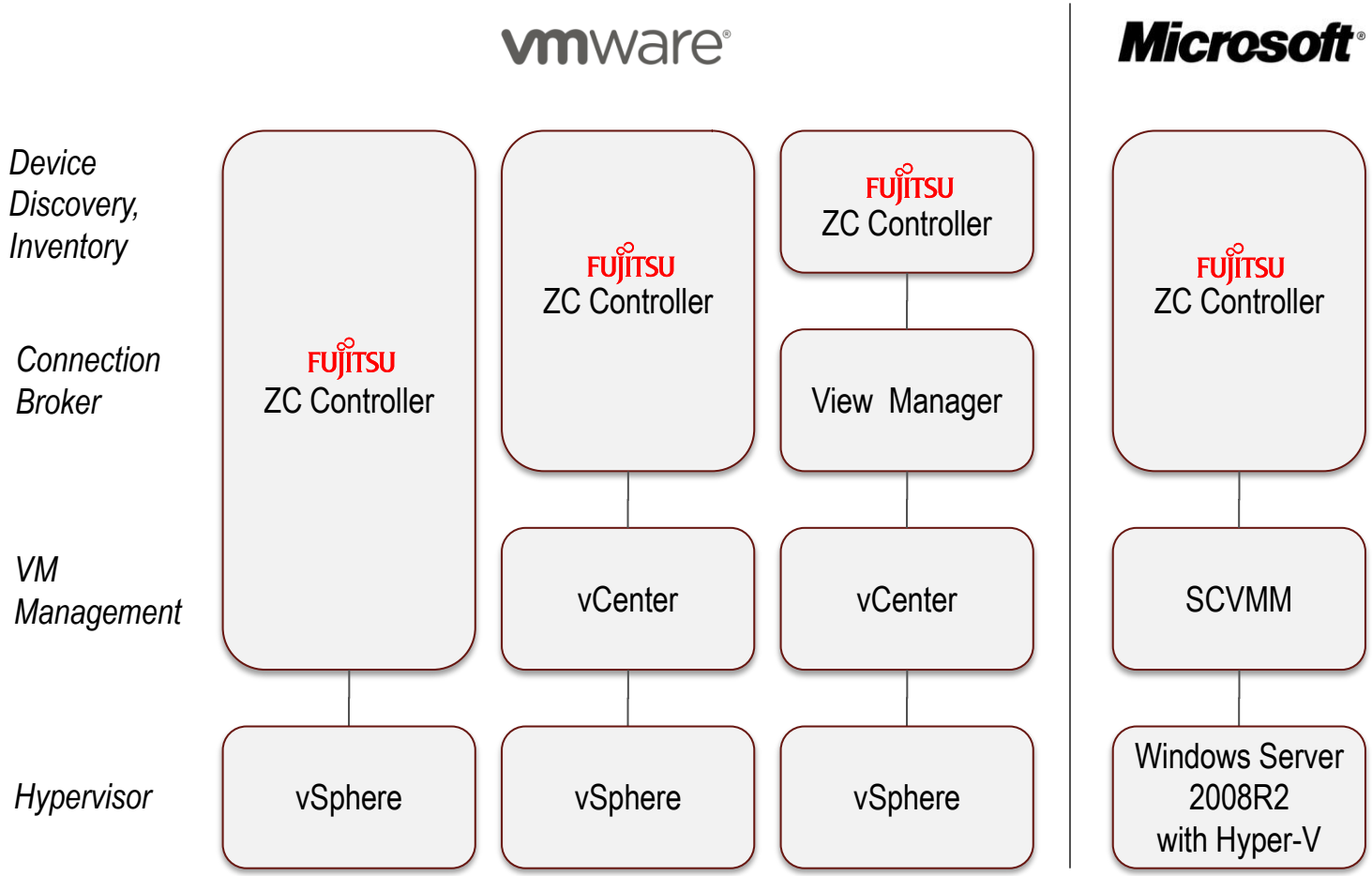

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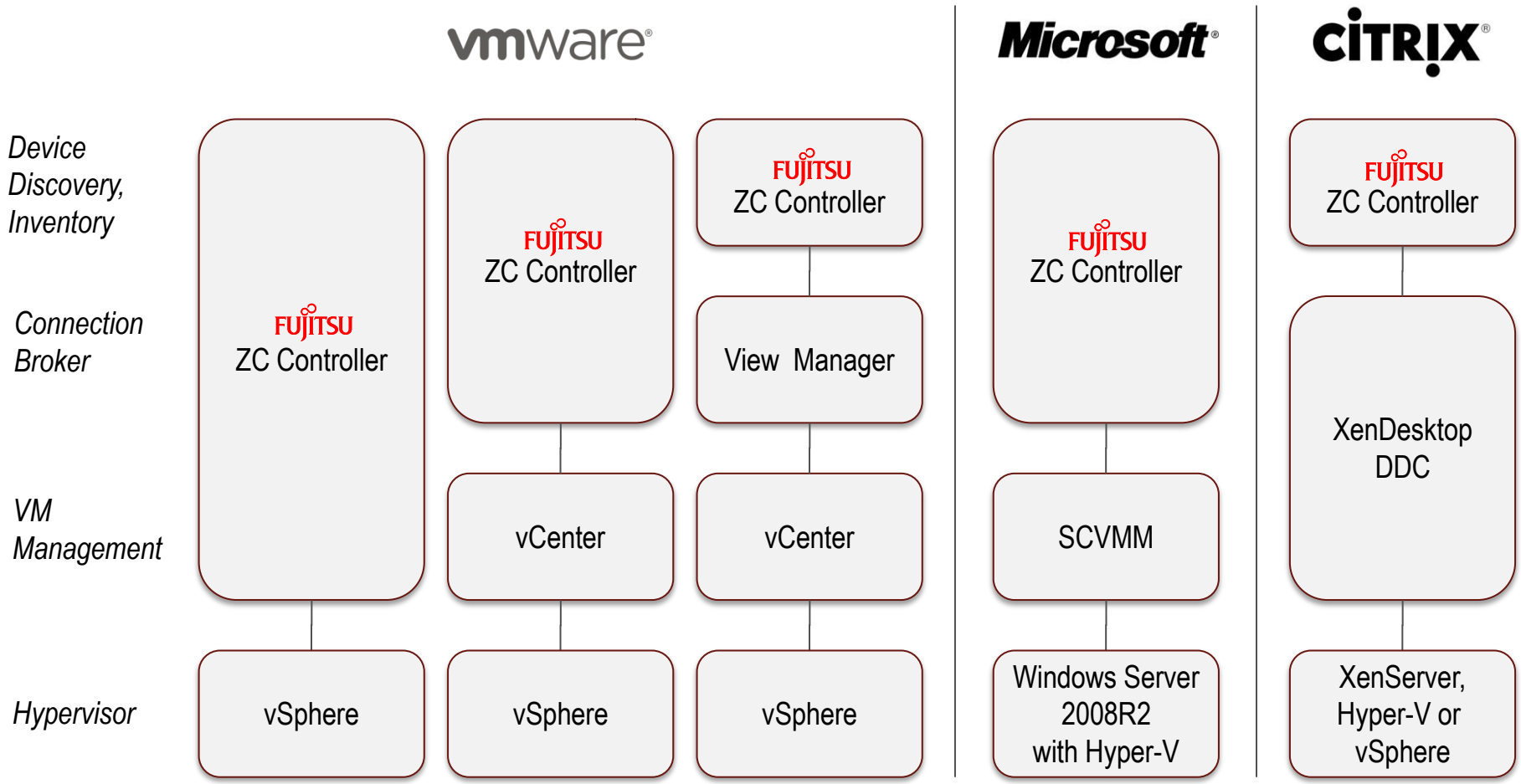

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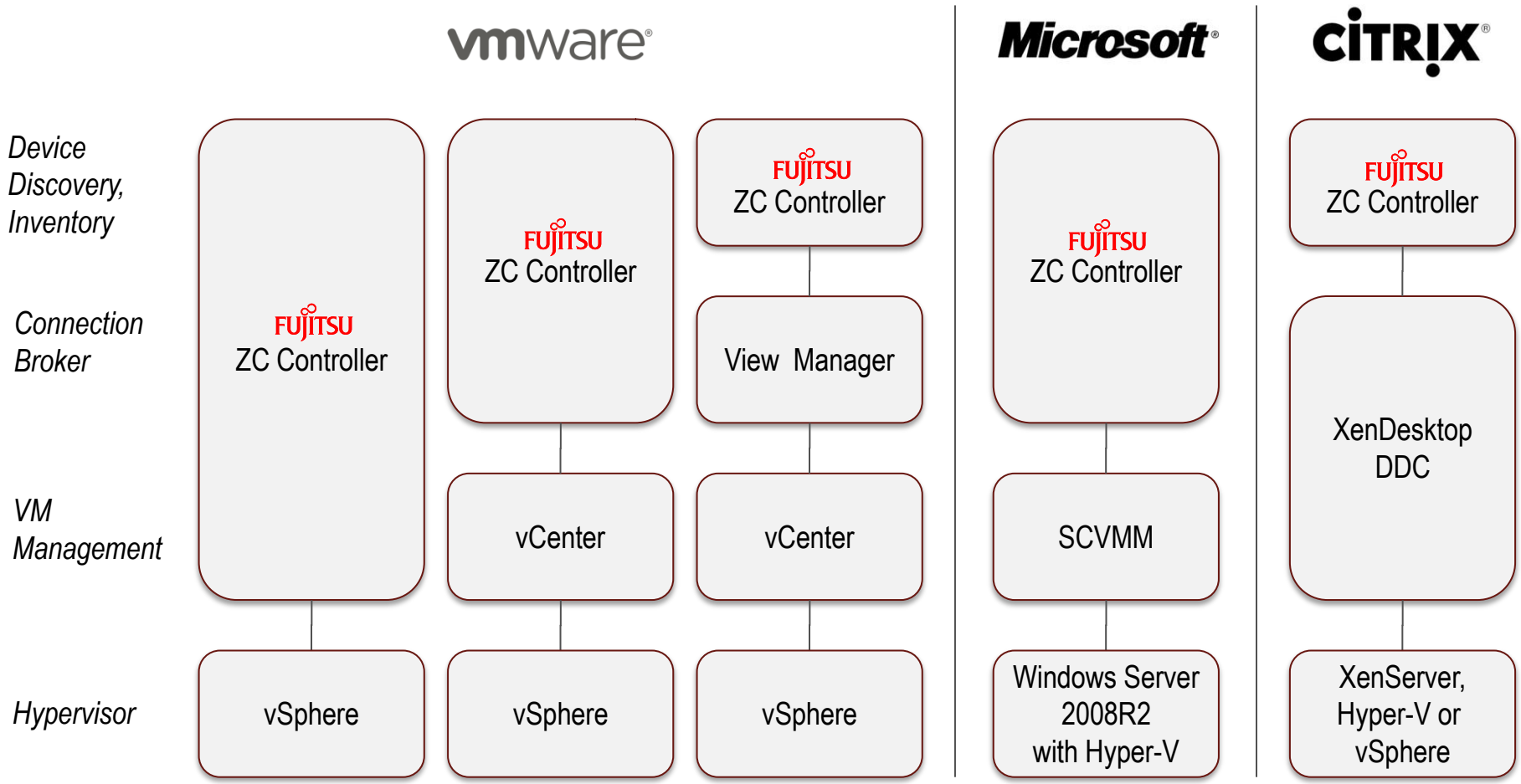

Support of all major market standards by one device

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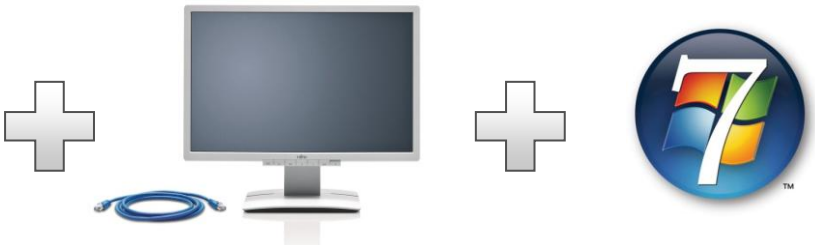
Zero Client Infrastructure Bundles

- What it is
  - Pre-configured infrastructure solution
  - Server pre-installed
  - ZC Controller
  - Network services (ADS, DHCP)
  - VM template (Windows 7 / XP)
  - Ready-to-run (VDI in a box)
- Various sizes and characteristics
  - Scalability, availability, automation
- Benefits
  - Optimized HW configuration
  - Easy setup and admin
  - Optimized cost per workplace



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Zero Client: The end of Thin Clients?

- Prerequisites for usage
  - VDI environment
  - Central rendering / decoding
  - USB-attached local peripherals
  - Central authentication
  - Max. 2 displays
  - DHCP controller (in LAN) with configuration option recommended

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- FUTRO Thin Clients
  - Attractive supplement to Zero Client
  - Flexible usage
  - Virtualization client, emulations, browser can run locally
  - Integrated smartcard reader
  - Backpack solution
  - Rollout and management extremely simple

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Portable Zero Client

- Concept
  - Portable VDI access device
  - Requires host PC (running Windows)
  - Full isolation from host PC
  - Executable runs in encrypted sandbox
  - Access to VM via RDP (LAN and WAN)
  - No footprint left on host device
- Secure connection from outside
  - Secure standard protocols
  - RDP via https / SSL gateway
  - VPN client (static / portable)
- Benefits
  - Secure access combined with easy use
- Typical use cases
  - Any device in any corporate location
  - Any device with access capability to corporate network
  - Cost-effective migration to VDI

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Summary

- Benefits of VDI
  - Improve service quality
  - Increase security and flexibility
  - Reduce costs
- Zero Client
  - New opportunity to reduce complexity
- Portable Zero Client
  - For mobile usage
  - Cost-effective option for VDI migration
- FUTRO Thin Clients
  - Attractive supplement to Zero Client
  - Flexible devices for diverse concepts
- One size does not fit all
  - Requirements and economy matter

FUJITSU - *The Outstanding Real Zero Client Computing Approach*

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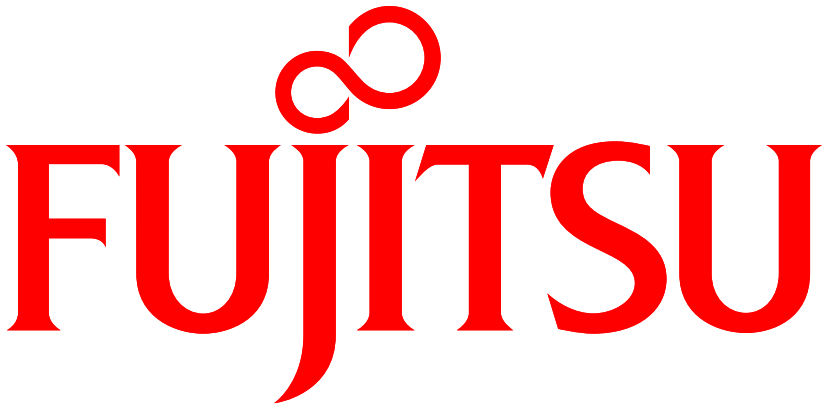

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Abstract

FUJITSU

- *For various reasons, more and more businesses are considering the introduction of virtual desktop infrastructures. This enables you to use any access device at the endpoint.*

  Fujitsu's outstanding Zero Client is not just a space and energy saving solution; it even relieves you absolutely from any device management activities.

  Thanks to the portable Zero Client with easy plug and play your virtual desktop is available at any location.

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