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Service Description
This service allows you to retain centralized command and control over imaging projects using your current image deployment solution. A secure Site-to-Site VPN tunnel allows you to extend your existing desktop imaging environment to a CDW Configuration Center. Your IT staff will have the ability to modify the task sequence for the image process as needed for each project. This gives your staff direct, dynamic control over the entire deployment process. Your new equipment will be completely integrated into your environment allowing for application differences between projects for different groups of users. With over 25 years of experience and a wide array of configuration service options CDW can allow you to ship your systems directly to the office they will be used fully configured and ready for out-of-box plug and play deployments.

Image Deployment Solutions
Popular solutions include but are not limited to:
- Microsoft System Center Configuration Manager (SCCM)
- Microsoft Deployment Toolkit (MDT)
- Symantec Altiris
- Casper Suite by JAMF Software
- LANDesk
- Red Hat Satellite

CDW has an experienced Microsoft professional services practice. If you do not currently utilize an image deployment solution, CDW Field Services and Partner Services can assist with the planning, design and implementation of a complete solution.

If you need assistance configuring a VPN appliance/firewall, CDW Remote Configuration Services can provide that service for devices at CDW or remotely.

Why would my organization use this service?
Increase your return on investment by shipping fully configured devices directly to the location of intended use. CDW saves you time and resources that would be needed to complete this task onsite or configure in one office and then pay additional shipping costs to deliver devices to another location. CDW’s Advanced Image Deployment Service offers many benefits:
- Leverage the expertise of our Imaging Team to assist in developing custom solutions
- VPN integration with your domain
- Reduce application installation and system deployment time
- Deploy your IT solutions on schedule
- Eliminate defective and DOA (Dead on arrival) devices and associated RMAs
- Free your IT staff to focus on core IT business objectives
Benefits of Advanced Imaging over static imaging

- Reduces license consumption by allowing software installation only to users who require it
- Allows you to have one universal image with several different software configurations
- Automatic scheduled software deployment
- Ability to join a domain after Operating System Deployment (OSD) using task sequences

How is this service priced?

Pricing is based on how automated the task sequence is and the technician’s time spent during the deployment process. Your CDW Account Manager will work a Configuration Services Specialist to create a quote based on the scope of imaging work and related configuration services. There is also a nominal annual fee to cover setup, testing and maintenance of a static public IP address for the VPN connection.

Common Pre-imaging Tasks & Services

Custom hardware installation/configuration (notebook, desktop, server)
BIOS & firmware updates/downgrades and configuration
RAID configuration

Common Post-imaging Tasks & Services

Run through Sysprep OOBE (out-of-box experience)
Software application installation (typically software that cannot be included in an image like antivirus)
Join device to customer’s domain
IP configuration
Site specific network integration
PC customization based on user or site variables
Hard drive encryption
Burn-in and diagnostics
Asset management tagging (customer, custom and CDW standard)
USB restore flash drive (operating system recovery)
Data capture of customer specified fields to a spreadsheet (LAN or WLAN MAC Address, hard drive serial #, etc.)
Special labeling and packaging
Custom inserts (welcome letter, kitting parts list, setup instructions, support contact information, etc.)
Kitting
Palletization

Additional services popular with imaging projects

Color Branding
Laser Etching
Server Rack Configuration and "Network in a box" (servers, switches, routers, firewalls, PDUs, KVMs, management stations, custom cabling and labeling)
Staging (Buy & Hold)

CDW Build Activities

CDW shall perform the following tasks as specified in the Customer Provisioning and Config Process Build Document:

1. Thoroughly inspect all equipment for physical damage or blemishes
2. Install all specified hardware options
3. Power on the system to check for hardware compatibility and POST errors
4. Defective components will be replaced from CDW’s in-stock inventory
5. Perform all specified pre-imaging tasks and services pre-approved by customer
6. Provision a base image on each device as stored on the customer provided deployment server
7. Perform all specified post-imaging tasks and services pre-approved by customer
8. Provide a quality assurance check on each device
9. Capture data as part of CDW’s standard value-added Asset Tracking Service (reports are available on customer’s CDW extranet) and contains: order #, order date, PO #, invoice #, invoice date, part description, serial # and asset tag # (if applicable). CDW offers Data Capture to a spreadsheet of customer specified fields as an optional service which can include additional fields such as LAN and/or WLAN MAC Address, hard drive serial #, etc.
10. Repackage the device for shipment using the original equipment manufacturer’s box unless specified differently

**Quality Assurance**

“Together we strive for perfection” is our stated goal for quality assurance. CDW has a team of engineers, technicians and team leaders trained to work on hosted server with VPN deployments. Customer specific deployment instructions are strictly followed to ensure your devices are image and configured your way. If any issues are encountered, CDW will contact you immediately to resolve the issue. Each device goes through a comprehensive quality control process that includes QC checks by the primary configuration technician and a second QC technician. CDW is ISO 9001:2008 certified and the names of the primary technician and QC technician are recorded for all orders. Team members are held accountable for adhering to our quality control procedures.

**CDW Responsibilities**

1. Provide secure housing for customer provided deployment server(s) and VPN appliance
2. Provide Internet connectivity to VPN appliance and deployment server hosted at CDW Configuration Center
3. Provide resources to assist in the testing and validation of infrastructure against customer provided build instructions
4. Notify customer of configuration issues the same day the issue is discovered
5. Obtain change authorization from customer prior to making any changes to image builds, server configuration or VPN

**Customer Responsibilities**

1. Provide CDW with a fully configured deployment server (hardware & software) and a fully configured Site-to-Site VPN appliance to be hosted at CDW
2. Establish the criteria for the various types of images in the Customer Provisioning and Config Process Build Document
3. Provide CDW limited access to customer environment required to execute image build sets
4. Manage and support deployment server and VPN appliance hardware, software and firmware

**Site-to-Site VPN Connection**

The following steps are used to establish the Site-to-Site VPN tunnel between customer and CDW sites:

1. Customer will provide CDW with a pre-configured Site-to-Site VPN appliance using a static public IP address assigned by CDW and leased annually.
2. Customer will provide CDW with a list of customer IP addresses and/or IP address range that will touch the peer address (CDW site static IP address specifically assigned to customer). For security purposes all other IP addresses will be denied access. Ports allowed through the VPN connection are limited to: IPsec, HTTPS and SSH. This connection is completely isolated and segmented from the CDW network and any other networks in our facility providing a secure connection to devices being imaged.
3. CDW will provide the Internet connection for the VPN appliance on the CDW end.
4. CDW Account Manager will provide customer with an RMA (return merchandise authorization) number and instructions on sending the pre-configured VPN appliance to CDW.
5. Customer will ship the pre-configured Site-to-Site VPN appliance to CDW Configuration Center.
6. CDW will contact the customer to test the VPN traffic and Imaging before processing any orders.
7. After VPN connection has been established and traffic validated, CDW will rack the VPN appliance and Deployment Server in the CDW Data Center. The data center room is climate controlled, has limited access through a badged entry electronic system and is monitored by a video camera surveillance system.

Customers have full remote control of their VPN appliance and remote deployment server 24x7 and assistance is available if needed.

Security of your equipment and data
CDW understands the importance of security and the security measures necessary to provide a hosted server and VPN appliance solution. CDW protects your organizations equipment as well as your data in transit and at rest. That security is comprised of various layers of protection:

Physical Security
All VPN appliances are stored in secured IDF (Intermediate Distribution Frame) cabinets. The hosted imaging server is stored in a locked rack enclosure. Electronic card access control restricts access to the Data Center to select individuals and is monitored by CDW’s video surveillance system. See additional physical security details under the "Security Monitoring Controls and Programs" section below.

VPN and Network Security
A CDW firewall sits between the Internet and customer VPN appliance at CDW. Each customer is provided a static public IP address. The customer provides CDW with a list of customer site IP addresses and/or an IP address range that will touch the peer address (CDW site static IP address specifically assigned to customer). For security purposes all other IP addresses are denied access through the CDW firewall. Ports allowed through the VPN connection are limited to: IPsec, HTTPS and SSH. This connection is completely isolated and segmented from the CDW corporate network and any other networks in our facility providing a secure connection to devices being imaged.

Login Access to Hosted Server and VPN appliance
In most cases, CDW personnel do not require login credentials to your hosted server or VPN appliance

CDW Configuration Center Personnel
CDW Configuration Center personnel understand the importance of security when working on projects at this this level. CDW has authorized a select team of highly trained technicians and engineers to work on orders involving Advanced Image Deployment Service. Each order is closely monitored and tracked through our comprehensive quality control process. The names of the technicians and team leaders processing builds are recorded for each order.

Security Monitoring Controls and Programs
Our security team monitors all facilities 24x7 from Security Control Centers in our two configuration centers/distribution centers located in Vernon Hills, IL and North Las Vegas, NV. A number of security controls, policies, and programs are in place:

- Security Officers – are deployed throughout our configuration centers/distribution centers and at entrance/exit doors to monitor activities.
- Camera Systems – over 1,000 cameras protect the offices and configuration centers/distribution centers. These cameras observe facilities, access control points, emergency doors, stairways, and parking lots. All of our cameras our monitored 24x7 from our security control center and backed up with digital video recorders. In the case of an incident we can retrieve video history for investigation.
- Search and Inspection Policy – everyone must open his or her bags, containers, packages, toolboxes, etc. for inspection when entering or leaving configuration center/distribution centers.
- Metal Detectors – metal detectors are installed and monitored at all exit doors from the configuration centers/distribution centers to protect against theft.
- Doors and Locks – keys to doors and locks are controlled and maintained by security management.
- Photo ID Electronic Access Control Program – every CDW coworker is issued a CDW photo ID card with his or her photo on it. IDs must be presented to security personnel upon entering the building. Coworkers without their CDW photo ID card need to sign in and be escorted into the building. Access control helps restrict unauthorized individuals from entering a property, building, room or door. Electronic access control is achieved through a
card reader system for a specific door, which when swiped or scanned, opens the door. In many cases, access control is augmented by our receptionists, security officers, locks and keys.

- Visitor Entry Control – all visitors must sign in at our electronic sign in stations located at all entry points. It is required that all visitors display a valid photo ID in order to be allowed into the building.
- Intrusion Detection Systems - Each facility has an intrusion detection system installed to protect coworkers and company assets. The system has various devices or sensors that detect security breaches and signal an alert or alarm to a panel that is monitored 24x7 by personnel located in our Security Control Center.
- Vehicle Patrol Program – CDW security vehicles patrol the configuration centers/distribution centers properties.

FAQs

1. How is a hardware failure on a server or VPN appliance handled?
   Answer: CDW will contact the customer to discuss the details and options to resolve the issue.

2. How many builds can be completed per hour or per day?
   Answer: This is contingent on a number of factors including image size, deployment server hardware, and the number and type of configuration tasks and services for the specific project.

3. Can the deployment server and VPN appliance at CDW be virtualized?
   Answer: Not at this time.

4. What are the hardware, operating system and software requirements for the deployment server to be hosted at CDW?
   Answer: See the software vendor’s site for your specific image deployment solution.

5. What are the hardware requirements for the Site-to-Site VPN appliance to be hosted at CDW?
   Answer: CDW has no specific requirements but recommends a VPN appliance by the same manufacturer as the VPN appliance at the other end of the Site-to-Site VPN connection.

Contacting CDW Configuration Services

Contact your CDW Account Manager to arrange a conference call with a Configuration Services Specialist to discuss a custom imaging solution to meet your deployment needs.

CDW Configuration Services on CDW.com