Drawn on purpose

- MDF to IDF runs over 90 m: fiber, not copper
- APs placed from a site survey, not a grid
- Conveyor (OT) on its own firewall port
- Cameras and APs on PoE from the nearest IDF

Cloud WMS
HTTPS 443
Fiber ISP
Circuit: DIA-90417733
Cable ISP
Circuit: BUS-6610284
1 Gbps
500 Mbps

Media Type Key
- Copper
- Single-Mode Fiber OS1/OS2
- DAC / Twinax
- Wireless Link
- WAN Circuit
- Logical

Distribution Center DC1

Conveyor (OT)
VLAN 60 · 10.40.60.0/24

OT only, fiber 150 m · 1 Gbps
SFP1
CVD-OT-SW01
Model: 8P DIN-rail, 2 SFP
SN: DN8S20194
Gi1-4
ETH1
Conveyor PLCs
Model: PLC, sorter controller

MDF, Shipping Office

WAN1
WAN2
X4
CVD-FW01
Model: NGFW 600
SN: FW6E0W22914
X1
10 Gbps

Management
VLAN 99 · 10.40.99.0/24
CVD-UPS01
Model: 3000VA UPS
SN: UP30R71520
NMC

Te1/1/1
Gi1/0/46
Te1/1/3
Te1/1/2
CVD-CORE01
Model: 48P PoE+, 4 SFP+
SN: SW48X8810275
OS2 fiber, 185 m · 10 Gbps
Gi1/0/1-14
Gi1/0/40
Gi1/0/15
Gi1/0/24
Gi1/0/41

Servers
VLAN 50 · 10.40.50.0/24
eth0
CVD-SRV01
Model: 1U Server
SN: SV1U73302
Role: WMS print and sort agent

Cameras
VLAN 40 · 10.40.40.0/24
LAN1
CVD-NVR01
Model: 64-channel NVR
SN: NV64R40813

PoE
CVD-AP01
Model: Wi-Fi 6 AP
SN: AP6W91001

IDF-1, North Aisles (185 m)

Te1/1/1
CVD-IDF1-SW01
Model: 48P PoE+, 4 SFP+
SN: SW48X8810311
Gi1/0/1-6
Gi1/0/13-30
PoE
CVD-AP02-07
Model: Wi-Fi 6, ext. antennas
PoE
Aisle Cameras
Model: 4 MP, PoE (802.3af)

OS2 fiber, 240 m · 10 Gbps

IDF-2, Dock Wall (240 m)

Te1/1/1
CVD-IDF2-SW01
Model: 48P PoE+, 4 SFP+
SN: SW48X8810342
Gi1/0/1-6
Gi1/0/9-24
Gi1/0/25-38
PoE
CVD-AP08-13
Model: Wi-Fi 6, ext. antennas
PoE
Dock Cameras
Model: 4 MP, PoE (802.3af)

CVD-Driver
CVD-Scan, roaming
CVD-Scan

Office
VLAN 10 · 10.40.10.0/24
NIC
Office PCs
Model: SFF PC
LAN
CVD-PRN01
Model: Laser MFP
SN: PR7X55120

Driver Wi-Fi
VLAN 90 · 172.16.90.0/24
Driver Devices

Handhelds and Vehicle Terminals
VLAN 20 · 10.40.20.0/23
Handheld Scanners
Model: Rugged handheld
Vehicle-Mount Terminals
Model: Rugged vehicle-mount

Label Printers
VLAN 30 · 10.40.30.0/24
LAN
Dock Label Printers
Model: Thermal label printer

DOCUMENT **Cedar Valley Distribution - DC1 Network** Cedar Valley Distribution · 4800 Industrial Parkway, Springfield	SHEET TITLE **Distribution Center**	VERSION 1.0	LAST CHANGED 2026-11-25	VERIFIED	SHEET 1 of 4
		DRAWN BY	LAST EDITOR	APPROVED	

Device Inventory 23 devices

Hostname	Type	Vendor / model	Serial	Mgmt IP	Area	Location	Page
Fiber ISP	ISP / Carrier						Distribution Center
Cable ISP	ISP / Carrier						Distribution Center
Cloud WMS	Cloud Provider						Distribution Center
CVD-FW01	Firewall	Example Networks NGFW 600	FW6E0W22914	10.40.99.1	MDF, Shipping Office	MDF, Rack 1, U40	Distribution Center
CVD-UPS01	UPS	Example Power 3000VA UPS	UP30R71520	10.40.99.5	Management	MDF, Rack 1, U1-2	Distribution Center
CVD-CORE01	Switch	Example Networks 48P PoE+, 4 SFP+	SW48X8810275	10.40.99.2	MDF, Shipping Office	MDF, Rack 1, U38	Distribution Center
CVD-SRV01	Server	Example Systems 1U Server	SV1U73302	10.40.50.10	Servers	MDF, Rack 1, U30	Distribution Center
CVD-NVR01	Storage / NAS	Example Security 64-channel NVR	NV64R40813	10.40.40.10	Cameras	MDF, Rack 1, U26	Distribution Center
CVD-IDF1-SW01	Switch	Example Networks 48P PoE+, 4 SFP+	SW48X8810311	10.40.99.3	IDF-1, North Aisles (185 m)	IDF-1, cabinet U10	Distribution Center
CVD-AP02-07	Wireless AP	Example Networks Wi-Fi 6, ext. antennas		10.40.99.12, 10.40.99.13, 10.40.99.14, 10.40.99.15, 10.40.99.16, 10.40.99.17	IDF-1, North Aisles (185 m)	Aisles 1-22, on rack uprights at 8 m	Distribution Center
Aisle Cameras	Camera / IoT	Example Security 4 MP, PoE (802.3af)			IDF-1, North Aisles (185 m)	Aisle ends and racking	Distribution Center
CVD-IDF2-SW01	Switch	Example Networks 48P PoE+, 4 SFP+	SW48X8810342	10.40.99.4	IDF-2, Dock Wall (240 m)	IDF-2, cabinet U16	Distribution Center
CVD-AP08-13	Wireless AP	Example Networks Wi-Fi 6, ext. antennas		10.40.99.18, 10.40.99.19, 10.40.99.20, 10.40.99.21, 10.40.99.22, 10.40.99.23	IDF-2, Dock Wall (240 m)	Dock doors and aisles 23-40, at 8 m	Distribution Center
Dock Cameras	Camera / IoT	Example Security 4 MP, PoE (802.3af)			IDF-2, Dock Wall (240 m)	Dock doors and yard	Distribution Center
CVD-OT-SW01	Switch	Example Industrial 8P DIN-rail, 2 SFP	DN8S20194	10.40.60.2	Conveyor (OT)	Conveyor control panel CP-1	Distribution Center
Conveyor PLCs	Generic Device	Example Automation PLC, sorter controller		10.40.60.11, 10.40.60.12, 10.40.60.13, 10.40.60.14	Conveyor (OT)	Control panels CP-1 to CP-4	Distribution Center
CVD-AP01	Wireless AP	Example Networks Wi-Fi 6 AP	AP6W91001	10.40.99.11	Distribution Center DC1	Shipping office ceiling	Distribution Center
Office PCs	Workstation	Example Computers SFF PC			Office		Distribution Center
CVD-PRN01	Printer	Example Printers Laser MFP	PR7X55120	10.40.10.30	Office	Shipping office	Distribution Center
Driver Devices	Mobile Device				Driver Wi-Fi		Distribution Center
Handheld Scanners	Mobile Device	Example Mobility Rugged handheld			Handhelds and Vehicle Terminals		Distribution Center
Vehicle-Mount Terminals	Laptop	Example Mobility Rugged vehicle-mount			Handhelds and Vehicle Terminals	Forklifts and reach trucks	Distribution Center
Dock Label Printers	Printer	Example Printers Thermal label printer		10.40.30.11, 10.40.30.12, 10.40.30.13, 10.40.30.14, 10.40.30.15, 10.40.30.16, 10.40.30.17, 10.40.30.18, 10.40.30.19, 10.40.30.20, 10.40.30.21, 10.40.30.22, 10.40.30.23, 10.40.30.24, 10.40.30.25, 10.40.30.26	Label Printers	One per dock door, in dust-rated enclosures	Distribution Center

Link / Cabling Schedule 22 links

Cable ID	End A	Interface	End B	Interface	Media	Speed	VLANs	Length	Test	Label / notes	Page
	Fiber ISP		CVD-FW01	WAN1	WAN Circuit	1 Gbps					Distribution Center
	Cable ISP		CVD-FW01	WAN2	WAN Circuit	500 Mbps					Distribution Center
	Fiber ISP		Cloud WMS		Logical					HTTPS 443	Distribution Center
CVD-C001	CVD-FW01	X1	CVD-CORE01	Te1/1/1	DAC / Twinax	10 Gbps	10,20,30,40,50,90,99	1 m	Pass		Distribution Center
CVD-F003	CVD-FW01	X4	CVD-OT-SW01	SFP1	Single-Mode Fiber OS1/OS2	1 Gbps	60	150 m	Pass, 0.8 dB	OT only, fiber 150 m	Distribution Center
CVD-C046	CVD-CORE01	Gi1/0/46	CVD-UPS01	NMC	Copper		99	1 m	Pass		Distribution Center
CVD-F001	CVD-CORE01	Te1/1/2	CVD-IDF1-SW01	Te1/1/1	Single-Mode Fiber OS1/OS2	10 Gbps	20,40,99	185 m	Pass, 0.9 dB	OS2 fiber, 185 m	Distribution Center
CVD-F002	CVD-CORE01	Te1/1/3	CVD-IDF2-SW01	Te1/1/1	Single-Mode Fiber OS1/OS2	10 Gbps	20,30,40,99	240 m	Pass, 1.1 dB	OS2 fiber, 240 m	Distribution Center
CVD-C040	CVD-CORE01	Gi1/0/40	CVD-SRV01	eth0	Copper		50	1 m	Pass		Distribution Center
CVD-C041	CVD-CORE01	Gi1/0/41	CVD-NVR01	LAN1	Copper		40	1 m	Pass		Distribution Center
CVD-D024	CVD-CORE01	Gi1/0/24	CVD-AP01	PoE	Copper		99 native, 10, 90	35 m	Pass		Distribution Center
CVD-D001-014	CVD-CORE01	Gi1/0/1-14	Office PCs	NIC	Copper		10		Pass		Distribution Center
CVD-D015	CVD-CORE01	Gi1/0/15	CVD-PRN01	LAN	Copper		10	20 m	Pass		Distribution Center
	CVD-AP01		Driver Devices		Wireless Link					CVD-Driver	Distribution Center
CVD-OT01-04	CVD-OT-SW01	Gi1-4	Conveyor PLCs	ETH1	Copper		60		Pass		Distribution Center
CVD-N001-006	CVD-IDF1-SW01	Gi1/0/1-6	CVD-AP02-07	PoE	Copper		99 native, 20	45-85 m	Pass		Distribution Center
CVD-N013-030	CVD-IDF1-SW01	Gi1/0/13-30	Aisle Cameras	PoE	Copper		40	up to 88 m	Pass		Distribution Center
CVD-S001-006	CVD-IDF2-SW01	Gi1/0/1-6	CVD-AP08-13	PoE	Copper		99 native, 20	30-80 m	Pass		Distribution Center
CVD-S025-038	CVD-IDF2-SW01	Gi1/0/25-38	Dock Cameras	PoE	Copper		40	up to 85 m	Pass		Distribution Center
CVD-S009-024	CVD-IDF2-SW01	Gi1/0/9-24	Dock Label Printers	LAN	Copper		30	10-60 m	Pass		Distribution Center
	CVD-AP02-07		Handheld Scanners		Wireless Link					CVD-Scan, roaming	Distribution Center
	CVD-AP02-07		Vehicle-Mount Terminals		Wireless Link					CVD-Scan	Distribution Center

VLAN / Subnet Table 8 VLANs

VLAN	Name	Subnet	Gateway	DHCP scope / helper	Devices	Page
10	Office	10.40.10.0/24	10.40.10.1	CVD-FW01, .100-.199	2	Distribution Center
20	Handhelds and Vehicle Terminals	10.40.20.0/23	10.40.20.1	CVD-FW01, 10.40.20.50-10.40.21.250	2	Distribution Center
30	Label Printers	10.40.30.0/24	10.40.30.1	Static	1	Distribution Center
40	Cameras	10.40.40.0/24	10.40.40.1	Static	1	Distribution Center
50	Servers	10.40.50.0/24	10.40.50.1	Static	1	Distribution Center
60	Conveyor (OT)	10.40.60.0/24	10.40.60.1	Static	2	Distribution Center
90	Driver Wi-Fi	172.16.90.0/24	172.16.90.1	CVD-FW01, client isolation	1	Distribution Center
99	Management	10.40.99.0/24	10.40.99.1	Static	1	Distribution Center