Enterprise System

ENTMAS or ENTMAS–LT Server

Recommended Specifications, Configuration 5D	
Chassis Type	Dell PowerEdge R730 (2U Rackmount)
CPU	Intel® Xeon® E5-2620 Quad Core 2.4GHz 15MB Cache
Operating System	Windows® Server 2012 R2 Standard Edition
RAM	16GB (2 x 8GB) 2133MHz
Onboard NICs	BROADCOM® 5720 QP 1GB Network Daughter Card
Optical Drive	DVD+/-RW SATA, Internal
Backplane	1 x 8 Backplane for 2.5inch Hard Drives
RAID Controller	PERC H730 Integrated RAID Controller, 1GB Cache
Operating System Drive(s)	(5) x 300GB 15K RPM SAS 2.5inch Hot-plug Hard Drive
Data Drive(s)	(5) x 300GB 15K RPM SAS 2.5inch Hot-plug Hard Drive
Hard-disk Backup Drive	RD1000, 500GB Native/1TB Comp Removable Hard Drive Cartridge
RISER	R730/xd PCIe Riser 2, Center. R730 PCIe Riser 3, Left. R730 PCIe Riser 1 filler Blank, Right
Video Graphics Card	Onboard Intel® HD Graphics 4500
Serial Port	(1) Serial Port
USB Ports	(4) USB 2.0 ports
Power	Dual, Hot-plug, Redundant Power Supply (1+1), 750W
Rail Kit	Sliding Ready Rails with Cable Management Arm
Warranty	3-year limited warranty

Regional Servers

SWS-ENTREG1 uses Configuration 5D
SWS-ENTREG-LT uses Configuration 5D
SWS-ENTREG-SM uses Configuration 3 or 4

Redundancy Options

NEC® Express 5800/R320e Fault Tolerant Server
NEC ExpressCluster® X R3.3 (LAN or WAN) Disaster Recovery Software

Standard Features

- First year Software Upgrade and Support Plan (SUSP) included
- Browser-based Lenel Console application dashboard
- Alarm monitoring
- Chromakey/Ghosting (ID only)
- MapDesigner
- System administration
- VideoViewer (video only, web)
- CCTV interface
- E-mail interface
- Event logging
- Anti-Passback
- Guard tour

Applications (Optional)

- Browser-based clients
- Area Access Manager
- OpenAccess Web Services API
- DataConduIT
- ID CredentialCenter
- VideoManager
- Visitor
- DataExchange
- FormsDesigner
- Support for OnGuard® modules (see separate datasheet)

Software (Optional)

- Biometrics/Smart Cards
- Fire & Intrusion
- Barco video wall integration
- Business card / Driver's license / Military ID / Passport scanning
- Elevator integration
- Intercom
- Intelligent video (live)
- Mustering
- OPC Server / Client
- VideoVerification
- Terminal services support
- Database segmentation
- Redundant Server Licensing

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Enterprise System

Enterprise Client

See chart below for client support.

Recommended Specifications	Configuration 6H	Configuration 7F High Performance
Chassis Type	Dell OptiPlex 3040 Small Form Factor	Dell Precision Tower 5810 XCTO
CPU	Intel® Core i3-6100 Processor (Dual Core, 3MB Cache, 4T, 3.7GHz, 65W)	Intel® Xeon® Processor E5-1620 v4 (4C, 3.5GHz, 3.8GHz Turbo, 2400MHz, 10MB Cache, 140W)
Operating System	Windows® 10 IoT EMB Ent 2015	Windows 10 IoT EMB Ent 2105
RAM	4GB (1 x 4GB) 2400 MHz DDR4 Memory	8GB (2 x 4GB) 2400MHz DDR4 RDIMM ECC
Onboard NICs	RJ45 Ethernet port	RJ45 Ethernet port
Wireless NIC	-	-
Modem	-	-
Optical Drive	8X Slimline DVD+/-RW	8X Slimline DVD+/-RW Drive
Operating System Drive(s)	500GB 2.5inch Serial ATA (7,200 Rpm) Hard Drive	512GB 2.5inch SATA Class 30 Solid State Drive
Video Graphics Card	AMD Radeon™ R5 430 (2GB DP/DVI-I)	AMD FirePro™ W7100 (4DP) (3 DP to SL-DVI adapters)
Serial Port	-	(1) Serial Port
Ports	(6) External USB 3.1 Gen 1 (2 front/2 rear) and (2) x 2.0 (2 rear), (1) RJ45, Display Port 1.21, HDMI 1.41, Universal Audio Jack1 Line-out	Front: (3) USB 2.0, (1) USB 3.0, (1) Microphone, (1) Headphone; Internal: (3) USB 2.0, (4) SATA 6GB/s, 2 SATA 6GB/s (for optical drive(s)); Rear: (3) USB 2.0, (3) USB 3.0, (2) PS2, (1) RJ45 (Intel Gigabit Ethernet)
Audio	Internal chassis speakers	Internal chassis speakers
Power	240W	685W
Mouse/Keyboard	Yes	Yes
Warranty	3-year limited warranty [DOES NOT INCLUDE MONITOR]	3-year limited warranty
Surge Suppressor	Yes	Yes

System Capacities

| Type of System | MASTER | | REGION | | |
	SWS-ENTMAS-LT	SWS-ENTMAS1	SWS-ENTREG-SM	SWS-ENTREG-LT	SWS-ENTREG1
Holidays / Time Zones	255 (per segment, each)	255 (per segment, each)	255 (per segment, each)	255 (per segment, each)	255 (per segment, each)
Alarm Inputs / Outputs	Unlimited*	Unlimited*	Unlimited*	Unlimited*	Unlimited*
Access Levels	32,000 per segment	32,000 per segment	32,000 per segment	32,000 per segment	32,000 per segment
Max Number of Regions Allowed	8	10	N/A	N/A	N/A
Reader Capacity Base	64	128	16	64	128
MAX Reader Capacity Per System / Upgrade Part	512 [PRO-64RUP]	Unlimited* [PRO-64RUP]	32 [REGSM-16RUP]	256 [64ADV-64RUP]	Unlimited* [PRO-64RUP]
MAX Client Workstations	10	Unlimited*	5	10	Unlimited*

Enterprise System

Type of System	SWS-ENTMAS-LT	SWS-ENTMAS1	SWS-ENTREG-SM	SWS-ENTREG-LT	SWS-ENTREG1
Types of Thick Clients Allowed [clients start with SWC]	ADV, IDADV & ADVI	ADV, IDADV & ADVI	32ES & IDES & 32ESI	ADV, IDADV & ADVI	ADV, IDADV & ADVI
MAX Readers allowed per entire Enterprise System	512	Unlimited*	N/A	N/A	N/A
Recommended # of Cardholders	50,000 (max)	Unlimited*	25,000 (max)	50,000 (max)	Unlimited*
MAX Number of ILS Locks Allowed Per System	Unlimited*	Unlimited*	128	1024	Unlimited*
SQL Server Standard Edition & Enterprise Edition support**	Yes	Yes	Yes	Yes	Yes
Oracle Support**	Yes [SWG-1295]	Yes [SWG-1295]	Yes [SWG-1293]	Yes [SWG-1293]	Yes [SWG-1293]
Redundant or Fault Tolerant Support and Part Number	SWS-ENTMAS-LT-REDU	SWS-ENTMAS1-REDU	SWS-ENTREG-SM-REDU	SWS-ENTREG-LT-REDU	SWS-ENTREG1-REDU
VM Ware Support**	Yes	Yes	Yes	Yes	Yes
Citrix Support [SWG-1370]	Yes	Yes	Yes	Yes	Yes
Database Segmentation Support [SWG-1240]	Standard	Standard	Standard	Standard	Standard
Base SUSP Part Number	SUSP-W-EN-LT	SUSP-W-ENT	SUSP-W-ENT-SM	SUSP-W-ENT-REG	SUSP-W-ENT-REG

MAX Readers allowed per entire Enterprise System - This is a System level MAX that includes the sum of all readers in the Enterprise. For example: Starting with an ENTMAS-LT master server with 2 ENTREG-LT regional servers = 192 readers (64 readers per server by default). Expand an additional 320 readers before having to upgrade to an ENTMAS1 with unlimited reader support.

*OnGuard® offers you scalability that is only limited by the physical limitations of your system size.

** See compatibility chart for full list of Databases, Operating Systems and which VMWare versions are supported by OnGuard
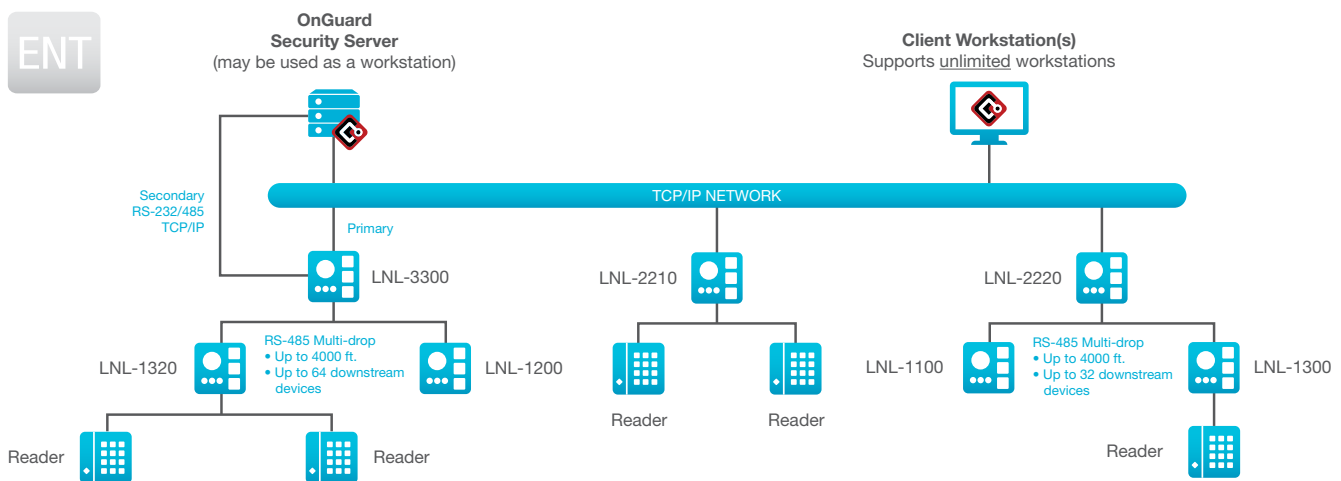
Enterprise System

Peripheral Hardware and Readers

Direct Card Printer Support
OnGuard® supports the following printer brands: Zebra®, MAGICARD®, NISCA®, and Fargo. Specific models support inline iCLASS®, MIFARE®, and magnetic stripe encoding.

Lenel USB Image Capture Kit
Included is a high resolution CCD (NTSC or PAL) camera with software zoom capabilities, a fully-synchronized cool white built-in flash, a tripod system with a powered base, TWAIN-compliant software, a USB communication cable and a universal power cable. The camera is USB 2.0-compliant, producing high resolution live video for image capture using the OnGuard ID CredentialCenter application (any badging client or mobile badging station). The built-in flash illuminates both video fields evenly.

Enclosures and Power Supplies

UL-Listed Enclosures and Power Supplies

LNL-CTX – Enclosure with lock and tamper switch, supports up to two (2) field hardware devices (12" x 16" x 4.5")

LNL-CTX-6 - Enclosure with lock and tamper switch, supports up to six (6) field hardware devices (18" x 24" x 4.5")

LNL-AL400ULX – 12VDC 4A output, 120VAC (1.6 amps) input, continuous supply current with enclosure (18" x 24" x 4.5"), lock/tamper switch, UPS capable (battery optional)

LNL-AL600ULX-4CB6 - 12VDC 6A output, 120VAC (1.6 amps) input, continuous supply current with enclosure (12" x 16" x 4.5"), power distribution module, lock and tamper switch, UPS capable (battery optional)

Upgrade Part Number

Server Upgrade	Part #	Path
	UPS-SMREG	ENT Regional SM server to ENT Regional Lite Server
	UPS-LTREG1	ENT Regional Lite server to ENT Regional Server
	UPS-LTMAS1	ENT Master Lite Server to ENT Master Server