



# Unifia Environment UE

## IT Specifications

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## UE SERVER MINIMUM SPECIFICATIONS

- **Operating System:** Microsoft Windows Server® 2012 R2 64-bit
- **Processor:** 2 Core (4 recommended) x64 compatible, 2.4 GHz
- **Memory:** 16 GB
- **Disk Space:** 100 GB recommended (available for UE install and data storage)
- **Ethernet:** 100 MB Ethernet Adapter (Gigabit 1000 MB preferred)
- **Optical Drive:** DVD or USB drive (required for install)
- **Video:** 1024 x 768 or higher
- **Software:** Microsoft .NET Framework 4.62 (or higher) (Microsoft .NET Framework 4.51 is part of Windows 2012 R2: must be patched to at least 4.62)

**Note:** This server must be dedicated to the UE software. This can be a virtual server using VMWare or Hyper-V virtualization as long as the virtual system meets specifications.

## ADDITIONAL SERVER SOFTWARE

### MS SQL Server 2014 Standard SP2 (optionally installed and licensed by customer)

- Microsoft SQL Server® 2014 Standard with Service Pack 2

**Note:** Do not install SQL Management Studio. Microsoft .NET Framework 3.5x is required by SQL Server Standard and must be installed before the SQL Server Standard installation. After the installation is complete, then .NET Framework can be upgraded to version 4.6.2 as required by UE. The UE prerequisite installer will install SQL Management Studio.

The following features must be installed:

- Database Engine Services
- Client Tools Connectivity
- Client Tools SDK
- SQL Client Connectivity SDK

Database instance, must be named *UESQLSRV*. In addition, mixed mode security is needed.

### UE Server Components (installed by Installer Package)

- Microsoft SQL Server® 2014 Express with Service Pack 2 (if SQL Standard not previously installed)
- Microsoft SQL Server Management Studio 17
- QlikView® Server 64-bit, Ver. 12.10 SR8
- Internet Information Services (IIS) 8.5

## UE CLIENT SPECIFICATIONS

### UE Client Components

- Google Chrome™ version 66 or above (preferred) or Microsoft Internet Explorer® 11 (Microsoft Edge® is not supported at this time)
- Recommended Video:
  - Video: 720p (1280 x 720) or higher for Administration
  - Video: 1080p (1920 x 1080) or higher for Daily Dashboard

## UE SCANNER SPECIFICATIONS

- **Scanner Model:** IT-HW-00082
- **Interface:** WiFi (2.4 GHz band only)
- **Battery:** Lithium-ion (3.7V DC, 1130 mAh)
- **Ingress Protection Rating:** IP65
- **Scanning Capability:** NFC and Barcode
- **Display:** 1" OLED
- **Weight:** 3.0 oz. (85 g)
- **Size:** 43 mm x 94 mm x 24 mm (1.69" x 3.70" x 0.94")
- **Server Limit:** 150 scanners per server

### UE Scanner Cradle Specifications (one required per scanner, desktop or wall-mount):

- **Desktop:** IT-HW-00083 1-Slot Charging Cradle
- **Power Requirements:** Standard 110 v, includes 5 ft cable
- **Wall-Mount:** IT-HW-00093 custom mount with up to 9" extension and charging cradle
- **Power Requirements:** Standard 110 v, includes 8 ft cable

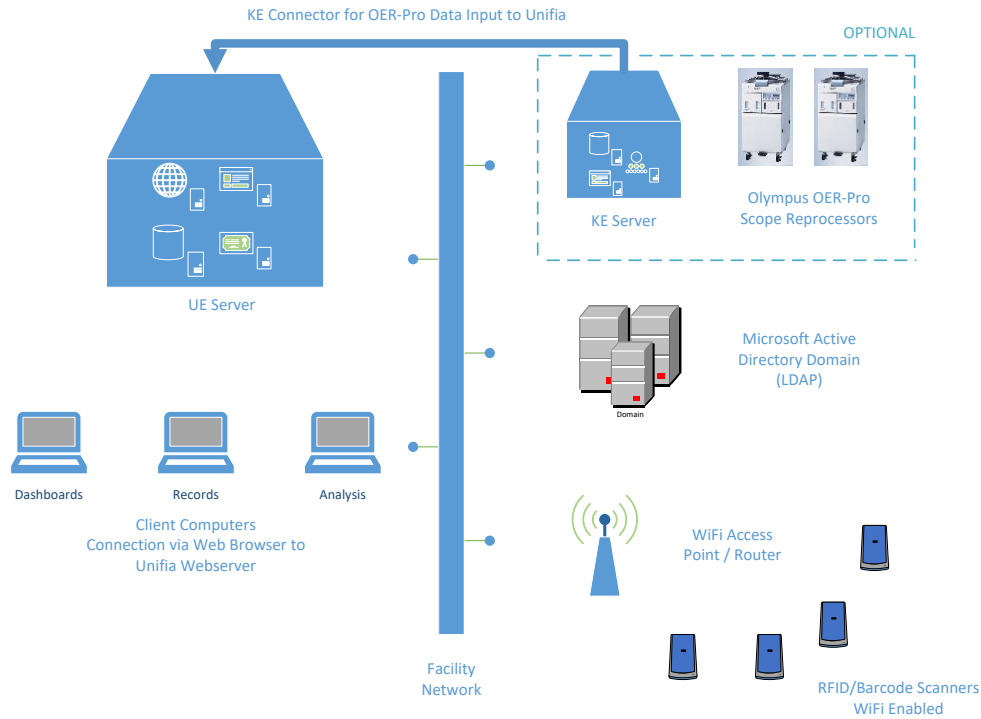
## CUSTOMER RESPONSIBILITIES

### The following items are to be performed based on facility policy and schedule:

- Installation of Operating System patches
- Optional: Microsoft SQL Server® 2014 Standard with Service Pack 2 installed and licensed according to Olympus specifications (on previous page)
- Installation of Anti-Virus Software and Anti-Malware Software
- Backup of SQL Server 2014 database  
(located in %programfiles%\Microsoft SQL Server\MSSQL 12.UESQLSVR\MSSQL\DATA\Unifia\_Primary.mdf/ldf)
- Network connections, wired and wireless

# CONNECTIVITY/SECURITY

## System connectivity concept



### Port Requirements

The following is a breakdown of known ports the UE application requires.

PORT	DESCRIPTION
TCP 443, 9722, 80 (backup port for gatekeeper)	Remote Support Services R7 (SecureLink®) <b>Note:</b> These ports are <u>external</u> facing.
TCP 9754, 9755, 4780	Application Communication and Configuration Software <b>Note:</b> These ports are <u>internal</u> facing. (9754 is only required if Olympus Knowledge Exchange (KE) System is also purchased)

### Certificate Requirements

The UE installer configures the application to use self-signed certificates. These are generated from IIS, as SHA-1 SSL 2048 bit certificates by default. Customer-provided certificates can be used and are considered a post-install activity. Customer-provided certificates are optional, and are to be configured as SHA-256 RSA 2048 bit certificates.

### Olympus Knowledge Exchange (KE) System Integration

For Olympus KE System customers, additional software called *KE Connector* will be installed on the Knowledge Exchange (KE) server. This will allow OER-Pro information to be input into UE. This feature is optional. One KE Connector is required per UE server.

## CONNECTIVITY/SECURITY (CONTINUED)

### Networking and Data Requirements

- Wired Ethernet required for local server.
- Access to Internet required for remote support services (see *Port Requirements* above).
- Domain Name System (DNS) server must be in the environment for referencing the UE server by fully qualified domain name (FQDN).
- Customer-provided WiFi network:
  - WiFi Compliance for UE scanners:
    - 2.4 GHz IEEE 802.11b/g/n
    - 5 GHz not supported
  - WiFi SSID password has a maximum character length of 128.
- Configure UE server and clients to use a network time source for sync date and time sync.
- All servers and clients must be in the same time zone.
- Customer-provided wired network:
  - Wired network requires a connection to the WiFi network used for the scanners.
  - UE requires a minimum 20 Mbps network speed for connection between server and clients.
- UE is limited to 15 Analysis users per UE server.

### Security Features

- Secure WiFi network support (see *UE Scanner Specifications* section):
  - Only WPA/WPA-2 Personal mode with SSID and password is required.
  - Cannot connect to WiFi networks that require webpage log on or SSID, username, and password.
  - WiFi SSID password has a maximum character length of 128.
- LDAP/Domain integration:
  - Operating system and application support
- Key data column level encryption in database
- HTTPS for all connections (except online help)
- Non-generic port usage (e.g., not TCP port 80 or 8080)
- The following special characters cannot be used for the SSID or SSID password: & \* ( )

## SECURITY REQUIREMENTS

- Server software installation requires administrative privileges and the use of a local administrator account, named *administrator*.
  - Microsoft Windows 2012 Active Directory™ is preferred. Additional installation steps may be required if different.
  - UE can be installed into a Domain or Workgroup environment. The software uses windows user administration for either environment. When in a domain, it uses LDAP authentication (this is preferred).
  - When joining to a facility domain, place in Domain Organizational Unit (OU) where **no** domain policies are applied during installation phase.
- Note:** If you need to change the OU to an OU that has policies after the installation, consult with your field representative, as this might affect application functionality.
- During the installation phase, do not change the operating system (OS) in any way from the default install, as that may impact the application install.
  - The application requires the creation of accounts with 'logon as service' rights. In addition, the installer creates accounts with the following password policy: 10-characters (including at least one capital letter, one number, and one special character). The main policy should not contradict these requirements. If your environment has different password requirements, ensure that the OU the UE server is placed in aligns with this requirement.
  - Create a user account for troubleshooting and share the user name and password with Olympus.
  - UE assumes that the software, and all devices used by the software, will be in a single domain and a single OU.
  - It is recommended that User Access Control be turned off during installation of the application.

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3500 Corporate Parkway, P. O. Box 610,  
Center Valley, PA 18034  
Fax: (484) 896-7128 Telephone: (484) 896-5000