ADVANTAGE Cloud℠

Compulink Advantage Cloud℠ Software Installation, Configuration, and Performance Guide for Windows®

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ADVANTAGE CLOUD^{sm}

Compulink Business Systems, Inc. has partnered with leading industry hosting solutions to simplify deployment and reduce customer acquisition costs with a SaaS (Software as a Service) solution. Advantage Cloud^{sm} will allow Advantage software to be deployed as a hosted service and accessed over the Internet globally.

BENEFITS OF ADVANTAGE CLOUD^{sm}

- Advantage Cloud^{sm} is hosted at our state-of-the-art data center to simplify client access and maximize security.
- Advantage clients have the ability to access patient data anytime and anywhere with only an Internet connection
- Lower IT and administrative costs
- Hardware requirements are minimum
- No need for complex data backup plans and maintenance

PRE-REQUISITES

The following information is the minimum hardware and software requirements for a remote workstation to access Advantage software over the public Internet lines.

A Certified Network Professional, if not provided by Compulink, must be readily available prior to and during your Compulink training if network problems are present or detected. Installation and operability must include the following:

- All workstations must function without errors at acceptable performance levels when minimum requirements are met
- Recommended and minimum network hardware resources are available (e.g., workstations, network appliances including routers and switches, scanners, printers, etc.)
- Operational Internet Protocol (TCP/IP) configured network between client's office and Compulink's data center
- All client workstations connecting to the remote application must have the latest Windows service packs, updates and patches from Microsoft including Remote Desktop Client version 6.0 or newer
- Broadband Internet access (50-100 kpbs per user)

HARDWARE MINIMUM REQUIREMENTS

THE BELOW CHART IS ONLY MINIMUM SYSTEM REQUIREMENTS, Enhancements to these requirements may boost performance depending on the number of open applications and network bandwidth.

	Minimum	Recommended
Processor	Intel Pentium 4 or higher (processor speed will vary based on availability and office needs)	Intel Dual Core or higher (processor speed will vary based on availability and office needs)
Storage	No files are stored locally	No files are stored locally
Memory	512 MB of SDRAM (RAM requirements may vary based on the number of tasks and applications)	1000 MB of SDRAM (RAM requirements may vary based on the operating system, number of tasks and applications)
Operating System	Windows XP, Windows Vista or Windows 7	Windows XP, Windows Vista or Windows 7 (**note:** Vista and 7 may require additional RAM)
Display	SXGA Adapter 1280 x 1024 or higher with minimum 16 bit Colors	SXGA Adapter 1280 x 1024 or higher with minimum 16 bit Colors
Network	Broadband speed of 64-100 kbps per user	Broadband speed of 64-100 kbps per user
Note: Compulink recommends Windows 7 Professional but most recent versions of Windows operating systems such as Windows XP service pack 3 are compatible with Advantage Cloud^{sm}.		

VIRTUAL PRIVATE NETWORK REQUIREMENTS (SSL-VPN) PRE-REQUISITES

Windows clients must meet the following pre-requisites in order to install SSL-VPN:

SUPPORTED OPERATING SYSTEMS

• Microsoft XP, SP2 and newer
• Microsoft Vista
• Microsoft 7

SUPPORTED INTERNET BROWSERS AND VERSIONS
• Microsoft Internet Explorer 6.0 and newer
• Mozilla 1.7.1 and newer
• Firefox 2.0 and newer
• Google Chrome

INTERNET BROWSER'S SECURITY SETTINGS

Compulink's SSL-VPN is fully compatible with Microsoft Windows 7, Vista and supports the same functionality as with other Windows operating systems. It may be necessary to restart your computer when installing Sonicwall NetExtender client (SSL VPN) on Windows 7 and Vista.

1. To initially install the SSL VPN client, the user must be logged in to the PC with administrative privileges.
2. Downloading and running scripted ActiveX files must be enabled on Internet Explorer
3. Internet Explorer's Protected Mode may need to be disabled temporarily to install the SSL VPN

INSTALLATION OF ADVANTAGE SOFTWARE

1. Pre-installation paperwork will be provided by your Sales representative. Once the paperwork is completed and received, a Launch Call will be requested.
2. A launch call is scheduled with the implementation coordinator. Depending on the type of account established with Compulink, the implementation coordinator will be joined by other key personnel from various departments to discuss client implementation and welcome process.
3. IT department will contact client to discuss the installation and user authentication process
4. Software is installed, configured and transferred to our data center by implementation coordinator and Compulink's IT staff
5. Client receives generic login information for Advantage software to examine and prepare to work with their trainer
6. Training is scheduled

ADVANTAGE CLOUD^{sm} LICENSING MODEL

Due to the limitations of the remote connectivity and Cloud licensing, all remote users are required to utilize a unique license for every active connection. Note: A single user can install and access the software from multiple locations providing only one connection is active at any given time for that user.

WIRELESS LOCAL AREA NETWORKS (WLAN)

Compulink Advantage software users may utilize wireless technology to access Advantage Cloud^{sm}.

RELIABILITY

Like any radio frequency transmission, wireless networking signals are subject to a wide variety of interference and may sever connection between Advantage users and Advantage data center. If a user is disconnected due to WiFi availability, no data is lost because no data is being transmitted to the client's network from our data center.   Just a simple reconnection of the SSL VPN and the server is required to start where the user left off.

SPEED

The speed of a wireless network depends on several factors. Wireless standards, typically advertised at 11-108 Mbps, will transmit data at a fraction of a wired network (typically at 100 Mbps and up to several Gigabits per second). There are also performance issues caused by TCP and its built-in congestion avoidance. Implementing a Wireless Local Area Network (WLAN) should be limited ONLY to environments where wired connectivity is not an option.

SECURITY

The "open air" nature of wireless radio signals poses challenges for securing wireless computer networks. Wireless radio signals broadcast through the air and are naturally easier to intercept. Signals from most wireless LANs pass through exterior walls and into nearby streets or parking lots. Strong encryption and wireless security is absolutely necessary to protect patient data. Advantage Cloud^{sm} is hosted at our secure and HIPAA compliant data center and the connections used are encrypted. Please consult your network administrator if you do not utilize a secure and encrypted wireless connection. Hackers can get access to your sensitive information such as your credentials for Compulink Cloud and put your patient data at risk.

PRINTERS

Compulink Advantage software utilizes printers that are properly setup in the Windows environment. Once printer drivers have been installed and the printer has been configured, a Test Page should be printed from within the printer properties for that printer to confirm the printer's functionality prior to printing from Advantage software.

Some all-in-one (multi-function) printers/scanners are not compatible with Advantage software and remote connectivity. Compulink software has been tested successfully with the HP LaserJet and Dell Laser monochrome business printer lines. It is recommended that basic printer driver language, such as PCL5 drivers are used. Postscript and PCL6 drivers may cause printing issues with Advantage software.

Note: Not all printers are compatible with Terminal Services and RDP protocol. Please consult the printer manufacturer's documentation or your network administrator.

For generating labels, Advantage software has been tested and proven compatible with **Dymo LabelWriter 450 Turbo**.

TWAIN DEVICES

Compulink software utilizes TWAIN compliant peripherals to capture and transfer images/data to the various sections of the patient's demographic and EMR screen. In most cases, the peripherals with "Data Source" file or ".ds" extension located in "C:\Windows\TWAIN_32" folder should allow Advantage software to acquire the image/data from the TWAIN source.

Due to the wide variety of peripherals and their associated drivers available on the market, it is impossible to guarantee which devices/peripherals will successfully work with Advantage software. Compulink recommends the use of peripherals that are tested and researched by our IT lab.

Compulink recommends the use of peripherals that are tested and researched by our IT lab. Visit Recommended Peripherals for details.

SECURITY INFORMATION

Secure Sockets Layer (SSL) Virtual Private Network (VPN) - Secure Sockets Layer (SSL) encryption technology and Virtual Private Network (VPN) are used to protect private information and PHI (Personal Health Information) while it's in transit via the Internet.

A virtual private network (VPN) provides a secure communication for patient data and other information transmitted between two endpoints. The traffic between the end user and Compulink's data center is encrypted with the SSL protocol.

SECURITY AND ANTI-VIRUS SOLUTION

Proactive Protection against Viruses and Malware – Compulink has deployed Symantec Endpoint Protection© for defense against threats at its data centers. Symantec Endpoint Protection© can provide advanced threat prevention from unknown targets. It includes proactive technologies that automatically analyze application behaviors and network communications to detect, block and report suspicious activities. Deploying Symantec Endpoint Security provides real-time security protection for Advantage users.

NOTE: Compulink Business Systems, Inc. utilizes Symantec Endpoint Protection and Windows Server Update Services (WSUS) to certify all communication between Compulink and Advantage clients are free of malware. At Compulink, all network nodes are protected real-time, and scanned daily using Symantec TruScan™ Technology. A comprehensive scan is also scheduled and performed on a weekly basis on all network nodes. Symantec Endpoint and WSUS are updated daily for any available and most current threat protection. These updates are delivered to all servers.

OPERATING SYSTEM UPDATES AND PATCHES

In addition to malware protection software, Windows Updates are the easiest, most reliable and cost efficient way to help protect your computer from the latest Internet threats.

Installing the most current Windows Service Packs, Critical Updates and Patches is highly recommended.

To check for available or missing Windows Updates, visit the following Microsoft Web site: http://windowsupdate.microsoft.com.

All current and supported Microsoft operating systems have the ability to check for missing updates by viewing, downloading and installing the available Windows Service Packs, Critical Updates and Patches free of charge. (Broadband Internet service may be required.)

DATA INFORMATION AND PROTECTION

BACKUP

Managed Backup – State of the art technologies in Network Attached Storage for backing up files has been implemented at out data centers. Data is backed up nightly and transferred weekly to a remote and secure location for redundancy and disaster recovery.

HIPAA Compliant – Our deployed encryption, security and storage management ensures your PHI (Protected Health Information) is protected from disaster and unauthorized access.

NOTE: Advantage Cloud application servers utilize latest Sybase SQL Database Management technology for complete data integrity and protection.

BACKUP AND MAINTENANCE SCHEDULE - Due to Network maintenance and administration, the Advantage Cloud^{sm} connection will not be available from 2:00 AM to 4:00 AM daily and Sunday, 9:00 PM to 12:00 AM Pacific Time.

IMPORTANT NOTES

Inventory Management – Advantage Cloud^{sm} supports patient bar-coding and inventory management. Just plug in your compatible USB barcode scanner and data will be transmitted to Advantage software using keyboard interface.

PROTECTING YOUR DATA BY USING A SCREEN SAVER PASSWORD

Advantage Cloud servers are set to start a password protected screen saver if the connection is left idle for a period of 30 minutes. Password protected screen savers keep the Protected Health Information private and protect against unauthorized access.

Your screen saver password is the same as your logon password.

CLIENT'S ACKNOWLEDGEMENT

Compulink provides these instructions as a guide to help insure a hassle free installation and operation. The support staff is available to assist with any questions and/or issues not covered in this guide.

I have read and understand the Installation, Configuration and Performance Guide for Compulink Advantage Cloud^{sm} (10 pages). These instructions have been followed to the best of my knowledge and ability. I hereby release Compulink from any configurations implemented by this office other than what is stated here or recommended by Compulink:

Date: **_____ / _____ / _____**

Compulink Account Number: **_____**

Client's Signature: **_____**

Print Your Name **_____**