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RAPIDComm®
Data Management System

Technical Requirements and Specifications

2025-04

RAPIDComm® System Software Version 7.1 Technical Requirements and Specifications

This document applies only to Version 7.1 of the RAPIDComm® Data Management System software.

Contents

Introduction

Before implementing the RAPIDComm software at your site, review the following information about the RAPIDComm system software components.

RAPIDComm Server

As a guideline, Siemens recommends that the RAPIDComm Data Management System server software be installed on a system dedicated to the RAPIDComm system or a dedicated instance on a VM virtual server. It should not be combined with other applications that may impact performance or communications.

Note The RAPIDComm server supports installation of POCcelerator on the same server using the same SQL Server database instance with minimal performance impact.

You may implement the RAPIDComm system as a standalone, single-server computer installation, supporting all application server functions, analyzer connectivity, and the RAPIDComm system user interface. RAPIDComm clients and workstations are not mandatory.

For small installations, you can directly connect Blood Gas, Cardiac, Diabetes, and Urinalysis analyzers to the RAPIDComm server.

RAPIDComm Workstation

You may connect RAPIDComm workstation computers to the RAPIDComm server. In addition to providing a user interface to the application, the workstation computer handles serial analyzer connectivity and performs network communications buffering for connected analyzers.

For large installations of more than 25 blood gas analyzers, you should use RAPIDComm workstations to distribute analyzer communications. Blood gas analyzers should be limited to 25 analyzers per workstation. Large installations of CLINITEK Status Connect and DCA Vantage analyzers would also require additional workstations.

You should use RAPIDComm workstations for wide area network deployments. Each remote location should have its analyzers connected to one or more RAPIDComm workstations to provide communications buffering.

RAPIDComm Client

You may connect RAPIDComm client computers to the server and use as needed to provide user access to the application.

Miscellaneous Considerations

- A dedicated uninterrupted power supply (UPS) is recommended for all RAPIDComm servers and workstations.

- You must configure all computers with RAPIDComm workstation and client software to use the same regional and language settings as the RAPIDComm system server.

- You must configure all RAPIDComm computers and connected analyzers to operate within the same time zone.

- You must select the installation executable corresponding to your operating system architecture (32-bit or 64-bit).

Device Connectivity

RAPIDComm supports the following devices:

Modality	Device	Latest Software Version
Blood Gas	RAPIDLab 248	2.30
	RAPIDLab 348	2.16
	RAPIDLab348EX	1.40
	RAPIDLab 8xx	4.6A and 5.3B
	RAPIDLab 12xx	3.3.1
	RAPIDPoint 4xx	3.9
	RAPIDPoint 500	3.0 (Windows 7) 2.3.1 (Windows XP)
	RAPIDPoint 500e	5.1
Cardiac	Stratus CS 200[a]	2.1.0 or greater
Diabetes	DCA Vantage	4.3.4.0
Urinalysis	CLINITEK Status	2.6
	Connector Software	2.4

a. Not available for sale in the U.S. Product availability varies by country.

RAPIDPoint 500e Support

RAPIDComm 7.1 does not support new features added to the RAPIDPoint 500e firmware in version 5.1 and above.

Recommended Hardware and Software

Minimum Hardware Requirements

The RAPIDComm software has minimum hardware requirements as described in *Table 1-1*.

Table 1-1:   Minimum Hardware Requirements

System	CPU	RAM	Disk Space Requirements
Server	Recommended: Intel Xeon E5-5620 (6 core, 2.3 GHz, 12MB L3, 80W)	8 GB minimum	Software: 150 MB Database: 40 GB (This is in addition to the disk space required by the operating system and SQL Server installations.)
Workstation	Recommended: Intel Core i5-3470 (4 core, 3.20 GHz, 6 MB cache)	4 GB minimum	Software: 150 MB
Client	Recommended: Intel Pentium G645 (2 core, 2.90 GHz, 3 MB cache)	2 GB minimum	Software: 150 MB

Supported System Software Requirements

Table 1-2 lists the server and workstation/client configurations supported by RAPIDComm 7.1 for new installations and for upgrades.

Note To install version 7.1, you must install version 7.0 first.

Table 1-2: Supported System Software Configurations - New Installations

Component	OS	Service Pack	Microsoft SQL Server	Service Pack
Server	Windows Server 2022 (64-bit)	N/A	SQL Server 2022 (64-bit)	N/A
	Windows Server 2019 (64-bit)	N/A	SQL Server 2019 (64-bit)	N/A
	Windows Server 2016 (64-bit)	N/A	SQL Server 2016 (64-bit)	N/A
	Windows Server 2012 R2 (64-bit)	N/A	SQL Server 2014 (64-bit)	N/A
	Windows Server 2012 R2 (64-bit)	N/A	SQL Server 2012 (64-bit)	SP2
Workstation/ Client	Windows 7 Professional (32-bit and 64-bit)	SP1	N/A	N/A
	Windows 8.1 Pro (64-bit)	N/A	N/A	N/A
	Windows 10 Pro (64-bit)	N/A	N/A	N/A
	Windows 11 Pro	N/A	N/A	N/A

Note RAPIDComm Web does not support Windows Server/SQL Server 2022 or Windows 11 Pro.

Table 1-3:   Requirements for Web App Client

Component	Notes
Apple iPad (iOS 5.0 or newer)	
Computer Workstation (32-bit or 64-bit) with Web Browser: • Microsoft Internet Explorer 11 • Microsoft Edge • Google Chrome • Mozilla Firefox • Apple Safari (on iPad)	• IIS Web Server name or IP address • Internet Explorer requires Compatibility View to be turned off. Click **Tools** > **Compatibility View Settings** > and uncheck "Display intranet sites in Compatibility View". • The use of HTTPS protocol is required. • Customers are responsible for providing the SSL certificate.

RAPIDComm System Deployment

Figure 1-1 shows one possible combination of instruments and connections in a RAPIDComm system deployment. *Table 1-4* provides a key to each component.

Figure 1-1:   RAPIDComm Configuration Example
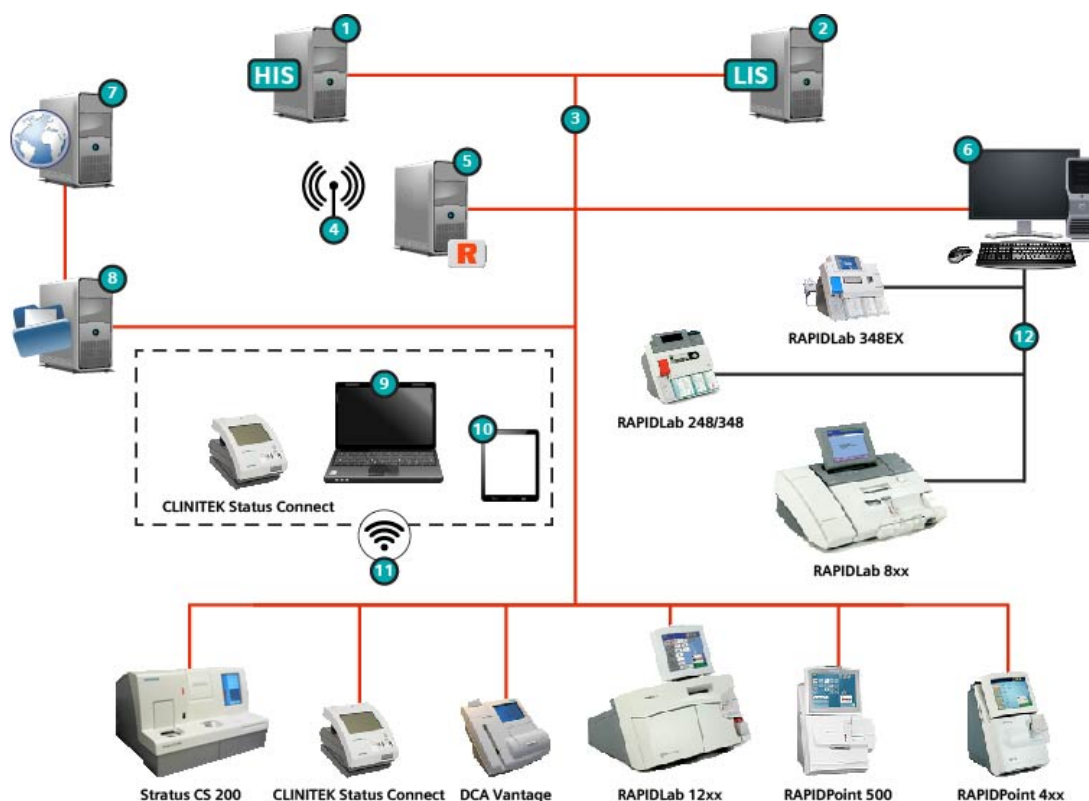
Note The Stratus CS 200 is not available for sale in the U.S. Product availability varies by country.

Table 1-4:   RAPIDComm Configuration Components

Hardware Components
1   Hospital Information System (HIS) Running HL7   • Orders and/or Results connections
2   Laboratory Information System (LIS) Running HL7   • ADT or Patient Query connections

5   RAPIDComm Server
      • Physical or Virtual Server
      • Remote or local database

6	Workstation
7	PEP-Admin Website
8	Hospital E-Mail System
9	Client
10	Tablet (Web App)
Connectivity	
3	Network Connectivity
4	Hospital Wireless Access Point
11	Wireless Connectivity (___ **)**
12	Serial Connectivity (___)

RAPIDComm Security, Users, and Groups

Domains vs. Local Security

RAPIDComm Data Management System security is integrated with Windows user and group security management. The RAPIDComm system will operate in domain or local security environments.

In a domain environment, the security of each RAPIDComm system is determined by the configuration in Active Directory. Your IT department should set up user accounts as domain accounts and configure them as Global Security groups. Domain local groups are not supported.

In workgroup environments, security is managed locally and you must configure RAPIDComm users and groups on each PC in the RAPIDComm workgroup.

You should use local groups with systems that do not belong to a domain. In a workgroup setting, authentication takes place on each PC. Make sure the accounts are identical on each system.

Users and User Groups

You configure RAPIDComm Data Management System users and user groups in the Windows operating system. Some users and groups are required before application installation and configuration can be started.

Note The account used for starting RAPIDComm system services must have access to the Active Directory system in order to validate Active Directory users.

The RAPIDComm administrator group can access all functions in the application. The system administrator must create this user group before installing the RAPIDComm system. The group must contain at least one user with the necessary privileges to install and customize the RAPIDComm system.

User Groups and Role Assignments

The RAPIDComm system administrator assigns roles to RAPIDComm system user groups. *Table 1-5* provides recommendations for Windows user group naming conventions and the roles that would be assigned to each group.

Table 1-5:   Recommended User Groups and Role Assignments

Windows User Group	RAPIDComm Data Management System Role Assignments
RAPIDComm Admin	Application Administrator, Device Administrator, Device Data Editor, Device Manager, Device Operator, External Systems Manager, Operator Manager, Patient Data Editor, Patient Data Manager, Patient Sample Reporter, Remote Device Operator, Report Designer, Web User[a]
RAPIDComm Key Operator	Device Data Editor, Device Operator, Patient Data Editor, Patient Sample Reporter, Report Designer, Web User[a]
RAPIDComm Routine Operator	Device Operator, Patient Sample Reporter
RAPIDComm Technical Support	Application Administrator, Device Administrator, Device Data Editor, Device Manager, Device Operator, External Systems Manager, Operator Manager, Patient Data Editor, Patient Data Manager, Patient Sample Reporter, Remote Device Operator, Report Designer, Restricted Access, Web User[a]

a. Web User should be assigned to any RAPIDComm group using the RAPIDComm Web application.

Service Accounts

The RAPIDComm system requires a dedicated service account to control the following services:

- RAPIDComm Business Services Server
- RAPIDComm Communication Services Server
- RAPIDComm Hospital Connection Services Server
- RAPIDComm Backup Services Server

The account designated to run the services should be reserved for system use. Siemens recommends that you change the service account password frequently for security purposes. When you change the service account password, you must update the password information in Windows Services for these four services.

Miscellaneous Security Requirements

Firewall Modifications

If local server or workstation computers are using a firewall, you must open ports to allow server access. Any ports configured for Hospital Connections must also be open for access.

Note This does not apply to servers or workstations that are within the enterprise firewall. It applies only to local systems using a firewall.

Table 1-6 lists the ports that must be open for server and device access.

Table 1-6:   Ports Configured for Server and Device Access

Connection	Ports Open for Access
RAPIDComm Server/Workstation	8890, 8895
Blood Gas devices	3001
CLINITEK Status Connect	6002 (default)
DCA Vantage	7002 (default)
Stratus CS 200[a]	9002 (default)
Remote Device Link (within RAPIDComm)	5900
Device Link (available through Internet Explorer when using the Web App)	5443
Secure Connection (when using SRS, Web App)	443

a. Not available for sale in the U.S. Product availability varies by country.

RAPIDComm Hospital Connection Interface

The RAPIDComm system connects to an LIS or HIS. The Hospital Connection Interface:

- Uses the HL7 v2.3 or v2.4 protocol via a network TCP/IP Ethernet connection.

- Supports multiple ADT (Admissions, Discharges, and Transfers), Orders and Result connections. It also supports one Patient Query connection.

Refer to the *RAPIDComm Hospital Connection Interface Manual* for more information.

Trademark Information

CLINITEK Status, DCA Vantage, RAPIDComm, RAPIDLab, RAPIDPoint, Stratus CS 200, and POCcelerator are trademarks of Siemens Healthcare Diagnostics.

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