



» PROService REMOTE SERVICE APPLICATION

Frequently asked questions



» Move healthcare forward.

MORE WAYS TO INCREASE UPTIME AND IMPROVE PRODUCTIVITY

GENERAL INFORMATION

Q: What is PROService?

A: PROService is Beckman Coulter's remote service application that utilizes the RMS data pipeline to maximize instrument uptime and service efficiency.

Q: What is RMS?

A: RMS is Beckman Coulter's proprietary data pipeline that remotely connects Beckman Coulter and its systems in customer laboratories. Once RMS remote connectivity is established, remote applications, such as PROService, can be used to provide added benefits to your laboratory.

Q: How is PROService developed and maintained?

A: PROService is developed and customized specifically for Beckman Coulter laboratory systems. Beckman Coulter uses the same standards of development, maintenance and support practices that are used for medical devices. In addition, Beckman Coulter uses robust, industry-leading development practices to ensure that it delivers high-quality software.

Q: What hardware is required to establish remote connectivity for PROService?

A: The hardware consists of the RMS Remote Application Processor (RAP) box, a small form-factor computer without a keyboard, mouse or monitor. The RAP box measures approximately 10.6" x 1.6" x 5.7". To function, the RAP box requires an electrical outlet and Internet connectivity to reach Beckman Coulter's servers.

Q: How is remote connectivity established?

A: The RMS RAP box connects to the Internet via Ethernet port, Wi-Fi or cellular network (availability of options varies by geography). Your connected instruments are isolated from your network by an internal firewall on the RAP box. Performance data from your connected instruments are then continuously and securely transferred through the Internet to Beckman Coulter servers.

Q: Where does the RMS RAP box reside?

A: The RAP box is installed in close proximity to the instruments to be connected and wired network Internet access (if connectivity is established via Ethernet port).

Q: What is the cost for PROService?

A: Beckman Coulter customers are entitled to PROService support for all their PROService-ready instruments covered by Beckman Coulter's service agreement. The RMS RAP box and associated hardware are installed at the expense of Beckman Coulter.



RMS
Remote Application Processor
(RAP) Box



FEATURES AND CAPABILITIES

Q: Which Beckman Coulter instruments have PROService capability?

A: Most Beckman Coulter instruments are compatible with PROService. Availability of features varies by instrument/system platform. While Beckman Coulter continues to expand instrument coverage and features, the most up-to-date information can be found at www.beckmancoulter.com.

Q: Can PROService be used for non-Beckman Coulter analyzers in the laboratory?

A: PROService is customized to work with Beckman Coulter instruments. At this time, only Beckman Coulter instruments are supported.

Q: How many instruments can be connected to one RAP box?

A: A single RMS RAP box can connect up to five instruments to RMS. Additional RAP boxes can be configured to accommodate additional instrument connections.

Q: I am a Beckman Coulter reagent and consumables metering customer. Can RMS remote connectivity process my metering information?

A: Yes, metering is available on select instruments. Please contact your Beckman Coulter representative for more information.

Q: How does Beckman Coulter use PROService to help me?

A: PROService's diverse set of features, tools and capabilities are used synergistically to help maximize instrument uptime, enhance productivity and increase efficiency in your laboratory. Through PROService, Beckman Coulter service and support staff can more efficiently evaluate system performance, resolve technical issues and identify potential system issues before they occur.

By using the PROService Service Dashboard and Remote Desktop Sharing (RDS) features, Beckman Coulter service and support staff can remotely view your instrument's performance at any time—whether you're calling for troubleshooting assistance or as a follow-up to an onsite call.

The instrument data transferred by RMS is also fed into the PROService Triggers system, where sophisticated algorithms are applied to identify potential sources of future instrument downtime. The system proactively alerts Beckman Coulter service and support staff to these issues so they can work with you to address them before they impact your workflow.

Additional PROService features on select systems allow Beckman Coulter to better serve you by providing such capabilities as remote upload, remote download and remote setup/configuration.



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INSTALLATION

Q: What is the installation process?

A: Your Beckman Coulter field service engineer configures and installs the RMS RAP box and enrolls your instruments in PROService. The RAP box is configured to match your network settings if Internet connectivity is established via Ethernet port or Wi-Fi. Once RMS remote connectivity is established, the instrument console software allows the instrument to be enrolled in the PROService system.

Q: Can PROService be added to existing Beckman Coulter instruments in the laboratory?

A: PROService can be added at any time. However, it's highly recommended that you establish RMS remote connectivity at the time of instrument installation to maximize PROService utilization.

Q: What do I need to do to prepare my site for PROService installation?

A: Beckman Coulter's service organization works with your IT staff to complete the PROService questionnaire, which confirms the required installation specifications. Physical access to a wired network connection (if the customer chose to connect the RAP box to Internet via Ethernet port), access to an AC power source and some minimal IT configuration (including assignment of a RAP box IP address and opening of an outbound port in your firewall) are required for Ethernet port or Wi-Fi options.

To help ensure a smooth installation process, the installation visit is scheduled after your site is prepared.

Q: How long will the installation take?

A: The required time to establish RMS remote connectivity and PROService utility depends on the number of instruments to be enrolled in PROService. In most cases, enrollment requires each instrument to be offline for approximately 20 to 30 minutes. If additional configuration is required, the installation and enrollment process may take longer.

Q: Who needs to be available during the time of installation?

A: The laboratory manager responsible for the instrument(s) will be contacted prior to installation and should be available. An IT representative should also be available to address any problems that may occur with the network connection.

Q: My laboratory only has wireless Internet access. Can I still have PROService?

A: Yes, the RAP box may also connect to the Internet via Wi-Fi or cellular network if those options are available in your geography.



COMMUNICATIONS



Q: How does PROService receive information from the instrument?

A: The instrument workstation sends instrument performance data to the RMS RAP box. The RAP box then secures this data and forwards it to Beckman Coulter servers. All communications between your connected instruments and Beckman Coulter are coordinated through the RAP box.

Q: How does PROService use my network?

A: The RMS RAP box is connected to your network using a static or Dynamic Host Configuration Protocol (DHCP) IP address. The RAP box communicates through your existing network to Beckman Coulter servers only. Two types of connections will routinely be made during PROService operation.

Outbound-initiated data messages are secured via encryption and sent through your firewall via HTTPS on port 443, the standard port for secure Internet usage. In most cases, this port will already be open in your firewall. Information is then transmitted using Secure Sockets Layer (SSL), a protocol for transmitting information securely via the Internet. SSL creates a secure connection between a client and a server, over which data can be sent securely.

RDS sessions are held through a secure virtual private network (VPN) tunnel, which encapsulates the session between your connected instrument and the Beckman Coulter PROService user to ensure no third-party interception of shared data.

Q: What if my network has a proxy server for Internet access?

A: If a proxy server is in place, RMS will adjust automatically after it is configured using information provided by your IT department. However, at this time, there is limited support for Microsoft IIS proxy servers that utilize user authentication.

Q: What bandwidth will my network need to handle PROService?

A: No additional resources should be necessary to support PROService data transmission. Typical data packets are 2 KB or less at intervals of approximately 30 seconds. For Remote Desktop Sharing and software updates, 128 kbps bandwidth is required.



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SECURITY, PRIVACY AND CONFIDENTIALITY

Q: Does connecting my instrument to the network/Internet through RMS put my instruments at risk?

A: The connections to your network and the Internet are secure. A firewall on the RMS RAP box creates a private instrument network, which isolates your instruments from other network traffic and your network from the connected instruments. For networked LIS interactions, including connections to middleware, the RAP box is configured to allow only specific, controlled network transmission between the instruments and LIS.

The system is configured such that all communications with the RAP box through the Internet pass through your firewall. Furthermore, the RAP box is protected with regular anti-virus software updates.

Q: Who can access my connected instruments and their data through PROService?

A: PROService is used by HIPAA-trained Beckman Coulter service and support staff (including customer technical support specialists and field service engineers) and authorized agents. Access control management for PROService users is defined by the user's support role and geographic location. Three levels of access controls are in place to authenticate users' access to the PROService system: an authorized PC login, connection to the secure Beckman Coulter network and separate PROService application login.

Q: What information is being sent from my instruments?

A: The data parameters that are transferred to Beckman Coulter servers vary by instrument model. In general, the RMS RAP box transfers data related to instrument performance, including:

- > Instrument status and events
- > Instrument subsystem vital signs, such as temperatures, pressures and voltages
- > Subsystem/module-specific parameters, including analytical system components, motion controls and fluidic systems
- > Calibration and quality control performance
- > Some analytical results needed for troubleshooting, with masked sample ID (select systems)
- > System identifiers and statistics: software versions, instrument configurations and metering data, if applicable

During RDS sessions, whatever is visible on the instrument console is visible to the Beckman Coulter service and support staff.

Each RDS session requires the customer's manual authorization from the instrument console.

Q: Where is the data from my instrument stored?

A: The servers are housed in Beckman Coulter's state-of-the-art data center. This data center has been awarded both a Tier III certification from the Uptime Institute and a SAS 70 Type II certification for its ability to provide high availability for applications as well as a secure computing environment.



Q: What security methods are in place to secure the transfer of instrument performance data? Can third parties access my connected instruments, the RAP box or the data transferred by the RAP box?

A: All messaging between Beckman Coulter and your instrument is secured through a robust SSL connection using a 128-bit AES, FIPS-compliant encryption algorithm. The system is configured to forward data only to Beckman Coulter servers; dual certificate authentication helps prevent unauthorized access to transmitted data. RDS sessions are secured with a VPN tunnel to ensure no third-party interception.

Your connected instruments and the RMS RAP box reside behind your firewall and use the methods you have put in place to secure the computer systems in your facility. All data transfers are initiated by the RAP box; no outside requests for data transfer are accepted.

Q: What patient-related information can be accessed through PROService? Can any protected health information (PHI) be viewed using PROService?

A: During all operations other than RDS sessions, the RMS RAP box transmits system performance data pertinent to mechanical and analytical function to PROService for immediate review by the Beckman Coulter service and support staff. For rapid identification of assay issues, the sample ID field is transmitted by some instruments and masked in the PROService service dashboard. Beckman Coulter recommends you do not include patient names or other medical information in the sample ID field.

Beckman Coulter service and support staff stay current with annual training requirements on HIPAA regulations that govern the handling of PHI.

Q: How do I get started with PROService?

A: Email PROServiceInstalls@beckman.com or contact your Beckman Coulter sales representative (or field service engineer) to begin the installation process.

Q: How secure is PROService?

A: The RMS RAP box meets the U.S. Department of Defense Information Assurance Certification standards.

Beckman Coulter also completed the Interconnection Security Agreement and Memorandum of Understanding (ISA/MOU) with the U.S. Department of Veterans Affairs (VA) to connect and utilize all PROService features at all VA sites.

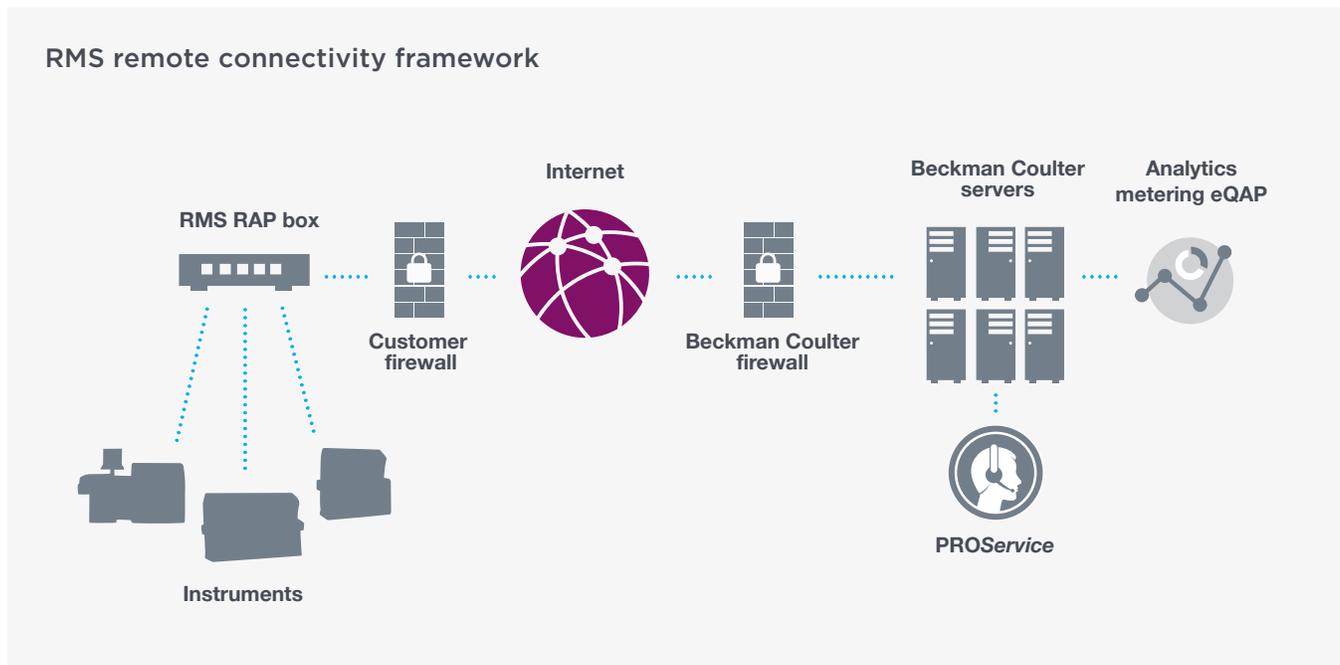


HOW DOES PROService WORK?

RMS is Beckman Coulter's proprietary data pipeline that remotely connects Beckman Coulter and its systems in customer laboratories. Once your instruments are connected, various remote applications may be utilized by you or Beckman Coulter to help improve your laboratory performance.

PROService is Beckman Coulter's remote service application that utilizes the RMS data pipeline to maximize instrument uptime and service efficiency.

Other remote applications that utilize the RMS data pipeline may include Analytics, Metering and eQAP.



PROService availability or features vary by instrument/system platform.

ISA/MOU memorializes the agreement between VA and Beckman Coulter regarding the management, operation, and security of a connection between the Beckman Coulter RAP box connected to laboratory instruments, owned by VA, and PROService, owned by Beckman Coulter.

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