3M

3M™ Coding and Reimbursement System

HARDWARE AND SOFTWARE REQUIREMENTS

This document applies to all versions and platforms of the 3M Coding and Reimbursement System, including 3M™ Coding and Reimbursement System Plus, 3M™ Codefinder™ Software, 3M™ Coding Reference Software, 3M™ Coding Reference Plus Software, and 3M™ Physician Coding and Reimbursement System.

Minimum requirements for application servers

Web CRS

A typical installation consists of CRS being installed on a Web server (Web CRS). In this instance, processing is done on the server. The number of planned concurrent coders should be multiplied by 1.5 for sizing and configuration purposes, up to a maximum of 675 on a single server. Using this configuration, you must provide:

- Memory—A minimum of 16GB of RAM for the operating system, plus 2GB for every 40 concurrent users
- CPU Cores—A minimum of two CPU cores with a base clock of 2+ GHz each, plus one additional core for every 40 concurrent users
- Disk space—20GB for coding system install

Windows CRS

Important update! Solventum is no longer installing Windows CRS. All new CRS installations will be Web CRS/Web CRS+ only. Clients who have an existing installation of Windows CRS will need to change to Web CRS/Web CRS+ or to Solventum Coding in the Cloud by the 24.11.10.0 release, scheduled to go out on December 3, 2024. This change can be completed with the assistance of Solventum Support by calling or opening a webticket. If you are considering Solventum Coding in the Cloud, please contact your Solventum sales representative. For more information, see answer 1002898 on the Client Support Website: https://support.3mhis.com/app/answers/detail/a_id/1002898.

Operating System	Server Core (configured without the GUI) is not currently supported. • Windows Server 2022 Standard or Datacenter is highly recommended starting with the v23.11.10.0 release of CRS and CRS+ • Windows Server 2019 Standard or Datacenter • Windows Server 2016 Standard or Datacenter • Transport Layer Security (TLS) 1.2 enabled (See Answer 1000392 on the Client Support Website)
Web browsers	• Google Chrome—Most recent (latest) generally available version and one version prior to the latest • Microsoft Edge (Chromium-based versions)—The most recent (latest) version and one version prior of the Microsoft Stable release channel **Important note:** The original Microsoft Version of Edge (non-Chromium based) is not supported.
Microsoft .NET	.NET 4.8 or newer (Solventum recommends the latest .NET version)
Display	Solventum recommends a 1280 x 1024 resolution monitor or higher. The minimum supported resolution is a 1024 x 768 resolution with a 19-inch-wide screen monitor
Internet connection	1.5Mbps (T1 line) or greater

Network interface card* and Internet access	Required for the following:
	• Downloading product and product updates
	• Accessing certain references (such as the Merck® Manual) in the coding reference software
	• Viewing and downloading product documentation
	• Accessing support information
	• Receiving remote access support from Solventum HIS Support website
	• Accessing and viewing medical necessity edits
	• Accessing and viewing local and national medical necessity policies on CMS and local FI/carrier websites
	• Editing content for ICD-10
	*To prevent a disruption of encoder service, Solventum recommends using a persisient MAC address.
Mouse	Microsoft-compatible
Printer	Compatible with your operating system and connection type
Other considerations	• Functions and specifications are subject to change without notice.
	• To ensure you have the latest recommendations check with your Solventum account representative before you order hardware.
	• You are expected to keep the operating system and any additional software up to date by loading available updates.
	• Solventum also recommends a power protection device, such as a UPS, that provides 15 minutes of backup power.
Additional notes	• Server requirements are over and above the requirements of any additional software running on the server (e.g., Antivirus).
	• Solventum highly recommends a dedicated application server for CRS+.
	• If the application server does not meet the above minimum requirements, the performance of CRS+ will be affected, especially for remote coding staff.
	• Solventum strongly recommends you use a physical server matching these specifications. However, if you do use a virtual server, be sure that the VM host is not overloaded; an overloaded VM host can cause sporadic reliability and poor performance issues.

Minimum requirements for client workstations/Citrix machines

Clients for Web CRS (i.e., WinAppLink) with Apache

- Memory—A minimum of 4GB for the operating system, 2GB for the CRS application, and any additional memory needed for other applications running on the PC
- CPU Cores—A minimum of two CPU cores with a base clock of 2+ GHz each
- Disk space—150MB per "user instance" folder (WinAppLink vs. WinAppLink shared)

Operating System	• Windows 10 Pro (64-bit only); the Home edition is not supported
	• Windows 11 Pro is supported starting with the v23.11.10.0 release of CRS and CRS+ (November, 2023)
Web browsers	• Google Chrome—Most recent (latest) generally available version and one version prior to the latest
	• Microsoft Edge (Chromium-based versions)—The most recent (latest) version and one version prior of the Microsoft Stable release channel
	Important note: The original Microsoft Version of Edge (non-Chromium based), is not supported.
Microsoft .NET	4.8 or newer is required for the WinAppLink MSI installer (Solventum recommends the latest .NET version).
Display	Solventum recommends a 1280 x 1024 resolution monitor or higher. The minimum supported resolution is a 1024 x 768 resolution with a 19-inch-wide screen monitor.

Citrix/Terminal Services/VDI	When used, any maintained version of Citrix XenApp running on any server operating system listed under "Minimum requirements for application servers."
	Due to the large variation in deployments, Solventum cannot assist with configuration of Citrix servers or Citrix deployments. Consult your internal Citrix resources for deployment and support planning. You should also thoroughly test and confirm workflow functions prior to deployment of each Solventum solution or solution update.
	In the event of any support concern, Solventum reserves the right to troubleshoot the problem on a workstation that meets the requirements for the specific solution. When a defect is corrected, Solventum will consult with your Citrix resource on application requirements only; your Citrix team is responsible to make these changes within your Citrix (or VDI) deployment.
Internet connection	1.5Mbps (T1 line) or greater
Network interface card and Internet access	Required for the following: • Downloading product and product updates • Accessing certain references (such as the Merck® Manual) in the coding reference software • Viewing and downloading product documentation • Accessing support information • Receiving remote access support from Solventum HIS Support website • Accessing and viewing medical necessity edits • Accessing and viewing local and national medical necessity policies on CMS and local FI/carrier websites • Editing content for ICD-10
Mouse	Microsoft-compatible
Printer	Compatible with your operating system and connection type
Other considerations	• Functions and specifications are subject to change without notice. • To ensure you have the latest recommendations check with your Solventum account representative before you order hardware. • You are expected to keep the operating system and any additional software up to date by loading available updates. • Solventum recommends a power protection device, such as a UPS, that provides 15 minutes of backup power.