

SAP2000® Version 21.2.0

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Notice Date: 2019-11-13

SAP2000 v21.2.0 is an intermediate update from SAP2000 v21.1.0 and is distributed electronically by download from the internet using the CSI Installation Wizard.

PLEASE READ THIS FILE!

It contains important information that may be more current than what is in the Manuals.

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1. Installation Instructions for SAP2000 v21.2.0

SAP2000 v21.2.0 is available electronically as a full installation by download from the internet using the CSI Installation Wizard. Installing SAP2000 v21 will not uninstall older versions of SAP2000.

SAP2000 v21.2.0 is available only as a 64-bit application and must be installed and run on a 64-bit Windows operating system. Windows 7 SP1 (with latest Windows Updates), 8.1 (with Update 2919355), and Windows 10 Build 1507 or higher are currently supported. Whether you are using a standalone license or network license, the full application must be installed on each workstation where SAP2000 will be used.

Use the Installation Wizard to guide you step-by-step through the process of installation and licensing.

Before installation, be sure you have your Activation Key available if you will be using a Standalone license. You should have received this by email from CSI or your local CSI Partner. If you will be using a Network license, it is necessary to have the licenses already activated on the license server that is accessible to the workstation.

To begin the CSI Installation Wizard, click this link:

<http://www.csiamerica.com/go/installation-wizard>

The Wizard will start and guide you through the process. The actual files needed for installation will be downloaded as necessary. An active internet connection is required throughout the installation and licensing process.

The license activation server ports are 80 and 443. If either of these ports is blocked, they need to be opened. Otherwise license activation will not be possible.

Windows User Account Control (UAC)

For recent versions of the Windows operating system, User Account Control (UAC) is enabled by default. When UAC is turned on, you must explicitly give permission to any program that wants to use "Administrative" privileges. Any program that tries to use Administrative privileges without your permission will be denied access.

The installation of SAP2000 and the activation of the license require "Administrative" privileges to run. When installing SAP2000 with UAC enabled, you should expect to be prompted to allow the installer access to system folders and Windows registry. Please allow it to continue so that the installation can complete.

2. Installation Instructions for License Manager 9.4

The information in this section does not apply if you are using Standalone licenses.

License Server

If you will be using a network license to run SAP2000, the **Sentinel RMS License Manager 9.4** and the **Sentinel RMS 9.4 Utilities** should be installed on a license server, which is usually not one of the client workstations.

If you are already running RMS License Manager version 9.4, then you only need to add the SAP2000 v21 licenses. If you are running an older version of RMS, you will need to upgrade to version 9.4. If you are not yet running RMS at all, then you need to install the 9.4 version of the License Manager and the Utilities.

All of these options are best done using the [CSI Installation Wizard](#), which will guide you through the steps necessary to handle your specific situation. If this will include upgrading a previous version of RMS to 9.4, you should do this at a time when no users are running software that is using any of the existing licenses.

An active internet connection is required throughout the installation and licensing process. The license activation server ports are 80 and 443. If either of these ports is blocked, they need to be opened if you are activating a Network license.

If you prefer to do this without using the Wizard, further information can be found on the [CSI wiki page](#) for this topic.

On the client workstations

To speed up finding a network license when SAP2000 is launched, you can do either or both of the following:

- Create a text file, LEVEL.TXT, and enter the *ProgramLevel* in a single line. The *ProgramLevel* should be one of the following:

BASIC / PLUS / ADVANCED / ULTIMATE / BASICC / PLUSC / ADVANCEDC
ULTIMATEC / ADVANCEDI / ULTIMATEI

Save this file to the folder where SAP2000 is installed. This file will cause the program to find the license faster.

- Create a text file, LMHOST.INI, and enter the network name or IP address of the machine that is running the License Manager. If you are serving licenses on more than one machine, enter each name or IP address on a separate line of text. Save this file to the folder where SAP2000 is installed.
- Either the LEVEL.TXT file or the LMHOST.INI file can also be placed in the user settings folder, which can be found by entering “%LocalAppData%\Computers and Structures\SAP2000 21” (without quotes) in Windows Explorer. Accessing this folder does not require administrative permissions like the installation folder does. Files located in the user settings folder will take precedence over those in the installation folder.

As an alternative to using the LEVEL.TXT file, you can specify the program level as a command-line option. To do this, use the Windows Run command or create a shortcut pointing to SAP2000.exe in the installation folder. Add the following text to the command line after “...\SAP2000.exe”

/L ProgramLevel

where *ProgramLevel* is one of the values listed above for the LEVEL.TXT file. Specifying *ProgramLevel* on the command line will supersede the value in the LEVEL.TXT file.

3. New Features for SAP2000 v21

SAP2000 v21 is a major new release, and significant new features have been added or enhanced since SAP2000 v20.

For more information about this release, please visit the SAP2000 releases page at <http://www.csiamerica.com/products/sap2000/releases>

An overview of the full power of SAP2000 is available at <http://www.csiamerica.com/products/sap2000>.

A complete list of all changes is provided in the separate file ReleaseNotes.PDF in the Manuals subfolder of the installation folder and is also available when running SAP2000 using the command *Help > Documentation*.

4. File Compatibility with Older Versions

SAP2000 v21.2.0 can open model files (*.SDB), as well as import SAP2000 database files (*.S2K, *.\$2K, *.XLS, and *.MDB) from the current and the previous major version of SAP2000 (v20.0.0 to v21.1.0), unless specifically stated otherwise in this document. In most cases SAP2000 v21.2.0 can directly open model files from older versions as well, but if not, they can usually be opened by using the intermediate versions in sequence. CSI cannot be responsible for opening model files for older versions that cannot be run on recent machines or operating systems due to changes beyond CSI's control.

Note that in certain cases results may differ for models run in newer versions compared to older versions due to enhancements and bug fixes as documented in the Release Notes for the intervening versions. Note that once you save or run older models in v21.2.0, they will not be usable by older versions of the program, so you should save them under a new name after opening or importing them in v21.2.0.