



Cadra Version 2002 Service Pack 3 Release Notes

SofTech is pleased to provide you with this service pack for Cadra Version 2002. This service pack includes a number of minor enhancements and corrections to the Cadra 2002 release. This document will describe how to install the service pack and briefly review the changes to Cadra.

Service pack 3 (2002-015) includes the following changes in addition to all the other changes that were part of service packs 1, 1a and 2. This service pack can be installed on top of the original 2002 (2002-008) release as well as a system that already had service pack 1 installed (2002-012), service pack 1a installed (2002-013) or service pack 2 installed (2002-014).

Fixes added by Service Pack 3

1. (SPR 53910) TrueType fonts were not being mapped correctly. After loading some TrueType fonts as specified Cadra font numbers, they were not correctly used when specifying the font numbers in the Text function. This has now been corrected.
2. (SPR 53892) Figure usage counts are now recalculated when a file is read from disk to correct bad usage counts produced by previous versions of Cadra.
3. (SPR 53894) Service pack 1 introduced a performance degradation when redrawing large files that this service pack has corrected.
4. (SPR 53828) When reading a CCD file written by Cadra into the CCD application, the text signifying a CCD unresolved external figure was being displayed at a very large scale.
5. (SPR 53829) The resolution of external figures in CCD files was not working correctly for some pools of external figures. The resulting unresolved figures would be displayed as "TAB000-SYM000".

No Need for a New Cadra Database Version

We are pleased to tell you that we discovered a way to provide all the new functions in Cadra 2002 without requiring a new version of the Cadra database. The Cadra delivered with this service pack will write out the same file version as the 11.x and 12.x versions of Cadra. As there is no need to write out an older file version for 11.x and 12.x support, this capability has been removed. This version of Cadra can read in all versions written out by the Cadra 2002 release version (2002-008).

Installing Service Pack 3 for Cadra Version 2002

This Service Pack is designed to work with the Windows version of Cadra 2002 only. DO NOT attempt to upgrade any other version.

This Service Pack upgrades Cadra 2002-008, 2002-012, 2002-013 or 2002-014 to 2002-015.

The Service Pack is distributed as a self-extracting zip file. There are two such service pack files of differing size:

- cadra2002sp3.exe contains NC images (size: 10 MB)

- cadra2002sp3nonc.exe does not contain NC images (size: 5.5 MB)

Verify that you are running version 2002-008, 2002-012, 2002-013 or 2002-014 by selecting Help/About Cadra... to display the About Cadra dialog box. The Cadra version number is shown in this dialog box.

Exit from Cadra after verifying that you are running the correct version and before continuing with this upgrade. If the machine you are upgrading is serving Cadra licenses, then you must also stop the FLM service.

If you downloaded the Service Pack (cadra2002sp3.exe) from the Cadra FTP site or the Softech bulletin board, the steps in performing the upgrade are:

1. Start an Explorer window if you do not have one open.
2. Make sure you have 25 MB of free space on the disk that holds your standard TEMP directory. For most users this is your C: drive. Using your mouse, right-click on the icon for this drive and select Properties from the menu. Explorer displays a dialog box that shows how much space is free.
3. Install the Service Pack by double-clicking on the downloaded Service Pack executable, cadra2002sp3.exe. When the self-extracting program starts, it displays a dialog box with three buttons: SETUP, CANCEL and ABOUT. Click the SETUP button to proceed. A dialog box opens and shows you where Cadra is installed. The upgrade is performed on the files in this directory.
4. A check box lets you have the update procedure create a backup of the replaced files in the event you wish to restore the previous version of Cadra. This box is checked by default. The backup files are placed in a subdirectory named save_old.sp\2002.4 under the Cadra directory. A message box lets you know when the update is complete.
5. Using Explorer, navigate to the directory where Cadra is installed and double-click Version.exe to verify that your version of Cadra is now Service Pack 3 compliant. Next, start Cadra and verify the version has been updated to 2002-015 by clicking Help/About Cadra...
6. You may now delete the Service Pack executable, cadra2002sp3.exe, from its original download location as it is no longer needed.

If you obtained the Service Pack on CD the steps in performing the upgrade are:

1. Place the CD in the CD-ROM drive.
2. The setup program on the CD should start automatically. If it does not, then:
 - Start and Explorer window if you do not have one open.
 - Using Explorer, navigate to the CD-ROM drive.
 - Install the Service Pack by double-clicking Setup.exe.
3. A dialog box opens and shows you where Cadra is installed. The update is performed on the files in this directory.
4. A check box lets you have the update procedure create a backup of the replaced files in the event you wish to restore the previous version of Cadra. This box is checked by default. The backup files are placed in a subdirectory named save_old.sp\2002.4 under the Cadra directory. A message box lets you know when the update is complete.
5. Using Explorer, navigate to the directory where Cadra is installed and double-click Version.exe to verify that your version of Cadra is now Service Pack 3 compliant. Next, start Cadra and verify the version has been updated to 2002-015 by clicking Help/About Cadra...
6. Remove the CD from the CD-ROM drive.

To restore Cadra to the previous version (2002-008, 2002-012, 2002-013 or 2002-014), first close Cadra if it is running. Then copy the files in the save_old.sp\2002.4 directory under the Cadra root directory into the Cadra root directory.

If you have questions about this update call Cadra Customer Support at (800) 321-2372.

A New COM Session Interface

This Service Pack provides a new COM interface to allow client applications to obtain a list of the currently active Cadra sessions. There are three new properties that have been added to the Cadra Application object: Sessions, SessionHandles and SessionPIDs. The following shows the Visual Basic usage of these new properties:

```
Dim numSessions as Long
Dim CadObj as Cadra.Application
Dim CadObj2 as Cadra.Application
Dim procs as Variant
Dim pids as Variant
```

```
CadObj = GetObject(, "Cadra.Application.1")
```

```
numSessions = CadObj.Sessions()
```

The **Sessions** property causes Cadra to retrieve the Cadra session information and return the number of sessions currently running. This property must be called before the other two.

```
procs = CadObj.SessionHandles()
```

The **SessionHandles** property returns an array of Cadra Application COM dispatch handles. The dispatch handles returned by this property can be utilized in the same manner as CadObj in this example code. This array is indexed the same as the array returned by SessionPIDs.

```
If numSessions > 1 then
    CadObj2 = procs(1)
Endif
```

Setting CadObj2 to a session handle in procs (where the index used is between zero and numSessions-1) will allow your application to address all the active Cadra sessions.

```
pids = CadObj.SessionPIDs()
```

The **SessionPIDs** property returns an array of Cadra session process identifiers. This array is indexed the same as the array returned by SessionHandles.

Note that the Autogeometry systat\$(type) function will return the current Cadra session PID if type is 24. So if your application is started from Autogeometry it can have the knowledge of the PID of the Cadra session from which it was started.

Handling of Changed SolidWorks Dimensions

This Service Pack enhances the handling of changed dimensions extracted from SolidWorks. Before dimensions that had changed in the SolidWorks model were only brought into Cadra if the **Insert ALL dimensions** option was selected in the Dimension/From Solid dialog. Now changed

dimensions will be updated in the Cadra drawing if the **Insert ONLY new dimensions** option is chosen.

Output of DXF/DWG Layer Names Without Dollar Signs

A new option has been added to cause layer names in DXF/DWG output files to NOT include special characters (dollar signs). This option is implemented for the Service Pack as a variable definition placed in the cadra.ini file (in the windir directory). It is called DXF_REMOVE_DOLLARS_FROM_LAYER_NAMES. Define it and set it to one to cause layer names to be produced without dollar signs. Note that if the **Paper space viewports for write** option in the DXF/DWG options dialog is enabled, the effect of this variable definition will be ignored.

Scaling of CCD External Figures

A new option has been added to fix the scaling of some external figures in CCD files. This option is implemented for the Service Pack as a variable definition placed in the cadra.ini file (in the windir directory). The variable is the same as is used by the direct (DRT) translator. It is called ADRA_DRT_EXTERNAL_FIGURE_UNITS_SCALE. Define it and set it to one to cause external figures to be scaled by the figure units.

Note that Cadra does not handle external figures specified in two different sets of units (e.g. millimeters and inches) simultaneously in the same way CCD does. If one set of external figures are specified in millimeters and another set in inches a line of length 5 in the inch set will be 25.4 times longer than a line of length 5 in the millimeter set in Cadra, whereas both lines will be rendered as of equal length in CCD.

Change to Line Font Behavior

Cadra 2002 introduced a line font rendering behavior that would cause font patterns to change with scale and cause very small lines to be rendered to visibly reflect the font even if the total length of the line was shorter than the font repeat. These changes in behavior cause problems in some environments and, therefore, are disabled in this service pack unless the variable ENABLE_LINE_FONT_SCALING=1 is defined in the cadra.ini file (in the windir directory).

Corrective Maintenance

The following corrections are included in this release:

1. Some repairs have been made to the MicroCadam translator for missing ellipses and incorrectly rendered pattern fills.
2. (SPR 53744) Fixed crashes of Cadra caused by a large (> 32765) number of figures and/or entities in a CCD file.
3. (SPR 53744) Fixed the rendering of crosshatches whose boundary includes offset splines.
4. Fixed the centering of text in balloons in DXF/DWG files.
5. (SPR 53770) Fixed a problem where editing of joggled dimensions was placing the dimension text incorrectly.
6. (SPR 53771) Prevent the deletion of entities on locked layers using the IMS selection method (Delete/Sel/View Win/Choice)

7. The behavior when creating an entity offset from another entity that is on a locked layer has been changed. Now the offset entity is placed on the same layer as the parent entity instead of the active layer.
8. (SPR 53276) Fixed a crash that occurred on the German version only when selecting Tools/Autogeometry/Layout Options.
9. (SPR 53773) Fixed the CCD translator to preserve plot format names on a round trip (CCD-Cadra-CCD) even if the name is longer than plot format names in Cadra (8 characters).
10. (SPR 53774) Fixed the reading of attributes in CCD files. Some attributes were not being read into Cadra at all.
11. Fixed a problem in CadraWorks where an update of geometry from SolidWorks would fail if the D drive on the system was not writable (e.g. a CD-ROM drive).
12. The number of Cadra sessions handled by an FLM license server has been increased on the Windows platform from 64 to 500.
13. Fixed a problem with the automatic expansion of the external figure model when resolving external figures in a file being read into Cadra. This was causing Cadra to crash. This automatic model expansion at file read time now does not crash.
14. Fixed a problem that was causing intermittent license retrieval failures of local licenses.
15. Fixed the retrieval and display of dimensions from SolidWorks into scaled Cadra views. Cadra had been assuming views with a scale of one and, therefore, incorrectly placing dimensions when the view scale was other than one.
16. Cadra's View-Proj2 function was incorrectly projecting entities from one view to another after reading in a CCD file created in CCD with a backward axis rotation. This problem has been fixed in this service pack.
17. (SPR 53910) TrueType fonts were not being mapped correctly. After loading some TrueType fonts as specified Cadra font numbers, they were not correctly used when specifying the font numbers in the Text function. This has now been corrected.
18. (SPR 53892) Figure usage counts are now recalculated when a file is read from disk to correct bad usage counts produced by previous versions of Cadra.
19. (SPR 53894) Service pack 1 introduced a performance degradation when redrawing large files that this service pack has corrected.
20. (SPR 53828) When reading a CCD file written by Cadra into the CCD application, the text signifying a CCD unresolved external figure was being displayed at a very large scale.
21. (SPR 53829) The resolution of external figures in CCD files was not working correctly for some pools of external figures. The resulting unresolved figures would be displayed as "TAB000-SYM000".

Platform Support

Service Pack 3 for Cadra Version 2002 has been qualified for the Windows platforms listed in the table below. The CD distributed with this update release contains software for all the following supported platforms.

Workstation	Operating System	Revision Level
Intel Pentium PCs	Windows XP Pro	All
Intel Pentium PCs	Windows 98	All
Intel Pentium PCs	Windows NT	4.0 with Service Pack 3 or higher
Intel Pentium PCs	Windows 2000	Service Pack 2

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