

CADDS[®] 5 Revision 7.1 Tips and Considerations

CADDS 5 Revision 7.1

DOC40087-005

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Preface

CADD5® 5 Revision 7.1 Tips and Considerations contains considerations and known issues in CADD5 5 Revision 7.1.

Your Comments

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Online User Documentation

Computervision supplies online documentation in HTML and provides PostScript files of each book in the online collection. You can print the PostScript files for hard copy books. The documentation media contains the PostScript files.

Related Documents

The following documents may be helpful as you use *CADD5 5 Revision 7.1 Tips and Considerations*:

- *CADD5 5 Revision 7.1 Release Notes*
- *What's New in CADD5 5 Revision 7.1*

Book Conventions

The following table illustrates and explains conventions used in writing about CADD5 applications.

Use of the Convention	Examples	Explanation
Menu selections and options	List Section option, Specify Layer field, File menu	Indicates a selection you must make from a menu or property sheet or a text field that you must fill in.
User-selected graphic location	X, d ₁ or P1	Marks a location or entity selection in graphic examples.
User input in CADDs text fields and on any command line	cvaec.hd.data.param tar -xvf /dev/rst0	Enter the text in a CADDs text field or on any command line.
System output	Binary transfer complete.	Indicates system responses in the CADDs text window or on any command line.
Variable in user input	tar -cvf /dev/rst0 filename	Replace the variable with an appropriate substitute; for example, replace filename with an actual file name.
Variable in user input	tar -cvf /dev/rst0 <filename>	Replace the variable with an appropriate substitute; for example, replace <filename> with an actual file name.
Variable in text	tagname	Indicates a variable that requires an appropriate substitute when used in a real operation; for example, replace tagname with an actual tag name.
CADDs commands and modifiers	INSERT LINE TANTO	Shows CADDs commands and modifiers as they appear in the command line interface.
Text string	"SRFGROUPA" or 'SRFGROUPA'	Shows text strings. You must enclose text string with single or double quotation marks.
Return key	<CR>	Press the Return key.
Return key	↵	Press the Return key.
Integer	n	Supply an integer for the <i>n</i> .
Real number	x	Supply a real number for the <i>x</i> .
#	# mkdir /cdrom	Indicates the root (superuser) prompt on command lines.
%	% rlogin remote_system_name -l root	Indicates the C shell prompt on command lines.
\$	\$ rlogin remote_system_name -l root	Indicates the Bourne shell prompt on command lines.

Resolved Issues

AEC - Pipe Supports

INSERT PAD

The INSERT PAD command now uses the auto-selection file
`CVAEC.PIPESUPPORTS.PAD`.

DELETE SUPPORT

DELETE SUPPORT no longer deletes the pipe parameters to the support being deleted.

CREATE ISOMETRIC

- CREATE ISOMETRIC gives the correct angle for boxes.
- CREATE ISOMETRIC now locates the correct Ntext

ANNOTATE ISOMETRIC

ANNOTATE ISOMETRIC DIMENSION on a slope with a negative y now works correctly.

SAVE ANNOTATION

SAVE ANNOTATION now works correctly when a Pline starts with a bend.

MODIFY PLINE

MODIFY PLINE SPEC no longer creates an error in the tracing utility if a branch exists.

INSERT FITTING

The command INSERT FITTING TAP on a reducing tee, now considers the branch diameter of the stockno property.

AEC - Advanced Structural Modeling (ASM)

COPE STOBJECT

The command COPE STOBJECT now works correctly with STPLATE.

UNRELATE STOBJECT

When you use the COPE command on the STELEMENT to see the exact shape, the graphics no longer disappear.

CALCULATE STQUANTITIES

The command CALCULATE STQUANTITIES with the modifier ALL now calculates the mass properties in parts with more than 400 STOBjects

INSERT STPLATE

You can now create a single STPLATE from many surfaces or Tsurfs.

GENSTIFFDRAW

There are numerous quality improvements to the CVMAC GENSTIFFDRAW including:

- The routine RUN CVM CVHULL.GENSTIFF DRAW can now differentiate between convex or concave bend dimensions.
- Text for end details and cut outs are now being inserted in the CV Hull GENSTIFFDRAW routine.
- The CVHull.Genstiffdraw routine now works when you extract more than one bar on a drawing sheet.

GENPLATEDRAW

- The CVHull.Gen.Plate Draw routine has increased the length of the array set on related projects.
- The Generate Plate routine now gives correct results.
- In ASM, when the CVHULL.GENPLATDRAW routine extracts structural plates, the extraction uses the Datum position of the plate

DIVIDE STOBJECT

In ASM, when the device object is aborted, a duplicate object no longer appears in the file.

INSERT STFLANGE

When selecting visualization layer four, ASM plates or bars now insert on the correct layer.

UPDATE

In ASM, a cutout generated from the viewed-in items now update when the viewed items are altered.

INSERT STELEMENT

- The command INSERT STELEMENT TWIST allows you to digitize
 - the lines or curves for the axis
 - curves for twist and selection or
 - curves or surfaces for a twist.
- INSERT STELEMENT now accepts the ROTATE modifier in degrees.

AEC - Equipment and Cabletray Supports

INSERT ELINER

The INSERT ELINER icon works.

INSERT ESUPPORT

INSERT ESUPPORT now works with alphanumeric text.

AEC - Heating Ventilation and Air Conditioning (HVAC)

When a rectangular transition is unfolded with spigots, the unfolded shape is now correct.

AEC - Piping

VERIFY DISTANCE

VERIFY DISTANCE now works with viewed parts.

Electrical/Mechanical

CBR Router

- The CBR Router now takes into consideration the maximum number of wires and maximum diameter for a channel.
- The CBR Router now recognizes predefined splices in the schematic.

EDITLOOM

The option UPDATE 2D HARNESS FROM 3D now works.

INSERT CHANNEL

INSERT CHANNEL will now insert the Nline on a layer number specified in the parameter file.

compname Property Character Limit

The character limit for the compname property reference designator has been increased.

LOAD NETLIST

The NETLIST file now accepts file names with blanks.

Parametrics

RENDER VIEW

- RENDER VIEW works with duplicated entities.
- In Parametrics, zooming with the mouse or spaceball no longer distorts graphics.

INSERT POINT

INSERT POINT with the modifiers ALONG and EQUISPACED N on a Pcurve now works correctly on Pcurves generated from a variation of wireframe entities. The points are now equispaced on the Pcurve.

ACTIVATE ASSEMBLY

You can now activate a new assembly with the PMD package.

REGENERATION

There are numerous quality improvements to the regeneration of parametric models.

EDIT SELECTION

EDIT SELECTION FLIP works.

APPLY DRAFTANGLE

APPLY DRAFTANGLE PARTING PLANE on a swept solid no longer crashes CADD5 after the FILE PART command is issued.

HIGHLIGHT OPERATION

There are performance improvements in HIGHLIGHT OPERATION.

CHANGE VARIABLE

The swap requirements for the constraints `anzahl_spante` are reduced.

Sheet Metal Design (SMD)

There are numerous quality improvements to SMD including improvements to SMD FOLD and SMD BENDALLOW.

DUPLICATE ENTITY

DUPLICATE ENTITY on an entity that has already been rotated now displays correctly.

ENTER EXPLICIT - Digital Only

On Digital, you can now ENTER EXPLICIT or FILE PART after a parametric change.

INSERT BOX

In Parametrics, inserting a box with a pattern and referencing the location works.

ADD ASSEMBLY

During COPY ASSEMBLY, CAMU allows you to add more than two copies of an assembly with View and Position selected.

Explicit

INSERT DATUM SYMBOL

INSERT DATUM SYMBOL with text height and text justification now works.

ATTACH DYNAMICS

- When you
 - use the Spaceball in Explicit
 - enter Parametrics and use mouse dynamics
 - and return to Explicit,
the spaceball works.
- The graphics no longer disappear from the screen when button four is pressed during dynamic manipulation with the Magellan Space Mouse.
- The dialbox no longer stays attached after exiting.
- The crosshair cursor no longer flickers during dynamic graphics manipulation with the Magellan Space Mouse.
- The middle mouse button for dynamics now works on accelerated platforms by setting a variable in the `.caddsrc`.

TRIM SURFACE

TRIM SURFACE with SELECT SGRAPHICS ALL LINEU LINEV POINT works.

CHANGE SGRAPHICS

CHANGE SGRAPHICS MESH 4x4 SOLID works.

LOFT NSURFACE

- LOFT NSURFACE: SELECT PROFILE now displays the correctly proportioned X axis symbol.
- The OK/NOT OK panel closes properly in the LOFT NSURFACE environment.

INSERT TEXT

SELECT TEXT FONT 11 CASE 2 HGT 32 LJT USPACE is now accepted by SELECT TEXT.

DIVIDE NSURFACE

DIVIDE NSURFACE UVDIR VIEW now works when you use the dialbox.

DYNAMIC VIEW - Digital Only

Dynamic manipulation in Explicit now works on the Digital platform.

RUN CVMAC

You can now obtain subrecord 1216.

RUN CVMAC

RUN CVMAC performance is improved.

DEFINE SECTION

- DEFINE SECTION CUTAWAY now works correctly.
- The command DEFINE SECTION can now produce a section looking down from the top.
- Sectioning now supports the Z axis correctly.
- Section views now appear in the correct location.
- DEFINE SECTION CUTAWAY now positions the section view, normal to the section line.

CHECK DBASE

- There is no longer a problem with VIEW PART LAYER after a CHECK DBASE.
- When you do a CHECK DBASE on a CADD5 part which has undergone HIDE OBJECT, it no longer removes the appearance modification.
- You no longer have to reset the view before you use CHECK DBASE.

- When you use CHECK DBASE, the text in the Report Window now wraps.

CADDS DRAWING WINDOW

When using OGL, the CADDs Drawing window graphics are now restored when an iconized CADDs is re-opened.

GET SET

GET SET works.

INSERT NFIGURE

In CAMU Nfigure graphics appear correctly.

TRIM SURFACE

TRIM SURFACE between a plane and a circle works.

Unified Layering Menus

Unified Layering menus now accept a range of layers.

REGENERATE DIMENSION

- Design dimensions imported from a parametric part no longer disappear.
- Dimensions no longer go to X0Y0 after being changed or updated.

REGENERATE GRAPHICS

REGENERATE GRAPHICS now displays all graphics in Explicit CAMU.

LIST PROPERTY

LIST PROPERTY now works.

SHADE SURFACE

SHADE SURFACE now shades a sphere correctly in ISO view.

ECHO GRID

The graphics no longer disappear after issuing the command ECHO GRID OFF.

PUT CGM

Layer-wide mapping is now working correctly in multi-entity parts.

SWEEP NSURFACE

The results of SWEEP NSURFACE with the modifier OPTIMIZE are improved.

INSERT FCSYMBOL

INSERT FCSYMBOL now draws a box around the feature control characters.

SHADE PICTURE

Resizing the Picture Window works.

INSERT FLANGE

The OK/NOT OK panel no longer stays on the screen after the command INSERT FLANGE.

FILE PART - StressLab

StressLab analysis in batch mode is now saving the `_stlab_/post_file` when filing the part.

INSERT LDIMENSION Menu

You can now use the PRIMARY3 Modifier with the MORE option from the INSERT LDIMENSION menu.

PLOT DOT

- There is no longer a shift in data when you use PLOT DOT ROTATE.
- You can now use PLOT DOT DISKFILE in CADDs on drawings in excess of 200 inches without using the ROTATE modifier.
- PLOT DOT WINDOW in explicit accelerated mode no longer generates the GERSERR (051): GCF ERROR IN SDEVP error in the CADDs Text window.

PLOT DRAWING

- The screen display and plot are now consistent with the command PLOT DRAWING.
- The lpsetup script now creates the correct configuration file for remote plotting on HP and Solaris.
- You now have the xsize (the size of plotter paper in x) and ysize (the size of plotter paper in y) on the PLOT DRAWING Menu.

ACTIVATE ASSEMBLY

The performance of ACTIVATE ASSEMBLY with large assemblies is improved.

HIDE OBJECT - DIGITAL Only

On Digital, HIDE OBJECT on a parametric assembly now works.

INTERSECT ENTITY

The command INTERSECT ENTITY now releases the swap space.

DEFINE LORIGIN

CHECK DBASE now handles subrecords created by the command DEFINE LORIGIN correctly.

MENU AD

On the Change Assembly menu, New Assembly and New Assembly Instance input names are accepted in the correct order.

SAVE SETUP

When you issue the command **SAVE SETUP** or **RESTORE SETUP** in CADD5, a default file name is used if you do not give a specific file name. Now, the menus in CADD5 also take this default file name.

UNION SOLID

The command **UNION SOLID RTOP** creates a valid solid

FILLET NSURFACE

You can now select or define a plane in the **FILLET NSURFACE** environment when you want to create a fillet between two surfaces and a plane.

INSERT NSURFACE

- **INSERT NSURFACE** property sheets no longer shift across the screen.
- The results for **INSERT NSURFACE** with the modifier **OPTIMIZE** are improved.

EVALUATE SURFACE

EVALUATE SURFACE with **NORMAL** and **VIEW** modifiers now works correctly.

CONSTRUCT GROUP

TRANSLATE ENTITY after **CONSTRUCT GROUP** works.

SELECT DIMENSION

SELECT DIMENSION now allows you to insert a tolerance with a specified height.

CVNC 5 AXIS

SURFINT5

There have been many quality improvements to SURFINT5.

SWARFCUT

If you use SWARFCUT with a cpl which has been rotated and translated from a top cpl, the correct toolpath is now generated.

SURFCUT5

There are many quality improvements to SURFCUT5 including:

- DESURF5 CONNECT ONSURF with STOCK creates the correct toolpath.
- SURFCUT5 CURVE with curve surface normals, produces a toolpath on the part surface.
- The SURFCUT5 menu now contains PREPARE CURVSURF.
- AUTOEDGE is now included on the menu for SURFCUT5 CURVE OPEN.

AREAMILL

AREAMILL with the FACE option now works.

PROFILE5

- You can now select Run Time List from the PROFILE5 Menu and the ZPROF3 Menu.
- PROFILE5 creates the same toolpaths using VECTOR locs or VECTOR Line.

CVNC MULTAX

CVNC MULTAX Data output is correct.

CVNC 3 Axis

ZPROF3

- When using ZPROF3, the depth of the first cut is now correct.
- ZPROF3 with an INTOL .01. OUTTOL .01 and a 3MM ball nose cutter, now results in the correct toolpath.
- ZPROF3 recognizes plunge 3 and def RET 3.

MPOCKET

There are quality improvements in MPOCKET.

SURFCUT3

There are quality improvements to the command SURFCUT3 including:

- The Surfcut3 general menu now generates before and after the name of the CPL.
- SURFCUT3with containment now works correctly on the Digital and SGI platforms.

SURFINT3

There are quality improvements to the command SURFINT3

- SURFINT3 with defplu3 now generates the correct toolpath.
- The SURFINT3 auto command with the UNCUT TOOL option works.

NCAXIS Waterline

MPOCKET MATERIAL EDGES Works.

NC3AXIS WATERLINE

The CVNC-M3 command MPOCKET BOUNDARY now gives the correct result.

CVNC

ED

Using the ED command inside a JCF now highlights trimmed surfaces as well as other surfaces.

NCMILL PROFILE

NCMILL PROFILE with FEED SLOWDOWN now works.

NCMILL DRILL

DRILL/BORE/TAP with the FACE option works.

NCMILL DRILL

The toolpath generated by the DRILL COMMAND in CVNC-M2 is correct.

NCMILL AREAMILL

The CVNC AREAMILL command works.

NCMILL

CONFIG AAXIS, BAXIS with MULTAX ON now creates the correct CLFILE

NCMILL CUT

The CVNC command CUT XYLOC LOCS now works.

Layering Menus

The new Layering menus are available in CVNC.

CV-DORS™

SOLID MDIST

SOLID MDIST now enables measuring between faces.

CADD5[®] 5 Revision 7.1 Considerations and Issues

CADD5 5 Revision 7.1 considerations and issues are documented in this chapter.

System Considerations

Default Shell Environment

CADDS 5 runs under and is supported in the C-Shell environment only. If you start CADDS 5 from an environment other than C-Shell, the results are unpredictable.

.caddsrc

You should not change the `UI_LOOK_AND_FEEL` setting in the `.caddsrc` file.

Updated License File

CADDS 5 Revision 7.1 requires an updated license file, if you do not already have the CADDS 5 Revision 7.0 license file.

Please note: VRML functionality is included at no additional charge for all core packages. To take advantage of the new VRML functionality, you must request an updated VRML license file. Contact your local Computervision Services representative to request one.

Please see *Using the License Manager*.

Installing CVact

You now install CVact from the CADDS 5 CD-ROM. If you purchased the CVact User Interface Toolkit, you need to select this from the SLIC main menu

Stack Size

In CADDS 5 Revision 7.1 issue the command `UNLIMIT STACKSIZE`. This revision is more sensitive to the stack size than previous revisions.

HP-UX NFS Mounts with Solaris

The HP read and writer buffer size for nfs is limited to 1024 bytes and Solaris uses a size of 8192 bytes. For NFS mounts (or automounted) with Solaris, use the following options:

```
mount -F nfs -o rw,rsize=1024,wsiz=1024 solaris:/dir1 /dir1
```

3M Film Output - Sun Only

3M file output is no longer supported on Solaris. It is supported on SunOS.

MEDUSA CADDS INTERFACE (MCI) 3.0.1

MCI 3.0.1 is compatible with CADDS 5 Revision 7.1.

cvdmed

cvdmed is not supported on CADDS 5 Revision 7.1.

CMOM 2.0 and AW 2.7 Libraries

CADDS 5 Revision 7.1 uses CMOM 2.0 and AW 2.7 libraries. These are the binaries built and used by Optegra 2.x and EPD.Connect.

With this configuration there is a compatibility issue with the sites running CMOM 1.0. (Navigator 1.1.4 uses CMOM 1.0.) If you are running CMOM 1.0 on the same site as CADDS 5 Revision 7.1 you cannot use history tree functionality.

Workaround: The workaround for CADDS is to kill the `optmsgsrv` process from a UNIX window and then restart CADDS. This, however, will probably affect the other product.

CVact™

CVact Menus

There is a problem with all run-time-list selections issued with the CVact menus Assign Attributes, Edit Attributes and Delete Attributes. If you make a new selection, it does not clear the default or previous selection. When you select APPLY, error messages appear because only a single selection from the scroll list is required.

CVact Platform Specific Information:

- The `share_cvact` script for generating the `libUserCr` library is supported on the following platforms:
 - Solaris 2.3
 - Solaris 2.4
 - Solaris 2.5
 - HP / HPUX
 - MIPS / IRIX
 - Digital Alpha / OSF
- The `share_cvact` script generates `libUserCr` as a shared library on the following platforms:
 - Solaris 2.3
 - Solaris 2.4
 - Solaris 2.5
 - HP / HPUX
 - MIPS / IRIX
 - Digital Alpha / OSF
- The `share_cvact` script generates `libUserCr` as a static library on the following platforms:
 - IBM AIX
 - SunOS 4.1
- To use the `libUserCr` static library generated by the `share_cvact` script on the above platforms, you must build a CR process using the `Makefile` supplied with the CVact distribution. Follow the steps below to build a CR

process on IBM AIX (See “CR Process on IBM” on page 2-5 for CVact 7.1 IBM issue) and SunOS 4.1 platforms:

- a. Enter: `cd /usr/apl/cvact/C5R6/cadds/obj/cr`
 - b. Edit the `Makefile` and add the name of your directory containing `libUserCr.a` to the beginning of the line for `LDFLAGS` :


```
LDFLAGS=-L/users/guest/cvactwork ...<Existing contents of LDFLAGS>...
```
 - c. Make sure `libUserCr.a` exists in the directory specified in step b.
 - d. Enter the following command:


```
make
```
 - e. The CR executable gets built as `/usr/apl/cvact/C5R6/bin/CR`
- You cannot use the CVUI executable for standalone testing of your menus on IBM AIX and SunOS 4.1 platforms.
 - On IBM /AIX and SunOS 4.1 platforms the CVact examples are distributed as a static library `libUserCr.a`. To build an executable version of the examples, you have to build a CR process using the appropriate `libUserCr.a` by following the instructions in the fourth bullet (the bullet that begins with "To use the `libUserCr static...`")
 - On the SGI platform, the environment variable `_RLD_ROOT` is used for locating dynamic shared objects (DSO's), which is SGI's implementation of shared libraries.

Please note: The `LD_LIBRARY_PATH` environment variable is overridden by `_RLD_ROOT` on SGI, therefore, you should not use `LD_LIBRARY_PATH` on SGI.

- On an HP platform, the environment variable `SHLIB_PATH` is used for specifying the shared library search path.

CR Process on IBM

On IBM, you are unable to use the `MAKE` command with CVact 7.1 to build a CR process.

AEC - Control Pipe

MODIFY CPIPE CHANGE LAYER - Digital and IBM

MODIFY CPIPE CHANGE LAYER fails with a segmentation violation on Digital and fails with the message `Invalid Modifier input` on IBM.

DISPLAY CPIPE MLINE - SGI, Solaris, SunOS and HP

DISPLAY CPIPE MLINE fails with a segmentation violation on SGI and mts memory errors on Solaris, SunOS and HP.

GENERATE CPSECTION - Solaris and HP

On Solaris and HP, GENERATE CPSECTION fails with a segmentation violation.

GENERATE CPLABLE - Digital and SGI

On Digital and SGI, GENERATE CPLABLE fails with a segmentation violation.

AEC - Advanced Structural Modeling

Recreating the Tables Using -R Option

You can recreate the following RDBMS tables by using the -R option in the script. Specifying this option deletes the entities for other applications, such as HVAC or Piping, and recreates all the structural entities. By default, tables are not recreated.

The following tables, common across AEC applications such as Piping, HVAC, Ship Electrical and so on, are recreated when you specify the -R option.

- AEC Project Dictionary Table
- AEC Application Object Dictionary table
- AEC Object Component table
- AEC Object table
- AEC Application Object Type table
- AEC Application Object Link or Relationship table
- AEC Property Dictionary table
- AEC Object Relationship Type table

Syntax

```
$0 [-R] [-h | -H] [-d <source directory, default = /usr/apl>] -l <admin login name> -p <admin password>
```

where,

- d Script source directory path (default = /usr/apl)
- R Option to recreate the AEC_PROJECT_DICTIONARY_TBL (default = no)
- l Database administrator login user name
- p Database administrator login password
- h Print the help message

INSERT STPLATE

INSERT STPLATE may create an open Tsurf instead of a properly closed solid.

MODIFY STPLATE

MOFIDY STPLATE may result in CADDS crashing.

INSERT STCUTOUT

The generation of `ind` files for the library of stiffeners, cutouts, collars, and endcuts will be corrupt. Workaround: If there are duplicate section names in the files remove the duplicates. The index will regenerate correctly the next time it is used.

INSERT STCUTOUT

The command `INSERT STCUTOUT SECTION ONFLAN` fails to create a cutout on the flange of the Stelement.

UPDATE STPART

UPDATE STPART fails with the error: The system cannot create a face from the offset of this surface.

CV Hull CVMAC - Solaris Only

On Solaris, the `cvmac CVHULL.GENTEMPLATE` prompts with an additional question. If you bypass the additional question by pressing `ENTER`, the `cvmac` fails with the error: No intersection was found between two curve entities during the point insertion ##Fatal error in cons_tem statement 403 * ERROR CALL 000A*** -- /runtime system interrupt. Execution aborted.

DIVIDE STOBJECT - IBM only

On IBM, `DIVIDE STOBJECT` may fail with a segmentation violation or hang.

INSERT STELEMENT - IBM only

On IBM, `INSERT STELEMENT` may fail with a segmentation violation.

AEC - Equipment and Cabletray Supports

INSERT ESUPPORT

You cannot change section selection name or parameter selection name when inserting equipment supports.

INSERT ESUPPORT fails to process the orientation keywords UDIR, VDIR, and WDIR in the seat procedure definition file correctly and/or consistently.

TRIM ESUPPORT

TRIM ESUPPORT may fail to correctly cut the Stelement support member with a stiffener.

AEC - Piping

DRAW PSPOOL

DRAW PSPOOL does not automatically generate drawing dimension and annotation entities.

AEC - Visualization

CREATE SURFACE

CREATE SURFACE does not allow the modifier SAMLAY with USE.

EDIT DETAIL

The results of the commands EDIT DETAIL BLANK and EDIT DETAIL RESTORE are the opposite of what they should be. BLANK is restoring and RESTORE is blanking.

CREATE DETAIL

CREATE DETAIL may result in error messages and incorrect graphics.

AEC

CLASSIFY POLYGON - HP Only

On HP, CLASSIFY POLYGON may fail.

Electrical/Mechanical

EDIT WIRE PATH

- When you activate EDIT WIRE PATH, activate UNROUT and unroute a net, select any narrated net in the edit wire path, and select Set active wire, you receive a rolling segmentation violation.
- There are problems with the EDIT WIRE PATH menu.

SPLICE NET

- You cannot splice the net if the created splice is deleted using the DELETE command. Workaround: Unroute the net and then reroute it.
- SPLICE NET does not always create a splice, even though it is listing the possibility of a splice in the menu.

INSERT HDCONNECTOR

The Insert HD-Connector menu shows some control characters

INSERT CHANNEL

If you select the ... button from the Channel Segregation menu or the Channel Attributes menu, nothing happens.

ROUTE NET

Shading is not done for channels which are converted from Parametrics after doing a ROUTE NET ALL.

CGRAV

CGRAV may give inconsistent results.

Parametrics

Apply Sketch

Automatically generated dimensions are not displayed with text on the vplane. Instead, the text is rotated 90 degrees.

History

If you associate variables to a sketch in Parametrics and try to reapply the sketch, the variables get disassociated.

Dynamic Manipulation with the Mouse

After dynamic manipulation with the mouse on all four views in a drawing, an abort from the utility pop up menu generates the following messages in the CADDS 5 Startup window and eventually a crash: `Free Trace: 0bytes, pool# -1, FREE ADDRESS: 5672668, FREE TRACE: 0 bytes, pool # -1, FREE ADADDRESS: 5762668*`

INSERT FEATURE

Using the View Feature Mode option in the INSERT FEATURE property sheet, crashes CADDS with a segmentation fault. The crash may occur when using the Utility menu to end the View Feature mode option or when attempting to insert the feature.

EXIT HARNESS

When you exist the harness session, the Harness Task Set menu stays.

ROUTE CHANNEL

- You should not perform multiple insertions of components in the same command.
- ROUTE CHANNEL fails to route between channel end to component. It does work if you select FIRST component and then channel end.
- ROUTE CHANNEL between a junction and a clip generates the error message: `error 5, could not create a channel`. Workaround: Digitize a free point between the junction and the clip and the channel will be created.

- ROUTE CHANNEL in parametrics does not follow the channel insertion layers specified in the parameter file.

ENTER PARAMETRICS

If you do a SHADE PICTURE and then Enter Parametrics, some components may be scaled wrong. Workaround: REGENERATE GRAHICS fixes the graphics.

GET IGES

The following line fonts are not converted by GET IGES: military, national, sidewalk, pipeline, wireframe, slantic2, lmetpres, nrrwgage, rsyspres, pipediam, railroad, lsypres, solid, dash-dot, rmetpres

DROP ENTITY

Parametric DROP and INTERSECT commands may result in non planar curves.

INSERT HDCOMPONENT

When more than one component is placed in one run then this component cannot be connected by a channel. Workaround: Insert one component at a time.

Sheet Metal Design (SMD)

3D Features

3D Features that add and subtract material at the same time do not work properly.

SMD

When attempting to add an SLIB to the model, SMD accepts the locations but may fail to generate the specific SLIB.

SMD FOLD

The system hangs when attempting to fold a cylinder after holes are placed in the correct flat pattern.

Explicit

HIDE OBJECT

HIDE OBJECT results in segmentation violation in multi view for Advanced Structural Modeling, Piping, and HVAC.

PUT GERBER

PUT GERBER results are unreliable. For example:

- Some pads are flashed two times.
- PUT GERGER SHAPEFILL is not keeping within the constraints of the shapes defined.
- PUT GERBER shapefills a specific shape but when other shapes are added to the part, nothing is shapefilled.
- PUT GERBER does not correctly handle a second or subsequent PUT GERBER in the same CADDS session
- PUT GERBER is placing small strings wherever Nfig origins were.
- PUT GERBER is not converting all pads.
- PUT GERBER INTERPOLATION CIRCULAR is not working.

CHECK BOUNDARIES

CHECK BOUNDARIES may return a segmentation violation.

GET MSP

- On Digital, If you try to use the MCAE tool either in CADDS or in Digital UNIX, for SystemsLab, it returns an error message and SystemsLab fails.
- On HP, you will receive a running segmentation violation after an animated display has been generated in SystemsLab. This occurs after one or more commands and sometimes on menu picks.
- Animated shaded display does not work with SystemsLab. The XWD files cannot be displayed in the animator.

DEFINE SECTION

DEFINE SECTION on parts with multiple voices may not create the correct section drawing. REGENERATE SECTION corrects this.

CHECK DBASE

With the DB_CHECKER environment variable set to call the third party ckcad tool, a CHECK DBASE in a CAMU model with more than one view fails with the following error message: The current part has been determined to be corrupt. This part session should not be continued. An Exit Part Quit is highly recommended. Please generate a bug with all necessary follow-up information.

CHECK DBASE

When CKCAD is enabled, it checks every instance of a component.

SMASH ENTITY

SMASH ENTITY fails with a loss of model graphics on Digital, SGI and SunOS. It results in missing entities on HP, Solaris and IBM.

GENERATE POLYGON - HP Only

On HP, GENERATE POLYGON may result in the message

```
Severe loss of model graphics precision due to large  
coordinate values
```

and a corrupted database.

ACTIVATE PART

If you have a part with three or more drawings, run CHECK DBASE, and file the part, the next time you go into the part and activate the drawings you get the message Error occurred during read from DMG bitmap; rdbitm c01cdmgmain: DMG File Error c01c.

This does not occur if you have 1 or 2 drawings.

ACTIVATE RASTER - HP ONLY

On HP, raster fails with mts memory errors in the startup window.

MCAE TOOL - Digital Only

On Digital UNIX 4.0A if you use the MCAE tool and try to save either the gif, MCAE file, or sun raster image, this action results in a core dump.

Explicit Graphics Window - SELECT GRID AZ ORIGIN

When using accelerated graphics, SELECT GRID AZ (n) ORIGIN followed by ECHO GRID on snap, incorrectly displays the grid points.

INSERT DTARGET - IBM ONLY

On IBM, INSERT DTARGET may hang CADD5.

MIRROR ENTITY - IBM ONLY

On IBM, MIRROR ENTITY may fail with a segmentation violation.

PUT SET - Digital Only

On Digital ALPHA, PUT SET results in the message UNKNOWN ERROR.

RUN CVMAC - DIGITAL ONLY

RUN CVMAC CVHULL.GENTEMPLATE results in the following error message in the startup window: MALLOC ERROR: (gen_mem_extract_node) Broken chain at last cell in pool.

RUN CVMAC - SGI Only

On SGI, RUN CVMAC fails with a rolling segmentation violation when attempting to obtain properties.

COPY ENTITY

You should not copy view dependent entities.

DISPLAY REFLECTION

If you use the command DISPLAY REFLECTION with SELECT SGRA ALL POINT LINEU LINEV DIR, you receive the message An unknown error has occurred etc.

ECHO APPEARANCE

- In XGL mode, the echo appearance symbol off does not echo off the Nfig origin symbol correctly.
- If you do a SCROLL DRAWING or ZOOM DRAWING, the symbol origin displays as a crosshair.

Change Entity/Insert Hole issue

Do not use the following commands on Explicit geometry brought into Parametrics through CHANGE ENTITY:

- INSERT HOLE (Through)
- INSERT NOTCH
- INSERT SLOT
- INSERT POCKET

If you use these commands on imported geometry it results in parts that cannot be regenerated.

Workaround: Use DUPLICATE ENTITY INPLACE on the Explicit geometry and apply the above commands to the duplicated geometry.

CVNC 5 Axis

VECTOR ANGLE

The VECTOR ANGLE modifier is supported only by SURFCUT5.

ROTATE COPY - HP, Digital and SGI

On HP, Digital and SGI, ROTATE COPY fails with a segmentation violation.

SURFCUT5

- SURFCUT5 curve toolset vector control with LOCS or LINES does not work from the menu. Workaround: Use the command line.
- If you select the Boundary option from the Surfcut5 Curve menu, it only allows the first boundary selection and does not allow you to select again. When you try a second boundary selection, it puts in either vector or psnormal.

SURFINT5

SURFINT5 produces an incorrect toolpath when the drive surface is a fillet with a smaller radius than the tool.

CVNC3 3 Axis

DRILL ROTATE

DRILL ROTATE displays incorrect graphics. Before using the command DISPLAY TOOL CONST PAINT in drilling operations, make all the cycles on for tool display. Issue the command DISPLAY CYCLE ALL.

PROFILE 3 RECUT

PROFILE 3 RECUT fails to find results.

Gouging

When a generated toolpath lies on the parametric center of the surfaces, there is gouging.

SURFCUT3 STRAIGHT

When SURFCUT3 STRAIGHT is used to machine a series of surfaces which form a horizontal/vertical/ horizontal, the shape of a step on a stair, the tool leaves the surface each time it traverses the vertical portion of the step. When the tool leaves the surface it also leaves the material behind.

SURFCUT3

SURFCUT3 has difficulty cutting fillets with tight areas that the cutter cannot fit into.

SURFCUT3 CURVE

- SURFCUT3 CURVE with containment does not result in an accurate toolpath.
- SURFCUT3 CURVE BOUND AUTOEDGE produces a bad toolpath.

CVNC

Considerations

- The SURFCUT3, SURFCUT5 and ZPROF3 commands only, are supported for contact point output generation.
- In automatic surface intersection and corner machining, optimal cut ordering is not supported. Cuts are made on pairs of surfaces.
- The RAMP and RADIUS modifiers are supported only by ZPROF3 and MPOCKET.

CVNC - View/Dynamic Manipulation Menu

In CVNC, the View/Dynamic Manipulation menu activates dynamic view in XGL mode instead of attach dynamics.

NCPUNCH

- The CVNC-P2 Punch demnu disappears any time a selection is made that brings up a drop down menu.
- PROGRAM NCPUNCH is producing output significantly different from previous versions of CADDS. If you use the file from CADDS 5 Revision 6.0, the output is correct.

Change Tool - HP Only

On HP, using the CHGTOOL menu may result in incorrect command syntax..

NCMILL PROFILE

PROFILE TO cuts the first entity last, if the last entity is an ARC with a smaller radius than #TOOLRAD and the toolpath is on inside of the arc.

PROGRAM NCTURN

PROGRAM NCTURN is producing incorrect `clfile` output. Workaround: Specify the value of the argument UPDEPTH in the command line FTURN.

NCGROUP EDIT menu

Using the NCGROUP EDIT menu, may result in syntax errors.

CVMACS

UNFOLD.GENERATE and UNFOLD.EXTRACT

To run CVMACS UNFOLD.GENERATE and UNFOLD.EXTRACT, change the following variables in the `caddsrc-local` file, depending on the application you are using.

To run Unfold and Extract CVMACS:

```
setenv CVMAC_CALLF_OBJ ` /usr/apl/cadds/data/cvaec/hvac/bin/`  
setenv CADDS_CVMAC_BASE ` /usr/apl/cadds/bin/CADDS5`
```

For CV Hull:

```
setenv CVMAC_CALLF_OBJ ` /usr/apl/cadds/data/cvhull/bin/`
```

