



R 8.0

Release
Notes

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Installation

Requirements

Please read the installation guidelines first.

Further information is available on the installation CD in the following document: "Installation_DE.pdf".

Upgrade of existing installations

Category: **Administration**

Please read the [installation guidelines first](#).

Further information is available on the installation DVD in the following document: "CADISON_Installation.pdf".

The installation itself

Category: **Administration**

Please read the installation guidelines first.

Further information is available on the installation DVD in the following document: "CADISON_Installation.pdf".

New installation of CADISON R8.0

Please read the installation guidelines first.

Further information is available on the installation DVD in the following document: "CADISON_Installation.pdf".

Post-installation / deinstallation of individual modules

The set-up supports the post-installation and the subsequent deinstallation of individual modules. To start the set-up process go to "Start", "Control Panel", "Add or Remove Programs" select "CADISON" from the list of programs and "Change or Remove Programs". Please read the installation guidelines first.

Further information is available on the installation DVD in the following document: "CADISON_Installation.pdf".

Installing the Network License Manager (NLM)

Run the setup from the CADISON R8.0 DVD under NLM\setup.exe.

Further information is available on the installation DVD in the following document: "CADISON_Licensemanager.pdf".

Licensing

Category: Administration

Further information is available on the installation DVD in the following document: "CADISON_Licensemanager.pdf".

Scope of delivery

The following is part of the CADISON R8.0 software package:

- A CADISON release 8.0 DVD program
- Possibly a DVD with the customised customer object model
- CADISON R8.0 release notes (as PDF and CHM on the DVD)

CADISON

New Functions

Unicode support

New Word Report Generator

New Report templates

Fill and number function

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CADISON General Information

Document management

Transfer of large files to Network drives

For some operating systems issues could arise if larger files were transferred to a network drive. In certain circumstances the files cannot be correctly written so that they can no longer be used. The files can then only be properly transferred directly to the server on the local drive. In this release file transfer has been improved, so that even large files can be transferred to network drives without any issues.

"Add a new document..." menu option in the Objects shortcut menu

In objects' shortcut menu the menu option "Add a new document..." used hitherto to import an existing document, has been renamed to "Import existing documents". In this way this entry is now compliant with the projects and document group shortcut menu, where this function is under the same name.

Full stop in directory names in drawings

Up to now a full stop in a directory name caused issues when opening the DWG file or during a drawing check. In this release the full stop in directory names (Project "Directory Folder" and Document group "Work Directory") are automatically ignored by CADISON.

"Remove Documents on disk" command

This command displayed hitherto the message that the transferred file was renamed to ". SAV", which is no longer the case since CADISON 7. Since an imported file can never allow a file to remain in the CADISON project folder, in this release the physical file in the CADISON project folder is deleted when "Remove Documents on disk" is selected. Therefore the message now appears that the transferred file is being deleted, when "Remove files from disk" is selected.

This change ensures that no file exists in the CADISON project folder that has been imported into CADISON.

Adding a new document group

CADISON must check when adding a new document group whether a document group already exists that uses the same path as the newly added document group. This check only operated in previous releases if the new document group was added directly within the project. In this release the test functions correctly so that even document groups of the same name are checked, if the new document group is added to a different location in the CADISON tree.

Unique name for a newly inserted document group

If a new document group was added directly within the project in the earlier version of CADISON, and if a document group of the same existed there already, a dialog appeared where the user had to enter a unique folder name for the new document group. The

dialog no longer appears in this release, instead CADISON automatically creates a new unique folder name using a counter.

Deleting documents

If a document is deleted, a dialog appears offering additional parameters for the deletion process. One option is "Delete drawing file" which also appears if a document and not the drawing is to be deleted. This option has been renamed to "Delete document file".

Tree functions

Moving of a non-imported document in the tree

Up to now a non-imported document could not be moved to a different document group, if the document had an imported, subordinate report. After it had been moved CADISON could no longer find the file that belonged to the document, so that the moved document appeared with a red cross in the tree. In this release it is no longer possible to move a non-imported document to a different document group.

Drag and Drop in System tree

Up to now it was possible to begin a copy process using the CTRL key and the Drag and Drop function, in order to copy a document group or documents from one project to another project. This copy process cannot be performed however using Drag and Drop, as CADISON will then shut down during the copy process. In this release it is no longer possible to copy between different projects in this way.

Note: You must use the "Copy" and "Paste" commands in the shortcut menu to copy files or document groups from one project to another in the system tree.

Updating the system tree

Updating the system tree displayed in the PDM and in the project select dialog was optimised. Database (or elements in the databases such as projects and document groups) updates using the "Update" command are now faster, especially for larger databases.

Updating objects

Until now objects directly assigned to the project the CADISON-tree where not updated, if they were updated by another CADISON application. For example if a document was deleted in an Engineer-session it kept visible even editable after updating the tree. This issue has been resolved.

Tree function "Copy Data from" / "Copy Data to" in drawings

Up to now where these commands were opened in drawings and the property "Filename without path" was displayed for the tree text, an incorrect file name was displayed in the tree for the target object of these commands. This issue has been resolved.

Use of "Copy" and "Paste" in the Tree

Since CADISON 7 it was no longer possible to copy the elements in the tree using "Copy" and "Paste". This limitation has been removed in this release.

CTRL + A shortcut in the CADISON system tree

If the CADISON system tree is displayed in the Engineer or in the Designer (to select a project or a drawing) and the user presses CTRL + A, the CADISON application shut down. This issue has been resolved.

[Table functions](#)

Table filter using number values with wildcards

It is possible to activate user-defined filters in the CADISON table. There is also the option to work with wildcard characters (such as * and ?). Up to now it wasn't possible to work with wild cards for numbers and/or unit data fields. This is possible in CADISON version 8.

Table filter sometimes does not find number values

If a filter using "=" or "<>" operators is used in the table, and the data fields to be filtered are number or unit fields, in some circumstances an internal rounding off error can mean that not all suitable objects are filtered.

Configured filter in the CADISON table

Up to now the preset filters for some editing functions were lost in the CADISON table of the CADISON main window in the PDM and Engineer. Deleting an object in the table for example caused the preset filter to be deleted. Even if new elements were added to the table through the Edit function, preset filters could be lost. In this release the current table filter is retained during these operations, as long as no other object is selected in the tree.

Object selection in the Selector via preset table filters

If the user is working a filter in the Selector in the detail table an incorrect object could be transferred to CADISON by clicking on the OK button. This release ensures that a valid object which applies the preset filter is transferred.

CTRL + A in a CADISON table

The shortcut key CTRL + A selects all entries in a table. Prior to this in CADISON this also happened if the table was set to single selection. By pressing CTRL + A in the Object Inspector for example, all columns in the table were highlighted, although only individual entries could be selected. In this release CTRL + A is only operated in tables where multiple selections are permitted.

[Function: copy database](#)

Copying of databases

If a database copy is created using the command "Copy database", the dialog "CADISON is busy..." appears. If it is found during the copy process, that not all documents in the database to be copied are imported, a corresponding error message appears and the process is aborted. However, up to now the "CADISON is busy..." dialog was not closed. In this release this dialog closes when the function is aborted.

Function: import database

Importing databases

The Versant program vstream.exe is used when importing databases. After the import CADISON tries to determine whether this program has reported an error in order to identify an incorrect import. In doing so a possible vstream stack error was not taken into account so that an incorrect import process was not reliably identified by CADISON in previous releases. When importing a database CADISON now automatically checks for a possible stack error and where necessary issues a warning message, that the import process could not be completed.

Matpipe data transfer

Import of Property Definitions from Matpipe

Since CADISON 7, the MIN and MAX values of the property definitions were imported and applied when transferring data from Matpipe. If however the value "0" was defined in Matpipe in both fields, to show that no MIN and MAX values existed, the "0" values were still imported to CADISON, meaning that in some cases no valid property values could be identified. Therefore in this release no MIN and MAX values are imported to CADISON if both values are set to "0" in Matpipe.

Multiline text in "Add Specification Sheet Data"

Prior to this there were issues with multiline memo fields in the "Add Specification Sheet Data" command. Instead of new lines the "\n" character was shown. This issue has been resolved.

Function Work copys

Checking out Documents

If documents or title blocks are contained in a check out, up to now a test was always run to see if these objects had super-ordinate CAD drawings. If a corresponding CAD drawing was found and this was not part of the objects to be checked out, the document or the title block were not checked out.

In this release super-ordinate CAD drawings are checked for title blocks only, since title blocks always belong to a super-ordinate CAD drawing (and these must always be checked out with the title block). For all other documents it is irrelevant whether a CAD drawing exists.

Check in from the last check out

If the user has opened a project in the Engineer sometimes this project contains only a check out. If this is then checked in from the opened project, the Engineer shut down when the "Purge" option was selected following the check in. This issue has been resolved.

Check-out with database errors

For certain database errors, when checking out, the program did not detect that a check out already existed for the current selected target database, and that certain objects

were already checked out. In these cases, all selected objects were checked out once more, although they were already checked out. This error has been resolved in this release, so that correct data can be checked out even in the case of these specific database errors.

Checking out objects

When checking out objects since CADISON 7 no objects that were linked with the selected object by connection points could be checked out with it. This issue has been resolved.

Calculations

Calculation of CALCONDEMAND properties

In order to calculate CALCONDEMAND type properties in CADISON, the command "Recalculate" must be opened in the tree shortcut menu. This command should recalculate the current object (where the command was launched from) and all its sub-objects. Up to now only the sub-objects were recalculated. This issue has now been resolved in this CADISON 8.

Calculation of the "INT_DRAWINGNO" property for a pipeline

The "INT_DRAWINGNO" property for a pipeline is composed of the "INT_DRAWINGNO" values of the subordinate 2D pipe routes, whereby the individual values are separated from each other by a Return character. However if a 2D pipe route contains no value for "INT_DRAWINGNO" (because for example the pipe routes were not drawn, or no drawing number is entered for the associated drawing) empty text was imported for the pipe routes.

Since the result of the calculation is sorted alphabetically at the end, these empty texts appear at the start of the results, so that the result begins with the return character. Because only the first "line" of the text is displayed in the CADISON tables, it was not possible to identify in which drawings the pipeline was drawn.

For this reason "empty" texts are ignored in this release when determining properties. This means that even if a subordinate 2D pipe route had set no drawing number, a valid drawing number for a different 2D pipe route can be displayed.

Highlighting objects from the Engineer / PDM / Navigator

If the Highlight command is launched from the Engineer / PDM / Navigator, a new Designer was always started up to now. In this release, similarly to when loading drawings, a check is run first to see if a running version of the Designer exists, which can be used for highlighting.

Note: In this type of highlighting, the objects to be displayed in the Designer are shown with dotted outlines. The objects are not shown as "flashing".

Structural links for quotation positions and packing units

If an object is attached via a structural link to a different object, all subordinate components are automatically attached to the new main object.

This is incorrect when assigning it to a quotation position and a packing unit.

Example:

```
- Valve
  |- Flat gasket
  |- Screw group
  |- Flat gasket
  |- Screw group
```

These valve sub-elements are valve components. If the valve is attached to a quotation position (VCS-CPOS) or a packing unit (VCS-FUNT) up to now the components were also attached to the quotation position/packing unit. This was not desirable, as the components could be assigned to a different packing unit for example.

In the update the components are no longer automatically attached in the structure assignment to the quotation position and the packing units.

The components are automatically assigned for all other structure assignments (such as in an assignment of the valve to a logical system).

Corrupt shortcut menu

If the CADISON shortcut menu (e.g. for the CADISON tree or the CADISON table) is opened frequently, sometimes the shortcut menu entries could be mixed up and commands may no longer function in the shortcut menu. This issue has been resolved.

Importing of template objects with SAVE_LOID properties

When importing template objects (DEF files) up to now, the internal CADISON properties SAVE_LOID1 and SAVE_LOID2 were recorded as "UnknownProperties". In this release no message is displayed any more for this internal property.

Positioning of windows and dialogs in multi-screen solution

When working with a multi-screen set-up the main screen (desktop) always had to be positioned on the left monitor in previous releases. As soon as another screen was defined as the main screen, dialogs and windows were incorrectly positioned in some instances by CADISON. The main screen can be moved around now in CADISON 8.

Changing the display unit via "Change Definition for this object only"

Up to now if the display unit of an individual attribute is changed using the command "Change Definition for this object only" and then a new value is entered without a unit, the value entered was interpreted as the globally configured value. In this release the display unit configured for the attribute is used, as long as no other unit is entered.

Deleting the User Management when launching CADISON

In an incorrectly configured CADISON work place the CADISON User Management in a system database of a different CADISON domain was sometimes deleted when a CADISON application was being launched. This happened if the CADISON work place was incorrectly configured in relation to the Versant settings or the system database. In this release, when this configuration problem occurs, a message appears that CADISON cannot access the system database and the CADISON application is shut down.

Logging on to the CADISON system

In previous releases it was not possible to logon to a CADISON application if another CADISON client was simultaneously importing template objects (DEF files) to the Object

Manager. CADISON stalled at the logon and sometimes the import process on the other client also stalled. In this release the user can logon even if another client is importing a template object at the same time.

System information in the "CADISON - Information" dialog

CADISON displays the Windows user name of the database administrator in the system information from the current database. If a project is opened in the Engineer, the current database is the opened project database. If the user has no project opened in the Engineer, the current database is the CADISON default database. In PDM the current database is the system database.

Deleting project databases

If the project database deletion fails due to the fact that the current user is not the database administrator, the Windows user name of the database administrator is shown in the error message. Only this user can delete the database.

Translation missing in the "Character set" dialog

The character set configuration dialog was not fully translated into English in previous releases.

Selection list of QUICKLINK / QUICKCOMPLINK fields in the Edit dialog

In CADISON's "Edit object" dialog, the QUICKLINK and QUICKCOMPLINK data field selection lists were too small when opened in some cases. Especially if only a few entries were available in the selection list, this sometimes made it difficult to select an entry. In this release the selection lists are displayed as larger in the Edit dialog, so that it is easier to select a specific entry.

Renaming of disciplines in the Object Manager

In this release individual disciplines were renamed (in the Object Manager). The "Electrical Engineering" (ET) discipline is now called "Power Supply and Distribution", "Automation" was renamed to "Control Engineering" and "Automation technology" is now known as "Automation".

Adding sanitary accessories

Up to now it was not possible to add "Sanitary Accessory" type objects in the Designer. An error message appeared in the AutoCAD command line.

Output of "[Qxxxx]" in queries

Up to now in some query dialogs in CADISON, the message began with "[Qxxxx]". This internal query mark has been deleted in this release.

Unicode-support

This version of CADISON is Unicode compatible. This means that all international characters can be used when applying the appropriate Unicode character sets. In this release Unicode characters are saved in the CADISON databases so that CADISON is not backwardly compatible. No CADISON R8 databases can therefore be used in older CADISON versions.

Project translations

Automatic translation of catalog entries

In this release the new property "Automatic Translation" ("AUTOTRANS") is available in the project in the "Translation" tab. If this property is set to "Yes", the catalog entries are automatically translated according to the current project setting, while catalog objects are being inserted or catalog entries are being assigned.

The default setting for new properties is "No".

Changed Translation of Catalog Entries

The translation function was changed for article objects (catalog entries). If the translation property originates from Matpipe in the format "<property>@<language>", the translation is no longer performed for the actual database object but instead for the article object.

Internal database layout:

```
- Database object (e.g. valve)
  |- Article object (invisible; originates from catalog entry)
    |- Properties
    |
    |- Properties
```

If the translated property (such as P_name@english) originates from the article object, the following happens:

If the catalog entry supplies a translation, the target translation property (e.g. P_name is translated according to PNAME_INT) is saved with the article object, so that the translation is displayed in red in CADISON and cannot be edited.

If the catalog entry does not supply any translation, the target translation property is deleted on the article object, so that the target translation property from the actual database object reappears in CADISON. This target translation property is then used as beforehand by the translation function. If it is empty a dictionary translation is entered there, if the target translation property is not empty no translation is given.

If there is no available translation property <property>@<language>, or this does not originate from the active catalog entry, the translation proceeds as per previously.

Project translation and properties with value lists

In some instances, the "Translate project" function did not translate properties whose current value originated from the values list. EDITABLE and QUICKEDIT properties could have saved value lists and if the value of a property corresponded to an entry from the value list, this value was hitherto not translated by Translate project. This limitation has been removed.

Search text in the Translation dialog (F2)

Up to now all text containing the text entered in the main language was displayed in the

translation dialog. In this release it is possible to search for text that begins with the search text entered and also to search in the target language.

If the search text starts with an asterisk * (the asterisk is automatically prepended to the search text in this version of CADISON), a search is run for text that contains the text entered.

If the search text does not begin with an asterisk, text is searched for that begins with the same characters as the search text entered.

If the first character of the search text entered is an angle bracket >, then the target language and not the main language is searched. The angle bracket can also be combined with the asterisk character.

If the search text begins with >* a search is run in the target language for text that contains the search text entered.

If the search text starts only with >, text is searched for in the target language that begins with the same character as the search text.

Fill and Number function

Fill and Number in the table

(new function)

Up to now the "Fill and Number" command is only available by right clicking on the column header in the table. All objects were then edited in the table. In this release the command is also available if a minimum of two objects are selected in the table and you then right click inside the table. Only the currently selected objects are edited by opening the "Fill and Number" function. The clicked on attribute (the column) is the one selected to be filled.

Fill & Number on data fields of type NOOVERWRITE

Usually the Fill & Number dialog displays a selection list for data fields of the EDITABLE and/or QUICKEDIT types and for which a selection list has been saved. A value list has been created for the "Display Object in Reports" data field, but the field type has been set to NOOVERWRITE. No selection list has been displayed up to now for these NOOVERWRITE data fields in Fill & Number. This limitation has now been resolved in this release.

Fill & Number with "0" found objects

If the number of objects to be edited is "0" in the Fill and Number dialog, and a selection was made in the "Alphabetic" tab, CADISON shut down. This issue has now been resolved in this release.

Favourites list for Reports and when creating new files

Favourites list for Reports and when creating new files

In this release CADISON manages a Favourites list for reports and created files. If a report is selected in the CADISON shortcut menu and a new file is created, the selected entry is added to the relevant Favourites list. The Favourites list is shown in the appropriate place the next time the shortcut menu is opened. The Favourites list contains the five latest selected entries.

New option in the Object Inspector

New option in the Object Inspector

There is a new command "Show all tabs" in the shortcut menu in the Object Inspector. If this option is selected all tabs of the current object are available in the Object Inspector. In this mode the same sorting as configured by the user in the Edit dialog is applied for the table.

Changes in PDM

"Transferring References to project specific User Management" command

In previous releases if multiple users or roles are selected in the CADISON table and the shortcut menu is opened, this command appeared twice in the shortcut menu. In this release, the command is shown only once in the shortcut menu.

Loading a new user management

Previous to this, once a user management was loaded the user management window was always closed and the normal CADISON tree reappeared. However the structural view remained on "user management".

In this release the user management window is not closed if a user management is imported.

Changes in the object model

"SUPPLIER" property for object type "PHI-MEAS" in ITF-MSR object model

The "SUPPLIER" property of the "Measuring point" object type (PHI-MEAS) was renamed from "Supplier" to "Supplier measuring point", as other object types already had the "Supplier" property, although the property name was "VENDOR".

In this way it was not possible to see which property is being applied "VENDOR" or "SUPPLIER" when CADISON displayed the word "Supplier".

P_dbowner with VCS-DB object in SYSTEM object model

The "P_dbowner" property is translated as "Database manufacturer" in CADISON 8 and subsequent releases. "Creator" is no longer being used as this could lead to a conflict with the "P_creator" property, which is also translated as "Creator".

Graphic links with MSR objects with a pipeline

In CADISON 7 some MSR objects can no longer be integrated in 2D pipelines ("PHI-PRUN" pipelines). When the MSR objects were positioned on a pipeline it was not broken any more and no link was created between the objects. The following object types were affected: sensor, measuring transducer, detection device, indication device, control-device and consumer.

In CADISON 8 these objects can again be integrated in a 2D pipeline.

Numbers selection list in "Duct" object model

Fixed selection lists for number values were saved for some properties in the "Ventilation" object model, for example for "THICKNESS", "DIAMETER D" and other graphic properties. Up to now it was not possible to enter values other than those that were in the list. For this reason some values that originated from a catalogue entry were not recognised by CADISON.

In this release the property definitions were changed from EDITABLE to QUICKEDIT so that other values could be accepted by CADISON here too.

Pipeline links ITF-FROM and ITF-TO

For these two object types, the following properties were missing from the object model up to now:

- P_nographic
- P_canlink
- P_canarticle
- P_loid
- P_defaultFileName

No legible text appeared for the selection lists for P_nographic, P_canlink and P_canarticle but instead the internal values "0" and "1" were shown. In this release the properties for these two object types are listed in CADISON object model, so that legible text can be displayed.

New STANDARDCALC_INT and STANDARD_INT properties

In this release all objects that already have the STANDARDCALC property now have the new STANDARDCALC_INT property, which is permanently calculated in CADISON. For most STANDARD property objects, the Property STANDARD_INT has also been added. Using the translation function (once the .cts translation file has been customised) the contents can be translated from STANDARD to STANDARD_INT and STANDARDCALC_INT acquires the standard to be translated from there.

Allocation of objects from the electrical engineering object model to different disciplines

Up to now electrical engineering object model (PHI-ET) objects were assigned to the "Electrical Engineering" discipline. In this release the objects were allocated to the "Power Supply and Distribution" and "Control technology" disciplines.

Pipeline layer name in plant design object model

Up to now the pipeline layer name (PHI-PLIN object LAYER property) contains the pipeline's LOID. In this release the layer name contains the pipeline number (Property PIPE_NO) instead of the LOID.

PIPE_SPEC property of a pipeline (plant design object model)

In this release, the pipeline's PIPE_SPEC property (PHI-PLIN object) uses the new property types MAJORQUICKLINK instead of QUICKLINK. This change means that only the pipe classes (PHI-PSPS) are available in this property's selection list, and they are sorted hierarchically below the super-ordinate medium.

If the pipeline is subordinated to a different medium when the pipe class is selected and if this medium does not have the same subordinated pipe class, the value of PIPE_SPEC for the pipeline is automatically set to "---".

Editing of the COUNTABLE properties property setting

If a COUNTABLE property was edited up to now in the Property Editing dialog and if the dialog was closed by the "OK" button, the COUNTABLE property no longer functioned, so that CADISON could no longer automatically increase the counter. If the counter was to be recalculated by CADISON, it was reported instead in the CADISON system instructions that the counter was outside the defined area. This issue has now been resolved in this release.

Unnecessary properties in template files

Some template files (.DEF files) contain the unnecessary properties P_creationdatetime, P_creationdate, P_updatedatetime, P_updatedate and P_creationuser. These properties

have been deleted from the .DEF files.

CADISON Administration

Designation style files (.CDC files)

Up to now .CDC files were located only in the configured LocalCFG folder and in the APP \PHI folder. In this release there is also the option to save the .CDC files centrally in the CONFIG folder on the server.

Inserting all Applicationkeys into the cadison.ini

While opening a drawing, CADISON searches the cadison.ini for an applicationkey (e.g. 2D-PIPE) which defines how AutoCAD is started. Starting with CADISON 8 all available applicationkeys will be inserted into the cadison.ini and not dependant on the installed modules. Until now the key was only inserted when the module was installed. E.g. 2D-PIPE was only inserted when 2D-Designer was installed, otherwise not. This lead to the problem, that on this workstation 2D-drawings could not be opened.

"Import auxiliary object model" function

If this function (without the "Override existing data" option) is used together with the project databases, a database object of each object type, listed in the object model to be imported, is changed. And in doing so the properties of this database object were set to the default values from the object model file. This issue has now been resolved in this release.

DEFAULT_CHECK_DB in the CADISON.INI entry

Up to now the CADISON installation entered the computer name in uppercase letters along with the DEFAULT_CHECK_DB entry in the CADISON.INI file. In this release it is entered using the defined syntax.

MADE_BY Property when importing .DEF files

If a new template database is created and existing, user-created DEF files (template objects) are imported, it sometimes happened that the property "MADE_BY" was created for these objects in the PGR_UNKNOWNPROPS tab. In this release this property is no longer displayed in this tab.

Änderungen in ITFTOOLS

Error message "ERROR: ow_ArticleManager" during a database purge.

Up to now the Purge function in ITFTOOLS could identify an error in the database object "ow_ArticleManager" but it could not clear it. In this release the error can be cleared for this database object.

Purging of databases with error E5006

In rare cases during database purges with ITFTOOLS, the error E5006 appeared, but this error could not be cleared. This issue has now been resolved in this release.

Purge of Check out sessions

When purging check out sessions using a CLEAN option from ITFTOOLS sometimes all sessions were deleted if it encountered a faulty session. In this release only the faulty session is deleted. Furthermore the sessions are now cleaned first when using the - [FASTCLEAN](#) option.

new Extensions for the Object model

New object keyword "EXTEND"

When defining an object prior to this release, only the keywords ADD and HIDE were available. In this release there is also the keyword "EXTEND". If this keyword is used for the object definition, the object type entered is only extended if it already existed. If the object type didn't exist already, it is not created and the following ATTRIBUTE instructions are ignored.

The new EXTEND keyword is used for the CommercialExtension, Shipping&Logistic and SAP object models. Since these object models define supplementary properties for each of the possible object types, all available object types were automatically added up to now through the use of these object models. By using EXTEND, in future not all available object types are added, instead only existing object types are extended.

EDITABLE properties with value list and formula

For EDITABLE properties that have a value list, it was not possible hitherto, to set the default property to a formula (with the syntax "\$FORMULA=xxx\$"). In this release a formula can be defined as a default value in the object model.

COUNTANDFILL Properties

Up to now COUNTANDFILL properties could only be calculated if the object, which contained the counter, super-ordinate was linked via a structural link to an object that contained the COUNTANDFILL property. In this release it is also possible to use a COUNTANDFILL property if the super-ordinate (counter) object is a super-ordinate component (that means if both objects are linked via a component link).

formula keyword "CONCAT"

The formula keyword "CONCAT" was enhanced in this release. CONCAT links multiple character strings to a text. In this release it is possible to limit the length of the resulting text. The syntax is:

CONCAT=<Text1>:<Text2>:...:<TextN>:Length

Either a property name or a set text, in inverted commas, can be entered for the <Text>. If the last element (after the last semi-colon) produces a positive number, this number is used as the maximum length.

New Propertytypes

LISTFROMFILE

In this release the property type LISTFROMFILE is available. This new type makes it possible to define a selection list for a property in an external file.

Up to now these selection lists were defined in the object model for the EDITABLE and QUICKEDIT property types, so that the object model is changed when the selection list is changed and the CADISON system must be reinitialised. By using LISTFROMFILE it is enough to change an external configuration file that contains the selection list.

MAJORQUICKLINK

This new property type allows the user to attach an object to another object, similarly to the QUICKLINK property type. In contrast to QUICKLINK, in the selection list of possible objects, there are objects which have been calculated based on another super-ordinate object.

The syntax for this new type is:

<MajorObjectType>.<SubObjectType>.<PropertyName>

Based on the current object, a super-ordinate object of the type <MajorObjectType> will be searched for. If a matching super-ordinate object is found, it is used to search for the subordinate objects of type <SubObjectType>. If an object is selected from this list, the value of the <PropertyName> property is imported from this selected object.

The objects found are displayed by CADISON in a selection list during processing of a corresponding property in exactly the same way as for the QUICKLINK property type.

This property is applied in CADISON when linking a pipeline to a pipe class. The PIPE_SPEC property for the pipeline is defined as follows:

PHI-MEDI.PHI-PSPC.PIPE_SPEC

First the medium super-ordinate to the pipeline is thereby calculated. Using these the subordinate pipe classes are requested. Finally the PIPE_SPEC property is imported from the selected pipe class and the pipeline is attached to the selected pipe class.

Reports

[Reports common](#)

Creation of a report based on a document group

If a new report is created based on a document group, the selection list for the target document group is disabled in the report dialog. Because of an error, it was previously possible to enable the selection list by disabling and re-enabling the "Insert in DB" button. This issue was resolved in this release so that it is no longer possible to select a target document group.

[Excel Reports](#)

Default Excel Report Generator

In CADISON there were two different EXCEL Report Generators available up to now. In previous releases the new (and extended) version had to be manually enabled via an entry in the CADISON.INI file. In CADISON 8 the newer report generator is enabled by default. To enable the old report generator the following entry needs to be added to the CADISON.INI file in the [PHI-CADISON] section:

```
[PHI-CADISON]
SF_REPORTXLSDRIVER=OLD
```

Blanking of unit details in the Excel Report Generator

CADISON 8 supports the blanking of units in the Excel report generator. The keyword "P_nounit" must be entered in the start.tpl file in front of the actual property name, in order to blank out the unit. For example the following syntax can blank out the "CONTENTS" property's unit:

```
[OUTPUT]
UNIT=EXPLICITLY
TABLE=CADISON
NOHEADER=1
HEADER=P_name;P_nounit.CONTENTS
STANDARD=P_name;P_nounit.CONTENTS
```

The general syntax is:

```
P_nounit.<PropertyName>
```

[Word Reports](#)

New Report templates

The majority of report templates were updated in this release. Existing report templates were also deleted and new ones added. The old CADISON report templates will be deleted when upgrading from an older CADISON release, with only the new report templates being available after the upgrade.

Erstellen eines Reports auf Basis einer Dokumentengruppe

Wenn ein neuer Report auf Basis einer Dokumentengruppe erstellt wird, ist im Report-Dialog die Auswahlliste für die Zieldokumentengruppe deaktiviert. Bisher war es jedoch auf Grund eines Fehlers möglich, die Auswahlliste zu aktivieren, indem der Schalter "Einfügen in DB" deaktiviert und wieder aktiviert wurde. Dieser Fehler wurde in dieser Version behoben, so dass es nicht mehr möglich ist, eine Zieldokumentengruppe auszuwählen.

New keyword "P_tableobjects" in the RTF/Word report generator

In this release the new keyword "P_tableobjects" is available for the RTF/Word report generator. This keyword can only be used in the first report template (start.rtf). The new keyword is ignored in all other (subordinate) report templates.

"P_tableobjects" uses exactly the same syntax and the same parameters as "P_treeobjects". However the database query is not run based on the objects currently selected in the CADISON tree, but instead for objects currently selected in the table. The overall result of these queries is output in the report.

If 5 pipelines are selected in the table for example and a report is opened that uses "P_tableobjects", the database query entered for "P_tableobjects" is run for all 5 selected pipelines and the overall result of all 5 queries is then output in the report.

The difference between "P_tableobjects" and "P_treeobjects":

The old keyword "P_treeobjects" is used instead of "P_tableobjects" and if several objects are selected in the table the actual database query "P_treeobjects" is ignored and the current selected objects are output directly in the report.

Multiple property filters in TPL file

In this release it is possible to enter multiple property filters in the Excel Reports TPL file. In the process, multiple filter criteria can be defined as AND or OR commands. The syntax corresponds to the syntax of the RTF report generator. OR filters must be separated with ",", AND filters by "&".

Syntax of individual property filters:

```
<Prop1>; <Operand>; <Prop2>
```

Two OR filters:

```
<Prop1>; <Operand1>; <Prop2>, <Prop3>; <Operand2>; <Prop4>
```

One OR and two AND filters:

```
<Prop1>; <Operand1>; <Prop2>, <Prop3>; <Operand2>; <Prop4>&<Prop5>;  
<Operand3>; <Prop6>
```

NOUNIT and ADD in the RTF report generator

In this release it is possible to combine the keywords NOUNIT and ADD so that combined values can be output without any unit. ADD can be used within the NOUNIT command, e.g.:

```
$NOUNIT(ADD(QUANTITY))$
```

This report expression totals the contents of the "QUANTITY" properties and outputs the result without a unit.

Enhancement for APP_PREFIX in start.tpl

Up to now it was possible to provide either a set name for the report file prefix or instead to use the contents of a property. In this release these are both combined so that the report file name can be combined from a set defined part and the contents of a property. The syntax in the start.tpl is:

```
APP_PREFIX=abc$<PropName>$def
```

As soon as a property name is entered for APP_PREFIX, a serial number is no longer attached to the report file names as per the basic configuration. If however the serial number is required, the following entry must be added to start.tpl:

```
APP_NOCOUNTER=0
```

A unique counter is thereby attached to the report file name.

New Word Report Generator

In this release a new report generator is used when generating RTF (Word-) reports. The new report generator is compatible with the old report templates so they do not require any changes.

The new report generator requires Word version Microsoft Office 2003. If Word 2003 is not installed the new report generator is not operable.

Thanks to a different report generator approach there are no longer any problems when CADISON \$\$-Report instructions are modified by the RTF functional character in Microsoft Word while a report template is being edited.

Since the new Word report generator can take longer to work in some cases than the previous version, there is now the option in this release to run the report in the background. If this option is selected in the report dialog, a new program is run in the background which generates the report in the background independently of the current CADISON application.

Alternatively the previous Word report generator can be enabled by deleting or commenting out the

```
SF_REPORTRTFDRIIVER=WORD
```

line in the CADISON ini file by putting a # in front of it.

However this means that the report templates can then only be edited using Microsoft Word 2000.

MSR

Stellenplan

Now it's possible to create panel layouts automatically
see online help

HookUp

Now it´s possibel to create hook ups automatically
see online help

Designer

Designer General Information

Highlight functions

The Highlight functions have been improved. If the Highlight function is closed by right clicking, the current view is retained. If the function is closed by left clicking, it reverts to the original view.

In general the drawing must be regenerated for technical reasons when switching back to the original view (by left-clicking or by entering "V"). This can take some time in the case of larger drawings.

Shortcut menu and Object Inspector for blocks

Extending the shortcut menus for XREF drawings in CADISON 7 caused a new issue, where the shortcut menu for CADISON elements could sometimes not be displayed if these were contained in blocks. The Object Inspector was also not in the position sometimes to display information from these elements in the blocks. This issue has now been resolved in this CADISON 8.

Incomplete initialisation when starting from the Engineer/PDM

If the Designer is launched directly by a drawing from the Engineer or PDM, in the past the Designer was not completely initialised for this drawing, so that the Designer did not respond to some changes that were made with AutoCAD commands (such as the "BREAK" AutoCAD command for example). This issue has now been resolved in this release.

Responding to Graphic changes in AutoCAD commands

Up to now CADISON did not respond to changes made by AutoCAD commands MOVE, ROTATE and DROPGEOM (Drag and drop of a graphic). If a CADISON element was changed by these AutoCAD commands, CADISON did not automatically update the connection points' co-ordinates, so that the pipeline routine of the pipeline elements to be created were generated in an incorrect position. The Designer responds to these AutoCAD commands in CADISON 8, ensuring that CADISON element internal co-ordinates are automatically updated.

Unwanted database objects through the use of AutoCAD clipboard

If elements are copied from one drawing to another using the AutoCAD "Copy" and "Paste" commands, sometimes in CADISON 7 unwanted CADISON database objects were copied. This could happen if just AutoCAD graphics were copied, that were not linked with CADISON database elements and if CADISON database elements were copied during

a prior use of "Copy" and "Paste".

Dockable dialogs with consistency checker and marking function

If the RETURN key was pressed after clicking on one of the two dialogs, sometimes the dialogs did not display any contents or the dialogs did not respond to any further input. This issue has been resolved.

Use of the shortcut command "Attach to another object"

The Designer remained frozen if the shortcut menu command "Attach to another object" was selected from the tree dialog. This issue has been resolved.

Change of the current layer

In CADISON 7 for some commands, such as "Link objects" for example, a different layer could be configured as the current layer in AutoCAD. This issue has been resolved.

No preview images in the Object Manager for self-generated template objects

Up to now when creating new template objects from the Designer, faulty preview images could be generated, meaning that no graphic of the newly created template objects were visible in the Object Manager. This sometimes happened if a scale of 1:1 and a millimetre unit of measurement were used in the current drawing (which is mainly the case in 3D drawings). This issue has been resolved in CADISON 8.

Incorrect Grid co-ordinates

In CADISON 7 incorrect or no grid co-ordinates were sometimes configured for a drawing object. This led to problems with cross-references. This sometimes happened if multiple drawings using different page sizes were loaded in the Designer. This issue has been resolved.

Error message when using "VP layer isolate"

When using this command AutoCAD sometimes generated the error message "Invalid Option title". This issue was resolved.

Highlight objects

In this release two changes were made in the Highlight function. The first is that it switches to the model space, if a Viewport was activated in a layout when a Highlight command was being opened. Otherwise the Highlight function would change the current zoom factor in the Viewport.

Up to now during highlighting, when calculating the object co-ordinates, all graphical representations of the object to be highlighted were taken into account, irrespective of the link to the AutoCAD model space or to a layout. This had the effect that no useful co-ordinates were calculated, if an object was designated from the model to a layout, as both the co-ordinates of the object designation in the layout and the objects from the

model space were included in the calculation. Only the graphical representations of the current active space (model or layout) are used in this release.

Change of the logical system during Synchronise Drawing on a pipeline

In CADISON 7 during Synchronise Drawing on a pipeline, which was linked to a logical system, an incorrect logical system was displayed in the pipeline dialog and the pipeline was linked to this logical system after drawing synchronisation. This issue has been resolved.

Positioning of revision tables

Up to now the co-ordinate details for revision tables were rounded to millimetres. In this release the revision tables can be positioned exactly to within a hundredth of a millimetre.

Synchronisation of objects that already have a designation

Up to now it was not possible to synchronise a drawing to an object that already had a designation object. The synchronisation process was cancelled up to now without any further notification. In CADISON 8 the designation objects are ignored, so that Synchronise Drawing also works if an object designation is already available.

AutoCAD automatic drawing recovery

In CADISON 8 the automatic drawing recovery function in AutoCAD is generally disabled as this AutoCAD functionality is incompatible with CADISON. The drawings are not loaded from the CADISON project folder by automatic drawing recovery. However all drawings in CADISON must originate directly from the CADISON project folder.

Nominal bore selection at "Continue pipeline"

When opening the "Continue pipeline" command a dialog appears for the selection of the nominal width that should continue to be used. Previously these nominal width lists shown were set values in the program. Instead of this old dialog, in this release the default pipeline dialog for selecting the nominal width is shown, so that the appropriate nominal width for the pipeline is always offered for selection.

Replacing drawing frames

Different grid positions can be produced by replacing the drawing frames. Hitherto, drawing objects were not automatically updated so that they could contain incorrect grid positions in certain circumstances. In this release the grid positions of all the objects planned in the drawing are automatically updated when replacing the drawing frames.

Enhancement of the consistency checking

(new function)

Prior to this, consistency checking in the Designer could not reliably check the nominal rating of pipelines and elements integrated in the pipeline. The reason for this is that the nominal rating can be saved for different objects in different data fields but up to now

the "PN" (nominal rating) data field was always checked.

For this reason the configuration file was enhanced for the consistency checker so that now the data field name to be checked per object type can be entered. The new syntax for the .CCK configuration file is as follows:

```
<Comparisonname>; <PropertyName>: <Operator>, <PropertyName.N>: <Operator.N>
```

The <PropertyName> can have the following layout in its own right:

```
<PropertyName.ObjType1.PropertyNameForObjType1.ObjType2.  
PropertyNameForObjType2...>
```

If the Object Type for the object to be checked is not contained in the list, the first entry in the list is used....

Note: this extended syntax is not available for the "DN" property.

Copying of the current drawing using "Save as"

The CADISON Copy dialog appears if the current drawing is saved using "Save as" and the "Copy" option is selected in the Save dialog. Up to now the dialog had a Close button, or the dialog could be closed by pressing the <ESC> key. If the Copy dialog was closed using the Close button or the <ESC> key the Designer shut down suddenly. In this release the Copy dialog no longer has a Close button, and if the dialog is closed using the <ESC> key, the current selection in the dialog is used.

Tool-tip in CADISON Explorer

Up to now in CADISON Explorer tool-tip, only the object description of the object suspended from the cross-hair was displayed. When synchronising several objects it was not possible to see which object was currently attached to the cross-hair. This is why in this release the configured tree display text is shown in the tool-tip instead of the object designation.

Creation of construction sets / Copy&Paste

There can be problems in CADISON 7 when creating modules or using Copy&Paste, if sub-/super-ordinate objects that were unplaced, are copied with the graphic selection or added as a module. The objects that were unplaced were in some cases, added in the wrong positions in the tree.

When creating a module, a sub-element of a placed object could be attached directly to the module and not to the placed object.

Recovery of AutoCAD variables from a Designer command

For some Designer commands some AutoCAD variables were not correctly recovered when the commands were submitted. The mechanism to recover the original AutoCAD variables from a Designer command has again been updated in this release so that the same settings should be available both at the start and end of the command.

Consistency checker shutdown

Prior to this the Designer shut down if a consistency check had found no errors and the user clicked on "Edit" in the error list. This issue has been resolved.

Insert a drawing frame with an "x" in the file name

No user-defined drawing frames could be added in the Designer up to now if an "x" was contained in the file names of the attached DWG file. This limitation has now been resolved in this release.

Increment in CADISON Explorer

In CADISON Explorer you have the option to work in a grid using the "Increment" option. Up to now however the increment entered was incorrectly converted. The increment was always too small by a factor of 1000. In this release the value is interpreted according to the currently configured unit.

Deletion of graphics and transfer of graphic entries

If a graphic representation of an object is deleted in the Designer (using the option "Delete only graphics") CADISON then checks if the graphic entry used by the graphic to be deleted, is available for the database object. If not, the graphic entry of the graphic to be deleted is added to the database object. In addition this automatically added graphic entry is highlighted as the default graphic entry, so that this graphic will be automatically selected when inserting the database object in the drawing (by Synchronise Drawing).

Example: The graphic 2D representation of a valve is deleted in a PID. During deletion the graphic entry of the deleted 2D graphic is added to the valve, where necessary, so that the same graphic is available when the valve is added to a different PID using Synchronise Drawing.

This mechanism has been implemented since CADISON 7 for all graphical representations. In this release the 3D graphic representations were excluded from this mechanism, as otherwise the graphic entries from old catalog entries are copied over when deleting a graphic in the main object thereby overwriting the graphic entry of the current catalog entry.

Example: A valve was inserted in 3D via the Selector. The 3D graphic definition (the graphic entry) originates from the catalog entry. If a new catalog entry is added in the CADISON tree and then only the graphical 3D representation is deleted, up to now the graphic entry of the old catalog entry was saved for the valve and highlighted as a default graphic entry. If the valve was added once more via Synchronise Drawing, the valve received the old graphic from the old catalog entry. Since the 3D graphic entry is not resaved in this and subsequent releases, the user gets the graphic from the newly applied catalog entry.

Deletion of the graphic entries when removing catalog entries

If a catalog entry is allocated to an object (or if an object is inserted via the Selector) and the catalog entry contains graphical descriptions (graphical entries), these are saved

to the CADISON object. In the process, CADISON records which graphical entries come from the catalog entry. If the catalog entry is subsequently deleted (without the catalog data being transferred) or if a new catalog entry is applied, the graphical entries that originated from the previous catalog entry, are automatically deleted.

This deletion did not function correctly up to now. If for example an object was inserted directly in the Designer via the Selector, CADISON could not delete the graphical entries that had been automatically entered, if the object was assigned a new catalog entry. The graphic entries thereby increased each time a catalog entry was applied.

Deletion of objects referenced in other drawings

If objects are deleted in CADISON that are positioned in drawings, and the drawing is in progress at the time, the user receives the message that the object cannot be deleted. This message is not displayed in the Designer if the current drawing is the drawing in progress.

In this release this message is no longer shown if the corresponding drawing is loaded in the same Designer session. This means that objects positioned in drawings, that are currently loaded in the Designer but are not currently being edited, could also be deleted in the Designer. If an object is deleted and the user switches to that drawing, this drawing then receives an invalid graphical representation of the deleted database object. If the user tries to access the graphic (e.g. from the shortcut menu), a message is displayed that this is an invalid graphic. This should then be purged with the CADISON drawing check.

Use of the "P_APPR" and "P_APPR_MIN" properties in designation blocks

If the "P_APPR" and "P_APPR_MIN" properties in designation blocks or directly for object blocks are used, these property values were not shown in the drawing up to now. This issue has been resolved.

Command "change Graphic variants"

The CADISON Designer could crash, if in an autocad-session this command is using very often.

CADISON could shows differnt error meassages.

This issue has been fixed.

Designation Function

new function

Option "List" for the designation function

When pressing the "Apply" button in the designation dialog, the object to designate must be selected in the AutoCAD drawing window. Beginning with this release, the additional option "Listselection" is available. By using this option it is possible to select the object to designate in the CADISON Tree dialog.

To use this option, the option "Listselection" must be typed in at the AutoCAD command line after pressing the "Apply" button (instead of selecting the object to designate in the AutoCAD drawing area). Or the AutoCAD context menu in the AutoCAD drawing area can be used to select the new option "Listselection". After calling this option, the CADISON Tree dialog is shown, so the object to designate can be selected. After closing this dialog with the OK button, the current designation settings might be adjusted automatically (for example, the option "Leaderline" is not available if an object has been selected in the CADISON Tree dialog).

New option when defining user-defined designations

During definition there is now the possibility to create a configuration that is independent of the object type. The new option "Independent of Object Type" must be selected for this. Configurations that are created with this setting are available independently of the selected object type if the "Configured" option is selected.

Display of the selected object type in the Designation Dialog

In this release CADISON displays the selected object type in the Designation dialog. In addition the button text for selecting the designated object type has been updated.

modification

Incorrect display of the Designation dialog

If an object selection was begun from the dockable Designation dialog and then prior to closing the object selection the dialog was moved, in the past the dialog was no longer correctly displayed. This has been fixed in this release.

Location of the configuration file for the new Designation function

The new Designation function introduced in CADISON 7 saved the user-defined configurations to the CADISON\Config folder. In this release CADISON automatically saves this file to the configured LocalCFG folder.

If no configuration file is found in the LocalCFG folder when starting the Designation function, it looks for the configuration file in the CADISON\Config folder. This is the one that is used if it is found there. As soon as the configuration file has to be saved though, it is always saved to the LocalCFG folder.

Object type for new Designation function

Up to now the Designation function introduced in CADISON 7 only marked objects if the object type corresponded to the original selection. In this release the Designation function does not take account of the originally selected object type if the following three points apply:

- No subordinate objects are selected and
- no super-ordinate objects are selected and
- it is designated with the "All" or "Configured" option

If subordinate or super-ordinate objects were selected or marked with the "Designation" option then the selected object type is taken into account.

Positioning of an object designation for rotated co-ordinates system

When using the new designation function introduced in CADISON 7, no object designation could be positioned if the co-ordinates system in AutoCAD were changed. This limitation has now been resolved in this release.

Designation of undefined properties

If unit properties, that are undefined as ("---") are being marked in an object designation, sometimes when the graphic was edited, the value "0" was saved as the value for the unit properties. This issue has been resolved.

Andockbare Dialoge

dockable Tree

in the CADISON Designer is the Tree now as a dockable Dialog available

dockable Object inspector

the objektinspector is in the CADISON Designer now as dockable Dialog available

dockable Table

The CADISON command "edit objects" mit multiselect is now in the Designer is as dockable Dialog available

PID Designer

"Change Nominal Width" function in PID drawing

Up to now, in certain conditions, the "Change Nominal Width" function also created pipeline objects that were missing in P&I drawings, such as welds, flanges, seals, etc. However no pipeline elements should be automatically created in P&I drawings. In this release the "Change Nominal Width" function only creates missing pipeline elements in installation diagrams.

New line type for hose

In this release the line type "HOSE" is available, which has been specially defined for hoses.

Break interval for "Create pipe crossing"

Up to now the default value for the "Create pipe crossing" function was fixed at 5. In this release the default value is calculated using the current Snap setting, whereby the default value equals the Snap width multiplied by 2.

Change of line thickness when copying pipe routes

When copying pipe routes to a drawing the line thickness sometimes changed on both the target object and the original object. When copying via the CADISON Copy function the line thickness was sometimes changed on the target object, by using CTRL + C the original object link thickness was sometimes changed. This happened if a formula was entered for the "CAD linewidth" (GEOM_WID) graphic property using the CADISON function "Change Definition for this object only...". The previously entered formula is deleted during copying. In this release the formulae are no longer changed or deleted when being copied.

Quick Purge of MPL styles

In this release the MPL styles that are no longer required are automatically deleted when a drawing is being loaded when quick purge is enabled.

3D Designer

Movement and rotation of XREF drawings

(new function)

Up to now the Designer could not correctly process any XREF files that had been moved and/or rotated while being added. A message always appeared while they were being loaded saying that the XREF files are not correctly aligned. The actual problems were due to the processing of the existing connection points in the XREF files. These could not be correctly evaluated by the Designer. The piping creation sequence could not cope with the co-ordinates from the XREF files.

In this release all XREF drawings can be moved and /or rotated while being added. The piping creation sequence can correctly process the co-ordinates from the drawings.

Note: For nested XREFs there are still problems when evaluating CADISON elements' connection co-ordinates.

Assembly Rules when updating 3D graphics

(new function)

If graphic related properties are changed in a database and these database objects were already inserted in a drawing, the object graphics can be updated by the Designer. This update is automatically performed when loading a drawing, or if the "Update objects" function is selected.

Although no complex 3D graphics, originating from a catalogue entry, could be updated prior to this. If for example a complex object (an object with multiple sub-objects) is inserted in a 3D drawing using the Selector, the catalogue entry contains a building regulation, which indicates how these objects are to be put together. If the main object was subsequently assigned a new catalogue entry (and hence a new assembly rule) prior to this only the individual elements were updated, without taking the building regulation into account.

In this release when updating the main object, a building regulation saved there will be referred to. In doing so newly added sub-elements are also created where applicable. If all existing sub-objects are updated and all missing sub-objects are created then all objects are arranged in accordance with the current building regulation.

Invisible vessels when using "Link Objects"

In CADISON 7 vessels were sometimes rendered invisible after the "Link Objects" option was used in the Tank Assistant. This issue has been resolved.

Offset between Tank Shell and Cap

Up to now, when positioning vertical vessels using the Tank Assistant the tank body was rotated less than one degree in relation to the vessel cap. As a consequence, any nozzles created by the nozzle assistant on the cylindrical tank body were automatically rotated when added. This issue has been resolved in this release.

Nozzle Assistant

Nozzle Rotation problem with blind flange

If a nozzle is defined as a flange and a blind flange in the nozzle assistant and when positioned is rotated using CTRL and the Delete key (or mouse), up to now only the nozzle and the flange were rotated when inserted. The blind flange was inserted at the original position. This issue has now been resolved.

Error message in Nozzle Assistant

In previous releases, an error message was sometimes displayed in the Nozzle Assistant, if a pipe class and nominal width were selected and then the "LC" value was changed. This error message could not be closed, making it necessary to exit the Designer with the Task Manager. This issue has now been resolved.

Minimum values not being met in Nozzle Assistant

If the "LA" value in the Nozzle Assistant is below its minimum, in previous releases an error message was generated which could not be closed. The Designer had to be exited using Task Manager. This problem has been corrected.

Alignment of the nozzles created by the Nozzle Assistant

When positioning a nozzle with the assistant there is an option to rotate the nozzle while positioning it on a dished bottom using the angle "W". You can also simultaneously tilt the nozzle using the "WA" angle. In previous releases the nozzles were always tilted in the same direction, irrespective of any rotation that was specified via the "W" angle. In this release the nozzle is generally tilted via the angle "WA" in the direction of "W".

Note: the new calculation is only used for newly positioned nozzles. Nozzles that were positioned in previous versions are calculated in the old way. This ensures that nozzles from old drawings are not automatically changed in CADISON 8.

Complete dimensioning of pipelines

If a pipeline is dimensioned with the "Complete dimensioning of pipelines" command, and if a pipeline dimensioning already existed for this window, in CADISON 7 the old dimensioning was not automatically deleted, resulting in the possibility of there being two dimensionings for the same pipeline.

In this release the old pipeline dimensioning is automatically deleted prior to the new one being created.

View of "Duct-Transition rectangular/round" object when plotting without hidden lines

Up to now, depending on the current configured view, when plotting a "duct-transition rectangular/round" object without hidden lines, individual object edges were sometimes missing, so that the element could not be correctly identified in the printout. The graphic generation of this object has been changed in CADISON 8 to resolve this issue when plotting without hidden lines.

Folder settings for NavisWorks Export

When exporting a drawing to NavisWorks, the last folder selected is saved. When the export command is next run, the previously selected folder is automatically used.

Opening the Isogen Help

In this release it is possible to open the Isogen Help directly from the Designer.

Crash with the "Centreline Overlay" function

The "Centreline Overlay" function can cause the Designer to crash where data is faulty. From this release on this function performs improved error checking so that faulty data should no longer cause the application to crash.

Revision character in Isometrics revisions

The issuing of revision characters when generating isometrics revisions has been improved in this release. The current isometrics revisions never contain a revision character. Each time an isometric is generated the revision character is incremented, with the first isometrics starting with "A". If an existing isometrics drawing is revised it receives the same revision character that the pipeline had prior to isometrics being generated.

Furthermore, up to now an incorrect revision character was displayed in the isometrics revision title block. Consequently in this release, the CADISON templates for Isometrics drawings show the property "ISOGEN REVISION" instead of "REVISION", whereby the isometrics revision is shown.

On-line Connection Check and On-Line bolt/screw Calculation

In previous releases, problems sometimes arose with these settings, if multiple drawings are loaded in Designer simultaneously. Up to now the settings were always determined based on the latest drawing loaded. If you switched to a drawing that had already been loaded, the setting of the new active drawing was no longer detected, which meant that in some cases these checks could be run or cancelled unintentionally. In this release the current drawing's settings are always used.

Creation of construction lines in 3D drawings (installation diagrams)

Up to now the construction lines created by the Designer function, were always limited to the current configured drawing borders, whereas the current drawing borders were set by CADISON using the inserted drawing frame. This limitation means that the construction lines are only created within the drawing frame.

However this limitation makes no sense in 3D drawings, since the drawing frame for these drawings are inserted in a layout and no direct connection exists between the configured drawing borders and the real 3D model. For this reason in this release, the current drawing borders are not taken into account by the construction line functions. Furthermore normal AutoCAD lines are no longer created in installation diagrams, instead there are infinite AutoCAD construction lines.

Selection of pipelines to create isometrics for through a list selection.

If the main drawing contains no pipelines and "List Selection" is selected in the open Isometrics dialog, the message "No pipelines found in project" appeared in previous releases. In this version the message now reads "No pipelines found in drawing".

Prior to this the pipelines contained in the XREFs were not taken into consideration. This

means that the XREF drawing pipelines were not found under the "List Selection" option. This limitation has been removed. The pipelines available in the XREFs are also displayed in the pipeline list.

Moreover up to now the pipelines appeared several times in the list selection. In this release each of the pipelines appears only once in the list.

Data from Matpipe

Display of square elbows from Matpipe

Up to now an additional line was drawn in the elbow for square elbows that were greater than 180 degrees. In this release the elbow is drawn in one piece.

N-Corner from Matpipe

N-Corners originating from Matpipe were incorrectly displayed in the Designer in older releases. A rotation configured in Matpipe was not applied prior to this. In this release, this rotation is applied in both the 3D-Designer and in the ACIS-Converter.

E-Designer

Electrical connection points when creating symbols

If new electrical connection points are defined for symbol creation, up to now the counter started at the connection point "B". In this release the counter starts at the connection point "A".

Other Applications

CADISON Archive Browser

Scroll bar in window with tree diagram

The window with the tree diagram of archived projects did not have a scroll bar up to now, meaning that it was not possible to scroll through the tree if it was larger than the current window. This issue has now been resolved in this release.

Shortcut menu in archive tree

If the shortcut menu was opened in the archive tree, up to now the shortcut menu was not generated for the entry selected by right mouse click but instead for the entry selected prior to this. In this release, right clicking the entry automatically selects it and opens the menu for this entry.

Displaying AutoCAD drawings

Up to now the application to view drawings is the program registered in the operating system to show DWG files. If the Designer is installed on the same machine, this could mean that it was opened instead. In this release the entry in the CADISON.INI file for the DWG viewer (PHI_DWGVIEWER) is used. This allows a real DWG viewer, such as AutoDesk TrueView for example to be used to view DWG files.

ACIS Converter

Error when converting cylindrical components from Matpipe

When converting components from Matpipe (variant entities in AutoCAD) errors sometimes occurred. The error occurs if the outer and inner radiuses are different in a cylinder and the inner radiuses were equal. In this release these objects will be correctly converted to ACIS elements.

Saving of the converted ACIS elements to an external DWG file.

In this release the ACIS Converter features the option to save the ACIS elements generated to an external DWG file. In doing so it retains the current layer and object colours.

Conversion of 180° pipeline elbows

Up to now the ACIS Converter could not convert any pipeline elbows that had used precisely a 180° elbow angle. This limitation has been removed in this release.

ISOGEN

Repeat-Part-Number when generating isometrics

When generating isometrics, objects that have the same repeat-part-number (Property ISOGEN-REPEAT-PART-NUMBER) have these numbers deleted internally in CADISON. Only the oldest object retains its repeat-part-number. This is done because objects with the same repeat-part-number are changed in such a way that they cannot be shown in the BOM under the same number. If the objects have remained the same, and CADISON is configured appropriately, the positions numbers provided by ISOGEN are transferred back to CADISON, the objects are automatically reassigned their original number in CADISON once the isometrics have been generated.

However these properties were also deleted up to now, if only a preview of the Isometric was generated, which is sometimes not ideal. For this reason the properties in the database are no longer deleted when generating isometrics. The "duplicate" repeat-part-numbers are temporarily removed only when transmitting data to Isogen.

The properties affected are ISOGEN-REPEAT-PART-NUMBER and ISOGEN-REPEAT-WELD-IDENTIFIER.

Option Editor

A new version of the Alias Option Editor is being issued with this release, which means that options/values in the new Isogen 8.13 version used can be configured.

MATPIPE

Changes in MATPIPE

Exporting of data with definition

The number format entered in the .EED file for the "Export -> Data with definition" is now taken into account (up to now the data in the .EED file was ignored).

Editing of multiline memo texts

If multiline memo texts were edited in Matpipe up to now, the internal line-break character "\n" is deleted in some cases. In this release the line-break characters are maintained.

Use of object filters in reports

Up to now it wasn't possible to define an object filter in reports. This limitation was removed so that when creating a report for example specific nominal diameters could be output.

Tees in VCS_DINPIPING_A catalog

For some reduced tees with dimensions DN 300 to DN 200 the value "21911.0" instead of "219.1" was entered in this catalog for "branch diameter DA". This mistake has been corrected so that the tees can be correctly added in the Designer.

Sorting in "Manage graphic entries"

The list of graphic entries in the "Manage graphic entries" window was not sorted properly in previous releases. Although the column header did show that it was sorted, in fact the list was not sorted up to now. In this release the list entries are sorted properly and the list is also recreated and sorted if a graphic entry is renamed, deleted or a new graphic entry is added.

Copying of elements with the data sheet to a different catalog

If an element in Matpipe is copied, moved or linked from the tree to a different catalog, the reference to a possible datasheet was also copied with it, but not the actual datasheet. In this release the corresponding datasheet is copied with the object.

Catalogs Conversion

When the catalog is opened with MATPIPE R8 the catalog version is increased to 8.0. The reason for this is the change and the formatting of the catalog database.

The following changes are performed when opening a catalog:

- The size of the "project key" field has been increased from 16 to 64 characters. The MP file name is saved in this field.
- The size of the "Sheet type" field is increased from 16 to 64.
- Since no separate versioning for the CCC extension is available in MATPIPE R8 and later releases, all catalogs with or without CCC properties are assigned the same release number. This means that the version numbers of all catalogs from 5.12 to 5.11 or older have been increased to 8.0. All relevant information with regard to CCC extension are saved directly in the database.

Furthermore the MATPIPE standard catalogs were converted from MATPIPE to Microsoft Office 2002/2003, so that it is no longer possible so that it is no longer possible to open these catalogs with MS Access 97 or MS Access 2000.

Saving the position and sizes of dialog boxes

Some MATPIPE dialog boxes such as properties or parametrisation dialog boxes overwrote each other's position and size when being exited. This issue has been resolved in this release so that the size and position of each adjustable dialog box can be individually saved in MATPIPE.

Error when importing CSV files

CCC properties were created when importing objects with the CSV import even if no CCC extension was enabled. Subsequently this catalog could not be opened without a CCC license. This issue has been resolved in the current release.

Updating in the "Link Graphic Entry"

The available graphic entries are viewed in the "Link Graphic Entries" dialog. In this release, if changes are made to the graphic entries using the "Graphic entry..." key (e.g. existing entries are deleted, new entries are added or existing entries are renamed) the lists are automatically updated in the "Link Graphic Entry" dialog.

Copying of pipe classes

If pipe classes are copied from one catalog to another (or copies are made) up to now

the catalog name was not updated in the pipe class and it still contained the names of the original catalog. In this release the catalog details are automatically updated in the pipe class.

Saddle tee in Tutorial catalog

In previous releases the saddle tee in the tutorial catalog had been given an incorrect graphic entry. The graphic entry identifies the graphic as a 2D graphic, not as a 3D graphic. This incorrect setting resulted in the saddle tee not being sent by the Designer to Isogen when an isometrics was to be generated, since the Designer only sends 3D graphics to Isogen. The graphic entry has been converted to 3D in the catalog.

User interface optimisation

The size of the dialog for editing graphic entries can now be modified. Furthermore the screen layout when changing the dialog sizes for the following has been updated, to reduce a sometimes noticeable "flickering":

- Parameterisation window
- Edit object table
- Assign graphic entries

Use of catalogs that were edited with "CCC"

If when disabling "CCC" a catalog is available in the current catalog directory that has already been edited with "CCC", a message appeared up to now when updating the index to say that this type of catalog is available. In this release the catalog name is specified in the message.

Removal of a message

If CCC-objects were found in a catalog, MATPIPE 7.0.0 - 7.2.1 displayed a message while executing the command "update index". The message claimed, that MATPIPE Catalog Control is not activated on the computer and that catalog cannot be opened. This error was solved.

New Functions

Rotationskörper

Extrusionskörper

"New" option during parametrisation in MATPIPE

In the MATPIPE parametric module the "New" option is implemented when setting the parameters on objects. This is a new feature, in addition to the "Add" and "Subtract" options that were already available. This "New" option makes it possible to insert a primitive to the base body.

If a primitive is identified by the "New" option this means that this primitive is inserted separately as a new part of the base body, and it is not mathematically added or subtracted to/from the base body. This greatly simplifies the internal calculation of the entire 3D graphical object.

It is up to the user whether the "New" or "Add" options are used and it depends on the desired result. It is recommended that the "Add" option only be used if it is really necessary (if something is to be removed from the overall geometry using "Subtract", then you have to work with "Add"). If possible the "New" option should be applied when inserting a primitive. This can be very useful in particular for complex objects, as these methods saves a lot of calculational work and in this way the known modeler error "eFail" can be prevented.

New languages in the language selectionn list

In this release the following four languages were added to the catalog's language selection list:

Russian, Chinese, Slovene and Hungarian.

New 'DELCHAR=' keyword in the formula parser

The 'DELCHAR=' keyword exists in CADISON for CALCULATE properties. Up to now the keyword did not exist in Matpipe meaning that the application used the same keyword for an error message. In this release the Matpipe formula parser also supports the keyword 'DELCHAR=' The syntax used is the same as in CADISON.

`DELCHAR=<PropName>`

The properties value <PropName> is retrieved in doing so and digits only are returned. Letters are not displayed.

New Word-Reportgenerator

The new Word-Reportgenerator is available for MATPIPE now and supports Unicode. Sorting of properties is now working regularly. In contrast to other modules MATPIPE-reports cannot be created in the background.

Concluding Information

The **CADISON Hotline** is available to you during the following hours:

Mon – Thurs. 8.30 a.m. to 5.00 p.m.
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We wish you every success with CADISON.

Your CADISON Team

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