



11



PART solutions



eCATALOG solutions



PART community

Version

What's New? - Administration

What's New? - Administration

CADENAS GmbH

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Preface

This document is chronologically sorted and intended to give a continuous overview concerning all technical innovations of CADENAS PARTsolutions Software. It especially turns to Consulting and Administration.

Note

The manual in hand contains links to different other manuals.

For a manual spanning working with this manual better use the program help instead of PDF and copy the file `whats_new_admin.qch` to `$CADENAS/proghelp/<language>` - if not installed or if you like to update. When updating better change all manuals to be sure that links work in any case.

- You can open the program help via F1 key. Then **all** manuals are opened.
- Also use the "**Advanced search**". See [below](#).
- When you followed a **link**, then you can return to the starting point via **Alt** + **<**.

Chapter 1. V11.00 SP11

1.1. VDI Import: Avoid invalid characters

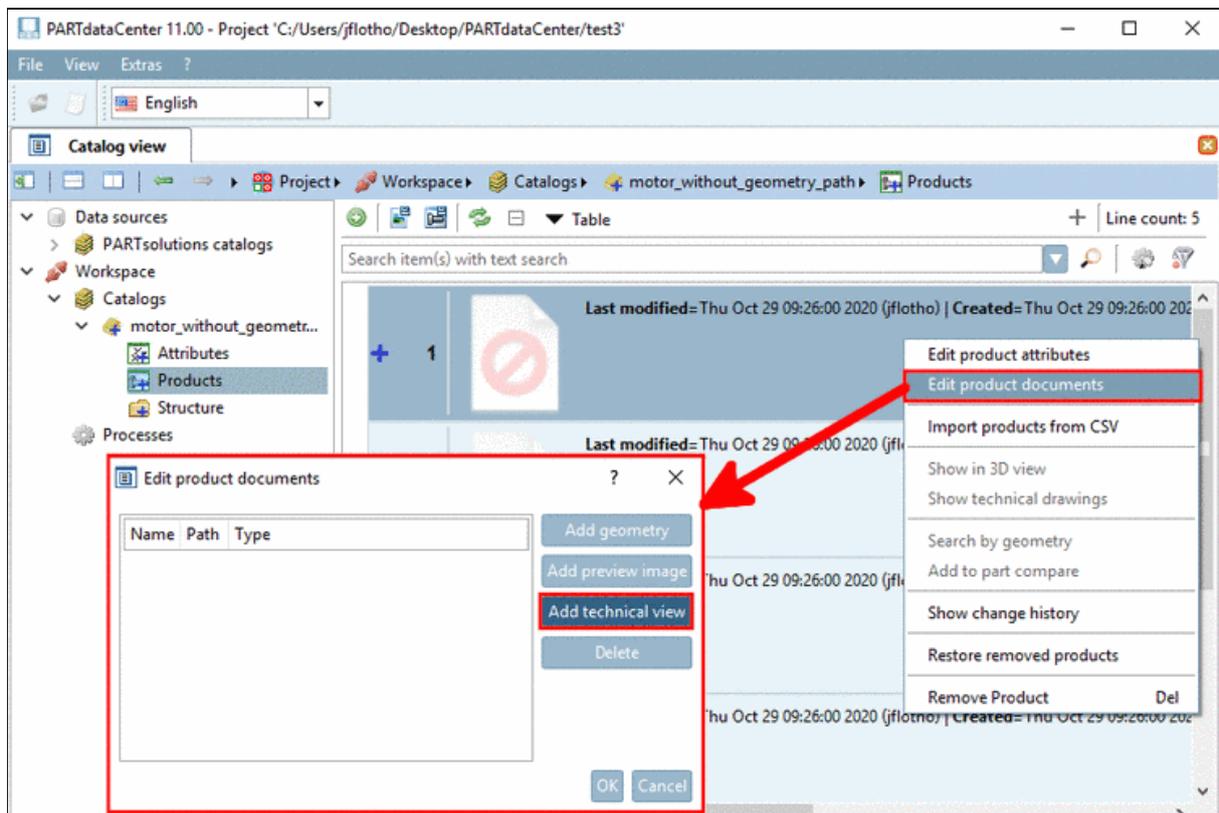
As of V11 SP11 no descriptive product names are used anymore for identification purposes when reading data, but unique attributes like "SA700ID04". This is advantageous, because it avoids special characters and the name in the pipeline is always the same.¹

Don't perform data enrichment with the new attribute names for already existing catalogs, because then columns would exist two times (old + new name).

1.2. PARTdataCenter: Import of Multipage TIFF and SVG for Technical Previews

When importing technical previews to a whole class (prj) or a single dataset, now you can also use Multipage TIFF and SVG.²

The call happens in **PARTdataCenter** via context menu command **Edit documents in product** -> **Add technical view**.



Edit documents in product -> Add technical view

However, precondition is the installation of **ImageMagick**, with the help of which the added files are converted into the PNG format.

In order to convert SVG please set the following block in `$(Cadenas_user)/partdatacenter.cfg` and adjust the path to ImageMagick according to your installation.

```
[conversion:svg]
program=C:\Program Files\ImageMagick-7.0.10-Q16-HDRI\magick.exe %path% %targetpath%
format=png
```

(%targetpath% is a placeholder for the temporary file which is then created by the code.)

¹#123085

²#122053

Chapter 2. V11.00 SP10

2.1. Update Geo index

See Section 3.1, "Update Geo index".

Chapter 3. V11.00 SP9

3.1. Update Geo index

If you made an update V10 to V11 (major release) or on update of service pack (e.g. V11 SP0 to SP9), you should update the geo-index. For all other combinations you have to check the features if it's important for your customer.

If you use geosearch / topo search also for the psol catalogs (not only native customer catalog), you should update the geo index in PARTadmin for all catalogs. If you only install a new update of a catalog (new cip), the fixes will not be active because CIPs are generated with an old psol release and so your psol installation doesn't fit together with the installed geo index. The geosearch / toposearch will work but not as good as when having a geo index with all the improvements and the fixed topics.

-> For native geosearch catalogs this is ok, because the geo index will be updated with the installed version at your customer. So you always get the correct index.

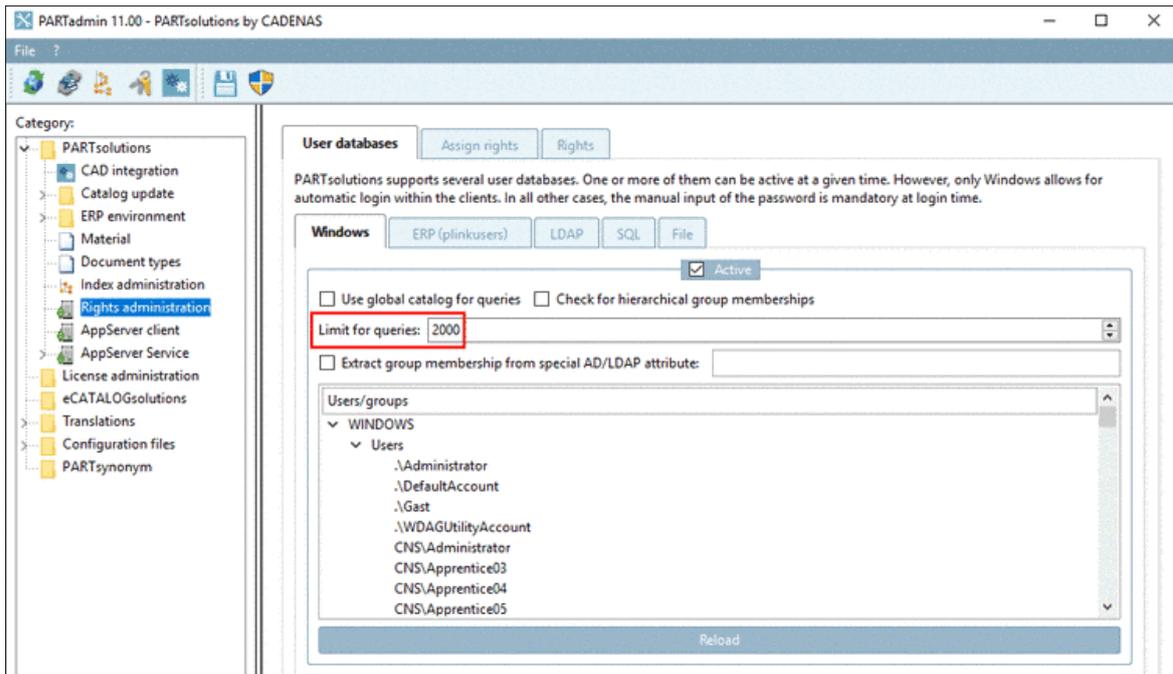
-> But if you update or install psol catalogs from time to time you will get the old geo index again. So you have to update the index manually after the updates again!

Relevant changes concerning index update in V11:

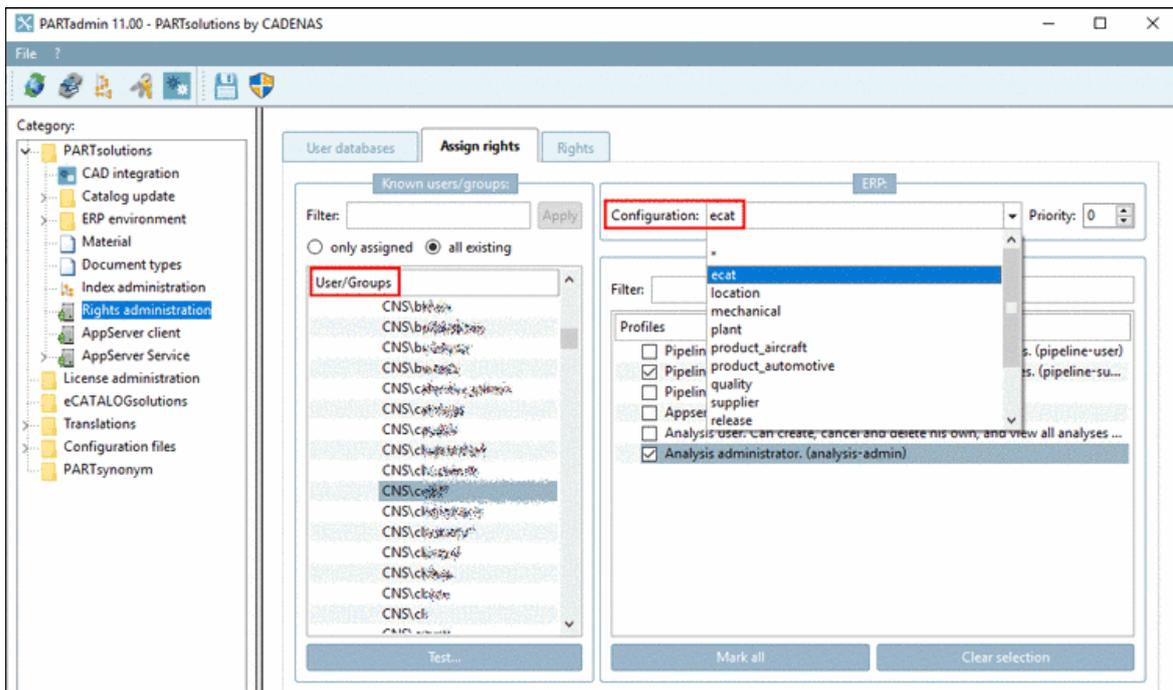
- SP0
 - Hole patterns (#21360)
 - Cone (#69601)
 - Elongated cylinder + pattern (#21357, #69599)
 - Length of cylinder (#22747)
 - Partial search (#65509)
 - Enhanced search for type of borings (#80169)
 - Mirrored parts (#19270)
 - Symmetry for very small parts (#81659)
- SP3
 - Rectangular holes + patterns (#82467, #87075)
 - Enhancement for partial search for planes (#93329, #92155)
 - New algo for sketch search (#76893)
- SP4
 - New color search (#29307)
 - Enhancement for patterns of rectangular holes (#93133)
 - Ignore length of cylinders in partial search (#93371)
 - Major rebuild in order to accelerate index generation (#95567)
 - INCH problems when searching for holes (#99173)
 - Improvement of performance for partial search (#99657)

3.2. PARTadmin Rights administration

- Please pay attention that under **Rights administration** -> tabbed page **User databases** -> tabbed page **Windows** -> **Limit for queries**, there is no **0** entered in the input field.
This will happen when disabling the option **Active** for Windows, then terminating **PARTadmin**, restarting and then enabling the user database "Windows" again.



- Furthermore, when performing an update to V11 SP9 keep in mind to assign users a configuration under **Rights administration** -> tabbed page **Assign rights** -> **ERP** -> **Configuration**.



More details on this can be found under:

- Section 4.12, "User-role concept" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*
- Section 1.3.9.8.1, "Rights administration" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*

3.3. Conversions from Creo to "STEP" format

In order for conversion from **Creo** to **STEP** format (e.g. in PLM Synchro) to work properly, some things have to be paid attention to.¹

- For versions < V11 SP8 the **Conversion path** has to be adjusted:
- The **STEP Export Profile Settings** have to be correctly set in **Creo** and the export profile has to be correctly entered in the `config.pro` file.

Among others, this is relevant for **PLMsynchro**.

Details on this can be found under Section 2.3.6.6, "Conversions from Creo to "STEP" format" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

3.4. For creating fingerprints Mesa is used by default

When creating fingerprints for the algorithm FV1, the results may differ slightly for mesa and real graphic cards. In many cases, the fingerprint database is created on a virtual machine using mesa, while the fingerprints for zjv, etc. is done on a local machine.

You can configure whether to force the use of mesa in `$CADENAS_SETUP/geomsearch.cfg`:

```
[settings]
#:VALS_M;"0","1";"No","Yes"
#:HELP;If ForceMesa is set, mesa is used even if a graphic is available
ForceMesa=1
```

For consistency reasons now Mesa is used by default.²

3.5. Switch internal SE version numbering to current year to match their naming conventions

As Solid Edge versions are now numbered according to years (currently SE2020), CADENAS internal version tracking of SE is changed accordingly.

Example:

```
st12=Application.cadVersion="112"
should be
st2020=Application.cadVersion="2020"
now
```

3.6. Geoindex, Topoindex oder Partialindex reparieren

Anwendungsfall:

Falls es bei der Generierung von Geo-, Topo- oder Partial-Index aufgrund eines fehlerhaften Teils zu einem Absturz kam, wird der Index nicht funktionieren. Reparieren des Index bedeutet gegenüber Neuerstellung einen erheblichen Geschwindigkeitsvorteil.

Vorgehensweise:

1. Reparieren Sie den Index per Skript.
2. Stoppen Sie den PARTapplicationServer.
3. Kopieren Sie den reparierten Index an die korrekte Stelle.
4. Starten Sie den PARTapplicationServer wieder.

¹#116747, #120245

²#112247

5. Verwenden Sie die Funktion **Manage fingerprints**, um die Anzahl der verfügbaren Fingerprints auf Plausibilität zu überprüfen.
6. Testen Sie, ob **Topology search**, **Geometric search (3D)** bzw. **Partial search** mit dem reparierten Index funktionieren.

Beispielskript:

```
option explicit
dim geoUtils = CreateObject("cnstools.geoindexutils")

dim types = CreateObject("cnstools.array")
types.add("geo")
types.add("partial")
types.add("topo")
geoUtils.repairIndexes("cat/stp", "C:\PSOL\consulting-1100SP9__2019-10-31__18.45__r185218
↳ \data\index\cat\cat_stp", "C:\PSOL\data\stp_repaired_index", types)
```

Parameter von geoUtils.repairIndexes:

1. Katalogpfad im Indextree
2. Pfad zum Katalogindex
3. Pfad, wohin der reparierte Index geschrieben wird
4. Zu reparierender Indextyp: types (die Typen "geo", "partial" und/oder "topo" sind unter "types.add" zu deklarieren.)

Note

Reparierte Indexe sollten in früheren Versionen funktionieren. Aber das Reparieren eines Index einer Version vor 11 SP9 wird wahrscheinlich nicht funktionieren.

3.7. Allow to filter projects and lines for geo index generation

In the configuration file `CADENAS_SETUP/geomsearch.cfg` you can define multiple filter rules. If at least one of the rules applies, the part is filtered out.³

In the block `[settings]`, in the key `GenerationFilterRules`, determine a comma-separated list of all the rules.

```
[settings]
GenerationFilterRules=Rule1,Rule2,etc.
```

For each rule, define a block according to the scheme `GenerationFilterRule_RuleX`.

Example:

```
[GenerationFilterRule_Rule1]
Catalogs=cat/__partialtest
AlgoTypes=PARTIAL,TOPO
PrjRegExp=.*ass.*
PrjScriptCallbackFile=
PrjScriptCallbackFunction=
LineFilterCount=1
LineFilterVar0=TYPE
LineFilterRegExp0=.*ass.*
Conjunction=AND
LineScriptCallbackFile=test.vbb
LineScriptCallbackFunction=checkLine
```

Explanations to the individual keys:

General settings

- **Catalogs**: Catalogs where the rule shall be applied.
- **AlgoTypes**: Index types that should NOT be generated (comma separated)

³#114615

Possible values: TOPO,GEO,PARTIAL

- **Conjunction:** AND | OR

Concerns project and line conditions. If there is not more than 1 project condition and not more than 1 line condition, it doesn't matter if OR or AND.

If OR, then a project or line filter is applied if one the rules matches. If AND, all non-empty rules must match.

Settings on project path

- **PrjRegExp:** Statement of a regular expression. This is tested for the project path relatively to the catalog. If it matches it will be filtered.

Example: All projects that have "asm" anywhere in the path will be filtered by following regular expression:

```
.*asm.*
```

- **PrjScriptCallbackFile:** Path to vbb script containing the callback
- **PrjScriptCallbackFunction:** The function `PrjScriptCallbackFunction` gets the prj path as a parameter and is expected to return "true" if the filter shall be applied, otherwise 0.

Settings on table line

- **LineFilterCount:** Number of line conditions

Example with 3 line conditions:

```
LineFilterCount=3
LineFilterVar0=A
LineFilterRegExp0=.*ab.*
LineFilterVar1=B
LineFilterRegExp1=.*ac.*
LineFilterVar2=C
LineFilterRegExp2=.*ad.*
```

- **LineFilterVar0:** Variable name from table (replace 0 by the index of the condition)
- **LineFilterRegExp0=** The value of the attribute of the stated variable must match the regular expression to be filtered. (Replace 0 by the index of the condition.)
- **LineScriptCallbackFile:** Path to vbb script containing the callback
- **LineScriptCallbackFunction:** The function `LineScriptCallbackFunction` gets the table as a parameter and is expected to return "true" if the filter shall be applied, otherwise 0.

Following example filters all lines with line-id greater than 50000:

```
function filterLines(table)
  dim row = table.SelectedRow
  dim lineId = row.Idnr
  if lineId > 50000 then
    filterLines = 1
  else
    filterLines = 0
  end if
end function
```

3.8. Create backups when updating the GeoIndex

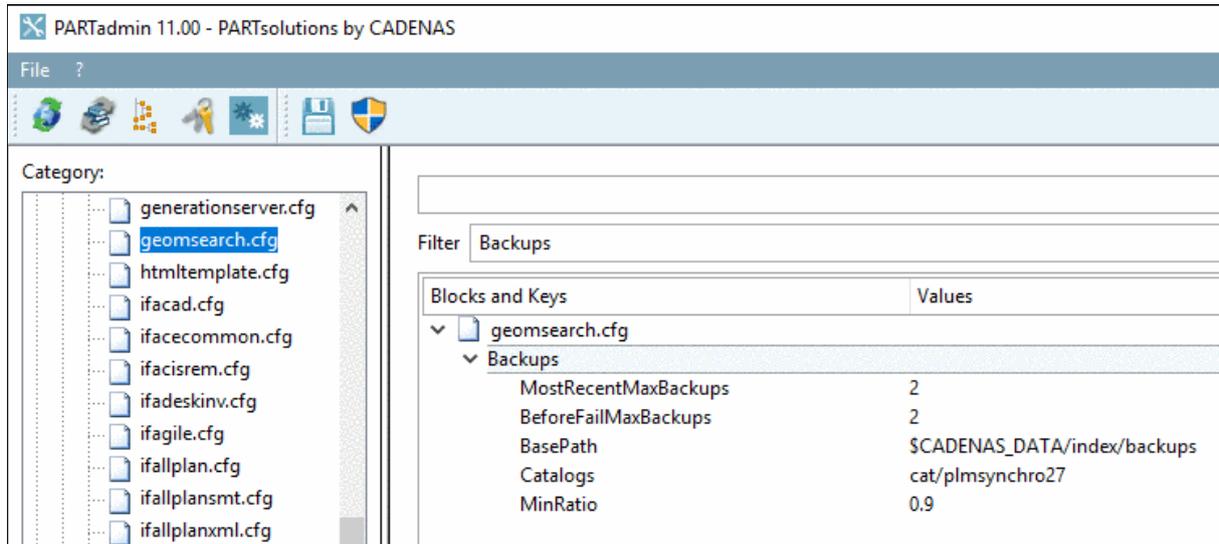
For own part catalogs you can automatically create backups of the Geo, Topo and Partial Index.⁴

By default, backups are created for the most recent 2 versions (see config key). (In case of a defective index, delete the index to be replaced, copy data from backup and restart PARTaplicationServer.)

⁴#114143

Configuration possibilities in detail

Settings are performed in the configuration file `geomsearch.cfg`, in the block `[Backups]`.



- **MostRecentMaxBackups:** Default value 2

Backups are created ...

- ... when updating the index via **PARTAdmin**
- ... when a reintegration of update files is started⁵ in **PLMsynchro**
- ... when a reintegration of update files is started by **VBS script**

Code:

```
dim geoUtils = CreateObject("cnstools.geoindexutils")
geoUtils.backupIndexes("cat/issues")
```

If the number exceeds the set value, the oldest backup is deleted.

These backups are identified by the file extension `.zip`.

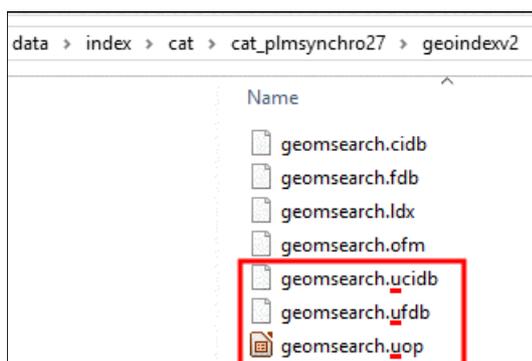
- **BeforeFailMaxBackups:** Default value 2

If there is a hint that the index is possibly defective, a backup of the current index is created (up to the number of set value).

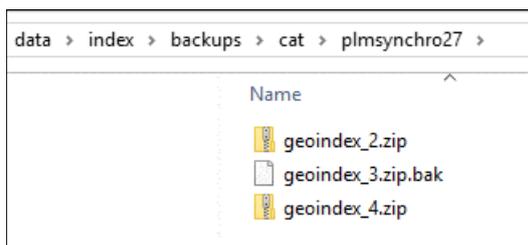
These backups can be identified by the file extension `.zip.bak`.

If the number exceeds the set value, the two oldest backups are kept, as an error in the older index is presumably also contained in the newer one.

⁵During a PLMsynchro run update files are created. These are **reintegrated** in the main index depending on the setting under `geomsearch.cfg` -> block `[settings]` -> key `MaxSizeOfUpdateList`). They are marked with a "u" in the file extension and found in the directory of the main index.



As a hint for defectiveness the file size of the index is used. See key **MinRatio**.



- **BasePath**=\$CADENAS_DATA/index/backups
Backups are stored under the stated path.
- **Catalogs**=
List of catalogs for which a backup shall be created (e.g. cat/test1,cat/test2)
- **MinRatio**=0.9
The ratio of old and new file size is automatically compared. If the value is smaller than 0.9 (default), the newly created index could be defective. (Of course the reason could also be a reduction of the version. So this should only be seen as a pointer and has to be manually checked.)

3.9. Use new environment variable \$CADENAS_POOL

In order to specify the CAD pool environment please use the new environment variable \$CADENAS_POOL.⁶

The common solution is %CADENAS_POOL%/cadsystem

- is a writable directory
- in the case of RFS it is set locally without the need to adjust the CFGs (independently of CADENAS_DATA)
- in the case of PARTS4CAD Deluxe it is overwritten centrally

Fallback: If the environment variable CADENAS_POOL is not set in the custom installation, %CADENAS_DATA%/pool is used automatically.

Background information: The old specification with %CADENAS_DATA%/pool/cadsystem is problematic for different reasons:

- for RFS it's wrong as it points to the RFS catalog which is not writable
- for PARTS4CAD Deluxe actually an adaption to %userdata%/documents should be made in each CAD

3.10. SAPPLM: Support for CATIA macro interface

Now the function "SAP_GetCadFileExtensions" is working with CATIAV5MAC.⁷

⁶#113899

⁷#114177

Chapter 4. V11.00 SP8

4.1. VDI Importer: Update mechanism for files cached in the user directory

Process files are initially cached in the CADENAS User directory at first start of the Wizard (\$CADENAS_USER/vdi).

(E:) > _OfflineCDs > sales_offlinecd-1100SP8_2019-07-18_22.21_r182854 > user > vdi				
	07-24-19 12_12_57.csv	7/24/2019 12:12	Microsoft Excel-C...	13 KB
	importpaths.cfg	7/24/2019 11:26	CFG	2 KB
	translations.csv	7/24/2019 11:26	Microsoft Excel-C...	1 KB
	vdi.pwp	7/24/2019 11:47	PWP	14 KB

- **CSV concerning import status:** Here, you can quickly detect which files have been successfully imported and for which the import failed.
- **importpaths.cfg:** Here, the catalog structure is set according to VDI data sheets.
- **translations.csv:** Optionally, translations can be stored here.
- **vdi.pwp:** The .pwp file is a XML file with all pipeline settings. You can open it via **PARTdataCenter** or the **Pipe editor**.

Update to now the .pwp file has been automatically overwritten with the user settings (in the Wizard). However, all other files have not been modified by the Wizard at no time, in order not to overwrite any user modifications.

Now as of V11 SP8 a query is shown: "Update files to new version?"¹



Now the user can choose if he wants all files in the user directory to be updated or not.

Details on the VDI importer can be found under Section 5.8.2.1.15.21, "VDI 3805 Importer" in *eCATALOGsolutions Manual*.

4.2. Catia V5 with Enovia Interface

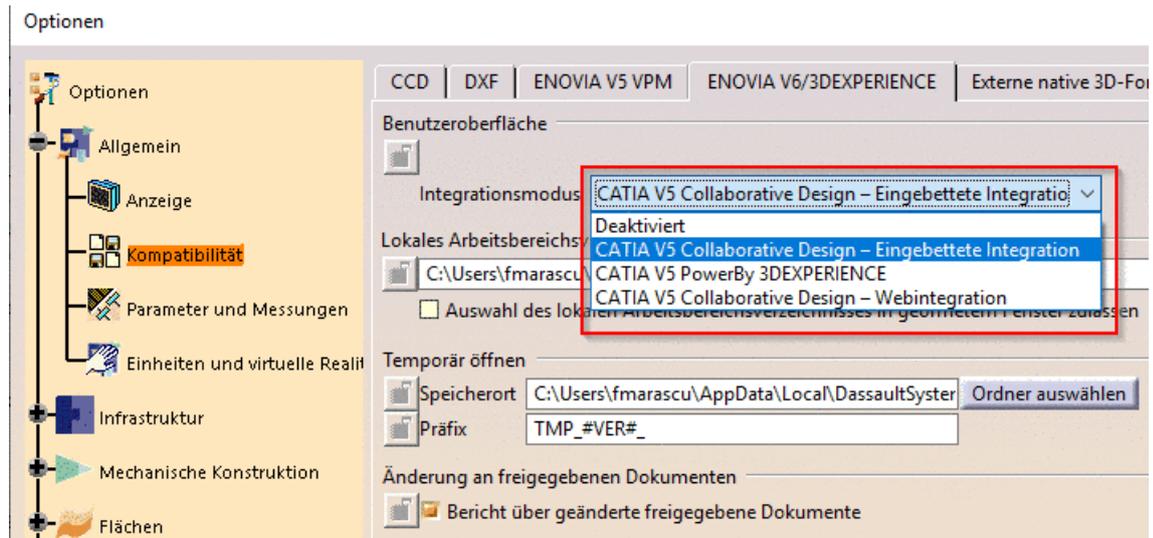
CATIA V5 can be linked with 3DEXperience Enovia in 3 different modes:²

- CATIA V5 Collaborative Design - Embedded Integration
- CATIA V5 PowerBy 3DEXPERIENCE
- CATIA V5 Collaborative Design - Web Integration

PARTsolutions currently supports "Embedded" and "PowerBy".

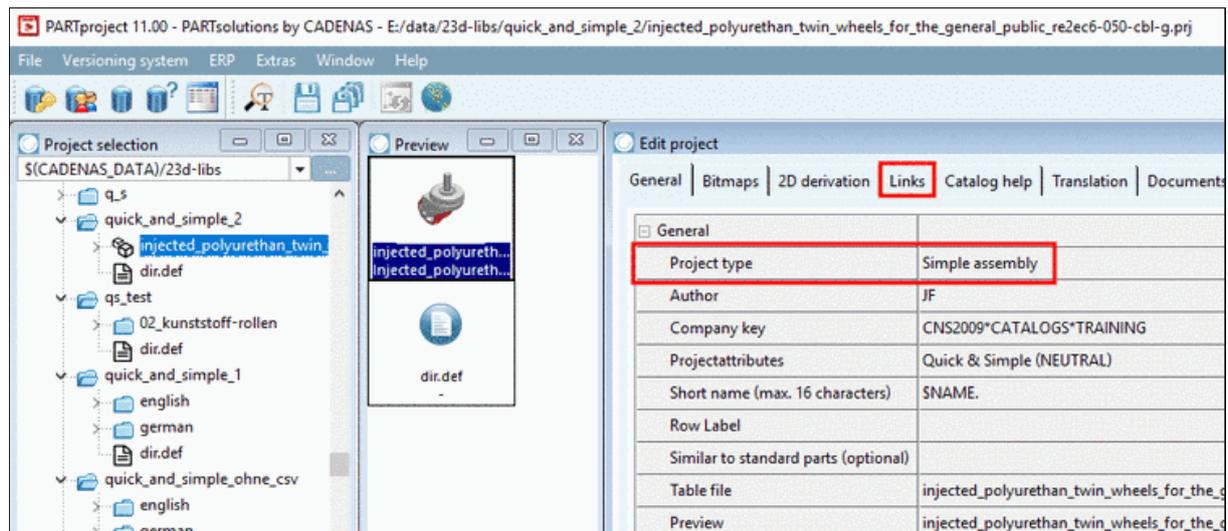
¹#111833

²#100351



4.3. Linking accessory parts for Quick & Simple projects

As of V11 SP8 now it's possible to link accessory parts with Quick&Simple projects, which means that the tabbed page **Links** is displayed for the **Project type "Simple-Assembly"**.³



Details on this can be found under Section 5.9.10, "Tabbed page Links" in *eCATALOGsolutions Manual*.

Note

Furthermore there is the possibility to link accessory parts via BMEcat with a (dedicated) plugin.

Chapter 5. V11.00 SP7

5.1. NX Series: MCD functionality only available with version \geq 1852

If using any PSOL version with NX Series $<$ 1852, MCD functionality will not work due to an issue with NX.

In this case update to a version \geq 1852.

Chapter 6. V11.00 SP6

6.1. Update Geo Index

Because geo-index updates are very time consuming, here is more detailed information:

If you made an update from V10 to V11 (major release) or an update of service pack (V11 SP0 to >=SP4), you should update the geo-index. For all other combinations you have to check the features if it's important for a specific customer (see list [below](#)).

If you use geosearch / topo search also for PARTsolutions catalogs (not only native customer catalogs), you should update the geo index in PARTadmin for all catalogs. If you only install a new update of a catalog (new CIP), the fixes will not be active because CIPs are generated with an older PARTsolutions release and so your PARTsolutions installation doesn't fit together with the installed geo index. Basically geosearch / toposearch will work, but not as good as it could be with updated geo index with all the improvements and the fixed topics.

-> So for native geosearch catalogs this is ok, because the geo index will be updated with the installed version at customer. So he will always get the correct index.

But if you update or install PARTsolutions catalogs from time to time you will get the old geo index again. So you have to update the index manually after the updates again.

Listing of V11 features where updating of geo-index is relevant:

For SP0 and SP4 generation of indexes is recommended, for SP3 only if respective features shall really be used.

- SP0
 - Slot pattern (#21360)
 - Cone (#69601)
 - Elongated Cylinder + Pattern (#21357, #69599)
 - Cylinder length (#22747)
 - Partial Search (#65509)
 - Enhanced search for hole type (#80169)
 - Mirrored parts (#19270)
 - Symmetry for very small parts (#81659)
- SP3
 - Rectangular Slot + Pattern (#82467, #87075)
 - Enhancement for Partial Search for planes (#93329, #92155)
 - New Algo for Sketch Search (#76893)
- SP4
 - New Color Search (#29307)
 - Enhancement for Rectangular Slot Patterns (#93133)
 - Ignore cylinder length at Partial Search (#93371)
 - Bigger rebuild to accelerate index generation (#95567)
 - INCH problems when searching for holes (#99173)
 - Enhancement of performance for Partial Search (#99657)

6.2. Make RFS writable

Enable writing access via RFS (Remote File System) [via WFS protocol].¹

¹#105309

1. On the server, in `pappserver.cfg`, make following entries:

```
[FileSystemModule]
PrefixAllow="$CADENAS_DATA", "$CADENAS_UPLOAD"
WriteAllow="$CADENAS_UPLOAD"
```

2. In the `start.env`, specify the environment variable `CADENAS_UPLOAD`.

```
CADENAS_UPLOAD=$CADENAS/./upload
```

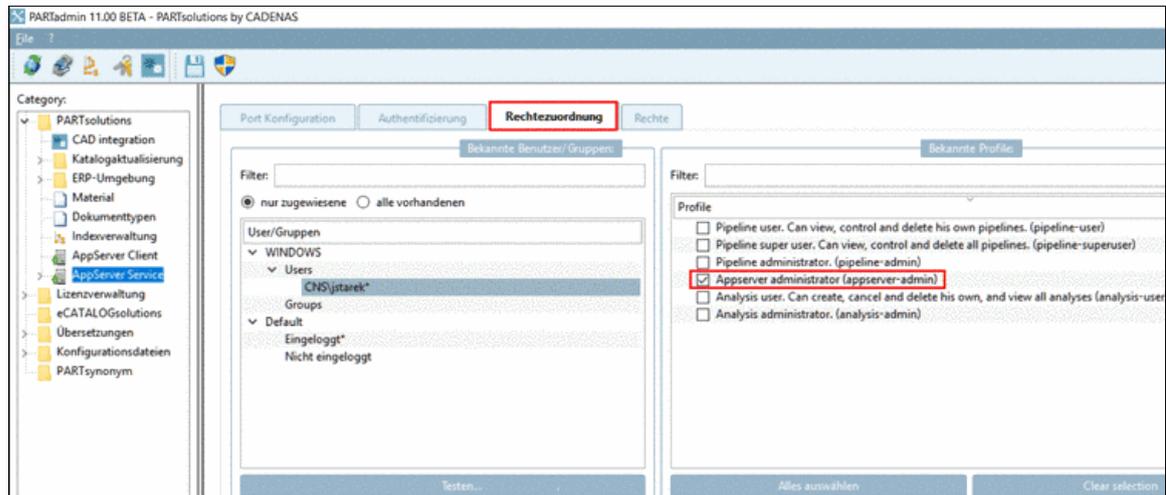
3. On the client, in `filesystem.cfg` make following entry:

```
[FILESYSTEMS]
$CADENAS/upload="m", "wfs://<hostname>:9020/CADENAS_UPLOAD"
```

4. In **PARTadmin** -> **AppServer Service** -> tabbed page **Assign rights** enter the desired user as **Appserver Administrator** (`appserver-admin`).

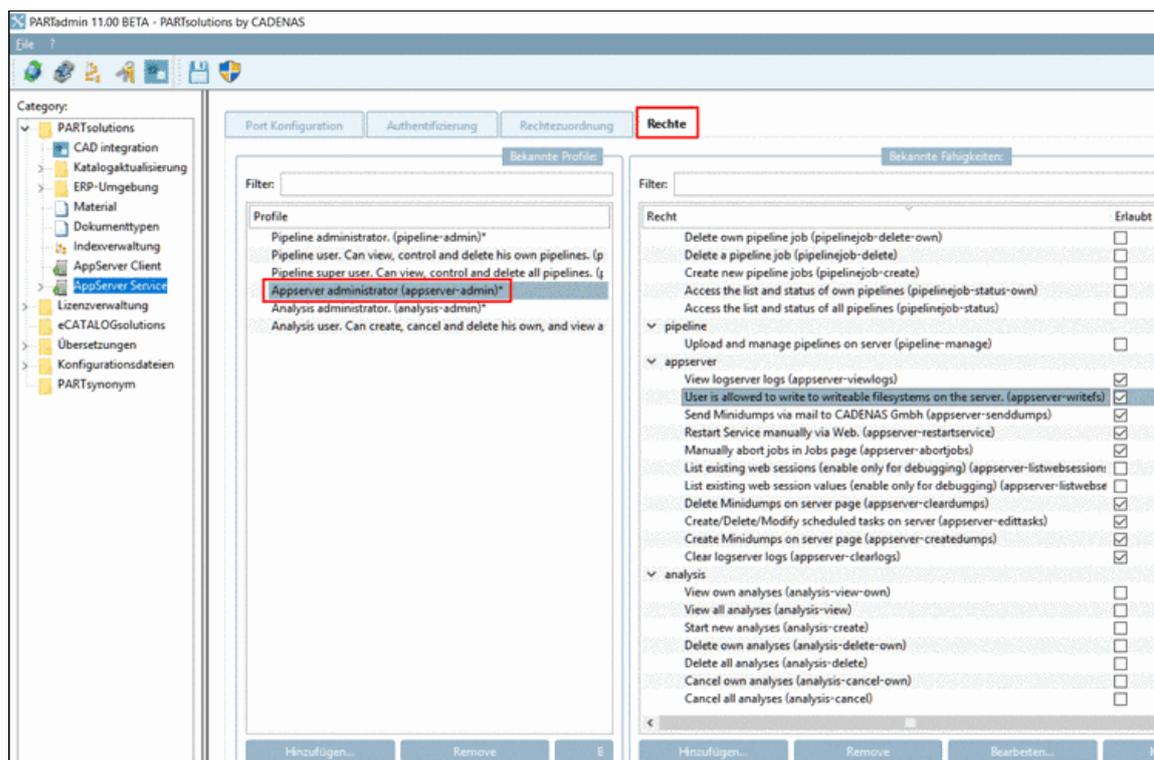
Note

It has to be a Windows user.



5. On the tabbed page **Rights** (`psolrights.cfg`), assign the right "`appserver-writefs`" to the user.

```
"User is allowed to write to writeable filesystems on the server."
```



Copy, delete and list should work now.

File upload via scripting should work as well now:

```
dim fso=createobject("scripting.filesystemobject")
stdprint(fso.copyfile("pappserver.exe", "$CADENAS/upload/pappserver.exe",1))
stdprint(fso.copyfile("I:\WEBNLS_DATABASE_BACKUPS\WEBNLS.bak", "$CADENAS/upload/
WEBNLS.bak",1))
```

The content is chunked in 1MB steps... Theoretically possible would be as well:

```
fso.copyfile("<localfile>", "wfs://<server>:<port>/CADENAS_UPLOAD/targetfile.ext")
```

NTLM authentication is only requested if write operations shall be performed. Otherwise it remains with anonymous access for service/fs...

6.3. NX - Export to STEP: Ignore contents on suppressed or hidden layers

As of V11 SP6 there is a config option to ignore contents on suppressed or hidden layers during STEP export. This is necessary when the target system is unable to process the Invisible property correctly.²

If needed enable the following option:

```
ifugnx.cfg
```

```
[Interface]
STEPExportVisibleLayersOnly = Yes/No
```

²#104241

Chapter 7. V11.00 SP5

7.1. New Oracle JDBC driver

As of V11SP5 the Connection string for Oracle JDBC can have a new format.

This is relevant, if both old PSOL installations and new ones are used, because the new Connection string is not downwards compatible.

7.2. Incompatibility NX 12.0.0 – PSOL V11 SP5

PSOL 11 - NX12 compatibility matrix

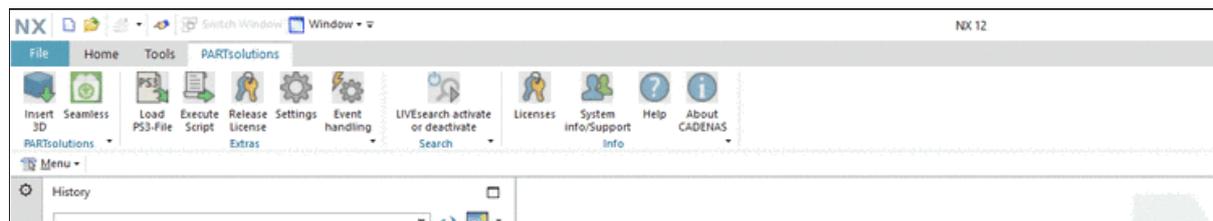
	NX 12.0.0	NX 12.0.1	NX 12.0.1.mp1	NX12.0.2
V11SP3	✓	✗	✓	✗
V11SP4	✗	✓	✓	✓*
V11SP5	✗	✓	✓	✓

When updating to V11 SP5 and currently using NX 12.0.0, please also update to NX 12.0.1, NX 12.0.1.mp1 or NX 12.0.2 in the same course.¹

7.3. Application-sensitive PSOL Ribbons

Up to now always all buttons have been displayed in the PARTsolutions Ribbon menu independently of context. For example,  **Execute Geometric Search** or  **Insert** (native part in PSOL) have been displayed, when no part is open in the session.

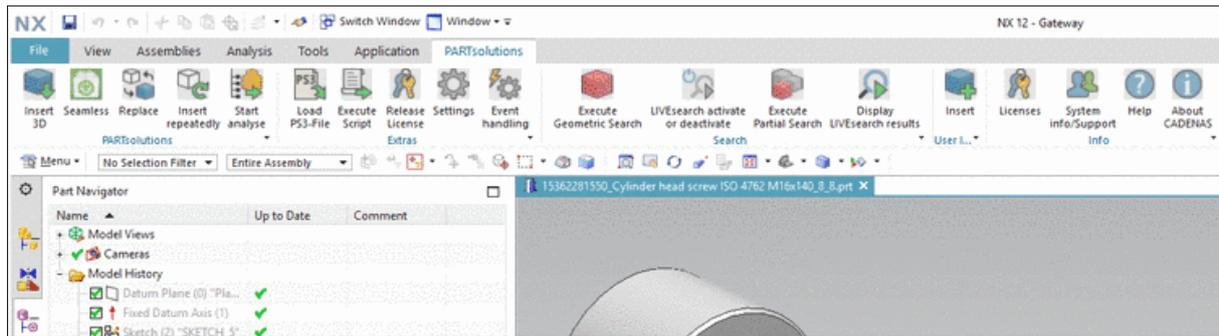
As of V11 SP5 PSOL Menus and Ribbons will now look differently depending on the currently active NX application, namely, when no part is loaded in session, the part-related buttons (like  **Execute Geometric Search**²). Once a part is loaded, the full menu will become visible. This change affects all supported NX versions (8-12) and also applies to toolbars and ribbons in versions where they can be created (8-10 and 9-12, respectively).



No part loaded

¹#102373

²#85621



Part loaded

This is facilitated by a second PSOL menu, `PARTsolutionsNoPart.men` file, which contains only buttons with the `app` flag attached to them in `ifugnx.cfg` file.

Both menu files will now be placed in the `application NX` folder. The `startup NX` folder will now contain a `PSOL .men` file as well. This file will contain a list of applications where the PSOL menus are to be shown. This list can be accessed and modified through the `PrepareMenuAppList` in `ifugnx.cfg`, directly under the other `PrepareMenu` keys. It is prepopulated with the following NX applications: `gateway`, `modeling`, `drafting`, `mechatronics`, `route`, `cam`, `mtb`, `route_mech`, `route_elec`. You don't need to remove applications from this list if you don't have the license for them, or they are not installed. In this case, the entries will simply be ignored.

Note

You need to delete the PSOL menus created in the older versions when updating to a version with this change available (11.0 SP5). Otherwise the PSOL ribbon will appear twice on the ribbon bar. This needs to be done once per installation.

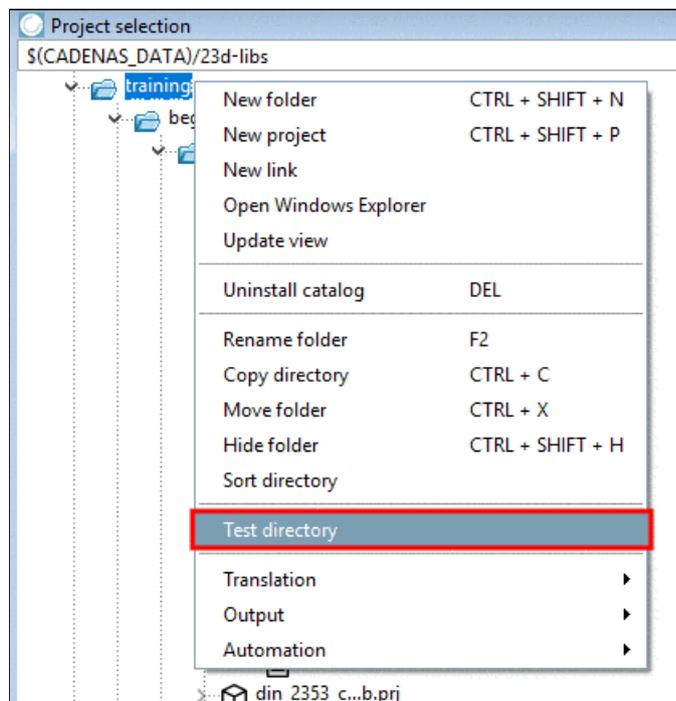
The old menus are normally located in the folder pointed to by the `PrepareMenuPath` config key in the `ifugnx.cfg` (standard is `%TEMP%\startup\PARTsolutions.*`).

To prevent this change from breaking special PSOL menu arrangements, make sure the `PrepareMenu` key is set to 0 before updating. This way, the old startup-based menu structure can continue to be used.

Chapter 8. V11.00 SP4

8.1. Resolving value ranges: Testing ReverseScripts

In **PARTproject** -> **Project selection** -> context menu of folder or project -> **Test directory/Test project** you have the possibility to check **ReverseScripts**.¹



Test directory/Test projects

The option **Test value ranges** also includes a test for **ReverseScripts**. Hereto the option **Test order number for uniqueness** has to be activated in addition.

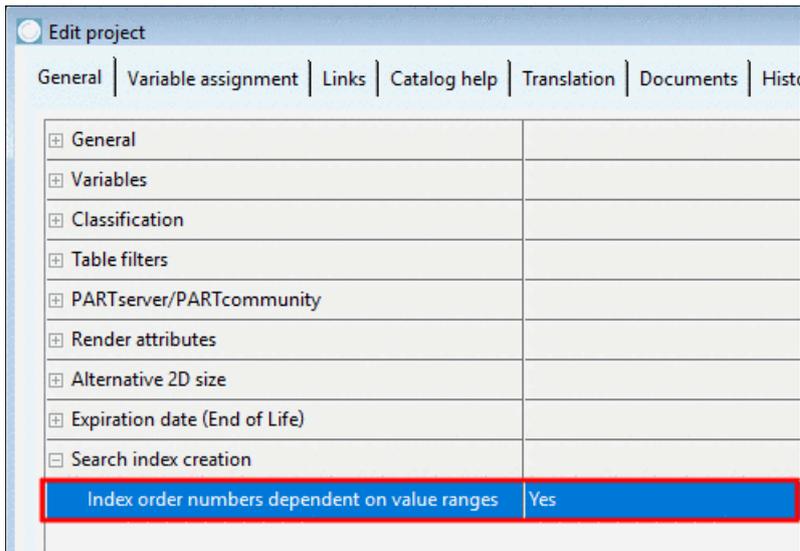
The test can also be performed for a single project.

The value stated under **maximum test time in minutes** is for **ReverseScripts** and all other processes concerning value ranges altogether.

Projects, where the order number can be found via Lucene, are excluded according to the following logic:

- Projects which do not have value ranges, because theses are always found via Lucene.
- Projects which are marked as "to be resolved" (see following figure) and which value ranges can be resolved (meaning don't have continuous value ranges such as 1-100 without step width, for example).

¹#97669



During testing order number or type code are searched via ReverseScripts.

If a search fails, then the following warnings are displayed:

- Type code search for type code "xy" failed
- Order number search for order number "xy" failed

In addition the following warnings are displayed:

- "Found wrong project", if a project was found which does not contain the searched number.
- "Found wrong line", if a line was found which does not contain the searched number.
- "Found wrong variable set", if the ReverseScript returns variable values which do not match order number / type code.

For **ReverseScripts** only warnings are displayed, so that the test won't fail therefore.

Also see Auflösen von Wertebereichen: Konfiguration und Testing.

8.2. Restriction of resolving value ranges (yellow fields)

The possible combinations resulting from resolving of yellow fields can be huge and extremely increase the index. That's why the allowed number of variants per catalog and per project is restricted by **configuration file**.²

Furthermore, in **PARTproject**, it can be set, whether order numbers shall be indexed depending on value ranges.

Restriction of resolving of yellow fields

The maximum number of allowed possible combinations, which result from values of value range variables (yellow fields), can be restricted in the configuration file `partsol.cfg`. The setting applies for all catalogs.

`partsol.cfg`

- `MaxProjectResolveRange` means, the stated number of variants must not be exceeded per project by the resolving of value ranges.

`MaxProjectResolveRange=25000 (default)`

- `MaxCatalogResolveRange` means, the stated number of variants must not be exceeded per catalog by the resolving of value ranges.

²#90015

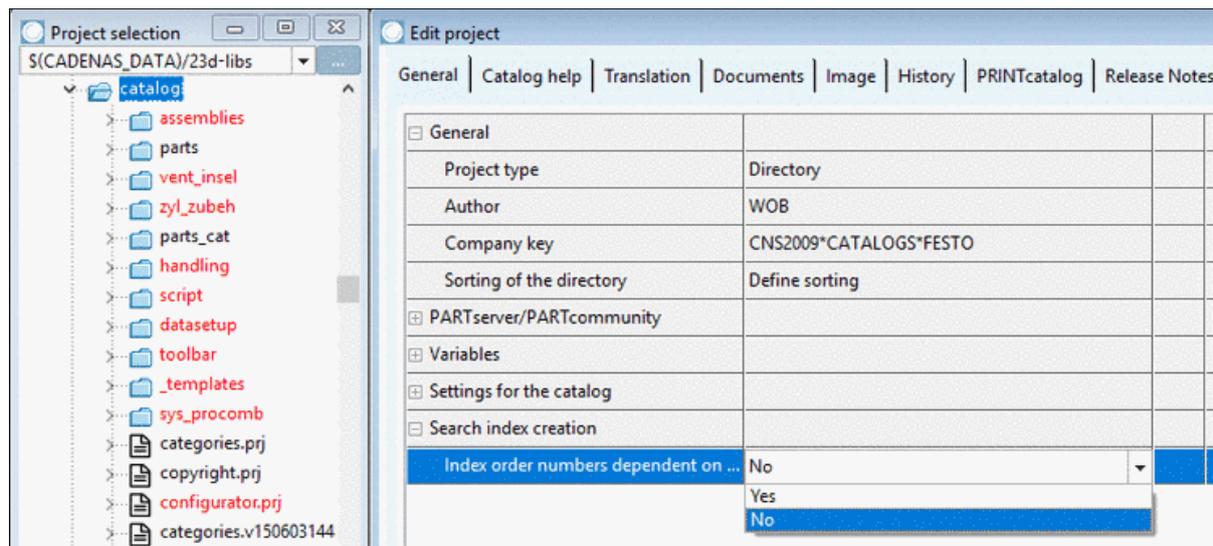
```
MaxCatalogResolveRange=50000 (default)
```

If one of these limits is exceeded, then no variants are indexed for the whole catalog.

Indexing order numbers depending on value ranges: Setting options catalog and project specific

In **PARTproject** -> **Edit project** -> tabbed page **General** -> **Search index creation** -> **Index order numbers dependent on value ranges**, specific settings for single catalogs or projects can be performed, if order numbers shall be indexed depending on value ranges.

Setting options on catalog level:



Value range:

- **Yes:**

```
VARSEARCHRESOLVEORDERNO=1
```

- **No: (default)**

```
VARSEARCHRESOLVEORDERNO=0
```

or key VARSEARCHRESOLVEORDERNO is not available

Note

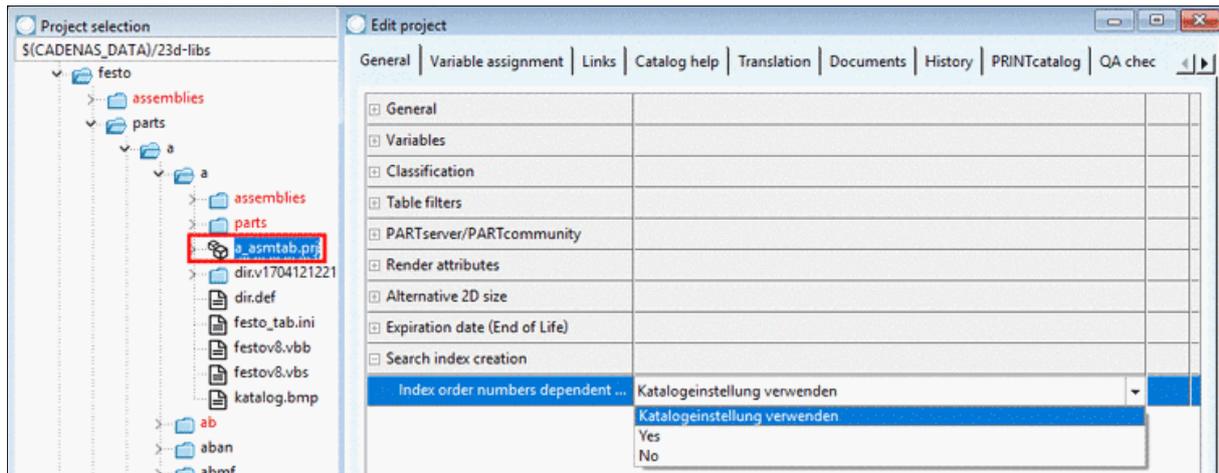
Since the feature is new^a, the default setting "No" still might be used in most catalogs. (Then on project level the default setting "Use catalog setting" is used.)

^aApril 2018

On catalog level, the key VARSEARCHRESOLVEORDERNO is in \$CADENAS_DATA/23d-libs/<catalogname>/dir.prj.

Setting options on project level:

The catalog setting can be overwritten per project. Unless **Use catalog setting** is set, then the catalog setting is used. And this is the default.



- **Yes:**

```
VARSEARCHRESOLVEORDERNO=1
```

- **No:**

```
VARSEARCHRESOLVEORDERNO=0
```

- **Use catalog setting:** (default)

("Catalog setting" is the setting on the catalog's root node.)

Key VARSEARCHRESOLVEORDERNO not available

On project level the key VARSEARCHRESOLVEORDERNO is in the project file.

Tip

A modeller can act in this way: First he sets if indexing should be done or not. If there are many projects to be indexed in the catalog, then he sets "Yes". If there are few, then "No".

Then he goes to those projects, which differ from the catalog's standard and there, makes the setting. This saves effort.

Resolving value range fields by scripting

As of V11 SP4 there is a new search method **Search for order number or type name** in addition.



At first this function searches for order number or type code via Lucene index. If nothing is found in this way, then a reverse search via script is executed. So a script for reverse search has to be created for a catalog, if the limits (see [above](#)) have been exceeded. If there are no value ranges in a catalog at all, then there is no need to create a script for reverse search.

The screenshot shows the PARTdataManager 11.00 interface. The search bar contains the part number HD12B017-0100EXX1MMSF. Below the search bar, there are several search filters and options. The main table displays search results with columns for PN, MIV, STDLC, S, and EMCSOPT. A dropdown menu is open for the 'STDLC' column, showing a list of ball screw options with their respective load capacities.

PN	MIV	STDLC	S	EMCSOPT
Part Number	Model and Input Voltage	Screw type dynamic load capacity	Ordering stroke L...	Electrak® Modular Control System options
1 HD12B017-0100EXX1MMSF	HD12 = Ectrak HD, 12 Vdc	B017- = ball screw, 1.7 kN (382 lbs)	0100 = 100 mm	EXX = Electronic Monitoring Package only
2 HD12B017-0100EXX1MMSF	HD12 = Ectrak HD, 12 Vdc	B017- = ball screw, 1.7 kN (382 lbs)	0100 = 100 mm	EXX = Electronic Monitoring Package only
3 HD24B017-0100EXX1MMSF	HD24 = Ectrak HD, 24 Vdc	B026- = ball screw, 2.6 kN (585 lbs) B045- = ball screw, 4.5 kN (1012 lbs) B068- = ball screw, 6.8 kN (1529 lbs) B100- = ball screw, 10 kN (2248 lbs)	0100 = 100 mm	EXX = Electronic Monitoring Package only

Example project with many value range variables, which interactively build up the part number

8.3. Authentication

Since Web functionality of **PARTApplicationServer** is used more and more, authentication has to be ensured against more than just the ERP users + NT autologin that worked for years in **PARTdataManager**.

V11SP4 adds this now as an extension of the already developed functionality for PARTserver authentication.³

- NTLM/NEGOTIATE http mechanisms to pass NT-Authentication from the clients to the PARTApplicationServer
- User model for identifying users from different NT-Domains
- Support of Domain Trusts and Forests
- Support for user groups to assign permissions

8.4. PLMSynchro

Also see Section 1.2.2.9, "Tips & Tricks" in *PARTwarehouse Manual*.

8.4.1. Tasks

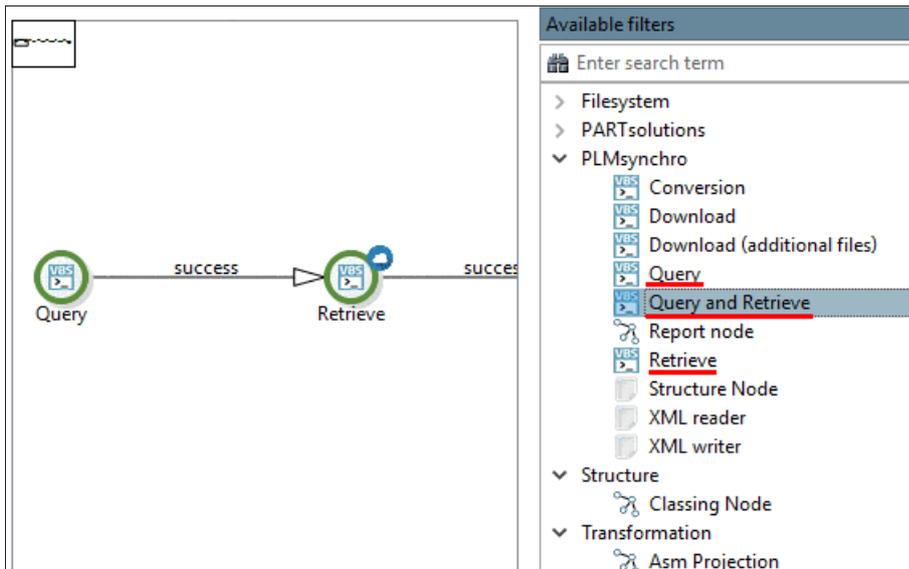
See Tasks.⁴

8.4.2. Query - Retrieve

When using **PLM Synchro with PDM system**, splitting of the node **Query and Retrieve** by the single nodes **Query** and **Retrieve** and **parallelisation** on different computers enhances performance and saves memory.

³#98121

⁴#96035



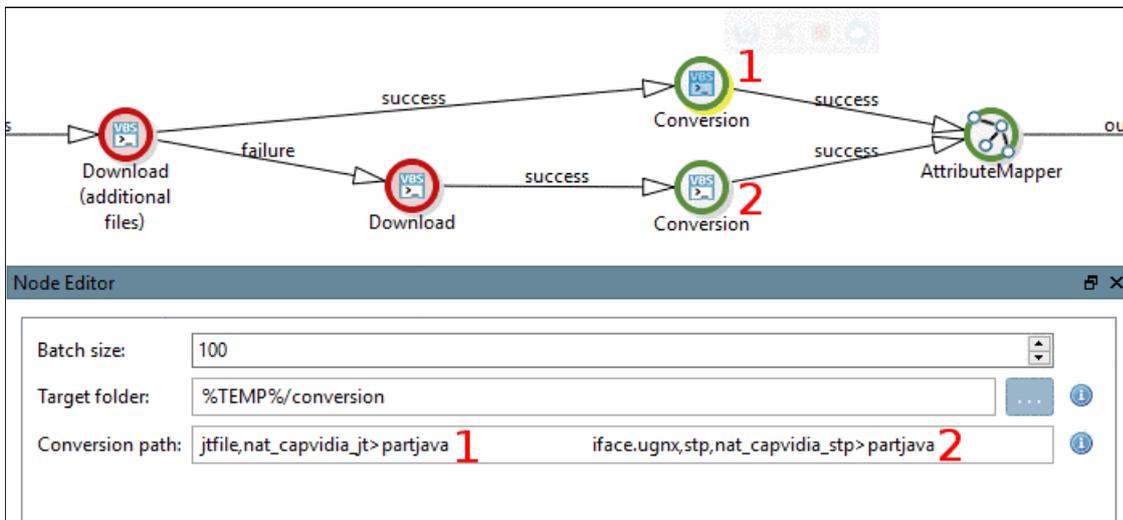
The **Query** node provides IDs (light weight object), the **Retrieve** node provides the complete document.

8.4.3. Download (additional files)

Note

The variant described here, only works for Teamcenter.

NX uses jt files in addition to native format. In such a case the conversion process can be splitted into a pipeline for conversion of jt files and another for conversion of native files.



Example: NX and use of Capvidia

Benefit:

- For the conversion of jt files no CAD and thus no license is needed.
- Time saving

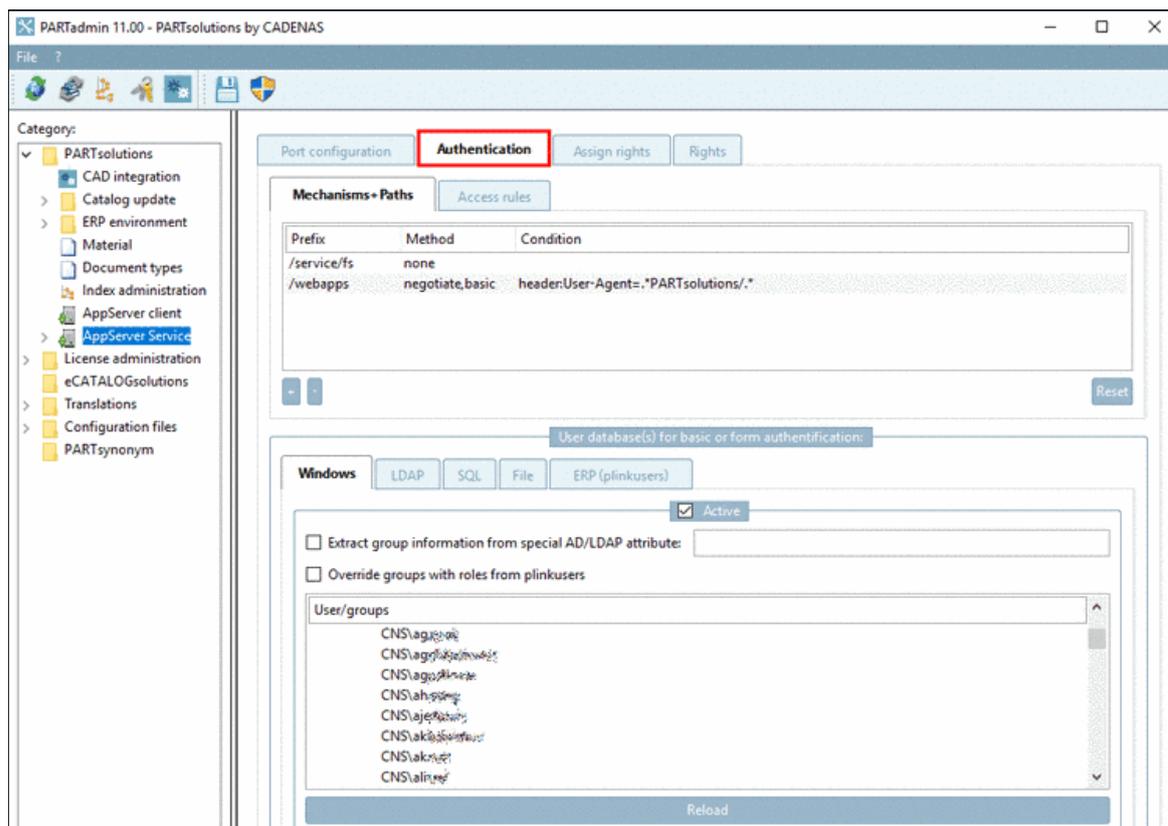
The described variant works with or without Capvidia alike.

8.4.4. AppServer Service: Authentication - Assign rights - Rights

In **PARTadmin** under **AppServer Service** you can find the setting options concerning **Authentication**, **Assign rights** and **Rights**. Also important is to use **HTTPS / SSL** for the **Port configuration** (see [below](#)).

- **Authentication** tabbed page: On subpage **Mechanisms+Paths** there is defined with which method and which condition authentication may happen.

Under **Prefix** "/webapps" there is defined, that autologin is used, when coming from Web Browsers embedded in PARTsolutions or PARTsolutions applications.



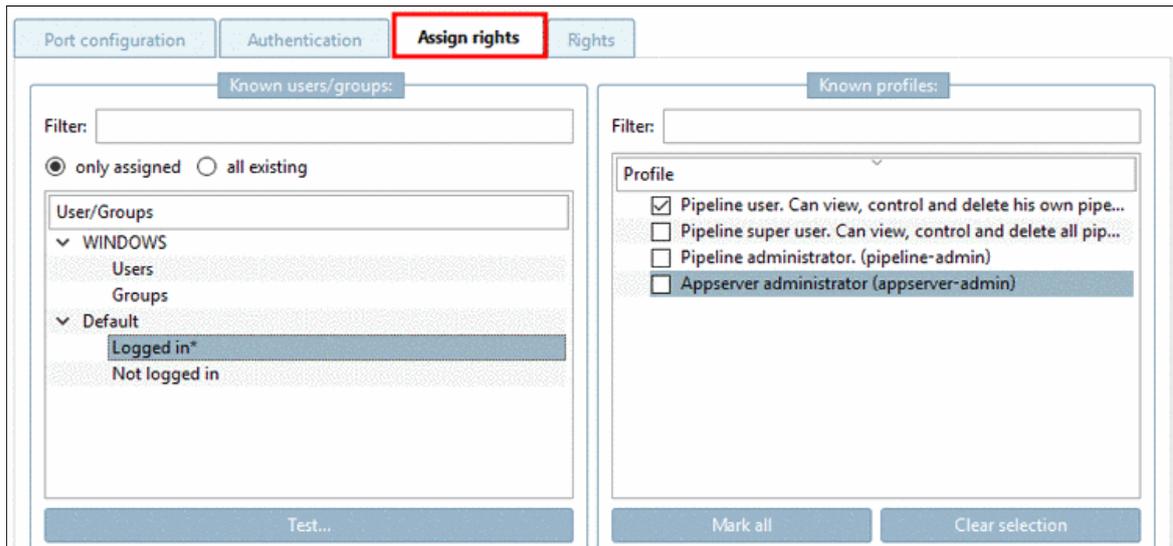
"Authentication" tabbed page

Note

In order to view all **Users/groups**, activate the option **Active** and click on [Reload](#).

- **Assign rights** tabbed page: Listing of **assigned** users and groups or **all existing** users and groups in all trusted Domains/Forests

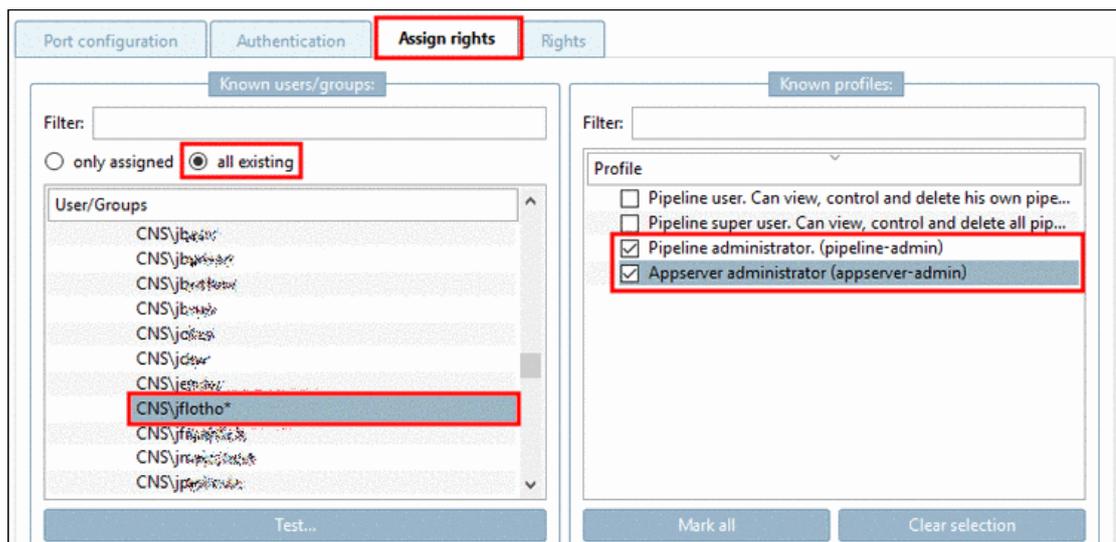
By default, a **logged in user** can view, control and delete his **own** pipelines.



"Assign rights" tabbed page (only assigned)

If you want that a certain user has extended rights, proceed as follows:

1. Under **Known users/groups**, select the option **all existing**.
-> All User/Groups are listed.



"Assign rights" tabbed page (all existing)

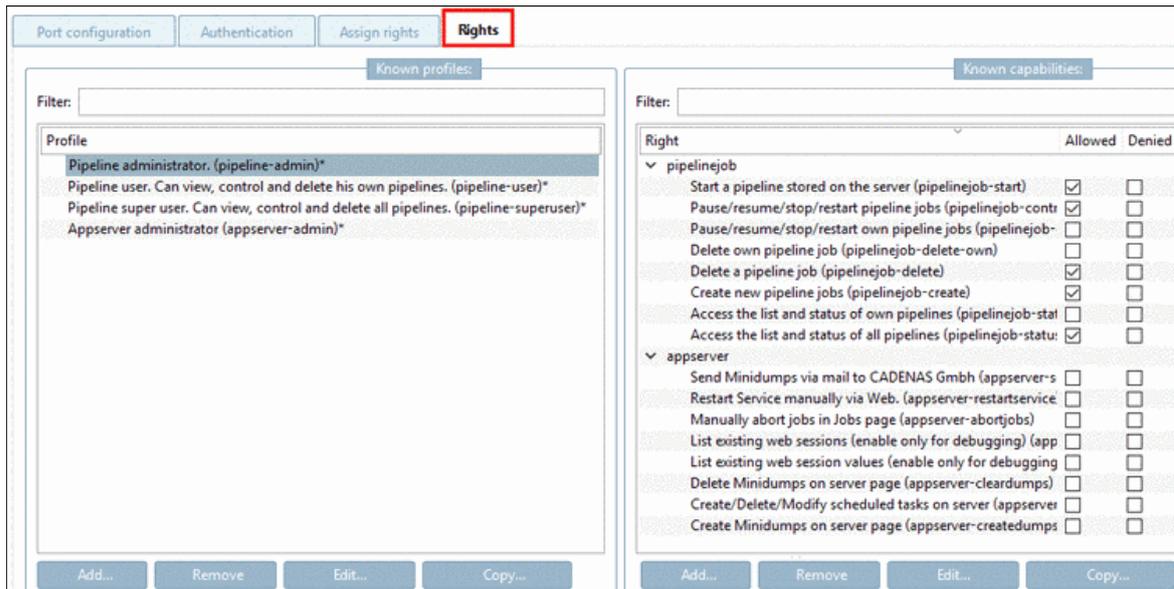
2. Under **Users/groups**, select the desired user.
3. On the right, under **Profile**, activate desired.

Note

Should there be no fitting default profile, you can define your own on tabbed page **Rights**.

- **Rights** tabbed page

Here you can add, remove, edit and copy **Profiles** and/or **Rights**, if needed.

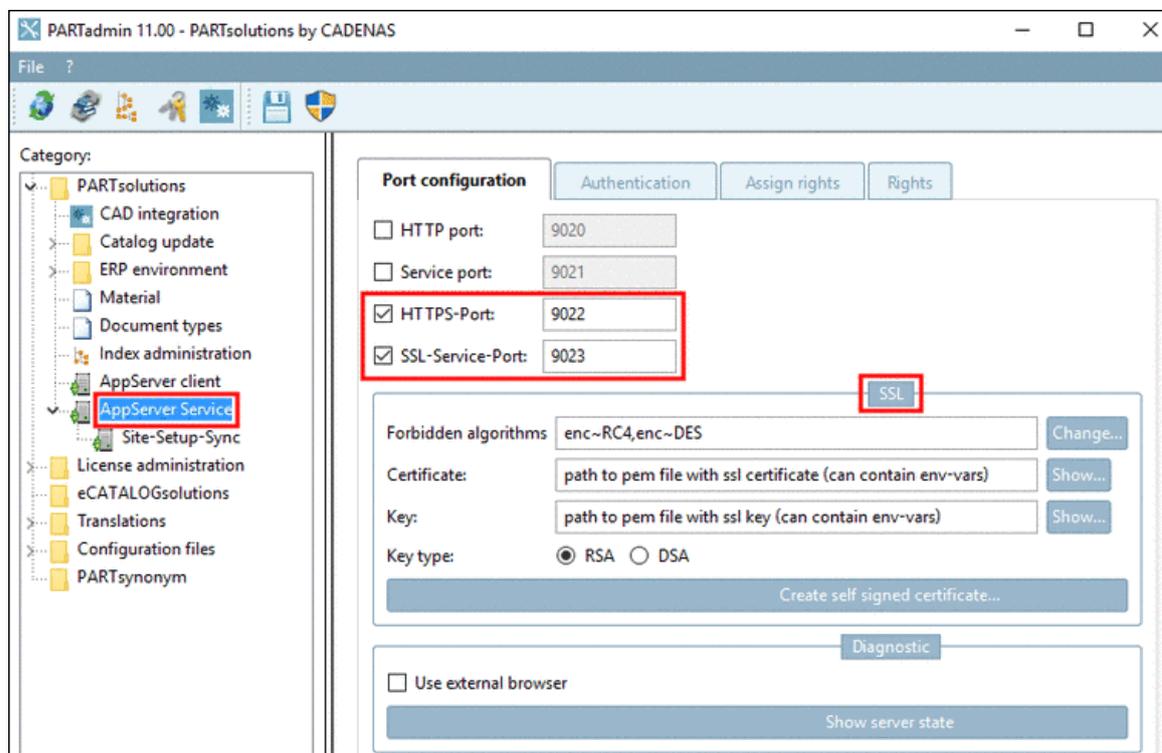


"Rights" tabbed page

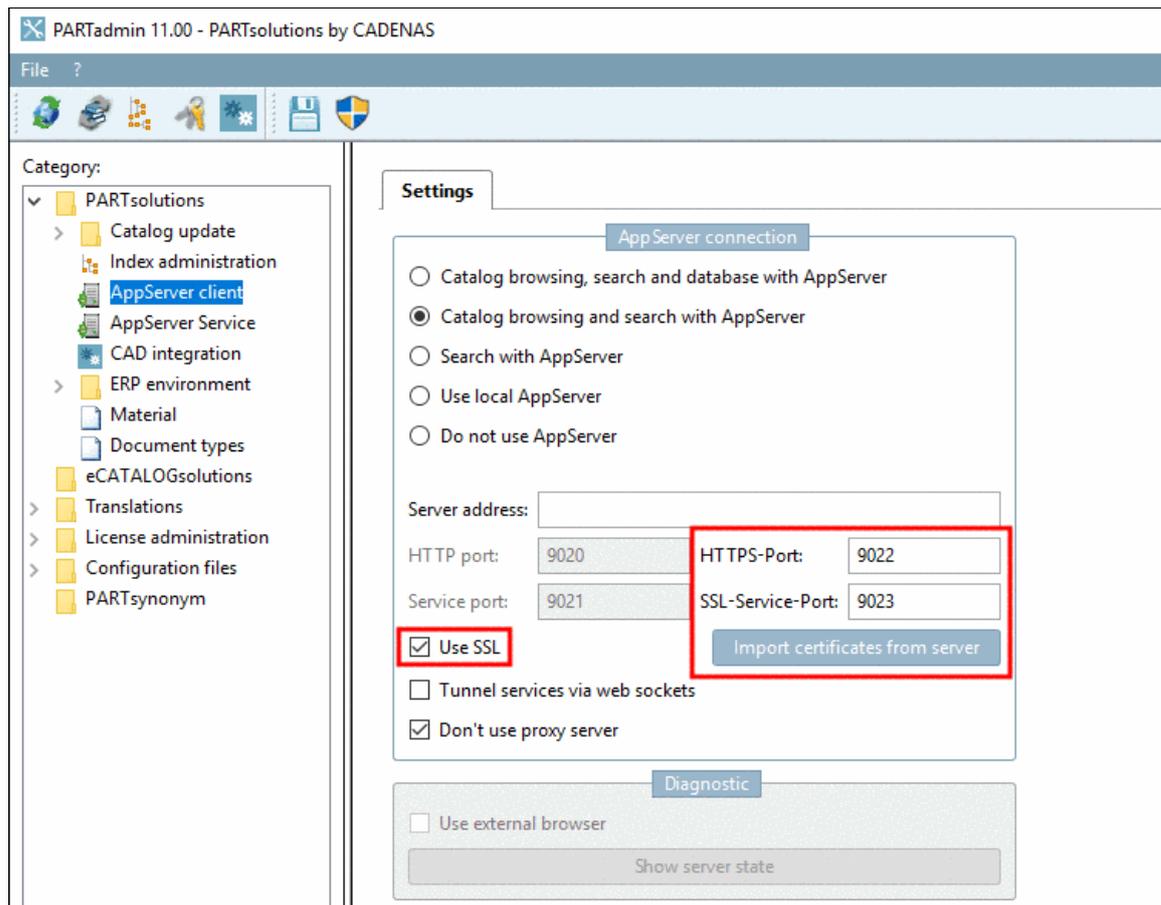
Use HTTPS / SSL

1. Use HTTPS and activate SSL (HTTP authentication is cleartext).

Under category **AppServer Service**, on tabbed page **Port configuration**, activate the two checkboxes **HTTPS-Port** and **SSL-Service-Port**. A description on how to create a self signed certificate can be found under Section 1.3.9.8.3.3, "SSL encryption" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

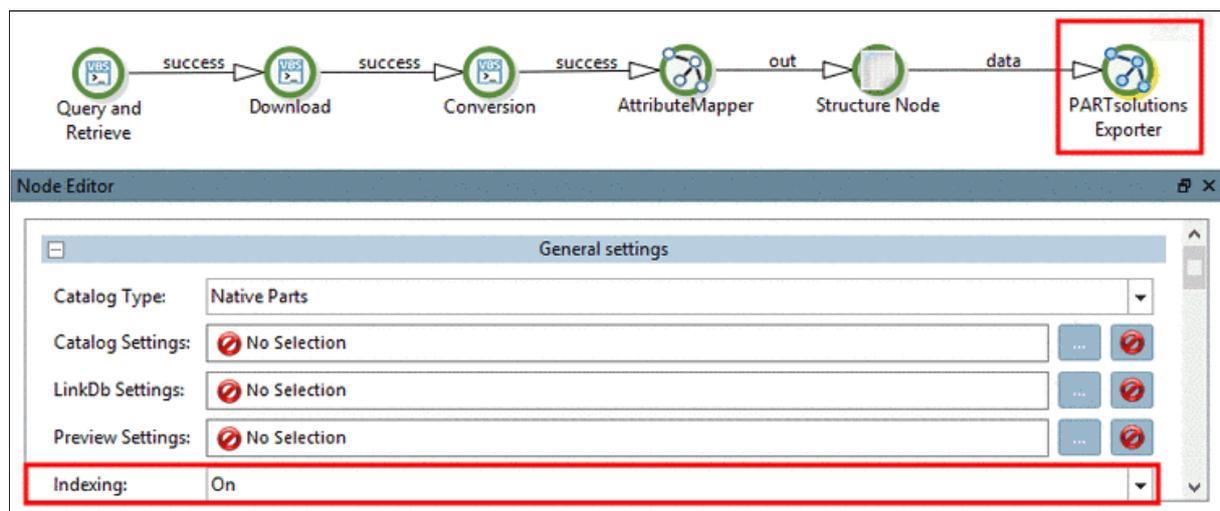


2. Under category **AppServer client**, activate the option **Use SSL** and import respective certificate from server. See Section 1.3.9.8.3.3, "SSL encryption" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.



8.4.5. Index update without Remote File System (RFS)

If **Indexing** shall be performed via Pipeline -> node **PARTsolutions Exporter**, no RFS connection from **PSWorker** or **PARTdataCenter** to **PARTApplicationServer** may be used!



8.4.6. Interface Proxy Configuration moved from ifacecommon.cfg to pcdmanager.cfg

With V11 SP4 Interface Proxy Configuration is moved from `ifacecommon.cfg` to `pcdmanager.cfg`.⁵

- Blocks like `[iface.<cadname>]`

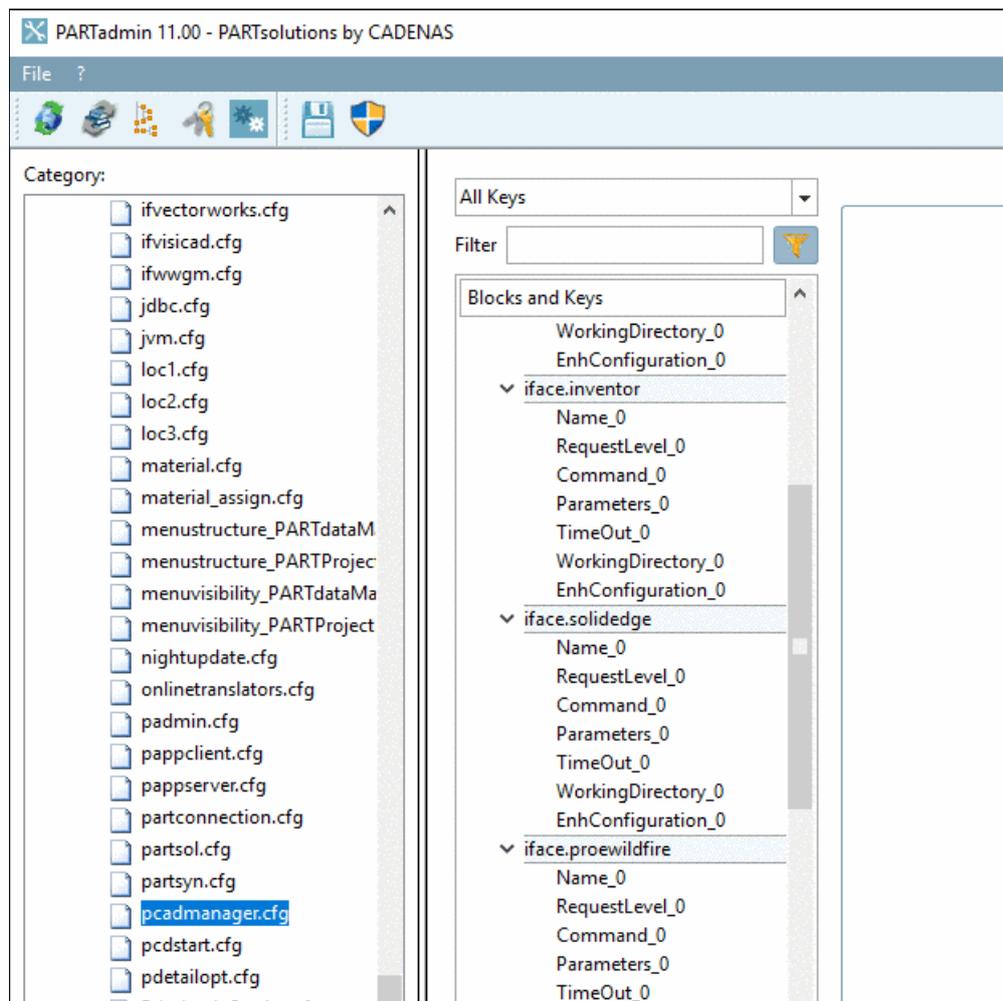
- Related settings for Input/Output

Important

`ifacecommon.cfg` was used to setup startup path for CAD systems. Please use new `cfg/sitesetup` to overwrite these settings.

Sample which moved to new config file `pcadmanager.cfg`:

```
[iface.solidedge]
Name_0=batch
#:VALS_N;0,1,2
RequestLevel_0=1
#:VALS_S;
Command_0=C:\Program Files\Solid Edge ST10\Program\Edge.exe
#:VALS_S;
Parameters_0=
#:VALS_N;
TimeOut_0=60000
#:VALS_S;
WorkingDirectory_0=%TEMP%
#:VALS_S;
EnhConfiguration_0=
```



8.5. Enhanced Color Search

When using color search from VBS, you have to use the topology search proxy.⁶

There is a new method to set the tolerance:

⁶#29307

```
addColor(int r, int g, int b)
```

And a property:

```
ColorTolerance
```

The old color search via geo search does not work anymore neither in GUI not in proxy.

Note

The **Geometrical search index** has to be updated in order to be able to use **Color Search**.

8.6. NX 12.0.1 Update breaks PSOL interface

PSOL 11.0 SP03 is the last PSOL version to support NX 12.0.0.⁷

From PSOL 11.0 SP04, only NX 12.0.1 is supported.

This only concerns NX 12. Previous major releases of NX are unaffected and remain supported down to NX 8.

⁷#97603

Chapter 9. V11.00 SP3

9.1. Seamless: Enter ERP number during export

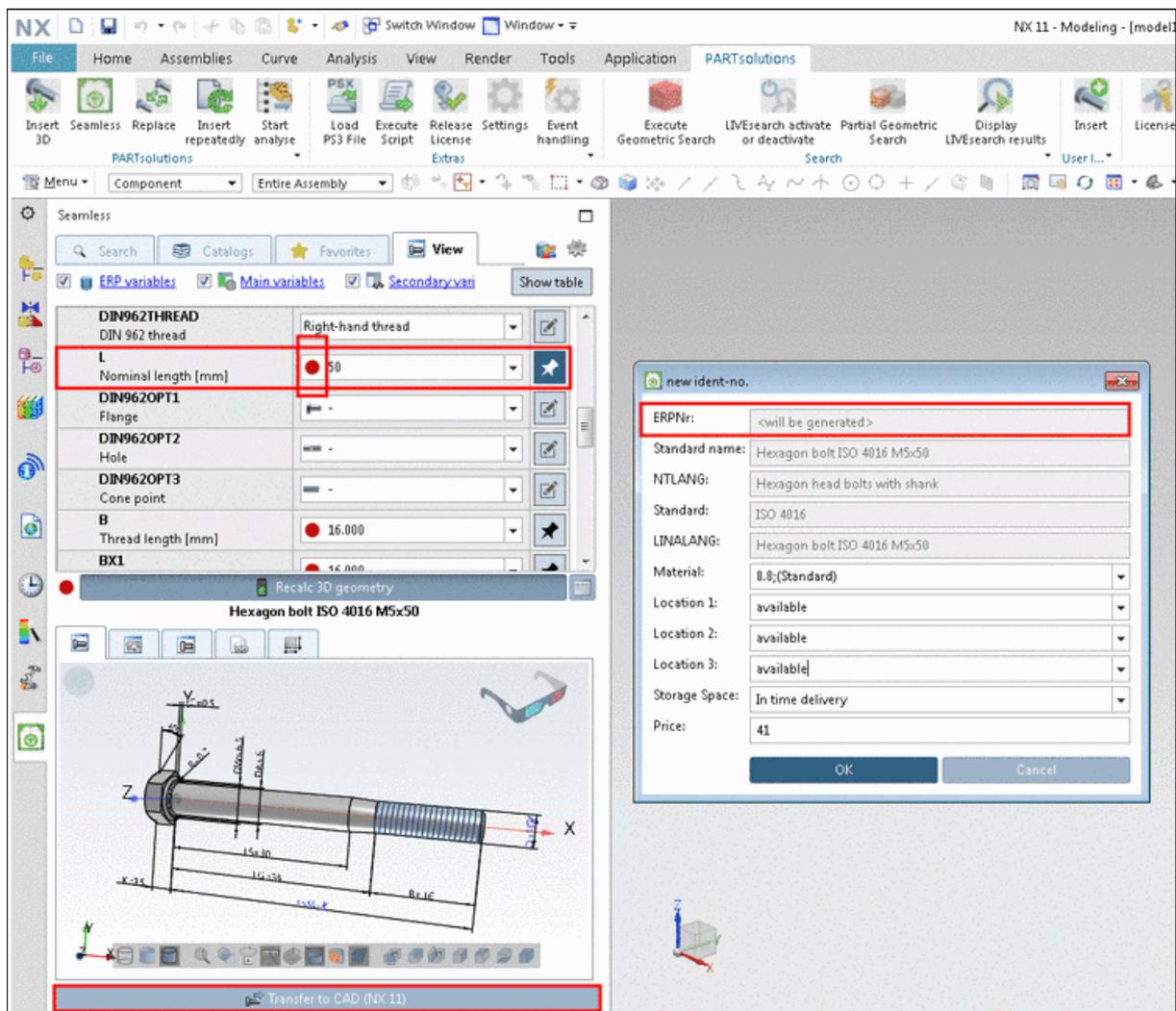
Standard case when using an ERP integration in PARTsolutions is adding an ERP number triggered from **PARTdataManager** via ERP toolbar and command **Add dataset to link database**. At the same time there is an **export restriction**¹ for parts which do not have an ERP number.



Add dataset to link database

I.e. that parts without ERP number cannot be exported to the CAD directly from the **Seamless** environment by default.

As of V11 SP3 it's possible to call the dialog **new ident-no.** in **Seamless** when exporting in order to create an ERP number, if not yet happened.



Hereto perform the following settings:

1. Decisive is, that under `plinkcommon.cfg` -> block [Common] -> key APPNAMES the value Seamless is entered.

¹#93407

```
[Common]
APPNAMES=PARTdataManager,PARTproject,PARTcreatorprint,Seamless
```

As of V11 SP3 this should be the case by default.

2. Under `erpcustom.cfg` -> block `[dialogOnExport]` -> key `default` set the value to 1.

```
[dialogOnExport]
default=1
```

3. Under `erpcustom.cfg` -> block `[LOAD]` activate the key `erp_export_ts`.

```
[LOAD]
;Generate ERP on Export
erp_export_ts=$CADENAS_SETUP/scripts/erp/erp_export_ts.vbb
```

4. Under `erpcustom.cfg` -> block `[ADDTODB]` activate the key `erp_nrgenerator`.

```
[ADDTODB]
#:HELP;default;Activation of the ERP Number Generator.
erp_nrgenerator=$CADENAS_SETUP/scripts/erp/erp_nrgenerator.vbb
```

Note

The input fields can freely be designed, furthermore whether the ERP number shall be automatically generated or manually entered (see last point above).

More details on configuration can be found under Section 1.7.4.9.19.2, "Seamless: Enter ERP number during export" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

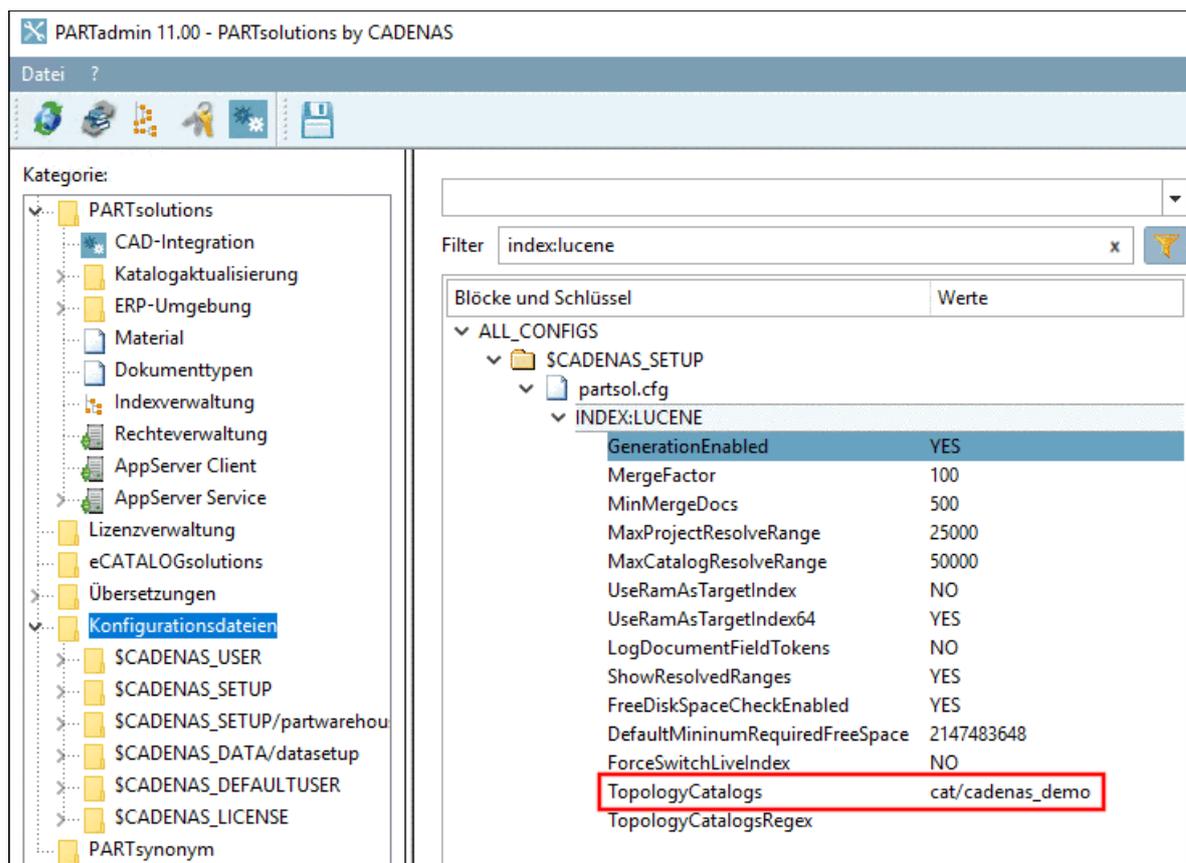
9.2. PLM Synchro and "Any" search

For "Any" search to work with **PLM Synchro** catalogs please regard to set either key `TopologyCatalogs` or `TopologyCatalogsRegex`.²

1. In the configuration file `partsol.cfg`, block `INDEX:LUCENE`, key `TopologyCatalogs` enter the desired catalog path in the following form:

```
cat/<catalog_name>
```

²#95047



TopologyCatalogsRegex is a regular expression. Using this you can state all catalogs under /nat for example.

```
nat/.*
```

Otherwise the catalog list can be stated in the other key.

2. Update the geometrical index (if not up-to-date).
3. Update the full-text search index.

The same applies for own part catalogs in general.

9.3. Catalog update: HTTP/S, SSL handshake connection error

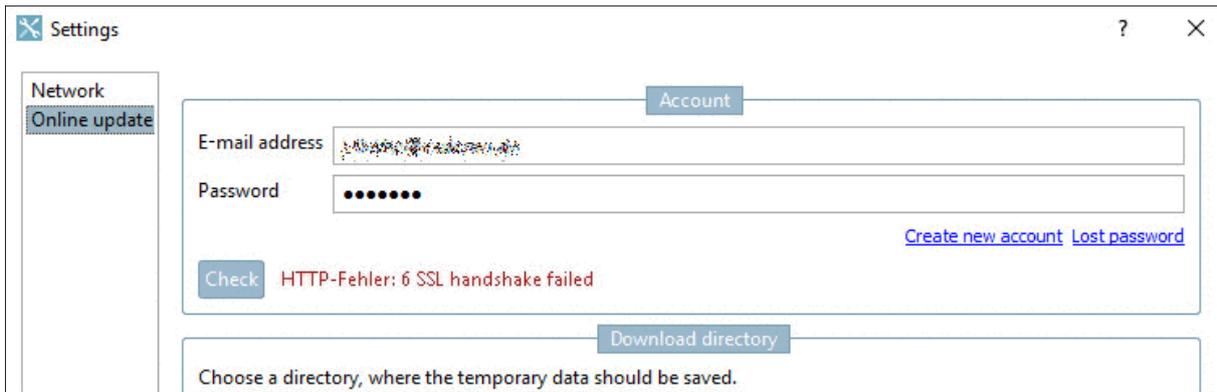
Problem:

Error during **PARTAdmin** -> **Online update**: When clicking on **Check**,

-> **Check connection** shows HTTPS connection error,

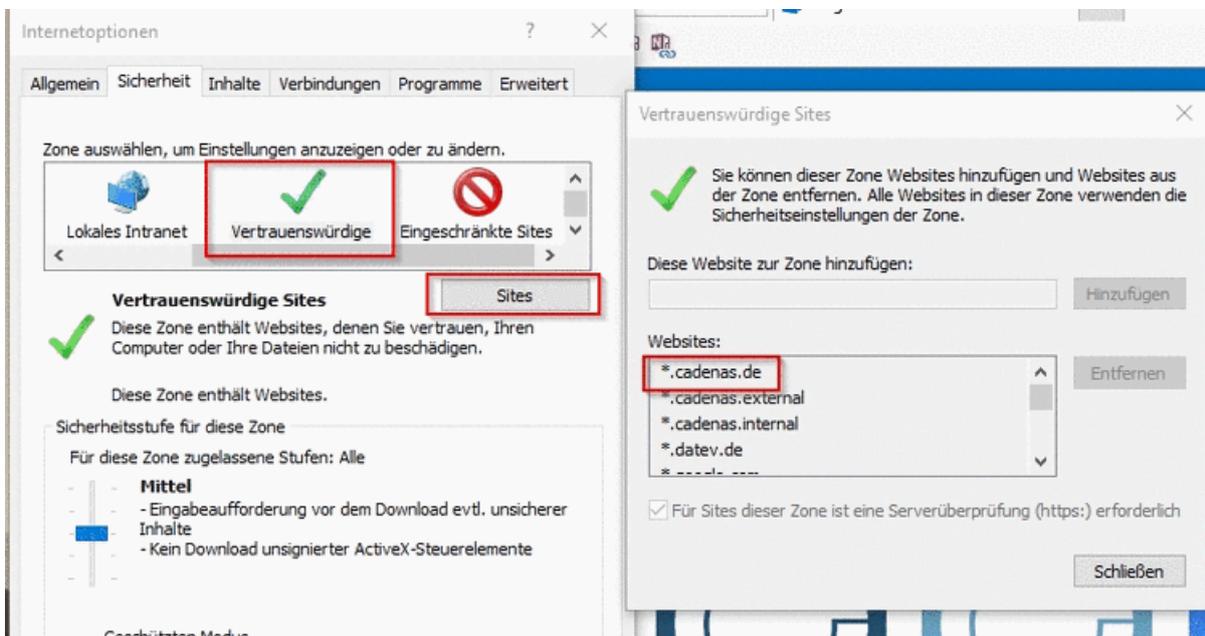


-> the error "**HTTP-Error 6: SSL handshake failed**" is displayed.



Solution:

Include cadenas.de + partupdate.cadenas.de to the trusted sites in Internet options.



9.4. Parallel downloads: New option in online update

With activated option **Parallel downloads**, you can determine the number of parallel performed downloads via **Segments**. With higher values the download speed can be increased. Default is 1 (no parallel downloads).³

³#94789

The screenshot shows a 'Settings' dialog box with a sidebar on the left containing 'Network' and 'Online update'. The main area is divided into three sections:

- Account:** Contains 'E-mail address' (j.flotho@cadenas.de) and 'Password' (masked with dots). Below are links for 'Create new account' and 'Lost password', and a 'Check' button showing 'Authentication successful!'.
- Download directory:** Contains the instruction 'Choose a directory, where the temporary data should be saved.' and a text box with the path 'E:_OfflineCDs\sales_offlinecd-1100SP3_2017-11-28_19.12_r166982\user\partupdate'.
- Parallel downloads:** Contains a checked checkbox and a 'Segments' spinner set to '4'.

At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

Note

Increase of download speed is not guaranteed to work in every scenario. If you have problems downloading, set back to 1.

9.5. \$CADENAS_DATA/pool: General access

Prior to V11SP3 the complete \$CADENAS_DATA directory was mounted from **PARTapplicationServer**. This made it impossible to check in **native parts**, because users would need to write to \$CADENAS_DATA/pool which was not possible over RFS (remote file system).

With V11SP3 the \$CADENAS_DATA/pool is forced to be NOT mounted from appserver by default. This means that - when working with/accessing **native parts** \$CADENAS_DATA/pool (and so \$CADENAS_DATA as well) must point to a directory in the filesystem where all clients have access to.⁴

However there may be cases, where a user wants to just open parts in **readonly mode** without being able to load/store native parts from within the CAD system.

For this cases, there is a config option in \$CADENAS_SETUP/pappclient.cfg or \$CADENAS_USER/pappclient.cfg that allows to change this behaviour based on client or application:

pappclient.cfg:

```
[common]
remotePool=1
remotePool(PARTdataManager)=1
```

Note

Basically, default settings don't prevent clients to access \$CADENAS_DATA/pool. Just make sure that this directory can be accessed with general rights by all clients.

If **readonly mode** is sufficient, use above mentioned settings.

⁴#94553

9.6. Running PLMSynchro with Capvidia

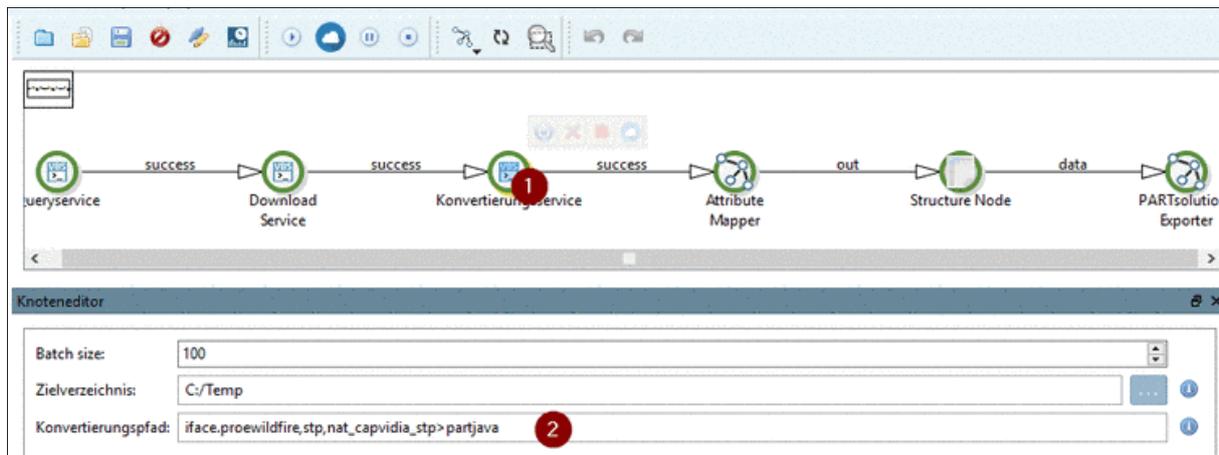
For **very small parts**, Capvidia will possibly calculate the Bounding Box not correctly, which results in wrong parts. In this case try the following setting under `plmsynchro.cfg` -> block [JOB] or [CONVERSION] -> key **ConversionPath**.⁵

```
iface.cad,stp,nat_capvidia_stp>partjava(;custom=AdaptTolerance=4)
```

or

```
stp,nat_capvidia_stp>partjava(;custom=AdaptTolerance=4)
```

When using **PLM Synchro** with **PARTdataCenter** perform the setting here:



Note

In SP3 the value of "AdaptTolerance" has been set from 3 to 4.

More setting options can be found under Running PLMSynchro with CAPVIDIA.

9.7. NX 12 interface available

NX 12 interface is available now.⁶

9.8. NX-Teamcenter: Create "Alternative Representations"

Altrep is supported as of NX 10.

In order to support native placing of "alternative representations" for NX10, the macro "cns_place_nx10_teamcenter_altrep.macro" has to be used. In addition to already available placeholders two new have been added: <<CNS_ITEMREVINDEX>> and <<CNS_ALTREPINDEX>>. These have to replace the numbers in the following macro lines when self-recording:

```
CUSTOM 25 PdmUI_BrowseApp * TL_EXPAND * (1) * 1 !
CUSTOM 25 PdmUI_BrowseApp * TL_EXPAND * (1 <<CNS_ITEMREVINDEX>>) * 1 !
CUSTOM 25 PdmUI_BrowseApp * TL_PICKED_ITEM * (1 <<CNS_ITEMREVINDEX>> <<CNS_ALTREPINDEX>>) * 0 !
CUSTOM 25 PdmUI_BrowseApp * TL_SELECT * (1) * 0 * 0 !
...
CUSTOM 25 PdmUI_BrowseApp * TL_SELECT * (1 <<CNS_ITEMREVINDEX>> <<CNS_ALTREPINDEX>>) * 0 * 1 !
```

(NX 11 and 12 do not need the special macro. The "normal" placing macros are sufficient.)

⁵#85257

⁶#93709

In addition, in ifnxteamcenter.cfg, the key TC_allowItemAltRep=1 has to be set for customers, which have activated Altreps for templates (<ShowAltrep>Yes</ShowAltrep> in the respective .pax file). This applies for all versions.

9.9. NX-Teamcenter: Assembly templates not recognized during Teamcenter export

Assembly templates are not recognized during Teamcenter export.⁷

Teamcenter can have separate item templates for Assemblies and Parts. The type of the template is stored in the "class" attribute of the "ObjectData" section of each template's palette in the relevant .pax file (usually nxdm_ugs_model_templates.pax).

"ModelTemplate" is the default template type, suitable for parts and assemblies. "AssemblyTemplate" is the type specifically meant for assemblies. There are also numerous other types meant for the various NX applications, such as Shape Studio or Routing Electrical.

When a template is selected for item creation in the NX/TC environment, the new NXOpen interface (NX 10 and later) requires all parameters of that template to match those in the pax file. There is no way of reading these parameters short of parsing the pax file manually and even one incorrect parameter will result in a "The selected template doesn't exist" error message.

Issue #67541 takes care of most of these parameters by adding them to ifnxteamcenter.cfg as keys that the user must set in accordance with their custom template parameters.

As we have had no templates other than the default "ModelTemplate" class, this class name was hardcoded into the interface. Now that customers want to use other template classes, this has to be added to the config keys as well.

9.10. OSDM+WWGM: WWGM11 requires different Save workflow than WWGM10

Added cfg key:

The configuration key has to be set on the correct version of Windchill Server.⁸

```
$CADENAS_SETUP/ifosdmwwgm.cfg
```

```
[CreationOptions]
WindchillVersion={10,11}
```

⁷#93671

⁸#91159

Chapter 10. V11.00 SP2

10.1. LIVEsearch: Results update configurable / Option for part comparison

There are some keys to adjust the update cycle of search results.¹

If no settings have been made, the display is updated after each feature change. If you don't want this, configure timeouts.

Default value is always 0, which equals a deactivation of key.

Values > 0 will be evaluated. The difference between the two first and the two last keys is marginal. So preferably only use the two first keys.

- **TimeoutAfterFeature**: Timeout before search in seconds after a feature has been modified
- **TimeoutAfterSearch**: Minimum interval in seconds between two searches
- **SaveTimeoutAfterFeature**: Time after feature end and saving (in PSOL)
- **SaveTimeoutAfterSearch**: Minimum timeout in seconds before saving the document (in PSOL) again after a search has been executed

Furthermore there is an option to automatically load the best part into the part comparison.

Details on **LIVEsearch** can be found under Section 2.6.10, "LIVEsearch" in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

10.2. Running PLMsynchro with CAPVIDIA

For **very small parts**, Capvidia will possibly calculate the Bounding Box not correctly, which results in wrong parts. In this case try the following setting under `plmsynchro.cfg` -> block [JOB] or [CONVERSION] -> key **ConversionPath**.²

```
iface.cad,stp,nat_capvidia_stp>partjava(;custom=AdaptTolerance=3)
```

or

```
stp,nat_capvidia_stp>partjava(;custom=AdaptTolerance=3)
```

More setting options can be found under Running PLMsynchro with CAPVIDIA.

¹#82683, #88425

²#85257

Chapter 11. V11.00 SP0

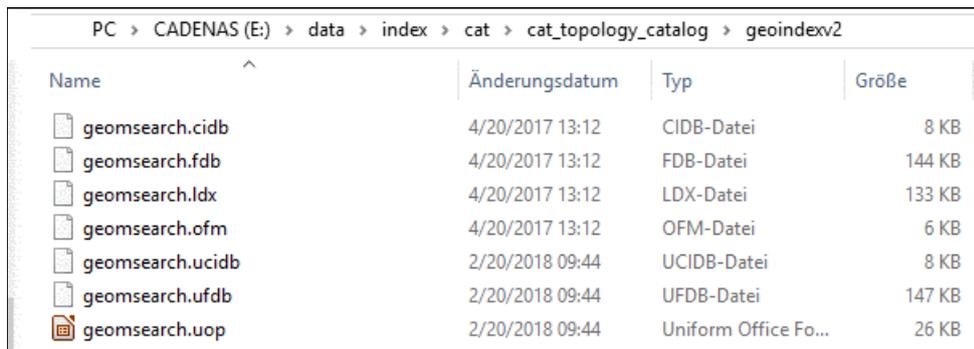
11.1. List of failed fingerprint generation avoids anew attempt

Problem¹: If files cannot be loaded by any reason (e.g. failed mesh reduction or corrupt file), then at next update there will be an anew attempt to generate missing fingerprints.

This may slow down the fingerprint generation considerably.

Solution: Save files with failed fingerprint generation in a CSV file named `ignore.csv`. These files will be excluded from further generation processes as long as the STL date does not change.

The file has to be stored in the geo index directory of catalog.



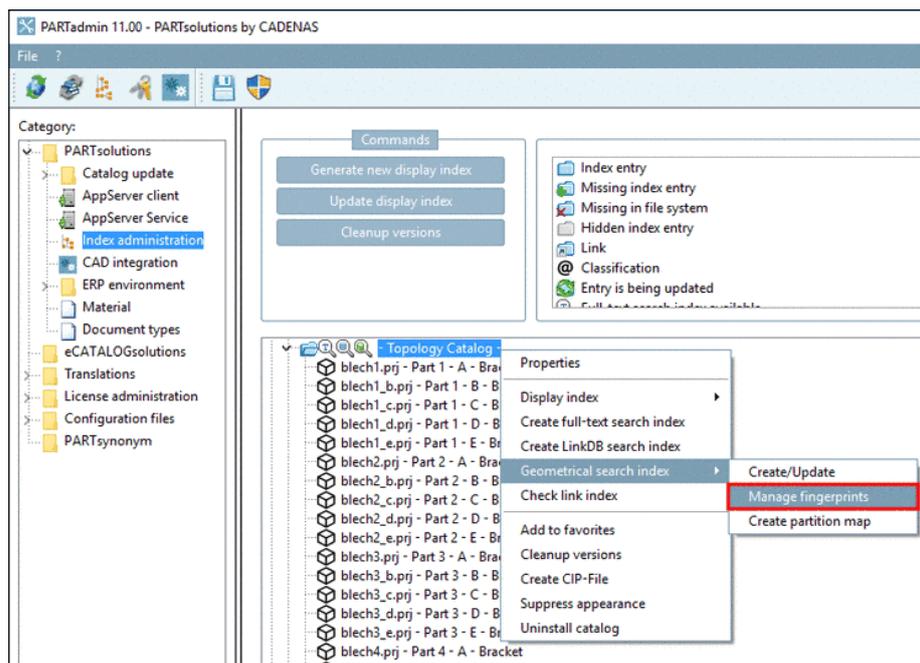
Name	Änderungsdatum	Typ	Größe
geomsearch.cidb	4/20/2017 13:12	CIDB-Datei	8 KB
geomsearch.fdb	4/20/2017 13:12	FDB-Datei	144 KB
geomsearch.idx	4/20/2017 13:12	LDX-Datei	133 KB
geomsearch.ofm	4/20/2017 13:12	OFM-Datei	6 KB
geomsearch.ucidb	2/20/2018 09:44	UCIDB-Datei	8 KB
geomsearch.ufdb	2/20/2018 09:44	UFDB-Datei	147 KB
geomsearch.uop	2/20/2018 09:44	Uniform Office Fo...	26 KB

Example

At least the two columns PROJECT and LINEID have to exist. All other columns are ignored. Fields are separated by semicolon and quoted by double quotes. The PROJECT field must contain the PART path relative to the catalog root using slashes.

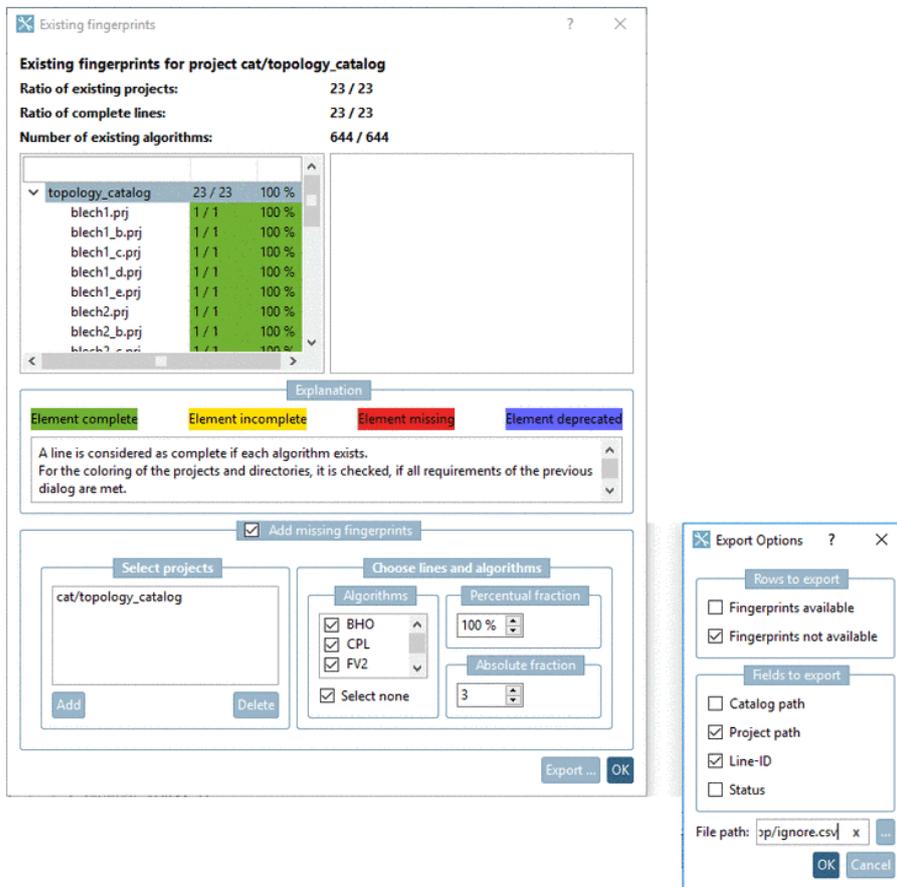
In order to create the respective CSV file do the following:

1. Call dialog **Manage fingerprints**.



¹#68901

- Open dialog **Export Options** by clicking on **Export ...** and there, activate the option **Fingerprints not available**.



11.2. Color value range columns

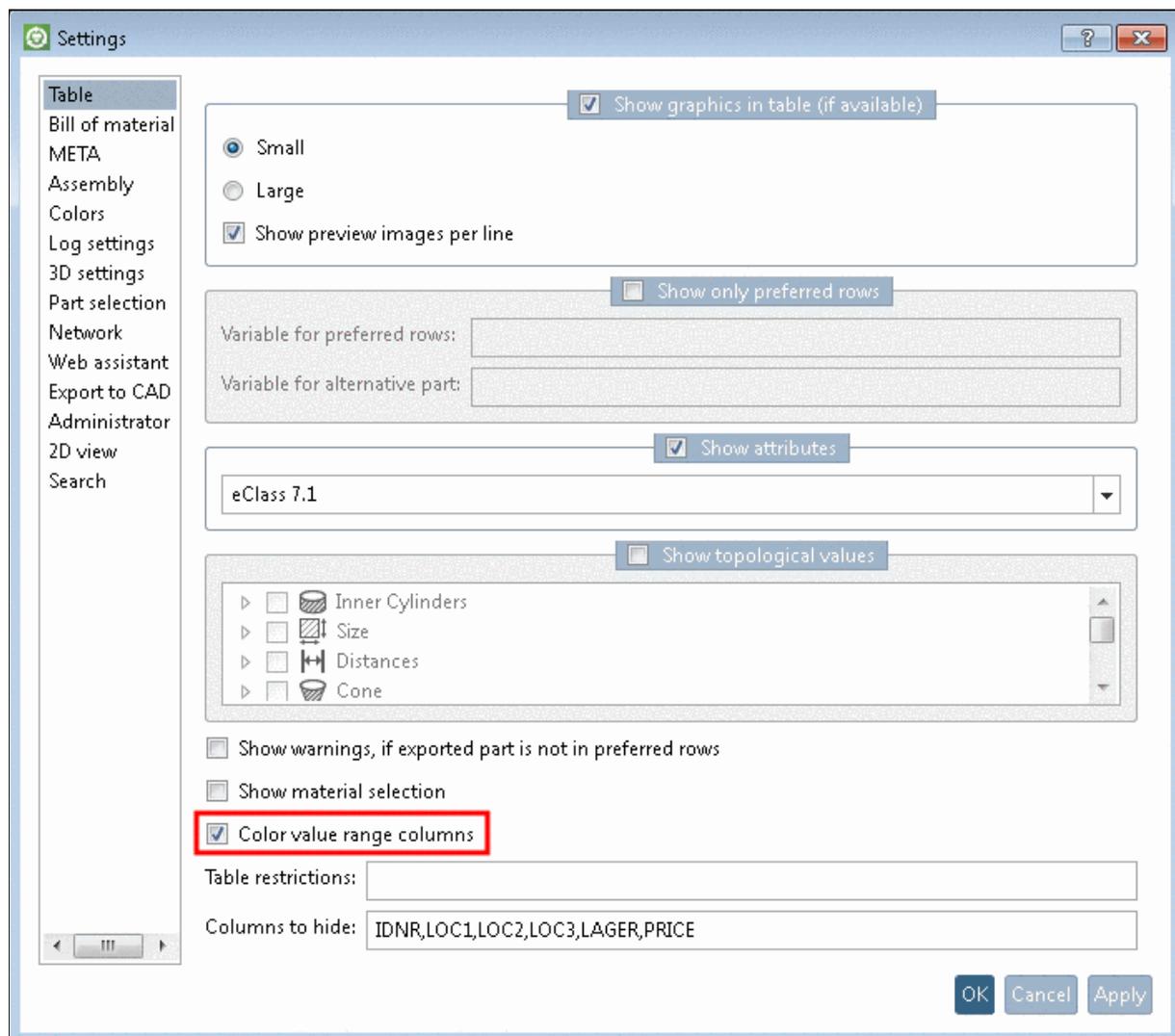
With V11 the default has been changed to the effect that value range columns are not colored anymore, and instead of this colored icons are used.

The screenshot shows the PARTdataManager 11.00 interface. The table below is a representation of the data shown in the screenshot.

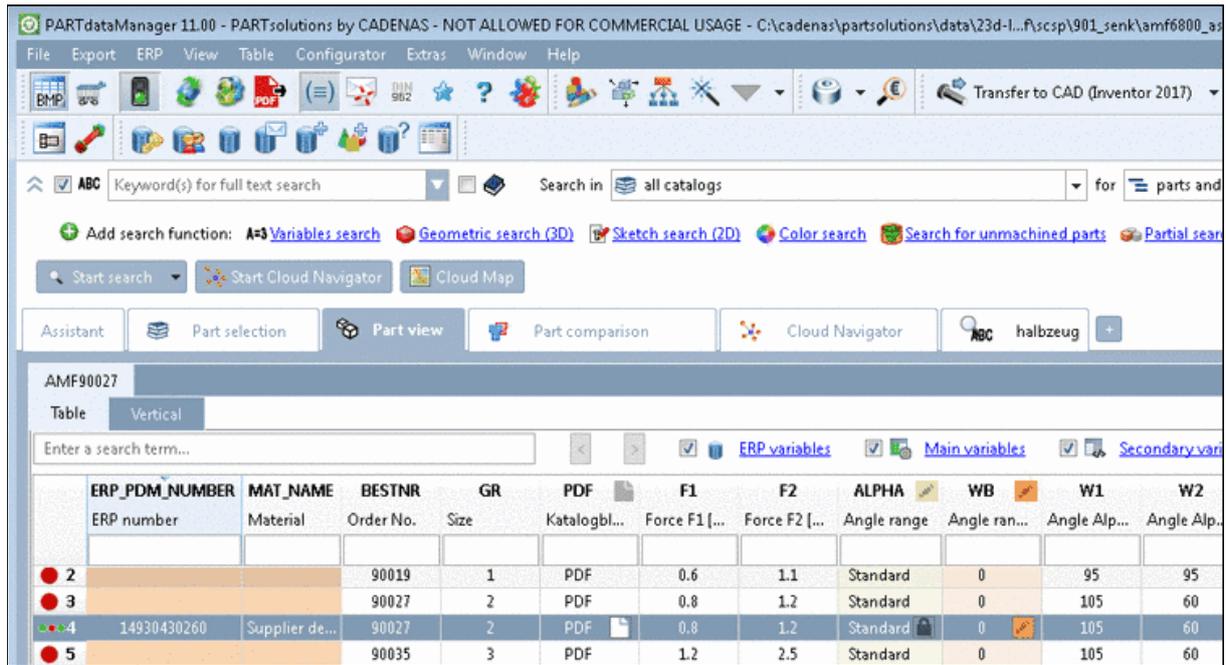
ERP_PDM_NUMBER	MAT_NAME	BESTNR	GR	PDF	F1	F2	ALPHA	WB	W1	W2	VB	AS
ERP number	Material	Order No.	Size	Katalogbl...	Force F1 [...]	Force F2 [...]	Angle range	Angle ran...	Angle Alp...	Angle Alp...	Adjustabl...	Clamping
2		90019	1	PDF	0.6	1.1	Standard	0	95	95	9.5	M5 x 3
3		90027	2	PDF	0.8	1.2	Standard	0	105	60	12.5	M6 x 3
4	14930430260	Supplier de...	2	PDF	0.8	1.2	Standard	0	105	60	12.5	M6 x 3
5		90035	3	PDF	1.2	2.5	Standard	0	105	60	18.0	M8 x 4

However, you can still use colored columns via setting option in addition to colored icons.

Under **Extras** menu -> **Settings...** -> **Table**, check **Color value range columns**.



-> Result



11.3. SSL encryption

You can use **SSL encryption** for all requests to the **PARTApplicationServer** ².

- File system service (access via **HTTPS-Port**)
- Mzcom service calls (index, DB, search) (access via **SSL-Service-Port**)

Self signed or official³ certificates can be used.

Detailed information on this can be found under Section 1.3.9.8.3.3, "SSL encryption" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

11.4. Classification for "NOSECTION" and "RAWMATERIAL" parts

For connection elements such as screws, nuts, rings, pins, etc. the cutting in the 2D view may be excluded.

In image 1 below you can see that with activation of the respective classification attribute only the plate is cut and not the screw itself.

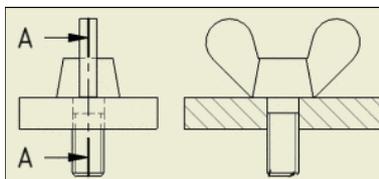


Image 1: Screw not cut

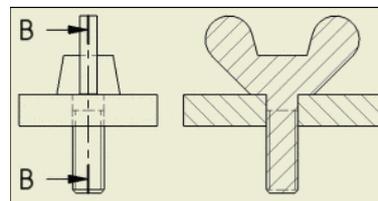


Image 2: Screw cut

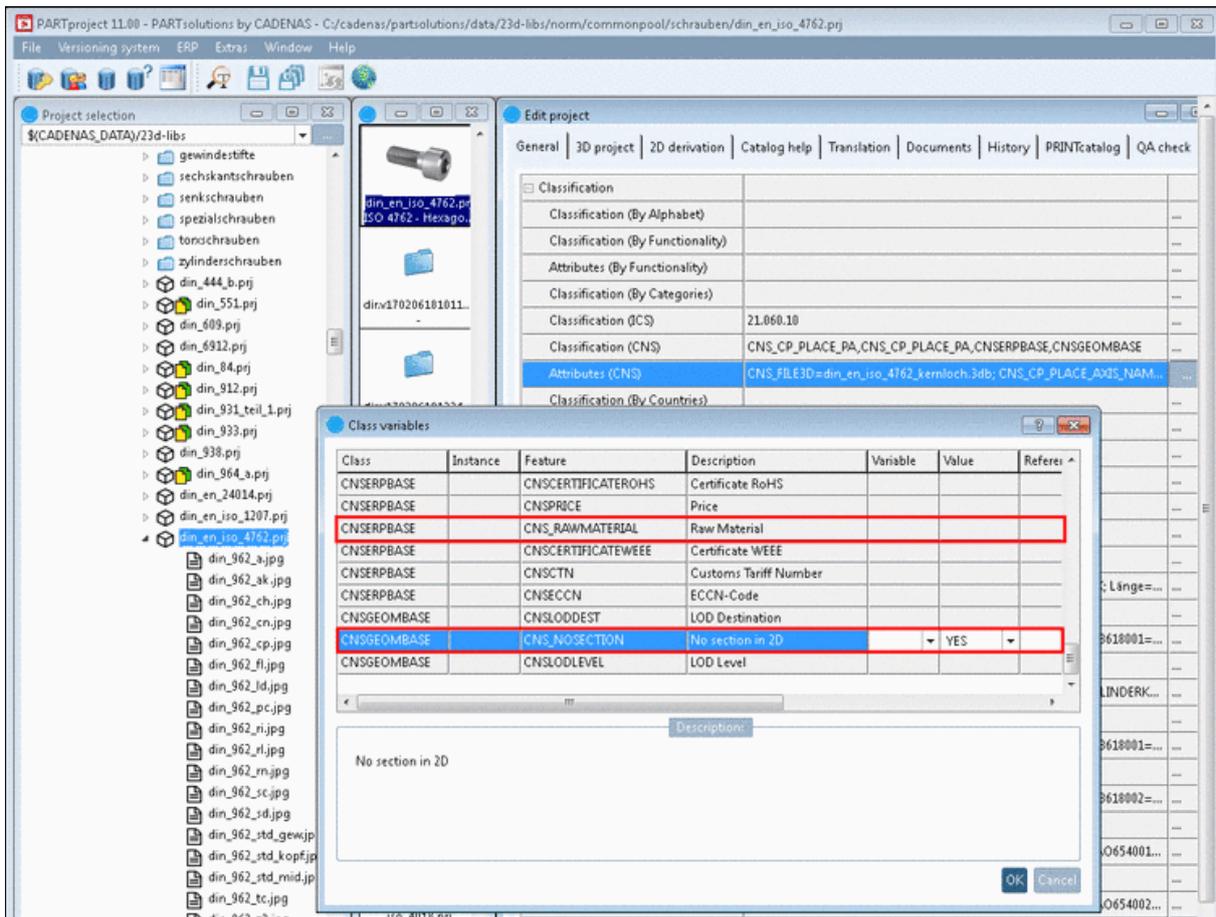
Furthermore semi-finished products can be classified as such.

As of V11 respective project are classified via **CNS classification**. The declaration in `iface-common.cf` is cancelled.

²SSL (Secure Sockets Layer) is a cryptographic protocol that provides communications security over a computer network.

³not part of the documentation

That means, in **PARTproject** under **Edit project -> General -> Classification > Attributes (CNS)**, the feature **CNS_NOSECTION** or **CNS_RAWMATERIAL** is set on **YES**.



Note

In exceptional cases, Consulting can step in via configuration file and so declare certain directories/projects in this way.

Local changes in the project file are not target-aimed, because these will get lost at next catalog update.

Details on classification can be found under Section 5.13.5, "Add projects to classification" in *eCATALOGsolutions Manual* -> **Classification (CNS)** -> Connection elements such as bolts, nuts, rings, pins, etc. or semi finished products.

Details on configuration via `ifacecommon.cfg` or `if<cadname>.cfg` can be found under Section 2.2.8, "General configuration file "ifacecommon.cfg" " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

Important

At software update to V11, please regard that in `ifacecommon.cfg`, the blocks [NoSection] and [RAWMATERIALS] are not available anymore, as respective information is now part of the project.

So an **Update** of **CNS classification** and affected **catalogs** is **mandatory**.

11.5. Variable CURRENTVARSET

The variable `CURRENTVARSET` is used for a unique row description.⁴

⁴#85497, #66127

The variable CURRENTVARSET contains current values of all variables. For example, it can be used in order to transfer respective parameters to a web site.

The variable CURRENTVARSET can be specified by different types.

Example:

```
$CURRENTVARSET( type=ERP_VARSET,MAXLENGTH=4000)
```

Possible types are:

- COMPLETE
- ERP_VARSET
- ERP_COMPLETE
- ERP_UPDATE
- SHORT (compact varset sufficient to find the row)
- XVARSET (only value ranges)

The types ERP_* and SHORT also support the "MAXLENGTH" parameter.

The types ERP_* support the PINDIMVARS parameter (value range 0/1). PINDIMVARS controls whether dimension variables are included in the varset, which is not the case by default.

11.6. Environment variable CADENAS_SHARED

New environment variable **\$CADENAS_SHARED** available.⁵

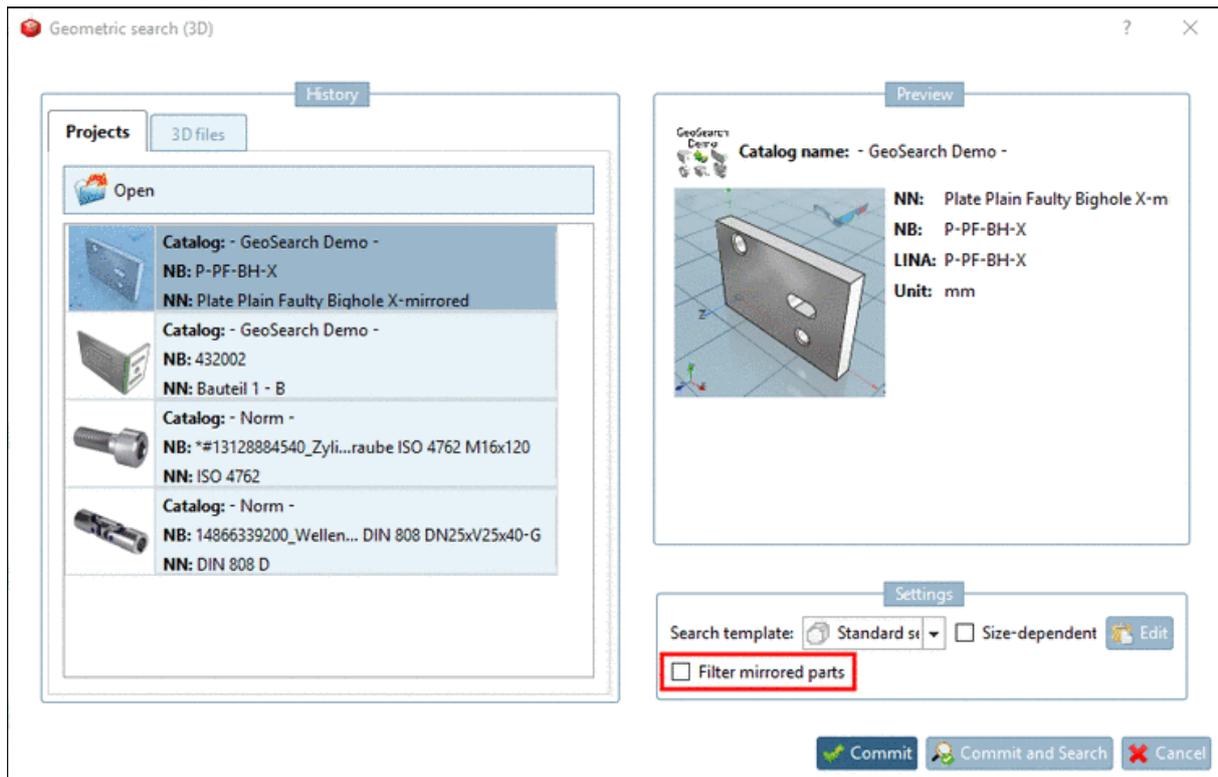
```
$CADENAS_SHARED=$CADENAS_DATA/shared
```

- Saving of reports, analyses, common documents of PARTconnection
- Saving of document scans

11.7. Configure visibility of mirrored parts

When using **Geometric search (3D)** you can filter mirrored parts.

⁵#85123



If the option **Filter mirrored parts** is deactivated, then mirrored parts are displayed as search result and marked with a respective icon . If the option is activated, then mirrored parts are not displayed.



Via **configuration file** you can set, as of which percentual similarity mirrored parts shall be shown. Default is 90%.

\$CADENAS_SETUP/geomsearch.cfg

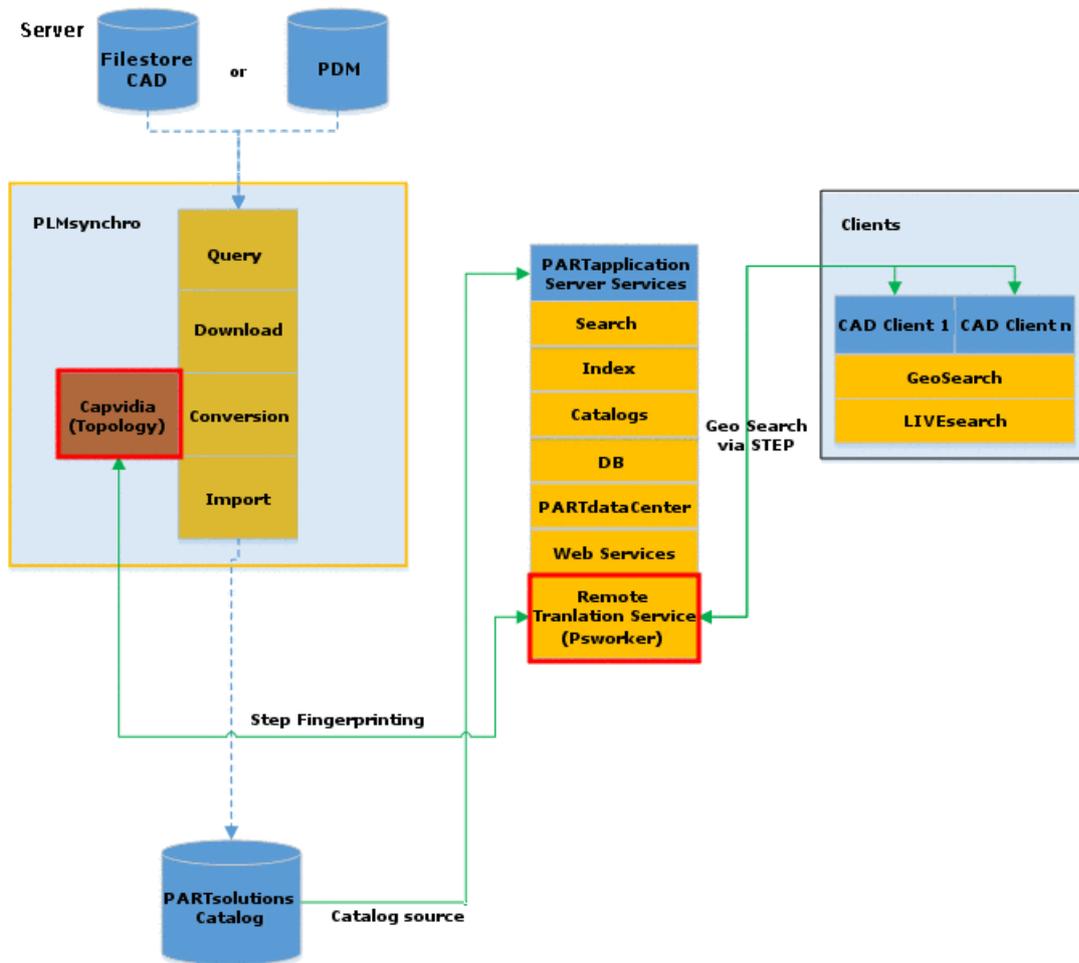
```
[settings]
ShowMirroredIconPercentage=90
```

11.8. Remote Translation Service for Capvidia

As of V10 SP11 CAD data can be converted for a GeoSearch or LiveSearch via **Remote Translation Service**, on the fly centralized with **Capvidia**.⁶

This ensures that current CAD data and data already generated by **Capvidia** before have the same information content.

⁶#83071



Overview graphic on Remote Translation Service

Note

When setting up V11 SP0, please regard a little change towards V10 SP11.

Adjust `transremote.cfg` as follows.

Set `"ADD_ENTRY_0=NAT_CAPVIDIA..."`

```

1  [COMMON]
2  #:VALS_N:0,1
3  #:HELP:Enables or disables the Remote-Translation-Server Client
4  #:SAMPLE:default;"0: do not use remote translation server","1: use remote translation server"
5  ENABLED=1
6  #:VALS_S
7  #:HELP:Name of the BUS we should connect to.
8  BUS=TRANSLATIONSERVER
9  #:VALS_S
10 #:HELP:comma separated list of queues that are configured here.
11 QUEUES=CAPVIDIA
12 #:VALS_S
13 #:HELP:comma separated list of additional servers to connect to (this is only needed when a different job bu:
14 NODES=mzcom://10.10.18.4:9030
15
16 [CAPVIDIA]
17 ADD_ENTRY_0=NAT CAPVIDIA .,*", "FILE, DIR", "STEP, SAT, STL, PARTJAVA, JPEG, IGES", "FILE, DIR"
18

```

transremote.cfg

Also see Section 12.1, "Remote Translation Service for Capvidia".

All Details can be found under Remote Translation Service für Capvidia.

11.9. Partial search

The partial search is active by default.⁷

However, the fingerprints for the partial search for a catalog are only created if configured. To create the fingerprints for the catalog "mycatalog", for example, set the following key in geom-search.cfg:

```
PartialSearchCatalogs=cat/mycatalog
```

If you want to set more than one catalog, separate the entries by comma.

This setting applies to every way fingerprints can be created.

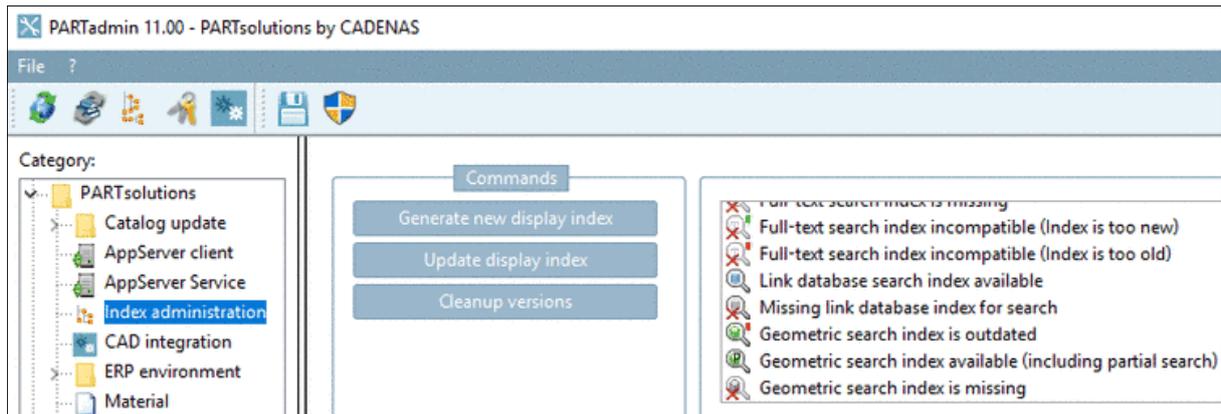
Finally create the geometrical index **for the whole catalog**.

Note

Background information:

The generation of fingerprints for the partial search is significantly more time consuming than the generation of normal fingerprints. Furthermore the fingerprints need more disk space. That's why they are not generated by default for all catalogs.

⁷#74693



How to know if partial search indexing is done?

If you want to know if partial search indexing is done, go to **PARTAdmin** -> **Index administration**.⁸

Catalogs with available index show the respective icon .

11.10. Seamless.cfg: Key "AlwaysOnTop" as workaround for key "KeepOnTop"

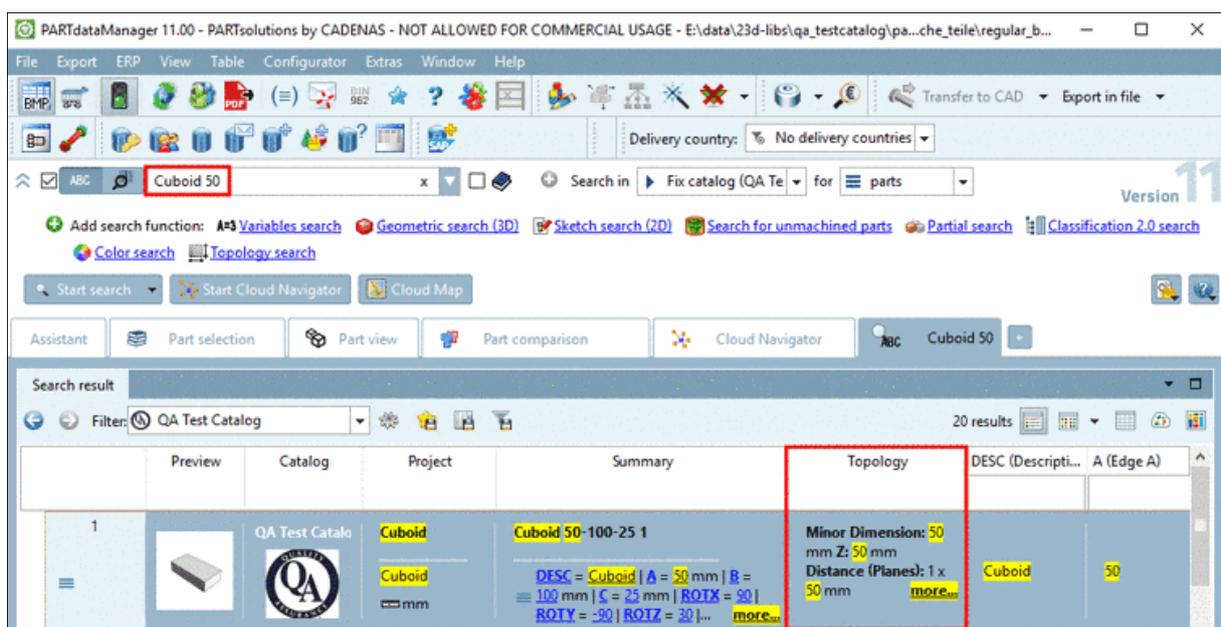
Key **AlwaysOnTop** is a workaround for key **KeepOnTop**.⁹

Key function: Keep **Seamless** window on top of all other windows.

11.11. Topological values are found with Full-text search / Update indexes

The **Full-text search** will also find all linear dimensions from **Topology** in addition to the values from the characteristic attribute table. This enhancement becomes evident especially when searching in own part catalogs, because here characteristic values are not necessarily found in the table.

Hits from the topology are displayed in an own column **Topology** and are marked with **orange**.



Search results with column "Topology"

⁸#82661

⁹#59359, #75189

Note

In order to use this new functionality do the following:

1. In the configuration file `partsol.cfg`, block `INDEX:LUCENE`, key `TopologyCatalogs` enter the desired catalog path in the following form:

```
cat/<catalog_name>
```

Example:

The screenshot shows the PARTadmin 11.00 configuration window. The left pane shows a tree view of configuration categories, with 'Konfigurationsdateien' selected. The right pane shows a table of configuration blocks and their values. The 'INDEX:LUCENE' block is expanded, and the 'TopologyCatalogs' key is highlighted with a red box, showing the value 'cat/cadenas_demo'.

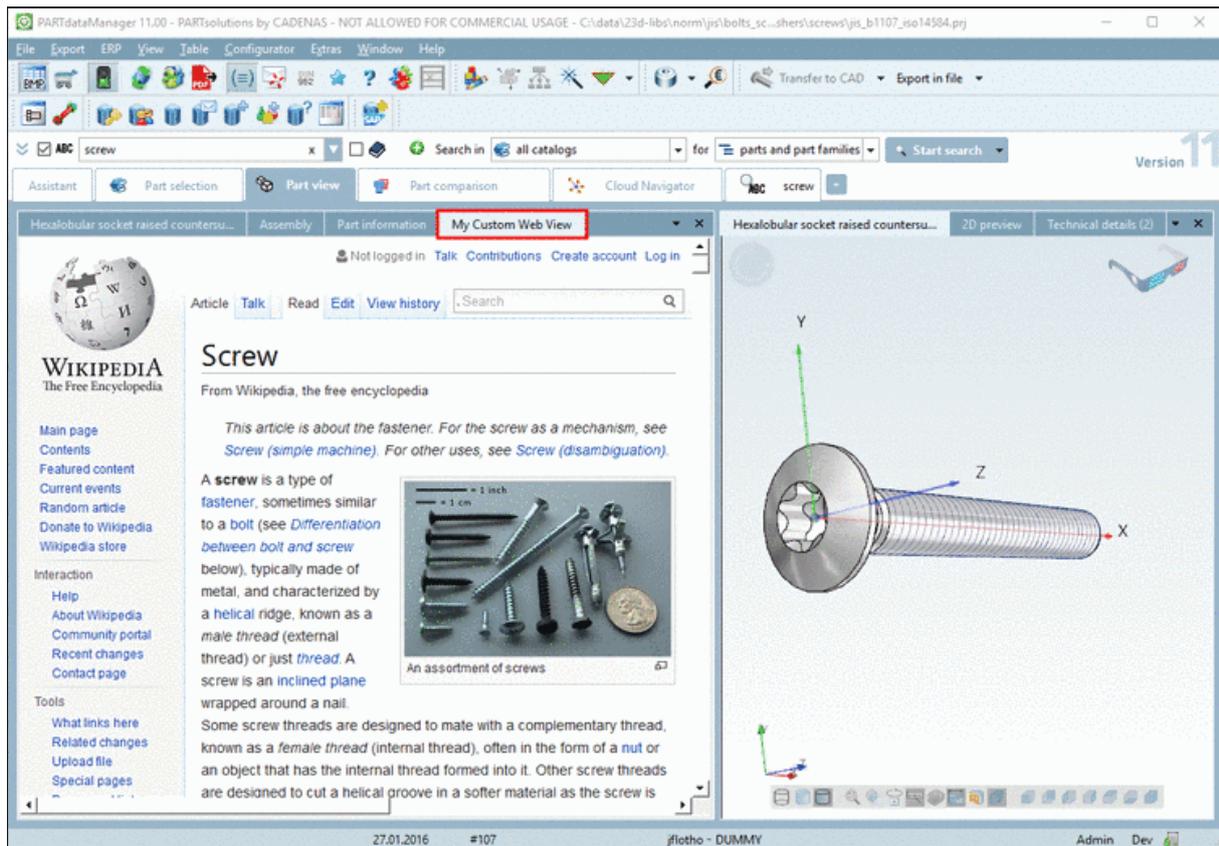
Blöcke und Schlüssel	Werte
ALL_CONFIGS	
SCADENAS_SETUP	
partsol.cfg	
INDEX:LUCENE	
GenerationEnabled	YES
MergeFactor	100
MinMergeDocs	500
MaxProjectResolveRange	25000
MaxCatalogResolveRange	50000
UseRamAsTargetIndex	NO
UseRamAsTargetIndex64	YES
LogDocumentFieldTokens	NO
ShowResolvedRanges	YES
FreeDiskSpaceCheckEnabled	YES
DefaultMinimumRequiredFreeSpace	2147483648
ForceSwitchLevelIndex	NO
TopologyCatalogs	cat/cadenas_demo
TopologyCatalogsRegex	

2. Update the geometrical index (if not up-to-date).
See Section 1.3.8.6.2, "Context menu commands in detail" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual* -> **Geometrical search index** -> **Create/Update**.
3. Update the full-text search index.
See Section 1.3.8.6.2, "Context menu commands in detail" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual* -> **Create full-text search index**.

11.12. Create custom docks with a web-view via config

Create custom docks with a web-view via config. The web-view is designed to handle events from part-selection and table-selection.¹⁰

¹⁰#66127



The linking to Wikipedia serves as an example. You can just as well link to your shop or provide installation instructions, etc.

Getting started:

1. Open `$CADENAS_SETUP/partsol.cfg`.
2. Search the block `[PARTdataManager:CustomDockContent:0]`.
3. Copy the entire block and increment the last number in the block's name to create additional docks.
4. Read the comments of keys to adjust everything as desired.

Using the following example results in the above depiction, when searching for "screw" and clicking one of the first results.

```
WEBVIEW_SELECTION_CHANGED_URL=https://de.wikipedia.org/w/index.php?search=$NT.
```

Any CADENAS environment variables are possible as well (`$CADENAS_LANGUAGE.`); `$NT.=Norm title`; `$NN.=Norm number`.

More details can be found in the descriptions of the keys itself.

It is also possible to access the widget from script:

```
dim app
set app = CreateObject("partdatamanager.application")

dim view
set view = app.FindSectionContent("UniqueNameHere")
if IsObject(view) then
    view.loadUrl("https://www.google.de")
end if
```

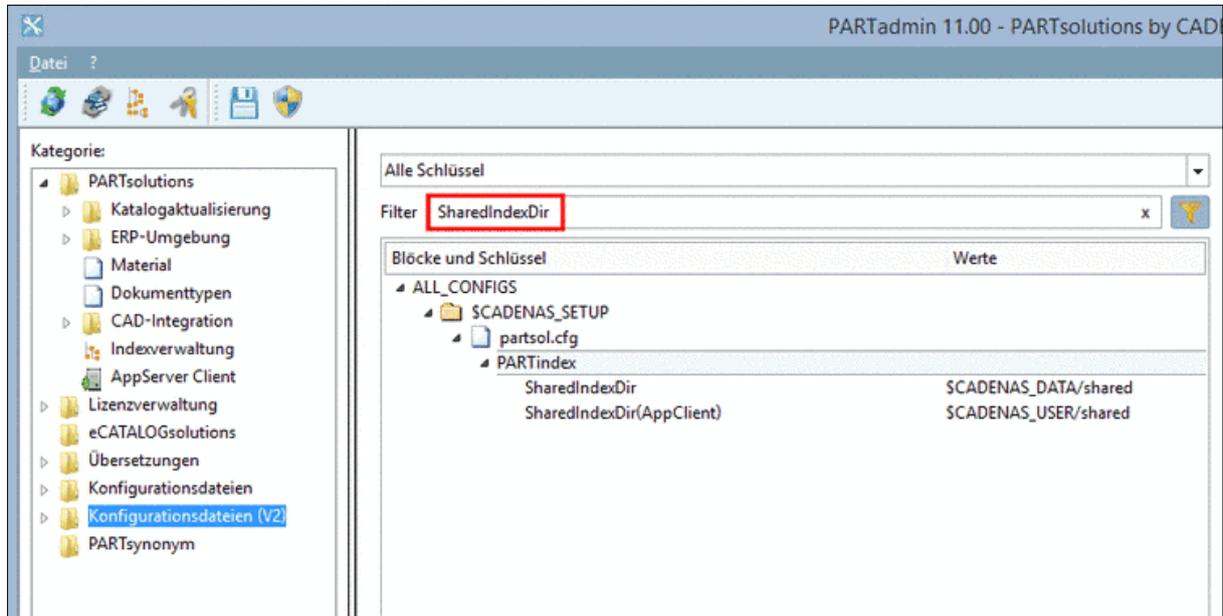
Note

This functionality works directly via client computer, not via **PARTApplicationServer**.

11.13. Report sharing

Up to V10 reports have been saved in the user directory [`$CADENAS_USER/Reports`] (of **PARTdataManager** or **PARTapplicationServer**) which possibly could be deleted for any reason.

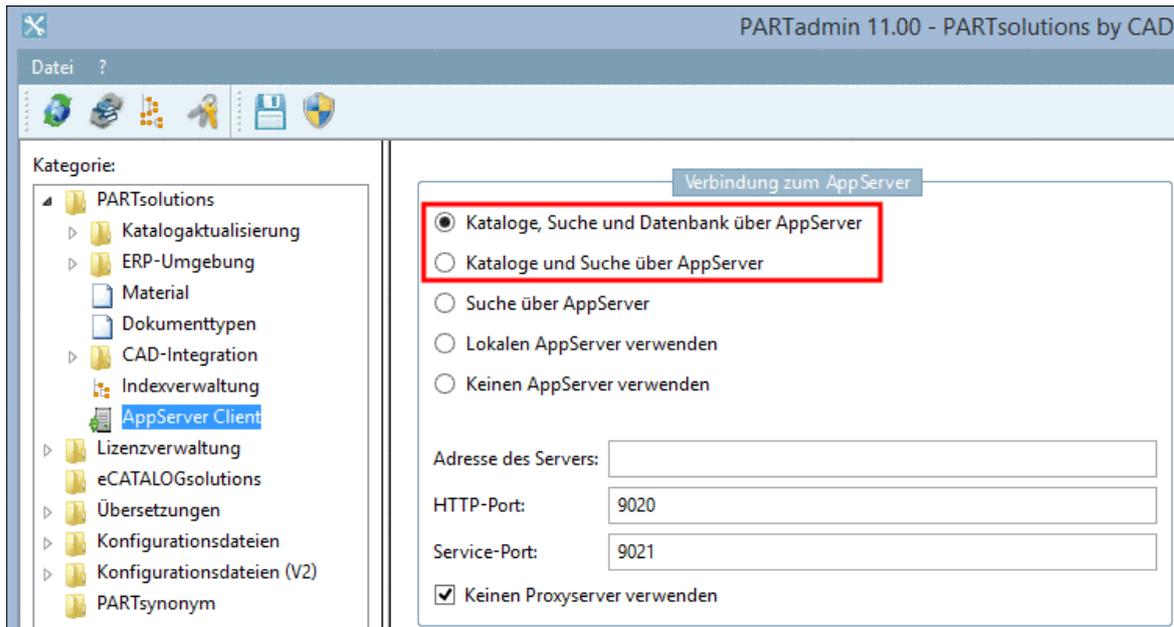
That's why as of V11 reports are saved in the shared directory which can be set under `$CADENAS_SETUP/partsol.cfg` -> block `[PARTindex]`.¹¹



There are two keys:

- SharedIndexDir for the AppServer
Default is `$CADENAS_DATA/shared`
- SharedIndexDir(AppClient) for the AppServer Clients if a remote AppServer is used, which means that the index is used via AppServer (whenever the "Catalogs" option is used [**Catalog browsing, search and database with AppServer** / **Catalog browsing and search with AppServer**]).

¹¹#65515



Otherwise:

- **Reports** and **Analyses** are created on the AppServer, thus are accessible for all.

Note

Document scan and **PARTconnection** will access the shared directory via file system (not via AppServer), so Clients have to have the required rights to access this path.

- It can be set whether reports should be visible only for the creator or for all.

`$CADENAS_USER/reports.cfg`

```
[Common]
ReportsVisibleForAllUsers=1
```

Value range:

- 1: Visible for all (default)
- 0: Visible only for creator

Note

Already existing reports are not found anymore.
So please move them into the correct directory.

11.14. Include / exclude lists for geo index preloader

There is a new option to control the preloading of the geo index.¹²

This is needed for Server environments in order to exclude catalogs or to load only special catalogs.

`$CADENAS_SETUP/geomsearch.cfg`

¹²#72711

```

#:VALS_S
#:HELP;default;Include catalog, if the expression matches.
PreloaderIncludeRegexPos=
#:HELP;default;Include catalog, if the expression doesn't match.
PreloaderIncludeRegexNeg=
#:VALS_S
#:HELP;default;Exlucde catalog, if the expression matches.
PreloaderExcludeRegexPos=.*copyright\.prj$|.*_qa$|.*_dev$
#:VALS_S
#:HELP;default;Exclude catalog, if the expression doesn't match.
PreloaderExcludeRegexNeg=

```

Also compare \$CADENAS_USER/varsearch.cfg -> [VariableSearch:Path]:

These settings control caching of the index for variable and full-text search.

```

#:HELP;default;Settings for the variable/full-text warm-up search.
The settings only apply to the warm-up search.
[VariableSearch:Path]
#:VALS_S
#:HELP;default;Include catalog, if the expression matches.
IncludeRegexPos=
#:VALS_S
#:HELP;default;Include catalog, if the expression doesn't match.
IncludeRegexNeg=
#:VALS_S
#:HELP;default;Exlucde catalog, if the expression matches.
ExcludeRegexPos=.*copyright\.prj$|.*_qa$|.*_dev$
#:VALS_S
#:HELP;default;Exclude catalog, if the expression doesn't match.
ExcludeRegexNeg=

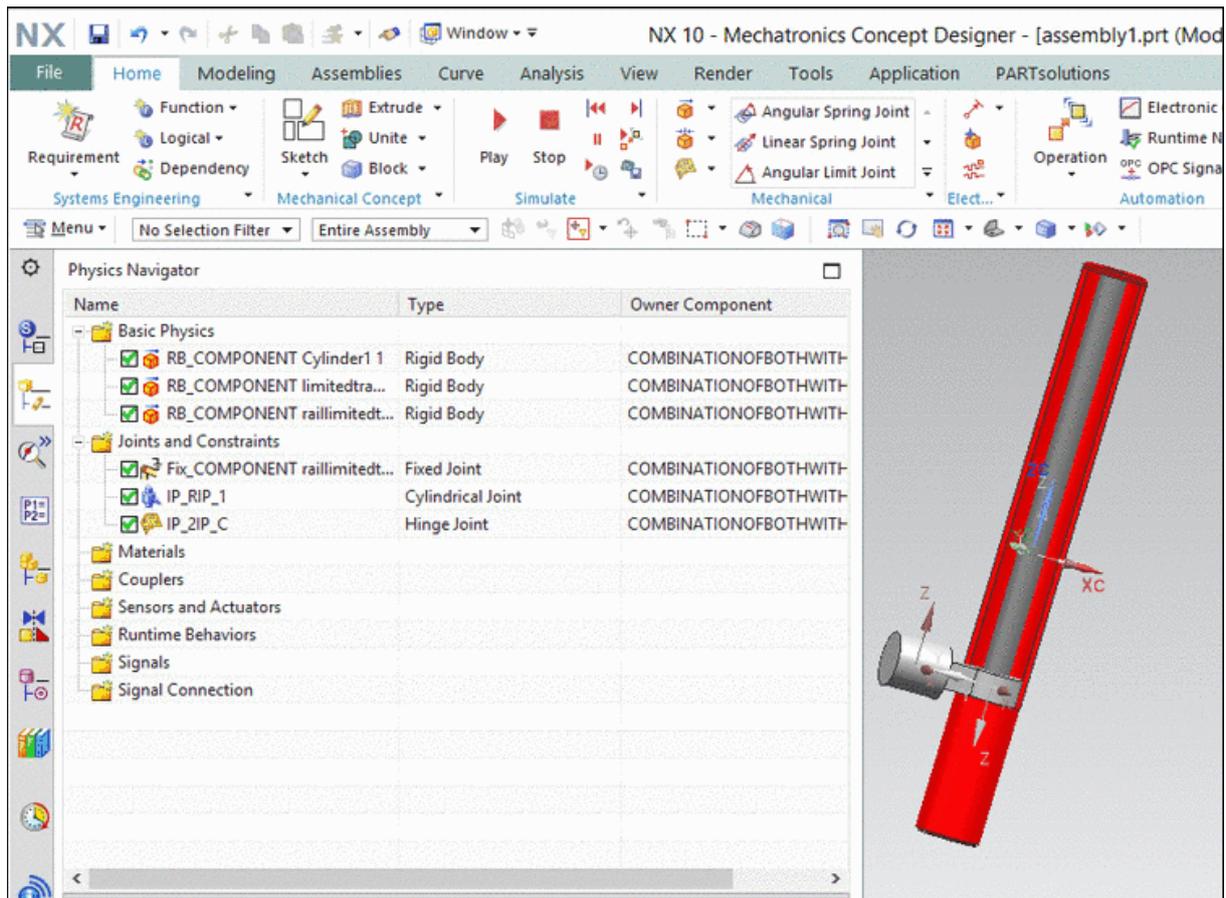
```

11.15. NX: Testing PARTsolutions parts in the Mechatronics Concept Designer

As of V11 you can test **PARTsolutions** parts in the [NX Mechatronics Concept Designer](http://www.plm.automation.siemens.com/de_de/products/nx/for-design/mechatronics-design/index.shtml) [http://www.plm.automation.siemens.com/de_de/products/nx/for-design/mechatronics-design/index.shtml]

Rigid bodies and joints are created at the assembly level from solid body instances in assembly components and assembly constraints respectively.

The resultant functionality can be found on the **Physics navigator** tab.



Above you can find the Rigid Bodies, below the joints. When clicking on a joint, the two connected components are marked red above.

The Rigid Bodies' name is the Journal Identifier of its Component source.

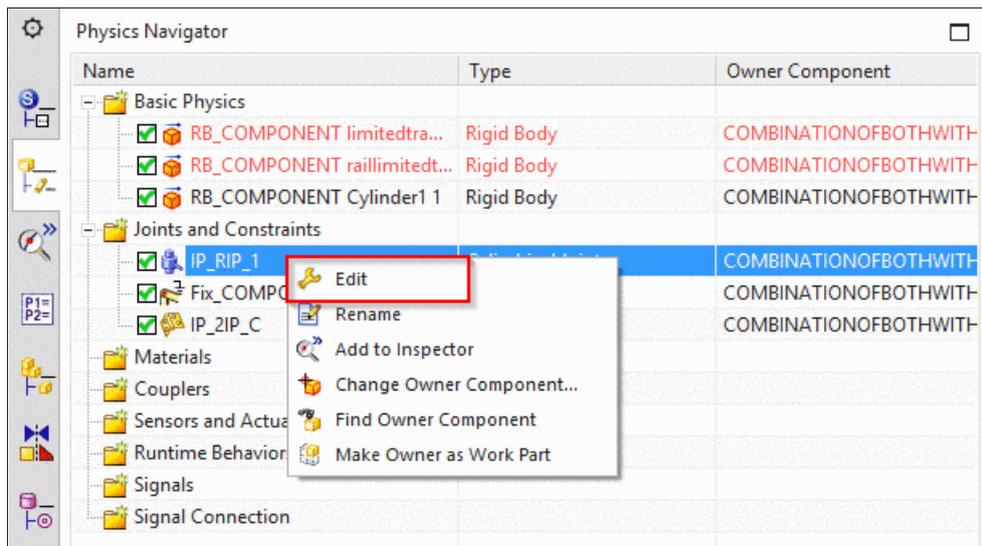
There are 3 types of **Joints and Constraints**

- **Fix joints:** Created from fixed mates
If the component is unconstrained, then fix joints are created. These joints immobilize the "Attachment" component, just like the "Fix" constraints do.
- **Hinge joint:** Created from rotate mates
Freedom of movement along just the RotateZ mate results in Hinge Joints
- **Cylindrical joint:** Created from rotate and translate mates
Freedom of movement along the TranslateZ and (optionally) RotateZ mate results in Cylindrical Joints.

Joint limits

For hinge and cylindrical joints, you can specify joint limits that define an acceptable range of motion for the joint.

In the context menu under **Joints and Constraints** you can find the context menu command **Edit**.

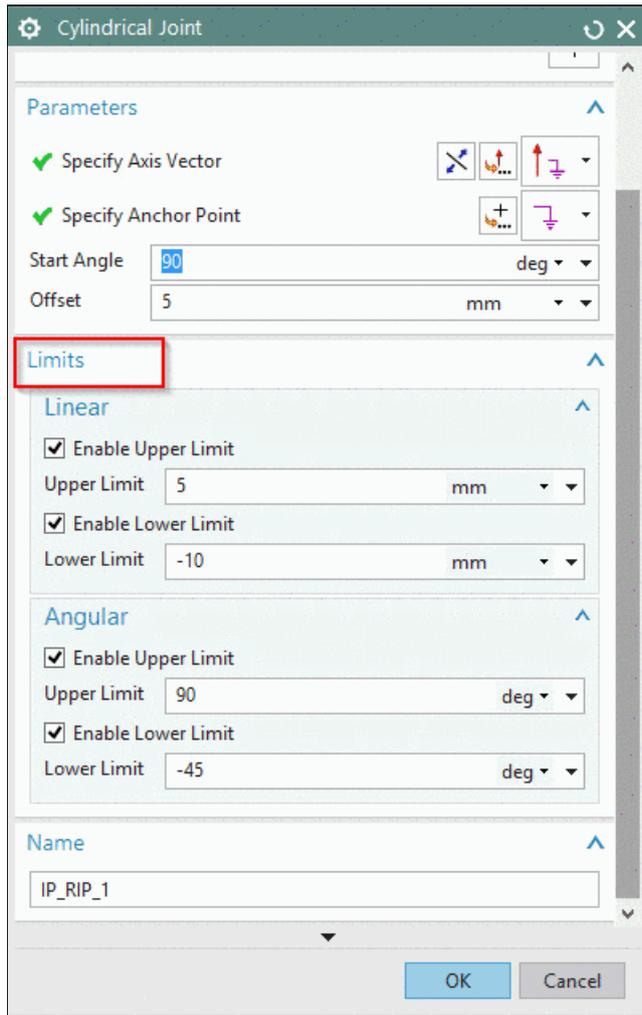


-> The respective dialog box with the dialog area **Limits** is opened.

Linear limits are based on translate mates. Angular limits are based on rotate mates.^{14 15}

¹⁴A fixed joint should be set to prevent the components from flying off when starting the simulation.

¹⁵Limits are derived from Mate Limits.



Note

Mate limits are implemented as Joint limits and are only available for NX10.

Layer placement

Joints are stored on layer 33 by default.

See ifugnx.cfg

```
layer_12=joints:33:4
```

Key and key value have the following structure:

Layer_IND=element_name : layer_number:layer_status : category

Naming convention for joints

If a port name (PortName variable) is provided in the `ifugnx.cfg`, it is used also for the corresponding joint, otherwise the name is built from the connection point names of the connected parts.

Precondition

To have the functionality available in the Mechatronics Concept Designer, under `$CADEN-AS_SETUP/ifugnx.cfg`, the key `UseAsmJoints` has to be set on 1 (default is 0).

Furthermore the respective NX license has to be accessible.

Version dependencies

The functionality is available with PSOL V11.

NX 10: Full functionality

NX 9: Limits are not adjustable. The dialog area **Limits** is missing.

NX 8: The creation of **Rigid Bodies** (RB) often fails due to too long names.

11.16. NX: Unicode support in file names

As of V11, unicode in file names is supported for NX10 and up.

cfg adjustment needed to use non-ANSI file names for NX 9 and older.¹⁶

11.17. NX Routing Options

As of V11 following is also supported:¹⁷

Attributes for Routing Ports

Attributes can be added to Routing Ports.

Hereto proceed as follows:

In `ifugnx.cfg`, add following lines:

```
[CADOPTIONS]
ProcessAdditionalClasses(is3dPart)=CONNPOINT

[CreationOptions(isConnectionPoint)]
Attr1=Value1
Attr2=Value2

[AttributeMapping(isConnectionPoint)]
Attr1=Value1
Attr2=Value2
```

Thereby attributes ("Attr1" and "Attr2" with values "Value1" or "Value2") are assigned to all Connection Points (and thereof resulting Routing Ports).

Perhaps assignment to individual ports is also possible.

Position Anchors

Hereto set the key `AnchorConnPoint` to 1.

-> Then on Connection Points, also Position Anchors for routing will be created.

Routing Port Attribute

With following `CreationOptions` name, type (`FittingPort` or `MultiPort`) and flow direction (`Both`, `In`, `Out`, `None`) can be controlled by the `RoutingPorts`:

```
[CreationOptions(isConnectionPoint)]
PortName=?_METAOBJ.name
#:VALS_M;"FittingPort", "MultiPort";
PortType=FittingPort
#:VALS_M;"Either", "In", "Out", "None";
PortFlowDirection=Either
```

¹⁶#79573

¹⁷#37539

11.18. NX: Misaligned loading options after export

A template macro "cns_place_nx10_teamcenter_partrev.macro" has been recorded as follows:¹⁸

0. Empty assembly in NX 10/TC 10, Layer 27 on, revision rule set to "Precise Only".
1. Assemblies-> Add -> Open -> Insert part number in field "number", press tab, then open found part in the table and choose first subelement.
2. In the field "Revision", insert revision number.
3. OK.

That line containing the text "BEG_ITEM 8716288 (1 OPTM 0) = 5 ! Precise Only" is edited as follows:

Number before exclamation mark is replaced by <<CNS_REVISIONRULEINDEX>> and the name of revision rule by <<CNS_REVISIONRULE>>.

Then the line looks like this:

```
BEG_ITEM 8716288 (1 OPTM 0) = <<CNS_REVISIONRULEINDEX>> ! <<CNS_REVISIONRULE>>
```

NB: The object code (here 8716288) can differ from version to version. The rule index (here 5) can also be different due to user settings. Normally the change has to be performed at two places in the macro, once at BEG_ITEM and once at END_ITEM.

All instances of Item number and revision then will be replaced by <<CNS_ITEM_NUMBER>> and <<CNS_ITEM_REV>> as usual.

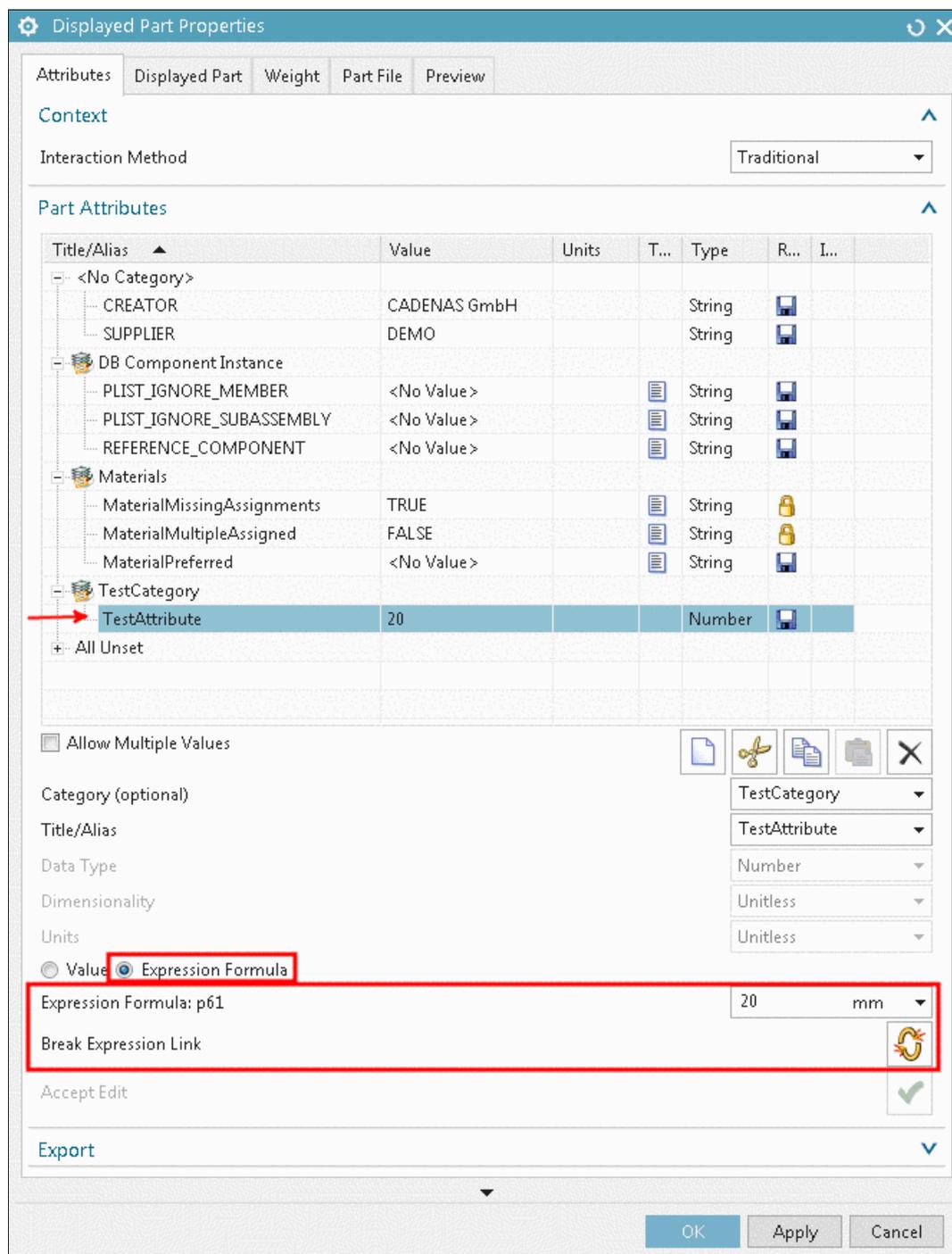
When using this macro it will use the current revision rule.

11.19. NX - Attributes: Units, category and Expression formula readable and optionally writable

The NX CAD Proxy can now read the "Units", "Category", and "Expression formula" of any model attribute. It can also set "Category" and "Expression formula" of any attribute (if allowed).¹⁹

¹⁸#66713

¹⁹#73675



11.20. Inventor: Read project name for template selection

In `ifadeskinv.cfg`, under "poolpath", you can use the function `GetObject("iface.contextservice").GetVariable("UserApp").GetActiveProjectPath("PARTsolutionsNeu")` in order to read the storage path from the active project.²⁰

11.21. Inventor: Several versions in parallel operation

As of V11 including, several Inventor versions can be operated on a workstation without registration/deregistration of DLL (however, not at the same time²¹).

²⁰#59287

²¹not possible on the part of Inventor

11.22. PDM : COMMON : Login service that can be used with all PDM modules etc.

Up to now mostly there was only the possibility to set PDM login data in the cfg file of PDM interface. Only some interfaces had a special login dialog - but without comfort function.

Now almost at all interfaces (except Vault and those which get along without login) the PDM login service can be used.²² Hereto there is a section for each supported interface in the configuration file `PdmLoginService.cfg` (CADENAS_SETUP), where behavior and structure of the respective login dialog can be set. Here, the single dialogs can also be (de)activated (in delivery condition all are deactivated). If a dialog is deactivated, login data is read from a same-named section in the configuration file of PDM interface. Detailed information on configuration of login dialogs is found in the beginning section of the file `PdmLoginService.cfg`.

If a dialog is activated, a default for the fields can be set in the PDM interface configuration file (section name identical to `PdmLoginService.cfg`). Furthermore after a successful login procedure, used login data can be stored encrypted for a later use (default, auto login, etc.) in the USER directory (`PdmLoginService.cfg`) (first has to be activated).

11.23. Vault: Interface ported to .NET api

Interface has been revised.²³

Changes in configuration file `ifvault.cfg` (CADENAS_SETUP):

```

ROOTFOLDER -> VAULT_FOLDER_00
SEARCHFOLDER_xx -> VAULT_FOLDER_01+

ROOTFOLDER_LOCAL -> VAULT_LOCAL_FOLDER_00
SEARCHFOLDER_LOCAL_xx -> VAULT_LOCAL_FOLDER_01+

VAULTFOLDER -> TARGETFOLDER

VAULT_ENDPOINT_NAME_xx -> ServerName / Values: comma separated list
VAULT_MAIN_CLASS_xx -> removed
VAULT_LONG_ARRAY_CLASS -> removed
VAULT_STRING_ARRAY_CLASS -> removed

useNtlmAuthentication -> UseNTLM
User -> UserName
Vault-> VaultName

API -> New, path to VAULT API. Normally this is the path to Vault client installation.
Version -> New, 2012-2016. Everything before 2012 is not supported.
ServerName -> New, name of Vault server
LoginDialog -> New, description see cfg

LIFECYCLE_DEFINITION -> New, description see cfg
LIFECYCLE_STATE -> New, description see cfg
LIFECYCLE_COMMENT -> New, description see cfg

```

²²#63663

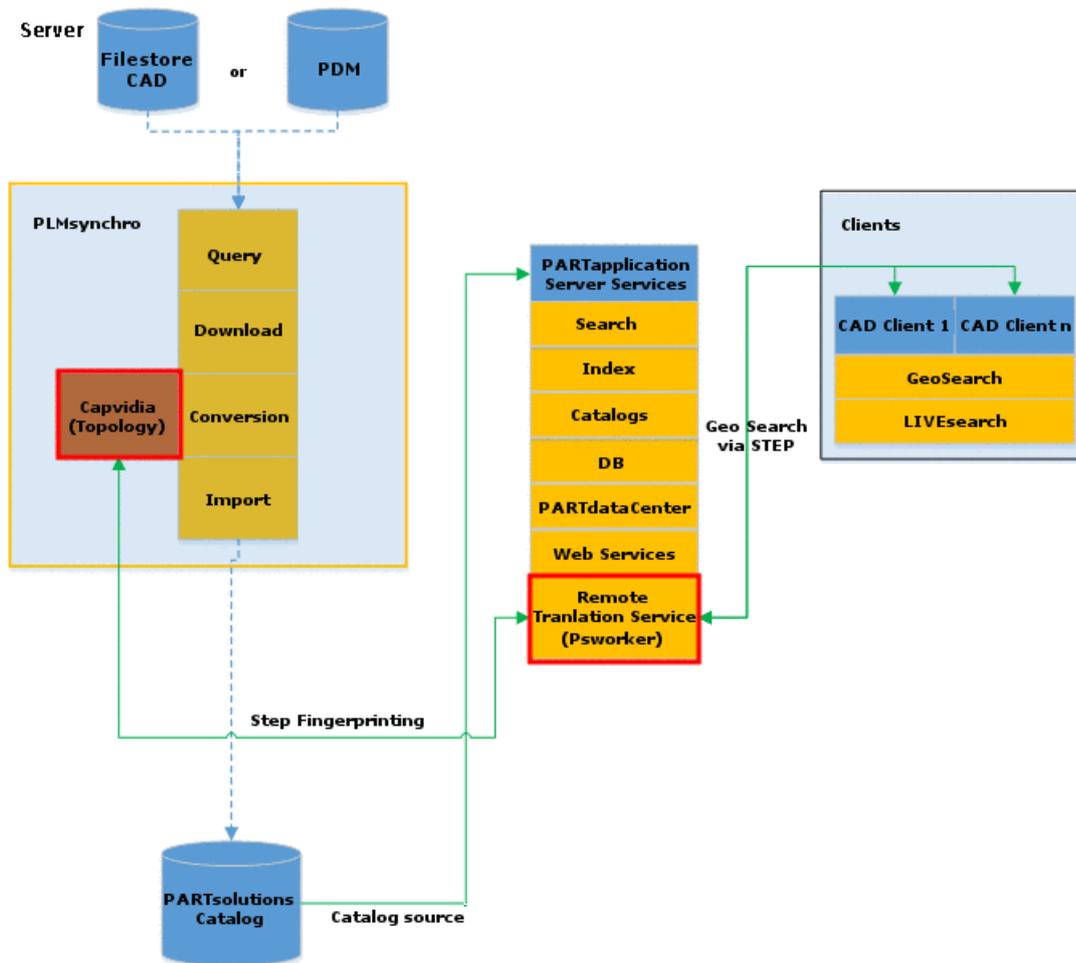
²³#62945

Chapter 12. V10.00 SP11

12.1. Remote Translation Service for Capvidia

As of V10 SP11 CAD data can be converted for a GeoSearch or LiveSearch via **Remote Translation Service**, on the fly centralized with **Capvidia**.¹

This ensures that current CAD data and data already generated by **Capvidia** before have the same information content.



Overview graphic on Remote Translation Service

In order to set up the remote translation process the following steps are required:

1. Precondition is availability of following licenses:
 - CADENAS license package for Capvidia operation
PS/ADDON_IMPORTER_TOPOLOGY or PS/ADDON_IMPORTER_TOPOLOGY_GUI
 - Valid Capvidia license
2. `$CADENAS_SETUP/partsol.cfg`
Adjust `partsol.cfg` as the following figure shows.

¹83071

```

879 TOOLIIP3=Classifications have been updated
880
881 #:HELP;default;classification values which are calcu
882 [CALCEDCLASSVALUES]
883 #:VALS_S
884 #:HELP;default;Syntax: classsystem, classname, class
885 VAL1=cns,CNSPHYPROP,CNSVOLUMECALCED,volume
886
887 [PSCLIENT]
888 #:VALS_S
889 EXE=$(CADENAS)/bin/$(OSNAME)/32/psclient.exe
890 #:VALS_S
891 EXE64=$(CADENAS)/bin/$(OSNAME)/64/psclient.exe
892
893 [PSWORKER]
894 #:VALS_S
895 EXE=$(CADENAS)/bin/$(OSNAME)/32/psworker.exe
896 #:VALS_S
897 EXE64=$(CADENAS)/bin/$(OSNAME)/64/psworker.exe
898
899 [PRINTCATALOG]
900 #:VALS_S
901 ENABLED=TRUE
902 #:VALS_S
903 INDEXTREE_CONTEXT_MENU_ENABLED=FALSE
904 #:VALS_S
905 RX_FONT=<(font|p)\s*(style|class|color)\s*=\s*["]{0
906 #:VALS_S
907 RX_HTMLENTITY=&{([\#]{0,1}[A-Za-z0-9]+)}\;
908 #:VALS_S
909 RX_W3C_HTMLENTITY_ENTRY=<!ENTITY\s+([A-Za-z0-9]+)\s+
910 #:VALS_S
911 RX_PSOLTABLE_VARIABLE=\$\{({0,1}([A-Za-z0-9\_-\])+\)}\{
912 #:VALS_S
913 RX_MEDIA_VARIABLE=\$\{({0,1}([A-Za-z0-9\_-\]=\(\))+\)}\
914
915 [INDEXTREE]
916 #:VALS_S
917 AUTO_RELOAD_INDEX_APPS=ALL

```

partsol.cfg

3. \$CADENAS_USER/psolopt.cfg or \$CADENAS_DEFAULTUSER/psolopt.cfg
The described workflow requires the following setting: In block **[CadAssistant]**, the key **UseStepFormat** has to be set on **YES**.
(STL as format is not possible.)

```

1471 [CadAssistant]
1472
1473
1474 #:VALS_S;"YES","NO"
1475 #:HELP;default;Should the search automatically start in PARTD
1476 #
1477 #
1478 AUTOSEARCH=YES
1479
1480 #:VALS_S;"YES","NO"
1481 #:HELP;default;Try to get geometry in the STEP format
1482 UseStepFormat=YES
1483

```

4. \$CADENAS_SETUP/transremote.cfg
Adjust transremote.cfg as the following figure shows.

```

1  [COMMON]
2  #:VALS_N:0,1
3  #:HELP;Enables or disables the Remote-Translation-Server Client
4  #:SAMPLE;default;"0: do not use remote translation server","1: use remote translation server"
5  ENABLED=1
6  #:VALS_S
7  #:HELP;Name of the BUS we should connect to.
8  BUS=TRANSLATIONSERVER
9  #:VALS_S
10 #:HELP;comma separated list of queues that are configured here.
11 QUEUES=CAPVIDIA
12 #:VALS_S
13 #:HELP;comma separated list of additional servers to connect to (this is only needed when a dif
14 NODES=mzcom://10.10.18.4:9030
15
16 [CAPVIDIA]
17 ADD_ENTRY_0="STPIN_QIF.*", "FILE, DIR", "STP, STEP, SAT, STL, PARTJAVA, JPEG, IGES", "FILE, DIR"
18

```

transremote.cfg

5. \$CADENAS_SETUP/pappclient.cfg

Install PARTApplicationServer (PAPPSERVER) via command line.

```
$CADENAS\bin\x86\64\pappserver.exe -install
```

Start PARTApplicationServer (PAPPSERVER) via command line.

```
$CADENAS\bin\x86\64\pappserver.exe -start
```

In pappclient.cfg, add the respective IP address.

```

#:HELP;default;Use the AppServer to access the CADENAS_DATA
remoteFileSystem=NO
#:VALS_S
#:HELP;default;Use the AppServer to access the Database
remoteDB=NO
#:VALS_S
#:HELP;default;Name of the Applications with should get their data from th
#:SAMPLE;default;"pdatamgr","pseamless","pbom","pdatacenter","indexupdater
applications=pdatamgr,pseamless,pbom,pdatacenter,indexupdater
#:VALS_S
#:HELP;default;Name of the Applications which should not start the app ser
#:SAMPLE;default;"pdatacenter"
delayedStartApplications=pdatacenter

#:HELP;default;Connection settings
[appserver]
#:VALS_S
#:HELP;default;Name oder IP-Address of the server
server=10.10.18.4

```

6. Install psworker Service

a. Install psworker service via command line.

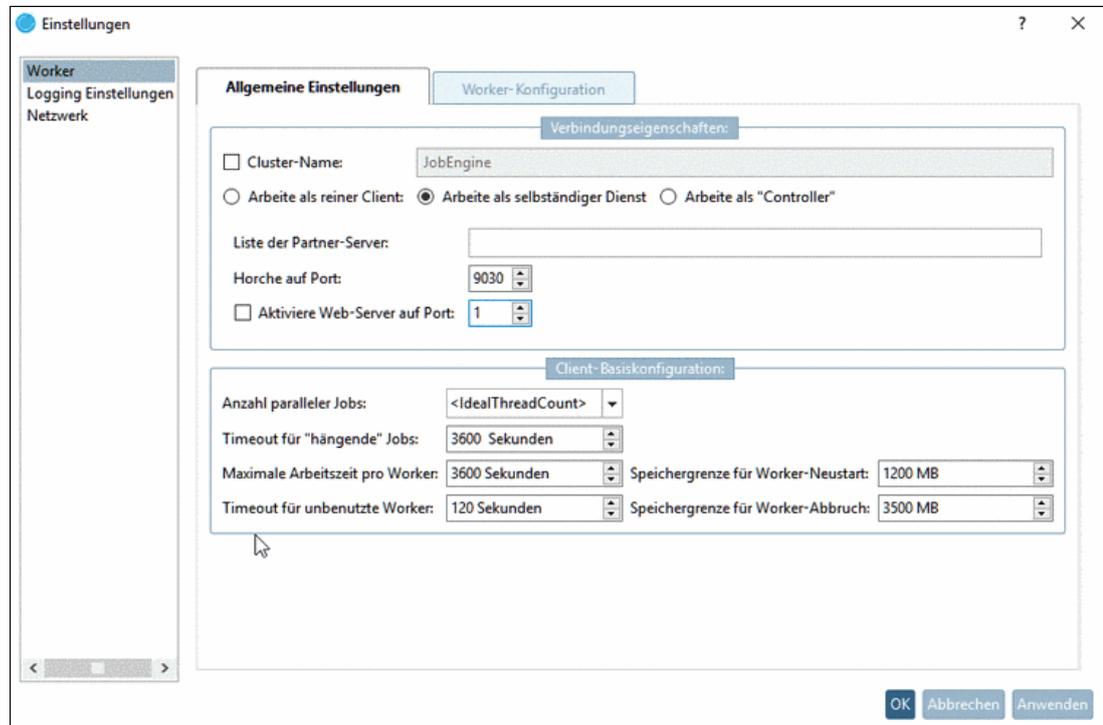
```
Path..\bin\x86\64\psworker.exe -install
```

- b. Start psworker GUI vial command line.

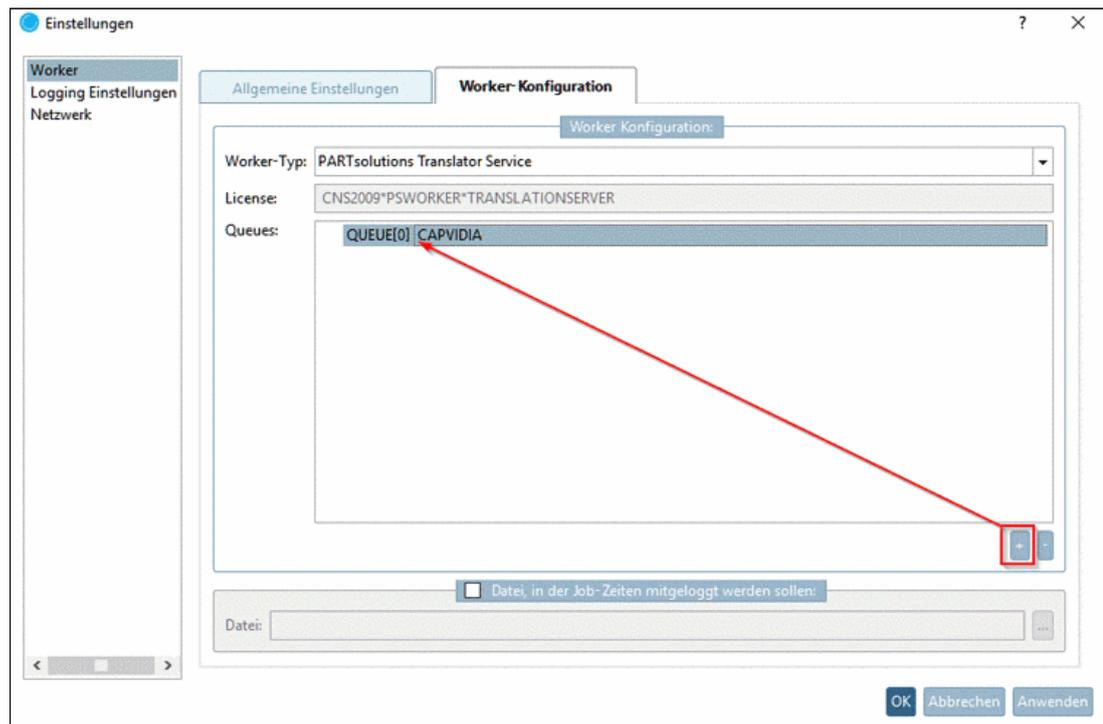
```
Path..\bin\x86\64\psworker.exe -gui
```

- c. Open psworker config via command line and adjust the settings as shown in the following figures.

```
Path..\bin\x86\64\psworker.exe -config
```



Tabbed page "General settings"

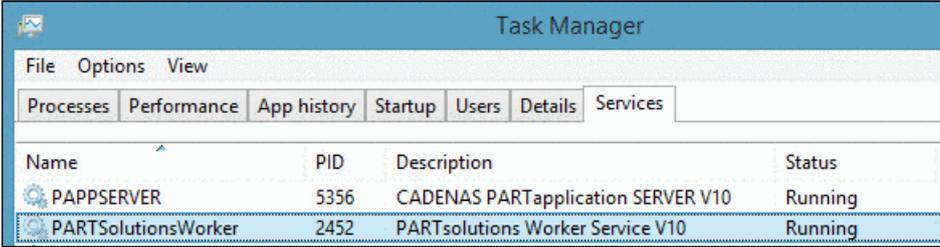


Tabbed page "Worker Configuration"

- d. Start PARTsolutionsWorker via command line or TaskManager-Services

```
Path..\bin\x86\64\psworker.exe -start
```

- e. PARTapplicationserver and PARTsolutionsWorker should be running now.



The screenshot shows the Windows Task Manager window with the 'Services' tab selected. The window title is 'Task Manager'. The menu bar includes 'File', 'Options', and 'View'. The tabs are 'Processes', 'Performance', 'App history', 'Startup', 'Users', 'Details', and 'Services'. The Services list is as follows:

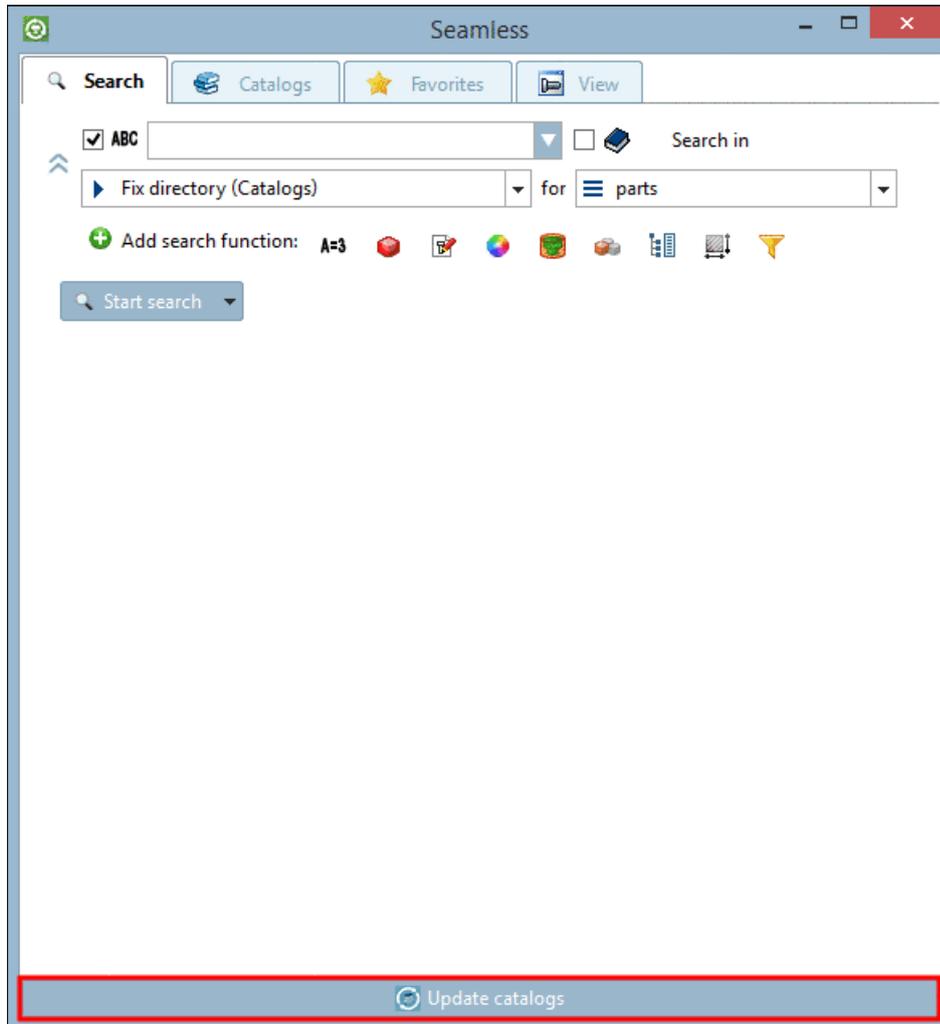
Name	PID	Description	Status
PAPPSEVER	5356	CADENAS PARTapplication SERVER V10	Running
PARTsolutionsWorker	2452	PARTsolutions Worker Service V10	Running

Services "PAPPSEVER" and "PARTsolutionsWorker"

Chapter 13. V10.00 SP9

13.1. Seamless: Hide "Update catalogs" button

In the **Seamless** user interface, the button **Update catalogs** can be shown or hidden via configuration file. (Normal users are not allowed to perform updates.)¹



\$CADENAS_USER\seamless.cfg:

```
[OPTIONS]  
ShowUpdateCatalogs=yes/no
```

¹#78751

Chapter 14. V10.00 SP8

14.1. Connection to Oracle 12 Database takes several minutes (ODBC)

Problem: Connection to Oracle 12 Database takes several minutes (ODBC).¹

Solution: Enter the following key in the configuration file `CADENAS_SETUP/dbodbc.cfg`.

```
[GLOBAL]
ReadColumnInfosByQuery=yes
```

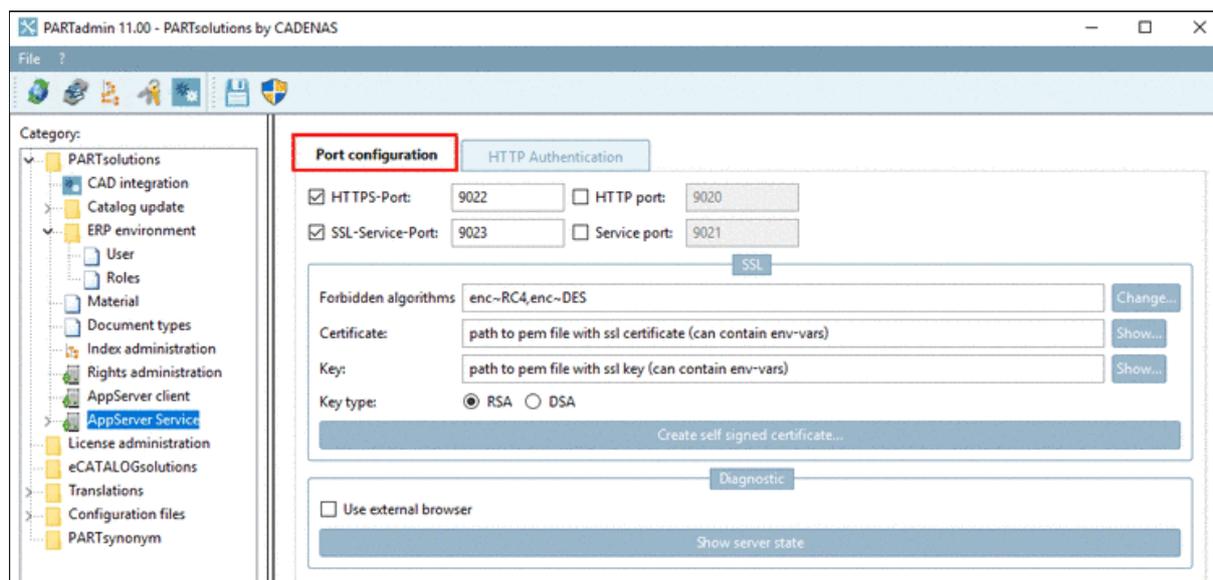
14.2. SSL encryption

You can use **SSL encryption** for all requests to the **PARTApplicationServer**.^{2,3}

- File system service (access via **HTTPS-Port**)
- Mzcom service calls (index, DB, search) (access via **SSL-Service-Port**)

Self signed or official⁴ certificates can be used.

With **Create self signed certificate...** you can create a self signed certificate on the Appserver.



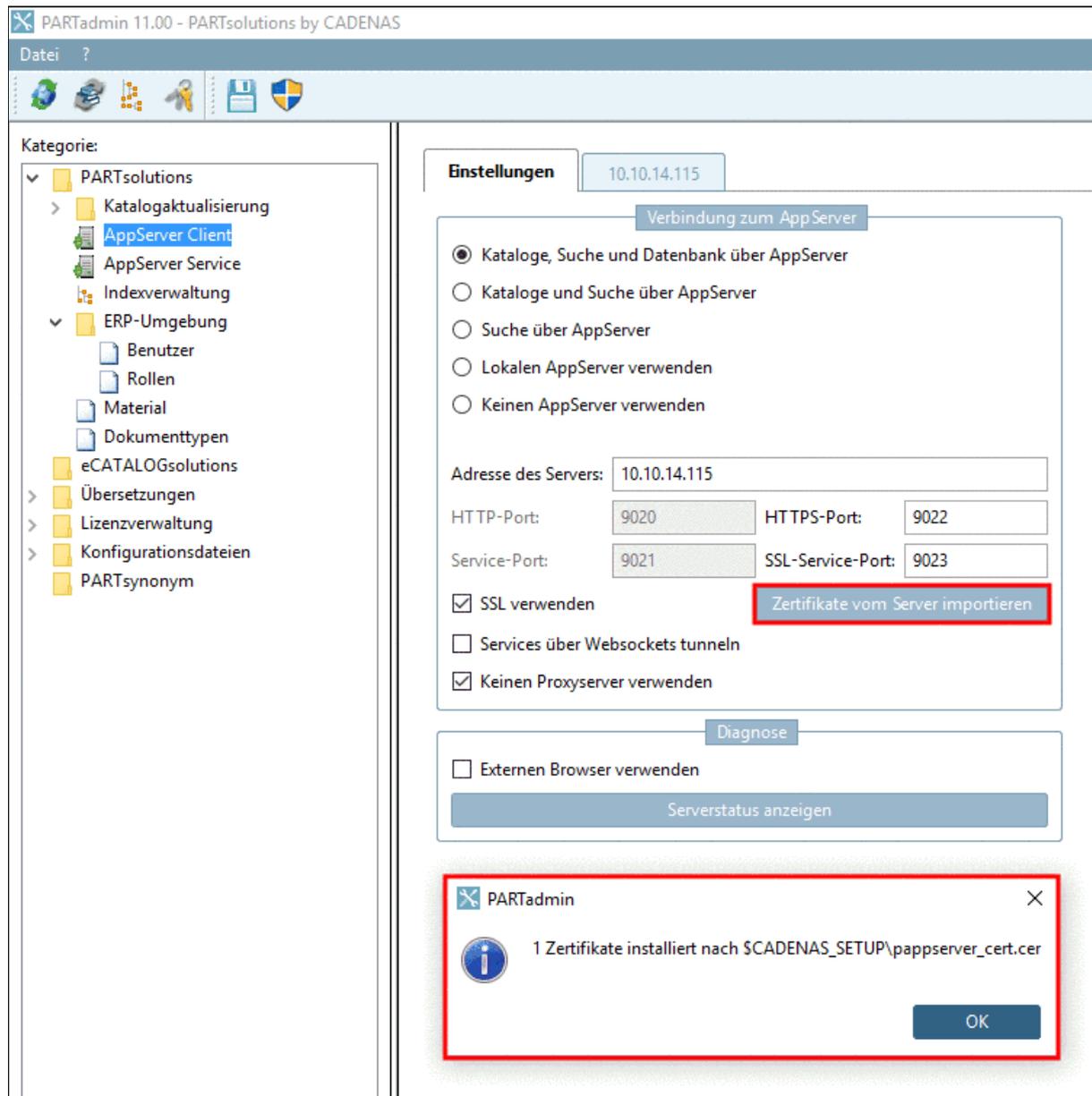
With **Import certificates from server** you can import the certificate on clients.

¹#74575

²SSL (Secure Sockets Layer) is a cryptographic protocol that provides communications security over a computer network.

³#74481

⁴not part of the documentation



Details on this can be found under Section 1.3.9.8.3.3, “SSL encryption ” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

14.3. Additional variant for role selection via freely definable variable

As of V10 SP8 there is an additional option for role selection. Not only selection via Windows login is possible, but also via a freely definable variable, which is provided by a LDAP⁵ server for example.⁶

This is especially advantageous when not all user names are known.

Configuration

The configuration happens in `$CADENAS_SETUP/plinkcommon.cfg`, in the block `LOGIN` via keys `AutoLoginUserX`. (If no keys `AutoLoginUserX` are stated, the standard role selection is performed and the username is used.)

⁵Directory-Server, whose data structure is according to the LDAP specification and which can exchange data via LDAPv3 protocol

⁶#73899

If `AutoLoginUserX` is stated, then exactly this is used. The key values are variables, which control the mode of role selection.

Via key value variable `%user%` you can check, whether there is an entry for the username in the `plinkusers.cfg`. So use this variable in the **first** `AutoLoginUserX` key, if you want to check the standard case **at first**.

Via key value variable `%ds.computer.company%` you can read a variable value from the defined LDAP server and check, whether there is an entry in the `plinkusers.cfg` for this.

At first the search is performed for the first `AutoLoginUser` in the `plinkusers.cfg`, then for the second and so on. If no value is matching, then the wild card user is used.

- **Specify LDAP server**

In the key `ldapURL` specify the URL of the LDAP server.

```
[Login]
ldapURL=ldap://CADENAS.QA/DC=CADENAS,DC=QA
```

- **Read value from the LDAP server**

In the key `AutoLoginUser1` you can specify the variable to be read.

Example:

```
[LOGIN]
AutoLoginUser0=%user%
AutoLoginUser1=%ds.computer.company%
```

In this example, at first it is checked whether there is an entry for the username in the `plinkusers.cfg` (`AutoLoginUser0`) and then for the value "company" in the directory server.

More possible values:

- `%domainUser%`
User in the domain. In this way local users, which are not part of the domain, are excluded.
- `%ds.user.key%`
A certain user's key in the **Directory Service**.

- **Use of regular expressions**

Regular expressions can filter the read value.

For each entry in `AutoLoginUser`, a list of regular expressions can be defined. The relation between key **AutoLoginUserX** and block **AutoLoginExprListX** is established by the number at the end of keys and blocks.

Example:

```
AutoLoginUser1=%ds.computer.company%

[AutoLoginExprList1]
Expr0=^.{2}
```

With the expression above only the first two characters of "company" are used.

Note

Safety information

When using a **PARTApplicationServer** the keys are read by this, so that users cannot access the settings.

Without using a **PARTApplicationServer** the keys are read by the client. When using Windows users there will be an element of uncertainty, because the login information could be faked. A safety solution is the use of a LDAP server or the explicit login with the domain user `%domainUser%`.

14.4. Seamless.cfg: Key "AlwaysOnTop" as workaround for key "KeepOnTop"

Key **AlwaysOnTop** is a workaround for key **KeepOnTop**.⁷

Key function: Keep **Seamless** window on top of all other windows.

⁷#59359, #75189

Chapter 15. V10.00 SP6

15.1. Safer index update for ClassImporter

Sometimes the index update does not work properly in the **ClassImporter**.¹

With V10 SP6 the index update functionality has been improved to make the update process safer.

Solution: In the configuration file `$CADEANAS_SETUP/classimport.cfg`, set `USETRANS-ACTIONSFORINDEXUPDATE` to 1.

There are 4 additional keys in `classimport.cfg`:

- `USETRANS-ACTIONSFORINDEXUPDATE`
 - 0 (default): Standard behavior
 - 1: The old index files are copied when updating the index. If the index update fails, there will be attempts to repair the index.
- `INDEXUPDATERETRYCOUNT`
Default value: 1
Number of attempts to repair the index
- `INDEXUPDATERETRYINTERVAL.`
Default value: 60000
Number of milliseconds to wait for next attempt to repair the index. If there are network failures, there is a greater chance that it will work again when waiting a few seconds.
- `INDEXVERSIONSTOKEEP`
Default value: 1
When updating the index, the version is incremented. If there are more versions than this, old files will be deleted.

¹#67223

Chapter 16. V10.00 SP2

16.1. Adjust arrangement of docking windows

You can adjust the arrangement of the docking windows via config file.¹

The settings are found under `$CADENAS_DEFAULT_USER/partsolu.cfg`.

As of V10 SP2 a layout block for NATIVE has been added.

For details please see under Section 18.3, “Adjust arrangement of docking windows”.

¹#62627

Chapter 17. V10.00 SP1

17.1. PARTwarehouse - Index Updater

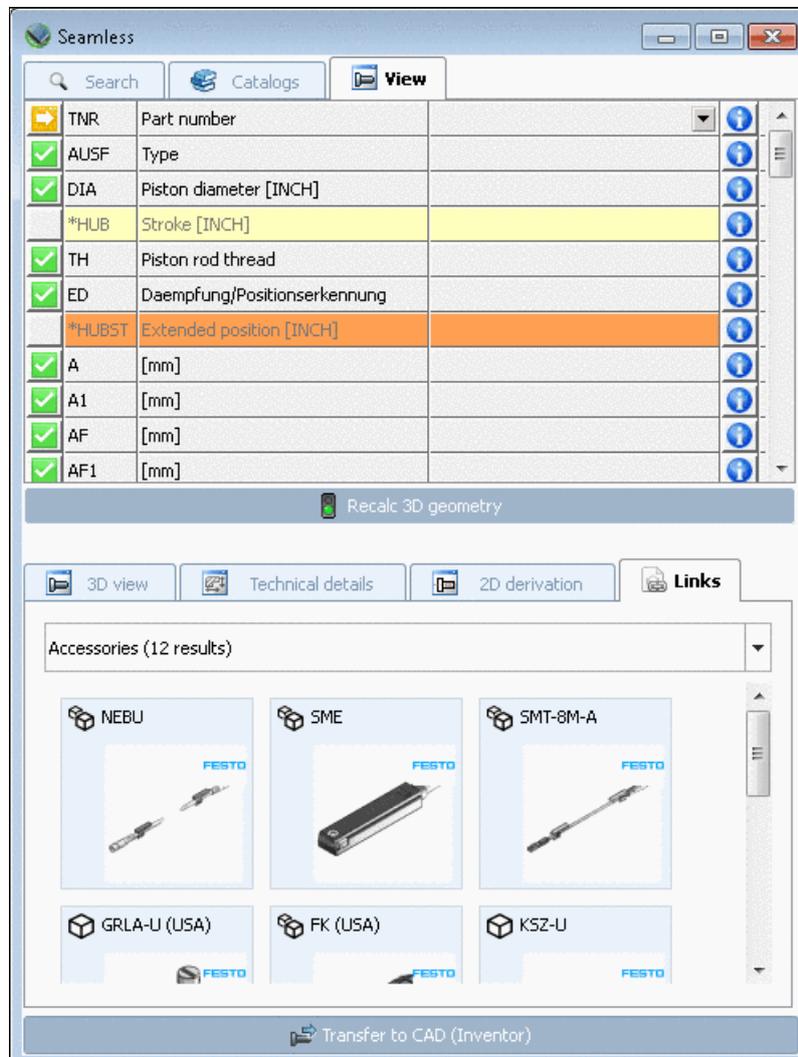
Now the index updater also uses the configuration file `pwclient.cfg`.¹

`$CADENAS_SETUP/partwarehouse/pwclient.cfg`:

```
[Component.index_component]
type=PWCORE::IndexService
Transport.id=appserver_transport
Transport.type=appserver
```

17.2. Seamless - Links to accessory projects

Now with V10.00 SP1 the **Links** dialog area from **PARTdataManager** is available in Seamless as well.²



Configuration:

`$CADENAS_USER/seamless.cfg`:

```
[OPTIONS]
ViewTabs=TechnicalViews,Derivation,Links
```

¹#60391

²#59291

The **3D view** tab is always in the front und cannot be configured. The sequence of key values determines the sequence of the other tabs: **Technical details**, **2D derivation**, **Links**.

If the default value in the list field shall be **Accessories** then in the configuration file, \$CADEN-AS_USER/psolopt.cfg "LINKS" (default value) has to be stated:

```
[SettingsIndexTree]  
SELLINKTYPE=LINKS
```

Chapter 18. V10.00 SP0

18.1. NX - Problem when generating 2D previews during Offline Native Checkin

This is a workaround for a bug occurring in NX 10.0.1-10.0.3.mp1 and PSOL 10 in Offline mode if a UGPHOTO license is missing.¹

Problem:

When generating 2D previews during an Offline Native Checkin NX is crashing.

Solution:

Disable generation via config file.

ifugnx.cfg

```
Create2DPreviews=0
```

The value is 1 by default and can be set to 0 on systems where this bug occurs.

As of PSOL 11.0 or NX 10.0.3.mp2 the switch is not relevant anymore and can be removed.

18.2. geomsearch.cfg - Number of features configurable

Up to now, for the number of features, a hard limit of 200 had been set to prevent the fingerprints from getting to large.²

Now this value is configurable.

For example, with the default of 200 it could happen that only a small ratio of holes is found. In order to find all features set a higher value as maximum.

\$CADENAS_SETUP/geomsearch.cfg

```
[limits]
MaxFeatureCount=200
```

18.3. Adjust arrangement of docking windows

You can adjust the arrangement of the docking windows via config file.³

The settings are found under \$CADENAS_DEFAULT_USER/partsolu.cfg.

```
-----#
# Default layouts                                     #
-----#

[LAYOUT-() (DOCSANBROWSERDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB2IAAAL0AAAAAAAAAAD////////wAAAAEAAA==
state=AAAA/wAAAAD9AAAAQAAAAIAAADjAAAC9fwBAAAAvsAAABEAFQAYQBIAEMAbwBuAHQ

[LAYOUT-() (CLOUDNAVIGATORDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB38AAPJAAAAAAAAAAD////////wAAAAAAAA==
state=AAAA/wAAAAD9AAAAAAB4AAAAAPKAAAABAAAAQAAAAIAAAACPwAAAAA

[LAYOUT-() (SEARCHRESULTDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB38AAPJAAAAAAAAAAD////////wAAAAAAAA==
state=AAAA/wAAAAD9AAAAQAAAAIAAAeAAAADyvwBAAAAvsAAAA6AFQAYQBIAEMAbwBuAHQ

[LAYOUT-() (SEARCHRESULTDEFAULT-CUSTOM) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB38AAPJAAAAAAAAAAD////////wAAAAAAAA==
state=AAAA/wAAAAD9AAAAQAAAAIAAAeAAAADyvwBAAAAvsAAAA6AFQAYQBIAEMAbwBuAHQ
```

¹#57609

²#54477

³#62627

```
[LAYOUT-() (PARTCOMPAREDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB38AAPFAAAAAAAAAAAD//////////wAAAAAAAA==
state=AAAA/wAAAAD9AAAAAqAAAAAAAAAL8AAADxvwCAAAAAfSAAAAuAFQAYQBiAEMAbwBuAHQ
```

```
[LAYOUT-() (ASSISTANTVIEW) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB38AAPJAAAAAAAAAAD//////////wAAAAAAAA==
state=AAAA/wAAAAD9AAAAAAB4AAAAPKAAAABAAAAQAAAAIAAAACPwAAAAA
```

```
[LAYOUT-() (PARTVIEWDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAAAEAAAAABAAAB3sAAANBAAAAAAAAAAD//////////wAAAAEAAA==
state=AAAA/wAAAAD9AAAAAQAAAAIAAAD4AAADPvwBAAAAA/sAAABEAFQAYQBiAEMAbwBuAHQ
```

```
[LAYOUT-() (PARTSELECTIONDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAAAAAAAAAAAAB38AAPFAAAAAAAAAAAD//////////wAAAAAAAA==
state=AAAA/wAAAAD9AAAAAQAAAAIAAAeAAADxvwBAAAAA/sAAABEAFQAYQBiAEMAbwBuAHQ
```

```
-----#
# Predefined part-view layouts                                     #
-----#
```

```
[LAYOUT-() (PARTVIEWDEFAULT) (__partview_database3d__)]
geometry=AdnQywABAAAAAAEAAAAABAAAB3sAAANBAAAAAAAAAAD//////////wAAAAEAAA==
state=AAAA/wAAAAD9AAAAAQAAAAIAAAD4AAADPvwBAAAAA/sAAABEAFQAYQBiAEMAbwBuAHQ
```

```
[LAYOUT-() (PARTVIEWDEFAULT) (__partview_database2d__)]
geometry=AdnQywABAAAAAAEAAAAABAAAB3sAAANEAAAAAAAAAAD//////////wAAAAEAAA==
state=AAAA/wAAAAD9AAAAAQAAAAIAAAD4AAADQfwBAAAAA/sAAABEAFQAYQBiAEMAbwBuAHQAZ
```

In the upper area under "Default layouts", you can find the standards for the individual tabs. The first filled bracket in the block name shows the affected tab.

The next area under "Predefined part-view layouts" shows special layouts. (At the moment mainly for the **Part view** and **Assistant** tab.)

For example, the layout "__partview_database3d__" is used for 3D projects.

If you want to adjust the standard layouts proceed as follows:

1. Start PARTdataManager.
-> The dockings are arranged by the mentioned layout specifications.
2. Now position the dockings as desired.
3. Exit PARTdataManager.
4. Open the file under \$CADENAS_USER/partsolu.cfg and look for blocks which start with "LAYOUT-RECENT".

Example:

```
[LAYOUT-RECENT-() (PARTVIEWDEFAULT) (__default__)]
geometry=AdnQywABAAAAAAEAAAAABAAAtYAAAOBAAAAAAAAAAD//////////wAAAAEAAA==
state=AAAA/wAAAAD9AAAAAQAAAAIAAALTAADmPwBAAAAA/sAAABEAFQAYQBiAEMAbwBuAHQA
```

5. All keys (currently "geometry" und "state") have to be copied in the corresponding standard blocks (those without "RECENT") under \$CADENAS_DEFAULT_USER/partsolu.cfg.

Currently a distinction is made between layouts for 3D and 2D.

Note

As of **V10 SP2** "NATIVE" has been added. Special subtypes are disregarded.

- Block for 2D:

```
[LAYOUT-() (PARTVIEWDEFAULT) (__partview_database2d__)]
```

- Block for 3D:

```
[LAYOUT-() (PARTVIEWDEFAULT) (__partview_database3d__)]
```

- Block for NATIVE:

```
[LAYOUT-( )(PARTVIEWDEFAULT)(__partview_native__)]
```

18.4. Customer stylesheets for GUI elements

Default GUI style

Under `$(CADENAS_SETUP)/styles`, the default `default.css` file is used for the GUI style.

Adjust GUI style

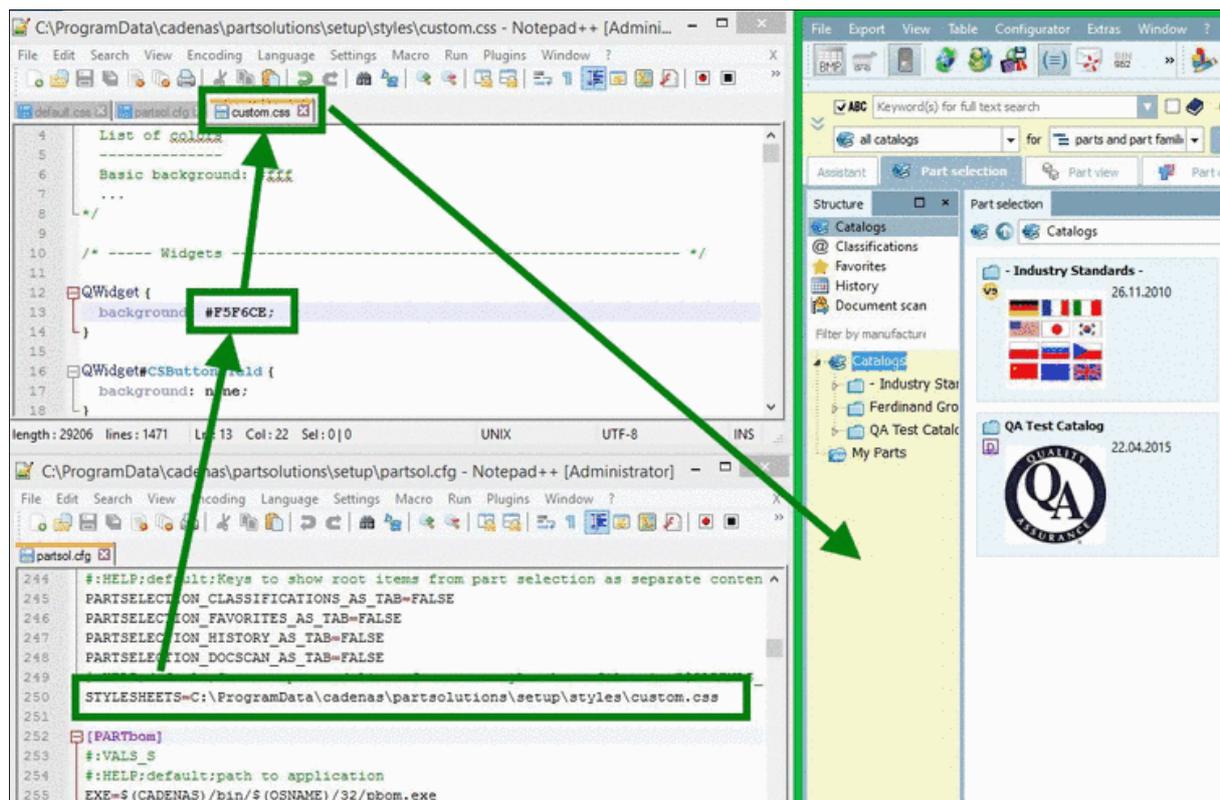
The GUI style can easily be adjusted.⁴

Under `$(CADENAS_SETUP)/partsol.cfg` -> Block [PARTdataManager] -> Key STYLESHEETS, state the desired CSS file.

If just the file name and no path is given the application attempts to find the file in the `$(CADENAS_SETUP)/styles` directory. Have a look there for some examples.

```
[PARTdataManager]
#:HELP:default;Comma separated list of custom style sheet files in "$(CADENAS_SETUP)/styles"
directory. Styles will be appended to the default style.
STYLESHEETS=custom.css
```

Just as well you can specify an absolute path.

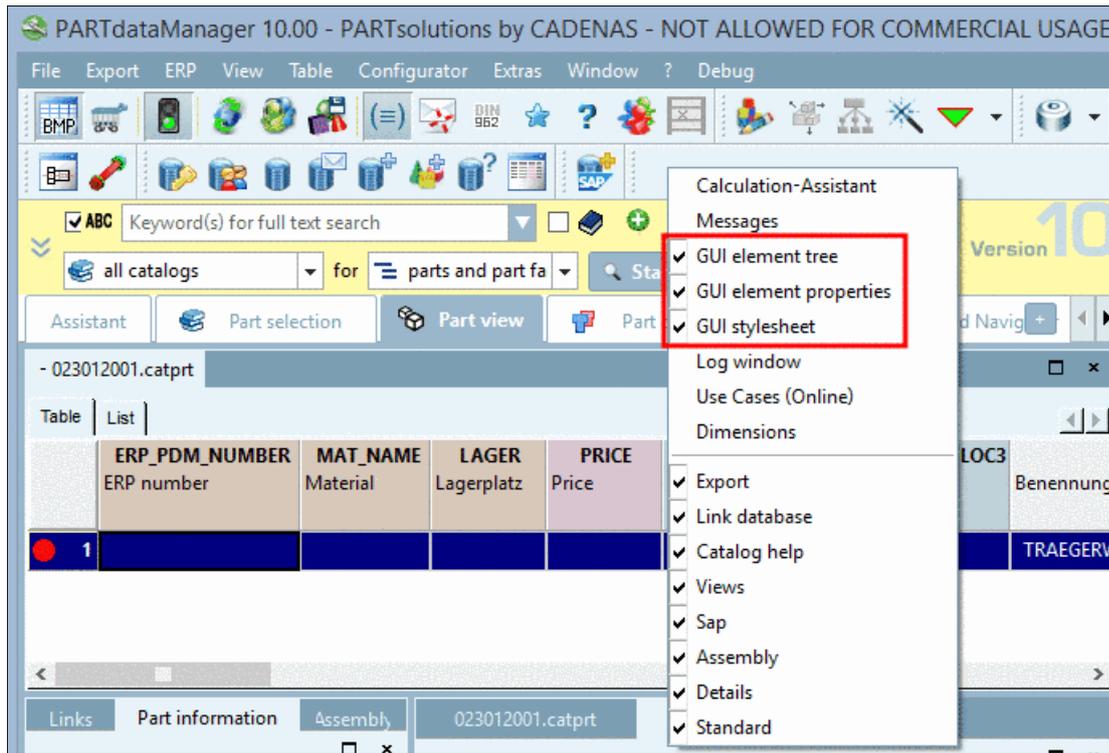


Find relevant keys in the css file

In order to ease finding relevant keys enable the following docking windows:

- GUI element tree
- GUI element properties
- GUI stylesheet

⁴#58791



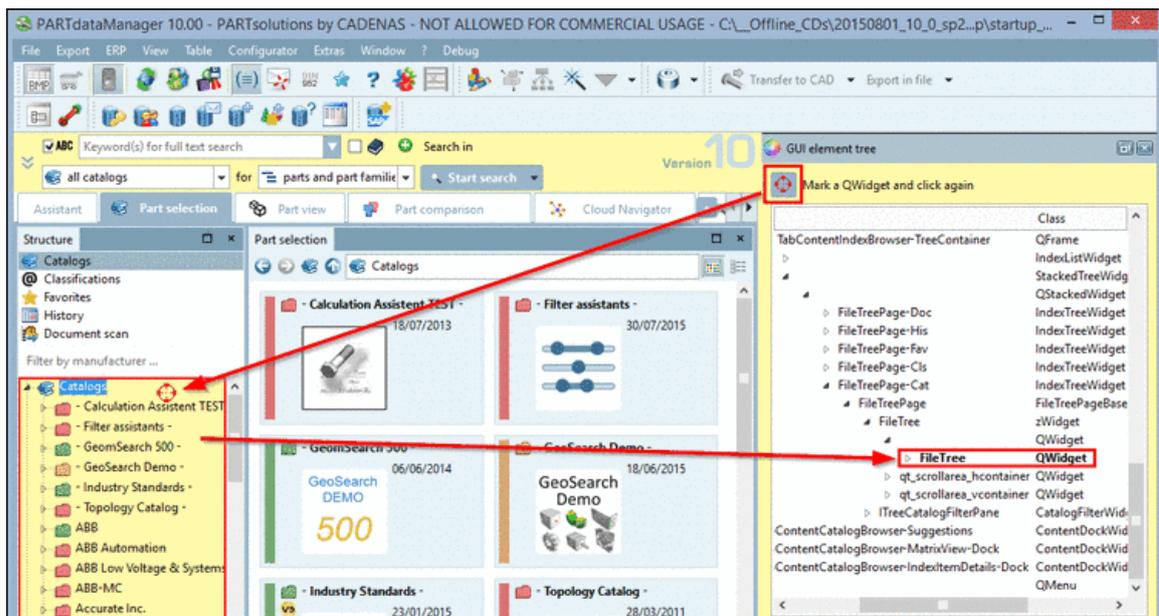
1. Under `$CADENAS_USER`, create a file named `debug.cfg` with the following content:

```
[ PDEBUG ]
showDebugMenu=1
showWidgetTree=1
showExportPath=1
```

-> Now the dockings are displayed.

2. Click on the icon .

-> The mouse cursor turns into a red circle.



3. Move the cursor over a QWidget.
 - > It is marked with a red rectangle.
4. Click on the desired QWidget.
 - > The element is marked with bold font in the docking **GUI element tree**.

With this information you can find the relevant key in the css file.

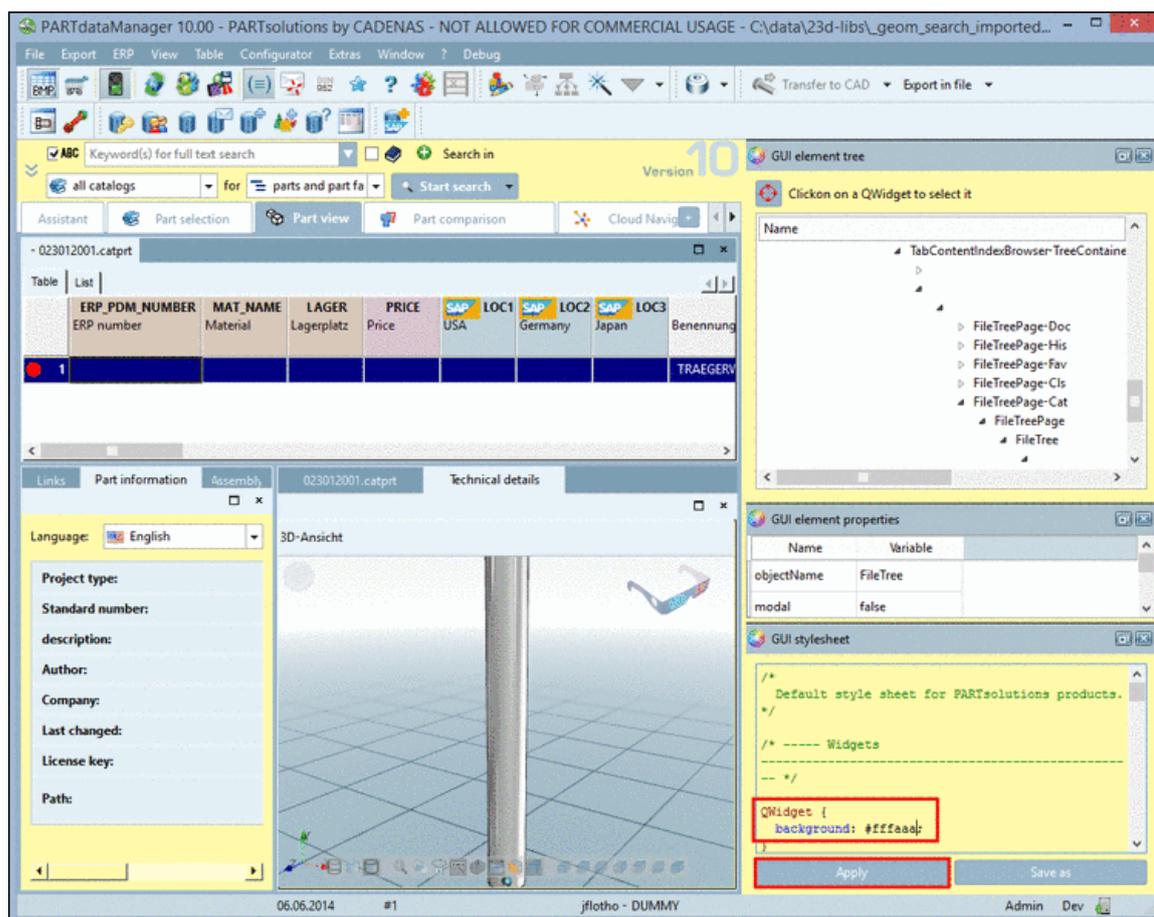
Try out adjustments

You can perform changes in the **GUI stylesheet** docking window.

Just for example:

1. Set a yellow background.

```
QWidget {
    background: #ffffaa;
}
```



2. Click **Apply**.
-> The change is immediately displayed.

Note

The **Apply** action does not save changes!

If you want to overtake changes use **Save as** and then copy the changes into the desired css file.

18.5. Encrypted communication with LinkDB server

V10.00 SP1 provides the precondition for encrypted communication with the LinkDB server.⁵

⁵#55979

Note

However, the required JDBC driver `sqljdbc 4.1` is not part of the installation for legal reasons. Please download the driver from the Microsoft Homepage and copy it into the directory under `$(CADENAS)/libs/all/java/jar`. Copy the corresponding `sqljdbc_auth.dll` into `software\libs\x86\32\java\lib` or `software\libs\x86\64\java\lib`.

The free driver jTDS is part of the installation. This one is unsuitable for encrypted communication in contrary to Microsoft `sqljdbc 4.1`.

18.6. Control evaluation of SQL state on startup

One big difference between V9 and V10 is that in V9 only the visible index is colored on startup.⁶

In V10 all not visible indexes are colored in addition (Classification, Favorites and History).

Especially Classification needs more time, because there, links have to be resolved and thereby the index is accessed. In V9 this only happens when switching on the **Classification** tab.

In order to control the behaviour you can use the new key **PrefetchErpState** under `$(CADENAS)_SETUP/plinkcommon.cfg -> block PARTdataManager`.

Default: "Prefetch" is performed for all categories, meaning for the stated categories the SQL-State will be evaluated on startup.

```
PrefetchErpState=cat,nat,cls,fav,doc
```

In order to reduce startup time please set the following (V9 behaviour):

```
PrefetchErpState=cat
```

In this way "Prefetch" is only performed for catalogs.

18.7. Changed default for NB display in 3D view

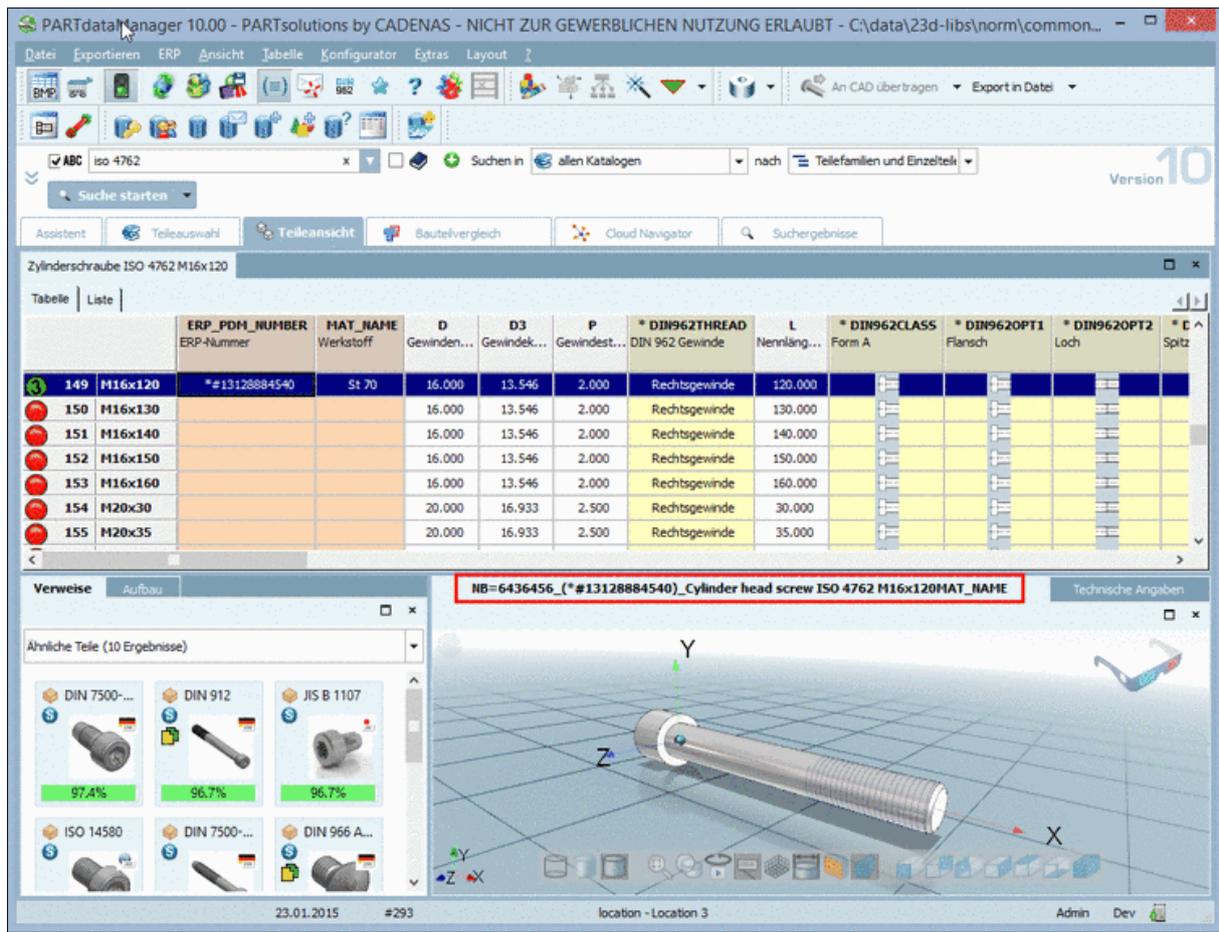
New default NB in 3D view: As of V10 without LOD

Can be adjusted in `$(CADENAS)_USER/pdatamgr.cfg` bzw. `$(CADENAS)_DEFAULTUSER/pdatamgr.cfg`.

Old setting:

```
[OPTIONS]
CAPTION3D=NB=$NB. $LOD.
```

⁶#59171



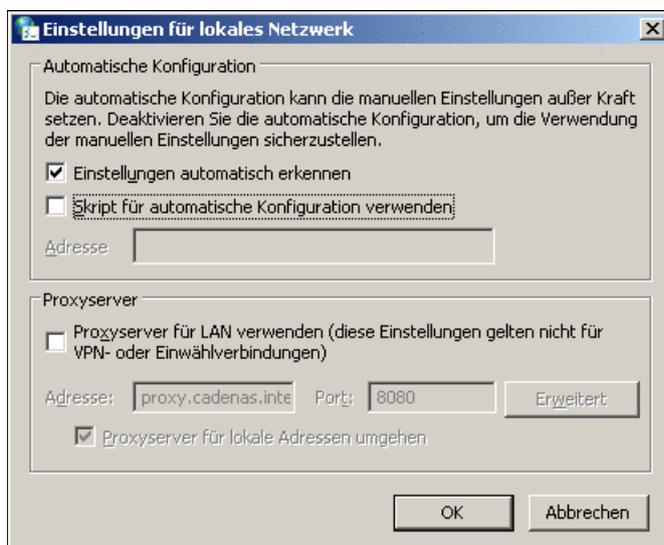
18.8. PARTApplicationServer - Slow connection on single clients

Problem:

On some single clients data flow is very slow. At other clients fast.

Solution:

Disable the option for automatic proxy search (**Einstellungen automatisch erkennen**).



Background information:

If searching is quick but loading of images slow then the problem is clearly on the side of the http-file system.

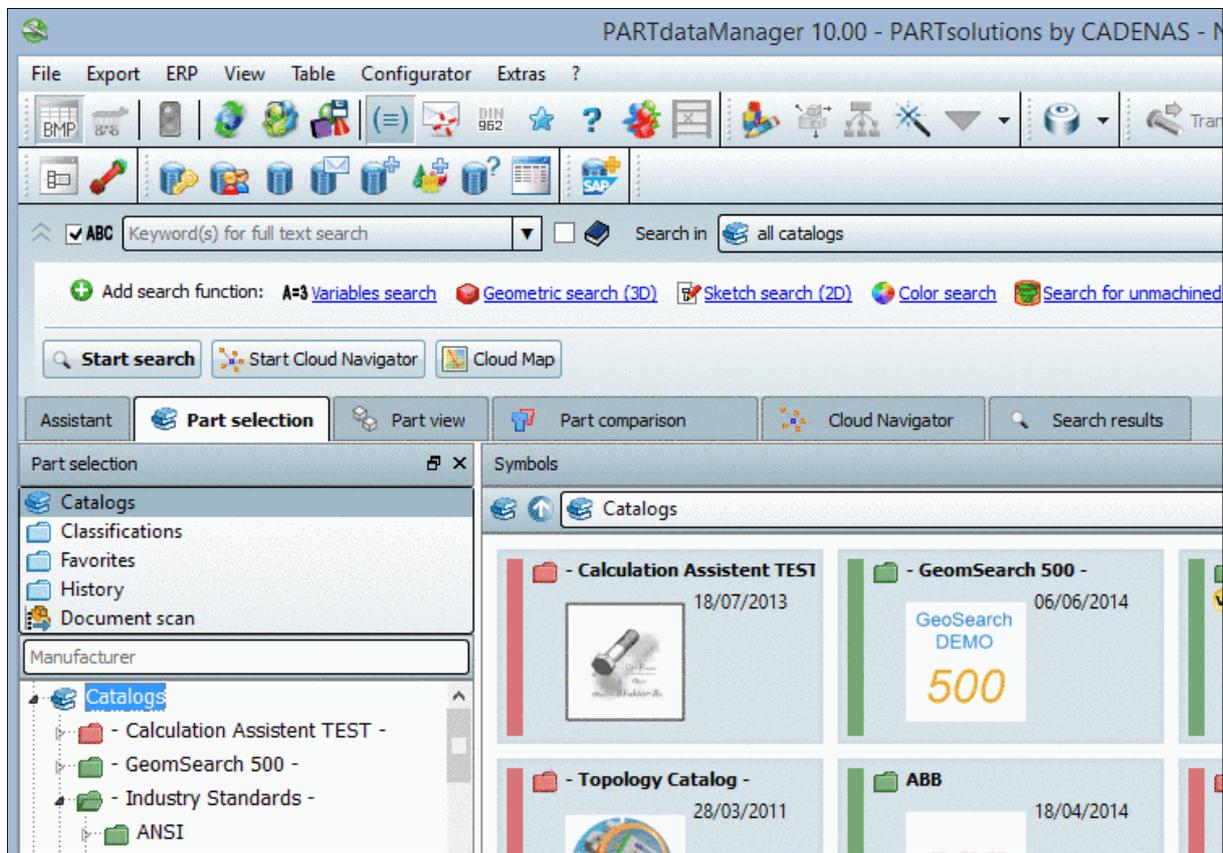
And because every load happens over an own connection the following has to be considered:

- Proxy settings
- Dns settings
- Authentication at proxies

Detailed information on the PARTapplicationServer can be found under PARTapplicationServer einrichten.

18.9. Key "PARTSELECTION_SHOW_..." - Hide "Part selection" item or move on tab

You can hide **PARTselection** items or move it on its own tab:



\$CADENAS_SETUP/partsol.cfg

```
[PARTdataManager]
#:HELP;default;Keys to enable/disable different root nodes in part-selection content.
PARTSELECTION_SHOW_CATALOGS=TRUE
PARTSELECTION_SHOW_CLASSIFICATIONS=TRUE
PARTSELECTION_SHOW_FAVORITES=TRUE
PARTSELECTION_SHOW_HISTORY=TRUE
PARTSELECTION_SHOW_DOCSCAN=TRUE

#:HELP;default;Keys to show root items from part selection as separate content tab.
↳ Disable it above in case you activate it here!
PARTSELECTION_CLASSIFICATIONS_AS_TAB=FALSE
PARTSELECTION_FAVORITES_AS_TAB=FALSE
PARTSELECTION_HISTORY_AS_TAB=FALSE
PARTSELECTION_DOCSCAN_AS_TAB=FALSE
```

Example

- Just to hide the item **Favorites**

```
[PARTdataManager]
PARTSELECTION_SHOW_FAVORITES=FALSE
```

- Hide item in the submenu of **Part selection** but show it on its own tab

```
[PARTdataManager]
PARTSELECTION_SHOW_FAVORITES=FALSE
```

AND

```
[PARTdataManager]
PARTSELECTION_FAVORITES_AS_TAB=TRUE
```

Note

If you enable a *_AS_TAB key then you have to disable the corresponding key in the above section.

18.10. Updates of search indexes (geo and text) enhanced

When updating the geo search index the update is written in its own index file. After x updates a full-update is performed.

In this way updates kann also be performed during daytime on-the-fly.

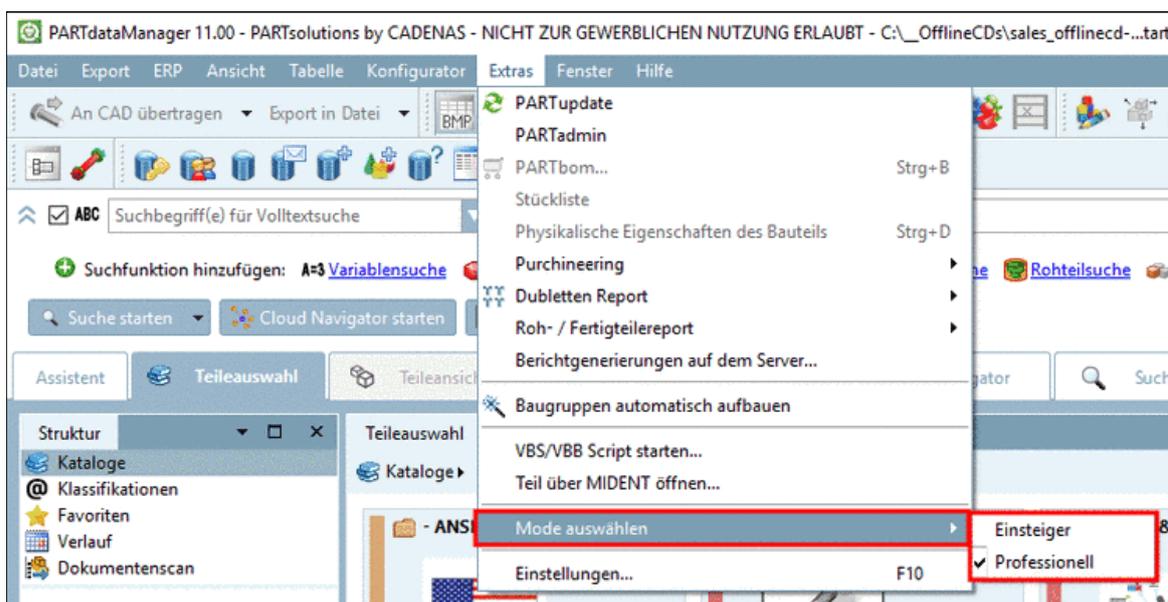
18.11. Rework "Tweakmenu"

18.11.1. Overview

⁷With V10 Tweakmenu has completely been reworked.

This results in some advantages:

- Old vbs scripts for tweakmenucfg have been removed and replaced by C++ code. So starting times are quicker now. Toolbars and menus can be managed by scripts, furthermore context menus and buttons, what was not possible before.
- There are "MODE_" sections which create a "Beginner / Professional" selection option (**PARTdataManager** -> **Extras** menu). These can act as additional filter for roles.



- Menu and toolbar order and toolbar positions (left, right, top, bottom) can be specified.

- You can specify whether icon or text or both shall be displayed in the toolbar.

All settings are handled with standard configuration files which can be displayed in **PARTAdmin** -> Category **Configuration files** -> **\$CADENAS_Setup**.

The name of the respective controlled application is included into the config name.

The tweakmenu is controllable with two configs:

- menustructure_<name of application>.cfg

Example:

```
menustructure_PARTdataManager.cfg  
menustructure_PARTProject.cfg
```

This config controls the structure of toolbars and menus in the application.

- menuvisibility<name of application>.cfg

Example:

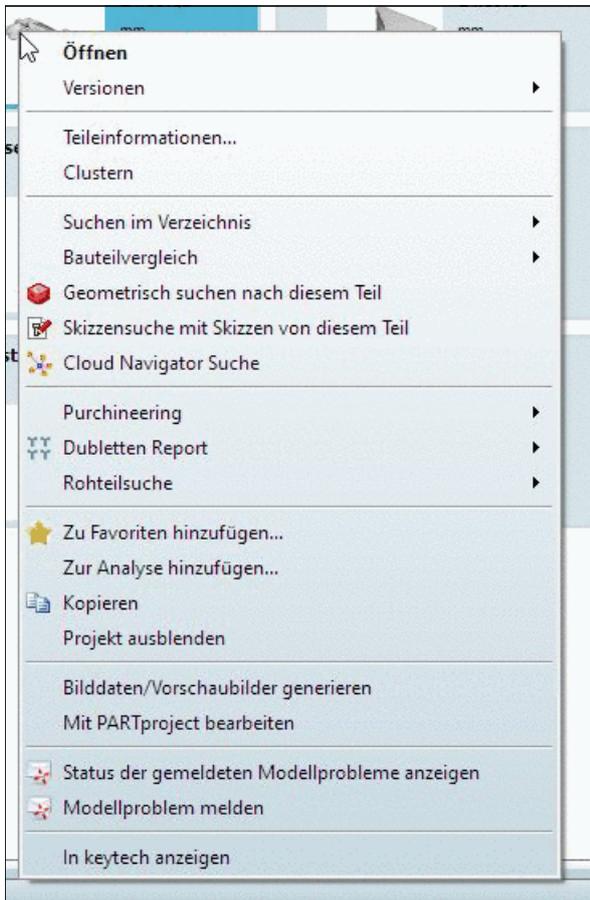
```
menuvisibility_PARTdataManager.cfg  
menuvisibility_PARTProject.cfg
```

This config controls the visibility of UI elements in the application.

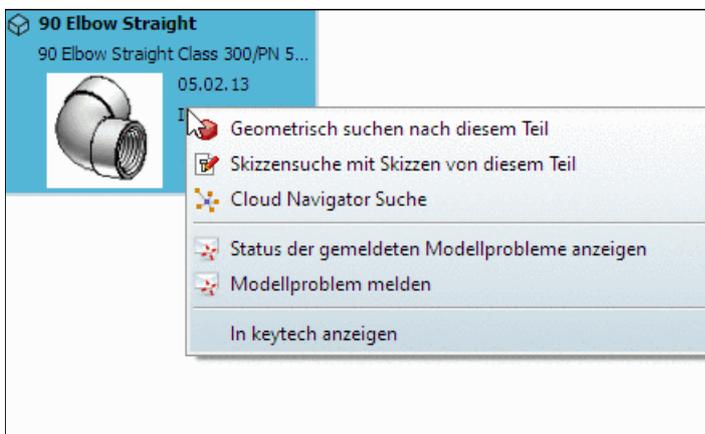
Examples:

In the following you can see some exemplary screenshots (when using PLDBDEMO database, with login „mechanical“).

"Leave sucker" and Hedge Shear have full menus (e.g. Admin):



"Chain saw" is reduced (e.g. CAD user):



"Tooling" still more reduces (e.g. purchaser, does not need Export functions):



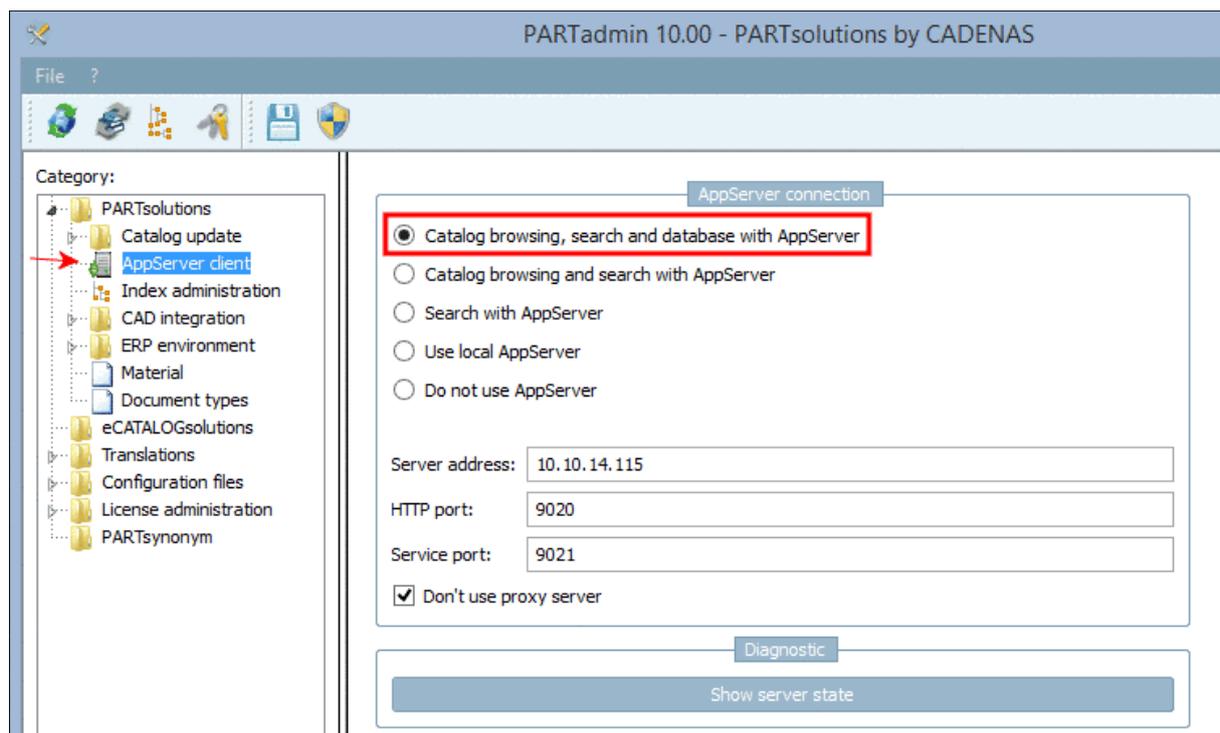
Detailed information can be found under Section 1.7.9.2, “ Tweak menus, menu items, toolbars, buttons and context menu commands ” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

18.11.2. Scripting with "Tweakmenu"

If you want to work with the new *tweakmenu*, you must register your action in the configs and in the *PApplicationPool*. You must only write the name of your action into the config. In your implementation you must only call *registerAction* via an instance from *PApplicationPool*. If you are coding with visual basic you must only call *application.commands.add("<name of action>")*. After you have registered the action, you must only set other properties (e.g. icon path, ...). The difference as compared to the "old" *tweakmenu* is that you don't register menu or toolbar in the application. *Tweakmenu* makes the *registerToolbar* and *registerMenu* step via your entries in the *menuvisibility-config* and *menustructure-config*. Furthermore actions from the *tweakmenu* have an additional property *autoRegistered*. If you want to check whether an action exists, you must now check the value of that property. If the value is true, the action is registered by the *tweakmenu*. Otherwise the value is false and the action is registered by the application. The query whether an action exists, will always return true. The reason for this approach is that the *tweakmenu* registers all actions from *menuvisibility-config* like a prototype.

18.12. Database queries routed via PARTApplicationServer

⁸As of V9.08 all queries concerning part search and index browsing of directories have been routed via *PARTApplicationServer*. However, database queries were made via direct call from *PARTsolutions* to the database. Now with V10 these are routed via *PARTApplicationServer* as well.



That means only ONE path is needed - that one to the PARTApplicationServer. This offers a number of advantages:

- Only ONE connection from PARTApplicationServer to LinkDB.
- Central login process on server.
The **ConnectionManager** is not needed anymore.
- DB returns are not packed, but optionally can be packed between AppServer and Client. (Good at slow connections.)
- The AppServer knows of all changes to the database and can therefore react with index updates or client notifications.

You can find detailed information on this under PARTApplicationServer-Installation.

18.13. PARTsolutions Update more simple: Second Setup directory contains customized changes

When changing the default configuration all changes are written in a second Setup directory. In this way it is directly evident, whether changes have been made at all and if so in which scope and which exactly. The Default_User directory is also inside this Setup and will be managed as well.⁹

In order to activate the function specify an environment variable CADENAS_SITESETUP in the start.env (the directory has already to be existent). For example:

```
CADENAS_SITESETUP=$CADENAS/sitesetup
```

If the function is active and any PARTsolutions application attempts to write into SETUP, then all changes are automatically saved and displayed under SITESETUP.

Via "Conditions" you can easily specify conditional sections in the start.env for your installation and so use different Setup directories. On this please see Section 21.9, "start.env with conditional sections".

An existing second Setup is also displayed in **PARTadmin** beside the default Setup.

⁹#50279, #52427



When a changed value is set on the default again, then the entry is automatically removed from the SiteSetup.

SITESETUP is also displayed under ?-menu **System info/Support (F7) -> PARTsolutions variables.**

PARTsolutions system info - PARTsolutions by CADENAS

System information:

```
Standard information:
PARTsolutions system information
General:
Exe = C:\Program Files (x86)\cadenas\partsolutions\software\bin\x86\64\padmin.exe
SW version = 11.00 Build 184315
CD version = 11.18.4315SP8
System date = Wed Feb 19 10:44:01 2020
Codepage = 1252

PARTsolutions variables:
$CADENAS (std)= C:\Program Files (x86)\cadenas\partsolutions\software (write protected)
(env)= C:\Program Files (x86)\cadenas\partsolutions\software (write protected)
$CADENAS_DATA (std)= D:\cadenas\partsolutions\data2
(env)= D:\cadenas\partsolutions\data2
$CADENAS_DATA/pool (std)= D:\cadenas\partsolutions\data2\pool (non existent)
$CADENAS_SETUP (std)= C:\ProgramData\cadenas\partsolutions\setup
(env)= C:\ProgramData\cadenas\partsolutions\setup
$CADENAS_HOBB (std)= C:\ProgramData\cadenas\partsolutions\hobb
(env)= C:\ProgramData\cadenas\partsolutions\hobb
```

Retrieve additional detailed information

Name:

Company:

Please enter the support e-mail address of your distributor here:

Error description (The more detailed your description, the faster you can expect a response):

E-mail support Save to file Support Tools Cancel

Tip

The variables are linked to the corresponding directories. Simply click on it to get there. (You have to have the administrative rights for the respective directory.)

18.14. LinkDB changes are logged**Problem:**

Up to V10 it was not possible to check who changed or created an ERP dataset. This is possibly causing a lot of confusion.¹⁰

Solution:

An extra table named LOGTABLE has been added.

So now INSERTS, DELETES and manual UPDATES (by PARTlinkManager or PARTdataManager) are automatically logged here.

Furthermore the log information is used to update the **ERP search index**. See [below](#).

¹⁰#55241, #20318, #52425

Structure of LOGTABLE

```
LOGID VARCHAR(40) NOT NULL,
TABNAME VARCHAR(15) NOT NULL,
KEYFLD VARCHAR(15) NOT NULL,
LOGKEY VARCHAR(500) NOT NULL,
LOGEXT VARCHAR(64),
LOGTIME VARCHAR(20) NOT NULL,
USERNAME NVARCHAR(20),
HOSTNAME NVARCHAR(20),
PROGNAME VARCHAR(15),
MODTYPE SMALLINT DEFAULT 0 NOT NULL,
UPDSEARCH SMALLINT DEFAULT 0 NOT NULL,
```

You can view this table via **PARTlinkManager** -> **Extras** menu -> **Database** -> **Edit additional tables**.

LOGID	TABNAME	KEYFLD	LOGKEY	LOGEXT	LOGTIME	USERNAME	HOSTNAME	PROGNAME	MODTYPE	UPDSEARCH
(efa22...	ERPTABLE	ERP_PDM_NUMMER	14230632120		2015-02-03 16:20:12	location	DE-AGB-JOFL-01	PARTdataManager	1	1

If in plinkcommon.cfg under ADDITIONALTABLES the entry LOGTABLE has been set it is displayed here.

Meaning of single LOGTABLE columns

- **LOGID**: LOGID is an unique number (GUID)
- **TABNAME**: Table, where changes are stored, meaning ERPTABLE or LINKTABLE.
- **KEYFLD**:
 - For ERPTABLE this is always ERP_PDM_NUMMER and **LOGKEY** contains the ERP number
 - For LINKTABLE this is always PRJ_PATH and **LOGKEY** contains the path
- **LOGEXT**: Additional information. At LinkDB changes this is version and line ID.
- **LOGTIME**: Time of change (in UTC)
- **USERNAME**: Login name of user, which performed the change
- **HOSTNAME**: Computer name of client
- **PROGNAME**: Program, where changes have been performed
- **MODTYPE**: Modification type
Value range:
 - 1: Insert (dataset has been added)
 - 2: Update (dataset has been changed)
 - 3: Delete (dataset has been deleted)
 - 4: Installation (updates during cip installation)
- **UPDSEARCH**: If UPDSEARCH is 1 then the ERP search index should be updated. Will be turned back to 0 by the AppServer after finished update

Configuration in pappserver.cfg

In the configuration file `pappserver.cfg`, tasks can be defined. Currently these are:

- Task for checking whether there are new entries in the LOGTABLE. If yes, the ERP search index is updated.
- Task for clearing the LOGTABLE.

Example:

```
[TaskManagerModule]
TimerInterval=60
tasks=loadAll
DBSearchIndexTask=1h
DBCclearLogTask=24h

[DBCclearLogTask]
DaysToKeep=365
```

Explanations on the single setting options

- **TimerInterval:** Specification in which interval (seconds) it shall be checked whether a new task is pending. Normally this does not have to be adjusted.
- **tasks:**

Value range:

- **loadAll:** All Task Modules shall be loaded when launching the AppServer. Currently there are only two: DBSearchIndexTask and DBCclearLogTask
- **DBSearchIndexTask:** Task interval for updating the ERP search index. The task checks the LOGTABLE whether there are new entries available. If yes, the ERP search index is updated.
- **DBCclearLogTask:** Task interval for clearing the LOGTABLE. This task deletes all entries from LOGTABLE.

Possible formats for date:

1m	Task is executed every minute
1h	Task is executed every hour
13:21z	Task is executed every day at 13:21 GMT
mon 14:30	Task is executed every Monday at 14:30 (locale time)

- **DaysToKeep:** Number of days to store the entries in the LOGTABLE.

18.15. PARTsolutions support for NX 10

PARTsolutions support for NX 10.¹¹

18.16. All CADs: Display of dimensions and parameters on NativeCheckin is configurable

As of V10.00 SP0 you can determine whether dimensions and/or parameters should be displayed in the characteristic attribute table on native checkin.^{12 13}

Setting in \$CADENAS_SETUP/ifacecommon.cfg:

```
[NativeCheckin]
ProcessDimensions={ignore,visible,invisible}
ProcessParameters={ignore,visible,invisible}
```

¹¹#43233

¹²Dimensions change the geometry and so become visible in the 3D view. Parameters are mere text and without controlling function.

¹³#24639

There are the following three options:

- visible (default)
Values are checked in and displayed
- invisible
Values are checked in but not displayed
- ignore
Values are ignored

18.17. Teamcenter: SingleSignOn (SSO) added

With V10.00 SP0 Single Sign On (SSO) has been added for the Teamcenter API. In the course of this there are three new keys:¹⁴

- Teamcenter login : <login_mode>

```
TC_HookService_Login_MODE=
```

- Teamcenter login : <security_service_url>

```
TC_HookService_Login_SECURITY_SERVICE_URL=
```

- Teamcenter login : <sso_application_id>

```
TC_HookService_Login_SSO_APPLICATION_ID=
```

Details on this can be found in the Teamcenter configuration files.

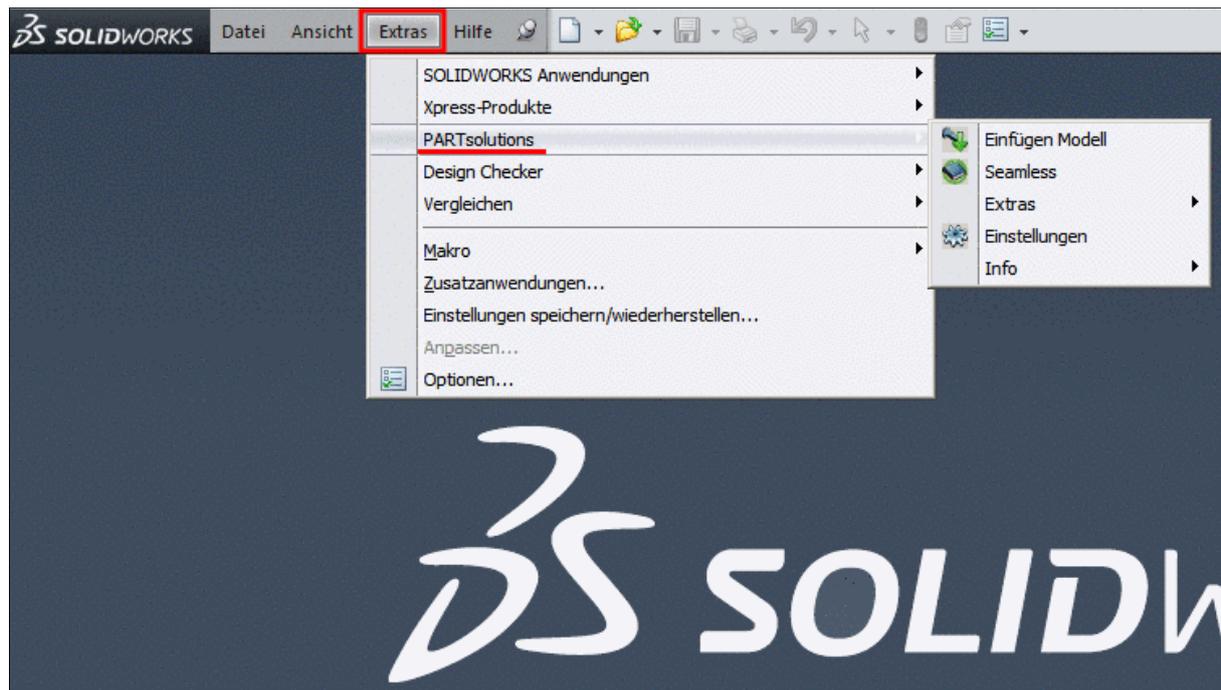
18.18. SolidWorks 2015: PARTsolutions menu is under "Tools" menu

Starting with SWX 2015 some tool menu modifications have been introduced.¹⁵

Any new third-party add-in that attempts to create a menu on the main menu will now appear on the **Tools** menu.

¹⁴#44463

¹⁵#52795



18.19. Creo/Teamcenter: Default poolpath './' correctly resolved by Teamcenter

As of V10.00 SP0 Teamcenter is able to resolve the poolpath statement './'.¹⁶

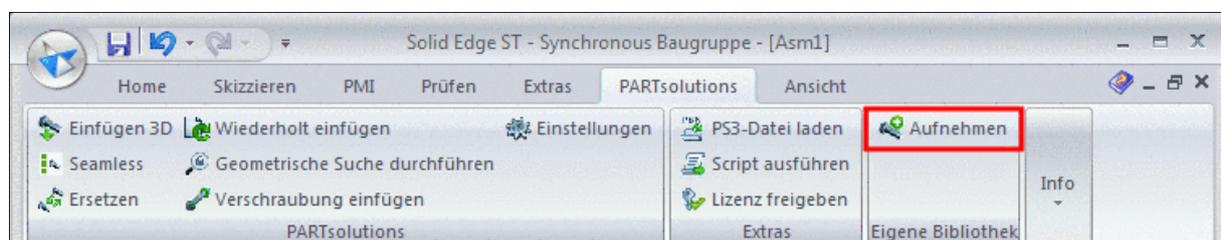
Up to now the the statement has only been resolved by Creo and the current Working Dir has only been read by Creo. However, Teamcenter returned './' when setting `it.getDocData().getDirectory()`.

The changes affected:

- \setup\ifproteamcenter.cfg
- \vbs\pdm_teamcenter\ifproteamcenter.vbs

18.20. Teamcenter / SolidEdge: "Insert" transaction (NativeCheckin) implemented

With 10.00 SP0 the **Insert** transaction has been implemented for the Teamcenter-Solid Edge integration.¹⁷



18.21. Vault: Windows login supported

As of V10.00 SP0, Windows login is supported.¹⁸

Modified: /vbs/pdm_vault/ifvault.vbs

In order to use the Windows login option, in the configuration file `ifvault.cfg`, do the following:

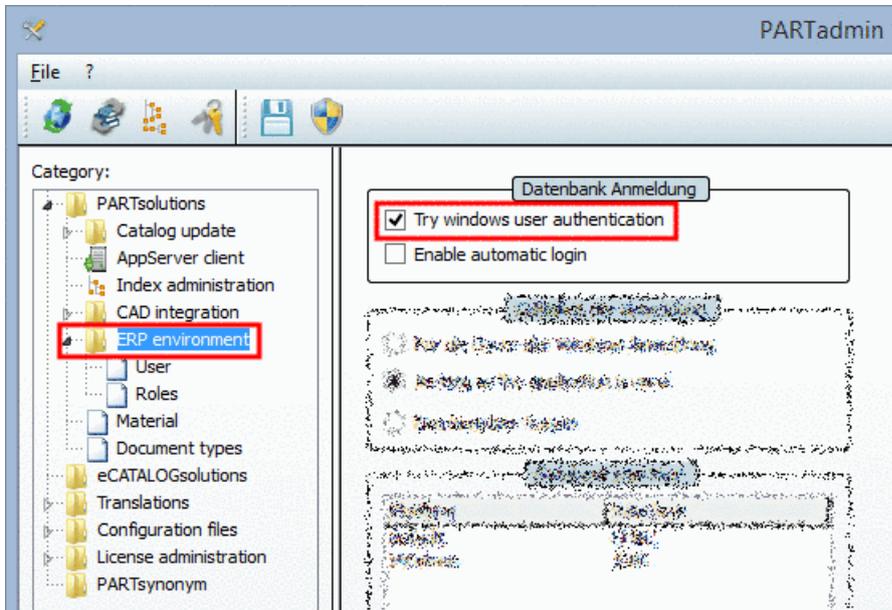
¹⁶#47631

¹⁷#39947

¹⁸#33775

- Change VAULT_ENDPOINT_URL to **VAULT_ENDPOINT_URL_00**
- Under **VAULT_ENDPOINT_NAME_00** insert a server name

If the Windows user authentication is enabled (compare NT-Benutzerauthentifizierung versuchen) then the CFG entries for user and password are ignored. The rest is as usual.



18.22. All CADs: Unknown or not supported mates (tilt / swivel) are replaced by fixed mates

Unknown or not supported mates (tilt / swivel) are replaced by fixed mates. In other words: All parts that were not constrained during assembly creation, whether because they had no constraints assigned from the source file or because their constraints are incompatible with the CAD system, will become 'fixed' in the resulting assembly.¹⁹

¹⁹#46237, #48611

Chapter 19. V9.08 SP3

19.1. AGILE E6: Installer available

Interface implemented based on new maiercss communication protocol.¹

There are two new files now:

- ifaces\vbs\agile\agile_public_api.vbs -> %cadenas_setup%/scripts/plm/autoexec (Note: with V10 at another location)
- %cadenas_setup%/agile_public_api.cfg

¹#54141

Chapter 20. V9.08 SP2

20.1. Catalog update: XVARSET - Adjustment of decimal places

As of 9.08 SP2 the decimal places of XVARSET are automatically adjusted - if differing. So it is ensured that no duplicates are created.¹

For older versions please execute the following command:

```
padmin.exe -updateWrongVersions Katalogname -updateXVarset
```

In the log window you will get a list of projects where XVARSET has been adjusted.

Note

- The PARTadmin command only adjusts the decimal places - not already existing wrong entries.
- For catalog updates, in order to avoid problems never use the option "**Only keep the new version**" in an ERP environment.
 - PLMTABLE2 cannot be updated.
 - The use of **Update manager** is restricted.

20.2. Creo Parametric 3.0 interface available

Creo Parametric 3.0 interface (32 and 64bit) has been included in the PARTsolutions installer.²



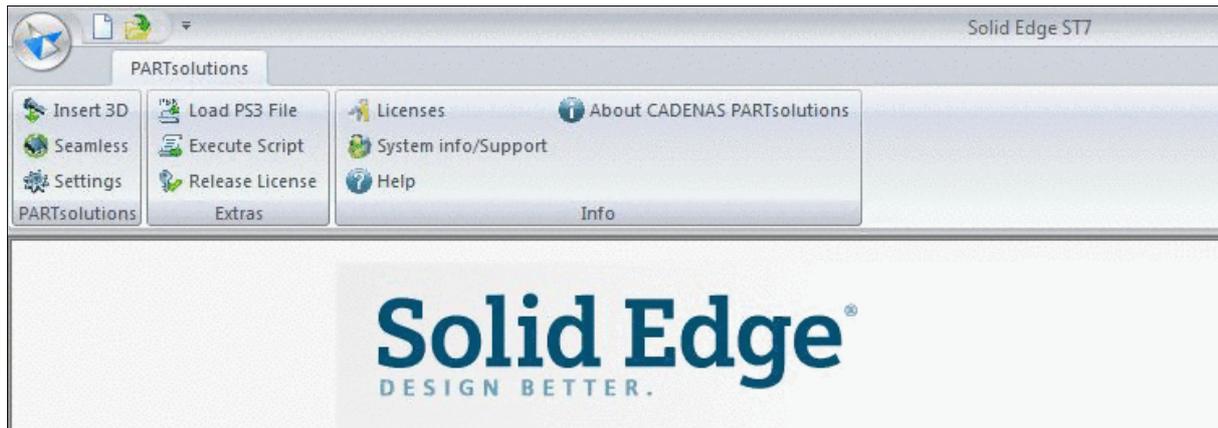
20.3. Solid Edge ST7 interface available

SolidEdge ST7 interface has been included in the PARTsolutions installer.³

¹#49679

²#52017

³#48135



Note

There is no 32 bit installation for ST7.

20.4. CATIA: Installer package for V5R24 available

As of V9.08 SP2 you can find the installer package for V5R24 on the ISO.⁴

Note

As of CATIA V5 R23 Dassault only supports the 64 bit version. Thus there are no 32 bit packages available anymore as of R23.

20.5. MYSQL: Update table structure

You can update the table structure of your MYSQL PLINKDB as of V8.1.09 to the state of V9.08 SP3 via script.

After executing the script both "old" V8 entries can be read and new entries can be written into the database.

Change steps:

```
* 8.1:
- add table: PLMTABLE2
- add table: PLM_HIERARCHY
- add table: CNSSEQ

* 9.00:
- add table: TREETABLE
- add table: CLASSASSIGNTABLE

* 9.01:
- add index: ELI_INDEX_PRJ_PATH ON LINKTABLE (PRJ_PATH);
- add index: ETR_INDEX_PRJ_PATH ON TREETABLE (PRJ_PATH);

* 9.02:
- add table: LOCKTABLE
- during development of 9.02 the LOCKTABLE column
  SESSION was renamed to SESSIONID

* 9.03 SP3:
- alter PLMTABLE2.VERSION to be nullable (remove NOT NULL)

* 9.04 SP0:
- alter LINKTABLE: add VARSET_UPDATE column
- alter TREETABLE: add LEVEL0-LEVEL9 columns
```

⁴#51285

```
* 9.07
- VARCHAR to NVARCHAR

* 9.07 SP1
- alter PLMTABLE2: add CREATIONINFO column
```

You can find the script on the installation DVD as of PARTsolutions V9.08 SP2 under `tools\databases\MYSQL\plinkdb_patch_mysql.sql`.

Chapter 21. V9.08 SP1

21.1. Teamcenter - UG-NX: HandleError in TC_HookService

Operation:

1. Start and login to Teamcenter
2. Start NX from Teamcenter
3. Start PARTdataManager from NX
4. Select a part and CAD-export

After 4, the following error occurs

```
Error:Failed to set the release status for the Teamcenter Item (<TC_ItemID>=000464).
Failed to retrieve the Teamcenter objects.
Cancel document creation
```

(The Item is created in Teamcenter, however the item revision does not have "released" status.)

Solution:

The error.log gives a hint on line 1496.

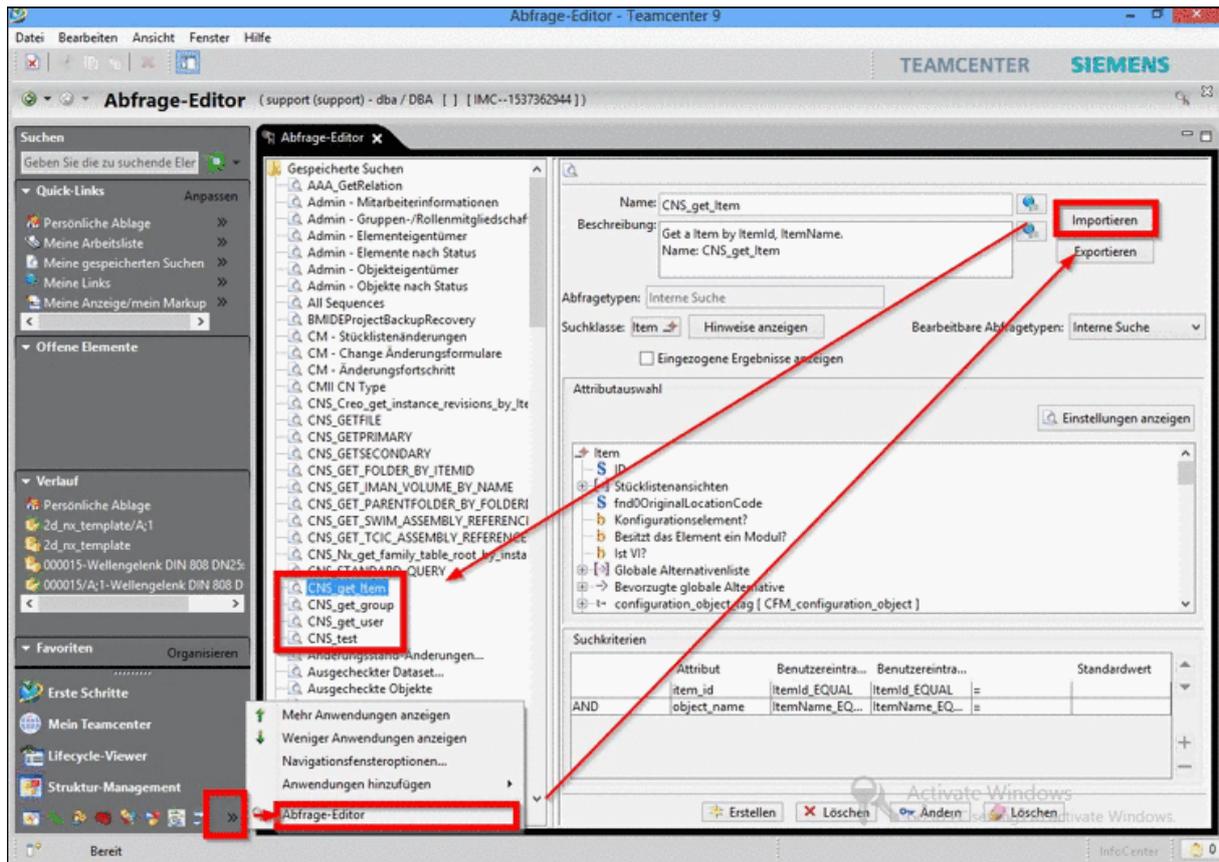
```
2014-09-03 17:58:41,492 [HIGHCNT=107674087023] [PROC=wscriptshost.exe]:[PID=0x00000d50]:
[thread=0x00000b38] ERROR cadenas.scripting.vbs.teamcenter.public TcDatamanagementServiceC::
getItemById \\WIN-J1RQ2BV2VSH\cadenas\setup\scripts\plm\autoexec\teamcenter_public_api.vbb
(2203) - GetItemById on DatamanagementService failed. Error: <prx_Teamcenter_Services_Query
_SavedqueryService::getSavedQuery> in <Couldn't find the saved query <CNS_get_Item> !> !
```

The **CNS_get_Item** is a nex xml query, which needs certain XML files. If these files are missing some HookServices cannot be used on the Teamcenter Server.

The xmls or better Query files are stored here:

```
C:\cadenas\partsolutions\software\iface\plm\teamcenter\saved_queries
```

You can import them with the Teamcenter Query Editor.



21.2. Command-line script updates ERP search index

Changes in the ERP system are cyclically gathered (e.g. daily or several times a day, mostly by night) and transferred to the LinkDB (\$CADENAS_SETUP/scripts/erp/nightupdate.vbb).¹

Now, as of V9.08 SP1 another script file is available, which updates the **ERP search index** (\$CADENAS_SETUP/scripts/erp/nightupdate_erp.vbb).

21.3. Special thickness algorithm available in geomsearch.cfg

May be for some customers it is interesting to add the topological attribute "**Sheet thickness**" into the standard. Only disadvantage: Longer search times.²

Enhance configuration file

In order to enhance the standard, please perform the following changes in the configuration file under \$CADENAS_SETUP/geomsearch.cfg:

- Block **ALGOS**

To **AvailableSystemAlgoList** and **CreationSystemAlgoList**, add "**THO**"

```
[ALGOS]
AvailableSystemAlgoList=...,...,THO
CreationSystemAlgoList=...,...,THO
```

- Block **AlgoTypes**

Add the following key and value:

```
[AlgoTypes]
THO=TOPO
```

¹#48189

²#45903

- Block **Category_size**
To the key **properties** add "**sheetthickness**"

```
[Category_size]
properties=...,...,sheetthickness
```

- Block **TOPOINDEXES**
To the keys **AvailableIndexes** and **CreationIndexes** add "**sheetthickness**"

```
[TOPOINDEXES]
AvailableIndexes=...,...,sheetthickness
CreationIndexes=...,...,sheetthickness
```

- Add the following blocks:

```
[Property_sheetthickness]
name=sheetthickness
displayName=Blechdicke
op_displayName=Blechdicke
description=Blechdicke
algoname=THO
algopropname=ABSTHICKNESS
type=DOUBLE(0, 0, 1000000000, 3)
measure=LENGTH
argCount=0
operators=EQ,NEQ,LEQ,GEQ,LT,GT,RANGE
multiple=
icon=$CADENAS_SETUP/bitmaps/topology/thickness.png
compactDisplayName=
visibleInGUI=1
defaultoperator=
visualizationInfoProp=
measureType=
searchResultTooltipTemplate=
searchResultTooltipProp=
searchResultDisplayTemplate=%loop1%<span style="%style%">%each01%</span>%endloop%
searchResultDisplayProp=
showAlways=0
defaultStyle=
matchStyle=background-color: #ff9900
TopoIndexName=sheetthickness

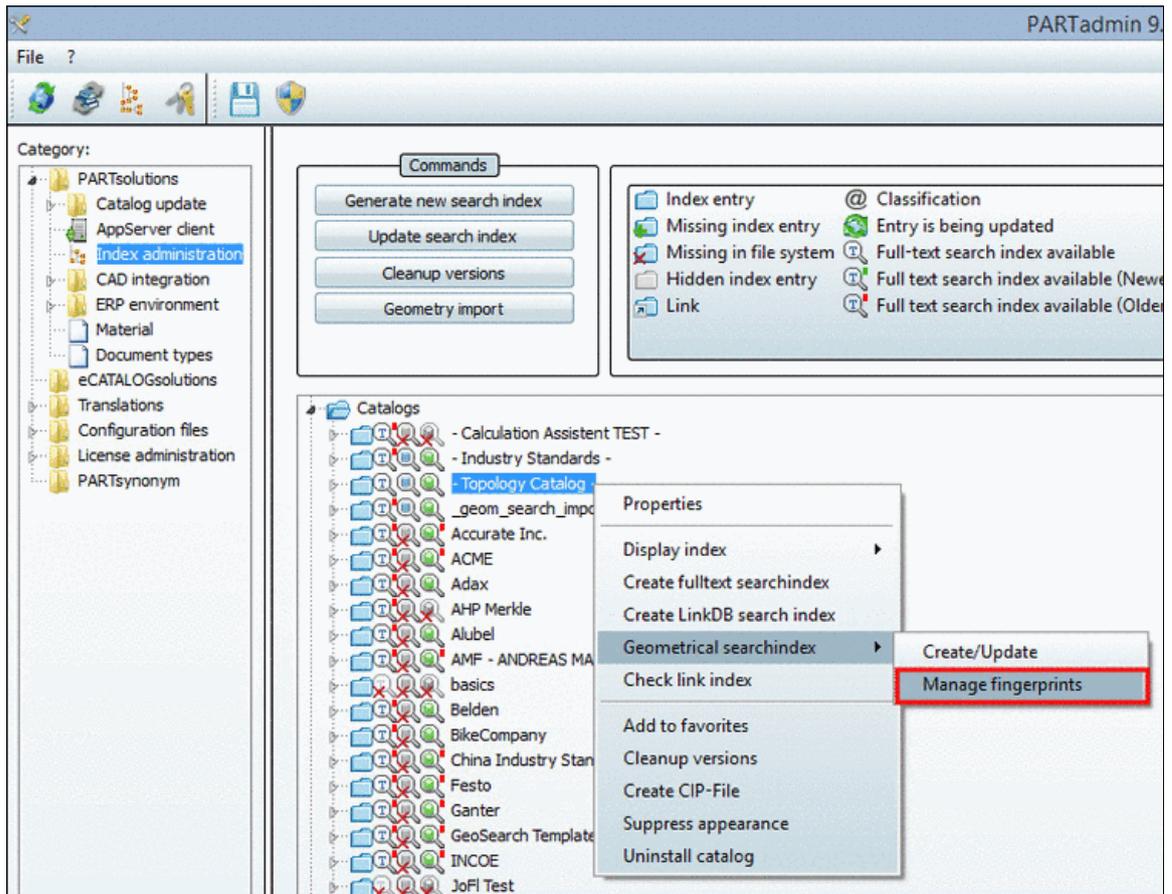
[Index_sheetthickness]
KeyType=DOUBLE(0, 0, 1000000000, 3)
FilterCount=1
Filter1_objectName=THO
Filter1_attributeName=Thickness
Filter1_ScanLevels=
ContainerLevels=line,prj
```

Geometrical search index create anew

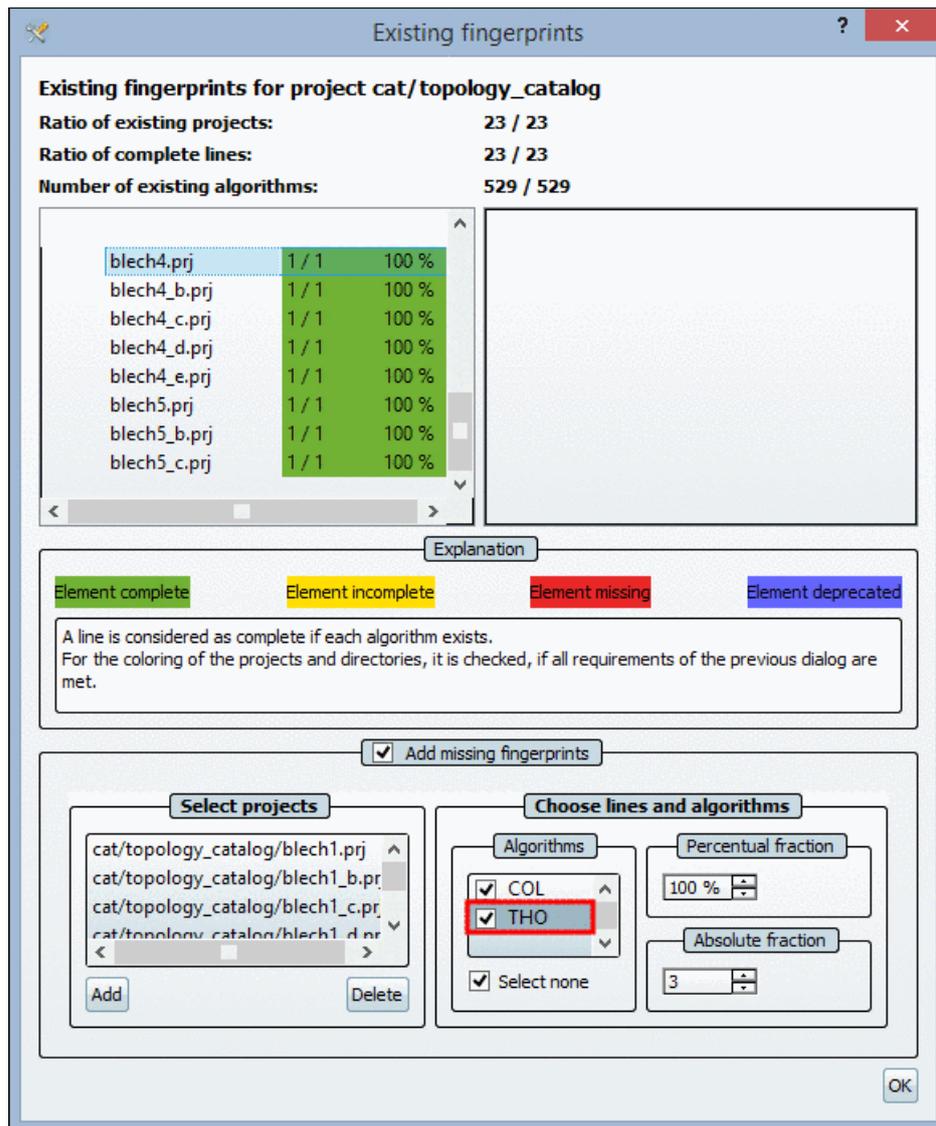
Note

After changes in the configuration file `geomsearch.cfg` the **Geometrical search index** has to be created anew. Please use the 64bit version of **PARTadmin** for short generation time.

1. Call up **PARTadmin**.
2. At the desired catalog, call up the context menu command **Geometrical search index -> Manage fingerprints**.

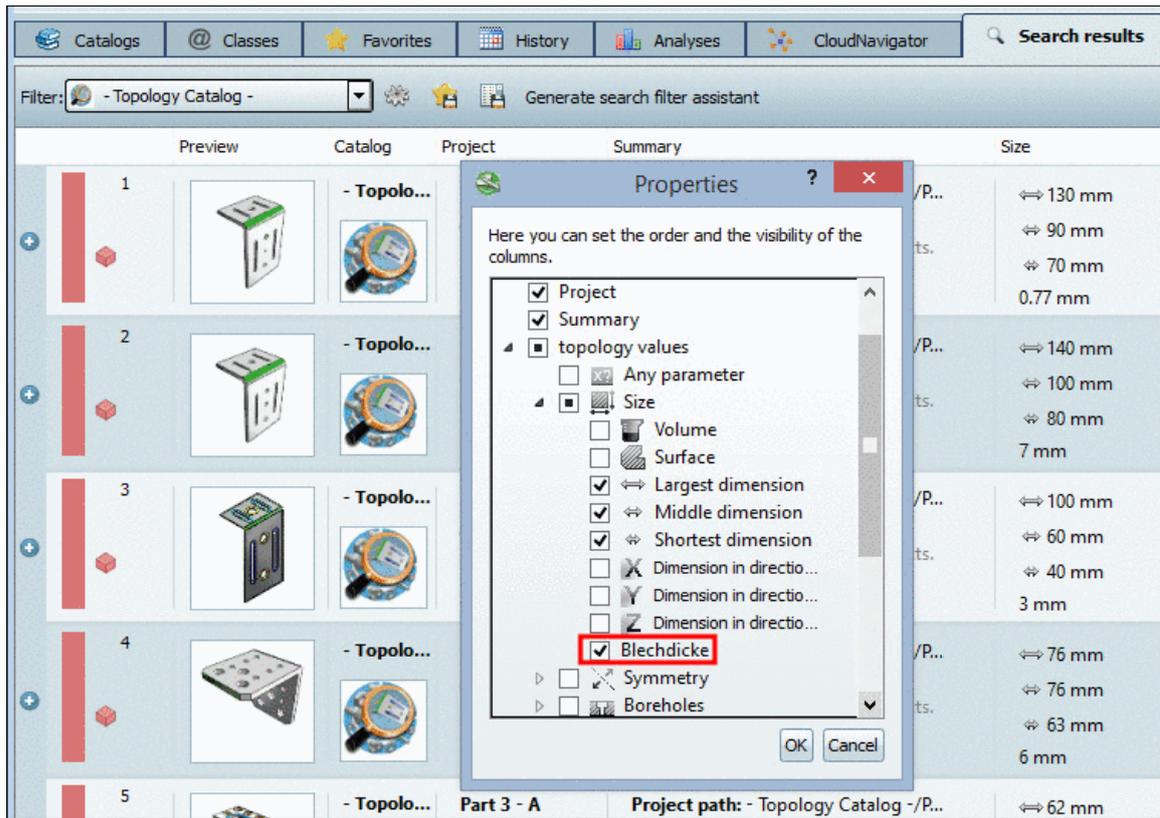


3. For the desired parts, create fingerprints with algorithm **THO**.



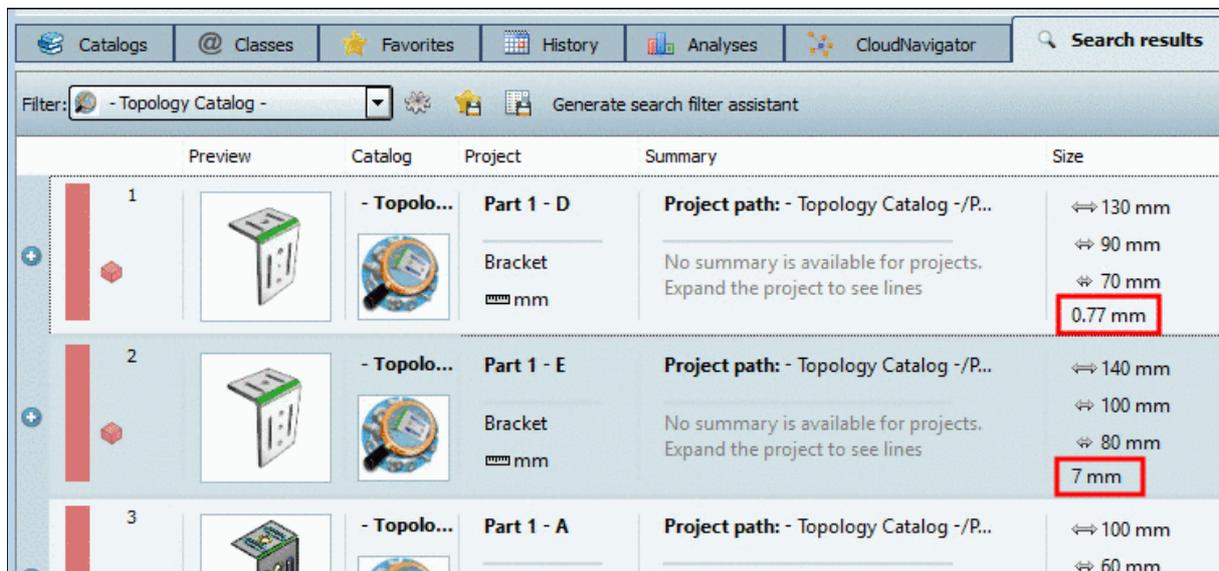
Use of the topological attribute "Sheet thickness" in PARTdataManager

1. On the tabbed page **Search results**, open the dialog box **Properties** by right-clicking in the column header.



- Open the tree and under **Topology values** -> **Size**, select the checkbox at "**Sheet thickness**" ("Blechdicke").

Now, when performing a search, in the column **Size** the sheet thickness is displayed in addition.



Furthermore, in the **Part comparison** dialog, the topological attribute **Sheet thickness** is displayed.

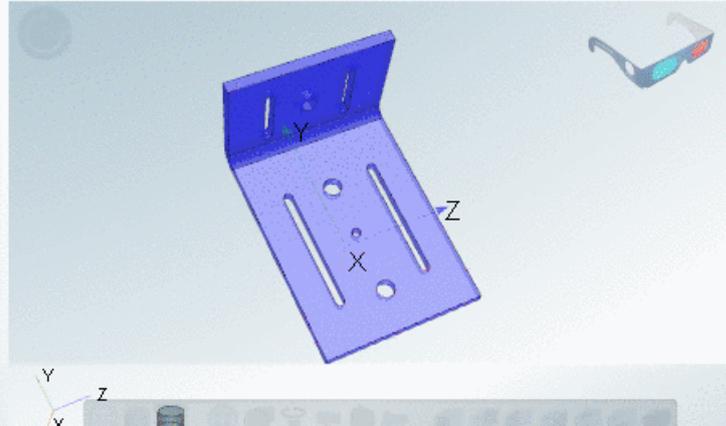
Use Cases (Online) **Part comparison**

Tabular Compare

Symbol	Description	432004
		 X
		M 1 2 
+ ERP data		
+ Parameter		
- Topology		
- Size		
	Volume	95787.4 mm ³
	Surface	38478.3 mm ²
	Largest dimension	130 mm
	Middle dimension	90 mm
	Shortest dimension	70 mm
	Dimension in direction of x...	70 mm
	Dimension in direction of y...	130 mm
	Dimension in direction of z...	90 mm
	Sheet thickness	6 mm
+ Symmetry		
+ Boreholes		

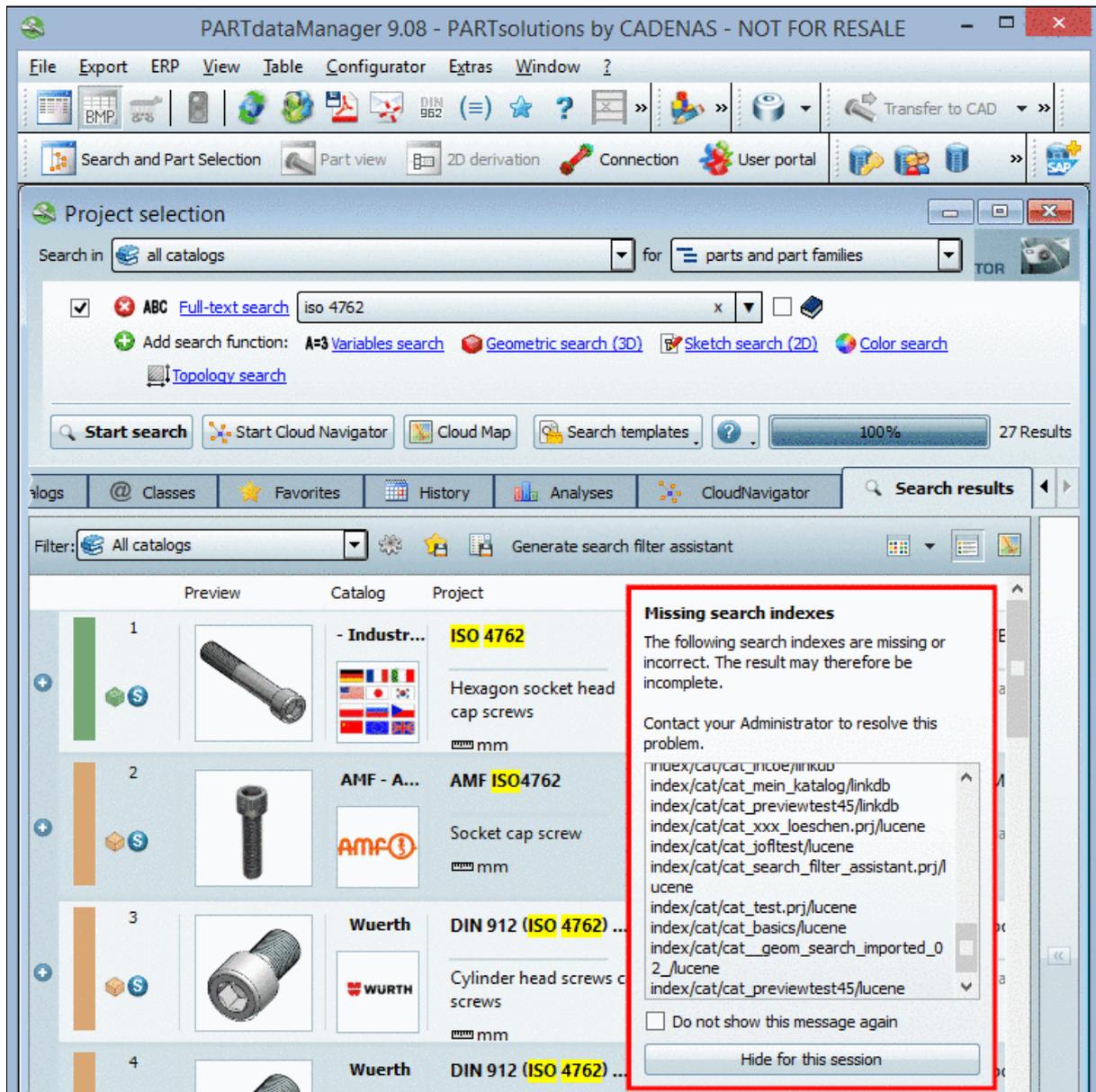
Select project line

3D comparison



21.4. PARTdataManager: Suppress note at missing search indexes

If search indexes are missing, in **PARTdataManager**, after searching a respective not is displayed.



Exemplary message in PARTdataManager

You can hide the note in future by selecting the checkbox **Do not show this message again**.

Should the note be suppressed basically, set/change the respective key in the configuration file.

\$CADENAS_USER/partsolu.cfg:

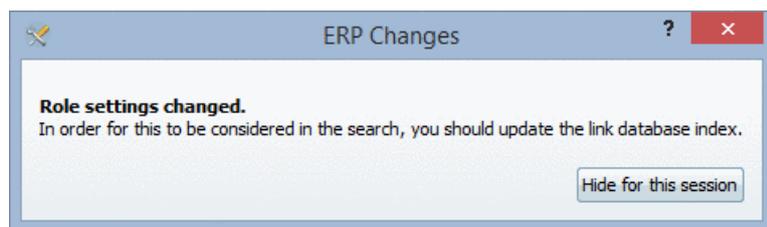
```
[ INDEXTREESearch ]
SHOW_MISSING_INDEX_HINT=0
```

Currently notes are displayed for missing **full-text search indexes** and for missing **LinkDB search indexes**.

On this see under Section 1.3.8.6.2, "Context menu commands in detail" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*, Point **Create full-text search index** and **Create LinkDB search index**.

Further notes:

As soon as **role settings changed**, in **PARTadmin**, the note is displayed that the **LinkDB search index** has to be updated.



Relevant role changes are:

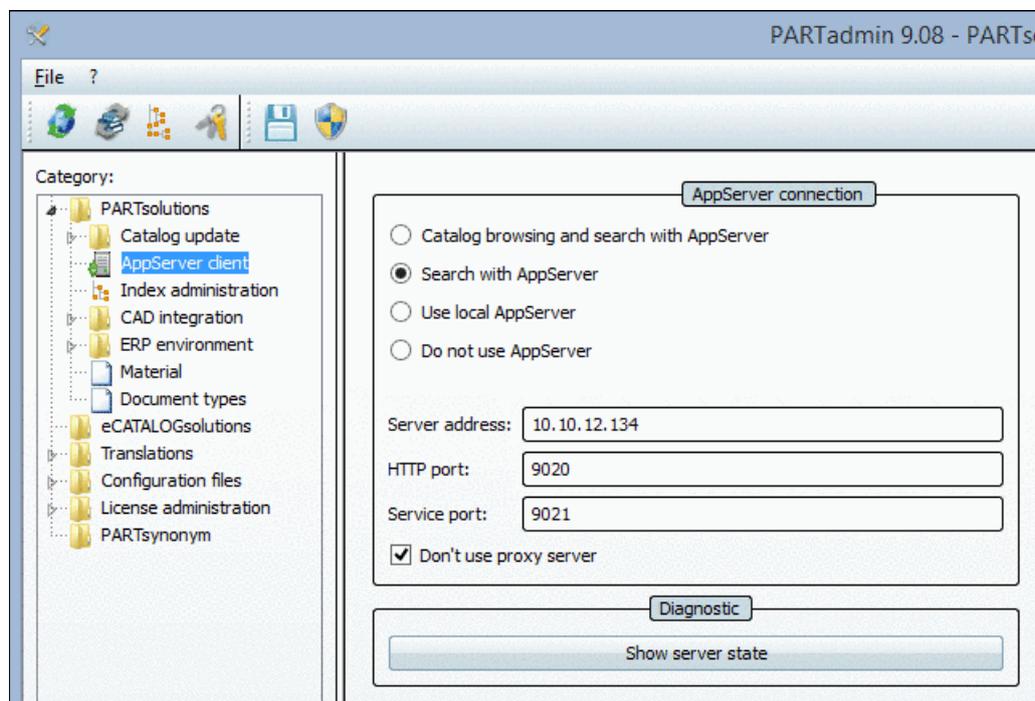
- Preferred ranges
- Filter condition for datasets
- Viewing condition for table rows
- Columns to be displayed
- Columns not to be displayed (export only)
- Display condition for parts selection

See Registerseite Allgemein.

21.5. Global and local PARTApplicationServer settings

Please perform the **AppServer Client configuration** in **PARTAdmin** -> category **AppServer client**.³

Here, you can define how clients should access the AppServer, meaning via which ports, whether a local AppServer should be used, whether the AppServer has only to be used for searching or for catalog browsing as well.



PARTAdmin -> "AppServer Client" category

The following listing explains the settings in particular:

- **Catalog browsing and search with AppServer**
As of PARTsolutions V9.08 there is only ONE central data directory for multi-installations as well.

³The configuration file for the AppServer client configuration is found under `$CADENAS_SETUP/pappclient.cfg`.

All access (catalog browsing and search) is processed via **PARTapplicationServer** - regardless from which location.

Thus select this option, if PARTsolutions is used remotely without synchronization of catalog data.

Therefore a specific license is needed.

Note

Using the API requires another license. Thereby third party systems can access the PARTapplicationServer.

Note

With this option there is no write access to **\$CADENAS_DATA**.

- **Search with AppServer**

Only the search runs on the AppServer.

Therefore no extra license is needed.

- **Use local AppServer** (default)

Using the local AppServer is advantageous compared to `pdatamgr.exe`. This is running on 64Bit, whereby possible memory problems are avoided.

The local AppServer is only used for searching, not for catalog browsing.

The AppServer is automatically started and exited together with **PARTdataManager**. If **Seamless** is also started, then **Seamless** uses the already running application.

- **Do not use AppServer**

All processes are running via **PARTdataManager**.

Enter server address and ports: (only active with the options **Catalog browsing and search with AppServer** and **Search with AppServer**)

- **Server address:** Here please enter the server address
- **HTTP port:** 9020 (default) [used for the file system]
- **Service port:** 9021 (default) [used for index and search]
- **Don't use proxy server:**

The respective keys and values of the configuration file

Clientmode can assume the following values:

- **Remote:** Connection with RemoteServer
- **Local:** A local AppServer is started, when **PARTdataManager** is started
- **Noserver:** No access on AppServer

remoteFileSystem: The key controls, whether the Remote File System shall be used, meaning whether the catalogs shall be fetched via AppServer.

The key can assume the following values:

- YES
In this case there is no write access possible to CADENAS_DATA.
- NO

Key combinations and values of the single GUI options

- **Catalog browsing and search with AppServer**

```
[Common]
clientmode=remote
remoteFileSystem=YES
```

- **Search with AppServer**

```
[Common]
clientmode=remote
remoteFileSystem=NO
```

- **Use local AppServer**

```
[Common]
clientmode=local
remoteFileSystem=NO
```

- **Do not use AppServer**

```
[Common]
clientmode=noserver
remoteFileSystem=NO
```

The key **applications** controls, which applications shall use the **PARTApplicationServer** and which not.

Global and local specification of the settings

Note

The usage of the **PARTApplicationServer** may be specified globally and locally.

First of all the file `$CADENAS_SETUP/pappclient.cfg` applies **globally** for all users.

However, in the file `$CADENAS_USER/partsolu.cfg`, for single clients certain keys can be overridden **locally**. If nothing is set, then the settings from `pappclient.cfg` apply.

Example:

Configuration file: `$CADENAS_SETUP/pappclient.cfg`:

```
[COMMON]
clientmode=remote
remoteFileSystem=YES

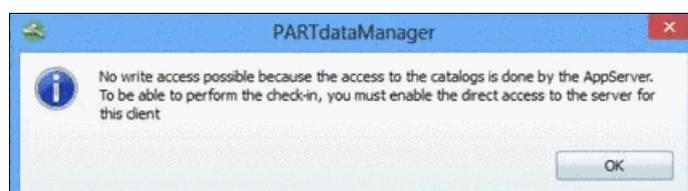
applications=pdatamgr,pseamless
```

applications=pdatamgr,pseamless (default): PARTdataManager and Seamless fetch their data from AppServer.

clientmode=remote: Connect with RemoteServer

remoteFileSystem=YES: The Remote File System shall be used, meaning the catalogs shall be fetched via AppServer.

In this case, if a normal user tries to perform a **NativeCheckin**, an error message is displayed:



No write access possible because the access to the catalogs is done by the AppServer. To be able to perform the check-in, you must enable the direct access to the server for this client

Reason:

- a. The global configuration file defines, that **PARTdataManager** (thereover the interface function **NativeCheckin** runs) uses the **PARTApplicationServer**.
(applications=pdatamgr,pseamless)
- b. Furthermore the Remote File System shall be used via AppServer.
(remoteFileSystem=YES)

So when in the local configuration file, for example at an Admin working place, the key remoteFileSystem is overridden, NativeCheckin should be possible.

Configuration file: \$CADENAS_USER/partsolu.cfg:

```
[COMMON]
remoteFileSystem=NO
```

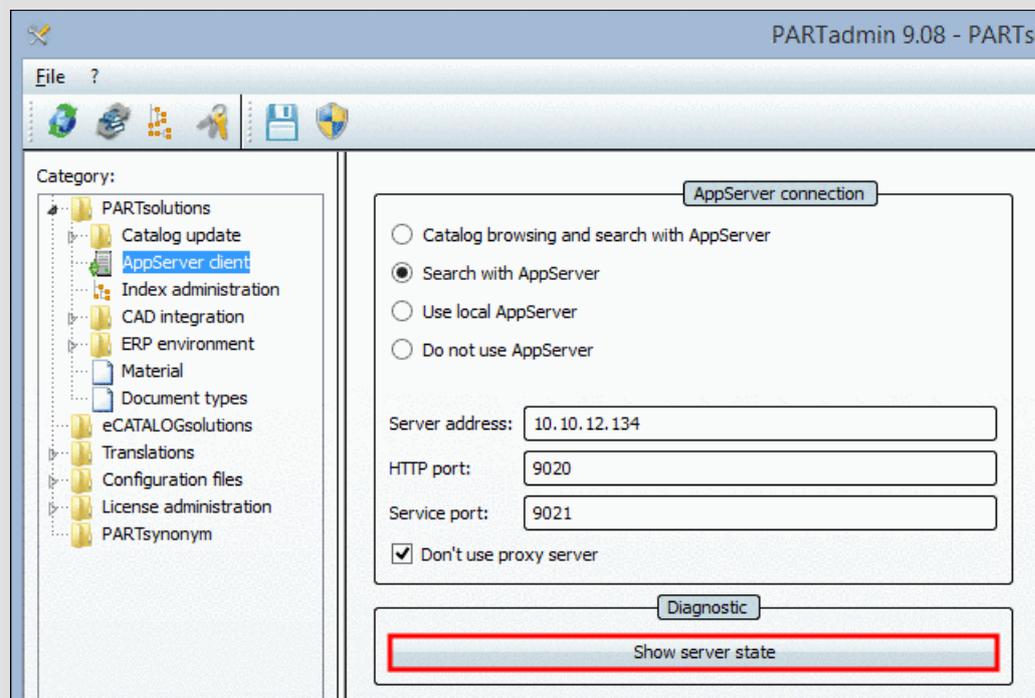
Now access to \$CADENAS_DATA does not happen via AppServer anymore (which does not have write access). Now \$CADENAS_DATA can be accessed via UNC or network drive.

Note

For Admin computers, please set the environment variable \$CADENAS_DATA respectively.

The DATA path via which the **PARTApplicationServer** accesses the catalogs, is displayed in the dialog box **Server state**.

In order to see the path, in **PARTAdmin** -> category **AppServer client**, click on the button **Show server state**.



On the tabbed page **Environment**, you can find the line **CADENAS_DATA**.



21.6. SharedIndex on \$CADENAS_USER

When using the **AppServer** the **Shared Index** may not be on \$CADENAS_DATA.

That's why there is a new key:

Configuration file: \$CADENAS_SETUP/partsol.cfg

```
[PARTindex]
SharedIndexDir(AppClient)=$CADENAS_USER/shared
```

When this key and value is used, the Shared Index is set up locally.

21.7. Check link index

Problem:

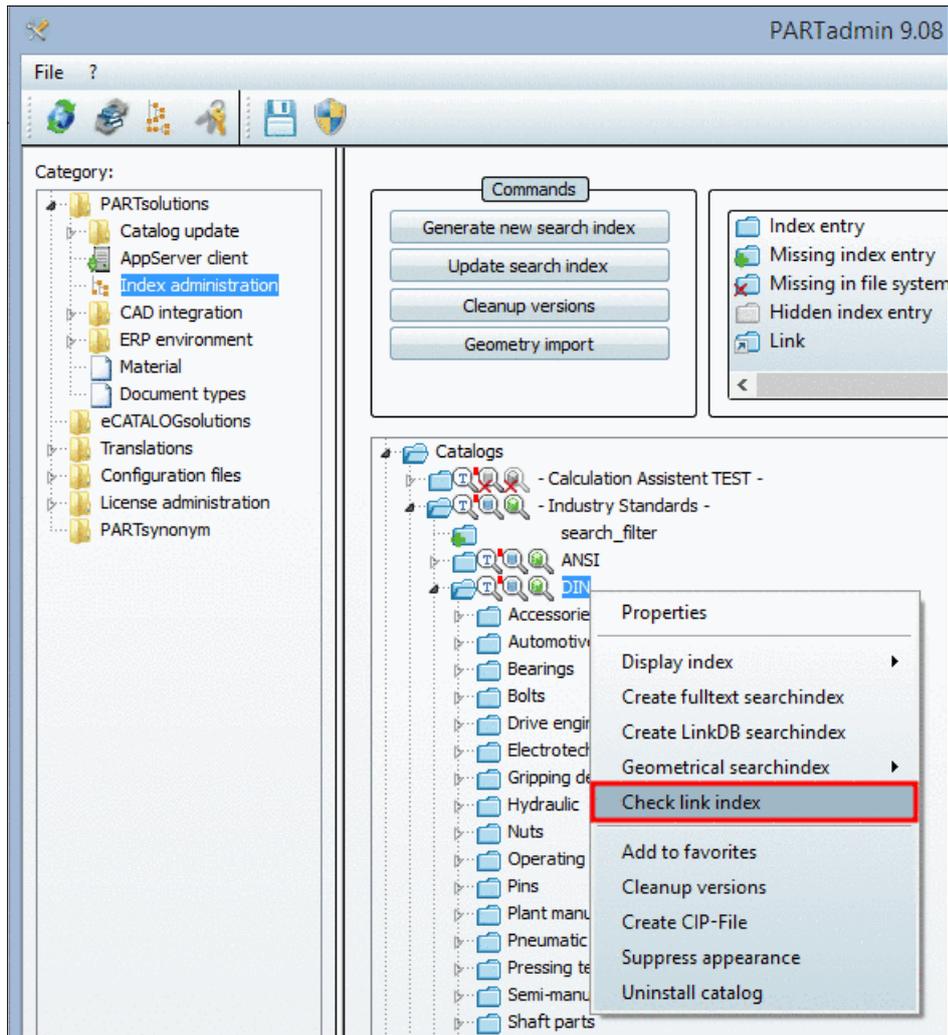
Up to now it was difficult to detect errors in the **Link index** (debug mode via debug.cfg).⁴

Solution:

Now as of version 9.08 SP1 you can use a GUI command on this:

PARTadmin -> Category **Index administration** -> Context menu of catalog/directory/project
-> **Check link index**

⁴#42841



If errors arise when executing the command **Check link index**, a message box is opened with the question whether the link index shall be created anew.

The **Link index** is part of the **Display index**. If the link index is faulty (recognizable by missing search results for example), the **Display index** could be generated for all catalogs as well. However that would need considerably more time than only updating the **link index**. This takes only a few minutes, even at a hundred catalogs.

21.8. Scripts for statistical evaluations

Zipped script files for statical evaluations can be found on Installation ISO and DVD under <root>/tools/InnovationStatisticScripts.⁵

21.9. start.env with conditional sections

It is possible to use conditional sections in start.env.⁶ This was introduced in order to be able to use one start.env in our PartServer environment for all checkouts.

The conditional sections depend on other environment variables.

Change is as follows:

```
[ENVIRONS]
var=value
```

⁵33429

⁶#48221

```
[ ENVIRONS ( COMPUTERNAME=EXV9* ) ]  
var=value  
  
[ ENVIRONS ( COMPUTERNAME=BEXV9* ) ]  
var=value  
  
[ ENVIRONS ( LOGONSERVER=*server.de* ) ]  
var=value  
  
[ ENVIRONS ( LOGONSERVER=server.it* ) ]  
var=value
```

The file is now parsed from top to bottom.

The last match wins (overwrites the var).

Any existing os-env-var can be used.

3 operations at the moment:

- VAR=text* => StartsWith
- VAR=*text => EndsWith
- VAR=*text* => contains

21.10. Show specific Topology and/or ERP values in search results

Up to now:

Display of topological values on the tabbed page **Search results** especially only at **Topology search**.

Innovation:

Now you can enable any topological values for every search in the **Properties** dialog box. For all search results these are displayed independent from the used search method. May be you want to see how many holes a part has for example, because this is not visible in the preview or you want to see **Largest dimension**, **Middle dimension** and **Shortest dimension** by default for example.⁷

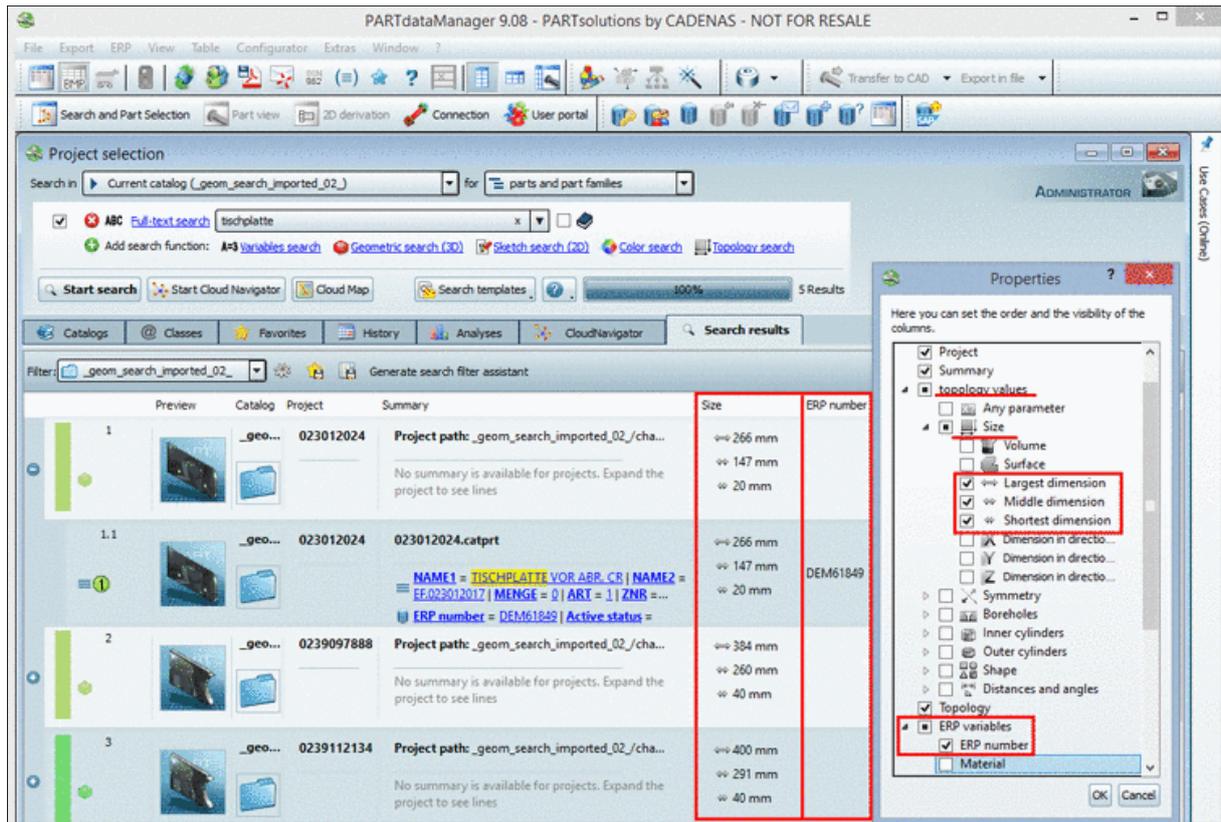
In the dialog box all properties are grouped by categories.

Furthermore you can display desired ERP values, independent from the used search method as well. Namely all ERP values are listed in the column **Summary**, but may be it is more comfortable to display the ERP number for example separately.

Setting options:

Call up the **Properties** dialog box by right-clicking on the column header of any table column of the **Search results**. Open the tree and select the checkbox at desired topological values.

⁷#41659, #48677

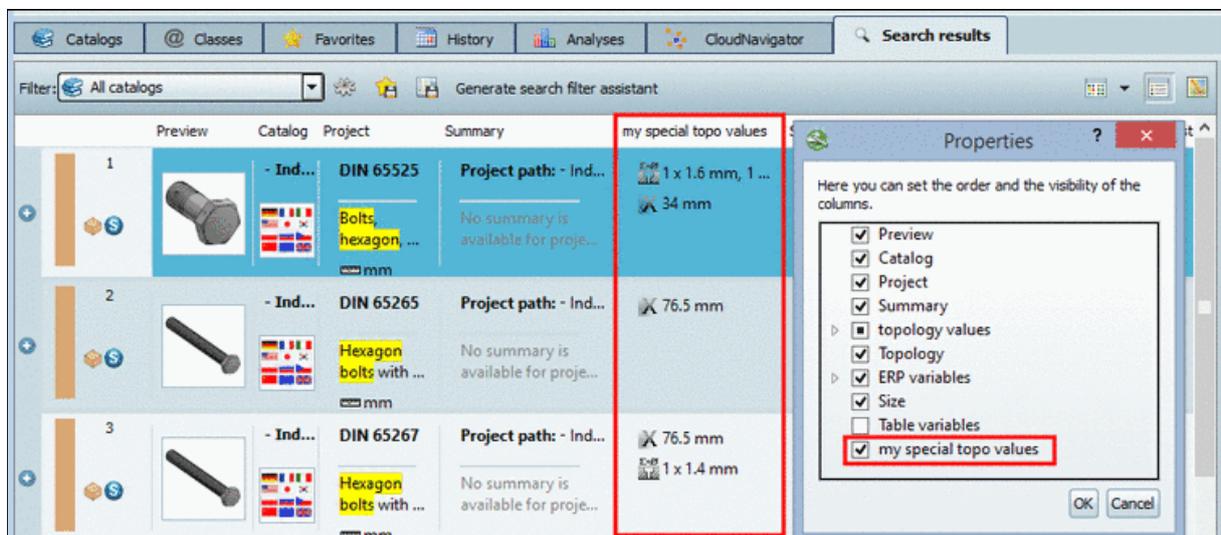


Maybe it is interesting in Consulting projects in addition to **define columns with own combinations of topological values:**

Therefore add an own xml file under \$CADENAS_USER/columns (e.g. topo.xml). (All xml files stored there are evaluated.)

```
<?xml version="1.0" encoding="UTF-8"?>
<columns>
  <!-- topo properties column -->
  <column name="TopoProperties" views="search" type="topoColumn" title="my special topo values"
  &#10;topoAttributes="holeCountWithDiam2,xextension" generateMissing="true" />
</columns>
```

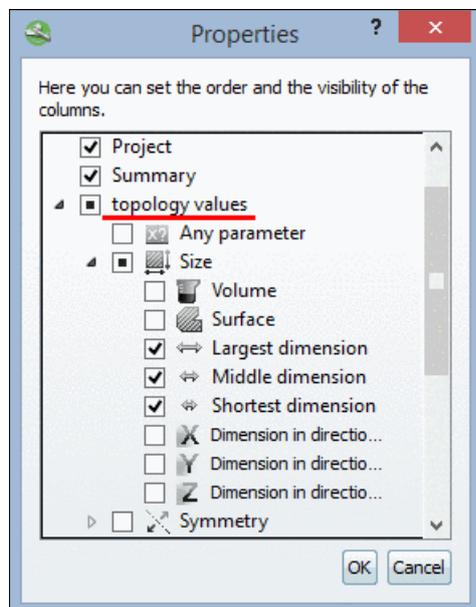
In this way you can mix any properties in a column, also with properties from different categories (e.g. if only ONE column is desired).



Own topology column

21.11. Suppress regeneration of missing topology data

In the standard catalog for example fingerprints only exist for a few lines. Now, when setting the option **Topology values**, the generation of missing topology data is processed by default.⁸



If this behavior is not wanted then you have the possibility to suppress the regeneration of topology data.

```
$CADENAS_USER/psolopt.cfg
```

```
[SettingsIndexTree]
GenerateMissingTopologyData=0
```

Set the above key with value 0.

Now the respective values remain empty.

21.12. Execute reports on AppServer

As of V9.08 SP1 full reports functionality is also given when using the AppServer (exception **Supplier branches** and **Kanban**, but these can be run locally).⁹

21.13. Reports - Visible for all?

As of V9.08 SP1 it can be set via configuration file, whether a report is visible only for the creator or for all.¹⁰

```
$CADENAS_USER/reports.cfg (on the server)
```

```
[Common]
ReportsVisibleForAllUsers=0/1
```

- 0: Only that user, which created a report, may view, delete or cancel the report.
- 1: All may view, delete or cancel a report.

⁸Compare #41659, #48677

⁹#47649, #50829

¹⁰47649

Note

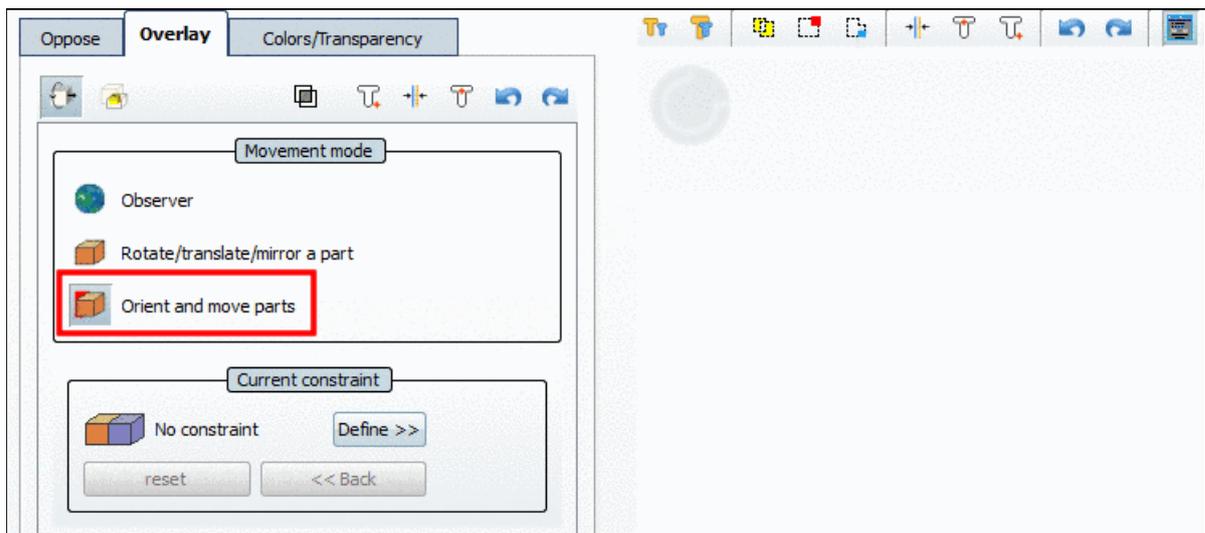
The distinction is made by the Windows username.

21.14. Part comparison - 3D view old/new

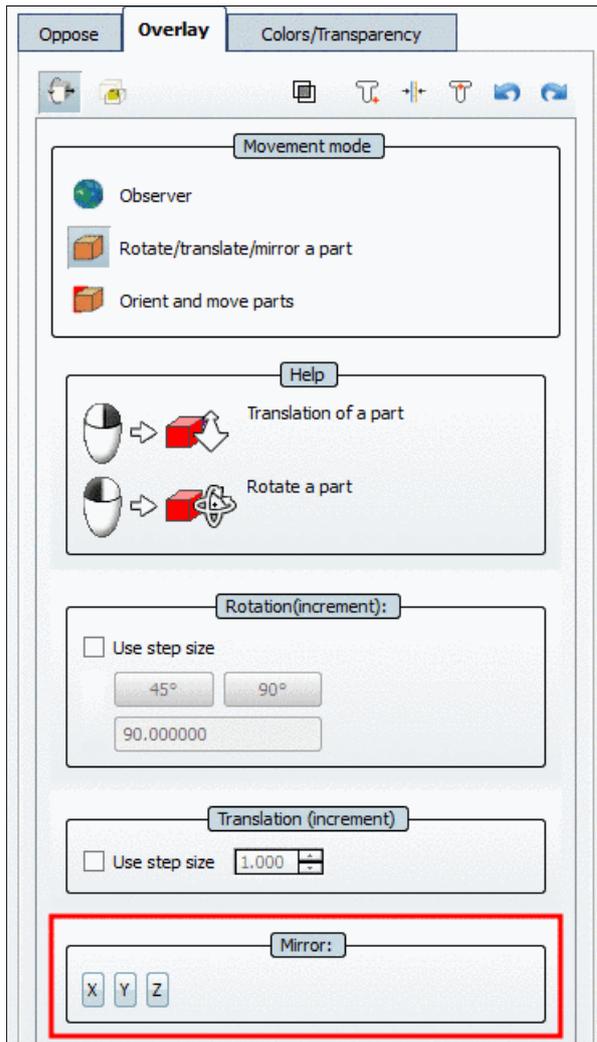
In the part comparison, now the new **3D view** is used as well (outwardly the same, but immense speedup for large assemblies).

2 functions are not available:

- **Orient and move parts**



- **Mirror**



If these two functions are essentially, then there is the possibility to switch to the old 3D view.

\$CADENAS_USER/psolopt.cfg

```
[SettingsAssembly]
ViewerCompare3DVersion=V1
```

Value range:

- V1: old 3D view
- V2: new 3D view

Detailed information on part comparison can be found under Section 3.1.6.10, " Part comparison " in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

Chapter 22. V9.08

22.1. Prioritize catalogs

Under `$CADENAS_SETUP/partsol.cfg` you can perform settings in order to prioritize certain catalogs.

Example:

```
[FULLTEXTSEARCH]
SimilarityFactor=cat/norm/*=1.5,cat/xyz=0.5
```

In this example the standards catalog gets higher priority than the catalog "xyz". When searching for a "screw" for example, hits in the standards catalog are listed first, followed by hits in the catalog "xyz" more behind.

At Standard catalogs, the wildcard (*) can only be used for catalog groups (e.g. cat/norm/*). At all other catalogs the syntax has to be in the following way:

Example:

```
cat/ahp
```

Folgende Anweisung funktioniert NICHT.

```
cat/ganter/*
```

22.2. PARTapplicationServer

22.2.1. Overview

Now the central service **PARTapplicationServer** can also be used for **PARTsolutions** and replaces the **SearchServer**. Up to now it only had been used for CADENAS Apps, PARTcommunity Mobile and for a while as PARTserver backend. Now the same technique is used for **PARTsolutions**. The user can search catalogs as usual, even if the catalog server is located at another company site. There is only ONE DATA directory.

Use cases for the PARTapplicationServer:

- Used by CADENAS **App** (PARTapplicationServer is located on CADENAS site).
- Used by **PARTsolutions V9.8** in order to avoid distribution and synchronization of catalog data (PARTapplicationServer is located at company site).
- In the future PARTsolutions can also use the CADENAS catalog server. In this way customers can save maintenance expenditure. (Supplier catalogs on the CADENAS-PARTapplicationServer and own parts on an inhouse PARTapplicationServer.)
- Access from third party systems such as PDM systems for example to the inhouse PARTapplicationServer, in order to show additional information.
- Access from third party systems such as CAD systems for example to the CADENAS website PARTapplicationServer, in order to directly show CADENAS content from there.

Using the PARTapplicationServer results in the following advantages:

- **Replication of \$CADENAS_DATA is obsolete**

The larger the catalogs database, the more time exposure is needed for the replication.

As of V9.08 catalog data does not have to be replicated to other locations. The replication can be omitted, because the **PARTapplicationServer** is much faster. If, however, it should also prove advantageous, caching via **SQUID** [<http://www.squid-cache.org>] is possible at secondary locations in addition.

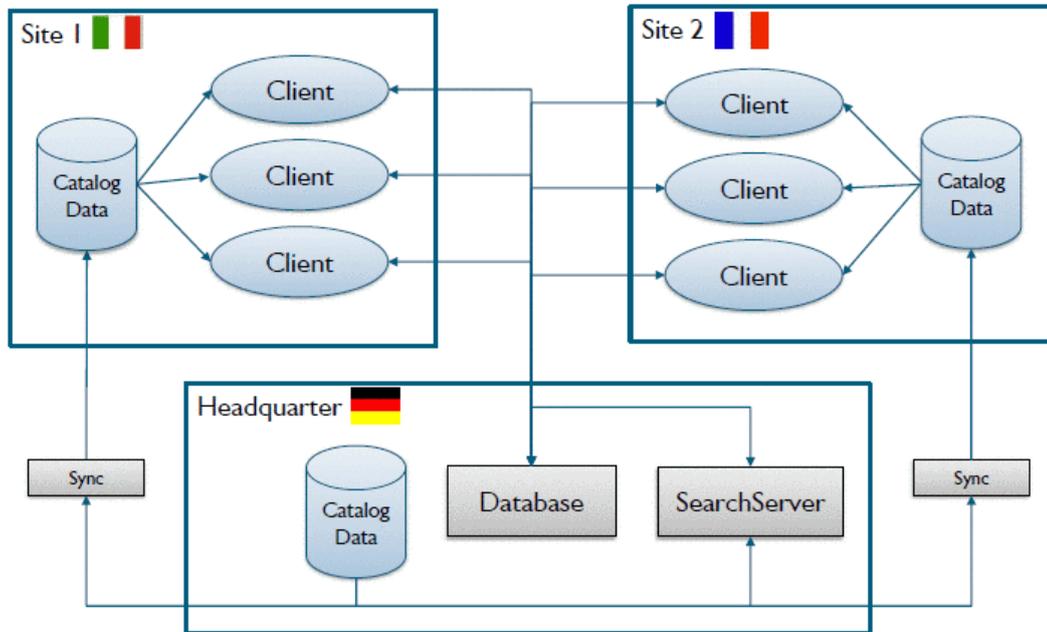
Using the **PARTapplicationServer** makes it possible to only install catalogs at one location and all clients - regardless at which location - access the **PARTapplicationServer**.

In so far link speed and latency play a role and thus caching. Caching holds downloaded parts as long as they are obsolete.

The two following figures compare the multisite installation structure up to V9.07 and as of V9.08:

- **Up to V9.07**

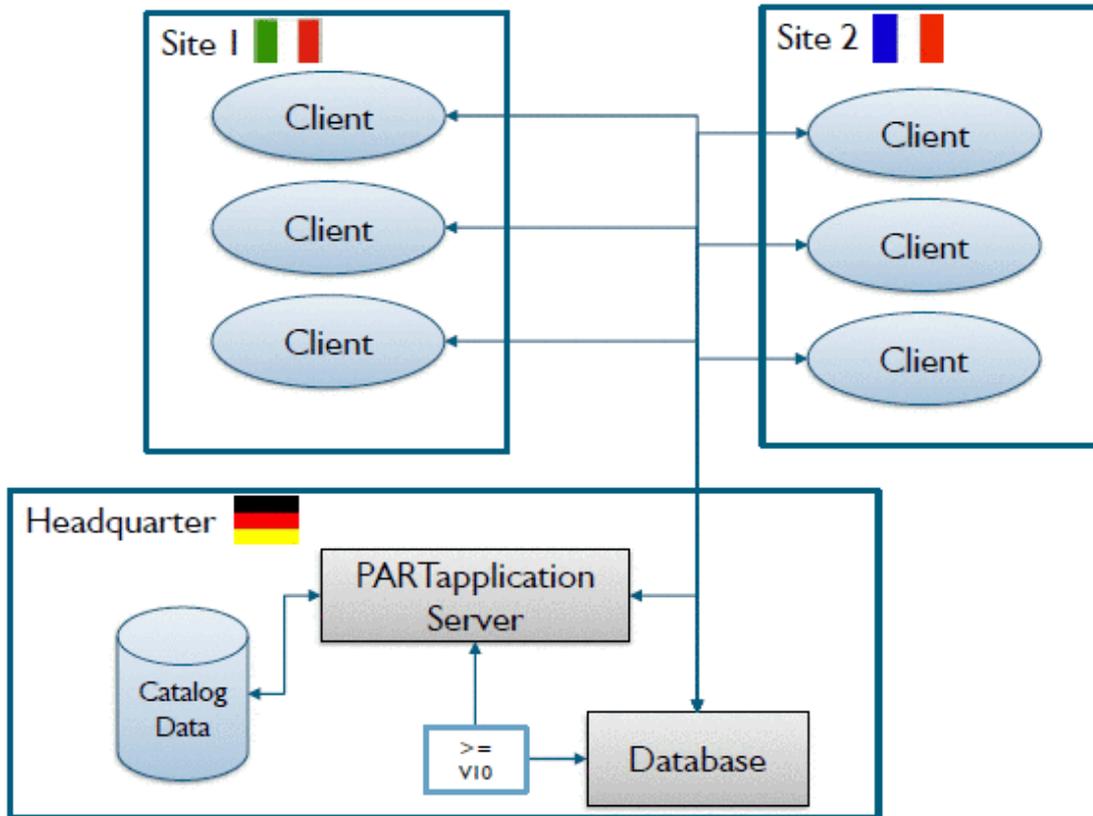
PARTdataManager (clients) directly access \$CADENAS_DATA.



With SearchServer V9.07 - V9.07 structure at large multisite installations

- **As of V9.08**

PARTdataManager (clients) now indirectly access \$CADENAS_DATA via **PARTapplicationServer**.



With PARTApplicationServer V9.08 - V9.08 structure at large multisite installations

- **Higher security - No user access to \$CADENAS_DATA**
The new concept leads to higher security: Direct, file based access to geometries is no longer possible. There is no direct access to \$CADENAS_DATA anymore. Thus users do not have to have access rights for \$CADENAS_DATA.
- **Direct access to \$CADENAS_DATA only by administration**
Administrative applications like **PARTadmin** directly access the 23d-libs directory with writing permission further on, because these have to perform changes there.
- **PARTApplicationServer also at Single workstation installation**
The **PARTApplicationServer** is also used for **Single workstation installation** (automatically started with `pdatamgr.exe`). This is advantageous, because then the search is outsourced and nevertheless can be used by all programs on the respective computer (**PARTdataManager** and **Seamless** for example). Thus more free memory is available, which again enhances the search speed.

22.2.2. Technical details

- **No replication/synchronization is needed:**
As of V9.08 there is no synchronization of CADENAS_DATA needed. At the local site, where the PARTApplicationServer is installed, access times then even will be a bit faster in compare to direct file access to 23d-libs.
At remote locations the speed should be Ok despite of accessing the headquarter. The main problem is the loading of large parts/ZJVs (also see caching with [Squid](#)).
- **Display of ERP information:**
With V9.08 clients further on directly connect to the LinkDB (in the same way as in current implementations).

Searching with filters and roles will be faster now from remote sites, although the LinkDB is not connected via AppServer. This is achieved by adding the LinkDB content to the full-text search index. That means, the LinkDB content has also to be updated by the "Nightly Update" (see Section 4.14.3.3, "Automated and cyclical update of data " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*).

- **No shared index on the server**

SharedIndex (partsol.cfg -> [PARTindex] -> SharedIndexDir) may not be configured on the server. Constant net access would slow down the search. SharedIndex is only used on clients. Also see Section 21.6, "SharedIndex on \$CADENAS_USER".

- **Ports settings:**

Ports for **PARTApplicationServer** and **SearchServer**, configured in the configuration files differ by default, so that it is possible to drive V9.8 and <= V9.7 parallel on one server, which could happen in the changeover phase.

- **Available functions** (with V9.08 SP0)

The PARTApplicationServer is providing the complete 23d-libs file system to PARTsolutions. That means:

- The file system is emulated on the lowest level, that means it is not possible to switch it off for some functions inside an application.
- Remote access is slower at large files.
- It is a read-only file system.

For the most used functions APIs are implemented in the PARTApplicationServer, in order to make it faster. But not yet for all functions. That means, a few functions will currently be disabled in AppServer mode, meaning all functions, which write on 23d-libs, because it's a read-only file system.

Functions in detail:

- Available with all features (the list contains the main points):
 - Catalog browsing
 - Search (text, geo, sketch, topo, color)
 - Background search
 - CloudNavigator
 - CloudMap
 - Auto complete
 - PARTconnection
- Slower:
 - **Reports (Search for unmachined parts, Purchineering)**
 - Listing of installed catalogs
- Not available, because for this writing permission is needed:
(Available on an Admin working place without usage of **PARTApplicationServer**)
 - **Native checkin**
 - **ClassificationToolbar**
 - **Own scripts**, which write on 23d-libs
 - **eCATALOGsolutions-PARTdataManager Configurator mode**
 - **Edit table**: This menu item is not displayed by default, but is used by some customers.
 - SharedPool for **Document scan**: Here the path should be set to the local user directory.

- **Caching**

- For external access from PARTsolutions to the PARTapplicationServer from secondary locations [SQUID](http://www.squid-cache.org) [http://www.squid-cache.org] can be optionally installed. Squid is free software, which is installed at customer site. For the **PARTapplicationServer** access HTTP is used. All ever loaded files are in the local cache.

Squid checks whether files are really up-to-date.

The cache can be initially filled via VBS scripting for certain catalogs. And via VBS command the files are nightly grabbed and copied in a temp-directory. Thereby the cache is filled.

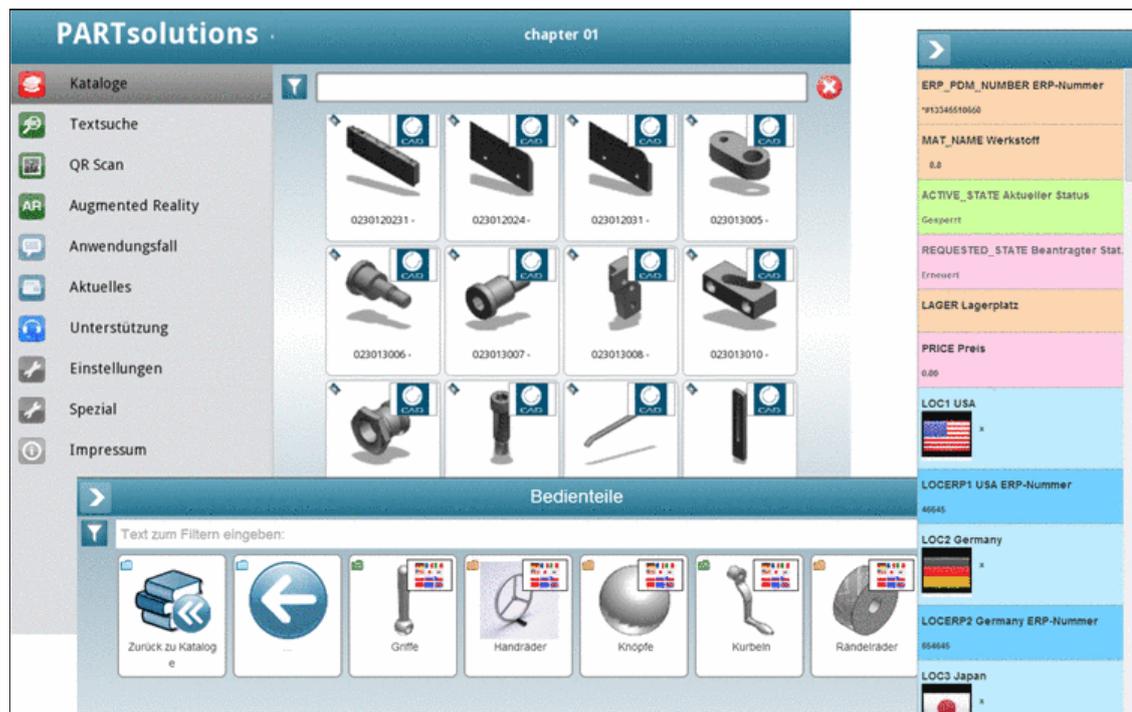
- Caching only works, when the headquarter is online.

This is not a real restriction, because the headquarter has to be online for LinkDB calls anyway. Also using earlier versions, PARTsolutions cannot be used remotely without access to the headquarter server.

- More use cases**

- Use by CADENAS-App:**

When changing to the new PARTsolutions PARTapplicationServer, then also company internal parts, including LinkDB colors and role selection can be displayed.



- API:** Via API inhouse third party systems like PDM systems for example can access the PARTapplicationServer. (Therefor an extra license is needed.)

- Turn off Windows File Caching**

Due to PARTapplicationServer's own caching an additional Windows File Caching is not necessary.^{1 2} It possibly can slow down the search on the server significantly.

- Slowed down search when using a virtual disk**

When testing on a virtual machine you have to consider, that the C disk on the server is not really local, but rather is in the network. (When testing on a real C disk the speed is possibly higher.)

¹ Could possibly be checked with the Process Monitor.

² Notes concerning turning off are found under <http://offlinefiles.blogspot.de/2010/03/disable-offline-files-in-windows-7.html>.

When caching is used, all search indices are saved on the **PARTApplicationServer**. This makes sense, because accessing a local resource is faster.

Using a VM the process differs: Caching happens from the net into the net and then parts are loaded from there. This could act as a brake.

Better use an ESX host with local disks, still better an ESX host with local SSDs. In this way search times can be reduced again, especially if a search results in as many parts that they do not fit into the memory. Furthermore then there is no network bottleneck.

22.2.3. Extra licenses for the PARTApplicationServer

- **PARTsolutions remote without synchronization of catalog data:**

As of PARTsolutions V9.08 there is only one central data directory (\$CADENAS_DATA).

All accesses (catalog browsing and search) - regardless from which location - run via PARTApplicationServer.

So if you want to use PARTsolutions remote without synchronization of catalog data, an extra license is required therefor.

- **API license:**

This license is required, if you want to access the PARTApplicationServer with third party systems.

22.2.4. PARTApplicationServer - Installation

For shared installations (Client-Server and Multi Site) it is recommended to setup the **Search Server as dedicated server or virtual machine**.³

Special reasons for this are:

- CADENAS software has to be installed with administration rights. In order not to put already existing software on the server at risk (isolated servers), CADENAS recommends a dedicated server here.
- In addition performance issues are important: In case of extraordinary frequent queries the server is blocked.

The recommended procedure of software installation is to locally copy \$CADENAS - the same as with any client.

Note

A 64 bit system is recommended.

Only ONE **PARTApplicationServer** is installed. All client - regardless at which location - access this one **PARTApplicationServer**.

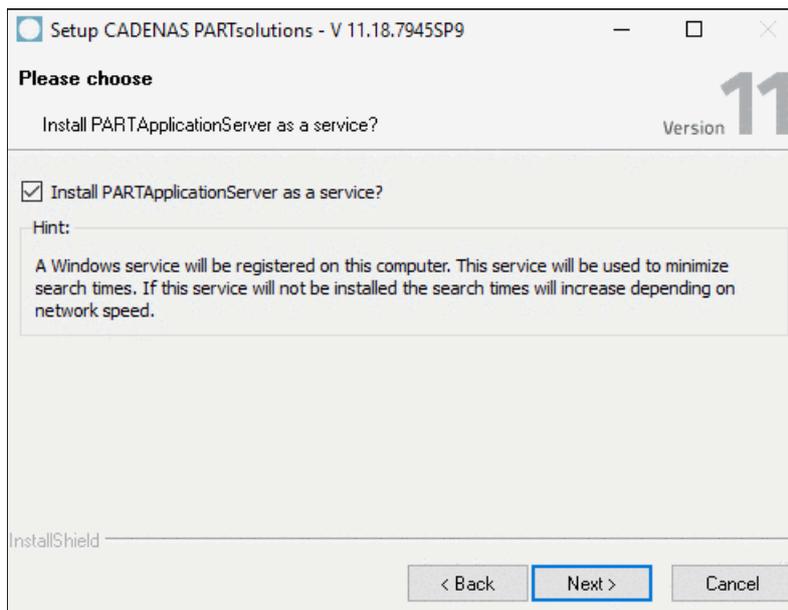
The environment variable **\$CADENAS_DATA** controls which **data directory** is used. At which directory it points, you can easily recognize on the **Server state** dialog box -> **Environment** tabbed page. On this see ???.

22.2.5. Set up PARTApplicationServer as service

Setting up **PARTApplicationServer** as service is advantageous, because it is automatically started at start of the server and Windows mechanisms for monitoring the stability (e.g. restart at crashes) are used. (Restart delay can be adjusted via registry.)

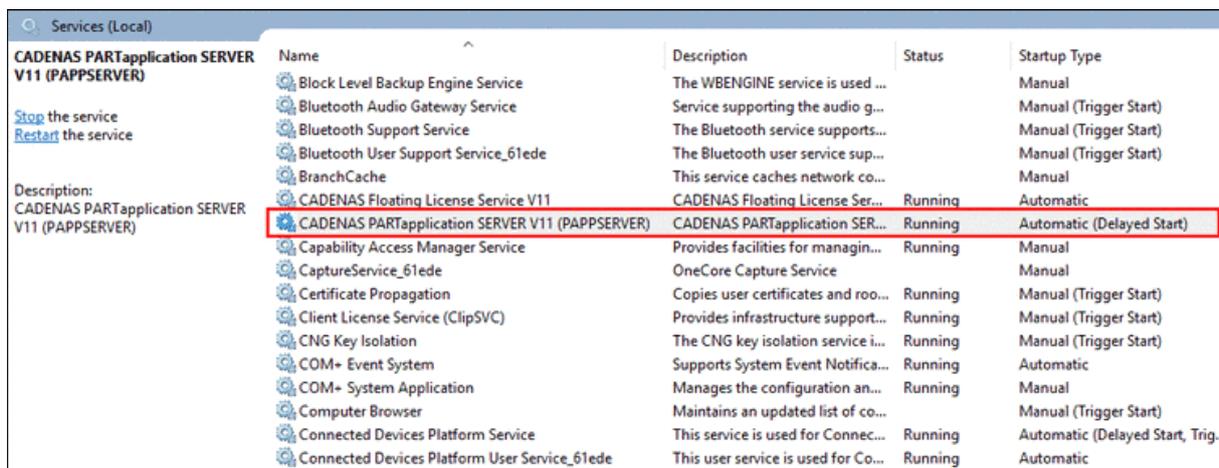
³On this server the CADENAS license server can also be installed. See Einrichten eines FLM-Servers.

You have the opportunity to set up the service during the PARTsolutions Server installation. Hereto simply activate the respective option.



Set up PARTApplicationServer as service

After finished installation the service **CADENAS PARTApplication SERVER V11 (PAPPSERVER)** is displayed under Windows -> Control panel -> Administrative tools-> Services.



CADENAS PARTApplication SERVER V11 (PAPPSERVER)

Manual installation

With the command `pappserver.exe -install`⁴ you can manually set up the service in a console.⁵

Note

When manually setting up the service the respective administrative permissions have to be given.

Note

Make sure that CADENAS PARTApplication SERVER is really started.

⁴You can find `pappserver.exe` under `$CADENAS/bin/x86/32` or `64`

⁵Deinstallation happens with `pappserver.exe -uninstall`.

If not, start the SERVER.

```
pappserver.exe -start
```

UNC path in services

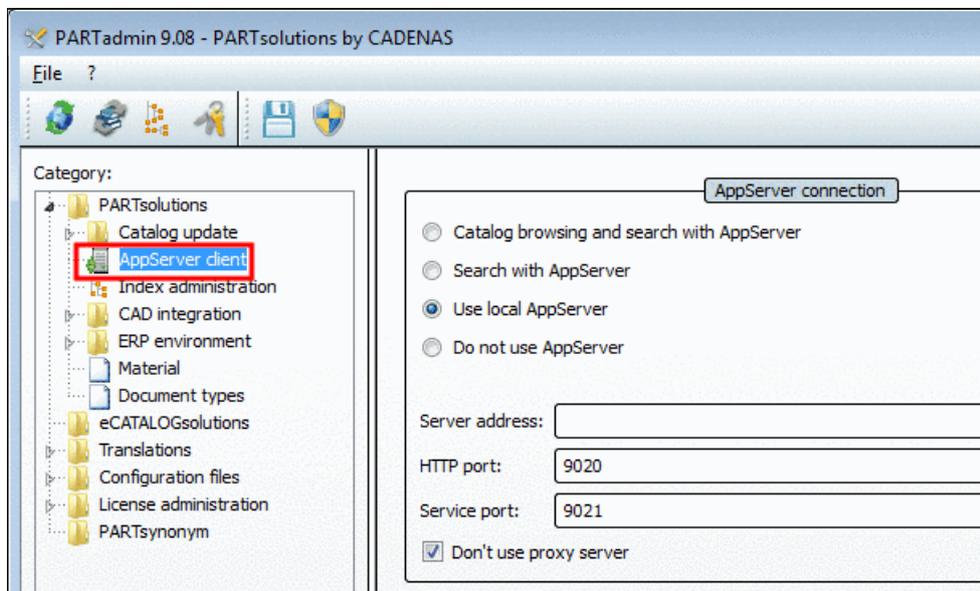
The installer sets up an UNC path for the AppServer service. Possibly this is not yet available when starting the service.

Furthermore UNC paths are slower than shares and local installation paths.

22.2.6. Configuration

22.2.6.1. PARTapplicationServer: Client configuration

Please perform the AppServer client configuration in **PARTadmin** -> category **AppServer client**.⁶



PARTadmin -> "AppServer Client" category

- **Catalog browsing and search with AppServer**

As of PARTsolutions V9.08 there is only ONE central data directory.

All access (catalog browsing and search) is processed via PARTapplicationServer - regardless from which location.

Thus select this option, if PARTsolutions is used remotely without synchronization of catalog data.

Therefore a specific license is needed.

Note

Using the API requires another license. Thereby third party systems can access the PARTapplicationServer.

- **Search with AppServer**

Only the search runs on the AppServer.

⁶The configuration file for the AppServer client configuration is found under `$CADENAS_SETUP/pappclient.cfg`.

Therefore no extra license is needed.

- **Use local AppServer** (default)

Using the local AppServer is advantageous compared to `pdatamgr.exe`. This is running on 64Bit, whereby possible memory problems are avoided.

The local AppServer is only used for searching, not for catalog browsing.

The AppServer is automatically started and exited together with **PARTdataManager**. If **Seamless** is also started, then **Seamless** uses the already running application.

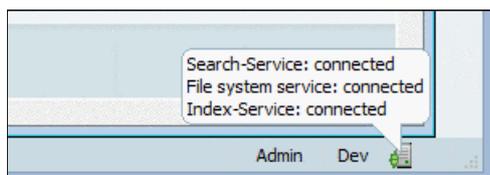
- **Do not use AppServer**

All processes are running via **PARTdataManager**.

Enter server address and ports:

- **Server address:**
- **HTTP port:** 9020 (default) [used for file system]
- **Service port:** 9021 (default) [used for index and search]
- **Don't use proxy server:**

If the **AppServer** is active, in the **PARTdataManager**, downright in the **status bar** a respective icon is displayed. The tooltip shows respective information at mouseover.



There are three categories, which possibly show up at mouseover:

- **Search service**
- **File system service**
- **Index service**

Which of the categories displays depends on the option chosen in **PARTadmin** -> category **AppServer client** -> **AppServer connection**.

Once the connection is established the icon  is displayed, otherwise .

22.2.6.2. PARTapplicationServer: Server configuration

The configuration file for the AppServer server configuration is found under `SCADEN-AS_SETUP/pappserver.cfg`.

Normally the settings don't have to be changed.

Information on the individual keys are found in the configuration file itself.

Note

The entries in the keys **port** and **mzcomport** are important. These have to match each other in the configuration files `pappclient.cfg` and `pappserver.cfg`.

22.2.6.3. Show server state

In order to display the server status, in **PARTadmin** -> category **AppServer client**, click on the button **Show server state**. You can reach all information via four tabbed pages:

- **Overview:** Among others you can see connected clients, a small statistic about hits to the PARTApplicationServer and via which modules the access happened.

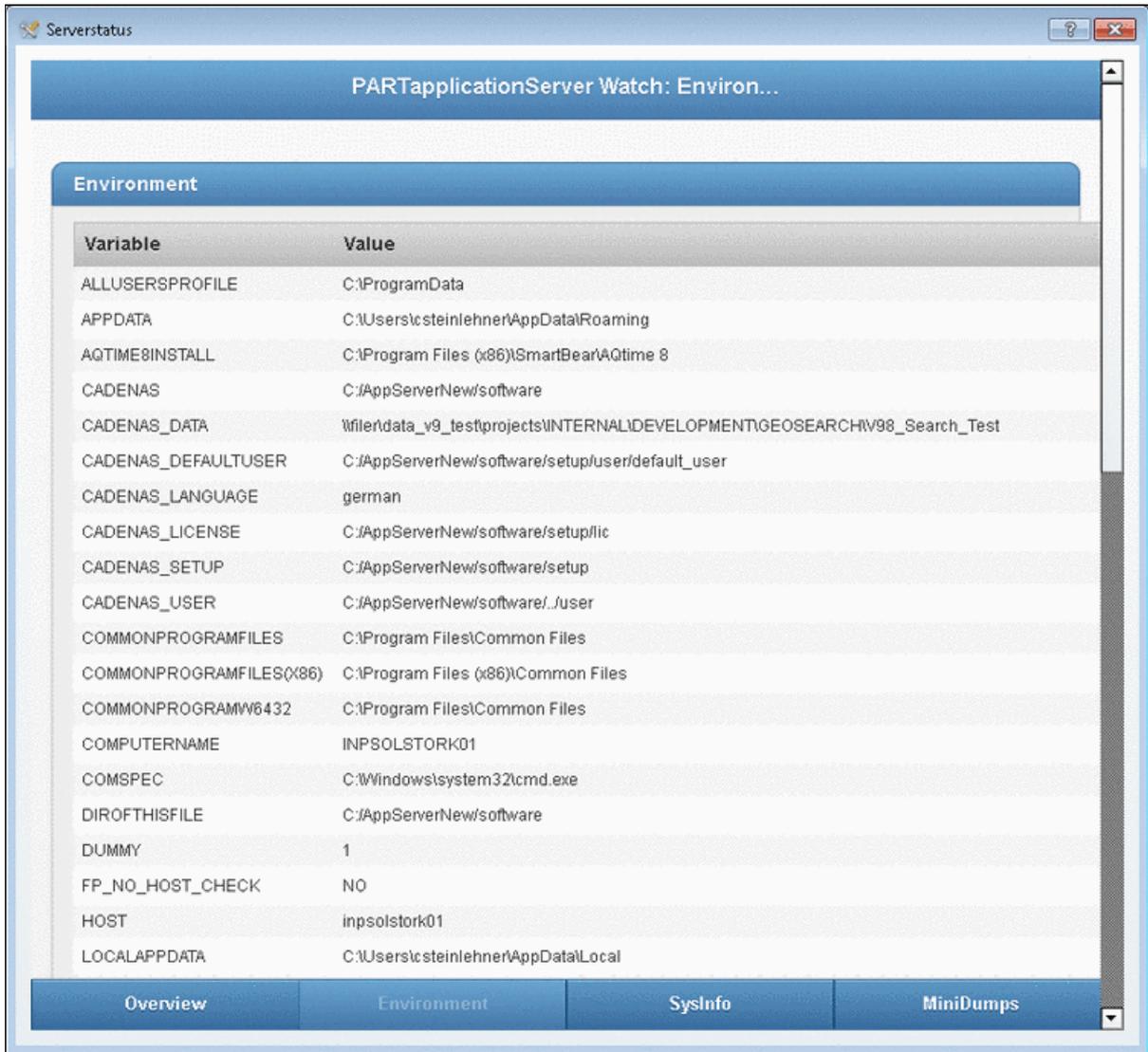
The screenshot shows a window titled "Serverstatus" with a sub-header "PARTApplicationServer Watch: Overview". The window is divided into several sections:

- System Info:** Displays "Memory Usage: 5968 MB" and "Virtual Memory Size: 5883 MB".
- Connected Clients:** Shows a table with one client connected:

IP	Ports
10.10.14.115	55800
- Service Details:** Lists two services:
 - RemoteIndexService:** Last request duration: 1 ms, Failed requests count: 0, Requests in progress: 0, Good requests count: 139.
 - SearchService:** Last request duration: 20182 ms, Failed requests count: 0, Requests in progress: 0, Good requests count: 216, Autocomplete count: 35, Did-you-mean count: 3.

At the bottom, there is a navigation bar with four tabs: "Overview" (highlighted with a red box), "Environment", "SysInfo", and "MiniDumps".

- **Environment:** All environment variables of the server are displayed; for example **CADEN-AS_DATA** or **CADENAS_LICENSE**.



The screenshot shows the 'Serverstatus' application window with the 'Environment' tab selected. The window title is 'PARTApplicationServer Watch: Environ...'. The Environment tab displays a table of system variables and their values.

Variable	Value
ALLUSERSPROFILE	C:\ProgramData
APPDATA	C:\Users\csteinlehner\AppData\Roaming
AQTIME8INSTALL	C:\Program Files (x86)\SmartBear\AQtime 8
CADENAS	C:\AppServerNew\software
CADENAS_DATA	\\filer\data_v9_test\projects\INTERNALDEVELOPMENT\GEOSEARCHW98_Search_Test
CADENAS_DEFAULTUSER	C:\AppServerNew\software\setup\user\default_user
CADENAS_LANGUAGE	german
CADENAS_LICENSE	C:\AppServerNew\software\setup\lic
CADENAS_SETUP	C:\AppServerNew\software\setup
CADENAS_USER	C:\AppServerNew\software\.\user
COMMONPROGRAMFILES	C:\Program Files\Common Files
COMMONPROGRAMFILES(X86)	C:\Program Files (x86)\Common Files
COMMONPROGRAMW6432	C:\Program Files\Common Files
COMPUTERNAME	INPSOLSTORK01
COMSPEC	C:\Windows\system32\cmd.exe
DIROFTHISFILE	C:\AppServerNew\software
DUMMY	1
FP_NO_HOST_CHECK	NO
HOST	inpsolstork01
LOCALAPPDATA	C:\Users\csteinlehner\AppData\Local

At the bottom of the window, there are four tabs: Overview, Environment (selected), SysInfo, and MiniDumps.

- **Sysinfo:** On the tabbed page **Sysinfo** you can find the subcategories on AppServer services, installed file systems, installed catalogs, license information, Windows logs, Network information, OpenGL information.

Serverstatus

PARTApplicationServer Watch: SysInfo

AppServer Dienste

Filesystem-Mounts

Installierte Filesysteme:

Kataloge

Installierte Kataloge:

- Norm -	:	
- PN EN ISO -	:	31.05.2012 14:16:17
80/20 Inc.	:	18.01.2013 10:15:58
A.Borrelly	:	01.06.2011 02:00:00
A4Hydrauliek	:	11.03.2011 01:00:00
Aalborg Industries	:	29.11.2011 14:45:45
ABB	:	08.08.2012 09:02:04
ABB Automation	:	09.05.2011 16:00:35
ABB Low Voltage & Systems	:	24.12.2013 13:48:09
ABB-MC	:	01.06.2011 02:00:00
Accurate Inc.	:	22.07.2013 09:11:48
ACE Stoßdämpfer	:	29.07.2013 12:12:08
ACME	:	01.06.2011 02:00:00
Actron Manufacturing	:	01.06.2011 02:00:00
Adax	:	01.06.2011 02:00:00
Advantec	:	01.06.2011 02:00:00
Afag	:	11.11.2013 10:36:07
AFRISO-EURO-INDEX GmbH	:	02.09.2013 10:55:16
Agathon	:	21.01.2013 13:11:33
Agru	:	06.09.2012 09:49:47
AHP Merkle	:	19.11.2013 08:41:05
Airtac	:	04.11.2013 07:02:00
Albion	:	03.10.2013 11:50:06

Overview Environment **SysInfo** MiniDumps

- **MiniDumps:** Minidumps of the PARTApplicationServer

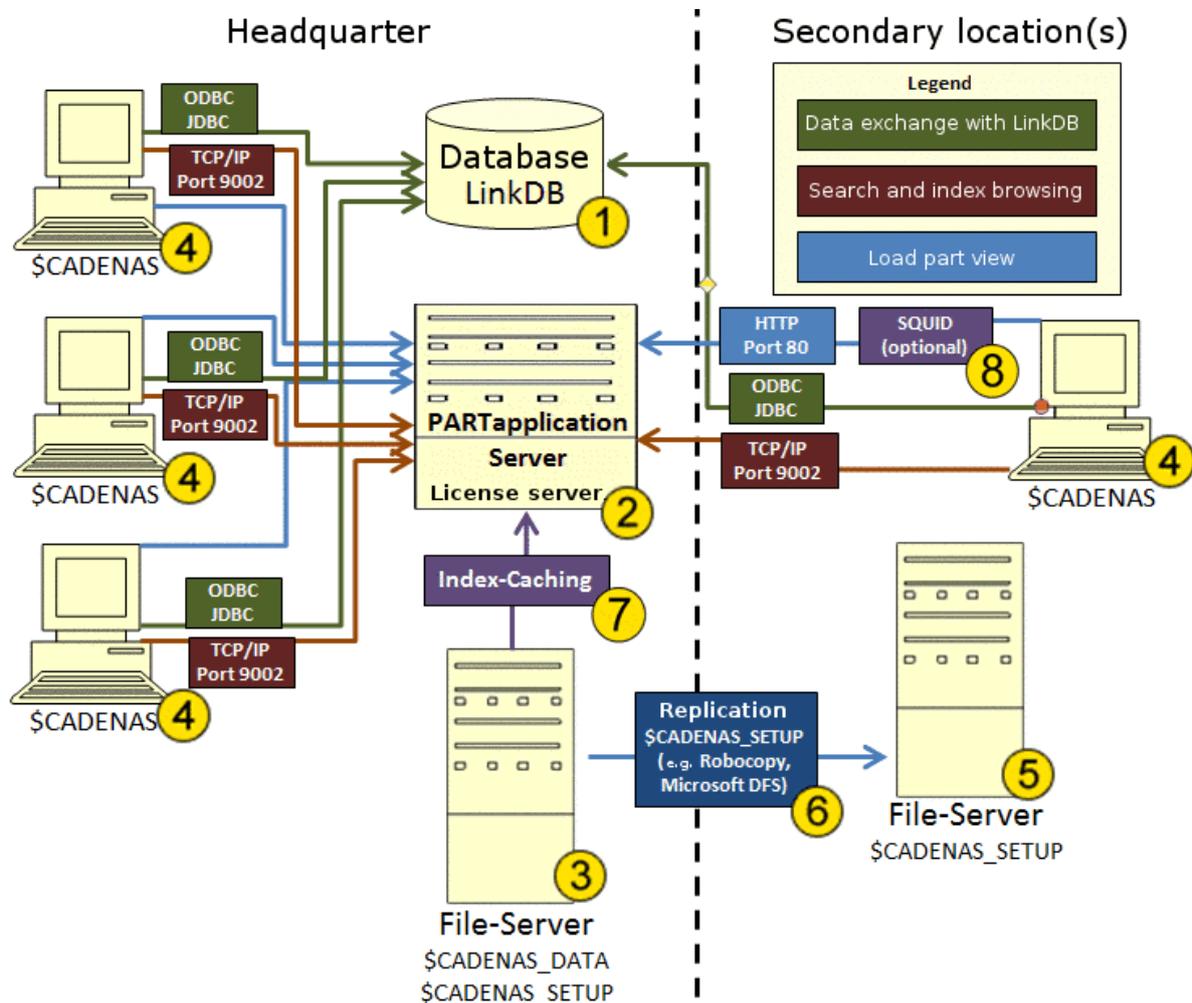
The screenshot shows a window titled "Serverstatus" with a sub-header "PARTapplicationServer Watch: MiniDum...". Below this is a "System Info" section containing a list of ten MiniDump files. Each file name follows the pattern "minidump_pappserver_2014_2_18_14_XX_YY_ZZZ.dmp" and has a right-pointing arrow icon. At the bottom, there are four navigation tabs: "Overview", "Environment", "SysInfo", and "MiniDumps", with the "MiniDumps" tab highlighted by a red border.

File Name	Action
minidump_pappserver_2014_2_18_14_27_57_535.dmp	▶
minidump_pappserver_2014_2_18_14_33_32_851.dmp	▶
minidump_pappserver_2014_2_18_14_35_36_599.dmp	▶
minidump_pappserver_2014_2_18_14_35_42_817.dmp	▶
minidump_pappserver_2014_2_18_14_36_11_168.dmp	▶
minidump_pappserver_2014_2_18_14_36_29_64.dmp	▶
minidump_pappserver_2014_2_18_14_43_19_626.dmp	▶
minidump_pappserver_2014_2_18_14_44_6_492.dmp	▶
minidump_pappserver_2014_2_18_14_46_0_618.dmp	▶
minidump_pappserver_2014_2_18_14_46_8_48.dmp	▶

Navigation tabs: Overview | Environment | SysInfo | **MiniDumps**

22.2.7. Architecture of a multisite installation

The following figure shows the recommended architecture for a multisite installation.



Architecture of a multisite installation with PARTApplicationServer

In the following explanations and further links analogously to the individual components and processes of the figure are found:

1 LINKDB

The PARTsolutions link database (LINKDB) is set up as additional database on an already existing database server. No further software is needed on the database server.

Detailed information on this is found under Section 4.2, "Installation Link database " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

2 PARTApplicationServer

For the PARTApplicationServer an own server or an own Virtual Machine is recommended.

Special reasons for this are:

- CADENAS software has to be installed with administration rights. In order not to put already existing software on the server at risk (isolated servers), CADENAS recommends a dedicated server here.
- In addition performance issues are important: In case of extraordinary frequent queries the server is blocked.

One central PARTapplicationServer for all locations is sufficient. All clients access this one server.

On this server the CADENAS license server can also be installed. See FLM-Server-Installation - Lizenzen beantragen/einspielen.

3 File server headquarter

- PARTsolutions catalogs [\$CADENAS_DATA]
- Setup directory [\$CADENAS_SETUP]

For the PARTsolutions catalogs and the setup directory a new share on an already existing file server is sufficient. No further software is needed on the file server.

Note

Catalog administration has writing permission. All other users only read permission.
\$CADENAS_DATA only exists 1x, for all clients and all locations.

4 \$CADENAS on clients (PARTsolutions software and interfaces)

Software deployment / software updates

In complex installation environments it is recommended not to perform the classic Client Server Installation (see Client-Server-Installation), but to setup an Admin client and to copy with software deployment tools usual in company.

Advantage: Software updates can easy be performed later.

5 File server secondary location (Setup directory [\$CADENAS_SETUP])

6 Replication of \$CADENAS_SETUP

\$CADENAS_SETUP can simply (cyclically or whenever needed) be replicated from the headquarter to the secondary locations (for example with Robocopy, Microsoft DFS or similar tools).

7 Caching of index files

In order for the **PARTapplicationServer** to work efficiently, we recommend caching of CADENAS_DATA index files.

Detailed information on this is found under Indexdateien von \$CADENAS_DATA auf PARTapplicationServer cachen.

8 SQUID Caching (optional)

Squid is a proxy for caching, which supports HTTP among others. Squid optimizes the dataflow between client and server and caches often used data (especially project- and ZJV files). At large assemblies (also native parts) the use of SQUID can enhance the performance.

22.3. New Geometric Search Index - Settings geomsearch.cfg

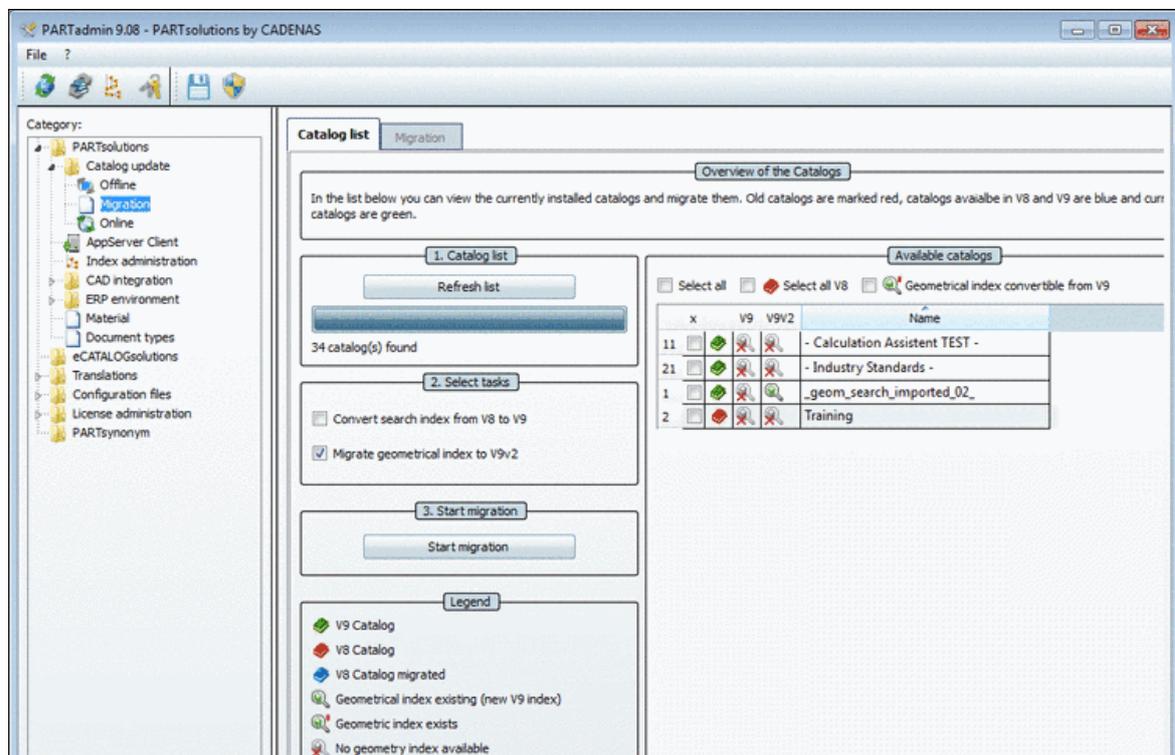
In order to improve the performance at the GeoSearch and Topology Search, the structure of the Geo Index has been completely revised. See Section 1.7.5.9.10.2, "Caching / geometric search index as of V9.08" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*. There you can find information on the following points:

- New structure of indices
- General settings under \$CADENAS_SETUP/geomsearch.cfg
- Migration of indices

After a software update to version 9.08 the existing geometric search index is reused. If you want to profit from the new search index as of version 9.08 (significantly faster search), then you have to perform an index conversion via Migration Assistant.

 - At catalogs, which already have the new V9V2 index

 - At catalogs, which still have the old V9 index (<= 9.07)



PARTadmin -> Category -> PARTsolutions -> Catalog update -> Migration

Details on this are found under Migration.

- Different modes for the generation of indices
- Changes at the actual search

For Geo and Topo indices there are 3 different modes each for conducting the search, depending on what was determined under \$CADENAS_SETUP/geomsearch.cfg in the section [settings].

- Caching settings
- Access on Topo values via VBS
- **Conversion successively:**

Via config key:

Key **convertindex** and **converttopoindex**: Conversion of old indices into new indices.
Possible values:

- 0: Conversion deactivated

- **1: Conversion active.** Then the conversion happens **automatically**, if an old index is created.

An old index is created, if **createNewDirectly** is **0** (see next point).

Each access on the GeoIndex (search, generation, ...) uses this setting.

- **Key: createNewDirectly**

Control whether an old or a new index shall be created.

Each access on the GeoIndex (search, generation, ...) uses this setting.

Possible values:

- **0: Create old index**
The "convert" keys are also relevant, if no old index is available, but has to be created first.
- **1: Create new index**
That means that with each action creating an index, always the new index is created.

Details are found under Section 1.7.5.9, " geomsearch.cfg " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

22.4. Warm up search for geo search

As of V9.08 you can perform a configurable warm up search for GeoSearch.⁷

You can decide which catalogs should be cached in preference if not all catalogs can be cached due to memory limitations.

Example:

```
[CACHEV2_GEO_SEARCH_32]
PreloadedCatalogs=cat/parts,cat/norm,cat
```

In the example above, the catalog cat/parts would be loaded into the cache first, if there is space left in the cache, cat/norm would be next, and all other catalogs would be loaded in arbitrary order if still space left.

Furthermore you can decide which type of index should be preloaded. Per default this is the linear index, which normally should fit into the memory.

The configuration is done in \$CADENAS_SETUP/geomsearch.cfg, in the sections **CACHEV2_GEO_SEARCH_32** respectively **CACHEV2_GEO_SEARCH_64**.

The following keys have been added:

- **Configuring the applications**

```
PreloadingApps=pappserver
```

You can list the applications which should perform the preload here, comma-separated. This list is empty by default for 32 bits, for 64 bits the pappserver is added by default.

- **Configuring the catalogs to be preloaded**

```
PreloadedCatalogs=cat/norm/din,cat/norm,cat
```

You can list catalogs, catalog groups (like cat/norm), categories (like nat, cat) here. The caching is done in the order given in the config file. In this example, norm/din is cached first, if there is still space left, the other norm catalogs are cached, and so on. Default: cat

- **Configuring the search templates**

```
PreloadedTemplates=SystemTemplate1
```

⁷#37063

List the most often used templates here. For these templates, the linear index will be pre-loaded.

Default: SystemTemplate1 (Standard search)

- **Configuring for result view**

```
PreloadLines=1
```

If you prefer the view with part families in the result view of PARTdataManager, set this value to 0. If you prefer to see all the lines, set this value to 1. Default: 1

22.5. Document scan: Identify parts without MIdent via CAD attribute

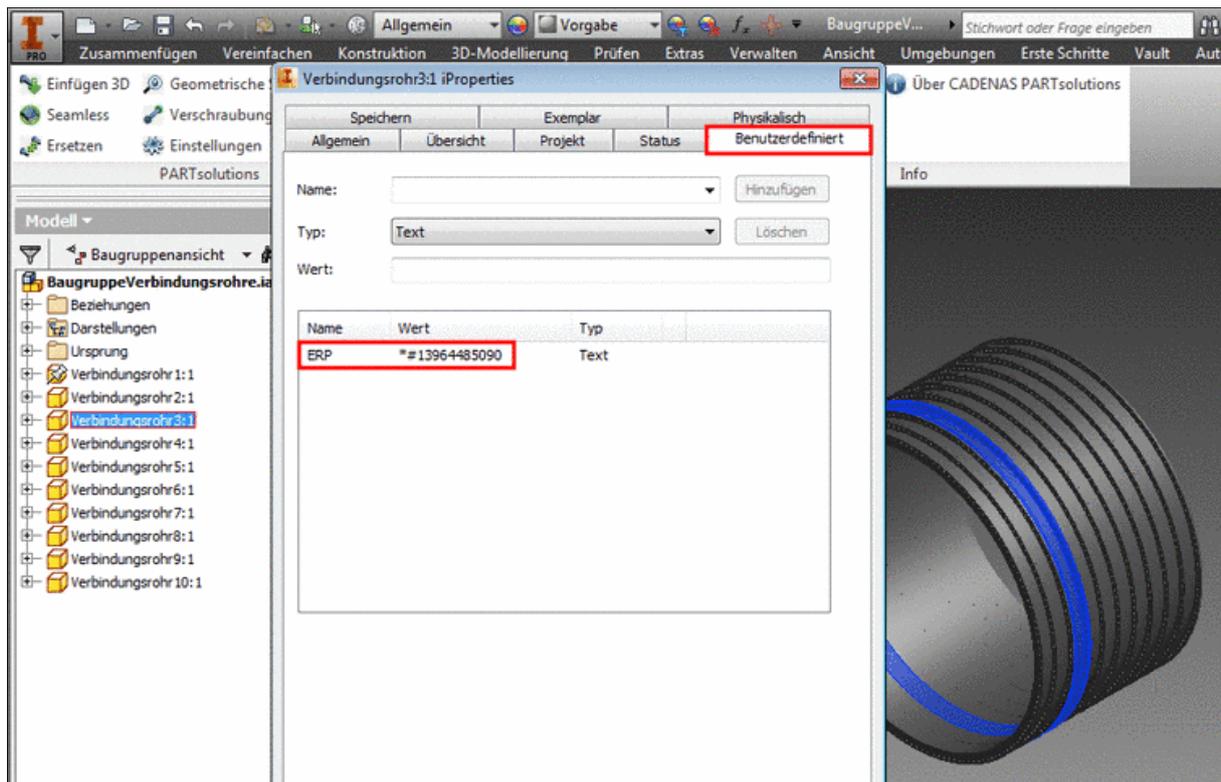
Parts administrated in **PARTsolutions** are identified by the MIdent by default, when processing the **Document scan**.

As of V9.08 there is a new option: Parts administrated in PARTsolutions, which do not have a MIdent - because they were imported by the **Classimporter** for example -, can be identified by the value of a user defined CAD attribute (the ERP number for example).⁸

In the following the background is explained using an example:

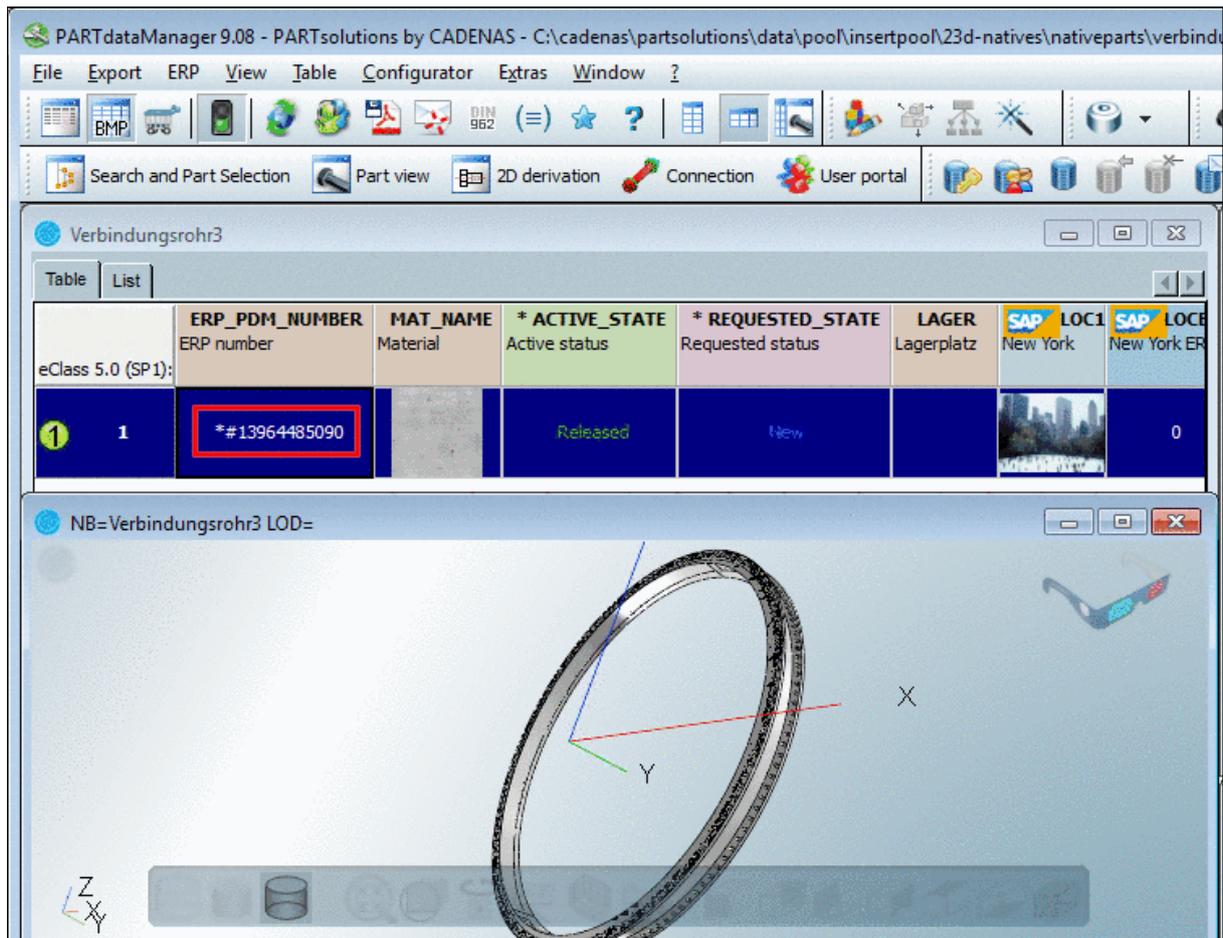
Initial situation in CAD system (here exemplified by an Inventor assembly):

The user defined attribute "ERP" contains the ERP number.



Initial situation in PARTsolutions:

A part imported in **PARTsolutions** by the **Classimporter** for example has no MIdent, but an ERP number.



In order to map this information (LinkDB attribute and CAD attribute), in **PARTAdmin**, make the following settings:

In the configuration file under `$CADENAS_SETUP/docscan.cfg`, in the section `ImportOptions`, in the key `ModelMappingFilterList`, add the value `ErpAttributeFilter` comma separated in addition. (Per default there is only the value `MIdentFilter`.)

```
[ImportOptions]
ModelMappingFilterList=MIdentFilter,ErpAttributeFilter
```

This value `ErpAttributeFilter` is the name of another config section:

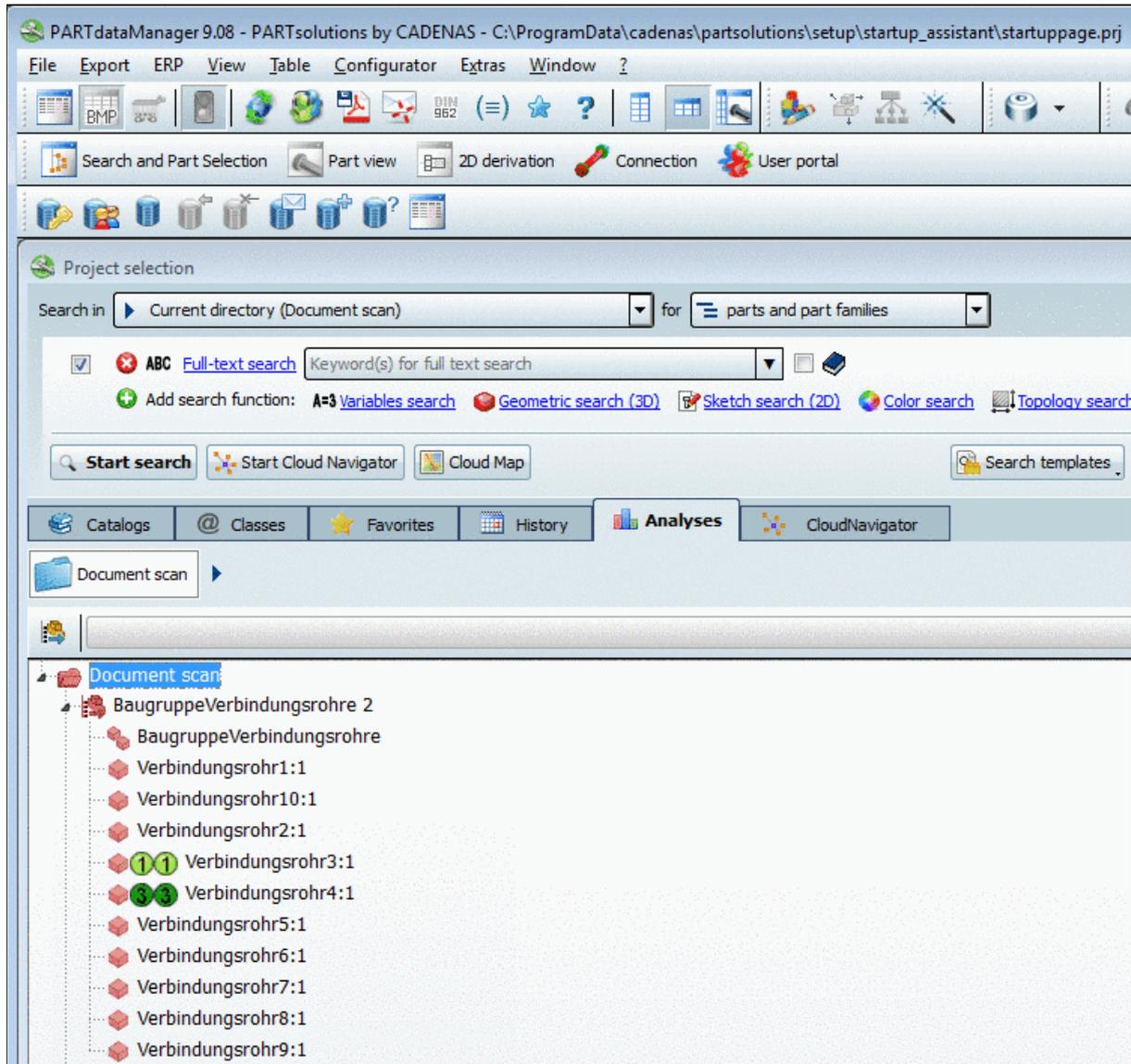
In this section, set the following keys:

- **FilterClass:** Enter the value `ErpAttributeFilter`.
- **ColumnName:** As a value, enter the respective LinkDB column.
- **Attribute:** As a value, enter the respective attribute name in the CAD system.

```
[ErpAttributeFilter]
FilterClass=ErpAttributeFilter
ColumnName=ERP_PDM_NUMBER
Attribute=ColumnName
```

At first the CAD attribute is queried at the model, if it is not found there, then at the document.

When you execute the **Document scan** in **PARTdataManager** for the respective assembly now, then parts existing in the LinkDB are identified.



22.6. Duplicate report - Already listed duplicates are marked

If a search part already got a duplicate assignment, then at another listing of the same assignment (search part - result part the other way around) a note is displayed.

This result was already listed above.



Example: At the elements in brackets the note would be displayed.

```
A: B, C, E
B: (A), E
C: (A), B
E: (A), (B), C
```

22.7. Duplicate report: Comparison covers all project lines

The setting options at the **Duplicate report** have been simplified with version 9.08:

The option **Search all source lines which have fingerprints** (on/off) is obsolete, because this is the desired behavior in 99,9% of cases.¹⁰

Create duplicate report

Thus a comparison always covers all project lines (those with fingerprints!).

If it does become necessary to perform a comparison based on a project's standard line, then this can be achieved by setting the value 1 under `$CADENAS_USER/report.cfg`, key **SearchForProjects**.

```
[DuplicatesSettings]
SearchForProjects=1
```

22.8. Reports with additional filters Variables search | Topology search | Preferred rows

In **Duplicates Report**, **Make or Buy report**, **Cost mockup report** and **Supplier search**, as of PARTsolutions version 9.08 there is an additional section **Filter for results** where you can restrict the results:¹¹

- **Variables search**
- **Topology search**
- **Filter (Show only preferred rows)**

¹⁰35927

¹¹#36853

Create Make or Buy report ? X

Select source parts:

in selected directory:

Search only for selected line

Files in file system: ...

include subdirectories

Search options:

Report name: Search template:

Threshold in %: Maximum number of search result:

Size-dependent

Filter mirrored parts

Search all source lines which have fingerprints

Show only the best matching result per project

Sort by result count

search in following directories:

Name

- > Analyses
- ▼ Catalogs
 - > - Filter assistants -
 - > - Filter Assistants -
 - > - GeoSearch Demo -
 - > - Industry Standards -
 - > - Topology Catalog -
 - > - UNI Standards -
 - > AHP Merkle
 - > AMF - ANDREAS MAIER GMBH & CO KG
 - > Bikecompany
 - > Bossard Catalog
 - > catalog_update
 - > catalog_update_xxx
 - > catupdate_test
 - > China Industry Standards
 - > cipupdate
 - > Debrunner Acifer AG
 - > eigene
 - > Elessa+Ganter
 - > example
 - > Example 123
 - > Example 124
 - > Example 125

Custom variables: A=3

Filter for results:

+ Add search function: A=3 Variables search Topology search

Search only in preferred rows

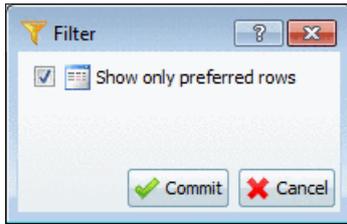
OK Cancel

Note

The filter concerns result parts not search parts.

The functionality is according to the standard search functions:

- **Variables search:** You can filter for a certain ERP number group or a certain material for example. In the dialog box all ERP variables visible in the table are displayed.



- **Show only preferred rows** activated:
Characteristics, which do not match the preferred rows condition are not displayed.

Details on this are found under Section 3.1.11.2.2, " Use preferred rows filter " in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

The filter can also be realized via scripting:

```
dim manager
set manager = CreateObject("analysis.reportmanager")
dim generator
set generator = manager.CreateReportGenerator("Duplicates")

generator.Options.IndexPath = "cat/norm/din/schrauben"
generator.Options.SearchTemplate = "SystemTemplatell"
generator.Options.ReportName = "Dublettenreport mit Filter"
generator.Options.Threshold = 90
generator.Options.MaxResults = 10

dim indexSearch
set indexSearch = application.ViewIndexTree.CreateObject("IndexSearch")
dim filter
set filter = indexSearch.AddSearchObject("filter")
filter.filterLines = true
set generator.Options.SearchFilter = indexSearch

dim report
set report = generator.GenerateReport()
```

22.9. Speedup slow database connection - Increase number of datasets to cached

Some databases only cache 10 datasets at fetches. This causes that database requests with a lot of datasets are very slow at connections with high latency. Via **setFetchSize** the number of datasets to be cached can be increased.

\$CADENAS_SETUP/jdbc.cfg -> Block <database name>

Example:

```
[PLINKDB_ORACLE]
DriverClass=oracle.jdbc.driver.OracleDriver
URL=jdbc:oracle:thin:@10.10.12.96:1521:xe
Settings=FetchSize=1000
```

22.10. Syntax/behavior harmonized between CreationOptions and AttributeMapping

Problem (explained using an example from the configuration file *ifcatia.cfg*)¹²

- [CATAddUserProperties]
...
PartNumberType(hasManSachstNr)=?"S"
PartNumberType=?"D"

In CATIA and in the *cadenas_error.log* this results in "S" or "D".

HOWEVER

- ```
[CATAddUserProperties]
...
PartNumberType(hasManSachstNr)=S
PartNumberType=D
```

In CATIA and in the `cadenas_error.log` this results in the concrete value. "13" for example.

**Solution**

The behavior has been changed:

As of version 9.08 the syntax of the `CreationOption` is now also used for attribute mapping. Thus all attribute sections are changed as of V9.08. Keep in mind for the next update!

- Old default values <= V9.07 (example from `ifadeskinv.cfg`)

```
[SummaryInformation]
Title=LINA
Subject=
Author="Cadenas PARTsolutions"
Keywords=
Comments=NT
Revision Number=
```

- New default values >= V9.08 (example from `ifadeskinv.cfg`)

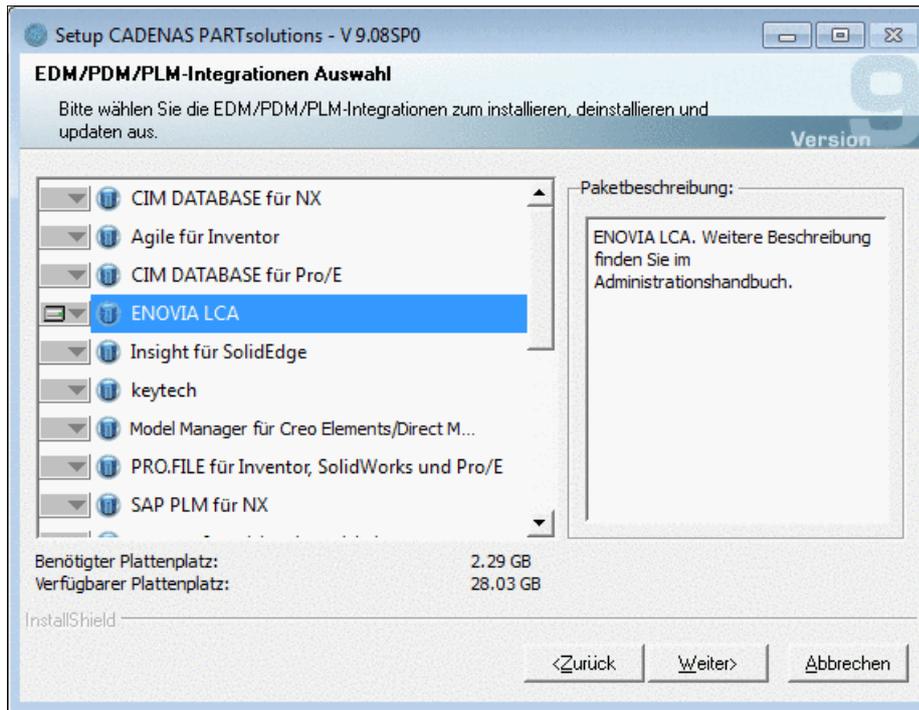
```
[SummaryInformation]
Title=?_ATTR(LINA)
Subject=
Author=Cadenas PARTsolutions
Keywords=
Comments=?_ATTR(NT)
Revision Number=
```

Old syntax is still valid like...

```
Author="Cadenas PARTsolutions"
Title=?getObject("customObject").customFunction()
```

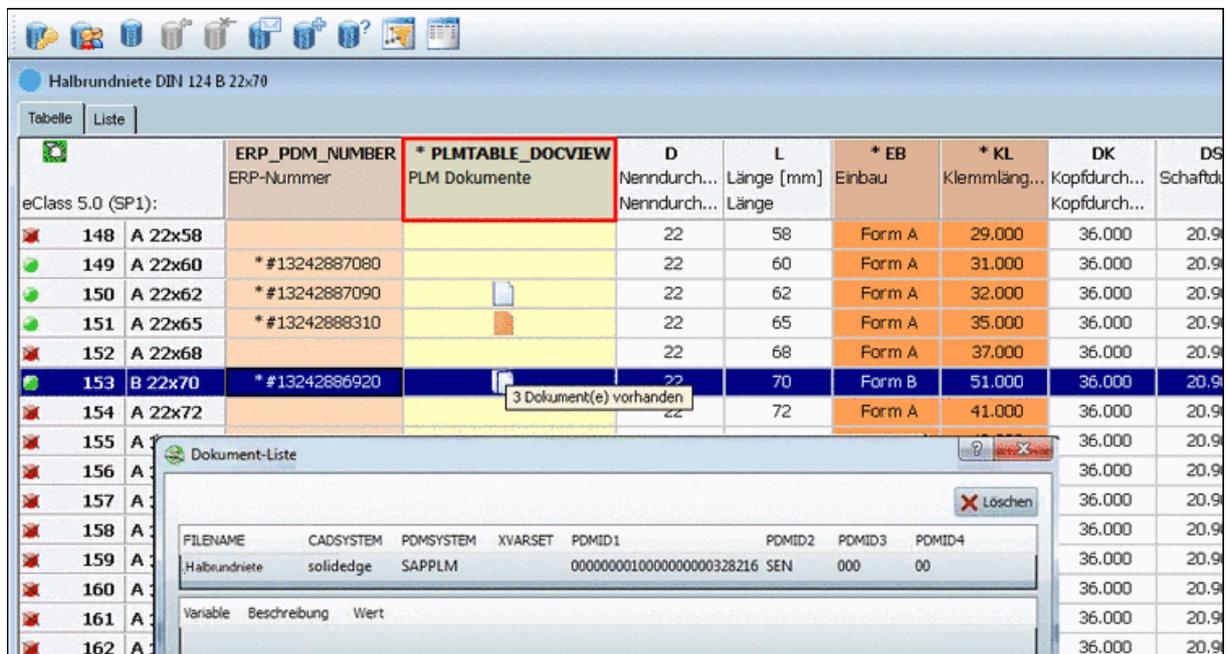
## 22.11. Installer for "ENOVIA LCA" PDM system

As of V9.08 an interface for the PDM system **ENOVIA LCA** is available.



### 22.12. Edit PLMTABLE2 in dialog box

Up to now it was only possible to perform changes directly in the table itself. As of V9.08 an **Edit** button is displayed in the dialog box **Document list** in order to enable changing of **PLMTABLE2** entries inside **PARTdataManager**.<sup>13</sup>

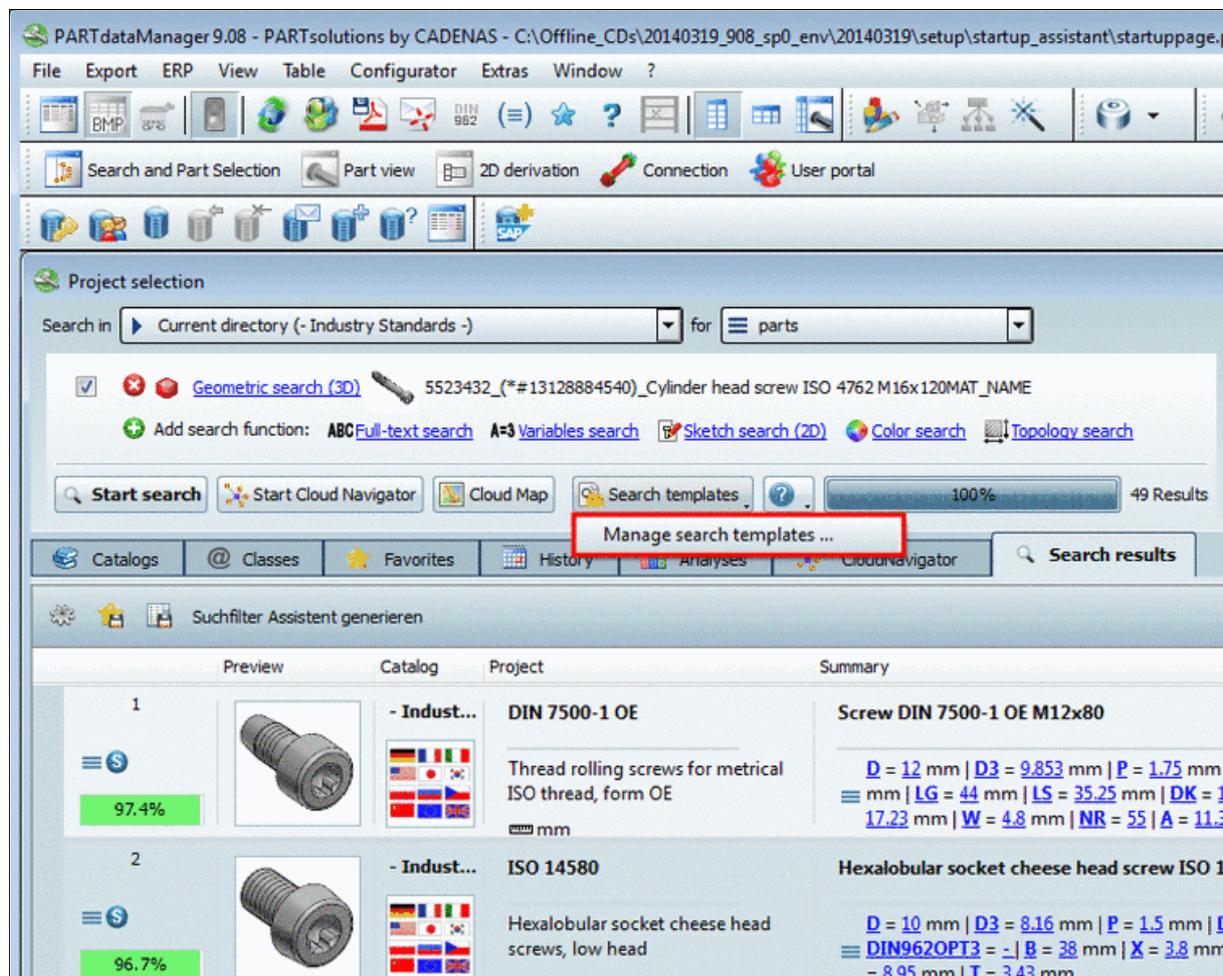


In this way customers can simply correct table entries by themselves (without PARTlinkManager). It is possible to enter CAD system, PDM system and PDMID 1-5.

<sup>13</sup>#42981

## 22.13. GeoSearch: Load desired search template automatically

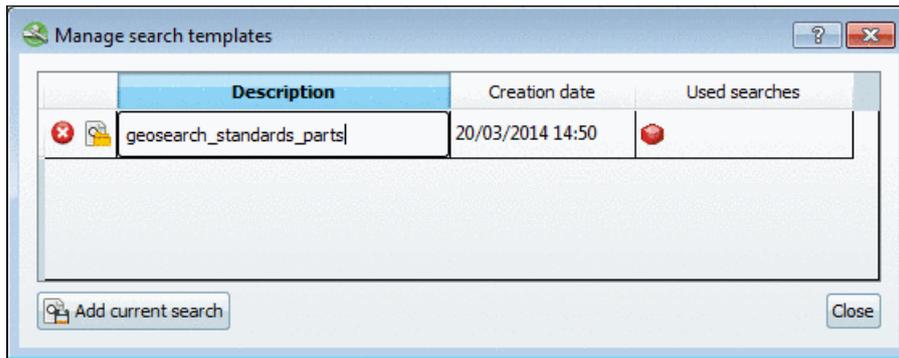
In **PARTdataManager** -> button **Search templates** -> subitem **Manage search templates ...**<sup>14</sup>, you can save as many search templates as you like.



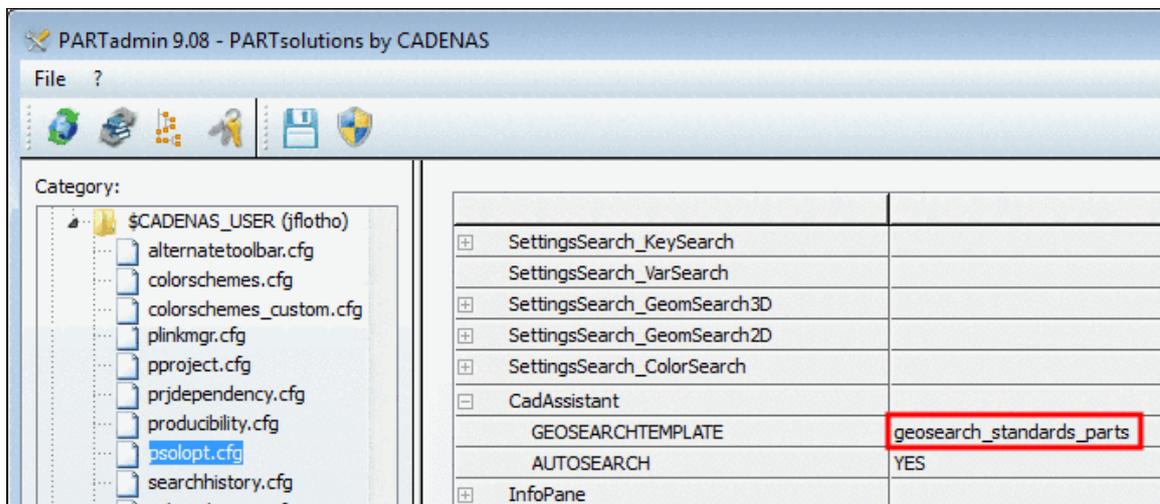
A special search template can be specified via configuration file as default for a **Geometric Search** started in the CAD system. This is then automatically loaded when calling a **GeoSearch** in the CAD system.

To define your desired template proceed as follows:

1. Perform the desired **GeoSearch**.
2. Click on the little black arrow in the button **Search templates** and in this way open the subitem **Manage search templates ...**  
-> The same-named dialog box opens.
3. Click on the button **Add current search**.  
-> A new entry is created for the current search.  
In the column **Description**, enter a (meaningful) name.



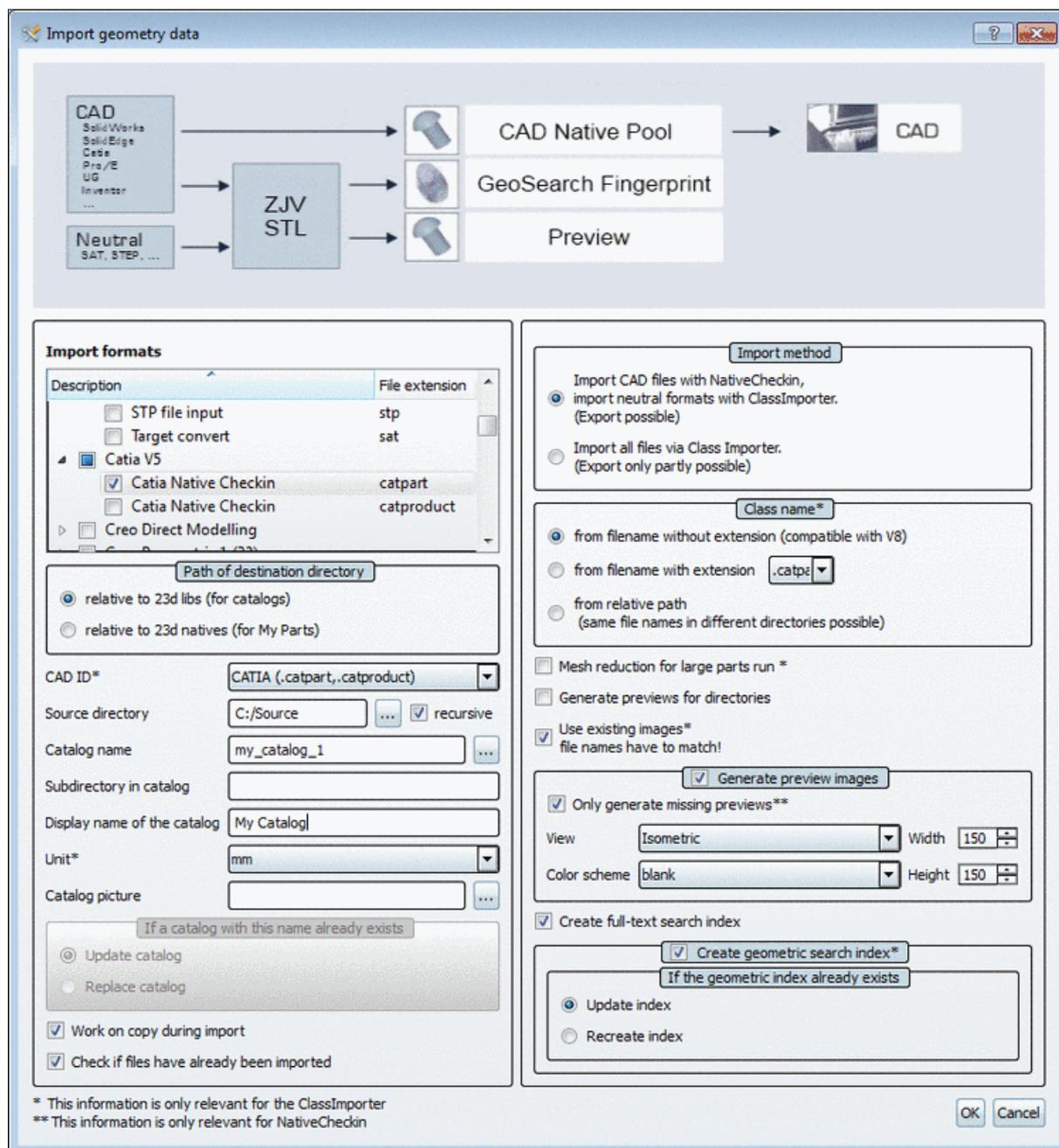
- Open the configuration file in `$CADENAS_USER/psolopt.cfg`.  
In the **section** `CadAssistant`, in the **key** `GEOSEARCHTEMPLATE`, enter exactly this name.



- Start a **GeoSearch** from the CAD system.  
-> Now always the specified template is automatically loaded in **PARTdataManager** or **Seamless**.

## 22.14. Geometry import: Mesh reduction option dialog box

For large parts you can use the option **Execute mesh reduction for large parts\***.<sup>15</sup>



Import geometry data

The maximum number of possible triangles is defined under `$CADENAS_SETUP/geo-search.cfg`.

Default:

```
stlMaxTriangleCount=250000
```

If desired the number of triangles can be detected with the following script beforehand.

```
set helper = CreateObject("tools.File3dHelper")
stdprint("Number of triangles: " &
helper.countTriangles("F:/Testszenarien/Geo-Suche/FaceCount/toobig.zjv"))
stdprint("Number of triangles: " &
helper.countTriangles("F:/Testszenarien/Geo-Suche/FaceCount/toobig.stl"))
```

If file is invalid or could not be read, -1 is returned.

## 22.15. PARTadmin: Status colors - Different colors for rest of results with or without condition

If under **PARTadmin** -> **ERP environment** -> **Roles** -> **Status colors for catalog index** conditions were entered (details on this under Registerseite Allgemein), then in **PARTdataManager**, in the index tree and in the symbol view folder and project icons are colored. New as of V9.08 is, that now transparent depiction is also possible. Furthermore, in the symbol view, colored bars are displayed in the same color as folders and projects in addition. These possibly are also transparent.

If under **Status colors for catalog index** conditions are given, then you can decide, how the rest of results, which does not meet any condition, is displayed.

- **PARTadmin**

- Condition = 1: The rest of results, meaning those, which do not meet any condition, are displayed in a certain color.
- Color: any

| Condition                                                                  | Color        | Description                                                   |
|----------------------------------------------------------------------------|--------------|---------------------------------------------------------------|
| (LOC1='x') AND (LOC2='x') AND (LOC3='x')                                   | Dark Green   | ERP number existing & product available in 3 locations        |
| (LOC1='x') AND (LOC2='x') AND (LOC3<>'x' OR LOC3 IS NULL)                  | Bright Green | ERP number existing & product available in 2 locations        |
| (LOC2='x') AND (LOC3='x') AND (LOC1<>'x' OR LOC1 IS NULL)                  | Bright Green | ERP number existing & product available in 2 locations        |
| (LOC3='x') AND (LOC1='x') AND (LOC2<>'x' OR LOC2 IS NULL)                  | Bright Green | ERP number existing & product available in 2 locations        |
| (LOC1='x') AND (LOC2<>'x' OR LOC2 IS NULL) AND (LOC3<>'x' OR LOC3 IS NULL) | Light Green  | ERP number existing & product available in 1 location         |
| (LOC2='x') AND (LOC3<>'x' OR LOC3 IS NULL) AND (LOC1<>'x' OR LOC1 IS NULL) | Light Green  | ERP number existing & product available in 1 location         |
| (LOC3='x') AND (LOC1<>'x' OR LOC1 IS NULL) AND (LOC2<>'x' OR LOC2 IS NULL) | Light Green  | ERP number existing & product available in 1 location         |
| LINKTABLE.ERP_PDM_NUMBER<>"                                                | Yellow       | ERP number existing but product not available at any location |
| IsStandardPart()                                                           | Orange       | Standard part                                                 |
| 1                                                                          | Blue         |                                                               |

**PARTdataManager** result in symbol view:



- **PARTadmin**

- No "Condition = 1": The rest of results, meaning those, which do not meet any condition, are displayed transparently.

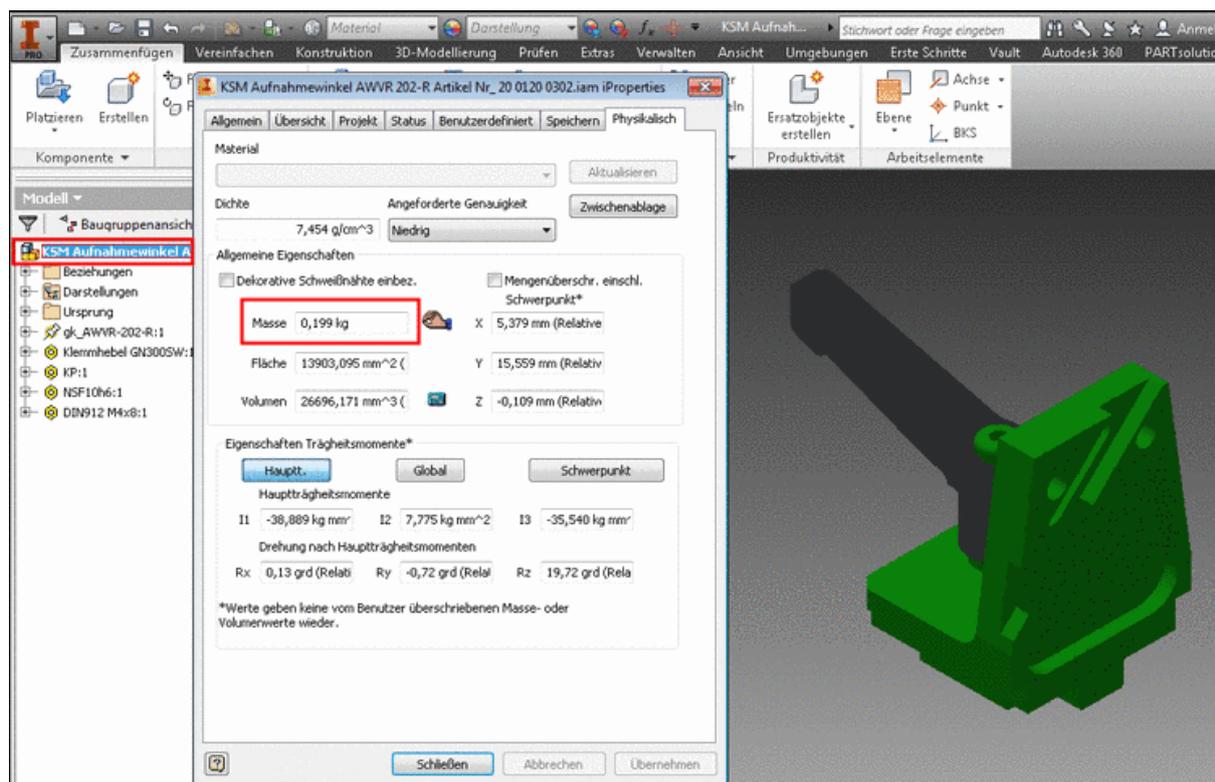
| Condition                                                                  | Color        | Description                                                   |
|----------------------------------------------------------------------------|--------------|---------------------------------------------------------------|
| (LOC1='x') AND (LOC2='x') AND (LOC3='x')                                   | Dark Green   | ERP number existing & product available in 3 locations        |
| (LOC1='x') AND (LOC2='x') AND (LOC3<>'x' OR LOC3 IS NULL)                  | Bright Green | ERP number existing & product available in 2 locations        |
| (LOC2='x') AND (LOC3='x') AND (LOC1<>'x' OR LOC1 IS NULL)                  | Bright Green | ERP number existing & product available in 2 locations        |
| (LOC3='x') AND (LOC1='x') AND (LOC2<>'x' OR LOC2 IS NULL)                  | Bright Green | ERP number existing & product available in 2 locations        |
| (LOC1='x') AND (LOC2<>'x' OR LOC2 IS NULL) AND (LOC3<>'x' OR LOC3 IS NULL) | Light Green  | ERP number existing & product available in 1 location         |
| (LOC2='x') AND (LOC3<>'x' OR LOC3 IS NULL) AND (LOC1<>'x' OR LOC1 IS NULL) | Light Green  | ERP number existing & product available in 1 location         |
| (LOC3='x') AND (LOC1<>'x' OR LOC1 IS NULL) AND (LOC2<>'x' OR LOC2 IS NULL) | Light Green  | ERP number existing & product available in 1 location         |
| LINKTABLE.ERP_PDM_NUMBER<>"                                                | Yellow       | ERP number existing but product not available at any location |
| IsStandardPart()                                                           | Orange       | Standard part                                                 |
|                                                                            |              |                                                               |

**PARTdataManager** result in symbol view:



## 22.16. Assembly CNSMASS\_EXACT transferred to CAD

As of PARTsolutions V9.08 it is possible to transfer the mass value for the assembly (in addition to values of single parts or solely).<sup>16</sup>



Mass value for assembly, exemplarily in Inventor

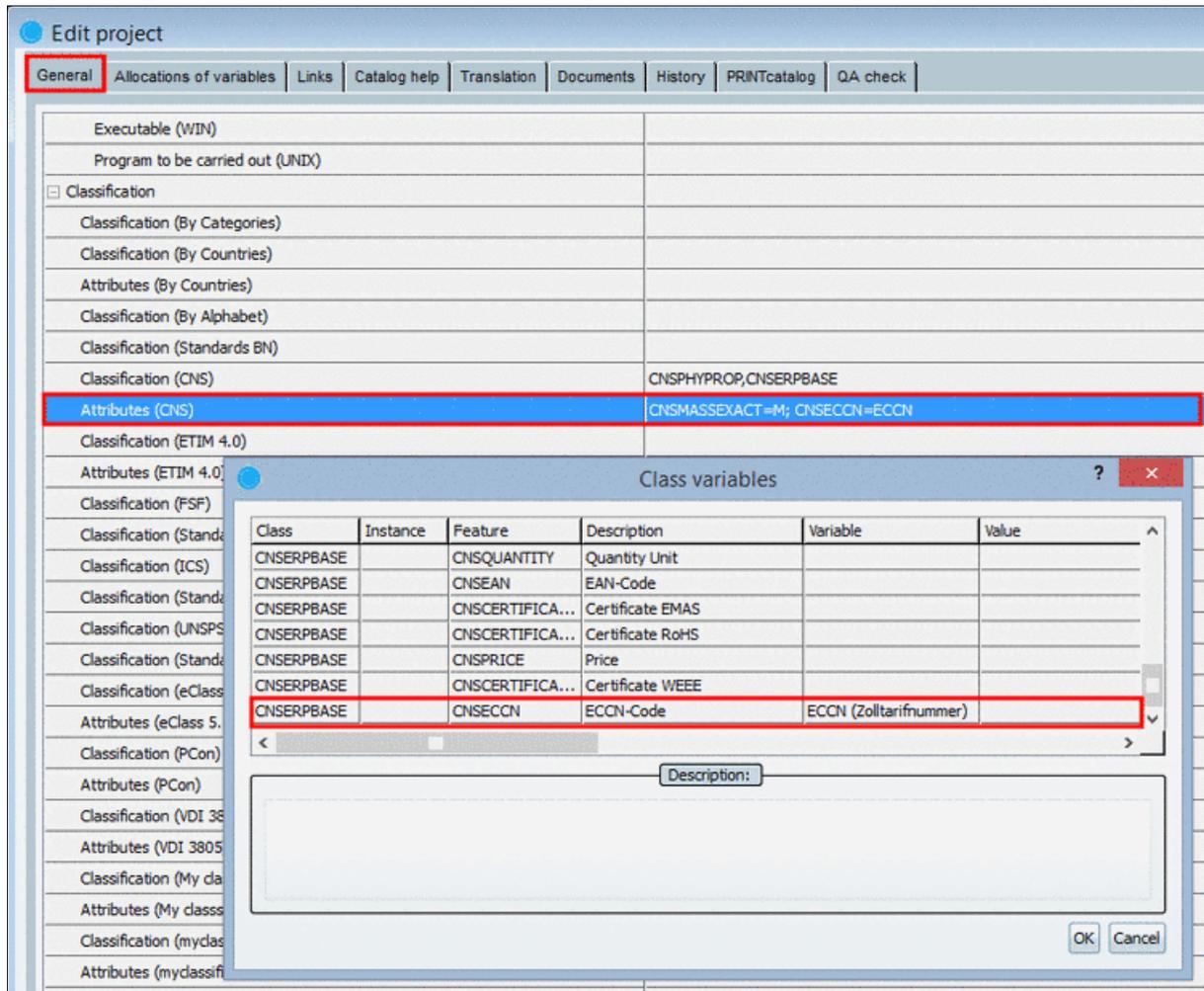
## 22.17. ECCN Numbers are transferred to target systems

Some catalogs contain an **Export Control Classification Number (ECCN)** for parts.

ECC numbers which are inserted in the CNS class system will be automatically transferred to the target systems like CAD/PDM.

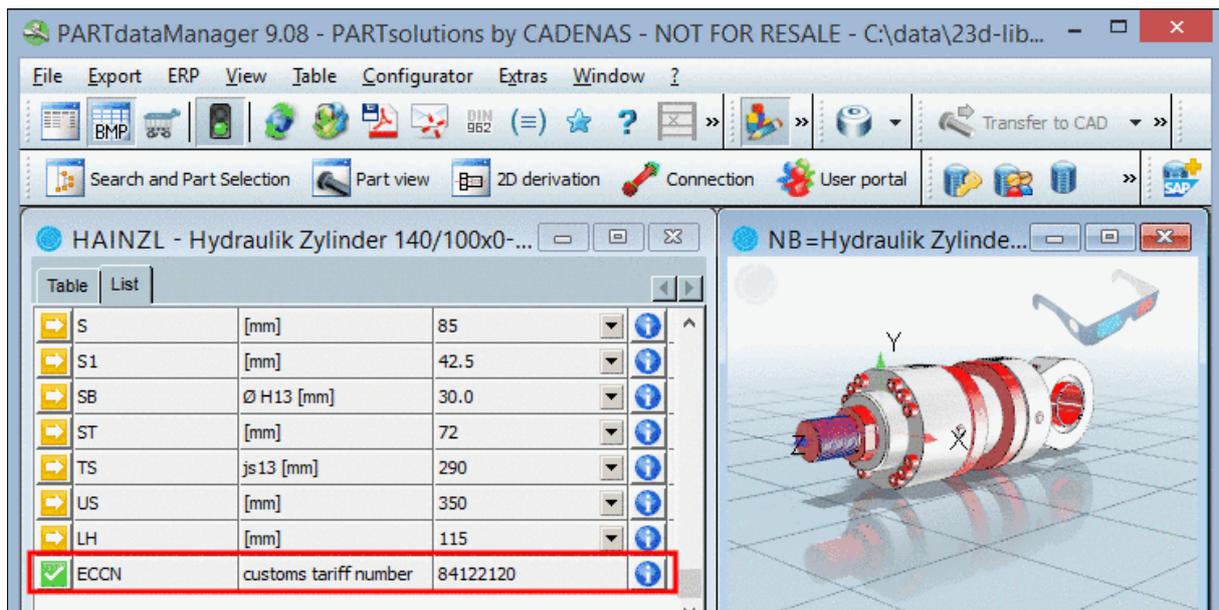
In practice the declaration happens in **PARTproject** -> dialog area **Edit project** -> tabbed page **General** -> **Attribute (CNS)**

<sup>16</sup>#41271



Via column "Variable", mapping to a table variable or via column "Value", mapping to a fixed value

The **CNSECCN** feature can either be mapped to a table variable or to a fixed value.



Exemplified display in PARTdataManager: The CNSECCN feature has been mapped to a table variable.

## 22.18. Automatically use calculated mass, if no other info is available

Calculated mass can be automatically used, if no other information is available.<sup>17</sup>

<sup>17</sup>#44929

Therefor uncomment the following key in the configuration file `ifacecommon.cfg`:

```
Mapping8(not hasClassProp(cns, CNSPHYPROP, CNSVOLUMEEXACT))=cns, CNSPHYPROP, CNSVOLUMEEXACT,
↳?_FORMAT_0("<CLASSPROP(cns, CNSPHYPROP, CNSVOLUMEEXACT)>").value()
```

The activated key effects that the calculated data is automatically mapped to the fixed data.<sup>18</sup>

## 22.19. Inventor - Set appearance independent from material

In Inventor, **material** and **appearance** of the material is handled separately.<sup>19</sup>

As of **PARTsolutions V9.08** and **Inventor 2014** there is an additional key available in PARTsolutions, by which you can set the appearance in Inventor.

If the key `MATERIAL_DEFAULT_APPEARANCE` is set to a correct value, known in Inventor, then the appearance is according to this value.

### Note

If a material is transferred from PARTsolutions and the key `MATERIAL_DEFAULT_APPEARANCE` is set, then **Appearance** has priority over **Material**.

If a material is transferred from PARTsolutions and the key `MATERIAL_DEFAULT_APPEARANCE` is not set, then the appearance is according to the material settings of Inventor.

If neither a material nor the key `MATERIAL_DEFAULT_APPEARANCE` is set, then, in Inventor, the default value "Flat - Polished Gray" is used.

### Example:

`MAT_NAME = Kupfer`

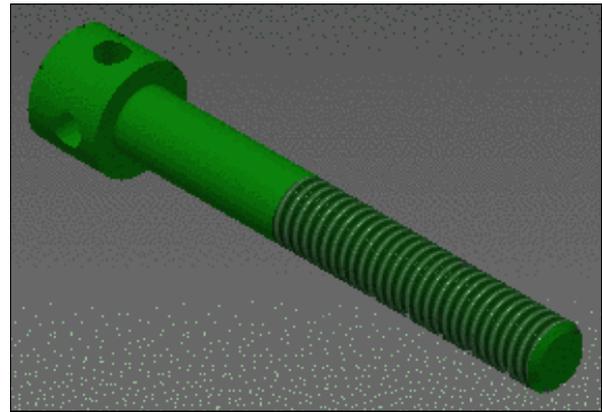
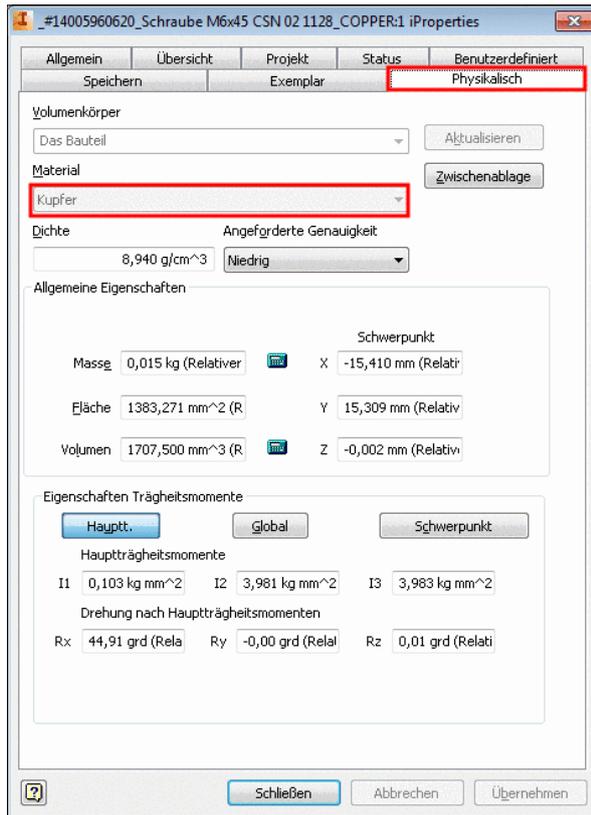
`AND`

```
[CreationOptions]
MATERIAL_DEFAULT_APPEARANCE = Dunkelgrün
```

The material is displayed in the dialog box **iProperties**, on the tabbed page **Physical**.

<sup>18</sup>Material/density comes from PARTdataManager, the other values such as volume and mass then can be calculated.

<sup>19</sup>#40281

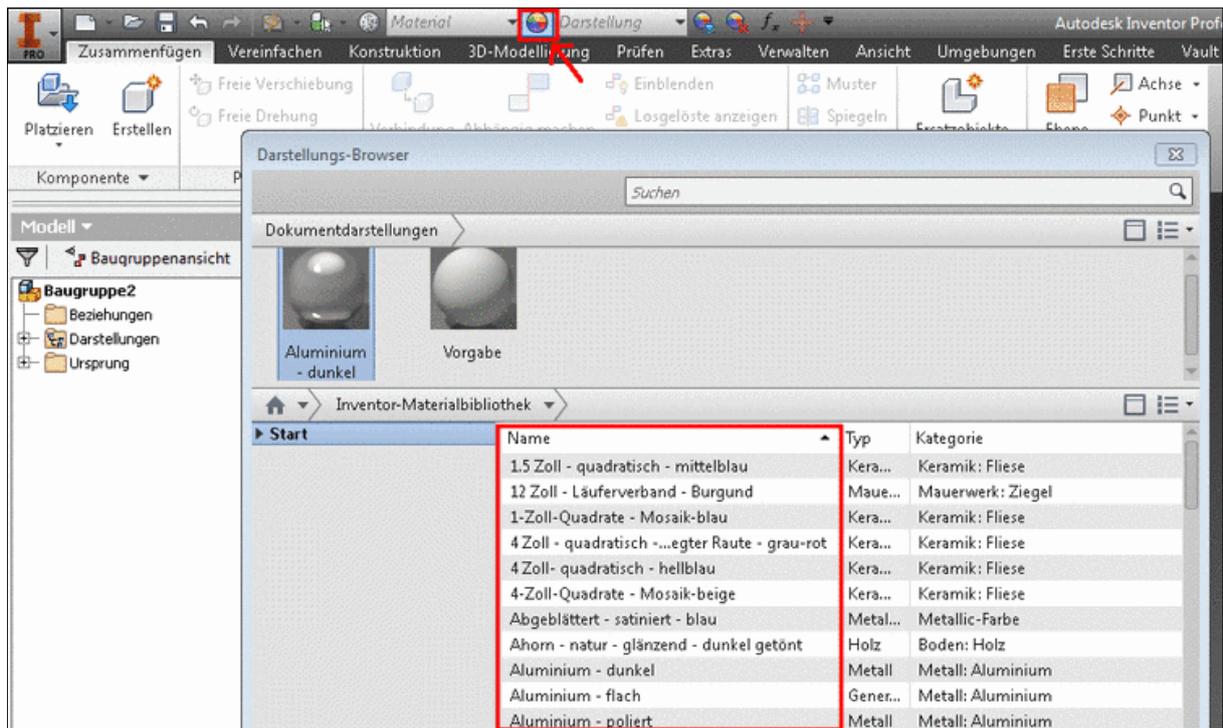


Example: The appearance is "Dark green".

Example: The material is "Copper".

## Note

Preferably look up correct key values in the dialog box **Appearance browser**.



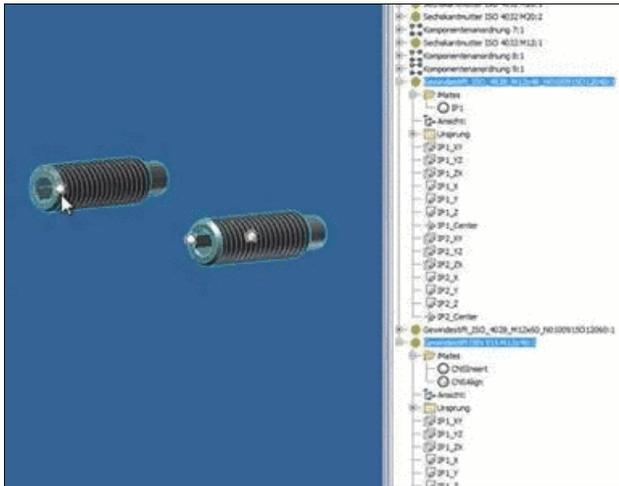
## 22.20. Inventor - Enhanced configuration possibilities for iMates

As of version 9.08 you have the opportunity to configure the behavior of the interface for the creation of iMates.<sup>20</sup>

%CADENAS\_SETUP%/ifadeksinv.cfg -> section CreationOption(is3d) -> key createimates

Value range: 0,1,2

- 0: No iMates are created.
- 1: Only placement information is used in order to create iMates.
- 2: iMates are created for all existing insertion points (behavior like in V8).



## 22.21. NX - Different modes for Native Checkin

There is a new key `ProcessDocumentState`, that controls the interface behavior during native checkin of unsaved parts.<sup>21</sup>

Configuration file `ifugnx.cfg`

```
[NativeCheckin]
ProcessDocumentState=0/1/2
```

- 0 (default): "Ignore": The last **saved** model is checked in.

### Note

However, if model's solid features were visibly modified prior to the checkin, nevertheless 2D and 3D views show the modified solid, because they are generated **during** the checkin.

- 1: "Fail": The checkin process is aborted and an error message is displayed noting the modified state of the model.
- 2: "Save": "Force save" is performed for the document and the checkin continues.

If the key is omitted or a value other than 0,1,2 is provided, 0 is assumed.

## 22.22. NX - "Material"-attribute error message - Exclude attributes from processing

### Problem:

Warning during attribute creation:<sup>22</sup>

```
Failed to set attribute 'MATERIAL'.
```

**Reason:** The attribute is locked or is owned by another object, so its value cannot be set or changed.

### Background:

The problem concerns only certain catalogs, namely those, which have an attribute named "Material". In this case the interface tries to set the attribute, which in fact is not possible, because it is a "system"-attribute.

<sup>21</sup>#42299

<sup>22</sup>#41675

**Solution:**

For copying attributes use the parameters **var\_exclude** and **var\_visibile=1**.

- **var\_visibile=1** at this place tells the interface that only visible attributes have to be processed, which solves the problem for all catalogs, which have "Material" as an internal expression.
- With „**var\_exclude**“ you can assign certain attributes to an "Ignore" list, whereby the problem will be solved.

Examples:

- `Attr_CopyFrom_01=default,var_exclude=A,var_visibile=1`

The variable A is explicitly set to the ignore list.

- `Attr_CopyFrom_01(isCatalog(norm))=default,var_exclude=D,var_visibile=1`

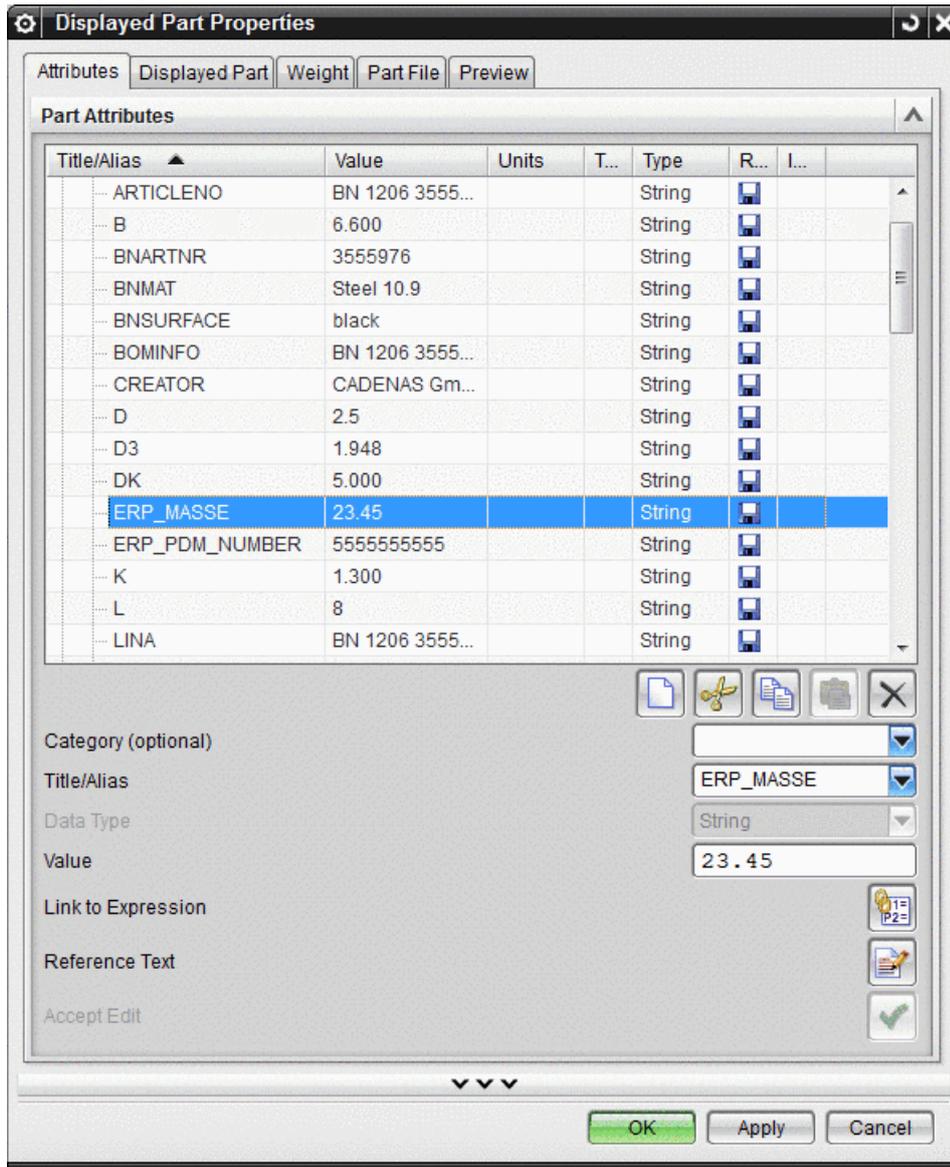
Here, the expression is only applied to the standards catalog.

### 22.23. NX - Evaluation of template attribute types and adjustment at export

As of NX 8 and PARTsolutions v9.08 the type of attributes available in the template is evaluated and adjusted during the export.<sup>23</sup>

The attribute type from the template is evaluated, and is set a) either with the default value „String“, if there was no type explicitly determined for the respective attribute in the block [CadDocumentAttributes], or b) with the determined type.

If, for example, the attribute "**ERP\_MASSE**" is transferred without type definition, then it appears as type "String" in NX.



The following describes how to set the attribute type in the block [CadDocumentAttributes]:

1. At first the attribute is set with the desired value. The value can be fixed or be specified by an expression like "?\_ATTR("NB")" for example.
2. Then, in a second line the desired category is set.

Example:

```
[CadDocumentAttributes]

TestAttribute=42
TestAttribute.custom=Category.TestCategory

TestAttribute2=1
TestAttribute2.custom=Category.TestCategory
```

3. Optionally you can set the attribute type, behind the category, separated by comma. If no type is specified, then the type will be "String" by default.

Example:

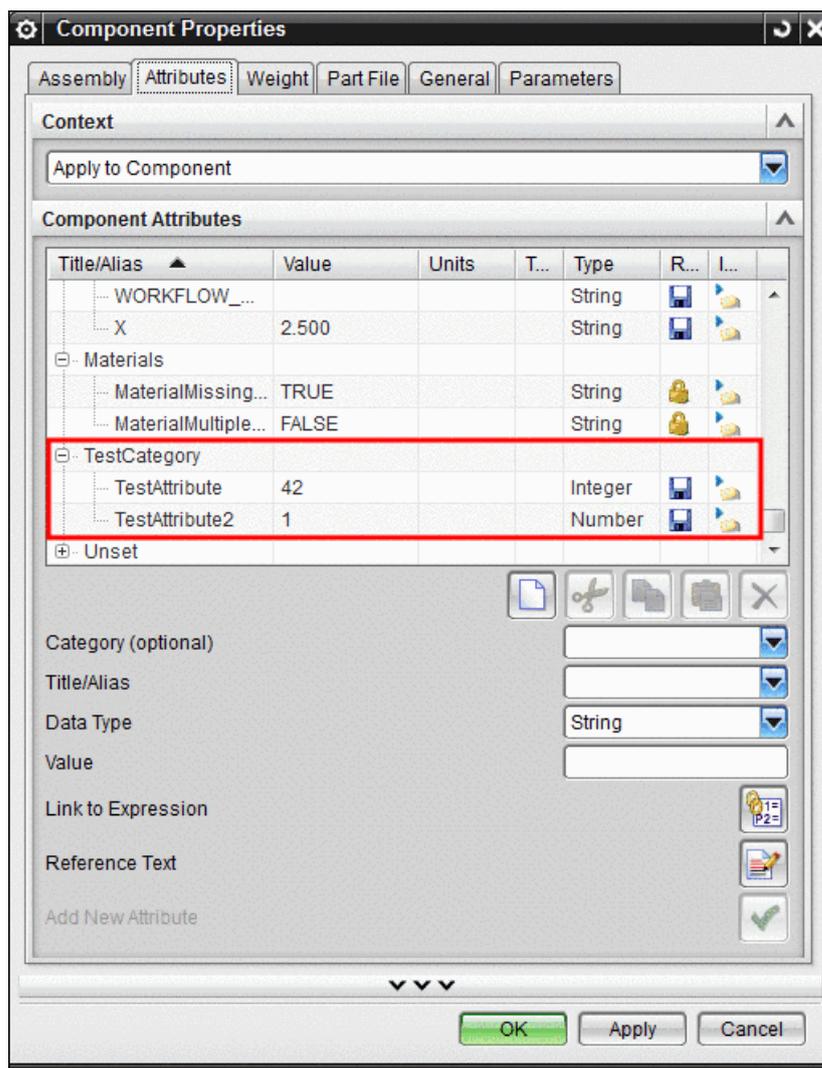
```
[CadDocumentAttributes]

TestAttribute=42
TestAttribute.custom=Category.TestCategory, Type.Integer

TestAttribute2=1
TestAttribute2.custom=Category.TestCategory, Type.number
```

The following "custom" type values are supported ("string" is default):

- string, time (String)
  - boolean
  - integer
  - double, number, float, real (Number)
4. After part export the attribute is found in the "**Component Properties**" dialog box, in the specified category "**TestCategory**" (name exemplarily).



## 22.24. NX 9 - STL quality can be improved by config key

As of NX9 with PARTsolutions V9.08 it is possible to force a higher quality for the generation of STL files by a new key in the configuration file `ifugnx.cfg`.<sup>24</sup>

```
[Interface]
ForceCreateNew3DPreviews=0
```

- 1: If set to 1, a new faceted model will always be created whenever a STL file must be written (e.g. geometric search, 3D-preview).

<sup>24</sup>#45753

- 0 (default): If left at its default value, 0, a new faceted model for the STL file will only be created when either no faceted models exists in the part file, or the file is modified. Otherwise, the existing faceted model will be used (faster).

Background:

Some customer STLs (3D-preview images) are generated with a very low quality. This has a negative influence on geometric search. The reason for this is existing facet models that were generated for these parts before they are passed to our interface. The interface then uses these facet models instead of generating its own to save time. Additionally, some customer parts are multi-body models, whereas we only support single-body models.

## 22.25. NX 9 - Supported with PARTsolutions 9.08

PARTsolutions v9.08 supports NX9.<sup>25</sup>

- NX is now available for 64-bit versions (not for 32-bit versions)
- Compatible compiler is Visual Studio 2012 (update 1).
- Compatible Windows OS are Win7 and Win8, 64 bit only.
- Compatible Teamcenter versions are 9.1 and 10.1.
- New Ribbon interface. The old menu-based interface is still available, but is to be phased out with NX11. Also see Section 22.26, "NX9 - Ribbon menu by default".
- Seamless
  - The Seamless dialog is displayed in a separate PARTsolutions window.
  - If Seamless shall be performed in the NX browser tab, then please set the following:
    - Set the environment variable "UGII\_WEB\_BROWSER\_FACTORY" on the value "iewebbrowser".
    - Remove the „(not nx90)“ from the two following keys.

```
MN_Environment_55(not nx90)=menu,part,app,asm,draw,toolbar
MN_Callback_55(not nx90)=Application.startSeamlessDialog()
```

- The default distance tolerance has been changed from 0.0254 mm (0.001 inch) to to 0.01 mm (0.0003937008 inch). This stricter tolerance may result in export failures of some of our catalog models.

Further release information is available here:

<http://support.industrysoftware.automation.siemens.com/docs/nx/nx9/rn/index.html>

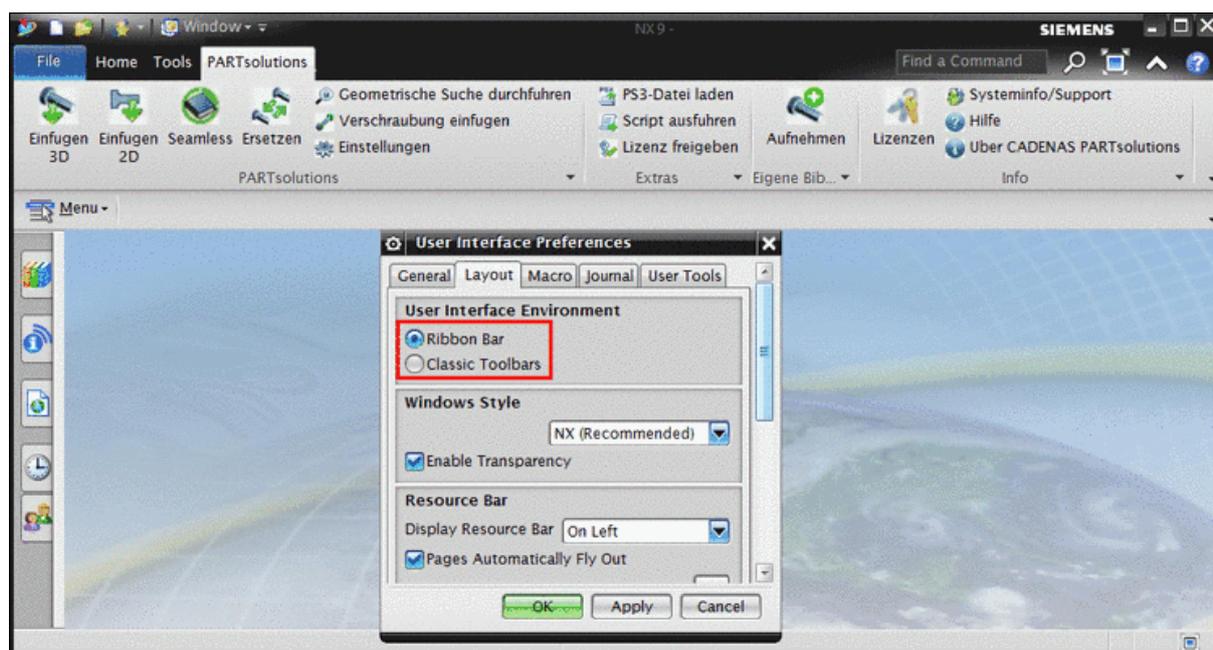
## 22.26. NX9 - Ribbon menu by default

As of version NX9 the Ribbon toolbar has been established. As of version V9.08 it is supported by PARTsolutions.<sup>26</sup>

The Ribbon menu is displayed by default. However, you can switch between the Classic and the Ribbon toolbar.

<sup>25</sup>#38517

<sup>26</sup>#42513



Via **Preferences - User Interface** you can call up the same-named dialog box. There you will find the following two options:<sup>27</sup>

- Ribbon Bar
- Classic Toolbars

Precondition for being able to switch is the following setting in the configuration file `ifugnx.cfg`. **PrepareMenuPath** has to point to the correct startup folder.

```
[UI]
PrepareMenu=1
PrepareMenuPath=$TEMP/startup
```

Alternatively to the dialog box you can also switch with the **Ctrl+2** key combination.

## 22.27. NX9 - Setting options for physical properties from PARTsolutions

There are different setting options available for the handling of physical properties of solids during export in the configuration file `ifugnx.cfg`:<sup>28</sup>

```
[Categories]
PhysicalPropertiesMode=0/1/2/3
```

- 0: Physical properties are not mapped at all. They are either acquired from the material (if provided) or calculated from NX customer defaults.
- 1: "Assert" mode for the physical properties

Available properties:

- CNSMASSEXACT (Mass)
- CNSDENSITY (Density)
- CNSVOLUMEEXACT (Volume)
- CNSCOG (Center of gravity)

Physical properties are "asserted" (mapped to specially provided NX fields). This option will make them appear in various information windows, such as the "Displayed Part Weight" properties dialog. It is also possible to map these properties to assemblies in this manner. Mass, density, volume and center of gravity can be mapped.

<sup>27</sup>Possible up to NX11, when the support for the old interface is phased out,

<sup>28</sup>#41217

**Note**

Note that the assignment of mass, density and volume only works if either a) the mass (CNSMASSEXACT) is specified or b) both the density (CNSDENSITY) **AND** volume (CNSVOLUMEEXACT) are specified. If just the density or volume are specified, the assignment will fail.

If an assignment fails, then a respective error message is displayed. See [below](#).

- 2: "Real" physical properties are set

Available properties:

- CNSMASSEXACT
- CNSDENSITY

Physical properties are set at the model level (mapped directly to the actual NX physprops). This method only works with parts. Only density and mass can be assigned this way.

- 3: Options 1 and 2 are both enabled.

Default value: 1

**Possible error message**

If "PhysicalPropertiesMode" is set to 1 or 3, then at missing key parameters the following error message is displayed:

```
Failed to assert physical properties due to missing key parameters.
↳
Either the mass or both volume and density must be provided
↳ for a successful assertion.

If only the density is available,
↳ please select a different physical properties assignment mode
↳ ifugnx.cfg(set PhysicalPropertiesMode to '2' in the configuration file ifugnx.cfg).
```

**Note**

The warning for PhysicalPropertiesMode=3 (density set, but not asserted) has the "Moderate" importance level and is displayed only when the key **DisplayCreationWarningLevel** is at 50 or higher. The warning for PhysicalPropertiesMode=1 (density not set at all) has the "Major" importance level and is visible by default.

Further information on this is found under Section 2.5.9.2.7, "Physical properties from PARTsolutions" in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

**22.28. NX - Teamcenter: Update from version NX 9 to NX 9.01**

The following is only necessary for Teamcenter-NX installations.<sup>29</sup>

When NX 9 is updated to NX 9.0.1, the following line in `ifugnx.cfg` has to be adjusted:

Change

```
placementmacro(nx90,tcActive)=$CADENAS/iface/unigraphics/shared/macro/cns_place_nx9_teamcenter.macro
```

to

```
placementmacro(nx90,tcActive)=$CADENAS/iface/unigraphics/shared/macro/cns_place_nx9_01_teamcenter.macro
```

<sup>29</sup>#47931

## 22.29. PDM Profile - Parameter value for PARTsolutions preview changed

ifprofile.cfg

```
[THUMBNAIL]
;create=1 --> use thumbnail from PartSolutions
create=1
createParameter=3DPREVIEW
```

The value of the parameter **createParameter** has been changed from **THUMBNAIL** to **3DPREVIEW**.<sup>30</sup>

## 22.30. Teamcenter-Pro/E - "Description" bug fixed

### Problem:

Up to now the **ItemDescription** was applied to **RevisionDescription**.<sup>31</sup>

### Solution:

With 9.08 SP0 the attribute DESCRIPTION has been added to CAD properties in order to set **ItemDescription** in IPEM.

```
[CadDocumentAttributes(is3d)]
DESCRIPTION=
```

CreationOption TC\_ItemDescription is used for all Teamcenter objects except Item and Dataset. Tc\_DatasetDescription is still used as description for Dataset.

Also fixed MULTICAD (was damaged by earlier commit).

## 22.31. NX-Teamcenter - LinkDB ReturnMapping implemented

Via **LinkDB ReturnMapping**, PDM attributes can be mapped to link database fields.<sup>32</sup>

### Example:

ifnxteamcenter.cfg

At first, in the block [AttributeMapping(is3d)], the block for the actual LinkDB mapping has to be declared (as usual).

```
[AttributeMapping(is3d)]
Attr_Content_00=LINKDB_RETURN_MAPPING
Attr_Section_00=LINKDB_RETURN_MAPPING
```

Then, via ERPTABLE.<ERP\_COLUMN\_NAME> or LINKTABLE.<ERP\_COLUMN\_NAME>, the needed columns can be specified.

### Example:

```
[LINKDB_RETURN_MAPPING(is3d)]
ERPTABLE.<ERP_COLUMN_NAME>=? "%TC_ItemId%"
```

ERPTABLE.<ERP\_COLUMN\_NAME> specifies table and column, the value the placeholder to be used. Thereby the ItemId for example (which is possibly created during the generation in Teamcenter) can be saved in the LinkDB.

Supported placeholders for ERPTABLE.<ERP\_COLUMN\_NAME> are:

- %TC\_ItemId%
- %TC\_ItemRevision%

<sup>30</sup>#45239

<sup>31</sup>#44715

<sup>32</sup>#41255

- %TC\_ItemName%
- %TC\_ItemDescription%
- %TC\_TargetFolder%
- %TC\_ItemType%

The following **preconditions** have to be given for **ReturnMapping**:

- In the attribute mapping section [LINKDB\_RETURN\_MAPPING] a key with the respective structure has to be available (see above).
- <ERP\_COLUMN\_NAME> has to be an existing VARCHAR column in the ERPTABLE!

After a new creation of parts the project has to be reloaded in **PARTdataManager** in order for the PDM values to be displayed.

## 22.32. SAP PLM for NX - Escaping for specified characters supported

The following keys have been added with V9.08 and enable "Escaping" for specified characters.<sup>33</sup>

- **RepTable\_DSCXML**

The key is required for "Escaping" in the XML file.

```
[CalcName]
RepTable_DSCXML=&,&," ," ; < ,< ; > ,> ; $, $ $, % , % %
```

- **cmd\_line\_escape\_chars**

The characters that need to be escaped in your environment to work in batch files, separated by ','.

Example:

```
[ECTR]
cmd_line_escape_chars=%,& , !
```

Default is "%".

## 22.33. Teamcenter - "Saved searches"

As of V9.08 for certain functionalities such as **MoveToNewFolder** certain **Saved Searches** have to be installed in Teamcenter. The needed data are found under \$CADEN-AS/iface/plm/teamcenter/saved\_queries/....<sup>34</sup>

When creating a "Saved Search" in Teamcenter, please note that the "Saved search" has exactly that name, which is defined in the description of the "Saved search".

<sup>33</sup>#42195

<sup>34</sup>#43815

## Chapter 23. V9.07 SP1

### 23.1. Forced local search for Duplicate Report

Duplicate Report is a batch function that sometimes needs to run for 24 hours to get the results.<sup>1</sup>

Running it with **Searchserver** by default (if Searchserver is activated) creates long queues and slows down all the other users that run searches.

As of 9.07 SP1 there is an option to force a local search for duplicate reports.

Configuration file: \$CADENAS\_USER\reports.cfg

```
[Common]
ForceLocalSearch=0 or 1
```

Default: 0 : Search Server is used

If you want to use a local search, change the value to 1.

Just a side information in this context: A possibility to accelerate Duplicate Reports is to enable **Multi Threading**. (Disadvantage: it slows down other searches)

Configuration file: \$CADENAS\_USER/reports.cfg

```
[Common]
EnableMultiThreading=1
```

### 23.2. Delay when changing configuration keys

As of 9.07 there is a 10 sec. delay until config changes become effective. (This avoids unnecessary network traffic.)

#### Note

Not relevant, when an application has to be restarted in any case.

As of 9.07 SP1 a config key can be set in order to adjust the fixed delay of 10 seconds - if needed.

\$CADENAS\_SETUP/partsol.cfg:

```
[ConfigCache]
MaxStaleSeconds=10
```

### 23.3. Load / Save Search Templates

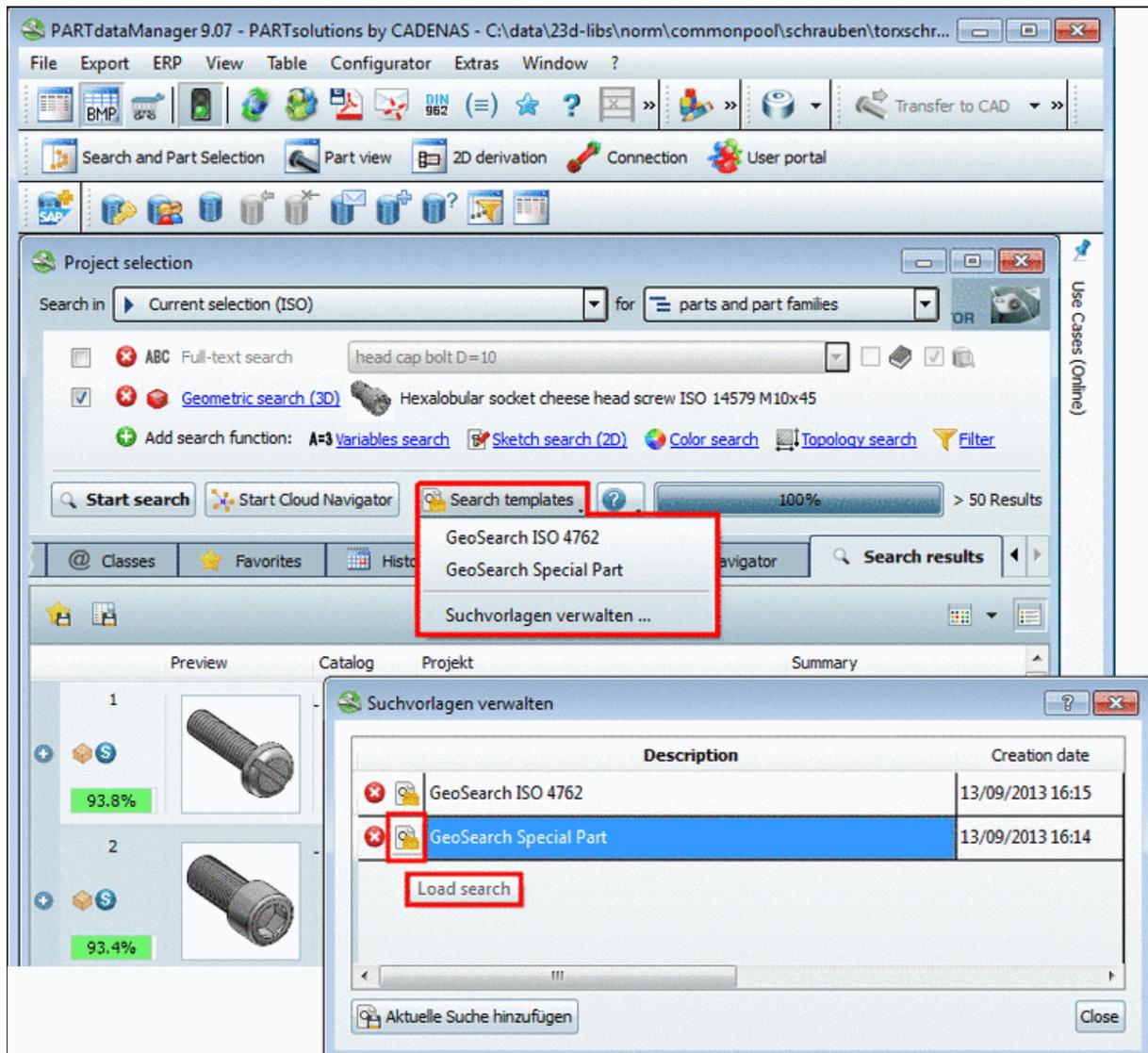
As of v9.07 SP1 saving and loading of search templates has been modified.<sup>2</sup>

Now the rarely required button **Save search**  is integrated in an own dialog box **Manage search templates ...** (Suchvorlagen verwalten ...) as button **Add current search** (Aktuelle Suche hinzufügen).

Calling the dialog box **Manage search templates ...** happens via the same-named menu item in the opened list field of the button **Search templates**.

<sup>1</sup>#41053

<sup>2</sup>#40525



The menu item **Manage search templates ...** (Suchvorlagen verwalten ...) can be hidden via `$CADENAS_SETUP/partsol.cfg -> section [PARTdataManager] -> key TOP_SHOW_QUERYMANAGER=false`. If desired - thus the respective functions can only be used by the administration/consulting in order to create own company templates.

Loading a XML template for a geometric search can be realized via scripting. When the search is started in the CAD system the template will be automatically loaded.

The current recommendation for Geosearch projects is: Create one template for Geosearch in native parts only, and one template for Keyword search in all catalogs. Also it may be useful to have a Keyword search in standards only.

Please provide feedback for good OOTB templates to the development team. We try to pre-configure good search templates based on consulting experience in the next releases.

#### 23.4. PARTdataManagerHide option „Search for synonyms“

Checkbox and icon of **Search for synonyms** can be hidden via configuration file `$CADENAS_SETUP/partsol.cfg`.

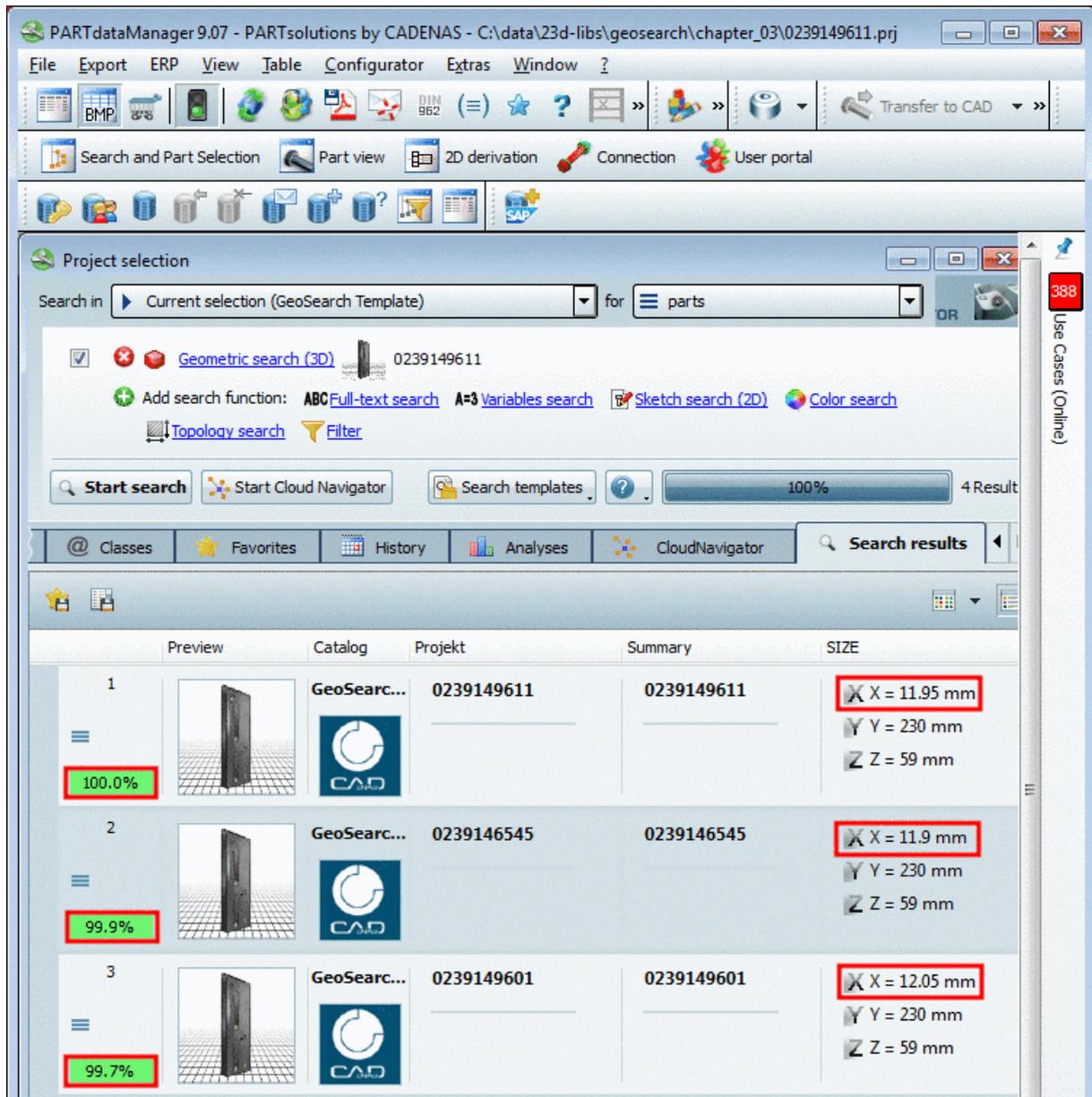


[PARTdataManager]  
TOP\_SHOW\_SYNONYM\_BUTTON=NO

Set value to **NO**.

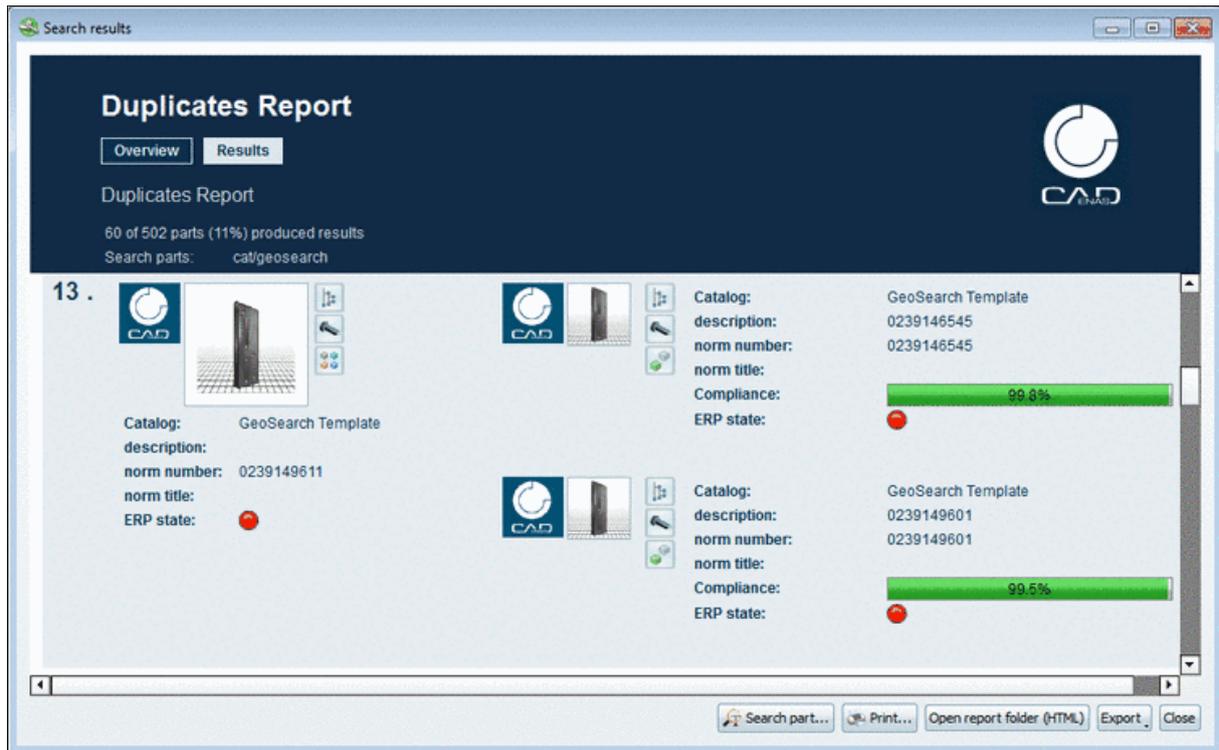
### 23.5. Geometric Search: Results with a decimal place

As of V9.07 SP1 a decimal place is displayed concerning results of a geometric search.



Geometric search (3D)

With a decimal place you see the difference (at a first glance) – instead of having many hits of 100%. In the example in hand the X-extension displayed in the SIZE column confirms the differentiation.



Duplicates Report

Especially for a **Duplicate search** the more precise result facilitates the estimation whether a real duplicate has been found. The displayed percentage value depends from a lot of parameters such as the chosen search template or whether the duplicates have been exported with different precision. However 98 percent is a good limit at the **Duplicates Report**.

The setting of the decimal place can be adjusted in the configuration file `$CADEN-AS_SETUP/geomsearch.cfg`.

```
[AliasDisplayOptions]
COMBINATION=PERCENT=1, BASE=1, REVERSE=1, COLOR={90:100:111:245:112},
COLOR={70:90:255:255:0}, COLOR={0:70:255:0:0}, PREC=1
```

If you don't want a decimal place to be displayed, set "PREC=0".

## Chapter 24. V9.07

### 24.1. Replace\_std.cfg - Rules for complete subtrees supported

Rules for complete subtrees are supported in \$CAEDENAS\_DATA/datasetup/replace\_std.cfg now.<sup>1</sup>

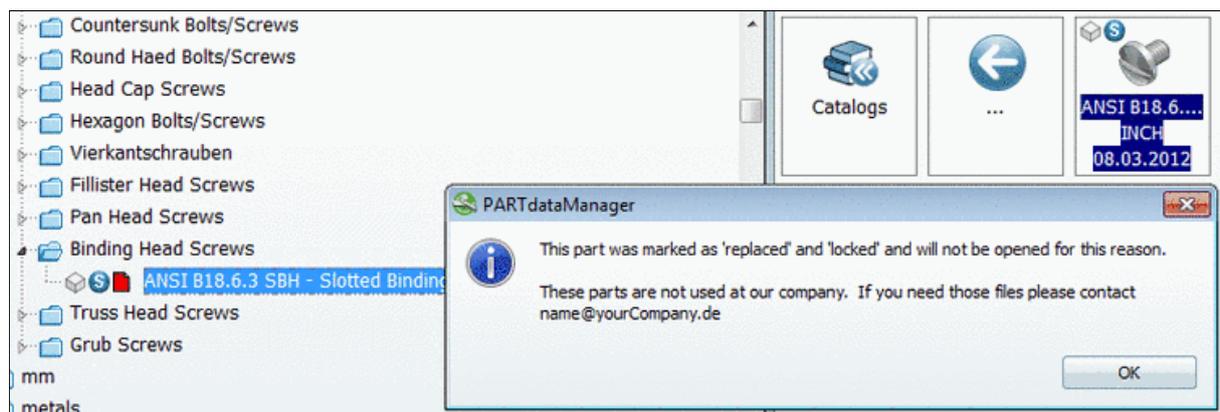
Simply add a section containing the desired path.

```
[norm/ansi/inch/bolts/binding_screws]
ALLOW_OLD=0
CREATENR_OLD=0
EXPORT_OLD=0
INFOTEXT=This folder is not used at our company.
↳ If you need those files please contact name@yourCompany.de

[_geom_search_imported_02_]
ALLOW_OLD=1
CREATENR_OLD=0
EXPORT_OLD=1
INFOTEXT=This catalog should not be used. Please try to avoid using it.
↳ If you need those files please contact name@yourCompany.de

[norm]
INFOTEXT=This catalog is nice!
```

When opening a part in the respective path a message is displayed.

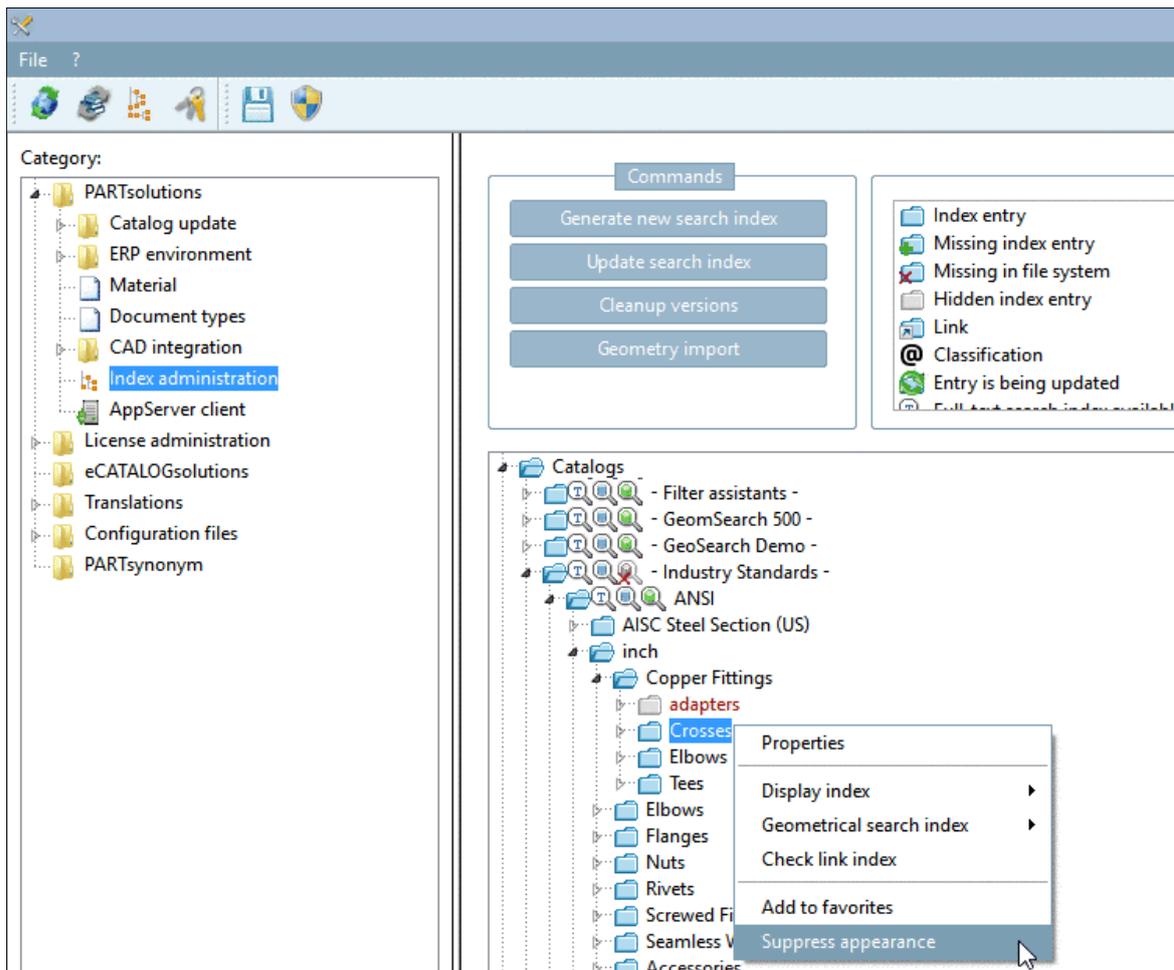


Advantage:

- This enables individual settings for catalog subtrees.
- The catalog administration can block catalog subtrees for a specific reason or provide certain information.

This is an alternative to the function under **PARTadmin** -> **Index administration** -> context menu command **Suppress appearance**.

<sup>1</sup>#38715



However via `replace_std.cfg` the subtrees stay visible even though they can't be used.

Further information on this configuration file is found under Section 1.7.3.3, "replace\_std.cfg" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 24.2. Additional functions for Teamcenter via "api.vbb"

Via the `TeamcenterHookService` method a new item can be created, be added to a Teamcenter folder and the Teamcenter item due to which the method has been called up optionally be added to the new item.<sup>2</sup>

Furthermore the login can be performed via `TeamcenterHookService`.<sup>3</sup>

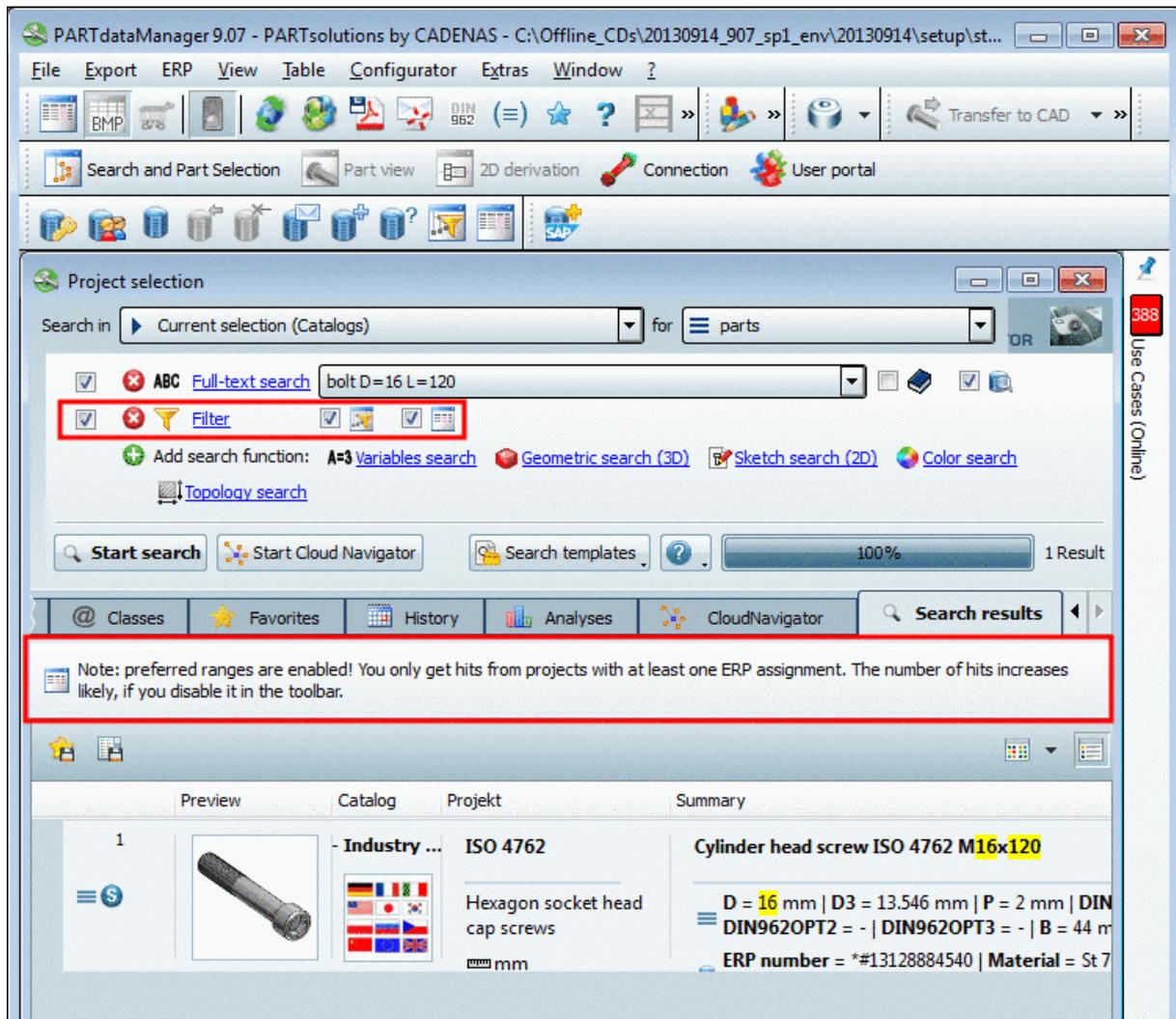
You can find detailed information on these methods and many others under Teamcenter Zusatzfunktionen (`teamcenter_public_api.vbb`).

## 24.3. Key "SearchFilterHint\_MaxResults" - Search result filtered - Control of message

If filters such as **Preferred rows on/off**  are enabled, this affects (reduces) the search results. Compare Section 3.1.11.2.2, "Use preferred rows filter" in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

<sup>2</sup>#35925

<sup>3</sup>#33911



Via key `SearchFilterHint_MaxResults` you can adjust, whether a respective message is displayed at all or which number of hits is displayed below.

**"Note: preferred rows are enabled! You only get hits from projects with at least one ERP assignment. The number of hits increases likely, if you disable it in the toolbar."**

`$CADENAS_USER/psolopt.cfg`

```
[SettingsIndexTree]
SearchFilterHint_MaxResults=
```

Value range:

- -1: No message is displayed
- 0: A message is only then displayed, when there are no hits at all (default).
- 1-5: When there are  $\leq 1$  to 5 hits, then a message is displayed.

## 24.4. Batchconvert.exe

The program `Batchconvert.exe` can convert 3D files in batch mode and create preview images.

As of v9.07 new parameters have been added:<sup>4</sup>

- In order for the program to be prevented from converting ALL files again, the parameter `--ignorenotmodified` can be used.

```
--ignorenotmodified
```

<sup>4</sup>#37085

Files which have not been modified are ignored at a new conversion.

Files which have been modified are converted again and preview images are generated.

### Caution

In this mode `--overwrite` should be active, in order for preview images to be enabled to be overwritten.

If only `--overwrite` is active, existing files are always overwritten.

If neither `--overwrite` nor `--ignorenotmodified` is active, existing files are not overwritten.

- `--deleteinput`

Deletes the original files.

- `--defaultpreview3d`

Default file, if the conversion fails. The file must already have the target format.

- `--defaultpreview`

Default preview image, if the preview image cannot be created. If already the conversion of the 3D file fails, this preview image is used - if set. Otherwise the preview image is created from the default 3D file. Also here the image must have the same format as the created preview images.

Detailed information on this is found under Section 1.9.3, "Batchconvert.exe" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 24.5. Abort native checkin for parts/assemblies with more than one characteristic

When using a **PDM integration** it is not possible to import a family table with several characteristics (variants) into PARTsolutions via function **Insert** . If this is the case the process is aborted with a respective error message.<sup>5</sup>

The function **Insert (Import own part / assembly into library)**  only supports parts/assemblies with maximal one characteristic (variant).

The following cases can occur:

- Assembly with one characteristic (variant)  
-> Supported
- Assembly with only one characteristic (variant), but with a part, which has several characteristics.  
-> Error message (not supported)
- Assembly with characteristics (variants)  
-> Error message (not supported)

### Settings for Native checkin with PDM:

Configuration file `ifacecommon.cfg`

```
[NativeCheckin]
copyNativeFiles=0
UseUploadTransaction=1
```

<sup>5</sup>#37803

**Key UseUploadTransaction:**

- 1: The method NativeUploadTransaction() of the active interface is processed -> Native Checkin with PDM
- 0: No method of the PDM interface

**Key CopyNativeFiles:**

- 0: No data is copied into the NativePool (data is fetched from the PDM). That's why this setting is actually only used together with UseUploadTransaction=1.
- 1: CAD files are copied into the PARTsolutions NativePool.

**24.6. New entries for variable status in PS3 file**

The variable status is shown in the PS3 file.<sup>6</sup>

The following entries have been added:

```
SOURCETYPE{
 "DA" Dataset variable, attribute algorithm or value range
}
DATATYPE{
 0 Text or number
}
VISIBLE{
 1 Visible or invisible
}
```

**SOURCETYPE** specifies how the user can select values.

Allowed values for **SourceType**:

```
DA Dataset variable
MA Attribute algorithm (calculated values)
FW Value range variable
DEF NB and LINA
```

**TYPE** is a logic classification of variables.

Allowed values for **Type**:

```
SM Object attribute
GM Geometry attribute
EM Extra attribute
FM Function attribute
GA Structure attribute
AT Feature attribute
DM Dimension attribute
ER ERP attribute
```

The types of **SOURCETYPE** and **TYPE** are not conflicted. The types are defined according to DIN V4000.

You can also find the types in the Language section.

You can use the following declaration in a **configuration file** for example:

```
Attr_CopyFrom_01=default,var_visible=1,var_sourcetype=DA
```

Valid entries are:

- var\_visible=0/1
- var\_sourcetype = value from the above list
- Var\_type = value from the above list

<sup>6</sup>#37391

## 24.7. Column sequence adjustable role dependent

As of v9.07 it is possible to define the sequence of columns role dependent.

In the course of this new feature there are the following changes:

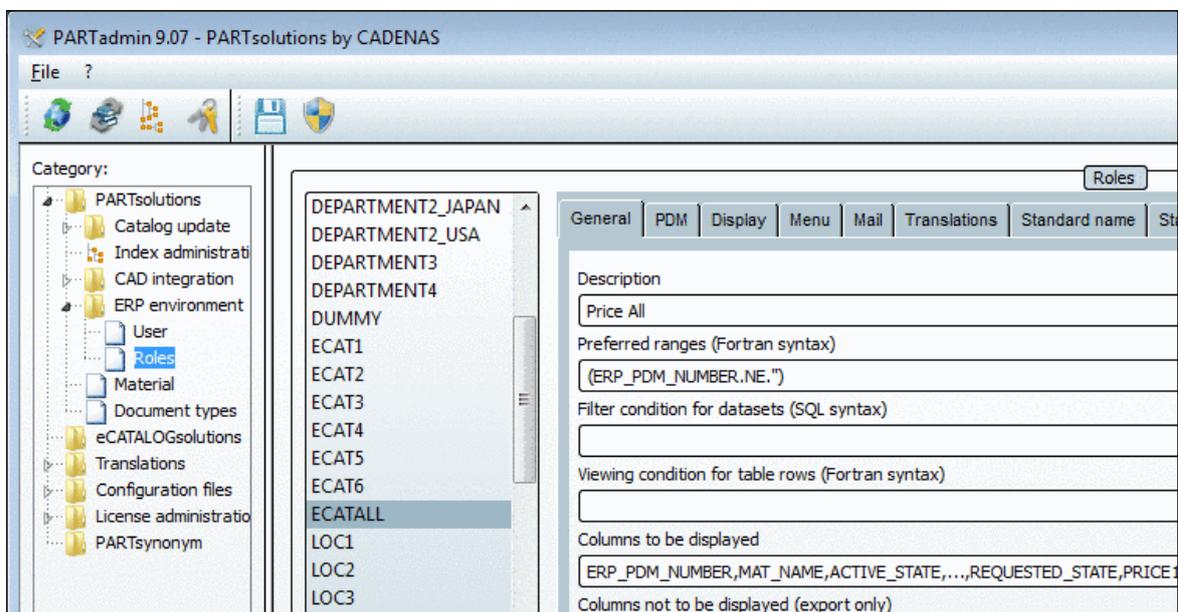
- The key `VARORDER` in the section `[PARTdataManager]` is omitted without substitution (and the respective field in the user interface as well).

(`$CADENAS_SETUP/plinkcommon.cfg`)

- Now the column sequence is defined in the key `VARUSED`, in the respective role section, thus is role dependent.

(`$CADENAS_SETUP/plinkgroups.cfg`)

In the user interface the setting is performed under **PARTadmin** -> **Category** -> **PARTsolutions** -> **ERP environment** -> **Roles** -> **Columns to be displayed**



Columns to be displayed

### Note

In case that some ERP columns are to be displayed at the top and others at the bottom - in other words the geometric data somewhere in the middle, then please use the following syntax:

```
ERP_PDM_NUMBER , MAT_NAME , . . . , DESCRIPTION
```

At the position of „...“ the geometric columns are shown.

## 24.8. New erpcustom [ADDTODB] script: erp\_duplicatecheck.vbs

### Problem Description <sup>7</sup>

When the **Add dataset to link database**  button is used another time on the same line, with the same material selected, then a duplicate is created.

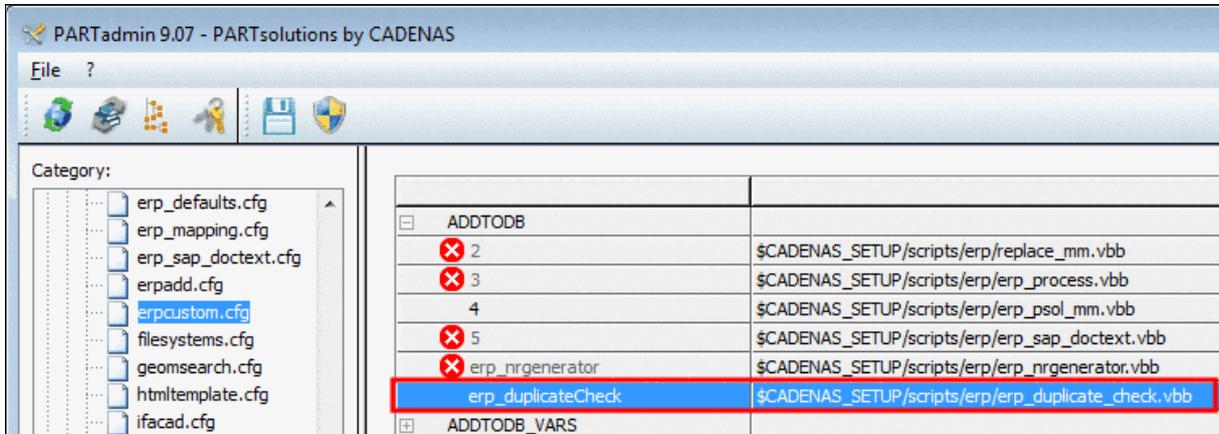
Also with yellow range fields, this could happen, especially if export timestamp is activated.

### Solution

<sup>7</sup>#38345

You can find a new script `erp_duplicate_check.vbb` in `$CADENAS_SETUP\scripts\erp`.

If the script shall be used, activate it in `$CADENAS_SETUP\erperpcustom.cfg`, in the [ADDTODB] section.



If not existing yet, insert the key as follows:

```
[ADDTODB]
erp_duplicateCheck=$CADENAS_SETUP/scripts/erp/erp_duplicate_check.vbb
```

The script makes a select statement to check for duplicates with this settings:

- prj\_path,line\_id
- all ERP-fields that are asked in the current dialog (material, surface, ... whatever is activated here)

## 24.9. Key "HiddenItemToolBarEntries" - Set buttons in search result list visible or hidden via configuration file

You can hide the buttons in the search result list via configuration file:

Perform the setting under **PARTadmin** -> category **Configuration files** -> `$CADENAS_USER` -> `pdatamgr.cfg` -> section [SettingsIndexTree] -> key `HiddenItemToolBarEntries`.



1. Activate the key `HiddenItemToolBarEntries`.  
If you want to hide all buttons, then that's it.
2. Otherwise you can list the desired button parameters comma separated.

```
[SettingsIndexTree]
HiddenItemToolBarEntries=FileTreeOpenAction,FileTreeCompareSearchResultAction,
FileTreeAddToPartCompareAction,FileTreeSetFirstComparePartAction,
FileTreeSetSecondComparePartAction,FileTreeExportToCadAction
```

## 24.10. Simplify CAD/PDM configuration with macros

You can collect a sequence of instructions or declarations under a macro name, in order to execute these with one simple command (instead of the single commands) <sup>8</sup>.

Basically it is recommended to declare encompassing used macros in `ifacecommon.cfg`, otherwise in the respective specific configuration file.

Under Section 2.2.1, "Syntax and concepts" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual* you can find general information on syntax.

Some examples follow:

- Example from `$CADENAS_SETUP/ifnxteamcenter.cfg`:

Macro definition to encode the part name:

```
_ENCODE_PARTNAME=Application.GetObject("iface.teamcenter").EncodePartName
```

Instead of using `Application.GetObject("iface.teamcenter").EncodePartName` you can simply execute `"zb _ENCODE_PARTNAME"`.

Excerpt from `$CADENAS_SETUP/ifacecommon.cfg`:

```
[Macros]
_CALCNAME=GetObject("iface.calnameservice")
_FORMAT_DOC=GetObject("iface.calnameservice").start("DOC").Format
_FORMAT_0=GetObject("iface.calnameservice").start(0).Format
_METAOBJ=GetObject("iface.metaoptionservice").GetObj()
_METAOBJ_ROOT=GetObject("iface.metaoptionservice").GetRoot()
; Macro to decrypt a password.
_DECRYPT_PW=GetObject("iface.passwordService").decryptPassword
; Macro to start a ChainCall
_START_CHAINCALL=meta_plm.startChainCall().chainCall
; Maco to get the active iface module
_ACTIVE_IF_MODULE=GetObject("pdm.ManagerService").getActiveIfaceModule()
; Macro to get the active iface item (InterfaceInfoC)
_ACTIVE_IFACE_ITEM=GetObject("pdm.ManagerService").GetActiveIfaceItem()
; Macro to get the current CAD name
_CURRENT_CAD_NAME=GetObject("pdm.ManagerService").GetActiveIfaceItem().getCurrentCadname()
;Macro to get the TeamcenterHookService object.
_TC_HOOK_SERVICE=teamcenter_public_api.getTeamcenterPublic().PDMHookService("9.1")
;Macro to get the value of a specific Creationoption. Only works in CreationOptions !
_CREATION_OPTION(=context.getGlobalOption("CreationOptions",
```

- Excerpt from `$CADENAS_SETUP/ifsapplm.cfg`:

Standard macro definition in `ifacecommon.cfg`:

```
[Macros]
NAMEMACRO=GetObject("iface.calnameservice").start(0).Format
NAMEMACRO_ROOT=GetObject("iface.calnameservice")
↳.start(GetObject("iface.metaoptionservice").GetRoot()).Format
```

Without replacement by macro:

```
[PLM_MAPPING]
MATNR(is3d,isRootDoc)=?GetObject("iface.calnameservice").start(0).Format("<ATTR(MATNR)>")
↳.value()NB_DE=?GetObject("iface.calnameservice").start(0)
↳.Format("<ATTR(german,NB)>").value()

[CreationOptions]
FileName(is3dpart,isVoithTestpartExport,1,1)=?GetObject("iface.calnameservice").start(0)
↳.Format("TESTPART_<ATTR(english,NB)>_").Add(GetObject("iface.calnameservice")
↳.start(GetObject("iface.metaoptionservice")
↳.GetRoot()).Format("<ATTR(MATNR)>").value()).alnum("_").add(".ipt").value()

FileName(hasRootMATNR,is3dasm) =?GetObject("iface.calnameservice")
↳.start(0).Format("<ATTR(english,NB)>_").Add(GetObject("iface.calnameservice")
↳.start(GetObject("iface.metaoptionservice").GetRoot()).Format("<ATTR(MATNR)>")
↳.value()).alnum("_").add(".iam").value()
```

<sup>8</sup>#37695, #32893

**With replacement by macro:**

```
[PLM_MAPPING]
MATNR(is3d,isRootDoc)=?NAMEMACRO("<ATTR(MATNR)>").value()
NB_DE=?NAMEMACRO("<ATTR(german,NB)>").value()

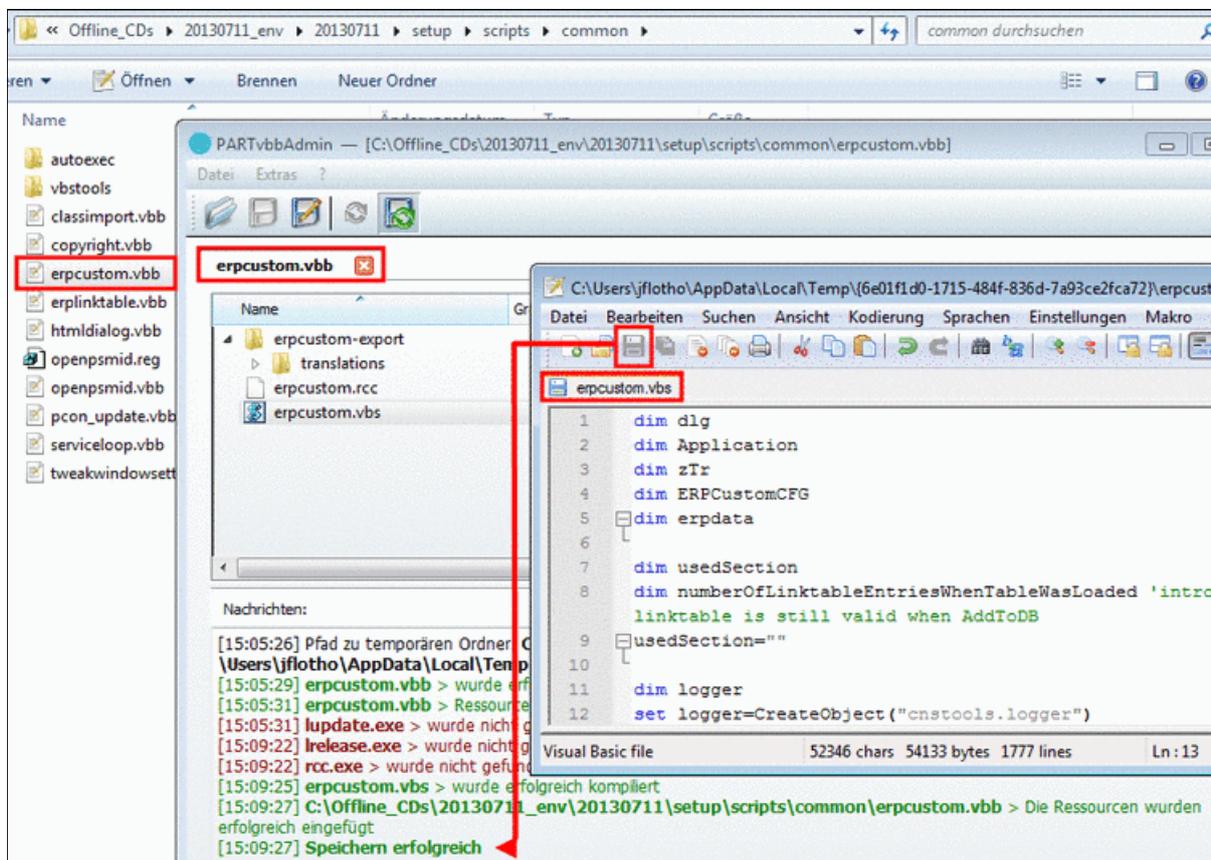
[CreationOptions]
FileName(is3dpart,isVoithTestpartExport,1,1)=?NAMEMACRO("TESTPART_<ATTR(english,NB)>_")
↳.Add(NAMEMACRO_ROOT("<ATTR(MATNR)>").value()).alnum("_").add(".ipt").value()

FileName(hasRootMATNR,is3dasm) =?NAMEMACRO("<ATTR(english,NB)>_")
↳.Add(NAMEMACRO_ROOT("<ATTR(MATNR)>").value()).alnum("_").add(".iam").value()
```

**24.11. Resource editor for vbb files**

Under %cadenas%/bin/x86/32 you can find the a new resource editor for vbb files (pvbbadmin.exe).

1. Just drag & drop the desired file into the resource editor.  
-> All contained files are listed.
2. You can open all containing components individually.  
Or double-click the file to be edited. Then the file is opened with the editor specified under "Extras -> Change paths" [PSPAD, notepad++].  
An external copy (clear text) is saved in c:\temp.
3. Edit the file and save.  
Changes are monitored on c:\temp and displayed.  
The vbb is automatically rebuilt.



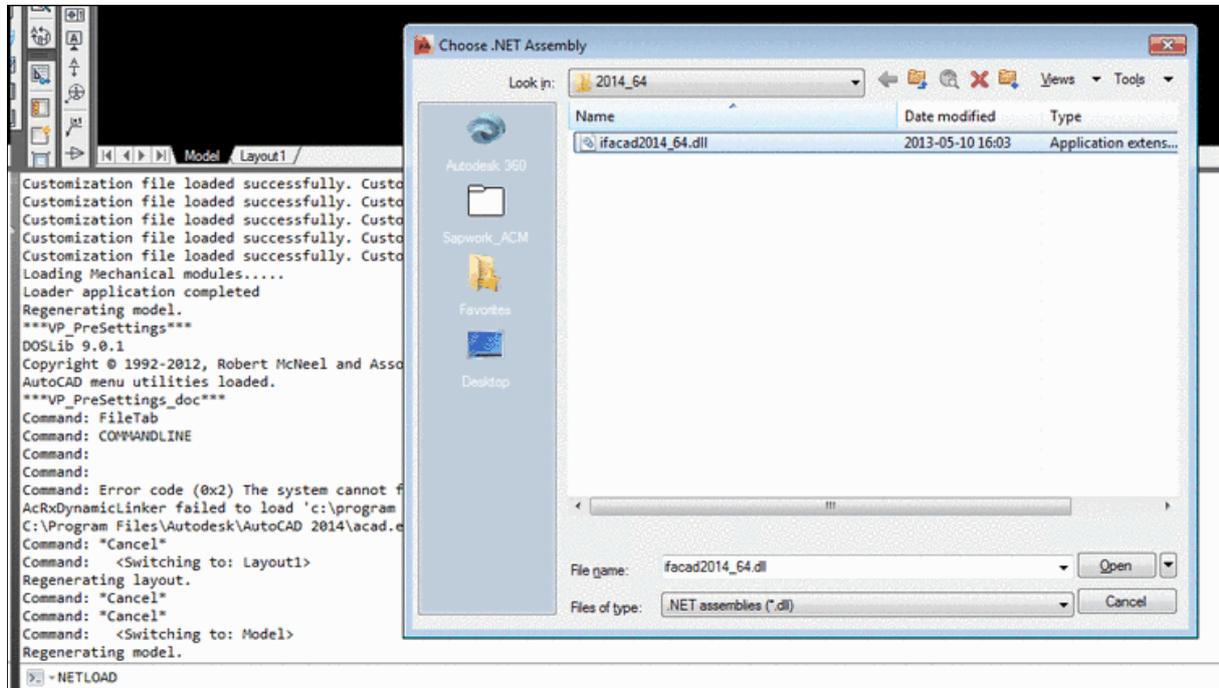
The tool is (more or less) self explaining, just try it out.

## 24.12. Installation of AutoCAD 2014 interface

As of PARTsolutions V9.07 AutoCAD 2014 is supported.

### Problem:

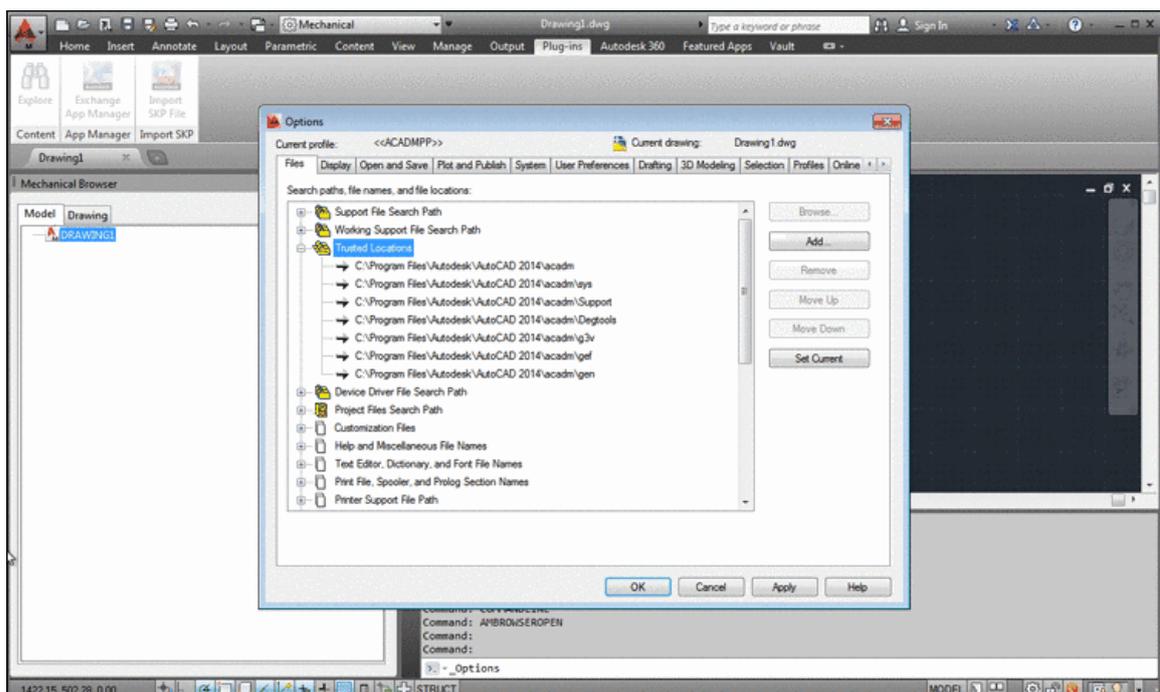
When loading the Plugin DLL with NETLOAD an error message appears.



### Solution:

In order to avoid the error message proceed as follows:

1. In the Options dialog box of AutoCAD open the tree **Trusted Locations**.



2. Click on "Browse" or "Add". Normally "Browse" is easier.
3. Enter the path to the plugin directory.

```
<CADENAS_INSTALL_DIRECTORY>/iface/autocad/autocad/2014_64
```

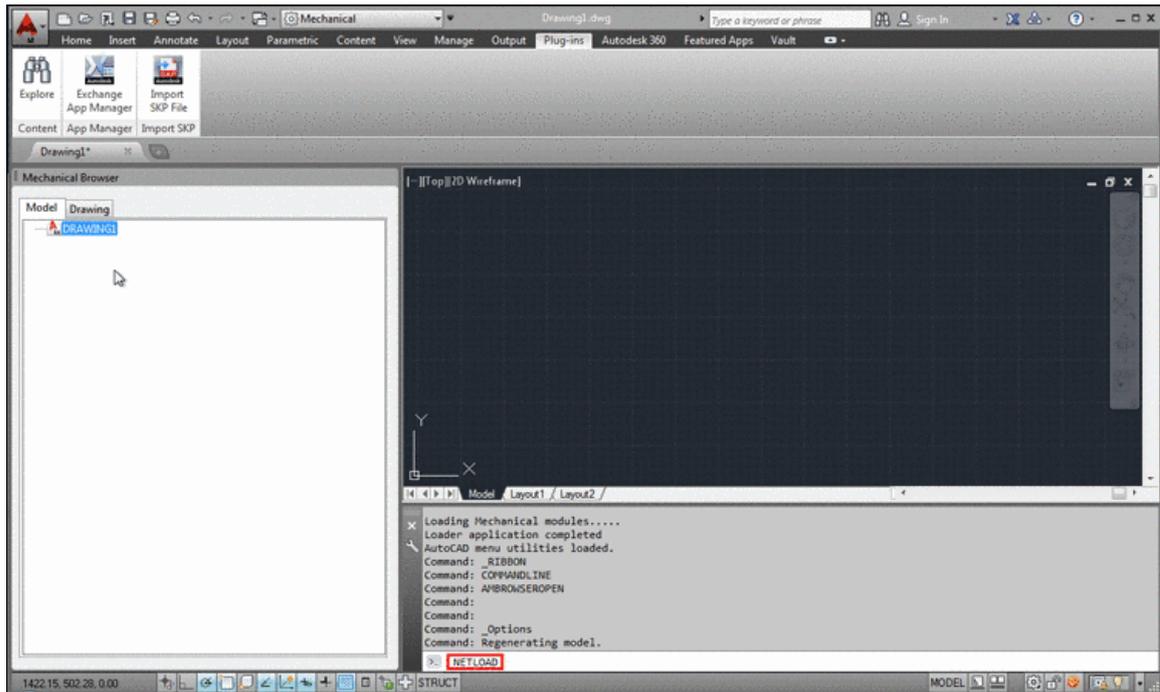
or

```
<CADENAS_INSTALL_DIRECTORY>/iface/autocad/autocad/2014_32
```

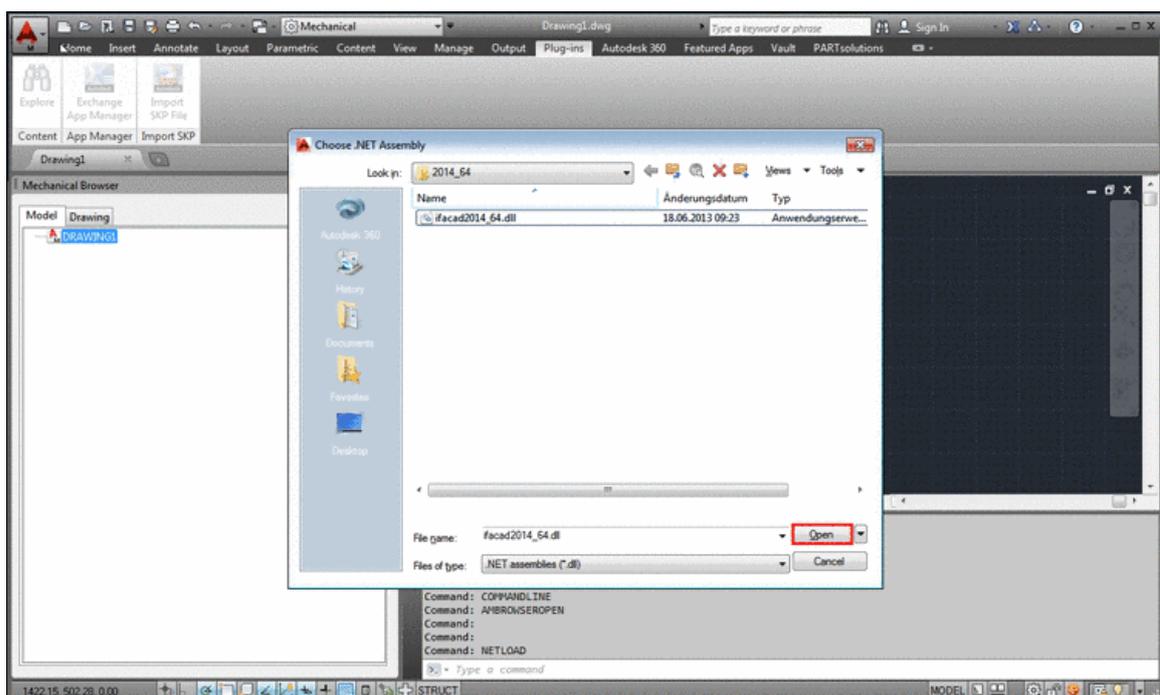
Possibly an error message shows up that the directory is not write protected. Ignore this message and confirm the action.

Test the installation:

1. In the command line of AutoCAD enter "**NETLOAD**".



2. In the dialog box select the plugin DLL.



3. Click Open.

Now the plugin should be started.

4. Exit AutoCAD and restart the application.

From now on the plugin should be automatically loaded.

### 24.13. NX 8.5 interface supported

Detailed information is found under Section 2.5.9, "NX" in *PARTsolutions / PARTcommunity4Enterprise - User manual* and Section 2.3.5, "NX Integration - Administration" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

### 24.14. NX: New pattern features

As of PSOL 9.07, in combination with NX 8.5 the new pattern features are generated during export.<sup>9</sup>

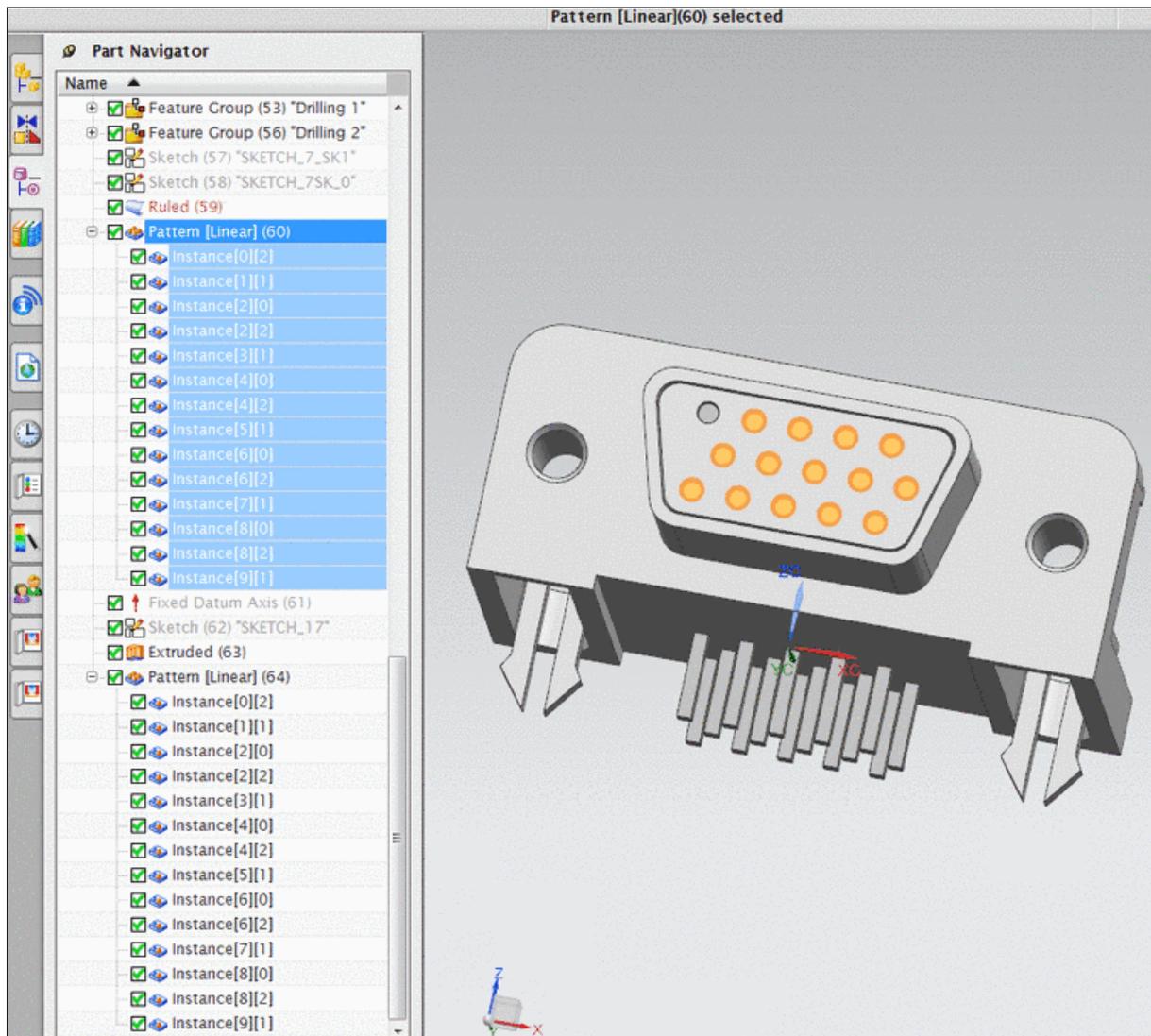
The pattern features are available as of NX 8, but optimal support is only given as of NX 8.5.

Features in particular:

- Sweep feature ("ruled") patterns are recognized as such.
- Patterns created from positive features will now also be recognized (only for the "place on circular edge" strategy for now).
- Support for non-rectangular linear pattern arrays.
- Unneeded feature instances will now be deleted instead of suppressed, so that only the features specified in the ps3 will be present in the resulting model.

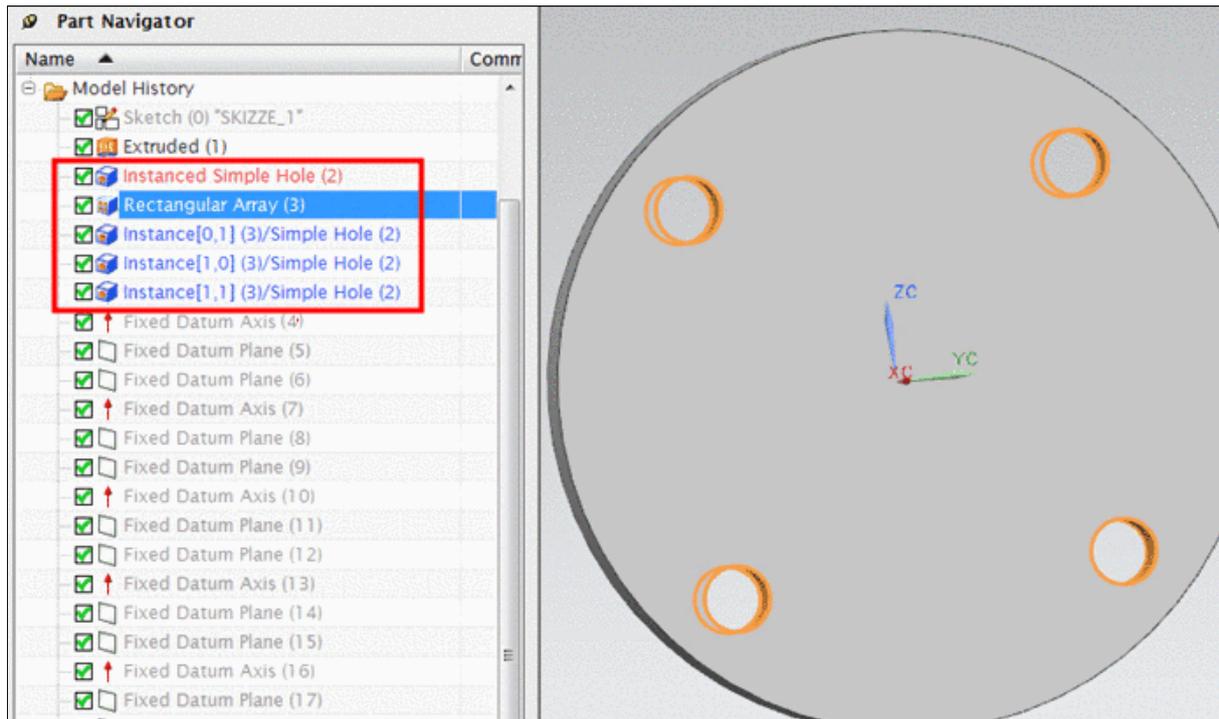
---

<sup>9</sup>#37291, #28708



The figure shows a pattern of "ruled" features. You can also see that unneeded patterns have been removed.

In all other PSOL-NX combinations, meaning PSOL 9.07 with NX8 and older, and PSOL  $\leq$ 9.06 with all NX versions the old instance array features are used.



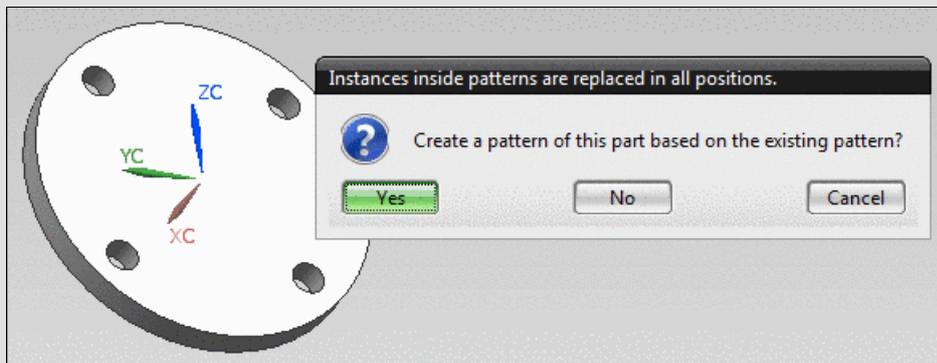
Pattern with the "old" instance features

"Sweep pattern" can only be generated with the new pattern features.

### Note

If instances are placed in a pattern, then while inserting parts a query occurs, whether the part shall be inserted in the selected instance or in the pattern (meaning all instances of the pattern).

Please regard the following **different behaviors** of different NX-PSOL combinations!

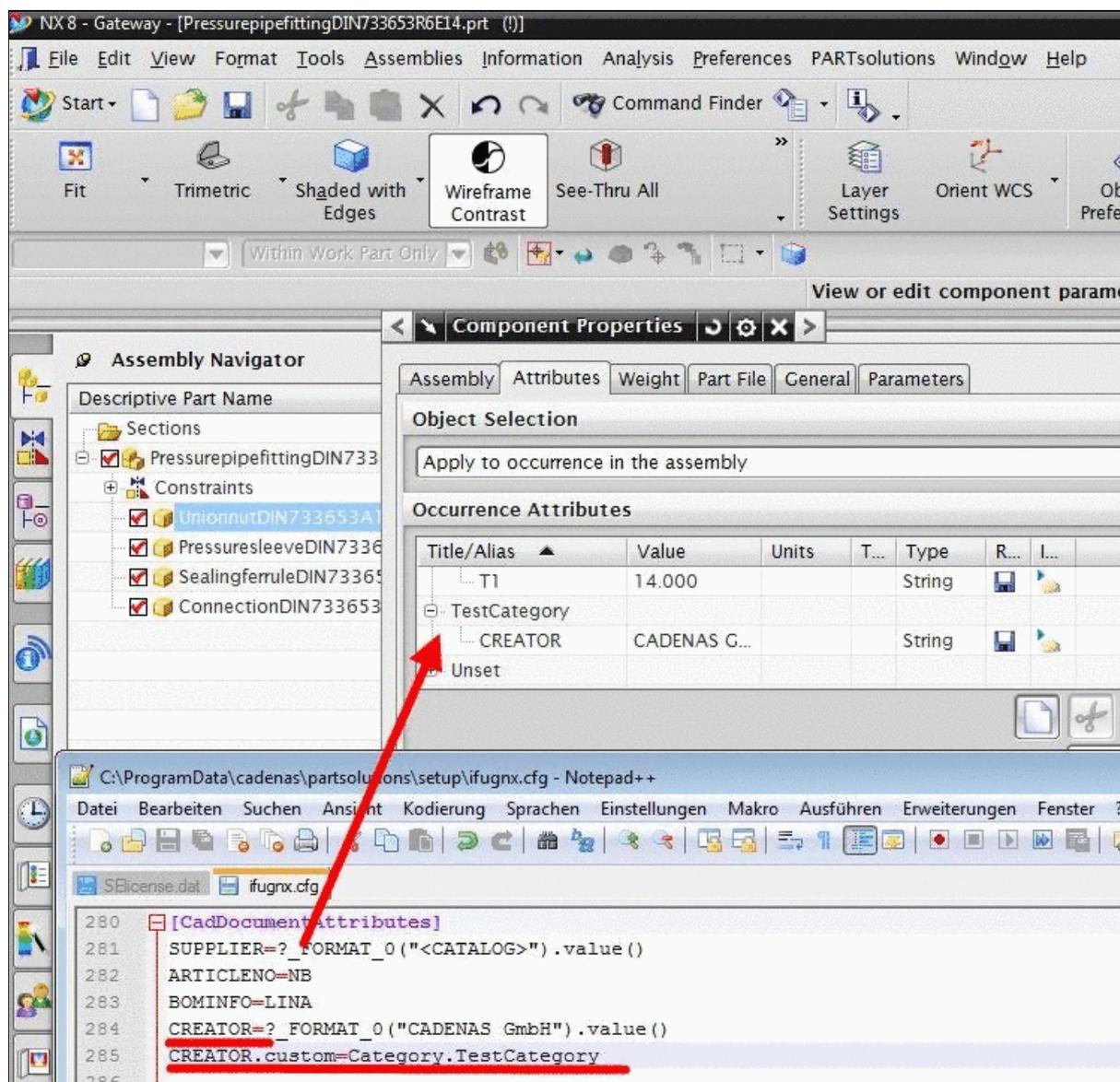


- All available NX versions up to PSOL 9.07; NX6-NX8 in PSOL 9.07  
Wherever the **old instance arrays** are used as pattern for holes, any hole can be selected and the element is placed in all instances.
- NX 8.5.0.0 up to NX 8.5.1.3  
As of NX 8.5 the **new pattern features** are used.  
Due to an API bug in NX the automatic placement of a bolt in all holes only works, if the **master element** is selected!
- As of NX 8.5.1.3.mp1. / PSOL 9.07  
**Any hole** can be selected and the bolt is placed in all instances.

## 24.15. NX: Add categories to attribute mapping

As of NX 8 attributes can be grouped in categories. As of V9.07 this new functionality is supported by PARTsolutions.

The following figure clarifies the relation between NX and the configuration in PARTsolutions.



1. In `ifugnx.cfg` the attribute "CREATOR" is applied.

```
CREATOR=?_FORMAT_0("CADENAS GmbH").value()
```

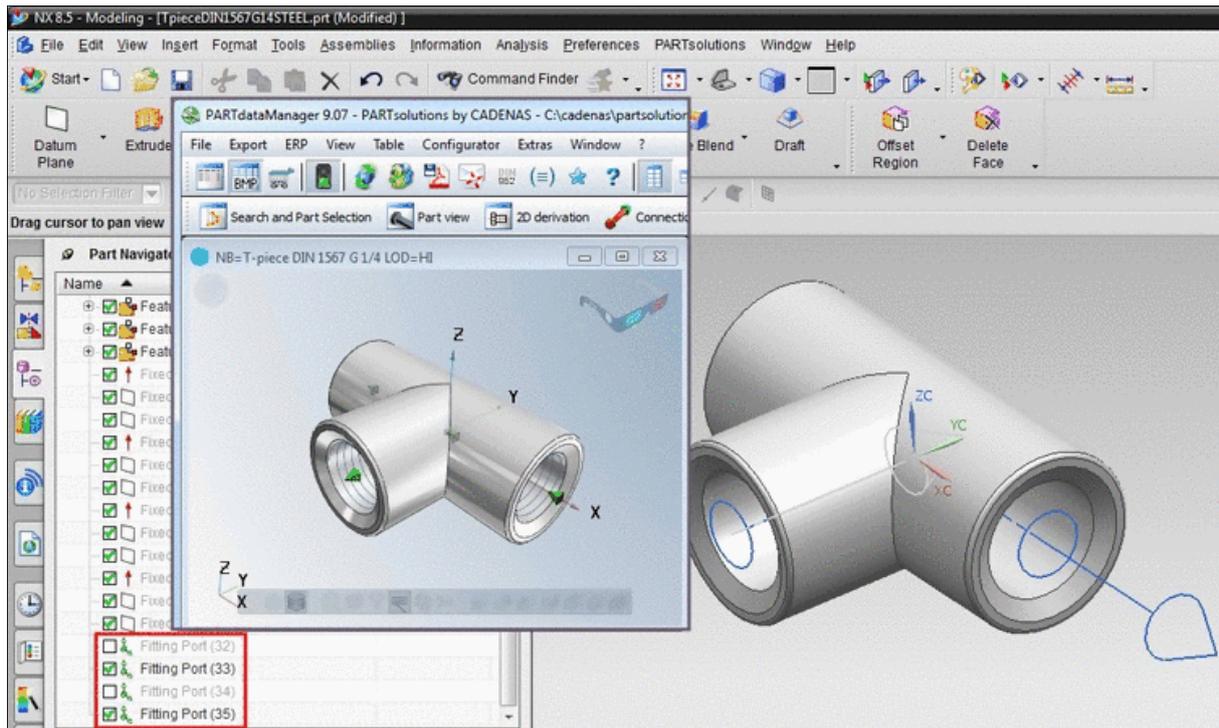
2. Then in `ifugnx.cfg` the desired category is applied with the following syntax.

```
CREATOR.custom=Category.Testcategory
```

3. After export the attribute is found in NX, "Component Properties", in the applied category "TestCategory".

## 24.16. Key "PipingConnPoint" - NX routing function

**Fitting ports** are shown by little arrows in NX, which indicate the flow direction. As of V9.07 this information can be generated from the PARTsolutions connection points.



PSOL connection points -> NX fitting ports

### License:

In order for the NX **Routing** function to be used with PARTsolutions, a "**NX Routing Electrical**" license must be available.

### Activation:

Configuration file `$CADENAS_SETUP/ifugnx.cfg` -> `section [CreationOptions(is3d):include(CreationOptions)]` -> `key PipingConnPoint`

Set the value to 1.

```
PipingConnPoint=1
```

With activated key at each export on each connection point a "Fitting Port Feature" is generated.

Flow direction of these ports is derived from the Z-axis of the connection point.

The ports will be generated on Layer 32 and will be visible by default (corresponding to the setting in `ifugnx.cfg` -> `key layer_11` -> `value ports:32:2`).

### 24.16.1. More NX Routing options

Following is also supported:

#### Attributes for Routing Ports

Attributes can be added to Routing Ports.

Hereto proceed as follows:

In `ifugnx.cfg`, add following lines:

```
[CADOPTIONS]
ProcessAdditionalClasses(is3dPart)=CONNPOINT

[CreationOptions(isConnectionPoint)]
Attr1=Value1
Attr2=Value2
```

```
[AttributeMapping(isConnectionPoint)]
Attr1=Value1
Attr2=Value2
```

Thereby attributes ("Attr1" and "Attr2" with values "Value1" or "Value2") are assigned to all Connection Points (and thereof resulting Routing Ports).

Perhaps assignment to individual ports is also possible.

### Position Anchors

Hereto set the key `AnchorConnPoint` to 1.

-> Then on Connection Points, also Position Anchors for routing will be created.

### Routing Port Attribute

With following `CreationOptions` name, type (`FittingPort` or `MultiPort`) and flow direction (`Both`, `In`, `Out`, `None`) can be controlled by the `RoutingPorts`:

```
[CreationOptions(isConnectionPoint)]
PortName=?_METAOBJ.name
#:VALS_M;"FittingPort", "MultiPort";
PortType=FittingPort
#:VALS_M;"Either", "In", "Out", "None";
PortFlowDirection=Either
```



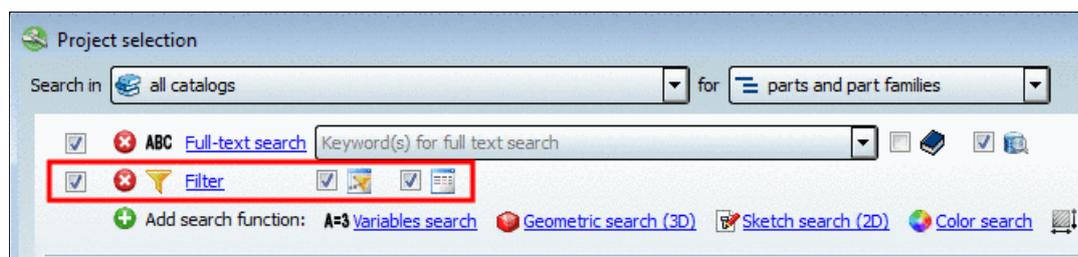
## Chapter 25. V9.06

### 25.1. Activate search filter as default via vbb script

Some customers prefer always searching with activated filters at first.

The search filters can be activated as default via vbs scripting.<sup>1</sup>

After successful execution of the script the user interface should look like this:



Here is a short example to set the filter. The vbb file has to be saved under \$CADEN-AS\_SETUP/scripts/partdatamanager/autoexec.

```
Codeset SearchView = application.ViewSearch
set indexSearch = SearchView.CreateObject("IndexSearch")
set filter = IndexSearch.AddSearchObject("filter")
filter.filterLines = true
filter.filterNodes = true
SearchView.CopySearchParameters(indexSearch)
```

A detailed example on effective usage of the filter options is found under Section 3.1.11.2.2, “Use preferred rows filter” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

### 25.2. Update Tweak Commands

As of v9.06 the Gui has changed and so new tweak commands are needed, especially for context menu commands.

On this see Menüs, Menüpunkte, Werkzeugleisten, Icons, Kontextmenübefehle anpassen.

A sample file with all commands is found under \$CADENAS/training/tweak\_menu\_config/tweak\_menuconfig\_partdatamanager.mfg.

Executing the file command.vbb all tweak parameters are displayed in the message window.

### 25.3. OSDM interface: Manage assembly as one part in BOM (9.06)

As of v9.06 there is the possibility in OSDM to create assemblies in this way that there is only one master data record for the whole assembly in ModelManager.<sup>2</sup>

Default is to create a master data record for the assembly and for each part.

The Bill-Of-Material counts the amount of master data records in an assembly.

If the respective option is enabled, then the assembly appears in the bom, but not the single parts in their multiplicities.

#### Configuration:

<sup>1</sup>#39919

<sup>2</sup>#26927

ifosdmmodelmanager.cfg

[CreationOptions(is3d)]

- **Disable**

```
FileName(is3d)=
DocOnOpen(is3dpart, not isNegativePart)=
DocOnSave(is3dpart, not isNegativePart)=
```

- **Enable**

```
FileName(is3d,isRootDoc)= Content name for TopLevel elements with entry in BOM
FileName(is3d,not isRootDoc)= Content name for parts of an assembly
#The name should contain the content name of the referenced assembly

DocOnOpen(isRootDoc, is3dpart, not isNegativePart)=GetObject("iface.osdmmodelmanager").
↳ PartOnOpen
DocOnSave(isRootDoc, is3dpart, not isNegativePart)=GetObject("iface.osdmmodelmanager").
↳ PartOnSave

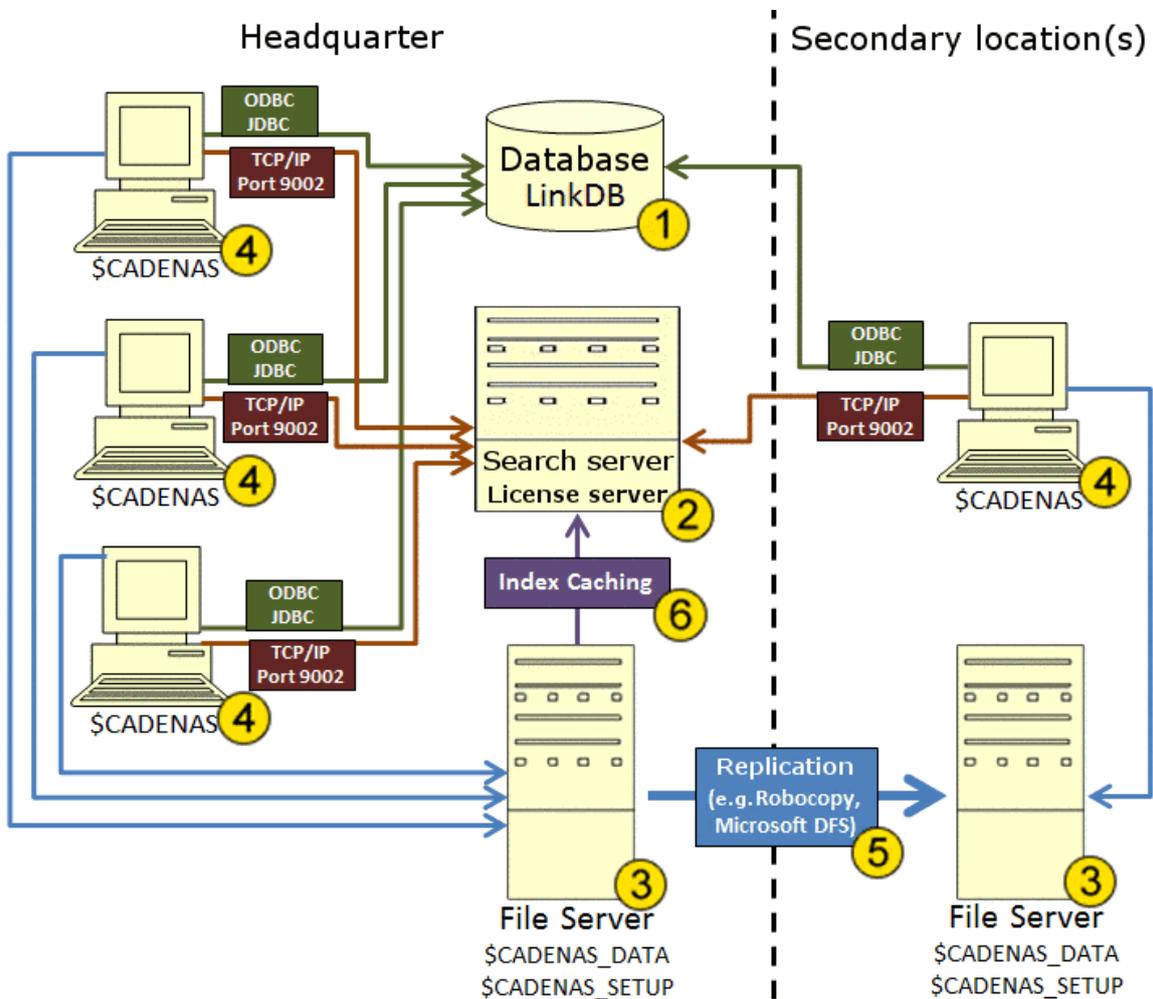
DocOnOpen(not isRootDoc, is3dpart, not isNegativePart)=GetObject("iface.osdm.callbacks").
↳ SessionPartOnOpen
DocOnSave(not isRootDoc, is3dpart, not isNegativePart)=

DocAfterCreate(is3dAsm, not isPartConnectionAsm)=GetObject("iface.osdm.callbacks").
↳ MakeUniqueChildren
```

## Chapter 26. V9.05

### 26.1. Multi Site Installation (9.05 SP0)

The following figure shows the recommended architecture with a Multi Site Installation.



In the following explanations and further links analogously to the individual components and processes of the figure are found:

#### 1 LINKDB

The PARTsolutions link database (LINKDB) is setup as additional database on an already existing database server. No further software is needed on the database server.

Detailed information is found under Section 4.2, "Installation Link database " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

#### 2 Search server

For the search server a dedicated server or a virtual machine is recommended.

Special reasons for this are:

- CADENAS software has to be installed with administration rights. In order not to put already existing software on the server at risk (isolated servers), CADENAS recommends a dedicated server here.

- In addition performance issues are important: In case of extraordinary frequent queries the server is blocked.

Detailed information on the search server is found under Such-Server-Installation.

ONE dedicated search server for all locations is sufficient, because no big data amount has to be transferred. The clients fetch the detailed data of the search hits from the local CADENAS\_DATA file server.

On this server the CADENAS license server can also be installed. See FLM-Server-Installation - Lizenzen beantragen/einspielen.

### 3 File Server(PARTsolutions catalogs [\$CADENAS\_DATA] and setup directory [\$CADENAS\_SETUP])

For the PARTsolutions catalogs and the setup directory a new share on an already existing file server is sufficient. No further software is needed on the file server.

#### Note

At the headquarter catalog administrators have read and write permission, all other users only read permission. At the secondary locations ALL users only have read permission.

### 4 \$CADENAS on clients (PARTsolutions software and interfaces)

Software deployment / software updates

In complex installation environments it is recommended not to perform the classic Client-Server-Installation (see Client-Server-Installation), but to setup an Admin client and to copy with software deployment tools usual in company.

Advantage: Software updates can easy be performed later.

### 5 Replication of \$CADENAS\_DATA

In order to ensure short client access time to catalog data also on the secondary locations, catalog data is replicated cyclicly (e.g. once a day) from the headquarter to the secondary locations (e.g. with Robocopy, Microsoft DFS or similar tools).

#### Important

##### Restrictions at the secondary locations

The following actions can change \$CADENAS\_DATA and may **only be processed at the headquarter** due to "one way replication":

- Catalog updates (see Kataloge (Normteile- und Herstellerkataloge) nachinstallieren / updaten)
- Inserting native parts via PARTsolutions menu command **User library** in the CAD (see Section 2.6.15, " User library " in *PARTsolutions / PARTcommunity4Enterprise - User manual*)
- Use of the Classimporter (see Section 3.1, " Classimporter " in *PARTwarehouse Manual*)
- Use of the Classification Toolbar (see Section 3.2, " ClassificationToolbar " in *PARTwarehouse Manual*)
- PARTadmin index administration (see Section 1.3.8, " Index administration " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*)

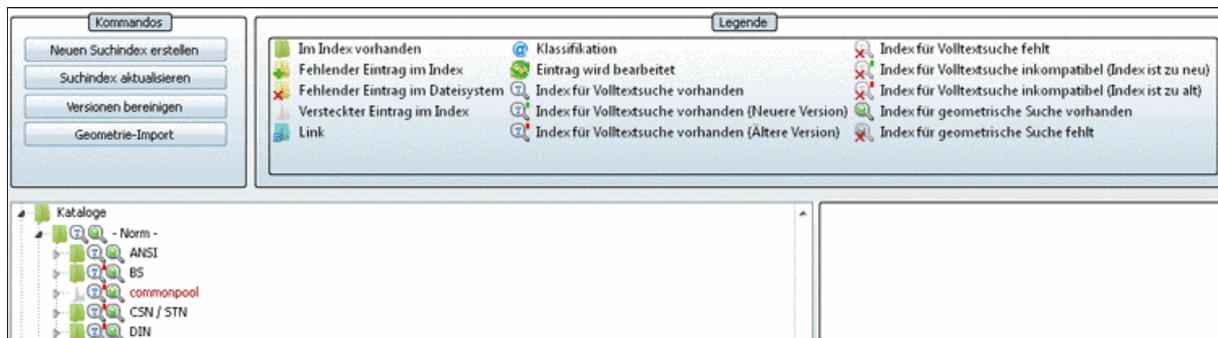
## 6 Caching of index files

In order for the search server to work efficiently, we recommend caching of CADENAS\_DATA index files.

Detailed information on this is found under Index von \$CADENAS\_DATA auf Such-Server cachen.

## 26.2. Dependencies between index and software version (9.05 SP0)

In **PARTadmin** under **Index administration** icons signalize the current status of the Lucene index (index for full-text search).



Index administration main page

Detailed information on this is found under Matrix: Software- und Lucene-Index-Version.

## 26.3. ProFile PDM - Settings for preview images (9.05 SP0)

Changes in \$CADENAS\_SETUP/ifprofile.cfg in the [THUMBNAIL] section.<sup>1</sup>

- Key **create**

Value range:

- create=0 --> Don't create a thumbnail for PRO.FILE documents
- create=1 --> Use thumbnail from PARTsolutions
- create=2 --> Create a thumbnail using PRO.FILE functionality

Default:

```
[THUMBNAIL]
create=1
```

- Key **createParameter**

(Options for thumbnail creation)

- for create=1 (thumbnail from PSol)
  - createParameter=THUMBNAIL
- for create=2 (thumbnail from PRO.FILE)
  - createParameter=pixel-width; pixel-height; file format BMP || GIF || JPG || PNG || TIF; colorDepth 16 || 24 || 32

Example:

```
createParameter=50;50;JPG;16
```

<sup>1</sup>#24875

- Pro.File does not support image generation for SolidWorks and ProE  
Add your CAD system here if Pro.File can't create a preview in Pro.File-WindowsClient.  
Example:

```
create(isSOLIDWORKS)=1
createParameter(isSOLIDWORKS)=THUMBNAI
```

```
create(isPROE)=1
createParameter(isPROE)=THUMBNAI
```

- Create thumbnails for SubParts  
Key **thumbNailsForSubParts**  
Default:

```
thumbNailsForSubParts=0
```

## 26.4. MicroStation V9 Interface (9.05 SP0)

Offline Export with direct insert or small interface with only export functionality. A full interface is not currently available.<sup>2</sup>

Added direct insert of 3D models to MicroStation (rev. 108428). Done via DWG due to both Teigha and MicroStation APIs lacking many key functions for 3D DGN.

Expanded interface functionality:

- Added an option to select MicroStation direct insert behavior:
  - Either place it in the active session (default)
  - or
  - open the exported item in a new session.

The relevant **ifdwgdirect.cfg** option is "**UI\_PlaceIntoActiveMicroStationSession**".

When the option is enabled, the "attach reference" dialog will be called in the active MicroStation session, allowing the user to choose the necessary placement options.

### Note

The model is placed as an external reference this way and will require the exported file to maintain the link. This can be solved by merging the inserted reference into the master model (File->References->Tools->Merge into master).

- Custom attributes can now be used to populate DWG file attributes.  
Add them to the CadDocumentAttributes section of the **ifdwgdirect.cfg** file and they will be assigned during export.  
For example, the following line will populate the "title" file attribute with the model's standard designation (NB).

```
TITLE=?GetObject("iface.calnameservice").start(0).Format("<ATTR(NB)>").alnum("_").value()
```

<sup>2</sup>#17619

## 26.5. Teamcenter - NX: Allow putting NX dataset into already existing items with other datasets (9.05 SP0)

As of version 9.05 SP0 the NX interface and NX Teamcenter interface are able to use already existing Teamcenter Items (e.g. from ProE) and put the newly generated NX Dataset into it, instead of creating a new Item with new IDs.<sup>3</sup>

**ifnxteamcenter.cfg** -> Key **SupportItemWithoutTargetDataset** (Key in ifugnxcfg : <AddItem-DataSet> (controlled by ifnxteamcenter iface)

Value range: 0/1

Default: 0

- 1: If you want the iface to support already existing Teamcenter-Items that do NOT have a NX-Dataset (instead of creating a new Item the NX-Dataset will be added to the existing Item) this key has to be set to 1.  
If set to 1 also <TC\_HookService\_Login\_USER>, <TC\_HookService\_Login\_PASS> and <TC\_HookService\_Login\_HOST> have to be set correctly.
- 0: Otherwise set this key to 0 and make sure that <TC\_ItemID / TC\_ItemRevision> does NOT point on such Items.

### Note

TC\_ItemRevision must be set either in cfg or in PLMTable2 if you want to use an existing revision. Retrieving one from TC will result in a new revision number !!!

### Note

If using **MoveToNewFolder functionality** do not set <TC\_HookService\_MoveToNewFolder\_SOURCE\_FOLDER> unless you are sure that ALL such items are linked under the folder(s) given by this key !!!

## 26.6. Installer for Creo Elements/Direct Drafting 18 Interface available (9.05 SP0)

As of version 9.05 SP0 an installer for the Creo Elements/Direct Drafting 18 Interface is available.<sup>4</sup>

## 26.7. New key to change PLMTABLE2 Docview header (9.05 SP0)

As of Version 9.05 there is a new key to change the Docview header of the PLMTABLE2 table.<sup>5</sup>

The key name is PDM\_COLUMNS\_DESCRIPTION. The number of columns has not to be according. As many headers are set as declared. The other namings remain unchanged. The feature is also added in PARTadmin.

Example:

```
PDM_COLUMNS=FILENAME , CADSYSTEM , PDMSYSTEM , XVARSET , PDMID1 , PDMID2 , PDMID3 , PDMID4
```

```
PDM_COLUMNS_DESCRIPTION=FILENAME , CADSYSTEM , PDMSYSTEM , Einbausituation ,
↳ SAP-DIS1 , SAPDIS2 , SAPDIS3 , SAP DIS 4
```

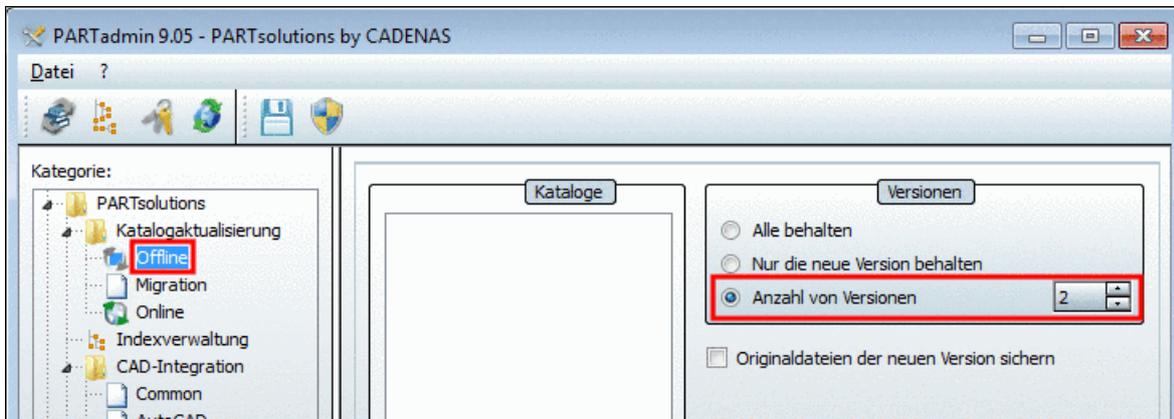
<sup>3</sup>#31821

<sup>4</sup>#31663

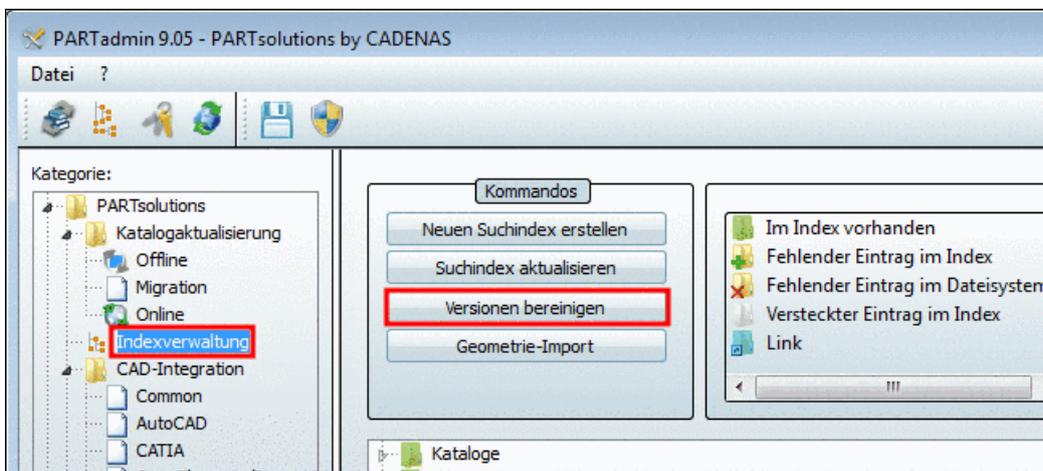
<sup>5</sup>#32641

## 26.8. Keep number of versions: Default changed (9.05 SP0)

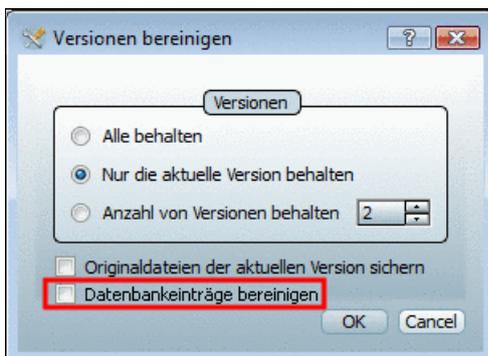
As of V9.05 the default setting has been changed to **Number of versions (2)**.



Via **Cleanup versions** versions can be removed afterwards.



Via **Cleanup database entries** the related datasets in the link database can be removed in addition.<sup>6</sup>



## 26.9. GeolImport - File size restriction (9.05 SP0)

As of V9.05 it is possible to restrict the file size for the GeolImport in PARTadmin via config file key.<sup>7</sup>

padmin.cfg -> Section STLImportInput -> Key MaxFileSize

<sup>6</sup>as of version 9.03

<sup>7</sup>#25992

Example.: No files bigger than 10MB shall be imported.

```
[STLImportInput]
MaxFileSize=10
```

## 26.10. SolidWorksEnterprisePdm interface supports NativeCheckin (9.05 SP0)

Native Checkin via PDM system is now supported by SolidWorksEnterprise PDM interface.<sup>8</sup>

### Note

Files already have to be in the PDM system, before this functionality can be used.

## 26.. PDMWorks Enterprise interface - New keys added (9.05 SP0)

Configuration file: `ifswenterprisePdm.cfg`<sup>9</sup>

As of V9.05 the following 3 keys have been added. They are used in order to control, which file version has to be downloaded and in which status (normal | read only) the files have to be after the download.

A download is only processed, when the local file version is -1 AND the file is not checked out by a user (normally this is the case, when the local cache has been deleted). Otherwise the local file version is used.

- VERSION\_NUMBER

With this key you can set, which version has to be downloaded.

Value range 0/1

0 (Default): The latest version is used. If this key is set, then it has priority. Only if this key is NOT set, the key REVISION\_NAME is used.

### Caution

If the key `PLM_checkoutIncludesSubItems` is set on 1, then for subparts always the latest version is used. Due to that in this case do NOT set VERSION\_NUMBER and/or REVISION\_NAME !

- REVISION\_NAME

The key RevisionName is used for file downloads.

The default value is "" [empty]. Meaning the latest revision is used. This key is only used, when VERSION\_NUMBER is not set.

- EDM\_GET\_FLAG

Value range 0/1

0: Download file with full read and write rights.

1 (Default): Download file only with read rights.

## 26.12. PDM Agile - Support for "usePlmtable2" (9.05 SP0)

Configuration file: `ifagile.cfg`

<sup>8</sup>#20390

<sup>9</sup>#26121

As of V9.05 the key `useplmtable2` has been added.<sup>10</sup>

### Caution

If `usePLMTable2` is set on 0 and `forceDownload` is also set on 0, then `checkoutIncludes-Subitems` should be set on 1, because otherwise subparts of an assembly (which is already in Agile and in the pool directory) are overwritten.

Files names of subparts are not known and therefor it is not possible to check, whether there already is a part in the pool directory.

### Note

If `forceDownload` is set on 0, then the following applies:

No older files are deleted on the disk. If there already is a file, it is used.

## 26.13. Teamcenter - Inv | ProE/Creo | SE | NX - functions concerning "TargetFolder" (9.05 SP0)

Configuration file: `if<cadname>teamcenter.cfg`<sup>11</sup>

Via the key `TC_TargetFolder` the target directory for PARTsolutions parts is defined.

Example:

```
TC_TargetFolder=Home\BaseFolder01\SubFolder01
```

As of V9.05 the functionality of the key `TC_TargetFolder` in different CAD systems is the following:

- **Inventor-Teamcenter**

`TC_TargetFolder` determines the target folder in Teamcenter - can automatically create any folders. (No changes in compare to earlier versions).

More information is found under Teamcenter - Inventor.

- **NX-Teamcenter**

`TC_TargetFolder` determines the target folder in Teamcenter – no automatic creation of folders.

If folders shall be automatically created, then `<TC_HookService_MoveToNewFolder_...>` has to be used.

As of V9.05 the path declaration happens in the same format as in the other Teamcenter interfaces.

### Note

If `TC_TargetFolder` is set to a folder, which does not exist (for the logged in user), then an error message is displayed and the export is aborted.

More information is found under Teamcenter - UGNX.

- **SE-Teamcenter**

`TC_TargetFolder` determines the target folder in Teamcenter – can automatically create any folders.

<sup>10</sup>#27647

<sup>11</sup>#28678, #28679, #28680, #28681 (#33459)

But if folders shall be created, then <TC\_TmpFolder> (or the default - if fitting), <TC\_HookService\_Login\_USER>, <TC\_HookService\_Login\_PASS> and <TC\_HookService\_Login\_HOST> have to be set correctly as well.

More information is found under Teamcenter - Solid Edge.

- **ProE/Creo-Teamcenter**

**TC\_TargetFolder** determines the target folder in Teamcenter – can automatically create any folders.

But if folders have to be created, then <TC\_TmpFolder> has to be correctly set as well – if the default value does not fit.

More information is found under Teamcenter - Pro/E / Creo.

## 26.14. PDMLink Windchill interface - Creation of not existing directories (9.05 SP0)

As of V9.05 in the configuration file `ifproepdmlink.cfg` a new key `PDMLINK_MovePartCreateFolders` has been added.<sup>12</sup>

Value range: 0/1

0: During checkin no subdirectories are created: Default is 0.

1: Subdirectories are created, if not existing

### Example:

```
PDMLINK_MovePartCreateFolders=1
```

Detailed information concerning PDMLink integration is found under Windchill PDMLink - ProE/Creo.

## 26.15. PDMLink Windchill interface - Determine version for checkout (9.05 SP0)

As of V9.05 in the configuration file `ifproepdmlink.cfg` a new key `PDMLINK_CHECKOUT_VERSION` has been added.<sup>13</sup>

The value is the document version, which has to be checked out from Windchill.

Value format: <Revision.Version>

### Example:

```
PDMLINK_CHECKOUT_VERSION=B.4
```

If no value is set, then the Windchill settings apply (as before).

Detailed information concerning the PDMLink integration is found under Windchill PDMLink - ProE/Creo.

## 26.16. PDM interfaces in general - Category for entry in PLMTable2 (9.05 SP0)

As of v9.05 in the PDM configuration files the following new category can be used:<sup>14</sup>

```
is3dInPlmTable2
```

For parts with an entry in the PLMTable2 the value 1 is returned, otherwise 0.

<sup>12</sup>#31771

<sup>13</sup>#32041

<sup>14</sup>#32421

## 26.17. PDMLink Windchill interface - Complete path declaration to "target library" (9.05 SP0)

Configuration file: `ifproepdmlink.cfg`

### Problem <sup>15</sup>

Until 9.04:

Only the lowest level of the target directory can be declared, but not the complete path.

Effect: If there are several company directories in PDMLink, then the part would be moved into the first found folder, which is not necessarily in the CADENAS-Library.

### Solution

As of V9.05:

Declare the path to TargetLibrary on the server via the new key `PDMLINK_MovePartTarget-Library`.

`PDMLINK_MovePartTargetFolder` has to be set to `/Default/<RootFolder>/[<SubFolderX>]....`

(Complete path without library. Prefix `/Default/.`)

### Example:

Use a setting similar to the following, in order to create the WTPart and to move EPMDoc and WTPart in a new folder.

```
#:HELP;default;The FolderPath of the folder, where the files should be moved to
↳ (must be a library folder). The path must be the full path starting after the library.
↳ /Default/ has to be appended at the front.
; Example: /Default/RootFolder1/SubFolder1
PDMLINK_MovePartTargetFolder=/Default/Unique1/A1/A2/A1

#:HELP;default;The name of the library the folder is located in.
PDMLINK_MovePartTargetLibrary=ArEs_CNS
```

Detailed information concerning PDMLink integration is found under Windchill PDMLink - ProE/Creo.

## 26.18. Line sorting in PARTdataManager (9.05 SP0)

If in **PARTdataManager** for example variants are inserted via **Add dataset to link database (variant)**  into the table, a correct sorting is not always guaranteed.

As of PARTsolutions V9.05 you can determine in an own dialog box, which schema has to be used for the sorting concerning the opened project. A manual editing of the PRJTABLE is not necessary anymore.

### Procedure:

Click on the icon **Set the sorting order for currently opened project**.

-> The **Change sorting order** dialog box opens.

The screenshot shows the PARTdataManager interface for 'Zylinderschraube ISO 4762 M16x47'. The main table displays the following data:

| ERP-PDM_NUMBER | MAT_NAME  | D                            | L                      | P                            | D3           | * DIN962THREAD  | * DIN962CLASS | * DIN   |
|----------------|-----------|------------------------------|------------------------|------------------------------|--------------|-----------------|---------------|---------|
| ERP-Nummer     | Werkstoff | Gewindene...<br>Gewindene... | Nennlänge ...<br>Länge | Gewindest...<br>Gewindest... | Gewindeke... | DIN 962 Gewinde | Form A        | Flansch |
| 139            | M16x45    |                              | 16.000                 | 45.000                       | 2.000        | 13.546          | Rechtsgewinde |         |
| 140            | M16x47    | *#13431579150                | 16.000                 | 47.000                       | 2.000        | 13.546          | Rechtsgewinde |         |
| 141            | M16x50    |                              |                        |                              |              |                 |               |         |
| 142            | M16x55    |                              |                        |                              |              |                 |               |         |
| 143            | M16x60    |                              |                        |                              |              |                 |               |         |
| 144            | M16x65    |                              |                        |                              |              |                 |               |         |

An overlay dialog box titled 'Ändern der Sortierreihenfolge' is open, showing the following configuration:

- Pfad zum Projekt: norm/commonpool/schrauben/din\_en\_iso\_4762.prj
- Verfügbare Variablen: D,L,P,D3,DIN962THREAD,DIN962CLASS,DIN962OPT1,DIN962OPT2,DIN962OPT3,B,LS,LG,DK,DA,DS,E,LF,K,R,S,T,V,DW,W
- Neue Sortierung:
- Hinweise: Die Angabe erfolgt Komma getrennt. Priorität: Von Links nach rechts (Beispiel Schrauben: D,L,P = zuerst Durchmesser D, bei gleichem Durchmesser nach Länge L, ...)
- Sie ändern die Reihenfolge des aktuellen Projektes für alle Benutzer! Die Speicherung erfolgt in der LinkDB (Tabelle: PRJTABLE)

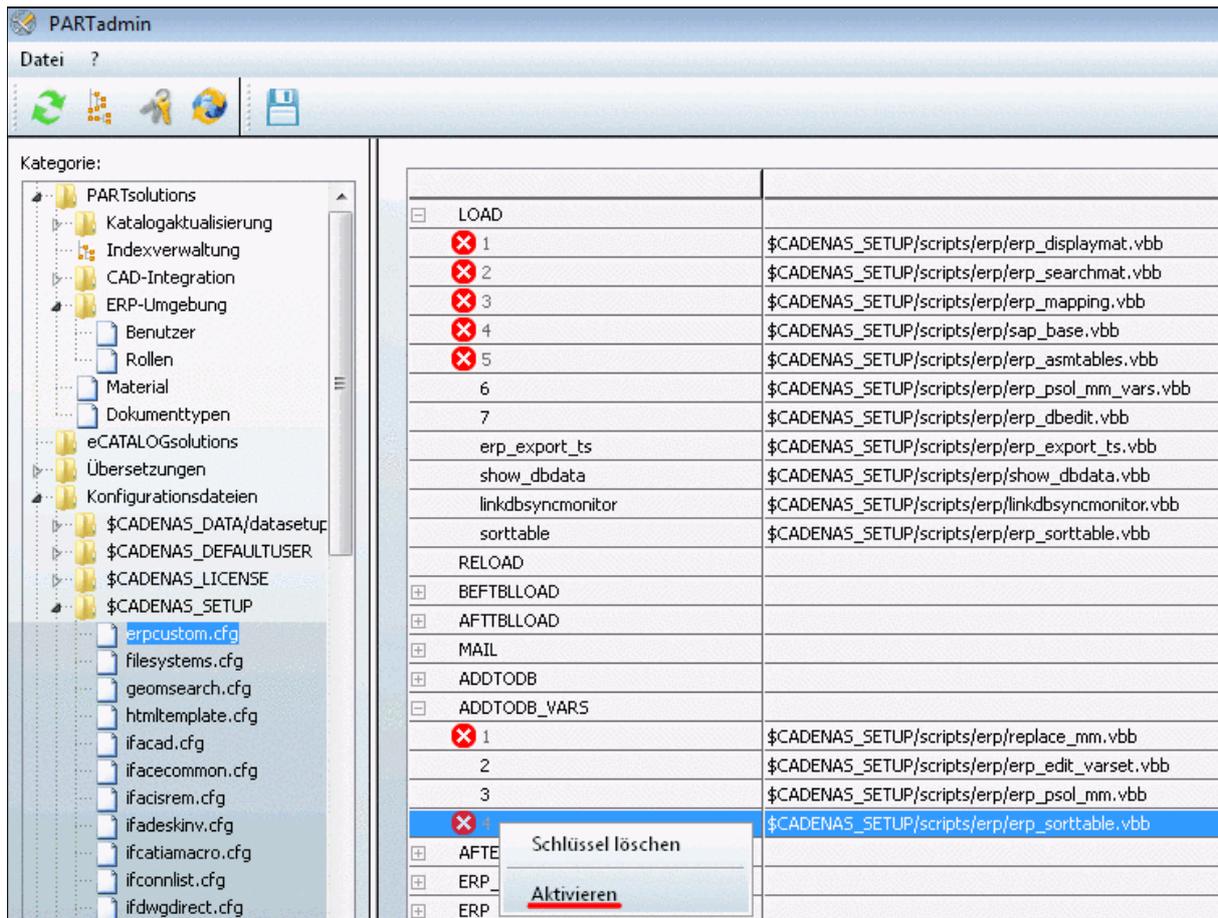
Under **New sorting order** insert the variables determining the sorting comma separated.

Confirm with **Change sorting order**. -> The new sorting is immediately performed and displayed.

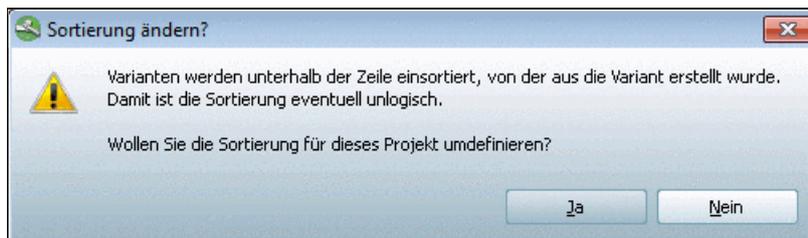
### Configuration:

In the configuration file under `$CADENAS_SETUP/erpcustom.cfg`, in the `LOAD` section a key with the value `$CADENAS_SETUP/scripts/erp/erp_sorttable.vbb` has to be activated.

Optionally a message can appear to point out that the sorting of variants possibly is illogical and that you have the opportunity to explicitly determine the sorting for the opened project. If desired, then in the configuration file under `$CADENAS_SETUP/erpcustom.cfg`, in the section `ADDTODB_VARS` activate the key with the value `$CADENAS_SETUP/scripts/erp/erp_sorttable.vbb`.



If this key is activated, then after setting a variant, the **Change sorting order?** dialog box appears. Not before the sorting has been explicitly determined, the dialog box will appear.



## 26.19. Connections

### Update of the pre-calculation file via scripting

#### Path adaption

#### 26.19.1. General information

For an efficient use of the function under **PARTdataManager** -> **Connection** a pre-calculation file is needed. The pre-calculation has to be always processed in the course of catalog updates or if ERP assignments have been changed.

#### Note

The pre-calculation file is automatically updated at a catalog update.

When an ERP integration is used, then the update should be automatically processed via scripting.

The pre-calculation is saved in the file `partconnection.sf`<sup>16</sup>. It contains information on all parts, which potentially can be used for connections. These have to be classified in the **Pcon classification**. On this see under Section 5.13.9, “Classify threaded connections (own company standards)” in *eCATALOGsolutions Manual*.

### Note

As of version 9.05 the button **Synchronize catalog and ERP data now**  is hidden by default, because a manual procedure is neither necessary nor makes sense (see above note). See Section 1.7.5.18, “partconnection.cfg” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

In Windows you can set up a **scheduled task** for an automated update of the pre-calculation file.

Detailed information on this is found under Section 26.19.3, “Execute script”.

### 26.19.2. Basic settings

- In order for the ERP information to be queried, a **valid database login** for the link database (LINKDB) is mandatory and ERP has to be activated in the configuration file (see `plink-common.cfg`, section [PARTdataManager], key `ERPenabled=1`).

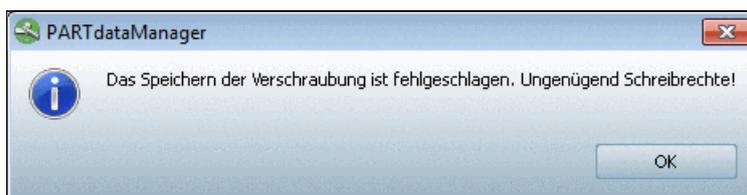
Preferably use a database login, which contains access rights for all users (writing permission is not needed), otherwise the ERP information cannot be read by all ERP users and roles.

- In the configuration file `partconnection.cfg`, in the section [PARTconnection] you can determine the storage path for user-owned and user-spanning connections.

This point does not explicitly concerns scripting, but also the standard setting without ERP use.

```
[PARTconnection]
LocalConnectionsPath=$CADENAS_USER/connections
GlobalConnectionsPath=$CADENAS_DATA/shared/connections
```

GlobalConnectionsPath: The desired users should get writing permission for the global path by Windows rights. Users without rights receive a respective error message.



- In the configuration file `partconnection.cfg`, section [PARTconnection], key `StorageFilePath` you can determine the storage location of the pre-calculation file.
- With existing ERP integration, in the configuration file `erpcustom.cfg` the path to the file `erp_pcon.vbb` has to be commented in at the first position.

```
[ADDTODB]
1=$CADENAS_SETUP/scripts/erp/erp_pcon.vbb
```

### 26.19.3. Execute script

For complex installations with several users **and ERP integration** a daily automated update of the pre-calculation file is recommended.

<sup>16</sup>under `$CADENAS_DATA/index/`

To this use the script under %CADENAS\_SETUP%/scripts/common/pcon\_update.vbb.

### Note

Notes on use can be detected via command line:

```
"%cadenas%\bin\x86\32\cscriphost.exe" "%cadenas_setup%\scripts\common\pcon_update.vbb" -?
```

The necessary process can be executed on every server, which is capable to run PARTsolutions, by starting a scheduled task with the following command line (recommendation once a day, at one o'clock in the morning). The **combination** of the scripts for **nightly update** nightupdate.vbb (compare Section 4.14.3.3, "Automated and cyclical update of data" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*) and connections pre-calculation file makes sense.

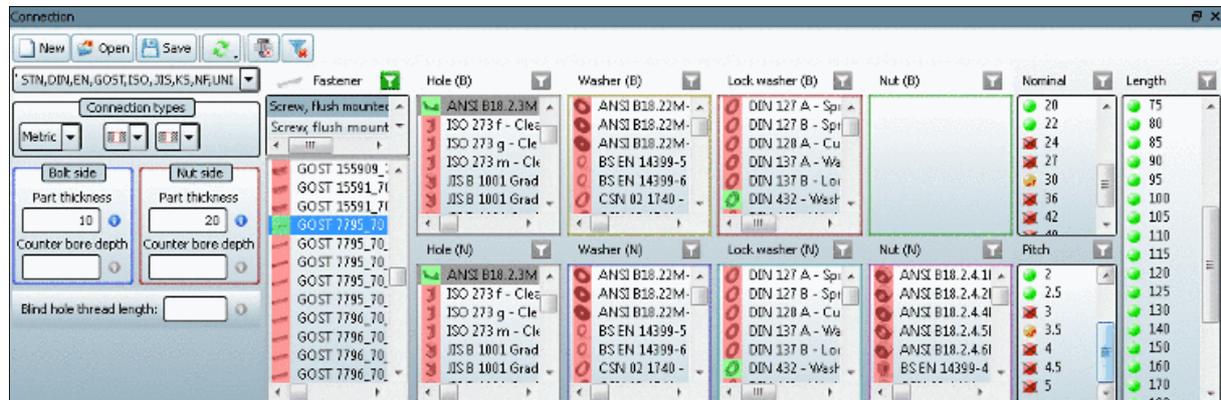
Rem First nightly update

```
"%cadenas%\bin\x86\32\cscriphost.exe" "%cadenas_setup%\scripts\erp\nightupdate.vbb" -user
```

Rem Afterwards connections pre-calculation file (\*.sf)

```
"%cadenas%\bin\x86\32\cscriphost.exe" "%cadenas_setup%\scripts\common\pcon_update.vbb" -user *
```

Thereby, at the latest one working day after the assignment, the display (especially colors) in PARTdataManager, in the dialog area **Connection** is adjusted. A detailed description with examples is found under Section 3.1.12.5.1, "Create and edit ERP connections" in *PARTsolutions / PARTcommunity4Enterprise - User manual*.



### Note

The script pcon\_update.vbb only accesses the pre-calculation file.

In the following the needed **call parameters** are explained (with examples).

-user

Define a user name, which shall be used for the database login.

### Note

If there is an **automated login** for the respective user, then in this case the stating of -user is sufficient. (stating of "-pwd" and "-group" can be omitted.)

On this compare Section 4.24.3.2, "Enable automatic login" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -pwd            | Define the user password for the database login.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| -group          | Define the user group (role).                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Options:</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| -i              | Ignore an active database login. The database login data or an automated database login are needed - if this option is set.<br><br>Using this option is possibly more secure due to questions of access rights.                                                                                                                                                                                                                                                                                             |
| -e              | Force ERP information. The script is cancelled, if none or incomplete ERP information is accessible.<br><br><b>Note</b><br><br>Possibly the ERP information cannot be read in completely due to missing access rights or a failed database login.<br><br>If the reading in of the ERP information is absolutely essential, then the use of this parameter makes sense. Thus reading in of incomplete information is prevented. In the command line a respective message will be displayed in case of abort. |
| -n              | Don't force ERP information.<br><br><b>Note</b><br><br>If the ERP integration is not used for connections, then using this parameter makes sense. (The time exposure for reading in ERP information is saved.)                                                                                                                                                                                                                                                                                              |

**Examples:**

- Update of the pre-calculation file with ERP information.  
Use active database login or manually log in with the stated data.  

```
CSCRIPTHOST.EXE PCON_UPDATE.VB -user erpuser -pwd erpuser -group admin
```
- Update of the pre-calculation file with ERP information.  
Use active database login or log in with the stated user.  
If only "-user" is stated, then there has to be configured an automated login for the stated user!  

```
CSCRIPTHOST.EXE PCON_UPDATE.VB -user erpuser
```
- Update of the pre-calculation file with ERP information.  
Ignore active database login and instead manually log in with an automated login.

**Note**

In this case a global user (Wildcard '\*') has to be created and there has to be an open connection.

```
CSCRIPTHOST.EXE PCON_UPDATE.VB -i
```



## Chapter 27. V9.04

### 27.1. Restart Search Server when configured memory space is exceeded (9.04 SP2)

The SearchController checks, whether the Search Server takes to much memory space. If this is the case, then the server has to be restarted.<sup>1</sup>Entry in \$CADENAS\_SETUP/partsol.cfg

```
[SEARCHCTRL]
MAXMEMORY0=800000
```

Unit is KB

### 27.2. Warning in NX, if material is not existing (9.04 SP2)

#### Configurable threshold for messages (warnings)<sup>2</sup>

##### New Parameter DisplayCreationWarningLevel

In ifugnx.cfg the key DisplayCreationWarningLevel has been added.

With the aid of this key the desired level (amount) of NX warning messages is adjustable:

- 0 - Only error messages are displayed.
- 25 - Warnings concerning **substantial errors** in the created geometry are displayed (e.g. when a feature could not be created).
- 50 - In addition warnings concerning **uncritical geometry changes** are displayed (e.g. "translate to simple feature" or "solve pattern").
- 75 - In addition warnings concerning **smaller changes** are displayed (e.g. created temporary layers for drills).
- 90 - Everything is displayed, including information messages.

#### Note

Warnings concerning missing material are classified as "smaller change" and are displayed with DisplayCreationWarningLevel=75

#### Note

If there is no material given, then no error message occurs.

Not until a material is selected AND an error occurs a message is created.

### 27.3. Path for log4cxx.properties changed (9.04 SP2)

As of v9.04 SP 2 **log4cxx.properties** points to \$TEMP/log and not to CADENAS\_USER/log anymore.

#### Problem:

If \$CADENAS\_USER is at a remote drive (UNC or network), then the "File Rolling" does not work reliably anymore and sometimes takes a lot of time.

Thus the startup time is lengthened.

#### Solution:

<sup>1</sup>#31259

<sup>2</sup>#30959

**Note**

Installations with version < 9.04 SP 2 have to be adjusted manually.

For installations as of including 9.04 SP2 there is no demand for action.

## 27.4. Update Lucene-Index bei großen Katalogen mit PARTadmin 64bit (9.04 SP2)

**Problem:**

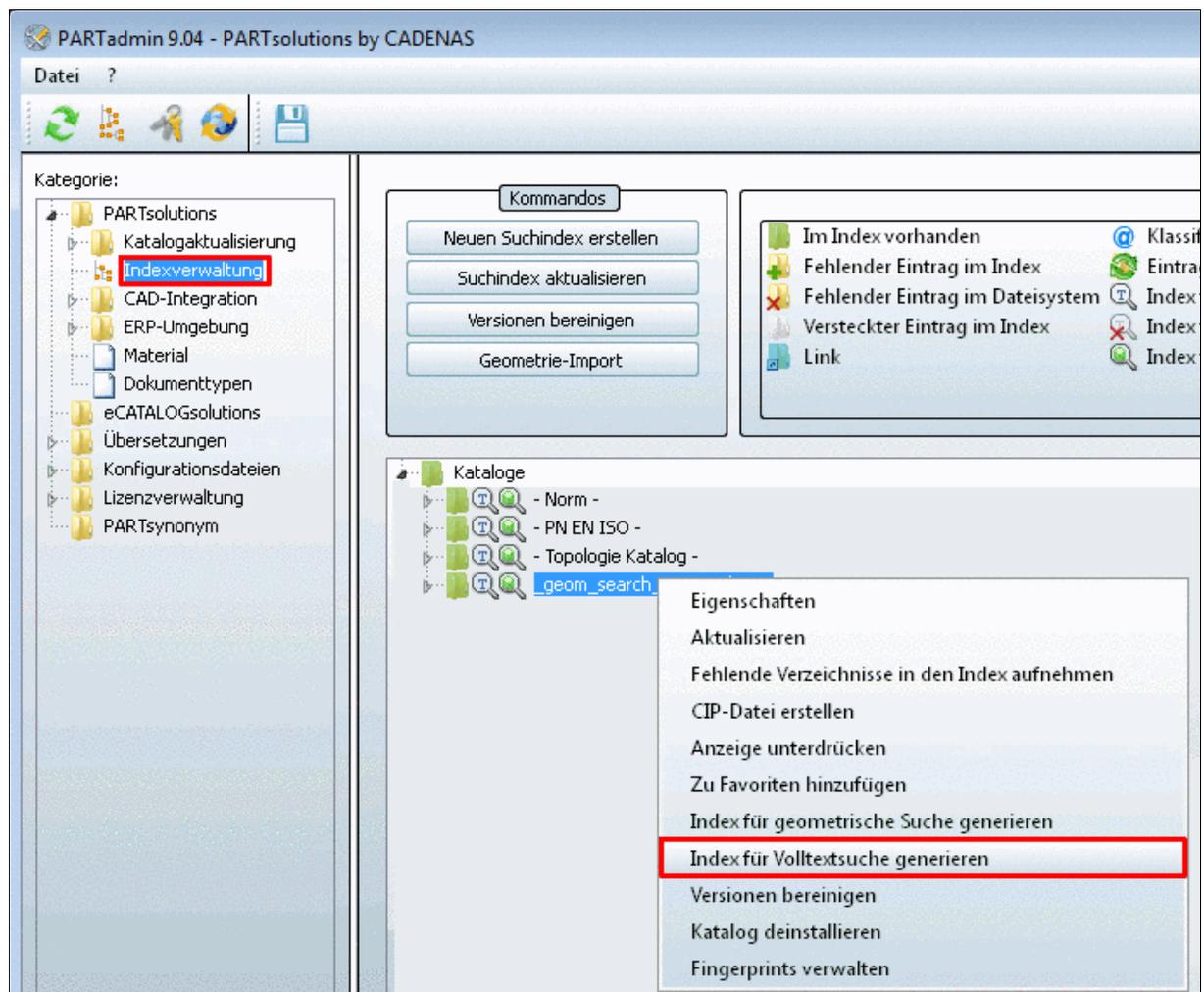
Bei großen Katalogen kann es beim Update des Lucene-Index (insbesondere bei Updates über alle Kataloge) aufgrund zu geringer Arbeitsspeichergröße Probleme geben.

Sie erhalten dann eine entsprechende Fehlermeldung.

**Lösung:**

Benutzen Sie die 64Bit-Version von PARTadmin. Diese finden Sie auf DVD, bzw. im Installationspfad unter `...\cadenas\partsolutions\software\bin\x86\64\padmin.exe`.

Starten Sie die Generierung des Lucene-Index für den gewünschten Katalog über den Kontextmenübefehl **Create full-text search index** oder für alle Kataloge (auf oberster Ebene) über den Kontextmenübefehl **Create all full-text search indexes**.



Vergleiche auch Section 27.17, "Volltext-Suchindizes selbst generieren".

## 27.5. SQL-Statements für Schlagwortsuche zu komplex (9.04 SP2)

### Problem:

Der Suchserver/PARTdatamanager sucht per Default in allen für eine Rolle konfigurierten Spalten.

Das daraus resultierende SQL-Statement ist kompliziert, wodurch die Performance leidet.

### Lösung:

Zu durchsuchende Spalten können gruppenabhängig deklariert werden.

Eintrag in \$CADENAS\_SETUP/plinkgroups.cfg -> Schlüssel KEYWORDSEARCHFIELDS

### Beispiel:

```
KEYWORDSEARCHFIELDS=FELDA, FELDB, FELDC
```

## 27.6. Windchill: Beliebige Zusatzdateien in den Workspace auschecken (9.04 SP1)

Es können neben dem eigentlichen Dokument beliebige Zusatzdateien (also nicht nur Zeichnungen), welche sich im PDM befinden, in den Workspace heruntergeladen werden.<sup>3</sup>

Der Dateiname muss bekannt sein.

Wenn mehr als eine Datei heruntergeladen werden soll, kann der Aufruf unter Verwendung des Chaining Mechanismus beliebig oft wiederholt werden.

### Beispiel:

Das folgende Beispiel zeigt den Aufruf in der Konfigurationsdatei \$CADENAS\_SETUP/ifproep-dmlink.cfg im Grundsatz.

```
PdmOnCheckout=meta_plm.startChainCall().chainCall(getObject("pdm.ManagerService")
↳.getActiveIfaceModule().CheckoutView(para.item(0)) , 1 , 1)
↳.chainCall(plmstart.getActiveIfaceItem().getGlobVar("wind")
↳.ServerObjectsCheckout("0000000334.DRW" , 0, NOTHING) , 1, 0).finish()
```

Die Zeile bewirkt, dass zusätzlich zum eigentlich ausgecheckten Teil die Datei 0000000334.DRW heruntergeladen wird.

Im konkreten Anwendungsfall muss "0000000334.DRW" entweder durch den Aufruf eines Custom Skripts, welches den Namen zurückliefert oder durch einen anderen Konfigurationsdatei-Schlüssel (oder ähnliches) ersetzt werden. Die genaue Umsetzung bleibt dem Consulting überlassen.

Beispielsweise könnte zu jedem Teil XYZ.prt auch ein XYZ.drw vorhanden sein. In diesem Fall würde das Skript für die herunterzuladende Datei .drw den identischen Namen des Dokuments .prt zurückliefern.

Weitere Informationen zur Schnittstelle finden Sie unter Windchill PDMLink - ProE/Creo.

## 27.7. NX: Makro-unabhängiger Platzierungsdialog (9.04 SP1)

### Problem:

Die Benutzung des Platzierungsmakro für native Platzierungsstrategie führt unter gewissen Umständen zu Fehlern:

Gründe können beispielsweise sein:

<sup>3</sup>#28418

- Natives Platzieren von Bauteilen aus Teamcenter in eine Baugruppe funktioniert ab TC2009 nicht und verursacht einen NX-Absturz

**Note**

Problem ab NX 8.0.3 nicht mehr relevant.

**Note**

Die PSOL-eigenen Platzierungsstrategien (**In Cylinder**, **On surface** und **Touching Surfaces**) können unberührt von dem Bug eingesetzt werden.

- Dateipfade mit Leerzeichen werden nicht erkannt (wird ab NX 8.5 behoben)

**Lösung:**<sup>4</sup>

Verwenden Sie alternativ eine reduzierte Benutzer-Schnittstelle.

Kommentieren Sie hierzu unter `§CADENAS_SETUP/ifugnx.cfg` im Block Placement den Schlüssel `PL_UseSimplePlacementDialog` mit Wert = 1 ein.

```
[Placement]
PL_UseSimplePlacementDialog=1
```

Vorteile:

- Verbesserte Kompatibilität zu älteren NX Versionen (6-7.5)
- Native Platzierungsstrategie kann beim Check Out auch ohne Makro erfolgen, was den Makro-Erstellungsaufwand einspart.

**27.7.1. Anhang: NX Makro für native Platzierungsstrategie erzeugen**

Ein NX-Makro für die native Platzierungsstrategie wird wie folgt erzeugt:

1. Arbeitsumgebung einrichten: Teamcenter starten, NX aus Teamcenter starten, ein neues leeres Modell erstellen, kontrollieren, dass der "Baugruppen-Modus" eingeschaltet ist.
2. Makroaufzeichnung in NX starten: Werkzeuge->Makro->Aufzeichnung Starten...(oder Strg+Shift+R)->Makro-Name eingeben->OK
3. Makro aufzeichnen: Baugruppen->Komponenten->Komponente hinzufügen->Öffnen->(Teamcenter-Exportmenü erscheint)->Teilenummer und Revision eingeben->Bauteil in der Ergebnistabelle auswählen->OK->(Teamcenter-Exportmenü schliesst)->Aufzeichnung an dieser Stelle beenden.
4. Makro anpassen: Neu erstelltes Makro in einem Texteditor öffnen, dann überall die Teilenummer durch `<<CNS_ITEM_NUMBER>>` und -Revision durch `<<CNS_ITEM_REV>>` ersetzen. Z.B., wenn das im Schritt 3 ausgewählte Bauteil "002012/A" hieß, sollen alle "002012" im Makro durch `"<<CNS_ITEM_NUMBER>>"` und alle "A" (mit Anführungszeichen!) durch `"<<CNS_ITEM_REV>>"` (ebenfalls mit Anführungszeichen) ersetzt werden.
5. Makro einsetzen: Makrodatei in den Ordner `%CADENAS_SOFTWARE%\iface\unigraphics\shared\macro` verschieben; `ifugnx.cfg` Zeile `"placementmacro(nx80,tcActive)"` entsprechend anpassen.

Z.B. `placementmacro(nx80,tcActive)=$CADENAS/iface/unigraphics/shared/macro/myTCmacro.macro` für eine "myTCmacro.macro" Makrodatei.

<sup>4</sup>#30081, #31689

**Note**

"placementmacro(nx80,tcActive)" bezieht sich auf NX 8 (mit aktiver Teamcenterverbindung). Für andere NX-Versionen muss „nx80“ entsprechend angepasst werden, z.B. „nx75“ für NX7.5.

**27.8. Keyword search - Functionality (9.04)**

The keyword search functionality is described under Section 3.1.6.4.2, “ Full-text search ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

**27.9. Combined search in PSOL and LinkDB (9.04)**

If **Keyword search in ERP**  is activated, then you can also use ERP values for searching in the **Keyword search** input field. Then the full-text search will search both in ERP fields<sup>5</sup>, and in projects.

**Note**

However the following restriction applies:

If **multiple terms** are entered in the **Keyword search** input field, then the combination of the terms has to be contained in ERP fields **OR** in projects, mixed combinations are not possible.

Example:

In the **Keyword search** field is **no combined search** e.g. for 933 (standard number) and 8.8 (material) possible, if 933 comes from **PSOL** and 8.8 comes from the **LinkDB**.

If both declarations are contained in the LinkDB field for material description (short text) for example, then the following query will work:

```
*933*8.8*
```

**Note**

Only fields, which are visible in the currently set role, are searchable.

In order to perform a **Keyword search combined with ERP variables**, you can use the **Search index** page.

All columns visible in the current role are listed (see following figure, colored lines). Enter a term under **Keyword** and in addition terms (values) for any amount of ERP variables.

**Example:**

**Keyword + ERP variable** ("Description")

<sup>5</sup> ERP table

Suche

Suchen in: /Kataloge

| Variable      | Beschreibung     |   | Wert / von         | bis | Einheit / | Sy |
|---------------|------------------|---|--------------------|-----|-----------|----|
|               | Schlagwort       | = | sechskant          |     |           |    |
| ERP_PDM_NU... | ERP-Nummer       | = |                    |     |           |    |
| MAT_NAME      | Werkstoff        | = |                    |     |           |    |
| DESCRIPTION   | Beschreibung     | = | superduperschraube |     |           |    |
| ACTIVE_STATE  | Aktueller Status | = |                    |     |           |    |

Suchen

100% Anzahl: 1

Suchen

DIN 7990 - 4...  
mm  
27.04.2012

Result:

WUERTH 007412 65 Sechskantschraube DIN 7990 M12x65 4.6 TZN

Tabellenansicht

|                   | ERP_PDM_NUMBER | MAT_NAME      | DESCRIPTION        | * ACTIVE_STATE   | ARTNR         | MATERIAL  | GUETE |
|-------------------|----------------|---------------|--------------------|------------------|---------------|-----------|-------|
|                   | ERP-Nummer     | Werkstoff     | Beschreibung       | Aktueller Status | Artikelnum... | Werkstoff | Guete |
| eClass 5.0 (SP1): |                |               |                    |                  |               |           |       |
| 7                 | M12x60         |               |                    |                  | 007412 60     | ST        | 4.6   |
| 8                 | M12x65         | *#13406427450 | Superduperschraube | Freigegeben      | 007412 65     | ST        | 4.6   |
| 9                 | M12x70         |               |                    |                  | 007412 70     | ST        | 4.6   |
| 10                | M12x75         |               |                    |                  | 007412 75     | ST        | 4.6   |

## 27.10. PARTdataCenter - Article Number Assignment (9.04)

### Data transfer from ERP/PDM system and display in the PARTdataManager

Do you want to overtake data such as article number, release status, material, surface, stock, prices, etc. from your ERP/PDM system and display in the characteristic attribute table in PARTdataManager for the part selection?

Then this data has to be linked with the according standard and supplier parts in the PARTsolutions LinkDB.

Therefore use the **PARTdataCenter** module with the **Article Number Assignment** function.



Get started quickly with a detailed description and sample files. See Artikelnummerzuordnung (Urfüllung).

### 27.11. Remember selected role (9.04)

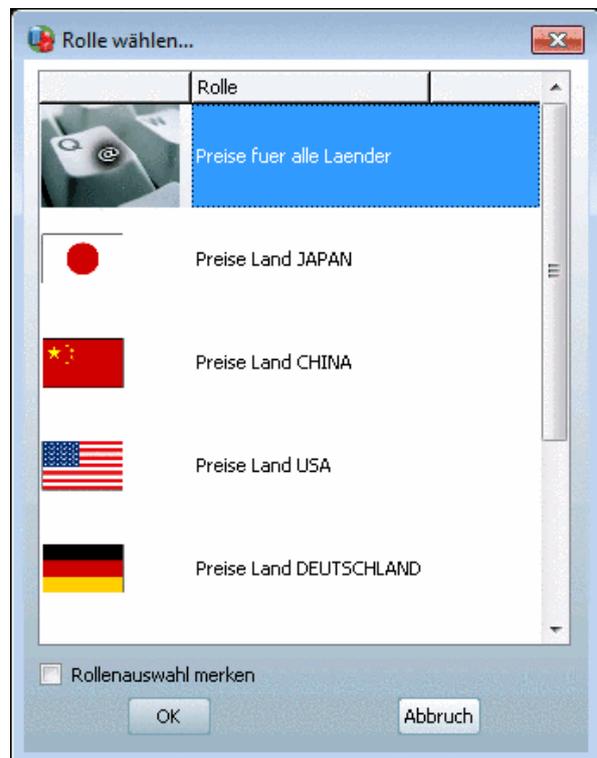
Using a PARTsolutions ERP integration different roles can be configured.

If users seldom change the role, then it makes sense to select the checkbox **Remember selected role**.

Thus the lastly selected role is remembered and the call up of the role dialog box is suppressed as long as the user clicks the **"Select group"** button



or the saved role is no longer available for the respective user (setting in plinkusers.cfg).



### 27.12. Vault for Inventor 2013 available

As of PARTsolutions 9.04, Vault (for Inventor 2013) is available.<sup>6</sup>

<sup>6</sup>#28863

### 27.13. Vault: Non-library directories (with subdirectories) supported (9.04)

As of PARTsolutions version 9.04 non-library directories (with subdirectories) are supported in Vault.

### 27.14. Vault: Key for checkout latest version "yes/no" (9.04)

As of version 9.04 there is a new key `checkout_newest_version` for Vault in the configuration file `ifvault.cfg`, whereby it can be controlled, whether the old or the latest version shall be checked out.

Value range 0/1:

```
1 -> Interface will always checkout the latest version of a file.
0 -> Interface will checkout the first version of a file,
 if there is an entry in PLMTable2.
```

### 27.15. SAP integration enhancement (9.04)

#### New buttons to call up different SAP masks

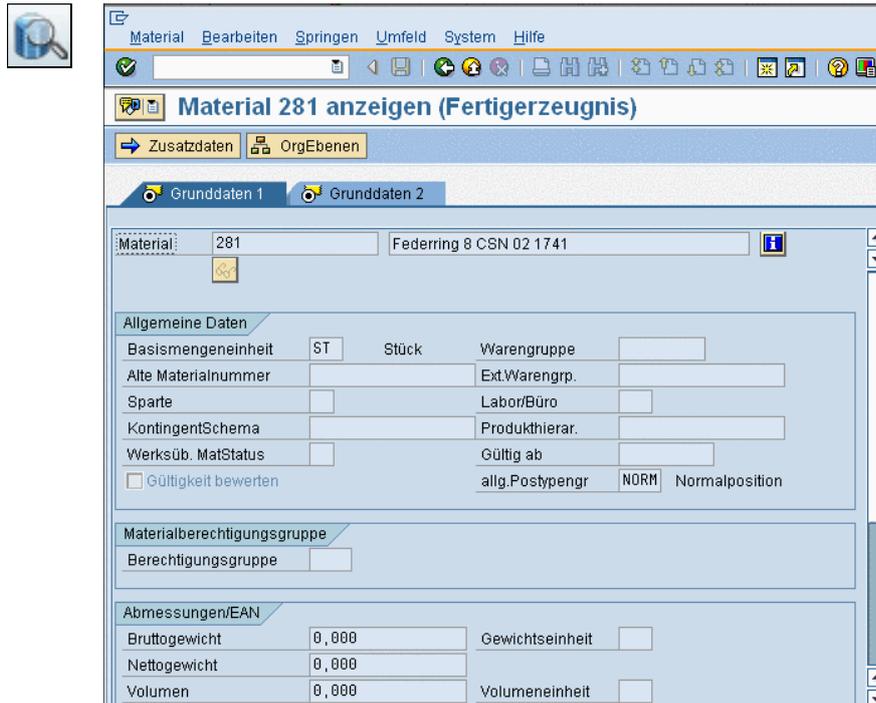
As of v9.04 you can call up the SAP masks **Change Material (MM02)**, **Show Material (MM03)** and **Search Material**:



Change Material

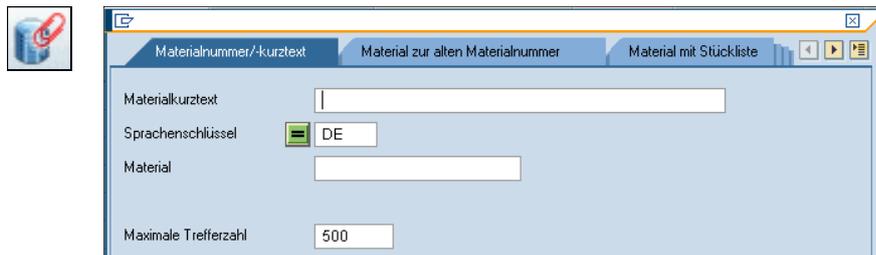
Change values inside the SAP mask.

After confirming the changed values are displayed in der PARTsolutions table on the fly.



The screenshot shows the SAP Material Master interface for Material 281. The title bar reads 'Material 281 anzeigen (Fertigerzeugnis)'. Below the title bar, there are tabs for 'Zusatzdaten' and 'OrgEbenen'. The main content area is divided into sections: 'Grunddaten 1' and 'Grunddaten 2'. The 'Material' field contains '281' and the 'Beschreibung' field contains 'Federring 8 CSN 02 1741'. The 'Allgemeine Daten' section includes fields for 'Basismengeneinheit' (ST), 'Stück', 'Warengruppe', 'Alte Materialnummer', 'Ext.Warengrp.', 'Sparte', 'Labor/Büro', 'Kontingentschema', 'Produkthierar.', 'Werksüb. MatStatus', 'Gültig ab', and 'allg.Postypengr' (NORM). The 'Materialberechtigungsgruppe' section has a 'Berechtigungsgruppe' field. The 'Abmessungen/EAN' section includes 'Bruttogewicht' (0,000), 'Gewichtseinheit', 'Nettogewicht' (0,000), and 'Volumeneinheit'.

Show Material



The screenshot shows the SAP Search Material dialog box. It has three tabs: 'Materialnummer/-kurztext', 'Material zur alten Materialnummer', and 'Material mit Stückliste'. The 'Materialnummer/-kurztext' tab is active. The fields include 'Materialkurztext', 'Sprachenschlüssel' (DE), 'Material', and 'Maximale Trefferzahl' (500).

Search Material

Select the desired row in the table and click on the button.

A complete documentation on this is found under SAP MM und PLM.

## 27.16. Shared-Index einrichten (9.04)

Für verschiedene Prozesse, wie z.B. den Dokumentenscan (neu mit V9.04) wird ein gemeinsam genutzter Index benötigt, in den unterschiedliche Benutzer schreiben dürfen, und den auch alle Benutzer sehen.

Aktuell gibt es den IndexTree in zwei Varianten:

- **User-Index:**  
Liegt unter %appdata%/index
- **Admin-Index:**  
Liegt unter \$CADENAS\_DATA/index. Zum Schreiben auf diesen Index werden Administrationsrechte benötigt (z.B. für Kataloginstallation).

Der zusätzlich benötigte **Shared-Index** kommt als dritter Index hinzu.

Alle Benutzer, die in diesen Index schreiben dürfen, müssen auch entsprechende Rechte im Dateisystem haben. Dies muss von Seiten der Administration sicher gestellt werden.

Konfiguriert wird der Pfad zum Shared-Index in der Konfigurationsdatei `$CADENAS_setup/partsol.cfg`.

Standardwert ist `$CADENAS_DATA/shared`.

```
[PARTindex]
SharedIndexDir=$CADENAS_DATA/shared
```

## 27.17. Volltext-Suchindizes selbst generieren

Bei CADENAS-Katalogen sind per Default die Suchindizes bereits generiert.

Wenn Sie die Volltext-Suchindizes (Lucene-Index) selbst generieren möchten, beachten Sie bitte Folgendes:

Um die Generierungszeiten klein zu halten, muss bei der **32bit-Variante von PARTAdmin**<sup>7</sup> der Schlüssel `UseRamAsTargetIndex` auf `true` umgestellt werden.

Nehmen Sie die Einstellungen in der Konfigurationsdatei unter `$(CADENAS_USER)/var-search.cfg` vor.

Default-Werte des "Spell"-Index. ("Meinten Sie")

```
[Index:Spell]
Generate=true
UseTemporaryDirectory=true
UseRamAsTargetIndex=true
```

Default-Werte des "Similar"-Index. ("Verwandte Begriffe")

```
[Index:Similar]
Generate=true
UseTemporaryDirectory=true
UseRamAsTargetIndex=true
```

### Note

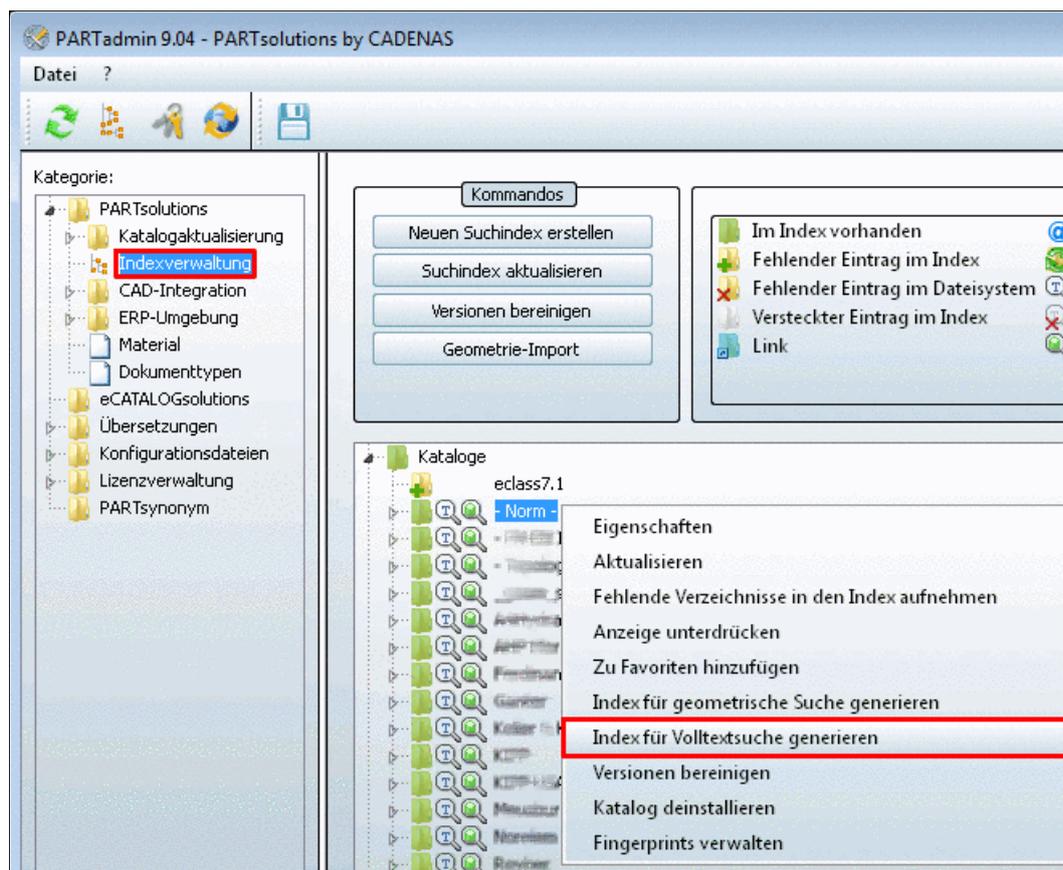
Für die **64bit-Variante** von **PARTAdmin** gibt es den Schlüssel `UseRamAsTargetIndex64`.

Dieser ist per **Default** auf **"true"**.

```
[Index:Similar]
UseRamAsTargetIndex64=true
```

Siehe auch Section 27.4, "Update Lucene-Index bei großen Katalogen mit PARTAdmin 64bit (9.04 SP2)".

<sup>7</sup> Ab Version 9.04 SP2 können Sie auch die 64bit-Variante von PARTAdmin benutzen.



Die Indexgenerierung starten Sie über PARTAdmin -> Kategorie "Index administration" -> Kontextmenübefehl "Create full-text search index".

## 27.18. SEW Drive Konfigurator + PARTsolutions/professional (9.04)

Durch eine Kooperation von SEW-EURODRIVE und CADENAS können die SEW-Antriebe im Strategischen Teilemanagement PARTsolutions integriert werden. Durch eine direkte Schnittstelle von PARTsolutions zum SEW-DriveKonfigurator können PARTsolutions-Nutzer bequem nach dem jeweils geeigneten Antrieb suchen.

### Das Prinzip:

- Im PARTdataManager ist zunächst der leere SEW (Online) Katalog, der nur einen Assistenten, aber noch keine Teile beinhaltet.
- Beim Aufruf des Assistenten wird der Benutzer weitergeleitet auf die Portalseite von SEW Eurodrive.
- Dort erstellt er sein gewünschtes Bauteil über den Online Konfigurator.
- Danach kann das Bauteil ins CAD-System importiert werden (keine CADENAS-Technologie).

Für den normalen Anwender, bzw. ohne weitere Einrichtung durch Consulting ist hier Schluss.

Hat man eine spezielle Freischaltung von SEW für die Benutzung mit PARTsolutions geht es so weiter:

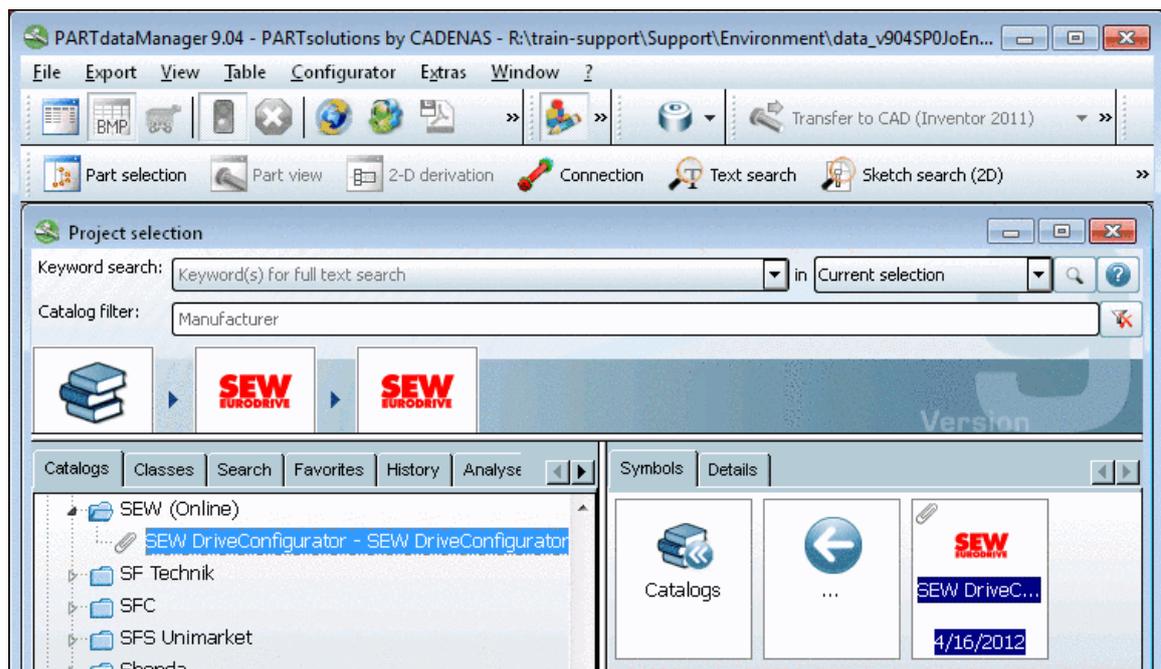
- Es wird eine sewzip-Datei für den Download generiert.  
Diese enthält ein STL für die 3D-Vorschau und die Parameter.
- Im einfachsten Fall wird nur die Dateiendung registriert (**sewzip** -> BAT liegt im Katalog; Schreibrechte werden benötigt)  
Per Doppelklick werden die Daten als Projekt in den SEW (Online) Katalog importiert und dann im PARTdataManager angezeigt.  
In einer großen Installation bietet es sich an, den Import im Zuge von "Nachtupdate" auf dem Server zu lösen.

- In einer LinkDB-Umgebung können Teile mit PDM und ERP verknüpft und verwaltet werden.
- Außerdem stehen nun viele gewohnte Features zur Verfügung:
  - Volltextsuche über geometrische und ERP-Merkmale  
(Die Indizierung für die Volltextsuche geschieht bereits beim Import.)
  - Erzeugen eines Datenblattes mit 3D-Vorschau und allen Parametern

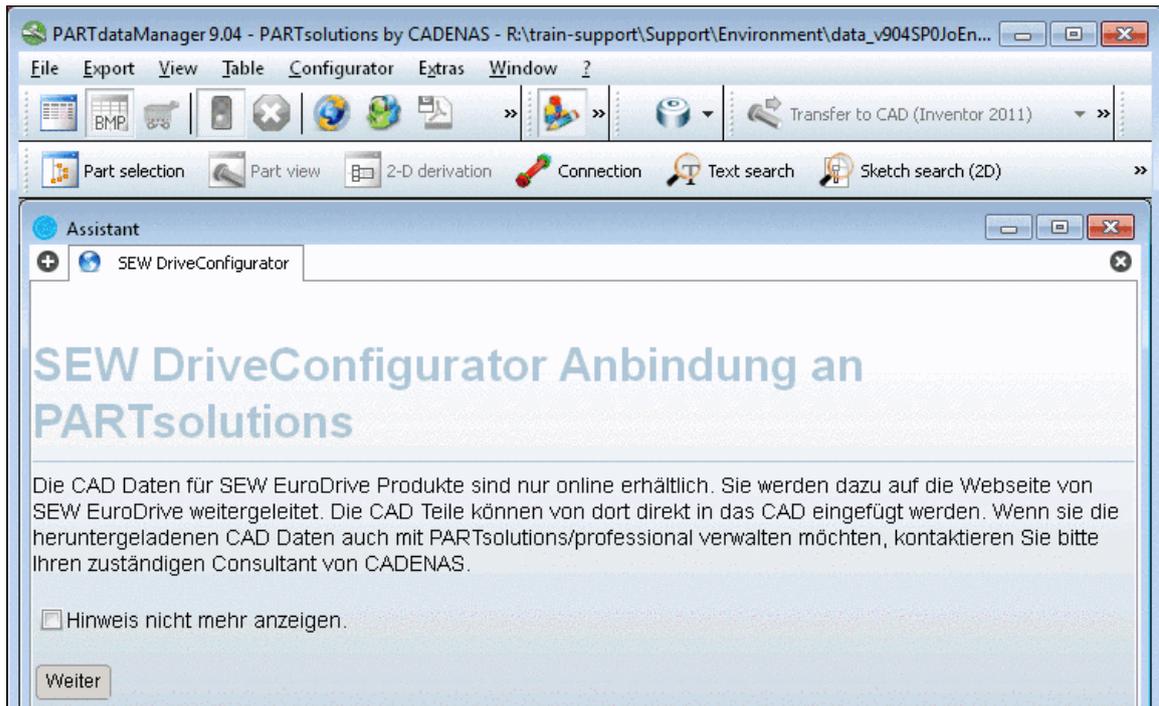
### Der Ablauf im Gesamten:

Im Folgenden wird der Ablauf im Gesamten gezeigt und einige wichtige Hinweise gegeben.

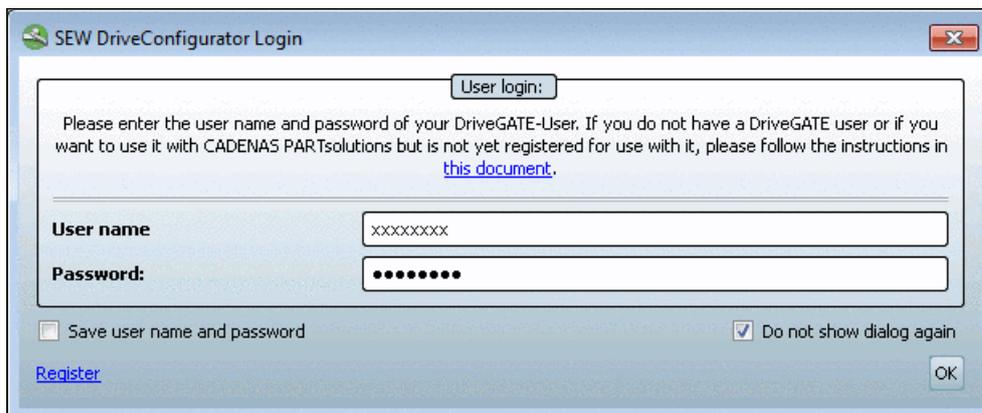
1. Rufen Sie im SEW (Online) Katalog den Assistenten auf.



2. Es erscheint eine Information zur Verwaltung der CAD-Daten mit PARTsolutions/professional.



3. Loggen Sie sich ein oder klicken Sie auf den Link "[diesem Dokument](#)", um nähere Informationen zum Login zu erhalten.



User login

Driving the world

**SEW  
EURODRIVE**

## Nutzung des SEW DriveConfigurators mit CADENAS Partsolutions

Zur Nutzung des DriveConfigurators mit CADENAS Partsolutions benötigen Sie einen Zugang zum SEW-Kundenportal „DriveGate“.  
Außerdem muss Ihr DriveGate-User einmalig für die CADENAS-Anbindung eingerichtet werden.

1. Sollten Sie noch keinen DriveGate-Benutzer haben, registrieren Sie sich bitte [hier](#). Die Registrierung ist kostenlos. Nach wenigen Minuten erhalten Sie eine Bestätigungs-E-Mail mit der Kennung ihres DriveGate-Users. Diese fängt –für Anwender aus Deutschland- mit DE2 an.
2. Um Ihren DriveGate-User für die Verwendung mit Cadenas Partsolutions einzurichten, senden Sie uns bitte eine Email an [DriveGate@sew-eurodrive.de](mailto:DriveGate@sew-eurodrive.de) mit Ihrem DriveGate-Nutzer (DE2...) und dem Stichwort „CADENAS-Anbindung“.

Bei Rückfragen zur Registrierung / Freischaltung erreichen Sie das DriveGate-Team der SEW unter 07251 / 75-3232 oder unter [drivegate@sew-eurodrive.de](mailto:drivegate@sew-eurodrive.de)

Informationen zur Verwendung mit CADENAS PARTsolutions

4. Konfigurieren Sie das gewünschte Bauteil.  
Über den Link [In Ihr CAD-System einfügen](#) können Sie das Bauteil ins CAD-System übernehmen.

### **Important**

Bitte zu Einrichtungs- und Testzwecken "Testbestellung" (siehe Abb.) eintragen.

**DRIVEGATE**
Willkommen
Abmelden

Start
**Auswahl & Anfrage**
Support
Training
Persönliche Einstellungen
Impressum

DriveKonfigurator
Anfrage / Vorlagen
Anfrage (Ersatz)

Benutzeroptionen

Neues Produkt
Ersatzprodukt
Kontakt

Produkt konfigurieren & anfragen

Auswahl mit Typenbezeichnung

Sie können nach Katalogbezeichnung suchen

DriveKonfigurator (R47DRE100M4)
Benutzeroptionen

← Zurück
Weiter →
Start
1. Suchen
2. Ausführungen
3. Optionen
4. Ergebnis
5. Zur Anfrage hinzufügen

Designoptionen

Bauform: M1 Einbauausführung: R. Getriebe in Fußausführung

DriveKonfigurator (R47DRE100M4)
Benutzeroptionen

← Zurück
Weiter →
Start
1. Suchen
2. Ausführungen
3. Optionen
4. Ergebnis
5. Zur Anfrage hinzufügen

Produkt

R47DRE100M4

Benutzereingaben

[Download CAD-Daten](#)  
in Ihr CAD-System einfließen

Ihre Materialnummer

Testbestellung

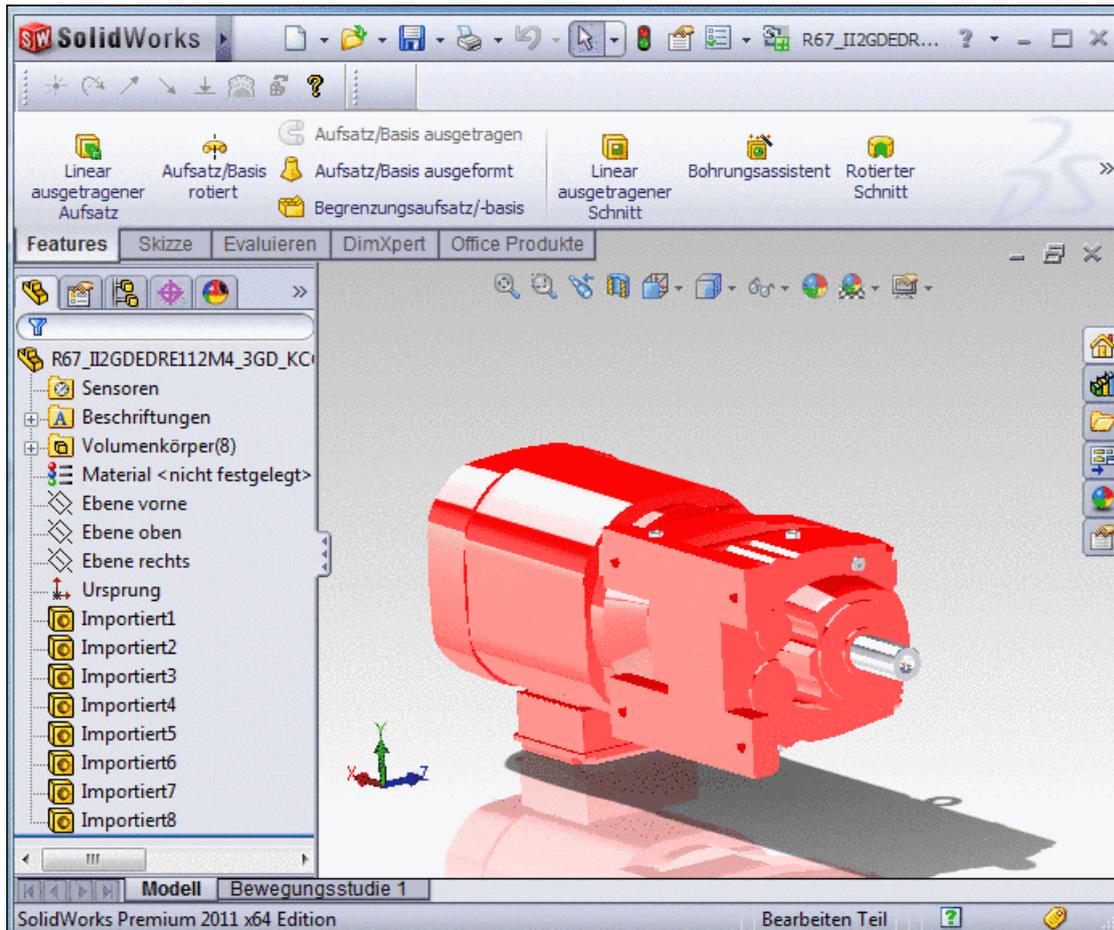
Ihre Nachricht an uns

Testbestellung, bitte nicht bearbeiten

Technische Daten

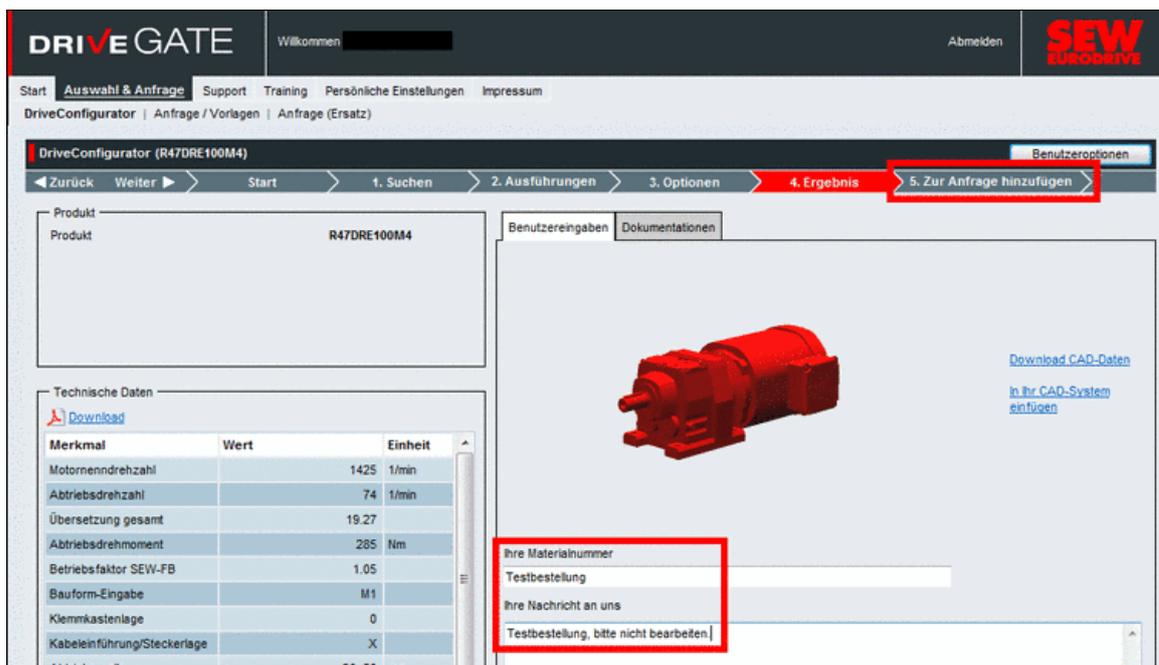
↓ Download

| Merkmal                     | Wert  | Einheit |
|-----------------------------|-------|---------|
| Motornendrehzahl            | 1425  | 1/min   |
| Abtriebsdrehzahl            | 74    | 1/min   |
| Übersetzung gesamt          | 19.27 |         |
| Abtriebsdrehmoment          | 285   | Nm      |
| Betriebsfaktor SEW-FB       | 1.05  |         |
| Bauform-Eingabe             | M1    |         |
| Klemmkastenlage             | 0     |         |
| Kabeleinführung/Steckerlage | X     |         |



Bis hier ist es ein Standard-Ablauf im SEW-Portal.

5. Klicken Sie nun auf **5. Zur Anfrage hinzufügen**.



- 6.

### Important

Bitte zu Einrichtungs- und Testzwecken unter "Ihre Referenz" "**Test**" eintragen.



## B. Automatisch

Damit der automatische Import per Doppelklick funktioniert, muss die Dateieindung "sewzip" registriert werden.

Führen Sie dazu unter %cadenas\_data%/23dlibs/sew\_online/assistant die Batch-Datei sew\_driveconfigurator\_register\_sewzip.bat aus.

### Note

Unter WIN7 und Vista muss die Batch-Datei als Administrator ausgeführt werden.

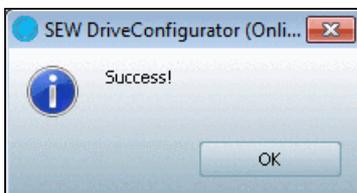
Inhalt von sew\_driveconfigurator\_register\_sewzip.bat:

```
@echo off
REM Associate file extension with an identifier:
assoc .sewzip=PDataManager.VB.SEW_DRIVECONFIGURATOR
REM Associate identifier with a command:
ftype PDataManager.VB.SEW_DRIVECONFIGURATOR="%CADENAS%\bin\x86\32\wscripthost.exe"
"%CADENAS_DATA%\23d-libs\sew_online\assistant\sew_driveconfigurator.vbb" "%1"
```

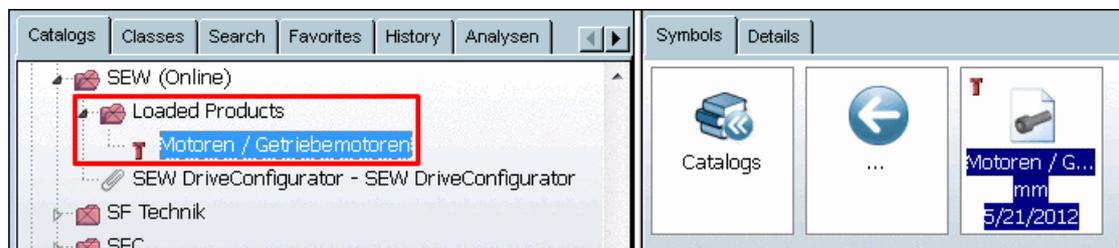
### Note

Nach der Registrierung wird auch das Icon von cscripthost im Explorer angezeigt.

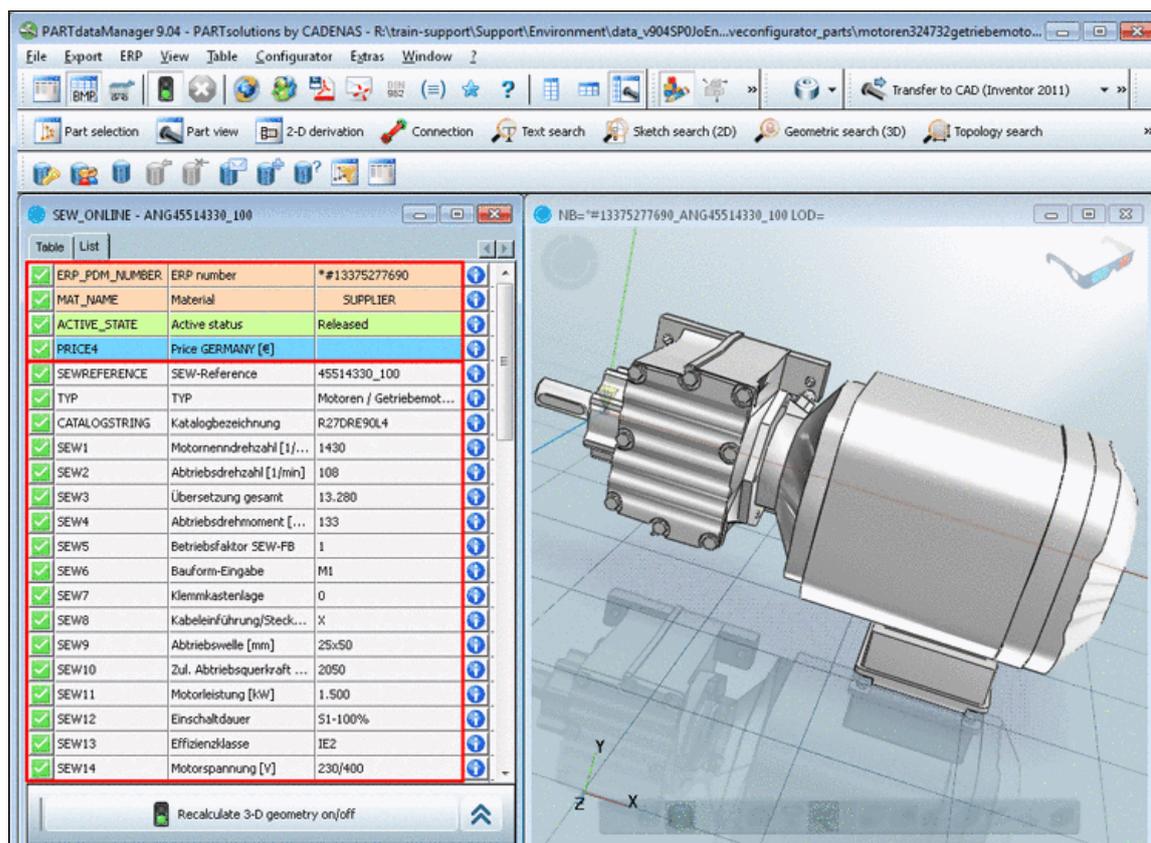
10. Egal, ob Sie den manuellen oder den automatischen Import wählen, sobald der Import abgeschlossen ist, erhalten Sie eine Bestätigungsmeldung.



Importierte Bauteile werden im SEW (Online) Katalog im Unterverzeichnis "Loaded Products" abgelegt.

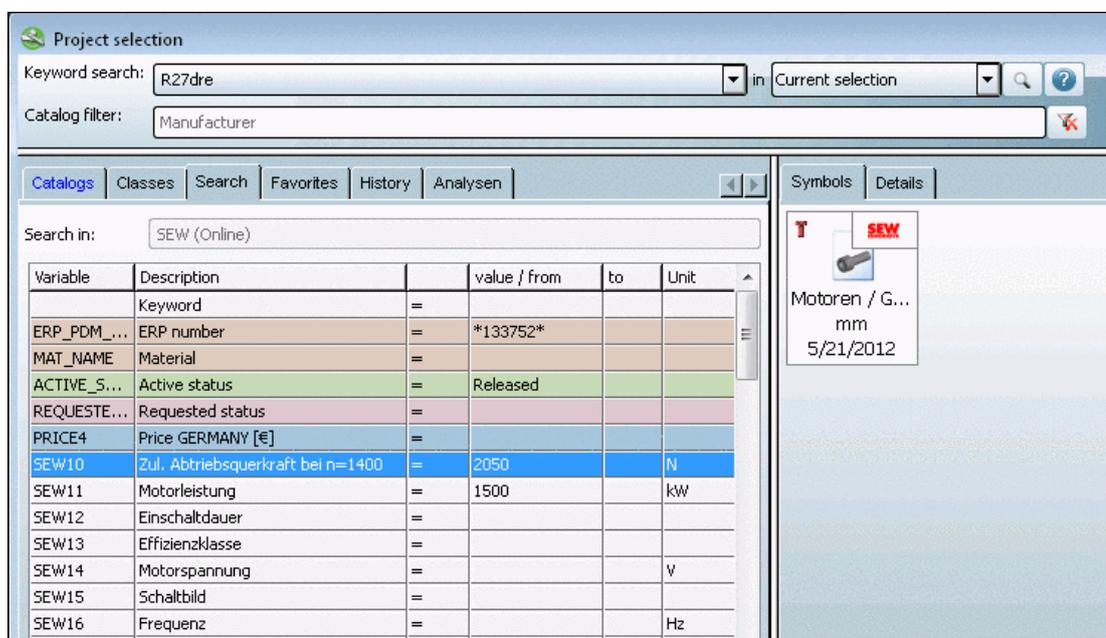


11. In der PARTdataManager **Part view** werden die 3D-Ansicht und alle Variablen angezeigt.

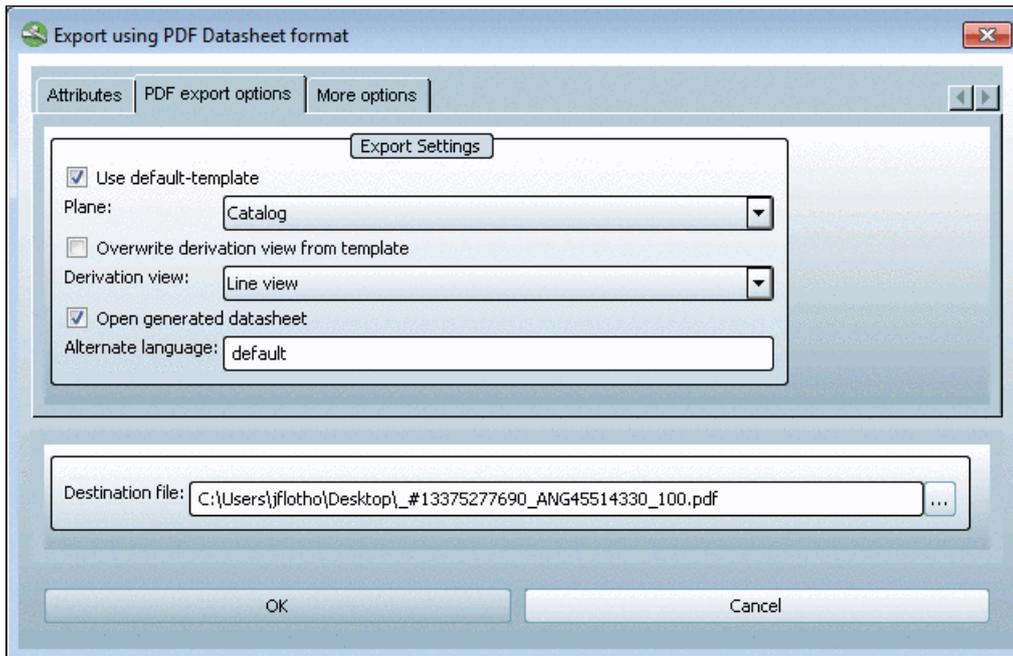


12. Im PARTdataManager stehen unter anderem folgende Funktionen zur Verfügung:

- Volltextsuche über geometrische und ERP-Variablen



- Datenblatt erstellen

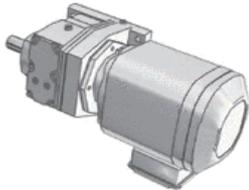


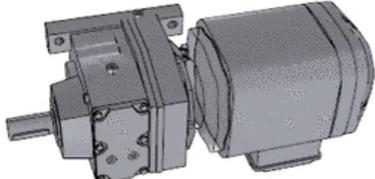


**Motoren / Getriebemotoren**  
Motoren / Getriebemotoren

**PDF DATASHEET**

© 1992 - 2011 CADENAS GmbH  
 Letzte Änderung (Geometrie): 18.04.12 13:33  
 Datenblatt Erstellungsdatum: 18.04.12 15:35





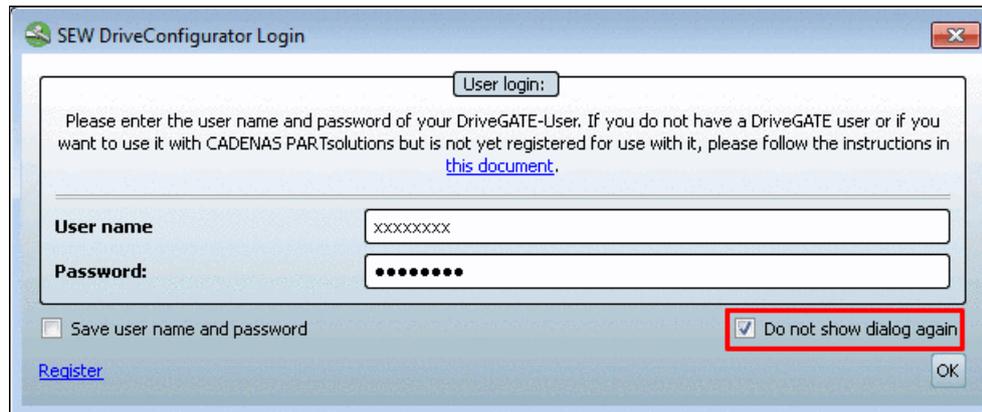
|                                       |                           |
|---------------------------------------|---------------------------|
| SEWREFERENCE (SEW-Referenz / )        | 45513764_100              |
| TYP (TYP / )                          | Motoren / Getriebemotoren |
| CATALOGSTRING (Katalogbezeichnung / ) | R47DRE90L4                |
| SEW1 (Motornendrehzahl / 1/min)       | 1430                      |
| SEW2 (Abtriebsdrehzahl / 1/min)       | 66                        |
| SEW3 (Übersetzung gesamt / )          | 21.81                     |
| SEW4 (Abtriebsdrehmoment / Nm)        | 220                       |
| SEW5 (Betriebsfaktor SEW-FB / )       | 1.35                      |
| SEW6 (Bauform-Eingabe / )             | M1                        |
| SEW7 (Klemmkastenlage / )             | 0                         |
| SEW8 (Kabeleinführung/Steckerlage / ) | X                         |
| SEW9 (Abtriebswelle / mm)             | 30x60                     |

Die Konfigurationsdatei wird beim 1. Start des Assistenten ins User-Verzeichnis geschrieben (\$CADENAS\_USER/ sew\_driveconfigurator.cfg).

### Login-Dialog wieder einschalten

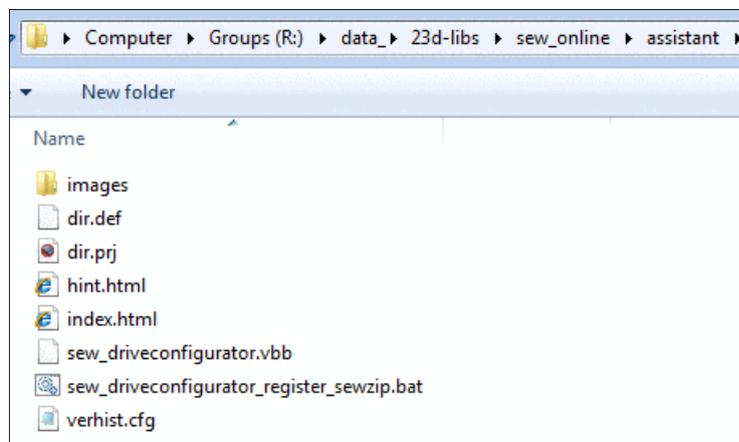
Sollte man im Login-Fenster "**Do not show dialog again**" aktiviert haben, kann der Dialog durch Änderung in der Konfigurationsdatei wieder geholt werden.

```
[SEW_DRIVECONFIGURATOR]
ShowLoginDialog=1
```



### vbb-Datei

Die vbb-Datei finden Sie unter %cadenas\_data%/23dlibs/ sew\_online/assistant.



## 27.19. Volltextsuche: Priorisierung zu durchsuchender Felder (9.04)

Die Gewichtung zu durchsuchender Felder kann unter \$(CADENAS\_USER)/varsearch.cfg eingestellt werden.

Die Default-Angaben müssen normalerweise nicht angepasst werden (können aber angepasst werden).

Wenn ein Feld nicht durchsucht werden soll, dann entfernen Sie die spezielle Angabe aus dem Wertebereich.

Wenn ein Feld überproportional stark bewertet werden soll, dann setzen Sie den Wert entsprechend hoch (z.B. 1000).

"orderno" ist das in eCAT festgelegte Feld für die Bestellnummer.

CNS\_SEARCHDATA ist nicht zu ändern.

Das explizite Ansprechen des Pfades ist mit 9.04 noch nicht möglich.

```
[VariableSearch]
FieldPriorizations=CNS_SEARCHDATA=1.0,orderno=150.0,nn=100.0,nt=60.0,nb=30.0
```

Die Synonym-Suche benutzt dieselben Angaben wie oben, allerdings mit dem hier angegebenen Faktor. Der Default-Wert von 0.3 sagt aus, dass Treffer, die über die Synonymsuche erzielt werden, nicht so hoch bewertet werden sollen, wie direkt erzielte Treffer.

```
SynonymFieldPriorizationMultiplier=0.30
```

## 27.20. Catalog update - Versionen behalten (9.04)

Bei der Verwendung einer ERP-Integration sollten bei Katalogupdates ältere Versionen behalten werden.

Bei den PARTsolutions-Versionen V9.01 bis 9.03 konnte es allerdings Probleme geben, wenn nicht die Option **Keep all (recommended for ERP)** verwendet wurde.



Beachten Sie bitte folgende Hinweise:

- **Keep all (recommended for ERP)**

### Note

Bitte wählen Sie für die Versionen V9.01 bis 9.03 unbedingt diese Option!  
Ab V9.04 können Sie beispielsweise auch "Anzahl Versionen =2" wählen.

- **Only keep the new version**
- **Number of versions**

### Note

Wenn Sie mehrere Standorte haben, zu denen **CADENAS\_DATA repliziert** wird, dann empfiehlt sich die Option **Number of versions** mit dem Wert **2** (ab V9.04 möglich, für frühere Versionen nicht [vgl. oben]).

## 27.21. Use encrypted passwords in config file (9.04)

If you want to use an encrypted password in a configuration file, then do the following:

1. Call up the following script (either via **PARTdataManager** -> **Extras** menu -> **Start VBS/VBB script...** or via **cscripthost**):  
`§CADENAS_SETUP/scripts/plm/pasowrdEncrypt.vbb`
2. Enter the password to be encrypted.



- Click on **Crypt**.  
-> You receive the encrypted password.



- Now you can use the encrypted password in a configuration file.  
Example:

```
password=?getObject("iface.passwordService").decryptPassword("<<encryptedPassword>>")
```

## 27.22. NX SAP (PDM) Interface von DSC (9.04)

Für die NX SAP (PDM) Schnittstelle kann als Connector „ECTR“ von DSC eingesetzt werden. Die zugehörige Konfigurationsdatei ist `ifdscsapplm.cfg`. Dort sind die nötigen Einstellungen anhand der Schlüssel-Beschreibungen erläutert.

Zur Kommunikation mit ECTR werden XML-Dateien verwendet. Hierzu gibt es XML-Templates (`..\software\iface\plm\ifdscsapplm`), welche über die Schlüssel in der Konfigurationsdatei mit den korrekten Daten versorgt werden.

## 27.23. Startgeschwindigkeit von PARTdataManager bei LinkDB-Verwendung verbessern (9.04, 9.03 SP2)

### Optimierung TREETABLELEVEL

- Problem:**

Bei jedem PARTdataManager-Start wird für jeden Katalog folgender SQL einzeln ausgeführt:

```
SELECT COUNT(LINKTABLE.PRJ_PATH) FROM LINKTABLE,ERPTABLE WHERE
(LINKTABLE.PRJ_PATH LIKE '{KATALOGNAME}/%') AND LINKTABLE.ERP_PDM_NUMBER =
ERPTABLE.ERP_PDM_NUMBER
```

Dies kann sich auf bis zu mehreren Minuten Wartezeiten aufsummieren (Remotestandorte, viele Kataloge installiert); selbst am Hauptstandort (Datenbank mit 100% Performance zur Verfügung).

- Lösung:**

`§CADENAS_SETUP/plinkcommon.cfg` -> Block **[Common]** > Schlüssel **TREETABLE-LEVEL=9**<sup>8</sup>

**UND**

Die TREETABLE enthält die Spalten LEVEL0-LEVEL9.

Bei einer V9.04 Installation mit SQL-Datenbank ist dies der Fall.

### Note

Handlungsbedarf besteht,

<sup>8</sup>Schlüssel ab 9.03 SP2 vorhanden, ab 9.04 per Default auf den Wert=9 gesetzt.

wenn auf 9.04 oder höher upgedated wird, von einer Version kleiner als 9.04. Dann muss das Datenbank-Update (DVD: <Laufwerk>\tools\databases\MSSQL\plinkdb\_patch.sql) ausgeführt werden (außer der Schlüssel und Spalten wurden bereits in einer 9.03 angelegt).

In einer 9.03-Installation ist sind die Spalten manuell anzulegen.

```
BEGIN
ALTER TABLE dbo.TREETABLE
ADD LEVEL0 VARCHAR(100),
 LEVEL1 VARCHAR(100),
 LEVEL2 VARCHAR(100),
 LEVEL3 VARCHAR(100),
 LEVEL4 VARCHAR(100),
 LEVEL5 VARCHAR(100),
 LEVEL6 VARCHAR(100),
 LEVEL7 VARCHAR(100),
 LEVEL8 VARCHAR(100),
 LEVEL9 VARCHAR(100);
END
```

Nach dem Update muss die **Structure table** einmal **aktualisiert** werden.

## 27.24. Batchconvert.exe (9.04, 9.03)

With this program you can convert 3D files and create preview images in batch mode.

You can use "Scheduled tasks" in Windows. (Hereto no GUI is needed; ActiveX is possible!)

(When you call up batchconvert.exe without parameter or with '--help' or with '-?', then the help with all possible parameters is displayed.

The file batchconvert.exe is found under:

```
C:\Program Files (x86)\cadenas\partsolutions\software\bin\x86\32\batchconvert.exe"
```

**Call up** happens in the following form:

```
batchconvert sourceDirName
 [--targetdir targetDirName]
 [--logfile logFileName]
 [--errorfile errorFileName]
 [--inputformats format1 format2 format3 ...]
 [--outputformats format3d formatImage]
 [--recursive]
 [--meshreduction]
 [--debug]
 [--imagewidth]
 [--imageheight]
```

### Note

#### sourceDirName

**As of version PSOL 9.04** there is an alternative possibility to declare the source directory:

Now instead of a directory you can specify a text file. Each line in this file has to specify the absolute path to a file to be imported. For the rest nothing has changed at call up.

### Exemplary initial situation:

```
C://abc/def/file1.prt
C://abc/ghj/file2.prt
C://xyz/stu/file3.prt
```

### Detection of target path:

In order for the structure of source files to be mapped correctly at the target, the target path is detected as follows:

At first the directory with the deepest path with the characteristic that it contains all files from the list is determined .

Then this common path is replaced by the specified target path.

Focusing on the first two lines the deepest common path would be "../abc" and focusing on all three lines it would be "C://".

```
C://target
```

**Result** would be then:

```
C://Ziel/abc/def/file1.stl
C://Ziel/abc/ghj/file2.stl
C://Ziel/xyz/stu/file3.stl
```

The common path may not be empty, especially all files have to be in the same drive or computer in the network.

Ergo the following is **not possible**:

```
C:/abc/file1.stl
D:/abc/file2.stl
```

Or

```
\\10.10.0.75/dir1/file1.stl
\\10.10.0.159/dir1/file2.stl
```

**Spelling:** (Example)

- Short version: -t  
or
- Long version: --targetdir

**Description** of the single parameters:

- --(t)argetdir: Target directory for the converted files
- --(l)ogfile: Log file, which contains a list of all converted files  
The file contains the complete paths to all converted output files as \t separated CSV.  
One line for each input file: col1=inputFilePath, col2=outputPathFormat1, col3=...)
- --(e)rrorfile: Error file, which contains a list of all files where an error occurred.  
The file contains the complete paths to the faulty input files.
- --(i)nputformats: Input formats to scan for in the source directory  
The following list exemplifies a selection of formats. Using the '**--listformats**' or '**-l**' you can output all formats in order to detect the correct names for the call up.

| Parameter            | Name                 | File extension |
|----------------------|----------------------|----------------|
| NATCATIAV5CATPRODUCT | Catia Native Checkin | CatProduct     |
| META3DV2             | PS3-V2 3D            | ps3            |
| NATINVENTORPART2011  | Inventor 2011        | ipt            |
| NATINVENTORASM2011   | Inventor 2011        | iam            |
| U3DFILE              | U3D                  | U3D            |
| SAT                  | SAT ascii 3D         | sat            |
| STEPIN               | STEP file input      | STEP           |
| STPIN                | STP file input       | STP            |
| IGS                  | IGS File input       | IGS            |

- `--(o)utputformats`: Output formats for 3D files:

| Parameter | File extension |
|-----------|----------------|
| STLFILE   | stl            |
| PARTJAVA  | zjv            |

for preview images:

| Parameter | File extension |
|-----------|----------------|
| BMP       | bmp            |
| PNG       | png            |
| JPEG      | jpg            |
| TIFF      | tif            |

- `--(r)ecursive`: The source directory is recursively scanned.
- `--(m)eshreduction`: The geometric part complexity is reduced. Stating this parameter cannot damage anything and makes sure that the geometric index can be correctly created. But in any case a respective message is outputted in the log file.
- `--(d)ebug`: An enhanced version is displayed in the command window.
- `--image(w)idth`: Width of preview images
- `--image(h)eight`: Height of preview images

In order to avoid errors please state width and height.

### Note

Please regard upper and lower case.

### Example 1:

```
batchconvert "C:\src" --targetdir "C:\target" --meshreduction --recursive
↳--outputformats BMP PARTJAVA --inputformats STLFILE --logfile C:\logfile.txt
↳--errorfile c:\errorfile.txt
```

### Example 2:

```
batchconvert "C:\src": -t "C:\target" -m -r -o BMP STL -i NATSOLIDEDGEPARTST2
↳NATSOLIDEDGEASMST2 -l C:\logfile.txt -e c:\errorfile.txt
```

### Note

- 64 Bit is currently not supported.
- In order to avoid that already converted parts are imported again at a restart, you can use the parameter "overwrite". Possibly as of V9.03 SP3, otherwise as of SP4 (presumably).

A detailed description of the geometry import via GUI is found under Import von Geometrie-Dateien.

## 27.25. Search server (9.04, 9.02)

### Why using a search server?

The search server speeds up the search (full-text search, variable search, geometrical search).

Implementing a search server does not change any processes. Everything remains the same for the user.

Whether or not a search server should be implemented mainly depends on the type of installation.

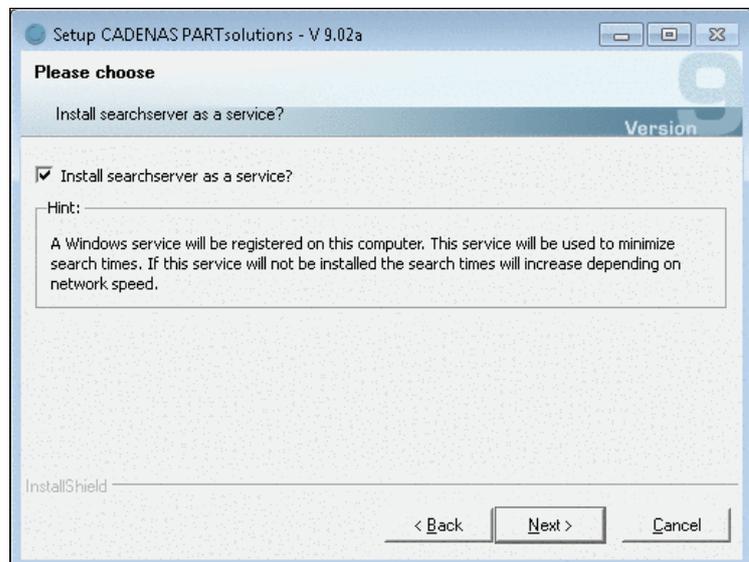
- **Single place installation** (local \$CADENAS\_DATA)  
No search server needed.
- **Client-Server installation**  
**Normally** the usage of a search server is recommended.
- **Multi Site Installation** (see also Section 22.2.7, "Architecture of a multisite installation")  
**Normally** the usage of a search server is recommended.

### Install search server as service (via installation routine)

The respective dialog box appears in the course of a client-server installation in the server installation section.

Activation of the **Install search server as a service?** checkbox:

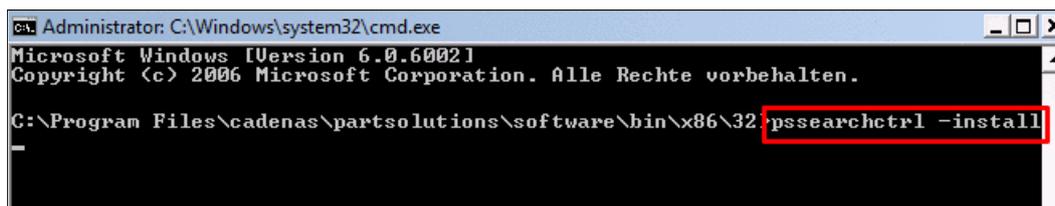
A Windows service will be registered on this computer. This service will be used to minimize search times. If this service will not be installed the search times will increase depending on network speed.



### Install search server as service (via command line) + Launching the server (service)

Register the search server (`pssearchctrl.exe`) in the "bin" directory via command line as **service** with the parameter "`-install`".

```
pssearchctrl -install
```



Command line: Install service with "pssearchctrl -install"

#### Note

Do not mix up "pssearchctrl" and "pssearchserver". "pssearchctrl" starts and controls the search server.

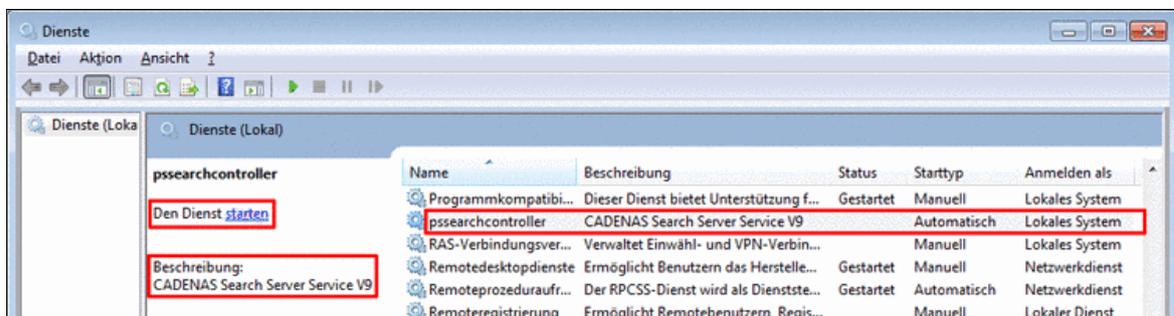
**Commands:**

- Pssearchctrl.exe –install  
The service is installed/registered, but not yet started.
- Pssearchctrl.exe  
The service is started.

**Note**

The service has to be started after the installation. Or the computer has to be rebooted, because during a boot procedure the installed service is automatically started.

Alternatively the service can be started via "Start -> Control panel -> Administration -> Services".



Service: CADENAS Search Server Service V9

- Pssearchctrl.exe –exec  
The search server is started as a normal process; that means not as a service.

**Search server activation in configuration file**

Perform the activation under \$CADENAS\_SETUP/partsol.cfg -> section [REMOTESEARCH] -> Key **enabled** -> Values: 0 = Off; 1 = on

If the search server is off, then the search is locally performed on the client via PARTdataManager.

**CACHE activation****Note**

Caching is officially available as of version 9.04 (as of v9.03 not yet well-engineered, experimental).

If a search server is activated, caching of the index files is recommended due to performance reasons, if CADENAS\_DATA and search server are not operating on the same server.

**Note**

Recommendation for multi site installations:

We recommend to install a central search server at the head quarter. CADENAS\_DATA (catalogs) should be replicated to a file server of the respective secondary locations. In this replication the Lucene index files do not have to be included.

The configuration file is found under %cadenas\_setup%/filesystems.cfg.

**Note**

The following excerpt of the configuration file shows the caching settings, but may possibly differ at release v9.04. In preceding release versions the setting options are similar.

```
[CACHEFS(psearchserver)]
#Caching activation
USECACHEFS=1
#Root directory, which has to be cached
CACHEROOT=$CADENAS_DATA/index
#Cache directory
SYNCDIR=$CADENAS_USER/cache_index
#which regex under CACHEROOT not to cache
↳ (ignore completely)
NOCACHE=.*index.cfg|.*index.idx
#Regular expressions under CACHEROOT, which have to be synchronized to $SYNCDIR
↳ and have to be checked concerning changes
SYNCLocal=.*lucene.*|.*geoindex.*|.*index.ic2t|.*index0.ic2t|.*index0.c2t|.*index.0.node.*
↳ |.*index.0.data.*
#Sync settings
as of which KB size copying happens in a side thread
SYNCLINELIMIT=100
Interval, wherein changes are checked
SYNCCHECKSECONDS=180
Number of Sync Threads, which check for changes on the filer at the same time
MAXSYNCTHREADS=100
```

**Important settings:**

- Activation  
USECACHEFS=1 (default = 0 = off)
- Declaration of the caching directory  
SYNCDIR=\$CADENAS\_USER/cache\_index  
=> Thus the cache index is stored under "C:\windows\system32\config\systemprofile\cache\_index". If this is not wanted, then any other path can be adjusted.
- Interval, wherein it is checked for changes.  
Adjust SYNCCHECKSECONDS if needed

Due to index file caching it is also possible to operate search server and \$CADENAS\_DATA on different servers.

**More detailed information** is found here:

- Why using a search server?  
See Such-Server einsetzen.
- Search server configuration  
See Such-Server Konfiguration.



## Chapter 28. V9.03 or older

### 28.1. Agile-Inventor integration (9.03 SP3)

As of PARTsolutions V9.03 SP3 the Agile-Inventor integration is available.

Detailed information on this is found under Agile - Inventor.

### 28.2. Teamcenter-ProEngineer integration (9.03 SP3)

As of PARTsolutions V9.03 SP3 the Teamcenter-ProEngineer Integration is available.

Detailed information on this is found under Teamcenter - ProEngineer.

### 28.3. Geometric index / Mesh reduction - Default changed (9.03 SP3)

All settings of the mesh reduction (reduction of the geometric part complexity) for the Geometric Search act on the settings of the configuration file `$CADENAS_SETUP/geomsearch.cfg`.

Mesh reduction is always processed, when, in the configuration file `geomsearch.cfg`, the respective key has been activated (value =1).

```
[meshReduction]
reductionEnabled=1
```

Furthermore `stlMaxTriangleCount` (the max. allowed number of triangles) from the section `[limits]` is relevant. If a part has more triangles than specified, then the number is reduced to that value.

```
[limits]
stlMaxTriangleCount=250000
```

If Mesh reduction is switched off and the number of triangles is higher than the value set under `stlMaxTriangleCount`, then a respective error message is displayed.

#### Note

As of V9.03 SP3 the default value for the maximum number of triangles has been changed from 100.000 to 250.000.

#### In which cases a difference results by this change of the default value?

For parts, whose number of triangles is between 100,000 and 250,000, a difference is resulting by the change.

- Case 1: Mesh reduction switched off.  
At the next geo index update the fingerprints are regenerated.
- Case 2: Mesh reduction switched on.  
A mesh reduction is not necessary anymore for the part now. That means, that the quality of the fingerprints is higher now, which has a positive effect on the topology search. The change only affects added parts or STL as search part or a complete new generation. Theoretically the following could happen: The same part is imported again and has a little bit different fingerprints than the old one, which may cause the similarity to be only 98 or 99 percent instead of 100 percent. The same applies, if a STL is used as search part.

#### For which processes the Mesh reduction is relevant?

- **Batchconvert.exe:**  
Mesh reduction can be used with the parameter "--meshreduction".

Also see Section 27.24, "Batchconvert.exe (9.04, 9.03)".

- **Geometry import** in PARTadmin:  
Mesh reduction is used for the fingerprint generation.
- As of V9.04 the Mesh reduction is processed, when a geo search is performed based on a STL and the number of triangles is too high.
- MeshReduction.exe can directly be executed.

## 28.4. Classimporter: Add document link (green column) (9.03 SP3)

Standard supplier catalogs can contain **document links**. These are displayed in a **green additional column** (compare Section 3.1.7.1, "Determine characteristic in "Table" view" in *PARTsolutions / PARTcommunity4Enterprise - User manual*). Green marked field mostly signalize that documents in the form of text, image or internet file formats are linked.

| - 06895-14012 |           |              |                              |                 |             |          |
|---------------|-----------|--------------|------------------------------|-----------------|-------------|----------|
| Table   List  |           |              |                              |                 |             |          |
|               | BEST      | AUSF         | A                            | D               | BS          |          |
|               | Order No. | version      | Length [mm]                  | Internal thr... | Description |          |
| ✖             | 1         | 06895-10006  | tumbled                      | 100             | M 6         | Infotext |
| ✖             | 2         | 06895-11208  | tumbled                      | 112             | M 8         | Infotext |
| ✖             | 3         | 06895-12510  | tumbled                      | 125             | M 10        | Infotext |
| ✖             | 4         | 06895-14012  | tumbled                      | 140             | M 12        | Infotext |
| ✖             | 5         | 06895-100061 | tumbled,black plastic-coated | 100             | M 6         | Infotext |

As of V9.03 SP3 this is also possible for catalogs, which have been created by the **Classimporter**.

In order for document link column to be displayed, proceed as follows:

- Settings in `attributedef.txt`  
In the column "**ATUDEF**" (attribute definition) set the value 'D'. Thereby a document link column is created.

Possible values are:

- A: Text
- I: Integer
- F: Floating
- D: Document link

If 'D' is set, then the creation of the column "**ATTRIBUTE\_DOCLINK**" is necessary (see next point). In all other cases not.

In the column "**ATBEZ\_german**" (and in the translation languages accordingly), set the text to be displayed (here in the example the term "Infotext").

```
"CLASSNAME";"ATTNAM";"ATUDEF";"EINHE";"ANZDZ";"ATWITHLIST";"ATWITHRANGE";"ATBEZ_german";...
"c_1734842242_0";"Idx";"I";"mm";"4";"";"Index";"Index";"";""
"c_1734842242_0";"Doc";"D";"";"Infotext";"Infotext";"";""
"c_1734842242_1";"Idx";"I";"mm";"4";"";"Index";"Index";"";""
"c_1734842242_1";"Doc";"D";"";"Infotext";"Infotext";"";""
"c_1734842242_2";"Idx";"I";"mm";"4";"";"Index";"Index";"";""
"c_1734842242_2";"Doc";"D";"";"Infotext";"Infotext";"";""
```

- Settings in `attributedata.csv`  
Create a column "**ATTRIBUTE\_DOCLINK**". The values are links.

```
"MATNR";"CLASSNAME";"ATTRIBUTE_NAME";"ATTRIBUTE_VALUE";"ATTRIBUTE_FL_VALUE";
"ATTRIBUTE_FL_MAX_VALUE";"VALDESC_german";"VALDESC_english";"ATTRIBUTE_DOCLINK"
```

```
"l_1734842242_0";"c_1734842242_0";"Idx";"";"0";"";"";"";"
"l_1734842242_0";"c_1734842242_0";"Doc";"Link";"";"";"";"F:/Links/text_0.txt"
"l_1734842242_1";"c_1734842242_0";"Idx";"";"1";"";"";"";"
"l_1734842242_1";"c_1734842242_0";"Doc";"Link";"";"";"";"F:/Links/text_1.txt"
"l_1734842242_2";"c_1734842242_0";"Idx";"";"2";"";"";"";"
"l_1734842242_2";"c_1734842242_0";"Doc";"Link";"";"";"";"F:/Links/text_2.txt"
```

**Note**

The link should not point to CADENAS\_DATA/23d-libs.

A detailed documentation on the Classimporter is found under Section 3.1, “ Classimporter ” in *PARTwarehouse Manual*.

**28.5. ProE configuration / new key concerning GeoSearch (9.03 SP3)**

In the configuration file `ifproewildfire.cfg` there is a new parameter in order to control the window during a GeoSearch.

Section: Interface

Key: ExportIntoNewWindow

Value: 0/1, default=0

Description:

**Value 1:**

- Currently an assembly is opened: Placement dialog is displayed.
- Currently a part is opened: New window for currently exported object is opened and activated. The window, where the search has been processed, can be called in the forefront again via "Windows" menu.
- Currently nothing is opened: Exported object is displayed in the current window.

**Value 0** set or missing: The current window, where the search has been processed, is closed. The part can only be found via "**In Session**".

The complete table with all configuration parameters can be found under Section 2.3.6, “ Creo / PRO-Engineer Integration - Administration ” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

**28.6. Placement dialog on/off via configuration file (9.03 SP2)**

In the configuration file under `$CADENAS_SETUP/ifacecommon.cfg` in the section `[Placement]`, in the key `PL_DisplayDialog` you can control, whether the placement dialog shall be displayed or not.

Value range: 0/1

- 0: Placement dialog off
- 1: Placement dialog on

**28.7. Catalog update with ERP integration - Update manager (9.03 SP2)****Why the Update Manager should be used?**

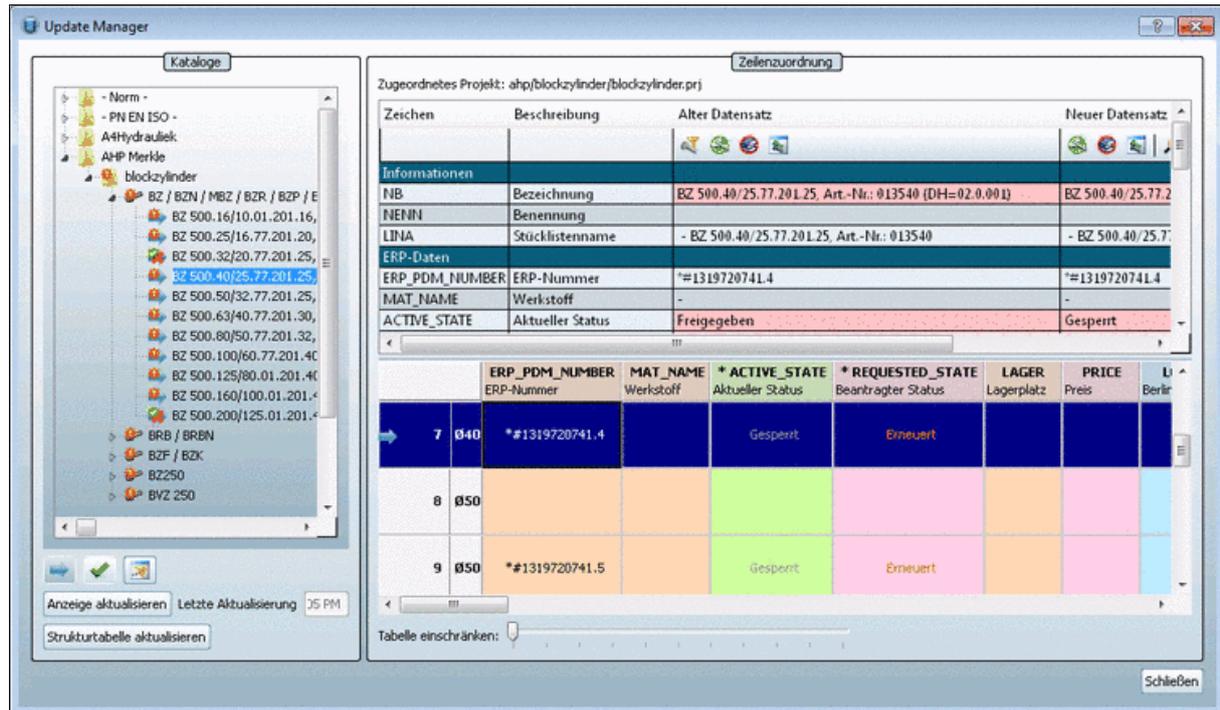
Normally during a catalog update with ERP integration the datasets in the LinkDB are assigned to the new version automatically.

However if changes have been made at the project (table, geometry, standard name) or the project has been moved, then there is no automatic assignment possible.

In order to handle the problematic assignments you can use best the **Update manager**.

The functionality has been considerably enhanced as of version 9.03 SP2.

- Better overview  
You can see all variables with values and the table at a glance.
- The status for ACTIVE\_STATE and REQUESTED\_STATE is automatically updated and different functions enable a quick process of the problematic assignments.



A detailed description is found under Section 4.16.3, “Catalog update with ERP integration - Fix mapping problems with the Update manager” in *PART solutions / PART community 4 Enterprise - Administration Manual*.

## 28.8. Logging Viewer (9.03 SP2)

Via **Logging Viewer** log files can be comfortably displayed not only by developers, but also by consultants and support.

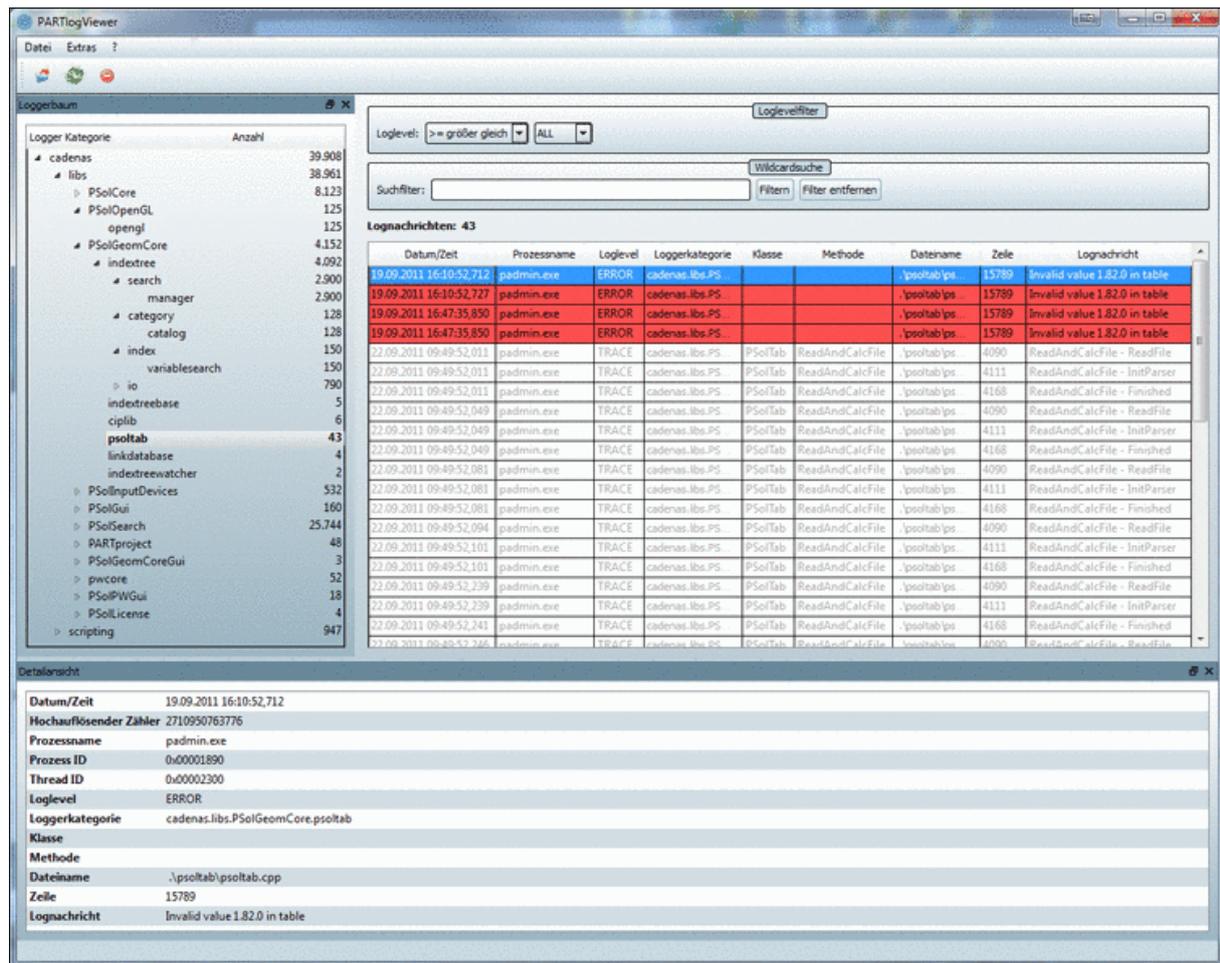
One or more log files can be loaded and then displayed in a tree structure including log number. Multi selection with SHIFT/CTRL key is possible as well as loading log files from different places.

The display can be comfortably filtered.

The single log level are color coded, so that the problematic ones are apparent at once.

On the left side in the tree the desired category can be selected.

You can find the Logging Viewer under `$CADENAS/bin/x86/32/plogviewer.exe`.



PARTlogViewer

## 28.9. PARTadmin Geometry import: Creation of Classimporter files

With the CADENAS Classimporter you can transfer classifications together with article master data to PARTsolutions.

Via **PARTadmin** category **Index administration** -> **Geometry import** the input files are prepared for the processing with the **Classimporter**.

The following steps explain the procedure. You can find a detailed documentation concerning Classimporter under Section 3.1, "Classimporter" in *PARTwarehouse Manual*.

### 1. Preparation:

If you want to keep the converted stl-, or zjv files in the "**import\_temp**" directory, then under \$CADENAS\_USER/padmin.cfg in the "**STLImportInput**" section the "**cleanup**" key has to be set on the value 0 (possibly you have to create the key). Otherwise the directory is deleted after finished import.

The "**import\_temp**" directory is found in the source directory.

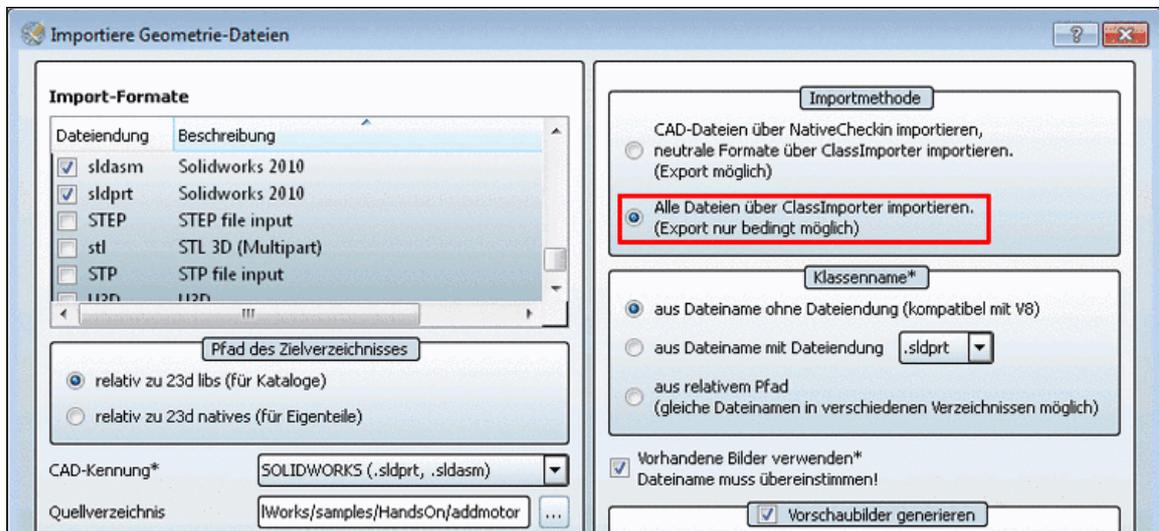
The file `image.csv` references there:

```
"MATNR"; "CLASSNAME"; "STLFILE"; "PREVIEWFILE"
"; "4bar1"; "C:/Program Files/SolidWorks Corp/SolidWorks/samples/HandsOn/addmotor/
import_temp/4bar1.zjv"; "
```

### 2. With **PARTadmin** import the geometry files from the defined **Source directory**.

**Note**

As **Import method** please select "**Import all files via Class Importer. (Export only partly possible)**".



Import all files via ClassImporter

You can find a detailed description of the **Import geometry data** dialog box under Import von Geometrie-Dateien.

- When all settings are made, then start the import with **OK**.

The following processes are executed:

- > The catalog is created.
- > The files needed for the "**Classimport**" process (attrdata.csv, attrdef.csv, erpdata.csv, image.csv, prjtable.csv, structure.csv, structuredef.csv) are automatically written and saved under \$CADENAS\_USER/PARTImporter.

Example attrdata.csv

```
"ATTRIBUTE_NAME";"ATTRIBUTE_FL_VALUE";"ATTRIBUTE_FL_MAX_VALUE";"ATTRIBUTE_VALUE";...
"CLASSNAME";"";"4bar1";"4bar1";"4bar1"
"CLASSNAME";"";"part1";"part1";"part1"
"CLASSNAME";"";"part2";"part2";"part2"
"CLASSNAME";"";"part3";"part3";"part3"
"CLASSNAME";"";"part4";"part4";"part4"
```

- > The file classimport.cfg is automatically created in a way, that a number of settings required for the **Classimport** process are already set.
  - The path declaration in the [CSV\_ClassStructure] section for example is already adjusted correctly to \$CADENAS\_USER/PARTImporter.

```
[CSV_ClassStructure]
FILE=C:/Users/jflotho/AppData/Roaming/cadenas/partsolutions_v9/
PARTImporter/structure.csv
etc.
```

- The key "**ADAPTFILENAMES**" for STL, preview images and Wantfiles has been set to 0. Leave this setting.

```
[STLIMPORT]
ADAPTFILENAMES=0

[PREVIEWIMPORT]
ADAPTFILENAMES=0
```

```
[WANTFILEIMPORT]
ADAPTFILENAMES=0
```

4. Now modify the CSV files in an intermediate step.  
Possibly you can use simple scripts for adjustments.
5. Start the Classimporter.
6. The catalog is created or updated (according to the setting).  
Files are saved in `$CADENAS_USER/classimporter`.

## 28.10. Mark CAD documents in PARTdataManager (9.03 SP2)

As of PARTsolutions V9.03 SP2, in the PARTdataManager characteristic attribute table, in an own column **PLMTABLE\_DOCVIEW**, you can signalize for each characteristic (line) via **icon**, whether one (or several) **CAD documents are available** and whether it (they) are available with the currently set value.

| Halbrundniete DIN 124 B 22x70 |         | ERP_PDM_NUMBER | * PLMTABLE_DOCVIEW | D            | L          | * EB   | * KL         | DK           | DS         |
|-------------------------------|---------|----------------|--------------------|--------------|------------|--------|--------------|--------------|------------|
| eClass 5.0 (SP1):             |         | ERP-Nummer     | PLM Dokumente      | Nerndurch... | Länge [mm] | Einbau | Klemmläng... | Kopfdurch... | Schaftd... |
| 148                           | A 22x58 |                |                    | 22           | 58         | Form A | 29.000       | 36.000       | 20.9       |
| 149                           | A 22x60 | *#13242887080  |                    | 22           | 60         | Form A | 31.000       | 36.000       | 20.9       |
| 150                           | A 22x62 | *#13242887090  |                    | 22           | 62         | Form A | 32.000       | 36.000       | 20.9       |
| 151                           | A 22x65 | *#13242888310  |                    | 22           | 65         | Form A | 35.000       | 36.000       | 20.9       |
| 152                           | A 22x68 |                |                    | 22           | 68         | Form A | 37.000       | 36.000       | 20.9       |
| 153                           | B 22x70 | *#13242886920  |                    | 22           | 70         | Form B | 51.000       | 36.000       | 20.9       |
| 154                           | A 22x72 |                |                    | 22           | 72         | Form A | 41.000       | 36.000       | 20.9       |
| 155                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 156                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 157                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 158                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 159                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 160                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 161                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |
| 162                           | A       |                |                    |              |            |        |              | 36.000       | 20.9       |

| FILENAME      | CADSYSTEM | PDMSYSTEM | XVARSET | PDMID1                  | PDMID2 | PDMID3 | PDMID4 |
|---------------|-----------|-----------|---------|-------------------------|--------|--------|--------|
| Halbrundniete | solidedge | SAPPLM    |         | 00000001000000000328216 | SEN    | 000    | 00     |

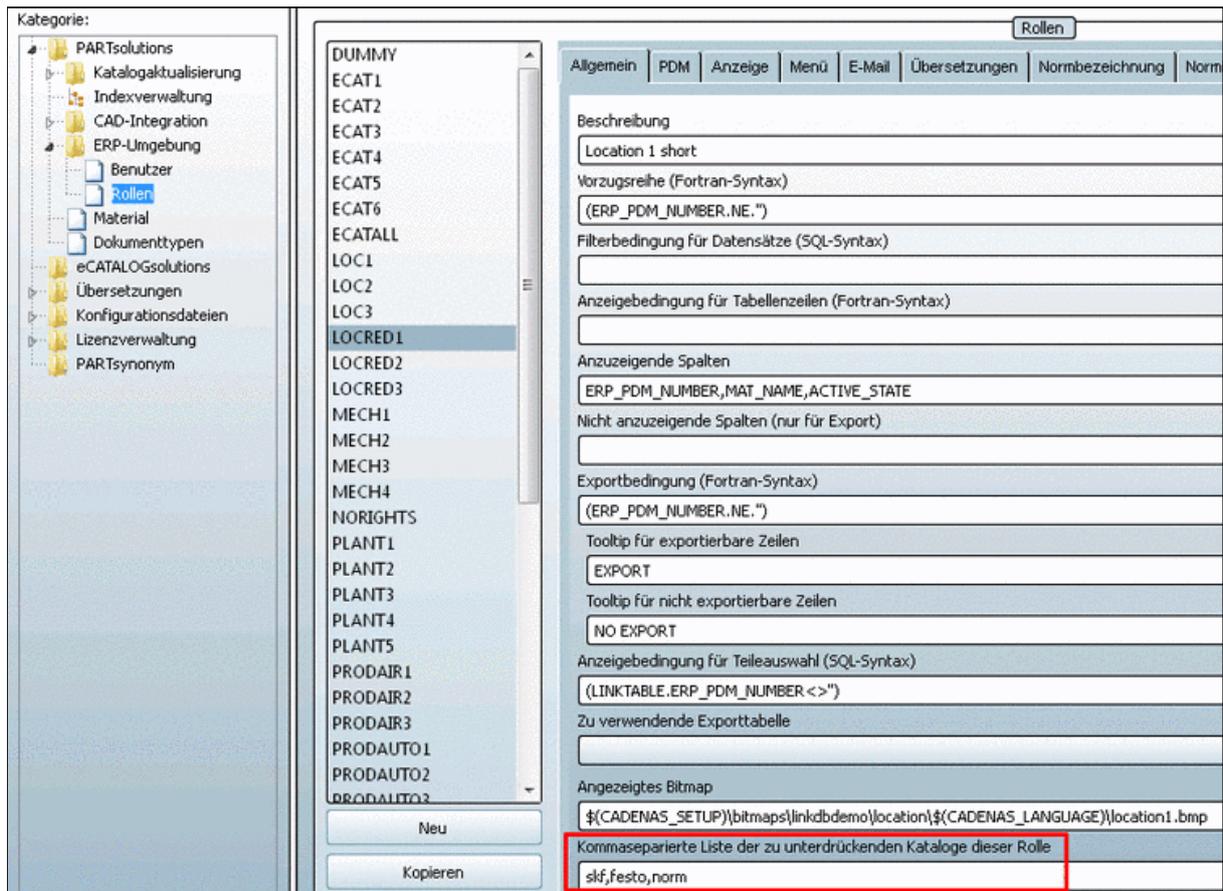
Icons in the characteristic attribute table signalize the availability of CAD documents

Detailed information on this is found under Section 3.1.4, "Show CAD documents (PDM-ID) in PARTdataManager" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 28.11. Hide specific catalogs role dependent (9.03 SP2)

With this new feature you can hide catalogs very simple and role dependent.

In PARTadmin, in the category **Roles** select the desired role. At the tabbed page **General**, under **Comma-separated list of catalogs to hide in this role**, enter the catalogs to be hidden.



Enter the catalogs to be hidden in lower case.

### Note

The spelling of the catalog name has to match the name under `$(CADENAS)/23d-libs/{catalog name}` exactly. In any case use lower case.

The declaration of subdirectories is also possible.

#### Example:

festo,skf,norm

or

festo/parts/a,norm/en

Until now this had to be performed by using the function **Display condition for parts selection** and the command **PRJ\_PATH LIKE 'festo/%' OR PRJ\_PATH LIKE 'fag/%'** in combination with the button **Display filtered tree**  (as workaround). On this compare Registerseite Allgemein and Registerseite Allgemein - Beispiele, example 2.

## 28.12. Crash dump (9.03 SP2)

Program crashes are very seldom, but if - the following setting possibly helps.

Minidumps (default behavior) are not always helpful in order to understand a problem, because only "Stack" is available. The **Stack** (storage for local variables and function parameters) can be sufficient to understand a crash.

However most data are on the **Heap** (can have several 100 MB). But concerning errors, difficult to follow, it can be interesting to use it for an analysis.

Use the following setting in order to write complete dumps:

```
$CADENAS_SETUP/partsol.cfg
```

```
[CRASHDIALOG]
MiniDumpMode=2
```

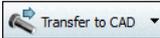
With the value 2 the complete storage is written in the minidump file.

Possible values are documented under <http://msdn.microsoft.com/en-us/library/ms680519%28v=vs.85%29.aspx>.

### Note

The setting under log level doesn't matter.

## 28.13. Automatic generation of ERP number + export dialog for material selection (9.03 SP1)

If the script file `erp_export_ts.vbb` is activated, directly when calling the export  an ERP number is automatically created and the line saved in the link database. The entry is visible in the **PARTdataManager** at once.

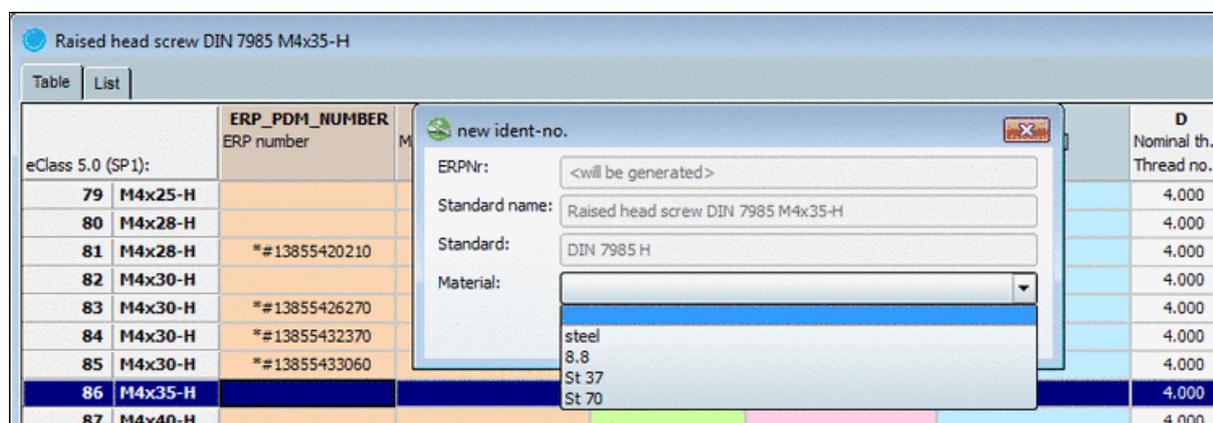
Via `$CADENAS_SETUP/erpcustom.cfg` -> section `[dialogOnExport]` you can control in addition, whether the process shall be performed without dialog or with dialog for the **material selection**.<sup>1</sup>

```
$CADENAS_SETUP/erpcustom.cfg
```

```
[dialogOnExport]
activ=1
*=0
norm/=1
```

The key `activ` (0/1) controls the activation of the export dialog.

- 0: The ERP number is automatically set without dialog and displayed in the **PARTdataManager** at once. Directly afterwards the export is processed. The number is transferred together with the other part properties to the CAD system.
- 1: In addition to the setting of the ERP number the dialog box **new ident-no.** is displayed. Here you can select the desired **Material** in the list field. This is also inserted in the link database before the export and transferred as part property during export as well.



The screenshot shows a table titled "Raised head screw DIN 7985 M4x35-H" with columns for "Table", "List", "ERP\_PDM\_NUMBER", "ERP number", "Material", and "D Nominal th... Thread no...". A dialog box titled "new ident-no." is open, showing fields for "ERPnr:" (set to "<will be generated>"), "Standard name:" (Raised head screw DIN 7985 M4x35-H), "Standard:" (DIN 7985 H), and "Material:" (a list with "steel", "8.8", "St 37", and "St 70").

|                   | ERP_PDM_NUMBER | ERP number    | D     |
|-------------------|----------------|---------------|-------|
| eClass 5.0 (SP1): |                |               |       |
| 79                | M4x25-H        |               | 4.000 |
| 80                | M4x28-H        |               | 4.000 |
| 81                | M4x28-H        | *#13855420210 | 4.000 |
| 82                | M4x30-H        |               | 4.000 |
| 83                | M4x30-H        | *#13855426270 | 4.000 |
| 84                | M4x30-H        | *#13855432370 | 4.000 |
| 85                | M4x30-H        | *#13855433060 | 4.000 |
| 86                | M4x35-H        |               | 4.000 |
| 87                | M4x40-H        |               | 4.000 |

The figure shows the table without any export limitations.

<sup>1</sup>#24768

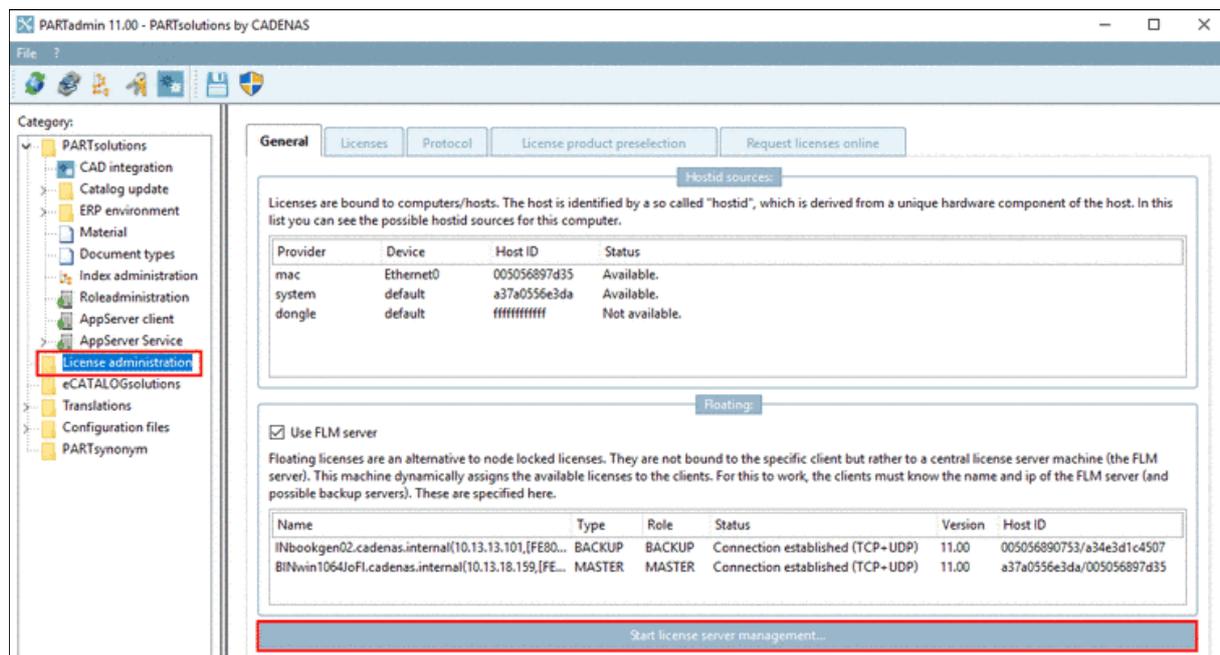
Furthermore you can specify via config key, whether the dialog shall be displayed at all parts or only for parts of the industry standards catalog.

```
[dialogOnExport]
*=0
norm/=1
```

More information is found under Section 4.21.1, " Load additional scripts - erpcustom.cfg -> Block [LOAD]" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 28.14. License manager / License administration (9.03 SP1)

As of PARTsolutions V9.03 the license administration has been integrated in PARTadmin under the category **License administration**.<sup>2</sup>Via **License administration** all licenses of the PARTsolutions installation are managed.



Clients - General

New features:

- **Hostid setting happens automatically**

No host ID settings have to be performed manually. All available host IDs are passed on to the service "cnslocal" or "cnsmaster" and the license file decides, which host ID is to be used.

- **Checkout:**

On the tabbed page **Checkouts** you can administratively specify, whether users are allowed to check out floating licenses. The checkout is performed in the respective module under ? menu -> **Licenses** (F9) -> tabbed page **Checkout**.

Thereby the amount of available Floating licenses is reduced for the before determined time period. Then the checked out license can be used on the respective computer up to the end of the checkout period. On the license server the license is blocked until the defined checkout period ends. In this way a floating license can be used on a journey for example as quasi "nodelocked".

On this see Section 5.6.1.5, "'Checkout" tabbed page" in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

- **Dynamic Nodelocked licenses**

<sup>2</sup>Herewith the so far used **License manager** is obsolete.

- **Dynamic Nodelocked** licenses are centrally administrated nodelocked licenses. They are created on a FLM server - like real Floating licenses - and distributed by it. In contrary to Floating licenses they are not released again directly after use.
- Each instance of a Dynamic-Nodelocked license is assigned to a specific computer ("**Nodelocked**")
- Existing assignments can be changed - after a certain minimum dwell time ("**Dynamic**"). In this way a quick reaction at a computer change is possible.

On this see Registerseite "Dynamic Nodelocked".

- and others...

The complete documentation on the new **License administration** is found under Section 1.4, "License administration" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 28.15. FLM Server and Licenses (9.03 SP1)

This section is an excerpt with important information of frequently asked questions.

Detailed information on this is found under Einrichten eines FLM-Servers.

### 28.15.1. FLM Server innovations

As of PARTsolutions v9.03 there is a completely revised FLM Server.

- As of v9.03 the FLM Server is managed with PARTadmin!<sup>3</sup>  
The complete documentation of the new license administration can be found under Section 1.4, "License administration" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.
- Valid hostids are automatically detected and transferred to the FLM Server.
- Ports do not have to be determined anymore. This also happens automatically.
- The **\$CADENAS\_LICENSE** environment variable **is not used anymore** in V9.

As of **V9.03 SP3** the until now set path on \$CADENAS\_SETUP/lic is overwritten.

When lower versions are used it should be deleted, in order to avoid problems. However as of 9.03 SP3 deleting is certainly ok as well.

### 28.15.2. Precondition when Floating Licenses are used

In order to be able to use licenses of the "Floating" type, a FLM Server has already to be installed at a computer in the network.

Possibly further FLM Servers can be setup as backup.

Detailed information concerning FLM Server installation is found under Einrichten eines FLM-Servers.

### 28.15.3. FLM Server Update

- **Procedure in general:**
  1. Stop running FLM service:  
Stop the license server via **Start / Control Panel / Administrative Tools / Services / CADENAS FLM (MASTER)**.
  2. Remove service:  
Remove the service via **Start/ Control Panel / Programs and Features**.

<sup>3</sup>The License Manager is not used anymore.

### 3. Deleting of files:

The files in the installation path (default C:/cadenas\_flm) are automatically deleted. Empty directories can be manually deleted.

#### Note

The installed FLM license is found under <drive letter>:\ProgramData\cadenas\_flm\partsolutions\setup\lic\keys.

Storage location of Nodelocked licenses however is in the PARTsolutions installation under %cadenas\_setup%!

If existing licenses shall be further used, please leave (or save) these directories.

### 4. New installation

- **FLM Server different versions**

If a V9.03 (or higher) and a V8.1 FLM Server shall be used combined (on an interim basis), then these have to be setup on different servers.

- **Client and FLM Server with different software versions**

If Client and FLM Server have different software versions, then please regard the following:

#### A. Combination V9.03 Clients == V8.1 FLM Server

- The V8.1-FLM Server has to be administered with the LicenseManager.
- The new licenses have to be installed on the V8.1 FLM Server.
- In order to be able to use all new functions, the usage of the current FLM Server of version 9.03 or higher is recommended.

#### B. Combination V8.1 Clients == V9.03 FLM Server

- The V9.03 FLM Server has to be administered with PARTadmin.
- The server can handle "old" license packages as well and distributes the according V8.1 packages to the clients.
- Restrictions

The **Checkout** function (see Section 5.6.1.5, "'Checkout" tabbed page" in *PARTsolutions / PARTcommunity4Enterprise - User manual*) is not available for V8.1 Clients.

- **Master Backup cluster**

A Master Backup cluster of V8 and V9 FLM servers is technically not possible.

A Master Backup cluster exists of 2 or more V9 FLM servers.

In the license file both hostids (MASTER and BACKUP) have to be declared.

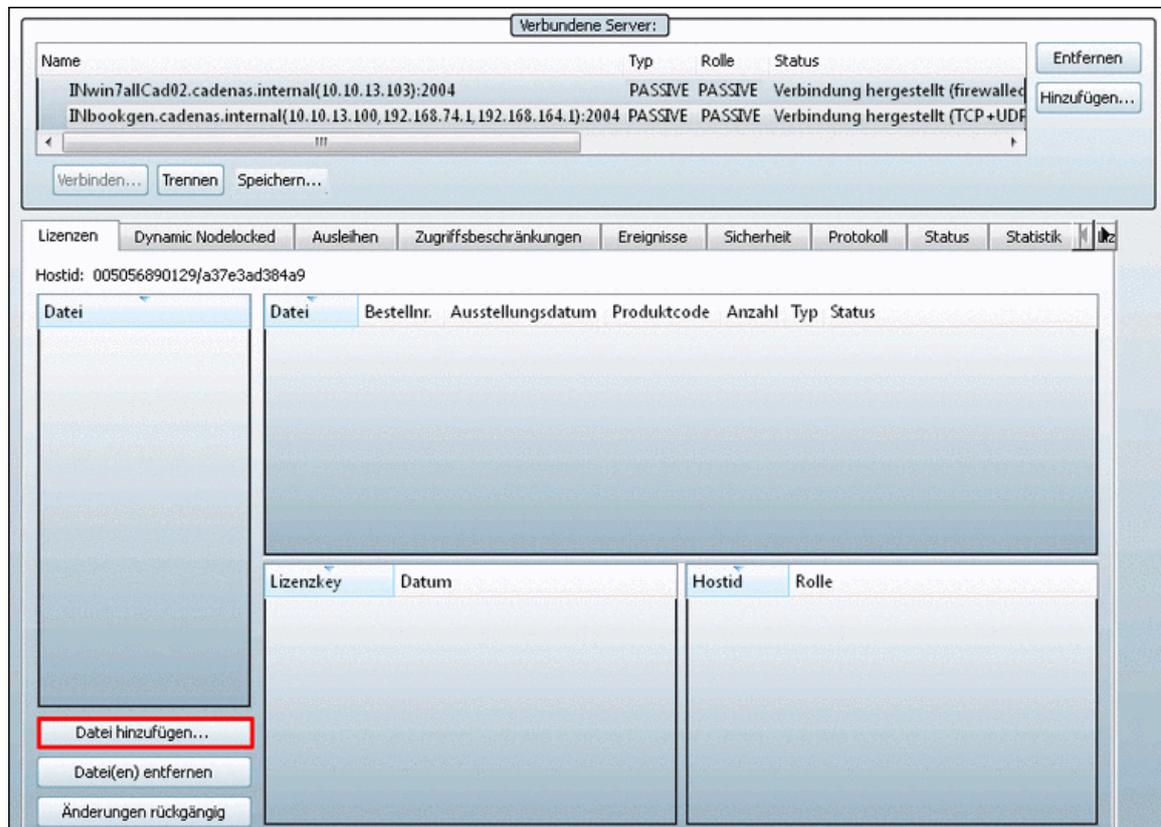
In the case of malfunction the BACKUP FLM server takes the place of the MASTER FLM server. Working in the backup mode is possible up to 12 hours.

Still more secure is to use three V9 FLM servers. Then unlimited working is possible as long as 2 from 3 servers are available. Also in this case all 3 server hostids have to be declared in the license file.

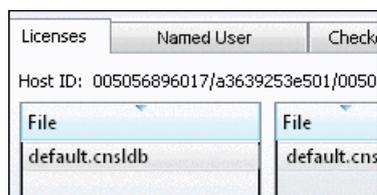
Information concerning setup of a master backup cluster can be found under Section 1.4.4.1, " "Connected servers" dialog area " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

### 28.15.4. Install FLM licenses

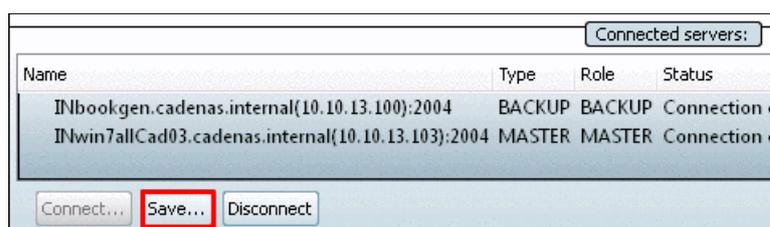
- Before installation the licenses are displayed with status "PASSIVE".  
In **PARTadmin** select the category **License administration** -> **FLM server**.<sup>4</sup>  
Install FLM licenses on the **Licenses** index page.  
Click on **Add file...**.



In Windows Explorer select the license file and transfer it.  
-> The license file is displayed under **File**.



- Now click on **Save...**.



-> -> **The license is automatically saved in the correct directory..**

<sup>4</sup>Use the downgraded PARTadmin directly at the license server or the PARTadmin from the PARTsolutions installation.

**Note**

The installed FLM license now is found on the CADENAS FLM server under <drive letter>:\ProgramData\cadenas\_flm\partsolutions\setup\lic\keys.

Storage location of Nodelocked licenses however is in the PARTsolutions installation under %cadenas\_setup%!

**Background information:**

In the installation path of the CADENAS FLM server (for example, C:\cadenas\_flm) you can find the file `start.env` with the startup settings of the environment variables.

Although the environment variables of the FLM server have the same name as in the PARTsolutions installation, they refer to different directories!

```
[ENVIRONS]
CADENAS=%DirOfThisFile%
CADENAS_SETUP=%ALLUSERSPROFILE%/cadenas_flm/partsolutions/setup
CADENAS_DEFAULTUSER=$CADENAS_SETUP/user/default_user
CADENAS_USER=%APPDATA%/cadenas_flm
```

If you want to copy the license yourself, please ensure you have the correct path.

After the license installation now one computer is displayed as **MASTER**, possibly available further computers as **BACKUP**.

**28.15.5. License product preselection**

**PARTadmin** -> **License administration** -> **Local computer** -> index page **License product preselection**

Detailed information can be found under Section 1.4.3.4, "License product preselection" tabbed page" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*

In the following some important items are explained:

- **When license product preselection is needed?**

**Within floating license environments** it can happen, that you want or have to use different products for the same installation (workstation) depending on program or user group. So possibly an employee in the standardization department can work with a reduced license, an employee in the engineering department however with the complete license.

On the **License product preselection** index page the administration can allow or deny specific license products for special users or groups.

Certainly it is more user friendly not at all to display not required licenses.

**Important**

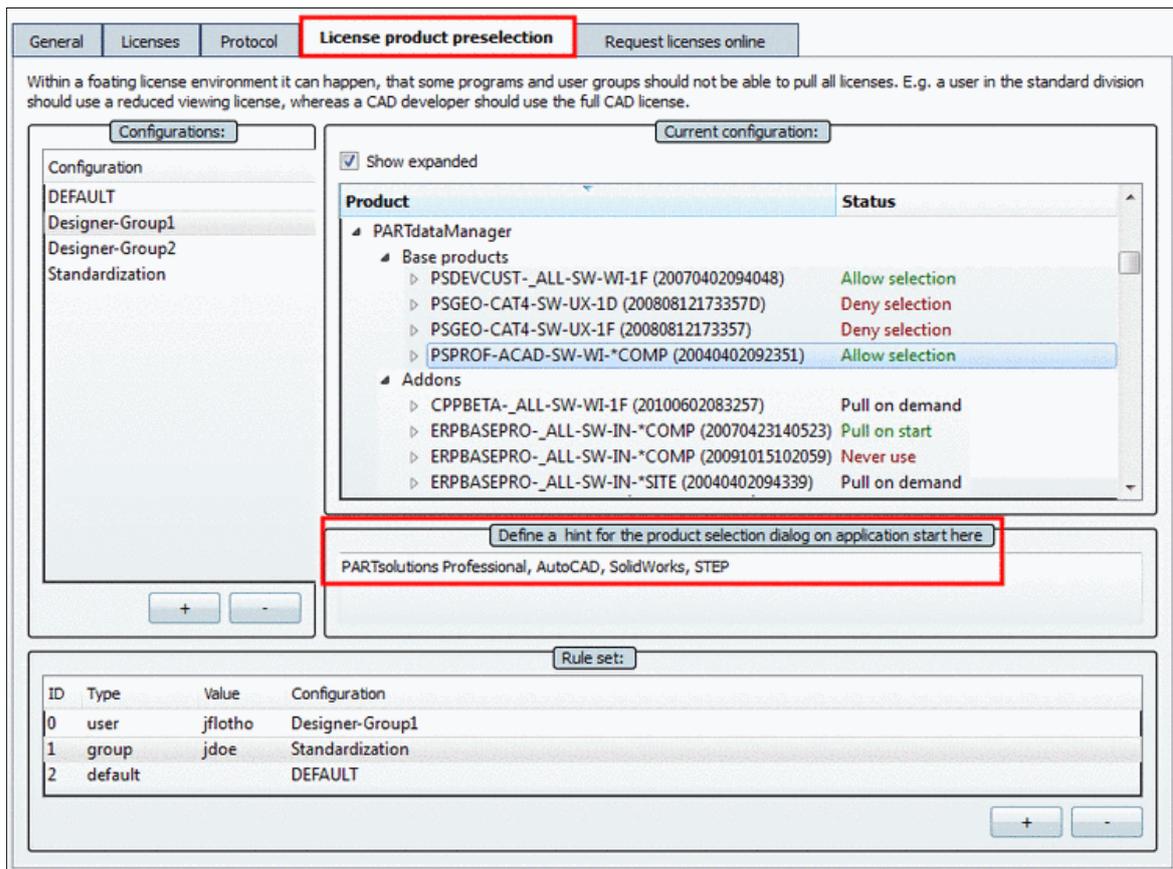
In order to setup the **License product preselection** use a PARTadmin (any computer) from the PARTsolutions installation and not the downgraded PARTadmin from the FLM installation.<sup>a</sup>

<sup>a</sup>So if you have just set up the CADENAS FLM Server at the respective server, then you have to change the computer now.

Background:

PARTadmin from the FLM installation writes in the configuration file `select_license.cfg` under %ALLUSERSPROFILE%/cadenas\_flm/partsolutions/setup.

PARTadmin from the PARTsolutions installation writes in the configuration file under %cadenas\_setup% / `select_license.cfg`.

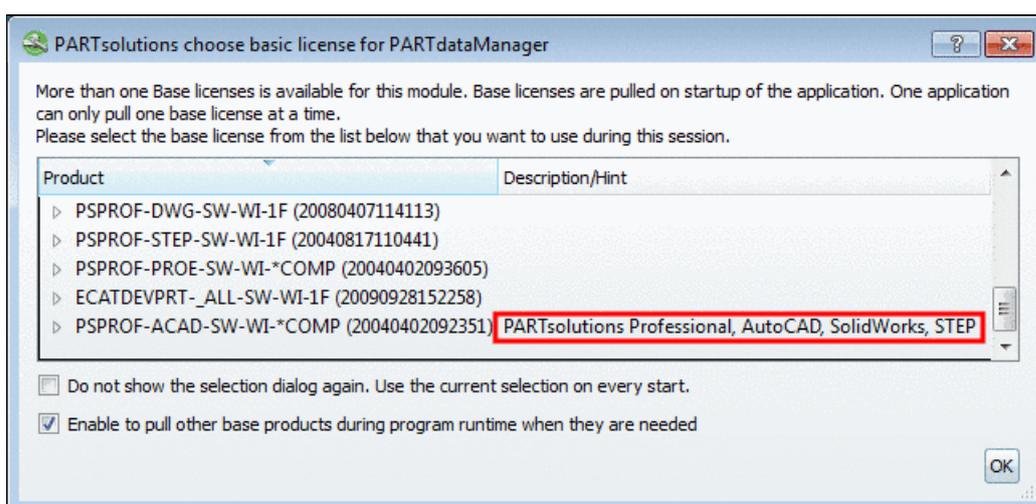


License product preselection

- **Use meaningful names for packages**

**Define a hint for the product selection dialog on application start here:**

In the **Define a hint for the product selection dialog on application start here** section (see Fig. „ License product preselection “) you can optionally insert your own legend, which is later displayed at module start beside the product code.



Description/Hint

The user selects the desired base license and confirms with **OK**.

## 28.16. Classification Toolbar (9.03 SP1, 9.00)

As of v9.03 the Classification Toolbar is available in revised form.

With the aid of the Classimporter you can apply your own company catalog, which uses your company internal class system.<sup>5</sup>

With the aid of the ClassificationToolbar, which can be displayed in PARTdataManager, you can further modify the structure of the class system.<sup>6</sup>



Classification Toolbar

The following commands are available:

|                                                                                     |                                                       |                                                                                     |                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------|
|    | Add class                                             |    | Edit dataset                           |
|    | Remove class                                          |    | Move datasets                          |
|    | Edit the classification features and the description. |    | Edit views                             |
|   | Move class                                            |   | Edit project in batch mode             |
|  | Add datasets                                          |  | Assign parts per geometrical search... |
|  | Delete datasets                                       |  | Update tool                            |

Examples:

- Edit class attributes

The following figure shows the **Edit class** dialog box. Here you can make changes on already existing classes.

<sup>5</sup>Detailed information on this is found under Section 3.1, "Classimporter" in *PARTwarehouse Manual*.

<sup>6</sup>Detailed information on this is found under Section 3.2, "ClassificationToolbar" in *PARTwarehouse Manual*.

ClassificationToolbar: Edit class

Class:

Hints:

Choose the class to edit in the part selection with a right click on it with the context menu option "Edit class...". Set the description of the class and it's features (only with a project) below.

Name:     Path:

Description: german    Description: english

Zylinderschrauben    Head cap bolts

Features:

Hints:

Edit, delete or keep existing features by modifying the mode of the line. Add new features by pressing the plus button and remove recently added features (mode: "New") with the minus button.

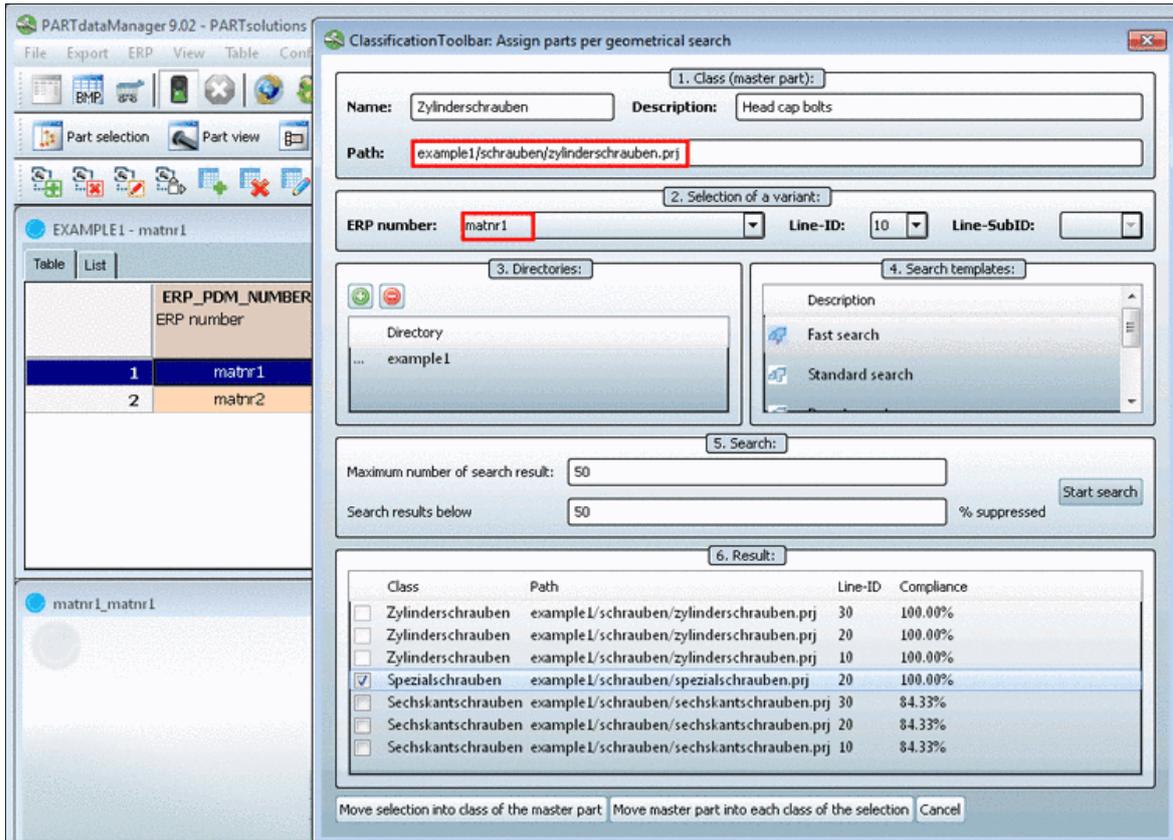
| Procedure | Feature name | Feature type | Unit | Decimal digits | List of values / Value range | Description (german) |
|-----------|--------------|--------------|------|----------------|------------------------------|----------------------|
| Keep      | D            | Float        | mm   | 3              | No                           | Diameter             |
| Keep      | L            | Float        | mm   | 3              | Yes                          | Length               |
| Keep      | TextA        | Text         |      |                | No                           | TextA en             |
| Keep      | TextB        | Text         |      |                | No                           | TextB en             |
| New       |              | Text         |      |                | No                           |                      |

OK    Cancel

Edit class

- Assign parts with the aid of the geometric search

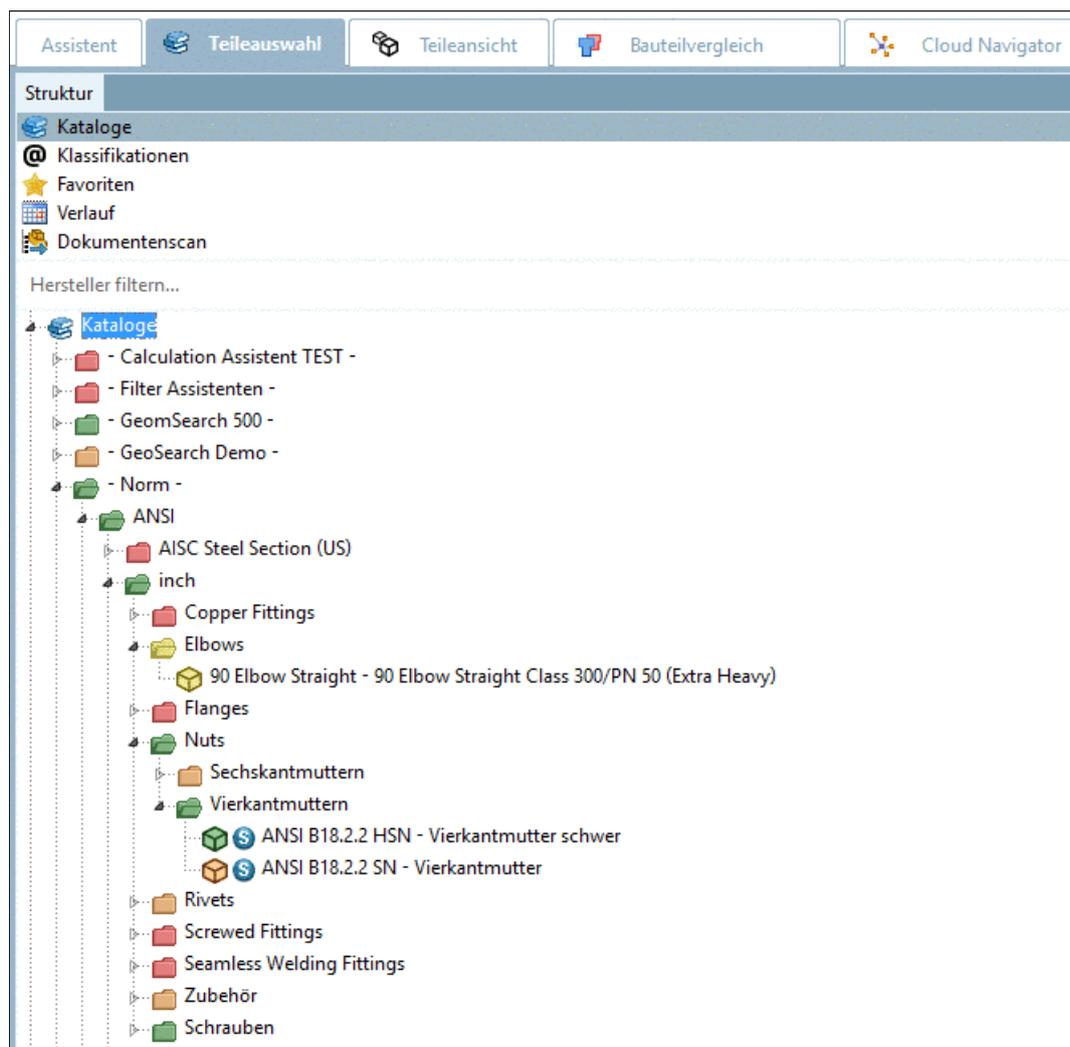
When a new part has been created, then on its base geometric similar parts can be searched. So you can see into which class the part is fitting best. In a next step you can move the search part or found parts accordingly.



Assign parts per geometrical search.

### 28.17. Status colors for catalog index and Status indicating bitmaps for table view (9.03 SP1, 9.03, 9.02)

As of V9.02 it is possible to define roles, what **colors** should be displayed in the PARTdataManager **catalog index** for directories and project icons. (Status indicating bitmaps in the table are possible as of the beginning of V9).



More information is found under Rollen konfigurieren.

## 28.18. ProFile - Part mapping using SML number (9.03)

\$CADENAS\_SETUP/ifprofile.cfg

If you have to differ between fields with the same name (e.g. NFT\_STK0) but different SML-numbers you can set the SML-number in the following way:<sup>7</sup>

```
[ProFilePartMapping]
;SML-numbers you can set the SML-number in the following way:
;<FieldName>{#1}=<value1>
;<FieldName>{#1}_BLOCKNUMBER=<SML-number1>
;<FieldName>{#2}=<value2>
;<FieldName>{#2}_BLOCKNUMBER=<SML-number2>
;CAUTION: The Format has to be exactly like in the example:
;<FieldName>{#<indexNumber>}=<value> . NO WHITESPACES !!!
```

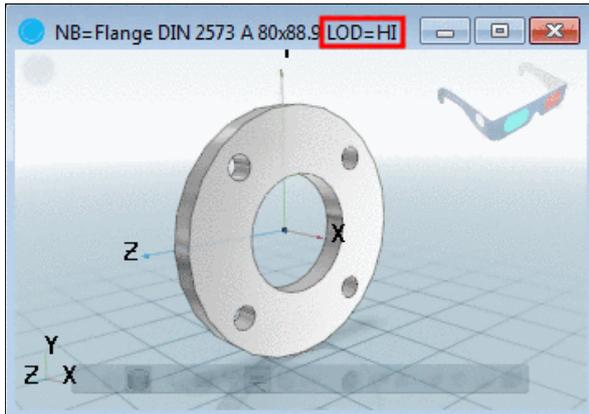
Details can be found under PRO.FILE.

## 28.19. Change title in 3D view (9.03)

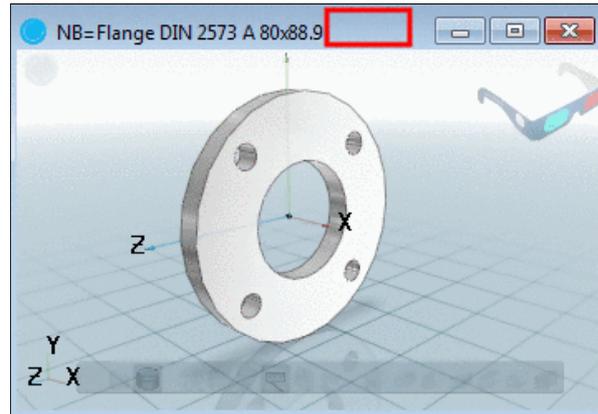
The title in the **3D view** can be changed.<sup>8</sup>

<sup>7</sup>#19079

<sup>8</sup>#18708



CAPTION3D=NB=\$NB. LOD=\$LOD.



CAPTION3D=NB=\$NB.

\$CADENAS\_USER/pdatamgr.cfg

```
[OPTIONS]
#CAPTION3D=NB=$NB. LOD=$LOD.
```

The following variables can be used: \$NB., \$LINA. and \$LOD.

The NB (Standard name) and LOD (Level of Detail) are displayed by default.

If you want to change the display, then comment in the line and set the desired variables following this scheme:

NB=\$NB. LOD=\$LOD.

## 28.20. PARTdataCenter - Create PARTsolutions catalog from BMEcat data (9.03)

As of PARTdataCenter V9.03 you can import a BMEcat catalog and export it as PARTsolutions catalog.

BMEcat 2005 is also supported; until now only 1.2 has been supported.

### Note

#### Advantages:

- **Accelerated catalog development**

For the catalog construction only minimalist tables are created and the geometries (projects) are delivered in a simple, flat structure. Documents and preview images are delivered in an own directory.

The BMECat file delivers the structure.

During the import in PARTdataCenter the BMECat file and the depending files are loaded.

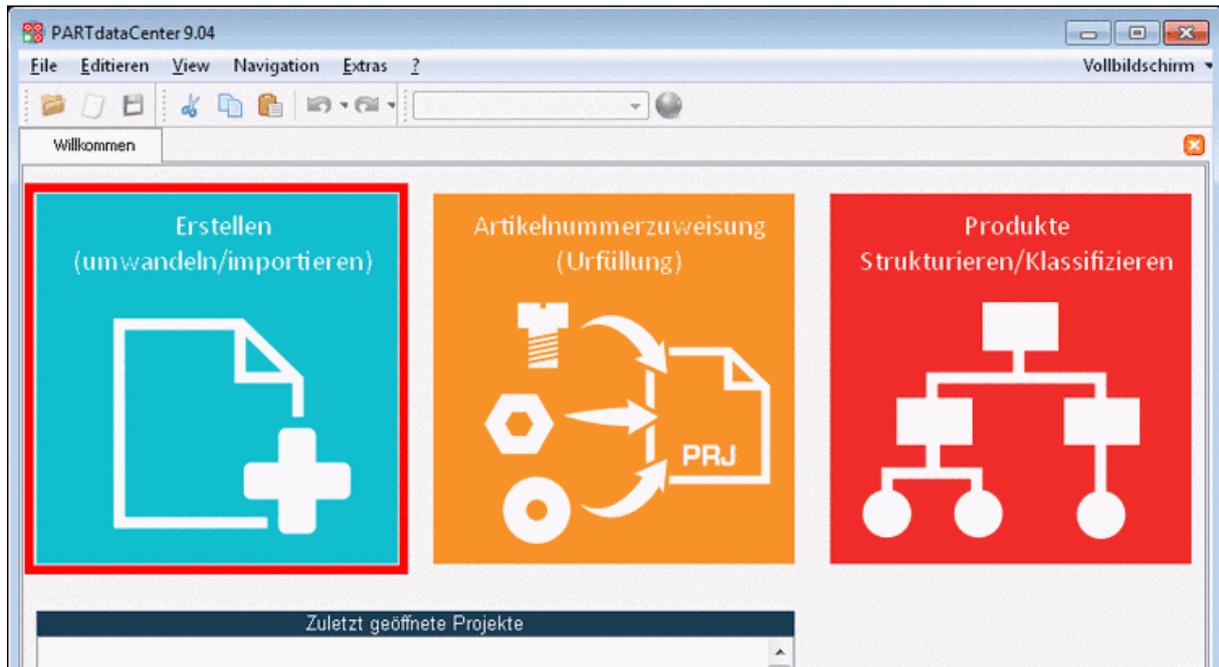
After this the whole can be exported as PARTsolutions catalog. This can either be only a PDF catalog or you can link to real eCATALOGsolutions geometries.

- **Simple update possibility**

The import can not only happen onetime, but always when there are new products.

Catalogs created with BMEcat can be used in PARTsolutions or PARTcommunity just like standard catalogs.

Therefore use the **PARTdataCenter** module with the **Create (convert/import)** function.



Get started quickly with a detailed description and a sample file. See PARTsolutions Katalog aus BMECat-Daten erstellen.

### 28.21. Connections: Always show holes (also without ERP integration) when "preferred rows" and "filtered tree" is on (9.03)

Normally holes are not managed via ERP. Meaning that these are "red" and thus are hidden when  (**Preferred rows on/off**) is on.

Because this behavior normally is not desired, you can explicitly declare all classes of holes via configuration file in an extra key and thus exclude from filtering.

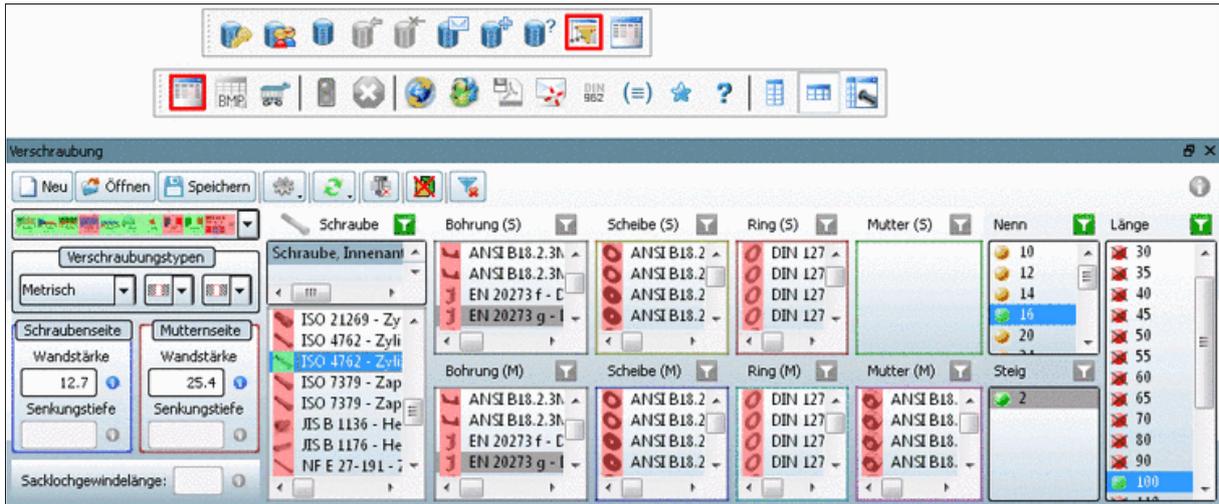
#### Note

The setting has to be performed in the configuration file under %cadenas\_setup%/partconnection.cfg for each desired type of connection [section] always in the key **ClassIdsSkipErp**.

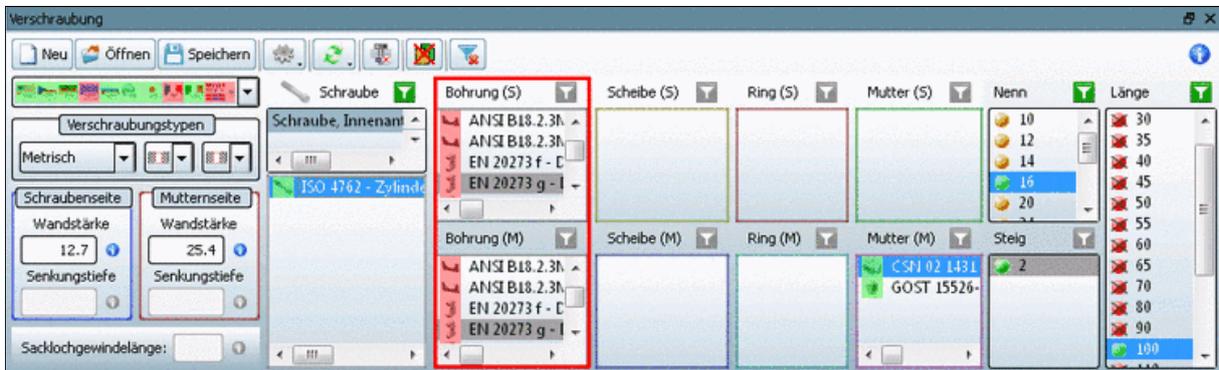
The holes are already listed per default.

```
[ThroughHole:ThreadNutside:CommonOuterdrive]
ClassIdsBoltside=HOLES_COMMON_THROUGHHOLE,WASHER,LOCKWASHER,BOLTS_COMMON_OUTERDRIVE
...
ClassIdsSkipErp=HOLES_COMMON_THROUGHHOLE,HOLES_COMMON_THROUGHHOLETHREAD
...
...
```

**Example:**



"Preferred rows on/off" and "Display filtered tree" OFF



"Preferred rows on/off" and/or "Display filtered tree" ON: Holes are displayed regardless

**28.22. Request parts via e-mail - Part information (Mident) attached as ".psmid" file (9.03)**

Request release for parts, which are locked for the export, directly from PARTdataManager via e-mail.

By clicking on the button **Request**

**ERP number per e-mail** the dialog box **Send e-mail** opens and the identifying information is already entered. Sent the e-mail directly to the standardization department for example.



Request dialog

As of V9.03 a ".psmid" file is added as attachment. By double-clicking this file PARTdataManager opens with the respective project and line.

The e-mail contains all important information on the part.

The last line contains a batch command by which the part could also be opened in PARTdataManager.

|                                                                          |                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                          |                                                                                                                                                                                                                                        |
| Prozess                                                                  | new                                                                                                                                                                                                                                                                                                                     |
| Kompletter Pfad zur Projektdatei                                         | E:/PSOL/data_v9/23d-libs/norm/din/anlagenbau/blindflansche/din_28122_c.prj                                                                                                                                                                                                                                              |
| Relativer Pfad zur Projektdatei                                          | norm/din/anlagenbau/blindflansche/din_28122_c.prj                                                                                                                                                                                                                                                                       |
| Projekt-Dateiname                                                        | din_28122_c                                                                                                                                                                                                                                                                                                             |
| Interne Identifizierung des Teiles                                       | { \$CADENAS_DATA\23d-libs\norm\din\anlagenbau\blindflansche\din_28122_c.prj }, 258 {VTYP=3D}, {NB=Blind 14:02:00}, {VERSION=v100503160000}, {LINEID=1450}, {LINESUBID=-1}, {WBVAR=ACTIVE_STATE,REQUES 1}, {IDNR=}, {DN=300}, {PN=16.000}, {D=460.000}, {K=410.000}, {D4=374.000}, {D5=370.000}, {D6=0.000}, {300 MG 16} |
| Variablen-Werte                                                          | {IDNR=}, {DN=300}, {PN=16.000}, {D=460.000}, {K=410.000}, {D4=374.000}, {D5=370.000}, {D6=0.000}, {D                                                                                                                                                                                                                    |
| Zeilen-Identifikation in der Tabelle                                     | 1450                                                                                                                                                                                                                                                                                                                    |
| Zeilen-Sub-Identifikation in der Tabelle                                 | -1                                                                                                                                                                                                                                                                                                                      |
| Projekt-Version                                                          | v100503160000                                                                                                                                                                                                                                                                                                           |
| Normtitel                                                                | Blindflansche mit glatter Dichtflansche                                                                                                                                                                                                                                                                                 |
| Übersetzter Normtitel                                                    | Blindflansche mit glatter Dichtflansche                                                                                                                                                                                                                                                                                 |
| Name des Teiles                                                          | Blindflansch DIN 28122 C 300 MG 16                                                                                                                                                                                                                                                                                      |
| Norm-Nummer                                                              | DIN 28122 C                                                                                                                                                                                                                                                                                                             |
| Übersetzter Stücklistenname des Teiles                                   | Blindflansch DIN 28122 C 300 MG 16                                                                                                                                                                                                                                                                                      |
| Batch-Befehl zum Laden des Teiles in PARTsolutions (aus Konsolenfenster) | "%CADENAS%\bin%\OSNAME%\32\pstart.exe" -id "{E:/PSOL/data_v9/23d-libs/norm/din/anlagenbau/blindfla                                                                                                                                                                                                                      |

Sample e-mail

After a standard installation the needed files for this feature are found in the directory under \$CADENAS\_SETUP/scripts/...

- \$CADENAS\_SETUP/scripts/erp/erpcustommail.vbb: This vbb-file generates a ".psmid" file, which is added as e-mail attachment.  
(At V8.1 .cip attachments have been generated)  
By double-clicking the ".psmid" file PARTdataManager opens with the correct line.
- \$CADENAS\_SETUP/scripts/common/openpsmid.vbb: This vbb file opens ".psmid" attachments in PARTdataManager.
- \$CADENAS\_SETUP/scripts/common/openpsmid.reg: Registers the file extension .psmid in the windows registry in the course of the PARTsolutions installation. (The file can also be executed anytime later.)

In the plinkcommon.cfg the following entry is set by default:

```
[MAIL]
...
INLINE2=open.psmid,$CADENAS_USER/open.psmid,application/x-cns-psmident-file
```

## 28.23. Classimporter (9.03, 9.02, 9.00)

The Classimporter enables the management and intelligent use of own constructed parts in the form of a separate catalog.

- **Display of classification with attributes in a separate catalog**
- **Normal part selection and part view with search option across all classes and attributes**
- **Cyclical updates of catalog structure, attributes, STL and BMP files**
- **When opening the export in the PARTdataManager, the corresponding self-constructed parts will be checked out of the PDM**

Some new features were added to the Classimporter with V9, which are explained in following sections.

A detailed description of the Classimporter itself can be found under Section 3.1, "Classimporter" in *PARTwarehouse Manual*.

### 28.23.1. Delete pool files (9.03)

Up to now it was impossible to delete the pool files. If files with the mode "del" are imported in the `classtruct.txt` file, then only those files in the 23dlibs directory are deleted. With the option `DELETEPOOLFILES` these can now be deleted from the pool.

A detailed description can be found under Section 3.1.5.2, "Class tree - classtruct.txt" in *PARTwarehouse Manual*.

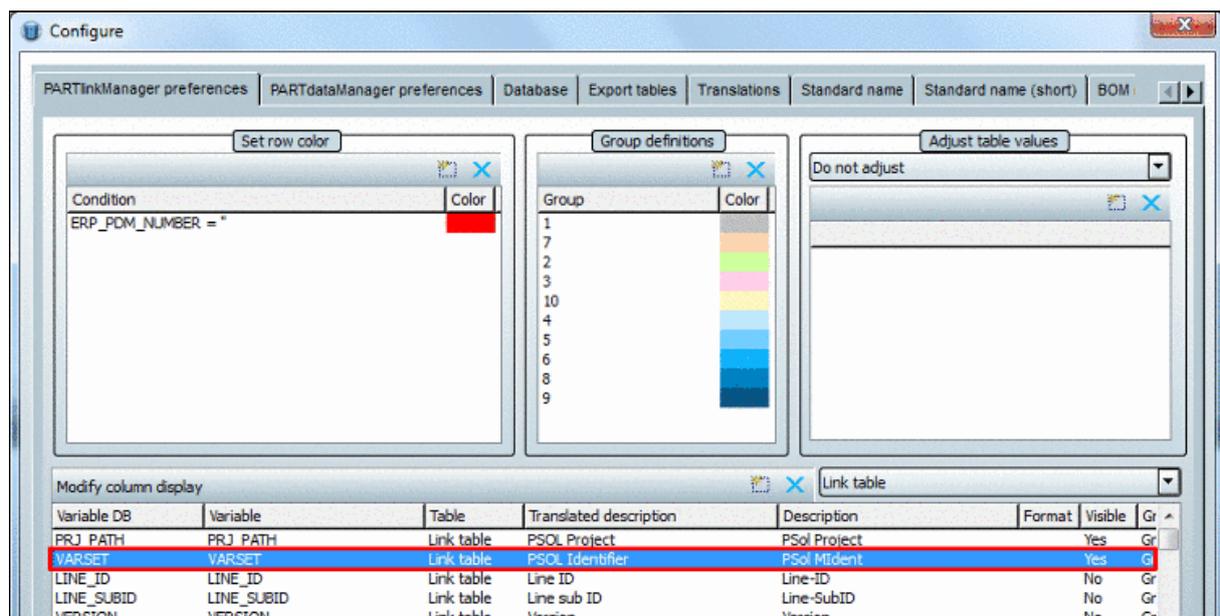
### 28.23.2. Insert variables in LinkDB (9.02)

When the "ADDVARSETTOLINKTABLE" key is set to '0', then the "VARSET" field in the LinkDB is not filled. This possibly means time saving for loading of parts. (Details on this please clarify with a CADENAS Consultant.) The feature is available as of v9.02; until now the field was principally filled.

```
[CLASSIMPORT]
ADDVARSETTOLINKTABLE=1
```

Value range: 0/1

Default: 1



Variable "VARSET"

| *native*                                     |                                                                                        |            |          |   |
|----------------------------------------------|----------------------------------------------------------------------------------------|------------|----------|---|
| PSOL Project                                 | PSOL Identifier                                                                        | ERP number | Material | S |
| nativeparts/schrauben/zylinderschrauben.prj  | {MATNO=matnr 1},{D=20.000},{L_WBRANGE=[25.000-100.000]},{TextA=text11},{TextB=text12}  | matnr 1    | 8.8      |   |
| nativeparts/schrauben/zylinderschrauben.prj  | {MATNO=matnr 2},{D=30.000},{L_WBRANGE=[40.000-100.000]},{TextA=text21},{TextB=text22}  | matnr 2    | 10.9     |   |
| nativeparts/schrauben/zylinderschrauben.prj  | {MATNO=matnr 3},{D=40.000},{L_WBRANGE=[100.000-200.000]},{TextA=text31},{TextB=text32} | matnr 3    | 8.8      |   |
| nativeparts/schrauben/sechskantschrauben.prj | {MATNO=matnr 4},{D=20.000},{L_WBRANGE=[25.000-100.000]}                                | matnr 4    | 8.8      |   |
| nativeparts/schrauben/sechskantschrauben.prj | {MATNO=matnr 5},{D=30.000},{L_WBRANGE=[40.000-100.000]}                                | matnr 5    | 8.8      |   |
| nativeparts/schrauben/sechskantschrauben.prj | {MATNO=matnr 6},{D=40.000},{L_WBRANGE=[100.000-200.000],250.000,300.000}               | matnr 6    | 12.9     |   |
| nativeparts/muttern/hutmuttern.prj           | {MATNO=matnr 7},{D_WBRANGE='A','A','B','B','C','C'}                                    | matnr 7    | 8.8      |   |
| nativeparts/muttern/hutmuttern.prj           | {MATNO=matnr 8},{D_WBRANGE='A','A','B','B','C','C'}                                    | matnr 8    | 10.9     |   |
| nativeparts/muttern/sechskantmuttern.prj     | {MATNO=matnr 10},{D_WBRANGE=10.000,20.000,30.000}                                      | matnr 10   | 8.8      |   |
| nativeparts/muttern/sechskantmuttern.prj     | {MATNO=matnr 11},{D_WBRANGE=10.000,20.000,30.000}                                      | matnr 11   | 10.9     |   |
| nativeparts/muttern/vierkantmuttern.prj      | {MATNO=matnr 12},{D=20.000}                                                            | matnr 12   | 8.8      |   |
| nativeparts/muttern/vierkantmuttern.prj      | {MATNO=matnr 13},{D=30.000}                                                            | matnr 13   | 8.8      |   |

Variable "VARSET" = "PSOL Identifier"

### 28.23.3. Translatable text attributes (9.02)

Values of text attributes can be translated.

On this do the following:

1. Create an own column for each desired language (here exemplified "VALDESC\_german" and "VALDESC\_english") and in the text attribute column insert the desired values (here exemplified "TextA" and "TextB").

|    | A      | B                 | C              | D               | E                  | F                      | G              | H               |
|----|--------|-------------------|----------------|-----------------|--------------------|------------------------|----------------|-----------------|
|    | MATNR  | CLASSNAME         | ATTRIBUTE_NAME | ATTRIBUTE_VALUE | ATTRIBUTE_FL_VALUE | ATTRIBUTE_FL_MAX_VALUE | VALDESC_german | VALDESC_english |
| 1  | matnr1 | Zylinderschrauben | D              |                 | 20                 |                        |                |                 |
| 2  | matnr1 | Zylinderschrauben | L              |                 | 25                 | 100                    |                |                 |
| 4  | matnr1 | Zylinderschrauben | TextA          | text11          |                    |                        | text11 de      | text11 en       |
| 5  | matnr1 | Zylinderschrauben | TextB          | text12          |                    |                        | text12 de      | text12 en       |
| 6  |        |                   |                |                 |                    |                        |                |                 |
| 7  | matnr2 | Zylinderschrauben | D              |                 | 30                 |                        |                |                 |
| 8  | matnr2 | Zylinderschrauben | L              |                 | 40                 | 100                    |                |                 |
| 9  | matnr2 | Zylinderschrauben | TextA          | text21          |                    |                        | text21 de      | text21 en       |
| 10 | matnr2 | Zylinderschrauben | TextB          | text22          |                    |                        | text22 de      | text22 en       |
| 11 |        |                   |                |                 |                    |                        |                |                 |
| 12 | matnr3 | Zylinderschrauben | D              |                 | 40                 |                        |                |                 |
| 13 | matnr3 | Zylinderschrauben | L              |                 | 100                | 200                    |                |                 |
| 14 | matnr3 | Zylinderschrauben | TextA          | text31          |                    |                        | text31 de      | text31 en       |
| 15 | matnr3 | Zylinderschrauben | TextB          | text32          |                    |                        | text32 de      | text32 en       |

attributedata.txt

2. Make sure that in the configuration file classimport.cfg the key "LANGUAGESFORVALUES" declares the desired languages

```
[CLASSIMPORT]
LANGUAGESFORVALUES=german,english
```

or that when calling up the "classimport.vbb" file the parameter "-languagesforvalues" is set.

```
%CADENAS%\bin\x86\32\cscriphost.exe
%cadenas_setup%\scripts\common\classimport.vbb
-mode new
-logfile c:\import\logfile.txt
-user erpuser
-pwd erpuser
-languagesforvalues german,english
```

3. In the attributedef.txt file for the desired text attributes, in the column "ATTRANS-LATED" the value '1' has to be set.

|    | A                  | B      | C     | D     | E    | F    | G    | H           | I          | J         | K        | L        | M        | N            | O |
|----|--------------------|--------|-------|-------|------|------|------|-------------|------------|-----------|----------|----------|----------|--------------|---|
| 1  | CLASSNAME          | ATTNAM | ATUDF | EINHE | ANZD | ATWV | ATWV | ATBEZ_germ  | ATBEZ_germ | DISPLAY_  | DISPLAY_ | DISPLAY_ | MODE     | ATTRANSLATED |   |
| 2  | Zylinderschrauben  | D      | F     | mm    | 3    |      |      | Durchmesser | Diam*      | Diamètre  |          |          |          |              |   |
| 3  | Zylinderschrauben  | L      | F     | mm    | 3    | x    |      | Länge       | Lengt*     | Longitude |          |          |          |              |   |
| 4  | Zylinderschrauben  | TextA  | A     |       |      |      |      | TextA de    | TextA*     | TextA fr  |          |          |          |              | 1 |
| 5  | Zylinderschrauben  | TextB  | A     |       |      |      |      | TextB de    | TextB*     | TextB fr  |          |          |          |              | 1 |
| 6  | Sechskantschrauben | D      | F     | mm    | 3    |      |      | Durchmesser | Diam*      | Diamètre  | 20,30,40 | 20,30,40 | 20,30,40 |              |   |
| 7  | Sechskantschrauben | L      | F     | mm    | 3    | x    | x    | Länge       | Lengt*     | Longitude |          |          |          |              |   |
| 8  | Hutmuttern         | D      | A     |       |      | x    |      | Durchmesser | Diam*      | Diamètre  |          |          |          |              |   |
| 9  | Sechskantmuttern   | D      | F     | mm    | 3    | x    |      | Durchmesser | Diam*      | Diamètre  |          |          |          |              |   |
| 10 | Vierkantmuttern    | D      | F     | mm    | 3    |      |      | Durchmesser | Diam*      | Diamètre  |          |          |          |              |   |

attributes\_definition.txt - 2

#### 4. -> Result in PARTdataManager

|                   | ERP_PDM_NUMBER | MAT_NAME | DESCRIPTION   | * ACTIVE_STATE | * REQUESTED_STATE | D              | * L         | TextA     | TextB     |
|-------------------|----------------|----------|---------------|----------------|-------------------|----------------|-------------|-----------|-----------|
|                   | ERP number     | Material | Description   | Active status  | Requested status  | Diameter [...] | Length [mm] | TextA en  | TextB en  |
| eClass 5.0 (SP1): |                |          |               |                |                   |                |             |           |           |
| 1                 | matnr1         | 8.8      | Head cap bolt | Released       | New               | 20.000         | 25.000      | text11 en | text12 en |
| 2                 | matnr2         | 10.9     | Head cap bolt | Released       | New               | 30.000         | 40.000      | text21 en | text22 en |
| 3                 | matnr3         | 8.8      | Head cap bolt | Released       | New               | 40.000         | 100.000     | text31 en | text32 en |

PARTdataManager - Columns with translatable text attributes

### 28.23.4. Apply units for parts (9.02)

You can now apply which unit you the imported STLs are to have.

|                   | ERP_PDM_NUMBER | MAT_NAME  | DESCRIPTION      | * ACTIVE_STATE   | * REQUESTED_STATE  | D            | * L        | TextA     | TextB     |
|-------------------|----------------|-----------|------------------|------------------|--------------------|--------------|------------|-----------|-----------|
|                   | ERP-Nummer     | Werkstoff | Beschreibung     | Aktueller Status | Beantragter Status | Durchmess... | Länge [mm] | TextA de  | TextB de  |
| eClass 5.0 (SP1): |                |           |                  |                  |                    |              |            |           |           |
| 1                 | matnr1         | 8.8       | Zylinderschraube | Freigegeben      | Neu                | 20.000       | 25.000     | text11 de | text12 de |
| 2                 | matnr2         | 10.9      | Zylinderschraube | Freigegeben      | Neu                | 30.000       | 40.000     | text21 de | text22 de |
| 3                 | matnr3         | 8.8       | Zylinderschraube | Freigegeben      | Neu                | 40.000       | 100.000    | text31 de | text32 de |

Unit: mm or INCH

classimport.cfg:

```
[CLASSIMPORT]
UNIT=mm
```

Values: mm, INCH

Default: mm

### 28.23.5. Check files (9.02)

You can define whether the prj, pol and tab files are to be checked after import. In case these are defect or incomplete, an error message will be written in the log file: "File filename is incomplete or corrupt"

classimport.cfg

```
[CLASSIMPORT]
CHECKFILES=1
```

Value range: 0/1

Default: 0

### 28.23.6. Parameter "Clusterupdate" obsolete (9.02)

As of v9.02 the parameter "Clusterupdate" is obsolete and has no effect anymore.

### 28.23.7. Changes when converting images

The external tool "Image magic" is not needed anymore.

\$CADENAS\_SETUP -> classimport.cfg -> [PREVIEWIMPORT] -> Key "convert"

\$CADENAS\_SETUP -> classimport.cfg -> [VIEWIMPORT] -> Key "convert1"

Values: 0/1

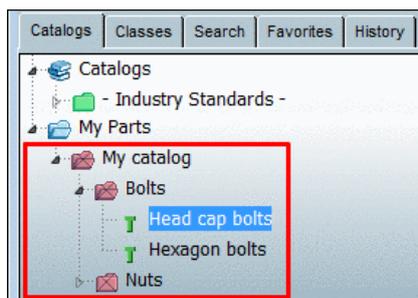
Default: 0

Via "convert" you determine whether the imported preview image is to be taken over 1:1 or is to be converted corresponding to the specifications under width and height (default 200).

A detailed description is available under Section 3.1.5.6, "Image import - filelist.txt" in *PART-warehouse Manual*.

### 28.23.8. Parts may also be imported into the PARTdataManager directory "Own parts"

Up to now, parts were only able to be imported into the "Catalogs" category. Now you can import them into the "Own parts" category as well.



Storage location under Catalogs or under My parts

The categories may be given either:

- When opening in the batch file directly via the parameter

```
-categoryname cat
```

```
-categoryname nat
```

- or via the configuration file

```
[CLASSIMPORT]
CATEGORYNAME=cat
bzw.
CATEGORYNAME=nat
```

Possible values are:

- nat (own parts)
- cat (catalogs)

Default: cat

## 28.24. Language dependent keys effect the output (9.02)

Some keys in config files are language dependent which may affect the output.<sup>9</sup>

<sup>9</sup>#19636

Keys like genericname or name, which are used for the file name are language dependent. Because each user can change the name without admin rights, this may create duplicated names in the PDM.

Example: <ATTR(default,nb)>

Details on syntax concerning language output can be found under Section 2.2.4.3, “Value types” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual* and Section 2.2.4.5.3, “Export standard attributes in several languages” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 28.25. Save/restore database (9.02)

In order to save the database either use the corresponding database-own administration tools or possibly the PARTsolutions internal dialog under **PARTlinkManager -> Extras -> Database -> Save/restore database**.

a

Under **Action**, select the option **Save database** or **Restore database**.

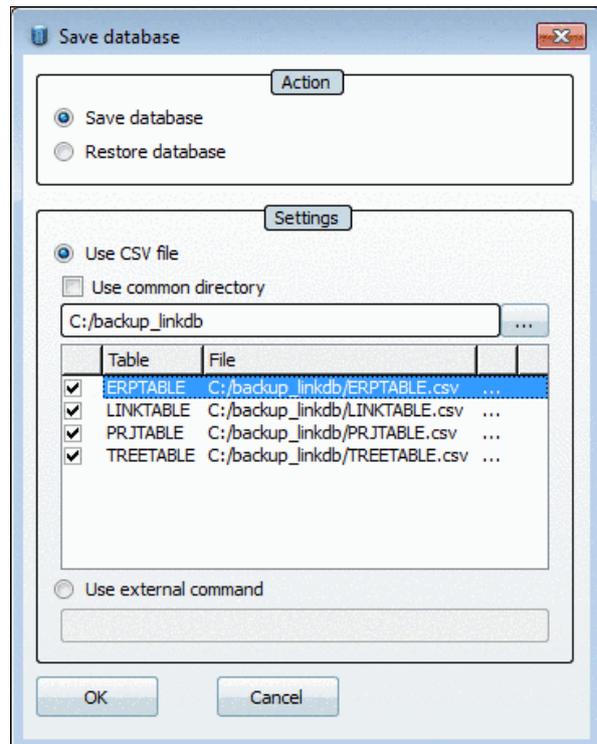
Under **Settings**, select the option **Use CSV file** or **Use external command**.

- **Use CSV file:**

If you activate the checkbox under **Use common directory**, then all tables are saved in the chosen directory with their standard name.

If you do not activate the option, then specify the desired CSV files via search button [...] and activate the respective individual checkboxes.

- **Use external command:**



<sup>a</sup>#20407, #19925

## 28.26. Adjust translations in the user interface (9.02)

If a quick solution for changing a term in the user interface is absolutely needed, then you can accomplish this in the following way.

**Example:**

Initial situation: The title **new ident-no.** (target language) of the dialog box shall be adjusted.

1. Open the WebNLS tool and find out the spelling in the source language.

| PrevPage | ID    | Source/Other      | Action            | NextPage    |
|----------|-------|-------------------|-------------------|-------------|
|          | 17696 | Neue Ident-Nummer | SetNotToTranslate | Copy Change |
|          |       | new ident-no.     | ChangeTranslation |             |

2. Create a file of the name `<language>.nls` (e.g. `english.nls`)<sup>10</sup> with any text editor and save it under `$CADENAS/lang`. The content of this file will overwrite the original translation.
3. In the file, create two columns separated by comma, on the left side the source language and on the right side the desired term in the target language.

```
"Neue Ident-Nummer", "New Ident No."
```

4. Open the dialog again.

### Result:

The changed term is displayed.

<sup>10</sup>the respective term for `CADENAS_LANGUAGE`

### 28.27. Query capability for PARTconnection assemblies and parts (9.02)

In the configuration file `ifcacecommon.cfg`, in the section [CATEGORIES] further keys have been added in order to enable queries for PARTconnection assemblies and parts:<sup>11</sup>

- Valid for PARTconnection export and Assembly documents

```
[CATEGORIES]
isPartConnectionAsm=(_METAOBJ.isValidClass("ASSEMBLY") ANDALSO (vbstools.GetMidentSetting
↳ (_METAOBJ.mident, "VTYP")="CON"))
```

- Valid for PARTconnection export and Part documents is part

```
[CATEGORIES]
isPartConnectionPart=(_METAOBJ.isValidClass("PART") ANDALSO (vbstools.GetMidentSetting
↳ (_METAOBJ_ROOT.mident, "VTYP")="CON"))
```

- Valid for all parts/assembly of a partconnection export

```
[CATEGORIES]
isPartConnectionExport=vbstools.GetMidentSetting(_METAOBJ_ROOT.mident, "VTYP")="CON"
```

- Valid for a negative part independent of PARTconnection

```
[CATEGORIES]
isNegativePart=(_METAOBJ.isValidClass("PART") ANDALSO _METAOBJ.isNegPart())
```

Details on syntax can be found under Section 2.2.1.1, “What are categories?” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual* and Section 2.2.1.2, “Apply and use own categories” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

### 28.28. Update ERPTable cyclically (9.02)

PARTident, which until now undertook the task of **cyclic data update**, is replaced by the script `nightupdate.vbb` as of PARTsolutions v9.02.

Detailed information on this can be found under Section 4.14.3.3, “Automated and cyclical update of data” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

### 28.29. Installation path of \$CADENAS\_SETUP

Under WIN7 and VISTA the directory \$CADENAS\_SETUP is installed under `C:\ProgramData\`.

<sup>11</sup>#19491

## 28.30. Index language encompassing

As of V9 the index is language encompassing. For the full-text search this results in searching all languages.

Under \$CADENAS\_DATA/index there are no language depending index files anymore.

## 28.31. Server-Client installation / Client configuration

### 28.31.1. Setup client via installation routine

At the individual client start the file **psol\_workstation.exe** in the PARTsolutions installation directory **.../software/install/setup/x86/clients** either via **DVD** or via access on the **Server**.

#### Note

If the client installation is performed via **psol\_workstation.exe**, then different processes are automatically performed in the course of the installation.

- PARTsolutions environment variables are set
- CAD interface is registered
- Start menu entries are set
- Possibly depending on the selected packages further processes

Detailed information on this is found under Client-Installation.

### 28.31.2. Setup clients without installation routine

Software deployment in companies is very different. That's why you will not find the "run-serv.exe" in version 9 anymore (deployment via admin computer).

The following describes essential steps how to set environment variables and to register the cad interfaces via batch or registry files.

The deployment of batch and registry files can be conducted by the IT administration automated via GPO. As soon as the user logs in at the client, these files are executed.

#### A. Setup client via batch file (\*.bat)

Launching the CAD system via batch file has the advantage, that in the same course the working environment can be set up. Especially when different CAD versions are used, it is an advantage always to register the correct interface in this way.

The following commands for example can be executed via batch file:

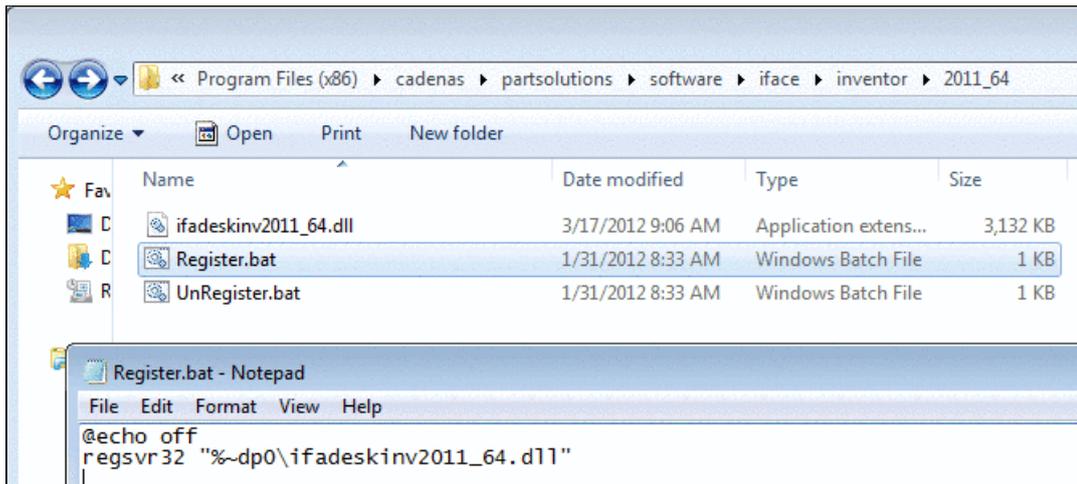
- Set the needed PARTsolutions environment variables
- Register the PARTsolutions CAD interface

#### Note

If different versions of a CAD system are used, then the respective batch file is started. This contains the path to the respectively correct registration file of the CAD interface (Register.bat).

The interface files are stored under:

%CADENAS%\iface\CAD-System\Version+Architektur\ifCAD-System.dll



The figure shows the content of the batch file "Register.bat".

- Optionally start other PARTsolutions applications such as PARTproject (modelling) or PARTadmin (administration) for example

### Note

PARTsolutions start menu entries are not absolutely necessary.

PARTdataManager (part selection) is started via the PARTsolutions menu in the CAD system normally.

### Batch file sample:

```
@echo off

rem ---- CADENAS Variablen ----
Set CADENAS=\\qasrv\cadenas\software
Set CADENAS_DATA=\\qasrv\cadenas\data
Set CADENAS_DEFAULTUSER=\\qasrv\cadenas\setup\user\default_user
Set CADENAS_SETUP=\\qasrv\cadenas\setup
Set CADENAS_USER=%APPDATA%\cadenas\partsolutions_v9
Set OSNAME=x86

rem ---- Start CADENAS Module ----
rem start %cadenas%\bin%\osname%\padmin.exe
rem start %cadenas%\bin%\osname%\pdatamgr.exe
rem start %cadenas%\bin%\osname%\pproject.exe

rem ---- CAD-Schnittstelle registrieren ----
"\\qasrv\cadenas\software\iface\inventor\2010_32\Register.bat"

rem ---- Start CAD-System ----
"C:\Program Files\Autodesk\Inventor 2010\bin\Inventor.exe"
```

### B. Set up client via registry file (\*.reg)

PARTsolutions environment variables can be set permanently via \*.reg file.

### Registry file sample:

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\Environment]
"CADENAS"="C:\\Program Files (x86)\\cadenas\\partsolutions\\software"
"CADENAS_DATA"="C:\\cadenas\\partsolutions\\data"
"CADENAS_DEFAULTUSER"="C:\\ProgramData\\cadenas\\partsolutions\\setup\\user\\default_user"
"CADENAS_SETUP"="C:\\ProgramData\\cadenas\\partsolutions\\setup"
"CADENAS_USER"="%APPDATA%\\cadenas\\partsolutions_v9"
"OSNAME"="x86"

[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS]
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH]
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\CADENAS]
@="\\\\qasrv\cadenas\software"
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\CADENAS_CLIENT]
@=""
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\CADENAS_DATA]
@="\\\\qasrv\cadenas\data"
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\CADENAS_DEFAULTUSER]
@="\\\\qasrv\cadenas\setup\user\default_user"
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\CADENAS_SETUP]
@="\\\\qasrv\cadenas\setup"
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\CADENAS_USER]
@="%APPDATA%\cadenas\partsolutions_v9"
[HKEY_LOCAL_MACHINE\SOFTWARE\CADENAS\PATH\OSNAME]
@="x86"
```

In addition the **CAD interface** has to be registered or integrated.

### 28.31.3. PARTsolutions Software locally installed on Client

With this type of installation the software is locally on the client. Only catalog data and the setup directory are on the server. In principle this is according to a single workstation installation, only the fact that the environment variables for "CADENAS\_DATA" and "CADENAS\_SETUP" point to the server.

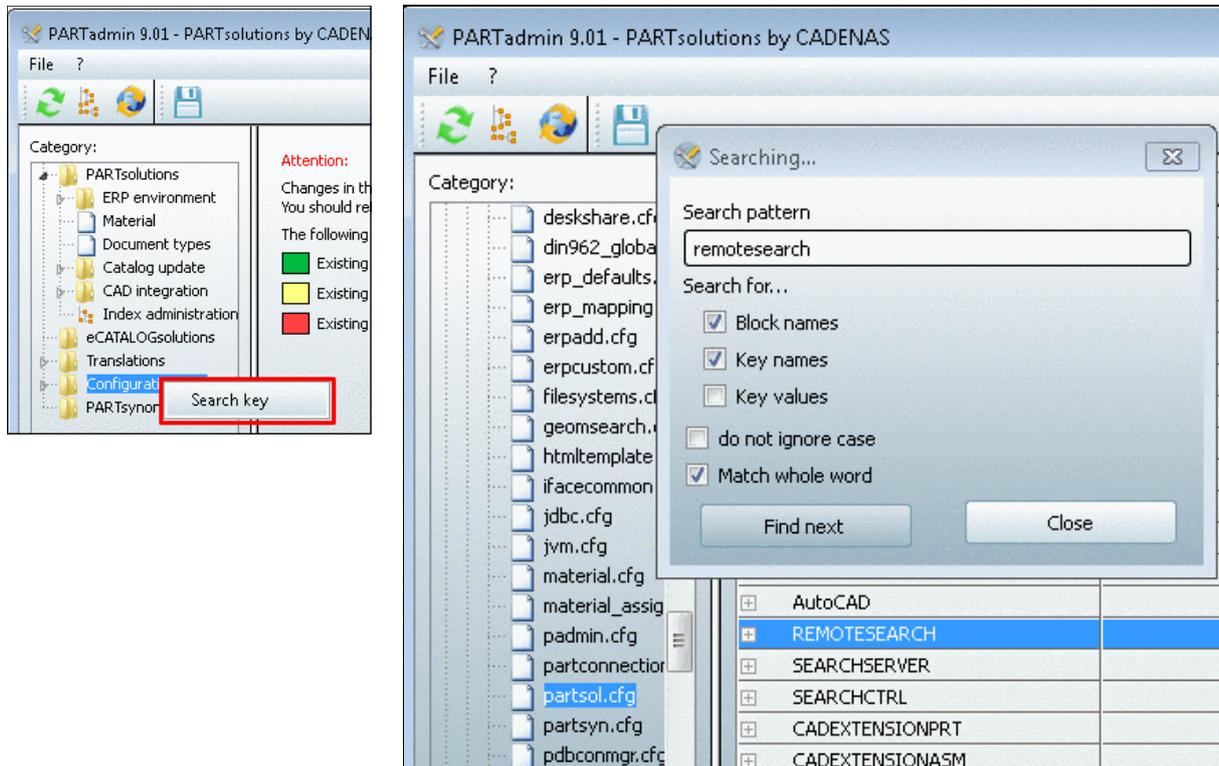
This variant can be used in order to minimize loading time (network traffic) when PARTsolutions software is called up.

### 28.32. Find keys in configuration file quickly

You can open the **Search key** in the context menu of each category level.

Enter the key name and click on **Search**.

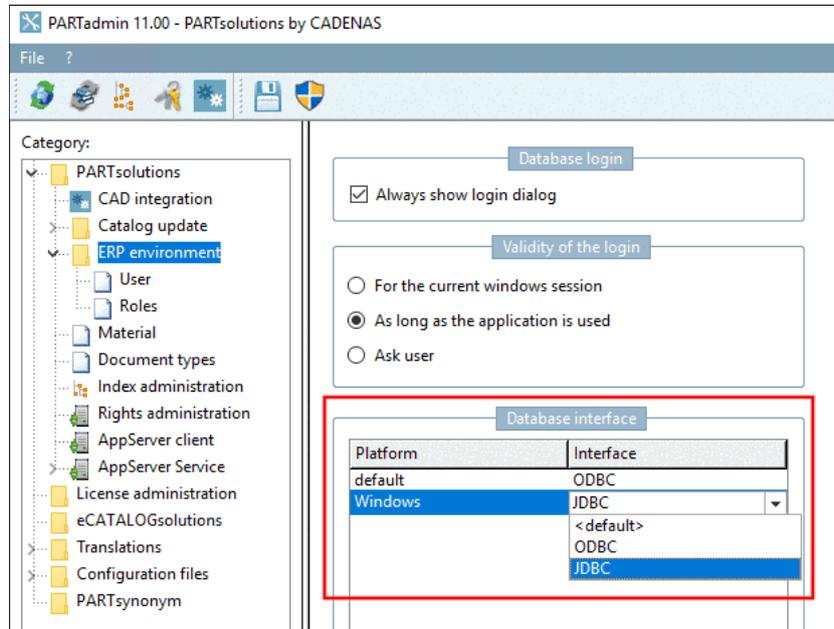
You are taken to the desired key.



### 28.33. Define Database interface

Under **PARTadmin** -> **Category PARTsolutions** -> **ERP environment** you can separately define the database interfaces for all supported operating systems in the **Database interface** window.

Either you determine specifically ODBC or JDBC for every operating system. Or you determine the default interface and then select <default> from the list field.



Select database interface from the list field

The appropriate configuration file can be found under `$CADENAS_SETUP/dbproxy.cfg`. Compare with Section 4.2.7.1, “dbproxy.cfg” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

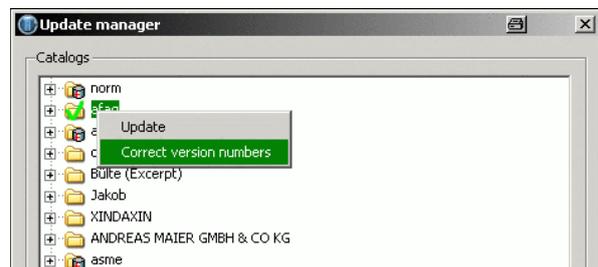
### 28.34. Correct version numbers with Update Manager

If the entry of version number in project file and in LinkDB differs, then the project cannot be displayed in the PARTdataManager.

This could occur by deleting or new installation of a catalog.

With the **Correct version numbers** command you can easily correct the entry in the LinkDB.

More information on this you can find under Section 4.16.3.3.1, “Update without connection to the LinkDB” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.



### 28.35. Special notes when updating from V8.1

As existing customer please regard the following:

- **Software installation**

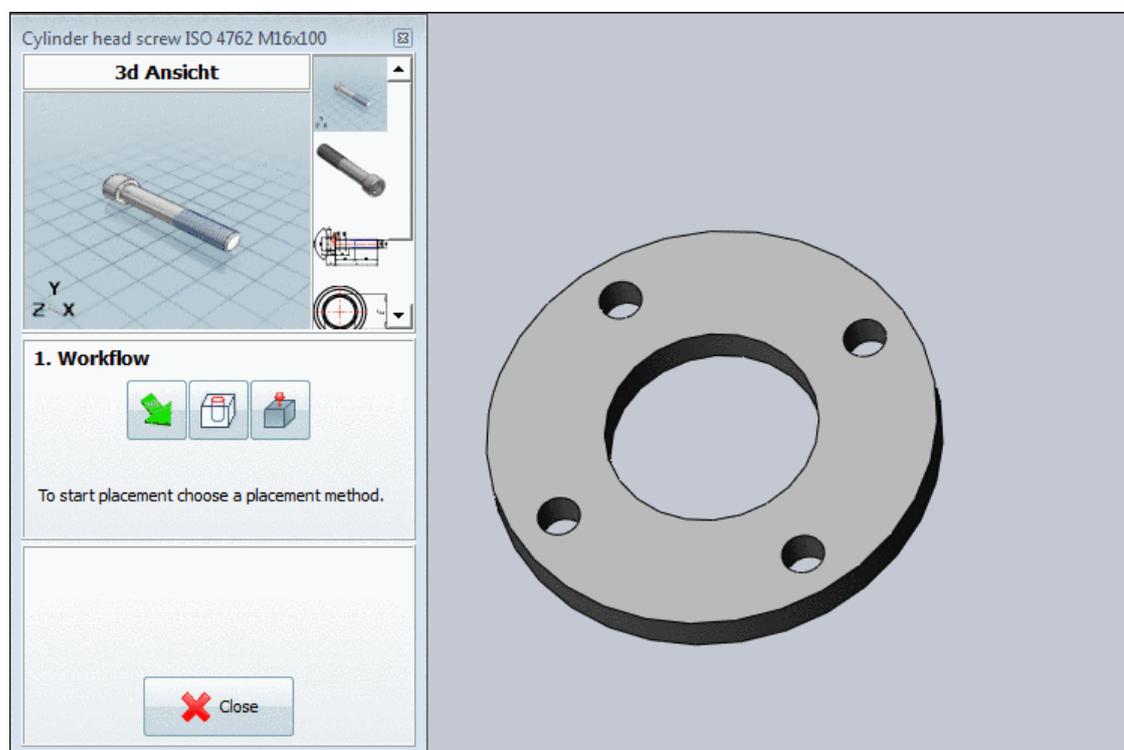
You must first uninstall V8.1 before you can install a later version.

- **Catalog installation / DATA directory - Continue to use existing data?**

The DATA directory remains intact during deinstallation, but the index has to be updated. Therefore, in **PARTAdmin**, you can find a **Migration Assistant** (see Migration). However, then neither the full-text, nor the improved geometric search, are usable. Therefore the migration is mainly recommended for own part catalogs and native catalogs. For catalogs provided by us we recommend to update these via catalog DVDs or **PARTAdmin** -> **Catalog update** -> **Online**.

- **Intelligent placement methods**

For certain parts such as bolts, nuts, rings, bearings, etc. in V9 there are intelligent **placement methods** available (on this compare Section 2.6.1, "Insert 3D from the Standard and supplier parts library" in *PARTsolutions / PARTcommunity4Enterprise - User manual* and Section 2.2.3, "Intelligent placement for standard parts" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*). V8 parts are not supported for these methods.



Placement dialog

- **Names of standard parts changed (Level of Detail)**

The names of all standard parts after transfer into the CAD have changed. The reason is that the geometries have been drastically changed so that the Level of Detail becomes possible.

When using standard parts, by default, these will be generated anew in the CAD pool due to the changed names. However, you can rebuild the old behaviour via configuration of the naming rule for the document. Also regard the setting for "FlatPool" (pool with subdirectories or flat hierarchy). Should you have adjusted these settings for your company, then rebuild this option again.

On this see Section 2.2.2, "Set file name ("FileName" key) and pool path ("poolpath" key)" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

- **Insert CAD company parts in native CAD format in PARTsolutions**

When you have inserted CAD company parts with V8.1 in CAD format to PARTsolutions "User library",<sup>12</sup> please contact our Support or Consulting before doing an update. In order to guarantee compatibility, special settings must be made.

- **Environment variables, Registry entries**

Should entries and/or variables from older installations still be set, these must be removed in order for the language adjustment to work properly in PARTadmin.

1. The language selection concerning the relation between PARTadmin and PARTsolutions Version 9 has been changed!

With versions < 9 PARTadmin writes on the environment variable \$CADENAS\_LANGUAGE.

With versions >= 9 PARTadmin writes onto \$CADENAS\_USER/partsolu.cfg. (\$CADENAS\_LANGUAGE can, if explicitly desired, continue to be used. The priorities can be taken from the list in the following point.)

Now due to the changeover, users without PARTsolutions admin rights (and operation system admin rights) can make language settings at the client computer.

2. The following lists, in order of priority, components that affect the language setting:

- a. start.env (not used per default)
- b. Environment variable (not used per default)
- c. Registry entry (not used per default)
- d. \$CADENAS\_USER/partsolu.cfg
- e. Local operating system

- **License management** (important notes for existing customers with V9.02 and lower)

As of V9.03 the license management has been completely reviewed. Due to many innovations and simplifications a new license service is necessary for the administration of Floating licenses. Should there already be a license service in use, then please finish it before. Parallel operation is not provided by default. Detailed information on the license service is found under ???.

- **eCATALOGsolutions** for V9 is released with V9.02. Please contact the respective project manager at CADENAS, if you want to model with V9.03 so that there is no collision during project management and to make sure the catalog is available correctly online.
- **PARTconnection** is no longer an independent module with V9.02, it is now integrated within **PARTdataManager**.
- **PARTshaft** will no longer be continued in version 9. Version 8.1.09 was the last version with **PARTshaft**.

## 28.36. Update from V8.1 to V9 with ERP connection

This section outlines the PARTsolutions updates from V8.1 to V9 plus an update of the standard catalogs with an existing ERP connection. With an ERP connection, the LinkDB must be connected to the new V9 projects.

### Starting basis:

The following figure shows the **Part view** in the **PARTdataManager** with linked ERP data.

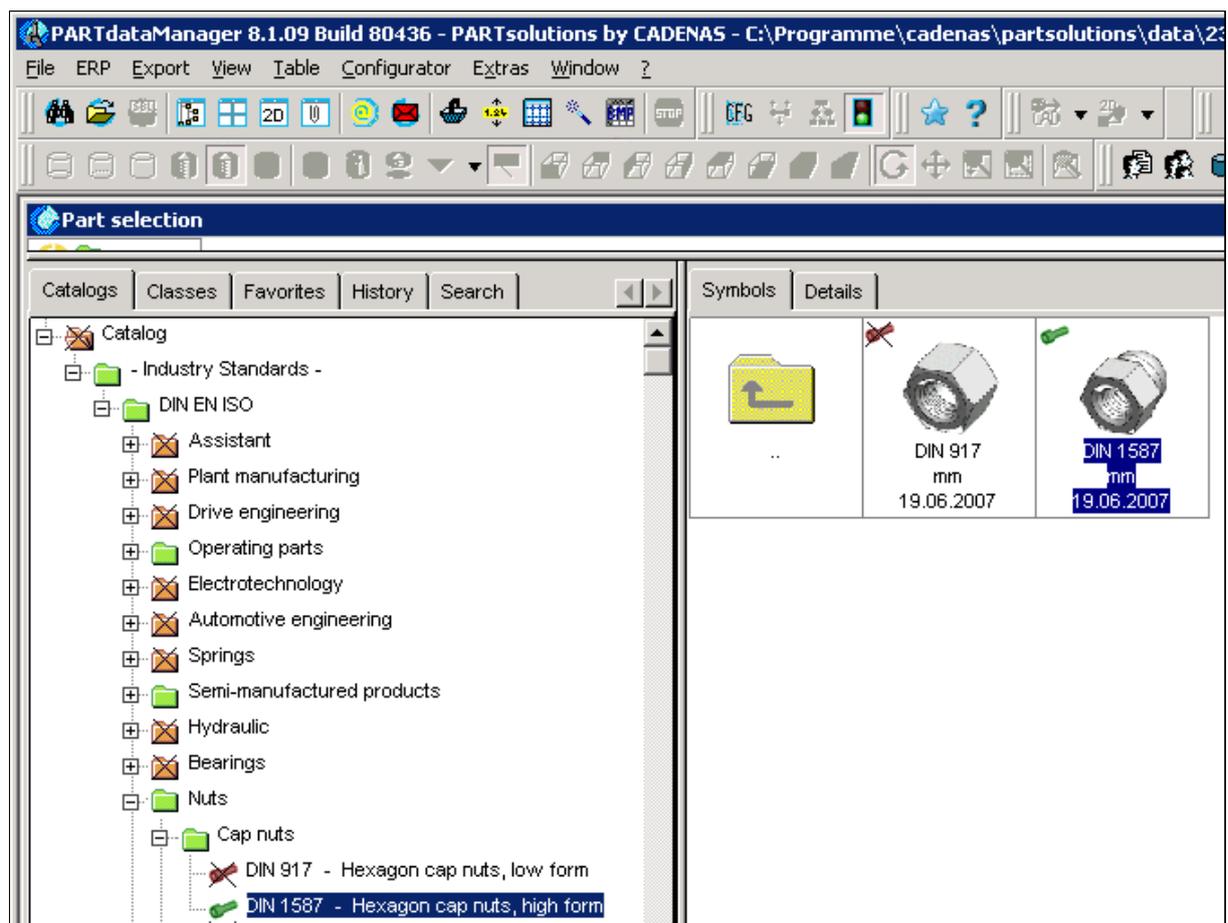
<sup>12</sup>In V9 the respective menu command is "User library -> Insert"

In V8.1 the respective menu command was "Own parts library -> Insert".

|    |         | ERP_PDM_IUMBER<br>ERP-Nummer | MAT_NAME<br>Werkstoff | FEST<br>Festigkeit | * ACTIVE_STATE<br>Aktueller Status | * REQUESTED_STATE<br>Beantragter Status | D<br>Gewindenenn... | D1<br>Gewindekern |
|----|---------|------------------------------|-----------------------|--------------------|------------------------------------|-----------------------------------------|---------------------|-------------------|
| 25 | M16     | NB8900699                    | NTBW001               | 6                  | Gesperrt                           | Neu                                     | 16.000              | 13.835            |
| 26 | M16     | NB8900717                    | NTBW002               | A1-50              | Gesperrt                           | Neu                                     | 16.000              | 13.835            |
| 27 | M16x1.5 | NB8900700                    | NTBW001               | 6                  | Gesperrt                           | Neu                                     | 16.000              | 14.376            |
| 28 | M16x1.5 | NB8900718                    | NTBW002               | A1-50              | Gesperrt                           | Neu                                     | 16.000              | 14.376            |
| 29 | M18     |                              |                       |                    |                                    |                                         | 18.000              | 15.294            |
| 30 | M18x1.5 |                              |                       |                    |                                    |                                         | 18.000              | 16.376            |
| 31 | M18x2   |                              |                       |                    |                                    |                                         | 18.000              | 15.835            |
| 32 | M20     | NB8900701                    | NTBW001               | 6                  | Gesperrt                           | Neu                                     | 20.000              | 17.294            |
| 33 | M20     | NB8900719                    | NTBW002               | A1-50              | Gesperrt                           | Neu                                     | 20.000              | 17.294            |

PARTsolutions V8.1.09 with LinkDB data

In PARTsolutions V8.1 the standard catalogs were bundled in the DIN EN ISO catalog. With V9 the standard catalogs are made available in 3 individual catalogs: DIN, EN and ISO.



PARTsolutions V8.1.09 - Part selection with DIN EN ISO catalog

The project paths in the PARTlinkManager also refer to "/din\_en\_iso/".

| PSQL Projekt                                  | PSQL Kennung      | Zeilen ID | Zeilen subID | Version       | ERP-Nummer | Aktueller Status |
|-----------------------------------------------|-------------------|-----------|--------------|---------------|------------|------------------|
| agathon/afnor/hbk/n691/n691.pj                | ..EWICHT=0.415)   | 20        | 0            | v080226082519 | NB0000001  | Freigegeben      |
| agathon/afnor/hbk/n691/n691.pj                | ..EWICHT=2.105)   | 70        | 0            | v080226082519 | NB0000002  | Freigegeben      |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 10        | 0            | v070619081714 | NB8900688  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 20        | 0            | v070619081714 | NB8900689  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 30        | 0            | v070619081714 | NB8900690  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 40        | 0            | v070619081714 | NB8900691  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 50        | 0            | v070619081714 | NB8900692  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 60        | 0            | v070619081714 | NB8900693  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 70        | 0            | v070619081714 | NB8900694  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=0.000) | 80        | 0            | v070619081714 | NB8900695  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=1.000) | 90        | 0            | v070619081714 | NB8900696  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=1.000) | 100       | 0            | v070619081714 | NB8900697  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=1.000) | 110       | 0            | v070619081714 | NB8900698  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=1.000) | 190       | 0            | v070619081714 | NB8900699  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=1.000) | 130       | 0            | v070619081714 | NB8900700  | Gesperit         |
| norm/din_en_iso/muttern/hutmutter/din_1587.pj | ...),(FORM=1.000) | 210       | 0            | v070619081714 | NB8900701  | Gesperit         |

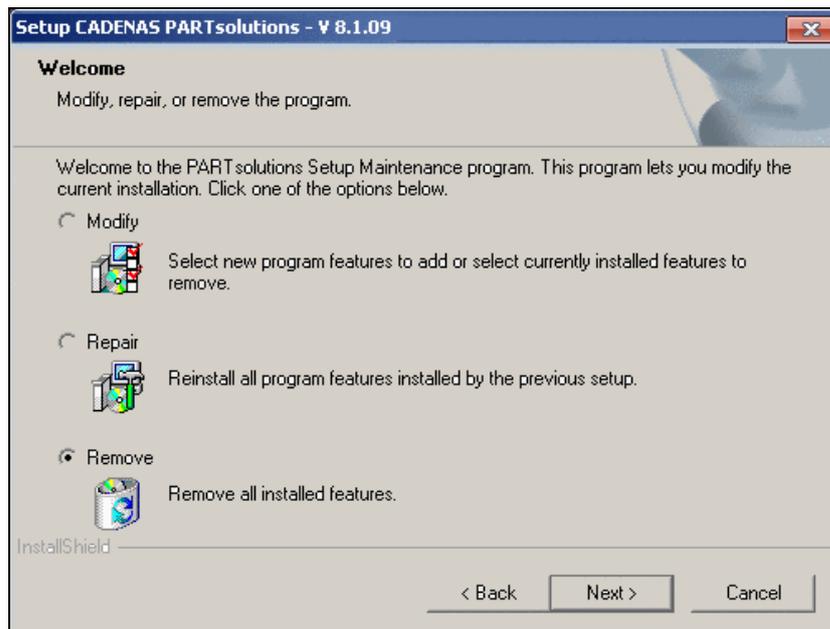
PARTsolutions V8.1.09 with LinkDB data

Follow these steps during the update:

### 1. Completely remove software V8.1

When removing the software the catalogs in the DATA directory remain untouched.

The MS-SQL server will also be removed. The PLINKDB data remain the same.<sup>13</sup>



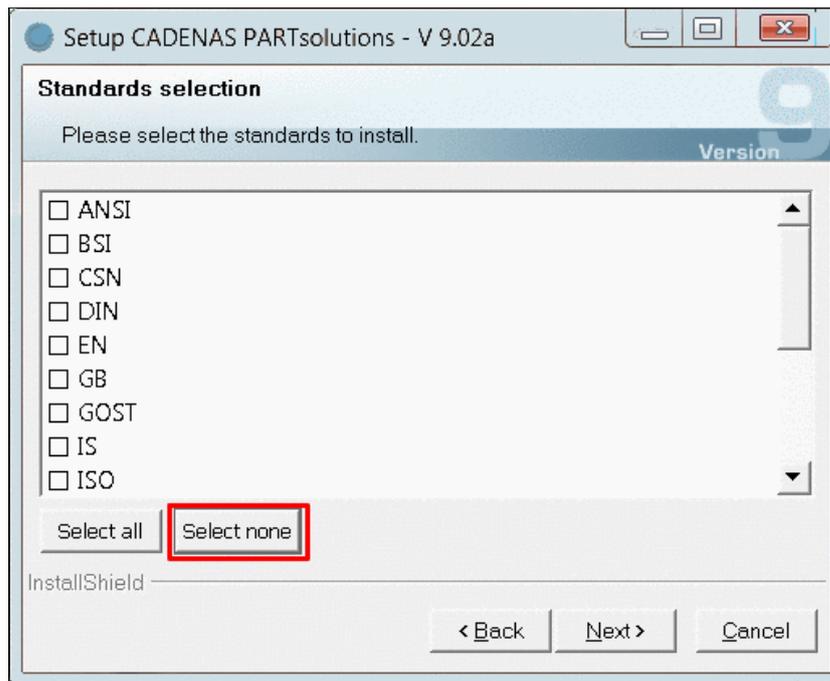
Remove

### 2. Install V9 without catalogs

Now install PARTsolutions Version 9.02 (or higher).

For the **Standards selection** click on **Select none**.

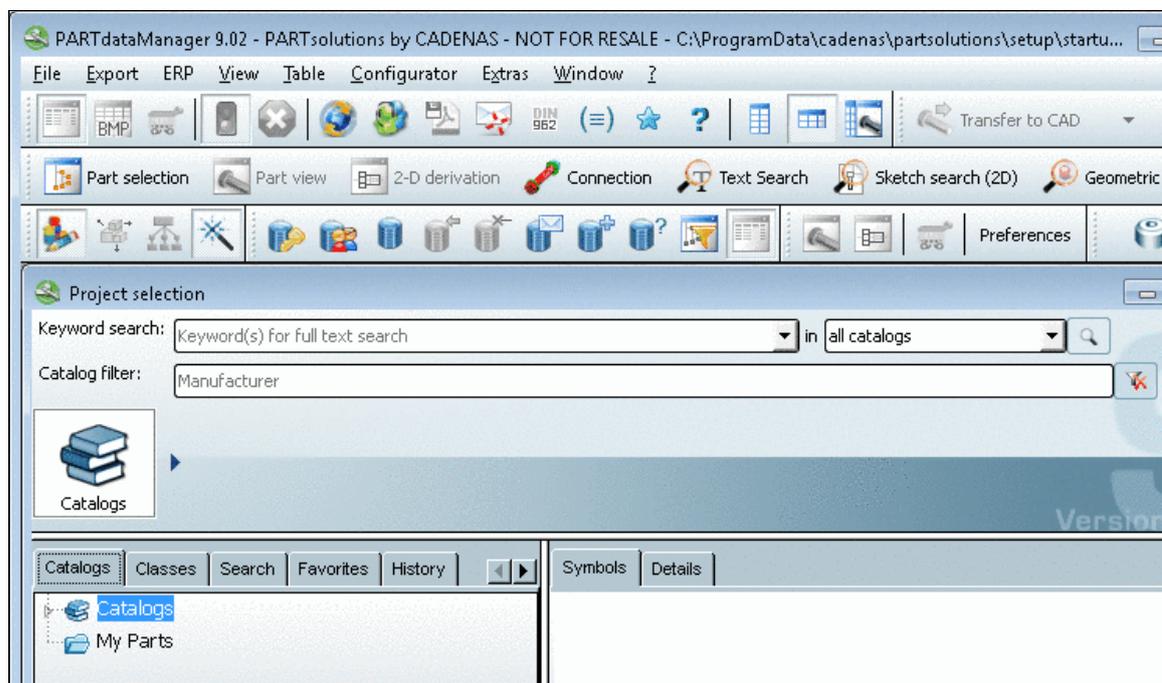
<sup>13</sup>The described workflow assumes the use of the MS-SQL server. When using other databases, the workflow must be modified accordingly.



Do not install standard catalogs at this point

### 3. Migration assistant

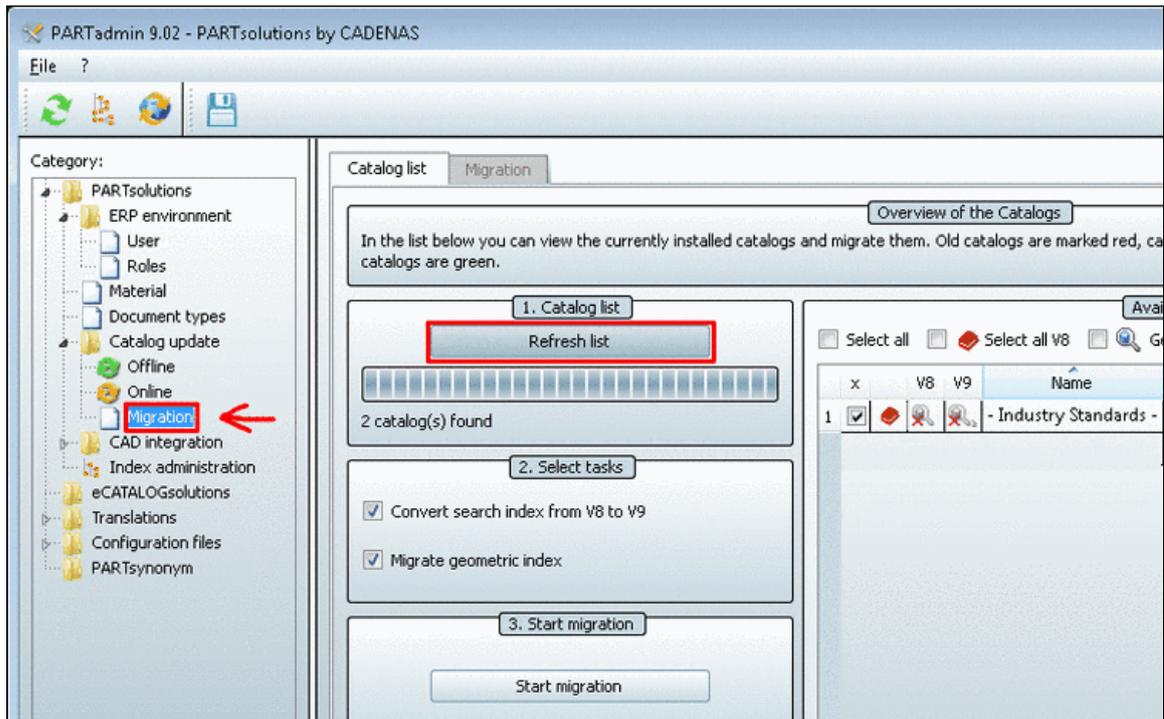
The old DIN\_EN\_ISO catalogs are not displayed in the PARTdataManager directly after installation.



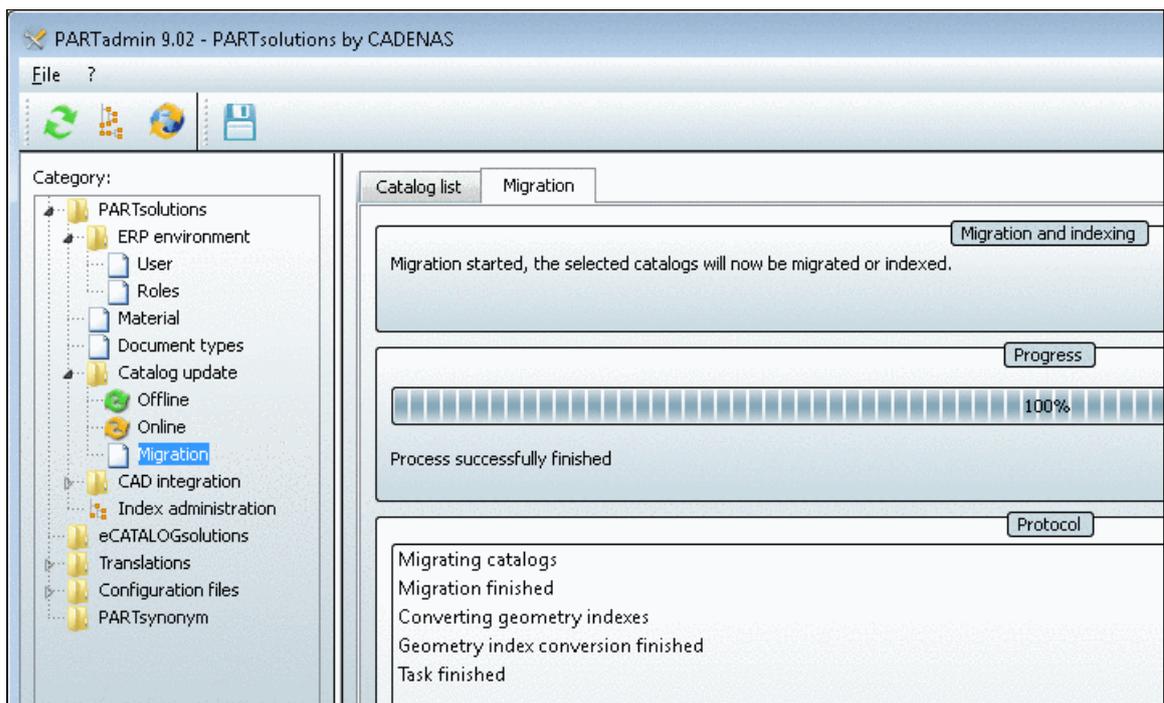
PARTdataManager before carrying out the migration assistant

Migrate the V8 catalogs to V9. Use the migration assistant under **PARTadmin** -> Category **Catalog update** -> **Migration**. See Migration.

Click on **Refresh list**. Select all V8 catalogs. Click on **Start migration**.

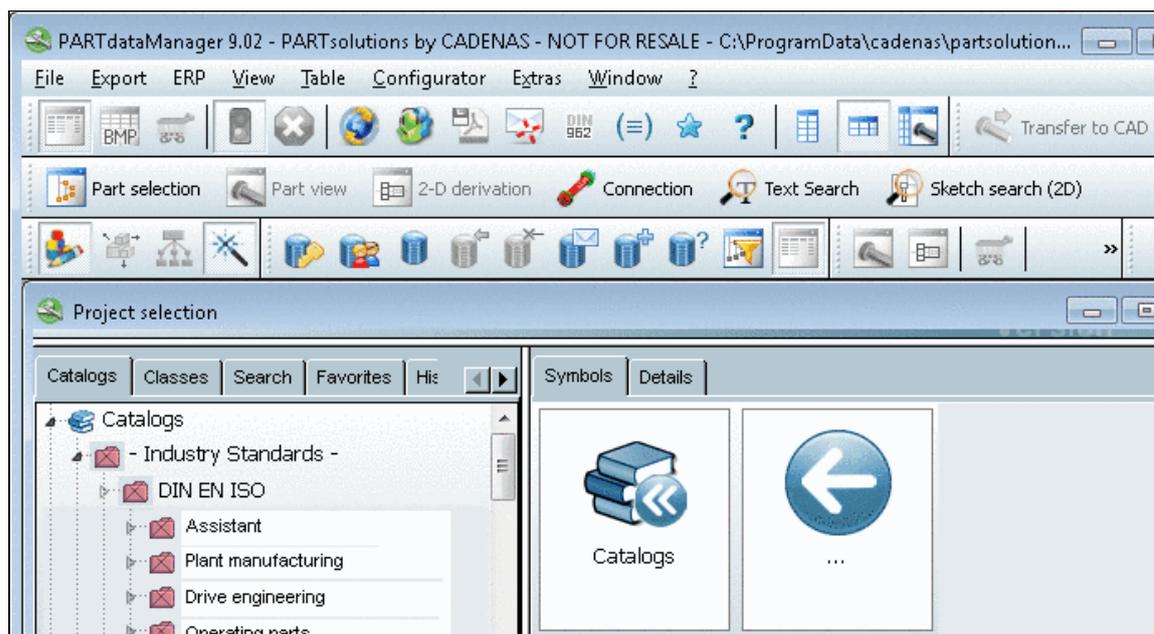


Start migration



Migration completed successfully

Now, the old DIN\_EN\_ISO catalog is displayed again in the PARTdataManager. However, still without the links to the ERP data.



Catalog data still without ERP connections

#### 4. Update LinkDB

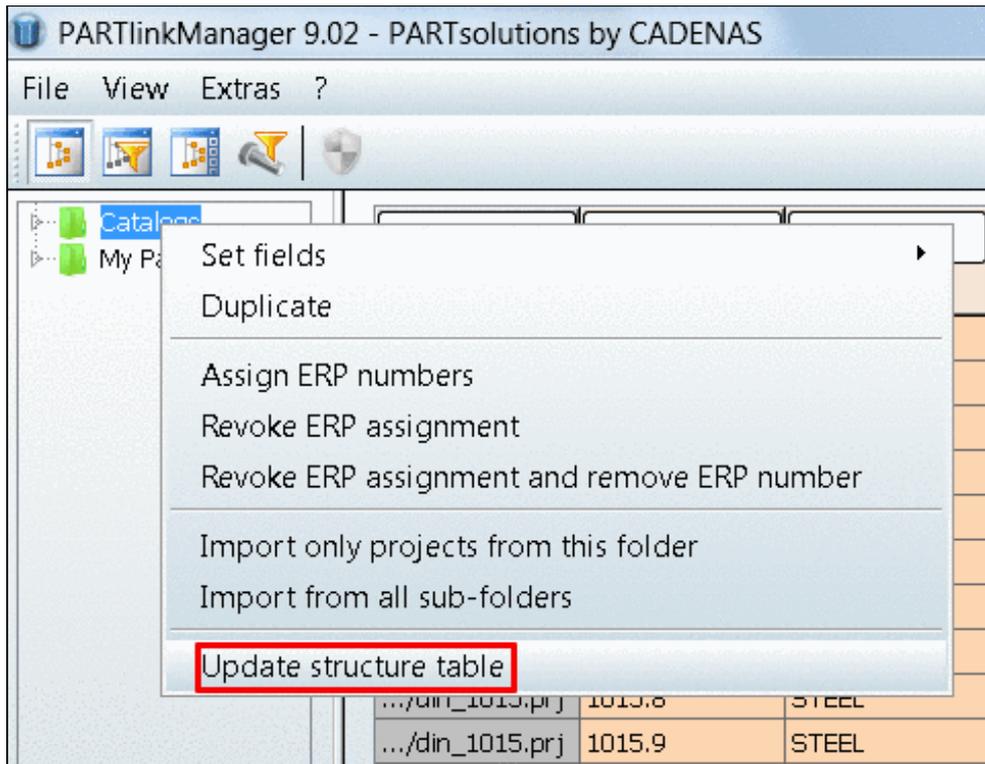
With V9.02 (or higher) the database structure is automatically adjusted to the structure of V9.02 (or higher) for the MS-SQL server 2005 during the installation routine (from V81.06 to V9.01).<sup>14</sup> You can find the script on the installation DVD under ... \tools\databases\MSSQL\plinkdb\_patch.sql.

For other database systems, please adjust these scripts and carry out manually.

In case you updated the MS-SQL server onto a higher version, you may make the basic settings for the database via ... \tools\databases\MSSQL\plinkdb\_reuse.sql. Please adjust the scripts before carrying them out.

5. In the **PARTlinkManager** in the "Catalogs" context menu, execute the **Update structure table**.

<sup>14</sup>If the LinkDB update was carried out automatically, this point is obsolete.

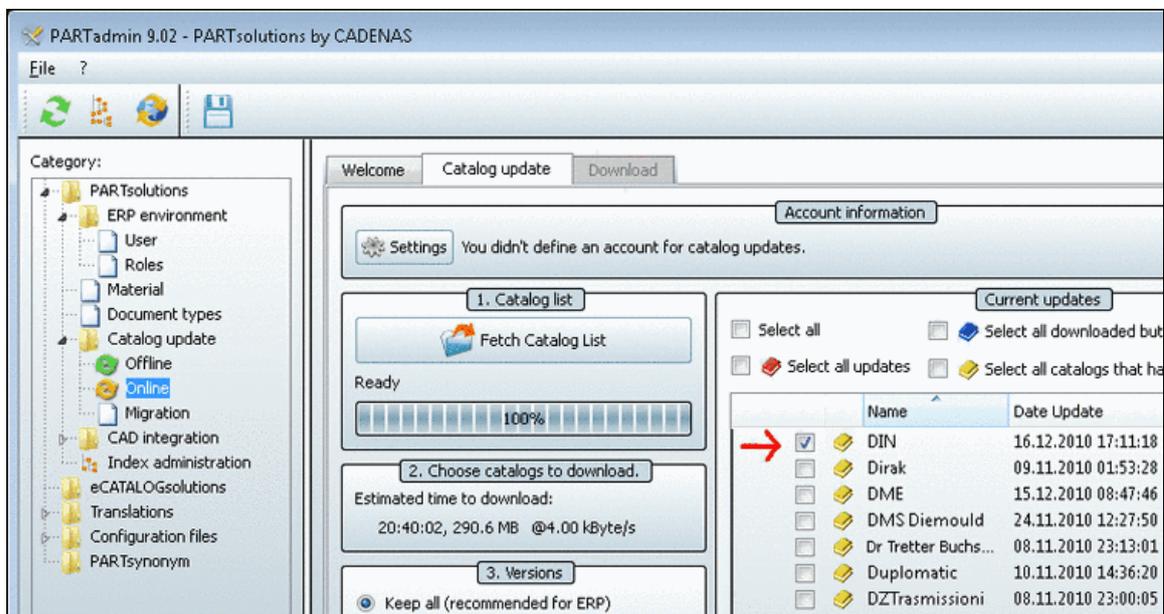


Update structure table

## 6. Install DIN, EN, ISO catalogs

Now install the current V9 catalogs DIN, EN and ISO.

You can do this via **PARTadmin** and the **online variant**.



Or via **PARTadmin** and the **offline variant**, by opening the cip files from the installation DVD under ...catalogs\norm.

## 7. Install DIN\_EN\_ISO link catalog

When installing the DIN\_EN\_ISOlink catalog, the connections are set to the new catalog structure, so that the LinkDB data is displayed correctly again after installation.

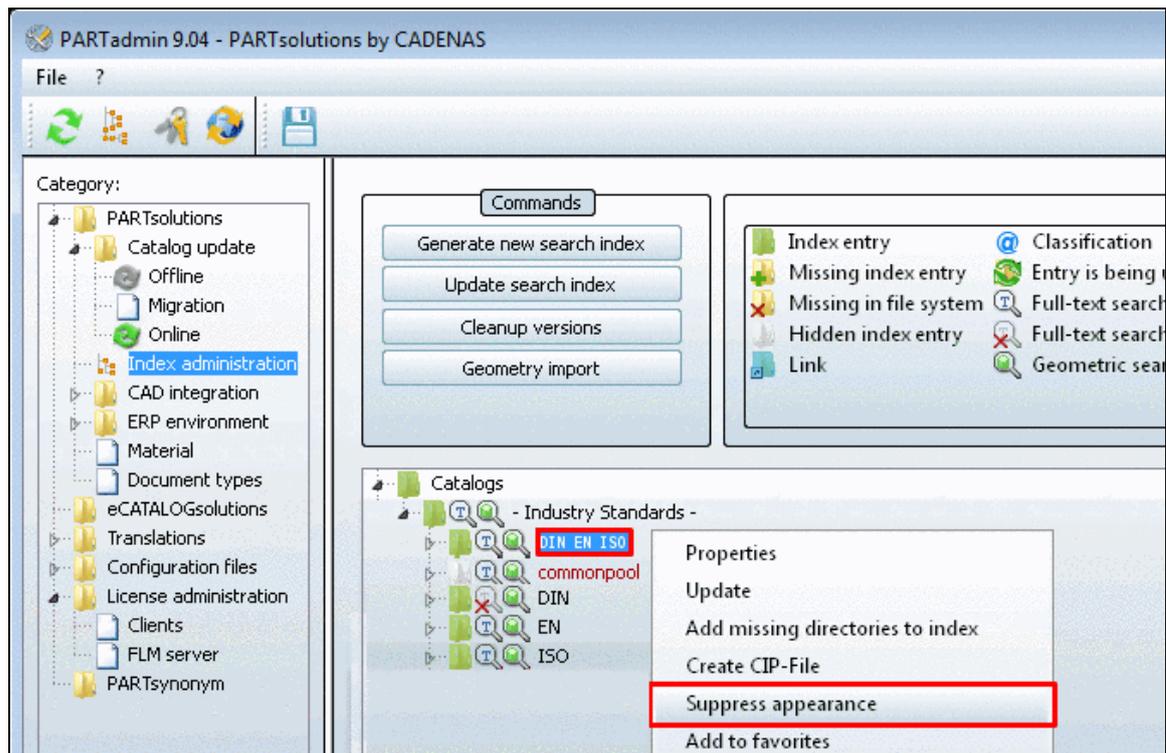
You can find the Link catalog on the installation DVD under ...catalogs\additional\norm\_din\_en\_iso.cip.

**Note**

Depending on the amount of lines to update in the LinkDB and the database type, the installation may take some time!

**8. Hide catalogs**

Either hide the DIN, EN, ISO catalogs, or the Link-DIN\_EN\_ISO catalog.



PARTAdmin -> Category Index administration -> Context menu "DIN EN ISO" Suppress appearance

**9. Result**

The new V9 catalogs are linked to the old ERP data.

The following image shows the **Part view** in the **PARTdataManager**.

The screenshot shows the PARTdataManager 9.02 interface. The main window displays a table with the following data:

|    |         | ERP_PDM_NUMBER<br>ERP-Number | MAT_NAME<br>Material | * ACTIVE_STATE<br>Active State | * REQUESTED_STATE<br>Requested State | D<br>Gewindene... | Gev |
|----|---------|------------------------------|----------------------|--------------------------------|--------------------------------------|-------------------|-----|
| 37 | M16     | NB8900699                    | NTBW001              | Locked                         | Updated                              | 16.000            |     |
| 38 | M16     | NB8900717                    | NTBW002              | Locked                         | Updated                              | 16.000            |     |
| 39 | M16x1.5 |                              |                      |                                |                                      | 16.000            |     |
| 40 | M16x1.5 | NB8900700                    | NTBW001              | Locked                         | Updated                              | 16.000            |     |
| 41 | M16x1.5 | NB8900718                    | NTBW002              | Locked                         | Updated                              | 16.000            |     |
| 42 | M18     |                              |                      |                                |                                      | 18.000            |     |

PARTsolutions V9.02 (or higher) with the original LinkDB data

### 28.37. Replace\_std.cfg - Adjust paths after Update

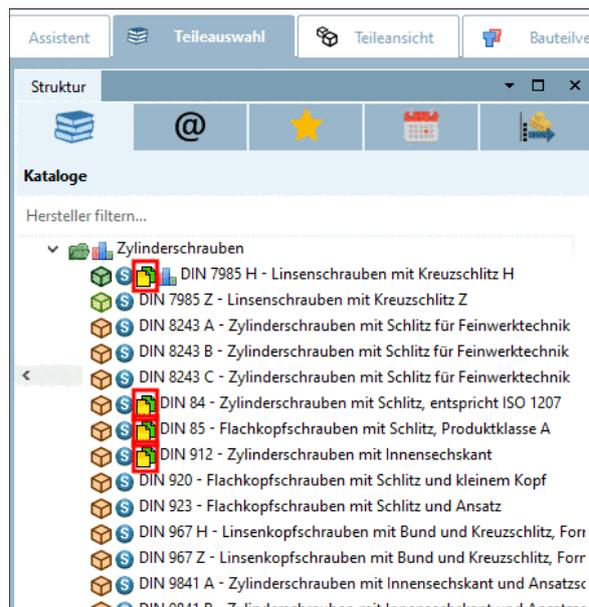
In the configuration file `replace_std.cfg` replacement projects can be specified.

Example: DIN 912 is replaced by ISO 4762.

| SECTION                                                             | KEYS                 | VALUE                                                                           |
|---------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------|
| <code>norm/din_en_iso/schrauben/zyinderschrauben/din_912.prj</code> | ALLOW_OLD            | 0 or 1                                                                          |
| <code>norm/din_en_iso/schrauben/zyinderschrauben/din_912.prj</code> | E X -<br>PORT_OLD    | 0 or 1                                                                          |
| <code>norm/din_en_iso/schrauben/zyinderschrauben/din_912.prj</code> | C R E -<br>ATENR_OLD | 0 or 1                                                                          |
| <code>norm/din_en_iso/schrauben/zyinderschrauben/din_912.prj</code> | NEW1                 | <code>norm/ din_en_iso/ schrauben/ zyinderschrauben/ din_en_iso_4762.prj</code> |
| <code>norm/din_en_iso/schrauben/zyinderschrauben/din_912.prj</code> | NEW2                 | Further projects to be listed can be stated. These are incremented with NEWx.   |
| <code>norm/din_en_iso/schrauben/zyinderschrauben/din_912.prj</code> | NEW3                 | Another project                                                                 |

In PARTdataManager these projects are marked by an icon.

|                                                                                   |                                                                                                 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  | Obsolete standard without substitution                                                          |
|  | Obsolete standard replaced by minimum one other part family                                     |
|  | Obsolete standard replaced by minimum one other part family and the obsolete standard is locked |



Icons - Index tree

After an **update from V8 to higher version** it can be the case, that the **path statements** in the configuration file are **not correctly anymore**. Then the script file `migrate_replace_std_v8_v9.vbb` can be used, in order to adjust the paths in the configuration file `replace_std.cfg`.

#### Field of application for the script

The script can be used in customization projects, where own standard catalogs are used.

#### What does the script effect?

The script reads in the old `replace_std.cfg` and compares the entries with the current catalog status, in order to check, whether the paths under SECTION and under VALUE are correctly for each line SECTION-NEW1, SECTION-NEW2, etc.

If not, then it is searched for the project names. According to the found correct paths a new configuration file `replace_std_updated.cfg` is created.

Furthermore a log file `replace_std_updated.log` is created. It contains a respective entry for each line:

The `.log` file is configured as tabstop separated CSV file and contains the columns "status", "old" and "new".

The following values for the column "status" are possible:

- still OK
- updated
- noMatchFound

After the script has finished, you can check with the help of the log file, which paths have not been found, etc.

The script is not available in the installation. If needed please contact the CADENAS Consulting team.

Also see Section 1.7.3.3, "replace\_std.cfg" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 28.38. CADENAS\_LANGUAGE

Concerning language settings there are some changes for V9:

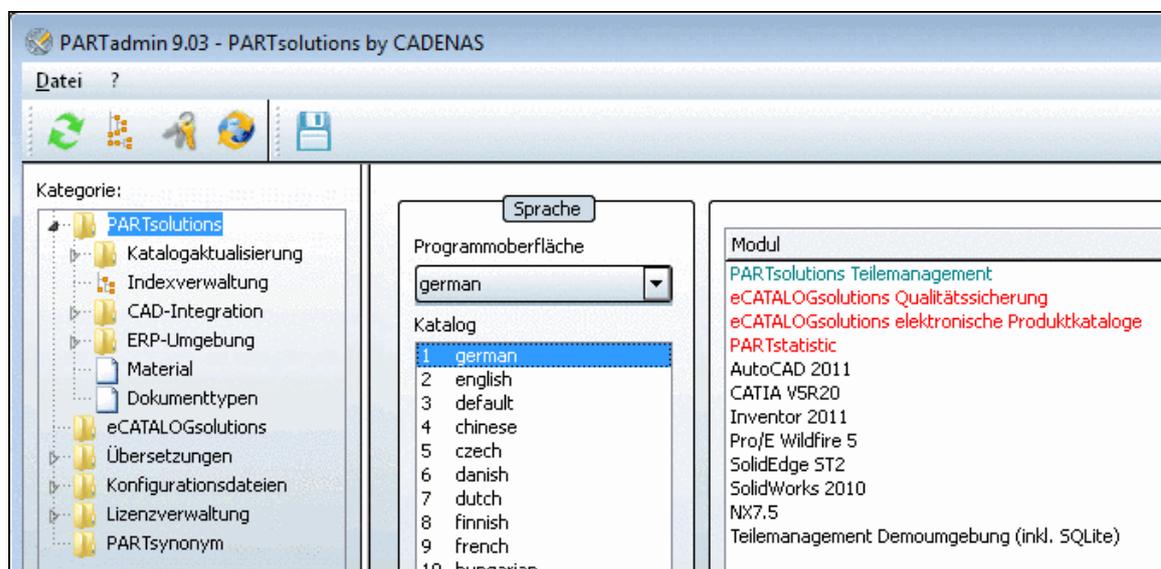
1. You can set the language for the **Graphical user interface** and the **Catalog** differently!
2. For the language selection the behavior of PARTadmin has changed with PARTsolutions version 9:

Up to now PARTadmin wrote to the environment variable \$CADENAS\_LANGUAGE.

Now with version 9 PARTadmin writes to \$CADENAS\_USER/partsolu.cfg. (\$CADENAS\_LANGUAGE can be used further on - if explicitly desired. The different priorities are listed under point 3.)

By this change users without PARTsolutions administration rights (and operation system administration rights) can perform language settings at the Client computer.

PARTadmin can be started without administration rights.



3. In the following all components, which affect the language settings, are listed:
  - a. start.env (not used by default)
  - b. Environment variable (not used by default)
  - c. Registry entry (not used by default)
  - d. \$CADENAS\_USER/partsolu.cfg
  - e. Operation system local

**Important:** If there are any entries or variables set concerning point 1-3, these have to be removed, in order for the language setting to be properly working.

More information on this is found under Section 1.3.1, "Language selection" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## 28.39. Access privileges

- **Edit configuration files**

In order to edit configuration files in PARTadmin under WIN7 or VISTA, PARTadmin has to be executed as Administrator.

Exception: Access to \$CADENAS\_USER is also given without Administration rights.

Example: Language settings for GUI or catalog language (see Section 1.3.1, "Language selection" in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*)

- **Not installed Admin modules or limited rights**

Please regard on user clients that administration modules such as PARTlinkManager and PARTAdmin are not installed or limit access rights via Windows privileges!

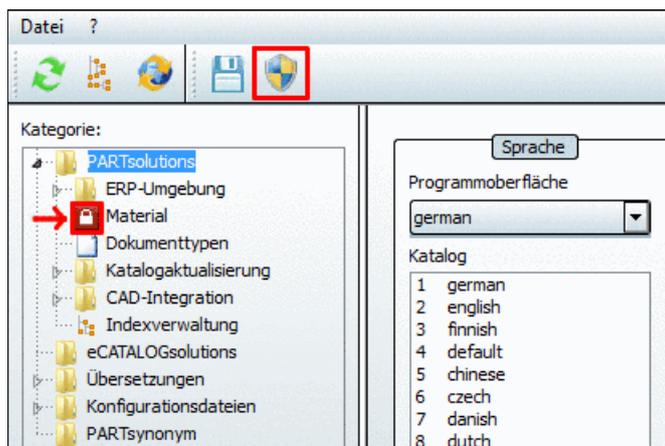
- In some catalogs Administration privileges are mandatory.

### Note

Access on files, under \$CADENAS\_USER, is possible without Admin privileges as well.

So **language settings** can be performed without Admin privileges.

In certain cases you can also recognize missing privileges at the **lock symbol**.



The figure exemplarily shows PARTAdmin with limited access privileges.

- If, in the toolbar, the icon  is displayed, this signalizes that an Administration module such as PARTAdmin or PARTlinkManager has not been started as Administrator. By clicking on the icon the module is restarted - this time with Administration privileges.

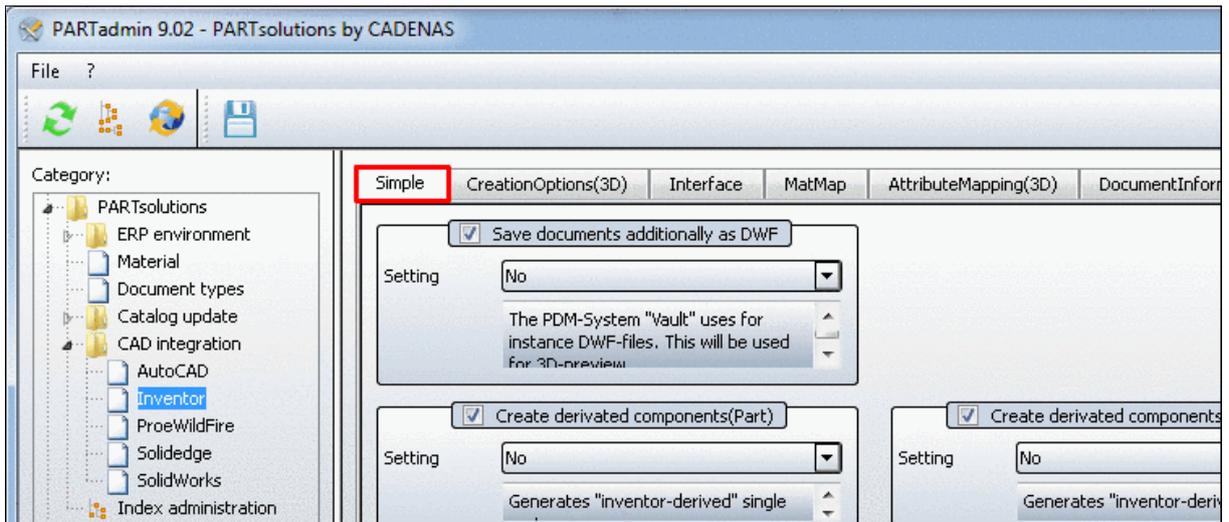
### Note

The icon is only then displayed, when the UAC mode is activated.

## 28.40. CAD configuration

All settings for CAD systems are based on configuration files, which are managed via the module **PARTAdmin**.

Syntax differences between the different CAD systems have mostly been standardized.



The figure shows the Category "CAD integration" exemplified by the selection "SolidWorks"

Detailed information on this is found under Chapter 2, PARTsolutions - CAD Integration - Administration in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

## Chapter 29. FAQ

### 29.1. Help

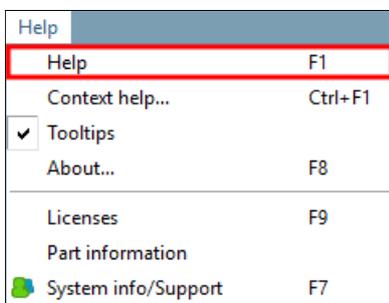
#### Call

In **PARTsolutions applications**, call the **program help** via **Help** menu or **F1**, in **CAD system**, in PARTsolutions menu or toolbar by clicking on .

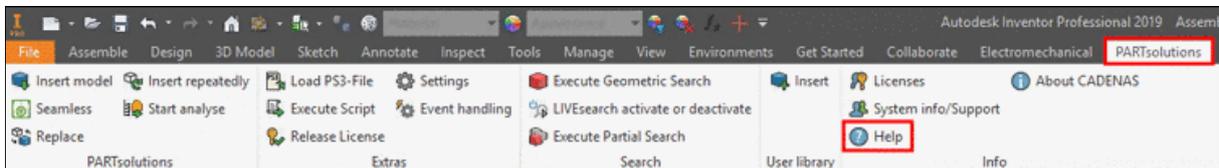
#### Note

All manuals available under `$CADENAS/proghelp/"language"` are loaded.

A search is performed encompassing ALL manuals.



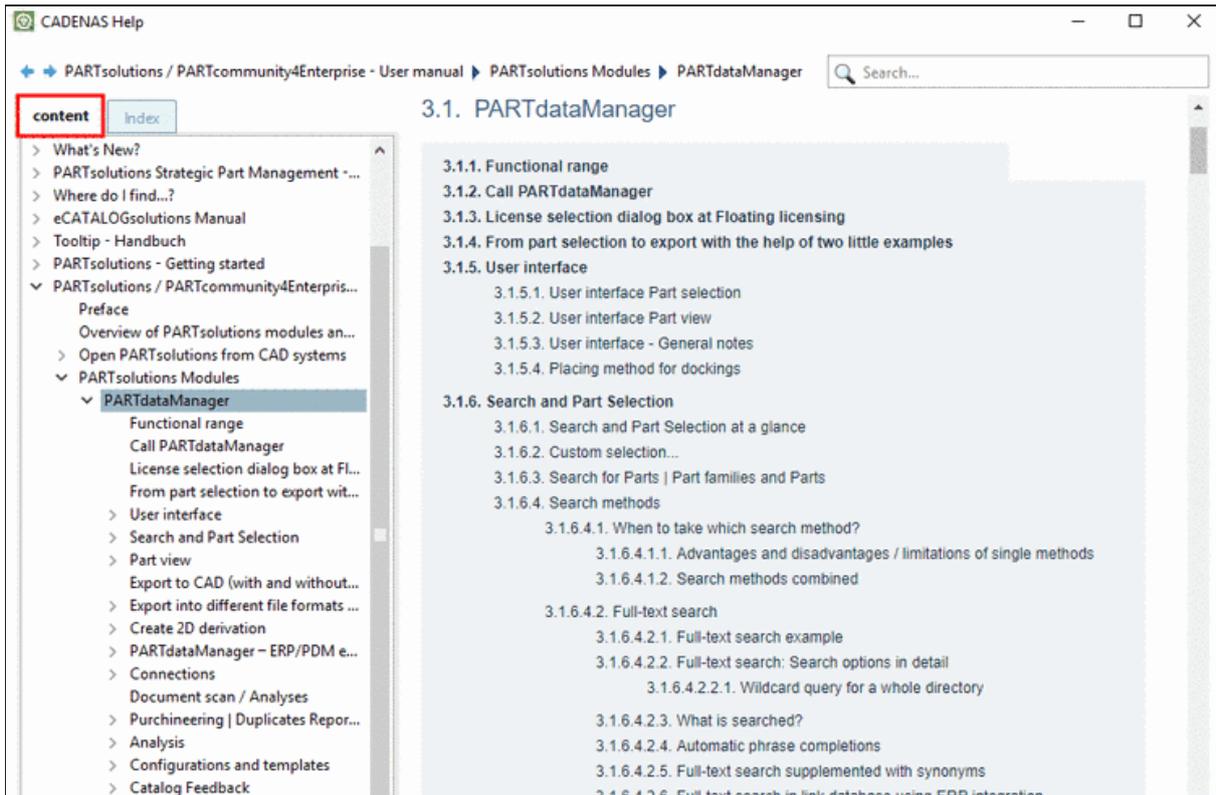
PARTsolutions application -> Help menu



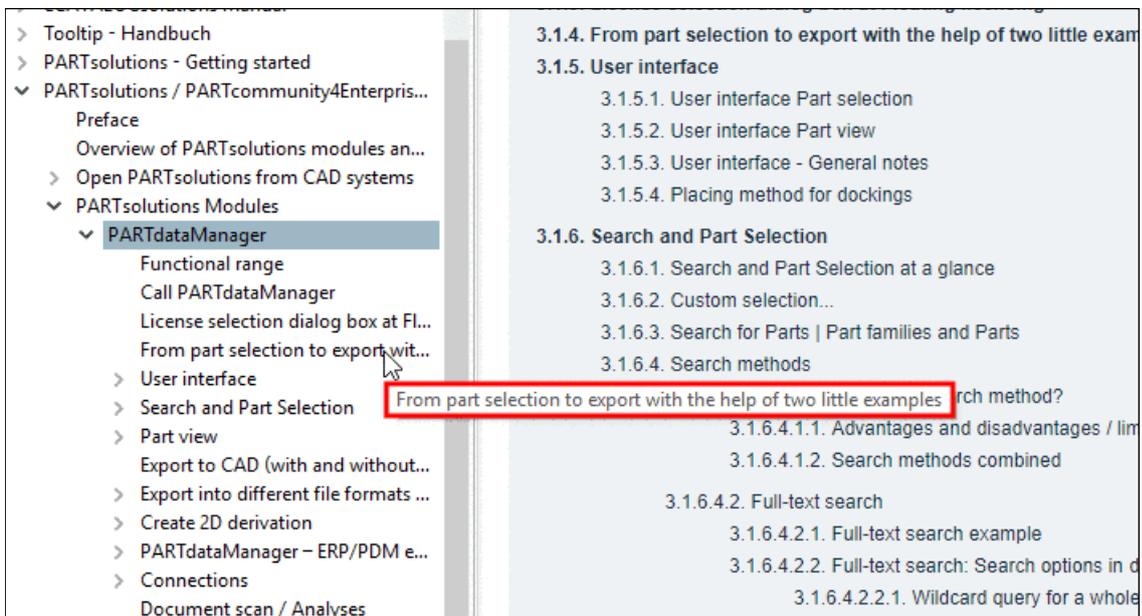
CAD system -> Help button

#### Table of contents

When opening the help, on the left, the tabbed page **Content** is displayed by default, so that you can open all books and subchapters specifically.

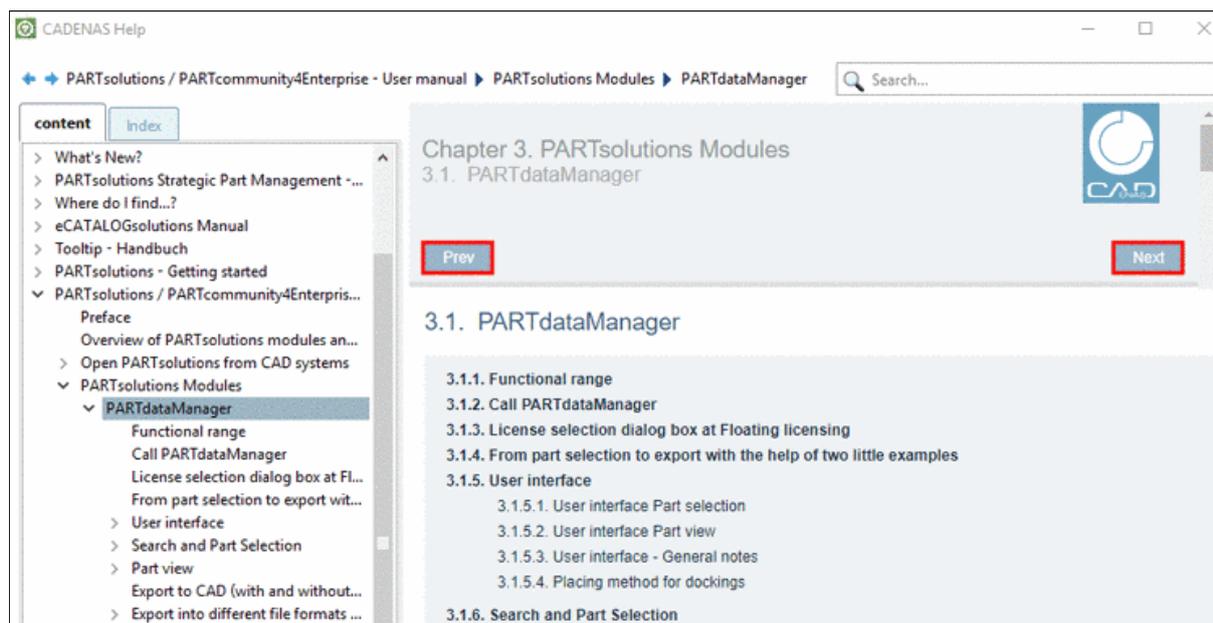


In the table of content, cut titles (recognizable by ...) are displayed in full length in the tooltip.



## Navigation

You can move **back and forth** via the buttons [Prev](#) and [Next](#).



Moving **back** and **forth** according to the sequence of called pages is possible via the **blue arrow keys** ← → at the top beside the search path display.

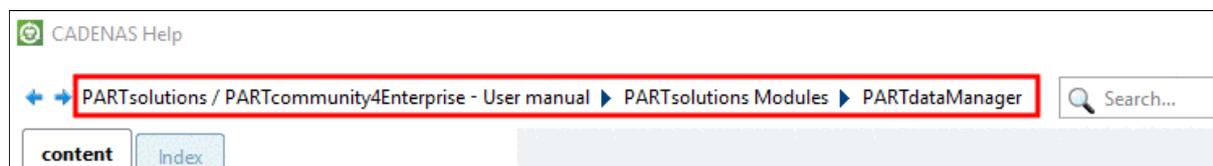


**Up** brings you to the hierarchically next-highest chapter (the button is found at page end).

**Home** brings you on the first page of the respective manual (the button is found at page end).

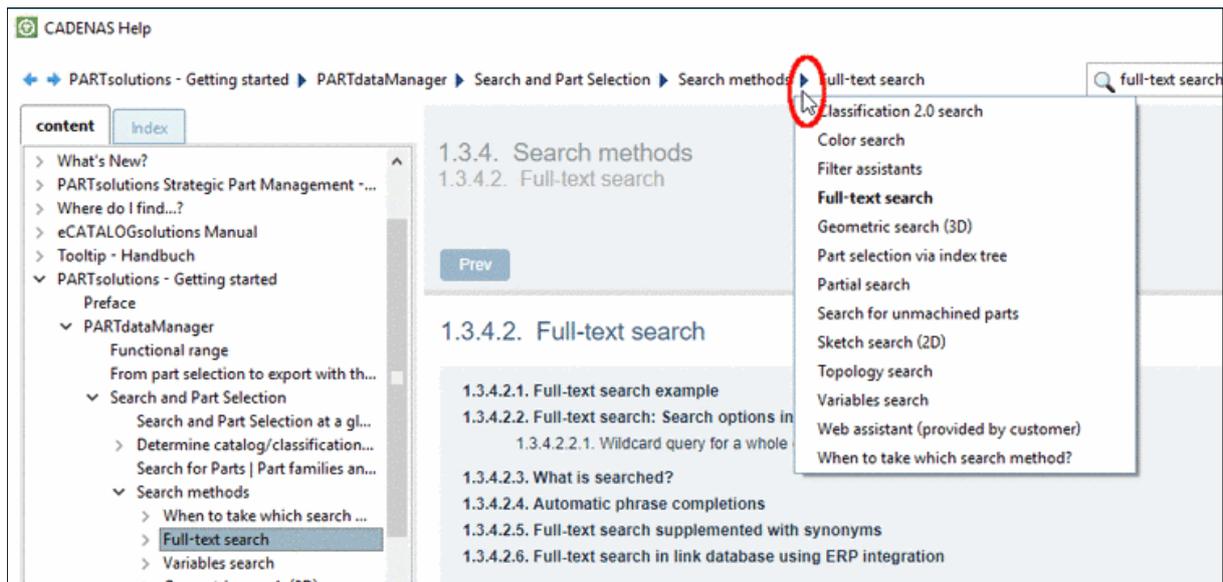
## Search path (Breadcrumbs)

The search path shows where you are at the moment. This is especially helpful when using links between different manuals.



The path components are links, so that you can directly jump into the respective chapter.

When clicking on an arrow ► in the search path, all chapters below the chosen item are listed.



## Index

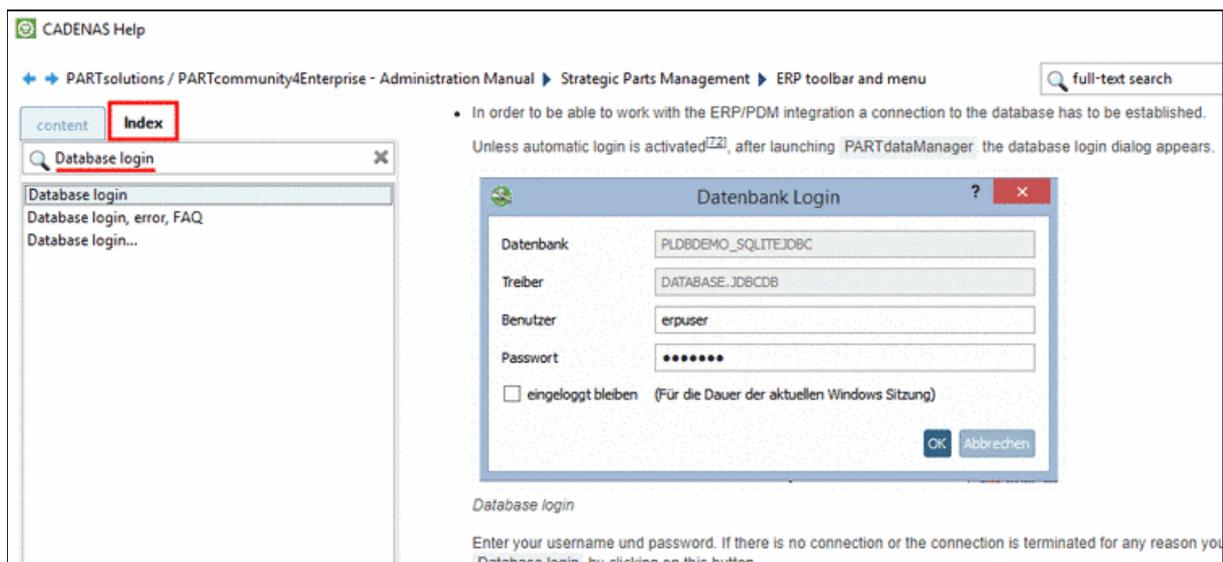
You can switch anytime between tabbed pages **Content** and **Index**.

In the index view you will get an alphabetical listing of all index terms. Simply select the desired term, in order to display the respective help.

### Tip

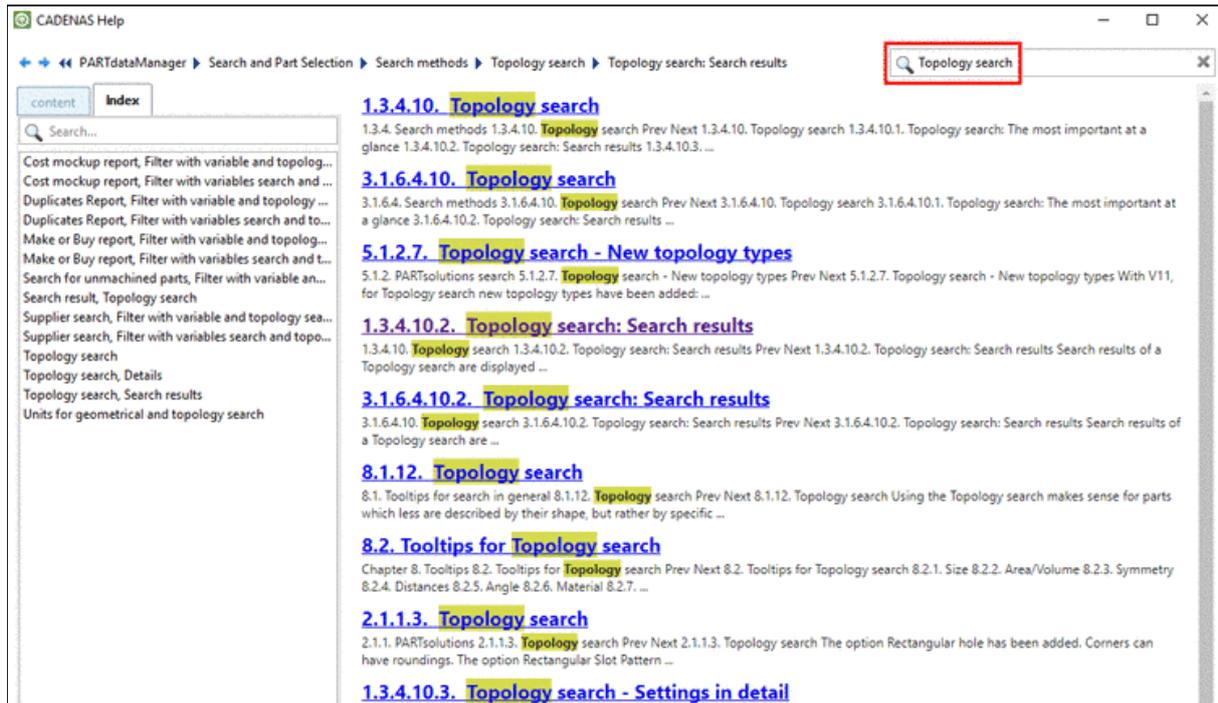
When selecting an entry and then typing the first character of a desired term, the display jumps to the first entry of the respective character.

As an alternative, search the index. In the input field **Search...**, enter the search term and start searching by clicking on the Return key.



## Search

In the input field **Search...**, enter the search term and start searching by clicking on the Return key.



On the main page, on the right, you can see hits found in the text. Click on any in order to load the respective page.

On the **Index** tabbed page, on the left, you can see found index terms. Once clicking on an index term, the respective page is loaded as well.

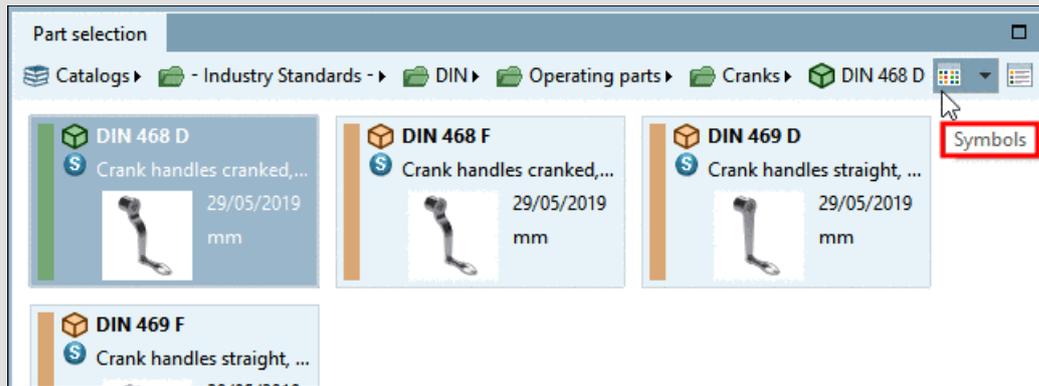
## Tip

- Basic **difference** between **Full-text search** (right) and **Index search** (left):  
The **Full-text search** (right) is a "fuzzy" search (similarity search). You will receive hits even if the search term was not exact. This may be desired or disturbing.  
If you want to perform an **exact search**, set the search term in **quotation marks**.  
Sometimes it's better to restrict the search term, in order not to exclude results unintentionally.  
For example, just use the core term or omit unimportant filler words:

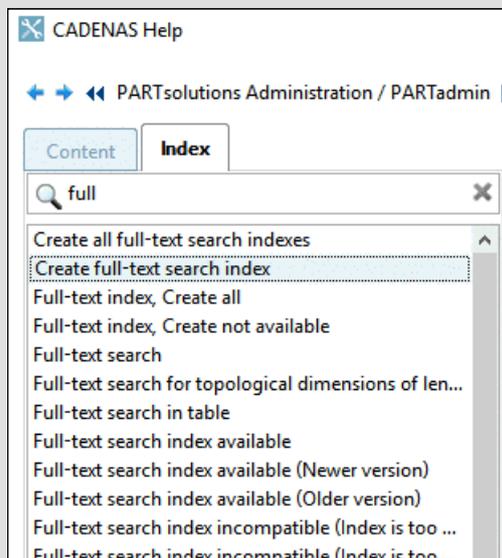


Here in the example, drop "part". Then you will find "2D comparison" in addition.

- For example, search with terms used in tooltips.



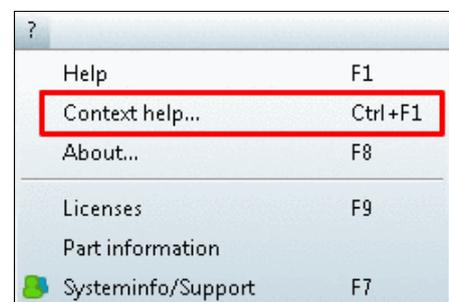
- In the **Index search**, always, exactly the entered term is used. Start searching by clicking the return key just after entering a few characters. You will receive hits if the search term is found *anywhere* in an indexed term.



## 29.2. Context help...

The context help enables directly jumping in the according chapter.

1. Click on the element with which you need help.
2. Then either press **Ctrl+F1** or click on the **Context help...** menu item.



Help menu

### Note

If no specific element has been marked, the help is loaded with the general chapter as with F1.

## Chapter 30. Appendix

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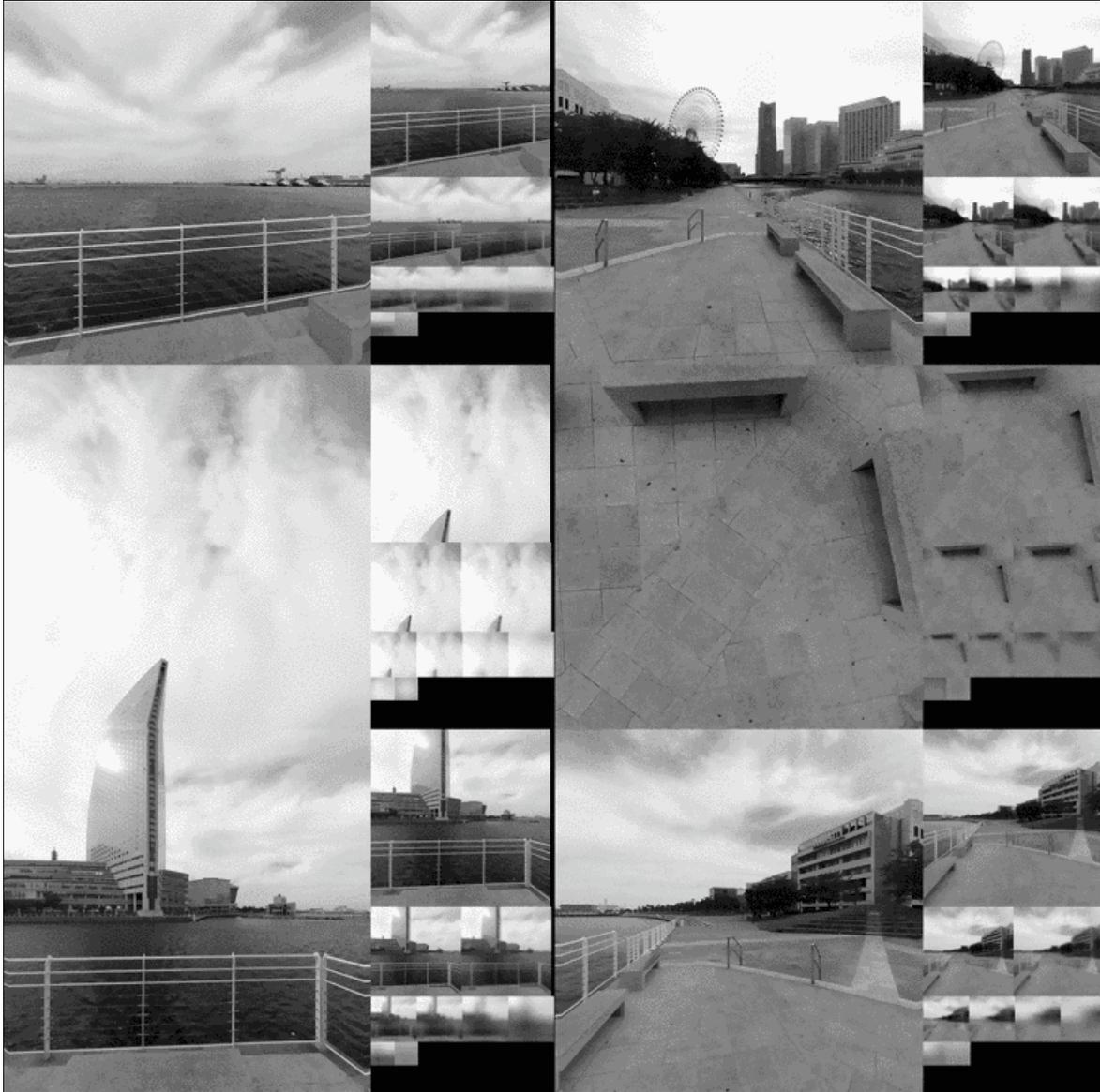
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Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124

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