

CAXperts *ClashManager*

Reference Guide



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1 Introduction

ClashManager provides high-level functions for PDS® interference checking. It has been developed to save time and money when clashes in a plant design have to be identified and solved.

ClashManager fully supports SmartPlant® Review version 5.0.1 or later, clashes can be examined directly in SmartPlant Review or MicroStation®. A new tool makes selecting viewing directions much easier while viewing in SmartPlant Review (ClashView-ControlCube).

ClashManager is the ideal software to identify large numbers of incorrect clashes and to approve them automatically. This makes it far easier for the user to identify real clashes. Depending on project extent and program configuration the number of collisions which have to be examined can be reduced by the factor 10 to 50.

Filter functions and detailed configuration options allow a preselection of clashes before visual examination takes place. Thus the number of collisions in a project can be reduced to a level which enables the user to examine and handle the remaining real clashes in the viewer.

A tabular representation with a wide range of filter functions considerably facilitates the detection of incorrect clashes. A graphical viewer makes things even easier and offers the chance to intervene immediately.

The software is closely integrated with PDS, which means that the results can be written back to PDS, where they can be used further. Already configured test mechanisms are stored and loaded with the next test procedure of the project. This substantially facilitates the finding of new collisions in the planning process. Likewise it is possible to cancel all changes and to restore the original status for all clashes as well as to delete the list of collisions in PDS.

The envelope builder and interference checker may also be run directly from **ClashManager**. Parallel batch processing increases speed at file building.

1.1 General conventions

This document contains many visual cues to help you understand the meaning of certain words or phrases. The use of different fonts for different types of information allows you to scan the document for key concepts or commands. Symbols help abbreviate and identify commonly used words, phrases, or groups of related information

Typefaces

Italic

Indicates a system response, which is an explanation of what the software is doing. For example,

The text is placed in the viewing plane.

Bold

Indicates a command name, parameter name, or dialog box title.

Command paths are shown using an arrow between command names. For example,

Choose **File** → **Open** to load a new file.

Sans serif

Indicates a system prompt or message, which requires an action be taken by the user. For example,

Select first segment of alignment

Normal typewriter

Indicates an actual file or directory name. For example,

The ASCII report is stored in the `layout.rpt` file.




Bold typewriter

Indicates what you literally type in. For example,

Key in **original.dat** to load the ASCII file.

Symbols

This document uses the following symbols to identify special information:

-  Note – important supplemental information.
-  Map or path – shows you how to get to a specific command or form.
-  More information – indicates there is additional or related information.

2 Installation

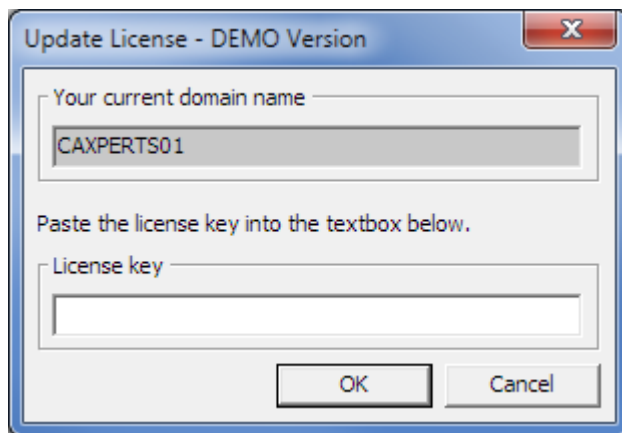
2.1 Setup

Requirements:

- Supported operating systems:
 - Microsoft Windows XP
 - Microsoft Windows Server 2003
 - Microsoft Windows Vista
 - Microsoft Windows 7
- PDS Version 6.4 or later
- MicroStation SE or later
- Microsoft Excel 2000 or later
- SmartPlant Review 5.0.1 or later


2.2 Licence

Once the setup has been completed and the program is started, a licence key will be requested as shown below.



CAXperts will need your **Current domain name** to issue a licence key.

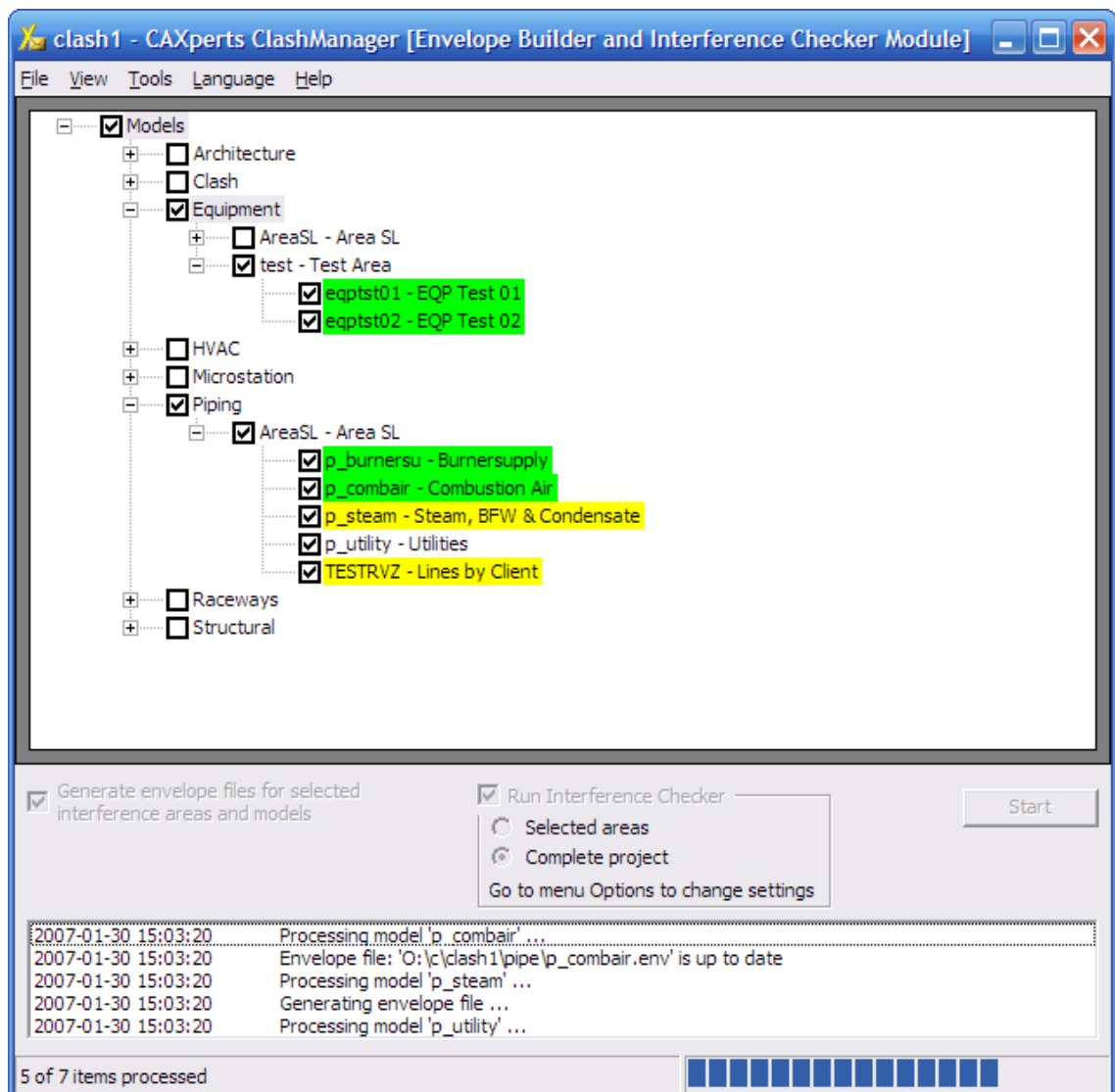
Please place this licence key into the **Licence key** text box and press **OK**.

 Note: Without a valid licence key the software will run in demo mode.

3 Envelope Builder & Interference Checker module

3.1 Envelope Builder

The envelope builder receives attributes of the elements from the database and generates envelope files (*.env). Calculation of envelopes is a requirement for collision detection.




Envelope files which are already up-to-date will be ignored during an envelope builder run. All other envelope files will be generated anew. This is especially useful for large projects (see also PDS documentation from Intergraph)

Choose all the models and interference areas in the **Envelope Builder & Interference Checker** window for which you want to generate envelope files. This is the colour mark-up for the processed items:

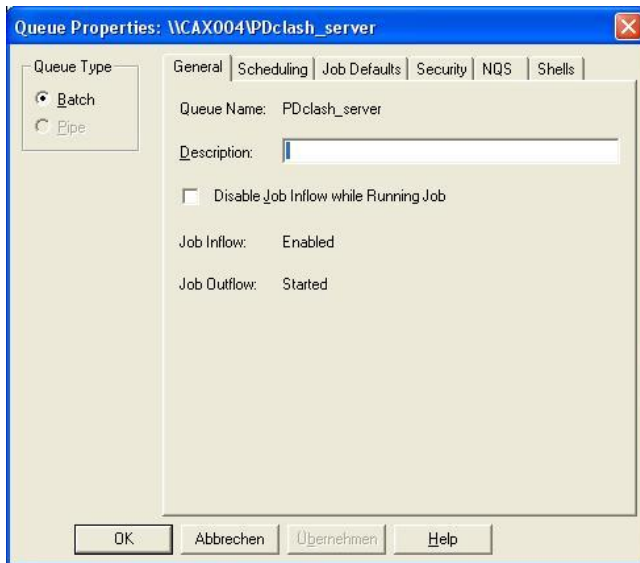
- **Green** envelope files are up to date or batch process was successful

- **Yellow** data is being updated at the moment
- **Red** envelope builder process has finished unsuccessfully


 Note – you can drop a plain ASCII file with model and drawing names (separated by line breaks) onto the tree view to automatically tick the check boxes of these models/drawings. Wildcards (*, ?) may be used to define the model/drawing names in the ASCII file.

The **Start** button starts the envelope generation and interference checking.

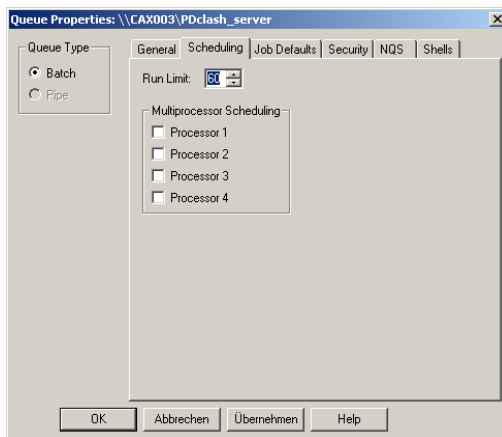
In Intergraph Batch Manager, **Disable Job Inflow while Running Job** may not be ticked (if it is ticked it would block sending of several jobs at once):



Envelope Builder processes may work “parallel”. **Run Limit** is a program-defined limit, a legally defined limit is the amount of available licences. We recommend that you set the scheduling properties for the “pdclash_server” queue in Intergraph Batch Manager to a value of up to 60 parallel processes to speed up the envelope building.

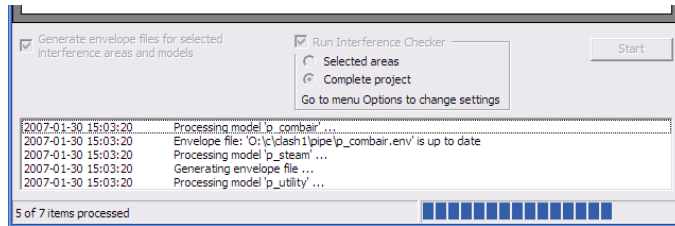
 Note – The number of parallel processes is depending on the number of available PDS licences.

Setting of queue properties in Batch Manager/pdclash_server:



3.2 Interference Checker

The Interference Checker receives the attributes from the files created by Envelope Builder and calculates the collisions (see also PDS documentation from Intergraph).



PDS collision detection after envelope generation can be activated by ticking the **Run Interference Checker** checkbox. Only if both processes are finished successfully for all elements, an effective analysis in **ClashManager** is possible. The **Selected areas** switch limits the Interference Checker run on the areas selected. If **Complete project** is switched on, the check-up of the whole project can be very time-consuming.

3.3 Menu bar

File

Select PDS project

Load settings from file

Load/import options from a configuration file.

Save settings to file

Save/export options to a configuration file.

Switch to approval module...

Click on **Switch to approval module...** to view and approve/unapprove clashes (see chapter **Approval module** below)

Most recently used projects

Shows the most recently used projects which can be loaded directly (if still available).

Exit

Terminates **ClashManager**.

View

Event window

Toggles the display of the event window.

Tools

Report status of envelope files for selected models

Generates an Excel report for all selected models with envelope file status (green – up to date, yellow – not up to date, red – envelope file is missing).

Discipline	Area	Model	Status	Description	Additional information
Piping	AreaSL	TESTRVZ	Warning	Envelope file: 'O:\c\clash1\pipe\testrvz.env' is out of date	
Piping	AreaSL	p_burners	OK	Envelope file: 'O:\c\clash1\pipe\p_burnersu.env' is up to date	
Piping	AreaSL	p_combair	OK	Envelope file: 'O:\c\clash1\pipe\p_combair.env' is up to date	
Piping	AreaSL	p_steam	Warning	Envelope file: 'O:\c\clash1\pipe\p_steam.env' is out of date	
Piping	AreaSL	p_utility	OK	Envelope file: 'O:\c\clash1\pipe\p_utility.env' is up to date	
Equipment	test	eqptst01	OK	Envelope file: 'O:\c\clash1\eqp\eqptst01.env' is up to date	
Equipment	test	eqptst02	OK	Envelope file: 'O:\c\clash1\eqp\eqptst02.env' is up to date	

Clean history of all clashes in PDS

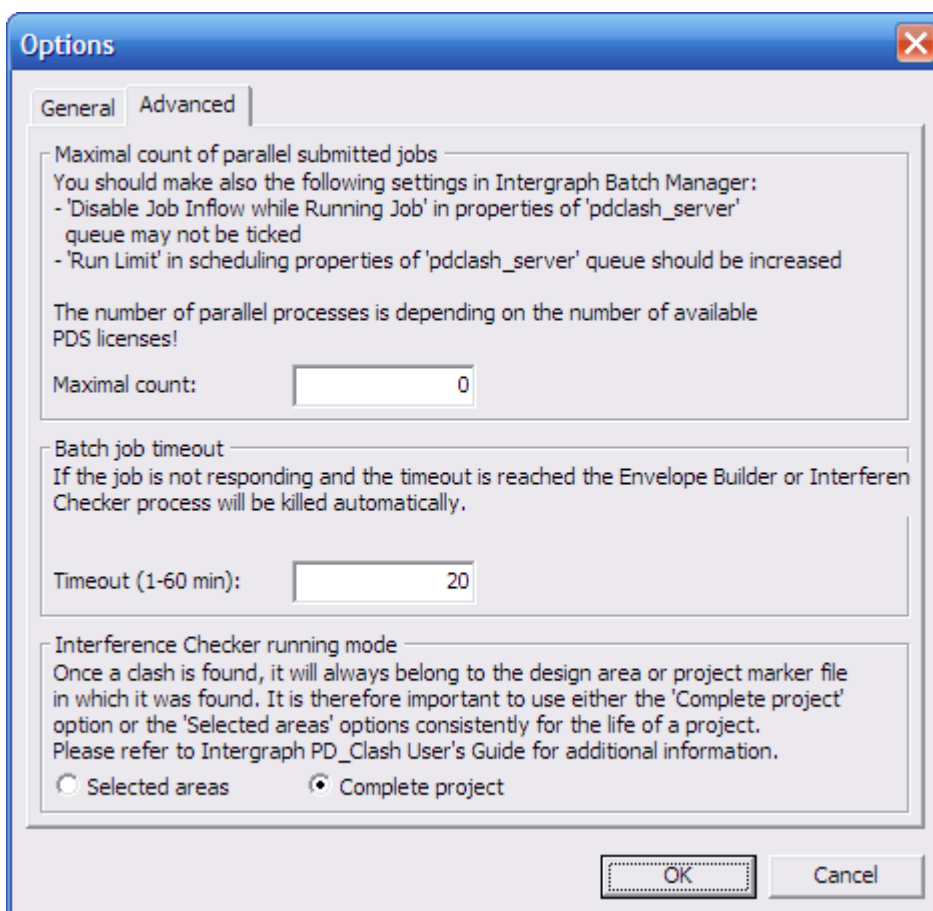
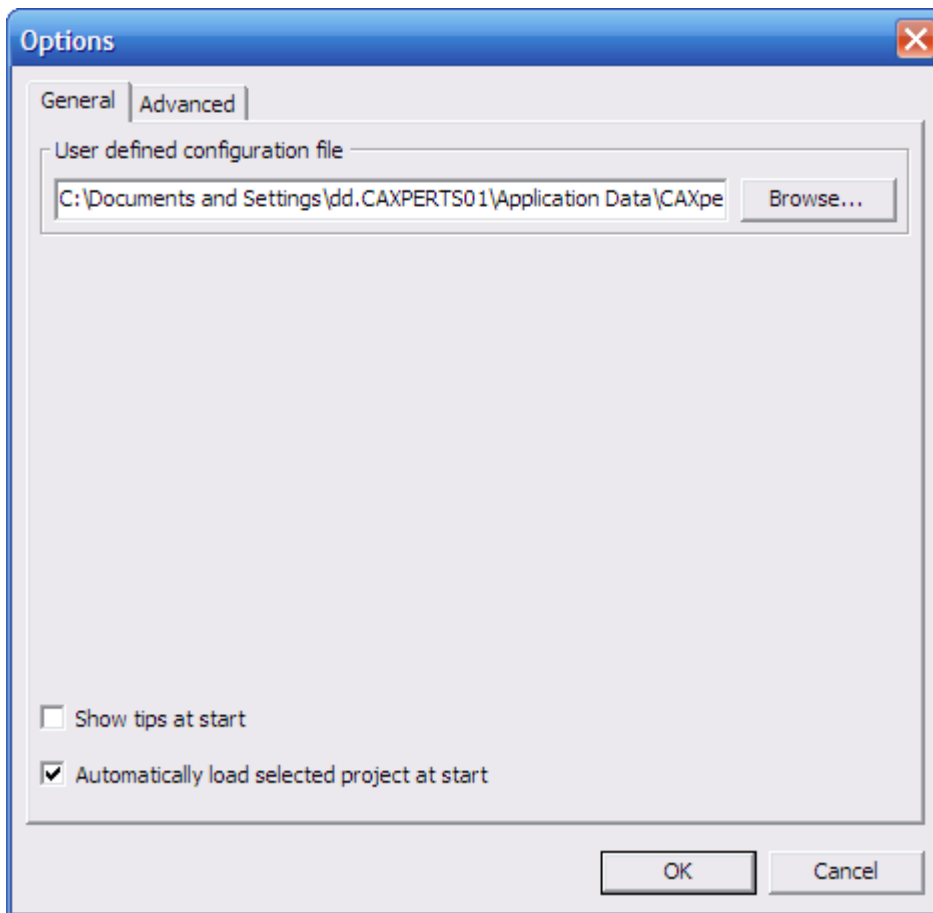
Cleans the Clash History Table (phtable_135). This speeds up loading and saving of clashes in **ClashManager**.

Clash Review History Information (phtable_135): One record per clash is created when it is reviewed after a run. Each time this clash is reviewed using **ClashManager**, the record in phtable_135 is updated. If the same clash is present on the next run of Interference Checker, a new record is created in phtable_135 with the same unique_clash_id. If a clash is never reviewed using **ClashManager**, no record will be created for this clash.

Delete all clashes from PDS

Deletes all clash entries from PDS database. **This is only required in the event of errors in PDS and should usually not be needed by the user.**

Options



You should also make the following settings in Intergraph Batch Manager:

- 'Disable Job Inflow while Running Job' in properties of 'pdclash_server' queue may not be ticked
- 'Run Limit' in scheduling properties of 'pdclash_server' queue should be increased. The number of parallel processes is depending on the number of available PDS licences!

If the job is not responding and the timeout is reached, the Envelope Builder or Interference Checker process will be killed automatically.

Once a clash is found, it will always belong to the design area or project marker file in which it was found. It is therefore important to use either the 'Complete project' option or the 'Selected areas' options consistently for the life of a project.

Please refer to Intergraph PD_Clash User's Guide for additional information.

Privilege manager

The **Privileges manager** allows you to lock functions for specific users/groups. The assignment of privileges is based on the Windows (domain) users and groups. This means that you do not have to establish a new privileges management system.

Group and user rights are linked by an OR operation: If a group has a certain privilege in **ClashManager**, every user in this group will have this privilege, even if this privilege is not explicitly stated in the settings for this user.

The access rights are stored in an Access database (**ClashManager.mdb**). This is located in the proj_file directory. The privileges are thus the same for all the projects in a proj_file.

Access to the Access database should be controlled using the Windows access rights.

Privilege manager is not available when the user works in offline mode of **ClashManager** (offline mode means that **ClashManager** has no connection with the PDS database of the project reviewed).

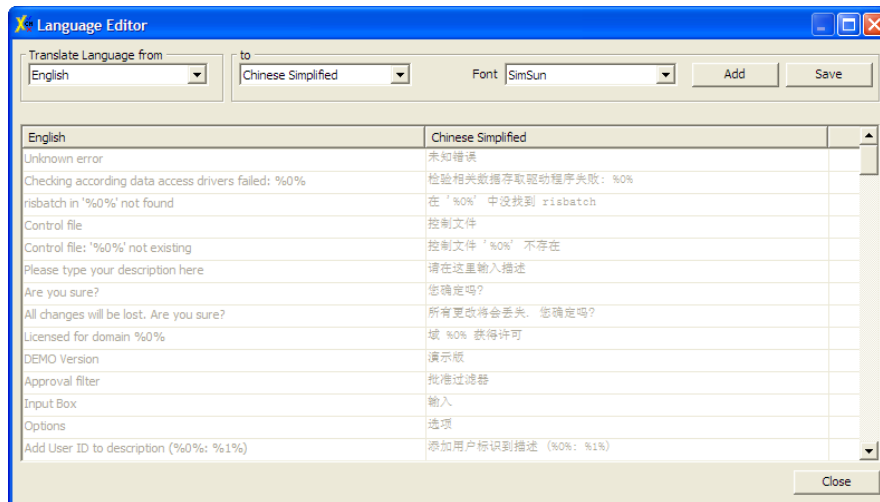
The default setting is "Allow" for every user and group.

Language

You can use the **Language** menu command to switch between languages at any time. You do not have to restart **ClashManager**. The most recent language setting is saved automatically.

Language editor

The **Language editor** allows you to translate the interface into other languages or to modify the existing translation tables.



- Select source language
- Select target language

Select the source and target language. You can then translate the individual items. If the required target language does not exist, you can add it by clicking the "Add" button. Save the completed translation by clicking the **Save** button.

Help

Contents

Opens the **ClashManager** online documentation (Contents tab).

Index

Opens the **ClashManager** online documentation (Index tab).

Search

Opens the **ClashManager** online documentation (Search tab).

Update licence

*See **Error! Reference source not found. Error! Reference source not found.***

About

About shows version and copyright information about the software.

4 Command line mode

The **ClashManager Envelope Builder & Interference Checker module** can also be started from command line. To do so, use the following syntax:

```
-----  
CAXperts ClashManager  
-----
```

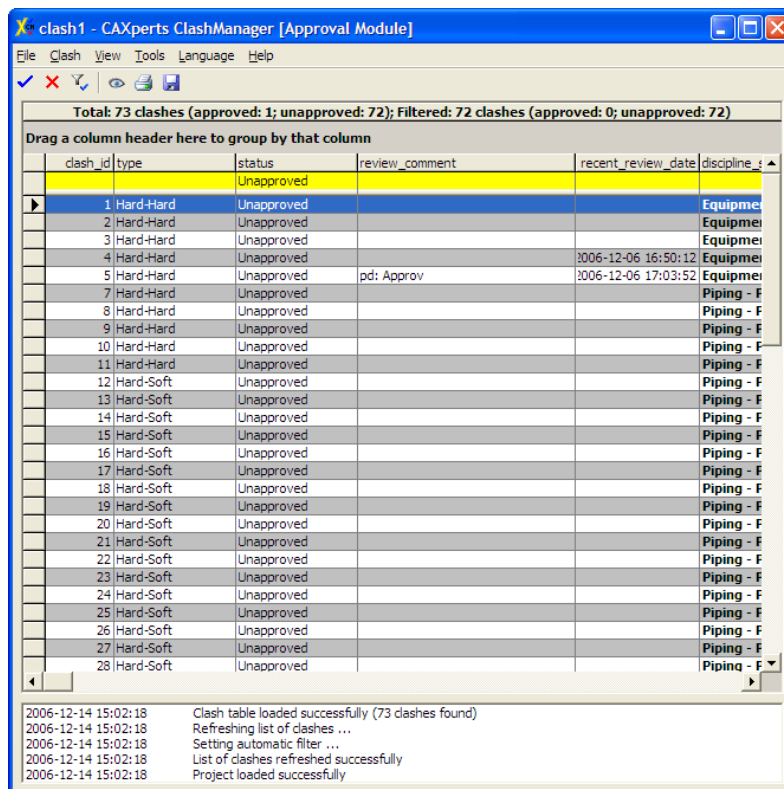
Command line arguments for **ClashManager.exe**:

```
/Mode mode - Running modes:  
            APPROVE - Approval module  
            CHECK - Envelope Builder and Interference  
                   Checker module  
  
/CMD control_file.cmd - Path to the control file.  
                       If control file is not defined, last  
                       control file will be used.  
  
/Project project_name - PDS-Project name.  
                       If project name is not defined, last  
                       project will be used.  
  
/Config config_file.ini - Configuration file.  
                        If not defined, last configuration file  
                        will be used.  
  
/batch - If defined Envelope Builder and  
        Interference Checker will be run in  
        batch mode
```

Example:

```
ClashManager.exe /Mode check /CMD control_file.cmd  
/Project project_name /Config config_file.ini /batch
```

5 Approval module




The main window consists of

- menu bar
- tool bar
- list of clashes
- log
- status bar


There are three modes to load a list of clashes:

1. from PDS
2. from an Access database (project schema available)
3. from an Access database (project schema not available = “offline mode”, also displayed in the window caption)

 Note – In offline mode, only Save to Microsoft Access database is available; additionally Show clashes in MicroStation, Automated generation of SmartPlant Review session and Privileges Manager will not be available.

The main window shows all clashes in the selected PDS project. The **Approve** and **Unapprove** buttons on the tool bar assign the corresponding status to the selected clashes.

The columns *review_comment* and *action_discipline* may be edited by the user.

 Note – To select more than one clash at once, press down the Ctrl key or Shift key like in Windows Explorer while clicking on the rows.

Order of columns

Column order may be changed by dragging & dropping column headers (left mouse button).


Sort

If you click on a column header, the list will be sorted depending on this column. Click once more to toggle between ascending and descending sort.

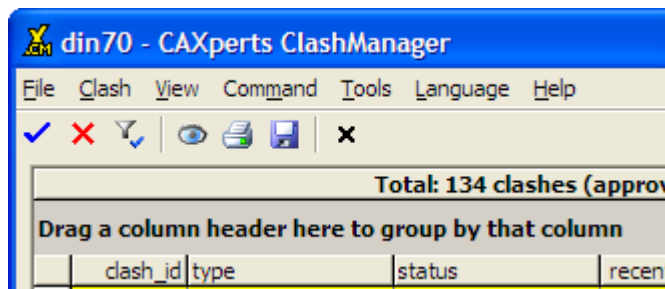
Filter

The yellow row is for entering filter conditions. The conditions may be selected from combo boxes or also be directly entered. All lines that do not match the conditions will be hidden.

Example: selecting **Piping** in column **discipline_a** and **Piping** in column **discipline_b** shows clashes between piping elements.

 Note – The filter can be reset by clearing the filter field

Group



You may drag & drop column headers to the dark grey area above to group by these columns. The order may be also changed via drag & drop.

Example: Use models (model_a) as first group and discipline (discipline_a) as second one.

discipline_a	discipline_b	area_a	model_a	model_status_a	comp_a	site_id_b	area_b
Equipment	Equipment	AreaSL	e_fcombair	Undefined	PROTECION SONIQL	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_stack	Undefined	CHEMINEE Y68400-C	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_stack	Undefined	CHEMINEE Y68400-C	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_stack	Undefined	CHEMINEE Y68400-C	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_silencer	Undefined	SILENCER	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_cabletra	Undefined	ANALYSENSCHRANK	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_airprehe	Undefined	CONNECT PIECE	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_oxidiser	Undefined	CHAMBRE DE COMBI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_oxidiser	Undefined	CHAMBRE DE COMBI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_oxidiser	Undefined	CHAMBRE DE COMBI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_oxidiser	Undefined	CHAMBRE DE COMBI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_oxidiser	Undefined	CHAMBRE DE COMBI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_oxidiser	Undefined	CHAMBRE DE COMBI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_cabletra	Undefined	CABLETRAY INSTR.	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_cabletra	Undefined	CABLE TRAY INSTR.	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_compres	Undefined	ROOF	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_fcombair	Undefined	PROTECION SONIQL	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_fcombair	Undefined	PROTECION SONIQL	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_plate	Undefined	TASSE	No SiteID	AreaSL
Equipment	Equipment	AreaSL	e_plate	Undefined	TRENCH	No SiteID	AreaSL
Equipment	Equipment	AreaSL	TESTRVZ	Undefined	PIPE-50 GSC FT U1C	No SiteID	AreaSL
Equipment	Equipment	AreaSL	TESTRVZ	Undefined	E90TLR-50 GSC FT U	No SiteID	AreaSL
Equipment	Equipment	AreaSL	TESTRVZ	Undefined	T-50 GSC FT U1CDI	No SiteID	AreaSL
Equipment	Equipment	AreaSL	TESTRVZ	Undefined	E90TLR-50 GSC FT U	No SiteID	AreaSL
Equipment	Equipment	AreaSL	TESTRVZ	Undefined	PIPE-50 GSC FT U1C	No SiteID	AreaSL
Equipment	Equipment	AreaSL	TESTRVZ	Undefined	PIPE-50 GSC FT U1C	No SiteID	AreaSL

More useful collision filters and sorts:

- Filter by status: Unapproved
All approved clashes (usually a large number) will be hidden.
- Filter by type of clash: If not already set in the approval filter, you could filter by “Hard-Hard”, most “real” collisions are of this type.

5.1 Menu bar

File

Load clashes from PDS

Load clashes from file

Loads a database file (*.mdb) which contains a **ClashManager** list of clashes.

- 📌 Note – You can review the clashes in these databases without having PDS installed on your system.
- 📌 Note – If a project schema from an Access database does not exist, the privilege manager will not be available and therefore no user restrictions will apply.

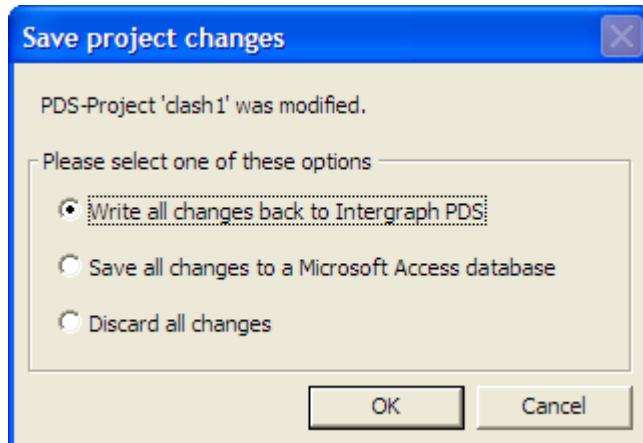
Load settings from file

Load/import options and approval filter settings from a configuration file.

Save settings to file

Save/export options and approval filter settings to a configuration file.

Save changes



Saves all changes from **ClashManager** to PDS or Access database. Changes will be only written back to PDS if the *recent_review_date* is newer as in the project schema.

Note – In offline mode, only **Save to Microsoft Access database** is available

Switch to Envelope Builder & Interference Checker module

Click on **Switch to Envelope Builder & Interference Checker...** to generate envelopes of models and detect collisions. The **Envelope Builder & Interference Checker** will show up (see chapter **Envelope Builder & Interference Checker** above)

Most recently used projects

Shows the most recently used projects which can be loaded directly (if still available).

Exit

Terminates **ClashManager**.

Clash

Approve selected clashes

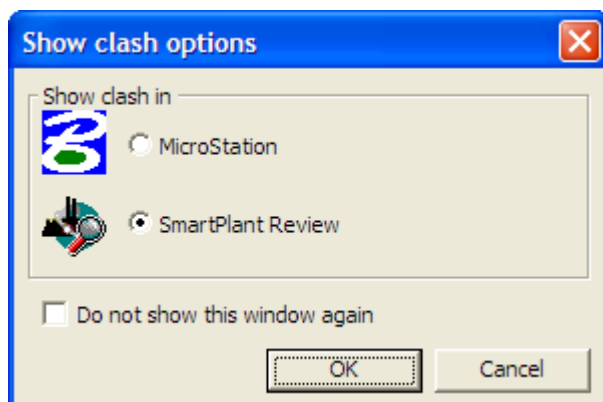
Sets the state of selected clashes to “Approved“ (same as “Approve False Clash” in PD_Shell Interference Approval Manager). If necessary, the description dialogue window will show up.


Unapprove selected clashes

Sets the state of selected clashes to “Unapproved“. If necessary, the description dialogue window will show up.

Show selected clash

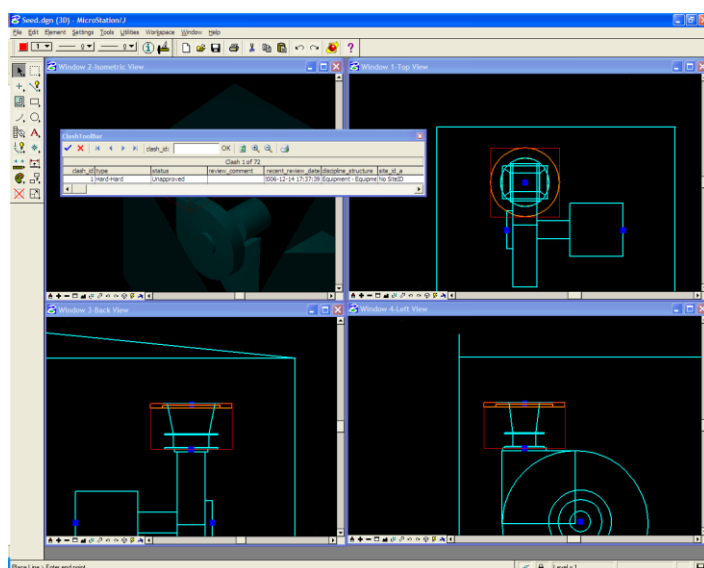
Shows a clash in MicroStation or SmartPlant Review, the viewer may be selected in this form:



 Note: Only standard PDS disciplines (piping, equipment, structural) can be shown in SmartPlant Review.

Select a clash and click on **Show selected clash** to display the clash in MicroStation or SmartPlant Review.

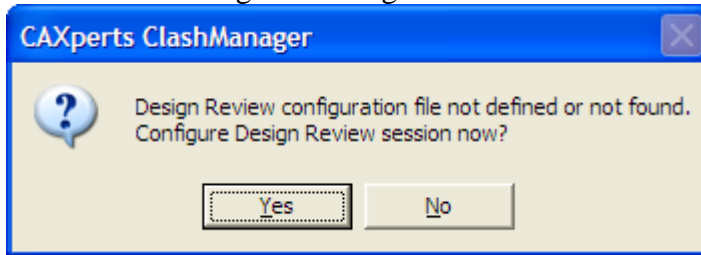
If MicroStation was selected, the display will look like this:



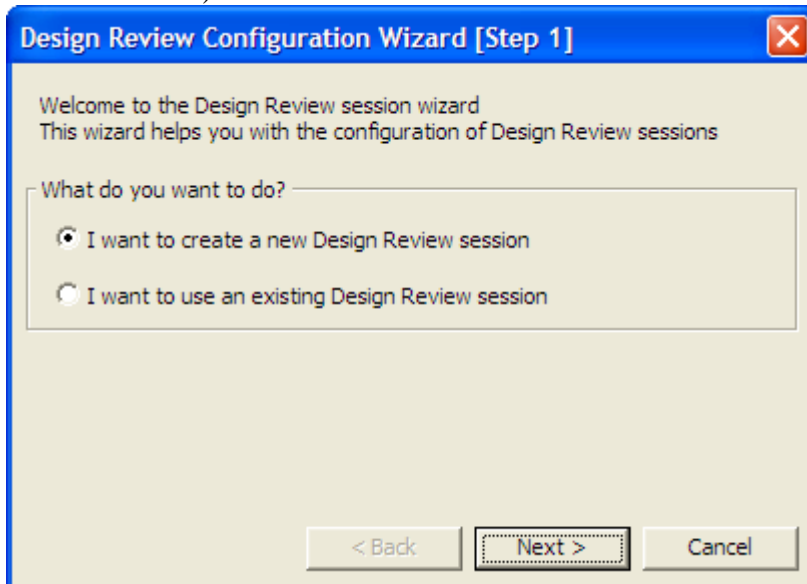
If SmartPlant Review was selected and the automated generation of the SmartPlant Review session is switched on (default) **ClashManager** will configure the session on-the-fly based on the clashes displayed in its list of clashes.

If no SmartPlant Review session configuration file is defined and the automated generation of the SmartPlant Review session is switched off, the **Configuration Wizard** will show up:

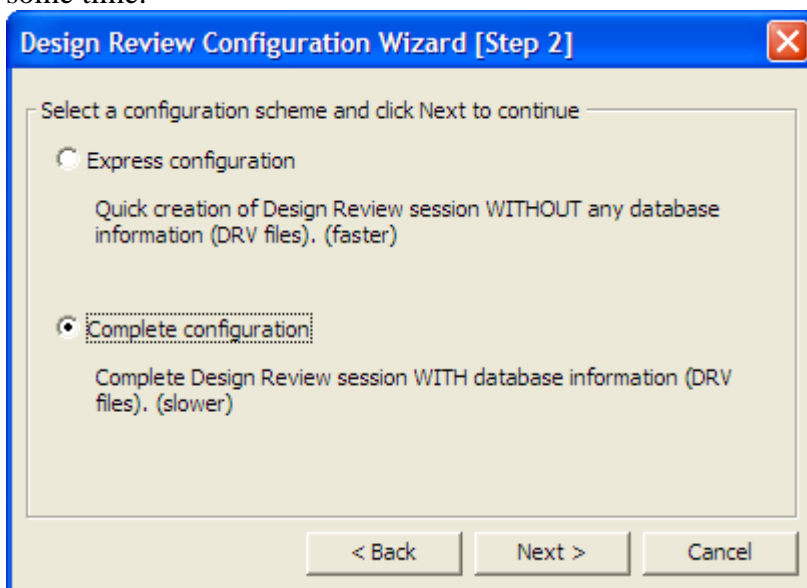
1. Click **Yes** to configure a Design Review session:



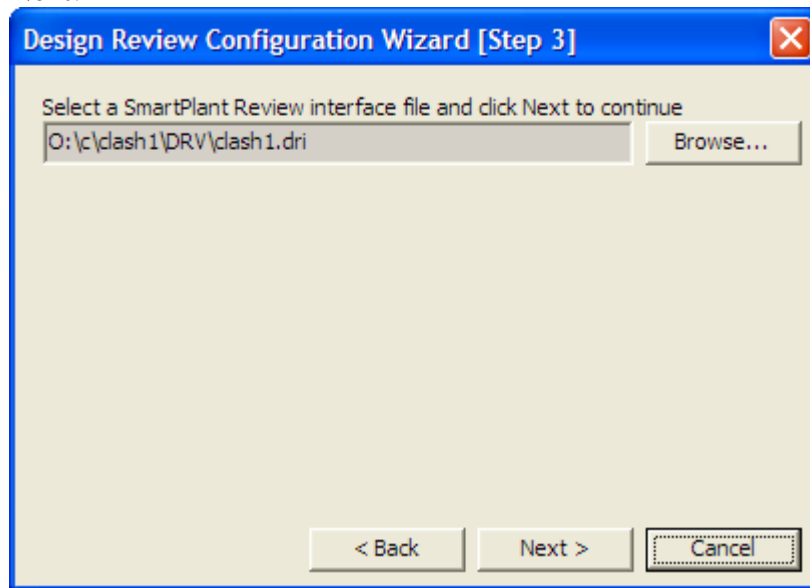
2. To create a new session, select the first option and click **Next** (to use an existing session tick the second option, click **Next**, select the session file and skip the rest of this enumerated list)



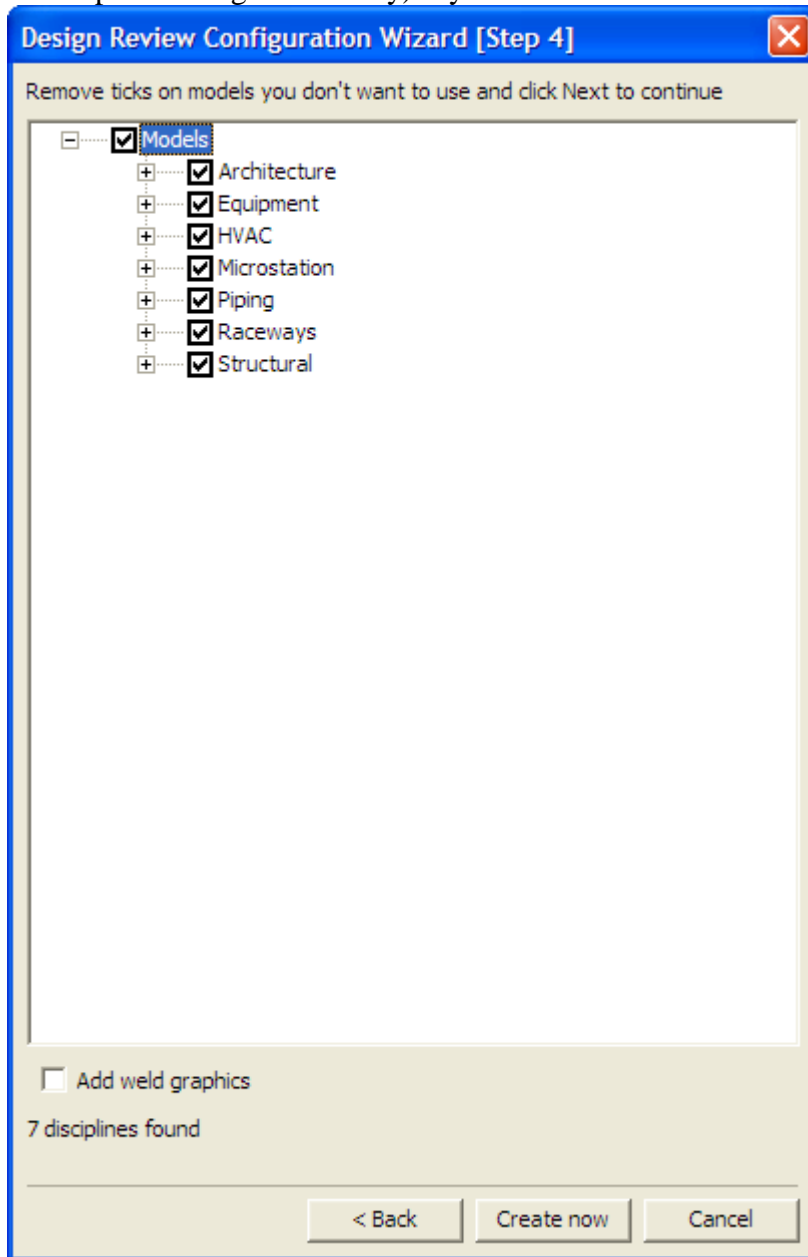
3. You may choose now between express or complete configuration. Complete configuration means that database information (DRV files) is generated, which may take some time.



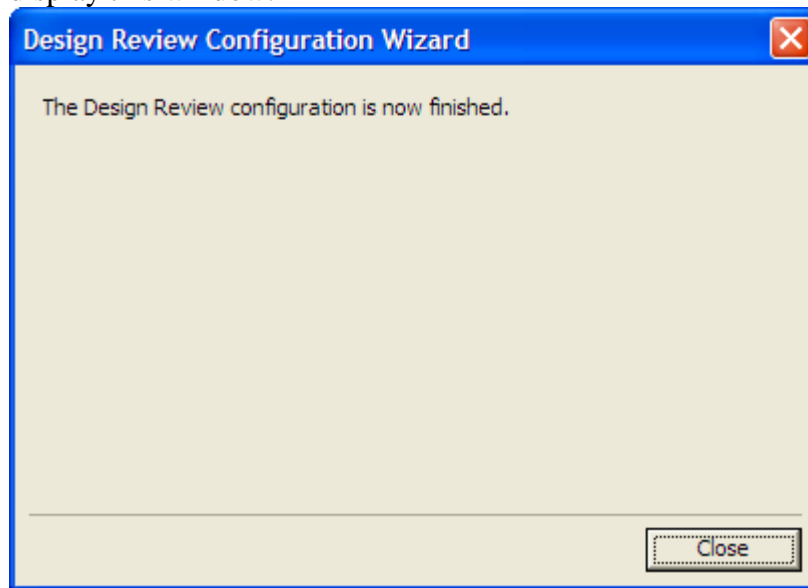
4. Select a SmartPlant Review interface file (using the **Browse...** button) and click **Next**:



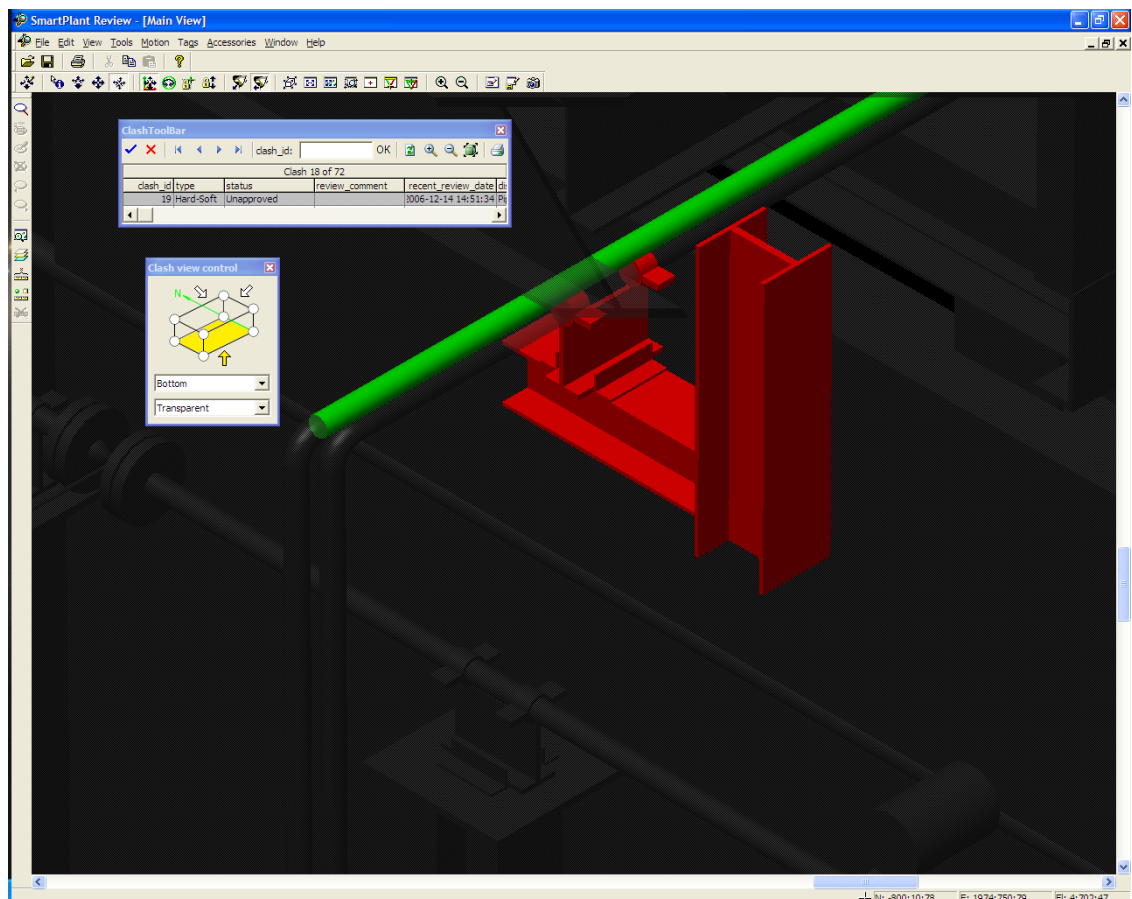
5. Remove ticks on models you don't want to use, tick **Add weld graphics** (available in complete configuration only) if you want to do so and click **Next**:



6. **ClashManager** will now configure the session (this may take some time) and finally display this window:



The Design Review session is now ready:



The main window will disappear and a toolbar showing a single row from the list of clashes will appear. The buttons on this toolbar allow you to navigate through the individual clashes from the clash list. Any selected clash will immediately be displayed in MicroStation or SmartPlant Review. The toolbar will always stay on top of all windows.

The toolbar shows these buttons:

- ✓ Approve selected clash
- ✗ Unapprove selected clash
- ⏪ Go to first clash
- ⏩ Go to previous clash
- ⏪ Go to next clash
- ⏩ Go to last clash
- clash_id textbox and **OK** button: go to the clash ID entered
- 🔄 Refresh/Reset display
- 🔍 Zoom in
- 🔍 Zoom out
- 🖥️ Show ClashViewControl (common views), only for SmartPlant Review
- 📄 Create report

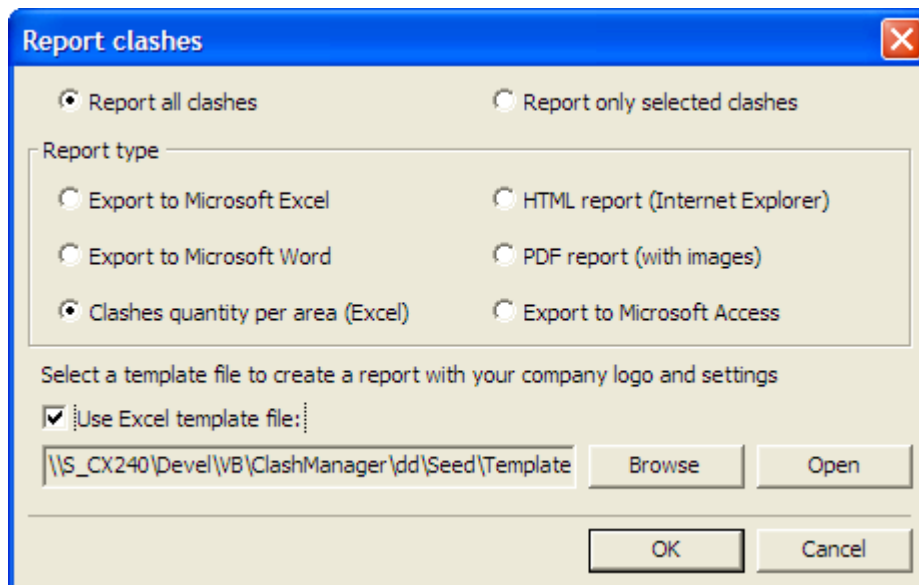
View

Event window

Toggles the display of the event window.

Tools

Report

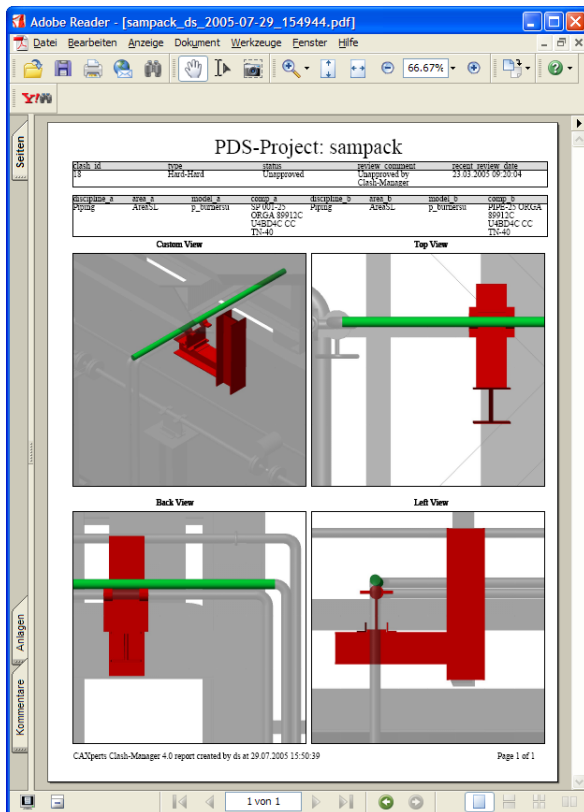


ClashManager supports these file types for reporting clashes:

- XLS (Microsoft Excel)
- HTML (web browsers)
- DOC (Microsoft Word)
- PDF (Adobe Acrobat Reader)

Saves a report with collision data and four views from MicroStation or SmartPlant Review: Isometric View, Top View, Back View and Left View

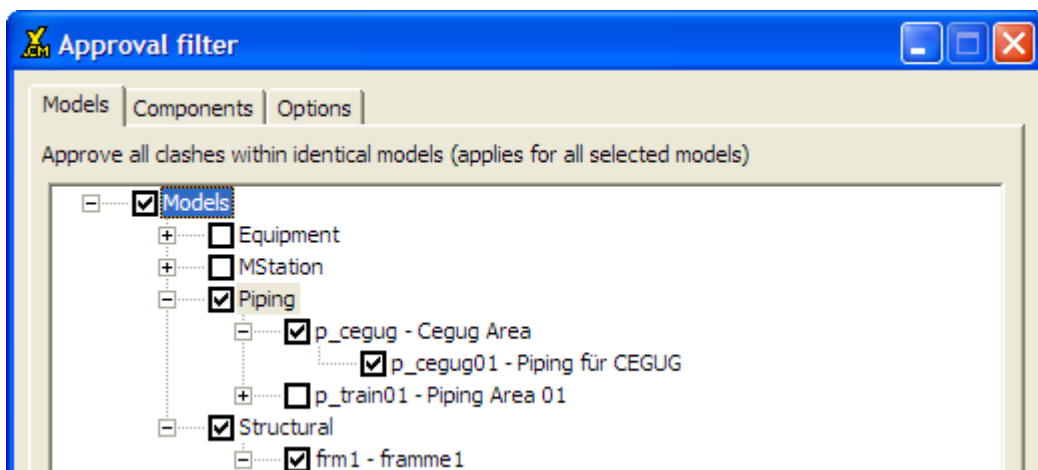
- Clashes quantity per area (Microsoft Excel)



Approval filter

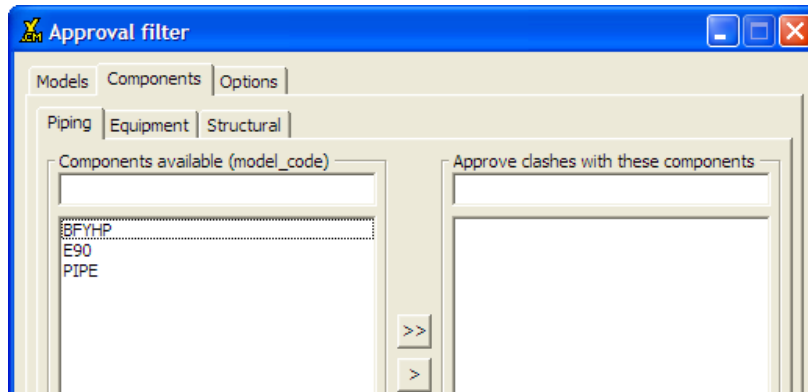
In the **Approval filter** window of **ClashManager** you may choose several filter criteria to set the status of clashes to *Approved*.

Selection of models



You can select here any models which may get the **Approved** attribute without further reviewing (e.g. test files, mesh reinforcement).

Selection of components



When you select the **Components** tab, three further tabs appear with the following component categories:

- Piping
- Equipment
- Structural

Within these three categories, you select the components which are **not** to be taken into account during clash checking, e.g. pipe clamps, verification equipment (person, truck, auxiliary lines etc.), floor slab etc.

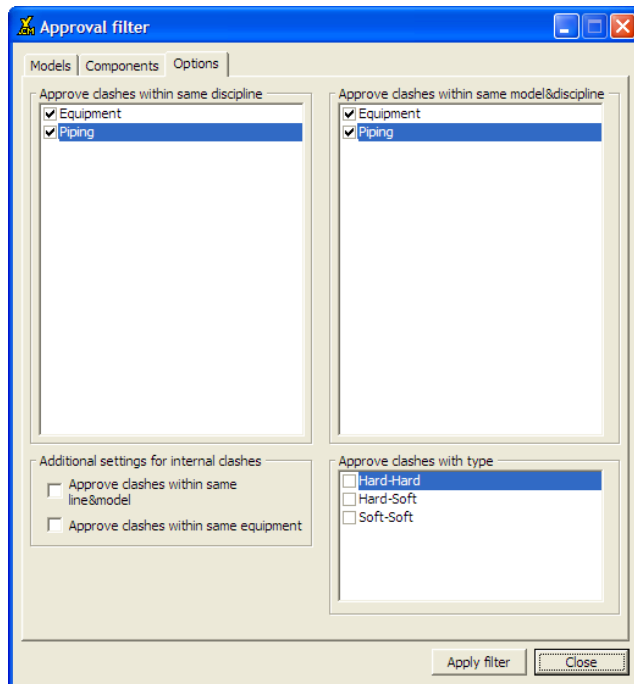
- The list on the left shows all available components.
- The list on the right is used to enter all the components for which clashes are not to be taken into account.

Use the >> > << < buttons to move the components between the two lists.

You can select components even more quickly by entering the first letters of the components in the filter fields above the lists.

Options

Approve clashes which match the rules defined in **Options**.



Clashes within same discipline

This approves clashes in which both elements are within the same discipline (e.g. Architecture).


Clashes within same model/discipline

Clashes within a single model will be approved for the selected discipline.

Approve clashes with type

A selection list allows you to exclude certain types of clashes in the filter:

- Hard = Component
- Soft = Insulation
- Construction = Equipment removal space, escape route, ...

 Note – If the clash types were not defined in the ClashManager configuration file, this list only shows numbers which correspond to the PDS clash types.

Clashes within same line in same model

This option approves clashes where the components lie within the same line (same line number label, the line clashes with itself).

Clashes within same equipment

This option approves clashes where the components lie within the same equipment element (the equipment element clashes with itself).

Privilege manager

The **Privileges Manager** allows you to lock functions for specific users/groups. The assignment of privileges is based on the Windows (domain) users and groups. This means that you do not have to establish a new privileges management system.

Group and user rights are linked by an OR operation: If a group has a certain privilege in **ClashManager**, every user in this group will have this privilege, even if this privilege is not explicitly stated in the settings for this user.

The access rights are stored in an Access database (**ClashManager.mdb**). This is located in the proj_file directory. The privileges are thus the same for all the projects in a proj_file.

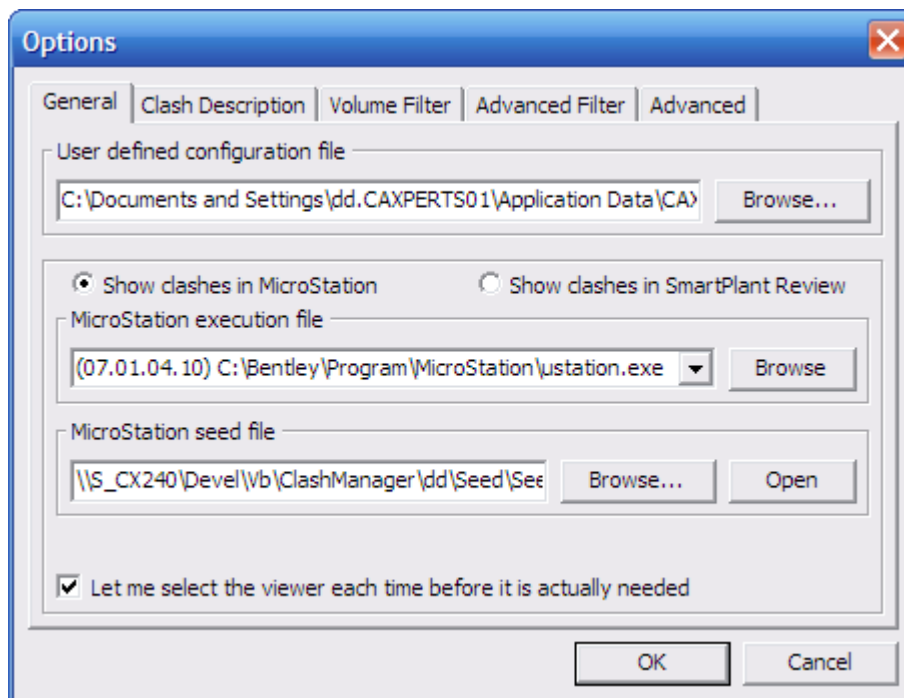
Access to the Access database should be controlled using the Windows access rights.

The default setting is “Allow” for every user and group.

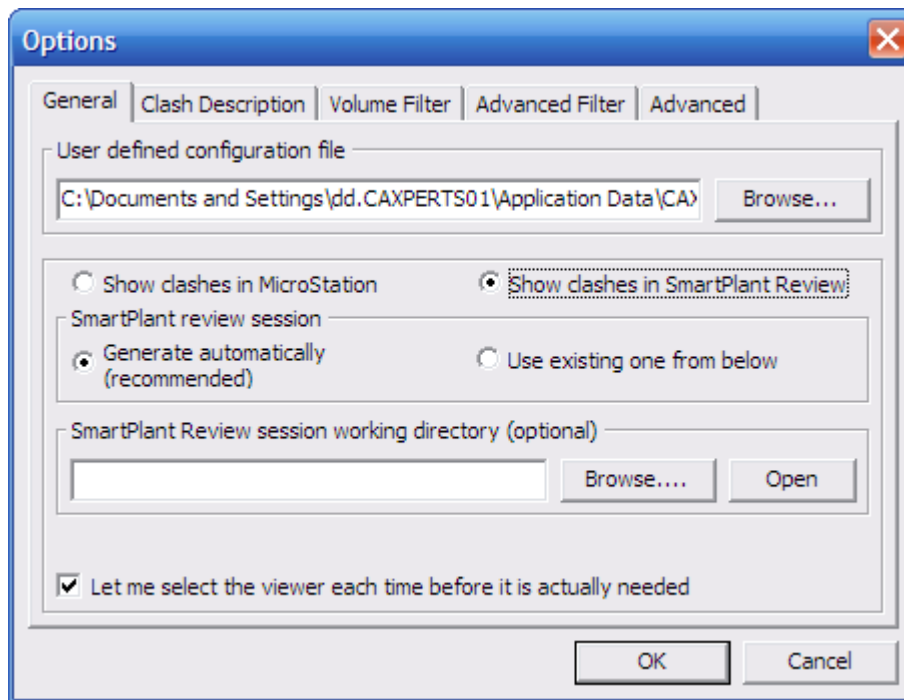
Options

General

On the **General** tab you may decide if **ClashManager** should show the clashes in Bentley MicroStation or Intergraph SmartPlant Review. It is also possible to decide every time individually (to do so, tick the checkbox at the bottom of the tab).



If you want to use MicroStation, select the ustation.exe of your MicroStation installation in the combo box and a seed file (DGN format) in the textbox in the middle of the tab (you may use the **Browse** buttons to select the files). The seed file will be used as a template for the display of the clashes in MicroStation.



Automated generation of the SmartPlant Review session is switched on by default: **ClashManager** will configure the session on-the-fly based on the clashes displayed in its list of clashes.

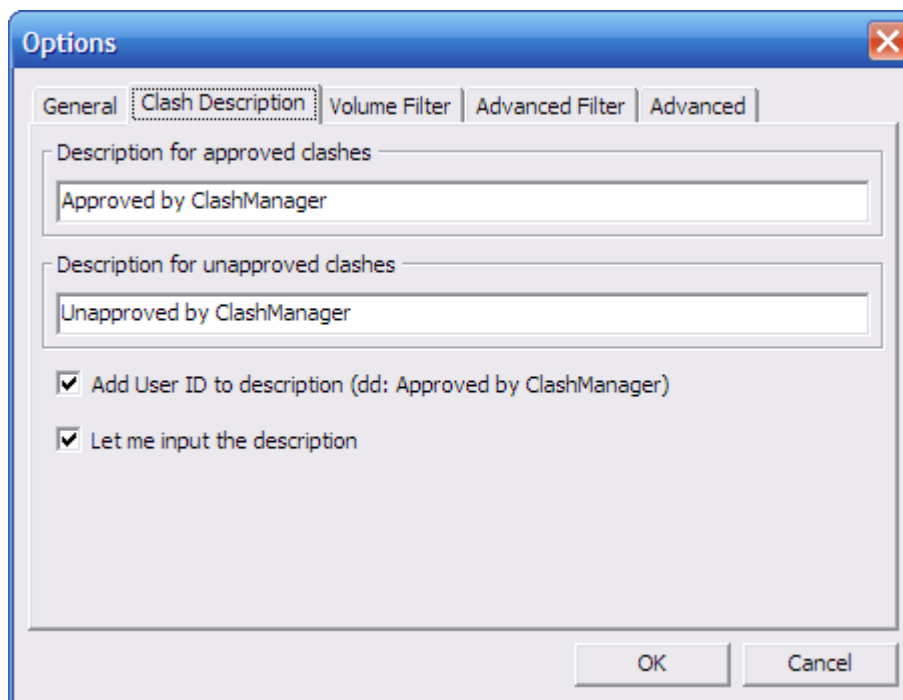
This happens, if the SmartPlant Review session working directory is defined:

- **ClashManager** will check if the models in this directory are up-to-date. Up-to-date models will be immediately used in the SmartPlant Review session, out-of-date model files will be copied from the original model file location.
- All files from this working directory will also be reused at the next start of **ClashManager**.

If the working directory is not defined all SmartPlant Review session files will be stored in the TEMP directory and will be deleted on program exit.

The user may also choose to use an existing SmartPlant Review session which will be displayed independently of clashes shown in the list of clashes.

Clash description



The **Clash description** tab offers you textboxes to key in user specific comments for approve/unapprove actions.

Example for user-specific comments:

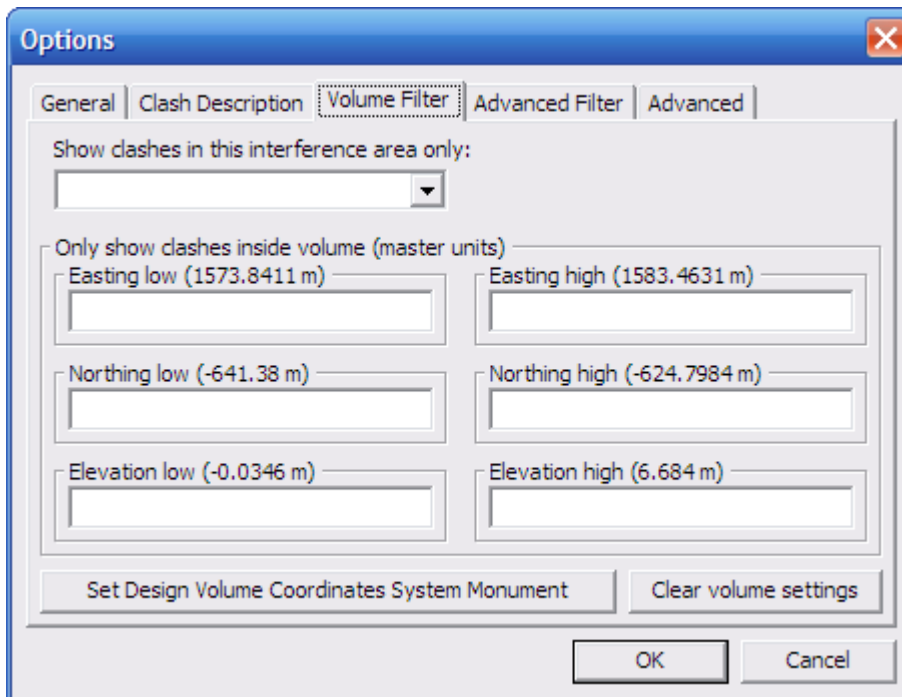
Approved by constructor A

or

Unapproved by project manager B

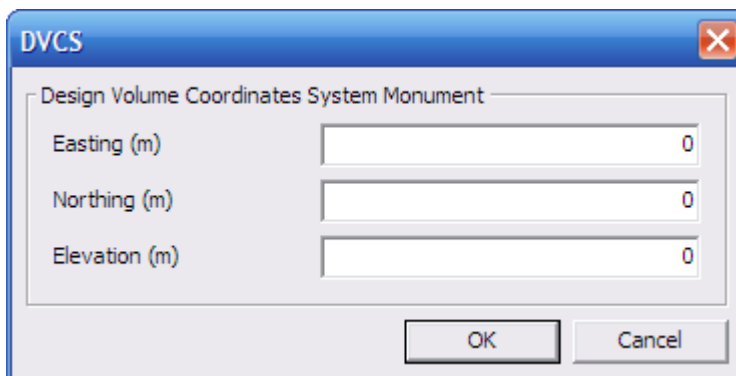
If the checkbox **Let me input the description** is checked, a dialogue will show up every time the status of an item has changed, otherwise the default text will be used.

Volume filter

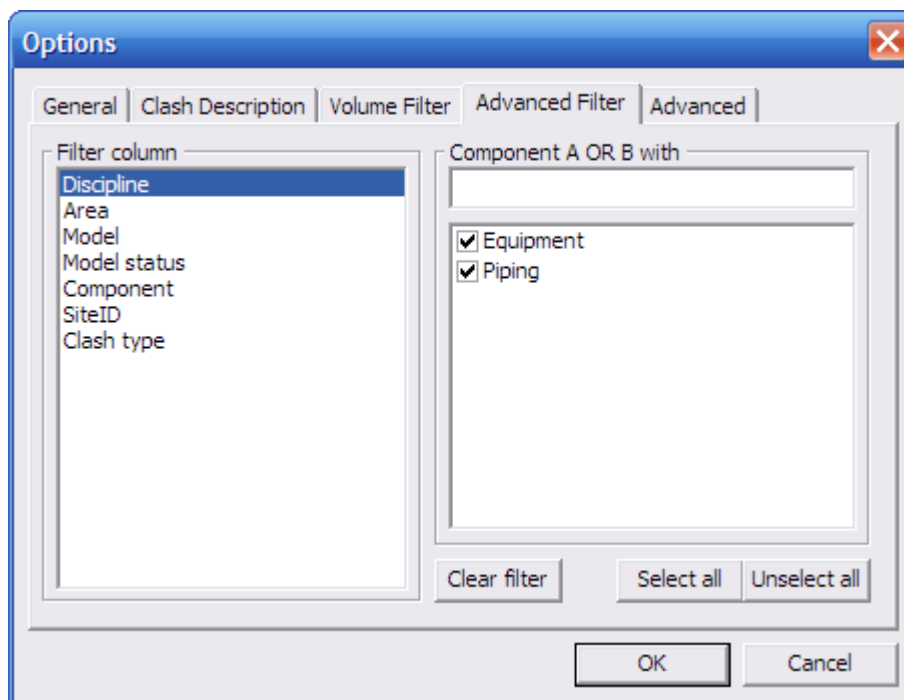


The volume filter defines the volume in which clashes are shown: You may select an interference area in the combo box or enter the corner points of the filter volume.

Press **Set Design Volume Coordinates System Monument** to edit these settings:

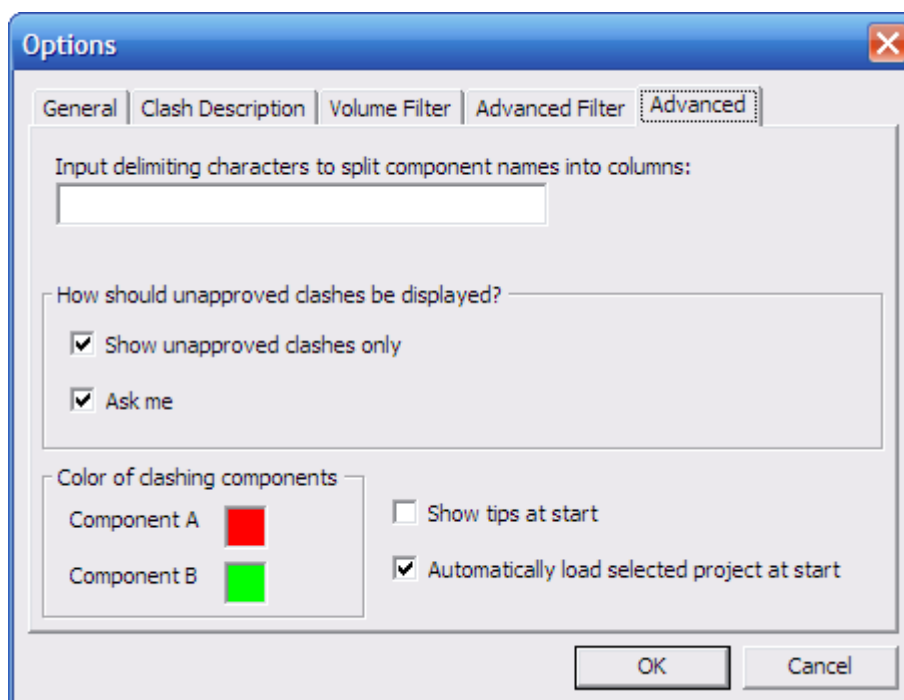


Advanced filter



This filter may be set to display only clashes within a model, discipline, area or SiteID (or a list of them). The clash will be shown if one of its components fulfils the condition.

Advanced



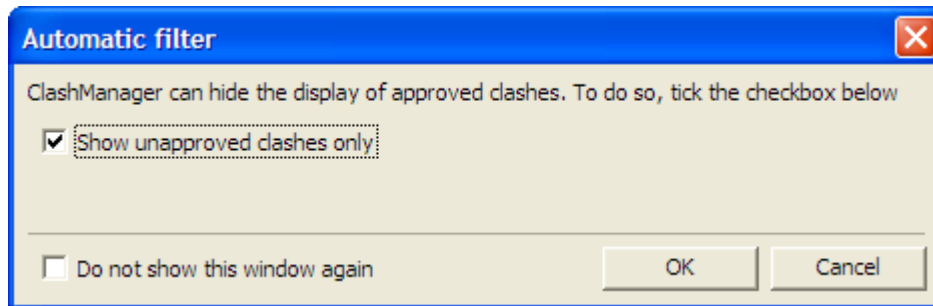
Component name split

This text field may contain one or more characters which will split the component's name in the list of clashes (the separator characters must be valid; otherwise the separator will be ignored).

- Example:
Component: PIPE-100 GSC FT U1CD1Q-0
Separator: -
- Appearance in Clash Viewer list:
Column comp_a_0: PIPE
Column comp_a_1: 100 GSC FT U1CD1Q
Column comp_a_2: 0

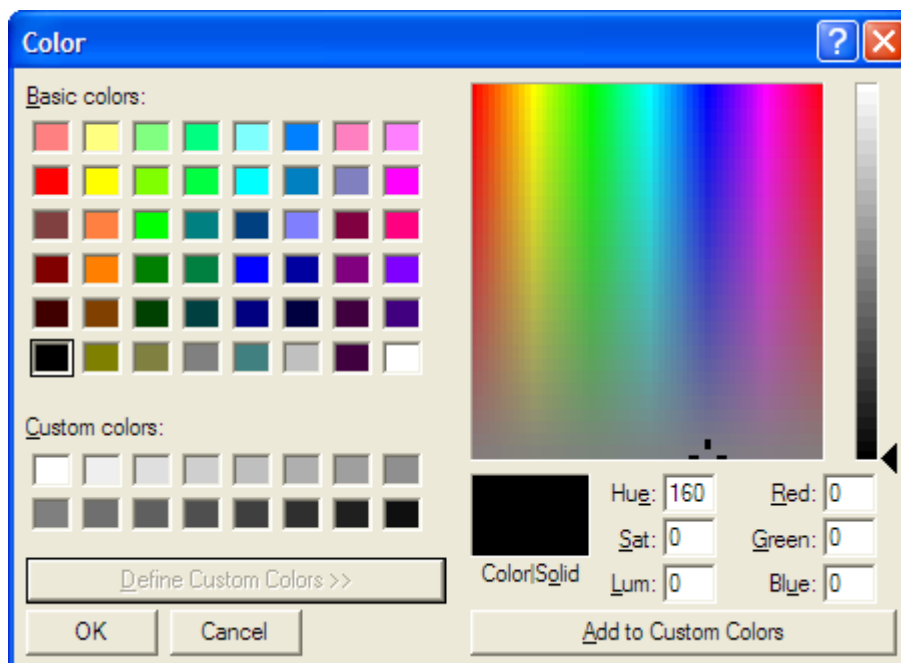
Display of unapproved clashes

You may choose to show unapproved clashes only by ticking the checkbox. If you tick **Ask me, ClashManager** will ask you on certain occasions (program start etc.) how it should display unapproved clashes:



Colours

Clashes are marked up by colours (in PDF reports and SmartPlant Review sessions) which you can choose by clicking on the coloured areas next to the Component A/Component B labels. A Windows standard colour selection dialogue will show up:



Start-up options

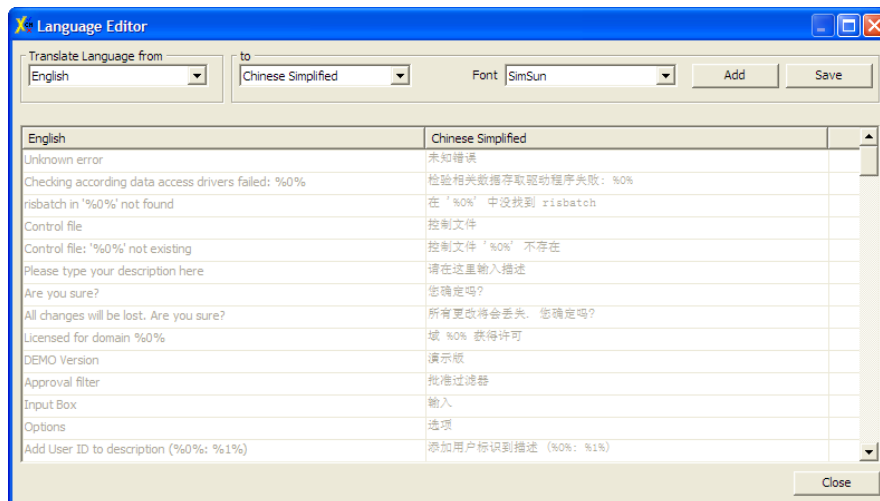
You may select here, if **ClashManager** should show a tip of the day window on start-up and if the last project should be automatically reloaded.

Language

You can use the **Language** menu command to switch between languages at any time. You do not have to restart **ClashManager**. The most recent language setting is saved automatically.

Language editor

The **Language editor** allows you to translate the interface into other languages or to modify the existing translation tables.



- Select source language
- Select target language

Select the source and target language. You can then translate the individual items. If the required target language does not exist, you can add it by clicking the "Add" button. Save the completed translation by clicking the **Save** button.

Help

Contents

Opens the **ClashManager** online documentation (Contents tab).

Index

Opens the **ClashManager** online documentation (Index tab).

Search

Opens the **ClashManager** online documentation (Search tab).

Update Licence







See Error! Reference source not found. Error! Reference source not found..

About

About shows version and copyright information about the software.

5.2 Tool bar

The toolbar contains select commands from the menu bar:

-  Approve selected clash(es)
-  Unapprove selected clash(es)
-  Approval filter
-  Show selected clash
-  Create report
-  Save changes

6 Log files

```

2006-12-07 18:42:04      1 sub-projects found
2006-12-07 18:42:05      Reading areas from sub-project: 'frm1
2006-12-07 18:42:05      1 areas found
2006-12-07 18:42:07      Reading models from area: 'fram1' (an
2006-12-07 18:42:07      2 models found

```

ClashManager creates a log file (*.log) in a sub-folder of the temporary folder of Windows® (usually **c:\temp\ClashManager**) for debugging reasons. This log file records date and time of every action carried out during a **ClashManager** session. It may be accessed by clicking on the log of the **ClashManager** main form.

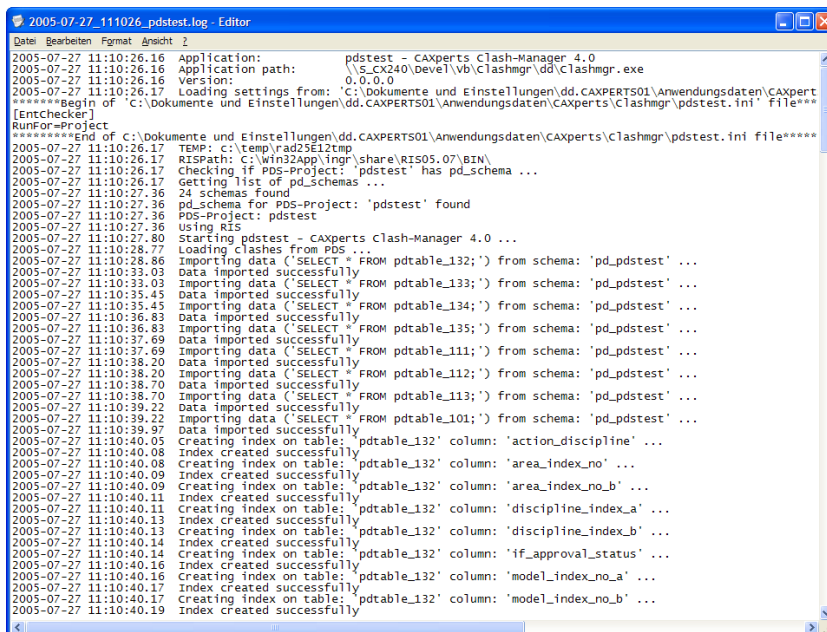
Naming of the log files follows this rule:

```
YYYY-MM-DD_hhmmss_projectname.log
```

Example:

```
2005-07-27_110408_pdstest.log
```

So the list of log files can be easily sorted and analysed. To open a log file in Windows Editor click on the event log textbox in the **ClashManager** main window.



```

2005-07-27 11:10:26.16 Application: pdstest - CAXperts clash-Manager 4.0
2005-07-27 11:10:26.16 Application path: \\S_CX240\devel\vb\Clashmgr\dd\Clashmgr.exe
2005-07-27 11:10:26.16 Version: 0.0.0.0
2005-07-27 11:10:26.16 Loading settings from: 'c:\dokumente und Einstellungen\dd.CAXPERTS01\Anwendungsdaten\CAXpert
*****Begin of 'c:\dokumente und Einstellungen\dd.CAXPERTS01\Anwendungsdaten\CAXperts\Clashmgr\pdstest.ini' file****
[EntChecker]
RunFor=Project
*****End of 'c:\dokumente und Einstellungen\dd.CAXPERTS01\Anwendungsdaten\CAXperts\Clashmgr\pdstest.ini' file*****
2005-07-27 11:10:26.17 TEMP: c:\temp\rad25e12tmp
2005-07-27 11:10:26.17 RISPath: c:\win32App\ligr\share\RIS05.07\BIN\
2005-07-27 11:10:26.17 checking if PDS-Project: 'pdstest' has pd_schema ...
2005-07-27 11:10:26.17 getting list of pd_schemas ...
2005-07-27 11:10:27.36 24 schemas found
2005-07-27 11:10:27.36 pd_schema for PDS-Project: 'pdstest' found
2005-07-27 11:10:27.36 PDS-Project: pdstest
2005-07-27 11:10:27.36 using RIS
2005-07-27 11:10:27.80 Starting pdstest - CAXperts Clash-Manager 4.0 ...
2005-07-27 11:10:28.77 Loading clashes from PDS ...
2005-07-27 11:10:28.86 Importing data ('SELECT * FROM pdtable_132;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:33.03 Data imported successfully
2005-07-27 11:10:33.03 Importing data ('SELECT * FROM pdtable_133;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:35.45 Data imported successfully
2005-07-27 11:10:35.45 Importing data ('SELECT * FROM pdtable_134;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:36.83 Data imported successfully
2005-07-27 11:10:36.83 Importing data ('SELECT * FROM pdtable_135;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:37.69 Data imported successfully
2005-07-27 11:10:37.69 Importing data ('SELECT * FROM pdtable_111;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:38.20 Data imported successfully
2005-07-27 11:10:38.20 Importing data ('SELECT * FROM pdtable_112;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:38.70 Data imported successfully
2005-07-27 11:10:38.70 Importing data ('SELECT * FROM pdtable_113;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:39.22 Data imported successfully
2005-07-27 11:10:39.22 Importing data ('SELECT * FROM pdtable_101;') from schema: 'pd_pdstest' ...
2005-07-27 11:10:39.97 Data imported successfully
2005-07-27 11:10:40.05 Creating index on table: 'pdtable_132' column: 'action_discipline' ...
2005-07-27 11:10:40.08 Index created successfully
2005-07-27 11:10:40.08 Creating index on table: 'pdtable_132' column: 'area_index_no' ...
2005-07-27 11:10:40.09 Index created successfully
2005-07-27 11:10:40.09 Creating index on table: 'pdtable_132' column: 'area_index_no_b' ...
2005-07-27 11:10:40.11 Index created successfully
2005-07-27 11:10:40.11 Creating index on table: 'pdtable_132' column: 'discipline_index_a' ...
2005-07-27 11:10:40.13 Index created successfully
2005-07-27 11:10:40.13 Creating index on table: 'pdtable_132' column: 'discipline_index_b' ...
2005-07-27 11:10:40.14 Index created successfully
2005-07-27 11:10:40.14 Creating index on table: 'pdtable_132' column: 'if_approval_status' ...
2005-07-27 11:10:40.16 Index created successfully
2005-07-27 11:10:40.16 Creating index on table: 'pdtable_132' column: 'model_index_no_a' ...
2005-07-27 11:10:40.17 Index created successfully
2005-07-27 11:10:40.17 Creating index on table: 'pdtable_132' column: 'model_index_no_b' ...
2005-07-27 11:10:40.19 Index created successfully

```

7 Technical support

Need more help? Contact CAXperts support by email, online, or phone:

<mailto:support@caxperts.com>

http://www.caxperts.com/component/option,com_contact