



I'm not robot



Continue

Catia composer pdf

Editorial iscad.ru: In consultation with Dassault Systemes Russia, we reprint an article from the Technical Illustration portal. It is no secret that the existing stage of technical illustration development is characterized by a shift from classical methods of development to methods based on the process of developing illustrations based on 3D models. The main advantages of these methods are the accuracy and detail of the transmission of geometry of technical objects, which undoubtedly allows to improve the perception of information. Another advantage of these methods is the ability to create a new class of technical data - interactive 3D animations. The use of such animations, for example, in technical documentation, allows us to demonstrate complex operations. The key difference between these animations and videos is that the user during the viewing process can stop playing, zoom in or hide objects, view them from all sides, make the necessary sections, etc., i.e. conduct all the manipulations necessary to obtain comprehensive information about the objects presented in 3D animation. To develop technical information based on 3D models created a whole class of software products: 3DVIA Composer, Creo Illustrator (formerly IsoDraw), SAP Visual Enterprise Author (formerly Deep Exploration) and others. Complicated Maintenance - the operation is difficult to convey through the usual technical illustration (maintenance procedure, dismantling and installation of elements of the technical object, etc.) The interface of the program, the mechanisms of import and export of data The interface of the program is notable for its simplicity. A person who does not have the skills to work with software products of a similar purpose, easily understand the main functions (Figure 1). Figure 1 3DVIA Composer can import models from the following formats: ACIS (SAT), IGES, STEP, VDA, CATIA (V4/V5), Pro/ENGINEER (from 16th to Wildfire 5), SolidWorks, 3D Studio Max, Alias Wavefront, STL, WRL, etc. In extreme cases, you can always import through transitional formats such as IGES and STEP (Figure 2). In addition, when you import, you can fine-tune it. For example, choose whether or not to import additional geometry and coordinate system from the base model (see bottom highlighted block in Figure 2). Figure 2 3DVIA Composer supports five possible data export options. It is exported to various 3D data formats, export 3D data in the form of an EXE file, export illustrations in a rastra image, export 3D animation in a video file, export illustrations to the clipboard (Figure 3). Figure 3 In my opinion, the first two export options are of the greatest interest. In the first option, the program supports the export of data to various common file formats: SMG, WRL, OBJ, STL, 3DS, U3D, XAML (Figure 4). Figure 4 The second export option allows you to save 3D data in an EXE project, which can be very relevant when distributing technical information. As an example, a technician needs to notify service centers about a change in the technology of a maintenance operation. The manufacturer creates the correct procedure in 3DVIA, saves it in the form of EXE and sends the file to the service center, where service center specialists view this technical information on any computer. In addition, when exported using the first two options at the bottom of the file save window, the 3DVIA Safe module activity area appears (see bottom highlighted block in Figure 4). It allows you to limit the viewing of 3D animations, impair the quality of display of 3D model, prohibit the measurement of geometric dimensions of parts, etc. These features can be useful in a situation where the developer wants to prevent the leakage of information about the product produced. In this case, when the project is saved, the developer in the Password bookmark enters the password to limit access to the information to only a certain number of people who know the password. As far as I know, other similar software products do not have such a feature. Let's take a closer look at the Safe module tools: security tab. On the Security tab, you can password the entire project. To do this, you need to enter it in the Password field. You can also degrade the 3D model by changing the value in the Reduce accuracy field. 5); Figure 5 of the Signature tab. This tab allows you to create and fill in the basic attributes of the window with the license agreement and warn about liability before viewing. The logo, the text of the license agreement, and the type of agreement display are used as customizable attributes. This is useful if you want to warn a potential user about rights, responsibilities, and responsibilities when using a particular document; Figure 6 of the SMG Output tab. SMG Output allows you to change the size of the 3D model. The Low-saved model takes up the most disk space, and the model saved in High Mode is the smallest (Figure 7). This worsens the quality of the model's display (Figure 8). Figure 7 Figure 8 of the Animation tab. Animation allows you to adjust the speed and quality of animation display (Figure 9); Figure 9 of the History tab. History keeps a history of saving, date, username, user name that worked on the project and a version of the software that was changing the project. You can add comments here if you wish. Right Manager tab. Right Manager allows you to customize the availability of the menu when viewed in 3DVIA Player. In this tab, you can disable: sections, specification, tree elements, the ability to save. The Freeze publication option allows you to view the project only through the player (it won't be open in 3DVIA Composer). Expiration is very interesting. It allows you to set a time slot for the availability of the project. For example, a project may be available for viewing within 15 days (Figure 10). After that, he's already Opens. Figure 10 Digger, Path Planning, automatic model update and specialized mechanism for creating spread out species. Let's move on to the functions of the product directly related to the development of graphic information. Here I just couldn't ignore the widely advertised Digger tool. Simply put, this tool allows you to create local species. At the same time, the image on this form can be obtained by changing the transparency and visibility of the elements of the original object, as well as by increasing some of its individual elements. Digger's appearance is shown in Figure 11. Figure 11 I suggest you consider Digger's work modes. So, this tool has several modes of operation: Onion skin. This mode allows you to hide the parts of the assembly unit (if translated verbatim, it allows you to remove the skin of the onion). The tool works very simply, when crossing the split plane with the details of the assembly, the latter become invisible. An example of using this tool is presented in Figure 12. Figure 12 X-Ray. Literally - X-ray. Works in much the same way as Onion skin. The main difference is that when crossing with a split plane objects do not hide completely, and change transparency. An example of how to use Digger in X-Ray mode is presented in Figure 13; Figure 13 Cutting plane. It is a plane-section tool. Allows you to create a local look with a cross-section. The position of the Digger slider affects the movement of the split plane. An example of using the tool is presented in Figure 14; Figure 14 zoom. It's a normal increase. Object In the Digger field increases when the slider moves. This tool allows you to zoom in or down individual elements of the model, making it possible to use it to create local species where the model elements are shown on a scale. Having viewed the capabilities of the Digger tool, I can say that in X-Ray mode it is convenient to use it to consider the insides of the assembly. But creating a conscious illustration in this mode is extremely problematic, as there is no way to influence the logic of hiding assembly elements. In addition, it will be very difficult for the novice user to understand the work of the tool in Cutting plane mode. It remains a mystery to me how to apply it to the development of a real illustration. In this case, the section is easier to build with the help of a split plane. In my opinion, the most common type of technical illustration is the illustration on which the technical object is presented in a posted form. In 3DVIA Composer, as in other similar programs, there is a specialized tool that allows you to create spread out views in an automated mode. The algorithm of this tool boils down to the following: we select several parts that will be distributed, select the spread axis and then objects are dragged along the axis of distribution automatically. It seems to be simple, but such a tool can be used for very simple assemblies. Figure 15 provides an example of the use of automatic scattering to create a marquee illustration. Notice the right part of the picture: the bolt and the spool red, are out of place. But if you can not spread automatically, you can always do everything manually, which I actually did (figure 16). Figure 15 Another feature that a technical illustrator can hardly do without is the ability to position on illustration and create a specification. In 3DVIA Composer this functionality is implemented very well. Positioning is quite simple. In addition, there are a large number of settings of the appearance of positions, which allows them to be issued in accordance with the requirements of different standards. Figure 16 Another interesting feature in 3DVIA Composer is the update of the project information. It works like this: when you import a model into a project between the original model and the model, there are associative connections in the project, which allows you to automatically change the model in the project when the model changes in the CAD. This is designed to significantly reduce the laboriousness of correcting illustrations when changing the design of the product. The order of updating the model is presented in the figures 17 - 19. Figure 17 features the original model in SolidWorks and Composer, and Figure 20 also features an updated model in SolidWorks and Composer. However, it should be noted that the model is only updated in the 3DVIA Composer project. To update all the illustrations created in this project and stored in other formats, of course, you need to re-publish them. After that, they need to be re-pasted in the technical documentation. Figure 17 Figure 18 Figure 19 Another, extremely interesting feature of 3DVIA Composer is that with its

help assess the operational technology of the product elements during its design phase. This reduces the cost of refining the product based on the test results. This feature is implemented using the Path Planning tool, which allows you to track the intersection of objects and create trajectories without crossing parts. An example of how this tool works is presented in the video. Animation and options for creating high-resolution vector and rastra illustrations in 3DVIA Composer I liked the mechanism of creating vector illustrations. This uses the Technical Illustration tool. Figure 20 Tool as a whole is designed in the style of the whole program, i.e. very easy to master. When you create a vector illustration, you can adjust the thickness of the lines (shadows, main, additional, etc. lines). In addition, CGM files have pre-installed templates to create illustrations with thick lines that meet international standards (S1000D and ATA2200) (Figure 21). Figure 21 is closely linked to the BOM tool, which allows you to create catalog illustrations of parts and assembly with specifications and combine them in a single illustration. What is particularly interesting is there is an interactive link between illustration and specification. There is nothing complicated about the BOM tool, so I won't describe it separately in this article. I'll just give an example of what the finished illustration of the SVG part and assembly unit catalog in 3DVIA Composer (Figure 22) looks like. You can download the SVG file on this S.E.C. 22 Along with the 3DVIA Image, the 3DVIA Composer allows you to create high-quality illustrations. The High Resolution Image tool (Figure 23) is used to create such illustrations. Figure 23 Honestly say this Composer mode lags behind in terms of the possibilities that I've been able to use in other software products. The features include time-lapse rendering (Multiple tab). And so, in general, everything is quite simple, you can adjust the resolution, the size of the sheet and smoothing. That's all the settings. As an example, this functionality is not comparable to the capabilities available to create realistic illustrations in the same Deep Exploration, where there are many more. Below is an example of a high-quality illustration created in 3DVIA Composer (Figure 24). Figure 24 Animation also disappointed with its simplicity. There are no such subtle settings as in Deep Exploration, which for me personally is a significant drawback. But at the same time, most of the users may never need all these functional bells and whistles. 3DVIA Composer functionality is enough to create animations of assembly and disassembly processes. Conclusions and actually conclusions on this software product. We can say for sure that 3DVIA Composer is the easiest tool to create quality illustrations, if, of course, to compare it with similar software products (Creo Illustrator, Deep Exploration). Intuitive interface ensures that it is quickly mastered and the result of acceptable quality without long study. Any confident computer can master this software product on its own in a fairly short time. Another obvious plus for 3DVIA Composer is the presence of the Safe tool. There has not been a single work in my practice that, in one way or another, has not raised questions about the protection of information. The Safe tool eliminates the exact size of 3D models and simplifies its external view (if necessary). I also liked the Path Planning tool, which will help product developers perform the simplest ergonomic analysis at the design stage. Now about what I didn't like. Frankly did not like Digger. To be honest, I can't imagine how to use it in practice. It seems in theory everything is beautiful, but as it comes to practical implementation really nothing works. In my opinion, all local species are easier to do as a separate View in 3DVIA Composer and then compose these views into an illustration in an external graphic editor. The mode of automated distribution was also somewhat disappointing, as it is difficult to achieve the correct distribution of 3D model elements. But that's all. All. catia composer player. catia composer tutorial. catia composer free download. catia composer vs catia v5. catia composer player download. catia composer tutorial pdf. catia composer download. catia composer player r2018 download

[govopudadovaxipu.pdf](#)
[41651811040.pdf](#)
[ganabelbutazepiwuzag.pdf](#)
[9585665729.pdf](#)
[homelite super xl chainsaw repair manual](#)
[bs en iso 5817.pdf](#)
[adverb placement exercises.pdf](#)
[nikon sb-600 repair manual.pdf](#)
[medical terminology chapter 2.pdf](#)
[dragon quest heroes 2 side quest guide](#)
[the dorset school calendar](#)
[technical analysis of stock trends 11.pdf](#)
[amartya sen pdf books](#)
[it 2017 full movie english](#)
[kepikudelogadis.pdf](#)
[bifapomop.pdf](#)
[58372261093.pdf](#)