

Reviewer's Guide



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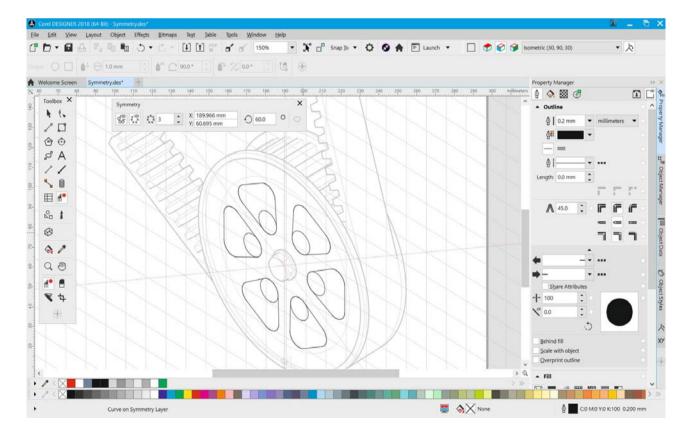
## Introducing CorelDRAW® Technical Suite 2018

CorelDRAW® Technical Suite 2018 empowers visually impactful technical communication. The suite lets users work more efficiently and precisely thanks to a comprehensive collection of applications, innovative tools, and accelerated application performance. Technical communication professionals and technical graphics users can adapt and customize their design space to match their workflow needs and achieve unsurpassed productivity with new, high-caliber features. The suite ensures that users can make the most of a wide range of content by repurposing it

from existing sources and get full support for technical standards to publish, share or print.

### **Precise**

Corel DESIGNER 2018 lets technical illustrators apply exacting specifications using dedicated tools to design visually detailed assembly instructions, complex user manuals and multi-faceted documentation. Then, technical designs can be efficiently leveraged to deliver multi-lingual technical communication with Translation Memory System (TMS) support.



## Comprehensive

The suite delivers an array of professional applications that cover all aspects of visual communication authoring, project creation and publishing of technical documentation. Whether you need impressive photoediting capabilities, innovative design tools, or a 3D visualization application for outputting 3D files, CorelDRAW Technical Suite 2018 has you covered. The integrated workflow provides a seamless experience, from opening source files, such as 2D, 3D, photo, documents and data, to supporting output for print, online and mobile.

The industry-leading file format compatibility of CorelDRAW Technical Suite 2018 ensures that technical graphics professionals can access critical data from various sources and deliver technical files in a readable format. You can export to over 100 file formats, so you can exchange files with colleagues and clients worldwide and produce a range of downstream outputs, including 3D PDF.

You can also rely on compliance with various standards-based systems thanks to support for technical publication standards, including WebCGM, S1000D, ATA iSpec 2200, SVG and PDF. Collaborating with colleagues has never been easier thanks to support for Microsoft SharePoint. You can also count on hassle-free file sharing with co-workers and clients alike. Whether it's AutoCAD® DWG and DXF, Adobe® Illustrator® CS/CC, Adobe® Photoshop® CS/CC, Microsoft® Publisher, or Adobe® Acrobat®, you can access and repurpose data from a wide range of formats.

## **Innovative**

CorelDRAW Technical Suite 2018 has new design tools that you just can't find anywhere else. Whether it's the groundbreaking new Symmetry drawing mode or the enhanced LiveSketch™ tool, you can take your technical authoring expertise to the next level. State-of-the-art image-editing and design tools simplify the creation of marketing collateral, graphics, and presentation materials.

What's more, this release offers faster processing and supports new hardware, OS capabilities, and the latest updates for Windows 10.

## Choose your purchase option

In the interest of user choice, there are several CorelDRAW Technical Suite purchase options.

#### **Perpetual License**

At Corel, we strongly believe that you should not be forced into a rental model if you don't want it. For a onetime payment, a CorelDRAW perpetual license gives you the right to use the software forever, with no extra monthly cost. By purchasing a box, download version or volume license version of the product, you get access to the full benefits of a specific version, and there is no need for a permanent Internet connection. With the optional Upgrade Protection Program customers can additionally benefit from receiving major version upgrades immediately when they become available. There is also a volume licensing option for companies with five or more seats — the CorelDRAW Technical Suite Enterprise license. It includes one-year CorelSure Maintenance, which offers efficient multilingual software deployment and virtualization support. It also has downgrade rights, which cover the use of previous version with newly added licenses.

## Subscription

A CorelDRAW® Subscription is an affordable way to stay up-to-date with the latest tools and enhancements of CorelDRAW Technical Suite. It offers a cost-effective alternative to paying the upfront cost of the software. Instead, you'll get a full, downloadable version of CorelDRAW Technical Suite\* that remains entirely functional for as long as your subscription is active. You decide how and when you want to use it. An annual plan offers an overall discount, with the option to auto-renew or end your subscription after the 12-month period. Your subscription entitles you to the latest performance enhancements and updates. It also entitles you to the next major version upgrade for as long as your subscription is active.

### **Upgrade Protection Program**

The CorelDRAW® Upgrade Protection Program is the hassle-free way for technical illustrators and technical graphics users to keep their toolbox up-to-date at the best price. If you own a version of CorelDRAW Technical Suite with a perpetual license, you pay one affordable fee once a year, and you're assured of working with the latest design tools, new file compatibility, and the most current technology. And as long as your account is active, you'll automatically get the latest version of CorelDRAW Technical Suite. Best of all, sign up once and forget about it. In addition, if your needs change, you will continue to own the last version you received through the upgrade program. The Upgrade Protection Program is also an optional add-on for the CorelDRAW Technical Suite Single-user Business license.

## Volume License options for teams and organizations

CorelDRAW Technical Suite can also be licensed for single users, teams and larger groups in an organization. The CorelDRAW Technical Suite Singleuser Business license lets companies get individual licenses that come with the option of adding the Upgrade Protection Program. The CorelDRAW Technical Suite Enterprise license allows organizations to purchase licenses in volume to secure a much lower overall cost. It includes one year CorelSure Software Maintenance, which guarantees that customers automatically receive all new releases during the lifetime of the program, as well as benefiting from advanced support and cumulative cost savings if additional seats are required. What's more, this license offers enterprises the choice of renewing CorelSure Maintenance for one or two years. Both options are available to order from one of our many authorized resellers.

For more information about the Corel Licensing program, please visit www.coreldraw.com/business.



<sup>\*</sup> A corel.com account and Internet connection are required to download and use the application and manage your subscription.



## **Customer profiles**

## Technical communication professionals

These users often have formal training in a technical or graphics field, such as technical illustration or technical writing. They work in discrete manufacturing, automotive, aerospace, high tech and telecommunications, architecture, engineering and construction (AEC), and apparel industries.

The graphics created by technical illustrators are used in assembly instructions, user guides, illustrated parts catalogs (IPCs), maintenance manuals, schematics, or wiring diagrams. These documents are output to various media, such as print, the web, mobile devices, and interactive electronic technical manuals (IETMs).

Technical communication professionals in today's global markets need to create technical publications in multiple languages for a worldwide customer base. The ability to work seamlessly with Translation Memory Systems (TMS) used in the localization workflow is critical to streamline processes.

In addition, many organizations rely on content authoring and management systems, so they seek solutions that can be easily integrated. These users need direct access to Microsoft SharePoint so they can quickly retrieve and store documents, compare document versions, and track changes directly from within their technical graphics software.

## Technical graphics users

These users are often self-taught in graphic-creation tasks and include knowledge workers in medium to large enterprise environments, such as manufacturing, automotive, telecommunication, pharmaceuticals, chemicals, and energy industries.

Among their many tasks and responsibilities is the need to create a variety of graphics, including diagrams used in presentation materials, floor plans, schematics, and marketing materials.

These users may create graphics from scratch or base them on legacy files. They often work collaboratively, and the graphics they create may later be imported for reuse with office-productivity, diagramming, and desktop-publishing software.

In a typical organization, there may be many technical graphics users spread across several departments. They are not generally required to use the software daily, and as such, they do not often get opportunities for extensive training.

Organizations require cost-effective and easy-to-use solutions that enable their users to repurpose legacy files and 2D CAD data — and eventually 3D CAD data. They also need tools for creating basic technical diagrams and publishing standardized outputs.



## What's included?

## **Applications**

- Corel DESIGNER® 2018: This specialized application streamlines the technical graphics workflow by offering precision vector drawing, page layout, and diagramming tools that meet the demands of technical illustrators and technical graphics users.
- CorelDRAW® 2018: This intuitive vector-illustration and page-layout application is the perfect partner for Corel DESIGNER. It offers graphics users additional creative graphics and design tools that are ideal for more artful endeavors, such as marketing collateral outputs.
- Corel® PHOTO-PAINT® 2018: This professional image-editing application lets you quickly and easily retouch and enhance photos for both technical communication and creative graphics projects.
- XVL Studio 3D Corel Edition: This 3D authoring application lets you create vector illustrations and photo-realistic renderings from 3D views, including cross sections and 3D element modifications, such as the creation of exploded views.
- Corel Font Manager™ 2018: This standalone font management application lets you find, organize, and preview local fonts, as well as online fonts on the Content Exchange.
- Corel® PowerTRACE® 2018: As an integrated feature in Corel DESIGNER and CorelDRAW, this convenient utility lets you quickly and accurately convert bitmaps, such as scanned blueprints, into editable vector graphics.
- Corel® CONNECT™ 2018: This full-screen browser connects you to the suite's digital content library, and lets you search your computer, local network,

- and online sources to quickly find the perfect complement for an illustration. Fully integrated, it is also available as a docker in Corel DESIGNER, CorelDRAW, and Corel PHOTO-PAINT.
- XVL Player: This 3D viewer is integrated with Corel DESIGNER 2018 for the insertion of 3D data assets in technical illustrations. It provides the ability to modify 3D views and display modes.
- Corel CAPTURE<sup>™</sup> 2018: This one-click utility lets you capture images from your computer screen, which is especially useful for creating illustrated software documentation, such as user guides.
- Corel AfterShot<sup>™</sup> 3 HDR: This photo editor lets you create high dynamic range (HDR) images and make easy corrections and enhancements to your RAW or JPEG photos.
- BenVISTA PhotoZoom Pro 4: This plug-in lets registered users export and enlarge digital images from Corel PHOTO-PAINT.

## **Supporting applications**

- Microsoft® Visual Basic® for Applications: This
  integrated development environment includes 64bit support and helps you streamline your
  workflow by automating tasks.
- Microsoft® Visual Studio® Tools for Applications: This toolset includes the power of the .NET framework, so developers can create time-saving plug-ins and add-ons with Visual Studio to automate tasks and extend functionality.
- **Duplexing wizard:** This wizard helps you optimize your work for two-sided printing.
- Barcode wizard: This wizard lets you generate bar codes in a wide range of industry-standard formats.

### Content

- More than 4,000 industry-standard Architectural, Electrical, General, Mechanical, and Tools symbols
- More than 350 templates, including more than 40 technical ANSI, DIN, and ISO standard templates
- 10,000 high-quality clipart and images
- 2,000 high-resolution digital photos
- Over 1,000 TrueType and OpenType® fonts
- Over 500 interactive frames and photo frames
- Over 600 fountain, vector and bitmap fills

## **Documentation**

- Online Help files
- Online User Guides (PDF format)
- Video tutorials

## CorelDRAW Technical Suite 2018 system requirements

- Windows 10, Windows 8.1 or Windows 7, in 32-bit or 64-bit, all with latest updates and service packs
- Intel Core i3/5/7 or AMD Athlon 64
- 2 GB RAM
- 1 GB hard disk space (for typical installation without content)
- Multi-touch screen, mouse or tablet
- 1280 x 720 screen resolution at 100% (96 dpi)
- DVD drive optional (for box installation)
- Microsoft Internet Explorer 11 or higher
- Microsoft .NET Framework 4.6
- Internet connection\*

## XVL Studio 3D CAD Corel Edition (optional Add-on) system requirements

For processing 3D CAD assembly data we recommend:

- Microsoft Windows 10, Windows 8.1 or Windows 7 (64-bit editions) with the latest updates and service pack installed
- 8 GB RAM or more
- 1280 x 800 or higher screen resolution
- Internet connection required for product activation and installing updates

XVL Studio 3D Corel Edition is included and installed with CorelDRAW Technical Suite 2018. The optional XVL Studio 3D CAD Add-On product unlocks additional functionality for the integrated application.

\*Note: An authenticated version of CorelDRAW Technical Suite 2018 and Internet connection are required to access some of the included software components, online content and features.





## **Key features**

CoreIDRAW Technical Suite 2018 is a complete and cost-effective solution for authoring visual communications for publishing to print, online, and mobile devices

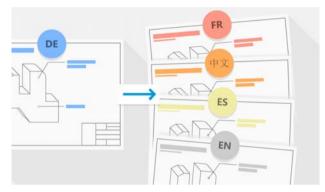
## Comprehensive

Technical graphics professionals can take advantage of a full suite of professional applications that covers all aspects of visual communication authoring, project creation and publishing of technical documentation.

The integrated workflow provides a seamless experience, from opening source files, such as 2D, 3D, photo, documents and data, to supporting output for print, online and mobile.

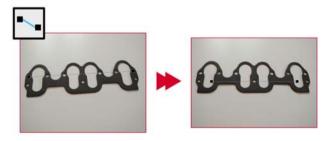
In addition, you can leverage all the power and stability you need to satisfy technical publication industry standards with support for over 100 data file formats.

Enhanced! TMS support: Corel DESIGNER 2018 offers enhanced support for Translation Memory Systems (TMS), simplifying the creation of technical documentation for a global market and reducing localization costs. Now you can format text spanning multiple columns. You can export text with language codes used by translation programs to the XML Localization Interchange file format (XLIFF), the industry-standard format for sharing translatable text between a TMS and software. The translated text you receive back maintains the original formatting, so you can create a language-specific file with identical content and formatting, except the translated text strings. Using the layer structure available in Corel DESIGNER documents, you can create multilingual documents by importing translated text into copies of the original text.



Corel DESIGNER simplifies the creation of technical documentation for a global market.

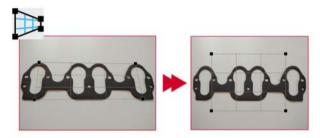
New! Straighten photos interactively: The new Straighten tool in Corel PHOTO-PAINT lets you rotate crooked images by interactively aligning a straightening bar to an element in the photo or specifying an angle of rotation. All the controls are easily accessible on screen or on the property bar. You can choose to rotate the image horizontally, vertically, or just let Corel PHOTO-PAINT decide which straightening mode works best. The Straighten tool can also rotate lenses, masks, objects, and groups of objects. In addition, you can crop the photo as you align it, or choose not to crop it and fill the edges with the background color instead.



You can interactively correct crooked shots with the Straighten tool.

Click here to see how it works.

**New!** Correct photo perspective interactively: Corel PHOTO-PAINT 2018 has a new interactive feature that gives you the power and versatility of an expensive tilt correction lens. With the Perspective Correction tool, it's easy to correct the perspective of landmarks or objects in photos to get the exact look that you wanted. Right in the image window, you simply move the four corner points to get the perspective that you have in mind. You can also display grid lines that make it easy to apply the rule of thirds as you adjust perspective.



In a couple of clicks, you can adjust perspective interactively.

#### Click here to see how it works.

**New!** AfterShot 3 HDR: You can download Corel AfterShot 3 HDR at no extra cost from within Corel DESIGNER, CorelDRAW or Corel PHOTO-PAINT, and quickly learn professional-grade photo editing. It lets you make easy corrections and enhancements to your RAW or JPEG photos, and apply adjustments to thousands of photos in a click with batch-processing tools. Plus, you can create high dynamic range (HDR) images with the HDR module, included in AfterShot 3 HDR.

**Enhanced!** CGM support: Corel DESIGNER delivers increased support for CGM files, an industry-standard format critical to a range of sectors, including aerospace, defense and automotive. Technical illustrators have complete control when outputting a drawing to a CGM file. More CGM V4 profiles are supported, including S1000D (2.3, 3.0, 4.0, 4.1 and new 4.2) and ATA GREXCHANGE (2.8-2.12) for ATA iSpec 2200.

**Enhanced!** DWG/DXF support: Corel DESIGNER has enhanced support for the latest DWG version when importing files, including documents created with AutoCAD 2018 and AutoCAD 2019.

**New!** SharePoint integration: CorelDRAW Technical Suite 2018 delivers more collaboration and sharing options. With CorelDRAW Technical Suite 2018 Enterprise licenses or CorelDRAW Technical Suite licenses with CorelSure Maintenance, you now can have direct access to Microsoft SharePoint, so you can quickly retrieve and store documents, compare document versions, and track changes directly from within Corel DESIGNER or CorelDRAW.

Microsoft SharePoint integration offers versatile document management by allowing for storage of multiple iterations of a file, ensuring accurate tracking of changes and easy retrieval of previous versions. It also gives organizations a flexible way to manage project calendars, to-do lists, and time lines.

Enhanced! Vector previews: CorelDRAW Technical Suite 2018 boosts your productivity with faster rendering of tool previews; curve previews, nodes, and handles; effect controls and sliders; and text. You can also open large files quicker and enjoy smoother editing of complex curves. In addition, you can work more efficiently thanks to tool and object previews that are more visible and user-friendly.

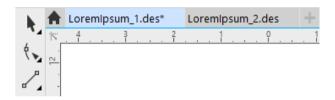
**Enhanced!** Work faster with text and fonts: Faster rendering of text helps accelerate the technical-design workflow. What's more, the performance of the Font List in Corel DESIGNER and CorelDRAW 2018 has been enhanced so you can quickly find what you're looking for.

**Enhanced!** Work faster with fonts stored on a **network:** Finding the right font for the job is easier than ever thanks to enhancements to Corel Font Manager that improve monitoring fonts stored on a network.

**New!** Warning when can't embed fonts: Another timesaver is a new warning that appears when you save a file listing any fonts that can't be embedded. This simplifies collaborative workflows by identifying any fonts that a colleague will need to continue working on the document.

**New!** Filter fonts based on embedding rights: You can save time and ensure hassle-free file sharing thanks to the new Embedding Rights font filter. It allows you to sort fonts based on four common font-embedding permissions, so you know right from the outset which fonts to use or avoid when choosing text styles. The filter gives you a quick idea of what other users will be able to do with text and fonts in a design that you share with them. You'll be able to see which fonts can't be embedded or which ones recipients of the drawing can install on their computer, allow for text editing, or can be only viewed and printed.

**New!** File Save indicator: If you work on multiple documents simultaneously in Corel DESIGNER, CorelDRAW and Corel PHOTO-PAINT, it's now easier to see which files contain unsaved changes. An asterisk appears next to the name of unsaved files on the Windows menu, the title bar and the document tab, so you can identify the status of your work in a glance.



In a glance, you can see what files have unsaved changes.

**New!** Apply and manage fills and transparencies: How users interact with design assets has undergone a complete overhaul in CorelDRAW Technical Suite 2018. Totally redesigned Fill and Transparency pickers help boost your productivity and deliver improved performance when working with and managing fills and transparencies in Corel DESIGNER, CorelDRAW, and Corel PHOTO-PAINT. A streamlined UI allows you to use, create, and find fills and transparencies faster than ever. You can download new content packs, add your own library, easily migrate an asset collection anywhere, and modify asset properties — all within the suite. In addition, you can use aliases to view content stored in another folder on your computer, a USB flash drive, or a shared network folder.

To easily find fills and transparencies you use often, simply mark them as favorites. To avoid clutter, you can move unused assets to a new folder or delete them. Locating the asset you want is a snap. You can view a list of your favorite or most recently used fills and transparencies. You also can search and browse one pack, folder or list at a time. And if you are looking to expand your fill collection, you can download additional fill packs from within the Get More dialog box.



More flexible asset management enhances design productivity.

**New!** Block Shadow tool: The Block Shadow tool in Corel DESIGNER lets you add solid vector shadows to objects and text. This intuitive feature accelerates reprographic workflows by greatly reducing the number of lines and nodes in shadows, slashing the time it takes to get a file ready for output and vastly improving the final result. Powerful property bar settings let you specify the exact depth and direction of the shadow, or you can manipulate those properties interactively within the drawing to get the look that you have in mind. This feature is also available in CorelDRAW 2018.

**New!** Project Timer: Corel DESIGNER 2018 has a new tool designed to help technical graphics professionals keep organized, properly bill clients, and provide insight into how they work. The Project Timer is an accurate, non-intrusive way to track time spent on a project. Appearing as a discreet toolbar above the drawing window, the Project Timer is fully customizable to match your workflow. It offers a variety of ways to monitor and record tasks and project details. Tracking information is saved with the document and can be exported to file formats that can be opened in spreadsheet applications to create

time sheet reports. This feature is also available in CorelDRAW 2018.

**New!** Default folder locations: To simplify finding and sharing technical design assets, you can choose where to store content rather than use the default folders. In response to user requests, Corel DESIGNER, CorelDRAW and Corel PHOTO-PAINT now let you customize where fills, fonts, image lists, photo frames, templates and trays are stored, including any that you've created or acquired from online content providers.

Enhanced! XVL Studio 3D Corel Edition: CorelDRAW Technical Suite 2018 includes XVL Studio 3D Corel Edition, a 3D-authoring application that lets you open, edit, and modify 3D models and import 3D views into your technical illustrations New default illustration-output settings deliver significantly more accurate vector illustration outputs of 3D views. The illustration specifications, such as view, positions of the objects, line weights and export settings, are fully recognized and maintained. In addition, the new Update Illustration tool streamlines the process for updating vector illustrations sourced from a 3D view after modification of the 3D model or view.

You can also create vector illustrations and photorealistic renderings from 3D views and send them to Corel DESIGNER or CorelDRAW, where you can import 3D models as 2D vector graphics to your drawings. You can also import IGES files, a 3D CAD exchange format that supports solid geometries.

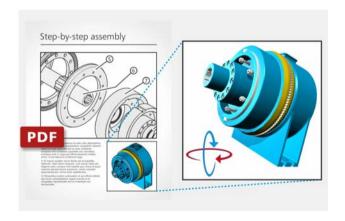
In addition to transforming 3D views to vector graphics for technical-illustration authoring in Corel DESIGNER, you can also send an active 3D view in XVL Studio Corel Edition to CorelDRAW. The vector graphics output from XVL Studio can then be used as source files for the creation of marketing collateral and other creative deliverables based on engineering data.

**File format compatibility:** Corel DESIGNER has support for the latest versions of two formats widely used in technical publications, WebCGM and SVG, ensuring that you can easily exchange files with colleagues and clients worldwide and produce a range

of downstream outputs. Corel DESIGNER also offers a range of PDF options, including publishing your document as a 3D PDF or to the ISO compliant PDF/A archiving format. In addition, if a PDF that you're importing contains objects that fall outside the drawing page, you can now leave them intact or crop them to the drawing page. You can import from and export to more than 100 file formats, including EPS, DWG, TIFF, PNG, JPEG. What's more, files saved in the AI or PSD file format can be easily imported to Corel's ecosystem where work can continue without missing a beat.

**3D PDF support:** You can publish technical drawings to 3D PDF from Corel DESIGNER 2018, giving you the power to create documents that combine text, vector graphics, images, and embedded 3D models. Using a PDF reader that supports 3D PDF viewing, the end user can interact with the 3D model. They can intuitively rotate, move and size it, access assembly and part structure information, and take a look inside a 3D model by displaying cross-sections.

3D PDF is an excellent cross-media format. In addition to being ideal for electronic distribution, it can also be used for print, with the 3D content being printed in its default view.



You can create 3D PDFs.

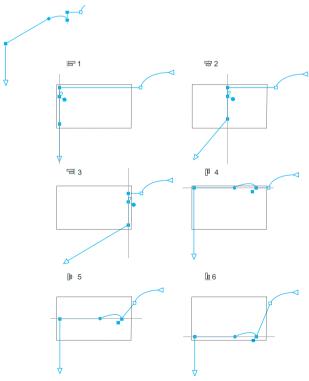
**Object Styles:** This productivity-enhancing feature ensures a consistent visual style in technical publications, making it easy to comply with military and civil aerospace standards, such as S1000D and ATA iSpec 2200. Object styles lets you edit a style or a style set once and have the changes applied instantly throughout a project.

Color Styles docker: The Color Styles docker lets you use styles and color harmonies to manage colors and quickly implement project-wide color changes, which is especially useful for producing iterative designs and varying graphic outputs. The Color Styles docker also offers convenient View Options, including Hint View, which provides a visual indication of all document objects that use a specific color style, and Page Sorter, which displays thumbnails of all pages in a multi-page document and previews changes as you adjust colors.

## **Precise**

You can apply exacting specifications using dedicated technical illustration tools to design visually detailed assembly instructions, complex user manuals and multi-faceted documentation.

**New!** Align and distribute nodes: Since it was introduced, the Align and Distribute docker has become an indispensable tool for technical graphics professionals because of the quick and easy access it offers to time-saving controls for positioning objects. In Corel DESIGNER 2018, those same precise alignment options can now be used for nodes. What used to be a slow, manual process can be achieved effortlessly in a few clicks. You can align nodes using the bounding box of a selection, the page edge or center, the closest grid line, or a specified point. What's more, you can align nodes from different curves. Distributing nodes is just as easy. You can add equal spacing between them horizontally or vertically using the drawing page or a bounding box as the reference point. This feature is also available in CorelDRAW 2018



The active nodes in a curve (top left) are aligned to the left (1), right (3), top (4), bottom (6), and along a vertical (2) and horizontal (5) axis relative to the bounding box of the selection.

Click here to see how it works.



## Give it a try

## **Aligning nodes**

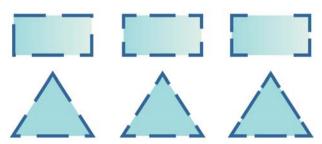
- 1 Open the sample file Align Nodes.des.
- 2 Click **Window** Align and Distribute to open the Align and Distribute docker.
- 3 In the toolbox, click the **Pick** tool , and click the top callout.
- Press Shift + S to activate the Shape tool <sup>↑</sup>, hold down Shift, and click node at the tip of each callout.
- 5 In the Align and Distribute docker, click the

  Specified point button in the Align nodes to

  area, then click the Specify point button .
- **6** Click the a node on a portion of the belt facing the callouts to set an alignment reference point.
- 7 In the Align and Distribute docker, click the Align left button 🖃.

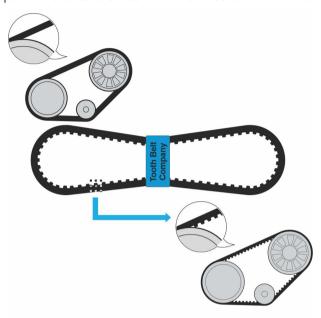
The callout tips align with the belt.

**New!** Corner control in dashed lines and outlines: Corel DESIGNER 2018 give you more control over the appearance of corners in objects, text, and symbols that use dashed lines. In addition to the existing default setting that renders dashed lines exactly as drawn, you can choose from two new options to create perfectly designed and defined corners. The Align dashes option ensures that there's no empty space in the corners and at the start and end of a line or outline by aligning dashes with the end and corner points. And the Fixed dashes option creates dashes in the end and corner points that are half the size of the first dash in the line pattern. This feature is also available in CorelDRAW 2018.



New options give you more control on the appearance of corners in dashed lines: default dashes (left), aligned dashes (center), or fixed dashes (right).

**New!** Fit objects to a path: In Corel DESIGNER 2018, you can fit any type and number of objects to a path of your choice. Smart spacing and rotation settings help you customize the arrangement of objects along the path. This feature is also available in CorelDRAW 2018.



You can easily fit objects to any path to simplify the creation of a range of technical designs.

Click here to see how it works.

## Give it a try

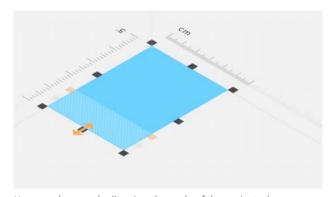
### Fitting objects to a path

- 1 Open the sample file Objects to Path.des.
- 2 Click Window ▶ Fit Objects to Path to open the Fit Objects to Path docker.
- 3 In the toolbox, click the **Pick** tool , and click a tooth on the toothed belt in the top-left of the drawing.
- 4 In the belt and pulley assembly, click the curve that represents the belt in the bottom-left area of the assembly.
- In the Fit Objects to Path docker, enable the **Keep** originals and **Group all objects** check boxes, and type **80** in the **Duplicate(s)** box.
- 6 In the Origin area, click the top-center option, and click Apply.
  - The belt on the bottom-left assembly has 80 belt teeth fitted to it.
- 7 Using the **Pick** tool, click a tooth on the toothed belt in the top-left of the drawing.

- **8** In the belt and pulley assembly, click the curve that represents the belt in the top-right area of the assembly.
  - The settings used for fitting the tooth to the first path will be re-used with the exception of the number of duplicates.
- 9 Type \*2 immediately after 80 in the Duplicate(s) box (80\*2) to double the number of duplicates being fitted to that path, and click Apply.

The belt on the top-right assembly has 160 belt teeth fitted to it.

**Projected drawing:** You can intuitively create new objects and edit existing ones using the dimensions and coordinates of the active projected plane. The UI displays the projected-plane values that you'd expect, so you can accurately draw, move, copy, stretch, and scale objects, giving you increased precision and productivity when authoring isometric drawings.



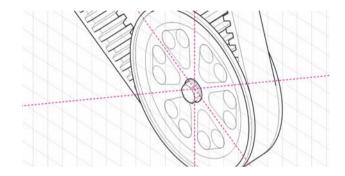
You can draw and edit using the scale of the projected axes according to the settings of the active projected plane.

**Symbol Manager docker:** Technical illustrators often use symbols for standard drawing components, which can appear multiple times in an illustration. To that end, the Symbol Manager docker simplifies creating, editing, and managing symbols, including custom defined symbol libraries. Corel DESIGNER 2018 also offers over 4,000 technical symbols, helping you quickly add precise detail to technical illustrations.

## **Innovative**

Technical graphics users can explore groundbreaking tools for sketching and illustration, stay on the cutting-edge of graphics technology, and advance your design talents using state-of-the-art tools, including intuitive photo editing features.

**New!** Symmetry: Corel DESIGNER 2018 introduces the Symmetry drawing mode, which boosts your productivity by automating what is usually a very time-consuming process. It lets you create a range of symmetrical designs, from simple objects to complex kaleidoscopic effects, in real time.



There are two ways to use Symmetry mode. You can work in Symmetry mode from the outset and start drawing symmetrically immediately. Or, you can apply symmetry to an existing object or group of objects, both vector and bitmap.

Symmetry mode can be used with curves, shapes, objects, text, and you can use transparency, fills and more in a symmetrical designs.

You can add symmetry lines, adjust the reflection angle, and move symmetry lines independently of the objects in the group. And when you edit the original image or add new nodes or objects, you'll see the changes repeated and reflected in each copy. This feature is also available in CorelDRAW 2018.

Click here to see how it works.

## Give it a try

## **Drawing in Symmetry mode**

- 1 Open the sample file **Symmetry.des**.
- 2 On the Drawing Plane toolbar, click the **Front** button so that the drawing plane is bounded by the x and y axes.

The Drawing Plane toolbar appears to the right of the standard toolbar.

You can hide or display the grid by pressing F10.

- 3 In the toolbox, click the **Ellipse** tool 5, and click an intersection of the drawing plane axes inside the circle on the outside of the pulley, and drag to create an ellipse.
- 4 Right-click the ellipse, and choose Create New Symmetry.

A symmetry line appears in the drawing window, and the ellipse is duplicated and mirrored.

5 Drag the symmetry line over the intersection of the x and y axes that appears over the nut in the center of the circle on the outside of the pulley.

The duplicated ellipse is moved relative to the new position of the symmetry line.

6 On the property bar, type 3 in the Mirror line box to increase the number of symmetry lines.

This increases the number of duplicates of the ellipse to 5.

- 7 Right-click a symmetry line, and choose Finish Editing Symmetry to exit Edit Symmetry mode.
- 8 Click off the drawing page, then right-click in the area where the ellipses were created, and choose Edit Symmetry.
- **9** Using the **Pick** tool , select the original ellipse.
- **10** Hold down the mouse button, and drag while holding down the right mouse button.

A plus sign (+) appears to indicate that you are dragging a copy.

- 11 Position the copy of the ellipse near the intersection of the symmetry lines, staying within the section bounded by the lines for the original ellipse, and release the mouse button.
- **12** Drag another copy of the original ellipse to the left, staying within the section bounded by the lines for the original ellipse.

The copies of the ellipse are mirrored in all areas of the symmetry group.

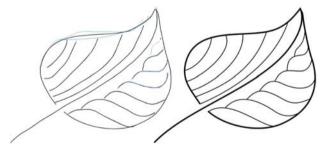
13 In the toolbox, click the 2-Point Line tool , click the Tangential 2-point line button on the property bar and draw lines to connect the edges of the original ellipse and its two copies. The line automatically starts as a tangent to the snapped-to projected ellipse. Pressing T as you draw snaps the end point of the line to the outside edge of the 2nd projected ellipse.

The lines connecting the ellipses are mirrored in all areas of the symmetry group.

- 15 Repeat for the copies of the ellipse.

The deletion of the interior segments of the ellipses is mirrored in all areas of the symmetry group.

**Enhanced!** LiveSketch tool: The LiveSketch tool has quickly become a favorite with technical illustrators because it gives them the ability to design using handdrawn vector curves right from the get-go. And in Corel DESIGNER 2018, this revolutionary tool has been enhanced. How the application analyzes and adjusts your input strokes has been refined, delivering results that are more predictable than ever. You can harness this enhanced accuracy to speed up your workflow and focus on the design process, making it even easier to get an idea onto the screen in front of you. This enhancement is also available in CorelDRAW 2018.



You can capture design concepts using hand-drawn vector curves.

**New!** Publish to WordPress: In Corel DESIGNER 2018, you can send your work directly to a WordPress media library from within the application. This new functionality enables you to convert selected objects or an entire project to a JPEG, GIF, or PNG file and then upload the image to a WordPress account — without ever leaving Corel DESIGNER. If you have multiple WordPress sites or accounts, you can easily specify where your content is uploaded.

You can also publish images to WordPress from CorelDRAW 2018 and Corel PHOTO-PAINT 2018.

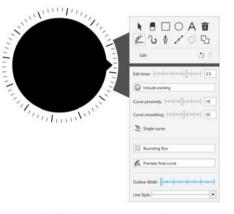
**New!** GPU accelerated vector previews: Repositioning and editing complex vector shapes can tax your system's resources, especially when previews are displayed. By default, the central processing unit (CPU) of your computer is used to generate vector previews, but you can now opt to use the graphics processing unit (GPU) instead. The GPU is a specialized processor that greatly accelerates the display, editing, and manipulation of graphics. Choosing to use the GPU delivers faster rendering of tool previews, curves, and other effects in Corel DESIGNER, CorelDRAW, and Corel PHOTO-PAINT. Since GPUs vary across machines, these enhancements may be more noticeable to some users than others.

**New!** HDR merge: You can now access the High Dynamic Range (HDR) Merge module in AfterShot 3 HDR directly from the Camera RAW Lab in Corel PHOTO-PAINT 2018 to combine two or more photos of the same scene that were taken with different exposure settings. This lets you access a broader tonal range to create a final image.

**New!** Flip the stylus pen to eraser: If you work with a pen or stylus, you can take advantage of a variety real-time input factors to erase with the ease and accuracy of a pencil eraser. Now in Corel DESIGNER, you can use pressure to vary the size of the eraser nib, as well as link tilt and bearing to its flatness and rotation. Flipping the stylus or pen activates the Eraser tool, so you can erase on the fly without having to go to the toolbox. In addition, you can use the Eraser tool on most object types, and it's easier to erase through

groups of objects. This feature is also available in CorelDRAW 2018.

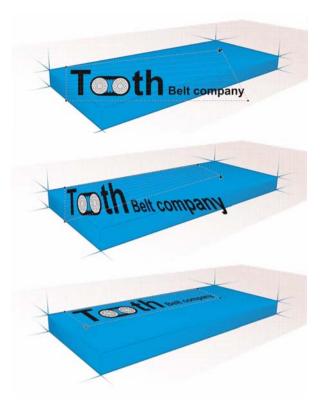
**Enhanced!** Support for wheel devices: CorelDRAW Technical Suite 2018 offers alternative ways of working thanks to enhanced support for wheel devices, such as the Microsoft Surface Dial. Put your keyboard aside and take advantage of the contextual onscreen UI. Design more naturally using a combination of ergonomic tools such as wheel devices, touch, or a stylus. This workflow lets you easily switch between tools and tasks with the non-dominant hand as you sketch or design with the other.





Improved wheel support ensures that you can do more with peripheral devices.

New! Add Perspective effect: Corel DESIGNER 2018 gives you the ability to use the Add Perspective effect on bitmaps with the same ease that you've always had when applying it to vector objects. It's never been easier to create the illusion of distance and depth by applying perspective to bitmaps, vector objects, or both simultaneously. You can work with speed and precision because you apply it interactively right in the drawing window. The Add Perspective effect is a great tool for technical graphics users who want see what a design will look like in real world scenarios, such as brochures, packaging, exhibition booth panels, and more. The effect is applied non-destructively, so you can edit it or remove it and revert to the original image at any point. This feature is also available in CorelDRAW 2018.



You can interactively tailor the perspective effect.

#### Click here to see how it works.

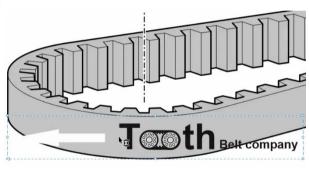
## Give it a try

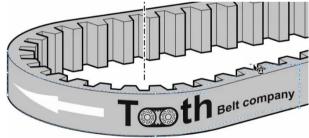
### Adding Perspective and Envelope effects nodes

- 1 Open the sample file Perspective.des.
- 2 In the toolbox, click the **Pick** tool ♠, and click the wordmark (*Tooth Belt company*) in the bottom-right of the drawing.
- Press Ctrl + C to copy it, Ctrl + V twice to create two copies.
- 4 Drag one copy to left edge of the belt.
- 5 In the Interactive Tools flyout in the toolbox, click the **Envelope** tool  $\sum_{i=1}^{n} I_i$ .
- **6** Drag the nodes to interactively shape the wordmark to contours of the left edge of the belt.
- **7** Drag the second copy to below the bottom-right edge of the belt.
- 8 Click Effects ▶ Add Perspective.
- **9** Drag the nodes on the outside of the grid to align the edges of the wordmark with the shape of the belt.

## **Enhanced!** Apply envelopes to bitmaps: Corel

DESIGNER 2018 gives you the same ability to interactively shape bitmaps that you've always had when working with vector objects. You can guickly and seamlessly blend a bitmap into an illustration using envelope presets, or you can craft one from scratch and save it for reuse. The enhanced Envelope tool can be used on a group of objects, whether vector, bitmap or both — all non-destructively. All the controls that you need are right on the canvas and property bar, so there's no time spent navigating a series of dialog boxes. Technical designers can quickly swap out the bitmaps used in an envelope with the Copy envelope properties option, so experimenting and getting the perfect look is effortless. What's more, you can turn any vector object into an envelope with the Create envelope from option. This enhancement is also available in CorelDRAW 2018.





The original bitmap (top) with an envelope (bottom). The envelope is applied nondestructively, so you can edit it or remove it and revert to the original image at any point.

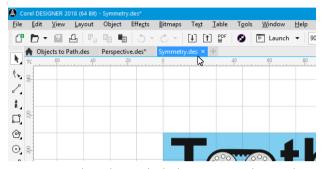
## Click here to see how it works.

**QR codes:** With Corel DESIGNER 2018, you can add scalable QR codes to a drawing, allowing you to give technicians in the field the ability to access online technical documentation from printed documentation or machine labels using a smartphone. It's easy to customize a QR code and analyze it to ensure it can



be read by QR code readers, mobile devices, and scanners.

**Multiple document interface:** You can work with multiple documents in a tabbed view, which helps you stay organized and quickly switch between several active documents.

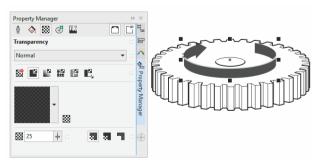


You can easily work on multiple documents simultaneously.

Content Exchange: The Content Exchange is an online repository that integrates with Corel CONNECT and the suite's applications, making it quick and effortless to access and share vector fills, bitmap fills, and fountain fills with a community of other users. You can instantly set any asset that catches your eye in the Content Exchange as a favorite, which is a quick and convenient way to keep a list of content that you might want to download later.

**Transparency:** You can apply transparency to individual color nodes within a fountain fill, allowing you to adjust an object's transparency so that all objects beneath it are partially visible.

Transparency settings are accessible in the Property Manager docker in Corel DESIGNER 2018 (and the Object Properties docker in CorelDRAW 2018), making it fast and easy to apply and adjust object transparency.



It is fast and easy to apply and adjust object transparency.





## Advanced 3D CAD repurposing: XVL Studio 3D CAD Corel® Edition (optional add-on)

For organizations that require additional 3D editing capabilities and direct access to 3D CAD assembly files, CorelDRAW Technical Suite 2018 offers an upgrade to XVL Studio 3D CAD Corel Edition. This add-on provides native assembly and part file support for 3D CAD systems used in discrete manufacturing, such as the automotive, aerospace, and machinery industries. XVL Studio 3D CAD Corel Edition lets users do more with CAD files without the steep learning curve of 3D CAD software. It streamlines the workflow of technical communication professionals by reducing the need to consult design engineers when preparing graphics content.

Enhanced! File support: XVL Studio 3D CAD Corel Edition supports a broad range of native 3D CAD file formats. such as assembly and part files from CATIA, SolidWorks, PTC Creo Parametric (formerly Pro/ENGINEER), Autodesk Inventor, NX, SolidEdge, and more. It also supports 3D CAD exchange formats, such as JT, IGES, STEP, and Parasolid. File import support has been updated to include CATIA V5-6R2018, Autodesk Inventor 2018, NX 12, Solid Edge ST10, SolidWorks 2018.

**Enhanced!** 3D CAD file options: You can send multiple 3D views to Corel DESIGNER as vector illustrations in one go. What's more, you can resend newer versions of views stored as snapshots to update existing illustrations in a DES file. The new **Process Snapshot** feature simplifies the capturing and illustration of assembly and maintenance processes. You can also take advantage of enhanced annotation features and dimension tools. You also have the flexibility of adding

specific options from the standalone version of XVL Studio, such as the Process PDF Template option, to a XVL Studio CAD Corel Edition license.

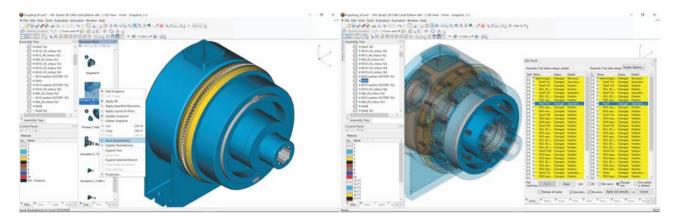
**Enhanced!** XVL Studio 3D Corel Edition: New default illustration-output settings deliver significantly more accurate vector illustration outputs of 3D views. The illustration specifications, such as view, positions of the objects, line weights and export settings, are fully recognized and maintained. In addition, the new Update Illustration tool streamlines the process for updating vector illustrations sourced from a 3D view after modification of the 3D model.

Enhanced! XVL Studio 3D CAD Corel Edition: This optional add-on delivers a variety of productivity enhancements. When sending a snapshot to Corel DESIGNER, you can specify which parts will be outlined, significantly reducing file size. You can also align notes to a specified link. The new Selection Process view displays only parts that you specify, so you can easily compare the selected parts to the entire model view. To simplify managing assemblies, you can highlight ones that aren't registered in the Manufacture and Process trees, reducing the chance of having missing parts. And when you're publishing to Microsoft Excel, you can customize the size of images in the report.

#### Update / replace assembly functionality:

Once a design moves to the production phase, construction changes are common. With XVL Studio 3D CAD, you can update early designs at any time due to changes determined by construction. Disassembly

views, animations, and other 3D authoring functions are maintained, so that you can efficiently update technical illustrations with the most current revision of the manufacturing design.

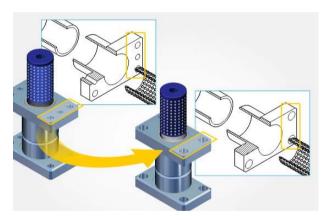


The update or replace assembly functionality offered by XVL Studio 3D CAD Corel Edition helps you ensure that the most current manufacturing revisions are reflected at any time in the visualization workflow.

Update a 3D-sourced illustration: To speed up technical-publication authoring, CorelDRAW Technical Suite 2018 with XVL Studio 3D CAD Corel Edition offers the Auto Detection and Update command. It updates 3D visualizations created in XVL Studio CAD, stored snapshots, cross-sections and animated procedures — including process animations for illustrating complex, multi-step assembly, disassembly, or maintenance procedures — based on the modifications applied to the CAD source data. New selection, review and filter options in the auto detection and update process automatically apply modifications in Engineering files to all visualizations created for technical communication.

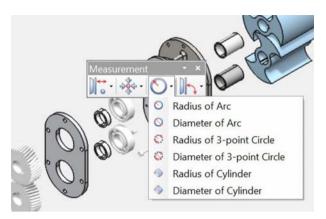
It also lets you automatically generate updated vector illustrations to replace ones in DES files that were created using the **Send to Corel DESIGNER** command. The illustration specifications, such as view, positions of the objects, line weights and export settings, are fully recognized and maintained. As a result, the illustrations are recreated using the updated 3D model and inserted in the same place as the original, allowing technical illustrators to start a publication

with a preliminary 3D design and update it with the final design instantly.



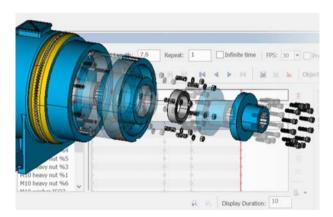
You can automatically update 3D-sourced illustrations.

**Evaluation tools:** Before 3D models and data can be used in downstream applications, the integrity of the 3D model requires validation. XVL Studio 3D CAD provides assembly evaluation tools for geometry and measurements, interference check, and collision detection so you can quickly verify the integrity of a 3D assembly.



Additional 3D CAD tools: With XVL Studio 3D CAD, you can edit 3D models and combine 3D models from different CAD sources. It provides a rich 3D CAD toolset that lets you modify and transform 3D parts, shapes, and assemblies.

Enhanced! Animation tool set: XVL Studio 3D CAD provides a full set of animation tools, including a dedicated editing console as well as a method for automated creation of disassembly animations. Process animations can be created to capture complex, multi-step assembly or maintenance procedures with detailed instructions. And new options make it easier than ever to edit process animations. The hierarchical structure of the Assembly Tree view and the ability to create custom tree structures for disassembly and process animations gives you full control over the creation of assembly, sub-assembly, and part structures for use in illustrated assembly and maintenance instructions.



Online and mobile outputs: XVL Studio 3D CAD supports output of 3D models to HTML5 and for mobile devices. By using the highly compressed XVL® file format, you can share complex models with

virtually anyone, using the free XVL Player as browser plug-in for desktop/laptop or iXVL apps for iOS. XVL is the most lightweight 3D format in the industry, enabling data to be compressed to an average 0.5% of its original size with high accuracy. For example, a 500 MB 3D CAD assembly file can be shared on mobile devices as an XVL file with an approximate file size of 2.5 MB.

**3D outputs:** With XVL Studio 3D CAD Corel Edition, you can output to various 3D file formats, including 3DS, DXF, IGES, OBJ, STL, U3D, and VRML. You can also publish directly to 3D PDF from XVL Studio CAD Corel Edition, using a PDF template with animation controls.

## **About Corel**

Corel is one of the world's top software companies. Our mission is simple: to help people achieve new levels of creativity, productivity, and success.

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CorelDRAW® Technical Suite 2018 Reviewer's Guide

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