

Reviewer's Guide

## CorelDRAW® TECHNICAL SUITE 2019

#### Contents

1   Introducing CorelDRAW Technical Suite 2019 2   Customer profiles	1	
	4	
	5	
4   Key features	7	
5   XVI Studio 3D CAD Corel Edition (ontional add-on)	1⊿	



### Introducing CorelDRAW® Technical Suite 2019

CorelDRAW® Technical Suite 2019 empowers visually impactful technical communication. The suite lets users design with new levels of precision thanks to a comprehensive collection of applications, innovative tools, and accelerated application performance all developed with productivity in mind. Carefully crafted for professionals and technical graphics users, CorelDRAW Technical Suite 2019 is your all-in-one suite for visual technical communication.

#### Be boundless

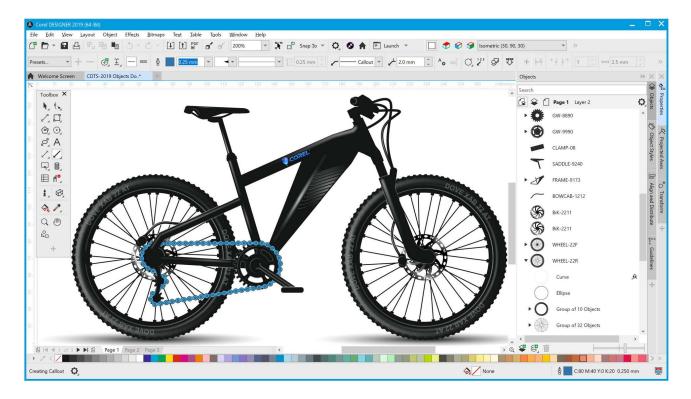
Whether you're creating complex user manuals, detailed illustrations or any other kind of output that requires technical graphics, CorelDRAW Technical Suite 2019 delivers a comprehensive suite of professional applications that meets all your visual communication needs for project creation, authoring and publishing of technical documentation.

Thanks to extensive file compatibility, users can import and edit content from any source, publish to industry-standards, or share with customers, business partners or colleagues. The suite offers a greater variety of ISO-compliant export options like PDF/X-4, which helps ensure hassle-free output of files to the widest range of printing devices. A redesigned Print Merge workflow simplifies combining an illustration with snippets of variable text to produce several different copies of a design. And CorelDRAW Technical Suite 2019 Enterprise license users can collaborate more easily thanks to enhanced support for Microsoft SharePoint.

You can also rely on compliance with various standards-based systems thanks to support for technical publication specifications. Technical communicators can export work to over 100 file formats, including to S1000D (including Issue 4.2), ATA iSpec 2200-compliant IETPs, WebCGM, SVG, as well as 3D PDF or PDF/A. You can also count on hassle-free file exchange with colleagues and clients worldwide and the ability to produce a range of downstream outputs. 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.

#### Be precise

When it comes to visually communicating how something is designed, assembled or operated, accuracy is paramount. CorelDRAW Technical Suite 2019 offers a range of precise illustration and design tools to create detailed technical documentation with exact specifications. Technical illustrators can work with projected drawing planes with confidence and find drawing axes easily with enhanced projected drawing features. Corel DESIGNER® continues to extend its S1000D support with the introduction of standardcompliant line style sets. And a series of new options take the guesswork out of creating crisp, clean icons, dashboard images, and web graphics. Adding to an already powerful, dedicated set of precision tools, Corel DESIGNER 2019 takes the guesswork out of creating detailed assembly instructions, complex user manuals, illustrated parts catalogs, and more.



#### Be productive

With CorelDRAW Technical Suite 2019, you'll work more efficiently and productively thanks to new tools and enhancements — from the new Objects docker that gives you direct control over the structure of a document and quick access to its components to performance upgrades that make this the fastest version of the suite yet. It's easier than ever to locate design components and update their properties, even in the most complex files. Users can also take advantage of a newly optimized workspace specifically for technical illustration.

What's more, the suite has an array of professional 3D-authoring, creative design and image editing applications that deliver a seamless workflow, from opening 2D and 3D source files, photos, documents and data, to producing and publishing technical communications.

#### Choose your purchase option

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

#### **Perpetual License**

At Corel, we 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 a range of sectors, including discrete manufacturing, automotive, aerospace, high tech and telecommunications, architecture, engineering and construction (AEC), and energy, oil and gas.

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 incorporated into their existing processes. These users seek integrated tools that allow them to create utilities and macros to automate tasks and enhance their workflow.

#### **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, so they need direct access to Microsoft SharePoint to quickly retrieve and store documents, compare document versions, and track changes directly from within their technical graphics software. 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® 2019: 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® 2019: 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® 2019: This professional image-editing application lets you quickly and easily retouch and enhance photos for both technical communication and creative graphics projects.
- XVL Studio 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<sup>™</sup> 2019: This standalone font management application lets you find, organize, and preview local fonts, including fonts in a network and regardless of being installed on the system.
- Corel® PowerTRACE® 2019: 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® CAPTURE™ 2019: 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.
- CorelDRAW.app™: This powerful web app lets you create, review and access designs on the go using devices other than your computer.
- Corel® AfterShot™ 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

- XVL Player: This 3D viewer is integrated with Corel DESIGNER 2019 for the insertion of 3D data assets in technical illustrations. It provides the ability to modify 3D views and display modes.
- Microsoft Visual Basic for Applications: This integrated development environment lets you create utilities and macros that interact with the drawing page, enhance applications in the suite, and streamline your workflow.
- 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.
- JavaScript (JS): The integrated API enables developers to automate tasks and extend functionality
- Barcode wizard: This wizard lets you generate bar codes in a wide range of industry-standard formats.
- **Duplexing wizard:** This wizard helps you optimize your work for two-sided printing.

• **GPL Ghostscript:** This feature lets you isolate and use individual elements of imported EPS files and improves the import of PDF files generated by third-party applications.

#### Content

- More than 4,000 industry-standard Architectural, Electrical, General, Mechanical, and Tools symbols
- 7,000 high-quality clipart, digital images, and vehicle wrap templates
- 1,000 high-resolution digital photos
- Over 1,000 TrueType and OpenType fonts
- More than 150 professionally designed templates, including more than 40 technical ANSI, DIN, and ISO standard templates
- Over 600 fountain, vector and bitmap fills

#### **Documentation**

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

## CorelDRAW Technical Suite 2019 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
- 10.7 GB hard disk space
- Multi-touch screen, mouse or tablet
- 1280 x 720 screen resolution at 100% (96 dpi)
- Microsoft Internet Explorer 11 or higher
- Microsoft .NET Framework 4.7.2
- CD drive optional (for box installation)
   Installation from CD requires a download of up to
   1.82 GB
- Internet connection is required to install and authenticate CorelDRAW Technical Suite and access some of the included software components, online features and content. For more information, please visit www.coreldraw.com.

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

For processing 3D CAD assembly data we recommend:

- 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 Corel Edition is included and installed with CorelDRAW Technical Suite 2019. The optional XVL Studio 3D CAD Add-On product unlocks additional functionality for the integrated application.

\*Note: CorelDRAW Technical Suite 2019 supports Windows 10, version 1803, 1809 and later versions being released during the lifecycle of CorelDRAW Technical Suite 2019.





### **Key features**

CorelDRAW Technical Suite 2019 is a complete and cost-effective solution for authoring visual communications for publishing to print, online, and mobile devices.

#### Be boundless

Whether you're creating complex user manuals or detailed illustrations, you will find a comprehensive suite of professional applications to meet all of your visual communication needs for project creation, authoring and publishing of technical documentation.

#### **Enhanced!** Non-destructive bitmap effects:

Corel DESIGNER 2019 makes it easy to apply, modify, and experiment with bitmap effects on both vectors and bitmaps, all without altering the source object. The new Effects tab in the Properties docker is the hub for non-destructive editing. It displays a list of all effects applied to a selected object and lets you add new effects and delete existing ones in a couple of clicks. What's more, you can launch an applied effect's dialog box from the docker and make quick adjustments. Great when working on a vector illustration, this new workflow allows for unlimited experimentation. You can get different looks by reordering effects in the list or toggling them on or off.

You can even apply a stack of effects, then create reusable styles or style sets based on that stack. This allows you to modify all objects to which it has been applied by altering the effects stack once in the style or style set definition.

This feature is also available in CorelDRAW 2019. *Click here to see how it works.* 

#### Give it a try

#### APPLY NON-DESTRUCTIVE BITMAP EFFECTS

- 1 In the Welcome Screen, open the Discover file Bike Effects.
  - If the Welcome Screen isn't open, click **Help ▶ Welcome**.
- 2 In the drawing, click on the top tube of the bicycle.
- **3** On the standard toolbar, set the zoom level to **400%**, and use the scroll bars on the drawing window to center the top tube and the *Corel* logo.
- 4 Press Alt+Enter to open the Properties docker, and click the Effects tab fx.
  - Any bitmap effects that are applied to a selected bitmap or vector object are listed.
- Position your cursor over Gaussian Blur in the Bitmap Effects list, then click the Hide button to to see the impact of the effect. Click the button to show the effect again.
- 6 Now position your cursor over the effect, and click the **Edit** button .

This automatically displays the dialog box for the applied effect for easy adjustments.

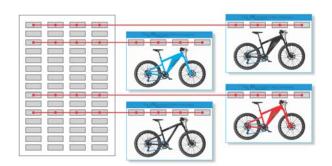
You can add more bitmap effects to the selected object by clicking the **Add effect** button +, and choosing an effect.



Add bitmap effects to objects without altering the original.

**Enhanced!** Print Merge: Corel DESIGNER 2019 has updated the way you combine a drawing with snippets of variable text to produce several different copies of a design. With overhauled UI and a streamlined workflow, the Print Merge feature makes it even easier to combine a graphic with a data source to quickly generate wiring diagrams of parallel circuits, bills of material, and more.

This enhancement is also available in CorelDRAW 2019.



Easily create multiple iterations of the same design.

**Enhanced!** PDF/X support: CorelDRAW Technical Suite 2019 offers a greater variety of ISO-compliant PDF/X export options. New support for PDF/X-4 helps ensure easy output of files that are compatible with the widest range of devices and compliant with the latest print-industry standards.

This enhancement is also available in CorelDRAW 2019.

**Enhanced!** Transform docker: The Transform docker lets you experiment with transformations without affecting the original object. You can transform objects with precision and apply the transformation to the duplicate of an object, which is created automatically. Clearer labels, improved layout, and new interactive controls make the Transform docker easier to use. And in Corel DESIGNER 2019, a new option lets you fit an object into a rectangular area that you specify.

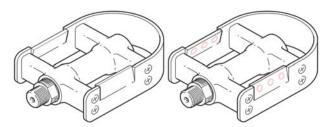
Enhanced! Microsoft SharePoint support: Users with a CorelDRAW Technical Suite 2019 Enterprise license (with CorelSure Maintenance) can take advantage of greater support for Microsoft SharePoint. New options allow for the addition of a version description or choice of a version type, such as a major or minor version. Major versions (1.0, 2.0 and so on) can be used for making important changes in a drawing, whereas minor versions (1.1, 1.2, 1.3 and so on) can be used for making light edits. In addition, depending on how the permissions are set up in a document library, a minor version might be treated as a draft document that only certain users can access.



#### Be precise

When it comes to visually communicating how something is designed, assembled or operates, accuracy is paramount. CorelDRAW Technical Suite 2019 offers a range of precise illustration and design tools to create detailed technical documentation with exact specifications.

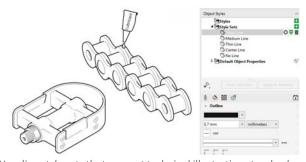
**Enhanced!** Isometric drawing tools: Corel DESIGNER takes the guesswork out of redefining a projected drawing plane when there is no third axis available. Instead of going through trial and error to customize a drawing profile, technical illustrators can define the active drawing plane interactively in just a few clicks. The values of the X, Y, and Z axis are automatically recalculated in the Projected Axes docker, and then you can finish the job with any of the drawing tools.



Confidently draw on projected planes using enhanced isometric drawing tools.

**New!** Line style sets: As more industries around the globe adopt the S1000D standard to ensure content quality and reliable information sharing, Corel DESIGNER continues to extend its support for this key technical illustration specification. S1000D-compliant line style sets, including Thick Line, Medium Line, Thin Line, Center Line or No Line, are now accessible from the from the Objects Styles docker or can be applied using keyboard shortcuts.

Click here to see how it works.



New line style sets that support technical illustration standards.

Enhanced! Object style sets: Now when vector illustrations are imported from XVL Studio Corel Edition via its Send to Corel DESIGNER command, you can create style sets from them with a single click in the Object Styles docker. This functionality applies for multiple curves imported from other sources, too. If style sets that match the properties of the imported curves already exist, they're applied to the curves automatically. When you modify and re-import a source model in a drawing, you can apply existing matching styles to all curves, saving yourself the hassle of applying styles to individual curves. In addition, when creating an illustration from scratch, you can do the same when applying style sets at any stage in the design.

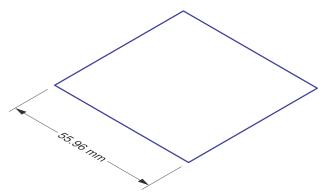
#### Give it a try

#### Create a line style set from an object

- 1 In the Welcome Screen, open the *Discover* file **Bike** Parts.
  - If the Welcome Screen isn't open, click **Help** ▶ **Welcome**.
- **2** Using the **Pick** tool , right-click the chain.
- 3 Choose Object Styles, and point to New Style Set From.
  - A preview shows you what object attributes will be included in the new style set.
- 4 Click New Style Set From.
- 5 In the New Style Set From dialog box, type *Chain* in the **New Style Set Name** box, and click **OK**.
  - In the Objects Styles docker, you can access the new style set and apply it to other objects.

#### **New!** Arrows and dimension lines in projected drawing:

Another projected drawing enhancement delivers better views of design components and more expected results. Arrowheads (line ends) of dimension lines and regular lines now project with the lines when you draw on a projected drawing plane.



Add context with enhanced projected arrows.

**New!** Pixel-perfect workflow: A series of new features take the guesswork out of creating crisper icons, dashboard images, and web graphics. Enhanced pixel snapping ensures clean results by automatically positioning an object on the pixel grid based on its properties. New page-alignment defaults and precise pixel readouts help deliver sharp graphic edges and better support for odd-pixel-number sized drawings. This feature is also available in CorelDRAW 2019.



Refined pixel workflow tools guarantee pixel-perfect results.

#### Be productive

No time or effort is wasted with this highly efficient solution for technical design. Enjoy a seamless workflow from opening 2D and 3D source files, photos, documents and data, to producing and publishing technical communications.

**New!** Objects docker: How users work with and manage design elements, layers and pages has been totally re-imagined in CorelDRAW Technical Suite 2019. The new Objects docker in Corel DESIGNER, CorelDRAW and Corel PHOTO-PAINT lets you work faster and smarter by giving you direct control over the structure of a document and fast access to its components.

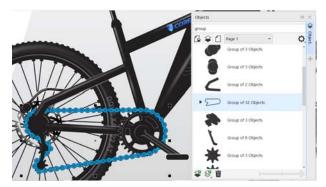
An enhanced interface makes it easier to find parts of your design. Object thumbnails update instantly to reflect shape and color changes, effects, and transformations to make it simpler to identify and pinpoint design elements. In addition, you can precisely resize object thumbnails in the docker. New search functionality lets you filter and group design elements by name. And to eliminate visual clutter, the Lock and Hide buttons for each object only display when hovered over.

In Corel DESIGNER 2019, new view modes allow you to change what the Objects docker displays. This lets you focus on what's most critical at that point in your workflow, whether it's everything in the document, only the active page, or just a list of pages in the design. When working with complex projects, you can use different views for different layers with a single click, having objects on one layer display as wireframe renderings and objects on another layer in color.

Working with layers in Corel DESIGNER 2019 is more intuitive. Now when you select an object, the layer on which it resides becomes the active layer, making working with objects more predictable. Enhanced drag-and-drop functionality makes it easier to group and move objects from layer to layer and reorder pages. Now with a single click, you can expand and

collapse pages, layers, and any grouped or nested objects residing on them. And dealing with large files created in other applications is never a problem thanks to a new command that instantly deletes any layer that doesn't contain objects or text.

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



Gain insight into project elements and get more control over the management of objects, layers and pages.

#### Give it a try

#### Work with objects

1 In the Welcome Screen, open the *Discover* file **Bike Effects**.

If the Welcome Screen isn't open, click **Help Welcome**.

2 In the Objects docker, type *bitmap* in the **Search** box

If the Objects docker isn't open, click **Window** ▶ **Objects** or press **Ctrl+F1**.

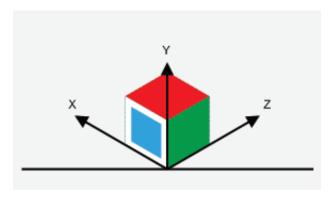
The **Content** list is filtered to display the only bitmap in the drawing.

- **3** Position your cursor over the bitmap in the Objects docker, then click the **Hide** button **()** a few times to toggle the display of the bitmap.
- 4 In the **Search** box, type *group* to display only the grouped objects in the drawing.
- **5** At the bottom of the Objects docker, drag the **Resize List** slider to the right.

The icons for the grouped objects in the **Content** list increase in size as you move the slider.

Enhanced! Projected Axes docker: It's easier than ever to create and edit drawing profiles thanks to Projected Axes docker enhancements. New labeled axis lines on the interactive cube give you a clearer understanding of how it relates to docker controls. The docker offers new features that are more intuitive and streamline projected drawing. Now you can set the active projection plane with a click of a cube plane or return to orthographic mode by deselecting the cube, accelerating workflows that call for intensive projected drawing.

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



Labeled axis lines add clarity to the interactive cube.

**New!** Shortcut and modifier keys: Corel DESIGNER 2019 introduces new shortcut and modifier keys that accelerate the workflow of some of the most frequently used tools and features.

Splitting objects with the Knife tool is faster thanks to a new shortcut (A) that lets you toggle between cutting modes — 2-point line, Freehand, or Bézier.

When the Pick tool is active, a new modifier key (W) lets you move an ellipse or an ellipse within in a group along its thrust axis. You can also move other selected objects together with the ellipse.

Another new keyboard shortcut (Ctrl+Shift+V) lets you paste objects in the center of the viewable area of your drawing so that you don't need to zoom out and pan to find them.

Click here to see how it works.

#### Give it a try

#### Determine projected drawing planes interactively

1 In the Welcome Screen, open the *Give it a try* file Create Projection.

If the Welcome Screen isn't open, click **Help Welcome**.

- 2 In the Objects docker, click the top object in the Content list, scroll to the bottom of the list, hold down Shift, and click the bottom-most object to select all items in the list.
- **3** Right-click, and click **Unlock**.
- 4 Click Window ▶ Projected Axes.
- 5 In the Projected Axes docker, enable the With 3 axes option, and click Define.
- **6** Click and drag over the group of objects in the topright of the illustration to define the Y, X, and Z axis consecutively using the cube in the Projected Axes docker as reference.
- **7** Use any of the drawing tools to draw on the drawing plane you just defined.

### Move an ellipse along its thrust axis with the Pick tool

1 In the Objects docker, type *ellipse* in the **Search** box.

Click the bottom-most ellipse, and click the **Lock** button to unlock it. In the drawing, the ellipse is selected.

2 Click the **Pick** tool , hold down **W**, move the cursor over the ellipse, and drag.

The ellipse is moved along its thrust axis or shortest diameter.

You can also move a group along the thrust axis of a specific ellipse in the group by selecting the group with the **Pick** tool, holding down **W**, moving the cursor over the ellipse, and dragging.

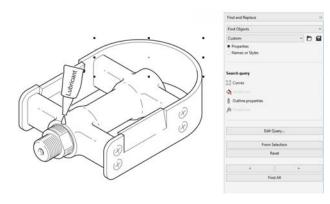
You can move an ellipse along its thrust axis independently from the group, by **Ctrl**-clicking the ellipse, holding down **W**, and dragging.

**New!** Find and Replace docker: Streamlining everyday tasks in a range of technical-design workflows was central in the development of Corel DESIGNER 2019. To that end, how you find and replace objects and text has been totally overhauled and simplified. The new Find and Replace docker, which replaces the Find and Replace wizard of previous versions, offers a straightforward, intuitive interface that lets you locate drawing components and change their attributes faster than ever.

The new From Selected option lets you select an object and use its type, outline, effects and fill as the basis of a search. You can also search for Corel DESIGNER object types such as thread shapes, well shapes, cylinders, and prisms. A selected object's properties are displayed in the docker, and you can choose which ones to use, allowing you to narrow or broaden the search.

Replacing object properties is a lot faster in Corel DESIGNER 2019, too. To save time, multiple properties, such as color, fill and outline, can be simultaneously replaced. What's more, you can find an object and replace properties even when it is part of a group, all without compromising the group hierarchy of the document. And finding and replacing text is enhanced to include text in PowerClips and nested in grouped objects.

This feature is also available in CorelDRAW 2019.



Save time finding drawing components with the Find and Replace docker.



Enhanced! Technical Illustration workspace: If you create technical graphics destined for any number of deliverables — product manuals, engineering publications, catalogs of interactive parts and more — the updated Technical Illustration workspace will boost your productivity in a couple of clicks. It puts everything you need right at your fingertips, so you can work faster and more efficiently. Corel DESIGNER optimizes and reconfigures the user interface (UI) to conveniently position the toolbox to suit your workflow and automatically display the dockers that technical illustrators use the most. It also closes the UI elements that you're not likely to need, giving you more screen space to work.

**Enhanced! Performance:** Because even a little lag time gets in the way of your productivity, the development team focused on making this release the fastest version of the suite yet. Comprehensive performance enhancements ensure that you can work faster than ever — whether launching an app, working with text, resizing UI elements and much more.

Enhanced! Options workflow: The interface for setting preferences has been reorganized, making it quicker and easier to tailor your design environment. The revamped UI minimizes time spent searching for controls and ensures it's clear whether changes affect the entire suite, the active application, or the current document. Corel DESIGNER 2019 also saves you time by streamlining how you set the default behavior of commonly used tools. In addition, you can quickly access color management options for document display and printing. This enhancement is also available in CorelDRAW 2019 and Corel PHOTO-PAINT 2019.



## 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 2019 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.

#### XVL Studio 3D CAD Corel Edition enhancements

#### **Process Design and Process Snapshot features:**

A variety of workflow improvements accelerate 3D CAD authoring. A new setting lets you select a part in the Manufacture tree, then press the Tab key to select the Manufacture assembly to which it belongs. Another new option simplifies the registration of multiple parts to a single task with a simple drag-and-drop to the Process tree.

Now parts belonging to a task are automatically shaded in the hidden line display mode. You can automatically add callouts with specified string formats to parts in a process or task. In addition, when you readjust a viewpoint that contains existing notes or markups, you can ensure that they remain visible when rotating.

And to improve collaboration, you can export process snapshots as image files. Process snapshots can also be imported and exported, allowing multiple authors to create and merge them into a single process tree.

**Technical Illustration output:** A new feature lets you export high-resolution, hybrid vector and bitmap output in a single step when using the Send to Corel DESIGNER command. When a 3D view is exported, you can now specify the resolution of shaded views, which are bitmaps, included with the vector illustration to ensure better scaling and high-quality printing.

Auto Detection and Update workflow: A new option helps you ensure that matched parts are always displayed in the same line between two lists, guaranteeing synchronicity while scrolling. Another new feature makes tracking parts easier than ever by retaining the original part name in the Design Update Property List, even if it changes. You can also search for parts or tasks where part names have changed during a design update. And in addition to having the ability to use the Assembly tree to compare and match parts, you now also use Manufacture trees.

#### XVL Studio Corel Edition enhancements

**Selection and navigation:** A series of new features and enhancements save you time by making it easier to select parts of a design and navigate drawing components in XVL Studio.

You can use the arrow keys to navigate to a parts folder tree and change selections. The Up and Down arrow keys change the active folder. The Left arrow

key opens up a selected folder to display nested contents, while the Right key collapses an expanded folder.

The new Find Similar Attributes function lets you quickly find parts that share similarities. By simply choosing an attribute to use as the search criteria, you instantly get a report of parts in your design that match those properties.

Cross-section tools: Because time is so critical, XVL Studio introduces cross-section workflow improvements to boost productivity. To that end, you can now click fill faces on the cross-section of a part to highlight and select it. A new option helps you work more efficiently by making it easier to distinguish the profile lines and fill faces of cross-sections. You can now choose different colors for profile lines and fill faces, ensuring that they always stand out against each other, so you can work faster than ever. In addition, cuts in overlapping parts display fills as expected and offer high-quality section views, including when being sent to Corel DESIGNER as vector illustrations.

Callouts: XVL Studio has enhanced callout (text note) functionality that lets you work with precision. When moving a 2D note, the end of the leader line is displayed as the center of the string. This lets you know the exact location of the 2D note in relation to other design elements as you drag to reposition it. You can resize images attached to 2D or 2D fixed notes by dragging a corner handle on the graphic or scaling it to a specific percentage of the original size. Another enhancement is the ability to add information to parts using pattern notes, which contain balloon numbers for parts and attribute properties. This allows you to concisely and quickly convey the most important data about a part.

And when you quickly need to know how two parts in a drawing measure up against one another, you can use a comparing note. By simply selecting the two parts and specifying what attributes to include in the comparison, you get a snapshot of their differences and similarities.

#### XVL Studio 3D CAD Corel Edition features

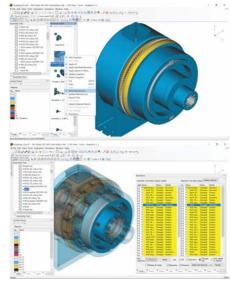
**File support:** XVL Studio 3D CAD Corel Edition supports a broad range of native 3D CAD file formats.

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 also includes CATIA V5-6R2018, Autodesk Inventor 2018, NX 12, Solid Edge ST10, SolidWorks 2018.

**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 Process Snapshot feature simplifies the capturing and illustration of assembly and maintenance processes. 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 3D CAD Corel Edition license.

#### 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.

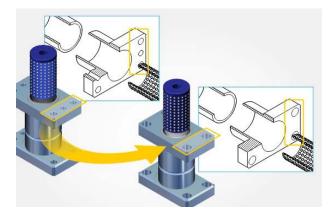


The update or replace assembly functionality offered by XVL Studio 3D CAD Corel Edition helps you ensure that the most current manufacturing revisions are reflected at any time in the visualization workflow.



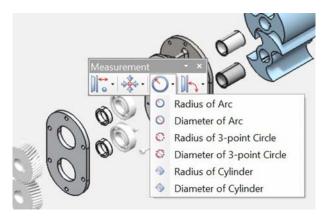
Update a 3D-sourced illustration: To speed up technical-publication authoring, CorelDRAW Technical Suite 2019 with XVL Studio 3D CAD Corel Edition offers the Auto Detection and Update command. It updates 3D visualizations created in XVL Studio CAD, stored snapshots, cross-sections and animated procedures — 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.



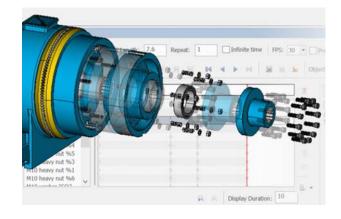
**Evaluation tools:** Before 3D models and data can be used in downstream applications, the integrity of the 3D model requires validation. XVL Studio 3D CAD provides assembly evaluation tools for geometry and measurements, interference check, and collision

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.

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**

One of the world's top software companies, Corel offers some of the industry's most respected and well-known brands, including CorelDRAW®, Parallels®, MindManager®, ClearSlide®, Pinnacle™, and WinZip®. Across our entire portfolio, Corel's products give today's knowledge workers the tools they need to achieve new levels of creativity, productivity, and success.

For more information, please visit www.corel.com.

Copyright © 2019 Corel Corporation.

CorelDRAW® Technical Suite 2019 Reviewer's Guide

Corel, the Corel logo, the Corel Balloon logo, the CorelDRAW Balloon logo, CorelDRAW, Corel DESIGNER, AfterShot, Capture, CorelDRAW.app, Corel Font Manager, Corel PHOTO-PAINT, MindManager, Parallels, Pinnacle, PowerTRACE and WinZip are trademarks or registered trademarks of Corel Corporation in Canada, the United States and/or in other countries. ClearSlide is a trademark or registered trademark of ClearSlide Inc in Canada, the United States and/or in other countries. Parallels is a trademark or registered trademark of Parallels Interational GmbH in Canada, the United States and/or in other countries. All other trademarks mentioned herein are the property of their respective owners

Patents: www.corel.com/patents

All other trademarks or registered trademarks are the property of their respective owners.

Product specifications, pricing, packaging, technical support and information ("specifications") refer to the retail English version only. The specifications for all other versions (including other language versions) may vary.

INFORMATION IS PROVIDED BY COREL ON AN "AS IS" BASIS, WITHOUT ANY OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABLE QUALITY, SATISFACTORY QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THOSE ARISING BY LAW, STATUTE, USAGE OF TRADE, COURSE OF DEALING OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS OF THE INFORMATION PROVIDED OR ITS USE IS ASSUMED BY YOU. COREL SHALL HAVE NO LIABILITY TO YOU OR ANY OTHER PERSON OR ENTITY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, LOST OR DAMAGED DATA OR OTHER COMMERCIAL OR ECONOMIC LOSS, EVEN IF COREL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR THEY ARE FORESEEABLE. COREL IS ALSO NOT LIABLE FOR ANY CLAIMS MADE BY ANY THIRD PARTY. COREL'S MAXIMUM AGGREGATE LIABILITY TO YOU SHALL NOT EXCEED THE COSTS PAID BY YOU TO PURCHASE THE MATERIALS. SOME STATES/COUNTRIES DO NOT ALLOW EXCLUSIONS OR LIMITATIONS OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.



Media Contact: media@corel.com