BE EMBROIDERY STUDIO

brother

WILCOM

Quick Start Guide

Rev 1 July 2025

BE EmbroideryStudio Setup

Welcome to BE EmbroideryStudio 2025, the leading design software application for the decorated goods industry. Combining both the embroidery capabilities of Wilcom software with the graphical capabilities of the CorelDRAW® Graphics Suite, no other product provides the flexibility of BE EmbroideryStudio in creating designs for both embroidery and multi-decoration. While supporting multi-decoration, the product is tailored to the requirements of the embroidery specialist who requires a powerful toolset to create and edit high-quality, production-ready embroidery. BE EmbroideryStudio is the ultimate embroidery software for professional digitizers, embroidery shops, industry educators, apparel decorators and hobbyists.

Note: Screen illustrations in this publication are intended as representations only. Depending on your software model or product level, screen layouts generated by the software may differ slightly. Similarly, samples used to illustrate software features and capabilities may not be exactly duplicable in your product level.

Product levels & Elements

The BE EmbroideryStudio 2025 suite consists of several product levels. These are powerful, well featured, professional embroidery applications for different needs.

Product level	Applications
2 ES Decorating ^	The power of auto-digitizing and CorelDRAW, backed by easy-to-use digitizing tools. ES Decorating provides professional lettering, customization and editing tools for smaller embroidery houses. Ideal for those who outsource digitizing work but need to be able to create logos, customize designs, or auto-digitize customer artwork. Supports some Elements.
3 ES Editing	Be in control of quality and production by bringing design editing in-house. ES Editing provides professional lettering, customization and editing capabilities for retail and production shops. Supports machine connections.
^ Includes CorelDRAW® Graphics Suite as standard	

Product level	Applications
4 ES Lettering	ES Lettering delivers world-class lettering quality. Create lettering, name drops, or monograms quickly, without a digitizer. Supports full lettering, customization, with machine connections.
^ Includes CorelDRAW® Graphics Suite as standard	

Add-on Elements

Add-on Elements allow users to access additional tools, effects, or automation features beyond the core functions of the licensed BE EmbroideryStudio product level. Some are available at extra-cost. Some are provided as standard in higher product levels. Benefits include...

Subscription access	For subscription-based licenses, all Elements for that BE EmbroideryStudio level are automatically included.
Enhanced functionality	Elements may include advanced lettering, monogramming, auto-digitizing, special stitch types, or other embroidery-related tools.
Customization	Users can enable specific Elements to tailor BE EmbroideryStudio to their workflow needs.
Perpetual license add-ons	Owners may purchase and assign specific Elements separately.

System requirements

Before you install, or if you experience operating problems, make sure that your computer meets the system requirements.

PC specifications

Check CPU/RAM as well as hard disk space. The table below provides minimum system requirements.

| Component	Minimum	Recommended
CPU	Intel® Core i5 (8th Gen) or AMD Ryzen 5 4000 Series	Latest Gen Intel® i7 / i9 processor or AMD Ryzen 8000 / 9000 series
Operating system	Microsoft Windows 10 64-bit Edition	Microsoft Windows 11 64-bit Edition with the latest updates
Browser	Microsoft Edge, Chrome, or similar	
Memory	16 GB	32 GB or more
Hard disk size	128 GB	512 GB or more (Solid State Drive)

Component	Minimum	Recommended
Free disk space	40 GB	60 GB or more
Graphics card	Support for Highest Color (32bit) and resolution (1600 x 900)	• Support for Highest Color (32bit) and resolution (1920 x 1080 or higher) • 4 GB or more of graphics memory (non-integrated)
Monitor	1600 x 900 screen resolution	Dual monitors capable of displaying 1920 x 1080 screen resolution
Mouse	USB mouse or Bluetooth	
USB port	Required for HL (hardware license) version. Not required for DL (digital license) version.	
Sound card	Required for online video help.	
Internet connection	Required for: • Product activation and registration • Machine file export • Periodic software updates • Access to news, community, product blog, tutorials, and product documentation • During installation, to download Windows features.	

Check OS and device specifications

Check your CPU (processor) and RAM specifications, and the version of Windows you are running, to ensure they meet BE EmbroideryStudio 2025 requirements. We recommend updating to Windows® 11 (64-bit edition) with latest updates installed. You will, however, need to uninstall any earlier versions of CorelDRAW® Graphics Suite. For latest operating system information, visit the Wilcom Support Center at help.wilcom.com.

To check your OS and device specifications...

1 Go to MS Windows® **Settings** and open the **About** tab.
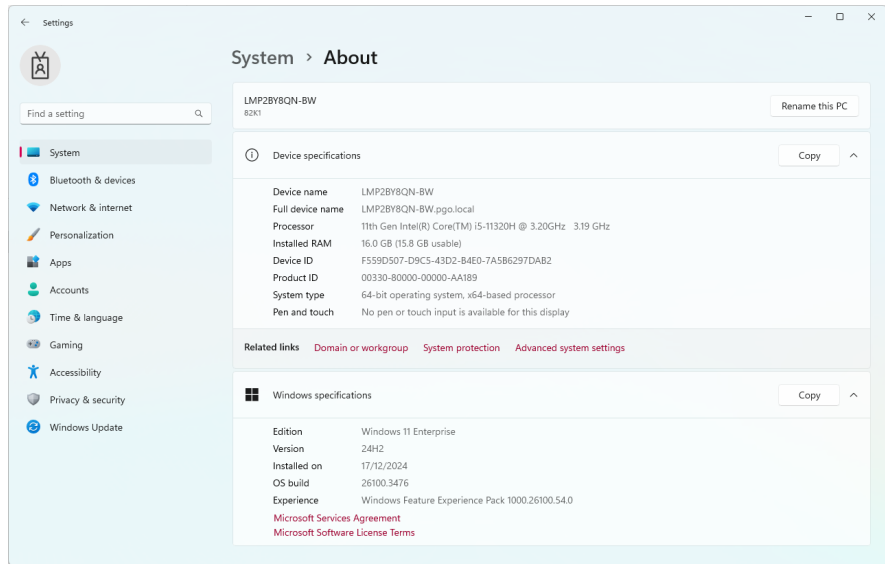
2 Check the Windows version, the CPU and the amount of RAM.

Check hard disk space

BE EmbroideryStudio occupies up to 5 GB of hard disk space, depending on options installed. CorelDRAW® Graphics Suite also takes up an additional 3 GB. However, you need additional free space for your applications to run smoothly. Check that your hard disk has enough space to run BE EmbroideryStudio effectively. After installation you will need 40 GB free or 10% of your total hard drive space, whichever is the greater amount.

To check your hard disk space...

1 Go to **This PC** in **File Explorer** and right-click the **Local Disk** (C:) to open the popup menu.
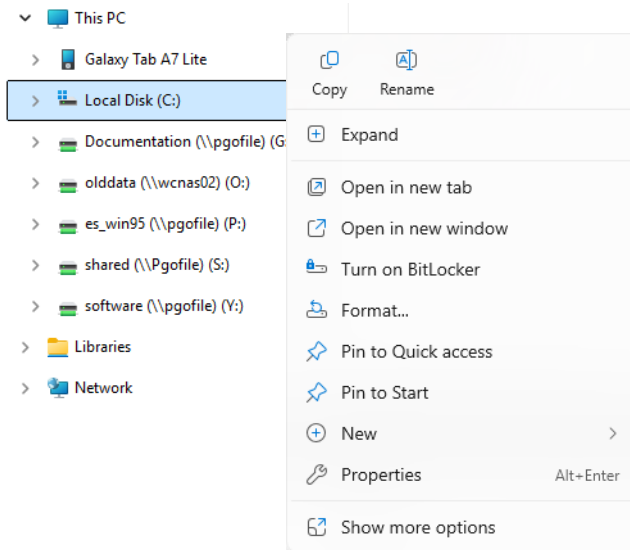
2 Select **Properties** to open the **Properties** dialog.
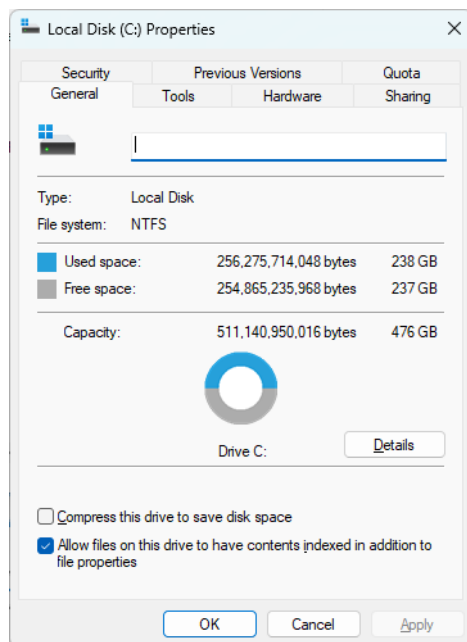
3 Go to the **General** tab. This tab shows the hard-disk capacity as well as any free space.

Check display settings

Some controls may be hidden on the user interface if you run your monitor at low resolutions. The physical size of your monitor will have a bearing on the optimum screen resolution. Larger fonts will exacerbate the problem.

To check your display settings...

1 Go to MS Windows® **Settings** and open the **Display** tab.
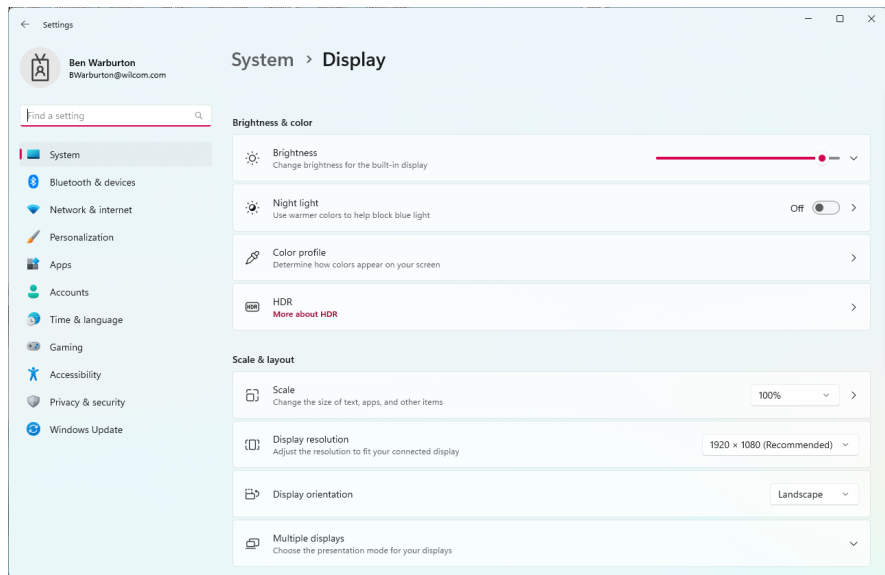
2 If you experience visibility issues, try adjusting both screen resolution and font size. For example, a resolution of 1920 x 1080 with a font size of 100% or 125% should be acceptable.

Power plan

For best performance make sure your PC is set to high performance power plan.

Software licensing

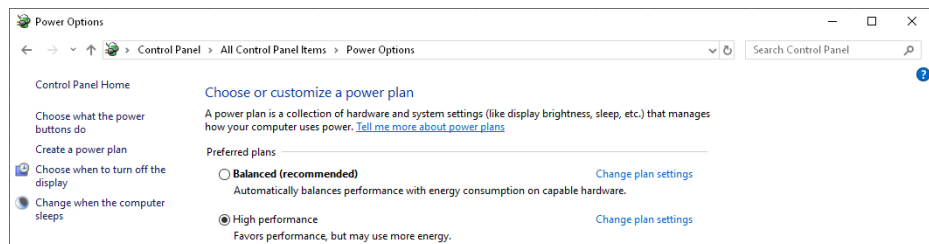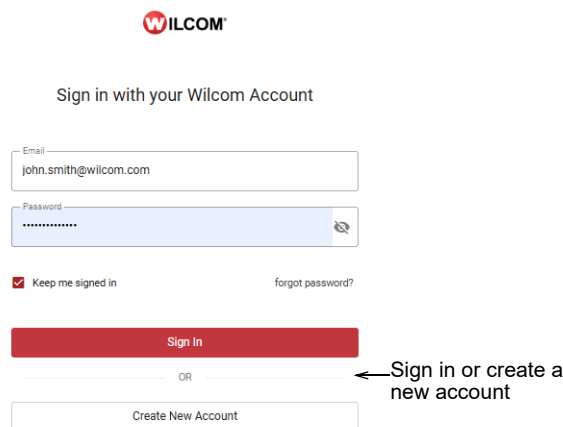With BE EmbroideryStudio 2025, all users have a **Wilcom User Account**. The software still needs to be installed on a computer but the license is mobile which makes usage more flexible. Whenever you log in, BE EmbroideryStudio will load the appropriate software level and registered add-on Elements.

Your **Wilcom User Account** is also required to provide access to:

◀ Personalized Wilcom support geared to your product level and registered add-on Elements.

◀ Live and recorded online training (as it becomes available)

◀ Information about product updates, events and special offers.

Licensing models for Wilcom products

Wilcom offers multiple licensing models to accommodate different user needs. These models define how users access and manage their Wilcom 'apps' or applications, such as **Truesizer**, **Estimator** and **BE EmbroideryStudio**.

Perpetual licensing

This is a one-time purchase model available for BE EmbroideryStudio. With this model:

◀ Users own and can use the software indefinitely.

◀ Licenses are linked to a specific user or device and can be transferred if needed.

◀ Includes automatic minor updates and support, for the life of the current version.

◂ Users must purchase major version updates. Generally, those which contain new features.

Network licensing (Enterprise)

Network licensing allows multiple users to access a shared license within an organization. With this model:

◂ Typically used by large production facilities needing centralized license management.

◂ Requires a license server and network dongle to distribute access.

◂ Each licensing model offers different benefits depending on the user's needs, budget, and software usage patterns.

Managing your Wilcom Account

Wilcom User Account is a cloud-based service designed to enable registered Wilcom Account holders to manage multiple licenses and users of various Wilcom 'apps' (applications) under a single account. From the top of the Wilcom website you can access your account via the dropdown menu...
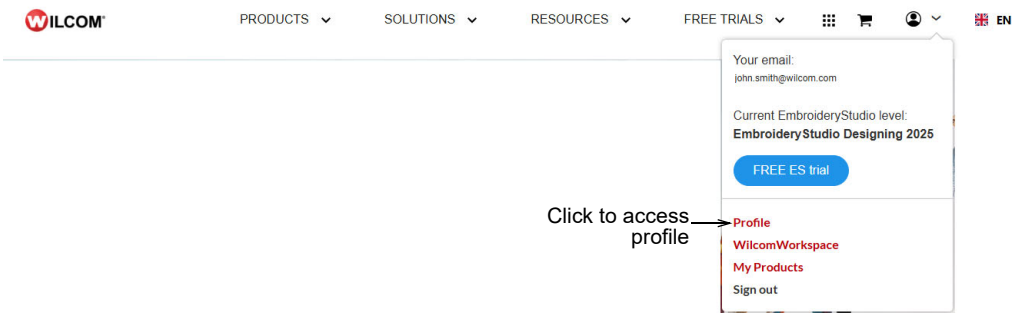
Supported apps

Wilcom 'apps' currently supported by the service include...

Truesizer	A Wilcom app that allows users to view, resize, and convert embroidery design files without altering stitch quality. It is often used for previewing and basic modifications.
Estimator	A Wilcom app that calculates the estimated stitch count and cost of an embroidery design before actual production.
BE EmbroideryStudio	Wilcom's flagship embroidery digitizing software, designed for professional embroidery design creation, editing, and production management. (Versions previous to EmbroideryStudio Digital Edition are not supported at this time.)

Active BE EmbroideryStudio sessions

Each licensed copy of BE EmbroideryStudio is for a single user. You may install it on multiple computers but only one active session can be used at one time. In the **Sign-in** dialog, tick 'Keep me signed in'. This means you will not have to enter your **Wilcom User Account** details each time you start the software.

Caution: Simply uninstalling the software does **not** release the license. Select **File > Sign Out and Exit** before uninstalling.

Key features

Wilcom Account Management allows for greater flexibility, enabling organizations to purchase and manage multiple licenses, add members, and assign or unassign licenses as necessary. Key functionalities include...

Multiple user management	Add and manage multiple users within a single organization account.
License management	Purchase, assign, and manage multiple licenses of various Wilcom applications.
Billing management	View and manage subscriptions and payments for licenses.
User security	Implement two-step verification within the organization for added security.
Reporting	Analyze usage for Truesizer and Estimator and monitor login activity for all apps, across all users and licenses.

Installation & registration

There are various scenarios you may encounter when installing or upgrading BE EmbroideryStudio software.

In every case, you will need to sign in or register a **Wilcom User Account**. Registration simply requires a username, an email address, and a password of your choosing. Registration is linked to your email account.

Custom assets

BE EmbroideryStudio allows you to create files or 'assets' of various kinds during normal use. The most important of these are of course actual embroidery designs. There are other assets you may create such as design templates, custom motifs and borders. These assets are preserved from installation to installation, whether installing a new version of BE EmbroideryStudio or an update patch. If you want to move your BE EmbroideryStudio to another PC, you will need to manually transfer any custom assets you have created or received from third parties. See Asset Management for details.

Caution: When installing new or updated assets, such as design templates, custom motifs and borders, or keyboard design collections, the installation procedure will not overwrite existing assets of the same name. If you do want to install new assets, remove or back up the old ones before updating your current installation.

Product installation

BE EmbroideryStudio is supplied as a downloadable product only. If you are installing on an operating system (OS) that is in a supported language, the installation process will run in that language.

To install the product...

1 Ensure your computer meets the system requirements.

2 Close all open applications.

Note: When you install the software, you will be prompted to reboot your PC to complete the installation. Make sure you save any files and close all applications beforehand.

3 Run the installation by double-clicking the installation file.

4 Follow the onscreen instructions. You will be prompted to choose:

- ◀ where the software will be installed on your PC (default location recommended)
- ◀ which components to install – i.e. additional languages. English is the default.
- ◀ which installed version you wish to merge user-defined settings with.

Upon successful installation of the software and any additional Windows files, the **Installation Complete** screen appears.

5 Click **Finish**. The computer will reboot and the software can be used.

Note: If you encounter problems with the installation, please contact Wilcom Support.

Register an account & sign in

Product registration is required to validate the software. Also, by registering you will have access to:

◂ Wilcom support

◂ Live and recorded online training (as it becomes available)

◂ Information about product updates, events and special offers.

Sign in and registration is essentially the same process. In both cases you will be presented with a **Sign In** screen. You register a **Wilcom User Account** whether or not you purchase. If you decide not to purchase, your registration remains and will be reactivated if you chose to purchase at a later date.

To register an account...

1 Go to the Wilcom website. From any page, you will have the option to sign in.
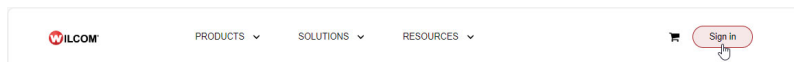
2 Click the **Sign In** button at the top of the screen. Alternatively, when you first run the software, you will encounter the same sign-in screen...

Note: If you are already registered, simply enter your email and password. Your BE EmbroideryStudio account is registered to your email address.

3 Click the **Create New Account** button to access the registration form.

Create new Wilcom account

Preferred language
English

First name *   Last name *
John   Smith

Enter personal details

Email *
john.smith@wilcom.com

Registration linked to email account

Password *
••••••••••••

Confirm Password *
••••••••••••

Next

OR

Sign In With Existing Account

4 Enter a few personal details together with your email address.
5 Enter a password you can easily memorize. Keep a written copy in case you forget.
6 Click **Next** to access the second page.

Create new Wilcom account

← Back

Country *
Australia

State / Province *
New South Wales

Phone *
+61432401628 — Enter mobile phone number

What Embroidery software are you currently using? *
Wilcom Embroidery Software

☑ Read and agree to the Terms And Conditions & Privacy Policy

☑ Send me tips and offers

Create Account — Click to create account

OR

Sign In With Existing Account

7 Enter your country of residence and a mobile phone number. Your are advised to read the **Terms & Conditions** and **Privacy Policy**. 'Tips and offers' are optional.

8 Click **Create Account**. You will receive confirmation via email.

Account successfully created ⊗

WILCOM®

Email verification

A verification link has been sent to
john.smith@wilcom.com
Please check your email, follow the instructions to verify your email address.

Resend verification email

Back to sign in

9 Once received, click **Verify Email** to confirm receipt of the email.

To sign in for the first time…

1 Return to the **Sign In** screen, enter your email and password, and click **Sign In**.

Sign in with your Wilcom Account

Email
john.smith@wilcom.com ←——— Enter sign-in details

Password
•••••••••••• 👁

☑ Keep me signed in   forgot password?

Sign In ←——— Click to sign in

OR

Create New Account

The first time you sign in, you will be prompted to verify your mobile phone number.

Verify your phone number

We need to register your phone number
before getting started!

🇦🇺 ∨ +61434156

Send the code ←——— Click to receive one-time verifcation code

Message and data rates may apply.
Terms of Use | Privacy Policy

2 Click the **Send Code** button. Check you mobile phone. The following screen will appear.

Verify your phone number

Enter the 6-digit code sent to
+61434156'

| 9 | 8 | 1 | 0 | 8 | 0 | ←——— Enter the one-time verifcation code

Verify

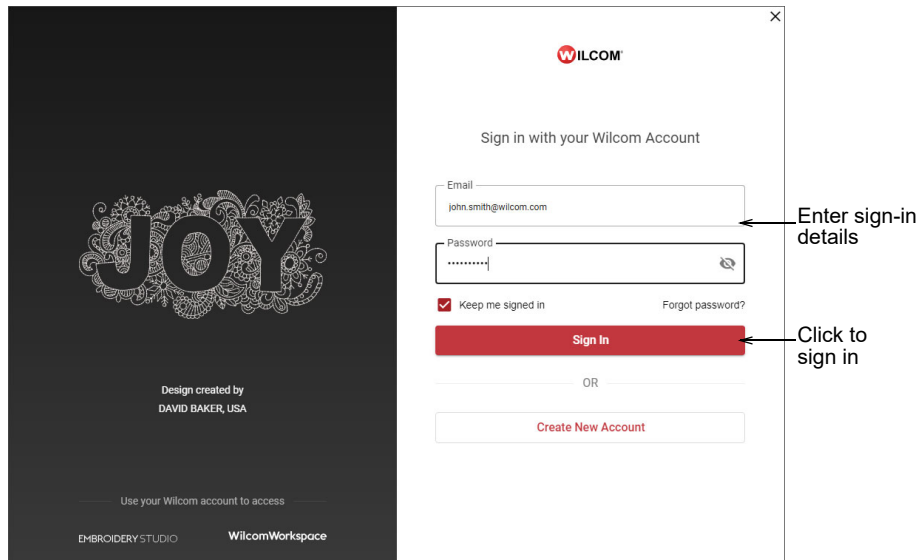Change phone number?   Resend code

3 Click **Verify**.

Run the software

Once you have rebooted your PC following installation, you can run the software.
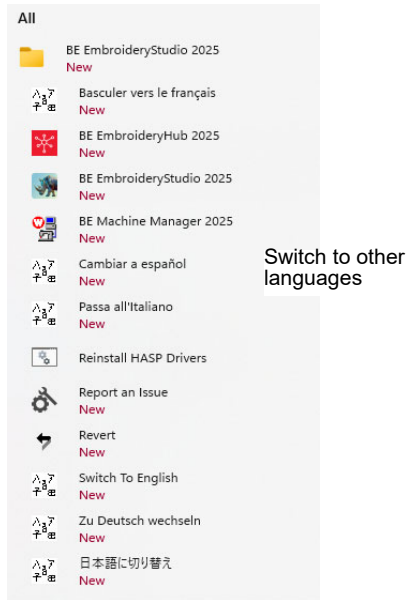
To run the software...

1 Double-click the icon on the desktop to start the software for the first time. If you are not already signed in via the website, you will encounter the same sign-in screen...

2 When prompted, enter your BE EmbroideryStudio email and password in the fields provided.
3 Click **OK** and the software will connect to our activation server and the software will open.

Run BE EmbroideryStudio in other languages

If you want to install and run a specific language on an English OS, you will need to select it from the available languages during installation. The software will then need to be 'switched' to the additional installed language from the BE EmbroideryStudio program group before it can be run in that language.

All

- BE EmbroideryStudio 2025
  New
- Basculer vers le français
  New
- BE EmbroideryHub 2025
  New
- BE EmbroideryStudio 2025
  New
- BE Machine Manager 2025
  New
- Cambiar a español
  New
- Passa all'Italiano
  New
- Reinstall HASP Drivers
- Report an Issue
  New
- Revert
  New
- Switch To English
  New
- Zu Deutsch wechseln
  New
- 日本語に切り替え
  New

Switch to other languages

Uninstall the software

If for any reason you need to uninstall BE EmbroideryStudio, make sure you do so via the MS Windows® **Apps > Installed apps** dialog. Select a Wilcom application from the list – BE EmbroideryStudio (main application), Wilcom PDF Printer, and/or Wilcom Shell Extension.
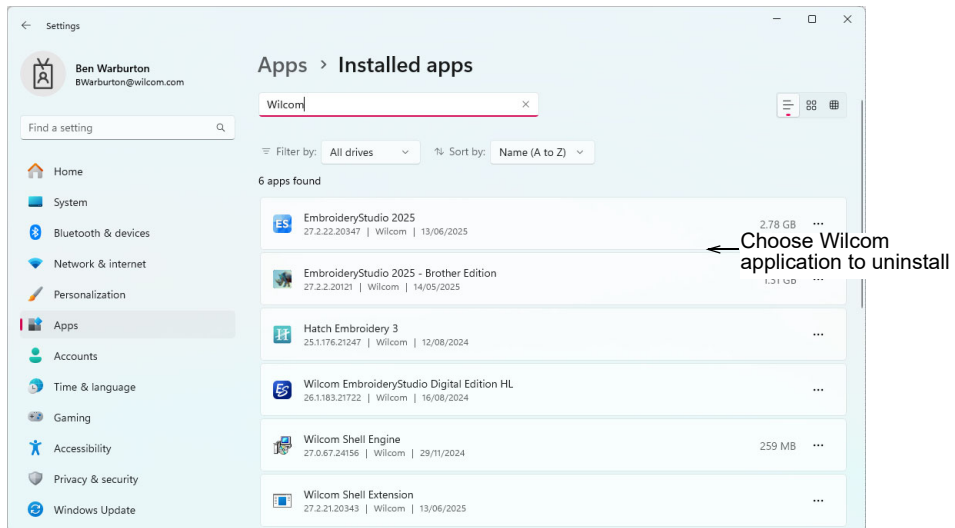
Choose Wilcom application to uninstall

Caution: Simply uninstalling the software does **not** release the license. Select **File > Sign Out and Exit** before uninstalling. Also...

◀ If you remove Wilcom PDF Printer without uninstalling the main app, you will be unable to print a PDF from BE EmbroideryStudio.

◀ Similarly, if you remove Wilcom Shell Extension for any reason, no thumbnails/design info will be displayed in **File Explorer** or **Design Library**.

Integration with CorelDRAW®

The CorelDRAW® Graphics Suite is a professional vector graphics design application used for creating illustrations, logos, and complex designs. It is widely used in various industries, including embroidery, because of its precise design capabilities. CorelDRAW® is integrated with BE EmbroideryStudio, allowing users to seamlessly convert vector graphics into embroidery designs.
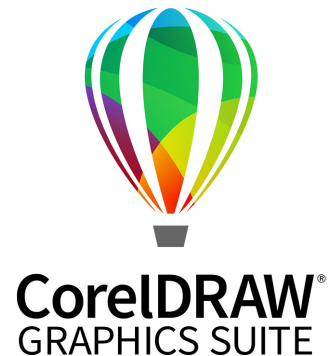
CorelDRAW as part of BE EmbroideryStudio

◀ Certain BE EmbroideryStudio product levels – ES Designing and ES Decorating – include a CorelDRAW® license as part of the package.

◀ Integration is currently only available with certain levels of CorelDRAW®. For more information, see FAQs on the BE EmbroideryStudio website.

◀ BE EmbroideryStudio only supports the MS Windows® version of CorelDRAW®.

◀ CorelDRAW® may be installed together with Windows .NET Framework. To ensure that CorelDRAW® uses the correct version of .NET, make sure you install it when prompted to do so. It can take up to 20 minutes or more to install on some computers.

How CorelDRAW enhances BE EmbroideryStudio

◀ You will be prompted to link upon launching BE EmbroideryStudio.
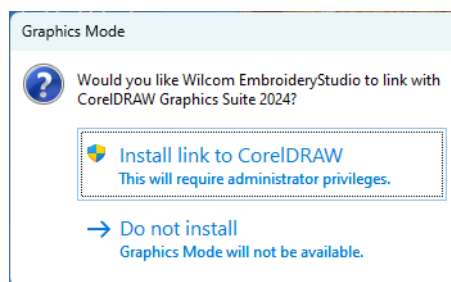
- The integration allows for a seamless workflow, making it easy to adjust designs before digitizing them into embroidery stitches.
- Users can import, edit, and convert vector graphics from CorelDRAW® into embroidery files.
- The built-in **CorelDRAW Graphics** window includes CorelDRAW® drawing tools which offer many techniques for drafting outlines and shapes on screen. Vector objects can be converted to embroidery designs. For a full description of the tools, refer to the online help available from the **Graphics** mode **Help** menu.
- Some CorelDRAW® functions may not be available in **CorelDRAW Graphics**.

Licensing & activation

- If an BE EmbroideryStudio product level includes CorelDRAW®, the **License Details** page in the **Wilcom Account Management System** displays:
  - The CorelDRAW Key (a unique activation code).
  - A download link to install CorelDRAW®.
- Users need to activate CorelDRAW® separately using the provided key.
- CorelDRAW® follows its own licensing terms but remains linked to the BE EmbroideryStudio license.
- If the BE EmbroideryStudio license is a subscription, access to CorelDRAW® is tied to the subscription period.
- If the BE EmbroideryStudio license is perpetual, CorelDRAW® remains available as long as the license is valid.

CorelDRAW® registration

- CorelDRAW® needs to be registered separately before it can be used by BE EmbroideryStudio.
- Registration also provides access to the latest CorelDRAW® updates.
- CorelDRAW® and its sister product, Corel PHOTO-PAINT® can also be run as standalone applications. CorelDRAW® features 'best-of-breed' bitmap-to-vector tracing, enhanced illustration capabilities, photo-editing together with a library of professional clipart images.

CorelDRAW® content

CorelDRAW® Standard Membership provides access to content – clipart, fonts, stock photos, templates, and much more.
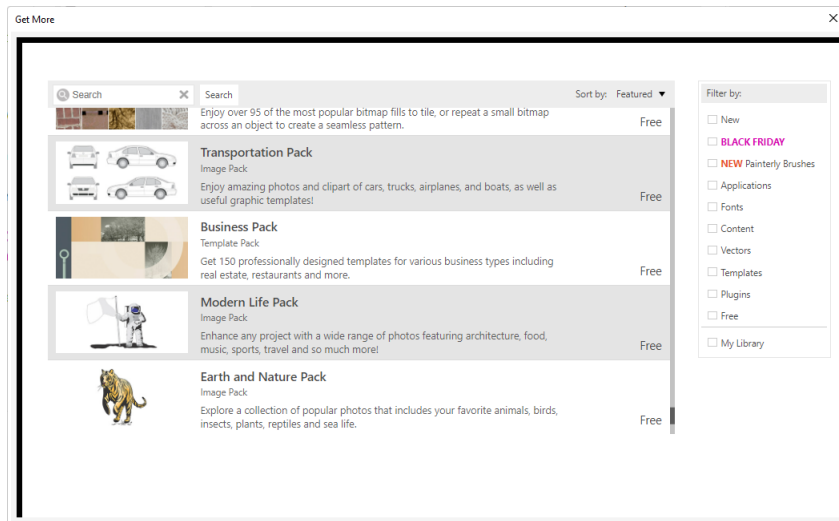
Device connections

You will need to connect peripheral devices for use with BE EmbroideryStudio. These may include digitizing tablets, printers, appliqué cutters, scanners and embroidery machines. Different devices are set up in different ways – some in MS Windows®, via the **Control Panel**, others within BE EmbroideryStudio itself.

Tip: The number of available ports limits the number of devices you can connect. If additional ports are required, you can add them. Multi-port serial cards can also be used. See a PC technician about your requirements.

Machine connection

BE EmbroideryStudio supports many sets of machine model. Most machines can read USB memory sticks. These are convenient portable memory devices which can hold large amounts of data.

💡
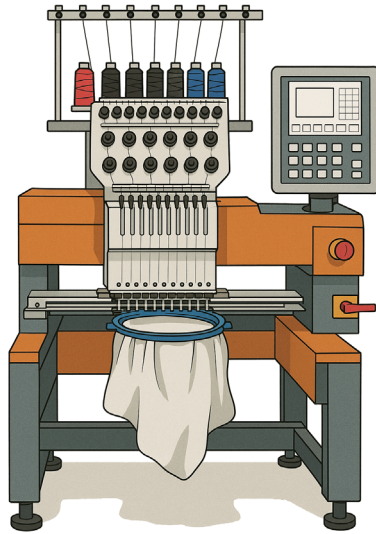
Tip: Some customers want to connect their embroidery software directly to machine. If your embroidery machine can be seen as an external drive in **File Explorer**, you may be able to send designs directly.

Related topics...

◀ Hardware Setup (Reference Manual)
◀ Sending designs to machine (Reference Manual)
◀ Exporting designs for machine (Reference Manual)
◀ Machine Formats (Reference Manual)
◀ Wireless Machine Connection with EmbroideryConnect (Reference Manual)

EmbroideryConnect networking

Wilcom's **EmbroideryConnect** capability allows you to wirelessly transfer embroidery designs from BE EmbroideryStudio to USB-enabled embroidery machines. Machine files are automatically generated and sent via a standard WiFi network to an EmbroideryConnect device plugged into a compatible machine. Design transfers are securely encrypted. The concept behind the EmbroideryConnect network is described by the following diagram...

WiFi Router

Operator 'pulls' barcoded design to embroidery machine from design queue

Embroidery machine 1

EmbroideryHub converts design to machine file for target machine

Embroidery machine 2

Ethernet LAN

Embroidery machine 'n'

ES User 1   ES User 'n'

Designer sends design to named embroidery machine OR to EmbroideryHub design queue
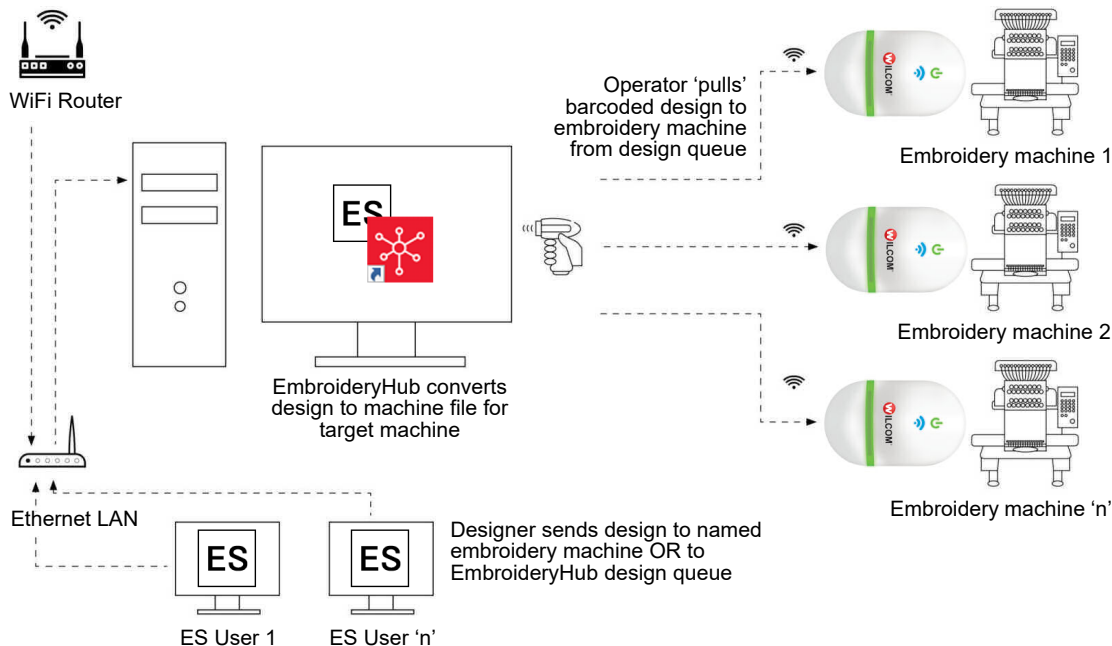
Quickly and easily send, scan, and queue your embroidery designs for production. EmbroideryHub software is included with the **EmbroideryConnect** Element.

Wirelessly manage and transfer embroidery designs from **EmbroideryHub** to any **EmbroideryConnect** WiFi device connected to your embroidery machines. Features include:

◀ Simple integration with your existing WiFi network.

◀ Color-coded LED light notifications.

◀ Barcode reader for fast design loading.

Related topics...

◀ Wireless Machine Connection with EmbroideryConnect (Reference Manual)

Scanner setup

BE EmbroideryStudio supports WIA-compatible scanners. Some scanners will not work with BE EmbroideryStudio because they require their own scanner software. If this is the case with your scanner, use your scanner software for scanning, save the image to your hard drive, then load the image into BE EmbroideryStudio.
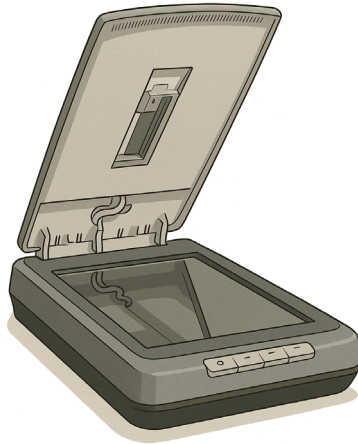
Related topics...

◀ Setting up scanners (Reference Manual)

Connecting digitizing tablets

You can use a digitizing tablet and puck with BE EmbroideryStudio as an alternative to digitizing directly on-screen. To use a tablet, you place an enlargement drawing on the active area, and use the puck to mark reference points.

Digitizing tablet with pressure sensitivity and pen tilt sensitivity

Related topics...

◀ Connecting digitizing tablets (Reference Manual)

Configuring embroidery libraries

Design Library is a design management tool. Use it to browse design and artwork files stored on your PC or local network. **Design Library** capabilities make it fast and practical for daily commercial use, avoiding the need to switch to and from **File Explorer**. It recognizes all file formats used by BE EmbroideryStudio. It also makes it easy to search, sort and browse all embroidery designs on your network.

If you are already familiar with **File Explorer**, the **Design Library** interface will be quite intuitive to you. You may, however, need to make a few adjustments to folder options for recommended embroidery design settings. The steps below are based on Windows 10 settings.

Activate embroidery libraries in File Explorer

Embroidery libraries may not automatically appear in Windows 10. If you do not see your them in **File Explorer**, follow the steps below.

To activate embroidery libraries in File Explorer...

1 Go to **File Explorer** and select **This PC**.
2 Right-click the empty navigation pane to invoke the popup menu as shown.
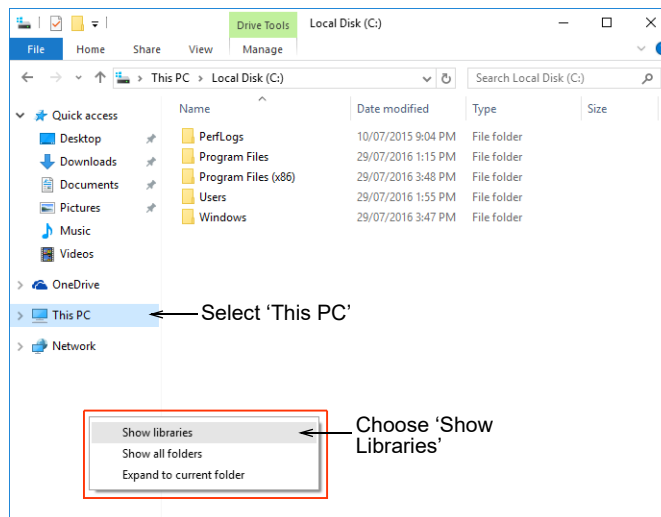
3 Alternatively, click the **Navigation pane** button to open the dropdown menu.

Activate 'Show libraries'

Select 'This PC'
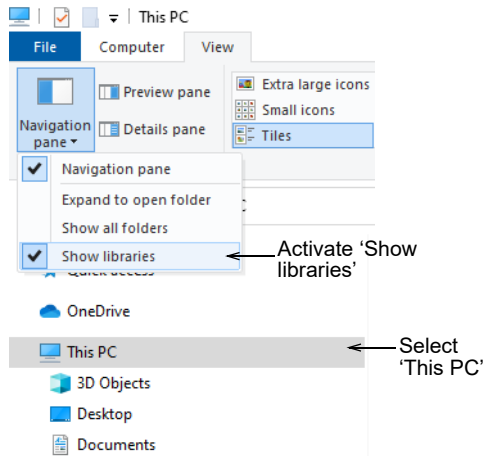
4 Select **Show libraries**. Embroidery libraries are added to **File Explorer**.

Embroidery libraries now visible
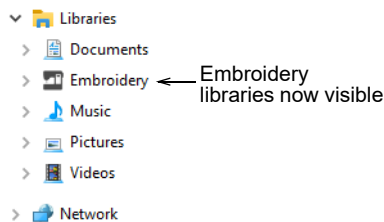
Note: If you want to display embroidery libraries in the **Save As** dialog, you need to activate them in the same way.

Related topics...

◀ Design library layout

◀ Viewing designs in network folders

Configure design thumbnails

In some Windows 10/11 installations, embroidery design thumbnails may not automatically appear. If so, follow the steps below.

To configure design thumbnails...

◀ Start the **File Explorer** program from the Windows taskbar.
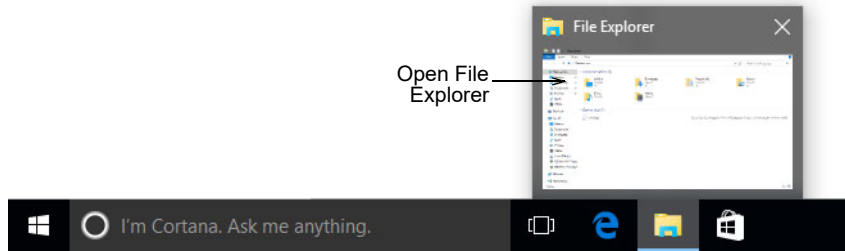
Open File Explorer

◄ Select the **Embroidery** folder.

Select Embroidery folder
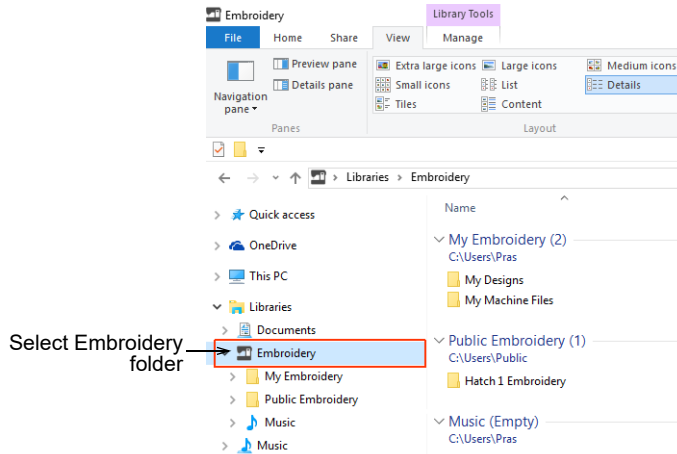
Note: Embroidery libraries do not automatically appear in some installations of Windows 10/11.

◄ Go to **File Explorer > View > Options** and select **Change folder and search options**.

Select 'Change folder and search options'
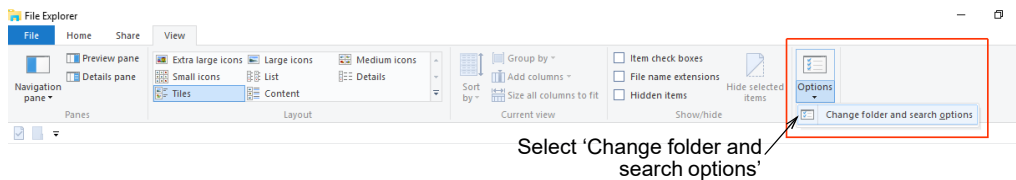
◄ The **Folder Options** dialog opens.

Apply settings to all folders
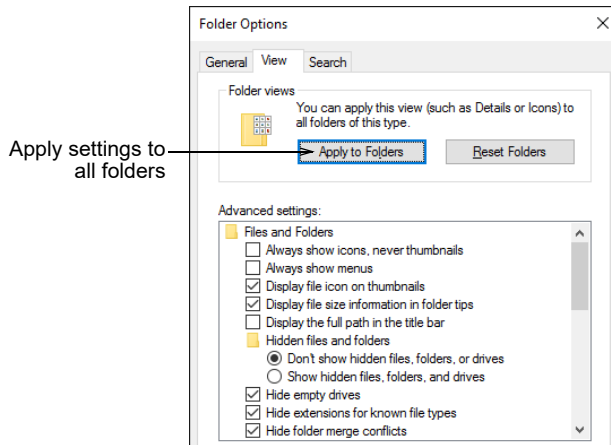
◀ Go to the **View** tab. Several Windows default settings are not ideal for embroidery. Recommended settings include:

Setting		Reason
Always show icons, never thumbnails	☐	So thumbnail images of embroidery designs will show, not the program icon.
Display file icon on thumbnails	☐	So program icons do not display in the corner of design thumbnails.
Hide extensions for known file types	☐	So you can see the different types of embroidery design files – EMB, DST, JEF, etc.
Show preview handlers in preview pane	☑	So you can see a preview of the embroidery design in the preview pane.

◀ Click **Apply to Folders** to apply settings to the **Embroidery** folders. If your **File Explorer** settings are properly configured, thumbnail images will appear as expected in the **Design Library**:
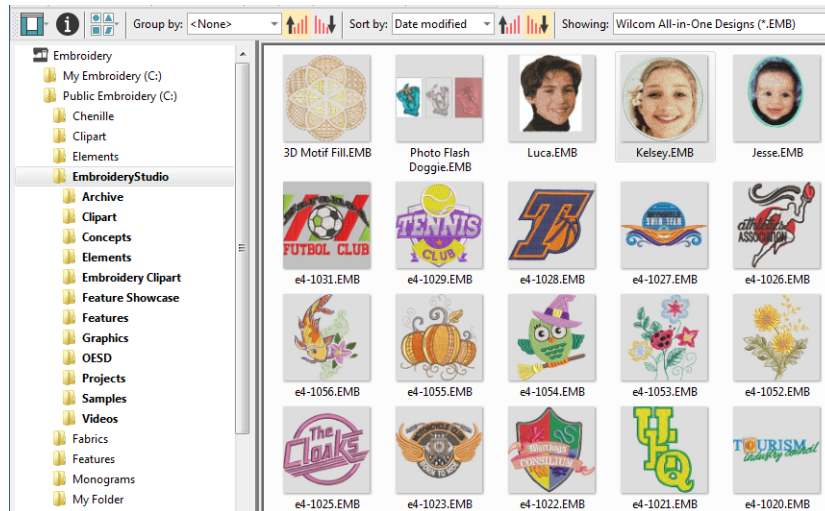
Tip: In addition to the **Design Library**, these settings affect how thumbnails display in **File Explorer** and other Windows applications.

Related topics...

◀ Viewing designs in network folders

◀ Opening designs from Design Library

Fast searching on shared network drives

For networks with multiple computers reading and writing EMB or machine format designs, you may want to set up a dedicated PC as a repository for all design files. Connect any folders on the repository to each 'client' PC via **Design Library**. **Design Library** relies on Windows indexing to ensure fast searching.

To set up searching on shared network drives...

◀ For the Windows file server, make sure you have the Windows Search service running. You should have the latest Windows Server installed to enable fast-search indexing. You will also need some version of BE EmbroideryStudio installed.

◀ Add the design folder to be shared with the indexing function. Go to **Control Panel > Indexing Options > Modify** and select the correct path.

Add design folder
as indexed location
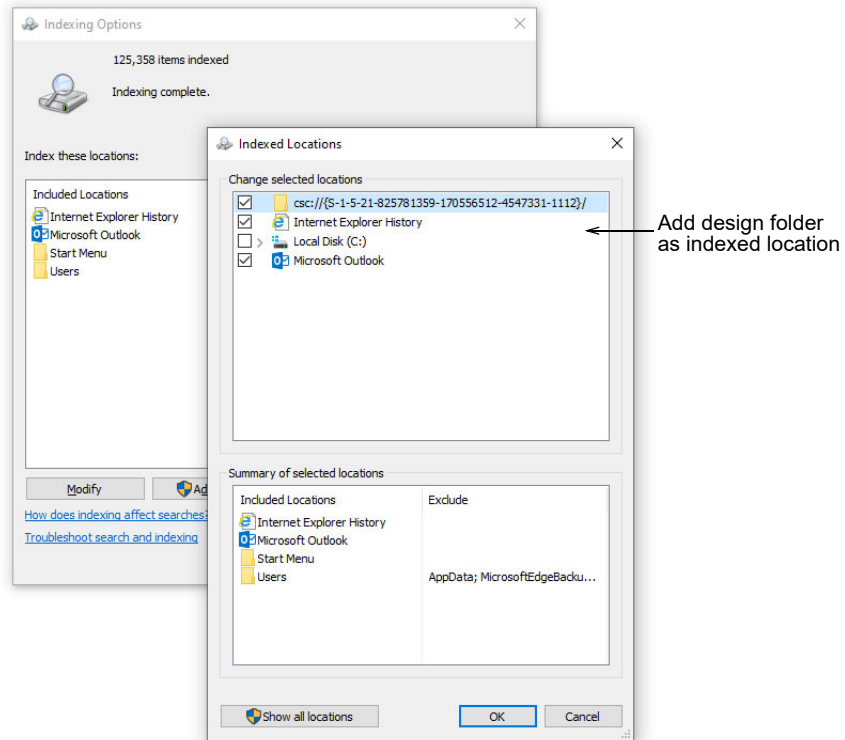
◀ Install BE EmbroideryStudio so that the Shell Extension is registered.
This allows the server to index additional embroidery file properties.

◀ Once the server has finished indexing the folder, then, for every PC
using the file server, add the design folder to **Design Library**. See
above.

Related topics...

◀ Viewing designs in network folders

OBJECT-BASED EMBROIDERY

Embroidery design in BE EmbroideryStudio consists of turning basic artwork shapes into embroidery objects. BE EmbroideryStudio allows you to create embroidery objects with artwork as backdrops or by directly converting digital artwork. You can take a mixed mode approach as well, doing the bulk of the design by means of automatic conversion, followed by touch-ups and edits using the suite of BE EmbroideryStudio digitizing tools.

Introduction to BE EmbroideryStudio

Embroidery design with BE EmbroideryStudio consists of turning basic artwork shapes into embroidery designs. BE EmbroideryStudio gives you the flexibility of creating embroidery objects using artwork as backdrops, or of directly converting digital artwork. You can take a mixed-mode approach as well, doing the bulk of the design by means of automatic conversion, followed by touch-ups and edits using the suite of BE EmbroideryStudio embroidery digitizing tools.

Artwork & designs

High quality embroidery starts with good design and forward planning.

Artwork

Electronic artwork in both bitmap and vector formats can be inserted, pasted or scanned into BE EmbroideryStudio for use as digitizing templates or 'backdrops'. Likely sources include:

- Internet and CD clipart libraries
- Business cards, post cards and wrapping paper
- Samples in the **Design Library**
- Books of embroidery patterns
- Children's story books
- Printed table cloths or tea towels
- Original artwork – e.g. children's drawings.

Unless you are an experienced digitizer, do not use complicated artwork. Also, be sure to check the copyright of any images you have not created yourself. If unsure, contact the relevant supplier to seek their permission.

Good design

Keep the following points in mind when digitizing your design and assessing the final output:

Design looks good—
shapes, colors, balance

Shapes are filled with
appropriate fill and
outline stitches

Details are clearly
defined

Stitches are angled to
match shapes
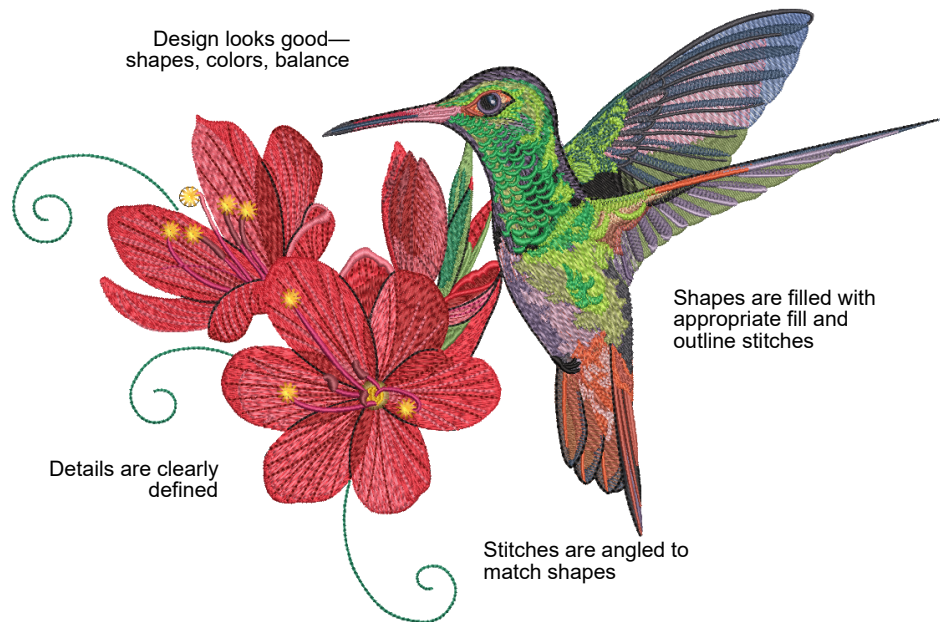
The stitched-out design should also have the following characteristics:

- Design looks good – shapes, colors, balance
- Shapes are filled with appropriate fill and outline stitches
- Details are clearly defined
- Stitches are neat, smooth and even
- Stitches angles follow design shapes
- Lettering is clear and easy to read
- The design stitches out efficiently on the machine
- Shapes are stitched correctly – no unwanted gaps
- The fabric has not puckered around the stitched areas
- The design is free of loose ends.

Tip: Good design is enhanced by the use of correct backing, tension and a good quality embroidery machine.

Sample designs & artwork

BE EmbroideryStudio contains hundreds of ready-to-stitch designs, including attractive ornaments, samples and digitizing backdrops. Design files (EMB files) and images (BMP, JPG, and WMF files) can be found in your **Embroidery** and **Picture** libraries.
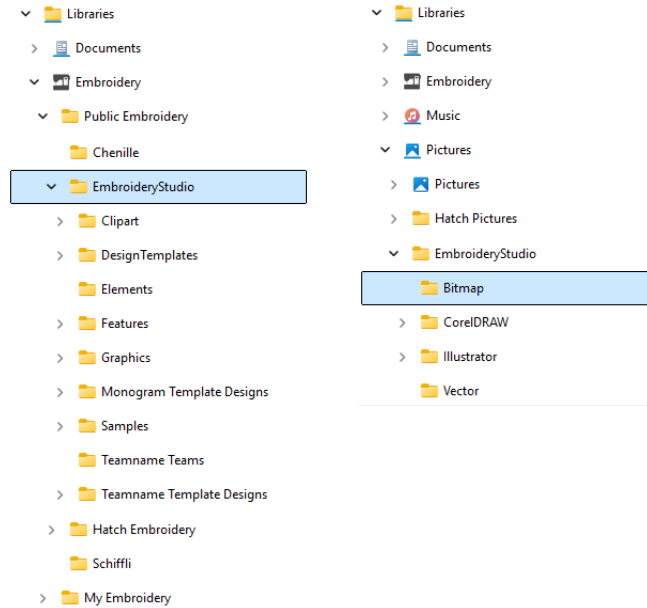
The most valuable thing you can do when starting out is to spend some time exploring these designs and getting to know what's available. BE EmbroideryStudio includes its own **Design Library** design management application to view and manage your embroidery designs. Alternatively, explore design folders using **File Explorer**. See also Design Management.
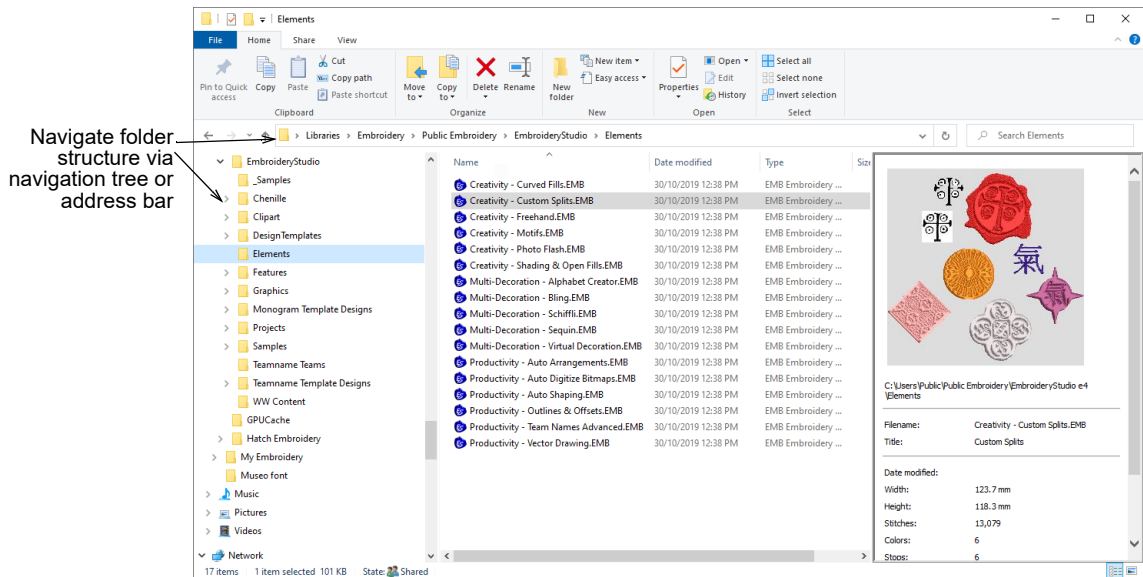
Navigate folder structure via navigation tree or address bar

⚠️

Caution: Included artwork (clipart) and embroidery designs can only be used for personal use – i.e. they cannot be commercially sold in any form. Changing the medium – i.e. clipart to embroidery or embroidery to clipart – does not remove copyright protection.

CorelDRAW resources

CorelDRAW® Graphics Suite is bundled as standard with some product models. CorelDRAW® Standard Membership also provides access to content – clipart, fonts, stock photos, templates, and much more.
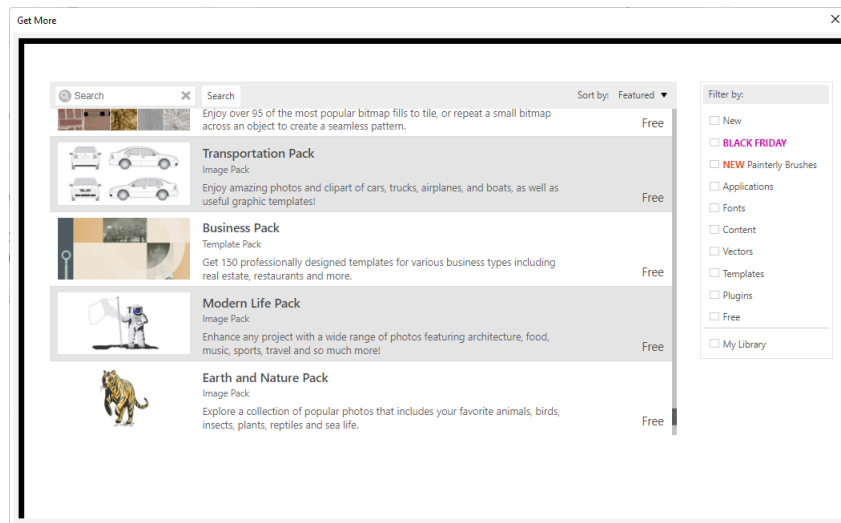
Get familiar with the many CorelDRAW® resources available to you. Many can be adapted for use with embroidery design, either as digitizing backdrops or direct conversion.

⚠️

Caution: Included artwork (clipart) and embroidery designs can only be used for personal use – i.e. they cannot be commercially sold in any form.

Embroidery creation techniques

Depending on your level of product, there are two fundamental design modes in BE EmbroideryStudio:

CorelDRAW Graphics	This mode allows you to create or edit graphic designs using the CorelDRAW® Graphics Suite toolset.
Wilcom Workspace	This mode allows you to create and edit embroidery designs using an embroidery digitizing toolset.

Note: For a full description of the CorelDRAW® Graphics Suite tools, refer to the electronic User Guide available via the MS Windows® **Start > Programs** group. Alternatively, use the online help available from the **Help** menu.

Using electronic artwork

There are two broad categories of artwork file, both of which can be imported into BE EmbroideryStudio for use as digitizing backdrops – vector and bitmap. **CorelDRAW Graphics** supports the automatic and semi-automatic digitizing of both bitmap images and vector graphics. The quality of the resulting embroidery greatly depends on the type and quality of the original artwork.
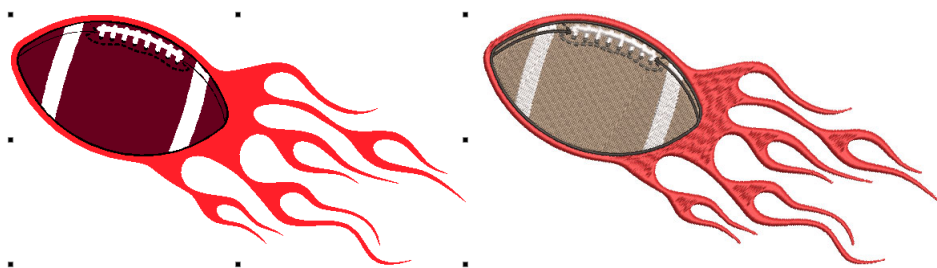
Preparing images for digitizing

Generally speaking, vector graphics preserve the picture quality when resized, whereas bitmap images cause problems of pixelation and image degradation when enlarged or scaled down. In order to make bitmap images more suitable for automatic digitizing, BE EmbroideryStudio provides image processing capabilities. See Digitizing with Bitmaps (Reference Manual).
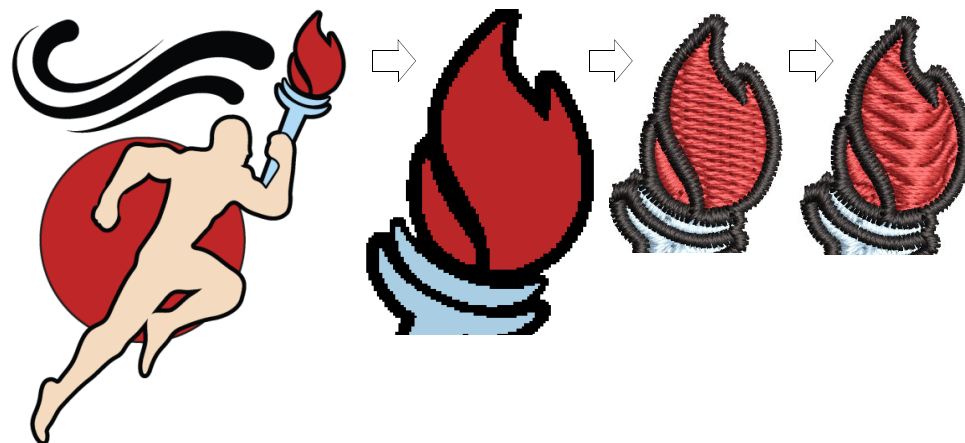
Digitizing shapes manually

You trace shapes and lines over electronic artwork using various digitizing on 'input' methods. Using a bitmap image in this way is like using an enlargement drawing on a digitizing tablet, except that everything is done on screen. See Embroidery digitizing (Reference Manual).
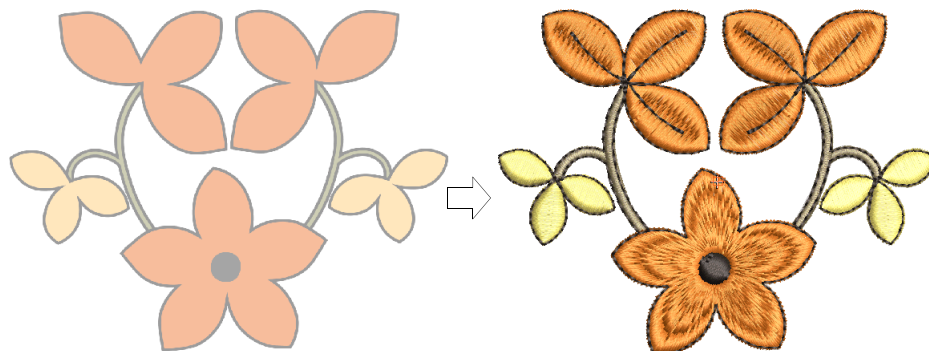
Converting artwork to embroidery

BE EmbroideryStudio lets you convert vector objects directly to embroidery objects. In fact, entire vector designs can be converted to embroidery. You can modify these designs as you wish. You can also convert embroidery to vector graphics. See Convert objects with CorelDRAW Graphics (Reference Manual).
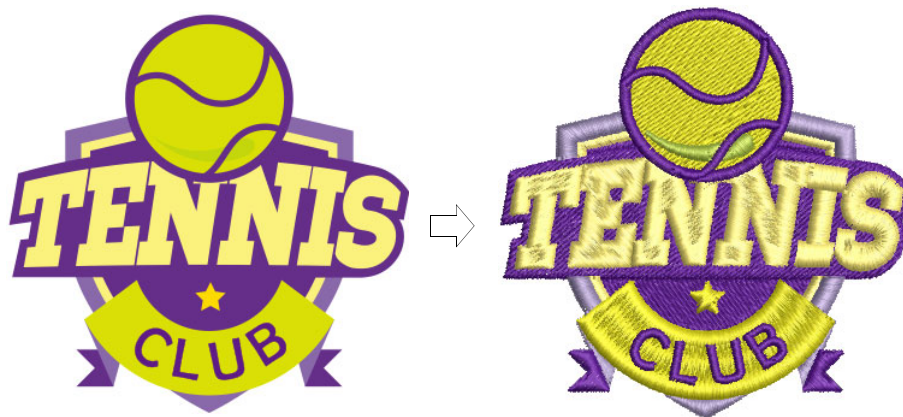
Tip: CorelDRAW® Graphics Suite lets you trace bitmaps to convert them to fully editable and scalable vector graphics. You can trace scanned sketches, artwork, digital photos, and logos and easily integrate them into your designs.

Object-based embroidery

In BE EmbroideryStudio, you build designs from basic shapes or 'embroidery objects'. They are called 'objects' because they are discrete entities which can be manipulated independently of each other. These are like ordinary vector objects in that they have certain defining characteristics or 'properties' such as color, size, position, and so on. They also have properties unique to embroidery such as stitch type and density.

Note: In BE EmbroideryStudio, vector and embroidery objects are in fact inter-convertible since they share many of the same characteristics. See also Convert objects with CorelDRAW Graphics (Reference Manual).

Design shapes and stitching sequence

The embroidery objects comprising a design form a stitching sequence. Before creating an embroidery design, it is good practice to analyze and plan shapes and stitching sequence in advance. Shapes need to be clearly defined to make them easy to embroider. The best ones have relatively constant width, with smooth edges, no sharp turns and no small, protruding details. Outlines and details should always be stitched last.
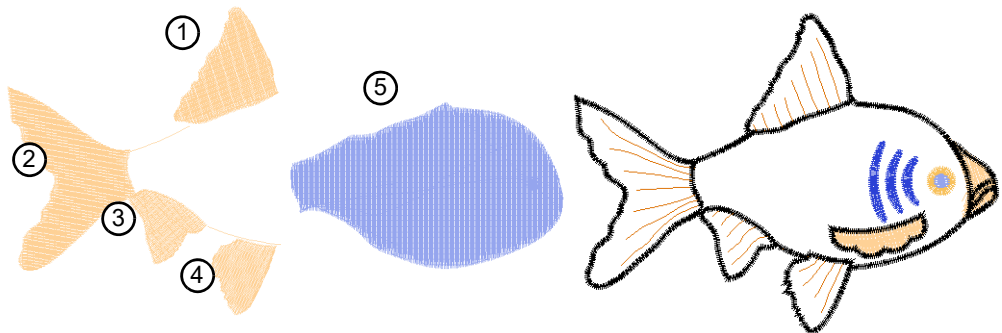
If you are digitizing manually, objects are stitched out in the order they were created. In other words, the digitizing sequence defines the stitching sequence. If you have converted an electronic design, BE EmbroideryStudio uses automatic sequencing to create the optimum stitching sequence. Auto-sequencing attempts to generate embroidery designs which are economical to produce, with minimal down time, and accurate registration of textures and colors.

Mixed-mode approach

If you take a mixed-mode approach, you may do the bulk of the design by means of automatic conversion, and touch-ups and edits using the suite of BE EmbroideryStudio embroidery digitizing tools. In addition, you can always manually adjust the stitching sequence to improve the

stitchout, for example, to minimize color changes. See also Automatic digitizing (Reference Manual).

Object viewing and selection

BE EmbroideryStudio provides many viewing modes to make it easier to work with your designs. View a design at actual size or zoom in for more detail. Pan a design instead of scrolling, or quickly change between one view and the last. Show or hide outlines, stitches themselves, or view designs in TrueView™.

Understanding stitching sequence

When working with embroidery designs, you can check the stitching sequence by 'traveling' through it by means of color blocks, embroidery objects, or even stitch-by-stitch. Alternatively, simulate the actual embroidery design stitchout on screen. You can also preview designs in different colors on different backgrounds by selecting from predefined colorways. See Viewing stitching sequence for details.

Selecting embroidery objects

BE EmbroideryStudio provides various ways to select embroidery objects. Modify the design as a whole or select individual objects for more precise modification. The **Color-Object List** provides an easy way to select objects and colors in a design and access their properties. Use it also to group and ungroup, lock and unlock, and show and hide objects. See Selecting objects for details.
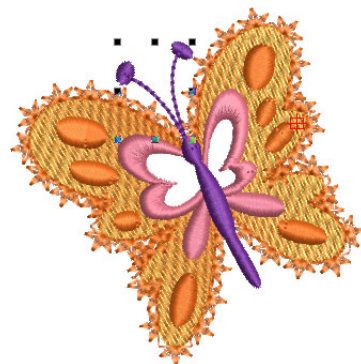
Digitizing embroidery shapes

In addition to the automated and semi-automated techniques BE EmbroideryStudio provides for creating embroidery designs, it also contains a suite of manual digitizing tools. These are similar to graphics

tools except that the end result are embroidery rather than vector objects. It is important to be familiar with manual digitizing methods in order to fully understand the process, the types of objects created, and the problems associated with embroidery digitizing.

Digitizing simple & complex shapes

There are tools for digitizing filled shapes with turning stitches and fixed stitch angles, with or without holes. There are also tools for creating columns and borders of fixed or varying width. See Embroidery digitizing (Reference Manual).
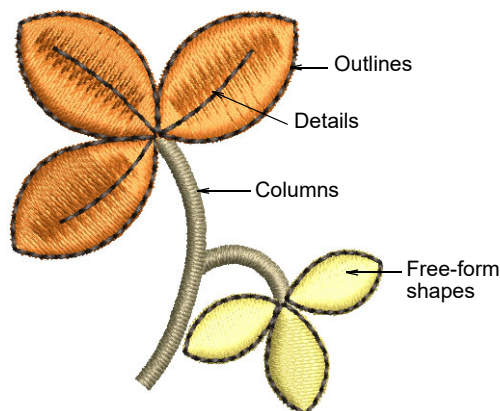
Digitizing outlines & details

BE EmbroideryStudio provides tools for creating outline stitching of varying thicknesses and styles. They are typically used to add outlines and details to designs. There are tools for creating simple run stitching as well as decorative outlines using predefined motifs. Backstitch is an older-style, adaptable stitch which can be used for delicate outlines. Stemstitch is thicker and can be used to mimic hand-sewn embroidery. Occasionally you may even need to digitize individual stitches. See Digitizing outlines & details (Reference Manual).

Stitch types

The most important property of all embroidery objects is their stitch type. The software uses object outlines and the associated stitch type to generate stitches. Whenever you reshape, transform or scale an object, stitches are automatically regenerated. See Stitch Types (Reference Manual).
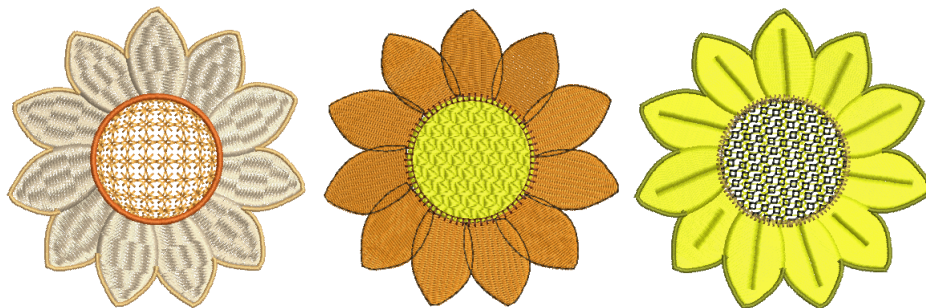
Threads & colorways

When digitizing, you select thread colors for objects from the color palette. This contains a selection of colors tailored to each design or color scheme. The particular 'colorway' represents the actual thread colors in which a design will be stitched. You can define multiple color schemes and switch between them. See Colorways (Reference Manual).
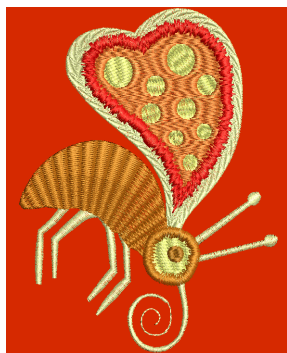
For each colorway you define, you can select colors from commercial thread charts or define your own. Search for particular threads by specific code. Automatic thread color matching helps you locate thread colors based on closest match across one or several thread charts. You can also match thread colors from imported graphics – vector or bitmap.

Design backgrounds

BE EmbroideryStudio also lets you set the background color, fabric, or product of the current colorway for more realistic previews and presentations. The background is saved with the colorway. See Fabric & product backgrounds (Reference Manual).

Properties, fabrics, styles & templates

Object properties are stored with each object whenever you save a design. These properties determine how stitches will be regenerated whenever you reshape, transform or scale an object or entire design.

Default properties are stored with the design template and form the basis of all new designs. These may be overridden by fabric settings which are automatically adjusted to suit different fabric types. These in turn may be overridden by individual property settings determined by the digitizer. See Object Properties (Reference Manual).

Underlays & pull compensation

Embroidery stitches pull fabric inward where needles penetrate. This can cause fabric to pucker, stitch bunching, and/or unsightly gaps to appear in the embroidery. BE EmbroideryStudio includes many techniques for achieving smooth, even placement of stitches, and the elimination of gaps in designs.
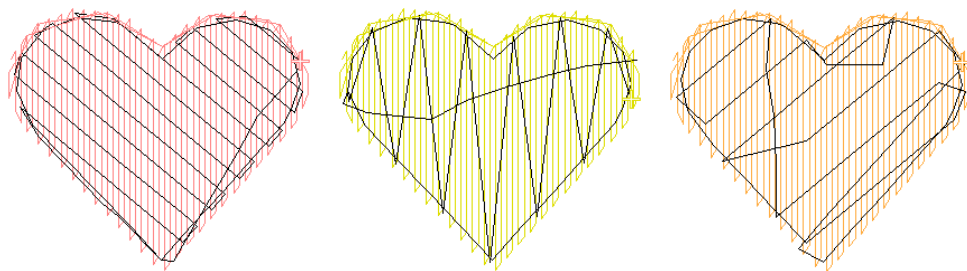
For an object to sew out correctly, it must have correct stitch spacing, sufficient pull compensation, together with a suitable underlay for the particular combination of cover stitch type, object type, object shape, and fabric. See Embroidery Reinforcement (Reference Manual).

Embroidery connectors

Connectors link objects in a design. They can be run stitches or jumps. Travel runs are typically used to connect segments **within** filled objects. You can use automatic settings to generate connectors, trims and tie-offs, or add them manually. You can change connector settings for a whole design or selected objects. If you prefer to add tie-offs and trims as you digitize, you can turn off automatic connectors altogether.

BE EmbroideryStudio also allows you to automatically connect first and last stitches of a design. This makes it easy to position the needle before stitching, and reduces the chance of it hitting the frame. See Embroidery Connectors (Reference Manual).

Automatic digitizing

Depending on your product level, BE EmbroideryStudio offers a variety of complementary tools and techniques for automatically digitizing suitably prepared artwork.

Auto-tracing bitmap artwork

Use **Auto Trace To Vectors** to create vector outlines from bitmap images. You can then convert these to embroidery objects using a variety of input methods. **Auto Trace To Vectors** can find holes in shapes – both inside and outside boundaries are detected. See Auto-tracing bitmap artwork (Reference Manual).
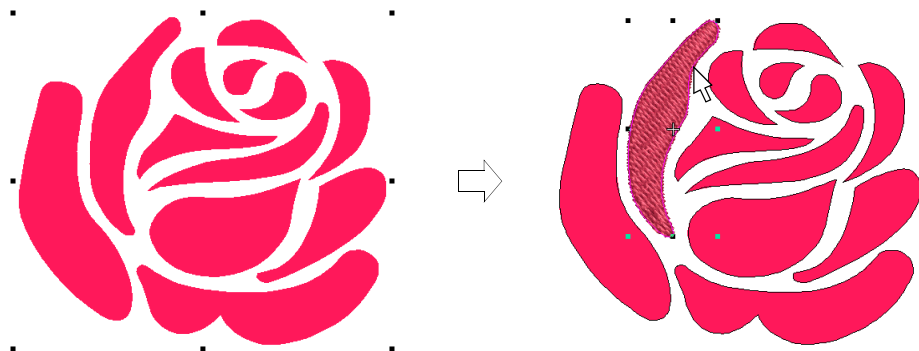
Auto-digitizing image shapes

Auto-Digitizing tools provide everything necessary to digitize shapes in bitmap images and vector graphics automatically without using manual digitizing methods. See Auto-digitize individual shapes (Reference Manual).

Turning satin

Tatami fill
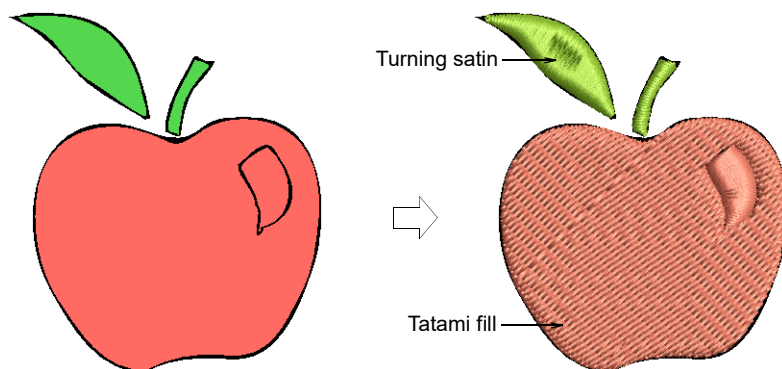
Auto-digitizing entire images

Smart Design automatically converts whole bitmap images to fully digitized embroidery. See Auto-digitize entire designs (Reference Manual).
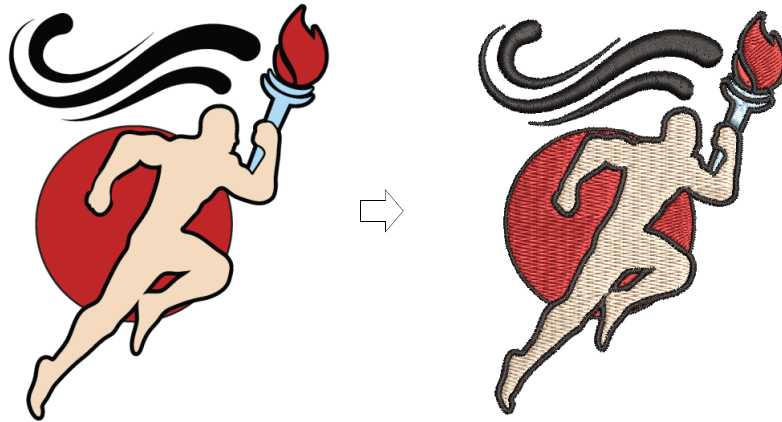
Auto-digitizing photographs

Use **Color PhotoStitch** or **Photo Flash** to create embroidery from photographs and other images. While **Photo Flash** designs consist of rows of single-color satin stitching, **Color PhotoStitch** produces variegated stitching using multiple thread colors. The overall effect is like multi-colored stippling. See Auto-Digitizing with Photos (Reference Manual).

Modifying designs

After digitizing a design, you can modify it as a whole, edit individual objects or even individual stitches.

Combining & resequencing objects

BE EmbroideryStudio provides various techniques for combining and sequencing objects. You can add to designs by duplicating and copying objects. Combine designs. Resequence objects in designs to minimize color changes and optimize production.

The stitching sequence naturally occurs in the order in which an embroidery design is digitized or assembled. When converting a graphic design to an embroidery design, BE EmbroideryStudio decides the stitching sequence according to its own internal logic. Either way, you may, for reasons of aesthetics or production efficiency, want to adjust it. The **Color-Object List** displays a sequential list of objects grouped by object and color. It provides an easy way to group, cut, copy and paste, and resequence selected objects and color blocks. BE EmbroideryStudio also allows you to create 'branched objects'. Like-objects are thereby resequenced, connectors minimized, components grouped, and stitches regenerated. Underlay can be applied to all. See Combining Objects (Reference Manual).

Arranging, scaling & transforming objects

You can change the position, size and orientation of objects in a design by moving, scaling and transforming them. Group objects together to apply universal changes, or lock them to avoid unintentional modification. Modify objects directly on screen or via their object properties. Access commonly used functions via the Color-Object List. See Transforming Objects (Reference Manual).
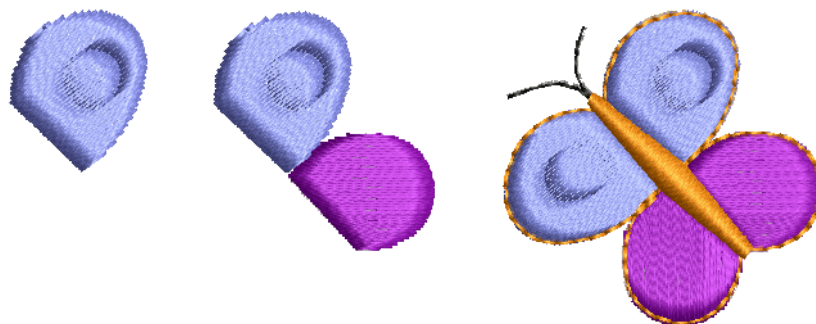
Reshaping and converting objects

BE EmbroideryStudio offers a number of techniques for reshaping embroidery objects, all with the one tool. Sometimes you may need to cut, split or break up complex or compound objects in order to fine-tune them. Various tools are available for this purpose. As well as reshaping object outlines, you can add and adjust stitch angles, a property unique to embroidery objects. You can also change the entry and exit points of individual objects which is important if you are digitizing manually or resequencing embroidery objects. See Reshaping & Splitting Objects (Reference Manual).
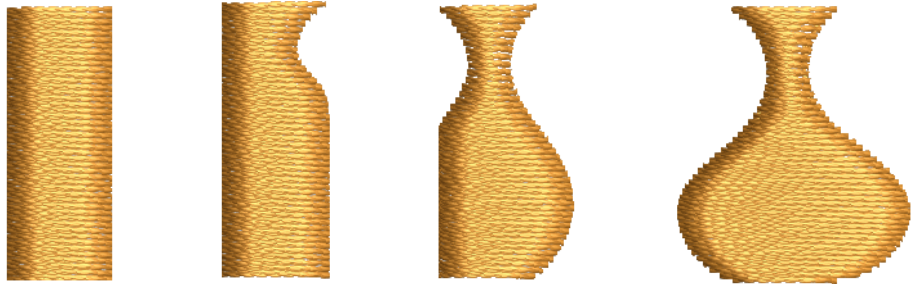
Optimizing stitch quality

When it comes to embroidery production, the current stitch density may not be perfect for certain fabrics or threads. Or you may want to make production cheaper by reducing overall stitch count. After scaling operations, for example, designs may contain small stitches which can damage fabric and cause thread or needle breakage. Sharp corners may cause stitch bunching which can create hard spots in the embroidery and damage fabric or needle. Embroidery machines have a maximum possible stitch length which is determined by the physical frame movement. If long Satin stitches exceed this, they are broken into smaller stitches. BE EmbroideryStudio helps you resolve these issues with a number of specialized techniques for optimizing stitching quality for different design types and production requirements. See Stitch Quality (Reference Manual).
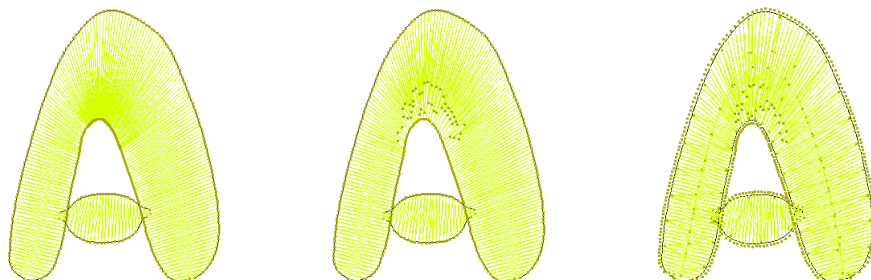
Editing stitches & machine functions

BE EmbroideryStudio automatically generates stitches from design outlines and properties. This means you can scale, transform, and reshape native designs without compromising stitch density or quality.

However, BE EmbroideryStudio also lets you edit individual stitches. You may need to do this, for example, when working with 'stitch' files which do not contain outline data. Like stitches, machine functions are inserted automatically whenever you digitize objects and specify object properties. They are stored with the embroidery object and updated whenever it is modified. However, BE EmbroideryStudio also lets you manually insert machine functions and modify them. This flexibility allows you to adapt designs to almost any machine requirement. See Stitches & Machine Functions (Reference Manual).
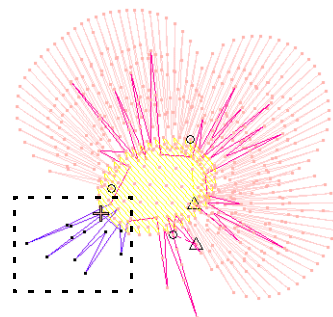
Advanced digitizing

BE EmbroideryStudio provides specialized productivity features as well as special effects and digitizing techniques.

Productivity techniques

Specialized digitizing features help to save digitizing time. BE EmbroideryStudio provides special input tools for circles, stars, and rings, as well as methods for creating repeated or 'backtracked' outlines. Remove underlying layers of stitching in overlapping objects to reduce stitch counts and prevent a build-up of stitches.

BE EmbroideryStudio also provides tools for quickly creating outlines based on existing filled shapes, and vice versa. Add decorative borders such as rectangles, ovals, and shields to designs or selected objects using the **Borders** library. See Productivity Techniques (Reference Manual).

Motif runs & fills

Motifs are predefined design elements, such as hearts, leaves or border patterns. They generally consist of one or more simple objects, and are stored in a special motif set. The BE EmbroideryStudio **Motif** tools allow you to use motifs to create ornamental runs and textured fills. Use the ones provided with the software or create your own. Motifs can be scaled, rotated and mirrored in the same way as other objects. You can even use them to create interesting three dimensional effects. See Motif Stitching (Reference Manual).
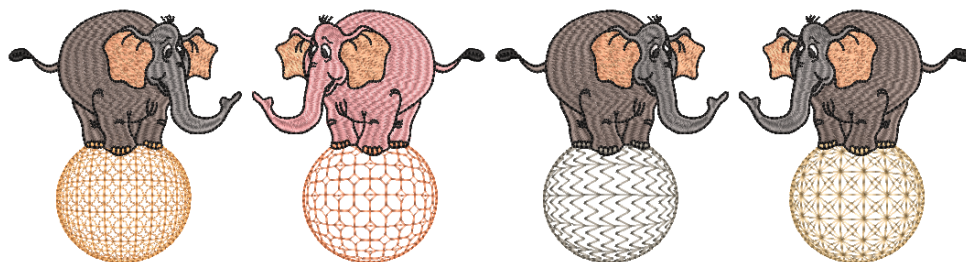
Embroidery lettering

Create top-quality lettering quickly and simply. BE EmbroideryStudio provides a large range of scalable closest-join font styles and multi-color and fancy fonts to choose from.

Creating embroidery lettering

Create high-quality embroidery lettering quickly and simply. BE EmbroideryStudio provides a large range of scalable fonts to choose from. Add embroidery lettering directly to designs or convert from **CorelDRAW Graphics**. Apply formatting just like a word processor, including italics, bolding, and right/left justification. Change values for the whole text or individual letters. See Creating Embroidery Lettering for details.

Editing embroidery lettering

BE EmbroideryStudio gives you interactive and precise numeric control over many settings affecting lettering objects. Adjust both individual letters and lettering objects as a whole. Apply horizontal, vertical, and curved baselines. Modify baseline type, length, radius and angle, as well as position. You can even define the rotation angle of letters relative to the baseline or the design itself. See Editing Embroidery Lettering for details.
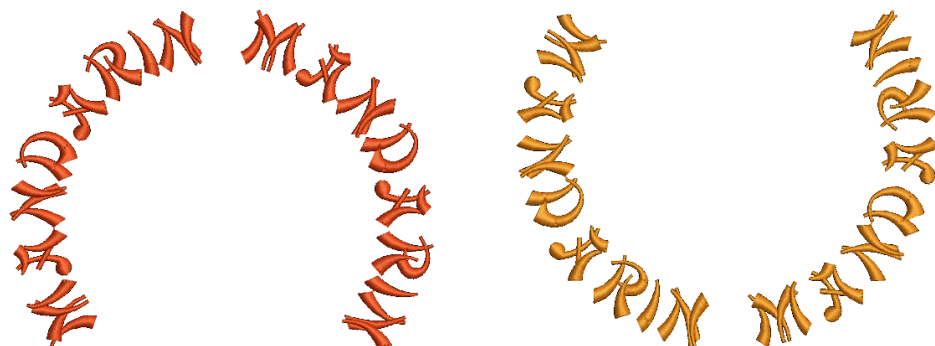
Advanced lettering techniques

Add special characters and symbols to your lettering. By default, lettering objects are filled with **Satin** stitch. Apply other basic fill stitch types as with all embroidery objects.

Specify the sequence in which letters are stitched to minimize registration problems. The automatic kerning feature improves lettering appearance and legibility by fine-tuning spacings between character pairs.

Alternatively, fine-tune letter spacing according to the number of characters per object. This is particularly useful with Asian fonts. Lettering appearance and quality can be improved with the correct underlay. See Advanced Embroidery Lettering for details.

Apply **Lettering Art** effects to make letters bulge or arch, stretch or compress. Many styles are available from the **Lettering Art** gallery. You can fine-tune preset shapes as preferred. Edit lettering text in envelopes the same way as normal lettering. See Creating special effects with lettering art for details.

Team lettering

The **Team Names** feature lets you create designs with multiple names. For example, you can use the same logo with different names for sports teams or corporate uniforms, without having to create multiple copies of the same design. Names are stored in lists that can be accessed from any design. You can add to these lists, or remove names at any time.

Depending on how you want to stitch out, you can choose to save and stitch names and designs separately, or together. See Team Names (Reference Manual).

Monograms

A monogram is a design composed of one or more letters, typically the initials of a name, used as an identifying mark. The **Monogramming** feature offers a simple way to create personalized monograms using a selection of predefined monogram styles, border shapes and ornaments, together with a set of tools to help you place these elements in creative and decorative ways. See Monogramming (Reference Manual).

Custom fonts

Turn any TrueType font installed on your system into an embroidery font. The automatic kerning feature improves lettering appearance and legibility by fine-tuning spacings between character pairs. Sometimes you find that you want to reshape a letter to improve its appearance, perhaps to suit a particular lettering height. BE EmbroideryStudio lets you save the letter as an alternative version. In fact you can save multiple versions of the same letter within the same font. You can even create your own custom fonts or modify an existing font for special applications. Even merge letters from two or more fonts. See Custom Lettering (Reference Manual).

Mixed decoration

BE EmbroideryStudio provides support for various multi-decoration techniques, including print.

Appliqué digitizing

Automatically create all the stitching you need for appliqué using the **Appliqué** tool. Up to four layers of stitching – guide runs, cutting lines, tack stitches and cover stitches – can be generated for any appliqué object, depending on current settings. You can also extract appliqué shapes from a design to output to a cutter or separate file. See Appliqué Embroidery (Reference Manual).

Bling digitizing

Bling refers to decorative objects placed on garments or templates, either on their own or in combination with other design elements. Bling is supplied in varying sizes, shapes, colors and materials. It goes under various names such as diamante, rhinestones, eyelets, ribbons, charms, crystals, glitz, nailheads, studs, etc.

BE EmbroideryStudio lets you create bling and embroidery multi-decoration designs with the **Bling** toolset. This tool lets you create and visualize bling embellishments in combination with other decorative elements. See Bling Digitizing (Reference Manual).

Multi-decoration export

The **Multi-Decoration File Export** (MDFE) capability allows you to export the different file formats involved in a multi-decoration design production with a single command option. The system recognizes whether a design element is embroidery, graphics, appliqué, or bling. It displays each element in an export dialog with a list of corresponding file types to choose from. See Exporting multi-decoration files (Reference Manual).

Files, machines, & design processing

Design processing and encoding involve all the important, back-end operations of embroidery design and manufacture. This is where you actually output your designs to machine, disk, printer, cutter, and so on. For this, you will need an understanding of embroidery file types as well as different machine formats. Depending on your setup, you will also

need an understanding of traditional storage media such as embroidery disks.

Printing designs

From the same design file, you can output a production worksheet for the embroidery machine operator. Designers frequently want to distribute their designs for viewing in real colors, in TrueView™ or otherwise, with or without fabric or product backgrounds. BE EmbroideryStudio allows you to customize information in the format you require for production worksheets and/or approval sheets. You can specify the data to print, graphics to include, zoom factor, and general options such as company name. You can use a color printer or plotter to produce your worksheets. See Design Reports (Reference Manual).

Outputting designs

You can output embroidery designs for actual stitchout in a variety of ways – sending directly to machine for stitching, or saving to specific machine formats and/or to embroidery disk. See Embroidery Output (Reference Manual).

Reading files of different formats

By default BE EmbroideryStudio saves to its native file format, EMB. This format contains all information necessary both for stitching a design and for later modification. When opening designs created or saved in other formats, BE EmbroideryStudio converts them internally to EMB format. They can then be modified using the full range of BE EmbroideryStudio features. Depending on the file type, you may need to provide additional information to assist BE EmbroideryStudio in the conversion process. See Machine Files (Reference Manual).

Manual objects with no outlines and manual stitches only
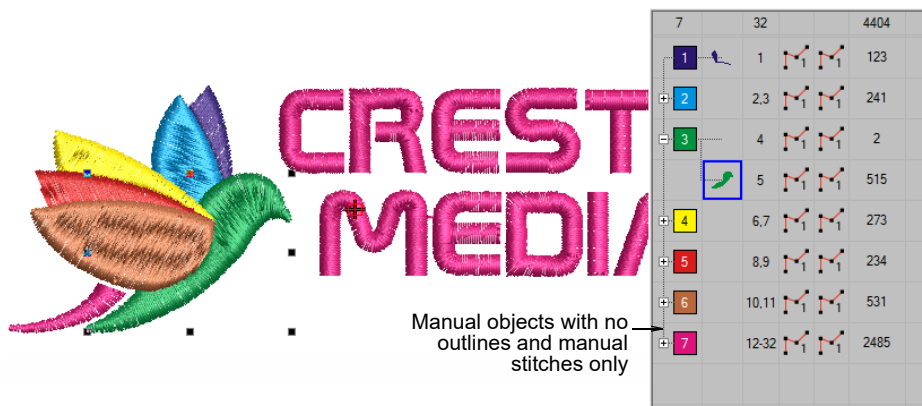
Hooping designs

Devices made from wood, plastic, or steel, hoops are used to tightly grip fabric and stabilizer between an inner and outer ring. Designed to hold fabric taut against the machine bed for embroidering, they attach to the machine's frame. Fabrics must be hooped before stitching out on the machine. BE EmbroideryStudio allows you to select from a wide range of standard factory-supplied hoops. If you are using a hoop which does not appear in the hoop library, you can define your own from scratch or based on a standard hoop. See Design Hooping (Reference Manual).

Machine formats

Different embroidery machines speak different languages. They have their own control commands for the various machine functions. Before you can stitch a design, it must be in a format which can be understood by the embroidery machine. When you select a machine format, BE EmbroideryStudio uses it to translate digitized designs into a specific machine-readable form. If required, you can customize machine formats to meet specific machine requirements. See Machine Formats (Reference Manual).
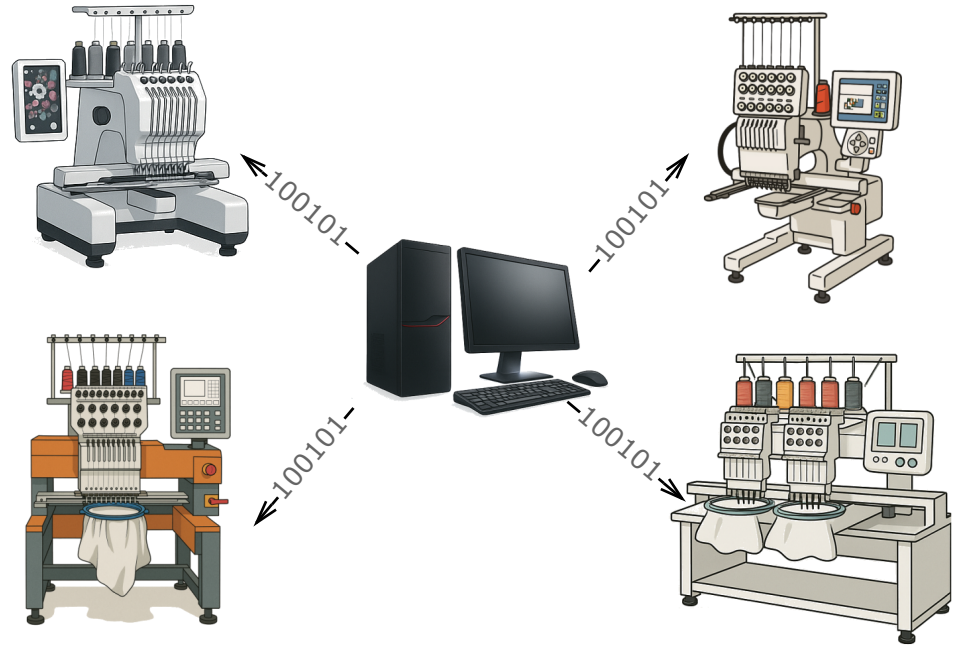
Hardware & software setup

In order to work with your particular equipment, BE EmbroideryStudio needs to be properly configured. You may also want to configure the software to your particular design requirements.

Setting up hardware

You will need to connect peripheral devices for use with BE EmbroideryStudio. These may include digitizing tablets, plotters, printers, appliqué cutters, scanners and embroidery machines. Different devices are set up in different ways – some in MS Windows®, via the **Control Panel**, others within BE EmbroideryStudio itself. See Hardware Setup (Reference Manual).
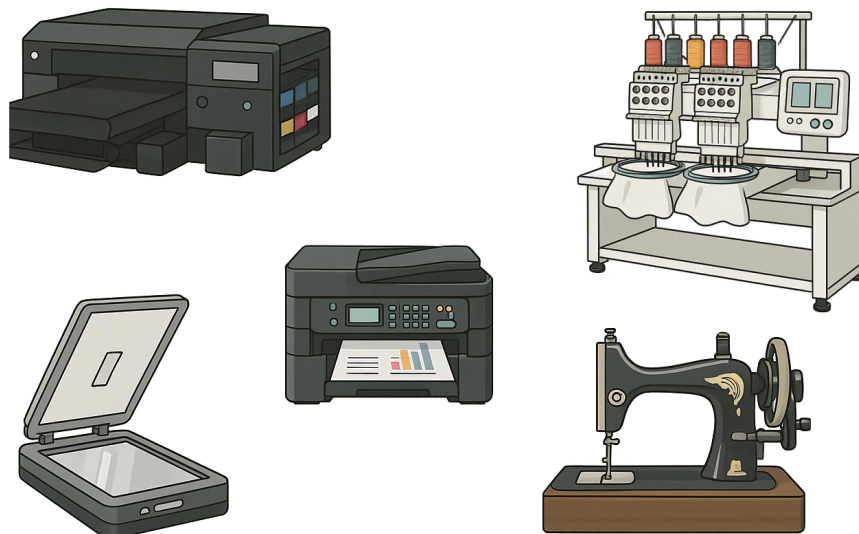
Changing system settings

BE EmbroideryStudio lets you adjust various system settings controlling the appearance of designs on screen, display of design information, the behavior of the design window, and other settings. See System Settings (Reference Manual).

Managing designs with Design Library

BE EmbroideryStudio comes equipped with its own built-in **Design Library** for managing your embroidery designs across your entire local network. Use it to browse design and artwork files stored on your local PC or company network. **Design Library** capabilities make it fast and practical for daily commercial use, avoiding the need to switch to and from **File Explorer**. It recognizes all file formats used by BE EmbroideryStudio. It also makes it easy to search, sort and browse all embroidery designs on your network.
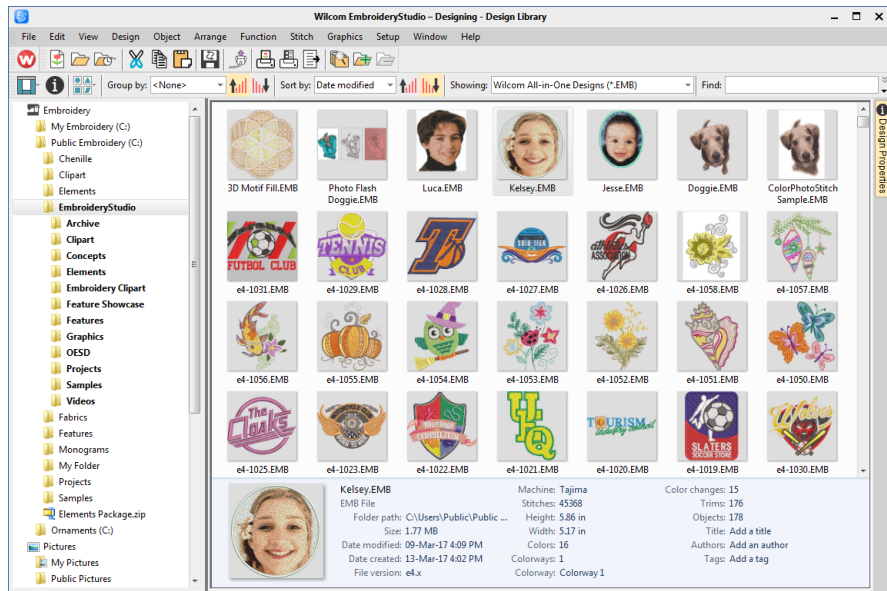
In a nutshell, **Design Library** lets you:

◀ Search for designs – including artwork files – anywhere on your local hard drive, network drives, or external devices such as USB or ZIP drive.

◀ Preview design information in the preview pane.

◀ Search for designs by various means, including known design information.

◀ Create an organizing structure for easy categorization.

◀ Batch-convert selected design files to all commercial embroidery formats such as DST, EXP, SEW, and others.

◀ Print selected designs or send them to embroidery machine for stitchout.

◀ Use **Design Library** to handle job orders.

Find embroidery designs anywhere on your hard drive or external storage device and, optionally, add them to your embroidery library. This section describes how to open and view designs in **Design Library** as well as adjusting viewing settings. It also covers browsing for and accessing designs in folders. See Design Management for details.

✏

Note: Design Library helps you manage designs in folders. It is not a multi-user database for company-wide design management. For this type of requirement, refer to the DesignWorkflow User Manual.

Basic Procedures

BE EmbroideryStudio is an MS Windows®-based product incorporating many of the conventions with which most PC users are already familiar. BE EmbroideryStudio integrates with CorelDRAW® Graphics Suite into a single application, allowing users to create, not just embroidery, but true, multi-decoration designs.

Operating modes

Open BE EmbroideryStudio using the desktop icon or the MS Windows® **Start** menu. The application has one workspace or 'design window' but you interact with it in different operating modes. These can be accessed via the **Modes** toolbar.
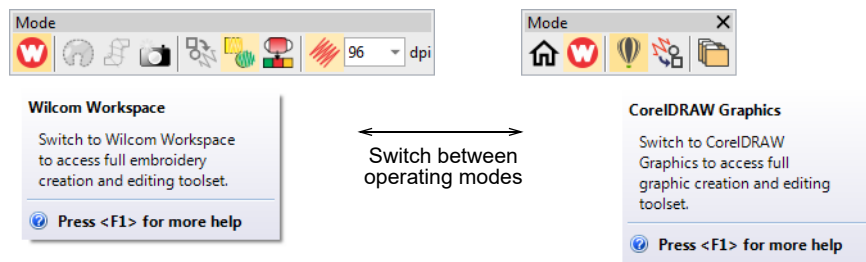
The main modes you'll be accessing are:

Mode		Function
	Wilcom Workspace	This mode allows you to create and edit embroidery objects using an embroidery digitizing toolset.
	CorelDRAW Graphics	This mode allows you to create and edit vector objects using the CorelDRAW® Graphics Suite toolset.
	Design Library	This mode allows you to manage designs and job orders.

Caution: You need to calibrate your monitor so that designs at 1:1 scale appear at real size. Do this when you first install BE EmbroideryStudio or whenever you change your monitor. See Calibrating the monitor (Reference Manual).

Wilcom Workspace window

 Use Mode > Wilcom Workspace to digitize and edit embroidery designs. Display embroidery as well as artwork. View designs realistically in 3D simulation.

When you open BE EmbroideryStudio, it appears by default in **Wilcom Workspace** window with a new, blank design displayed. This mode allows you to create and edit embroidery objects using the embroidery digitizing toolset. The screen image below shows the more prominent toolbars in BE EmbroideryStudio. Depending on your product level, you will have access to some or all of these options.

The figure labels (reading top to bottom):

- Menu bar →
- Standard tools →
- View tools →
- Stitch Effects tools →
- Design tabs →
- Mode tools →
- Toolbox →
- Graphic style and traditional input methods →
- Stitch Types tools →
- Status / Prompt bars →

Figure callouts on right side:
- 'Floating' toolbar
- Docker tabs
- Object properties docker
- Color tools
- Design window

Window title: Wilcom EmbroideryStudio - Designing - [Design1]   Barudan FDR-3

Use this mode when you want to create embroidery from digitizing 'backdrops'. Various types of image file can be loaded in BE EmbroideryStudio. **Wilcom Workspace** also offers a graphical representation of what the final embroidery will look like. Use **TrueView™** together with a background fabric to see how your design will look when stitched out. Some of the more prominent **Wilcom Workspace** interface elements include:

Element	Description
Menu bar	This contains the application menus such as File, Edit, View, etc.
Mode toolbar	This contains tools and icons which are visible in both Wilcom Workspace and CorelDRAW Graphics.
Standard toolbar	This contains commonly used tools and commands which are specific to and only visible in Wilcom Workspace.
View toolbar	This contains commands for viewing embroidery designs – e.g. as design outlines, by stitches, by machine functions, as they will stitch out on the fabric – either separately or in combination.
Stitch Types toolbars	This contains tools which determine the stitch types which can be applied to embroidery objects, including Satin, Tatami, Motif Fill, etc.

Element	Description
Stitch Effects toolbar	This contains tools for modifying or improving stitch quality, including applying automatic underlay to selected objects.
Toolboxes	Depending on the product model, there are up to three 'toolboxes' – Toolbox, Graphics Digitizing, and Traditional Digitizing. Between them, toolboxes contain all the embroidery digitizing/editing tools specific to and visible only in Wilcom Workspace.
Color toolbar	This contains the embroidery color palette which is specific to and visible only in Wilcom Workspace.
Status / Prompt bars	These contain current status information and prompts which are visible only in Wilcom Workspace. See below.
Docker	Wilcom Workspace includes 'dockers' – Object Properties, Color-Object List, Color Palette Editor, and others. These stay open as long as you need them.
Design Window	This contains the main work area where you create and edit embroidery objects as well as graphics objects when you switch to CorelDRAW Graphics.

◀ Customize the design window by showing or hiding the grid, changing the grid dimensions, as well as showing and hiding toolbars.

◀ Dock or 'float' toolbars and dockers in any configuration that suits. Toolbars are dockable left, right, top and bottom, and can be 'floated' anywhere in the design window.

◀ BE EmbroideryStudio allows you the choice of large or small button icons with or without text names.

Related topics...

◀ Access object properties

◀ Display grids, rulers & guides

◀ Menus & Toolbars

Design tabs

BE EmbroideryStudio allows you to switch between open designs by means of design tabs. This also makes it easy to copy/paste between designs, including drag and drop operations.

Design tabs

Butterflies ✕ | Gold Fish 2 ✕ | Fancy Seashell ✕ | Design1 ✕
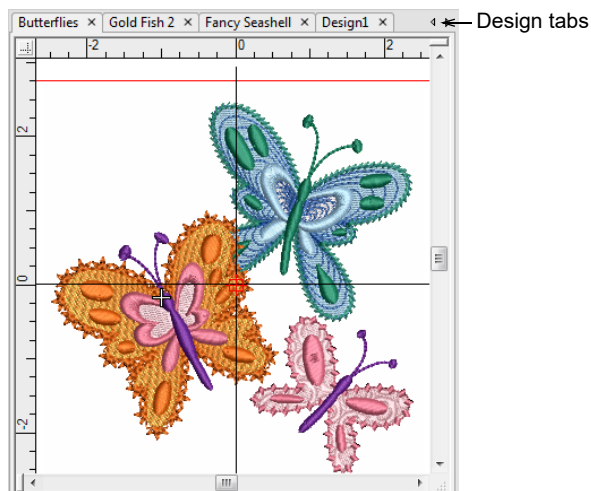
Related topics...

◀ Set up multiple views

◀ Menus & Toolbars

Status & Prompt bars

The **Status** and **Prompt** bars at the bottom of the **Wilcom Workspace** design window provides continuous display of current cursor position status as well as instructions for use of selected tools.

Coordinates of current needle position — Length and angle of current stitch — Stitch type and current settings — Current object — Selected auto fabric

Stitch count

Status Bar → 5428   X= -0.26 Y= -0.13 L= 0.29 A= -153.42   SATIN 0.37 mm   Object 3: Complex Fill   Jersey

Prompt Bar → Enter point 1 on the curve.   Jump (M)   Brother 100 x 100 mm

Current machine function — Current hoop
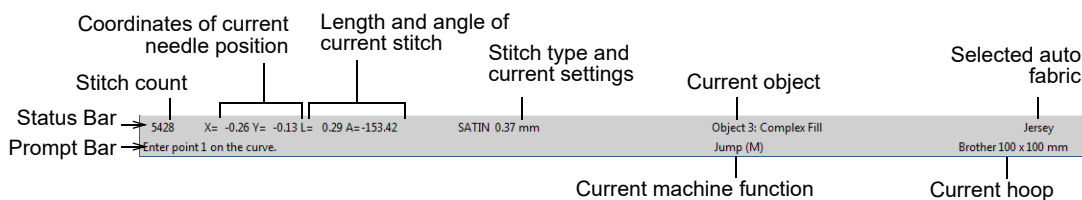
Information includes:

Item	Details
Prompt	Guides you through use of selected functions.
Stitch count	Total number of stitches in design.
Design size	Width and height.
Coordinates	Coordinates of current needle position (X/Y), and length (L) and angle (A) of current stitch.
Current fabric	Fabric settings take into account the type of fabric you are stitching on.

CorelDRAW Graphics window

> Use Mode > CorelDRAW Graphics to import, edit or create vector artwork as a backdrop for embroidery digitizing, manual or automatic.

> In Graphics mode, click Mode > Show Embroidery to show or hide embroidery components.

CorelDRAW Graphics window includes the entire suite of CorelDRAW® Graphics Suite drawing tools. This mode allows you to create and edit vector graphics using the **CorelDRAW Graphics** toolset which offers many sophisticated techniques for drafting outlines and shapes onscreen.
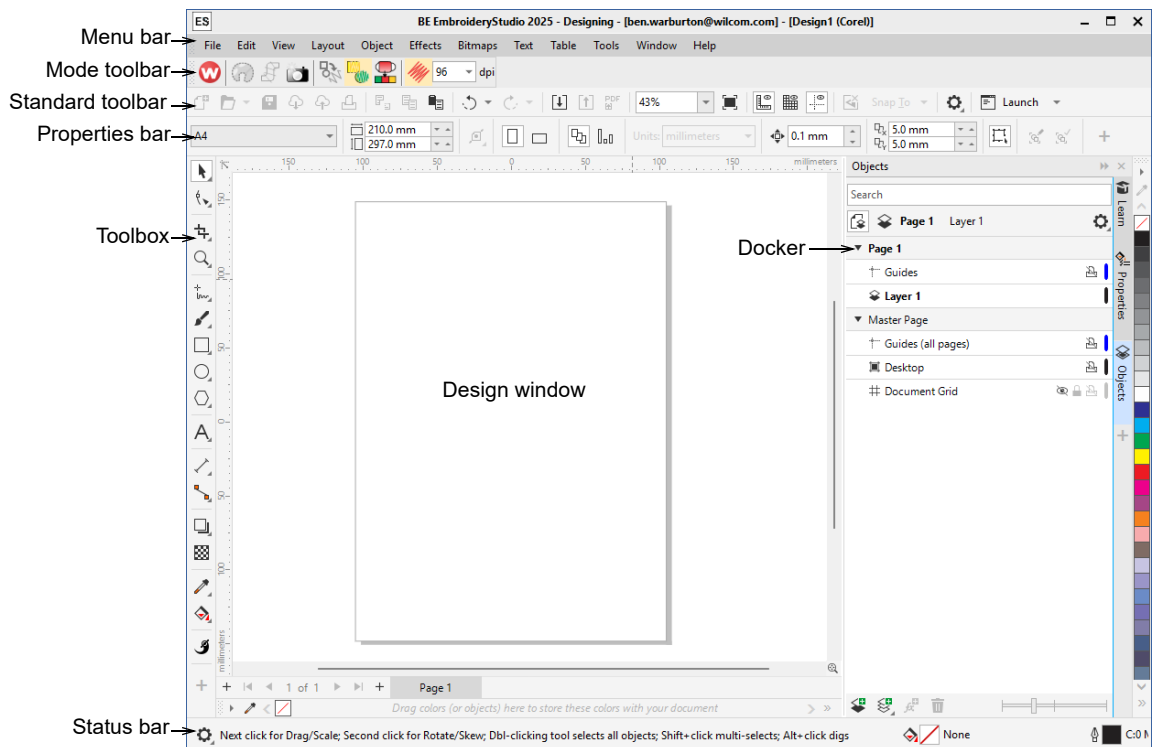
In addition to the CorelDRAW® Graphics Suite toolset, **CorelDRAW Graphics** provides capabilities to convert vectors and vector text directly to embroidery objects. Imported vector graphics or created text can be converted directly to embroidery designs. You can use **CorelDRAW Graphics** to insert or paste third-party vector graphics such as clipart for use in embroidery designs. Alternatively, insert, paste or scan bitmap artwork for use as digitizing templates or 'backdrops'. Here are some of the prominent **CorelDRAW Graphics** interface elements.

Element	Description
Menu bar	This contains application menus such as File, Edit, View, etc.
Mode toolbar	This contains the universal tools and icons which are visible in both Wilcom Workspace and CorelDRAW Graphics windows.
Standard toolbar	This contains commonly used tools and commands which are specific to and only visible in CorelDRAW Graphics.
Properties bar	This contains the commands and controls that relate to the active tool in the Toolbox or active object in the design window in CorelDRAW Graphics.
Toolbox	This contains the drawing/editing tools specific to and visible only in CorelDRAW Graphics.
Design window	This contains the main work area where you create and edit graphics objects as well as embroidery objects when you switch to Wilcom Workspace.
Color palette	This contains the graphics color palette which is specific to and only visible in CorelDRAW Graphics.
Docker	In CorelDRAW Graphics, this contains graphics-specific dockers.
Status bar	This contains current status information visible only in the CorelDRAW Graphics.

For a detailed description of the CorelDRAW® Graphics Suite interface, refer to the electronic User Guide available via the MS Windows® **Start > Programs** group. Alternatively, use the online help available from the **Help** menu.

Note: CorelDRAW® needs to be registered before it can be used by BE EmbroideryStudio. Registration provides CorelDRAW® Standard Membership which gives you access to content – clipart, fonts, stock photos, templates – via Corel CONNECT. It also gives you access to the latest CorelDRAW® updates.

Design library

Click Mode > Design Library to open a window from which to search and manage designs and job orders.

Design Library is a design or job order management tool. Use it to browse design and artwork files stored on your local PC or company network. **Design Library** capabilities make it fast and practical for daily commercial use, avoiding the need to switch to and from **File Explorer**. It recognizes all file formats used by BE EmbroideryStudio.
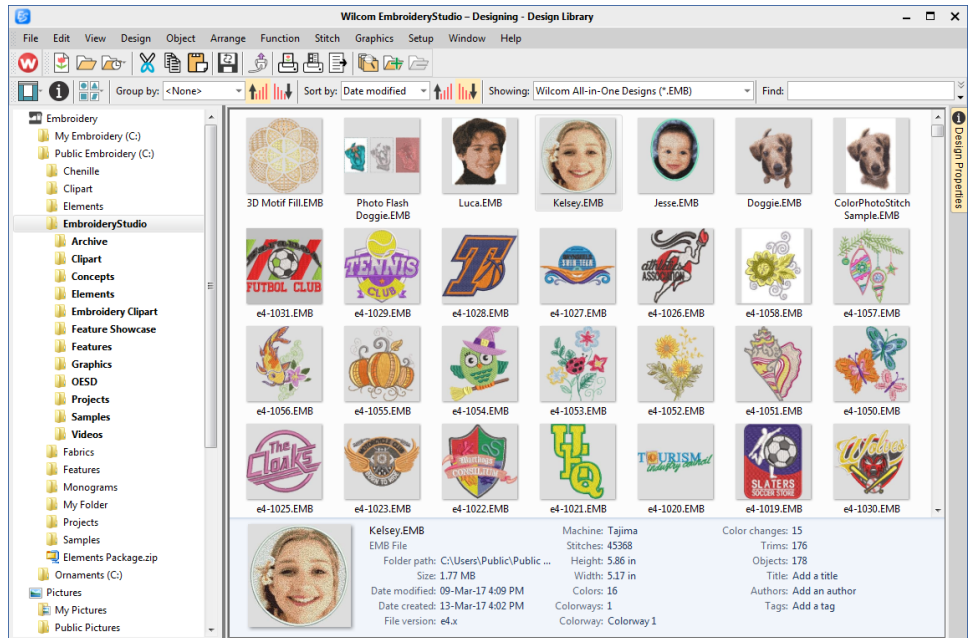
Design Library is installed with sample designs in EMB format. These show various stitching techniques and effects, including 'multi-decoration' and multiple colorways. When starting out as a new user, make sure to spend time exploring these designs.

Toolbars & dockers

The BE EmbroideryStudio design window provides 'dockers' for key functions. **Wilcom Workspace** has docking panes for **Color-Object List**, **Object Properties**, **Overview Window**, and so on. All panes are dockable on either side of the design window.

Access toolbars

Toolbars provide quick and easy access to most BE EmbroideryStudio commands. Show or hide them at your convenience. As you get more familiar with the system, you may prefer menu and keyboard commands.

To access toolbars...

◂ Select **Window > Toolbars** or right-click the docking area at the top or left of the design window. The **Toolbars** menu opens.

Select toolbars
to display
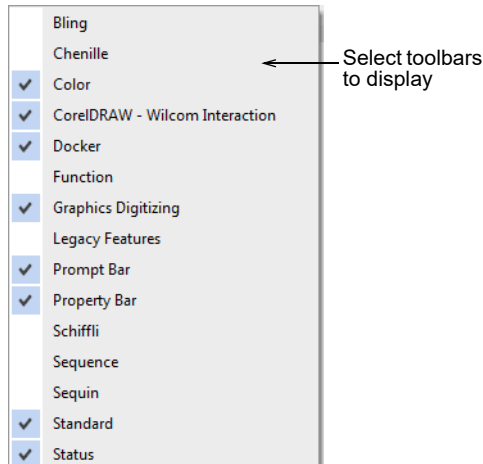
◀ Click to activate one or many.

Work with dockers

	Use Docker > Color-Object List to view and sequence design objects.
	Use Docker > Object Properties to preset properties or adjust properties of selected objects.
	Use Docker > Colorway Editor to assign thread colors to color palette and define colorways.

In **Wilcom Workspace** mode, there are three important dockers:

Docker	Description
Object Properties	The most important is the Object Properties docker. Use it together with the Property Bar to access properties of selected embroidery objects.
Color-Object List	The Color-Object List offers an easy way to selectively view and resequence color blocks and objects.
Colorway Editor	When you create a new design, it includes a single default colorway called 'Colorway 1'. The Colorway Editor allows you to edit default colors, add extra color slots as required, and set up additional colorways.

Access dockers via the **Docker** toolbar or **Window** menu. They can be docked on either side of the screen.

Access dockers via menu or toolbar
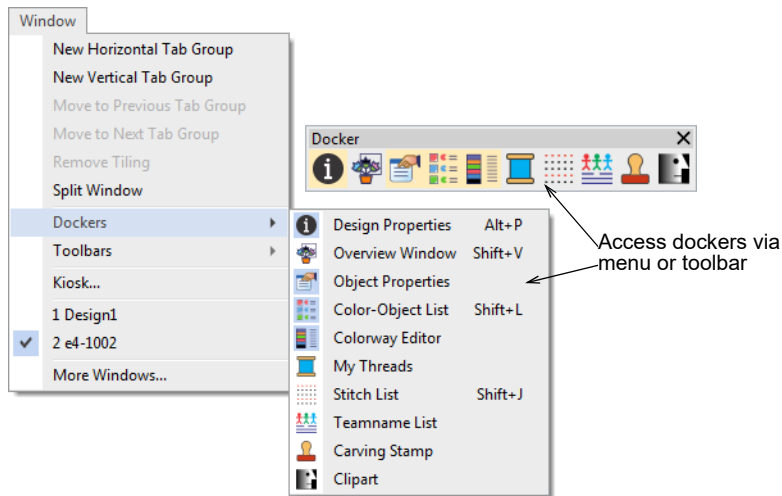
All dockers can be fixed or minimized. Dockers may also be 'floated' by dragging the caption bar to the design window or double-clicking it when 'pinned' in place. Dockers can be 'nested' to increase available workspace. When nested, tabs for each docker appear down the side.

Hover docker over title bar of another

Click and drag tab to float docker

Click tab to view docker
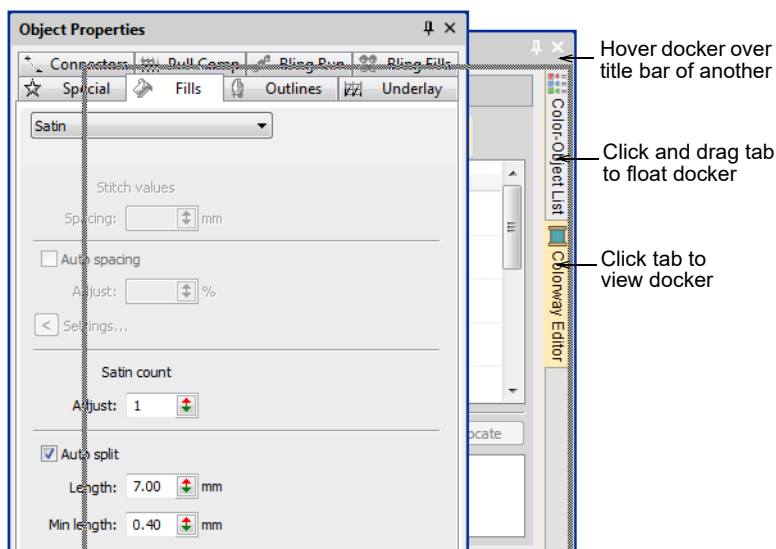
Toggle **Auto Hide** next to the **X** close button. Docking panes automatically retract when not in use. By hovering the mouse over the tab, a minimized docker will 'fly out', allowing you to access its functions.

Double-click title bar to
return to docked state

Enable/disable
auto-hide

Close
docker

Object Properties

Connect... | Pull Comp | Bling Run | Bling Fills
Special | Fills | Outlines | Underlay

Satin

Stitch values
Spacing: 0.37 mm
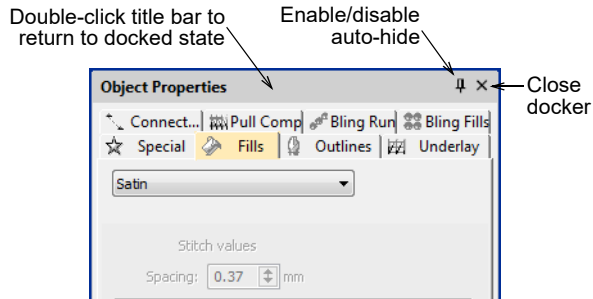
Related topics...

◄ Access object properties
◄ View selected color blocks

Access object properties

Use Docker > Object Properties to set properties of selected objects.

The most important docker is **Object Properties**. Use it together with the **Property Bar** to access the properties of selected embroidery objects.

To access object properties...

◄ Open the **Object Properties** docker by any of the following means:
  ◄ Click the **Object Properties** toggle.
  ◄ Double-click an object in the design window.
  ◄ Right-click an object and select from the popup menu.
  ◄ Right-click an object in the **Color-Object List** and select from the popup menu.

Object Properties — Click to close

Object Properties tabs

Droplist

Adjust settings as required
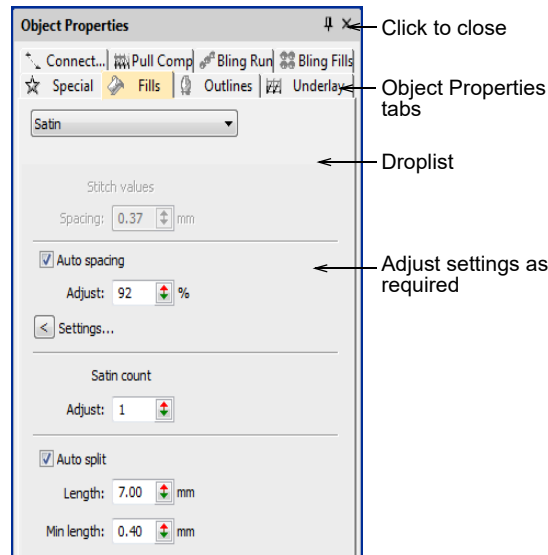
- Select a tab to access the properties to adjust.
- Adjust general properties – width, height, position – by means of the **Property Bar**. Press **Enter** to apply. Press **Esc** to discard changes.
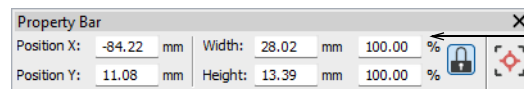
Adjust position and size settings. Press Enter to apply.

Tip: You can specify units of measurement when entering values into a measurement control.

Related topics...

- Set measurement units

Embroidery machine formats

Different embroidery machines speak different languages. They have their own control commands for the various machine functions. When you create a design, you need to select a format corresponding to the embroidery machine you intend to use. BE EmbroideryStudio uses the format to translate digitized designs into a specific machine-readable form. You don't, however, need to change a design's 'native machine format' in order to output to a different machine. If a selected machine format does not support a particular function in the design, it is simply ignored on output.

To select a machine format...

1 Select **Design > Select Machine Format**.

Select machine format → [Select Machine Format dialog]

Click to create new format

Click to adjust settings
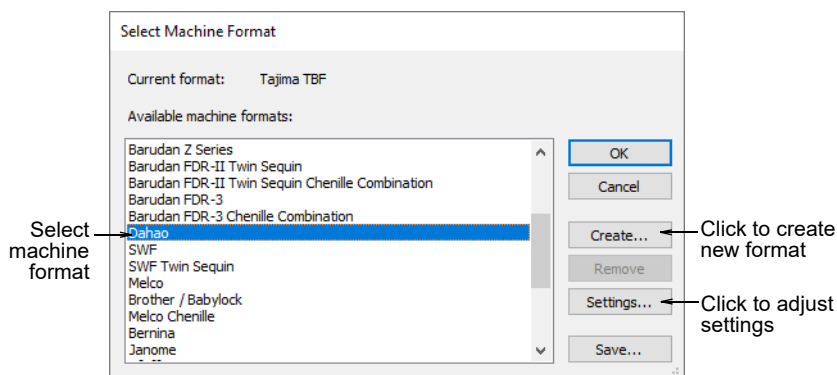
2 Select the required machine format from the list.

Note: You can change the machine format itself if machine values do not correspond precisely to your particular machine. Or you can create a new format based on a selected one.

Embroidery file formats

Embroidery designs are saved in one of two formats – 'design' (outline) or 'machine' (stitch) file format.

Note: For details of the formats supported by BE EmbroideryStudio, see Embroidery file formats (Reference Manual).

Design files

Design files, also known as 'all-in-one' files, are high-level formats which contain object outlines, object properties and stitch data. When you open a design file in the software, corresponding stitch types, digitizing methods and effects are applied.

Embroidery objects with outlines and stitch properties

Design files can be scaled, transformed and reshaped without affecting stitch density or quality. After modification, you can choose to save your design to EMB format, or to a different format altogether.

Note: Some design files, such as Wilcom INP and Gunold PCH, contain incomplete information. Old format ESD designs are somewhere between a design file and a machine file. They contain stitch data, information about selected stitch types, densities, and machine functions. They do not, however, contain information about shapes and lines. ESD files require object/outline recognition if you want to perform object editing in BE EmbroideryStudio.

Machine files

Different embroidery machines understand different languages. Each has its own control commands for the various machine functions. Before you can stitch a design, it must be in a format which can be interpreted by the machine. Machine or 'stitch' files are low-level formats for direct use by embroidery machines. They contain only stitch coordinates and machine functions. They are generally created on-the-fly when sending designs to machine. Or they are converted when saving to disk or memory stick.

Manual objects

When they are read into BE EmbroideryStudio, machine files do not contain object information such as outlines or stitch types, but present the design as a collection of stitch blocks called 'manual objects'. Manual objects are created wherever machine functions – e.g. color changes or trims – are detected in the design. They have only general and connector

properties. Manual objects, in turn, consist of individual stitches, called 'manual stitches'.

Manual objects with no outlines and manual stitches only
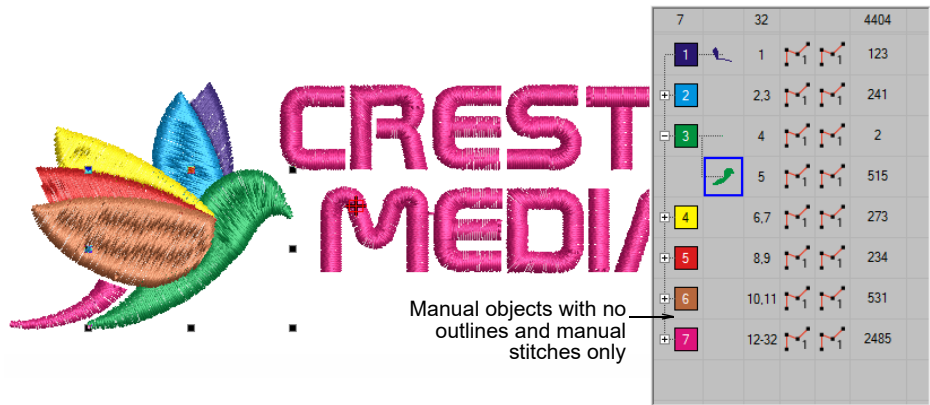
File sources

While embroidery files are broadly classified as 'design' (outline) or 'machine' (stitch), BE EmbroideryStudio internally tags files as belonging to one of four types – native design (A), imported outlines (B), processed stitches (C), or imported stitches (D).

Grade		Description
A	♥	Pure embroidery file created in BE EmbroideryStudio or similar software. These files contain objects, outlines and stitches.
B	♡	Designs read from an outline format such as GNC and saved in ART / EMB / JAN format. Such designs cannot be read directly by BE EmbroideryStudio but once converted, they are treated as Grade B designs.
C		Designs read from machine files – EXP, DST, PES, etc – where stitches have been converted to objects.
D		Designs read from machine files where stitches have NOT been converted to objects.

Native EMB designs as well as ART and JAN files are all 'Grade A' embroidery formats read and written by BE EmbroideryStudio. They are called 'Grade A' because they contain a complete set of design information in a single file – object outlines, properties, stitches, thread colors, thumbnail image, and comments. There are three other grades of embroidery file. It goes without saying that only Grade A files provide 100% perfect scaling and transformation.

Note: For information about the source of a design file, refer to the **Design Information** docker.

Related topics...

◀ View design details in BE EmbroideryStudio

Working with design files

BE EmbroideryStudio handles all commercial and home stitch file formats. In fact native EMB files are read and written by leading home embroidery systems.
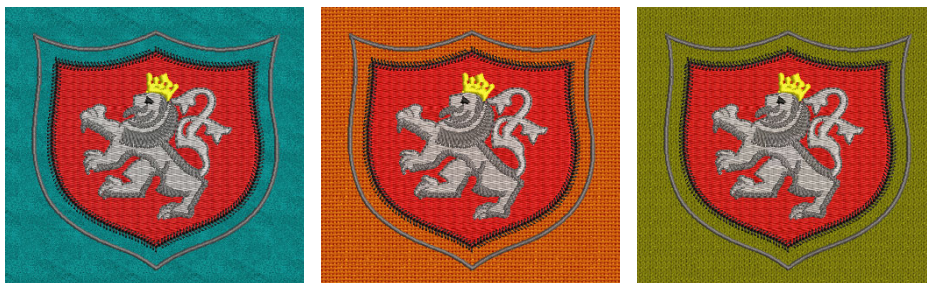
Whenever you start BE EmbroideryStudio, a new file – **Design1** – is automatically created. By default, **Design1** is based on the NORMAL template. Templates contain preset styles, default settings or objects, to make digitizing quicker and easier. BE EmbroideryStudio provides a set of optimized fabric settings that take into account the type of fabric you are stitching on.

Open designs

Use Standard > Open Design to open an existing design.

Use Standard > Open Recent Designs to open a design from a list of recently opened designs.

BE EmbroideryStudio opens a comprehensive range of both 'design' and 'machine' files.

To open a design...

1 Click the **Open Design** icon.

Supported design and machine files
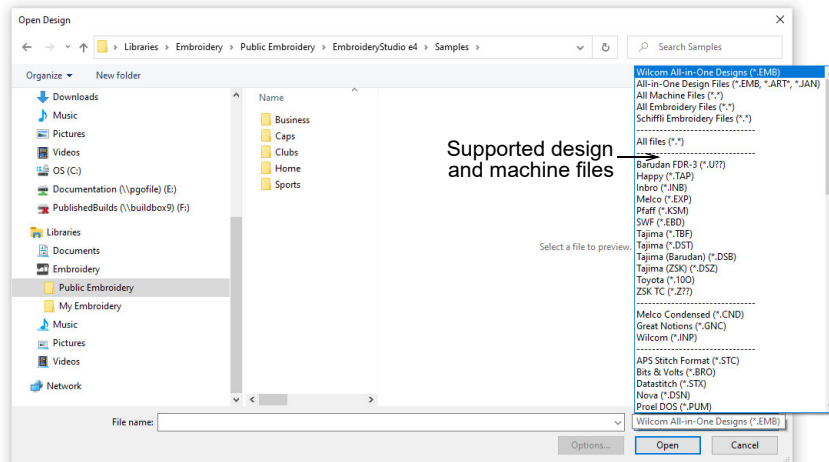
2 Navigate to the design folder. The dialog filter defaults to 'Wilcom All-in-One' designs which displays all native EMB design files. Adjust the filter as required...

Filter	Files
All-in-one design files	All design files supported by BE EmbroideryStudio including JAN and ART.
All machine files	Filter by machine file format only. No design files.
All embroidery files	All supported 'design' and 'machine' files.

3 Select a design or designs.

   ◄ To select a range, hold down **Shift** then select first and last.

   ◄ To select multiple items, hold down **Ctrl** and click.

Tip: For more information about a selected file, right-click and select **Properties** from the popup menu.

4 For file types other than EMB or ESD, click **Options** and adjust recognition options as preferred.

5 Click **Open**.

6 Optionally, select **Design > Auto Fabric** to apply preferred fabric settings.

Tick to activate →

Choose a fabric type
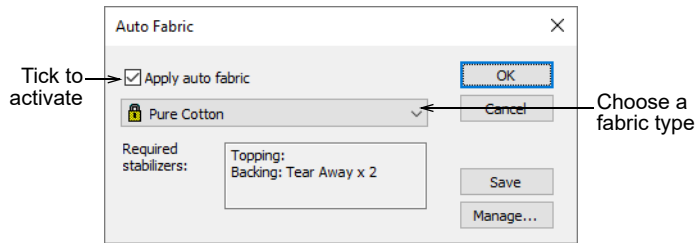
7 Whenever you want to work on a recently opened design, use the **Open Recent Designs** for quick access.

Quickly access any recently opened designs
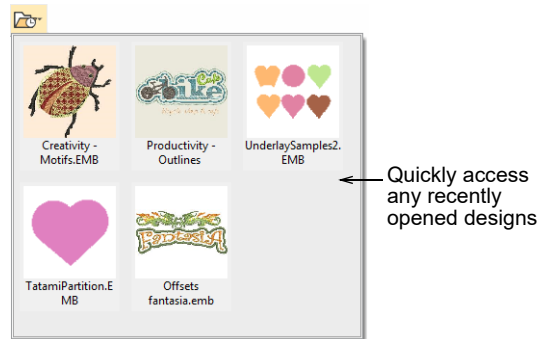
8 If the **Backup Copy** option is active, a backup copy of the current design file is automatically created in its **previously** saved form. Access the backup folder via the **File > Open Backup Design** command.

💡

Tip: You can also open designs from proprietary embroidery disks, or read them from paper tape.

Related topics...

◀ Viewing design information

Create designs from templates

> Use Standard > New Design to start a blank design based on the currently selected template. Hold down Shift and click to open New from Template dialog.

Templates are special files used to store styles, default properties, as well as fabric settings. Although the NORMAL template settings are suitable for a range of fabrics, selecting an auto fabric further adjusts settings.

To create a design based on a template…

1 Select **File > New from Template** or, holding down the **Shift** key, click **New Design**. The **New from Template** dialog opens.

Choose a template

Activate auto fabrics and choose a target fabric

Set background color and swatch

Choose a target machine format

Save as default
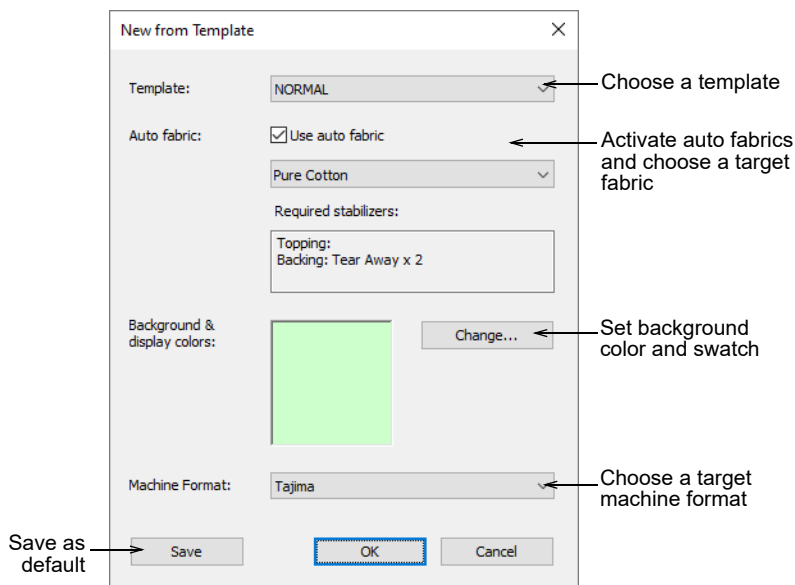
2 Select a template from the droplist. When you create a file based on a template, its settings are copied to the new design.

3 If you want, additionally, to use fabric settings, tick the checkbox. From the droplist, choose a fabric type nearest the one you intend to work with.

4 Optionally, choose a background to match the selected auto fabric.

5 Choose a target machine from the droplist. You normally decide which machine format to use before you start. However, formats can be changed at any time.

Tip: You can customize or add formats to suit the target machine.

6 Click **OK** to accept. A blank design opens in the design window based on the selected template. Settings will apply to all newly created embroidery objects. Any selected fabric is displayed in the **Status Bar**.

Tip: The **New from Template** option is activated by default. Turn it off if you prefer work without predefined fabric settings.

Save & close designs

> 💾 Use Standard > Save Design to save the current design. Right-click to open the Save As dialog.

The **Save Design** option allows you to save a design to the latest native EMB 'all-in-one' format. To save designs to previous formats, choose **File > Save As**.

Choose an output file format
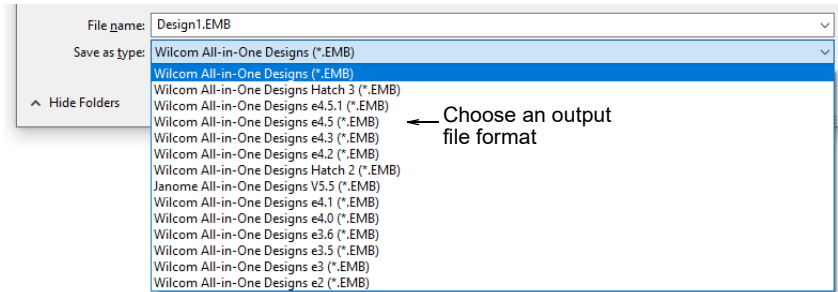
Native EMB files contain a complete set of design information in a single 'all-in-one' file – object outlines and properties, actual stitches and machine functions, thread colors, a picture icon, summary information, and more. Even the original design bitmap image can be included in EMB format. Only native EMB files provide 100% perfect scaling and transformation. BE EmbroideryStudio lets you save designs in various native EMB formats. This can be important if your suppliers or clients use previous versions of Wilcom software.

⚠️

Caution: If a design feature is not available in the selected file type, it will be converted. For example, **Flexi Split** stitching may be changed to plain tatami. If the design contains a bitmap using a color depth unsupported by the selected file type, it will be removed from the resulting file.

Closing designs

To close designs, use the commands in the **File** menu to close open designs individually or all together. Alternatively, use the design tabs to close open designs.

Design tabs – click X to close

Close current or all open designs
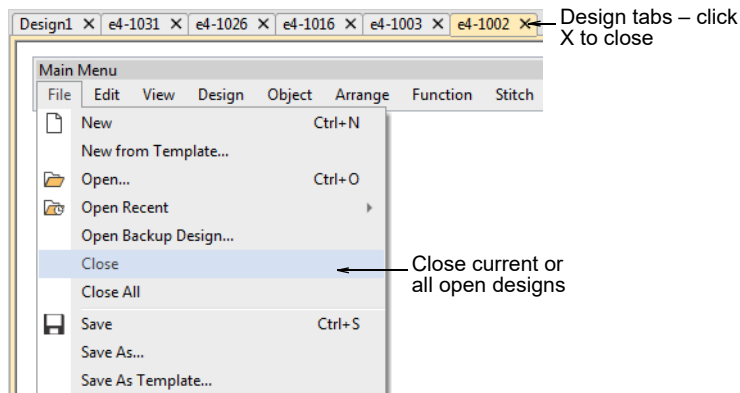
Design thumbnail display

Design thumbnails reflect display settings at the time of saving. When a design is saved, the design thumbnail is generated using all visible objects as well as the current design background. If you have bitmap or vector display turned on, these too appear in the thumbnail.
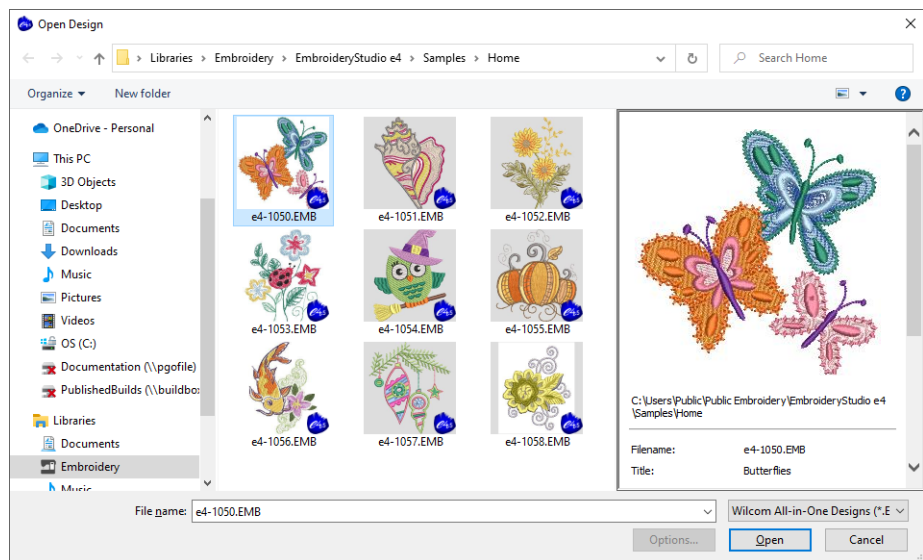
Related topics...

◄ View embroidery components

Send designs as email attachments

Use Standard > Open Design to send a design as an email attachment.

You can attach designs to emails from the design window or via the **Open Design** dialog.

To send designs as email attachments...

◄ With the design open in the design window, select **File > Send via Email**.

◄ Alternatively, click the **Open Design** icon. Select the file to send, then right-click it. The popup menu appears. Select **Send To > Mail Recipient**.

Your default email system is launched and a new email created with the design file attached.

Select Send To > Mail Recipient
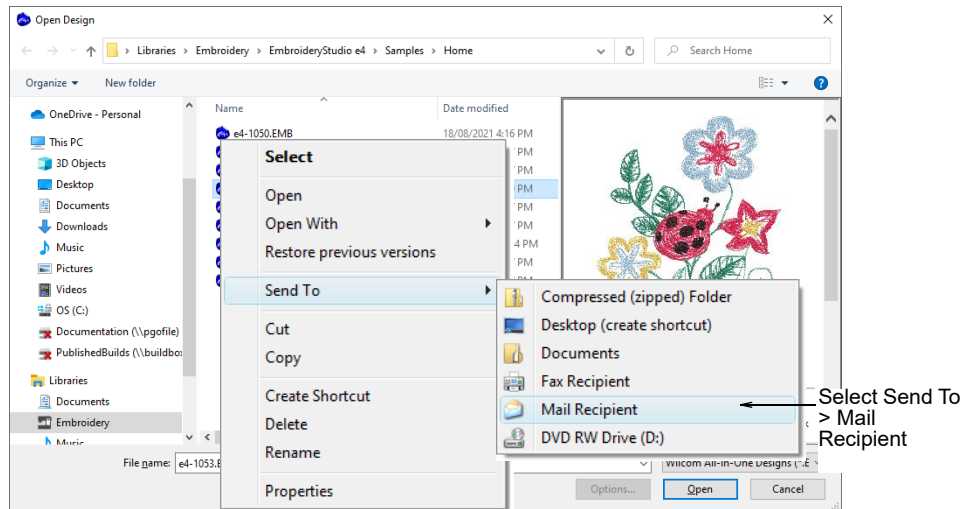
◄ Enter mailing details and send.

◄ Optionally, to output a design as a bitmap, select **File > Capture Design Bitmap**.

Select output option
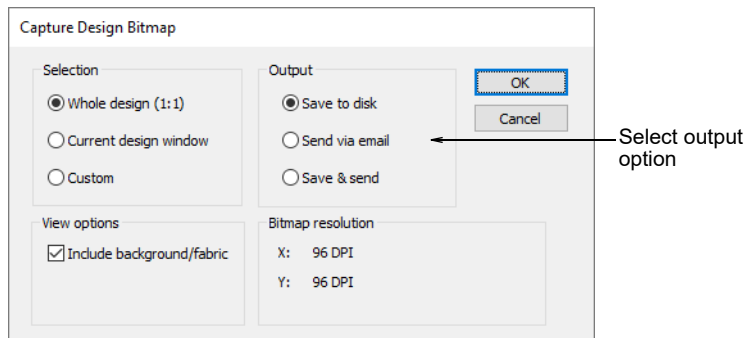
Selecting objects

BE EmbroideryStudio provides various ways to select embroidery objects. It supports point & click, selection marquee and multiple object selection. The **Color-Object List** provides an easy way to select objects and colors and access their properties.

💡

Tip: Depending on your background, you can change display colors for unsewn stitches, selected objects, object outline, grid and guides. See also Change display colors.
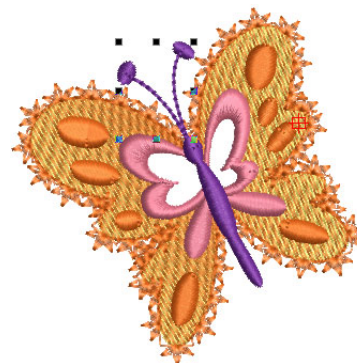
Select objects with selection tools

▰	Use Select > Select to select individual objects as well as groups or ranges of objects.
▰	Use Select > Freehand Select to select object at current by drawing a freehand line.
▰	Click Select > Polygon Select to select objects with a selection marquee.
▰	Click Select > Polyline Select to draw a line through the object to select.

Use selection tools to select individual objects as well as groups or ranges of objects.

To select objects…

◀ The simplest way to select an object is to point and click with the **Select** tool activated. Selection handles appear around selected objects.

Click first object   Ctrl + 🖱 Hold down Ctrl and click another object   OR   Shift + 🖱 Hold down Shift and click last object
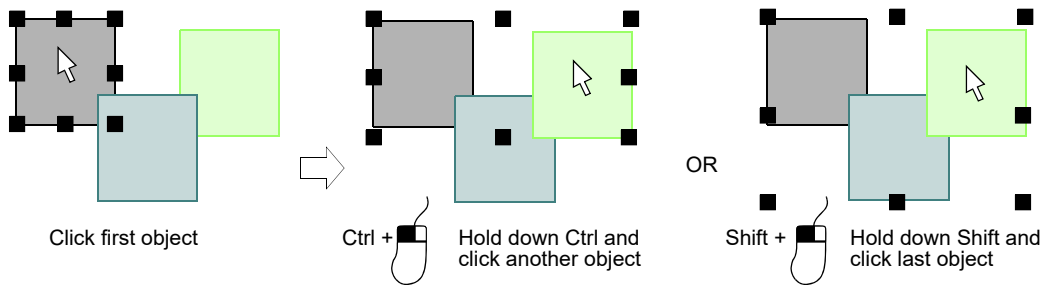
◀ To select multiple items, hold down **Ctrl** as you click. To select a range, hold down **Shift** as you click.

◀ Alternatively, drag a selection marquee around the objects you want to select.

Drag a selection marquee around objects to select
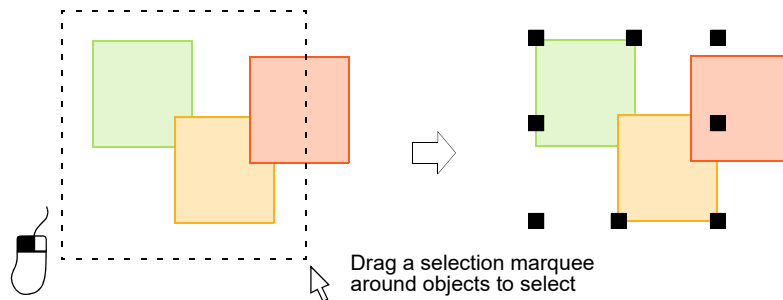
◀ Where you have a mixture of objects – outline, closed-fill, open-fill – click through holes or gaps to select objects beneath.

◀ Alternatively, use the **Freehand Select** tool to draw a freeline around the object/s you want to select. Press **Enter** to close.

Draw a freeline around object/s to select
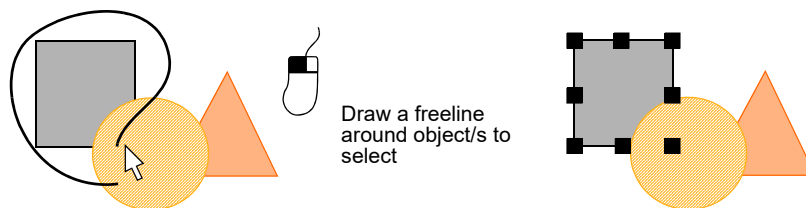
◀ Alternatively, use the **Polygon Select** tool to mark reference points around the object/s you want to select. Press **Enter** to close.

Mark reference points around object/s to select
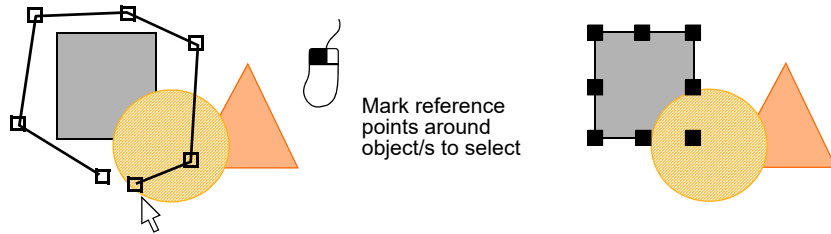
◀ Or use **Polyline Select** to mark two or more reference points to create a line touching all objects you want to select.

Mark two reference points
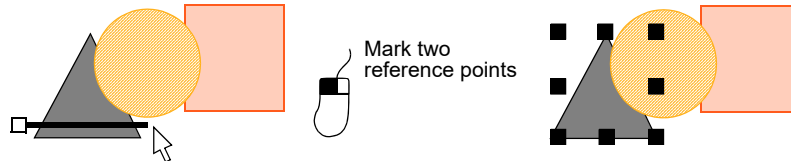
◀ To select an object which is sitting behind another filled object, hold down the **2** key and click until the underlying object is selected.

◀ To select all objects, select **Edit > Select All** or press **Ctrl+A**. Selection handles appear around the entire design.

◀ Deselect objects by any of the following means:

  ◀ To remove an object from a selection, hold down **Ctrl** and click.

  ◀ To deselect all, click an empty area of the background or a different object.

  ◀ Alternatively, press **Esc** or **X** to deselect all or select **Edit > Deselect All**.

💡
Tip: BE EmbroideryStudio also provides a method for you to select individual objects within grouped objects. See Select objects within groups (Reference Manual).

Select objects with Color-Object List

> Use Docker > Color-Object List to toggle the Color-Object List on/off. Use it to view and sequence objects in a design.

The **Color-Object List** offers an easy way to select objects and selectively view them. It is synchronized with the design window, dynamically updating whenever you edit.

To select objects by Color-Object List...

1 Click the **Color-Object List** icon to open the docker. A separate icon for each color block and each object in the design appears in order of stitching.

Total color block count

Total objects in design

Object icon
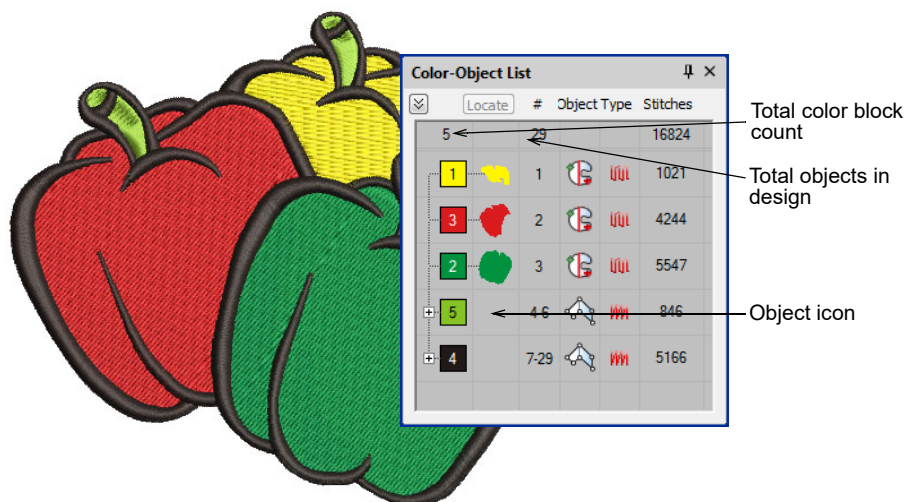
2 Click a 'node' to open or close a color block and see its components.

Click to open/close all color block nodes

Click to open/close individual color block node

Blue border appears around selected objects

Right-click any object or color block, and Select All
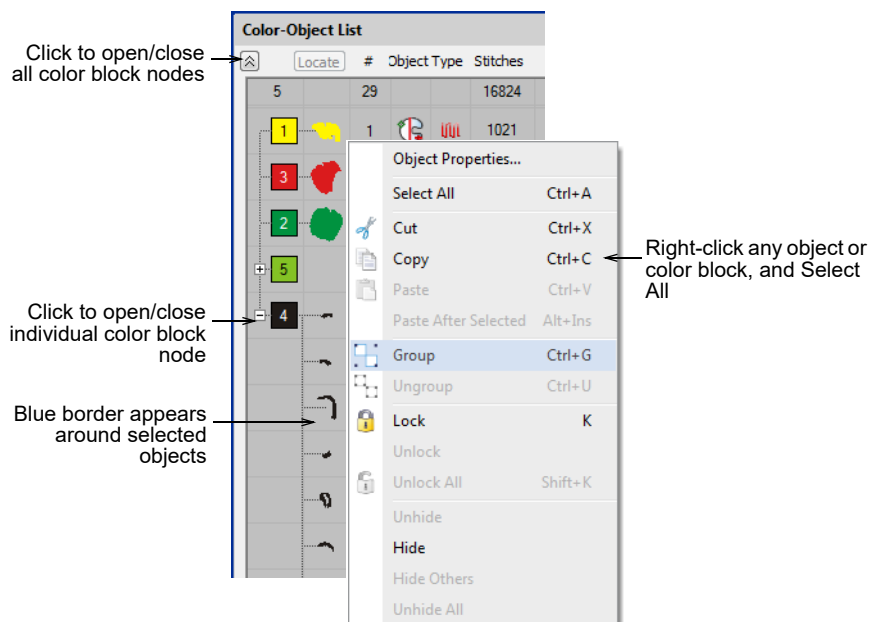
3 Click an icon to select a color block and/or individual objects.
- ◀ To select a range of items, hold down **Shift** as you click.
- ◀ To select multiple items, hold down **Ctrl** as you click.

◀ To select all items, right-click and choose **Select All** from the popup menu.

◀ To deselect, click away from the design.

Note: You can also use the **Color-Object List** to group and lock objects as well as cut, copy and paste, resequence, and branch objects. See Combining Objects (Reference Manual).

Measurements

BE EmbroideryStudio provides a set of grid lines to help accurately align or size embroidery objects.

Display grids, rulers & guides

⊞	Click View > Show Grid to show or hide the grid. Right-click for settings.
⊞	Click View > Show Rulers and Guides to show or hide rulers and guides. Right-click for settings.
⊡	Drag the ruler zero point to reset a new ruler zero point.

Use grid lines to help accurately align or size embroidery objects. Default grid spacing is 10mm x 10mm. Invoke rulers to accurately position and scale objects. The unit of measurement – mm or inches – defaults to the regional settings in the MS Windows® Control Panel.

To display grids, rulers and guides...

◀ Click the **Show Grid** icon or press **Shift+G**. Right-click for settings. You can change grid spacing, select a reference point and turn **Snap to Grid** on or off in the **Options** dialog.
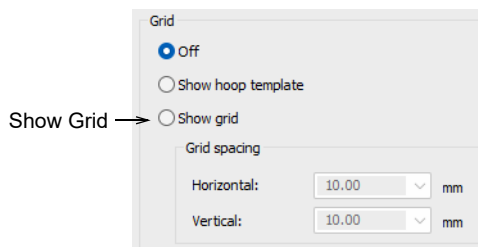
◀ Click the **Show Rulers & Guides** icon or press **Ctrl+R**.

Click-and-drag to reset ruler zero point

Click-and-drag to reposition guides

Click ruler to create new guide

Drag guide off ruler to remove
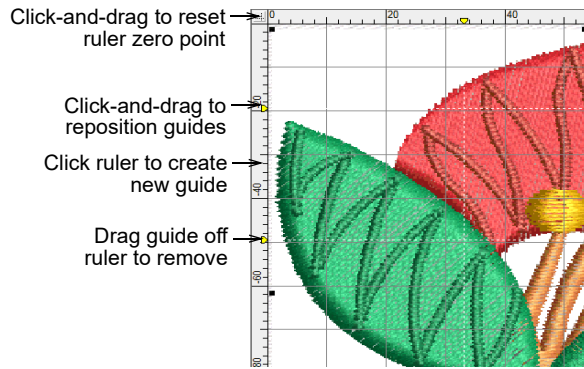
◄ Reset the ruler zero point by clicking and dragging the button in the top left-hand corner of the ruler.

◄ To create a guide, click either ruler – horizontal or vertical – and click-and-drag it into position. Multiple guides can be created and just as easily removed.

◄ For more accurate positioning of guides, double-click the yellow handle. In the **Guide Position** dialog, enter a precise distance from zero point and click **OK**.

Enter precise offset from zero point
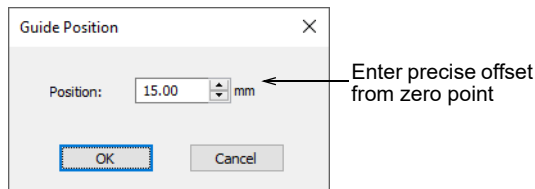
◄ To remove a guide, drag the yellow guide handle off the design window.

◄ Optionally, turn on the **Snap to...** feature via the **Options** dialog.

Select to display grid

Select to snap design points to grid

Show rulers and guides
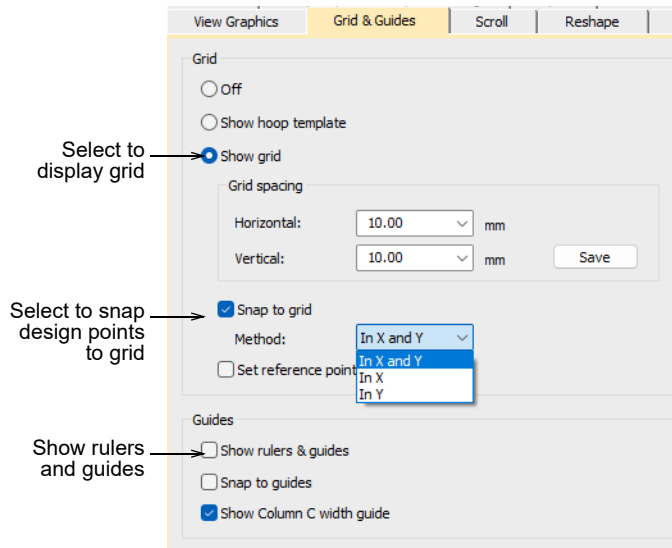
◀ You can also change the color of grid and guidelines via the **Background & Display Colors** dialog.

Related topics...

◀ Change display colors

Set measurement units

The first time you run BE EmbroideryStudio, the measurement system will default to whatever the operating system is using. However, you can change measurement units from within BE EmbroideryStudio.

Select desired measurement unit
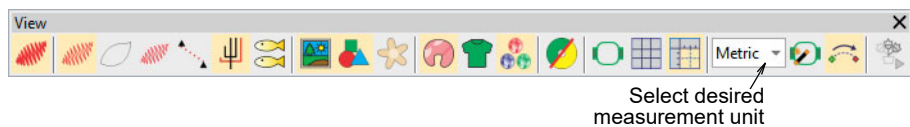
Note: Technically, when you select 'U.S.', you will get the imperial measurement system – inches, feet, and yards. Inch rulers are displayed in 1/16, 1/8, ¼, ½, and 1" divisions. The grid size can be set in decimal inches.
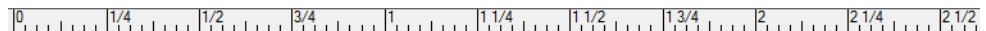
Ripple-on effects

Changing the measurement system will change the units used by most controls.

Measurement units display

Length: 2.788 in
Angle: 0.09°
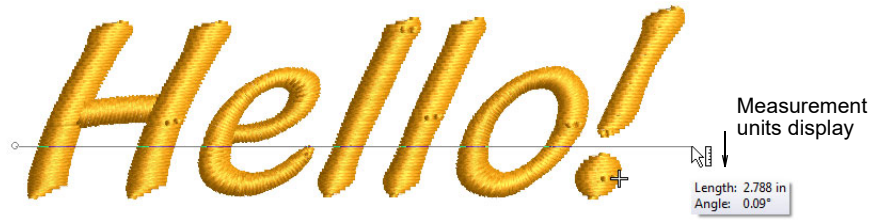
Relevant fields also appear in the selected unit of measurement – e.g. **Design Information** docker as well as **Production Worksheet**.

Selected measurement unit displayed
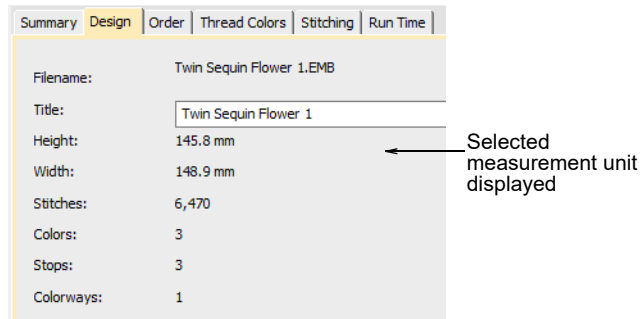
There are, however, exceptions to this rule:

◄ Stitch List: this used to be displayed in inches for U.S. systems. But these are stitch lengths, so must always be in mm.

◄ Stitch length and density controls remain in mm regardless of measurement system. These controls reflect the machine functions as industrial machines are always in millimeters.

Stitch length and density controls remain in mm
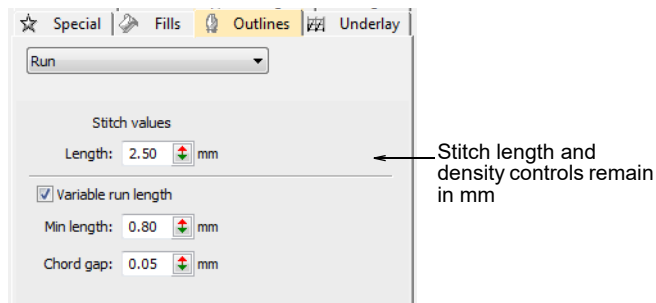
Specify measurement units on-the-fly

Alternatively, you can specify units of measurement when typing values into a measurement control. BE EmbroideryStudio automatically converts the value.

For example, if a US customer orders lettering in inches – say ¾" – and the digitizing is to be done in metric, you can enter '3/4in' or '3/4 in' into the **Lettering Height** field and it is automatically converted to 19.05mm.

Note: BE EmbroideryStudio supports both proper and improper fractions – e.g. '1 1/3' as well as '4/3'. It does not, however, support mixed units – e.g. 1'3". Nor does it display values as fractions **after** they are entered, only during.

Supported units

Supported units include:

◀ millimeters, mm

◀ inches, in

◀ feet, ft

◀ yards, yd

◀ centimeters, cm

◀ meters, m

Tip: BE EmbroideryStudio also allows entering units in text form, both English and the language the software is currently running in.

Related topics...

◀ View design details in BE EmbroideryStudio

Measure distances on screen

Measure the distance between two points on screen using the **Measure** command. View measurements in the **Status** bar or tooltip.

Tip: For more accurate results, zoom in before you measure. The measurement is always the actual size, and is not affected by the zoom factor.

To measure a distance on screen...

1 Select **View > Measure** or press **M** and click the start point.

2 Move the pointer to the end point and hold the mouse still. If activated, length and angle measurements appear in a tooltip.

Measurements appear as tooltip
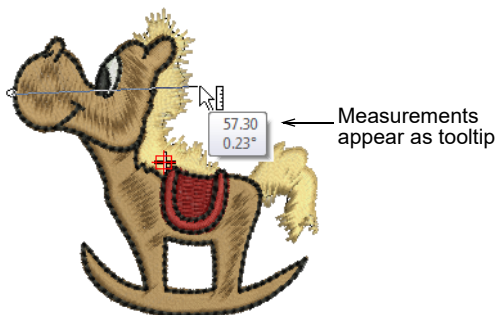
The following information displays in the **Status Bar**:

◂ Position coordinates of the end point (X=, Y=)

◂ Length of the measured line (L=)

◂ Angle of the line relative to the horizontal (A=).

X= 4.82 Y= -6.42 L= 8.03 A= -53.07

Measurements are shown in millimeters or inches according to selection.

3 Press **Esc** again to exit the command.

Viewing Designs

BE EmbroideryStudio provides many viewing features to make it easier to work with your design. Use zoom and pan functions to study design details. Toggle between 'artistic' and 'technical' views. You can also preview designs in different colors on different fabrics by means of 'colorways'.

BE EmbroideryStudio provides design information in various forms. Approval and production sheets provide essential information such as design previews, size, color sequence information and any special instructions.

Viewing design components

BE EmbroideryStudio provides many viewing modes to make it easier to work with your design. View a design at actual size or zoom in for more details. Pan across instead of scrolling, or quickly change between current and previous views.

Note: You need to calibrate your monitor so that designs at 1:1 scale appear at real size. Do this when you first install BE EmbroideryStudio or whenever you change your monitor. Go to **Setup > Calibrate Screen**.

View embroidery components

When you open an embroidery design in BE EmbroideryStudio, toggles on the **View** toolbar allow you to alternate between 'artistic' and 'technical' views. Use **TrueView** for presentation purposes. You can include it on approval sheets, or capture it as a bitmap to send via email or publish to a website.

Design viewing toggles

TrueView / Settings (T)
Toggle between stitch view and TrueView(TM). Right-click for settings.

Press <F1> for more help

Hover cursor for tooltips

Use these toggles, singly or in combination, to focus on design details. For example, view design outlines, stitches, needle points, or even machine functions such as trims and tie-offs. You can also turn on connectors in stitch view. How you use the view options will depend largely on whether you are editing a design or checking for production readiness.

Note: Design thumbnails reflect display settings at the time of saving. When a design is saved, the design thumbnail is generated using all visible objects as well as the current design background. If you have bitmap or vector display turned on, these too appear in the thumbnail. See also Save & close designs.

Shortcut keys

Available shortcut keys include:

	TrueView	Toggle between stitch view and TrueView™.	T
	Show Stitches	Toggle embroidery stitching display.	S
	Show Outlines	Toggle object outlines.	L
	Show Needle Points	Toggle needle points to select stitches for editing.	. (period)

	Show Connectors	Toggle connecting stitches to help position entry and exit points.	Shift + C
	Show Functions	Toggle display of machine functions such as trims and tie-offs.	Shift + F

Tip: Depending on the design background, you can change display colors for selected objects, unsewn stitches, etc.

Related topics...

◄ Change display colors

View graphical components

	Use View > Show Bitmaps to show and hide bitmap images. Right-click to set image display options.
	Use View > Show Vectors to show and hide vector graphics. Right-click to set image display options.
	Use View > Dim Artwork to dim graphic backdrops to show stitches more clearly for digitizing.
	Use View > Show Appliqué Fabric to toggle the appliqué fabric display on/off.
	Use View > Show Bling to toggle bling display on/off.
	Use View > Show Functions to visualize any sequin or beading components present in the design.

Apart from embroidery, EMB designs may include other components such as bitmap images, vector graphics, appliqué fabrics, product backdrops, and rhinestones or 'bling'. These can also be turned on or off as desired.

View graphic elements, including product images
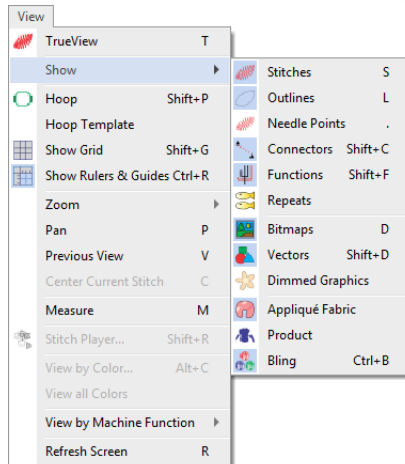
- Toggle the **Show Bitmaps** and/or **Show Vectors** icons to selectively view both vector and bitmap images.
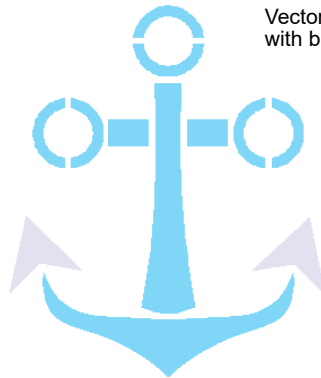
Vector graphic together with bitmap image
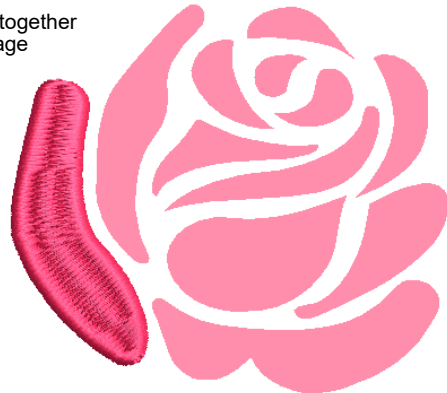
- Click **Dim Artwork** to dim the onscreen image to view stitches more clearly when digitizing. The command applies both to bitmap and vector graphics.

- To lock an image in place, select and press **K**.

- Click the **Show Appliqué Fabric** icon to toggle display of appliqué fabric on/off.

Appliqué fabric On

Appliqué fabric Off

◀ Use **Show Bling** to visualize any bling components present in a design.

Bling components in TrueView

◀ Use **Show Functions** to visualize any sequin components present in the design.

Sequins in TrueView

Sequins turned off
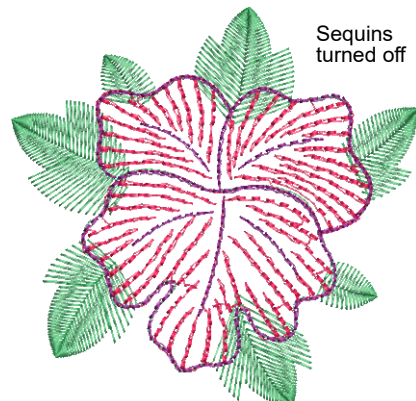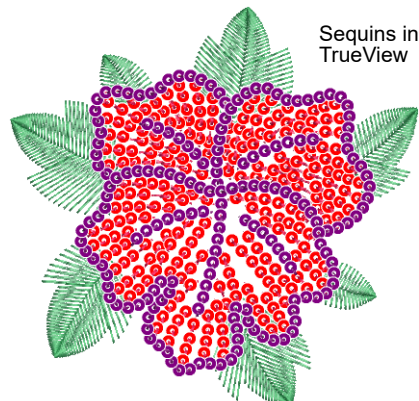
◀ Similarly, beading can be viewed while **Show Functions** is toggled on.
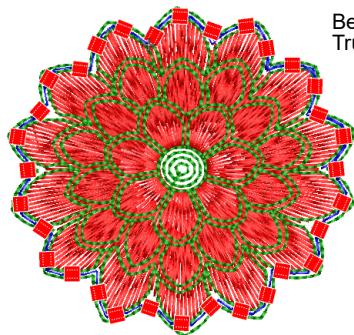
Beading in TrueView
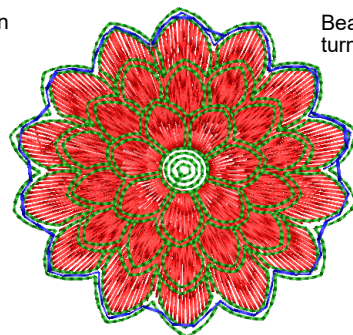
Beading turned off

Tip: Depending on view options set in the **Options** dialog, images display in full color, or dimmed.

Related topics...

Zoom & pan designs

	Click Zoom > Zoom to invoke zoom mode. Zoom in or out via left and right mouse clicks, or drag a selection marquee to view design detail.
	Click Zoom > Zoom 1:1 to display a design at actual size.
	Use Zoom > Zoom In/Out 1.25x to zoom in or out for greater or lesser detail.
	Click Zoom > Zoom to Fit to display the whole design in the design window.
	Click Zoom > Zoom to Selected to magnify only selected objects.
149	Select Zoom > Zoom Factor from the droplist or key in a zoom factor and press Enter.

Zoom tools allow you to magnify your view of the design by zooming in on individual stitches or details. The easiest way to zoom is via mouse wheel. This defaults to 1.25x increments. Zoom behavior can be modified by holding down **Alt**, **Ctrl**, and **Shift** keys while rotating the wheel. Settings can be adjusted in the **Options > Scroll** tab. See also Scroll options (Reference Manual).

Zoom tools are also available from the **View** menu and **Zoom** toolbar. Experiment with the available options.

Zoom tools available from menu and toolbar
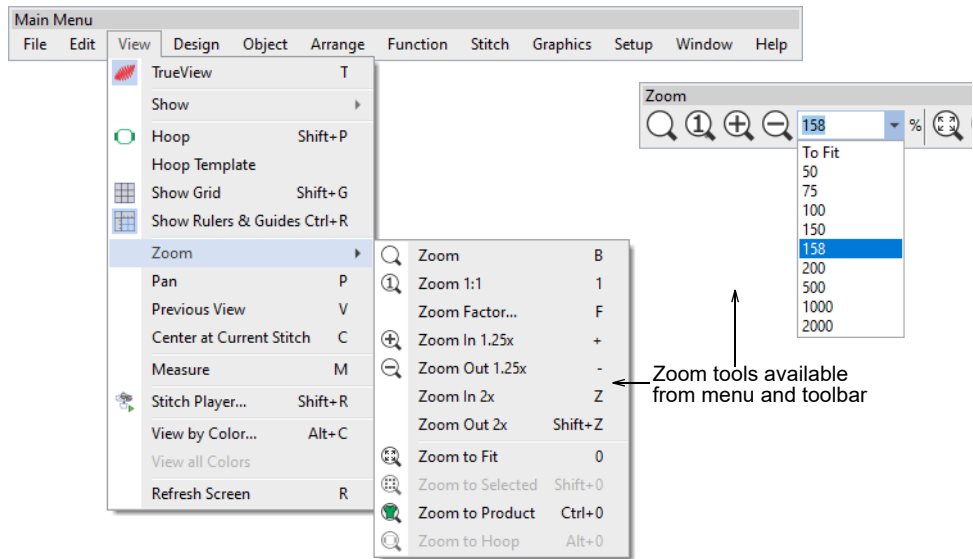
Use shortcuts keys as indicated in the menus. For instance, to zoom in on a section of design, select **View > Zoom** or press **B**, and drag a marquee around the zoom area. To display the whole design, select **View > Zoom to Fit** or press **0**.

Drag selection marquee around area to zoom
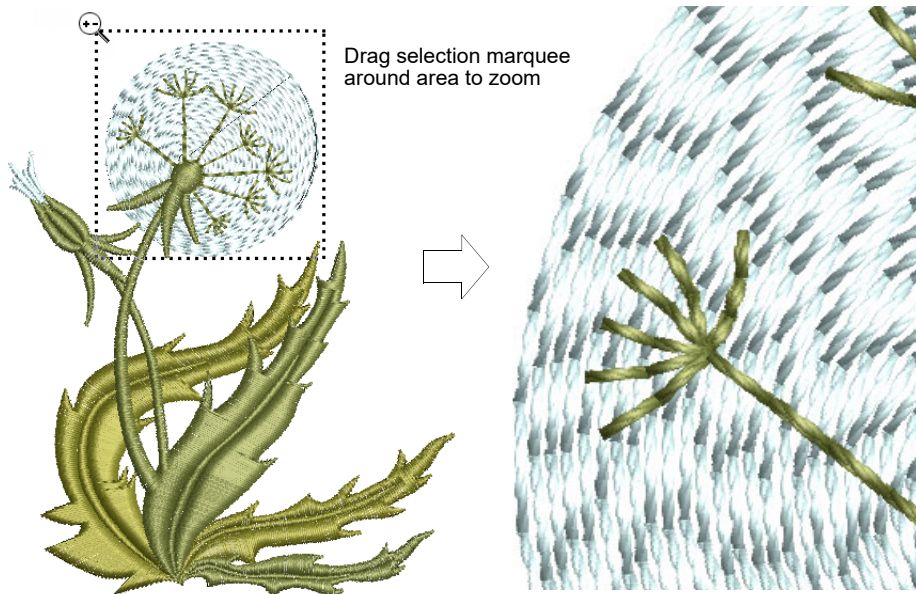
◀ To display stitches at a particular scale, select a zoom scale from the droplist or key in a zoom factor and press **Enter**. Alternatively, select **View > Zoom Factor** (or press **F**). In the **Zoom Factor** dialog, enter

a scale as a fraction of the actual size, where '1' = '100%', '1.5' = '150%', etc.

Enter scale as fraction of actual size →

Zoom Factor

Scale: 3.00 ⇕   OK

Cancel
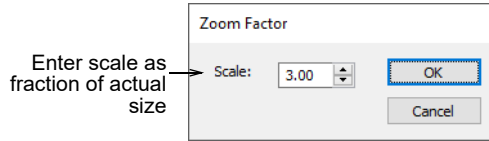
◂ To pan across a design, select **View > Pan** or press **P** and use the 'grabbing hand' tool.

Click and drag to pan across design
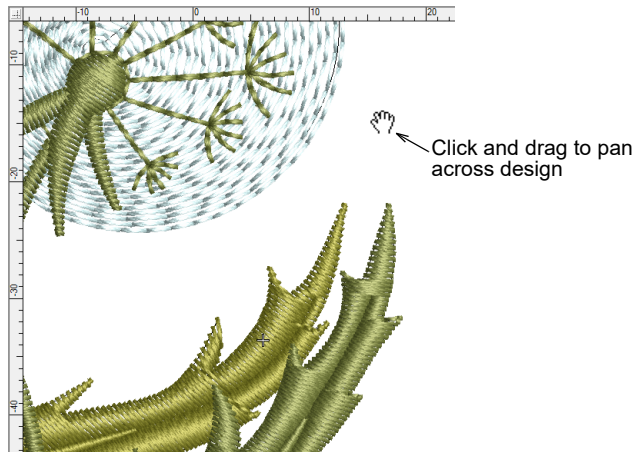
Set up multiple views

BE EmbroideryStudio gives you multiple views of the same design. It also allows you to switch between open designs by means of design tabs. This also makes it easy to copy/paste between designs, including drag and drop operations.

To set up multiple views...

◂ Use the **Window** menu commands to set up groups of tabs as preferred.

Use commands to set up tab groups
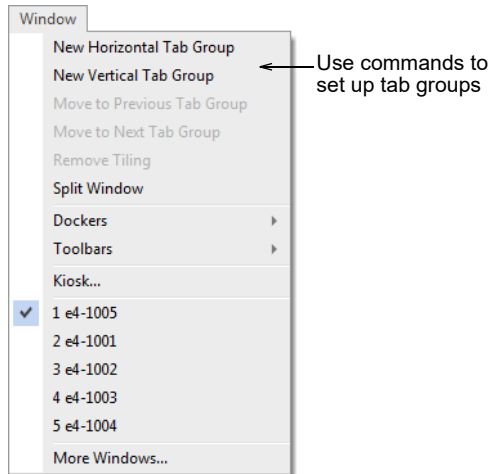
◄ Set up vertical or horizontal tabbed groups.
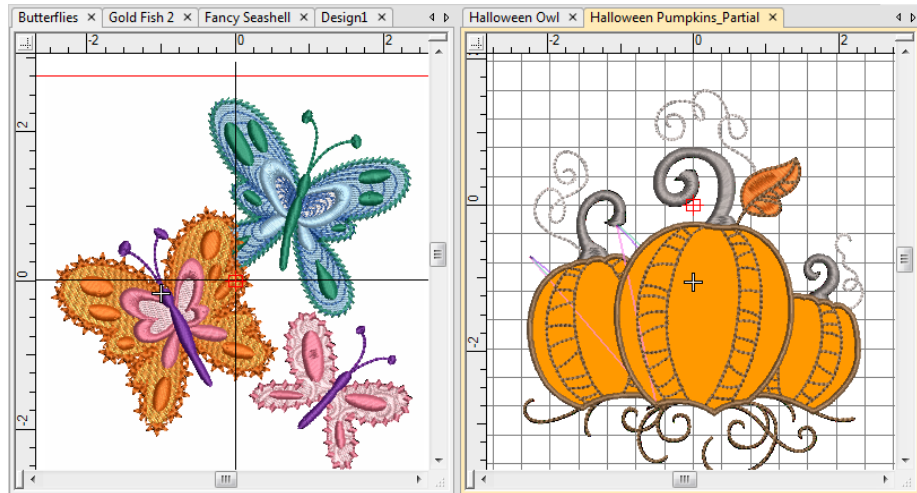
◄ To create multiple views of a single window, use the **Window > Split Window** command. Adjust view settings for each pane.

Double-click to remove split bars
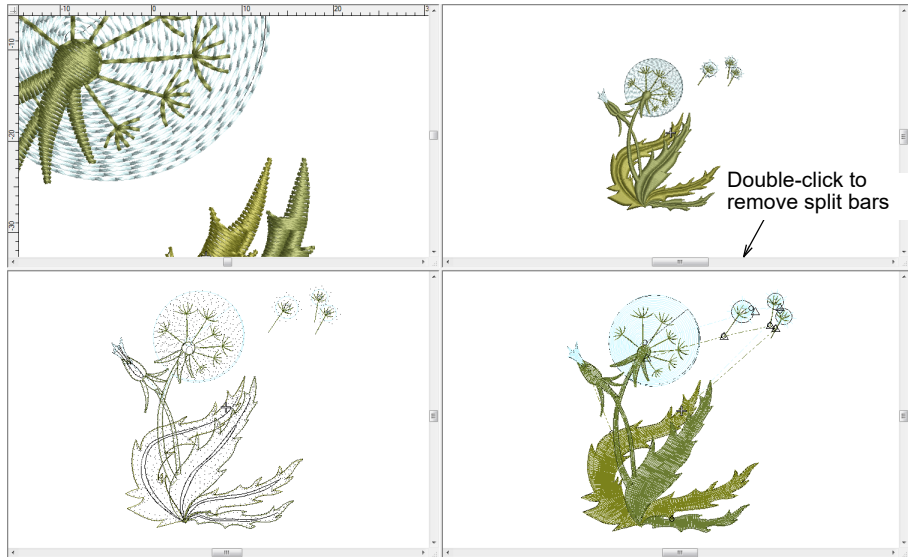
◂ Use the **Remove Tiling** command to return the design window to normal display mode.

💡

Tip: After certain operations you may need to refresh the screen for a clearer display. Select **View > Refresh Screen** or press **R**.

Work with the Overview Window

 Use Docker > Overview Window to toggle window display on/off. Use it to view a thumbnail of the design.

Use the **Overview Window** to view a thumbnail of the design. Use it to pan and zoom the design when working at high zoom factors. Set view settings independently to the design window.

Click for zoom box
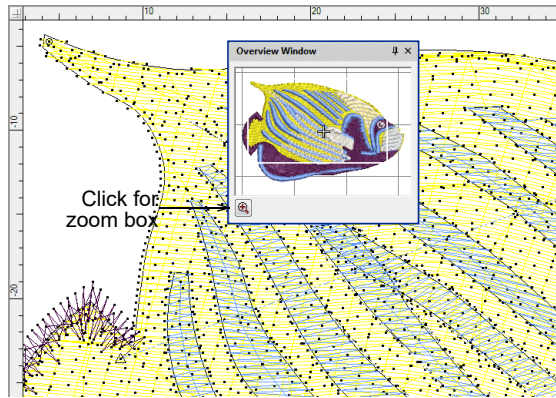
◄ To zoom in or out, click the **Zoom** button at the bottom of the window and drag a selection marquee around the area to zoom.

Drag selection marquee around area to zoom
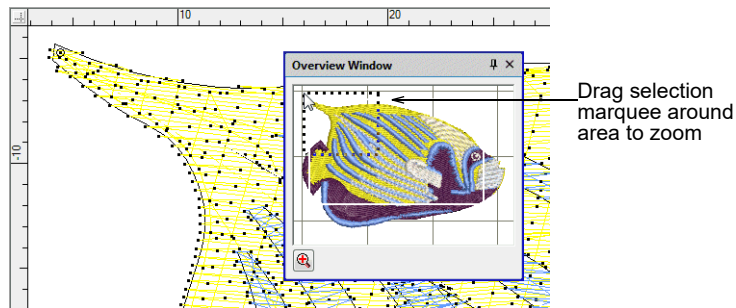
◄ To pan across the design, click and drag the zoom box.

Drag zoom box to pan across design
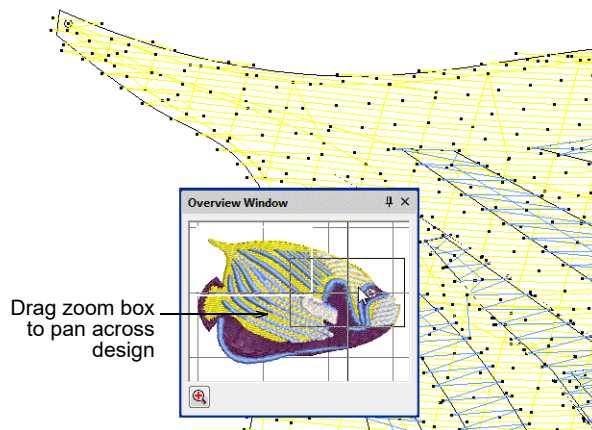
◄ To change the view settings for the **Overview Window**, click it to make it the active window.

Click inside window to change view settings
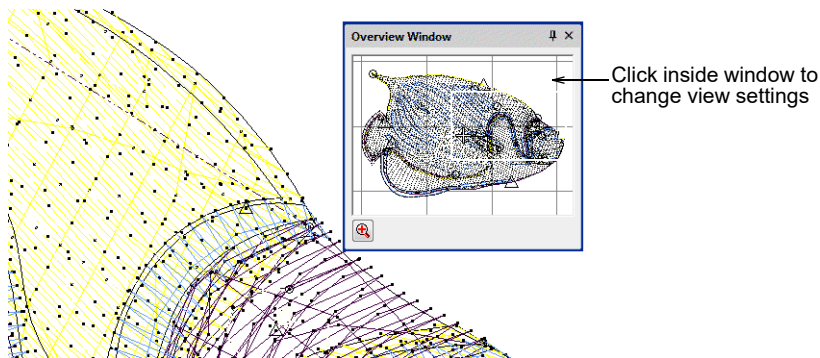
Related topics...

◀ View embroidery components

Viewing objects & color blocks

BE EmbroideryStudio provides many techniques for selectively hiding or viewing embroidery objects or color blocks.
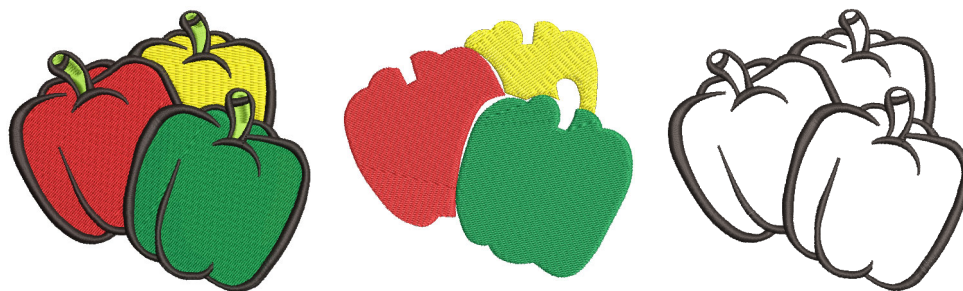
The **Color-Object List** offers an easy way to selectively view color blocks and embroidery objects. This is useful when re-sequencing.

View selected objects

▶	Use Select > Select to select individual objects as well as groups or ranges of objects.
▦	Use Docker > Color-Object List to toggle the Color-Object List display on and off. Use to view and sequence objects in a design.

BE EmbroideryStudio provides many techniques for hiding or showing selected embroidery objects in the design window.

To view selected objects…

◄ Select the objects you want to view.

Select objects to view

◄ Press **Shift+S**. All other objects are hidden. They can be revealed again via the **Color-Object List** popup menu.

All other objects hidden

Select to unhide objects
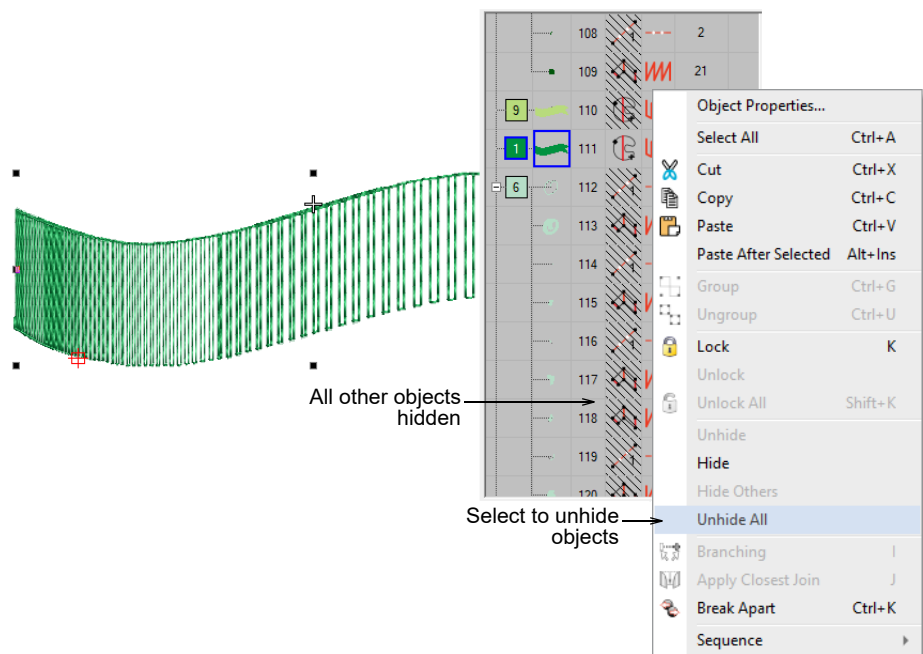
◄ To temporarily hide other objects, select the object you want to view and click and hold the **Locate** button.

Click and hold to isolate selected blocks

Color-Object List

	#	Object Type	Stitches
8	12-34		2003
4	35-39		519
1	40-52		1910
2	53		369
3	54-78		145
8	79-81		495
7	82-86		501
5	87-109		1768
9	110		2914
1	111		1205
6	112-138		2255
8	139-174		2848

Select object/s to view
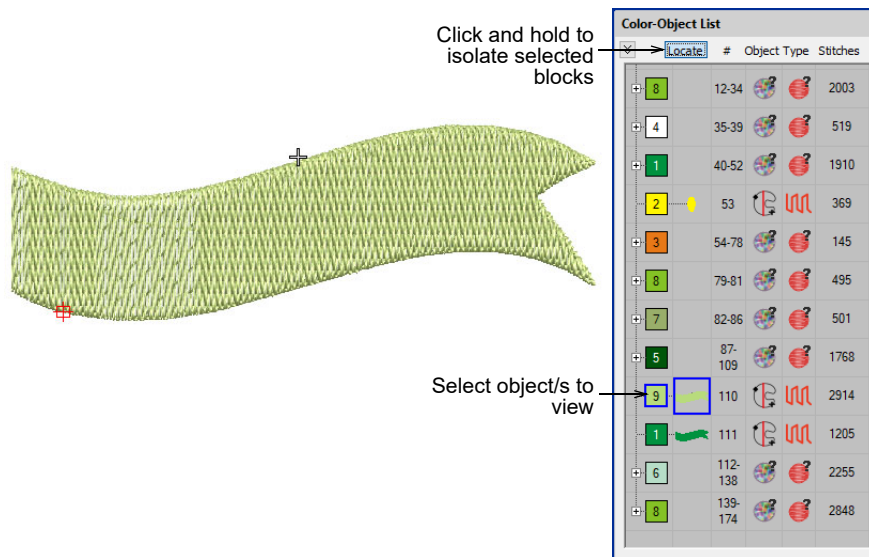
◄ To display the selected object full-screen, press **Shift+0** (zero).

◄ To return to the previous view, select **View > Previous View** or press **V**.

◄ To re-display the entire design, press **Esc** followed by **Shift+S**.

◄ To redraw the screen, select **View > Refresh Screen** or press **R**.

◄ To toggle options for selective display of embroidery objects, select the **Options** icon in the **Standard** toolbar, or select **Setup > Options > View Design** tab.

Visibility
- ● No change
- ○ Show whole design
- ○ Show selected objects
- ○ Show unselected objects
- ○ Hide whole design

Select viewing options
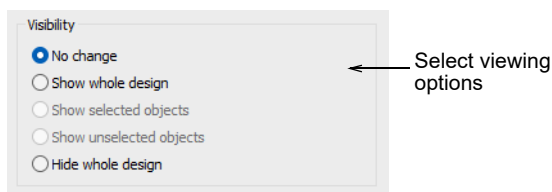
Options include:

Option	Function
No change	The display remains the same as before.
Show whole design	All embroidery objects in the design are visible.
Show selected objects	Only objects that are currently selected are visible.
Show unselected objects	The reverse of the above option. Only objects that are currently 'unselected' are visible.

Option	Function
Hide whole design	All embroidery objects in the design are hidden.

View selected color blocks

Use Docker > Color-Object List to toggle the Color-Object List display on and off. Use to view and sequence objects in a design.

Use Color > Colorway Editor to assign thread colors to color blocks in the design.

A color block corresponds to a color stop in the design. It may contain a single object or group of like-objects – e.g. 'ropes'. Or it may be comprised of different objects of like-color – e.g. 'ropes and birds'. The **Color-Object List** offers an easy way to selectively view color blocks and embroidery objects. The **View by Color** function also lets you view objects by color. The **Colorway Editor** provides another method for selective viewing of color blocks.

To view selected color blocks...

◀ Click the **Color-Object List** icon. The **Color-Object List** can be docked to the either side of the design window, or floated in any position.

◀ Click the switch to view the list by color block.

Click to toggle color blocks

Total color blocks, objects and stitches in design
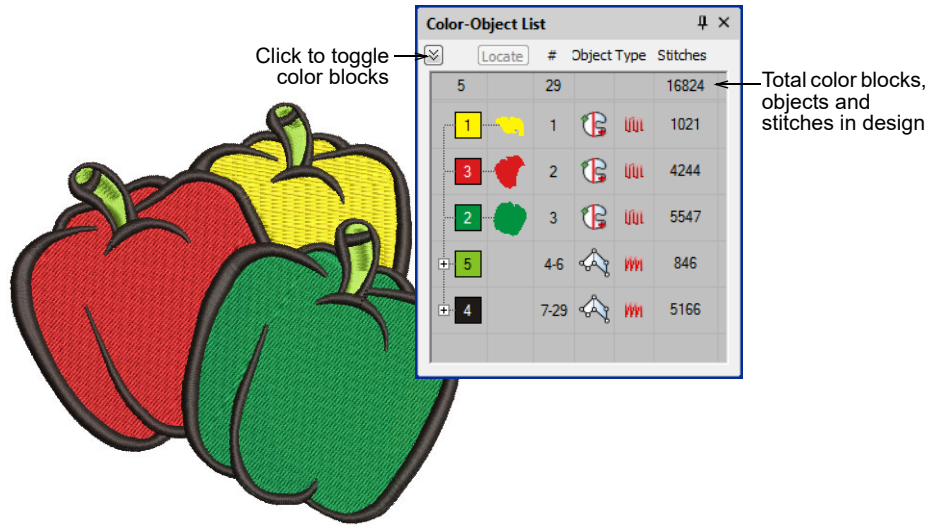
◄ Select a color block or blocks and click **Locate** and hold.

Click and hold to isolate selected blocks

Select color block/s to view
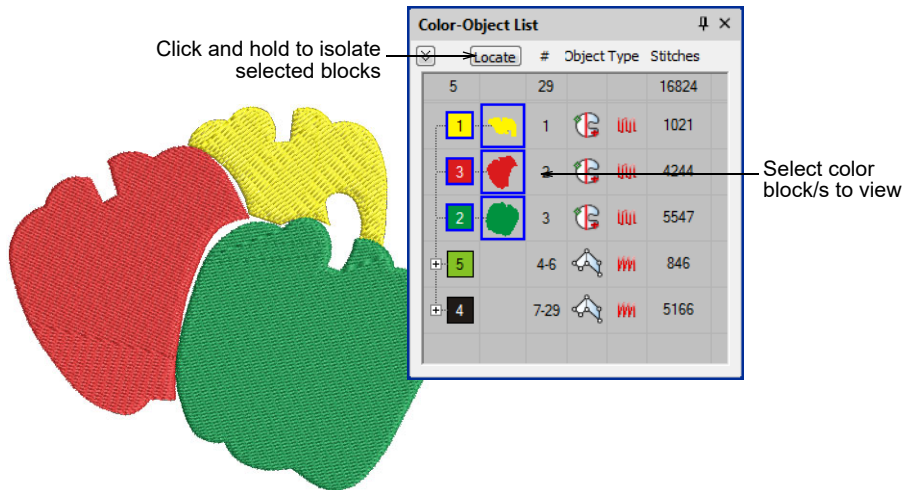
◄ Selectively hide or 'unhide' selected color blocks and embroidery objects using popup menu commands.

Use commands to selectively hide or show color blocks and objects
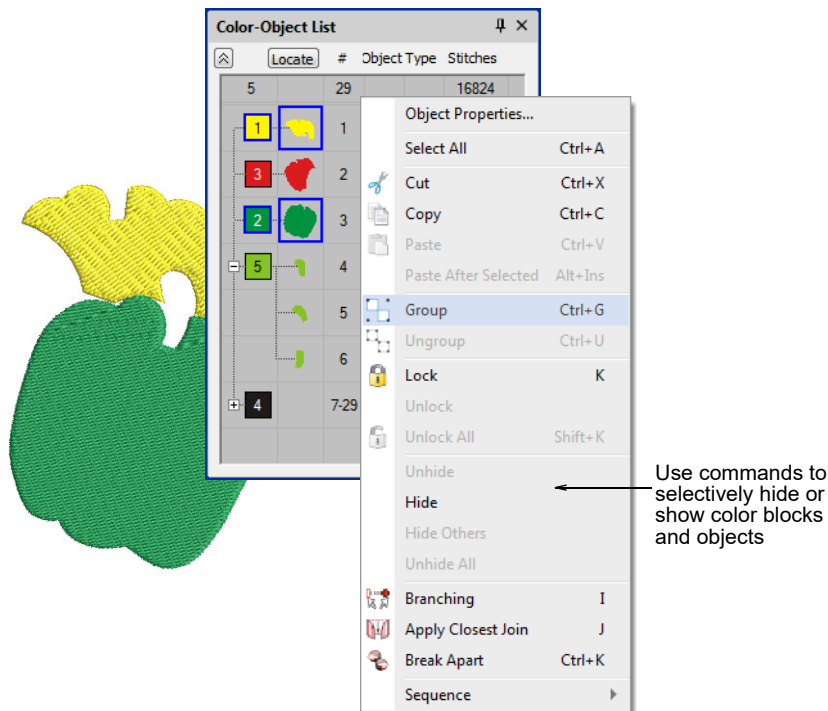
◀ Alternatively, to isolate a color block in the design window, click and hold it in the **Color** toolbar. First press **Esc** to deselect all objects.

Click and hold with no objects selected
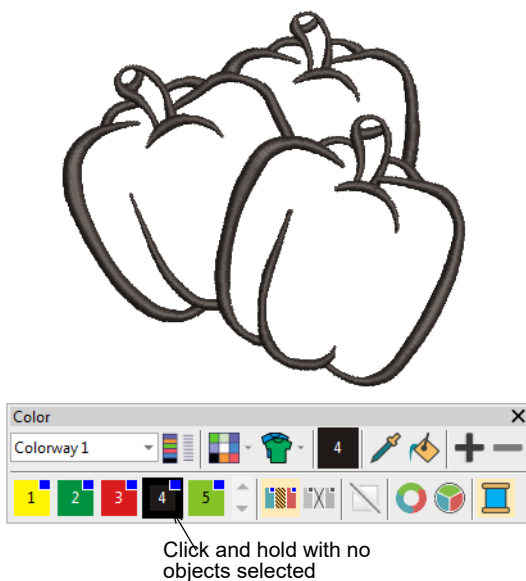
◀ Alternatively, select **View > View by Color**. Select the colors you want to view. This function will not work with grouped objects.

Select color blocks to view
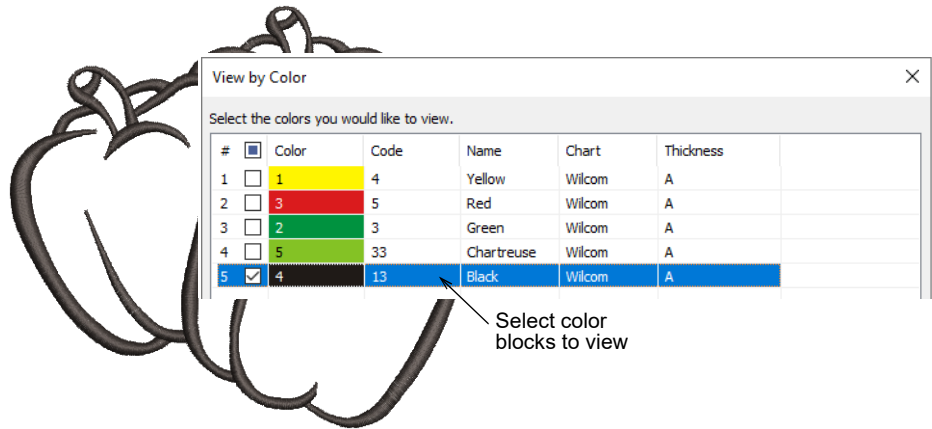
◀ Alternatively, click the **Colorway Editor**. Select a color block and click **Locate** and hold.

Select color block

Click and hold to locate selected color block
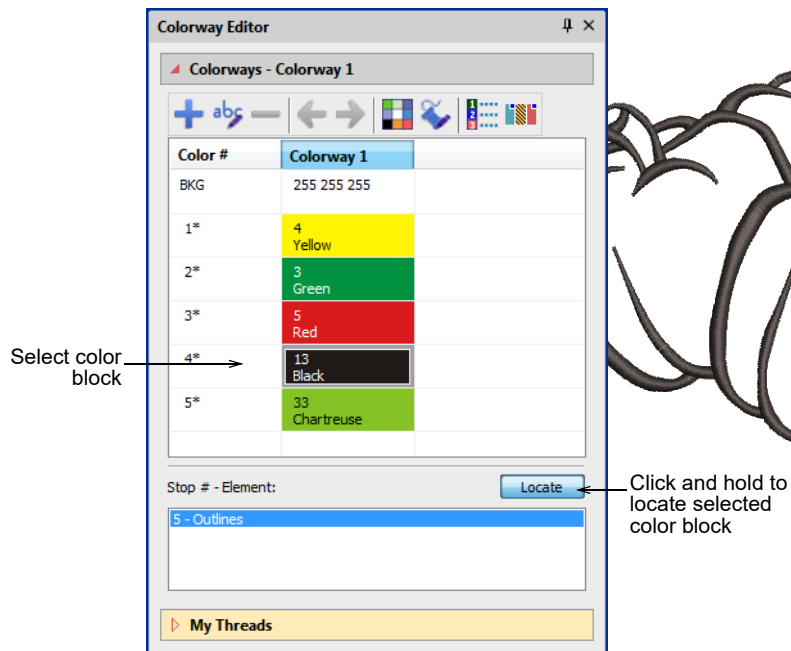
◀ To reveal all hidden objects press **Esc** followed by press **Shift+S** or select **View > View all Colors**.

Related topics...

◀ Selecting objects

◀ View selected color blocks

Viewing stitching sequence

When checking embroidery designs, you will want to understand the stitching sequence in order to ensure efficient stitchout on the machine. 'Travel' through designs by color block, embroidery object, or even stitch-by-stitch. Alternatively, simulate the stitchout on screen.

Tip: Depending on your design background, you can change display colors for unsewn stitches. See Change display colors for details.

Simulate design stitchouts

Use View > Stitch Player to simulate embroidery design stitchout on screen.

Stitch Player is an important tool in BE EmbroideryStudio. It lets you simulate the actual embroidery design stitchout on screen. Because **Stitch Player** emulates the movements of the embroidery machine, you are able to make decisions about how to optimize your design in order to lessen the load on the machine. This is important if you intend to make multiple stitchouts.

To simulate the design stitchout…

◄ Choose a design view to visualize your design. **Stitch Player** can be run with or without TrueView™.

◄ Click **Stitch Player** or press **Shift+R**.

Set starting point

Stitch Player

Set design to pause at color changes, stops or trims

5708

Color Change
Stop
Trim

Use video controls to run stitch player

Adjust redraw speed

960 s/m
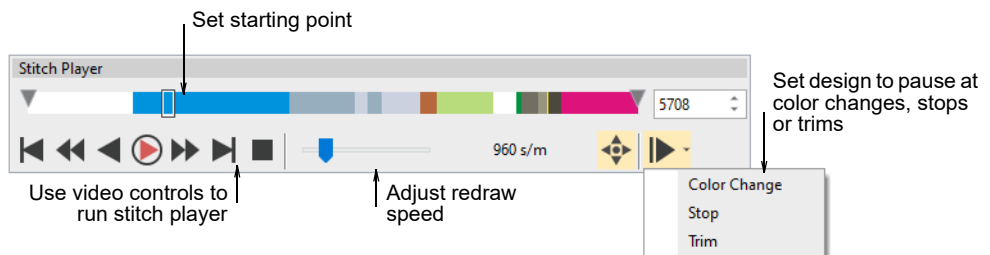
◀ Use the slider bar to move the starting point.

◀ Use the controls to stitch forwards or backwards through the design. Typical 'media player' buttons are available for play, pause, rewind operations.

◀ Use the **Auto Pause** control to set stop points – by color change, stop, or trim.

◀ To redraw a section of design, specify a start and end stitch using the tabs.

Set stitch range to redraw section of design

Toggle Auto Scroll to view at high zoom factors
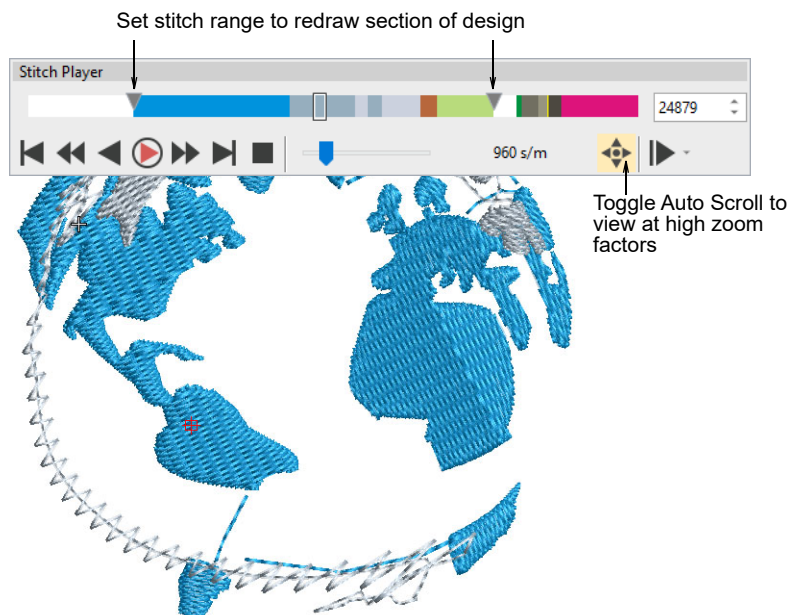
◀ Use **Auto Scroll** when running **Stitch Player** at high zoom factors.

Tip: Depending on your background, you can change display colors for unsewn stitches, selected objects, object outline, grid and guides.

Related topics...

◀ Change display colors

Travel through designs

It is useful to be able to view the stitching sequence color-by-color, object-by-object, or even stitch-by-stitch. The **Travel** toolbar provides all tools required to do so. Travel forwards or backwards with any button by right or left mouse-clicks. Traveling can be initiated from any stitch in the design. The current needle position is marked by a white cross or 'needle

position marker'. The current stitch number is displayed in the **Status Bar**.

To travel through a design...

◀ Turn off **TrueView™** and press the **Esc** to ensure no object is selected.

Use 'travel' tools to move through every component of a design

◀ Travel to the start of the design by clicking the **Start/End Design** icon or pressing the **Home** key.

◀ Use the **Travel by Stitch** functions to travel forwards or backwards through the stitching sequence. Use left or right mouse-clicks or arrow keys – ← or →, ↑ or ↓. Alternatively, to travel by 1000 stitches, press **Shift + Num+** or **Shift + Num-**.

Travel to previous stitch   Travel to next stitch
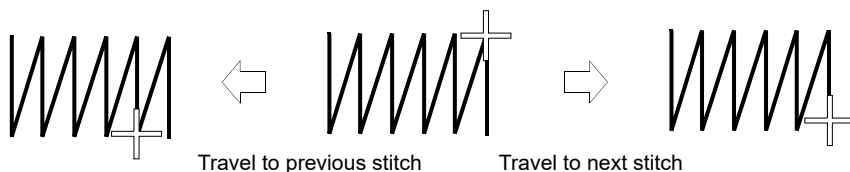
◀ To travel by color, click/right-click **Travel by Color**. This is useful if you need to locate a specific color change in order to insert an object or delete it from the stitching sequence.

◀ To travel by object, click/right-click **Travel by Object**. Alternatively, press **Tab** or **Shift+Tab**.

◀ To travel by machine function, click/right-click the **Travel by Function** tool. Alternatively, press **Ctrl+Page Up** or **Ctrl+Page Down**. The needle point will stop at every jump, trim, and color change in the design.

◀ It is sometimes easier to use **Travel by Trim** to travel by trim functions alone – e.g. when checking for unnecessary trims.

Alternatively, press **Ctrl + Left Arrow** or **Ctrl + Right Arrow**. Turn on **Show Connectors** and **Show Functions** to view while traveling.

Travel by trims with connectors and functions showing

Tip: While traveling through a design or editing stitches, click the **Select Current** icon or press **Shift+0** to select the object associated with the current cursor position.

Related topics...

◀ View selected color blocks

Select objects while traveling

▶	Click Select > Select together with the Ctrl key to select objects as you travel through a design.
	Left/right-click Travel > Travel by Object to travel to previous or next object.
	Click Select > Select Current to select the object associated with the current cursor position.

Traveling is usually associated with checking the stitching sequence. You can select objects as you 'travel' through a design using the **Ctrl** key.

To select objects while traveling...

◀ Click the **Select** icon.

‣ Use the **Travel by Object** tool or **Tab** and **Shift+Tab** buttons to travel forwards or backwards by object. See Travel through designs for details.
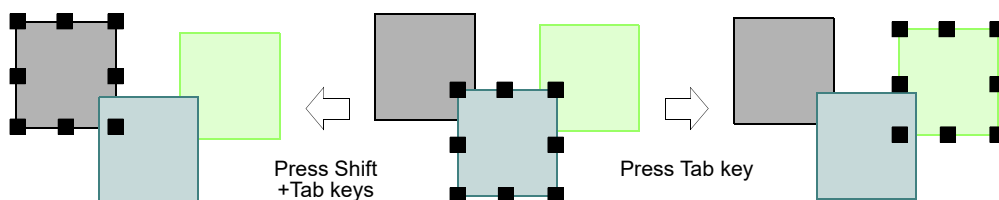
Press Shift
+Tab keys   Press Tab key

‣ Click the **Select Current** icon or press **Shift+0** to select the object associated with the current cursor position.

‣ Hold down the **Ctrl** key to select an object as you travel through it.

Viewing colorways

A 'colorway' is a color scheme or palette of thread colors. It may also include a background color, fabric sample, or a product image. In BE EmbroideryStudio, you can define multiple colorways for the one design. This means you can stitch out the same design in different colors on different fabrics. You can also print multiple colorways, icons of color blocks, and design backgrounds with the production worksheet.
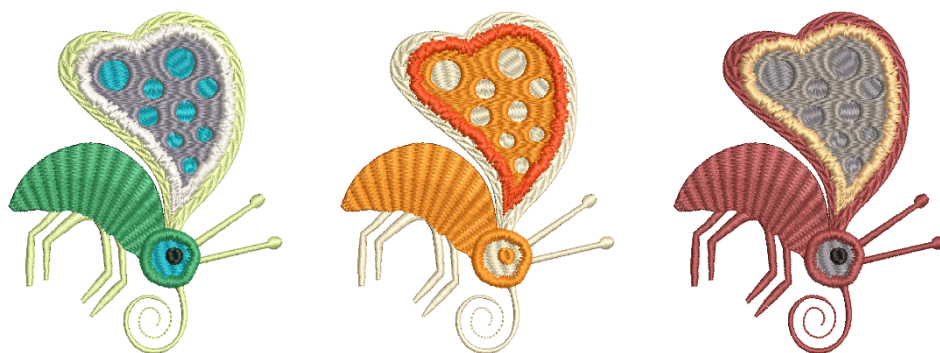
Switch colorways

Blue	Use Color > Current Colorway dropdown to select a new color scheme for design.
	Use Color > Colorway Editor to assign thread colors to slots in the color palette.

In BE EmbroideryStudio, you can preview the same design in different colors on different fabrics.

To switch colorways...

◄ Open a design with multiple colorways.
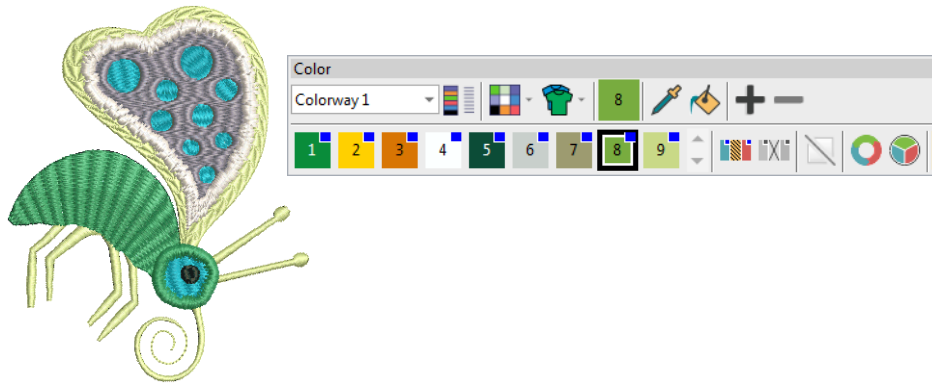
◄ Select a colorway from the droplist.

Select colorway
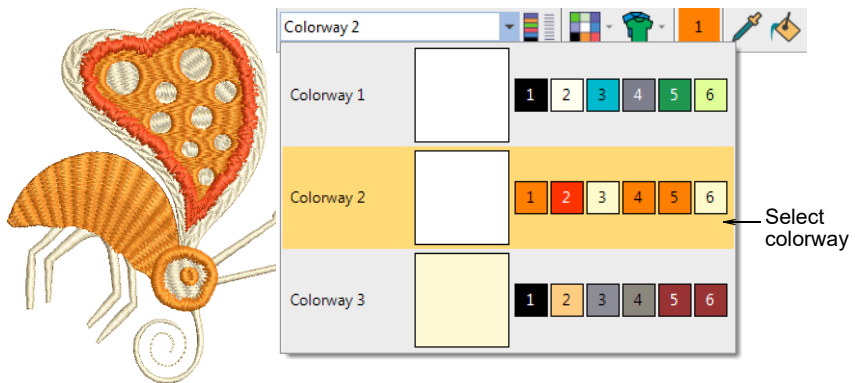
◄ Alternatively, use the **Colorway Editor** to toggle between colorways.

Select colorway

Double-click to edit background or product image
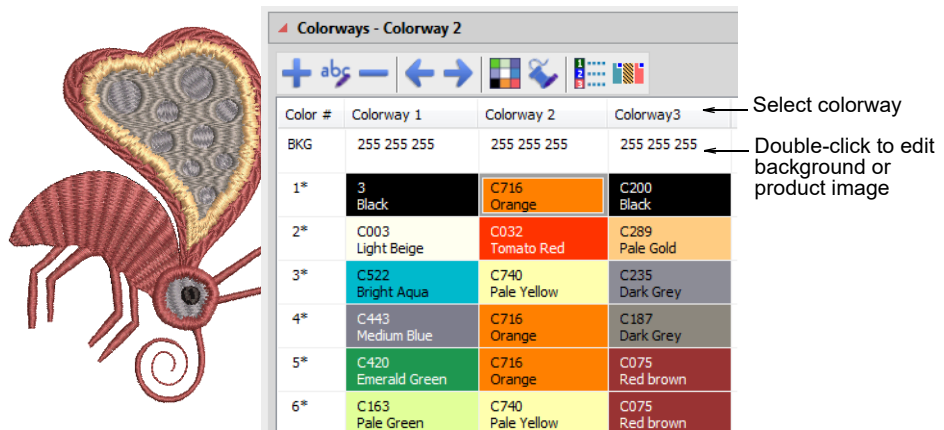
Change backgrounds

 Click Color > Background & Display Colors split arrow to change the background color of the current colorway.

 Use Color > Product Visualizer to choose a garment or product backdrop on which to position your decoration.

 Click View > Show Product to toggle product image on/off. Right-click to open the Product Visualizer docker.

BE EmbroideryStudio lets you set the background color, fabric, or product of each colorway for more realistic previews and presentations.

To change backgrounds...

1 Open the design and select a colorway.
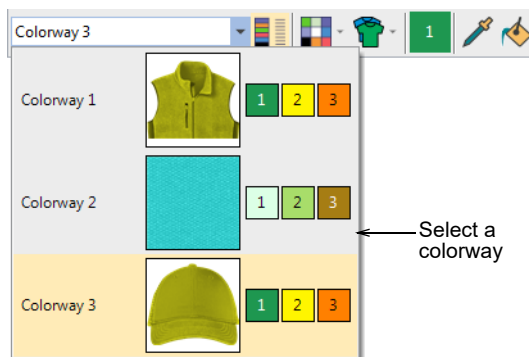
2 Use **View > Show Product** to toggle on or off any product image that may be included in the colorway.

3 Click the droplist next to the **Background & Display Colors** icon.

◀ Change color via the **Background Color** popout menu.

Click arrow to invoke popup menu

Select background color
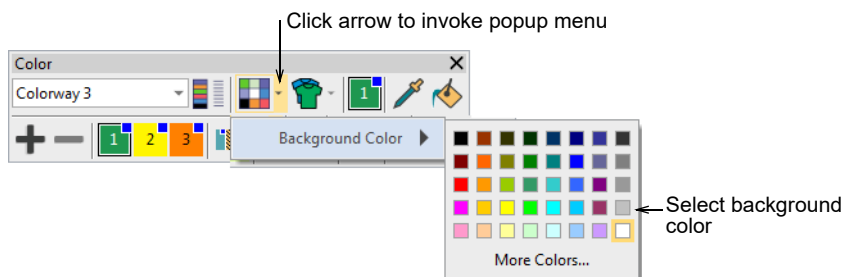
◀ If your colorway includes a background fabric, change color via the **Fabric Color** popout menu.

Change fabric colors
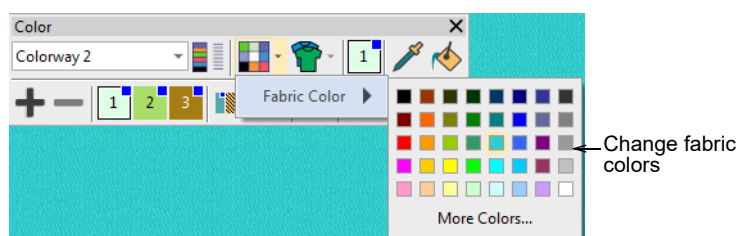
4 If your colorway includes an article or product, open the **Product Visualizer** droplist and change color via the **Product Color** popout menu.

Change product color
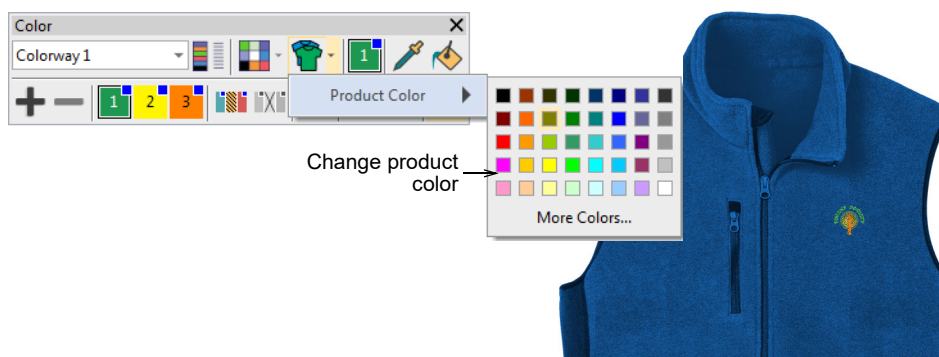
Tip: Click **Background & Display Colors** or **Product Visualizer** icons to preset any of these options.

Change display colors

Use Color > Background & Display Colors (or Colorway Editor docker) to change design background presets for the current colorway.

In addition to background color or fabric, display colors for borer holes, selected and 'unsewn' stitches, object outlines and grid are part of the colorway definition. Change them if the default display color is not visible against the current colorway. The **Background & Display Colors** dialog includes a **Display Colors** panel.

Select preferred display color

Function symbols
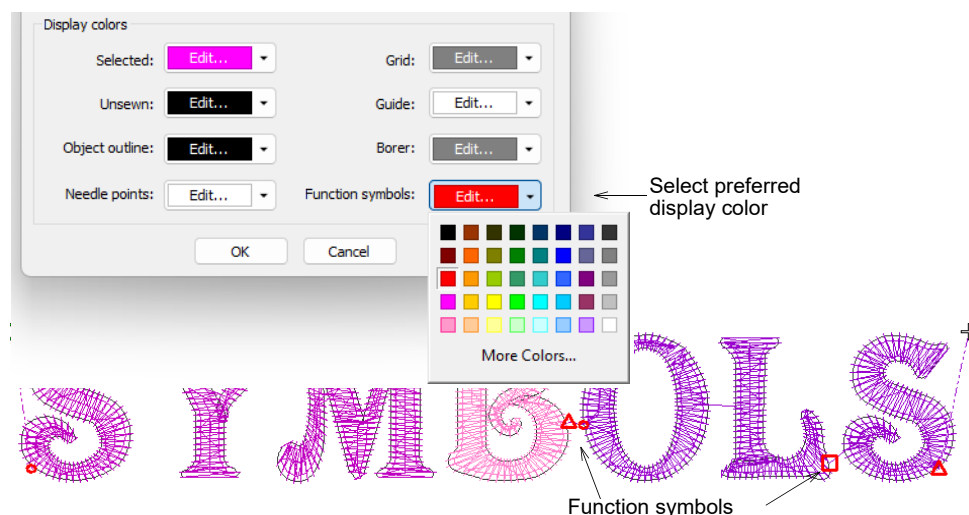
Adjust colors as required for:

Display item	Description
Selected	Selected objects or stitches.
Unsewn	Unsewn stitches as they appear when traveling through the design.
Object outline	Object outlines as they appear when Show Outlines is activated. See View embroidery components for details.
Needle points	Change needle point display color according to current background. See also View embroidery components.
Grid	Depending on the colorway, you may need to adjust grid display colors in order to view them against the background color. See also Measurements.
Guides	Depending on the colorway, you may need to adjust guide display colors in order to view them against the background color. See also Measurements.
Borer	Borer points. These are machine functions which only appear when Show Functions is activated. See View embroidery components for details.
Function symbols	Symbols such as trims and tie-offs as they appear in stitch view. Use in conjunction with the Show Functions toggle. See Types of connectors (Reference Manual).

Display colors are saved with the colorway. You can save the colorway as an EMT template file for use in future designs.

Black needle points against white background
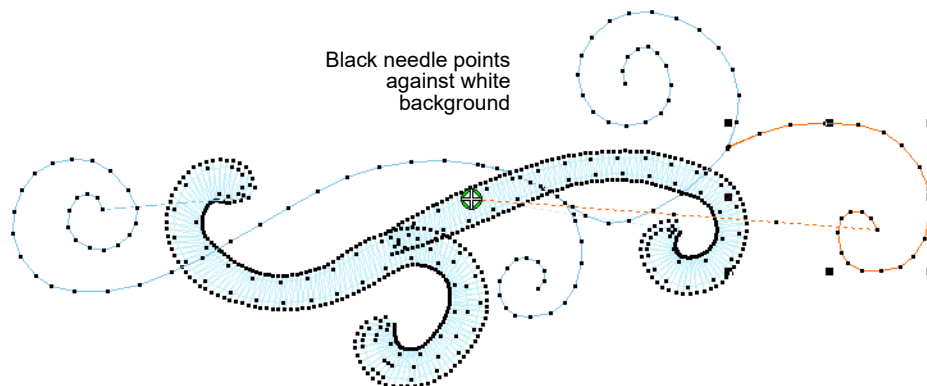
Related topics...

◀ View embroidery components

Viewing design repeats

Use View > Show Repeats to toggle design repeats display. Right-click for settings.

Many customers make traditional garments such as sarees which employ continuous and sometimes overlapping designs. It is important to be able to see these designs together with their repeats. The **Show Repeats** function displays repeating designs, including sequins, in both **TrueView** and stitch view. You can view a design, even while digitizing, with any number of repeats. The number can be a whole number or fractional.

Vertical distance, user-defined

Horizontal distance, user-defined or automatically calculated

✎
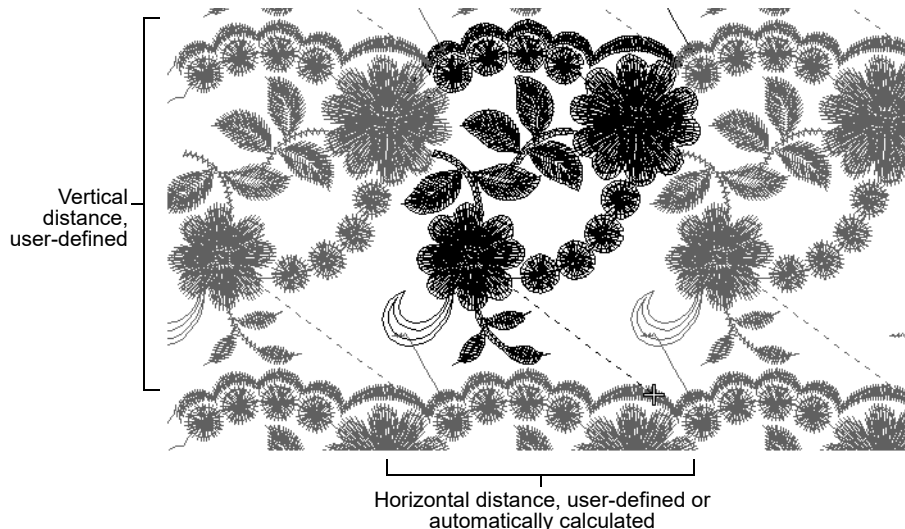
Note: It is important that the artwork you use is properly sized and in the correct horizontal position. Always check the position of your artwork before starting to digitize.

To view design repeats...

1 Set your units of measurement as required.

✎

Note: Stitch length and density controls remain in mm regardless of measurement system. These controls reflect the machine functions as industrial machines are always in millimeters.

2 The first time you use the feature, right-click the **Show Repeats** tool or press shortcut **W** to access the **Repeats** dialog.

Select Show Repeats

Enter required number of horizontal repeats

Enter distance between horizontal repeats

Enter required number of vertical repeats

Enter distance between vertical repeats
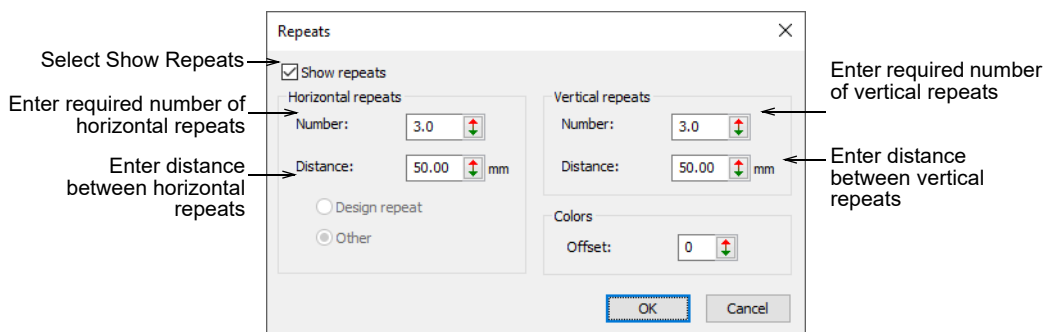
3 Select the **Show Repeats** checkbox to activate the feature.

4 Set the distance between horizontal repeats. This will always be expressed in millimeters. Depending on the template, different options are available:

Option	Function
Design repeat	This option is only available with the Schiffli template. Repeat distance is fixed. This is typically a factor – x1, x2, x3, etc – of needle distance. See Schiffli Supplement for details.
Other	When selected, you need to manually enter a repeat distance in mm. This is typically used when doing continuous design work on multihead machines. The figure will generally correspond to the distance between machine heads – e.g. 135 mm – or factors thereof.

5 Enter the number of horizontal repeats. Repeats are balanced around the source design. This means that whole designs are displayed only for odd integer (1, 3, 5) numbers of repeats.

Repeat	Effect
1.0	The original design only is displayed.
1.2	• The original design is displayed, plus • 0.1 of the design on either side of the original.
2.0	• The original design is displayed, plus • 0.5 of the design to either side of the original. The repeat pattern looks like this:][][.
2.9	• The original design is displayed, plus • 0.95 of the design to either side of the original.
3.0	• the original design is displayed, plus • a complete copy of the design to either side of the original. The repeat pattern looks like this: [][][].

‹ Click **OK** to apply.

Usage tips...

‹ Vertical distance is not constrained by needle or head distance. Vertical distance will be a function of design height. Set vertical distance and number of repeats as preferred.

‹ To help distinguish the source design from repeat patterns, Use the **Colors** option to display repeats in different colors. Enter a color offset to indicate where you want to start the first repeat color. Let's say you have a 4-color design using palette colors 1, 2, 3, 4. If you set color offset to 5, repeat colors will display as 5, 6, 7, 8.

‹ Use the **Show Repeats** icon to toggle design repeats on or off.

Source design

Viewing design information

You can obtain design information in a variety of ways and formats –
before opening the EMB file via **File Explorer** and from the **Design
Information** docker. See also Preview design reports.

View design details in BE EmbroideryStudio

> ⓘ Use Docker > Design Information to view and modify design details prior to
> design approval or stitchout.

You can check design details via the **Design Information** docker. This
is always advisable prior to design approval or stitchout. The opening tab
contains information about design height, width, stitch count, colors, and
so on. On other tabs, summary and order information may be provided
by the digitizer or sales team. The information is printed with approval
sheets and production worksheets. Choose a file and select **Design >
Design Information**.

Use tabs to view other design information, including orders and machine runtime estimates

Provide descriptive name as preferred
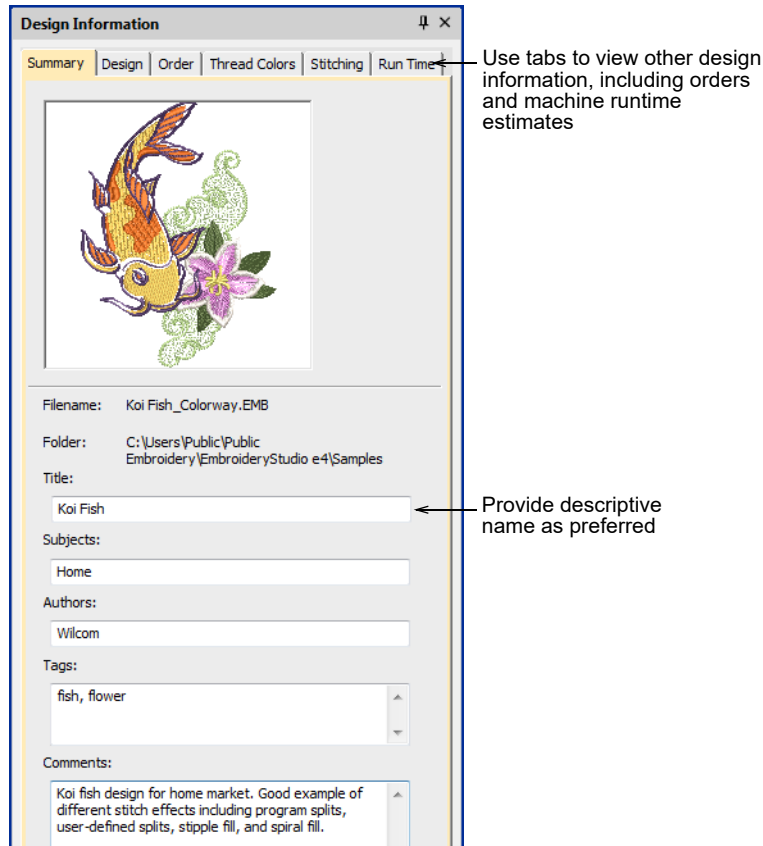
View design details in File Explorer

Even without opening EMB files, you can check software version number and other design details via **File Explorer**. This same dialog can be accessed from within the **Open** dialog in BE EmbroideryStudio as well as the **Design Library**.

To view design details in File Explorer...

◀ In **File Explorer**, right-click an EMB file and select **Properties** from the popup menu.

The **Properties** dialog displays with an **EMB** tab. View general file information, such as file size and modification dates, together with design information such as stitch count, number of stops and color changes, as well as machine format.

Dedicated EMB properties tab
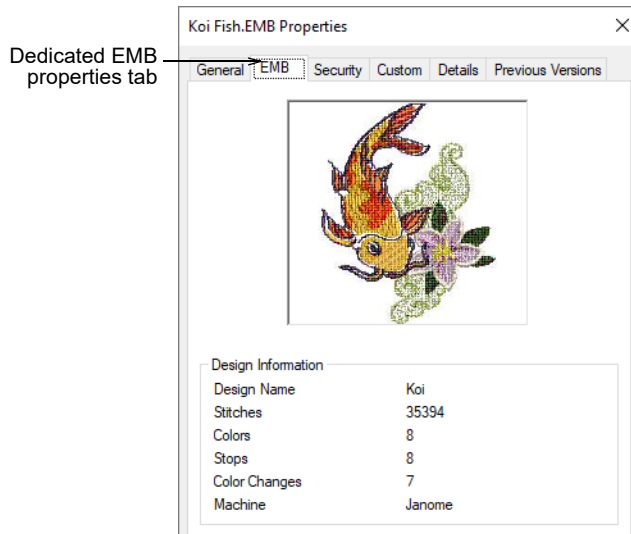
◄ The **Custom** tab shares information with the **Design Information > Summary** docker in BE EmbroideryStudio.

Use Custom tab to provide additional file information
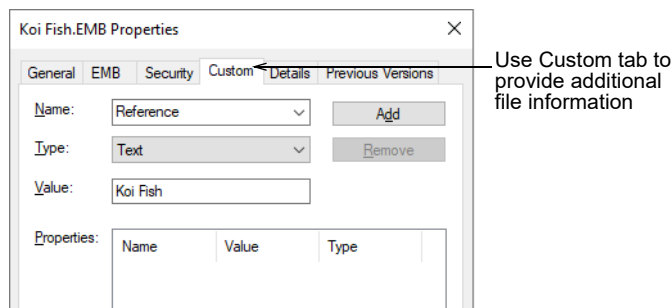
Preview design reports

> Click Standard > Print Preview to preview the production worksheet on screen.

Approval sheets and production worksheets contain all or some of the design details contained in the **Design Information** docker. Approval sheets are intended for customers, not production staff. Customers can see what they are ordering and approve accordingly. Production worksheets are intended for production staff. All production-related information, such as bobbin length, design size, garment fabric, etc, is provided.

To preview a design report...

◄ Click the **Print Preview** icon.

Choose a print option

Order details

Modify report options

Click Close to return to design window
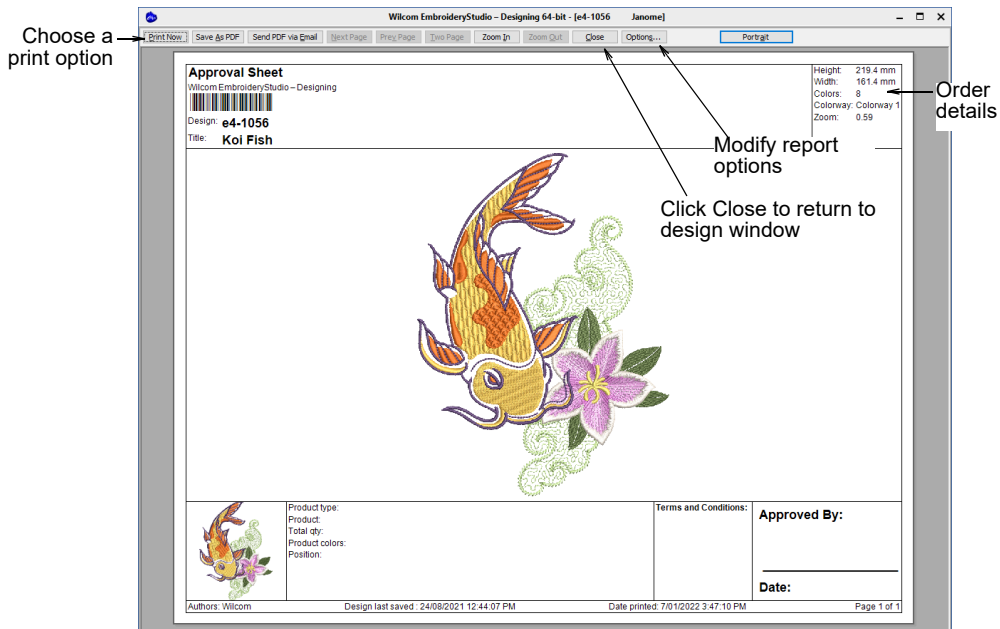
- To change paper orientation, click **Landscape** or **Portrait**. Large designs may be displayed over a number of pages.
- To change included information and set printing/plotting preferences, click **Options**. Here you can choose the report type – e.g. Approval sheet.
- To print the design, choose an option:

Option	Function
Print Now	Send the design report to your local printer.
Save as PDF	Save the report as a PDF document. You are prompted to save to the hard drive or network location.
Send PDF via Email	Send the report – usually an approval sheet – as a PDF attachment to your local email client.

- To close the preview, click **Close**.

Design Management

Design Library is a design management tool. Use it to browse design and artwork files stored on your PC or local network. **Design Library** capabilities make it fast and practical for daily commercial use, avoiding the need to switch to and from **File Explorer**. It recognizes all file formats used by BE EmbroideryStudio. It also makes it easy to search, sort and browse all embroidery designs on your network.
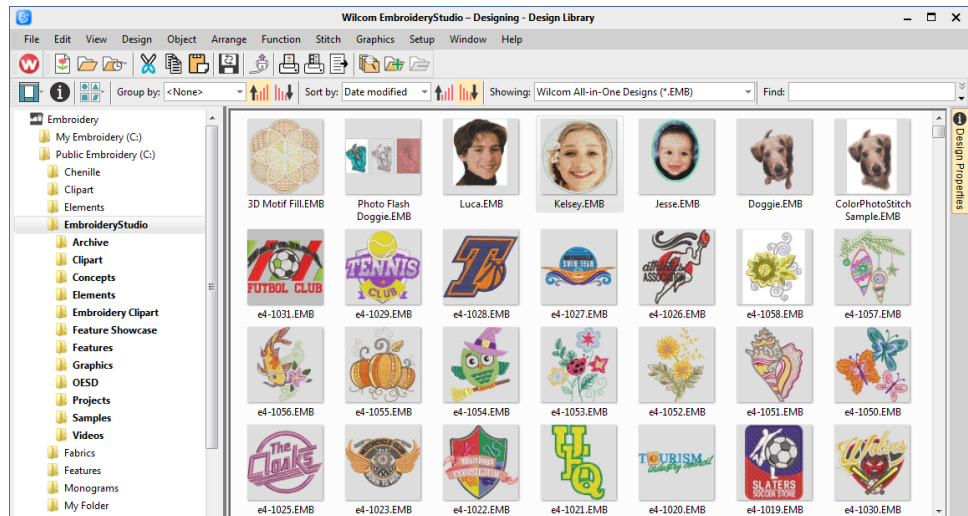
If you are already familiar with **File Explorer**, the interface will be quite intuitive to you. But there are some differences. **Design Library** is a 'virtual library' in that any designs on your system can be located and displayed within the navigation pane. Any folder containing embroidery designs which resides on your hard disk, external storage device, or local network can be included in the navigation pane. In a nutshell, **Design Library** lets you:

◀ Search for designs – including artwork files – anywhere on your local hard drive, network drives, or external devices such as USB or ZIP drive.

◀ Search by various means, including summary information such as design title, subject, authors, tags, etc. Order information can also be associated with any supported design file.

◀ Preview design information in the preview pane or **Design Information** docker.

◀ Create an organizing structure for easy categorization. Add to or remove design folders from your 'virtual library'.

◀ Record and manage quotes, orders, and approvals.

◀ Batch-convert selected design files to all commercial embroidery formats such as DST, EXP, SEW, and others.

◀ Print selected designs or send them for stitchout to embroidery machine or to folders which machines can access for stitching.

◀ Use **Design Library** to handle quotes, orders, and approvals.

Caution: Included artwork (clipart) and embroidery designs can only be used for personal use – i.e. they cannot be commercially sold in any form. Changing the medium – i.e. clipart to embroidery or embroidery to clipart – does not remove copyright protection.

Note: CorelDRAW® needs to be registered before it can be used by BE EmbroideryStudio. Registration gives you access to the latest CorelDRAW® updates. It also provides CorelDRAW® Standard Membership which gives you access to content – clipart, fonts, stock photos, templates – via Corel CONNECT.

Design library layout

The **Design Library** is accessed from the **Mode** toolbar.

Mode — Switch between Design Library and Wilcom Workspace

Design Library
Opens the Design Library window

ⓘ Press <F1> for more help
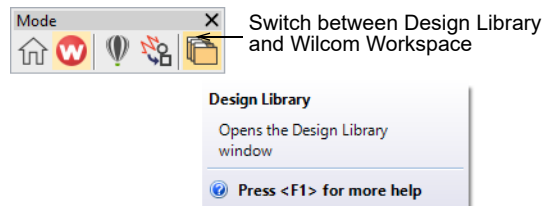
The library has five main components – toolbars, navigation pane, design display area, details pane, and **Design Information** docker. The appearance will differ somewhat depending on your operating system.
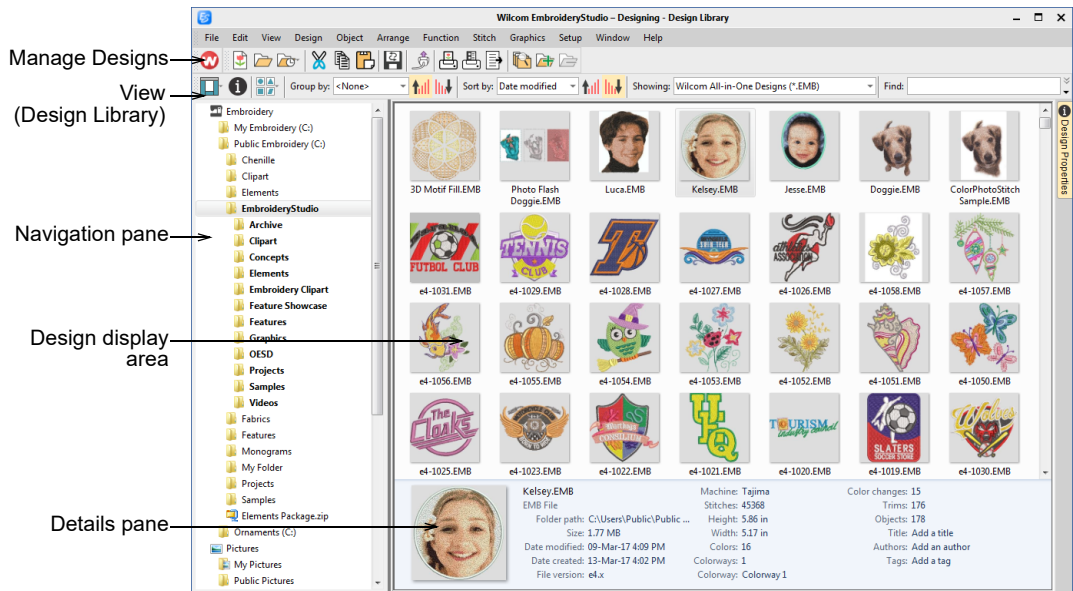
Library components are summarized as follows...

Component	Function
Navigation pane	The navigation pane in the Design Library is not an exact duplicate of your File Explorer folder structure. It is selective in that it only contains folders relevant to embroidery design and multi-decoration. Select and add any folder on your PC or network to view supported file types.
Design display area	The design display area shows any designs in selected folders corresponding to the filter selected or search criteria entered in the View (Design Library) toolbar. • Use the toolbar to filter the design display. • Right-click selected designs to access a popup menu. Use it to cut, copy and delete without leaving the software. • Use it also to zip designs and folders.
Details pane	When a design is selected, summary information is displayed in the preview pane.
Design Information docker	Check design details via this docker. This is always advisable prior to design approval or stitchout. Summary and order information may be provided by the digitizer or sales team. This information can be printed with approval sheets and production worksheets.
Toolbars	

Component	Function
Mode	Switch to Wilcom Workspace to digitize and edit embroidery designs.
Manage designs	Open selected or recent designs, cut, copy and paste them, convert them, print them, or output them to any connected embroidery machine or data media.
View (Design Library)	Search or sort the entire embroidery library or any chosen folders on any criteria selected. Find and manage folders containing designs.

Viewing designs in network folders

Click Mode > Design Library to open the Design Library window from which to search and catalogue designs as well as quotes, orders, and approvals.

Use View > Layout to toggle navigation pane, details pane, and/or preview pane display.

Navigating to design folders with **Design Library** is similar to browsing with **File Explorer**. Your access to design folders on your local network is only limited by access rights determined by your System Administrator. View any supported file type residing in design folders. Designs can be searched, sorted, grouped, and browsed by customer or order. Click the **Design Library** icon on the **Mode** toolbar. **Design Library** opens in its own window.
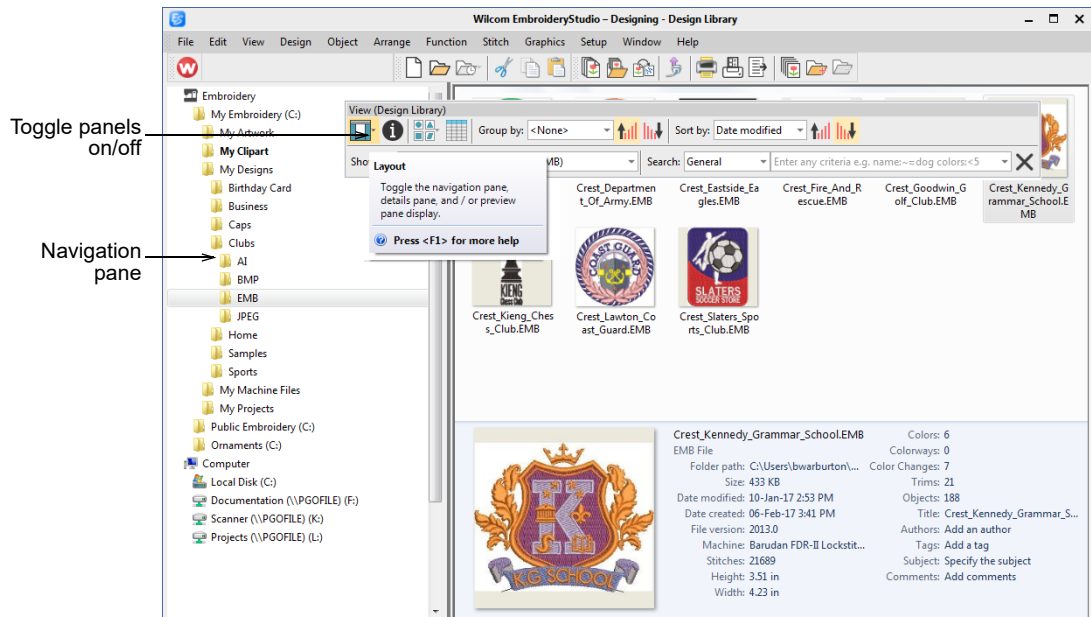
Design Library is 'virtual' in the sense that any designs on your system can be located and displayed within the library. This folder acts as a container which appears in **File Explorer** amongst your other Windows libraries.

Embroidery library appears amongst Windows libraries
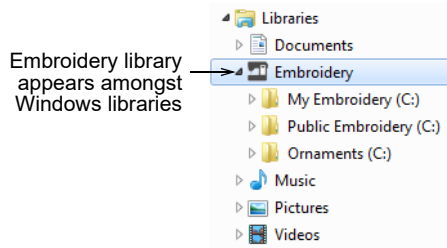
You can add folders both in **File Explorer** and in the **Design Library** itself. The initial folder structure is created by your installation. However, any folders on your local network which contain embroidery designs or artwork can potentially be included and viewed in **Design Library**.

Navigate folder structure via navigation tree or address bar
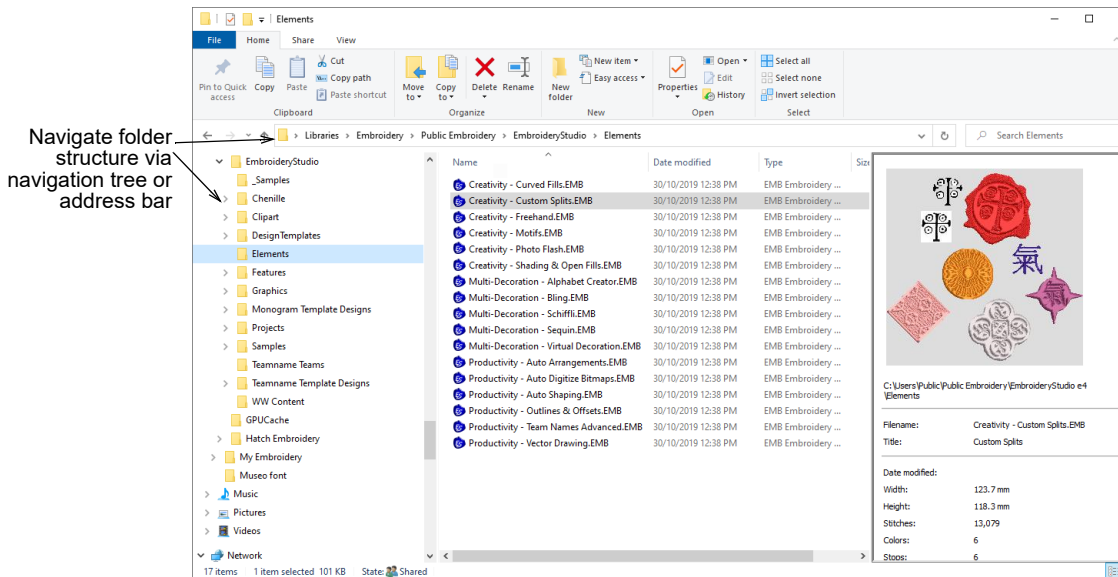
Tip: Like **File Explorer**, the **Design Library** display can be refreshed with a simple **F5** keypress.

Change design display

Use View > Change View to select thumbnails only, thumbnails with stitching details, or summary information only.

Use the **Manage Designs** toolbar to control display of the navigation pane as well as thumbnail appearance. Use the **Change View** droplist to display designs in the preferred format.

Display designs as icons or lists
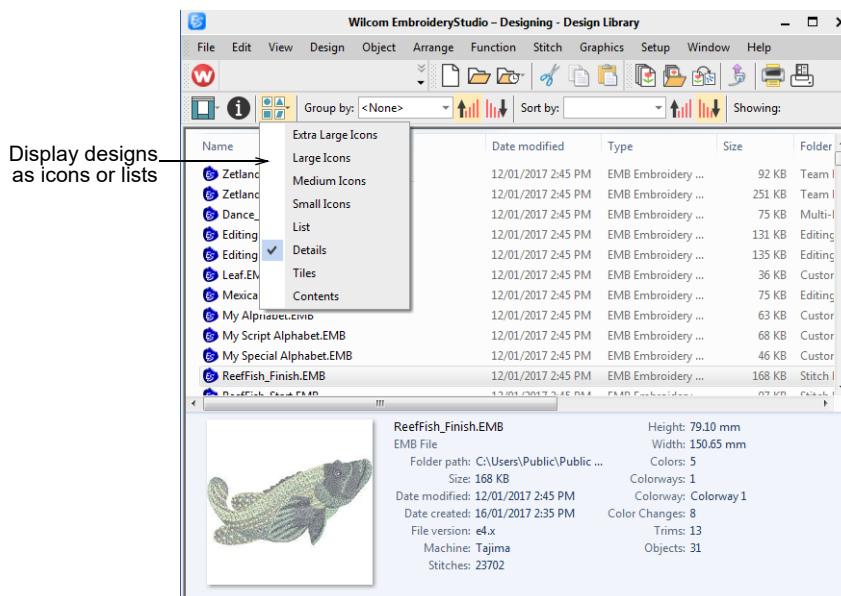
Tip: The **Design Library** display can be refreshed with a simple **F5** keypress, the same as **File Explorer**.

View design details

> Use View > Reset Detail Columns to reset the columns displayed in details view to the default layout.

Default detail columns vary by file type and are controlled by MS Windows®. **Design Library**, however, provides additional columns for data derived from embroidery files. These may include design status, customer, order date, etc. Such details are primarily intended for use with EMB but can also apply to other embroidery formats.

When viewing design lists in **Details** view, columns can be arranged in any order and with a variety of criteria. Sometimes Windows will reset detail columns to Windows defaults, even for EMB files. To return to the default layout, simply click the **Reset Detail Columns** button.

Group & sort designs

Various mechanisms are available for you to sort and group design listings...

Use droplists and toggles to sort

Click column headers in list view

The **Group** and **Sort** by droplists also provide a convenient mechanism for managing orders...

Group and sort by same or mixed criteria
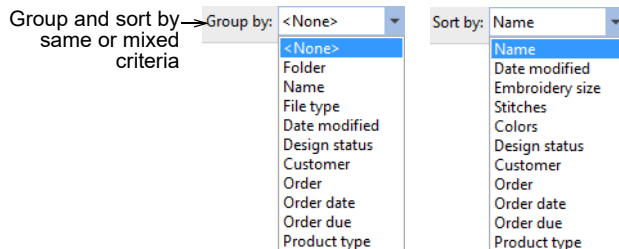
View zipped designs

View designs in zipped folders. The limitation is that the contents of zipped folders cannot be viewed as thumbnail images.

Access zipped folders
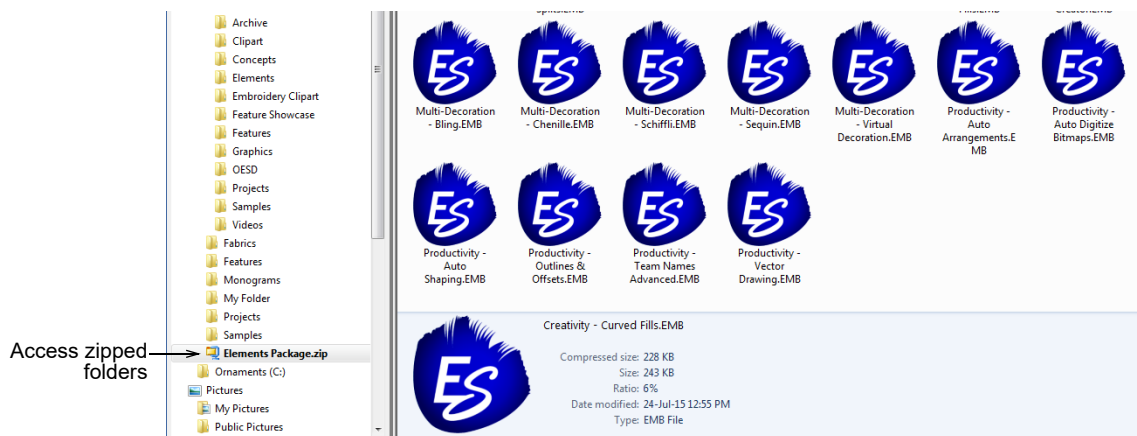
Opening designs from Design Library

Embroidery files fall into two broad categories – 'design files' and 'machine files'. Design files are ones you open and modify in **Wilcom Workspace**. Machine files are generally ones you send to machine for production. There is some inter-convertibility between the two formats.
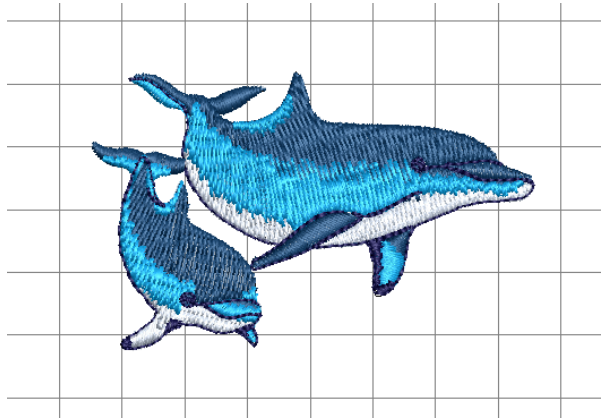
Filter designs

You can filter your embroidery library between file categories – design files, machine files, or all.

Filter designs by file type
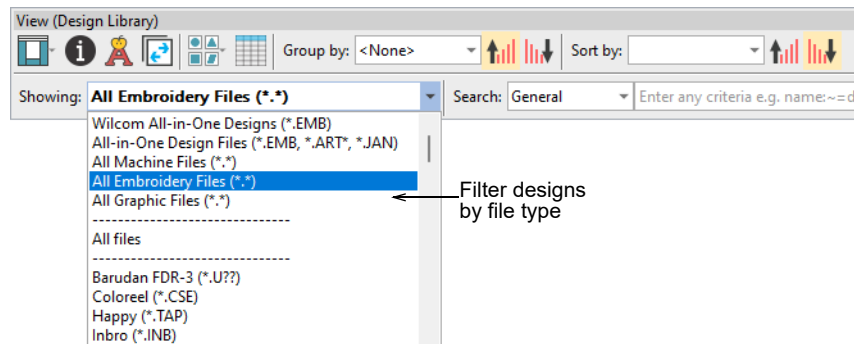
The **Design Library** can filter:

‹ All Wilcom-supported design files: EMB, ART, JAN

‹ All machine formats such as DST, EXP, JEF, etc.

‹ All artwork files read by BE EmbroideryStudio, both vector and bitmap

Open design files

> Use Manage Designs > Open Selected to open design(s) selected in the embroidery library.

Design files, also known as 'all-in-one' or 'outline' files, are high-level formats which contain object outlines, object properties and stitch data. When you open a design file in the software, corresponding stitch types, digitizing methods and effects are applied. Design files can be scaled,

transformed and reshaped without affecting stitch density or quality. After modification, you can save to any supported file format.
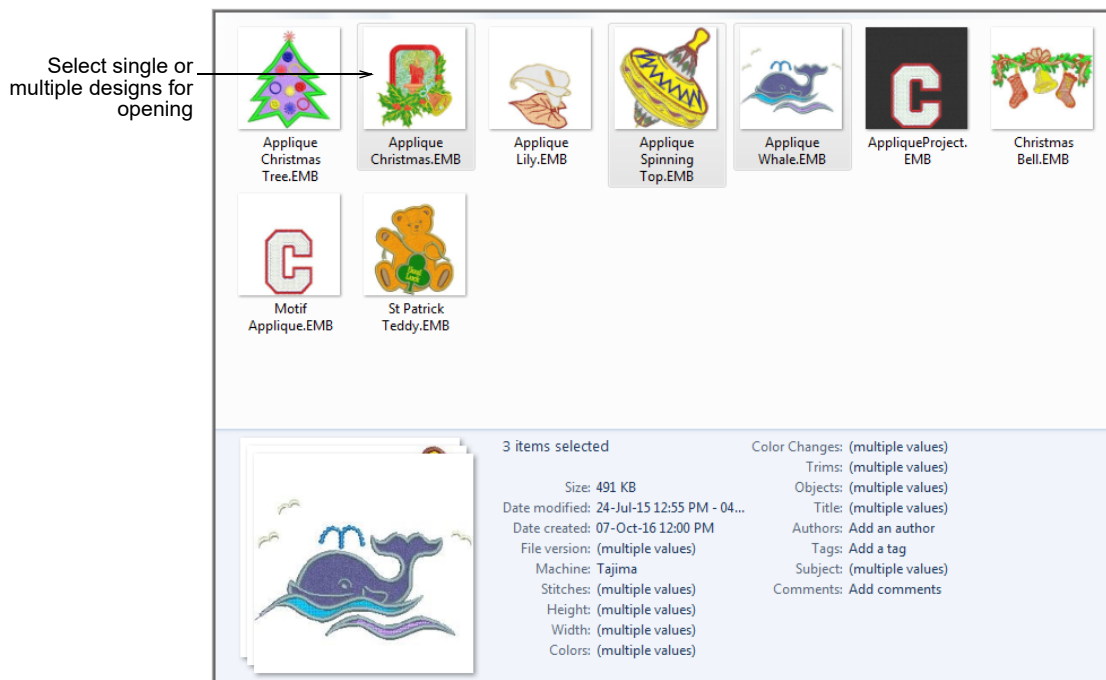
Using the **Design Library**, you have the option of opening one or more selected designs in their own design tabs. Simply select a design or designs by holding down **Ctrl** as you click, and then click **Open Selected**.

⚠

Caution: Be careful not to open too many designs simultaneously. Potentially you could select all designs in the library and click **Open Selected**. This operation cannot be stopped and may result in the computer running out of memory.

Open machine files

Different embroidery machines speak different languages. Each has its own commands for the various machine functions. Machine files, also known as 'stitch files', are low-level formats for direct use by machines. They contain information about the position, length and color of each stitch. When they are read into BE EmbroideryStudio, machine files do not contain object information such as outlines or stitch types, but present the design as a collection of stitch blocks called 'manual objects'.

Manual objects with no outlines and manual stitches only

While machine files are generally not suited to modification, the software can 'recognize' object outlines, stitch types and spacing from stitch data with some success. By default, machine files are converted to outlines and objects upon opening. These 'recognized' designs can be scaled with stitches recalculated for the new outlines. Processing is effective for most stitch designs but cannot produce the same level of quality as original outlines and may not handle some fancy stitches.

Open graphic files

Artwork can be opened in BE EmbroideryStudio in both vector and bitmap (raster) formats via **Design Library**. Samples of both file types are installed with BE EmbroideryStudio in the **Pictures** library shown below.

Filter by graphic file
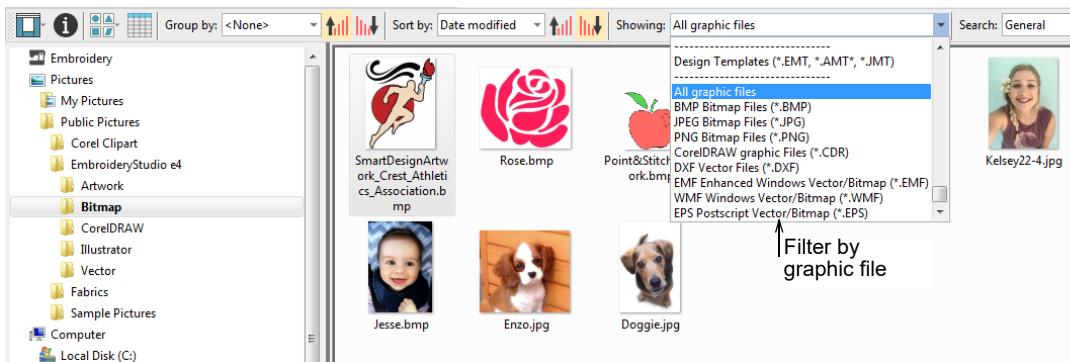
Extended support for CDR files

Design Library provides extended support for Corel CDR files. This includes:

◄ Right-click to access Windows operations – **Open**, **Open With** – directly into CorelDRAW Graphics. Or double-click to open a selected CDR file using the default template.

◄ Drag-and-drop from File Explorer into CorelDRAW Graphics.

◄ Drag-and-drop into Wilcom Workspace.

◄ Drag-and-drop into standalone CorelDRAW® Graphics Suite.

Note: For details of supported image file formats, refer to the CorelDRAW® Graphics Suite electronic User Guide. This is available via the MS Windows® **Start > Programs** group or the **Help** menu.

Open new files from existing

Use Manage Designs > New from Selected to create new designs based on designs selected in Design Library.

Instead of opening the original designs, you can use **New from Selected**. The only difference for practical purposes is that this command creates a copy which opens in a new design tab, thus preserving the original design file. Left-clicking uses the default template. Right-clicking allows you to select a different template from the dialog. Selection is remembered and used the next time the command is invoked.
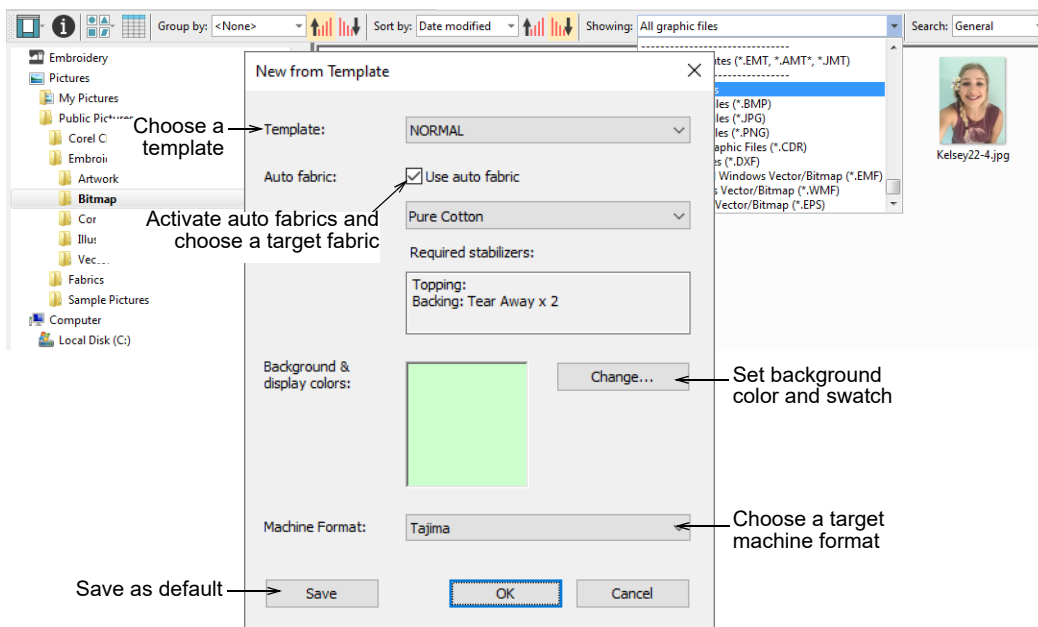
The **New from Selected** command can also be used to open graphics files, including Corel CDR. With CDR, a new file is opened in BE EmbroideryStudio before switching to CorelDRAW Graphics.

🔅

Tip: If you want to open one design into another, an **Import Embroidery** function is available in **Wilcom Workspace**. Combine designs or design elements into a single design layout.

Outputting selected designs

Send designs to machine for stitching via **Connection Manager**. Create hard copy reports of a selected designs using a printer or plotter. Report types may include production worksheets, appliqué patterns, color films, as well as catalogs and lists of selected designs.

Convert designs

🔲	Use Manage Designs > Convert Selected Designs to convert the design selected in the embroidery library into different machine file types.
🔄	Use View (Design Library) > Exports to view the export status of the current session. Conversion to older formats or machine file is performed as a background task.

By default BE EmbroideryStudio saves designs to its native EMB format. This contains all information necessary both for stitching a design and for later modification. The **Design Library** conversion function allows you to batch-convert to and from all EMB and other supported design file types. It also batch-converts many machine file formats such as DST, EXP, SEW.

To convert designs...

1   Select the file(s) to be converted and click the **Convert Selected Designs** icon. The dialog lists all machine file formats supports by the software.

Select target folder

Select machine file formats to convert
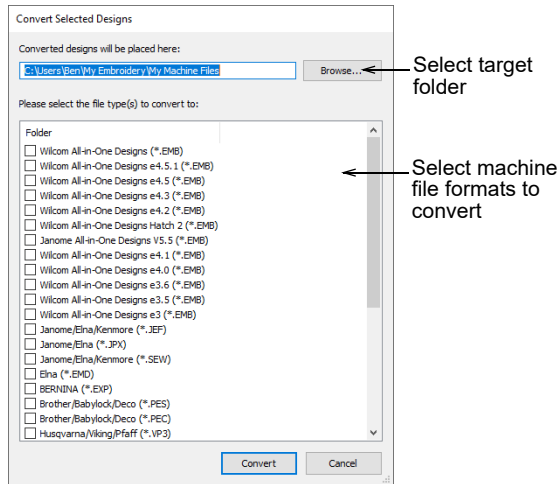
2 Select the file types you want to convert to.

3 Click **Browse** to locate a destination folder for the converted designs.

4 Click **Convert** to start the conversion. The converted designs will be stored in the nominated folder.

Tip: The **Exports** docker automatically opens when a design is converted to machine file or saved as an earlier EMB design file. This shows you the export status of the current session. Machine file export is performed as a background task.
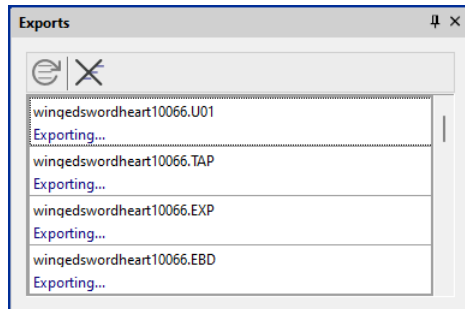
Send designs to machine

> Use Manage Designs > Send to Connection Manager to stitch out the design selected in Embroidery Library.

BE EmbroideryStudio supports various machine models. Some can be connected by cable directly to your PC via USB port. Others require files to be placed in a specific network location or 'watching folder'. Older-style machines do not support direct connection but they do read ATA PC cards

and/or USB memory sticks. **Connection Manager** provides a method of connection to machines that appear as removable media or make use of third-party connection software. Once set up in BE EmbroideryStudio, a single click is sufficient to send the design to machine.

Note: You can only send one design at a time via **Connection Manager**.

Print selected designs

Use Manage Designs > Print Selected to print designs selected in the embroidery library.

You can print worksheets for selected designs, and include thumbnails of each in the worksheet. Unlike **Print Designs**, this option can provide design and sewing information.

To print selected designs...

1 Sort the designs to be printed using **Sort**.

2 Select a design and click the **Print Selected** icon. The **Print Design** dialog opens.

3 To customize the printout, click **Options**.
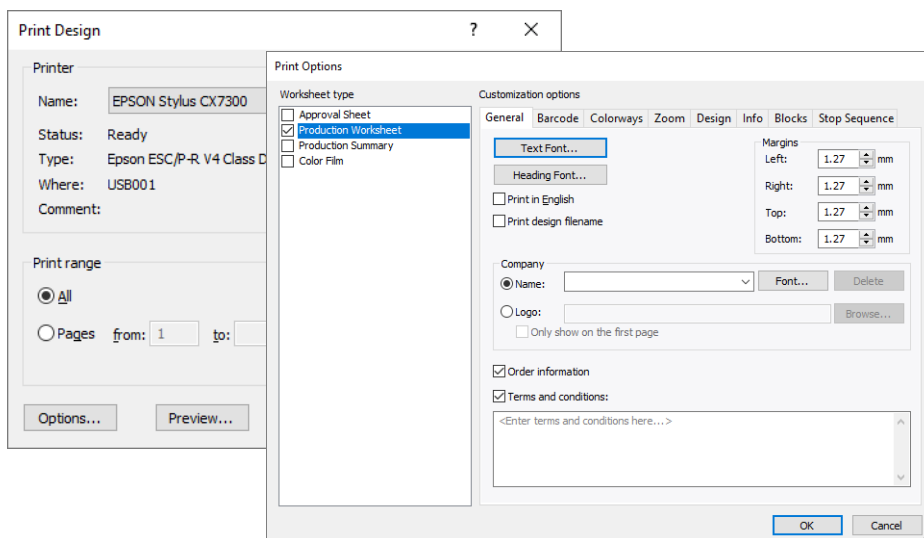
4 Set design report options to include the information you want in the format you require.

Option	Function
Approval sheet	This is intended for the customer, not production staff. Customers can see what they are ordering and approve accordingly.
Production worksheet	This is intended for production staff. All production-related information, such as bobbin length, design size, garment fabric, etc, is provided.
Production summary	This provides two summary tables of the design and associated colorways – a Colorway Summary together with a Design Summary.
Appliqué patterns	This shows appliqué patterns – cutter information – isolated from the design. These can be used as a guide to cutting out fabric pieces. They also show which appliqué pieces are to be included.
Color film	Provides a list of colors in the design, together with color and stitch information for each color layer. This helps the machine operator to see each stitch color in order of stitchout.

5 The **Worksheet type** panel provides options for further customization.

6 Click **OK** and ensure correct printer settings in the MS Windows® **Print Setup** dialog. The dialog and the settings available vary from printer to printer. See your printer manual for details.

This section provides fully worked sample designs demonstrating some of the key features of the software. The samples assume familiarity with basic techniques such as zooming and viewing designs.

Download the tutorial files from the online help landing page and copy to your embroidery library.

💡

Tip: For more details, see the topics in the Reference Manual by clicking the links. Ensure the Reference Manual and Quick Start Guide are present in the same folder.

Design Editing

In this worked example we take a ready-made logo and incorporate it into a design for stitchout on both polo shirt and cap. The design involves some additional lettering. We also need to scale it for stitchout on two different fabrics.

This tutorial explains many techniques and procedures you will use time and again in your embroidery work. Topics covered include setting up projects, importing and scaling designs, assigning and sequencing colors, adjusting object properties, and checking connections. Also covered are adding lettering, finalizing designs, and adapting designs for other purposes.

Note: Download the tutorial files from the online help landing page and copy to your embroidery library. To view the sample 'Mexican Peppers.EMB' file, navigate to the **Tutorials > Editing** folder.

Copy tutorial files to your embroidery library
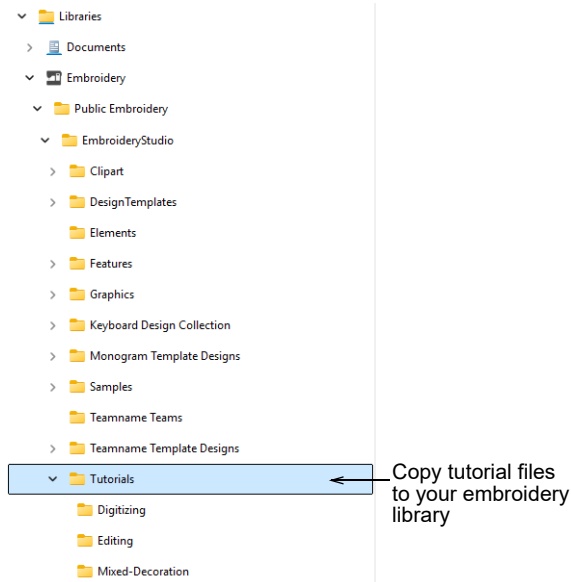
Set up the project

The first step in this and all projects is to specify, optionally, the fabric, the machine, and the artwork you want to use. BE EmbroideryStudio provides a set of optimized settings to take account of the target fabric. It also allows you to select from a wide range of standard factory-supplied hoops.

Choose fabric, backdrop and machine format

Use **Standard > New Design** to start a blank design based on the currently selected template. Hold down Shift and click to open New from Template dialog.

Use **Color > Product Visualizer** to choose a garment or product backdrop on which to position your decoration.

Open BE EmbroideryStudio from the desktop icon or Windows **Start** menu. From the **Home** screen, click **New from Template** or, holding down the **Shift** key, click **New Design**. Here we choose 'Jersey'. Select a suitable machine format – e.g. Brother – and click **OK**.

Activate auto fabrics and choose a target fabric

Set background color or swatch

Choose a target machine format
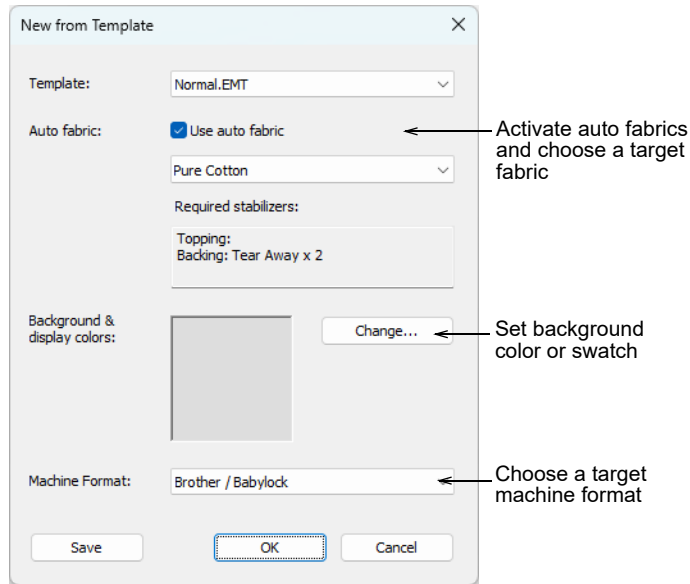
Open the **Product Visualizer** and choose a product backdrop – in this case, **Polos > Mens > Short Sleeves**.

Set article size and color

Select article
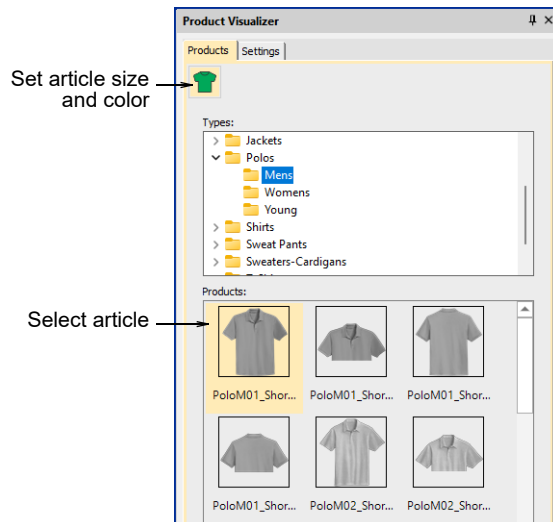
From the **Settings** tab, adjust article size and set the color to black. Optionally, use the 'smart tape' to measure shoulder width and set size to suit.

Adjust article size

Adjust article color
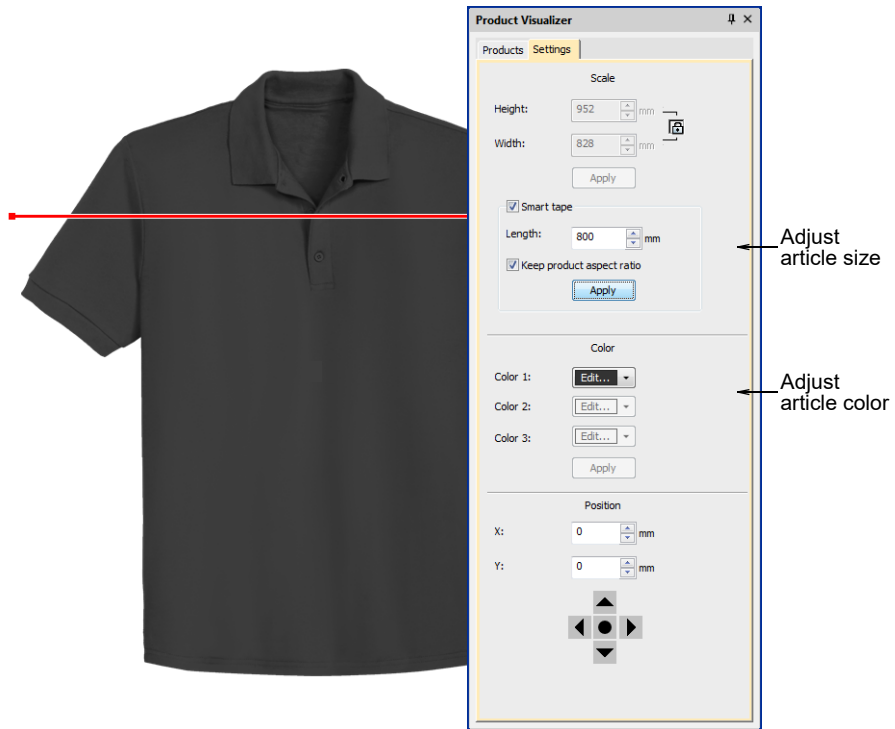
Related topics...

◀ Create designs from templates

◀ Fabric & product backgrounds (Reference Manual)

◀ Visualize products (Reference Manual)

Set up hoop list

> Click Hoop > Show Hoop to turn hoop display on or off. Right-click to change hoop settings.

BE EmbroideryStudio lets you select from a wide range of factory-supplied hoops. Configure the **My Hoops** list to include your available hoops. The list can contain commercial brands as well as custom-defined hoops. Set up your hoop list via **Setup > My Hoops**.
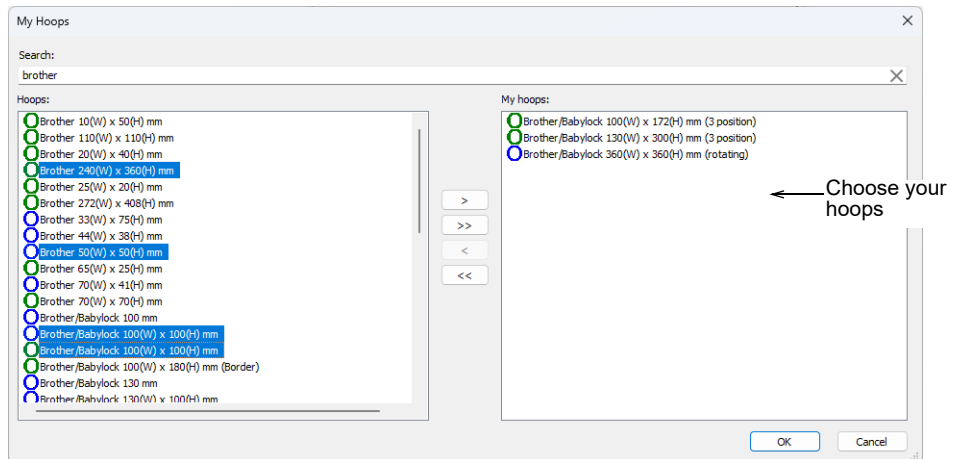
Related topics...

◀ Hoop lists (Reference Manual)

◀ Custom hoops (Reference Manual)

Import & scale the design

For the purposes of this sample we use a prepared design. In the 'real world', this might be supplied by a client or outsourced to a third-party supplier. Depending on digitizing quality, you may need to adjust for smooth stitchout.
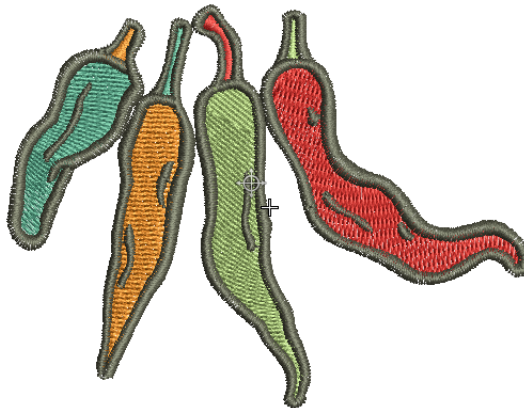
Import embroidery

> Click Standard > Import Embroidery to import embroidery design file into current design.

Import the embroidery file from your local drive with the **Import Embroidery** command. You'll find it on the **Standard** toolbar or **File** menu. To view the sample 'Mexican Peppers.EMB' file, navigate to the **Tutorials > Editing** folder.

Navigate to the Editing folder

Insert project file
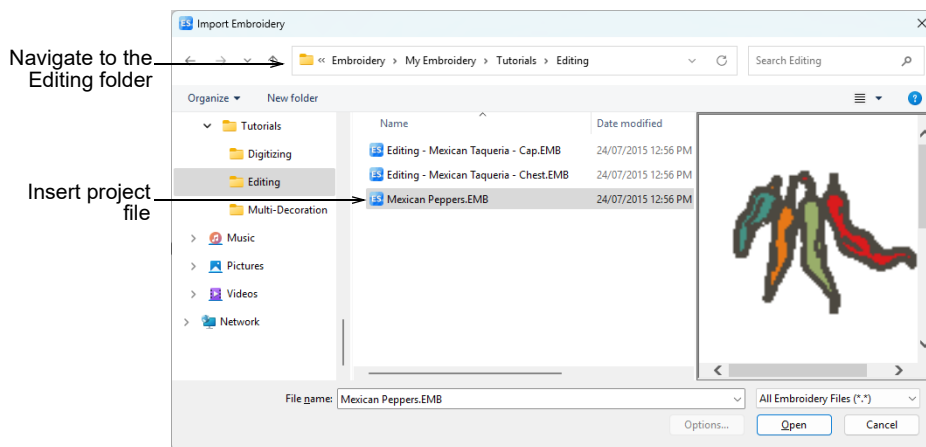
Tip: If BE EmbroideryStudio detects that a fabric already applies, it will update design settings according to the current fabric. Otherwise, it will leave the settings alone. To make sure that the correct fabric applies, select the whole design – **Ctrl+A** – and go to **Design > Auto Fabric**.

Related topics...

◀ Insert designs (Reference Manual)

Measure & scale the design

In this example, we are creating a left chest design. Maximum size should be approximately 4.25" or 108 mm square, including lettering. Select all objects – **Ctrl+A** – and check the **Property Bar**. Ensuring the aspect ratio is locked, set the width to about 65 mm.

Change width to 65 mm

Aspect ratio locked
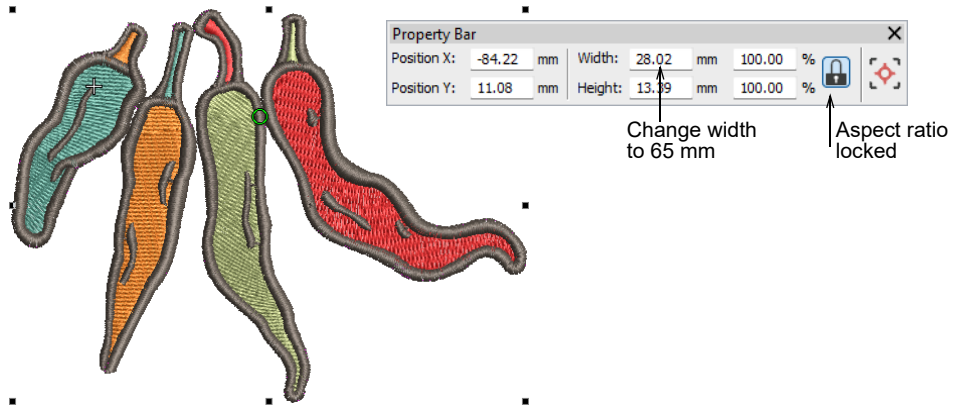
Note: The first time you run BE EmbroideryStudio, the measurement system will default to whatever the operating system is using. However, you can change measurement units from within BE EmbroideryStudio.

Related topics...

◄ Measurements

Assign & sequence colors

First we need to set up the color palette with threads we intend to use for stitchout. At the same time, we sequence colors to minimize changes on the machine.

Assign thread colors

	Use Color > Remove Unused Colors to remove all unused colors from the color palette.
	Use Color > Threads to search for and match threads from different charts, and assign for use.
	Use Threads > Assign Thread to assign selected thread to the highlighted color in the current colorway.
	Use Threads > Match All to match threads from the current chart/s to all color slots in the current colorway.

Our imported design contains five colors. Currently they are not assigned to actual threads. Our first task is to assign the threads we intend to use. Click **Remove Unused Colors** in the **Color** toolbar. Open the **Threads** docker. Here we choose 'Royal' as the thread chart. Assign threads to

color slots automatically using the **Assign Thread** or **Match All** buttons. Or scroll through the list to choose preferred thread colors.

Click to select thread chart/s

Click to assign color to selected color slot

Click 'Remove Unused Colors'

Select thread chart/s to use
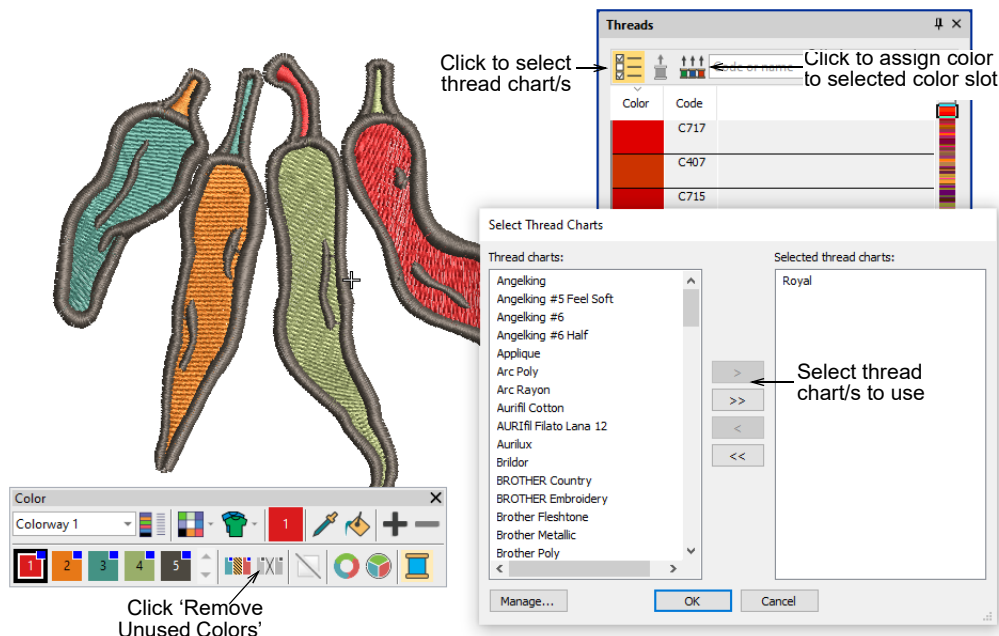
Related topics...

◄ Assign thread colors (Reference Manual)

Resequence colors & objects

> Use Docker > Color-Object List to resequence objects.

Now we look at color sequencing because we want to minimize changes on the machine. The **Color-Object List** provides an easy way to select objects and access their properties. Notice that colors in this design are stitched twice, in the same order objects were digitized. We use the **Color-Object List** to resequence color blocks and objects within the list.

Drag and drop to minimize color changes
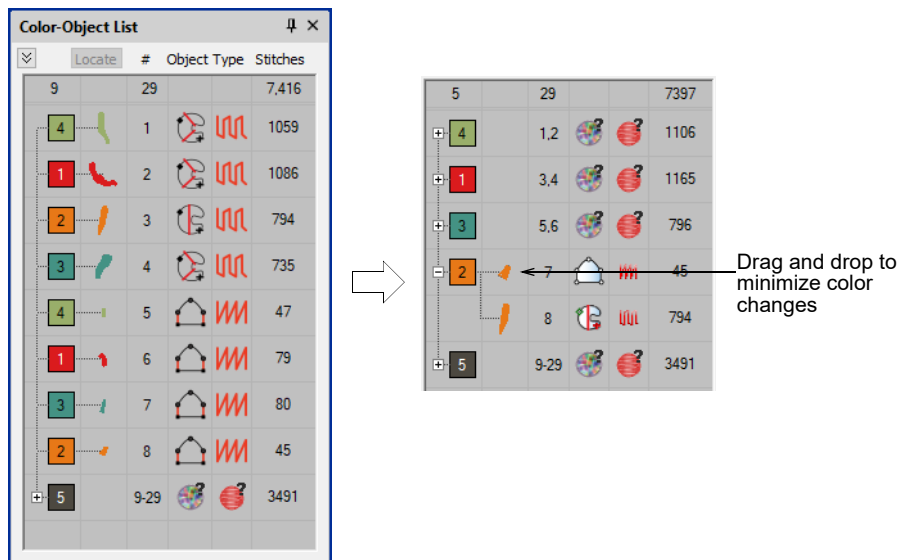
Related topics...

◀ Sequence with the Color-Object List (Reference Manual)

Adjust object settings

Now we look at objects in the design a little more closely in order to check and optimize their settings.

Adjust stitch type & angles

▶	Use **Select > Select** to select individual objects as well as groups or ranges of objects.
▦	Use **Docker > Color-Object List** to toggle the Color-Object List display on and off. Use to view and sequence objects in a design.
WW	Use **Fills > Satin** to apply satin stitch to new or selected narrow columns and shapes. Right-click for settings.
▶	Use **Reshape Tools > Reshape** to reshape selected objects, edit stitch angles, and adjust entry/exit points.
◿	Use **Reshape Views > Show Stitch Angles** to toggle on/off stitch angles for selected objects.

Because we've scaled down the design, we can change the fill to satin stitch for a nicer finish. To hide the outlines, right-click in the **Color-Object List** and select **Hide** from the popup menu.
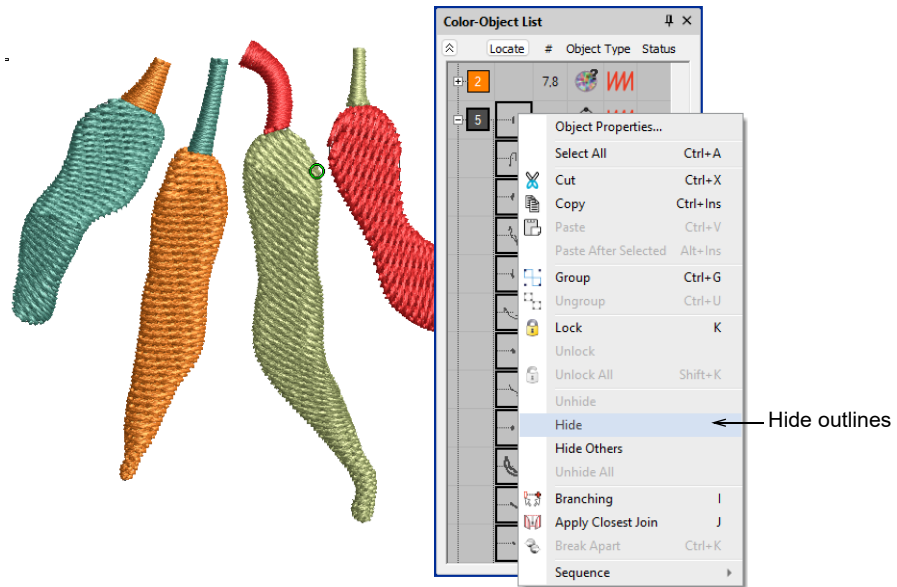
Holding down the **Ctrl** key, select the four chillies and click the **Satin** icon. Then, with the aid of the **Reshape** tool, adjust stitch angles for nice, even turning stitches.
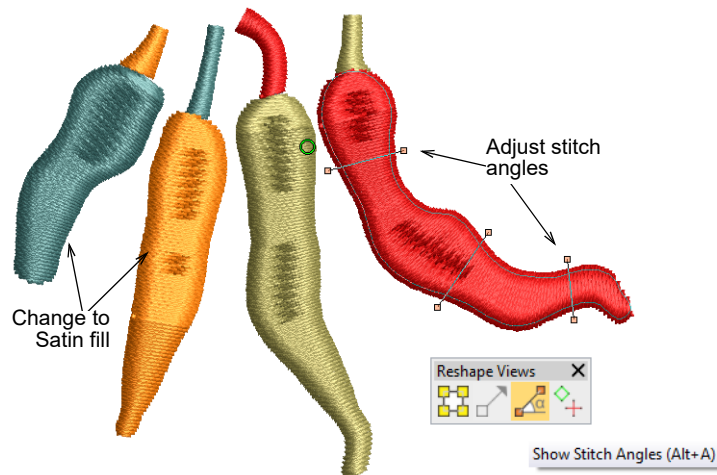
Related topics...

◀ Adjusting stitch angles (Reference Manual)

Adjust satin settings

Use Docker > Object Properties to set properties of selected objects.

	Use Reshape Tools > Reshape to reshape selected objects, edit stitch angles, and adjust entry/exit points.

Whenever you apply satin fill to a shape, **Auto split** is on by default. Where satin stitches become too long, they are split. Too many splits can spoil the effect. Try adjusting auto-split length – e.g. 8 mm – to achieve a glossier look.

Adjust Auto split length
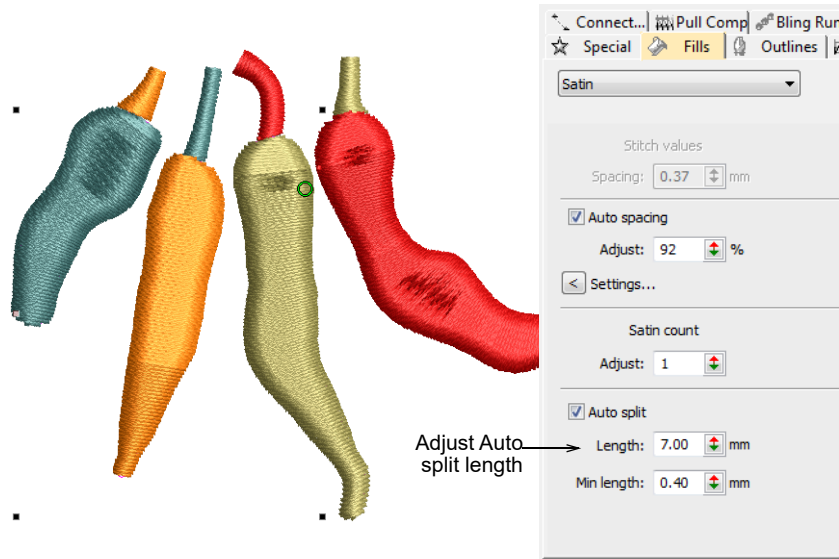
Related topics...

◀ Split satin stitches (Reference Manual)

Check underlay & pull compensation

	Use Docker > Object Properties to set properties of selected objects.

For an object to sew out correctly, it must have correct stitch spacing, sufficient pull compensation and a suitable underlay. Select all peppers and open **Object Properties**. Check both **Pull Comp** and **Underlay** tabs. Give the peppers an edge run underlay combined with, say, zigzag. Pull compensation should be set to about 0.2 mm according to fabric settings.

Check underlay settings

Check pull compensation settings

Combined edge run and zigzag underlay
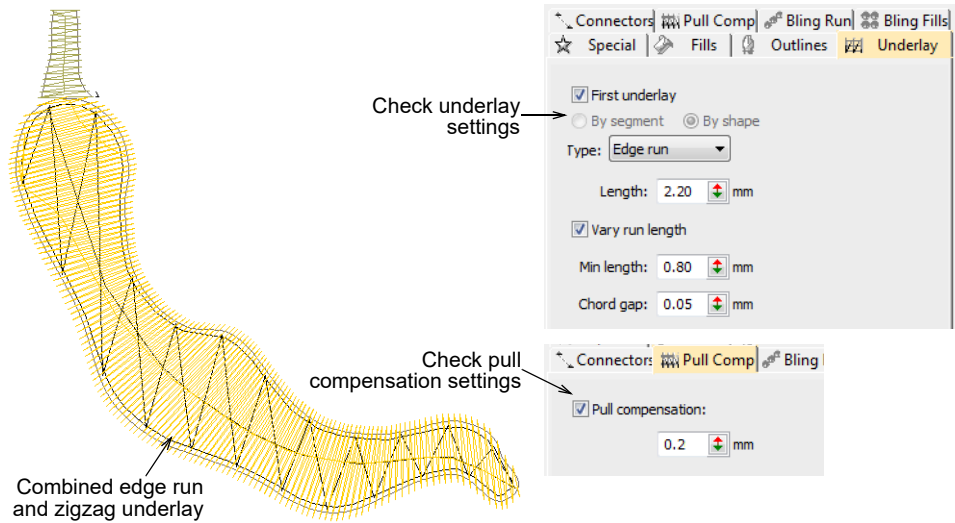
Related topics...

◄ Stabilizing with underlays (Reference Manual)

◄ Pull compensation (Reference Manual)

Check object overlaps

▣	Use Docker > Color-Object List to toggle the Color-Object List display on and off. Use to view and sequence objects in a design.
◄	Use Reshape Tools > Reshape to reshape selected objects, edit stitch angles, and adjust entry/exit points.
▦	Use Reshape Views > Show Reshape Nodes to toggle on/off reshape nodes for selected objects.

First we do a little forensic work to check object overlaps. Adjoining objects need to include a few millimeters of overlap in addition to pull compensation. This ties objects together and prevents gaps from forming.

Drag control
points to
enlarge overlap
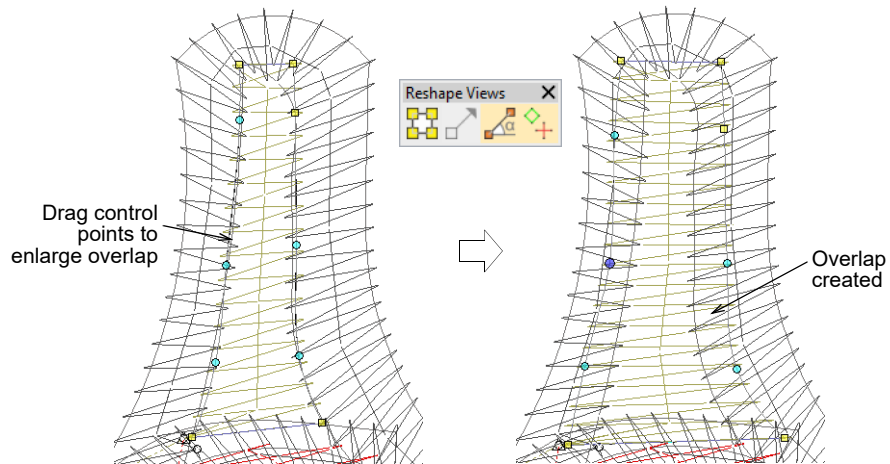
Overlap
created

Select the first object in the **Color-Object List** and click the **Reshape**
tool. Toggle on **Reshape Nodes** and toggle off other control points. Now
use **Tab** and **Shift+Tab** keys to cycle through the objects. Study outlines
where they overlap. Reshape where necessary. For instance, the stem of
the red chilli does not have sufficient overlap. With **Reshape**, we create
a little more overlap all around.

Related topics...

◂ Reshaping objects (Reference Manual)

Check connections

It's important to check connections between objects to make sure they
will stitch out in the most efficient way, without unnecessary trims, and
without leaving connecting stitches exposed. At the same time, you want
to ensure than no unsightly gaps appear in the final embroidery.

Connect same-color objects

	Use Docker > Color-Object List to toggle the Color-Object List display on and off. Use to view and sequence objects in a design.
	Left/right-click Travel > Travel by Trim to travel to previous or next trim function.
	Click View > Show Connectors to show or hide the connectors.
	Click View > Show Functions to show or hide the function symbols.

Where objects are separated by too large a gap, trims and tie-offs appear. Where consecutive objects share the same color, you can join them with a 'travel run' for more efficient stitchout. Click **Show Connectors** to toggle on connecting stitches. Here we see a trim between consecutive objects. This can be turned into a travel run which will be hidden beneath the outline.
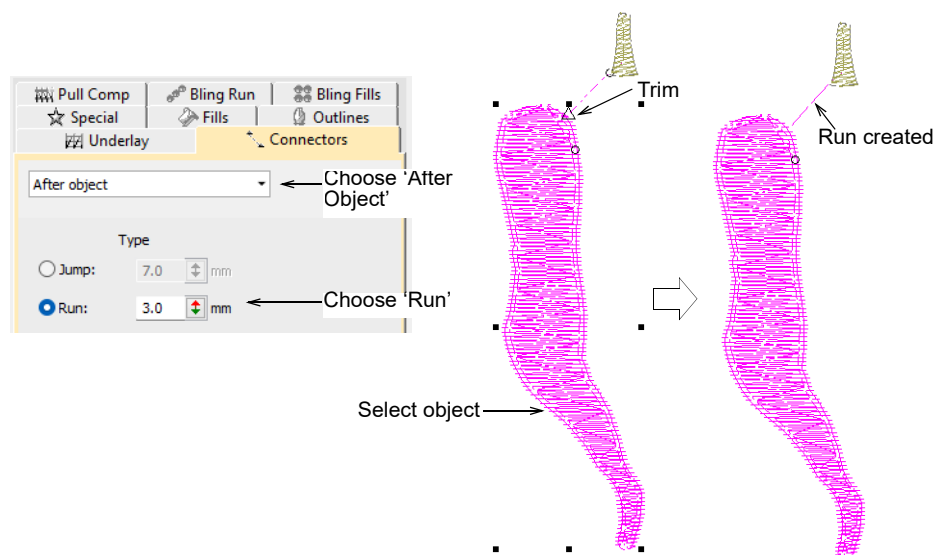
Select the preceding object and apply **Run** type 'after object' in the **Object Properties > Connectors** tab.

Tip: Use the **Travel by Trim** tool to jump between trims for easy inspection.

Related topics...

◀ Viewing objects & color blocks

◀ Viewing stitching sequence

◀ Embroidery Connectors (Reference Manual)

Check for visible connectors

	Use Reshape Tools > Reshape to reshape selected objects, edit stitch angles, and adjust entry/exit points.
	Use Reshape Views > Show Entry/Exit Points to toggle on/off entry/exit points for selected objects – respectively, green diamond and red cross markers.

Unhide outlines and check for visible travel runs. We may be able to conceal these by adjusting entry and exit points.

Visible connectors – exit points need adjusting
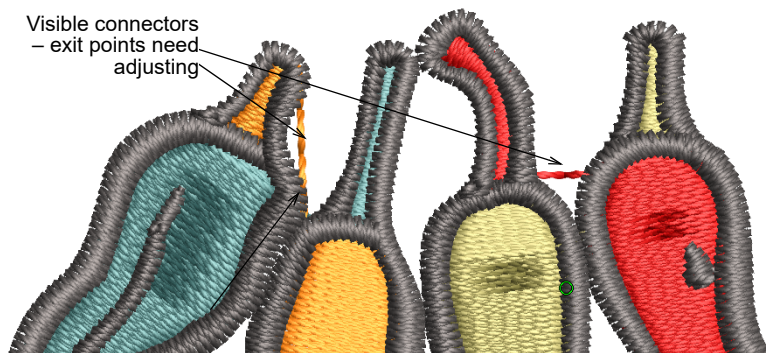
Select an object and click the **Reshape** tool. In the **Reshape Views** toolbar, toggle on entry/exit points and toggle off other control points.

Reshape Views

Relocate end point to create closer join
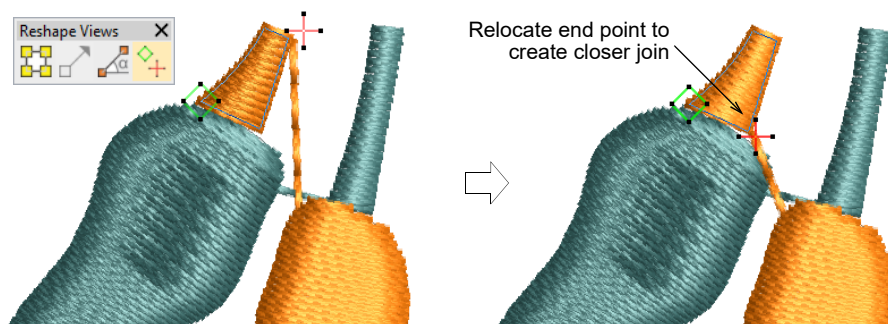
Adjust entry and exit points to hide travel runs beneath outline stitching.

Connectors will be hidden beneath outline stitching
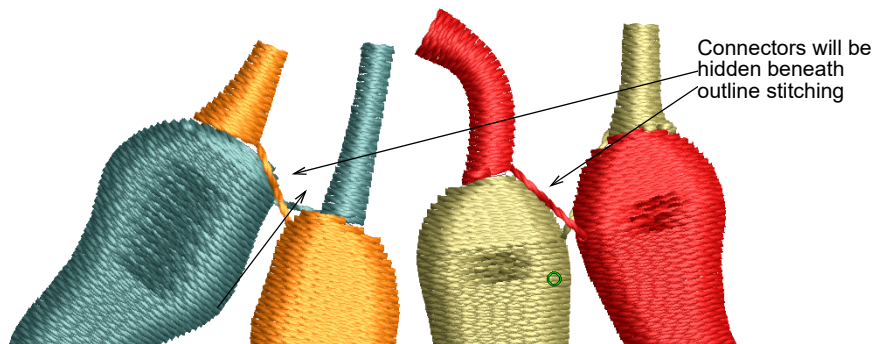
Tip: The **Closest Join** feature automatically connects consecutive objects by finding the nearest points, so you don't have to worry about where to start or end. But sometimes the closest join may not always be the best solution when hiding travel runs beneath cover stitches.

Add the lettering

Now we add lettering to the logo – the words 'Cuatro Hermanos', meaning 'four brothers' in Spanish, and below, the words 'Mexican Taqueria'.

Add color

> Use Color > Add Color to add a new color slot to the color palette.
>
> Use Color > Threads to search for and match threads from different charts, and assign for use.

First we add a lettering color. Click the **Add Color** icon and assign a yellow thread – e.g. Yellow Gold – to the new slot.

Click to assign

Color slot added and thread assigned
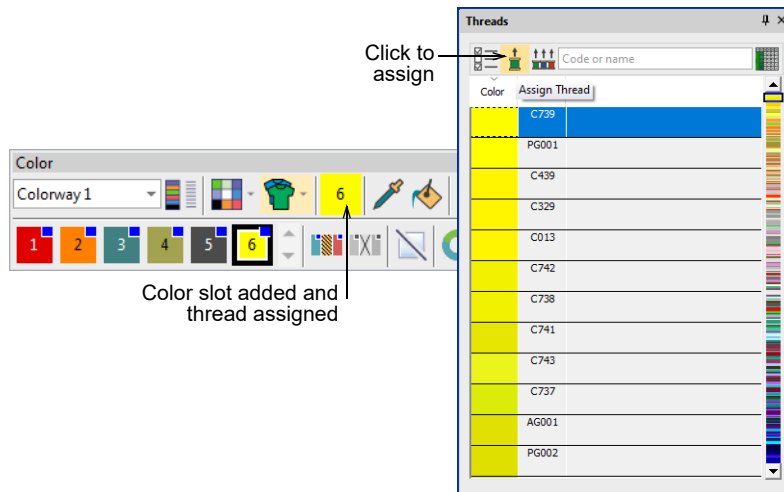
Add large lettering

> Use Toolbox > Lettering to add lettering directly on screen.

> Use Reshape Tools > Reshape to reshape selected objects, edit stitch angles, and adjust entry/exit points.

Choosing the newly added color, we create the text 'CUATRO HERMANOS' using TrueType font – e.g. 'Lucida Handwriting' – with an 'Arc CW' baseline. Adjust width to 85%. Digitize the arc. The TrueType letters are directly converted to embroidery lettering.
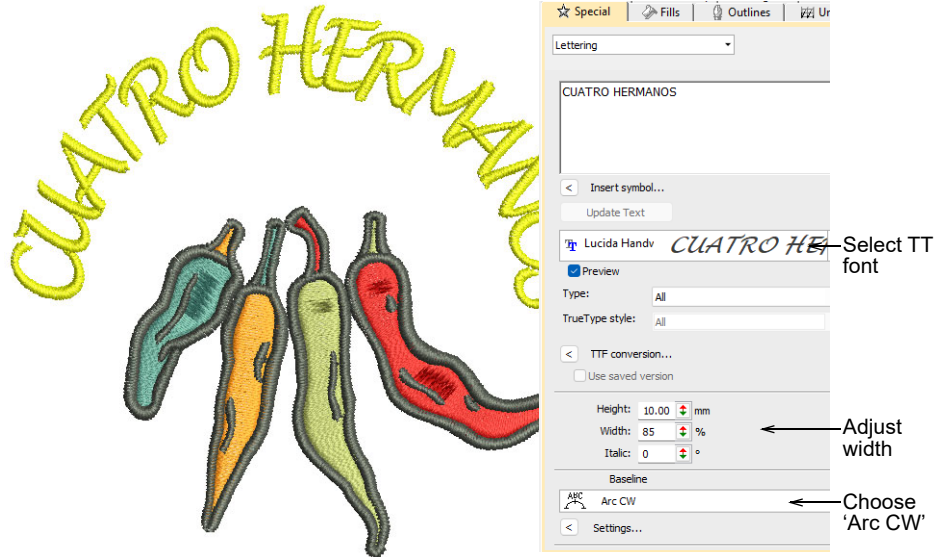
Tip: You can use the **TTF Conversion** button to convert an entire TTF font for use as an embroidery font.

Related topics...

◀ Convert letters on-the-fly (Reference Manual)
◀ Convert TrueType fonts (Reference Manual)

Add small lettering

For the words 'MEXICAN TAQUERIA', we choose embroidery font 'Small Block2' and set the height to 5 mm. Choose 'Free Line' baseline.

Choose 'Small Block2'

Set to 5 mm

Choose 'Free Line'

Related topics...

◄ Creating embroidery lettering (Reference Manual)

Adjust individual letters

> Use Reshape Tools > Reshape to reshape selected objects, edit stitch angles, and adjust entry/exit points.

Now we fine-tune the letter 'C' for a more personalized look. We scale the 'C' and adjust its position with the **Reshape** tool. Rotate the letter to fit. Adjust spacing between letters by dragging the diamond control point.

Letter scaled and rotate

Use diamond control point to position letter
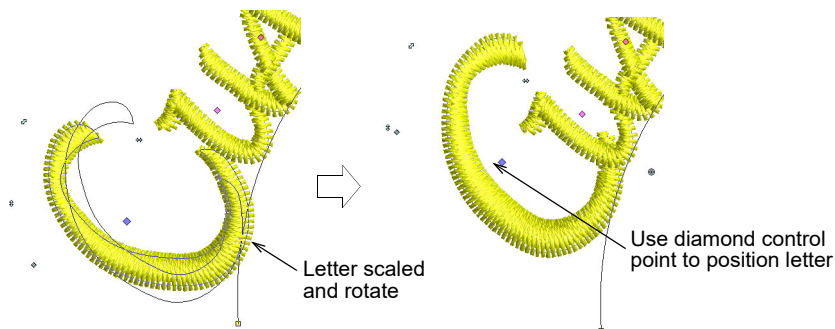
Remove overlaps by adjusting control points.

Adjust overlaps
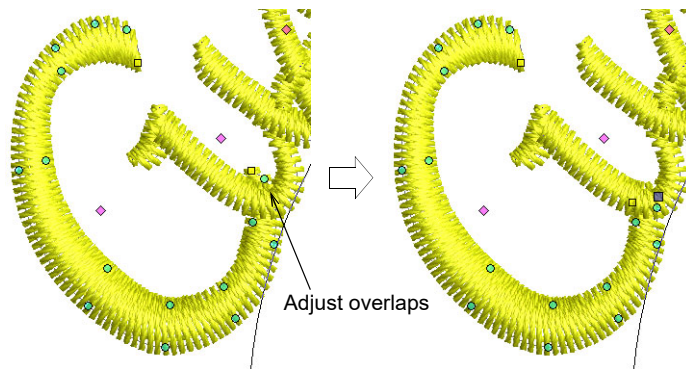
Fine-tune letter kerning along the baseline. Move each by dragging the diamond control point. Hold down **Ctrl** to move letters freely.

Fine-tune letter positioning

Related topics…

◀ Adjusting individual letters (Reference Manual)

◀ Reposition letters (Reference Manual)

Finalize the design

Our design is complete. All that remains are a few adjustments and a preview of the final stitchout.

Check stitching sequence

> Use View > Stitch Player to simulate embroidery design stitchout on screen.

Do a final check of the stitching sequence. If necessary, use the **Travel** tools to study the trim sequence again. Use **Stitch Player** to simulate the stitchout.

Related topics...

◀ Simulate design stitchouts

Visualize finished product

> Click View > Show Product to toggle product image on/off. Right-click to open the Product Visualizer docker.

> Use Zoom > Zoom to Product to view the entire product in the design window.

Turn on **Show Product** to see the product you have chosen. Check the whole appearance by clicking the **Zoom to Product** icon.

Related topics...

◀ Visualize products (Reference Manual)

Set start & end points for whole design

> Use View > Auto Start & End to toggle the Auto Start and End function
> on/off according to the current settings. Right-click to adjust settings.

It's easy to forget, but you should always set a design start and end point
prior to stitchout. Access the dialog by right-clicking the **Auto Start &
End** icon or via **Design > Auto Start & End**. Adjust settings as needed.

Set auto start /
end point

Design set to start
and end here
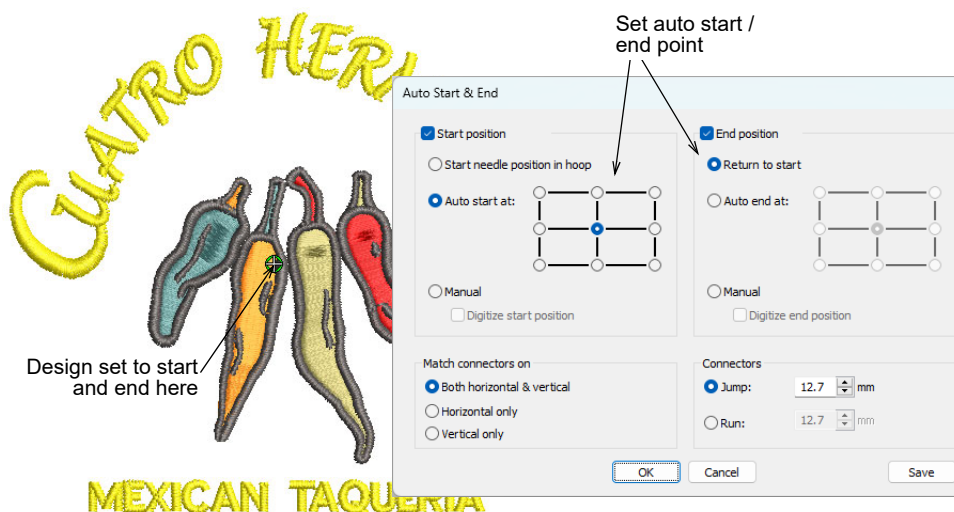
Select hoop

Click Hoop > Auto Hoop to prompt the system to select a suitable hoop automatically.

Click Zoom > Zoom To Hoop to view entire hoop in the design window.

We have already added hoops to our **My Hoops** list. Click **Auto Hoop** to auto-select a suitable hoop for the design. Or choose your preferred hoop from the droplist. Use **Zoom to Hoop** to check.

Choose hoop to comfortably accomodate design

Create production worksheet

Click Standard > Print Preview to preview the production worksheet on screen.

Open the **Print Options** dialog. Click **Options** to select the items to include on your worksheet, including the hoop.
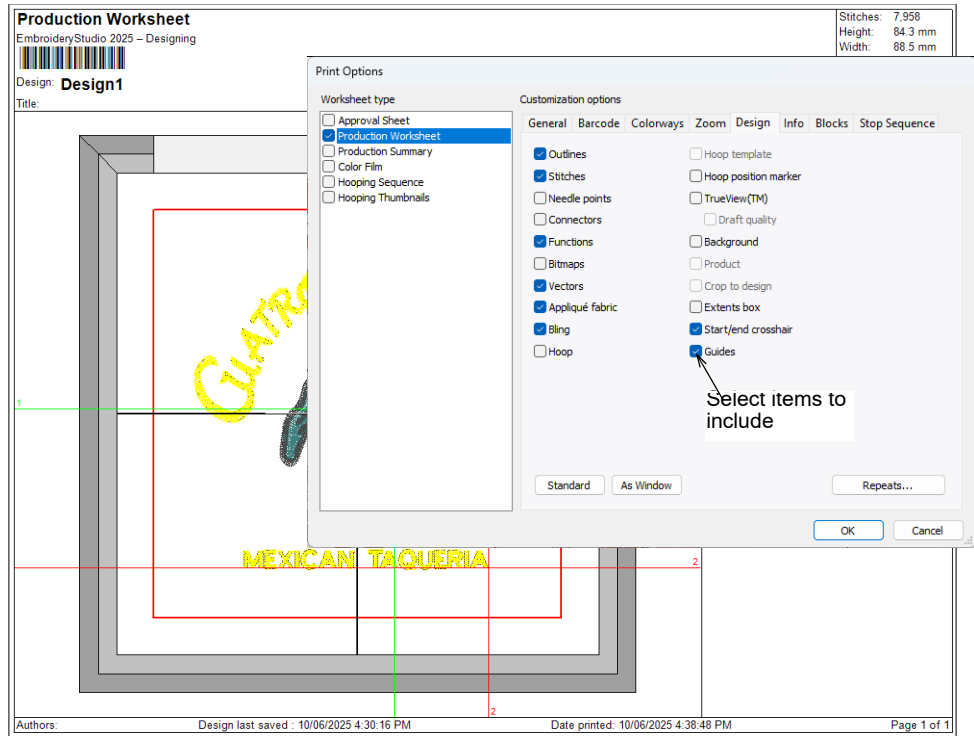
Tip: Compare your design with the 'Editing - Mexican Taqueria - Chest.EMB' sample design in the **Tutorials > Editing** folder.

Create the cap design

Part of our brief involves adapting the design for stitchout on a cap. This means re-sizing and changing the target fabric. Because of the way caps are stitched, it also means adjusting letter stitch sequencing.

Save design & change fabrics

Use Standard > Save Design to save the current design. Right-click to open the Save As dialog.

Save a copy of the design for caps. Here we call it 'Mexican Taqueria - Cap.EMB'. Change the fabric type via **Design > Auto Fabric**. Choose 'Pure Cotton'.

Choose pure cotton
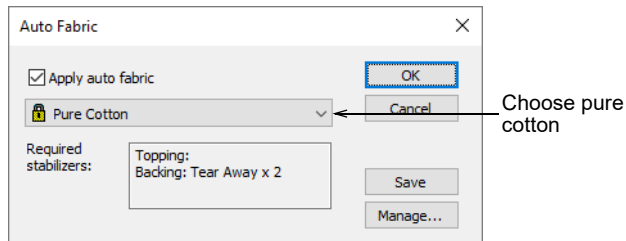
Related topics…

◂ Working with fabrics (Reference Manual)

Resize design

Resize the design to fit the front of a cap. Select all objects and set the height to 55 mm in the **Property Bar**. Make sure the aspect ratio is locked.

Change height to 55 mm

Aspect ratio locked
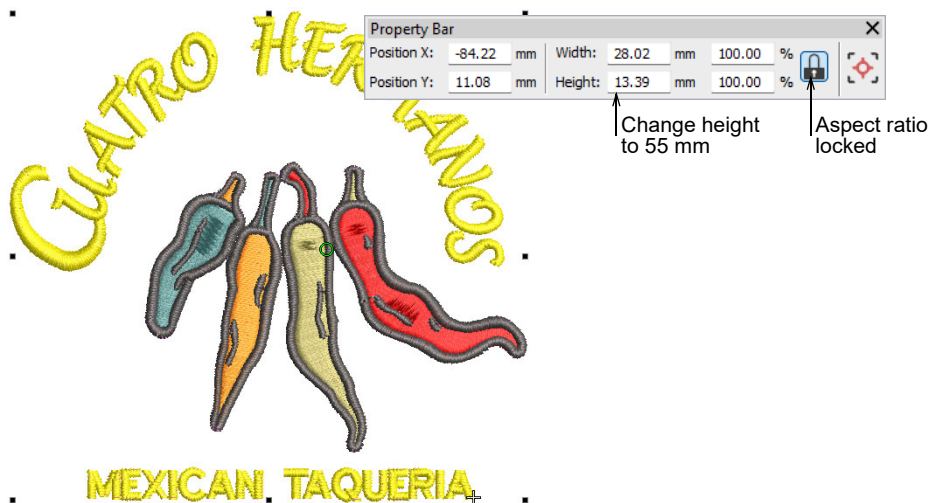
Related topics…

◂ Scaling objects (Reference Manual)

Change letter stitching sequence

You can specify the sequence in which letters are stitched in order to minimize registration problems on caps or difficult fabrics. For example, the **Center-out** option is especially useful when stitching on caps. Double-click the lettering objects to access **Object Properties**. Click the **Sequence** button. In the **Letter Sequence** dialog, choose the **Center-out** option with the **Closest Join** stitch method.

Click Sequence

Choose 'Center-out'   Choose 'Closest join'
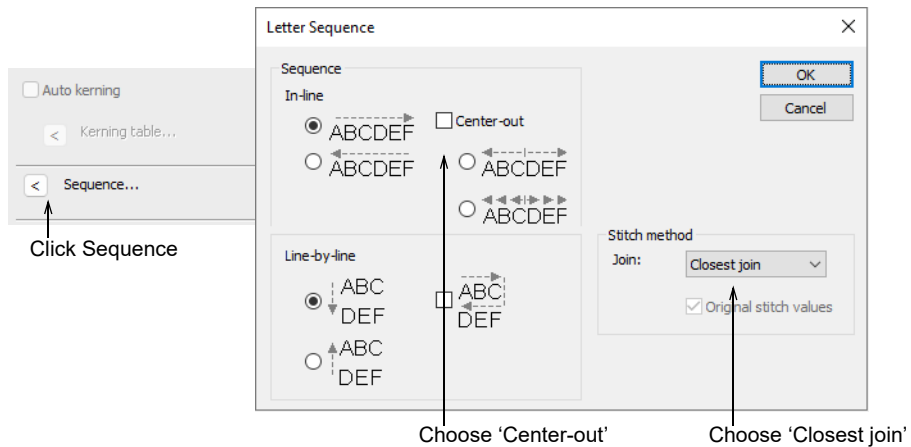
Related topics...

◄ Adjust letter sequencing (Reference Manual)

Visualize finished product

 Use Color > Product Visualizer to choose a garment or product backdrop on which to position your decoration.

 Click View > Show Product to toggle current product display. Right-click for Product Visualizer settings.

 Use Zoom > Zoom to Product to view the entire product in the design window.

Open the **Product Visualizer**. This time, we choose a cap as our product backdrop. Select black. Scale to fit – e.g. 120%. Check the appearance using **Zoom to Product**.

Choose 'Headwear'

Choose cap
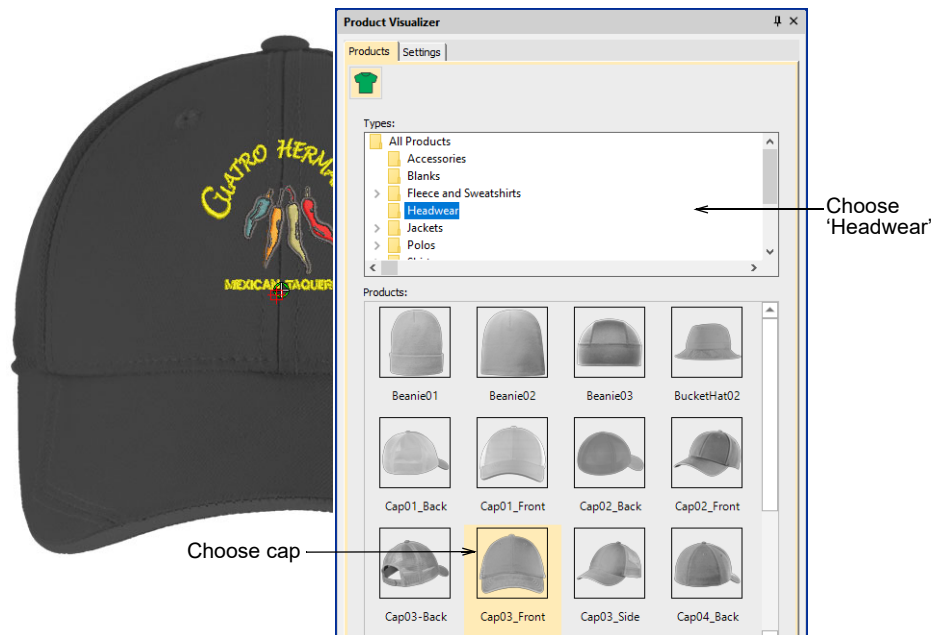
Related topics...

◀ Visualize products (Reference Manual)

Set the start point for the cap

> Use View > Auto Start & End to toggle the Auto Start & End function on/off according to the current settings. Right-click to adjust settings.

Having set the letter sequence to sew from the center out, we need the design to start at the center. In order to align the cap on the machine, set the start and end point to the lower-center, as shown. Align the needle on the machine where the needle position marker (white cross) appears.

Set auto start / end point

Design set to start and end here
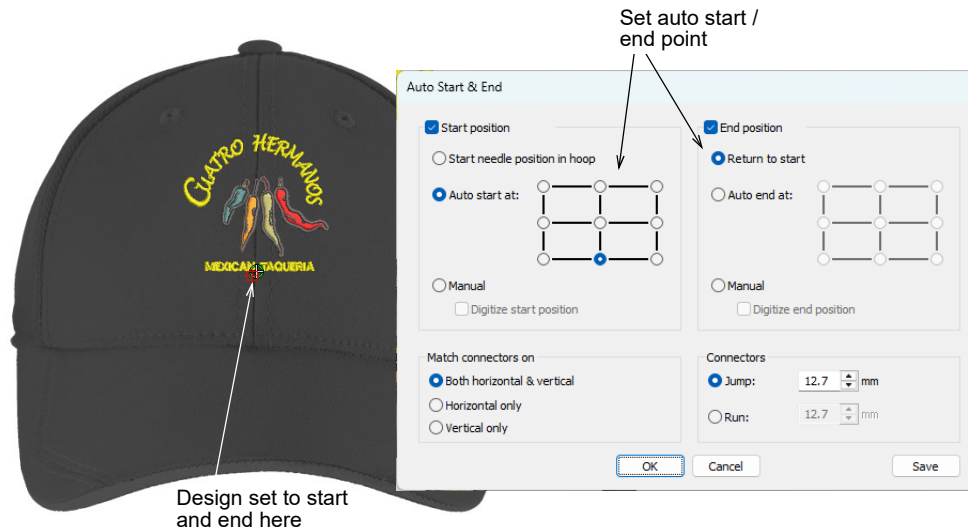
Related topics...

◀ Start & end points (Reference Manual)

Create worksheet

	Click Hoop > Auto Hoop to prompt the system to select a suitable hoop automatically.
	Click Zoom > Zoom To Hoop to view entire hoop in the design window.
	Click Standard > Print Preview to preview the production worksheet on screen.

Again use **Auto Hoop** to select a suitable hoop. Optionally, create a worksheet for your cap design.

-🔅-
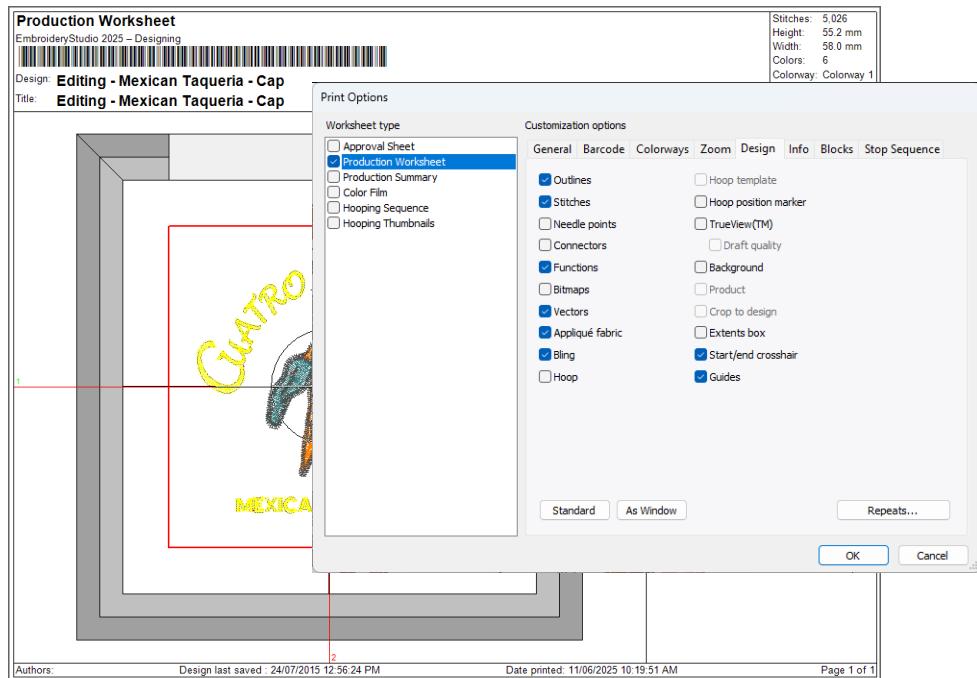
Tip: Compare your design with the 'Editing - Mexican Taqueria - Cap.EMB' sample design in the **Tutorials > Editing** folder.

Related topics...

◀ Design Hooping (Reference Manual)

◀ Print reports (Reference Manual)

Mixed Decoration

In this worked example, we explore the support BE EmbroideryStudio provides for mixed decoration. Here we combine three decoration types – digital print, embroidery, and bling – to create a mixed or 'multi-decoration' design. It will be applied to the front of a black T-shirt intended for attendees at a dance conference in New York.

This design is to be printed on digital printer, stitched on embroidery machine, and to have bling applied as a final step. Printed and sewn sections of the design need to be perfectly aligned.

Note: Download the tutorial files from the online help landing page and copy to your embroidery library. To view the sample 'Dance_Conference_T-Shirt.EMB' file, navigate to the **Tutorials > Mixed-Decoration** folder.

Copy tutorial files
to your embroidery
library
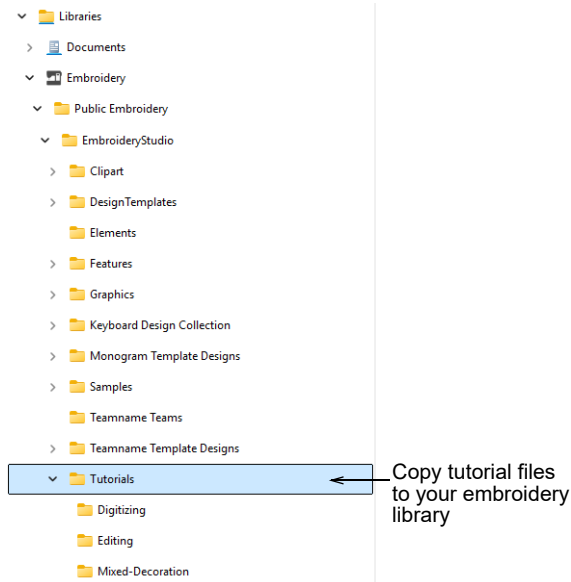
Set up the project

Use Standard > New to start a blank design based on the currently selected template. Hold down Shift and click to open New from Template dialog.

Use Color > Product Visualizer to choose a garment or product backdrop on which to position your decoration.

The first step in this and all projects is to specify the fabric, machine, and artwork you wish to use. BE EmbroideryStudio provides optimized settings the software will use to adjust for the type of fabric you are stitching on.

To set up the project...

1 Open BE EmbroideryStudio from the desktop icon or Windows **Start** menu. From the **Home** screen, click **New from Template** or, holding down the **Shift** key, click **New Design**.

New from Template

Template:	Normal.EMT
Auto fabric:	☑ Use auto fabric
	Pure Cotton
	Required stabilizers:
	Topping: Backing: Tear Away x 2
Background & display colors:	Change...
Machine Format:	Brother / Babylock

Save   OK   Cancel

Activate auto fabrics
and choose a target
fabric

Set background color
and swatch

Choose a target
machine format
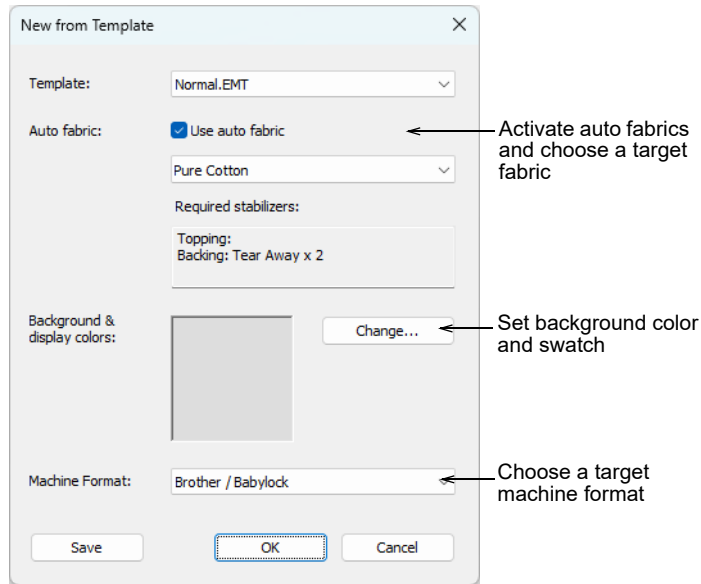
2 From the list, choose 'Jersey' for the fabric.

3 Select a suitable machine format – e.g. Brother – and click **OK**.

Predefined settings for the selected fabric will apply to all embroidery objects created in the design. The selected fabric is displayed in the **Status Bar**.

4 Open the **Product Visualizer** and choose 'T-Shirts > Mens > T-Shirt short sleeves (front)'. From the **Settings** tab, set the color to black.

Set article size and color

Select article
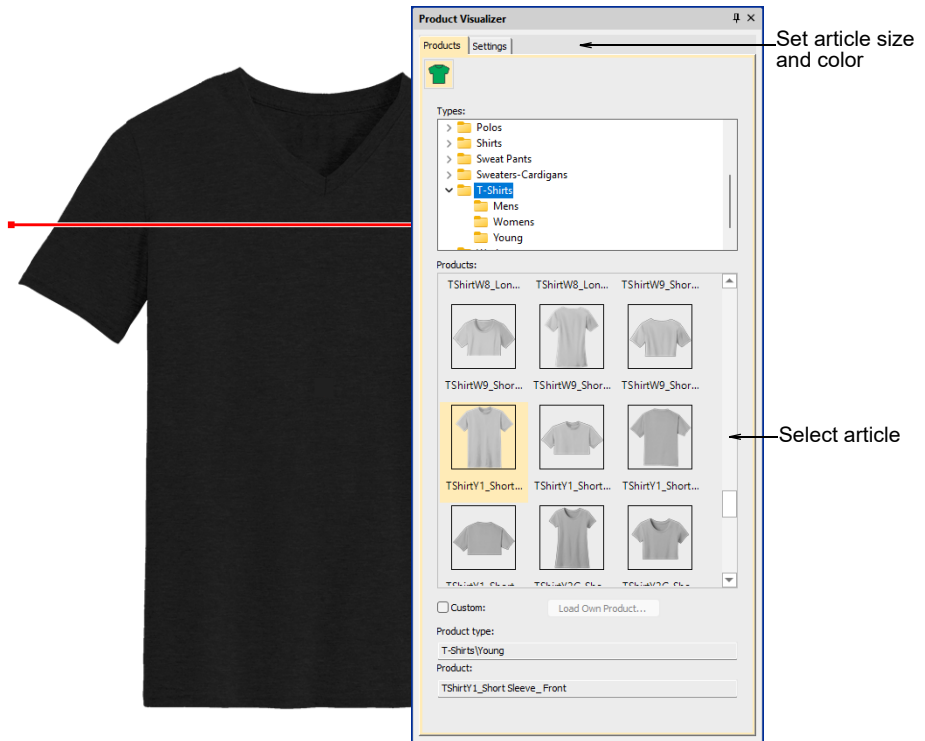
5 We want to start building this project in the CorelDRAW®
Graphics Suite graphics suite so we choose **CorelDRAW Graphics**.

Switch between operating modes

Wilcom Workspace

Switch to Wilcom Workspace to access full embroidery creation and editing toolset.

ℹ️ **Press <F1> for more help**

CorelDRAW Graphics

Switch to CorelDRAW Graphics to access full graphic creation and editing toolset.

ℹ️ **Press <F1> for more help**
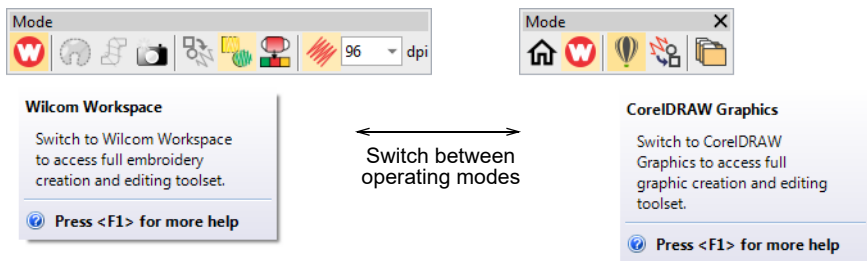
Related topics...

◂ Operating modes

◂ Create designs from templates

◂ Fabric & product backgrounds (Reference Manual)

◂ Visualize products (Reference Manual)

Import & place design elements

> Click Standard > Import Embroidery to import embroidery design file into current design.

Once we've switched to **CorelDRAW Graphics**, we start building our design by importing original artwork provided by the client.

To import and place the design elements...

1 Select **Import** from the **Standard** toolbar or **File** menu.

Navigate to the Mixed-Decoration folder

Select artwork to import
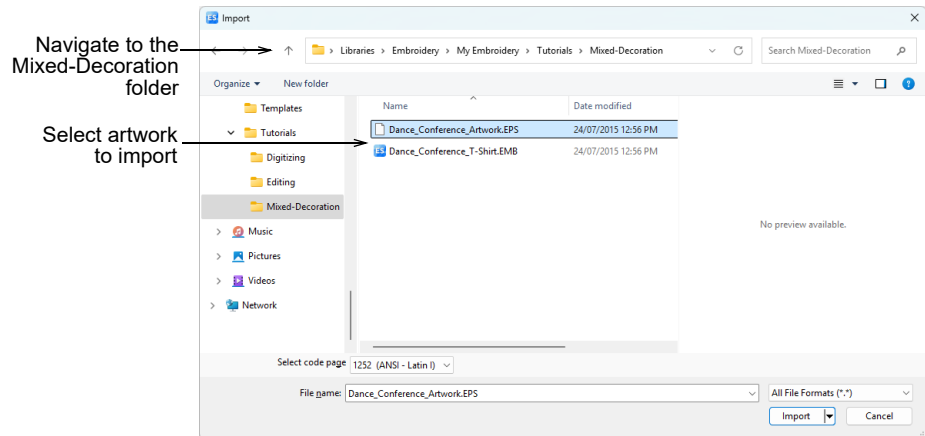
2 Navigate to the **Tutorials > Mixed-Decoration** folder.

3 Select the 'Dance_Conference_Artwork.EPS' file and click **Import**. Since the artwork is provided as an EPS file, you are prompted to import text as pure text or as vector curves.

Import text as curves
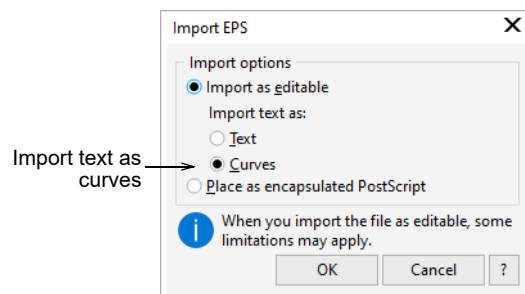
4 Choose 'Curves' and click **OK**.

5 Press **Enter** to center the imported artwork on screen.

255.628 mm   100.0 %
414.352 mm   100.0 %   — Note size of artwork
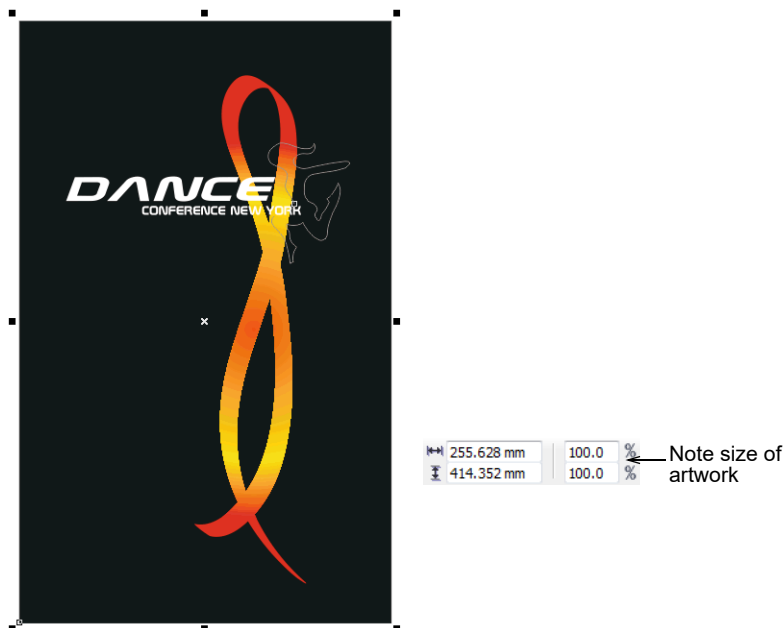
6 Check the size of the artwork in the **Object(s) Size** fields in the **Graphics Property** bar. It should approximate 256 x 414 mm.

Convert text to embroidery

	Use Mode > Convert Graphics to Embroidery to convert selected graphics to embroidery and switch to Wilcom Workspace.
	Use Mode > Tag Fill as Turning Satin to tag narrow shapes for conversion to turning stitching.
	Use View > Show Vectors to show and hide vector graphics. Right-click to set image display options.
	Click View > Show Product to toggle product image on/off. Right-click to open the Product Visualizer docker.
	Click Zoom > Zoom to invoke zoom mode – zoom in or out via left and right mouse clicks.

We're now ready to convert the artwork text to embroidery. Since we are treating the lettering as 'curves' rather than 'text', we will be converting to normal embroidery rather than lettering objects.

To convert design to embroidery...

1 Ungroup the artwork.

Ungroup objects
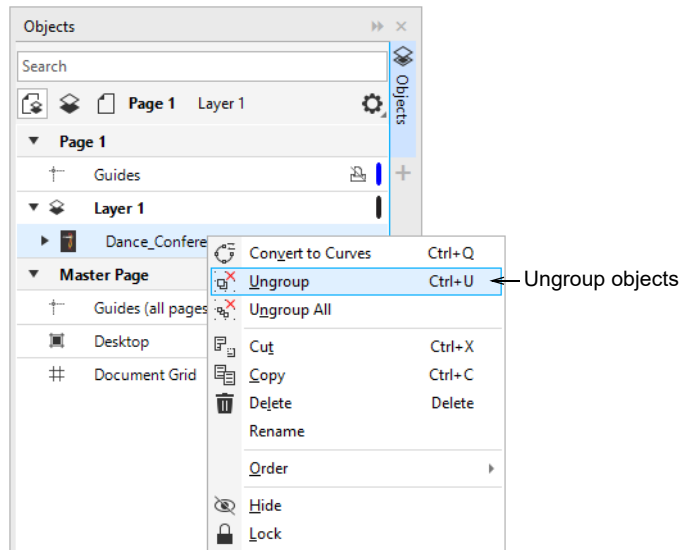
2 Holding down the **Shift** key, select the letters of the word 'DANCE' on screen. Alternatively, holding down the **Ctrl** key, select the curves in the **Object Manager**.

Hold down Ctrl key and click to select multiple items
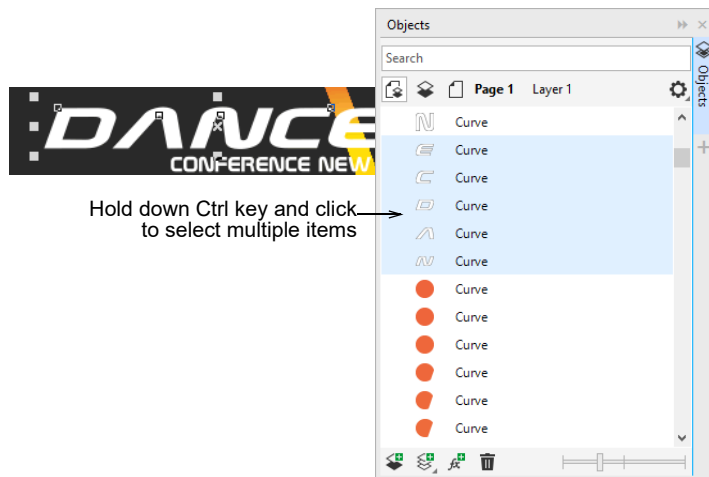
3 Toggle on **Tag Fill as Turning Satin** and click **Convert Graphics to Embroidery**.

BE EmbroideryStudio switches to **Embroidery** mode and automatically converts all selected objects to embroidery.

4 Toggle off **Show Vectors** and **Show Product**, and zoom in for a closer look.

Tip: The stitch quality of direct conversion is generally good. You can use the **Reshape** tool to fine-tune overlaps – e.g. on the letter 'D'.

Fine-tune overlap
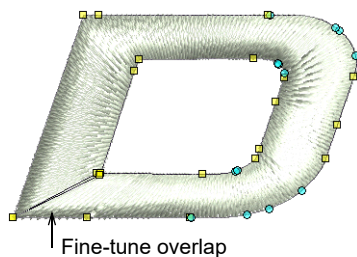
5   Optionally, select all objects and turn off **Auto split** in **Object Properties**.
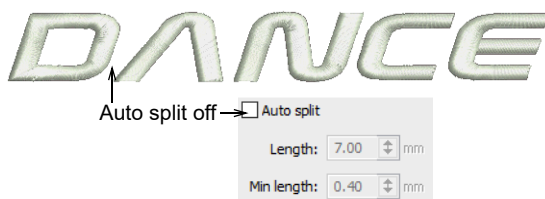
Auto split off →

Add text to design

	Use View > Show Vectors to show and hide vector graphics. Right-click to set image display options.
	Use Toolbox > Lettering to add lettering directly on screen.
	Use Reshape Tools > Reshape to reshape selected objects, edit stitch angles, and adjust entry/exit points.

We add the rest of the text using a native embroidery font.

To add text to the design...

1   Toggle on **Show Vectors**.

2   In the **Color-Object List** select the artwork icon, right-click, and select **Lock** or press **K**.

Lock artwork in position
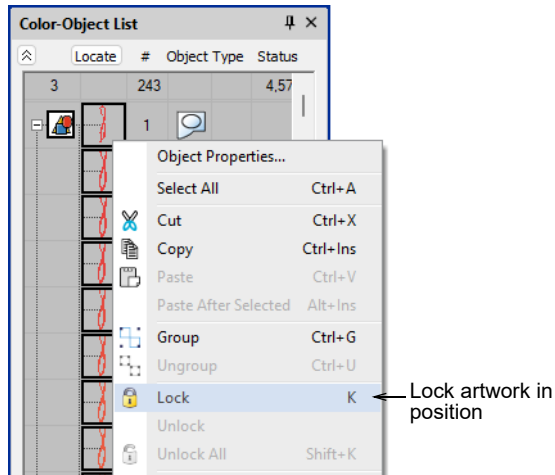
3 Select white from the color palette.

4 Right-click the **Lettering** icon. The **Object Properties > Special > Lettering** dialog opens.

Enter text here

Click to create text

Choose 'Lazer' alphabet
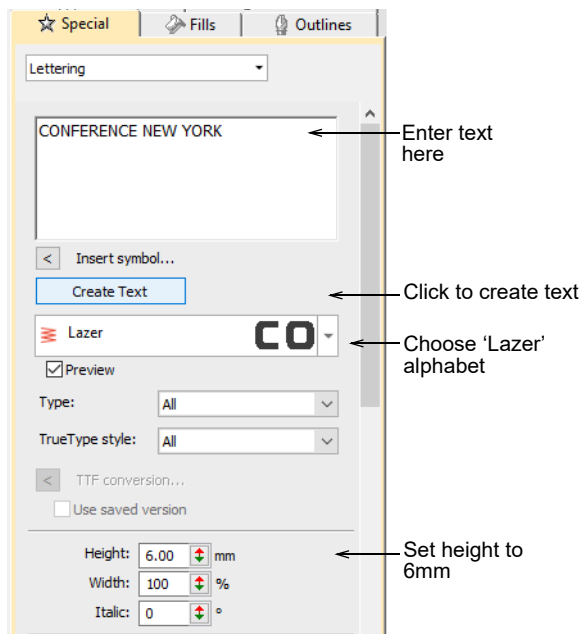
Set height to 6mm

5 Type 'CONFERENCE NEW YORK' in the text entry panel.

6 Select **Lazer** from the dropdown list and set **Height** to 6mm.

7 Click **Create Text** and click within the design window to create the text on screen.

8 Drag text into position.

9 Use the **Reshape** tool to adjust lettering size, spacing, and kerning to match the artwork.

Adjust text to match original artwork

Related topics...

◄ Create lettering with object properties (Reference Manual)

◄ Reposition letters (Reference Manual)

Convert outlines to bling

Use Bling > Bling Palette Editor to select bling shapes from a library.

Use Bling > Bling Run Auto to create a string of rhinestones along a digitized line according to current settings.

In this step, we convert our dancing figure outline using the **Bling** tool. This tool allows you to create input to two bling processes: hot-fix template production or direct-to-garment.

To convert outlines to bling...

1 Click **Bling Palette Editor**.

2 Choose a round ss12 bling style.

Choose ss12
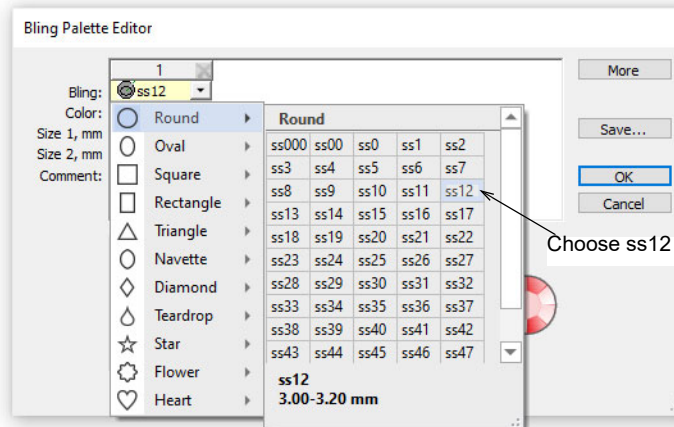
3 Choose a grayish color from the droplist and click **OK**. This will represent the transparent 'crystals' we will be using during production.

4 Locate the dance figure outline in the **Color-Object List**, right-click and unlock.

5 Right-click the object in the design window, and select **Convert > Convert to Bling Run**. Alternatively, click the **Bling Run Auto** icon on the **Bling** toolbar.
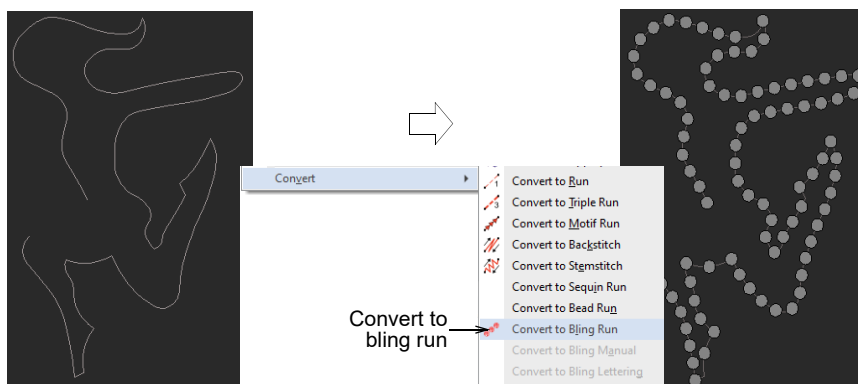
6 Double-click the bling object to check its properties. Note that the bling count is 89. Note too that spacing is set to 1.0mm by default. This is the minimum necessary for template cutting machines.
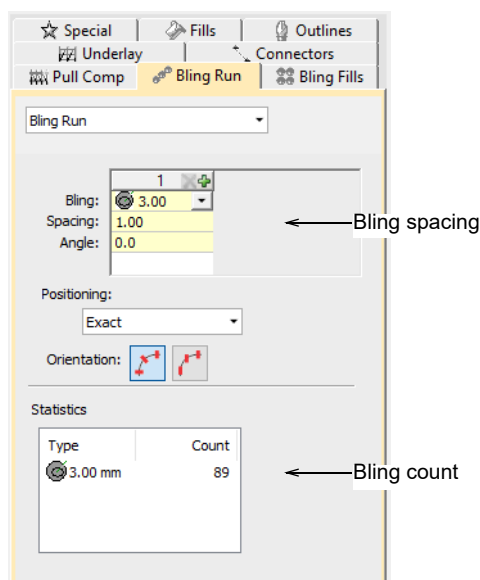
Related topics...

◀ Bling Digitizing (Reference Manual)

Visualize finished product

> 👕 Click View > Show Product to toggle product image on/off. Right-click to open the Product Visualizer docker.

BE EmbroideryStudio lets you to choose a garment or product template on which to position your decoration. This assists in displaying location, size and overall appearance, for visualization of concepts and approval purposes.

To visualize the finished product...

1 In the **Color-Object List**, select the black background, frame, vectors comprising 'DANCE' and 'CONFERENCE NEW YORK', and delete them. Only the ribbon and dance figure remain.

Select unwanted vector objects
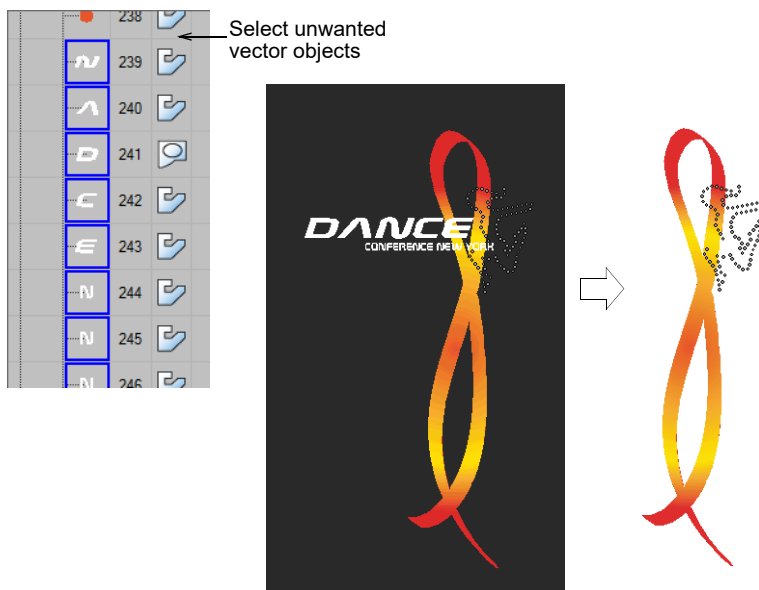
2 Toggle on **Show Product**.

3 Press **Ctrl+0** to zoom to product. The product image is centered in the design window at the selected scale.

4 Select all objects and adjust their position over the product image.

Align embroidery & digital print

	Use View > Auto Start & End to toggle the Auto Start & End function on/off according to the current settings. Right-click to adjust settings.
	Use View > TrueView™ to change between normal view and TrueView™.
	Use View > Stitch Player to simulate embroidery design stitchout on screen.

To ensure you get perfect alignment between embroidery and digital print, you need to tell BE EmbroideryStudio where to start sewing the embroidery part of the design. To do this, we choose a reference point on the print design which the embroidery machinist can use when aligning the needle.

To align embroidery and digital print...

1 Right-click **Auto Start & End**.

Return to digitized start point

Choose to digitize start point
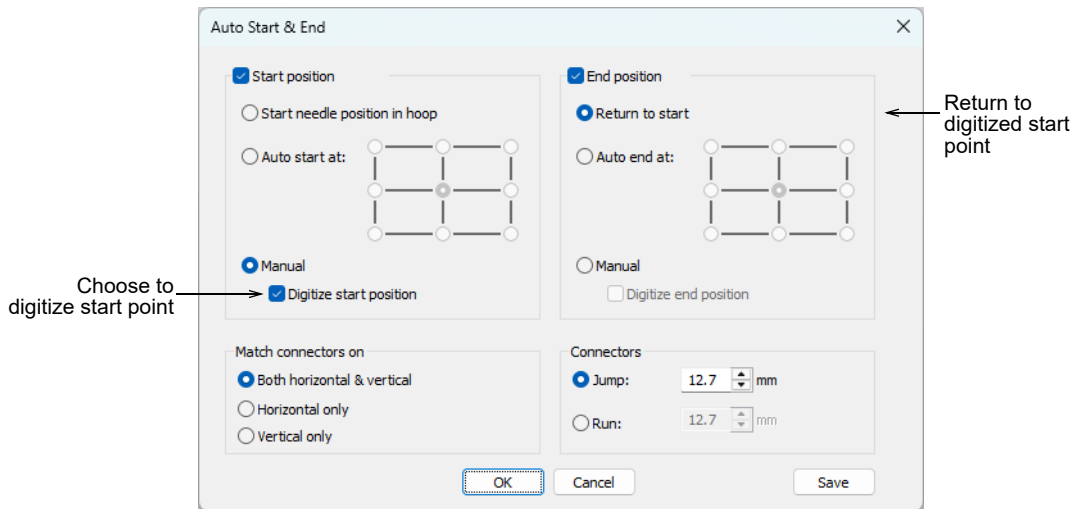
2 Choose **Digitize start position** and **Return to start** and click **OK**. BE EmbroideryStudio prompts you to click the point on screen where you want the design to start and finish.

3 Click the intersection of the ribbon. This manually sets the start and end point of the embroidery. During stitchout, the needle starts and ends at this point.

Click to set start and end at intersection of ribbon

Related topics...

◀ Start & end points (Reference Manual)

Check stitching sequence

> Use View > Stitch Player to simulate embroidery design stitchout on screen.

	Left/right-click **Travel** > **Travel by Trim** to travel to previous or next trim function.
	Use **Arrange** > **Apply Closest Join** to (re-)apply closest join to objects after editing.

For production purposes, it's always a good idea to check stitching sequence, and adjust entry and exit points for a smooth stitchout.

To check the stitching sequence...

1 Turn off **TrueView™** and check the start and end points by traveling through using the **Travel** functions or **Stitch Player** tool.

Check stitching sequence

2 In the **Color-Object List**, select embroidery objects and hide everything else. Notice that the 'DANCE' stitching sequence starts with the letter 'N'. Embroidery objects are created in the same sequence as the graphics file. This is not necessarily the best stitching order.

Click and drag objects into correct stitching sequence
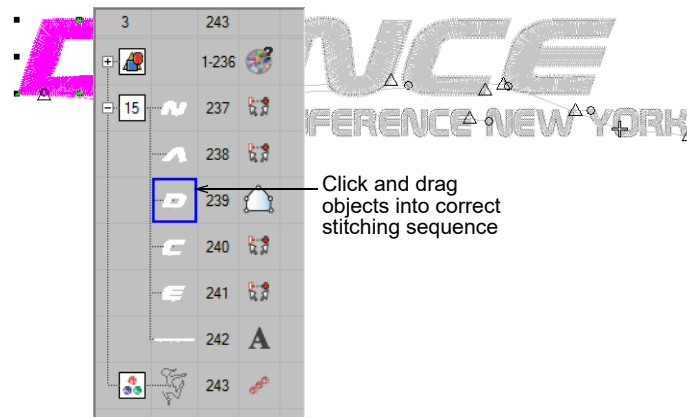
3 Click and drag the lettering objects into the stitching sequence. Because we have set the start point at the intersection of the ribbon, the nearest letter is 'E'. So we will sequence backwards from 'E' to 'D' and finish with the 'CONFERENCE NEW YORK' lettering.

Objects resequenced
for efficient stitchout

4 Travel through the design again or run **Stitch Player**. You may notice some unnecessary travels between letters. This is because, following resequencing, entry/exit points of each object are no longer optimally placed.

5 Select all embroidery objects and click **Apply Closest Join** on the **Arrange** toolbar.

6 Travel once more through the design or run **Stitch Player** to verify the stitching sequence.

Related topics...

◀ Viewing stitching sequence

◀ Sequencing embroidery objects (Reference Manual)

◀ Minimizing connectors (Reference Manual)

Send design to production

We now use the **Export Multi-Decoration Files** capability to export the file formats used in our multi-decoration design. The system recognizes whether a design element is embroidery, graphic, appliqué, or bling. It

displays each in an export dialog with a list of corresponding file types to choose from.

To send the design to production...

1 Select **File > Export Multi-Decoration Files**.
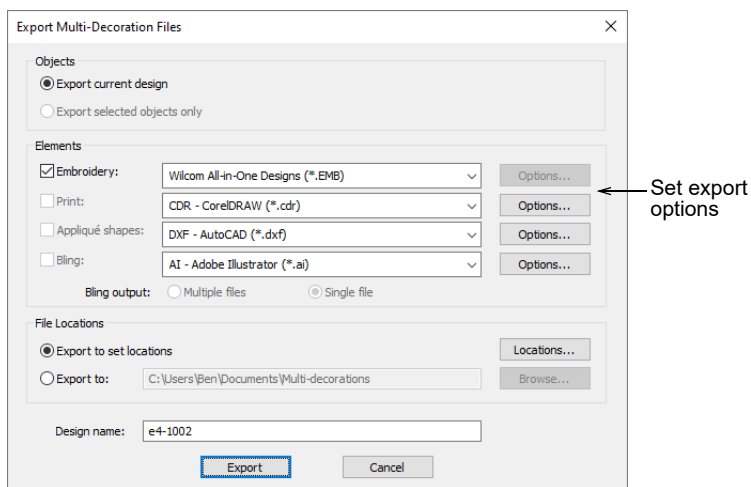
Set export options

2 Select **Export Current Design** and adjust options to suit:

‣ Select 'PNG' for digital print. The gradient effect is hard to achieve with screen print. The preset resolution is set to 300 DPI with a transparent background.

‣ For bling, you can choose AI format for semi-automatic machines. For any other cutting machines, you can save directly to CDR format.

‣ For embroidery, choose for example, 'DST'. This is a popular stitch file format which can be read by Tajima style machines.

3 Choose the **Export to** option and specify a location – e.g. USB stick. All files will be output to that location.

Tip: For larger production environments, you may want to set specific network locations for each file type. You do this via the **Locations** button.

4 Click the **Export** button to execute the multi-decoration file export. The system writes the selected multi-decoration components to the selected location/s.
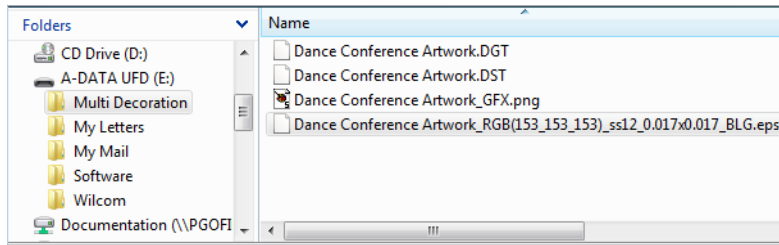
5 Optionally, print out a production worksheet. You may choose to display the background product for positioning purposes.
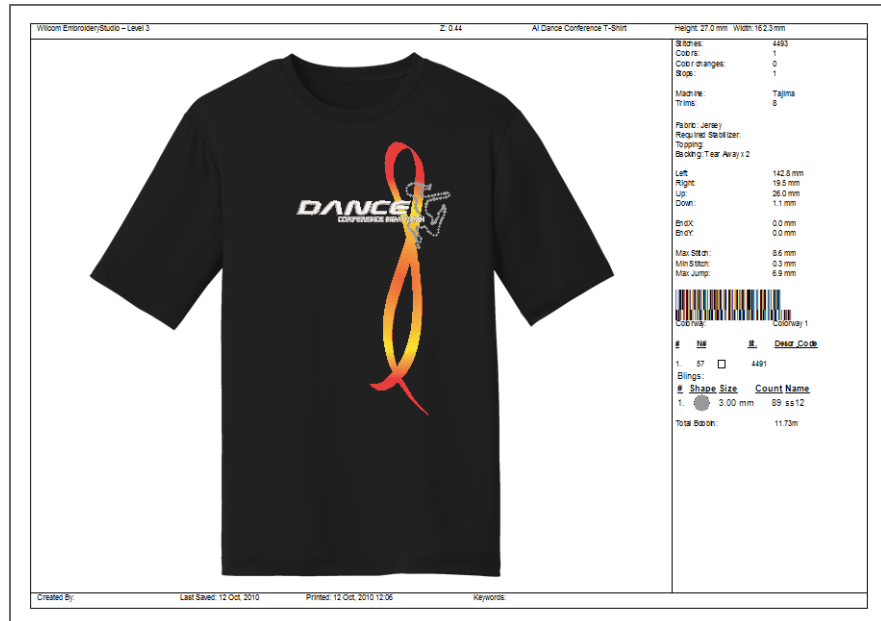
Tip: Compare your design with the 'Dance_Conference_T-Shirt.EMB' sample design in the **Tutorials > Mixed-Decoration** folder.

Related topics...

◀ Multi-Decoration Output (Reference Manual)
◀ Set export locations (Reference Manual)
◀ Customizing design reports (Reference Manual)

QUICK REFERENCE

The BE EmbroideryStudio design window contains the pulldown menus and toolbars described in the following section. Some commands are available both as toolbar buttons and menu items. Some are exclusive to either category. The most commonly used commands are available as 'keyboard shortcuts'. This section contains a complete summary of all commands available in the software.

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Tip: Standard MS Windows® **Alt** key shortcuts also apply. Use the **Alt** key with the letter underlined in the menu. To cancel an operation, press **Esc** twice.

Menus & Toolbars

There are two fundamental design modes in BE EmbroideryStudio:

Wilcom Workspace

This mode allows you to create and edit embroidery objects using the embroidery digitizing toolset.
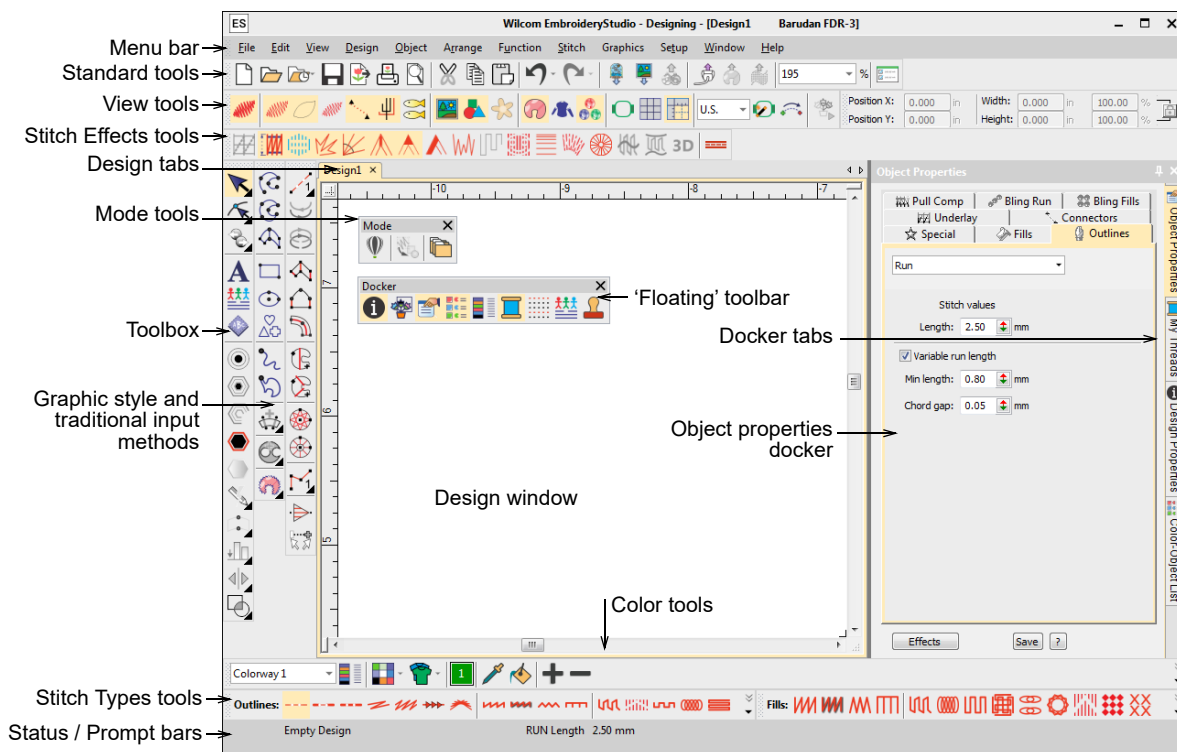
CorelDRAW Graphics

This mode allows you to create and edit vector objects using the CorelDRAW® Graphics Suite toolset. For a detailed description of the **CorelDRAW Graphics** interface, refer to the electronic User Guide available via the MS Windows® **Start > Programs** group. Alternatively, use the online help available from the **Help** menu.

BE EmbroideryStudio menus

The BE EmbroideryStudio design window menu bar contains the pulldown menus described below. Some commands are also available as toolbar buttons.

File menu

New design	Create new blank design based on a fabric or template.
New from template	Create new design from a template.
Open design	Open existing design.
Open recent	Most recently used files listed – select to open file.
Open backup design	Opens directly onto the backup folder for quick access to backup files in case of software failure.
Close	Close current design window.
Close all	Close all open design windows.
Save	Save current design.
Save as	Save current design with a different name, location or design file format.
Save as template	Save current design as a design template for future use.
Save as monogram template design	Save current design as a monogram template for future use with the Monogramming tool.
Save as teamname template design	Save current design as a teamname template for future use with the Team Names tool.
Export machine file	Convert current design to a machine format other than your selected machine.
Print	Print the current design.
Print preview	Show production worksheet / approval sheet. Print from preview window.
Import embroidery	Insert one design into another to create combined design. Color palettes are also combined. Colors with same RGB values are automatically identified as having the same thread color.
Import graphic	Import artwork into current design as a backdrop for manual or automatic digitizing.
Scan graphic	Scan images directly into BE EmbroideryStudio.
Export design as vector	Save design as vectors in EMF or WMF format.
Export multi-decoration files	Export mixed decoration design components as file formats for use by control software or machine.
Capture design bitmap	Save design image as bitmap exactly as it appears on screen.
Capture virtual decoration bitmap	Output high resolution digital print TrueView for 'virtual embroidery'.
Send via email	Send design as email attachment.
Export design properties	Output current design information and machine runtime settings to CSV file.
Send to Connection Manager	Connect to supported machines via proprietary machine software.
Send to Embroidery Connect	Send current design to named EmbroideryConnect device.
Queue design	Send current design to EmbroideryConnect design queue to be 'pulled' from machine.
Send to appliqué cutter	Send appliqué shapes from design file to laser cutter.

Send to bling cutter	Send vectors for any bling in a multi-decoration design to a supported cutting machine. Configure the machine via Setup.
Cross stitch	Access Cross Stitch application.
Sign out and exit	Exit BE EmbroideryStudio and sign out of Wilcom account.
Exit	Close all open designs and exit BE EmbroideryStudio.

Edit menu

Undo	Undo previous action.
Redo	Redo previously undone action.
Cut	Cut selection and place on Clipboard.
Copy	Copy selection and place on Clipboard.
Paste	Paste contents of Clipboard. Options available in Options > Edit tab.
Paste after selected	Override current defaults and paste directly after selected object in the stitching sequence.
Paste special >	Override current Paste setting and select from paste options available in Options > Edit tab.
Duplicate	Duplicate selected objects within the design (rather than copy to clipboard).
Duplicate with offset	Duplicate an object with an offset. Adjust settings via the Options > Edit dialog.
Delete	Delete selected objects.
Select / deselect all	Select or deselect all objects in a design.
Select by color / stitch type	Select all objects of the same color or same stitch type.

Close curve with straight line / curve line	Close an open outline with a straight or a curved line.
Reverse >	Reverse stitch direction to control push-pull effect – affects Jagged Edge, Contour Stitch and E Stitch objects. Can also affect Tatami offsets, Flexi Split and Motif Run orientation.
Smooth curves	Apply curve 'smoothing' to both embroidery and vector objects.
Transform >	Transform selected objects using a combination of reference points and numeric values. Rotate selected objects with the aid of reference points alone.
Envelope >	Apply Bridge, Pennant, Perspective, and Diamond effects to lettering objects.

View menu

TrueView	Toggle between normal (stitch) view and TrueView™.
Show >	Access same design viewing commands as available on View toolbar.
Flip sequins	Toggle between front and reverse sides of sequins in flip sequin designs.
Hoop	Show/hide hoop.
Hoop template	Show/hide hoop template as an alternative to grid lines, in order to align design at correct location and orientation.
Show grid	Show/hide grid.
Show rulers & guides	Show/hide rulers and guides.
Zoom >	Zoom in to selected area of design.
Zoom 1:1	Show design at actual size.
Zoom factor	Set precise viewing scale.

Zoom in/out 1.25x	Zoom in/out for greater or lesser detail.	Auto fabric	Change current fabric type and associated settings.
Zoom in/out 2x	Show design at twice/half current size.	Auto hoop	Prompt system to select a suitable hoop from My Hoops list.
Zoom to fit	Show whole design in design window or just selected objects.	Background & display colors	Change background colors, fabric swatches, and display colors for current colorway.
Zoom to selected	View selected objects in design window.	Auto start & end	Access automatic design start/end settings.
Zoom to product	View whole product backdrop in design window.	Remove small stitches	Automatically remove unwanted small stitches.
Zoom to hoop	View whole hoop in design window.		
Pan	Pan across current design.	Repeats	Use in combination with Show Repeats tool to define design repeat settings for continuous and overlapping designs.
Previous view	Return to previous view.		
Center at current stitch	Center design in design window at current stitch cursor position.		

Object menu

Measure	Measure distance between two points on screen.	Make properties current	Make properties of a selected object current for the design.
Stitch player	Simulate embroidery design stitchout on screen.	Apply current properties	Apply current settings to selected objects.
View by color	View embroidery objects by color – e.g. when resequencing objects.	Apply favorite style	Assign up to 10 favorite styles via Manage Styles. Select object and click button to apply.
View all colors	Show all colors after activating View by Color.	Apply style	Apply predefined style to selected objects.
View by machine function >	View machine Chenille and Schiffli functions – Chain/Moss, Stepp/Blatt, etc.	Use for Florentine / Liquid effect	Make guidelines for Florentine or Liquid effects.
Refresh screen	Refresh screen display.	Create motif	Add individual motifs to a design. Save own motifs for future use.

Design menu

Design properties	Show design information – size, number of stitches, job order details, etc – and add comments for worksheets.	Create program split	Turn embroidery or drawing objects into patterns for use in Program Split fills.
		Create letter	Access command used in custom fonts. See Custom Lettering (Reference Manual).
Select machine format	Select machine format corresponding to embroidery machine you intend to use.	Create user-refined letter	Save a reshaped letter as a 'user-refined letter'. Only available when selected in Reshape mode.
Machine format settings	Define values to encode when outputting to a specific machine format.		

Update kerning settings	Update kerning settings for contiguous pairs of selected letters of the same font. Only available when Automatic Kerning is in use.
Create sequin shape	Define sequin shapes with custom hole position and size. Save to custom sequin library.
Create sequin fixing	Define custom fixing stitches to support multi-head sequin devices.
Set color	Change color of consecutive objects of same color.

Arrange menu

Group / Ungroup	Group or ungroup selected objects.
Lock / Unlock all	Lock selected objects or unlock all objects in a design.
Branching	Automatically sequence and group like embroidery objects.
Apply closest join	Join selected objects at the closest point. Re-apply closest join after editing.
Break apart	Split branched objects – monograms, appliqués, lettering, etc – into components. Allows each to be edited individually.
Sequence >	Resequence selected objects in order selected, or resequence objects by color to reduce color changes.
Align >	
Space evenly >	Same functions as the Arrange toolbar. See Arrange tools for details.
Make same size >	
Shaping >	Same functions as the Shaping toolbar.
Remove overlaps	Remove the underlying layer of stitching in overlapping objects.

Function menu

Penetrations	Toggle Penetrations function on/off. Engage needles or borers, or disengage to create jumps.
Borers	Toggle Borers function on/off.
Insert Stop	Insert Stop function at current stitch cursor position.
Insert Tie-off	Insert a tie-off.
Insert Trim	Insert a trim.
Insert Empty stitch	Insert an empty stitch.
Insert Empty jump	Insert an empty jump.
Insert function	Insert machine function at current stitch cursor position.
Clear function	Remove machine functions from current stitch cursor position.
Edit function	Edit machine function at current stitch cursor position.

Stitch menu

Generate stitches	Generate stitches for selected objects.
Stitch edit selection	Select a range of objects as you travel through the design.
Process stitches	Adjust stitch density of and/or scale whole or selected parts.
Recognize objects / outlines	Recognize new or revised object outlines after stitch editing – use with machine files opened without object/outline recognition.
Split object	Split object in two at current needle position. Use with Travel by Stitch functions.

Graphics menu

Import graphic	Import artwork into current design as a backdrop for manual or automatic digitizing.
Instant smart design	Automatically create embroidery from imported artwork instantly.
Smart design	Create whole embroidery designs directly from imported artwork.
Keep graphic objects	Retain original artwork during conversion.
Color matching method	Set color matching for auto digitizing. Add or match bitmap colors to palette, or match to thread colors in selected chart/s.
Crop bitmap	Crop bitmap images to remove unnecessary detail and save processing time.
Remove crop	Remove cropping area.
Finalize crop	Turns a 'virtual crop' into a 'hard crop' by reducing an image to its new visible extents.
Prepare bitmap colors	Prepare bitmap images for automatic digitizing.
Edit using >	Edit bitmaps using Paint, Corel PHOTO-PAINT, or Paint Shop Pro.
Turning satin object	Fill narrow column shapes with turning stitching.
Tatami fill object with holes	Fill large shapes with tatami stitching, preserving any holes
Tatami fill object	Fill large shapes with tatami stitching, ignoring any holes.
Centerline run object	Create centerlines in narrow shapes with Run stitching.
Outline run object	Create outlines around shapes with Run stitching.
Auto trace to vectors	Convert artwork to vector objects. These can be converted to embroidery objects.
Adjust bitmap	Adjust image lightness and contrast.
Photo Flash	Create whole embroidery designs directly from photographs.
Color PhotoStitch	Convert photographs and other bitmap artwork into multi-colored embroidery.
Reef PhotoStitch	Convert photographs into reef-like embroidery.
Add bitmap colors	Assign matching thread colors from selected chart/s to the current colorway.

Setup menu

Options	Access current settings for object display.
Manage thread charts	Define your own thread charts. When you create a thread chart, you are creating a store of colors for future use.
Manage auto fabrics	Modify existing fabric definitions and create new ones.
Manage styles	Define new styles for a template, either from scratch or based on an existing style or object.
My hoops	Configure My Hoop list to include only hoops available for use.
Manage motifs	Manage your custom motif sets.
Manage user-refined letters	Adjust height range and other settings for custom 'user-refined' letters.
Manage sequin fixing	Rename or delete custom sequin fixings from the library. See also Object > Create Sequin Fixing.
Manage sequin shape	Rename or delete custom sequin shapes from the library. See also Object > Create Sequin Shape.
Manage alphabets	Modify custom alphabets by changing names, default letter spacings and join types.
Convert TrueType font	Convert a TrueType font to an embroidery font.

Calibrate screen	Set up your monitor.
Connection Manager setup	Connect to machines that appear as removable media or make use of third-party connection software.
Tablet setup	Set up digitizing tablet.
Scanner setup	Set up Scanner.
Bling machine setup	Set up direct connection to CAMS automatic rhinestone placement machine.
Machine runtime setup	Set up multiple named machines for the purposes of runtime analysis.

Window menu

New tab group...	Split the design window into a second tab group, either vertical or horizontal. Each tab group can contain multiple designs.
Move to tab group...	Move a current design to the other design tab. Can also be dragged to the other design group.

Remove tiling	Remove tab groups and split windows and return to a single design window.
Split window	Split design tab into multiple views of the same design.
Dockers >	Show/hide dockers to optimize working area.
Toolbars >	Show/hide toolbars to optimize working area.
Kiosk	Lettering kiosk capability for cap and other embroidery for use at retail outlets where simple personalization of standard design layouts is required.
More windows	View more open windows.

Help menu

BE EmbroideryStudio provides various ways to access information about the software and how to use it via the **Help** menu.

BE EmbroideryStudio toolbars

The **Wilcom Workspace** contains the toolbars described below. Some tools are shortcuts to pulldown menu commands. Details of optional toolbars are provided in the onscreen documentation.

Note: Only the most commonly used toolbars are on by default.

Standard tools

The **Standard** toolbar contains commonly used tools and commands, specific to and only visible in **Wilcom Workspace**.

	New design	Create new design file.
	Open design	Open embroidery design.
	Open recent designs	Open design from list of recently opened designs.
	Save design	Save current design file.
	Export machine file	Export current design to machine file for stitching.
	Print	Print current design using current print settings.

⬚	**Print preview**	Preview production worksheet/approval sheet. Print from preview window.
✂	**Cut**	Cut selection and place on clipboard.
▤	**Copy**	Copy selection and place on clipboard.
▣	**Paste**	Paste contents of clipboard. Options available in Options > Edit tab.
↰	**Undo**	Undo previous action.
↱	**Redo**	Redo previously undone action.
▣	**Import embroidery**	Import embroidery design file into current design.
▣	**Import graphic**	Import artwork into current design as a backdrop for manual or automatic digitizing.
▣	**Export multi-decoration files**	Export mixed decoration design components as file formats for use by control software or machine.
▣	**Send to Connection Manager**	Send current design to machine via proprietary machine software.
✐	**Send to Embroidery Connect**	Send current design to named EmbroideryConnect device.
⯈⯈⯈	**Queue Design**	Send current design to EmbroideryConnect design queue.
▣	**Send to appliqué cutter**	Send appliqué shapes from current design to laser cutter.
▣	**Send to bling cutter**	Send bling shapes in current design to cutting machine. Configure machine via Setup menu.

195 ▾		Select zoom scale from droplist or key in zoom factor and press Enter.
▣	**Options**	Access application options for design view, grid & guides, and other settings.

Property bar

Adjust general properties – width, height, position – by means of the **Property Bar**. Changes to the values are applied by pressing **Enter** on the keyboard. They are discarded when you press **Esc** or click anywhere outside the fields. See Access object properties for details.

Property Bar								
Position X:	-84.22	mm	Width:	28.02	mm	100.00	%	🔒 ◈
Position Y:	11.08	mm	Height:	13.39	mm	100.00	%	

The **Center All** command can be used to center the whole design and hoop at the (0,0) position. This means you can reposition the hoop around the design **after** you have finished digitizing without the need for auto-centering. See Set automatic or fixed hoop positioning for details.

Status & Prompt bars

The **Status** and **Prompt** bars provide continuous display of current cursor position status as well as instructions for use of selected tools. See Operating modes for details.

View tools

Use the **View** tools to visualize your designs – e.g. as design outlines, by stitches, by machine functions, as they will stitch out on the fabric. Right-click to access settings. See also Viewing Designs.

▨	**TrueView**	Toggle between stitch view and TrueView™.
▨	**Show stitches**	Show/hide embroidery stitching.

	Show outlines	Show/hide object outlines.
	Show needle points	Show/hide needle points.
	Show connectors	Show/hide connecting stitches.
	Show functions	Show/hide machine function symbols.
	Show repeats	Show/hide design repeats.
	Show bitmaps	Show/hide bitmap images.
	Show vectors	Show/hide vector graphics.
	Dim artwork	Dim graphic backdrops to display stitches more clearly when digitizing.
	Show appliqué fabric	Show/hide appliqué fabrics.
	Show product	Show/hide product backdrop. Right-click for Product Visualizer settings.
	Show bling	Show/hide bling (rhinestones).
	Flip sequins	Toggle between front and reverse sides of sequins in flip sequin designs.
	Show grid	Show/hide grid.
	Show rulers & guides	Show/hide rulers & guides.
Metric ▾		Change measurement units in BE EmbroideryStudio without changing system settings.
	Auto start & end	Set auto start and end points for whole design.
	Stitch player	Simulate embroidery design stitchout on screen.
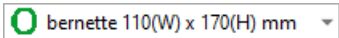
Zoom tools

Use the **Zoom** tools to magnify the design view by zooming in on individual stitches or details. See Zoom & pan designs for details.

	Zoom	Zoom in/out with left/right mouse clicks, or drag selection marquee to view design detail.
	Zoom 1:1	Show design at actual size.
	Zoom in/out 1.25x	Zoom in/out for greater or lesser detail.
149 ▾		Select zoom scale from droplist or key in zoom factor and press Enter.
	Zoom to fit	Show whole design in design window.
	Zoom to selected	Magnify selected objects.
	Zoom to product	Show whole product backdrop in design window.
	Zoom to hoop	Show whole hoop in design window.

Hoop tools

Use the **Hoop** tools to configure, select, and place both single and multiple hoopings. See Design Hooping for details.

	Show hoop	Show/hide current hoop. Right-click for settings.
◯ bernette 110(W) x 170(H) mm ▾		
	My hoops	Select new hoop from My Hoops list. Displays currently active hoop.
	Hoop options	Configure hoop lists, change hoop position settings, and define custom hoops.

	Auto hoop	Prompt system to select a hoop from My Hoops list.

	Calculate Hoopings	Calculate hoopings resulting from current layout.

	Rotate hoop left 15°	Rotate hoop and hoop template, or selected hoops in hooping mode, in 15° increments to left or right.
	Rotate hoop right 15°	

	Add/Delete Hoop	Add or remove hoopings in a multi-hooping layout.

	0	Rotate hoop by specified amount in degrees – positive or negative.

	Hooping mode	Toggle on to access hooping toolset. Toggle off to access digitizing and editing toolset.

Hooping Mode tools

BE EmbroideryStudio provides a dedicated **Hooping Mode** toolbar which allows you to specify multiple hoopings for large designs, both manually or automatically. See Multi-Hooping for details.

	Select	Click or drag a selection marquee to select hoop or split line. Hold down <Ctrl> to select multiples. Click twice to activate rotation handles.
	Reshape	Reshape selected mode-specific objects, edit stitch angles, and adjust entry/exit points. Right-click for settings.
	Multi-Hooping Options	Change multi-hooping options in the Multi-Hooping tab of the Options dialog.
	Auto Layout Hoops	Automatically add/rotate/delete hoops and split lines to cover the entire design.
	Add Splitting Line	Digitize one or more guides in a multi-hoop layout to split objects between hoopings.
	Preview Hoopings	View hooping thumbnails in Preview Hoopings docker. Click thumbnails to isolate hoopings.

Mode tools

The **Mode** tools control interactions between **Wilcom Workspace** and **CorelDRAW Graphics**.

	Home	Switch to Home screen to access My Wilcom account, access announcements, community forums, blogs, tutorials and other product information.
	Wilcom Workspace	Switch to Wilcom Workspace to access access digitizing and editing toolset.
	CorelDRAW Graphics	Switch to CorelDraw Graphics to access full graphic creation and editing toolset.
	Design Library	Open Design Library to search for and catalogue designs as well as quotes, orders, and approvals.
	Convert embroidery to graphics	Convert selected embroidery to vector graphics and switch to CorelDRAW Graphics.
	Convert graphics to embroidery	Convert selected graphics to embroidery and switch to Wilcom Workspace.
	Tag as appliqué	Convert selected vector lettering to appliqué with turning stitching.
	Tag fill as turning satin	Convert selected narrow vector objects to turning satin.
	Tag as Photo Flash	Convert photos to Photo Flash embroidery.
	Keep graphic objects	Retain original artwork during conversion.

	Match to embroidery palette	Toggle thread-color matching for converted vector objects.
	Show embroidery	Toggle embroidery object display.
`96 ▾ dpi`		Virtual Decoration Quality: set the rendering quality of embroidery TrueView for a virtual decoration.

Docker tools

Use the **Docker** tools to toggle modeless dialogs (dockers) on or off. See also Work with dockers.

	Design information	Show design information – size, number of stitches, job order details, etc – and add comments for worksheets.
	Overview window	Show/hide Overview Window. Zoom and pan thumbnail of current design.
	Object properties	Show/hide Object Properties docker. Preset properties or adjust for selected objects.
	Color-object list	Show/hide Color-Object List. View and sequence design objects.
	Colorway editor	Show/hide Colorway Editor. Assign thread colors to color palette and define multiple colorways.
	Threads	Show/hide Threads docker. Find threads from different charts and change design colors.
	Stitch list	Show/hide Stitch List. View, filter and select stitches.
	Team names	Show/hide Team Names docker. View and edit teamname lists.

	Carving stamp	Show/hide Carving Stamp. Create needle penetrations using a 'carving stamp' as template.
	Embroidery clipart	Show/hide Embroidery Clipart docker. Record and recover re-usable design elements.
	Keyboard design collection	Show/hide Keyboard Design Collection docker. Create new or edit current collections.
	Exports	Show/hide Exports docker. View export status of current session. Conversion to older formats or machine files performed as background task.

Color tools

The **Color** toolbar contains a palette specific to and only visible in **Wilcom Workspace**. See Thread selection for details.

`Blue ▾`		Switch between colorways. Define via Colorway Editor.
	Colorway editor	Show/hide Colorway Editor. Assign thread colors to color palette and define multiple colorways.
	Background & display colors	Change background colors, fabric swatches, and display colors for current colorway.
	Product visualizer	Show/hide Product Visualizer. Set current product backdrop.
	Current color	Displays the current color.
	Pick color	Pick color from design and make current.
	Apply current color	Apply current color to embroidery objects.
	Add color	Add color slot to palette. Edit via Colorway Editor.
	Remove color	Remove last unused slot from color palette.

	Hide unused colors	Show/hide unused colors in color palette.
	Remove unused colors	Remove unused colors from color palette.
	Split palette color	Split selected color in two color slots. Used with multiple colorways.
	Cycle used colors	Cycle through combinations of used colors. Left- or right-click.
	Color wheel	Access Color Wheel to test combinations of related colors.
	Threads	Show/hide Threads docker. Find threads from different charts and change design colors.

Colorway Editor

The **Colorway Editor** contains tools for editing colorways.

	Create colorway	Add new colorway to current design.
	Rename colorway	Rename selected colorway.
	Delete colorway	Delete selected colorway.
	Move left	Move selected colorway in Colorway Editor to right or left.
	Move right	
	Background & display colors	Change background colors, fabric swatches, and display colors for current colorway.
	Edit color	Edit specification and color of selected color slot.
	Show colorway details	Show selected colorway details.
	Hide unused colors	Show/hide unused colors in color palette.

Toolbox

The **Toolbox** contains embroidery digitizing/editing tools specific to and visible only in **Wilcom Workspace**. By default, the **Toolbox** docks vertically to the left of screen but can be floated, re-configured, and docked like any other toolbar.

	Select	See Selection tools for details.
	Reshape	See Reshape tools for details.
	Edit	See Edit tools for details.
	Lettering	Create embroidery lettering onscreen using embroidery fonts, keyboard design collections, or TrueType fonts. Right-click for settings.
	Team names	Show/hide Team Names docker. View and edit teamname lists.
	Monogram-ming	Show/hide Monogramming docker. Create monograms using predefined styles, border shapes and ornaments.
	Laydown stitch	Generate light fills to flatten nap of fabrics like terry toweling as substrate for embroidery.
	Simple offsets	Create precise offsets for closed embroidery or vector objects.
	Outlines & offsets	Create outlines and offsets for closed embroidery or vector objects.
	Open offsets	Create precise offsets for open embroidery or vector objects.
	Add border	Add predefined borders to designs or selected objects.
	Color blending	Generate color blends, perspective and shading effects in selected objects.
	Auto-digitizing	See Property bar for details.

	Envelope	See Envelope tools for details.
	Arrange	See Arrange tools for details.
	Shaping	See Shaping tools for details.

Selection tools

Use the **Select** tools to select embroidery objects in a variety of ways. See Selecting objects for details.

	Select	Use with <Ctrl> or <Shift> keys to select groups or ranges of objects. Drag selection marquee to select multiple objects.
	Freehand select	Select objects by dragging freehand selection marquees.
	Select current	Select object at current cursor position.
	Polygon select	Select objects by digitizing a selection marquee around them.
	Polyline select	Select objects by digitizing line through them.

Reshape tools

Use the **Reshape** tools to reshape objects with control points as well as edit individual stitches. See Reshaping objects for details. See also Stitches & Machine Functions (Reference Manual).

	Reshape object	Reshape selected objects, edit stitch angles, and adjust entry/exit points.
	Show reshape nodes	Show/hide reshape nodes for selected objects.
	Show bézier handles	Show/hide Bézier handles for selected objects. (Activate in Options > Reshape.)

	Show stitch angles	Show/hide stitch angles for selected objects.
	Show entry/exit	Show/hide entry (green diamond) and exit (red cross) points for selected objects.
	Stitch edit	Select individual stitches for editing.
	Keep last stitch	
	Omit last stitch	Set last stitch in selected column (A/B) shapes.

Edit tools

Use the **Edit** tools for object editing operations. See Reshaping & Splitting Objects for details.

	Break apart	Split branched (composite) objects – monograms, appliqués, lettering, etc – into components. Allows each to be edited individually.
	Knife	Cut objects along a digitized line, preserving stitch settings and colors.
	Automatic knife	Slice large objects into smaller ones with automatic overlaps.

Envelope tools

Envelopes are typically applied to lettering objects, but they can also be applied to other types of embroidery object. See Applying envelopes for details.

	Bridge envelope			Align top	Align tops of selected objects.
	Pennant envelope	Apply to lettering objects to make them bulge or arch, stretch or compress.		Align centers horizontally	Horizontally align centers of selected objects.
	Perspective envelope			Align bottom	Align bottoms of selected objects.
	Diamond envelope			Align centers	Align selected objects through their centers.
	Delete envelope	Delete envelopes from selected objects.		Space evenly across	Evenly distribute three or more selected objects horizontally.

Arrange tools

Use the **Arrange** tools for moving, aligning and distributing objects, as well as grouping and locking operations. See Transforming Objects for details.

	Group	Group selected objects.
	Ungroup	Ungroup selected grouped objects.
	Lock	Lock selected objects.
	Unlock all	Unlock all locked objects in design.
	Branching	Automatically sequence and group like embroidery objects.
	Apply closest join	Join selected objects at closest point. Re-apply closest join after editing.
	Break apart	Split branched (composite) objects – monograms, appliqués, lettering, etc – into components. Allows each to be edited individually.
	Align left	Left-align selected objects.
	Align centers vertically	Vertically align centers of selected objects.
	Align right	Right-align selected objects.

	Space evenly down	Evenly distribute three or more selected objects vertically.
	Make same width	Scale selected object/s to same width as last-selected reference object.
	Make same height	Scale selected object/s to same height as last-selected reference object.
	Make same width & height	Scale selected object/s to same dimensions as last-selected reference object.

Traditional digitizing tools

The **Traditional Digitizing** toolset provides all the input methods embroidery digitizers are familiar with. Traditional digitizing methods divide into three main categories – 'free shapes', 'column shapes', and 'outlines'. See also Embroidery digitizing.

	Outlines	See Outline tools for details.
	Backtrack	Reinforce outlines, stitching in reverse direction to original.
	Repeat	Duplicate outlines in same direction – normally used with closed shapes.
	Column A	Digitize columns of turning stitches of varying width.

	Column B	Digitize columns of turning stitches where opposing sides are different.
	Column C	Digitize columns or borders of fixed width.
	Complex fill	Digitize filled shapes with a single stitch angle.
	Complex turning	Digitize filled shapes with turning stitches.
	Star	Digitize star shapes with zigzag stitching.
	Ring	Digitize circles and oval-shaped rings.
	Manual	See Manual stitch tools for details.
	Use motif	Add single motifs to design. Rotate, scale, or mirror into position.
	Branching	Automatically sequence and group like embroidery objects.

Outline tools

Use the **Outline** tools for digitizing embroidery outlines. See Digitizing outlines & details for details.

	Digitize run	Place row of single or triple stitches along digitized line.
	Triple run	
	Motif Run	Place row of motifs along digitized line.
	Backstitch	Place row of backstitches along digitized line.
	Stemstitch	Place row of stemstitches along digitized line.

Manual stitch tools

The **Manual** tools are used for digitizing individual stitches. Manual objects have no outlines, only stitches. Stitch density does not change. See Digitize stitches (Reference Manual).

	Manual	Digitize single stitches.
	Triple manual	Digitize three stitch layers at a time.

Graphics digitizing tools

Graphics Digitizing tools operate in a similar way to **CorelDRAW® Graphics Suite** or other graphics applications. Assign a stitch type to a digitized shape from **Outline Stitch** or **Fill Stitch** toolbars. See also Digitizing with graphical tools. See also Appliqué Embroidery (Reference Manual).

	Digitize open shape	Digitize open shapes with left and right mouse clicks for straight lines and curves.
	Digitize closed shape	Digitize closed shapes with left and right mouse clicks for straight lines and curves.
	Digitize column	Digitize column shapes of varying width, setting the stitch angle at each pair of points.
	Rectangle	Digitize two corners of a rectangle, or press <Ctrl> for a perfect square.
	Ellipse	Digitize the center points plus 2 size points for an ellipse or press <Enter> for a perfect circle.
	Basic shapes	Digitize basic shapes. Press <Ctrl> to maintain proportions. Press <Shift> to center around starting point.
	Freehand open shape	Click and hold to draw freehand open shapes. Adjust smoothing control for preferred result.
	Freehand closed shape	Click and hold to draw freehand closed shapes. Adjust smoothing control for preferred result.

	Stitch angles	See Stitch angle tools for details.
	Holes	See Hole tools for details.
	Appliqué	See Appliqué tools for details.

Stitch angle tools

Add or remove stitch angles with the **Stitch Angle** tools. See Adjusting stitch angles for details.

	Stitch angles	Add stitch angles to selected objects.
	Remove stitch angles	Remove stitch angles from closed objects with turning stitches.

Hole tools

Hole tools are used to cut as well as fill holes in embroidery objects. See Adding & filling holes (Reference Manual).

	Add holes	Cut holes in filled objects.
	No holes	Remove hole/s from selected object.
	Fill holes	Fill holes formed by existing boundaries. Choose an exact fit or offset.

Appliqué tools

Appliqué tools are specialized for appliqué work. Use them to create appliqué objects, resequence objects for efficient stitchout, as well as generate partial cover stitching for overlapping appliqué. See Appliqué Embroidery (Reference Manual).

	Appliqué	Digitize appliqué objects, with or without holes, with up to four layers of stitching – guide runs, cutting lines, tack stitches, and cover stitches.
	Appliqué without holes	Digitize appliqué objects (without holes) with up to four layers of stitching – guide runs, cutting lines, tack stitches, and cover stitches.
	Combine appliqué	Break appliqué into component objects and recombine and resequence for efficient stitchout.
	Partial appliqué	Create partial cover stitching for overlapping appliqué objects.
	Remove overlaps	Remove underlying layers of stitching in overlapping objects using selected 'cutter' object(s). Right-click for settings.

Auto-digitizing tools

Auto-Digitizing tools provide everything necessary to automatically digitize shapes in electronic artwork, both bitmap and vector, without using manual input methods. See Auto-digitize individual shapes for details.

	Instant smart design	Automatically convert imported artwork to embroidery.
	Smart design	Create whole embroidery designs from imported artwork.
	Keep graphic objects	Retain original artwork during conversion.
	Color matching method	Set color matching for auto digitizing. Add or match bitmap colors to palette, or match to thread colors in selected chart/s.
	Crop bitmap	Crop artwork for use with auto-digitizing. Digitize points and press Enter to create cropping shape.

Remove crop	Click to remove cropping area.		Run	Create outlines and details.
Finalize crop	Make cropping permanent. Once finalized, cropping cannot be removed.		Sculpture run	Create alternating triple/single stitch runs for a hand-stitched look.
Prepare bitmap colors	Prepare artwork for automatic digitizing.		Triple run	Create heavier triple stitch outlines and details.
Turning satin object	Fill narrow column shapes with turning stitching.		Backstitch	Create traditional backstitch outlines for delicate borders.
Tatami fill object with holes	Fill large areas with tatami stitching, preserving any holes.		Stemstitch	Create traditional stemstitch outlines for decorative details such as stems and vines.
Tatami fill object	Fill large areas with tatami stitching, ignoring any holes.		Motif run	Create ornamental craftstitch outlines. Choose from a motif library.
Centerline run object	Create centerlines in narrow shapes with run stitching.		String	Create craftstitch outlines for delicate borders.
Outline run object	Create outlines around shapes with run stitching.		Satin	Create glossy satin borders or columns of even width.
Auto trace to vectors	Convert artwork to vectors. These can be converted to embroidery.		Satin raised	Create layered satin borders or columns of even width for a raised surface.
Adjust bitmap	Adjust image lightness and contrast for auto-digitizing.		Zigzag	Create borders or columns of even width for an open 'sawtooth' effect.
Photo Flash	Create whole embroidery designs directly from photos.		E stitch	Create borders or columns of even width for an open 'comb' effect.
Color PhotoStitch	Automatically convert grayscale or color photos to embroidery.		Tatami	Create borders or columns of even width for different needle penetration patterns.
Reef PhotoStitch	Automatically convert photos into reef-like embroidery.		Program split	Create borders or columns of even width for decorative needle penetration patterns.

Outline Stitch tools

The **Outline Stitch** toolbar provides a range of basic outline stitch types as well as those of a more decorative nature. These stitch types can be applied to open or closed shapes. Right-click to access stitch settings. See also Stitch Types.

Square	Create borders or columns of even width for an open 'toothed' effect.
Coil	Create borders or columns of even width for an open 'coil' effect.

	Contour	Create contoured stitching following borders or columns of even width.
	Vector outline	Create vector outlines without stitch properties.

Fill Stitch tools

The **Fill Stitch** toolbar provides a range of basic fill stitch types as well as those of a more decorative nature. Apply to closed shapes. Right-click to access stitch settings. See also Stitch Types.

	Satin	Create glossy satin fills for narrow shapes.
	Satin raised	Create layered satin fills for a raised surface.
	Zigzag	Create zigzag fills for an open 'sawtooth' effect.
	E stitch	Create an open 'comb' effect.
	Tatami	Create solid stitching for large shapes with different needle penetration patterns.
	Coil	Create open coil fills.
	Square	Create open straight parallel fills.
	Double square	Create grid fills.
	Island coil	Create concentric rows of coil fills.
	String	Create string craftstitch fills.
	Program split	Create solid decorative fills using needle penetrations to form tiled patterns.
	Motif fill	Create decorative fills using embroidery motifs to form repeating patterns. Choose from a motif library.

	Motif column	Place motifs along the center line of a column shape and resize to fit. Right-clicking for settings.
	Cross stitch	Fill large areas with cross stitching on an invisible grid that applies to all design objects.
	Contour	Create curved fills where stitches follow contours of a shape.
	Spiral	Create spiral stitching radiating from the center of the object.
	Maze	Create maze-like stitching which follows object contours for open fills.
	Offset	Create offset fill stitching in any closed shape.
	Stipple	Create a stipple fill which meanders randomly within a shape.
	Stipple backstitch	Create a stipple backstitch fill which meanders randomly within a shape.
	Stipple stemstitch	Create a stipple stemstitch fill which meanders randomly within a shape.
	Laydown	Generate a light fill to flatten the nap of textured fabrics like terry toweling for subsequent embroidery.
	Vector fill	Create vector fills without stitch properties.

Stitch effect tools

Use the **Stitch Effects** tools for modifying or improving stitch quality, including applying automatic underlay to selected objects. Right-click for settings.

	Auto underlay	Generate automatic underlay for selected objects.
	Pull compensation	Apply to selected objects to compensate for fabric stretch.

	Auto jump	Preserve long stitches in new and selected objects.
	Shortening	Reduce stitch bunching in tight curves by shortening stitches along inside edge.
	Fractional spacing	Even out stitch density along inside and outside edges.
	Mitre corners	Create sharp mitre corners at intersections.
	Cap corners	Create capped corners for fewer stitches.
	Lap corners	Create 'Tidori' style corner stitching.
	Jagged edge	Create rough edges, shading effects, or imitate fur and other fluffy textures in selected objects.
	Trapunto	Force underlying travel runs to the edges of selected objects. Use with open stitching.
	User-defined split	Create custom split-line effects.
	Accordion spacing	Create perspective and shading effects with stitch spacing varying between dense and open fill.
	Flexi split	Create decorative split patterns following stitch angles and scaled according to object width.
	Radial fill	Create radial turning stitching with various stitch types including satin, tatami and program splits. Can be applied to ring shapes.
	Florentine effect	Create custom curve-line stitching with a single guideline.
	Liquid effect	Create custom curve-line stitching with twin guidelines.

3D	3D Warp	Create 3D effects in selected motif fills.
	Hand Stitch Effect	Create hand-stitch effects which combine randomized stitch length, angle and count.
	Cording	Apply cording effect to new or selected objects with run stitching. Contour, spiral, offset or stipple may be used.

Mirror-merge tools

Mirror Merge tools allow you to duplicate and transform selected embroidery objects, as well as merge them into a single object. See Mirroring objects for details.

	Mirror copy horizontal	Duplicate and mirror horizontally and merge overlapping objects (optional).
	Mirror copy vertical	Duplicate and mirror vertically and merge overlapping objects (optional).
	Mirror copy horizontal & vertical	Duplicate and mirror selected objects around a center point.
	Array	Duplicate designs, such as badges, automatically re-sequencing color blocks for efficient multiple design stitchouts.
	Reflect	Duplicate and mirror objects or designs. Create decorative borders.
	Wreath	Duplicate objects around a center point.
	Kaleidoscope	Duplicate and mirror paired objects in a wreath.

Mirror Merge settings include...

[icon] 2	Rows:	Set number of rows in the array.
[icon] -28.3	Row spacing:	Set spacing between rows in the array.
[icon] 2	Columns:	Set number of columns in the array.
[icon] 113.7	Column spacing:	Set spacing between column in the array.
[icon] 4	Wreath points:	Set number of duplicates (including source). Kaleidoscope works best with an even number.
[icon] 130.2 [icon] -35		Set precise distance and angle – measured from center of source object to center of wreath or kaleidoscope.
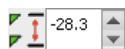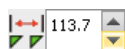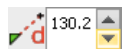
Shaping tools

When working with overlapping vector or embroidery objects, you can merge, trim or split them with the **Shaping** tools. See Shaping objects (Reference Manual).

[icon]	Weld	Merge selected overlapping objects into a single 'flattened' object.
[icon]	Intersect	Trim selected overlapping objects so that only intersected areas remain.
[icon]	Exclude	Trim selected overlapping objects and preserve individual properties.
[icon]	Front-back	Trim selected overlapping objects so that only non-overlapping areas of the topmost object remain.
[icon]	Back-front	Trim selected overlapping objects so that only non-overlapping areas of the bottommost object remain.
[icon]	Flatten	Trim all overlaps in selected overlapping objects.

[icon]	Divide	Split selected objects into separate adjoining objects wherever they intersect.
[icon]	Combine	Merge properties of selected overlapping objects and trim overlapping areas.
[icon]	Keep original objects	Preserve original objects after shaping operations.
[icon] 1.00		Overlap: Adjust object overlaps resulting from Flatten or Divide shaping operations.

Sequence tools

Sequence tools are used to resequence selected objects. Use them in conjunction with the **Color-Object List**. See Sequencing embroidery objects for details.

[icon]	Back 1 object	Move selection back one object in the stitching sequence.
[icon]	Forward 1 object	Move selection forward one object in the stitching sequence.
[icon]	Back 1 color	Move selection back one color in the stitching sequence.
[icon]	Forward 1 color	Move selection forward one color in the stitching sequence.
[icon]	Move to start	Move selection to start of stitching sequence.
[icon]	Move to end	Move selection to end of stitching sequence.
[icon] 123	Sequence by selects	Resequence objects in order of selection.
[icon]	Sequence by color	Resequence all blocks of like color. (To maintain separate color blocks, use the Color-Object List.)

Transform tools

Use the **Transform** tools to mirror, rotate and skew objects. See Transforming Objects for details.

	Mirror horizontal	Flip selected objects horizontally.
	Mirror vertical	Flip selected objects vertically.
	Mirror by reference line	Mirror objects around a defined axis using a reference line.
	Rotate left 15°	Rotate selection in 15° increments to the left.
	Rotate right 15°	Rotate selection in 15° increments to the right.
		Rotate selection by specified amount – positive or negative – in degrees.
		Skew selection by specified amount – positive or negative – in degrees.
	Transform by reference line numerically	Transform selected objects using a combination of reference points and numeric values.
	Transform by reference line freely	Rotate selected objects with the aid of reference points alone.

Styles tools

Use the **Styles** toolbar to apply predefined styles to a design. The tools let you:

◂ Apply current settings to selected objects

◂ Change current settings, and

◂ Apply styles to selected objects.

The styles you select as 'favorites' are each assigned a tool icon on the toolbar. See Working with styles for details.

	Make properties current	Make properties of a selected object current for the design.
	Apply current properties	Apply current settings to selected objects.

	Favorite style	Assign up to 10 favorite styles via Manage Styles. Select object and click button to apply.
	Apply style	Apply predefined style to selected objects.

Stitch editing tools

Use the **Stitch** tools for stitch editing and processing operations. See also Stitches & Machine Functions (Reference Manual).

	Generate stitches	Generate stitches for selected objects.
	Stitch edit	Select individual stitches for editing.
	Selects on / off	Select a range of objects as you travel through the design.
	Process stitches	Adjust stitch density of and/or scale whole or selected parts.
	Split object	Split object in two at current needle position. Use with Travel by Stitch functions.

Function tools

Use the **Function** tools to insert machine functions manually. See Stitches & Machine Functions (Reference Manual).

	Penetrations	Engage needles or borers. Disengage to create jumps.
	Borers	Engage Borers function. Use for cutting holes in fabric.
	Insert Stop	Insert Stop function at current stitch cursor position.
	Insert Tie-off	Insert Tie-off function at current stitch cursor position.
	Insert Trim	Insert Trim function at current stitch cursor position.
	Insert Empty stitch	Insert Empty stitch function at current stitch cursor position.
	Insert Empty jump	Insert Empty jump function at current stitch cursor position.

	Insert function	Insert machine function at current stitch cursor position.
	Clear function	Remove machine functions from current stitch cursor position.
	Edit function	Edit machine function at current stitch cursor position.
	Slow	Insert Slow function to set machine to low speed.
	Fast	Insert Fast function to set machine to high speed.

Caution: When you insert stitches or machine functions manually, you must maintain them manually. If an object's stitches are regenerated for any reason, all stitch editing and machine functions are lost.

Legacy feature tools

Newer machines use USB and wired or wireless network connections. Older machines use serial ports or even proprietary embroidery disks. Use the **Legacy Features** for connecting to older style machines. See Embroidery Output for details.

	Send to Machine Manager	Send multiple designs to machine from BE EmbroideryStudio or DesignWorkflow and view or manage job queues.
	Send to Stitch Manager	Send current design direct to embroidery machine for production.
	Embroidery disk	Open designs from or save to proprietary embroidery disk formats.
	Hardware setup	Set up a machine connection with name, port, and protocol.

Travel tools

Use the **Travel** tools to view the stitching sequence of a design color-by-color, object-by-object, or stitch-by-stitch. Traveling can be initiated from any stitch in a design. See Viewing stitching sequence for details.

	Start / end design	Move stitch cursor to start/end of design. Left/right-click.
	Travel by object	Move stitch cursor to next/previous object. Left/right-click.
	Travel by segment	Move stitch cursor to next/previous segment. Left/right click.
	Travel by color	Move stitch cursor to next/previous color change. Left/right click.
	Travel by function	Move stitch cursor to next/previous machine function. Left/right click.
	Travel by trim	Move stitch cursor to next/previous Trim function. Left/right click.
	Travel 1000 stitches	Move stitch cursor forwards/backwards 1000 stitches at a time. Left/right click.
	Travel 100 stitches	Move stitch cursor forwards/backwards 100 stitches at a time. Left/right click.
	Travel 10 stitches	Move stitch cursor forwards/backwards 10 stitches at a time. Left/right click.
	Travel 1 stitch	Move stitch cursor forwards/backwards 1 stitch at a time. Left/right click.

Sequin tools

Use the **Sequin** tools to digitize sequined designs for compatible machines. There are also tools for creating boring holes. See Sequin Embroidery (Reference Manual).

	Sequin palette editor	Select sequins for the design from a sequin library.
A 5.0		Sequin Palette: Select sequin shapes for the current design.
	Manual sequin	Digitize individual sequin drops. Right-click for settings.
	Left sequin	Switch to left sequin when digitizing twin-sequin designs.
	Right sequin	Switch to right sequin when digitizing twin-sequin designs.
	Sequin run auto	Create a string of sequins along a digitized line. Right-click for settings.
	Sequin run manual	Digitize sequin-drops along a digitized line. Right-click for settings.
	Sequin fill	Digitize and fill larger shapes with sequins. Right-click for settings.
	Sequin edit	Fine-tune placement of individual sequins within selected sequin objects.
	Sequin Split Edit	Assign sequins to split areas of sequin fills.
	Vectors to sequins	Create sequin runs from sequin artwork. Digitize a guideline connecting the sequins to include within a run.
	Drop sequin	Left-click to insert a Drop Sequin function at current needle position. For twin-sequin machines, left- and right-click for alternative sequin drops.
	Clear function	Remove machine functions (inc sequin) from current needle position.

Beading tools

Use the **Beading** tools to create bead runs as well as fills for compatible machines. See Bead Embroidery (Reference Manual).

	Bead palette editor	Select shapes from a bead library, and define bead colors and sizes.
A 3.0		Bead palette
	Manual bead	Digitize individual bead drops.
	Bead run auto	Create a string of beads along a digitized line. Right-click for settings.
	Bead run manual	Digitize bead-drops along a digitized line. Right-click for settings.
	Bead edit	Fine-tune placement of beads within selected Bead objects.
	Clear function	Remove machine functions (inc bead) from current needle position.

Bling tools

Use the **Bling** tools to create bling runs as well as fills for compatible machines. See Bling Digitizing (Reference Manual).

	Bling palette editor	Select shapes from a bling library, and define bling colors and sizes.
	Bling manual	Digitize individual bling drops.
	Bling run auto	Create a string of rhinestones along a digitized line. Right-click for settings.
	Bling fill	Digitize and fill larger shapes with rhinestones. Right-click for settings.
	Bling lettering	Create bling lettering onscreen using native embroidery fonts or TrueType fonts. Right-click for settings.
	Automatic overlap removal	Toggle on to remove excess rhinestones in overlapping Bling objects.

|	No automatic overlap removal	Toggle on to preserve rhinestones in overlapping Bling objects.
	Highlight bling overlaps	Toggle on to highlight overlapping rhinestones. Use with manual edits.
	Bling edit	Fine-tune placement of individual rhinestones within selected Bling objects.
	Show bling work area	Visualize design within work area of selected machine model. Right-click for settings.

Chenille tools

If you have the **Chenille** option installed, the Wilcom Workspace will include a **Chenille** toolbar containing specific Chenille stitch types and machine functions. See Chenille User Manual Supplement for details.

	Chain	Switch to chain stitch mode to create decorative stitching resembling links of a chain – used for outlines and borders as well as monograms.
	Moss	Switch to moss stitch mode to create dense cover using looped stitch typical of Chenille raised stitching – best with simple shapes.
	Needle height	Control moss stitch loop height and chain stitch width.
	Compound chenille	Use with Complex Fill to automatically generate moss or chain stitch run-arounds for complex shapes. Right-click for settings.
	View by Chain / Moss	View chenille objects in special mode for easy identification of lockstitch (green), chain (blue), and moss (red) elements.

Schiffli tools

If you have the **Schiffli** option installed, the Wilcom Workspace will include a **Schiffli** toolbar containing specific Schiffli stitch types and machine functions. See Schiffli User Manual Supplement for details.

	Blatt	Reduce thread tension.
	Stepp	Increase thread tension.
	End jump	Engage needles or borers.
	Begin jump	Disengage needles or borers.
	Slow	Decrease machine speed.
	Fast	Increase machine speed.
	Borer in	Engage borer.
	Borer out	Disengage borer.
7		Borer depth: Determine borer hole size – valid depths are 1-13 for Plauen and 0-12 for Saurer.
	RPM-	Decrease turning speed of machine.
	RPM+	Increase turning speed of machine.
	Fadenleiter-	Decrease Fadenleiter stroke by one increment.
	Fadenleiter+	Increase Fadenleiter stroke by one increment.
	Thread brake-	Decrease thread brake pressure.
	Thread brake+	Increase thread brake pressure.

	Drop sequin	Trigger a sequin drop.
	Schiffli arrangement	Split designs into color blocks arranged into logical parts.

Manage design tools

Use the **Manage Designs** tools for fast searching of designs on shared network drives. This is important for businesses with multiple computers and multiple users creating and accessing EMB or machine format designs. See Design Management for details.

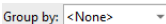|		
	New from selected	Create new designs from chosen template based on selected designs and/or bitmaps. Right-click to select template.
	Open selected	Open designs currently selected in Design Library.
	Open recent designs	Open a design from list of recently opened designs.
	Cut	Cut selection and place on clipboard.
	Copy	Copy selection and place on clipboard.
	Paste	Paste contents of clipboard.
	Convert selected designs	Convert all designs currently selected in Design Library to different file formats.
	Send to Connection Manager	Send current design to machine via proprietary machine software. Right-click for settings.
	Print selected	Print designs currently selected in Design Library to connected and configured printer.
	Print selected to catalog	Print designs currently selected in Design Library to HTML catalog.
	Export design list	Export list of design files visible in Embroidery Library, together with associated design information, to CSV or TXT file.
	Manage embroidery library locations	Add or remove folders to/from Embroidery Library for fast searching and filtering.

View (Design Library) tools

Design Library allows for fast searching of designs on shared network drives. The **View** (Design Library) toolbar contains functions for quick search, sort, and location of designs on your company network. See Design Management for details.

	Layout	Show/hide navigation pane, details pane, and/or preview pane.
	Design information	Show design information – size, number of stitches, job order details, etc – and add comments for worksheets.
	Keyboard design collection	Show/hide Keyboard Design Collection docker.
	Exports	Show/hide Exports docker. View export status of current session. Conversion to older formats or machine files performed as background task.
	Change view	Change current view of design lists.
	Reset detail columns	Reset columns in details view to default layout.
	Group by: <None>	Group current design list by selected property.
	Ascending order	Sort designs in ascending or descending order.
	Descending order	

Sort by:	Sort current design list by selected property and sort order.
Showing: All-in-One Design Files	Filter current design list by file type.
Search: General ▾ Enter any	Filter designs based on specified search criteria – e.g. stitch range.

Keyboard Shortcuts

In addition to shortcut keys, standard MS Windows® **Alt** key shortcuts apply in some cases. Use the **Alt** key with the letter underlined in the menu. To cancel an operation, press **Esc** twice.

General functions

To...	Press
open design	Ctrl+O or Alt+F+O
close design	Alt+F+C
export machine file	Shift+E
open Lettering dialog	A
open online help	F1
print design	Ctrl+P or Alt+F+P
save design	Ctrl+S
save as	Alt+F+A
send design to EmbroideryConnect	Shift+Alt+S
send design to EC Queue	Shift+Alt+Q
start new design	Ctrl+N
toggle Color-Object List	Shift+L
toggle Design Information docker	Alt+P
toggle Grid	Shift+G
toggle Overview window	Shift+V
toggle Stitch List	Shift+J
toggle measure tooltip	Ctrl+I
measure distance on-screen	M
cancel command	Esc
redo command	Ctrl+Y
undo command	Ctrl+Z
exit application	Alt+F4

Digitizing functions

To...	Press or
activate Auto Trace To Vectors for selected artwork	Ctrl+M
activate Branching	I
activate Complex Turning	F2

Digitizing functions (cont)

To...	Press	or
activate Complex Fill	F3	
activate Column A	F4	Shift+A
activate Column B	F5	
activate Column C	F6	
activate Backtrack		Shift+X
activate Appliqué	F7	
activate Single Run	F8	Shift+N
activate Triple Run	F9	
activate Motif Run	F10	
activate Backstitch	F11	
activate Stemstitch	F12	
apply Satin stitch	Shift+I	
apply Tatami stitch	Shift+M	
delete last input point	←Bksp	
finish digitizing object (keep last stitch)	Enter↵	
finish digitizing object (omit last stitch)	Spacebar	
finish digitizing free shape boundary	Enter↵	
generate stitches	G	
make combined vector object	Shift+H	
switch between fill and run stitch	Spacebar	
switch between fill and manual stitch	Enter↵	

Selecting objects

To...	Press
activate Select tool	O
deactivate Select tool	Esc
select all objects	Ctrl+A
deselect all objects	Esc or X
activate Polygon Select tool	Ctrl+L
select by color	Ctrl+Alt+A
* Stitch Edit tool selected	

Selecting objects (cont)

To...	Press
select object at current needle position	Shift+O
select multiple objects	Ctrl+🖰
select range of objects	Shift+🖰
select next object	Tab⇥
select previous object	Shift+Tab⇥
select object beneath	2+🖰
add next object to selection	Ctrl+Tab⇥
add previous object to selection	Ctrl+Shift+Tab⇥
group selected objects	Ctrl+G
ungroup selected objects	Ctrl+U
lock selected object	K
unlock all locked objects	Shift+K

* Stitch Edit tool selected

Viewing designs

To...	Press
toggle TrueView™ on/off	T
toggle stitches	S
toggle outlines	L
toggle needle points	† .
toggle connectors	Shift+C
toggle function symbols	Shift+F
view by color	Alt+C
hide others	Shift+S
toggle bitmaps	D
toggle vectors	Shift+D
zoom (marquee)	B
zoom to 1:1 scale (100%)	1
specify zoom factor	F
zoom in 2X	Z
zoom out 2X	Shift+Z
zoom to all design	* 0
zoom to selected objects	* Shift+0
zoom to product	* Ctrl+0
zoom to hoop	* Alt+0
zoom box in Overview window	Shift+B
activate panning	P
deactivate (temporarily) Auto Scroll	^ Shift
toggle Auto Scroll on/off	Ctrl+Shift+A

† Period * Zero ^ Hold down

Viewing designs (cont)

To...	Press
center current stitch in design window	C
return to previous view	V
redraw (refresh) screen	R

† Period * Zero ^ Hold down

Viewing stitching sequence

To travel...	Press
activate Stitch Player	Shift+R
to start of design	Home
to end of design	End
to next color	PgDn
to previous color	PgUp
to next object	Ctrl+T
to previous object	Shift+T
to next segment	^ Ctrl+→
to previous segment	^ Ctrl+←
to next function	^ Ctrl+PgDn
to previous function	^ Ctrl+PgUp
to next trim	^ Alt+→
to previous trim	^ Alt+←
1 stitch forward	^ →
1 stitch backward	^ ←
10 stitches forward	^ ↓
10 stitches backward	^ ↑
100 stitches forward	† +
100 stitches backward	† -
1000 stitches forward	† Shift+ +
1000 stitches backward	† Shift+ -

^ No object selected † Numeric keypad only, no object selected

Cutting & pasting objects

To...	Press	or
cut object	Ctrl+X	Shift+Delete
copy object	Ctrl+C	Ctrl+Ins
paste object	Ctrl+V	Shift+Ins
duplicate object	Ctrl+D	
duplicate with offset	Ctrl+Shift+D	
paste special > object property position	Shift+Ins	
paste special > shift pasted objects	Ctrl+Shift+V	

Cutting & pasting objects (cont)

To...	Press or
paste special > center at current stitch	`Ctrl`+`Alt`+`V`
paste special > start at current stitch	`Shift`+`Alt`+`V`
delete selected objects or last object	`Delete`

Modifying objects

To...	Press or click
activate Reshape tool	`H`
activate Show Stitch Angles tool	`Alt`+`A`
activate Show Reshape Nodes tool	`Alt`+`N`
activate Stitch Angles tool	`Ctrl`+`H`
add outlines and/or offsets	`Ctrl`+`Shift`+`O`
add stitch angles (Complex Turning)	`Ctrl`+`H`
change reshape node type	^ 🖱+`Space`
check design integrity	`!`
maintain proportions while resizing	† `Shift`+↔🖱
mirror horizontally	`Ctrl`+`1`
mirror vertically	`Alt`+`1`
move selected object horizontally or vertically	* `Ctrl`+↔🖱
nudge selected object	🖱+`↑` `↓` `←` `→`
remove overlaps	`Ctrl`+`Shift`+`E`
toggle Auto Underlay on/off	`U`
* Drag object † Drag handle ^ Select control point	

Schiffli functions

To...	Press
insert Blatt/Stepp function	`[` `]`
insert Fadenleiter Plus/Minus	`<` `>`
insert Boring Tension Start/End	`/` `\`
insert RPM Plus/Minus	`:` `"`
change Schiffli borer depth	`;`
show Schiffli repeats	`W`

Editing stitches (Stitch Edit mode)

To...	Press or click
activate Stitch Edit tool	`E`

Editing stitches (cont)(Stitch Edit mode)

To...	Press or click
toggle stitch selection	`Q`
toggle stitch selection while traveling by stitches	`Tab`