WILCOM®

EMBROIDERY STUDIO e4

Release Notes

e4 - Nov 2022

EmbroideryStudio e4 Release Notes

These release notes provide an overview of new and improved features in the EmbroideryStudio e4 product range. In the first instance, the notes outline features and improvements which are specific to ES e4.5. For new users, or users updating from ES e3, they also cover the major features and improvements introduced since ES e4.0.

Wilcom EmbroideryStudio e4 is a major new version of Wilcom's professional embroidery and multi-decoration software, replacing the e3 version of software. The two primary embroidery and multi-decoration product models are:

- **ES Designing** – top-of-the-line professional digitizing with CorelDRAW® Graphics Suite
- **ES Decorating** – small-shop commercial digitizing with CorelDRAW® Graphics Suite replaces DecoStudio with much greater capabilities.

ES Lettering and **ES Editing** products are fully featured professional embroidery software for staff who do not need digitizing capabilities. **ES Digitizing** is a top-of-the-line professional digitizing system without CorelDRAW® Graphics Suite for production digitizing companies not

requiring graphic design software. ES e4.5 maintains the current product range. See below.

Direct links are provided from the release notes to the EmbroideryStudio Reference Manual which contains detailed instructions on all product features. Every effort has been made to ensure the accuracy of these notes but screen illustrations may vary from screen layouts generated by the software. Some features are standard across the product range, some are cost options, others are only available in certain product levels.

Tip When viewing these release notes on screen, click cross-references to link directly to the manual. Click the **Go to Previous View** button in Acrobat Reader to return to these release notes.

Modular elements

EmbroideryStudio offers optional 'Elements' for Creativity, Production, and Specialty processes. The EmbroideryStudio e4 product suite consists of these product models:

Product models		Applications
1	ES Designing	^ Larger logo embroidery businesses with digitizing
2	ES Digitizing	* Fashion and textile production digitizing
3	ES Decorating	^ Small embroidery shops – replaces DecoStudio
4	ES Editing	Logos, retail shops, production shops
5	ES Lettering	Logos, retail shops

^ Includes CorelDRAW® Graphics Suite as standard. * Only available in certain countries.

Optional ES Elements for each category – Creativity, Production, and Specialty – are shown below. Some are included as standard in certain product models.

Element			1	2	3	4	5
Creativity							
	Shading & Open Fills	Add depth and dimension to your embroidery with powerful shadows, shades and open fills.	○	○	–	–	–
	Curved Fills	Create unique, flowing stitch patterns that add motion and dimension to any closed object.	○	○	–	–	–

1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
● Included as standard ○ Modular 'element'

Element			1	2	3	4	5
	Maze Fills	Automatically fill large areas with double-spiral stitching that never crosses itself.	○	○	–	–	–
	Spiral Fills	Create open stitching that follows the contours of a shape for some interesting visual effects.	○	○	–	–	–
	String Stitch	Create outline or filled shapes with overlapping ‘string art’ stitching to hold mirror pieces or for decorative effects. Known as ‘Paghadi’ in India.	○	–	–	–	–
	Freehand	Create embroidery the most natural way – as if you were drawing with pen and paper.	●	○	–	–	–
	Hand Stitch	Create hand-stitch effects which combine randomized spacing and stitch angles for a more organic look. Apply to satin, tatami, run, backstitch, and other stitch types.	●	○	○	–	–
	Motifs	Create motif runs and both single and double motif fills. Apply 3D Warp distortion. Create and reuse motif patterns.	○	○	–	–	–
	Motif Runs Advanced	Create advanced motif runs with variable or gradient motif size and spacing effects. Motifs can also conform to varying size column shapes.	○	–	–	–	–
	Custom Splits	Add carving, embossing and other dimensional effects to your embroidery.	○	○	–	–	–
	Photo Flash	Convert black and white, grayscale and color images into embroidery.	○	○	○	–	–
	Reef PhotoStitch	Convert photos into embroidered designs in seconds. Automatically fill large areas with open stitching reminiscent of a coral reef.	○	○	○	–	–
Productivity							
	Team Names Advanced	Save lettering layouts for reuse. With different logos and lettering, reuse makes teamname design simpler and faster.	○	○	○	○	○
	Offsets Advanced	Embolden logos, badges and other designs with distinctive, colorful borders.	○	○	○	–	–

1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
● Included as standard ○ Modular ‘element’

Element			1	2	3	4	5
	Auto Shaping	Use auto-shaping tools to weld, flatten, intersect, and other shaping operations to give you accuracy and speed.	●	○	–	–	–
	Auto Arrangements	Automatically create reflecting borders, and wrap reflections around a center point to create wreath or kaleidoscope effects.	○	○	–	–	–
	Kiosk Mode	Use at retail outlets where fast and simple personalization of standard design layouts is required in consultation with customers.	●	●	●	○	○
Specialty							
	Embroidery-Connect	Quickly and easily send, scan, and queue your embroidery designs for production. EmbroideryHub networking software is included as standard. EmbroideryConnect WiFi devices are available for purchase.	●	●	●	●	●
	Single Sequin	Create artistic sequin designs with sequin runs and sequin fills for single sequin machines using automated predefined fixing stitches.	○	○	○	–	–
	Sequins Advanced	Create embroidery files for single and twin-sequin dispensing machines.	○	○	–	–	–
	Beading	Provides support for beading devices. Classic fixing methods available: upright, flat, and sideways.	○	○	–	–	–
	Bling	Use any combination of stones, sizes and colors to light up your design. Includes bling lettering.	●	○	●	–	–
	Virtual Decoration	Bring the look of embroidery to your printed designs. Includes high resolution TrueView images. Print in CorelDRAW Graphics.	●	○	●	–	–
	Font Creator	Match logo type exactly or create unique ones all your own.	○	○	–	–	–
	Chenille	Add chenille embroidery capabilities to a lockstitch embroidery digitizing system.	○	○	–	–	–
	Schiffli	Create and prepare lacework and emblems precisely and efficiently.	○	○	–	–	–

1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
● Included as standard ○ Modular 'element'

Included features

For details of the features included with each Element, click the links in the table below.

Creativity

Element	Features	Reference
Shading & Open Fills	Cross Stitch Fill	Cross stitch fills (Reference Manual)
	Stipple Fill	Stippling effects (Reference Manual)
	Accordion Spacing	Accordion spacing (Reference Manual)
	Color Blending	Color blends (Reference Manual)
Curved Fills	Liquid Effect	Create curved fills with Liquid Effect (Reference Manual)
	Florentine Effect	Create curved fills with Florentine Effect (Reference Manual)
	Contour Stitch	Contoured fills (Reference Manual)
Maze Fills	Maze Fill	Maze fills (Reference Manual)
Spiral Fills	Spiral Fill	Spiral fills (Reference Manual)
String Stitch	String	String stitching (Reference Manual)
Freehand	Freehand	Freehand embroidery (Reference Manual)
Hand Stitch	Hand Stitch	Hand stitch effect (Reference Manual)
Motifs	Full Motif Fill	Motif fills (Reference Manual)
	Motif Run	Motif runs (Reference Manual)
	Create Motif	Custom motifs (Reference Manual)
	3D Warp	Enveloped motif fills (Reference Manual)

Element		Features	Reference
	Motif Runs Advanced	Motif Run	Create graded motif runs (Reference Manual)
		Motif Column	Create graded motif columns (Reference Manual)
	Custom Splits	Flexi Split	Flexi-splits (Reference Manual)
		Carving Stamp	Creating patterns with custom splits (Reference Manual)
		User Defined Split	
	Photo Flash	Photo Flash	Auto-digitize with Photo Flash
		Color PhotoStitch	Auto-digitize with Color PhotoStitch
	Reef PhotoStitch	Reef PhotoStitch	Auto-digitize with Reef PhotoStitch

Production

Element		Features	Reference
	Team Names Advanced	Save As Teamname Template	Teamname templates (Reference Manual)
	Offsets Advanced	Outlines & Offsets	Generating outlines & offsets (Reference Manual)
	Auto Shaping	Shaping Tools	Shaping objects (Reference Manual)
	Auto Arrangements	Mirror Merge	Mirroring & reflecting selections (Reference Manual)
	Kiosk Mode	Lettering Kiosk	Lettering Kiosk (Reference Manual)

Specialty

Element		Features	Reference
	Embroidery-Connect	EmbroideryHub EmbroideryConnect	Machine Networking (Reference Manual)
	Single Sequin	Sequin Run	Digitizing sequin runs (Reference Manual)
		Sequin Fill	Creating sequin fills (Reference Manual)
	Sequins Advanced	Advanced Sequin	Advanced Sequins (Reference Manual)
		Sequin Fill	Creating sequin fills (Reference Manual)
		Twin Sequin	Creating multi-sequin runs (Reference Manual)
		Multi Sequin	
	Beading	Bead Run	Bead Embroidery (Reference Manual)
	Bling	Create Bling	Bling Digitizing (Reference Manual)
		Bling Lettering	Creating bling lettering (Reference Manual)
	Virtual Decoration	Capture Virtual Decoration Bitmap	Virtual embroidery
	Font Creator	Create Letter	Creating custom fonts (Reference Manual)
		Convert TrueType Font	Converting TrueType fonts to embroidery (Reference Manual)
	Chenille	Chenille	Chenille Supplement
	Schiffli	Schiffli	Schiffli Supplement

Elements now standard

Some e3 elements are discontinued and their functionality now bundled as standard.

Element	DES	DIG	DEC	EDI	LET
Auto Shaping	●	●	–	–	–
Bling	●	●	●	–	–
Offsets Standard	●	●	●	–	–
Team Names Standard	●	●	●	●	●
Vector Drawing	●	●	●	–	–
Auto-Digitize Bitmaps	●	●	●	–	–

DecoStudio

DecoStudio has been discontinued, now replaced by the more powerful ES Decorating. TrueSizer and TrueSizer Pro products have been updated to e4. TrueSizer Web also continues to be available as a free online web service.

CorelDRAW Graphics Suite

The CorelDRAW Graphics Suite of applications is included as standard with ES Designing and ES Decorating. EmbroideryStudio e4 links to CorelDRAW® Graphics Suite. Customers must register with Corel to enable the product. See also CorelDRAW® features & benefits.

Note Users who have purchased ES e4.1 or ES e4.2 will have received CorelDRAW® Graphics Suite 2017. Customers updating from ES e4.0 who already have CorelDRAW® Graphics Suite X8, can purchase an update to CorelDRAW® Graphics Suite 2017 from Wilcom for a small fee. Contact your local reseller for more information or visit www.wilcom.com.

Logistics for ES e4.5 software

The release of EmbroideryStudio e4 brings with it a few changes in software logistics, including distribution, software security, and end-user registration.

Simplified software distribution

EmbroideryStudio e4 products are supplied on USB memory stick. Documentation is provided in electronic format as part of the installation. Help is hosted online for easy update. For higher level products which support CorelDRAW, two separate installation/setup programs are provided on the same USB memory stick – one for Wilcom ES Software and one for CorelDRAW software.

New hardware dongle

Both new and update users will be provided with a new dongle if updating from a previous version or buying a brand new system. A dongle 'transplant' is required for update/upgrade customers (from e3). When updating from e4, use your current dongle. No codes are necessary unless you are including extra-cost elements.

End-user registration

EmbroideryStudio e4 prompts the customer to register the software for support and warranty.

New ES e4.5 version EMB design format

EmbroideryStudio e4 provides the latest version of the EMB all-in-one design format that supports the new features and objects that can be created with ES e4 software, including the latest CDR file format embedded in EMB. ES e4.5 can save to previous ES e4 formats for backwards compatibility.

What's new in ES e4.0?

The first release of EmbroideryStudio e4 contains many new product features and enhancements to many aspects of the software since the release of ES e3:

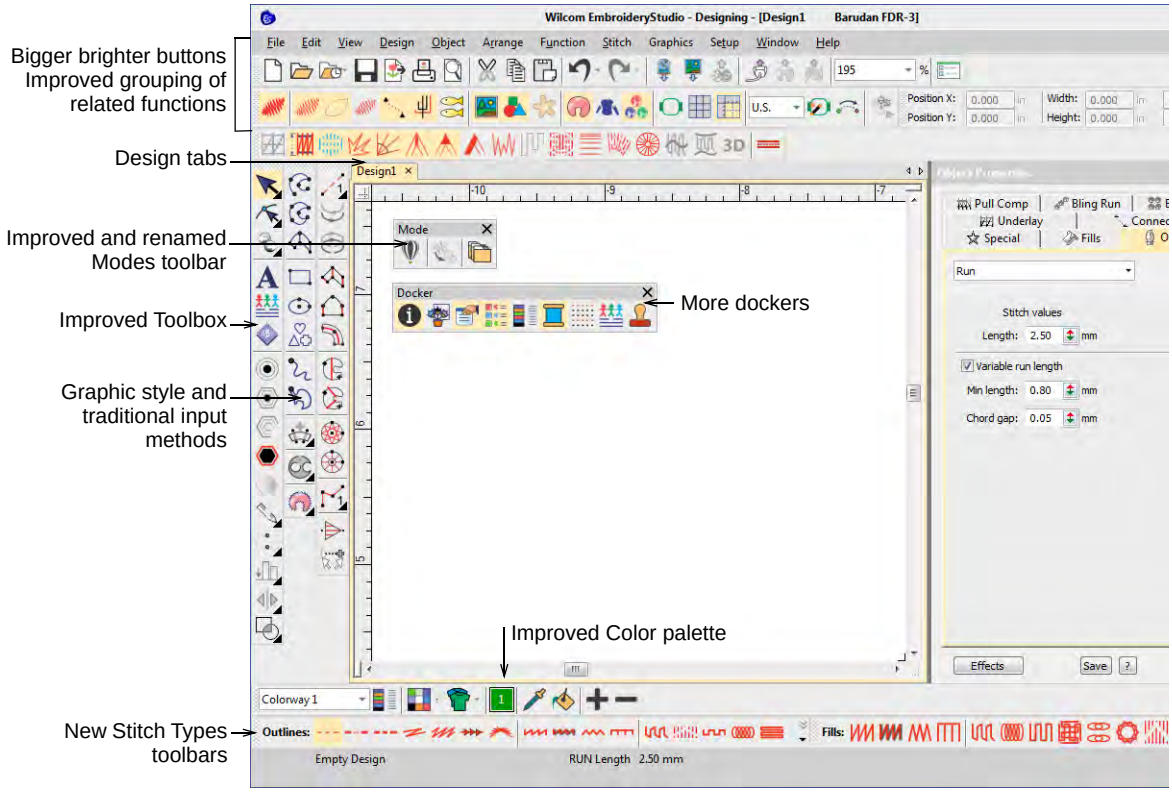
- Improved ES design workspace
- New Design Library
- New EMB Job Order Details
- Improved Product Visualizer
- New & improved lettering
- New & improved digitizing
- New & improved automatic digitizing
- Other improvements

Tip: For a summary of new and improved features, see the Product differentiation table at the end of these release notes. For a complete feature listing, see the product differentiation table in the user manual.

Improved ES design workspace

The EmbroideryStudio e4 user interface uses the same basic style and layout as e3 with some improvements. Not a big learning curve for existing customers to upgrade. EmbroideryStudio e4 introduces a new easier 'graphics style' of embroidery digitizing while also improving on the professional 'traditional' digitizing style. Graphics style is standard in

ES Decorating while both graphics and traditional digitizing are standard in **ES Designing** and **ES Digitizing**.



The user interface now includes:

- New color scheme
- Selectable icon size with or without icon labels
- 4K high resolution monitor support
- an improved **General** toolbar at the left
- a new **Graphics Digitizing** toolbar
- an improved **Traditional Digitizing** toolbar
- a new **Outline Stitch Types** toolbar
- an improved **Fill Stitch Types** toolbar
- an improved **Stitch Effects** toolbar
- a new **My Threads** docker
- an improved **Color** toolbar

Improved toolbox organization

The main vertical toolbox at the left side of the screen is re-organized for more efficient and obvious use:

- A simplified main toolbox has the commonly used tools for all product models.
- A new vertical **Graphics Digitizing Tools** toolbar holds graphics style shape tools.
- A new vertical **Traditional Digitizing Tools** toolbar holds improved traditional digitizing tools.

All frequently used tools are available in a single click – not hidden in flyout toolbars.

Note: Some optional features are shown. Not all tools are in all product models.

Improved flyout toolbars

Infrequently used tools are combined into flyout toolbars to save screen space and visual distractions. All flyouts can still be detached and left open if desired. Flyout toolbars are also quicker to respond and hence easier to use.

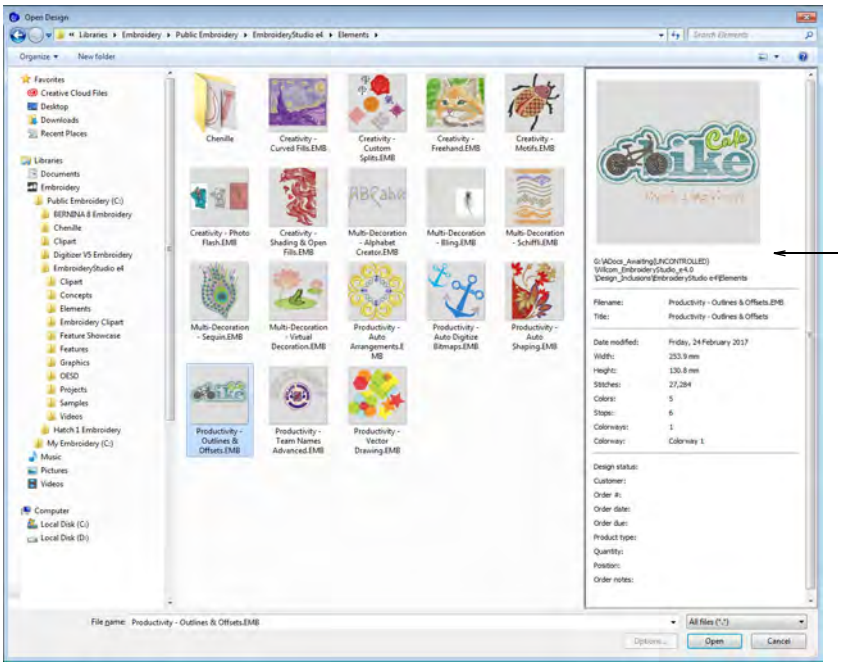
Improved default layout of tools and toolbars

Default layout of tools and toolbars in EmbroideryStudio e4 has been updated as follows:

- Only commonly used toolbars visible by default – specialty toolbars deactivated.
- Improved grouping of toolbars based on common usage.
- Vertical toolbox flyouts replaced with expanded toolbars for easier access.

Large Open and Save dialogs

EmbroideryStudio implements improved **Open Design** and **Save Design** dialogs.



Key features:

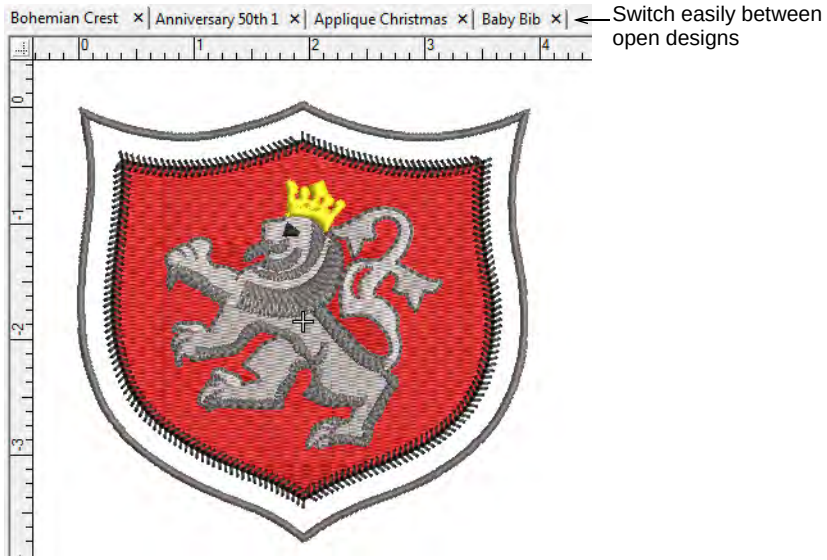
- Large, re-sizable **Open Design** dialog with full folder browsing.
- Windows Explorer search capability within the dialog.
- More extensive design preview info panel like Windows Explorer.
- Design thumbnails and preview ranging from small to extra large.

Open recent files by thumbnails

You can now preview recent designs before opening.

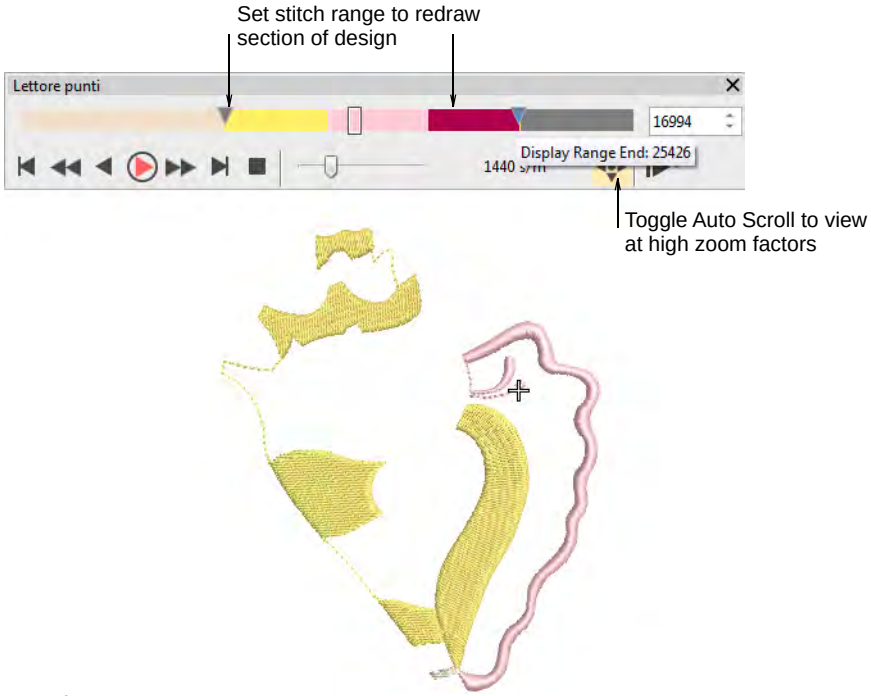
Display multiple open designs in separate design tabs

EmbroideryStudio makes it easy to see and switch between open designs with new design tabs. This also makes it easy to copy/paste between designs, including drag and drop operations. Optionally, you can tile multiple design tabs. See also Set up multiple views (Reference Manual).



New Stitch Player replaces Slow Redraw

EmbroideryStudio provides an improved **Stitch Player** tool for handling stitchout simulations. See also Simulate design stitchouts (Reference Manual).



Key features:

- Typical 'media player' buttons for play, pause, rewind operations
- Progress bar showing thread colors in proportion to number of stitches
- Progress bar marker which can be dragged forward or backward
- Auto scrolling at high zoom
- No change to current needle position in the design.

Improved color palette

The **Color Palette** has been improved and extended with new features. It now defaults to 15 colors representing 15 needles on a machine. Use the new **My Threads** docker to change the RGB values or assign real thread colors. See also Choosing threads (Reference Manual).

There are new tools to manage colors in the design palette more easily:

Tool	Details
My Threads	Invokes the new My Threads docker.
Hide Unused Colors	Displays only colors used by the design.
Remove Unused Colors	Replaces Compact Palette to remove all colors not used in the design. It then renumbers used colors.
Split Palette	The existing command remains.
Current Color	Highlight which palette color is current.
Pick Color	Eye dropper to select a new color from the design and make current.
Apply Current Color	Re-color objects in the design with the current color.
Cycle Colors ^	Automatically re-color objects by swapping colors used in the design.
Color Wheel ^	Create new color combinations based on rotating existing colors through the color space.

^ ES Designing and ES Digitizing only

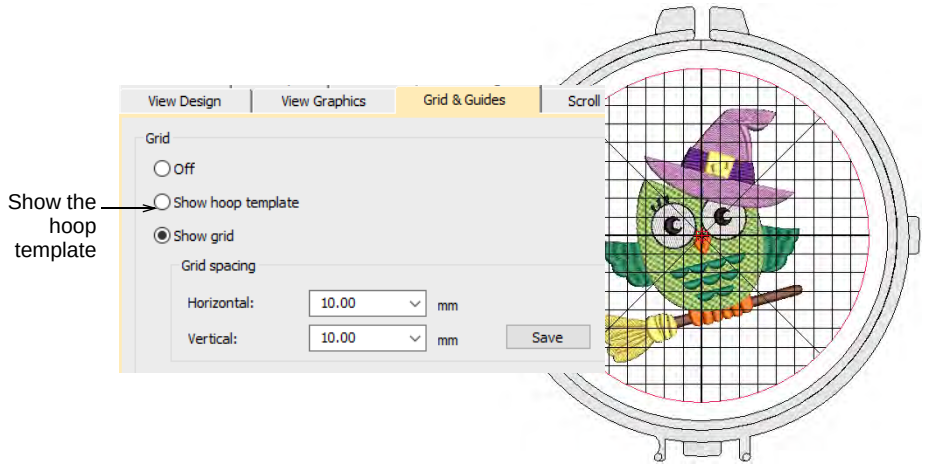
Other features:

- Color palette positions are numbered for easier reference
- Used colors are tagged with a blue marker.

New hoop template

Click View > Show Grid to show or hide the grid. Right-click for settings.

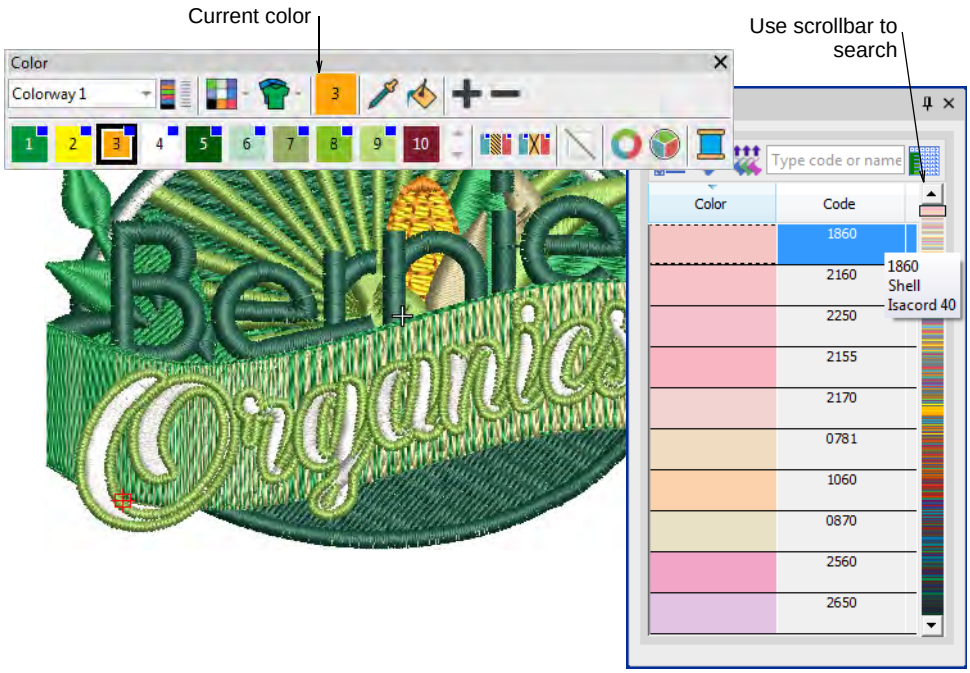
Now you can optionally turn on the **Hoop Template** display via the **Options** dialog or **View** menu. The template may be used to help position your design within the hoop.



Tip: You can include the hoop template in the production worksheet, together with alignment and registration guide markings. This allows you to cut out the printed design and align it within the hoop. Use the template markings to align it to physical hoop template.

New My Threads docker

A new ‘My Threads’ docker makes it easy to select and assign thread colors. See also Assign thread colors (Reference Manual).



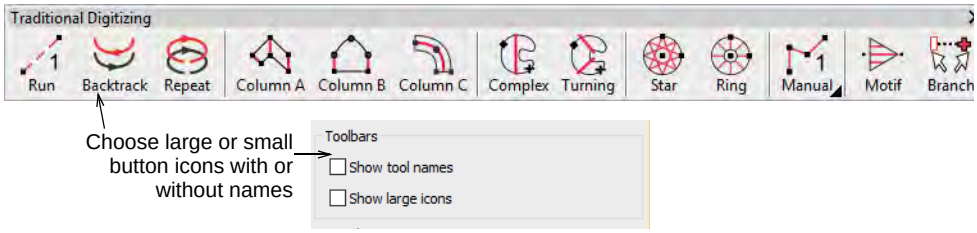
Key features:

- Easily choose which thread charts to display.
- Dynamically sort thread colors in docker by numerical code or color shade.
- Locate desired colors using a color scroll.
- Enter color code to locate a specific color.
- Double-click to assign thread color to current palette slot.

Configurable toolbar display

Use Standard > Options to access application options for design view, grid & guides, and other settings.

EmbroideryStudio allows you the choice of large or small button icons with or without short names. See Toolbar display options (Reference Manual) for details.

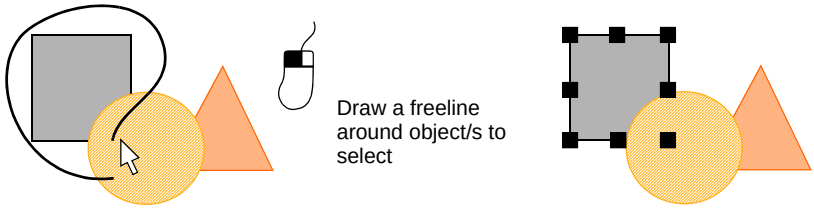


Object selection

Use Toolbox > Select Tools > Select Object to select individual objects as well as groups or ranges of objects.

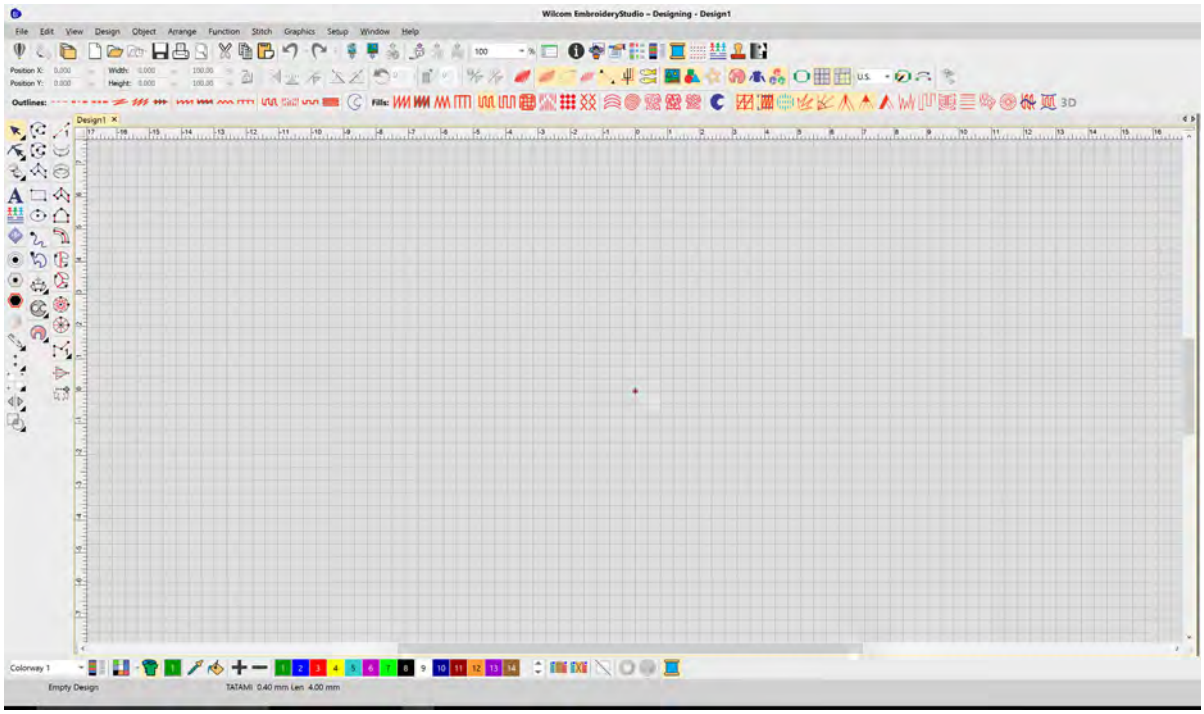
Use Toolbox > Select Tools > Freehand Select to select object at current by drawing a freehand line.

In addition to existing **Select** tools, the new **Freehand Select** tool allows you to draw a freeline around the object/s you want to select.



Support for 4K high-res monitors

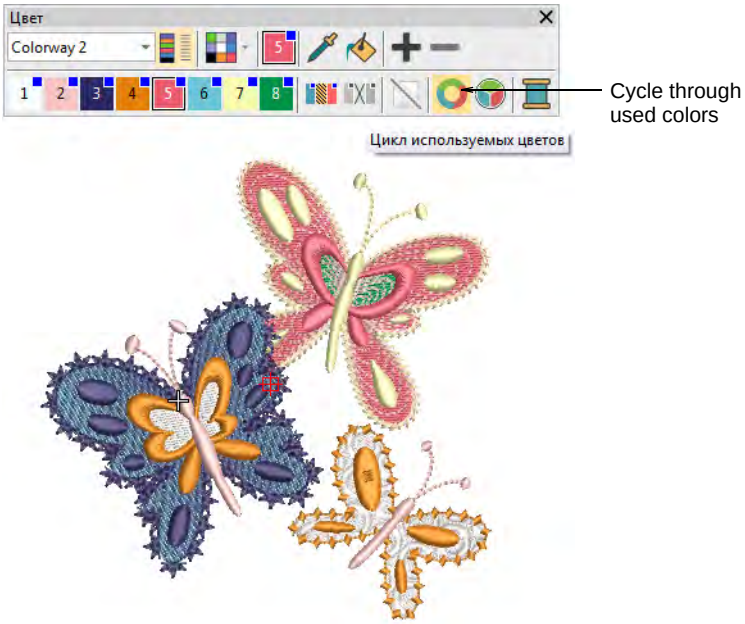
EmbroideryStudio e4 now provides support for 4K high resolution monitors. Buttons are large enough to be seen effectively providing effective use of the large graphic area.



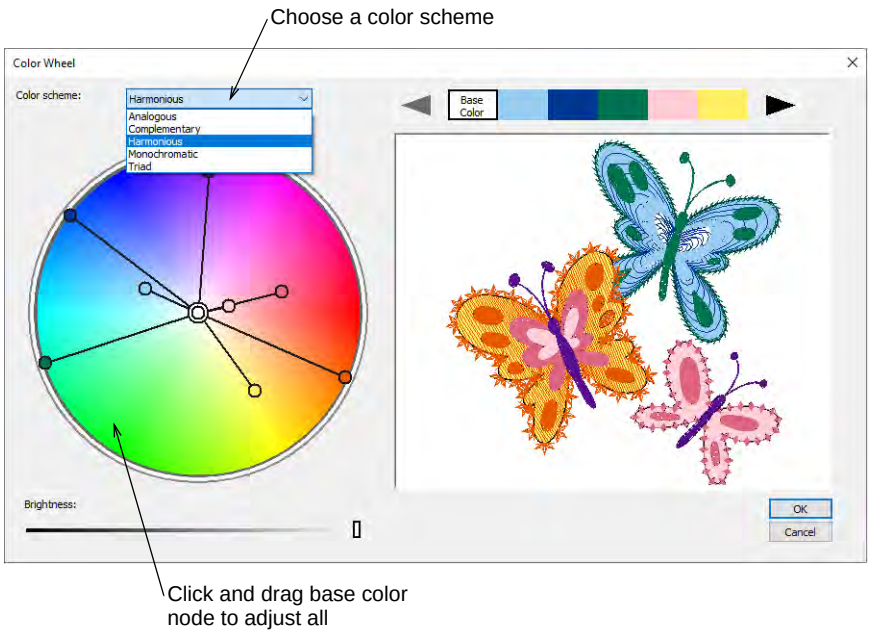
Quick recoloring

New tools allow you to quickly re-color entire designs. See also Add colorways (Reference Manual).

- The **Cycle Colors** tool lets you automatically re-color objects by swapping colors used in the design.



- Use the **Color Wheel** to cycle through different color combinations using preset color schemes – **Analogous**, **Complementary**, **Harmonious**, etc.



New Design Library

A powerful new **Design Library** is integrated into the main ES application, replacing the separate **Design Explorer** application used in earlier versions. **Design Library** is a major new capability included as standard in all EmbroideryStudio product models.

- Very quick to start up and browse designs, open, view, edit designs
- Much greater functionality for finding and managing your designs
- An integral part the new job Order management in ES e4

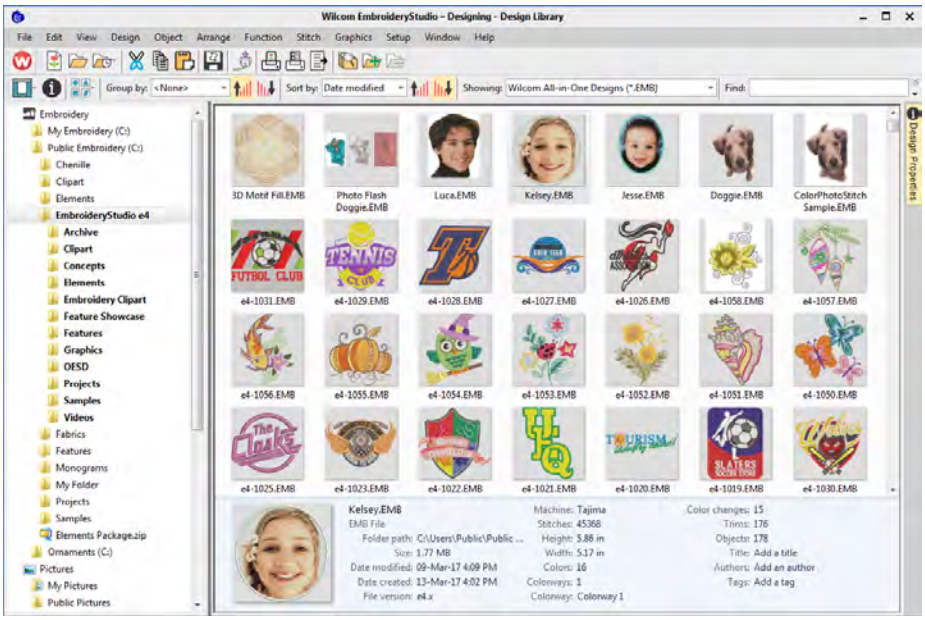
Design Library extends the Windows library feature far beyond what Windows Explorer does.

- Automatically finds and show only those folders with embroidery designs in them
- Choose to see all your designs in one window, regardless of what folder they are in,
- Group and sort your designs by customer, by order, by date, by folder…

With its fast and powerful search capabilities you'll never misplace another design:

- Fast search for designs by customer, name, description, date, order, any text…
- On my computer, on company network of computers, on machines
- Relating designs to customers and orders.

Design Library operates within the main ES window

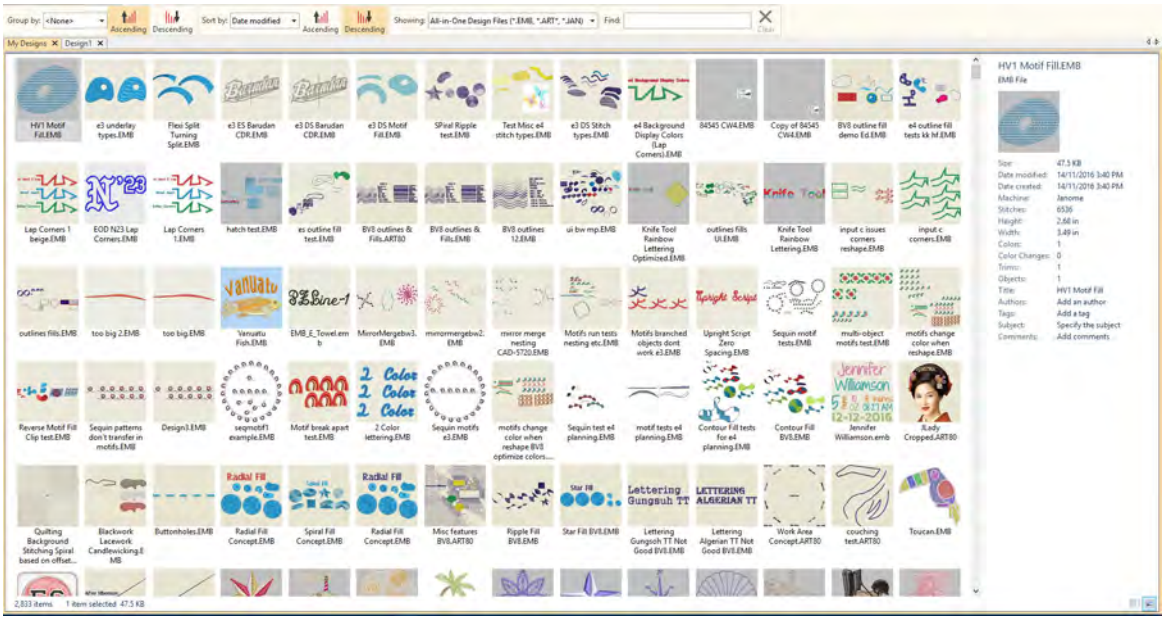


- Easily switch between open design window and the **Design Library**
- Library commands are in a toolbar at the top of screen
- Double-click to open a design for editing.

Design Library can show all designs in all folders

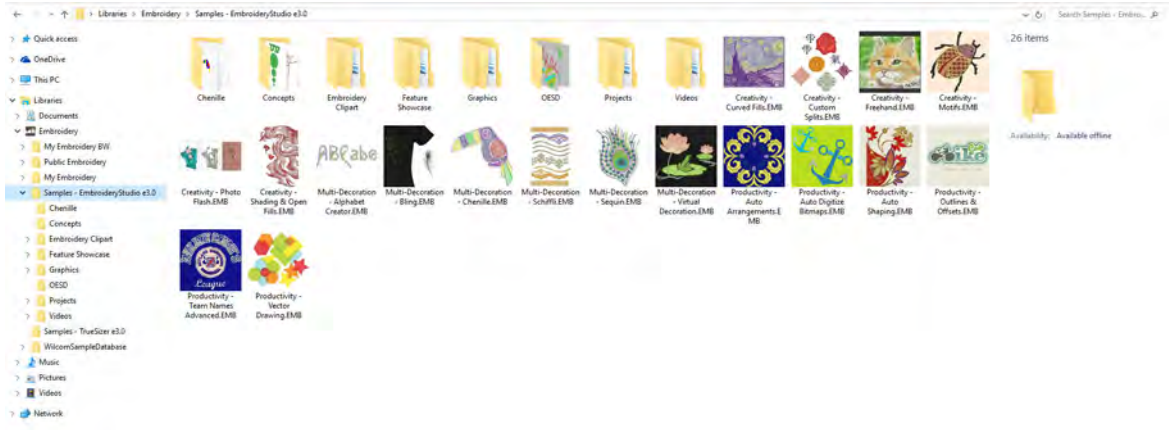
- Browse embroidery designs from all folders and sub-folders at the same time. Windows Explorer can only show designs in one folder at a time.
- Sort designs by date to see your most recent designs at the top, even if you can't remember what folder you put it in.

For your entire embroidery library... e.g. sorted by date descending

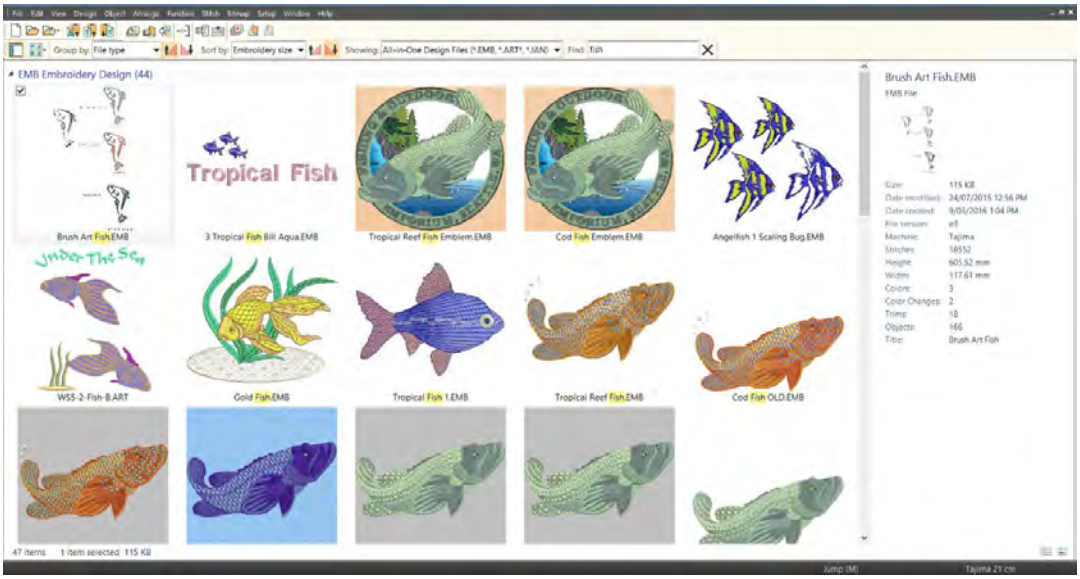


… or a Selected Portion of your Library… e.g. sorted by filename ascending

Windows Explorer shows only one folder at a time



Fast search for designs via any text in filename, folder, or design file properties



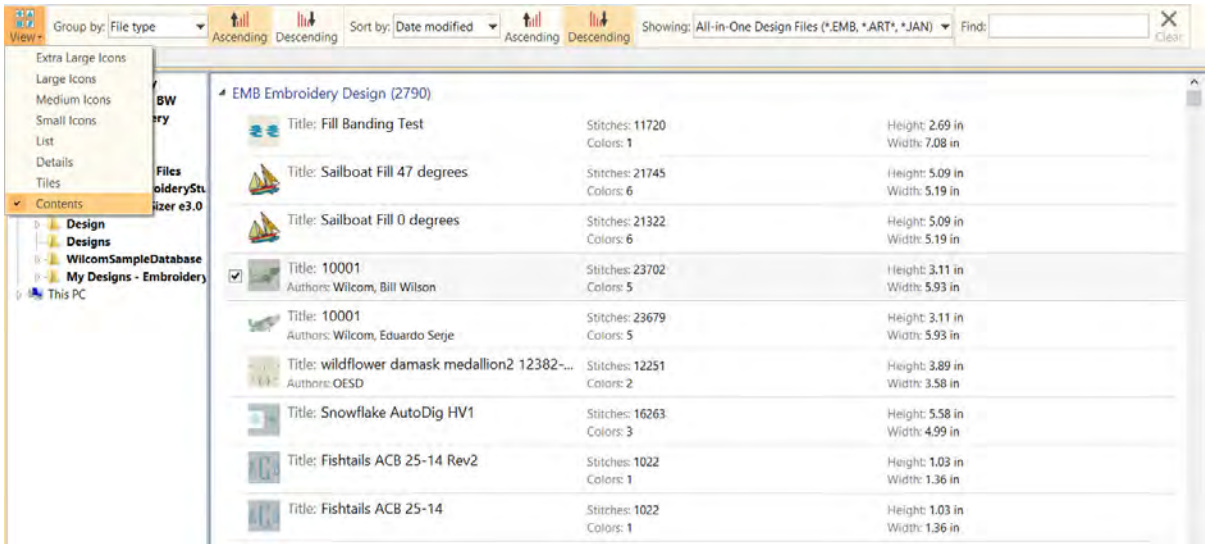
Powerful new search capabilities to find designs by text terms for all designs in the Library

- **Design Library** automatically indexes your design files for fast, free format searching
- Find designs with any text string in filename, folder name, or Design Properties
- group by various parameters – e.g. File Type in this example
- sort by various parameters – e.g. Embroidery Size in this case

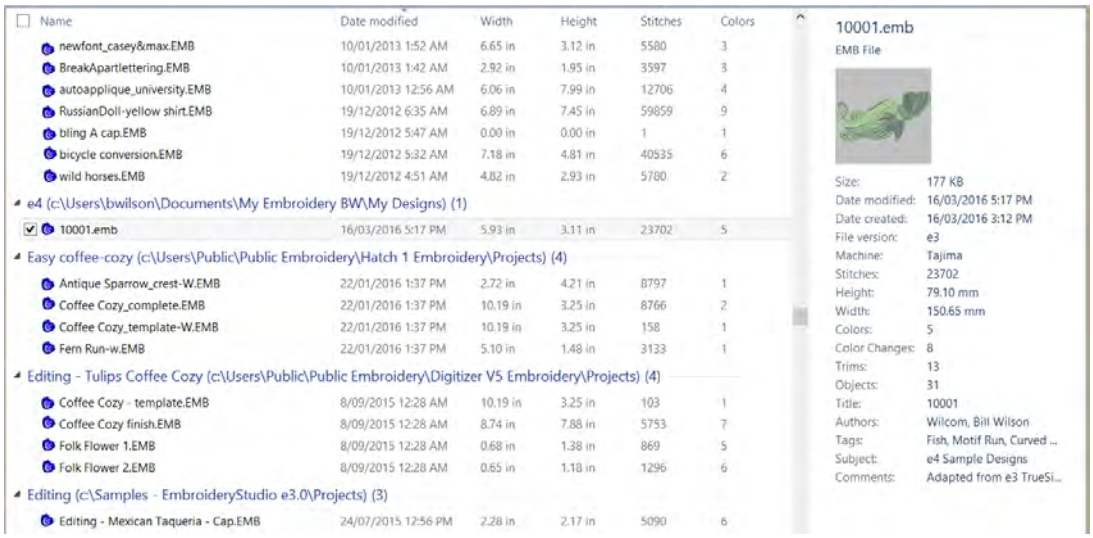
Display lists of designs in several different layouts

- Extra large Thumbnails, Large Thumbnails, Medium Thumbnails, Small Icons
- List, Details, Tiles, Contents,
- Customer, Order, Details

List designs with thumbnail and contents details



List designs in a table with user selected details visible



An integral part of the ES Order Job Feature

ES e4 extensions to the EMB file format include Quote/Order information. This makes the **Design Library** an integral part of the EmbroideryStudio Order Job Feature.

New EMB Job Order Details

EmbroideryStudio e4 software now stores basic embroidery job order information and design status right in the EMB design file. Together with the new **Design Library** system, this provides a practical and simple method of recording and managing custom embroidery jobs without the complications of a full order database system.

It is a simple approach oriented mainly for 'Custom Logo' type of commercial embroidery, where a custom design is required to be stitched of a specified garment in a defined location for a customer order.

A Production Job is one design on one garment

A 'production job' in the ES Job Order system is defined as:

- a specific embroidery design
- to be stitched on a specified Product, in a defined Position
- for a specified Order Quantity, broken down by Color / Size / Quantity
- for an order # for a specific customer on a specific order date.

A customer order might sometimes need multiple 'production jobs'. If so, you use a separate EMB design file for each 'job' in the order. To see all jobs for a specific order, you can list designs by order # or customer, etc.

Create and Manage Design Requests, Estimates, Approvals, Design Status

You can choose to enter values for the job Order fields, and then use **Design Library** to organize workflow for design requests, estimating, quoting, approval, scheduling, design status.

- Basic Design Requests with Artwork and Requested Details
- Advanced Design Requests with Garments and Logo Placement
- Improved Product Visualizer to visualize a design on a garment for an order
- Improved Design Approval Form
- Estimate Design Run Time and Job Time
- Use Design Status for Internal Workflow for Design Digitizing and Approvals

The EMB Order Job Feature is not a commercial order entry or production management database system. It uses the ES 'design management system' to view production job and order information saved with the EMB design. This allows custom embroidery jobs to be managed indirectly via the designs they use, without the complications or cost of a commercial database system.

Use the EMB Job Order Details to Prepare and Track Jobs

Embroidery sales and customer service staff can prepare and manage quotations and orders:

- create new design requests and enter job Order details in new or existing designs
- determine stitch estimates to help determine pricing for quotations
- display the artwork or digitized design on the product to be embroidered
- email Approval Sheets for design and quotation for an order/job to customers for approval
- track the status of designs and customer approvals
- release approved jobs for digitizing and/or production

Digitizing managers and staff can plan and manage digitizing designs:

- know what new designs to create or existing designs to modify by customer, order, date
- track and manage the internal checking status of newly digitized or modified designs
- track and manage previous and new designs by customer, order, date and other job details

Production managers and staff can plan and manage production jobs:

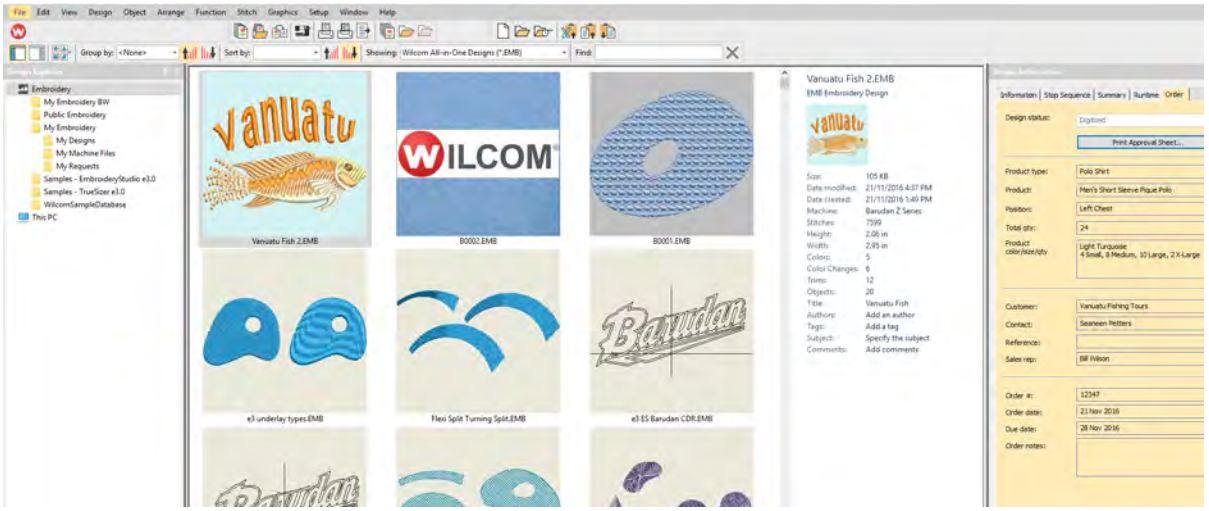
- know when a new design / order is approved for production
- know what design to use for what order, and how many pieces to embroider on what products in what position, with color/size/ quantity details
- help plan production schedules from the order due date, design statistics, and job quantities

Manage Job Order details by EMB Design

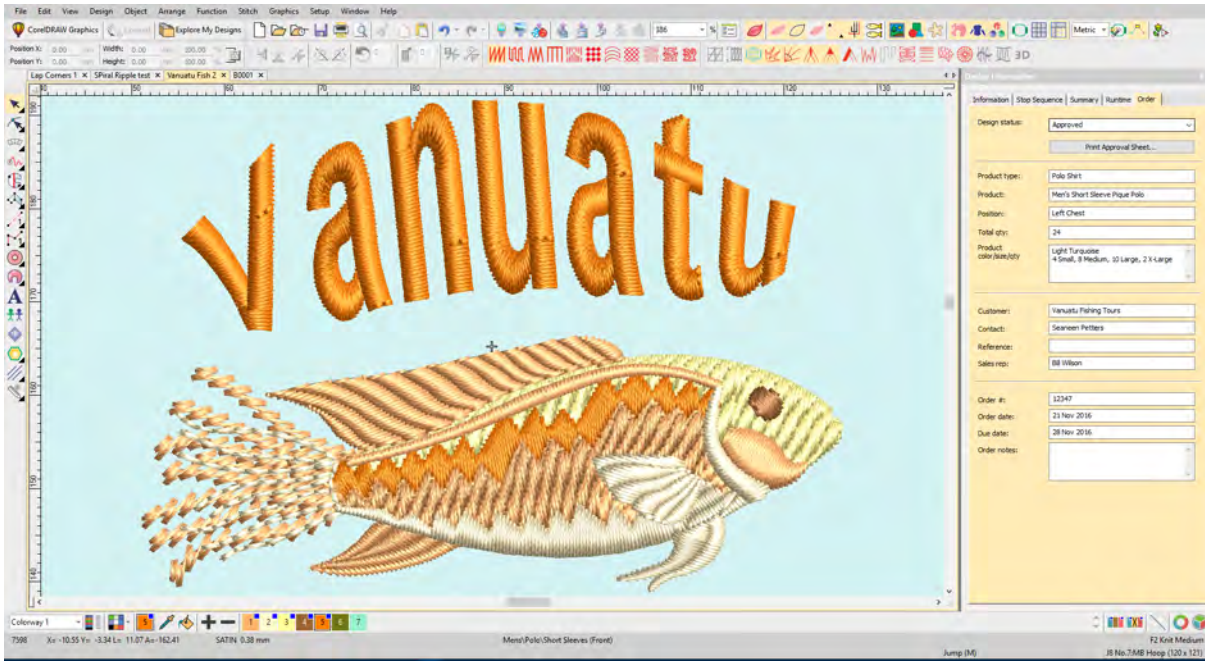
- Staff enter basic job Order details and status into **EmbroideryStudio** and save it in an EMB design file
  - either a new EMB file which serves as a design request to be digitized
  - or an already digitized EMB design which is to be used for a new order
- **Design Library** automatically indexes the designs with order and design details
- Staff use **Design Library** to view and manage designs and the orders/jobs they define
  - browse, list, or search for designs by various criteria
  - for customer, order, date, size, design name or description, etc
- Order / Job details are printed on Design Approval Sheets for customer approval

- With easy emailing to customers for approval
- Order / Job Details are printed on Production Worksheets for production staff
  - With print to PDF to use for design work orders
- Staff use the design status to track and manage the workflow of a design or production job
  - eg List designs to be digitized
  - eg List designs waiting for customer approval
  - eg list designs ready for production, etc

See Job Order Details in Design Library



See and Edit Order Details Before or After Design is Digitized



List Designs with Order Details

Name	Title	Date	Design Status	Customer	Order #	Order Date	Order Due	Quantity	Product Type	Position
B0002.EMB	Wilcom Logo for Polos	21/11/2016 11:51 AM	Requested	Wilcom Int	12346	21 Nov 2016	28 Nov 2016	24	Polo	Left Chest
B0001.EMB	HV1 Motif Fill Title	14/11/2016 3:40 PM	Requested	Wilcom Int	12345	10/11/2016	28/11/2016	12	Polo Shirt	Left Chest

Use **Design Library** to Group/Sort designs by Order number to see them together.

Basic Job Order Details Stored in EMB File Properties

The order / Job details can be entered via the **Design Library** or the **Design Properties** dialog inside **EmbroideryStudio**. Basic order details are stored as EMB file properties. Any alphanumeric information can be entered. Fields include:

Field	Details
Filename	File name of the selected design. This will often be a number or alphanumeric format for easy cataloging.
Title	Defaults to filename. Add a more descriptive name for easy searching. This name appears on the approval sheet or worksheet.

Field	Details
Design status	Use ‘design status’ for digitizing and approvals. Most companies will want to define their own status types – e.g. ‘Logged’, ‘Verified’, ‘In Progress’, ‘For Review’, ‘Approved’.
Print approval sheet	Takes you to Approval Sheet print preview directly. You have the option of sending to a printer, printing a PDF, or sending by email.
Design details	
Quote / Order #	Embroidery company’s order number
Order date	Date the order was placed
Order due date	Date the completed order is due
Order notes	Notes about the order
Customer details	
Customer	Customer name and/or ID
Contact	Customer contact person
Reference	Customer reference / PO order or similar
Sales rep	Name of salesman dealing with the customer
Product details	
Product type	Garment or article type – e.g. Polo Shirt
Position	Position of design on the product
Quantity	Total number of pieces to be stitched with design
Product	Brand, style code, product name
Product colors	May include product color code or name.
Color / Size / Qty	Matrix of product color, size, quantity for the product

Job Order Detail is standard in all ES Product Models

All products in the EmbroideryStudio family of products (ES) include the **Design Library** and job order details as standard. Small shops would typically use **ES Decorating** for most staff. Digitizing staff would use either **ES Decorating** or **ES Designing** depending on the amount of digitizing they do. Customer service staff could use lower cost **ES Lettering**. Production Staff are better suited to **ES Editing**.

New Improved Design Approval Process

EmbroideryStudio introduces a much improved design and order approval sheet and process:

- Improved Approval print form displays main Order and Job details
  - Uses Improved Product Visualizer images

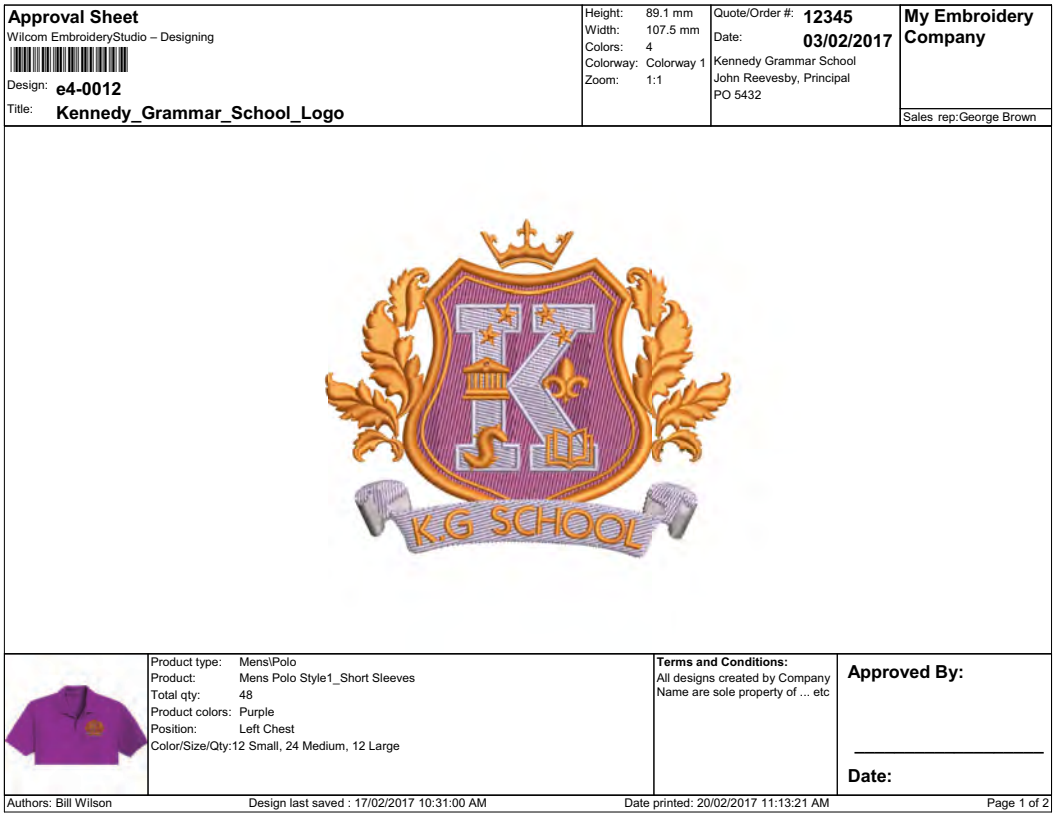
- Includes Customer, Order, and other job details
- Excludes stitch count for commercial confidentiality
- Various improvements to the Print Options dialog

- Email PDF print file to customer for quote / approval
  - with automatic PDF filename
  - Print to PDF file on local network for easy staff reference
- Track approval status via 'Design Status' field in EMB file / **Design Library**

Improved Approval Print Forms with Job Order Details

Relevant order / job details previously saved in the EMB file are displayed on the design Approval Sheet.

- Design close up / actual size on page 1



Approval Sheet
Wilcom EmbroideryStudio – Designing

Design: **e4-0012**
Title: **Kennedy_Grammar_School_Logo**

Height: 89.1 mm
Width: 107.5 mm
Colors: 4
Colorway: Colorway 1
Zoom: 1:1

Quote/Order #: **12345**
Date: **03/02/2017**
Kennedy Grammar School
John Reevesby, Principal
PO 5432

My Embroidery Company
Sales rep:George Brown

Product type: Mens\Polo
Product: Mens Polo Style1_Short Sleeves
Total qty: 48
Product colors: Purple
Position: Left Chest
Color/Size/Qty:12 Small, 24 Medium, 12 Large

Terms and Conditions:
All designs created by Company Name are sole property of ... etc

Approved By:

Date:

Authors: Bill Wilson | Design last saved : 17/02/2017 10:31:00 AM | Date printed: 20/02/2017 11:13:21 AM | Page 1 of 2

- Design on selected Product Image visualized on page 2

Approval Sheet
Wilcom EmbroideryStudio – Designing

Design: **e4-0012**
Title: **Kennedy_Grammar_School_Logo**

Height: 89.1 mm
Width: 107.5 mm
Colors: 4
Colorway: Colorway 1
Zoom: 0.30

Quote/Order #: **12345**
Date: **03/02/2017**
Kennedy Grammar School
John Reevesby, Principal
PO 5432

My Embroidery Company
Sales rep:George Brown

Product type: Mens\Polo
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Approved By:

Date:

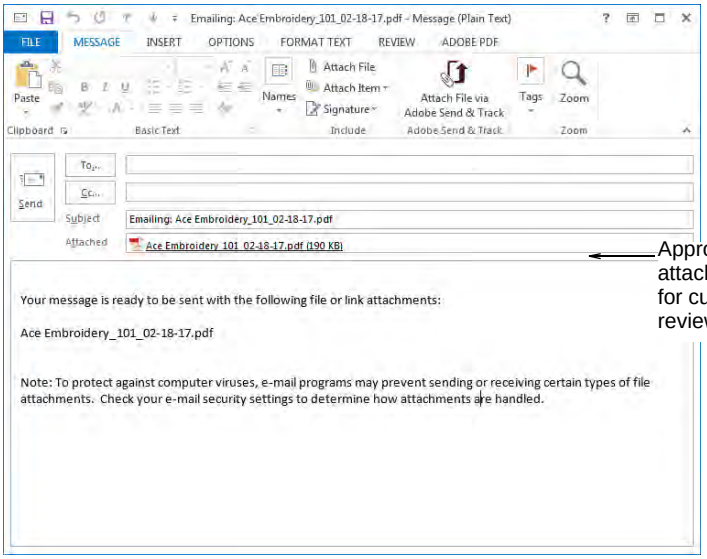
Authors: Bill Wilson | Design last saved : 17/02/2017 10:31:00 AM | Date printed: 20/02/2017 11:13:22 AM | Page 2 of 2

The changed information added to the Approval form in **EmbroideryStudio** includes:

- Customer, Customer Contact, Customer Reference
- Order Date, Sales Rep
- Product Type, Product Name, Product Color(s), Embroidery Position
- Total Quantity, Quantity by Color and Size
- Terms and Conditions text
- Signature Block for name and date approved
- Stitch count removed

Email PDF of Approval Sheet to customer for approval

Email approval sheet as PDF attachment

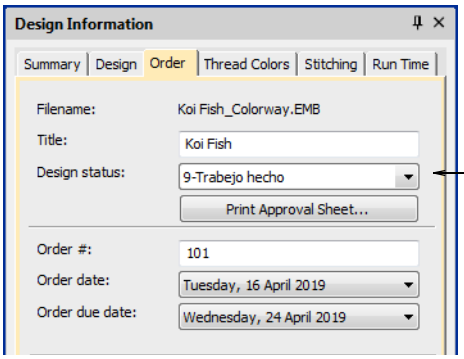


Approval sheet attached to email for customer review

- Send approval forms via PDF to customer for approval.
- Add pricing and delivery details in covering email – not saved in EMB file
- Optionally Save PDF prints to local disk or network drive for staff access
- Optionally email and save PDF of Production Worksheet prints for production use

Track Status of Design Approval via Status field in EMB File

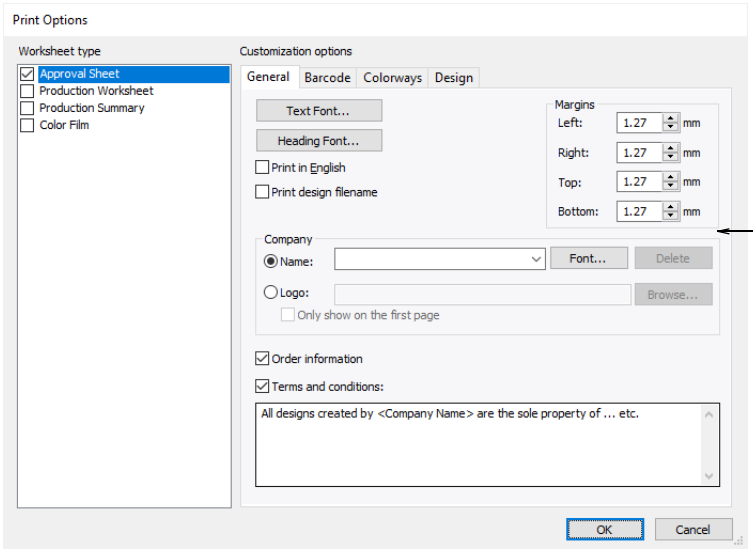
If desired, you can set/update the design status field in the **Design Information** docker. Then other staff can see and monitor the design approval status via **Design Library**.



Set design status for improved design tracking

Improved Print Options Dialog

Various improvements are made to the **Print Options** dialog to support improved **Approval Sheet**.



Improved Product Visualizer

A major improvement is made in EmbroideryStudio to the **Product Visualizer** – means to display a design on a garment or other product being embroidered. The key points are:

- New high resolution predefined product articles supplied in ES e4
- Defaults to ‘Blank’ 100 x 100mm embroidery area displayed in white. Resize and/or re-color if desired.
- Easier to select and use product images
- Locate product images anywhere in the design window
- Resize product images graphically or numerically
- Re-color product images
- Save product images in the EMB design file for viewing on any Wilcom system.

New High Resolution Re-colorable predefined product images

A new set of high resolution product images of common embroidered items is included with **Product Visualizer**. These include:

- Products with multiple views – front, back, and sides.
- Cropped versions of large items for easier presentation

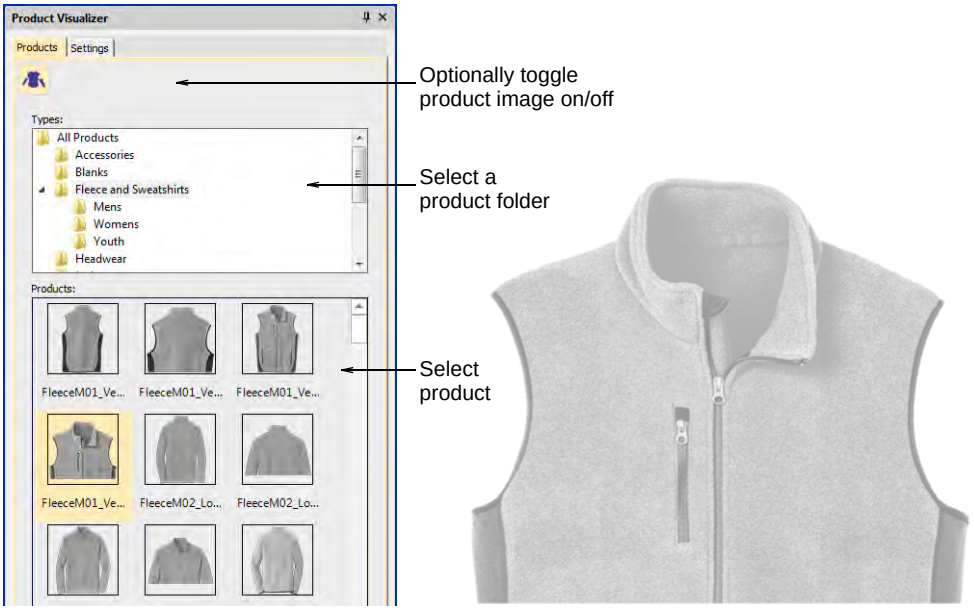
Add your own pre-coloured or re-colourable product images

Easier to select and use Product images

Access Product Visualizer From Color Toolbar

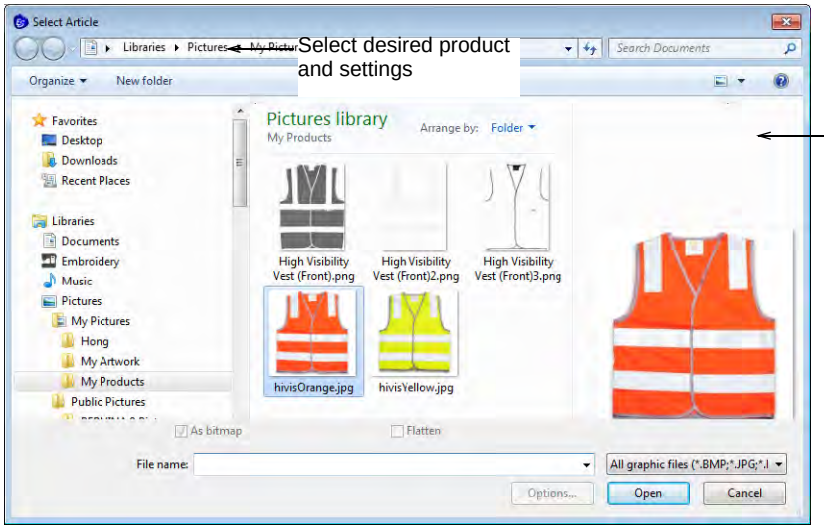
- Access the improved **Product Visualizer** via a button on the **Color** toolbar. See Visualize products (Reference Manual) for details.

Select Desired Product and Setting from new Docker



- Standard generic products are organized in folders by product type

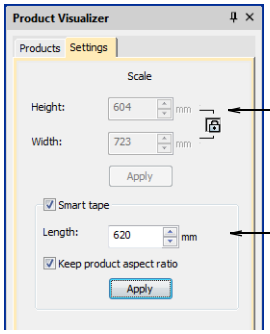
Select custom products from your folder of product images



Select desired product and settings

Select custom products from your own folder

Re-color and Re-size Product Articles in the Settings tab



Scale product image as necessary

Alternatively, enter known dimension and click Apply to resize product image

Measure garment to determine real-world size

- Re-size a product graphically or use Smart Tape to use a specific a measurement
- Re-size a product by specifying the size in mm (rather than %)
- Re-size a product using Smart Tape to use a specific a measurement.

See Visualize products (Reference Manual) for details.

Product Images are copied and saved in the actual design EMB file

- The product image goes with the design to anyone you send the EMB file to
- Unlike e3 EMB which only kept a reference to the product image filename.

New & improved lettering

In EmbroideryStudio e4, embroidery ‘alphabets’ are now referred to as ‘fonts’. Native fonts are digitized for use with embroidery. Graphic TrueType fonts from Windows and other sources are converted to stitching upon use.

Additional lettering fonts of various styles

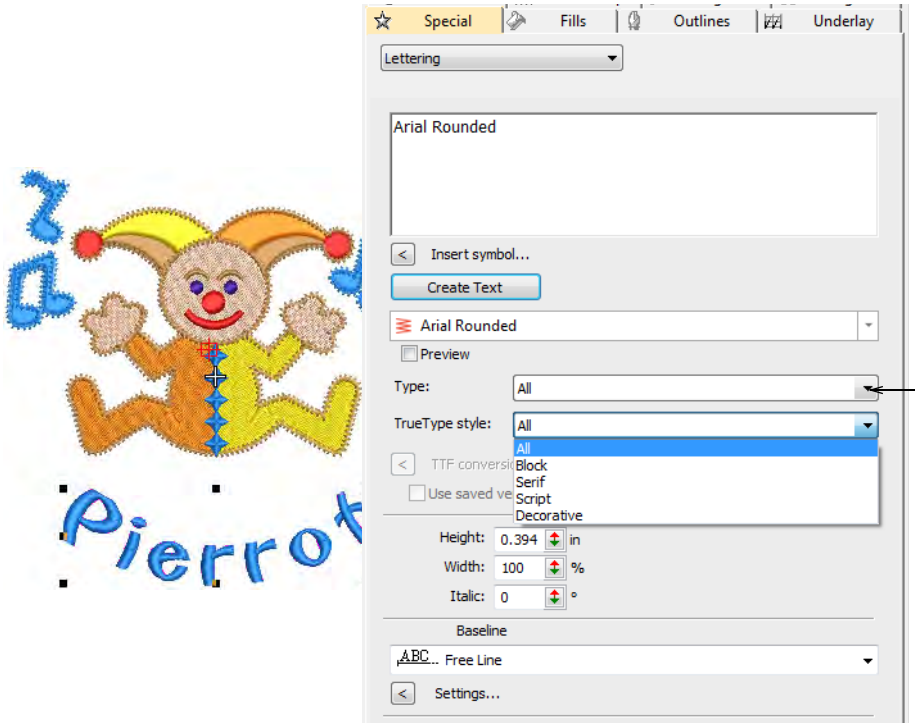
EmbroideryStudio e4 includes 32 new professionally digitized fonts, including:

- Mixture of normal embroidery fonts
- 3D foam fonts
- More and better running stitch fonts
- Outline fonts for sports lettering
- Two-color outline fonts
- Commercial logo fonts
- Double-color bordered fonts used for sports apparel and by hobbyists. See also Standard Fonts (Reference Manual).

Improved font selection user interface

Use Toolbox > Lettering to create embroidery lettering directly on-screen. Right-click to access settings.

EmbroideryStudio e4 includes improvements in font selection. Fonts are listed in category groups for easier identification. This makes it easier to find a suitable font for a particular purpose in mind. Also you can type the font name to select it from the list. The first few letters of the name will locate it in the list. See also Creating embroidery lettering (Reference Manual).



Fonts are grouped as follows:

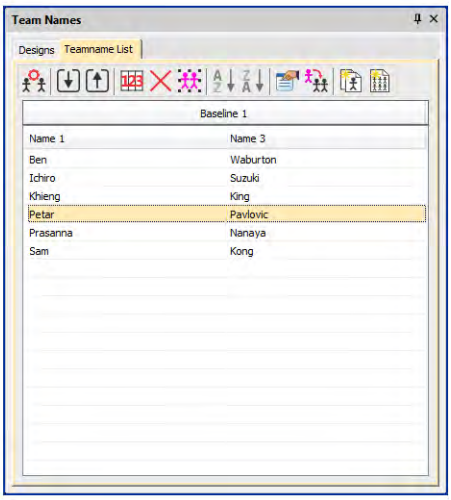
Category	Details
Type	Embroidery font, TrueType font (TT), OpenType font (OT)
Style	Block, serif, script, decorative, etc
Technique	Normal, Run stitch, 3D Foam, Chenille, Border, Monogram, appliqué, etc
User-defined	Custom font vs system font.

Improved Team Names feature

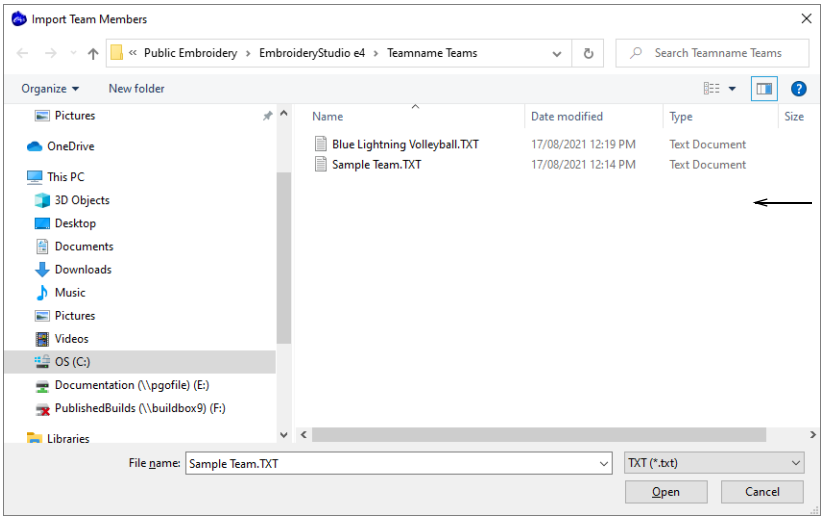
Use Toolbox > Team Names to associate multiple names with a design.

Various aspects of the **Team Names** feature have been improved:

- Simple teamname lettering can be managed from a single docker. See also Creating simple teamname designs (Reference Manual).



- Import and export lists of names from TXT or CSV file. See also Managing teams (Reference Manual).



Import names as TXT or CSV

- For **Advanced Team Names** users, the mechanism for creating and employing single- or multi-baseline layouts, is now much easier via

the dedicated **Team Names > Designs** tab. See also Teamname templates (Reference Manual).

Note: By default, the **Designs** tab includes a 'Custom' folder which is the default for all user-defined teamname templates. If you merge settings from an older version of the software, other folders may appear.

- Re-purpose designs for use as custom layouts via the **File > Save as Teamname Template** command.

Kerning tables for more fonts

Spacing kerning tables are now included for all fonts. Kerning is also the default spacing method. Kerning automatically adjusts spacing between pairs or triplets of letters. This can improve readability and appearance.

Unlike character spacing, kerning is defined in the actual font. See also Setting automatic letter kerning (Reference Manual).

Improved auto-digitizing of TrueType fonts

EmbroideryStudio e4 provides improved auto-digitizing of TrueType fonts. In particular, serif fonts and fonts with wide stroke letters.

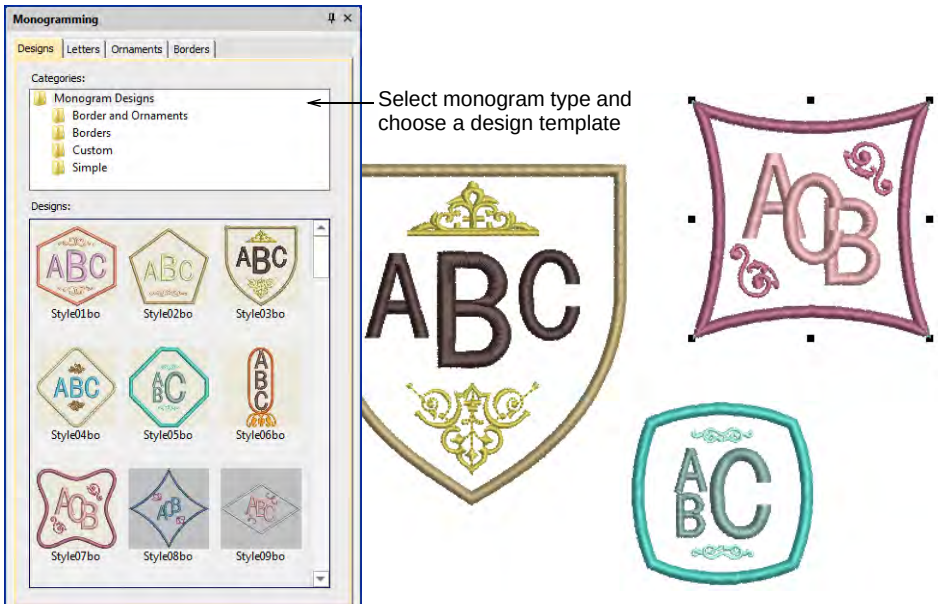
New & improved monogramming

Use Toolbox > Monogramming to create personalized monograms using a selection of predefined monogramming styles, border shapes and ornaments.

You build monograms using the **Monogramming** docker. The simplest way to get started is with the new **Designs** tab. This gives you a selection of design templates ranging from lettering only, with borders, or with ornaments. The updated **Monogramming** docker also includes:

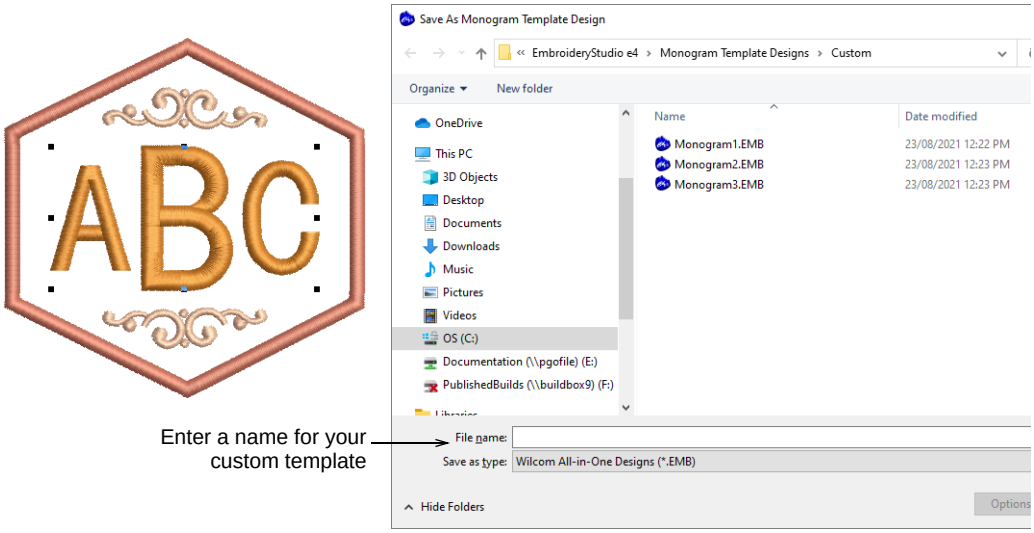
- 38 border shapes with many different stitch types
- More predefined styles including enveloped styles

- Increase to 8 border shapes and also with many different stitch types. See also Monogramming (Reference Manual).



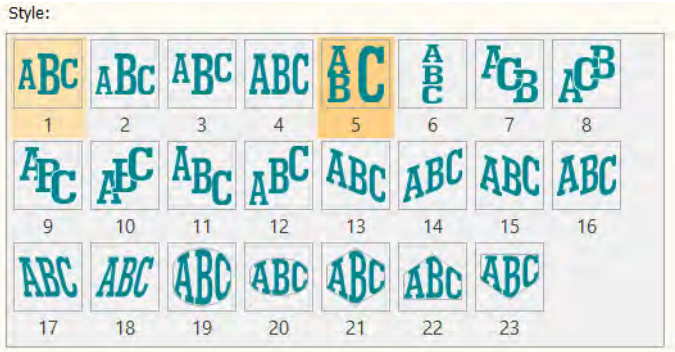
Monogram templates

EmbroideryStudio e4 also includes predefined monogram templates typical for commercial use. These contain layouts commonly used for typical items such as shirt pockets, cuffs, towels, and other popular items. If you want to save a design as a template for future use, use the new **File > Save as Monogram Template** command. The design will appear in the **Designs** tab under the **Custom** folder.



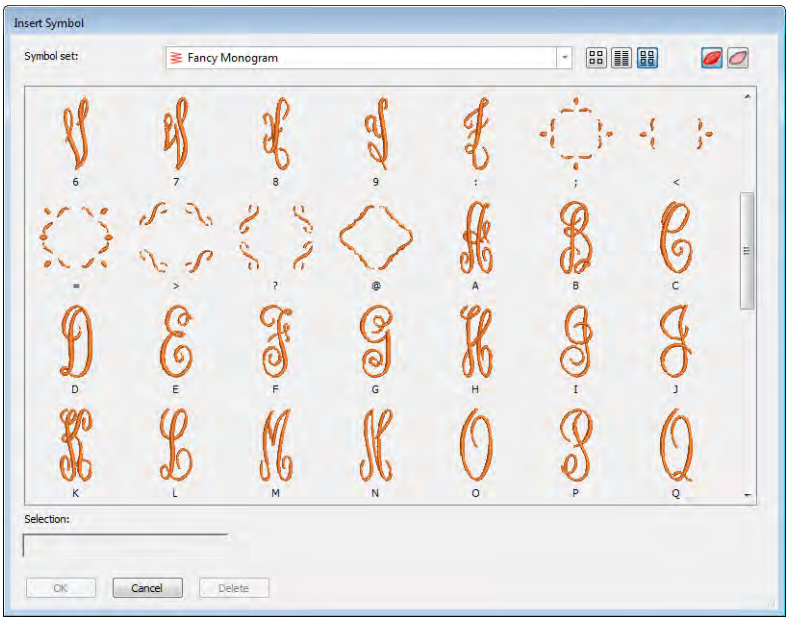
More styles

The **Monogramming** docker also includes more predefined styles including enveloped styles.



Easier use of borders and flourishes in monogram fonts

You can now select monogram ornaments from alphabet fonts. The size of ornament is set independently of the letters.



Greater control

You now have greater control of more advanced settings in monogramming styles. For example:

- Control of the size ratio of letters in styles. This replaces separate letter height parameters.
- Control of letter spacing for all styles.

- Option to remove underlying stitching where letters overlap.

New & improved digitizing

EmbroideryStudio e4 brings a huge increase in digitizing capabilities to all digitizing product models, especially for **ES Decorating** compared to **DecoStudio e3**.

- New graphics style plus traditional style digitizing
- New graphics style digitizing
- Improved traditional digitizing
- New **Basic Shapes** tool
- New standard stitch types
- New & improved technical stitching
- New & improved creative stitching
- Improved **Appliqué**
- Improved **Add Border**

Everyone will appreciate:

- how much easier and obvious it is to digitize designs
- the many new combinations of any shape with any stitch type
- the ability to convert virtually any fill to any outline and vice versa with a single click.

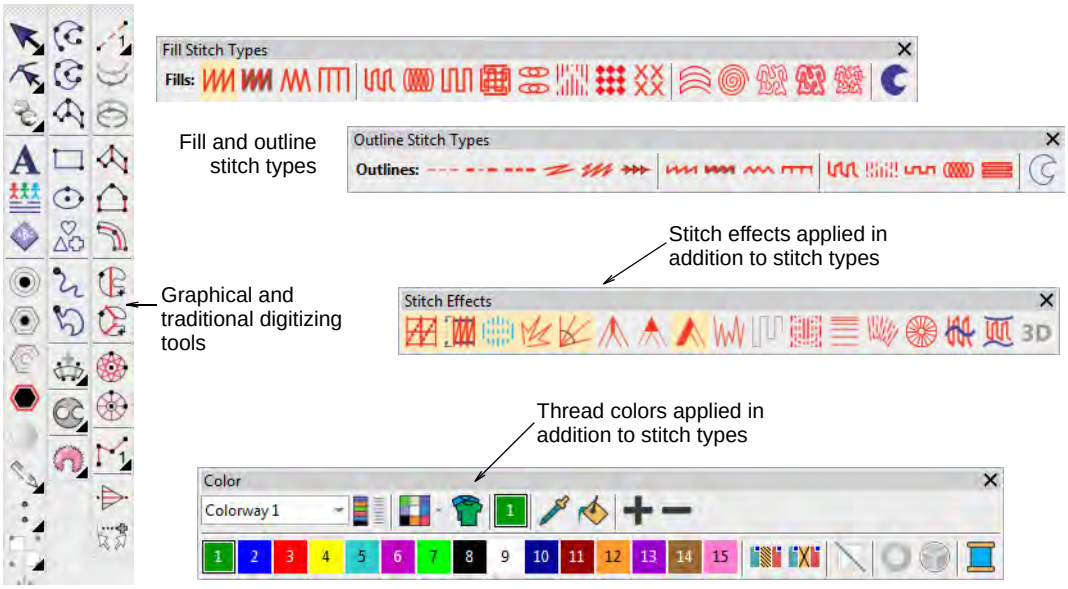
Production digitizers will appreciate:

- additional capabilities and control with traditional digitizing
- higher digitizing productivity
- flexibility that both approaches provide.

New graphics style plus traditional digitizing

EmbroideryStudio e4 has a new outline/fill digitizing paradigm similar to graphics applications. This should make digitizing easier and more obvious for beginners, and much easier to convert between outlines and fills generally. But don't worry, the new paradigm does not compromise the ability of professional digitizers to do the same 'power digitizing' they

do now. If anything, digitizing should become that much easier. See also Digitizing Shapes (Reference Manual).



Note: Some optional features are shown. Not all tools are in all product models.

New digitizing user interface

The user interface now includes:

- an improved General Toolbox vertical toolbar at the left
- a new Graphics Digitizing Tools vertical toolbar
- an improved Traditional Digitizing Tools vertical toolbar
- a new combined outlines and fills Stitch Types toolbar
- an improved Stitch Effects horizontal toolbar

Everyone appreciates:

- how much easier and obvious it is to digitize designs
- the many new combinations of any shape with any stitch type
- ability to convert virtually any fill to any outline and vice versa with a single click.

Production digitizers appreciate:

- additional capabilities and control with traditional digitizing,
- higher digitizing productivity,
- flexibility that both approaches provide

New graphics digitizing style

The graphics approach to digitizing operates similar to graphics design programs. It provides one set of tools to create shapes to be stitched:

- on the shape as outlines, or
- inside the shape as fills, or
- both

Assign an outline or a fill to a shape by clicking on the desired stitch type in the new **Stitch Types** toolbar.

To create both an outline and a fill, create the fill first, then select and duplicate the object and convert the duplicate to an outline, which is stitched after the fill.

Standard in **ES Designing**, **ES Digitizing**, and **ES Decorating** products.

New graphics digitizing tools for both outlines and fills

The new **Graphics Digitizing Tools** toolbar provides one easy set of tools for digitizing shapes for either fills or outlines.

Standard graphics digitizing tools in **ES Decorating** include:

- Digitize Open Shape, Digitize Closed Shape, Digitize Columns (Column A),
- Rectangle (Square), Ellipse (Circle), Single Line

Additional graphics tools in **ES Designing** and **ES Digitizing** include:

- New **Basic Shapes** tool
- Freehand Open Shape, and Freehand Closed shape with the Freehand optional element.

Assign an outline stitch type to open or closed shapes created from any shape tools by clicking on the desired outline type in the new **Stitch Types** toolbar. Assign a fill stitch type to closed shapes in the same way.

New Stitch Types toolbar

Assign an outline stitch type to open or closed shapes created from any shape tools by clicking on the desired outline type in the new **Outline Stitch Types** toolbar.

Select stitch type to use with current digitizing tool

ES Decorating includes 6 standard outline stitch types:

- Run stitch, Triple run, Satin stitch, Zigzag stitch, E Stitch, Vector Outline

ES Designing and **ES Digitizing** include 12 standard outline stitch types:

- The 6 outline stitches in **ES Decorating**, plus 6 more
- Backstitch, Stemstitch, Tatami outlines
- New **Sculpture** stitch, new **Satin Raised** stitch, and new **Square** stitch.

Satin, Zigzag, and E Stitch outlines automatically create a thick outline along the shape using the Column C object type. Use the rectangle and circle tools for outlines as well as for fills.

Assign a fill stitch type to a closed shape created from any shape tools by clicking on the desired fill type in the new **Fill Stitch Types** toolbar.

Assign a fill, including vector, to any closed shape

ES Decorating includes 6 standard fill types: Satin stitch, Zigzag stitch, E Stitch, Tatami, Motif Fill, Vector Fill.

Standard motif fill is a simplified motif fill for predefined motifs only, as in **DecoStudio e3**. Fully featured motif fill capabilities are provided as an add-on element for ES Designing and ES Digitizing only.

ES Designing and **ES Digitizing** include 10 standard fill types:

- The 6 fill stitches in **ES Decorating**, plus 4 more:
- New **Satin Raised**, new **Square** stitch, new **Double Square**, **Program Splits**

ES Designing and **ES Digitizing** offer a further 7 optional fill stitch types via various optional elements:

- New Satin Flexi Split, Cross Stitch, Contour, new Spiral
- Stipple run, Stipple Backstitch, Stipple Stemstitch.

No prompts for additional input with graphics style tools

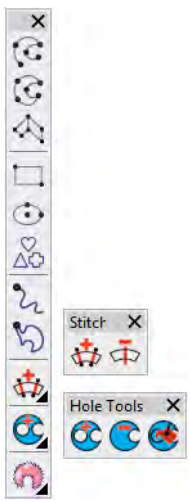
Graphics digitizing tools do not prompt for additional input such as multiple boundaries (holes) or stitch angles. These are automatically set to sensible default values. If you want to change them, use the new hole tools, stitch angle tools, and reshape tool to adjust. This approach has the advantages of:

- Immediate stitching result after creating the shape
- Easier and more obvious especially for newcomers
- More capabilities with fewer tools.

New add or remove stitch angles and holes to fills

Filled objects default to straight parallel stitching (complex fill) at your preferred default stitch angle value.

- Change a parallel fill to turning fill with the Add Stitch Angle tool.
- Change a turning fill to a parallel fill with the Remove Stitch Angles tool.
- Use Reshape to adjust existing stitch angles in an object.



Filled objects default to a single boundary, no holes.

- Add holes to a filled object using Add Hole tool
- Remove all holes from a filled object with Remove Holes, or
- Fill all holes in a filled object with Fill Holes.

See also Adding & filling holes (Reference Manual).

New vector drawing standard with graphic digitizing tools

Use the same graphic digitizing tools to create shapes for vector objects (no stitching).

- Select Vector Outline from the Outline Types toolbar, or
- Select Vector Fill from the Fill Types toolbar
- Use Object Properties to set both Outline and Fill properties for the same object.

Vector drawing is standard in e4 **ES Decorating**, **ES Designing** and **ES Digitizing**, not optional as in e3. See also Creating vector shapes in EmbroideryStudio (Reference Manual).

Improved traditional digitizing

Traditional style digitizing is standard in **ES Designing**, and **ES Digitizing** products. It is not available in **ES Decorating**. Graphics style digitizing is also provided, so you can use both as desired.

What do we mean by traditional style of digitizing?

The traditional style of digitizing is different from typical graphics design programs:

- Separate sets of input tools for outlines, for fills
- Explicit selection of which object / calculation method is used
- Emphasis on digitizing shapes with corner and curve points – limited standard shapes
- Prompts for additional input for each object.

The traditional style of digitizing has evolved to follow historical embroidery digitizing practices:

- Experienced digitizers can digitize faster and with greater control
- Newcomers can master it also but require more time to learn.

Prompt for additional input for each object

Traditional digitizing tools prompt for additional input for multiple boundaries (holes), stitch angles, and start and end points for each object. Pressing **Enter** will bypass an input and take the default value if desired. This approach has the advantages of:

- More control for the professional who wants to decide the best for each object
- Much quicker to specify when digitizing the shape than coming back to edit it with other tools.

Simplified set of traditional digitizing tools

EmbroideryStudio e4 has a simplified and rationalized set of traditional digitizing tools, re-named more consistently.

- 1 dedicated Run Tool for digitizing running stitches - whether decorative or travel runs
  - With Backtrack and Repeat tools beside for quick access
- 3 traditional 'Column Fill' digitizing tools:
  - Column A (previously Input A)
  - Column B (previously Input B)
  - Column C (previously Input C - centerline)
- 2 traditional 'Area Fill' digitizing tools:
  - Complex Fill - for parallel fill of simple or complex areas
  - Complex Turning Fill - for turning stitching of simple or complex areas (previously Fusion Fill)
- 4 specialty fill tools:
  - Star stitching of circle/oval
  - Ring stitching of circle/ovals
  - Manual Stitch and Triple Manual

Independent stitch types for traditional digitizing tools

Column Fill tools default to Satin stitch and will automatically remember this or any other fill stitch you choose for them, independently of Area Fill tools.

Area Fill tools default to Tatami stitch and will automatically remember this or any other fill stitch you choose for them, independently of Column Fill tools.

The Run Tool is always set to Run Stitch type. It does not change to the other outline stitch types. So you can swap between the Graphics digitizing tools (e.g. Digitize Open Shape) for all outline stitch types, and quickly return to Run tool for travel runs without changing stitch type.

Best of both worlds in ES Designing and ES Digitizing

EmbroideryStudio e4 maintains and improves on the advantages of the traditional approach to digitizing while also offering the increased flexibility and ease of use of the graphics approach to digitizing. Mix and match to suit each case. Use traditional style digitizing tools:

- for the dedicated run stitch tool, especially for travel runs between objects
- for digitizing column fills in any of 3 methods - A, B, or C
- for digitizing complex fills parallel or complex turning fills
- for specialty stitch techniques such as manual stitch, star and ring, backtrack & repeat.

Use graphics style digitizing tools:

- for digitizing open or closed shape outlines with the wide variety of outline stitch types

- for creating generic shapes such as rectangle, circle, standard shapes – for outline or fill
- for converting between outlines and fills
- for creating vector objects.

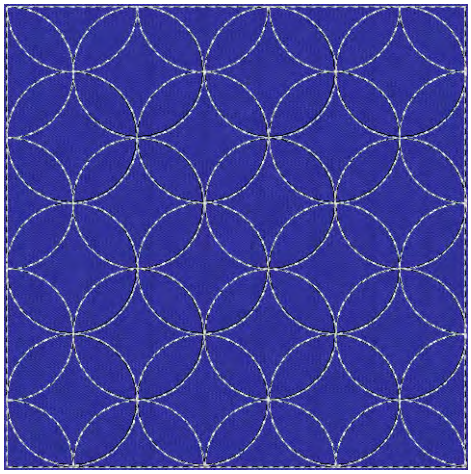
New standard stitch types

EmbroideryStudio e4 provides four new standard stitch types in ES Designing and ES Digitizing.

New Sculpture Outline stitch

Use Outline Stitch Types > Sculpture Outline to create a thick-thin outline alternating single and triple stitches for a hand-stitched look.

For a more hand-stitched appearance, use the new **Sculpture Outline**. This variant stitch type alternates single and triple stitching for a thick-thin outline. Alternating single and triple straight running stitches, gives a hand stitched look. See also Simple outlines (Reference Manual).

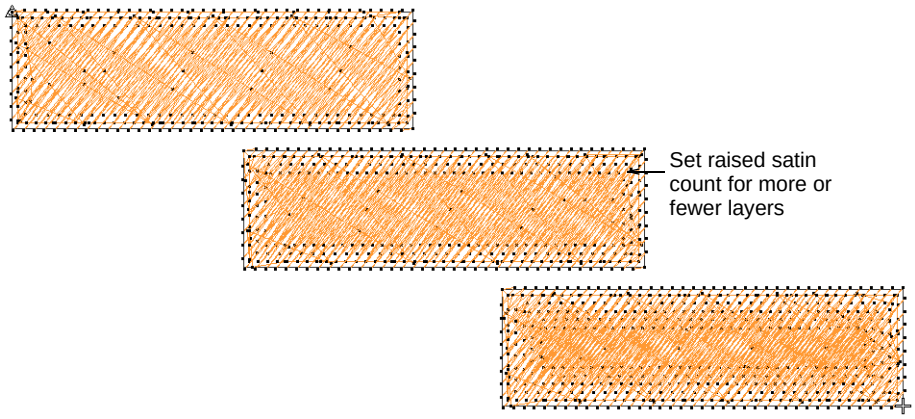


New Satin Raised stitch

Use Fill Stitch Types > Satin Raised to create raised surfaces – can be applied to lettering or used with trapunto for quilting effects. Right-click for settings.

- Automatic multiple layers of overlapping satin stitching for a 3D look

- For both fills and outlines (Column C)



See also Satin stitching (Reference Manual).

New Square stitch

Use Outline Stitch Types > Square to create open borders or columns of even width for an open 'toothed' effect. Right-click for settings.

Use Fill Stitch Types > Square to create open straight parallel fills. Right-click for settings.

- Square end open run style fill
- For both fills and outlines
- Useful for digitizing underlays as an object on their own for special cases. See also Chenille patterns (Reference Manual).

New Double Square stitch

Use Fill Stitch Types > Double Square to create grid fills. Apply closed shapes.

- Two layers of square end open run style fill
- At a selected angle to each other - default 90 degrees

- Useful for digitizing underlays as an object on their own for special cases.

Basic Motif fill Standard

Use Fill Stitch Types > Motif Fill to create decorative fills using embroidery motifs to form repeating patterns. Right-click for settings.

- In ES Decorating/Designing/Digitizing
- Additional predefined motifs included

Standard motif fill is a simplified motif fill for predefined motifs only, as in **DecoStudio e3**. Fully featured motif fill capabilities are provided as an add-on element for ES Designing and ES Digitizing only. See also Motif stitching (Reference Manual).

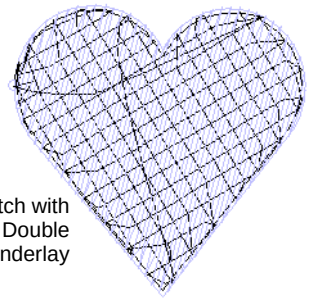
New & improved technical stitching

EmbroideryStudio e4 brings the following improvements in technical stitching for ES Designing and ES Digitizing.

New & improved automatic underlay

EmbroideryStudio e4 brings important improvements in automatic underlay.

- Default tatami underlay stitch angles: 90° to top stitch when single layer tatami. 45° when using a double layer tatami (net fill).
- For extra support with very soft or elastic fabrics, try using **Double Tatami** in combination with **Edge Run**. Adjust stitch angle so that **Double Tatami** provides symmetrical slanting in forward and backward directions. This should result in a 'cross-hatch' effect. In addition, it can give a raised surface similar to 'puff embroidery'.



Tatami stitch with Edge Run & Double Tatami underlay

Adjust angle for slanted double tatami underlay

- When **Auto Fabric** is turned on, a default underlay is applied, based on fabric settings. When **Auto Fabric** is turned off, an underlay is still appled but it is based on the digitizing method. Previously, with **Auto Fabric** turned off, underlay was not applied to newly digitized objects.

See Stabilizing with automatic underlay (Reference Manual) for details.

Improved quality of Lap corners

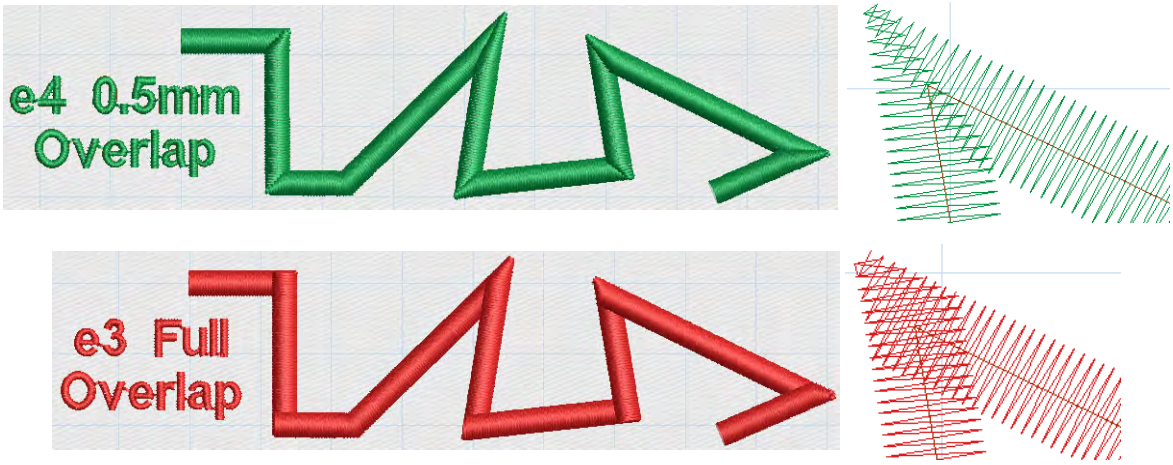
Use Stitch Effects > Lap Corners for 'Tidori' style stitching. Right-click to adjust settings.

Lap overlaps for satin stitching have been reduced for a better appearance and less chance of poking out. This saves time on manual editing or re-digitizing. The **Lap Corners** feature has been significantly extended and improved in ES e4. It provides better technical stitching as well as new creative stitching effects. Together these make the feature more usable in more cases, helping reduce manual digitizing times. The main changes are:

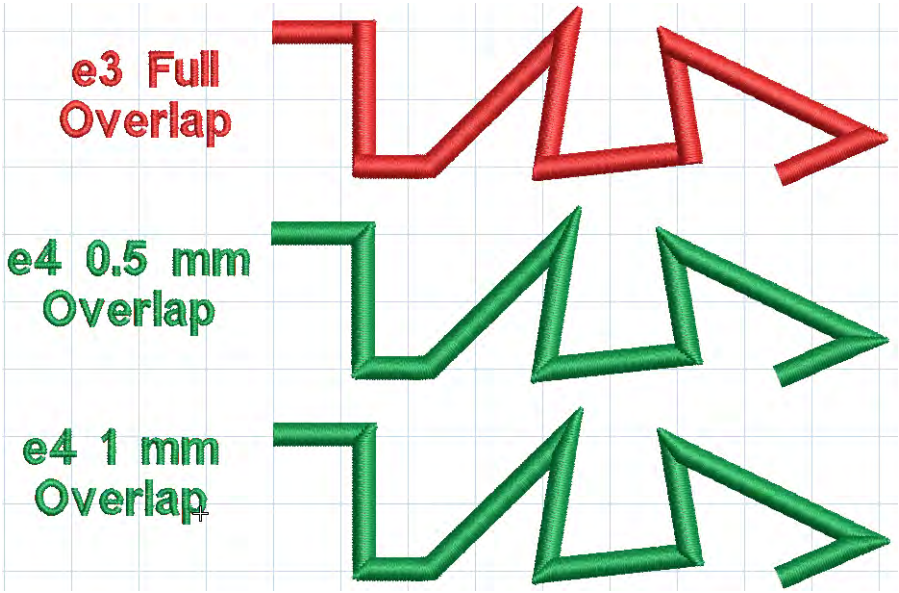
- Choice of full overlap or split overlap methods, object-by-object.
- Improved 'Full Overlap' method – flat curve intersections
- New 'Split Overlap' method with:
  - Variable amount of overlap at the corner
  - Sharper corner geometry for curved shapes.

Lap Corner Split Overlaps

The new 'Split Overlap' method provides a selectable amount of overlap between the two parts of a lapped corner. This is similar to a mitre corner, but with different stitching. See Controlling corner stitching (Reference Manual) for details.

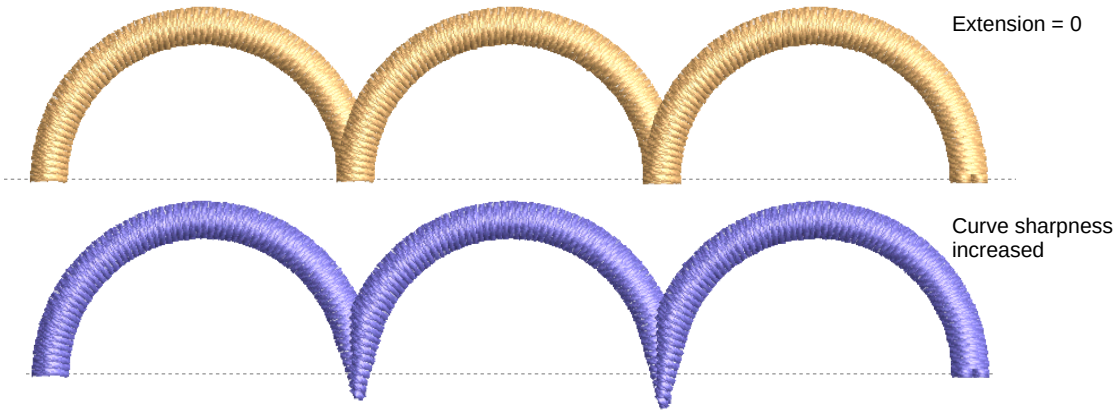


Variable amount of overlap in lapped corners is possible.



Improved Lap Corner Curve Extensions

The existing e3 **Lap Corners** method continues to provide a 'full overlap' of segments at a corner. A new 'flat corner' effect for digitizing curved scallop shapes is now possible. Curve shapes can have flat full or selectable pointed split overlaps. See Controlling corner stitching (Reference Manual) for details.



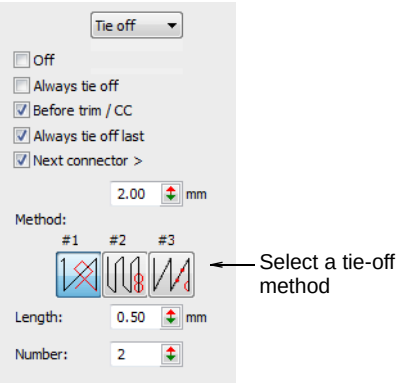
Improved tie-off stitching

Tie-offs with satin stitching can cause problems in some cases such as:

- Becoming visible in the stitchout
- Coming undone

- Sticking out beyond the shape.

The software includes a new tie-off method. Existing methods remain in place as well. The new #3 method splits the second-last stitching line into three equal stitches. It also adds a specified number of small stitches between the last two stitching lines. It is generally used with dense fills. See Automatic tie-off settings (Reference Manual) for details.

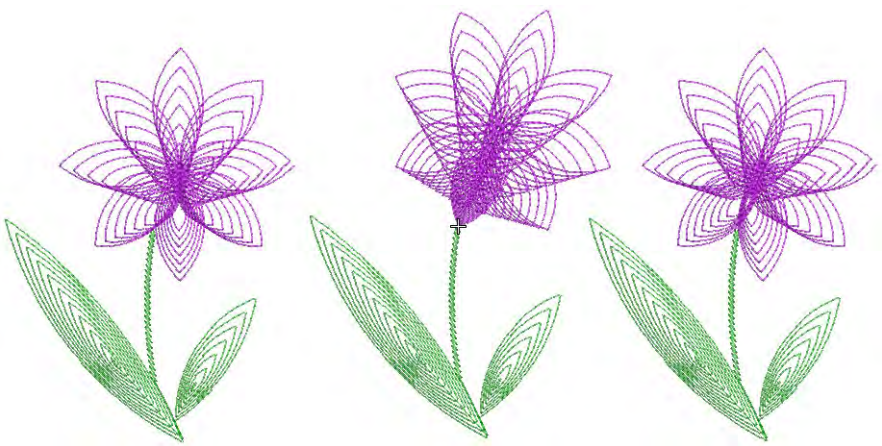


New & improved creative stitching

EmbroideryStudio e4 brings the following improvements in creative stitching for ES Designing and ES Digitizing.

Spiral fill

Spiral Fill is a new add-on Element available in ES Designing and ES Digitizing only. It works best with simple shapes that can be stitched in a single segment without holes or islands. Use it with either fixed or variable length run stitching. With longer shapes, it may generate stitches that go outside the perimeter of the object, but this can provide for some interesting visual effects.



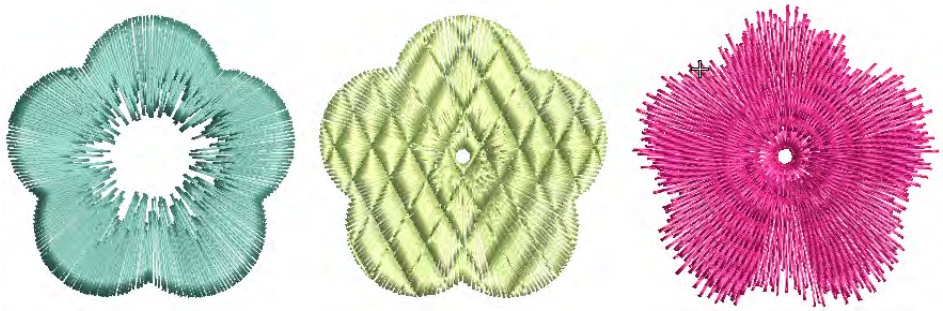
Different stitch types can be used – sculpture, backstitch, stemstitch, or run stitch. Similarly, basic spiral fills can be converted to outlines such as motif run, satin outline, sequin run, and bling run. See also Spiral fills (Reference Manual).

Radial fill

Use Stitch Effects > Radial Fill to create radial turning stitching with available stitch types.

Click Reshape > Reshape Object to view the reshape nodes of a selected object.

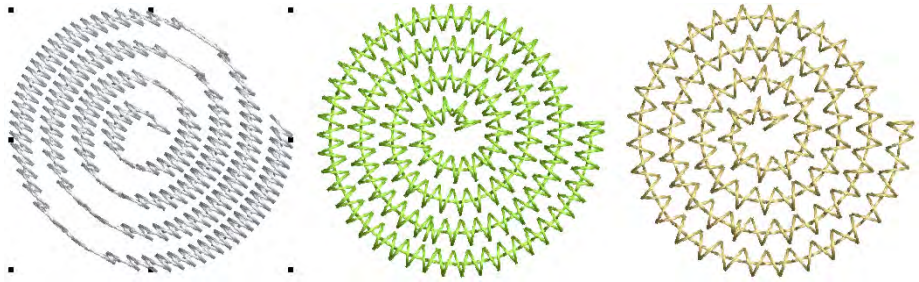
New **Radial Fill** creates radial turning stitching in either **Satin** or **Tatami** objects. Stitches are generated from the outside edge to the geometric center. The center can be shifted. The effect may be on or off while digitizing. Shaping operations such as **Mirror Merge** or **Remove Overlaps** preserve the effect. See also Radial fills (Reference Manual).



Zigzag outlines

Use Outline Stitch Types > Zigzag run for narrow, open borders with a 'zigzag' effect.

New zigzag outline stitch creates V-shape stitching whereas satin outline creates N-shape stitches. See also Decorative borders (Reference Manual).



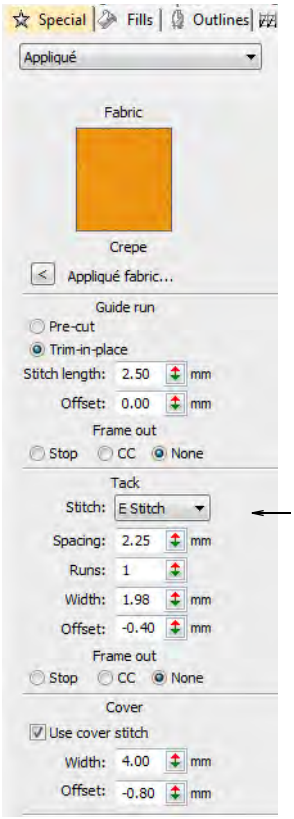
Features:

- Zigzag stitch spacing and width independent of satin parameters
- Works with automatic corner processing.

Improved Auto Appliqué

EmbroideryStudio e4 includes the following improvements to auto appliqué:

- Full choice of cover stitches, including no cover stitch.
- Full choice of tackdown stitch types with parameters.



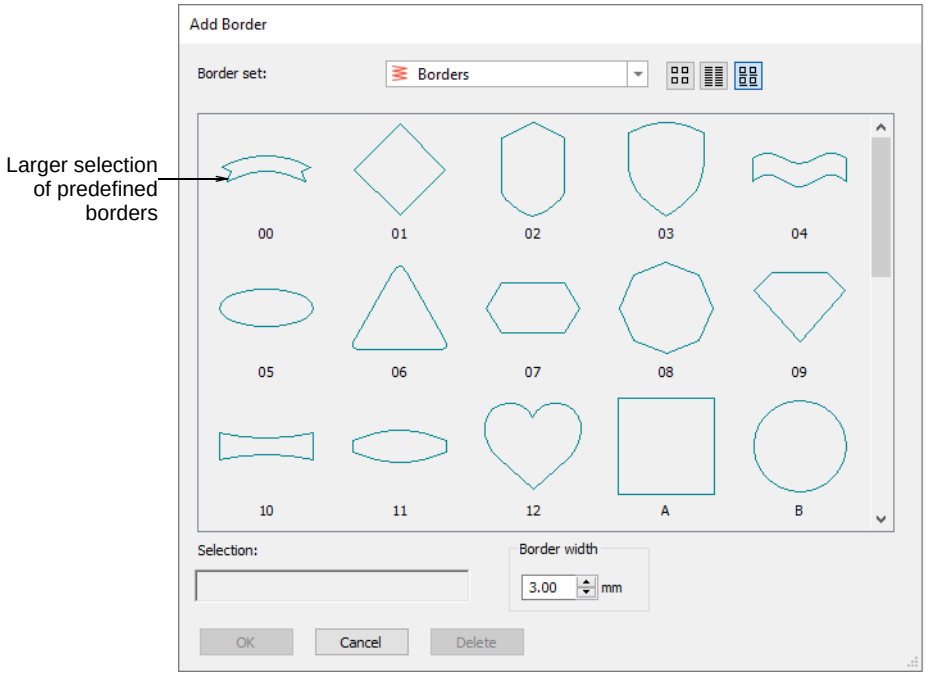
Full choice of tackdown stitch types

Note: Cover stitch is generally a satin border around the appliqué shape. For more or less dense cover stitching, you can now change stitch types via the **Object Properties > Fill** tab. See Creating appliqué embroidery (Reference Manual) for details.

Improved Add Border

Use Toolbox > Add Borders to add borders to designs (or selected objects) with or without lettering.

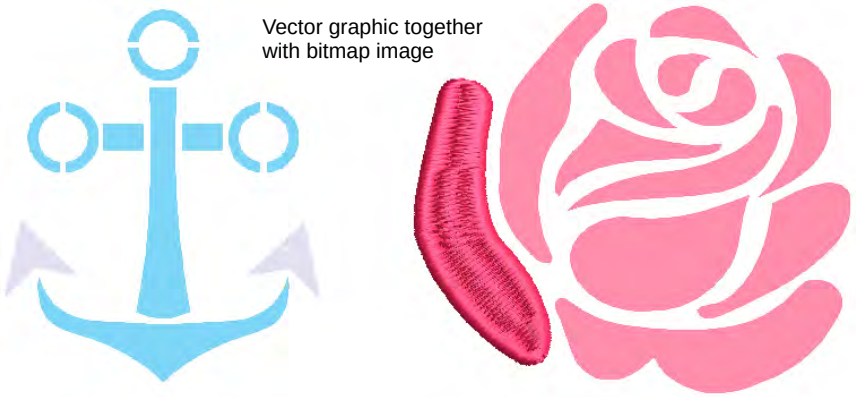
The **Add Borders** tool provides a greater selection of predefined border shapes. These are also available via the **Graphics Digitizing** toolbar as a **Basic Shapes** gallery. See Add design borders (Reference Manual) for details.



Dim graphics

Use View > Show Graphics as Dimmed to dim graphic backdrops to show stitches more clearly for digitizing.

Click the new **Show Graphics as Dimmed** button to dim the onscreen image to view stitches more clearly when digitizing. The command applies both to bitmap and vector graphics.



New & improved automatic digitizing

EmbroideryStudio e4 offers major improvements in automatic digitizing. In particular, note the improvements in the practicability and quality of auto-digitized artwork for commercial use:

- Auto-digitize in EmbroideryStudio from bitmap or vector formats without relying on CorelDRAW Graphics.
- Enjoy better control of embroidery effects used in different objects.

EmbroideryStudio also includes the new **Color PhotoStitch**, provided as as part of **Photo Flash** add-on Element for specialty and custom photographic work.

Improved vector & bitmap auto-digitizing

EmbroideryStudio e4 offers improved auto-digitizing both from CorelDRAW Graphics and from Wilcom Decoration. Wilcom bitmap auto-digitizing uses the same techniques as the API, with more user control over parameters.

Better image processing

- New **Instant Smart Design** provides one-step bitmap auto-digitizing
- Auto-determination of turning stitches for general shapes as well as fonts
- Improved auto-determination of appropriate stitch types and fill methods for generated objects
- Better quality results and fewer complex fill segments
- Default fill angle changed to 45°.

Improved vector auto-digitizing

EmbroideryStudio e4 now provides direct conversion of vector graphics from within Wilcom Decoration. Key features:

- Ability to select vector objects in Wilcom Decoration and choose to auto-digitize them directly
- Same vector shape conversion and mapping as now from CorelDRAW Graphics
- Mapping of vector object properties to embroidery object properties
- Mapping of gradient colors to solid colors
- Optionally designate objects for different types of digitizing – e.g. turning fills vs complex fills, etc

Automated stitch estimates

EmbroideryStudio e4 provides automated stitch estimates by auto-digitizing artwork. This is easy for customer service staff to do. The result is designated as 'Preliminary' stitching.

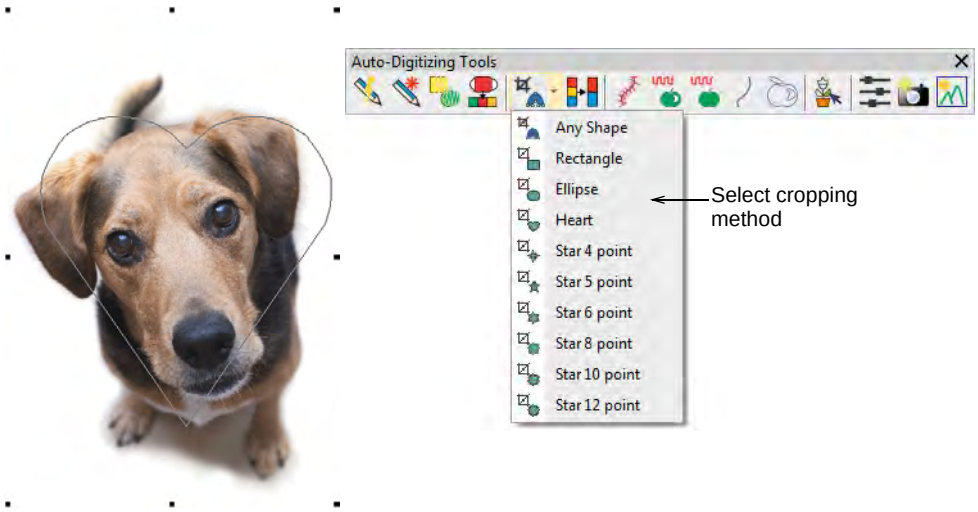
Improved image preparation

Use Auto-Digitize > Crop Bitmap to crop bitmap artwork for use with auto-digitizing.

Use Auto-Digitizing > Adjust Bitmap to adjust image lightness and contrast.

EmbroideryStudio provides ready access to cropping and touch up functions. The functions are still available from the **Graphics** menu but can now be readily accessed from the **Auto-Digitize** toolbox. The **Crop Background** tool opens a new **Crop** toolbar which in turn provides ready

access to all cropping functions. See also Preparing artwork for digitizing (Reference Manual).

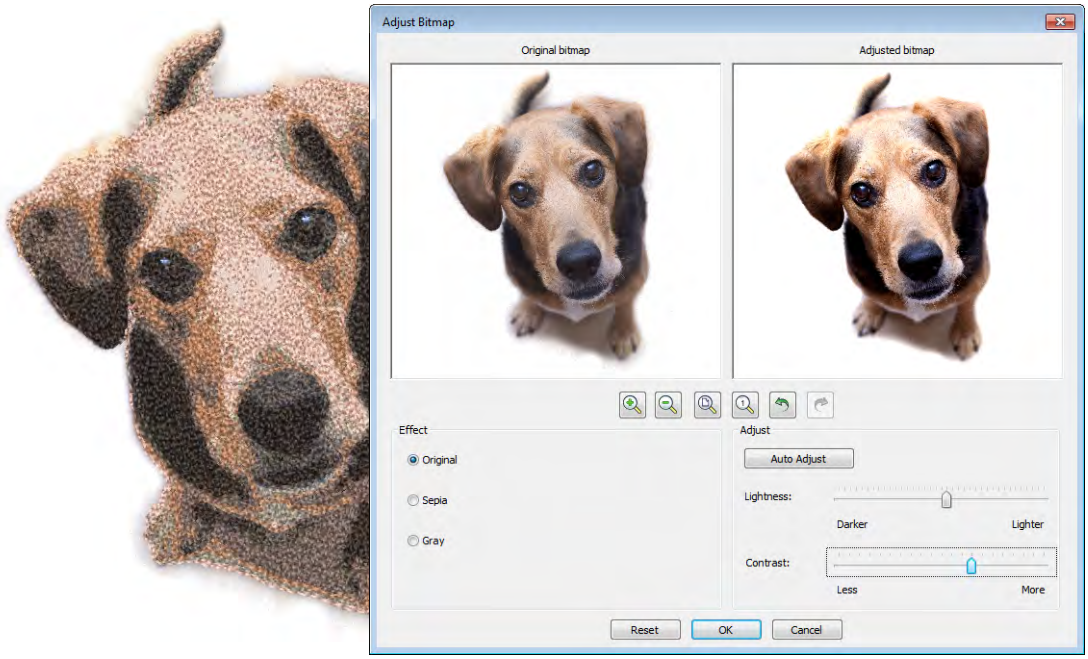


The new **Adjust Bitmap** function allows you to adjust image lightness and contrast, primarily for use with the new **Color PhotoStitch** tool. See below.

New Color PhotoStitch

Use Auto-Digitizing > Color PhotoStitch to automatically turn photographs and other bitmap artwork into multi-colored embroidery.

Amongst new and improved auto-digitizing features, EmbroideryStudio provides a powerful new **Color PhotoStitch** tool. See also Auto-digitize with Color PhotoStitch (Reference Manual).

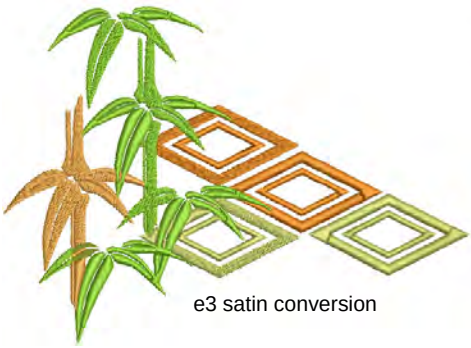


Process...

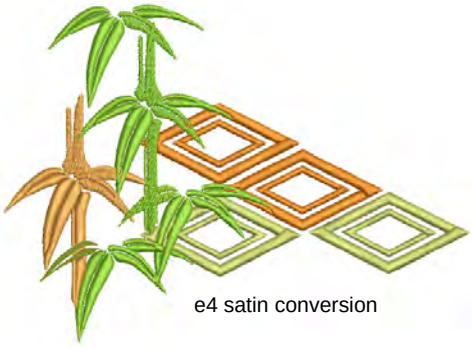
- Import a photo/picture.
- Optionally, crop the image.
- Optionally cut out/mask background from the foreground with the cropping functions. You can do additional passes of the same photo with different cropped areas.
- Optionally adjust lightness and contrast in the image.
- Set the number of thread colors to use.
- Map image colors to a selected thread chart.
- Optionally, adjust stitching resolution to high, medium, or low. High resolution allows greater detail but with a higher stitch count.
- Automatically convert to stitching using multiple thread colors.
- Optionally, edit the resulting embroidery objects. Stitching created by **Color PhotoStitch** is editable as individual **Manual Stitch** objects. Select and delete as preferred and/or digitize other objects over the top.

Better quality satin stitch conversion

EmbroideryStudio converts to satin more consistently and with better stitch angles.



e3 satin conversion



e4 satin conversion

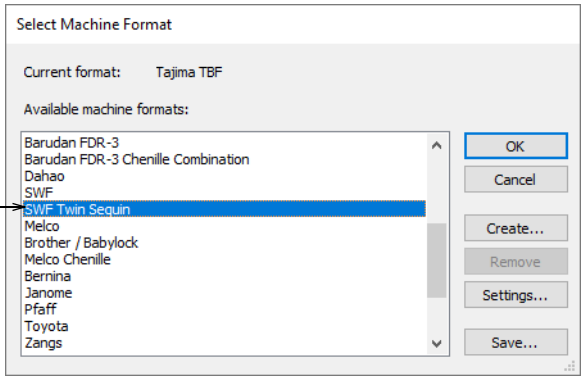
Other improvements

EmbroideryStudio e4 provides the following additional improvements.

Machine formats

EmbroideryStudio now provides support for SWF Twin Sequin machine format.

Choose SWF Twin Sequin format



Improved speed of very large designs

Especially sequin designs

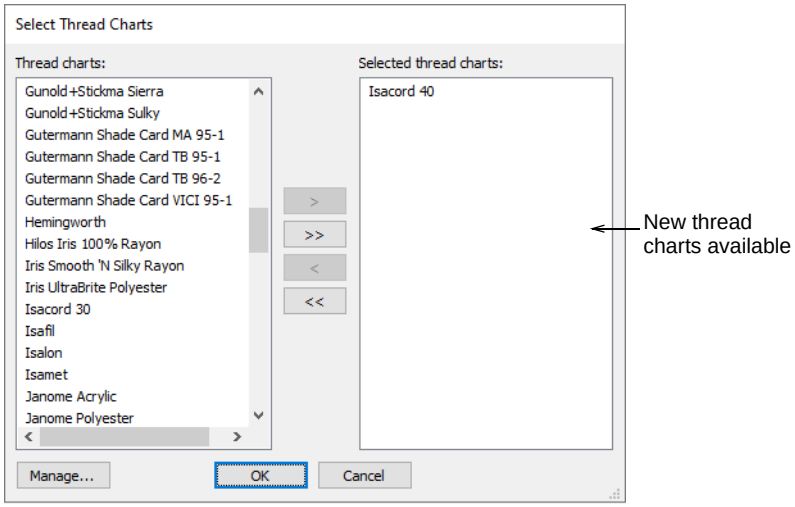
Wider range of embroidery machine hoops

Updated threads charts

The following thread charts have been added to EmbroideryStudio:

- Iris UltraBrite Polyester
- Iris Smooth 'N Silky Rayon

- Madeira Frosted Matt 40
- Timeless



Improved file support

EmbroideryStudio e4 reads and writes a new EMB4 file format. Features include:

- Reads all previous versions of EMB file, including EMB 3.5 from Janome 5, Hatch 1.
- Writes the four most recent versions of EMB file e4, e3.5, e3, e2.
- Reads all versions of ART file, including new ART8, but does not write ART format.
- Reads all versions of JAN and writes to JANV4.

Printing directly to PDF

You can now print directly to PDF without need for third-party software. This allows you to save Design Approval sheets, Production Worksheets, and Virtual Decoration PDFs to predefined filenames and locations.

What's new in ES e4.0 Update 1?

The release of ES e4 Update 1 contains enhancements and improvements to many aspects of the software since the first release of ES e4.5:

- Design Library improvements
- Team Name improvements
- Lettering improvements
- Digitizing improvements
- Visualization improvements
- Usability improvements
- Output improvements
- Graphics handling improvements
- LOTE improvements
- System improvements

Tip: For a summary of new and improved features, see the Product differentiation table at the end of these release notes. For a complete feature listing, see the product differentiation table in the user manual.

Design Library improvements

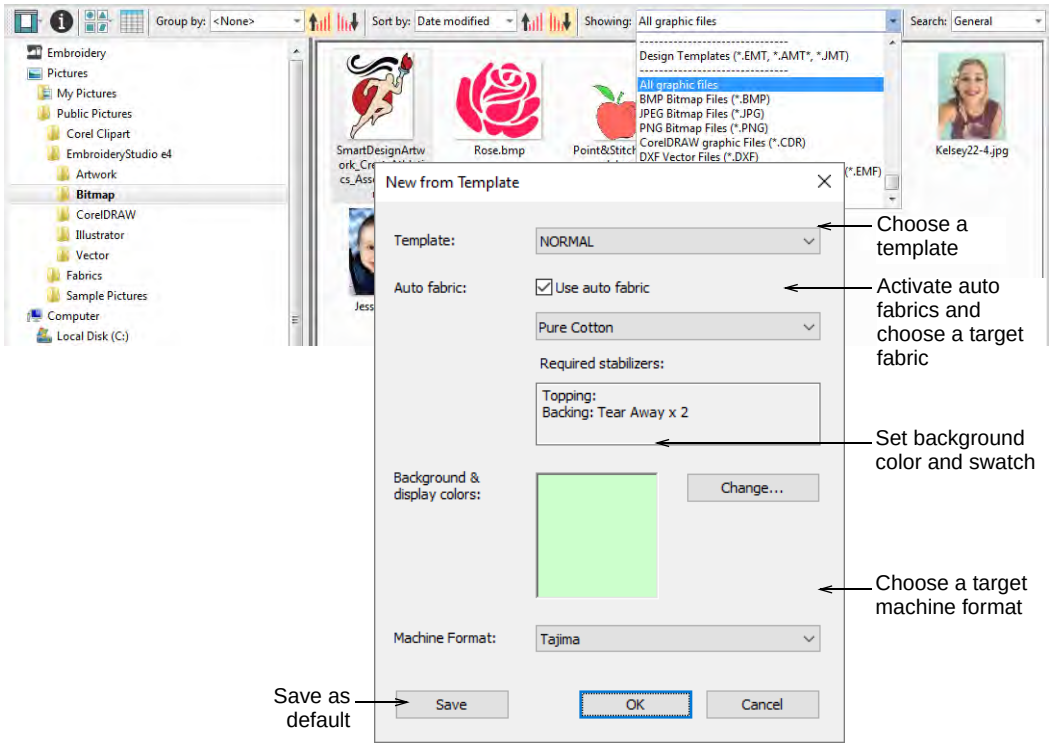
The ES e4 Update 1 enhances **Design Library** functionality and corrects a number of problems.

New from selected template in Design Library

Use Manage Designs > New From Selected to create new designs based on designs selected in the embroidery library.

You can now specify which EMB template to use in **Design Library**. Select a graphic file and right-click the **New from Selected** button. This allows you to choose which EMB template to use for the new design you will create from the selected graphic. This template selection is remembered during the current session and used the next time the

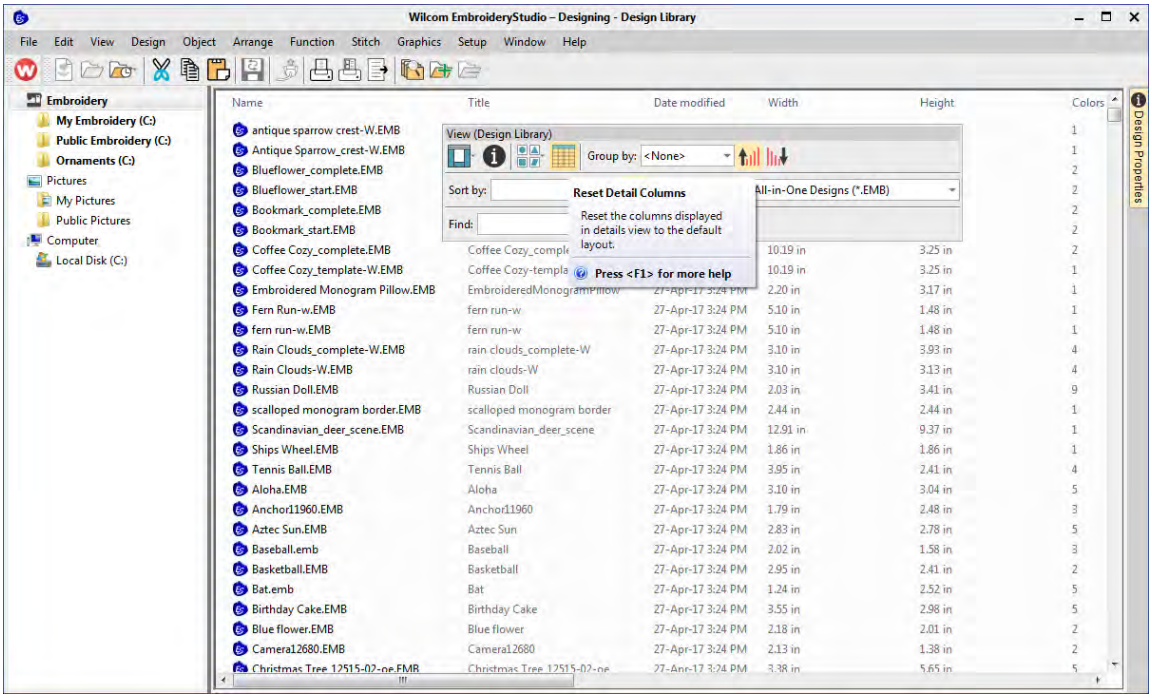
command is invoked. Left-clicking uses the default selection. See also Opening designs from Design Library (Reference Manual).



New Reset Detail Columns button

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

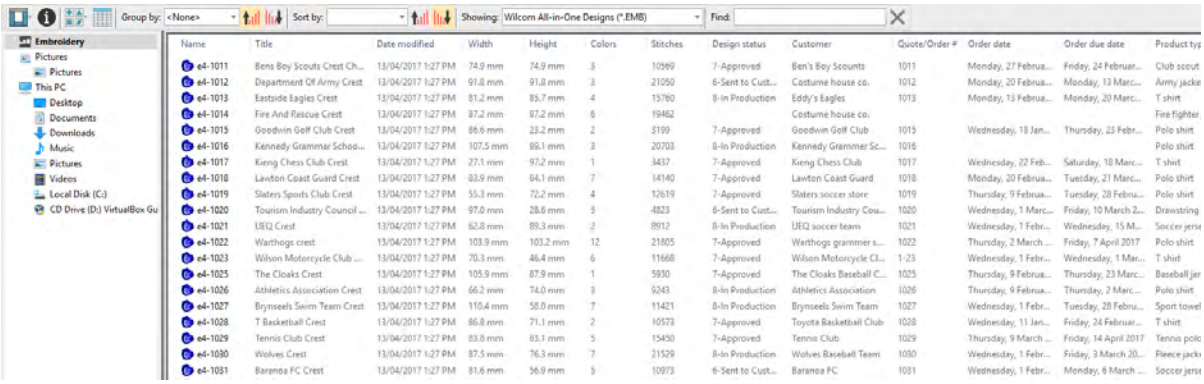
Design Library provides a new **Reset Detail Columns** button on the **View** toolbar:



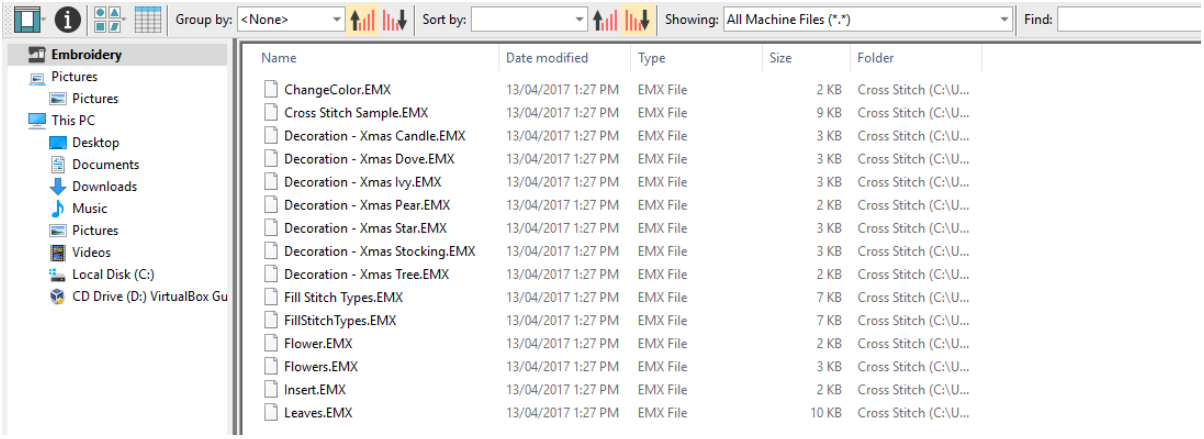
When viewing design lists in **Details** view, columns can be customized in any order and with a variety of criteria. To return to the default layout, simply click the new **Reset Detail Columns** button. See also View design details (Reference Manual).

Note that default fields vary by file type and are controlled by Windows. **Design Library** columns for embroidery files are controlled by ES e4.5. These are primarily intended for EMB format but can be useful for other

embroidery formats as well. They include such details as design status, customer, order date, etc.



Sometimes Windows resets detail columns to Windows defaults, even for EMB files:



If this happens, use the **Reset Detail Columns** button to reset detail columns to ES e4.5 defaults. Do this for other embroidery formats as necessary.

Design Library refresh

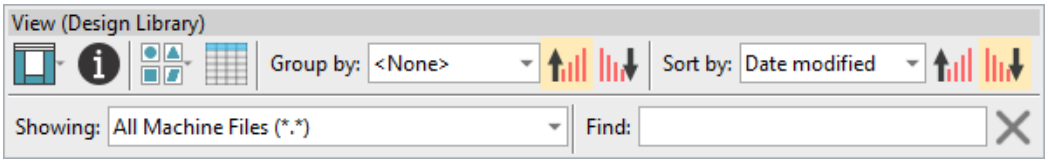
Like **Windows Explorer**, the **Design Library** display can be refreshed with a simple **F5** keypress.

Pressing backspace in search

Previously, holding the **Backspace** key to clear a search would jump to the cursor to the beginning of the field without deleting the text. This problem has been rectified.

Searching for non-native files

Searching for machine files did not always yield correct results. Problems were also reported when searching for ART and T0? files. A related issue has been the mismatching status of the **Showing** field. These problems have been rectified.



Order information

A problem occurred with missing order information in the **Details** pane. This has been rectified.

Browsing the network for large files

Problems were reported with abnormal loading when browsing through network folders containing large files. This has been rectified.

Design Library reliability

Occasional **Design Library** crashes were reported while carrying out some operations such as:

- Editing properties in the **Design Properties** docker. For instance, updating design status in the **Details** pane and/or **Design Properties** pane and then saving.
- The **Preview** pane can cause the software to crash when selecting a design file while thumbnails are being generated.
- Also reported – application crashes when moving images from one folder to another.

All these problems have been rectified.

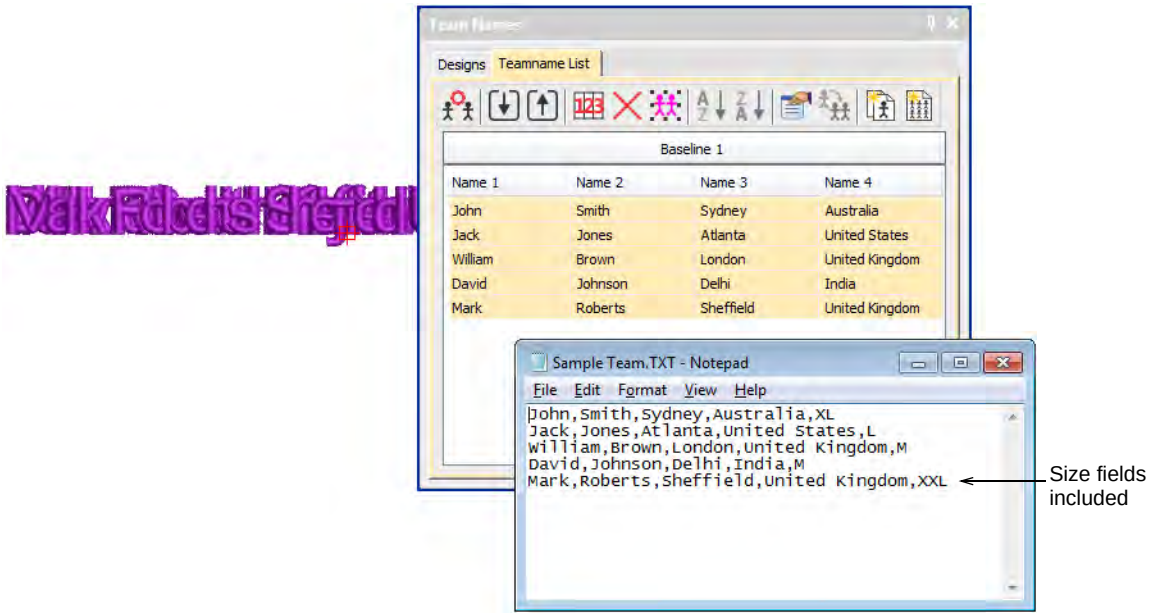
Team Name improvements

The ES e4 Update 1 enhances **Team Names** functionality and corrects a number of problems.

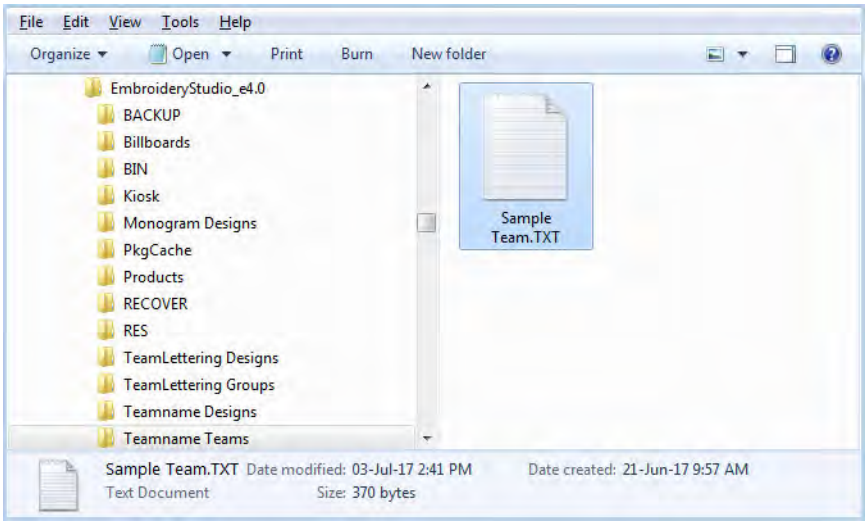
Importing teamname lists with additional fields

Use Toolbox or Docker > Team Names to associate multiple names with a design.

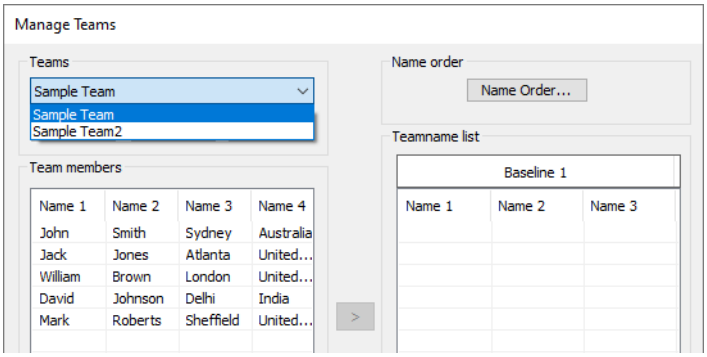
A ‘size’ field is often added to teamname lists even though it does not form part of the design. Previously, additional fields were stripped on import. They are now included. While the size field doesn’t appear in the design, it is added to each design name when generated. This allows machinists to ensure they are using the right size garment for the specified name. See also Creating simple teamname designs (Reference Manual).



To view size fields in the **Manage Teams** dialog, first save the teamname file in CSV or TXT format to the **Teamname Teams** system folder as shown. Don't use sub-folders.

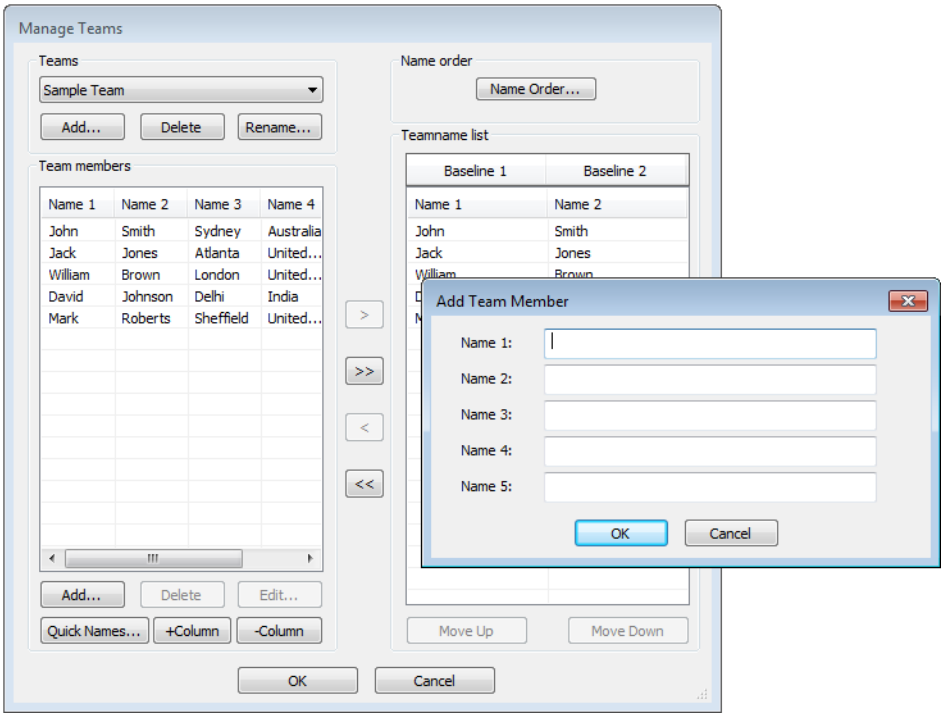


Open the **Manage Teams** dialog and select the file name from the **Teams** droplist. All fields will be imported...



Adding columns to the members list

There used to be a 10 column limit on the number of team members you could add. You can now add a virtually unlimited number of columns. Note, however, that only the first 100 will be saved.



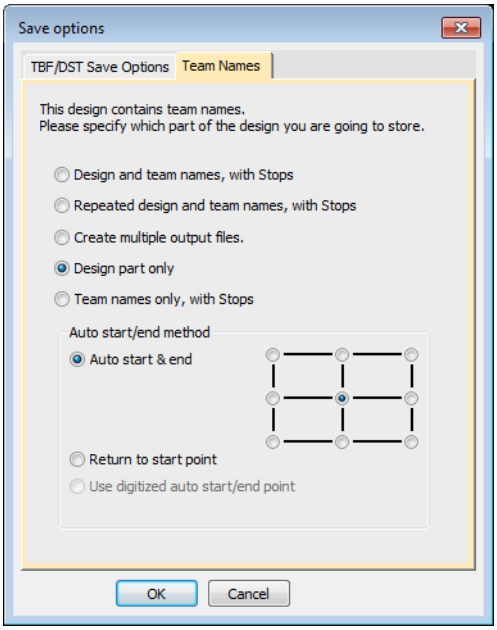
Manage Teams button

Use Team Names > Manage Teams to manage teams and team members for future use.

The **Manage Teams** button should not be selected by default immediately after the **Team Names** docker is opened. This problem has been rectified. See also Managing teams (Reference Manual).

File export for team names

The file export dialog for team names now displays correctly.

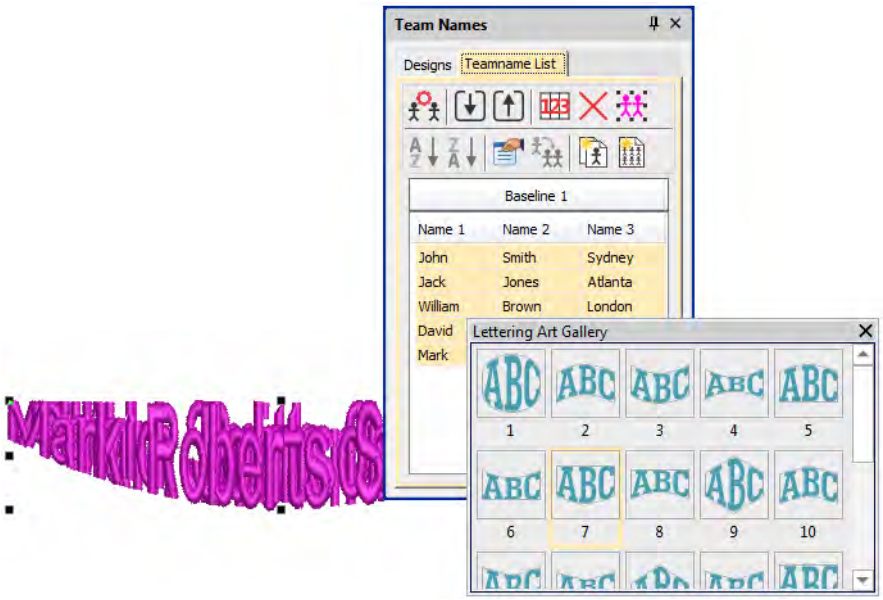


When saving a teamname design with ‘Repeated design and team names with Stops’ selected, the design gets shifted in the output files. This problem has been rectified.

Adding lettering art to team names

You can add lettering art to teamname objects from lettering properties accessed via the **Team Names** docker. Circumstances have been reported where lettering art is applied but then lost. This problem has been rectified when switching between two team names. There may be

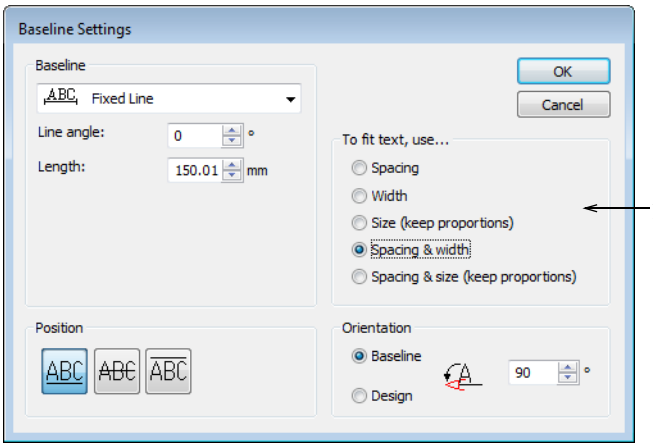
other circumstances, however, that have not been identified or addressed.



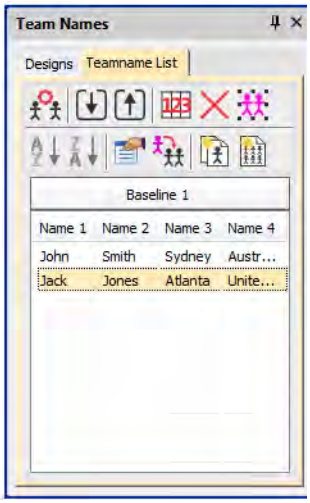
Teamname letter spacing

Teamname letter spacing issues were reported in cases where a design contains very long names or different numbers of names.

The solution is to edit the baseline to make more space available, or change the method of size reduction in lettering properties:



Adjust baseline settings for ‘fit text’ either using ‘Spacing and Width’ or ‘Spacing and Size’:



Lettering improvements

The ES e4 Update 1 enhances **Lettering** functionality and corrects a number of problems.

Zigzag with lettering

Previously, users were unable to apply zigzag stitching to selected lettering via the **Stitches** toolbar. Zigzag was disabled and could not be

selected. This problem has been rectified. See also Applying stitch types & effects to lettering (Reference Manual).

Embroidery fonts

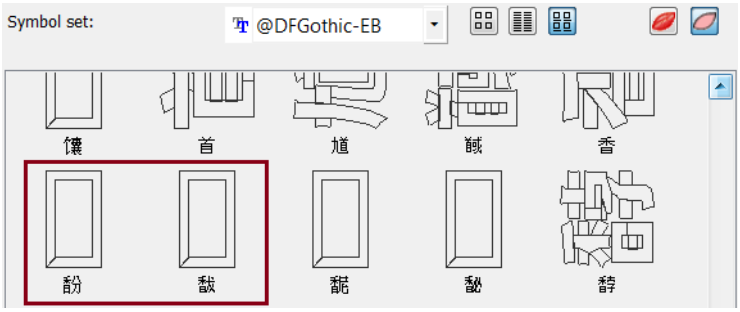
The 3D Futuro embroidery font has been improved and repackaged.

Recommended letter heights for 3D and some other fonts have been reviewed and the user manual updated accordingly. See Standard Fonts (Reference Manual) for details.

Character display

Characters were replaced by a ~ character in the **Lettering** field when not appearing in the font. Selecting another font caused the lettering object to be completely removed. This problem has been rectified.

In the **Insert Symbol** dialog, non-existent characters are now displayed as squares and used when inserted into a design. A 'fallback character' is displayed below the blank placeholder character.



Tip: If you want to check whether a character exists in a font, copy the fallback character and paste it into an MS Word document. Then try changing fonts until you find one that includes the character.

Lettering Kiosk

Some related issues were causing problems when the **Kiosk** lock setting is activated in the **Options** dialog:

- Toolbars are unavailable via the **Window > Toolbars** menu.
- Opening designs from **Design Library** invokes the **Kiosk** instead of the **Wilcom Workspace** screen.
- Some **Kiosk** controls appear in the **Wilcom Workspace** window immediately after exiting the **Kiosk** mode.

All these problems have been rectified.

Digitizing improvements

The ES e4 Update 1 enhances and corrects a number of digitizing problems.

Flexi-split with complex fill objects

Use Stitch Effects > Flexi Split to create decorative split patterns following stitch angles and scaled according to object width. Right-click for settings.

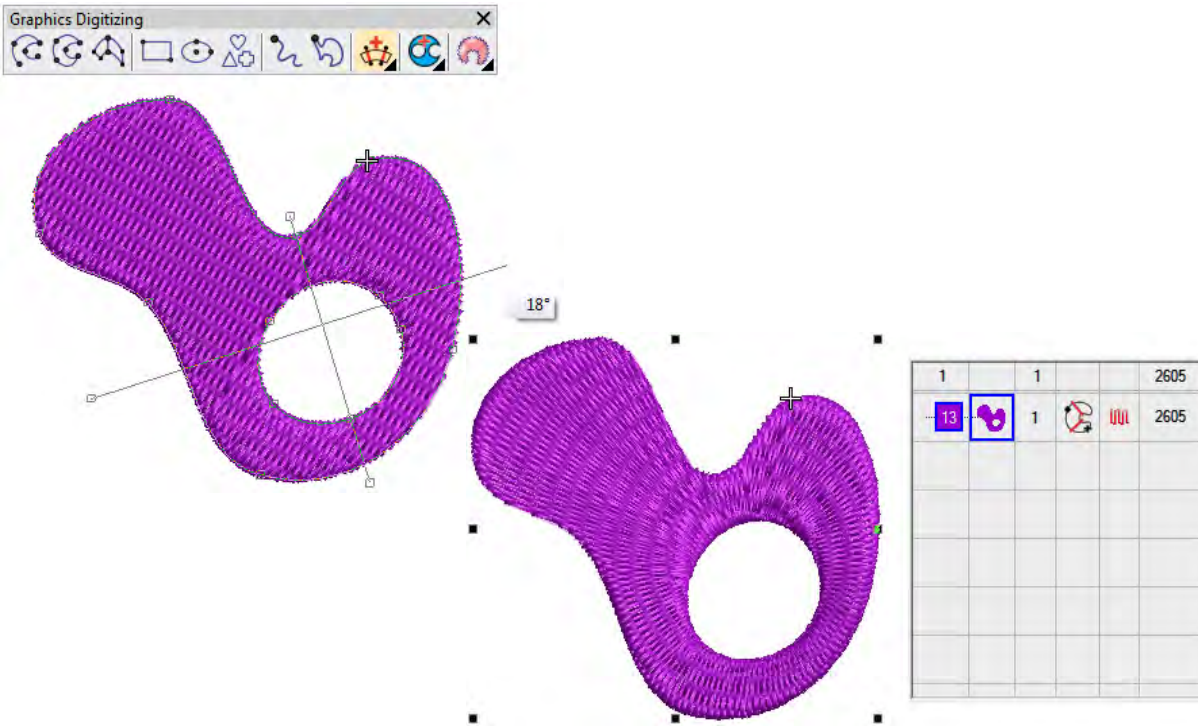
Currently flexi-split effect is used mainly with satin stitch. It could always be applied to tatami Input A objects. It can now be applied to tatami complex fill objects. See also Flexi-splits (Reference Manual).

Note: Flexi-split is applied to each ‘segment’ of a complex fill as shown above.

Stitch angles

Use Graphics Digitizing > Stitch Angles to add stitch angles to selected objects.

When creating or selecting complex fill objects with holes, the **Stitch Angles** tool is now enabled in ES Decorating. Also, the addition of stitch angles to closed shapes now results in complex turning objects (rather than A/B). See also Adjusting stitch angles (Reference Manual).



Visualization improvements

The ES e4 Update 1 enhances and corrects a number of visualization functions.

Stitch Player works with ZSK

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

Stitch Player has been enhanced to work with ZSK files. It now provides the option of stopping at color changes in the same way as ZSK (formerly ZANGS) embroidery machines would act. See also Simulate design stitchouts (Reference Manual).

Viewing bling

Use View > Show Bling to toggle bling display on/off.

The **Show Bling** command was missing from the ES Digitizing product level. It has now been included. See also Bling Digitizing (Reference Manual).

Reshaping objects on a 4K screen at 200% scaling

A number of issues have been reported when reshaping objects on a 4K screen at 200% scaling:

- Unable to reshape a manual or manual triple run object. Node points are not shown.
- Unable to reshape an individual motif dropped with **Use Motif**.
- Unable to reshape a manual sequin object.

These problems have been rectified.

Usability improvements

The ES e4 Update 1 enhances and corrects a number of usability functions.

Color palette scrolling

In instances where the color palette is full, you need to click the spin box to scroll through the available colors. Previously, the palette reverted to first position when you start digitizing. It now remains at the current color slot. This allows you to easily select nearby colors.

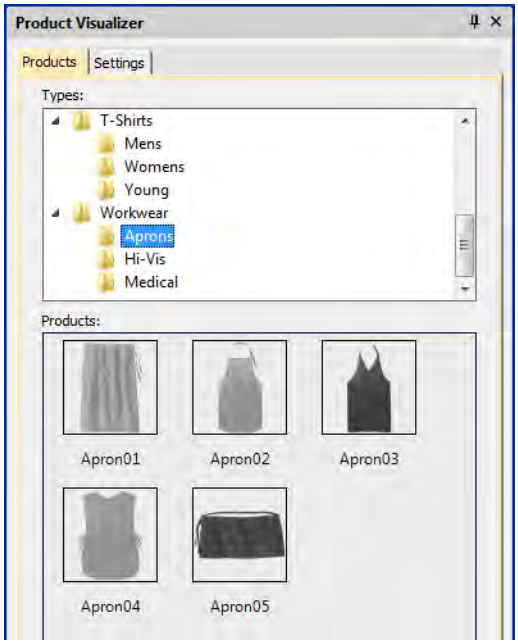
Tip: You can always float the color palette to display the full range of colors (max 128). This is more practical when using a high resolution (4K) monitor or second monitor.

Product registration

There have been requests to include a **Product Registration** option in the **Help** menu. This has now been added to allow users to both register their product and/or check its current status. If already registered, it will display your current serial number and dongle tag number. If not registered, it will walk you through the process.

Scrolling through items in Product Visualizer

The mouse scroll-wheel now works correctly and faster when scrolling through the product listing.



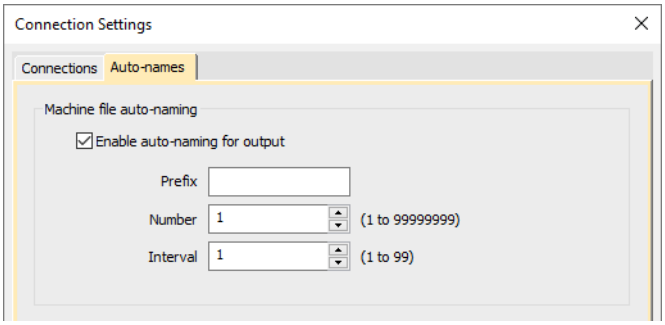
Output improvements

The ES e4 Update 1 enhances and corrects a number of issues to do with outputting designs.

Automatic machine file naming

Connection Manager now provides an option for automatic machine file naming. When enabled, the specified filename format is used for all

machine connections established in **Connection Manager**. See also Setting up machines for Connection Manager (Reference Manual).



Where...

Setting	Details
Filename format	Filenames take the format <prefix><number>.<extension>
Prefix	ASCII only, no unicode characters. No Windows reserved characters. Length limit 8 characters.
Number	Numeric only. Range 1 – 99,999,999.
Interval	Interval is numeric only and is the amount the number is incremented each time a file is generated. Range is 1 – 99.

Note: When enabled, Kiosk also uses this auto-name specification for all machine files. If not enabled, it uses the kiosk machine file definition.

PDF printing

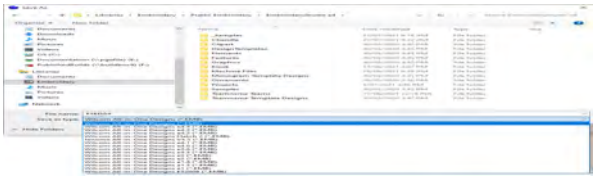
A number of problems were reported in relation to PDF printing from the **Print Preview** window.

- The **Print Preview > Print to PDF** command ignores the **Portrait / Landscape** setting. It always creates a portrait display.
- The software reports an error attempting to read the license for the NovaPDF software after a Windows 10 update.
- Similarly, a NovaPDF license error is sometimes reported after starting up the software.

All these problems have been rectified.

Hatch e3.6 file format

The latest release allows ES e4.5 to read and write Hatch EMB e3.6 file format. The standard list of supported formats now includes:



Graphics handling improvements

The ES e4 Update 1 enhances and corrects a number of graphics handling issues.

CorelDRAW X8 64-bit installation in Graphics mode

When switching to **CorelDRAW Graphics** mode, the software previously warned (erroneously) that CorelDRAW X8 was not installed. This problem has been rectified.

Undoing bitmap modifications

Problems were reported when attempting to undo repositioning or transformation of large bitmaps inserted into the software via **CorelDRAW Graphics** mode. This has been rectified.

Undo actions between Wilcom Decoration and CorelDRAW Graphics

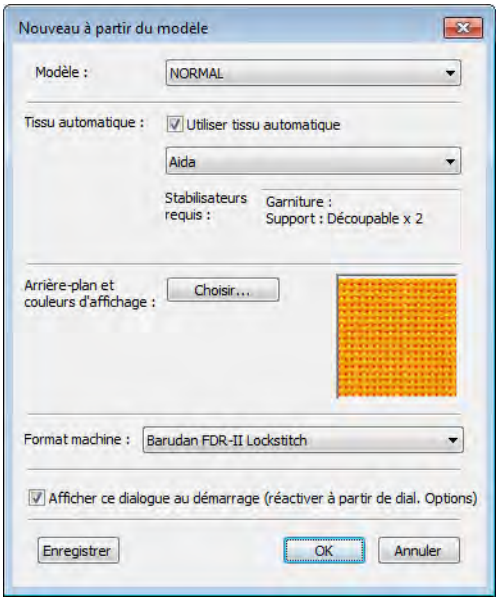
Problems were reported when undoing actions after switching between **Wilcom Workspace** and **CorelDRAW Graphics**. These have been rectified.

LOTE improvements

The ES e4 Update 1 enhances and corrects a number of LOTE issues.

Truncation problems

Truncation problems in some dialogs have been reported in languages other than English. These have been rectified.



Pique polo in Spanish interface

In Spanish language, the fabric type ‘pique’ was missing from the auto-fabric settings. It now appears translated as ‘lucio’.

Application crashes when saving user-refined letters

There have been reports of application crashes when saving a user-refined letter in German or French interfaces. This issue has been rectified.

System improvements

The ES e4 Update 1 provides a number of general system improvements.

Icons in the Object Properties docker

Incorrect icons have appeared in the **Object Properties** docker when not all options are enabled. This problem has been rectified.

Color changes with Colorway Editor docker

Problems have occurred when clicking a color in the Colorways list of the **Colorway Editor** docker. Any selected object’s color incorrectly changes. This problem has been rectified.

Generic Write Error

'Generic Write Errors' have been reported when saving designs incorporating images imported via **CorelDRAW Graphics**. This problem has been rectified.

CorelDRAW in ES dockers

Problems have been reported with CorelDRAW 'artefacts' persisting in **Wilcom Workspace** dockers. These have been rectified.

Using high-end Wacom tablets

With the initial release of ES e4.5, the user had to do an extra swipe to obtain a right-click action on high-end Wacom tablets. For example, when creating curve points with a digitizing tool. This problem has been rectified. Input behavior is as it was in ES e3.

Application crashes with packaged teamname sample designs

When **Team Names Advanced** is unavailable, there have been reports of application crashes when opening packaged teamname samples. This problem has been rectified.

Failure to create empty document

When a complex fill object is created and the design saved – EMB or machine file format – a 'Failed to create empty document' is displayed when attempting to create a new design. Also most of the UI is grayed out and the software unusable until restarted. This has been rectified.

Communications with the Happy Voyager machine

Problems have been reported when downloading design files to the Happy Voyager machine via Machine Manager. A serial error is shown on the machine panel. This problem has been rectified.

Internal Envelope Error

An Internal Envelope Error has been reported in relation to system security. This problem has been rectified.

What's new in ES e4.1?

The release of EmbroideryStudio e4 contains enhancements and improvements to many aspects of the software since the first release of ES e4.5:

- New ES Ordering
- New product elements
- WiFi USB machine networking
- Design Library refinements
- Drag-and-drop EMB designs from the new clipart docker
- Order Job Feature improvements
- Digitizing tools
- New & improved stitch types & effects
- Improved contour fills
- Improved motif runs & fills
- Improved sequin fills
- Auto-digitizing quality improvements
- Design output improvements

Tip: For a summary of new and improved features, see the Product differentiation table at the end of these release notes. For a complete feature listing, see the product differentiation table in the user manual.

New ES Ordering

New **ES Ordering** is a low-cost product which allows all relevant people in a company to access the Order Job Feature and Design Library. It comes with a range of features to help improve your customer service and sales processes. It allows customer service personnel to quickly find customer designs by order status, and add notes for production or tracking purposes, all without the need for a database. In addition, minor changes to colors can be made on-the-fly. Essentially it gives you all the capabilities of **TrueSizer Pro** together with the full **Design Library** and **Order Job Feature**.

Design Library

- Search designs in seconds by customer, order, date or any text field.
- Designs are automatically indexed for fast search. No manual categorization required.

- Browse designs from all folders in one screen, or folder-by-folder.
- Group and sort designs by customer, order, date, folder, design status, stitches and more.
- Quickly see recent designs by date, no matter what folder they are in.

Order Job Feature

- Save customer, order & job details in the EMB design file. A separate database is not required.
- Identifies the garment, quantities, sizes, colors and approval status.
- Display job details with high resolution product mock-ups in PDF for customer approval.
- Create digitizing requests as EMB designs and manage status in the Design Library.

Other features

- Open designs in Wilcom EMB format.
- View designs in TrueView™ and normal stitch view.
- Email EMB files directly from the application.
- Save designs in Wilcom EMB format.
- Open multiple designs.
- Change and re-color EMB, ART, JAN designs.
- Create and save multiple colorways in EMB designs.
- Re-color EMB designs based on colorways.
- Match threads to current colorway.
- Match threads to all color slots in the current colorway.
- Create customer approval sheets showing design and location on garments.
- View designs on garments.
- Create new designs.
- Open and save new designs based on selected artwork.

Software security

ES Ordering does not require a hardware dongle like other ES e4 products. It uses a convenient ‘software dongle’ for software protection similar to **TrueSizer Pro**. You obtain a ‘Product Key’ when you purchase **ES Ordering** and activate the software on your PC via an Internet connection. Once activated, you do not require an Internet connection to run the software. This makes it very convenient especially for laptop computer users.

New product elements

With the ES e4.1 release, the following new product elements have been introduced:

Element		1	2	3	4	5
Creativity						
Motif Runs Advanced	Create advanced motif runs with variable or gradient motif size and spacing effects. Motifs can also conform to varying size column shapes. See Improved motif runs & fills for details.	❍	❍	–	–	–
String Stitch	Create outline or filled shapes with overlapping ‘string art’ stitching to hold mirror pieces or for decorative effects. Known as ‘Paghadi’ in India. See New String stitch for details.	❍	❍	–	–	–
Specialty						
Embroidery Connect	Configure a wireless WiFI USB Stick network. Send designs wirelessly to multiple brands of USB capable embroidery machines. See below.	❍	❍	❍	❍	❍
Single Sequin	Create artistic sequin designs with sequin runs and sequin fills for single sequin machines using automated predefined fixing stitches.	❍	❍	❍	–	–
Sequins Advanced ^	Create embroidery files for single and twin-sequin dispensing machines.	❍	❍	–	–	–

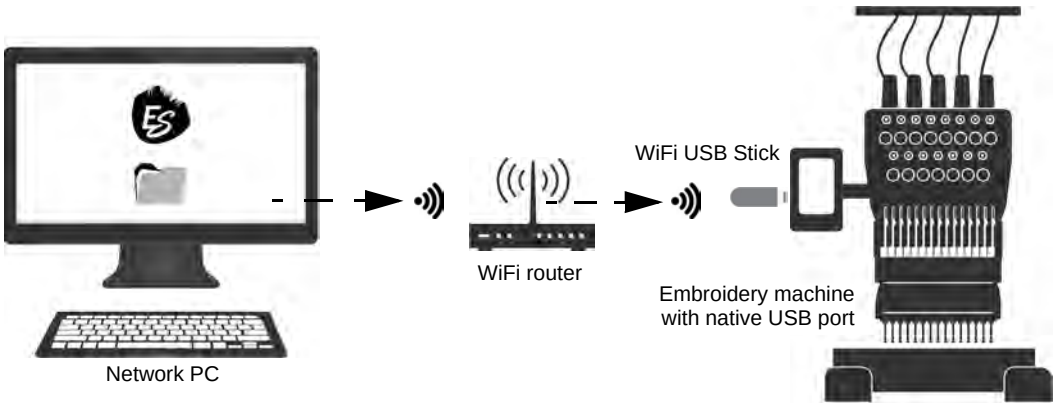
1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
❍ Modular ‘element’ ^ Replaces previous ‘Sequins’ element

WiFi USB machine networking

A new **EmbroideryConnect** element is available for customers to send machine files to any embroidery machine with a ‘native’ USB port (not USB converter). When activated in the software, you can send machine files wirelessly via a standard WiFi network to a compatible WiFi USB Stick plugged into the machine. Tajima, Barudan, and most modern commercial embroidery machines can read files from a standard

USB memory stick. There is no need for serial ports, different interface methods, or wiring for different machines.

The simplest type of configuration is shown below.



You are not limited to a single relationship between PC and embroidery machine. You can send designs to many machines from the one PC. Or you can send designs from many PCs to the same machine via its shared folder. See Machine Networking (Reference Manual) for details.

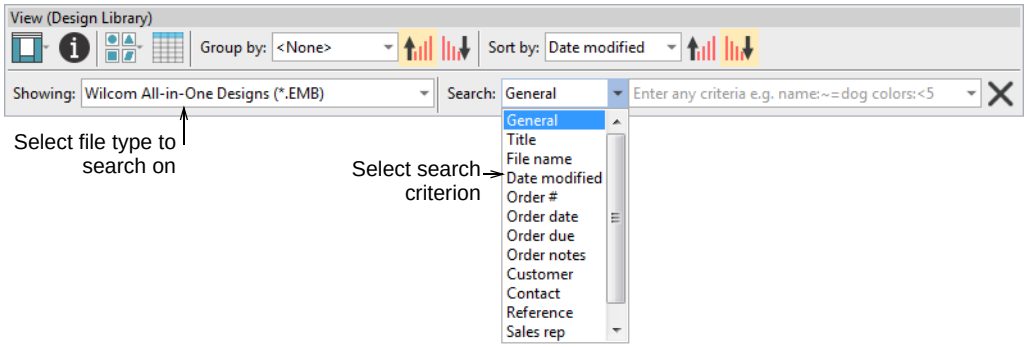
Design Library refinements

In response to customer feedback, there are a number of important improvements to existing **Design Library** functionality.

Faster and more precise design searches

Design Library allows for even faster searching of designs. Use the **View** toolbar to quickly search or sort designs by name, create date, and other criteria. The improved **Search** field is very powerful. To begin with,

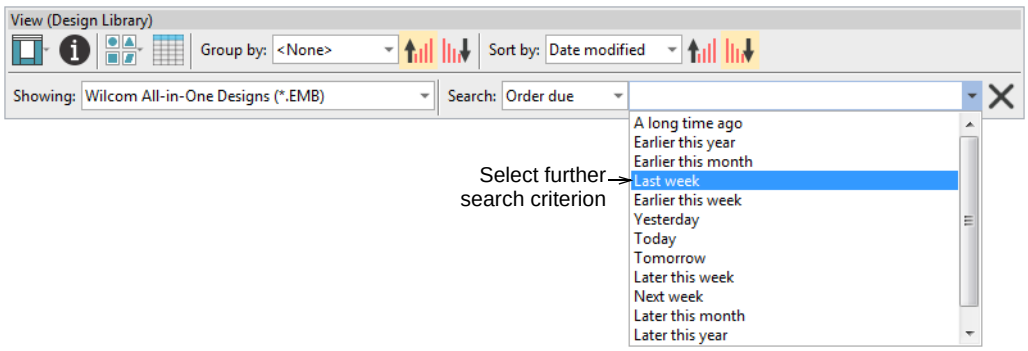
select a file type to search on, and select criteria from the improved droplists.



Searchable fields include common commercial categories:

- Name
- Title
- Date modified
- Order #
- Order date
- Order due date
- Order notes
- Customer
- Contact
- Reference
- Sales rep
- Design status

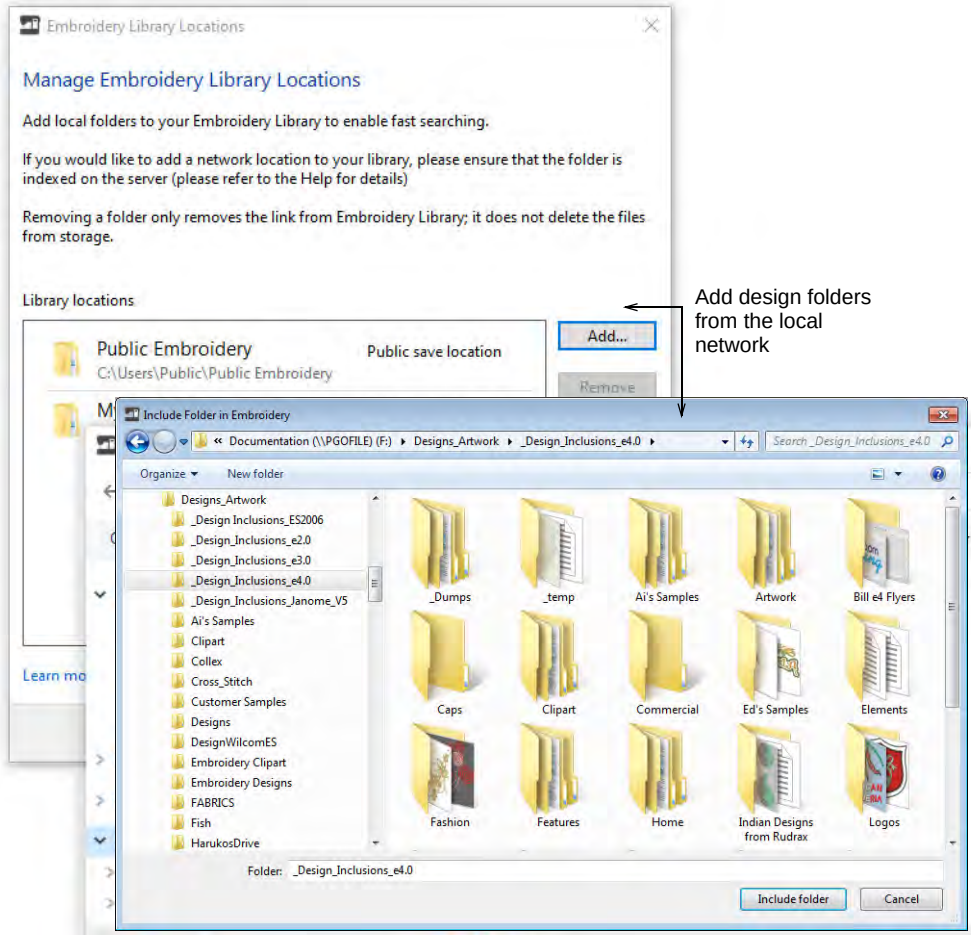
Once you have selected a search criteria – e.g. 'Order due' – select further criteria from the second droplist. See also Locating designs in the library (Reference Manual).



Manage folders in the library from a single control

Use Manage Designs > Manage Embroidery Library Locations to add or remove existing folders from the Embroidery Library, enabling fast searching and filtering.

The mechanism for adding and removing folders from the **Design Library** has been improved with the addition of the **Manage Embroidery Library Locations** function. This replaces the obsolete **Add Folder to Library** and **Remove Folder from Library** functions. See Locating designs in the library (Reference Manual) for details.



Note: For businesses with multiple computers reading and writing EMB or machine format designs, there is usually a need to store designs in shared network folders. You may want to set up a company server as a central repository for all design files. Connect any folders on the server

to each client PC via **Design Library**. **Design Library** relies on Windows indexing to ensure fast searching. See also Fast searching on shared network drives (Reference Manual).

Extended support for CorelDRAW CDR graphics files

Design Library now provides extended support for CDR files. Existing support for CDR and other graphics files within Design Library includes:

- Display Windows thumbnails for CDR files.
- Right-click to access Windows operations – **Open**, **Open With** – directly into CorelDRAW Graphics.
- Drag-and-drop from Windows Explorer into CorelDRAW Graphics.
- Drag-and-drop into standalone CorelDRAW® Graphics Suite.

Extended CDR capability includes:

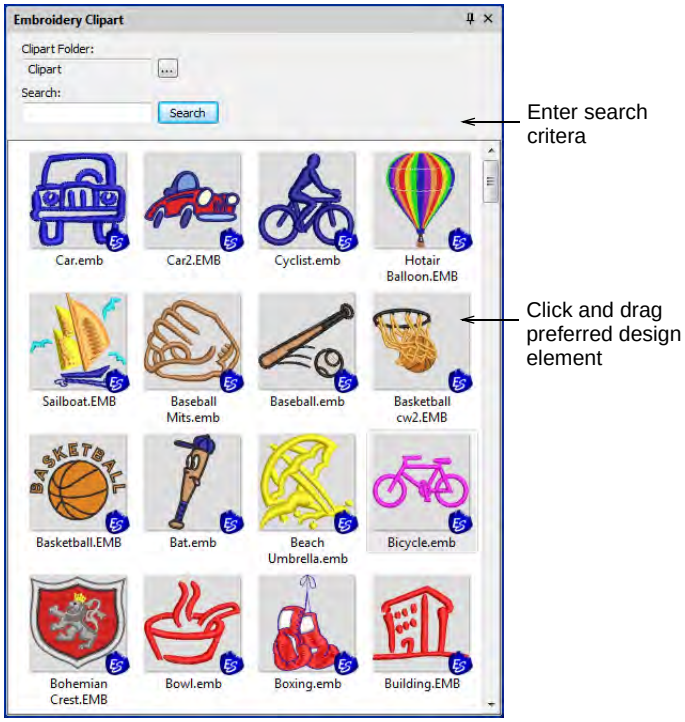
- Drag-and-drop from Windows Explorer into Wilcom Workspace.
- Open CDR files with **New from Selected**. A new file is opened in EmbroideryStudio before switching to CorelDRAW Graphics. The CDR file is inserted.
- Alternatively, double-click to open a selected CDR file using the default template.

Drag-and-drop EMB designs from the new clipart docker

Use Docker > Embroidery Clipart to toggle the docker display. Use it to record and recover re-usable embroidery elements.

With the ES e4.1 release, the **Embroidery Clipart** feature has been reinstated, albeit in a modified form. **Embroidery Clipart** is a powerful productivity tool which allows you to recycle commonly used elements. When you install EmbroideryStudio, the **Embroidery Clipart** feature is installed with the **Design Library** together with a sample clipart library. The feature uses standard EMB designs in folders, not EMC designs from

a database as used in ES e3. It is available with ES Designing and ES Digitizing only.



Use **Design Library** to manage design elements in your clipart folders. Use **Design Properties** to assign names and keywords to each design element you save. Keywords play an important part in organizing a growing clipart library. Finding a suitable element can take time but keywords narrow the selection. Any number of keywords can be assigned to the same clipart element. See also Viewing & managing design information (Reference Manual).

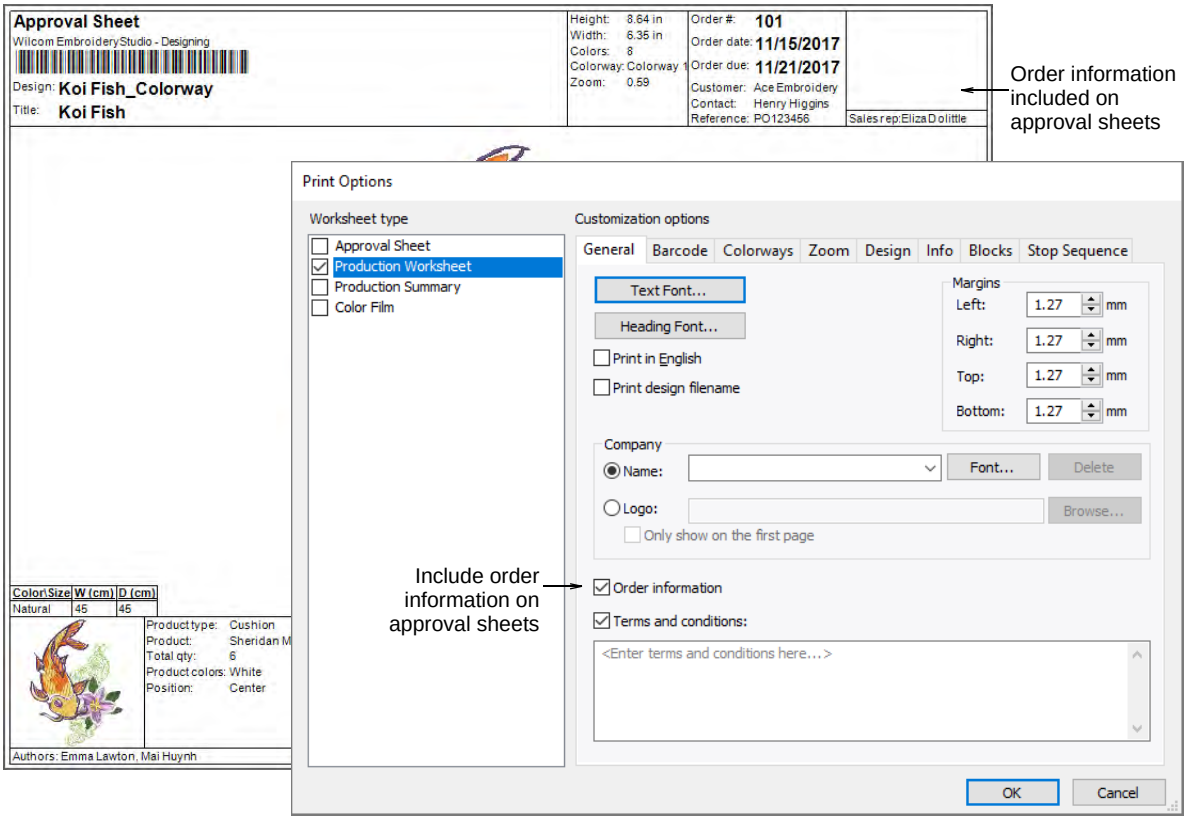
Note: The current **Embroidery Clipart** implementation allows you to access your old clipart designs. Simply browse to the 'C:\WilcomClipArt\Designs' folder. You can even add this folder to **Design Library**. Note, however, that keywords entered into the old database are not included in the clipart files and are not searchable in the new docker.

Order Job Feature improvements

The ES e4.1 release includes a number of improvements to the Order Job Feature.

Customize order information on approval sheets

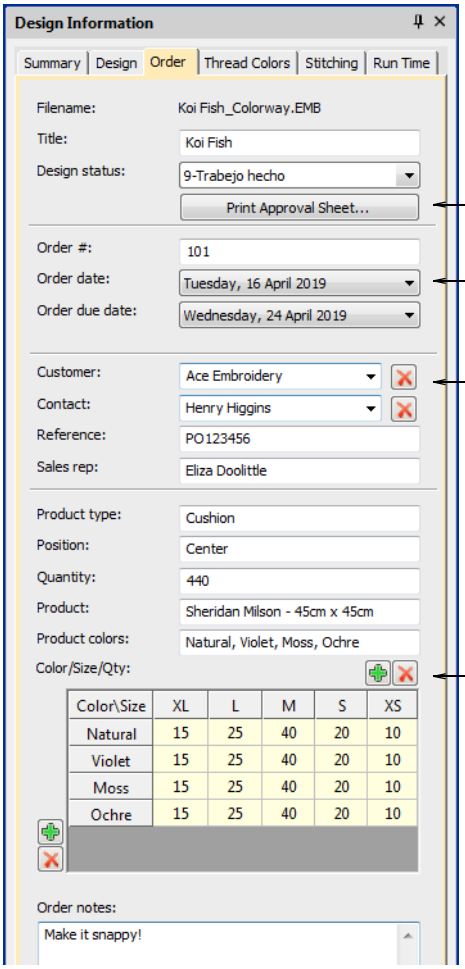
With the ES e4.1 release, you can better customize the approval sheet options. Customer information is now included with order information. Terms and conditions can be excluded, as preferred. See also Customizing design reports (Reference Manual).



New Order tab Color/Size/Quantity table

The **Order** tab in the **Design Properties** docker includes a number of improvements. Order information is saved directly with the design file. This allows embroidery orders to be managed via the designs they use without the need for a commercial database. The information is included

on approval sheets. See also Managing quotes & orders (Reference Manual).



Note the following:

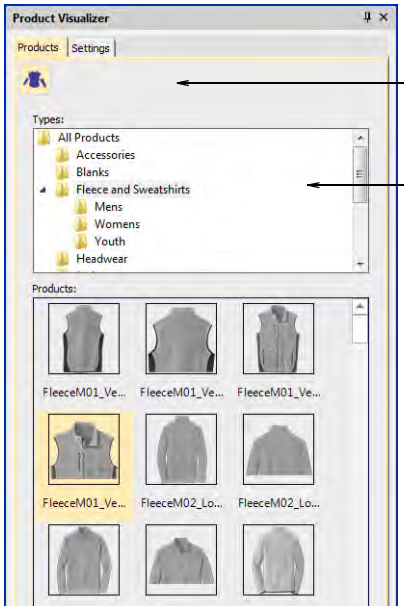
- All fields in the **Design Properties** docker can now be read and written in **Design Library**.
- The **Color / Size / Qty** table is included in the approval and production worksheets. Click buttons to add rows and columns. Double-click to edit labels.
- Numeric displays use Windows locale settings.
- Order date fields use the 'Long Date' format as set in the Windows 'Region' settings. These can be changed via the Windows **Control Panel > Region** settings.
- Date fields use locale settings.

Improved product visualization

Use Color toolbar > 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.

The **Product Visualizer** tool now includes more product categories and product images to choose from. The **Show Product** toggle is also included in the docker for ease of use.

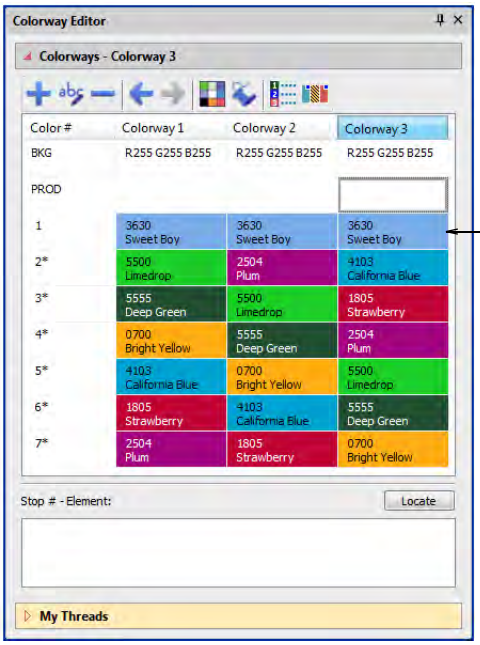


Create new colorways with the color wheel

Use Color toolbar > Cycle Used Colors to cycle through combinations of used colors. Right- or left-click.

ES e4.1 allows you to create new colorways using the **Cycle Used Colors** method. Simply create a new colorway in the **Colorway Editor** and cycle

through existing colors to find a color scheme you like. See also Creating colorways (Reference Manual).



Create new colorways using Cycle Used Colors

Digitizing tools

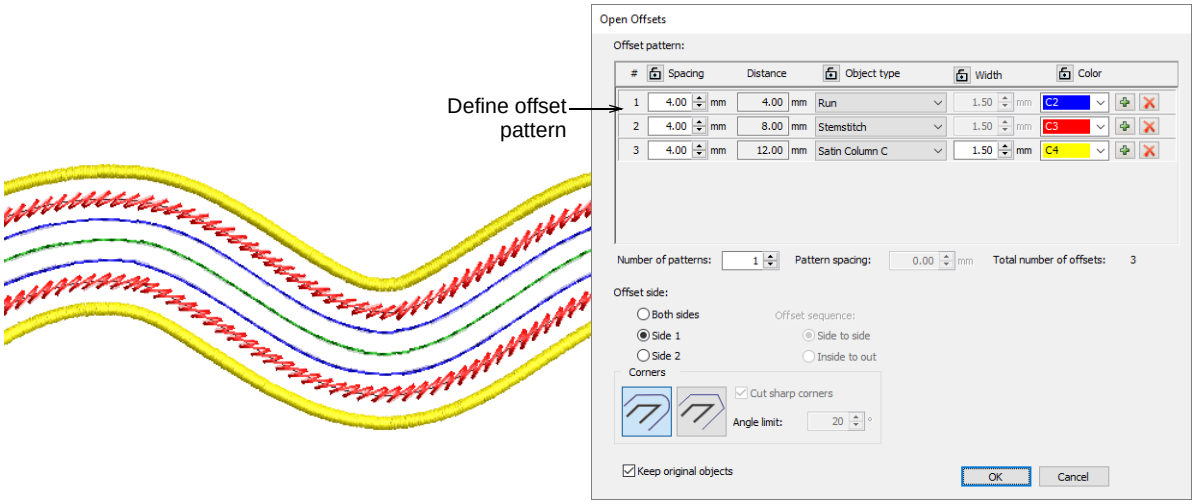
ES e4.1 includes significant improvements in digitizing tools:

Create offsets with open objects

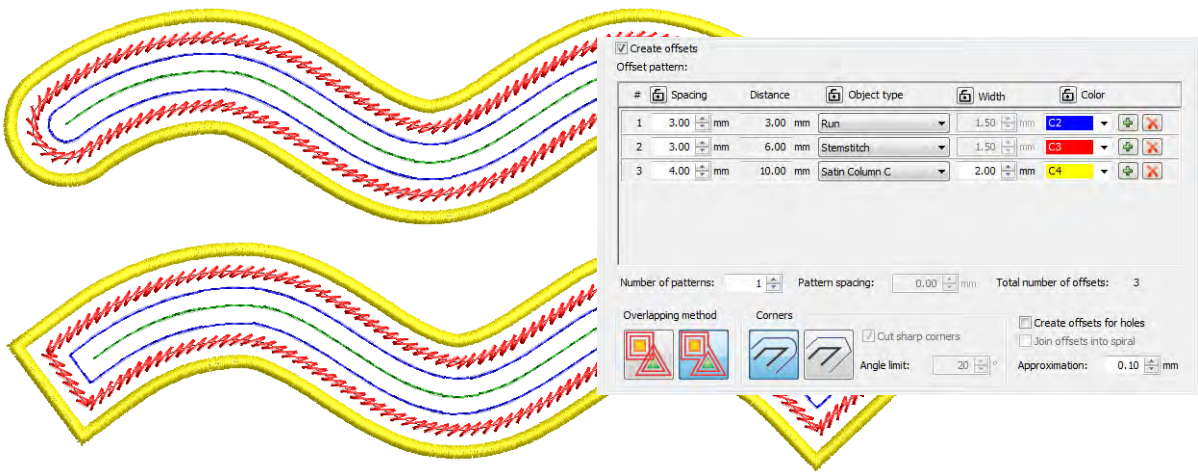
Use Toolbox > Open Offsets to create accurate offsets for any open embroidery or vector object.

Use Toolbox > Outlines & Offsets to create closed offsets for open embroidery or vector objects.

The **Open Offsets** tool allows you to generate parallel offsets from any open shape. Offset lines are calculated at a specified distance for a specified number, one side or other side, or both sides.



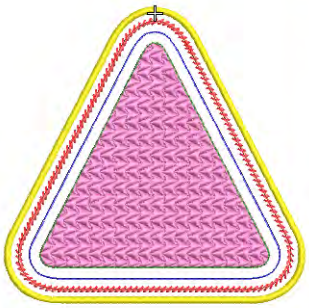
You can now use the **Outlines & Offsets** tool with open objects to create closed offsets as shown. Select rounded or squared corners as preferred. The squared option allows you to adjust the angle limit – first select **Cut Sharp Corners** and set required angle value. See also Generating outlines & offsets (Reference Manual).

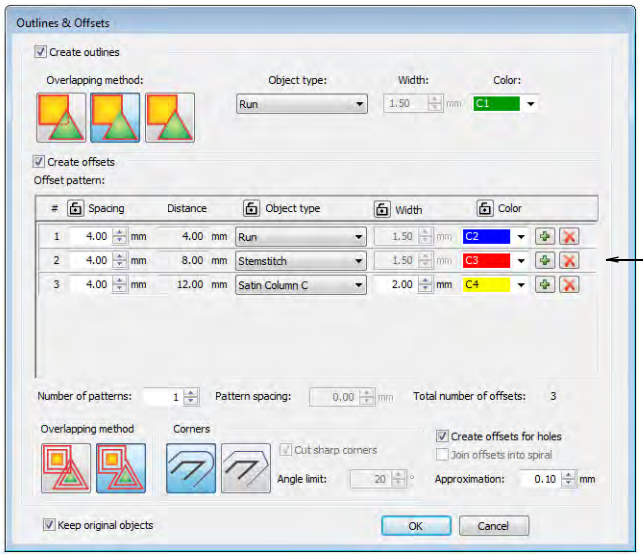


Define Column C width in offset objects

Use Toolbox > Outlines & Offsets to create outlines and offsets of any type for any filled embroidery or closed vector object.

The Outlines & Offsets tool now includes a **Width** setting to define Column C width when creating Satin Column C offsets. See also Create outlines & offsets (Reference Manual).



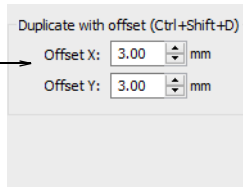


Define width for Satin Column C offsets

Improved options for 'duplicate with offset'

The **Options > Edit** tab includes improved 'duplicate with offset' options, more consistent with how the feature works. Duplicate position settings are 'nominal' in that they apply to normal **Ctrl+Shift+D** operations. However, clone by right-click and drag operations will override these settings temporarily. See also Paste & duplicate options (Reference Manual).

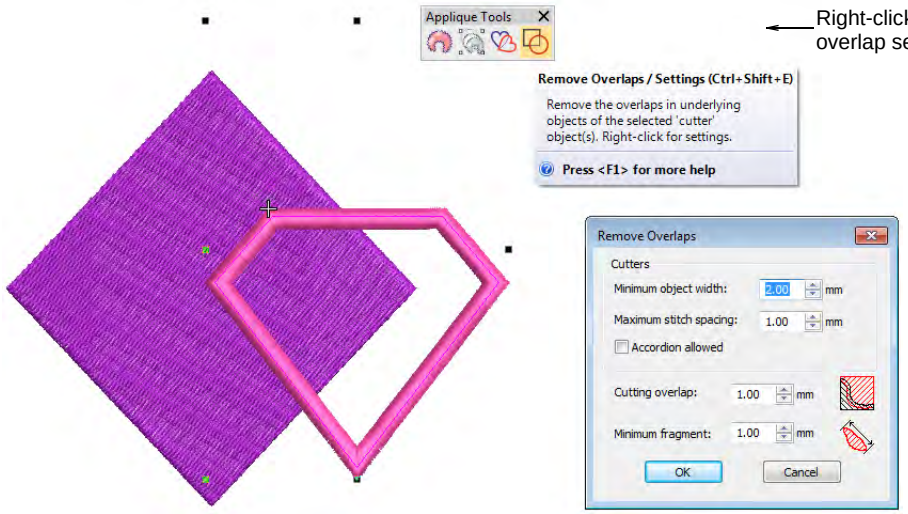
Improved 'duplicate with offset' settings



Easy access to Remove Overlaps settings

Use Appliqué > Remove Overlaps to remove underlying layer of stitching in overlapping objects using the selected object as a 'cutter'. Right-click for settings.

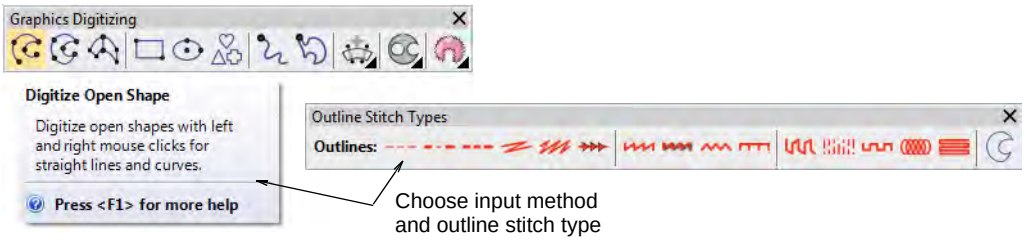
Right-click of the **Remove Overlaps** tool will display the overlap settings dialog. A shortcut key, **Ctrl+Shift+E**, has been added for quick overlaps removal. See also Removing underlying stitching (Reference Manual).



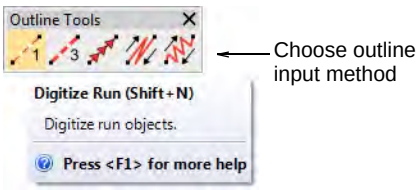
Reinstated outline tools

The traditional outline input methods have been reinstated in the software. You now have a choice of graphical or traditional input methods for outline stitching. See also Digitizing outlines & details (Reference Manual).

- Select a suitable input tool together with an outline stitch type.



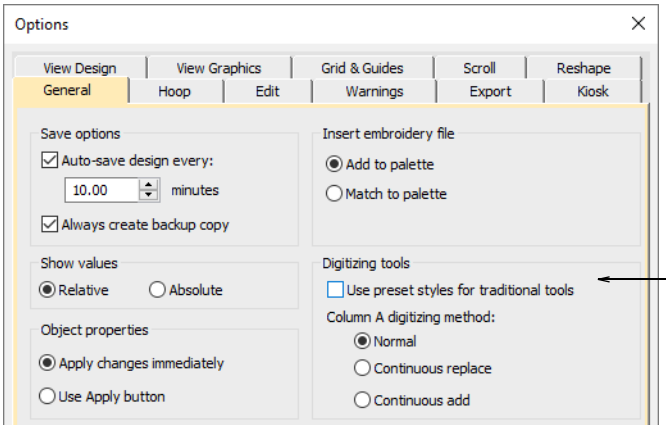
- Alternatively, choose a traditional outline input method from the **Outline Tools**.



Preset styles for traditional tools

Use Standard > Options to access application options for digitizing tools.

Use preset styles for traditional digitizing tools as preferred by selecting the option in the **Options > General** tab. See also Digitizing presets (Reference Manual).



Select the preset styles option to have the traditional digitizing tools behave the same as they did in e3 (default). Preset styles use a set of predefined stitch types and underlay parameters for each of the traditional digitizing tools. These styles can be changed and saved to the normal template as preferred.

New & improved stitch types & effects

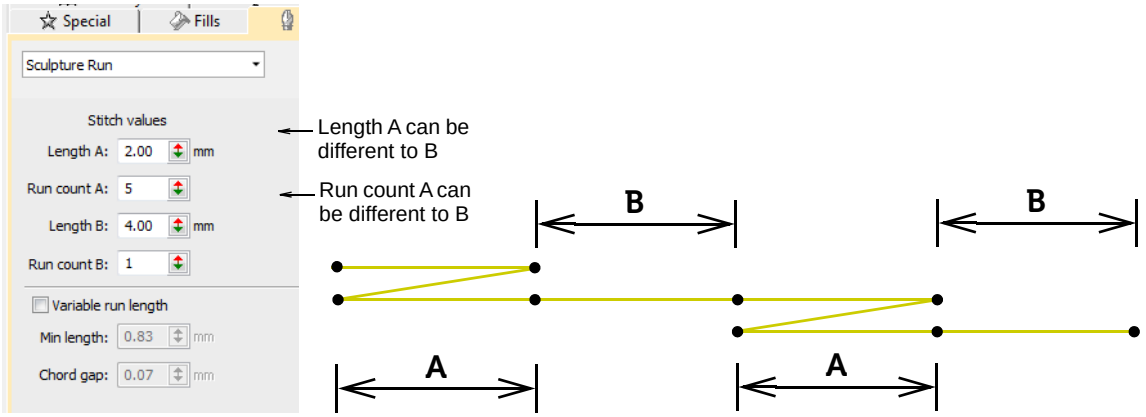
The ES e4.1 release contains many improvements in stitch types and effects:

Extended Sculpture Run

Use Outline Stitch Types > Sculpture Run to create a thick-thin outline alternating single and triple stitches for a hand-stitched look.

Sculpture Run now provides independent stitch length parameters for alternating stitches. This is handy for creating a hand-stitched look. Apply to open or closed shapes. Default alternating values are equal but can be independently set – e.g. A=2.5 mm and B=1.5 mm. Also, the

number of A/B repeats can be independently set. The default setting is #A=3, #B=1. See also Simple outlines (Reference Manual).

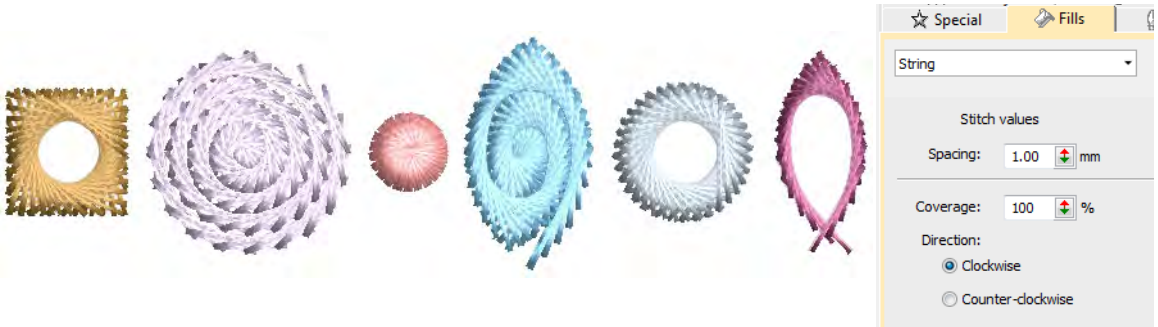


New String stitch

Use Fill Stitch Types > String to create string craftstitch fills. Apply to closed shapes.

Use Fill Stitch Types > String to create string craftstitch outlines for delicate borders. Apply to open or closed shapes.

New **String** stitch type is ideally suited to creating craftstitch fills as well as delicate borders. It can, for instance, be used as a border for fixing ornamental mirrors and sequins. Apply to open or closed shapes. See also String stitching (Reference Manual).

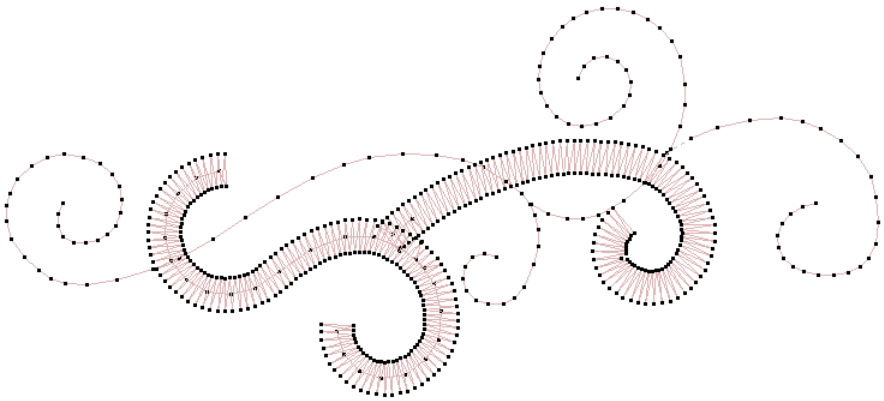


Note: String stitch is included as a separate Element within ES Designing and ES Digitizing products.

Cording

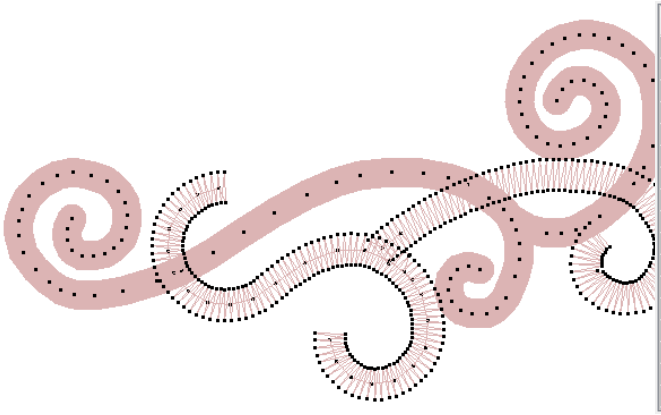
	Use Traditional Digitizing > Digitize Run to create row of single stitches along a digitized line.
	Use Effects > Cording to add cord to objects with run, tatami, contour, spiral, or stipple stitching.
	Click View > Show Needle Points to show or hide the needle points in embroidery stitching.

Cording refers to the technique of fixing a thick cord or yarn onto a fabric, usually for decorative purposes. Digitizers frequently want to see the cord line so that while they digitize, they don't overstitch on sharp turns. The new **Cording** function allows you to designate the outline stitching which is to form the cording.



The **Cording** effect can be applied to **Run** stitch objects. The cord is displayed as a graphic line. It takes the color of the outline stitching. This

allows designers to check technical correctness and better visualize a corded design look.



#	X	Y	L	Func
0				Start, Cord In
1	0.00	0.00	0.00	Color (#4) (Needle #C04) (empty)
2	1.58	0.96	1.84	
3	1.64	0.68	1.78	
4	2.02	0.43	2.07	
5	1.98	0.13	1.98	
6	1.39	-0.20	1.40	
7	1.17	-0.43	1.24	
8	1.29	-0.81	1.52	
9	1.04	-0.99	1.43	
10	0.82	-1.29	1.53	
11	0.38	-1.26	1.31	
12	0.11	-1.62	1.62	
13	-0.16	-1.34	1.34	
14	-0.41	-0.92	1.01	
15	-0.59	-0.59	0.83	
16	-0.73	-0.33	0.80	

When **Cording** is applied, a Cord In/Out function is inserted into the stitch sequence. Some machines have a specific cording function which is output when saving to machine file – e.g. Barudan FDR-3 file format or Schiffli machines that support cording. See also Cording.

Improved contour fills

EmbroideryStudio provides significant improvements in spiral and contour fills:

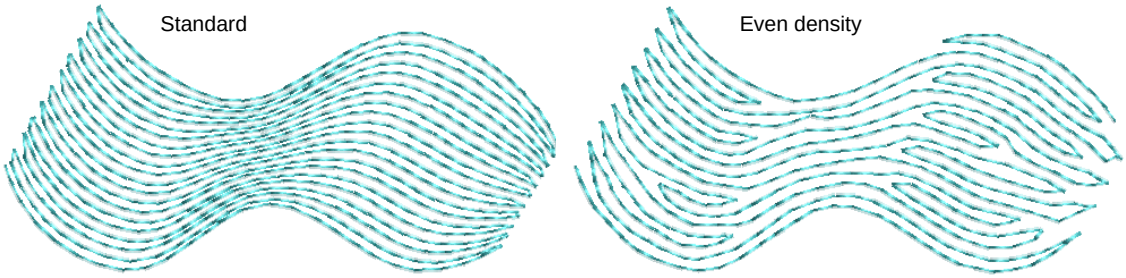
New even density contour fill

Use Outline Stitch Types > Contour to create outlines which follow object contours, creating a curved, light-and-shade effect. Right-click for settings.

Use Fill Stitch Types > Contour to create fills which follow object contours, creating a curved, light-and-shade effect. Right-click for settings.

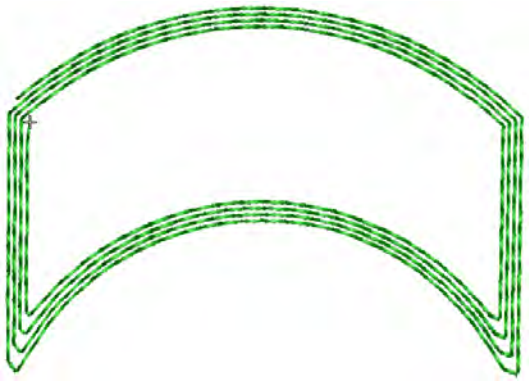
Contour is a curved fill stitch type which can be applied to Column A/B or Circle/Ring objects. It can also be used for outline stitching. Stitches follow the contours of a shape, creating a contoured, light and shade effect. **Contour** now includes an **Even Density Contour** fill method which maintains even density across shapes which vary in width. Contour

stitching follows the shape with uniform stitch density. See also Contoured fills (Reference Manual).



Improved simple contour stitch corners

Contour stitch has been improved for more reliable alignment at sharp corners. Simple **Contour** stitch allows you to set/edit start and end points.



Offset fill

Use Fills Stitch Types > Offset Fill to create offset fill stitching in any closed shape.

New **Offset Fill** is similar to **Contour** in producing a curved fill stitch type which follows the contours of the shape. However, it can be applied to complex fill objects as well as turning stitch objects. Stitch angles, however, have no effect on the fill pattern. Like **Contour**, it is best used

for open fills with low stitch counts. See also Offset fills (Reference Manual).

Improved motif runs & fills

The ES e4.1 release contains significant improvements to motif runs and fills. These form part of the new **Advanced Motifs** Element.

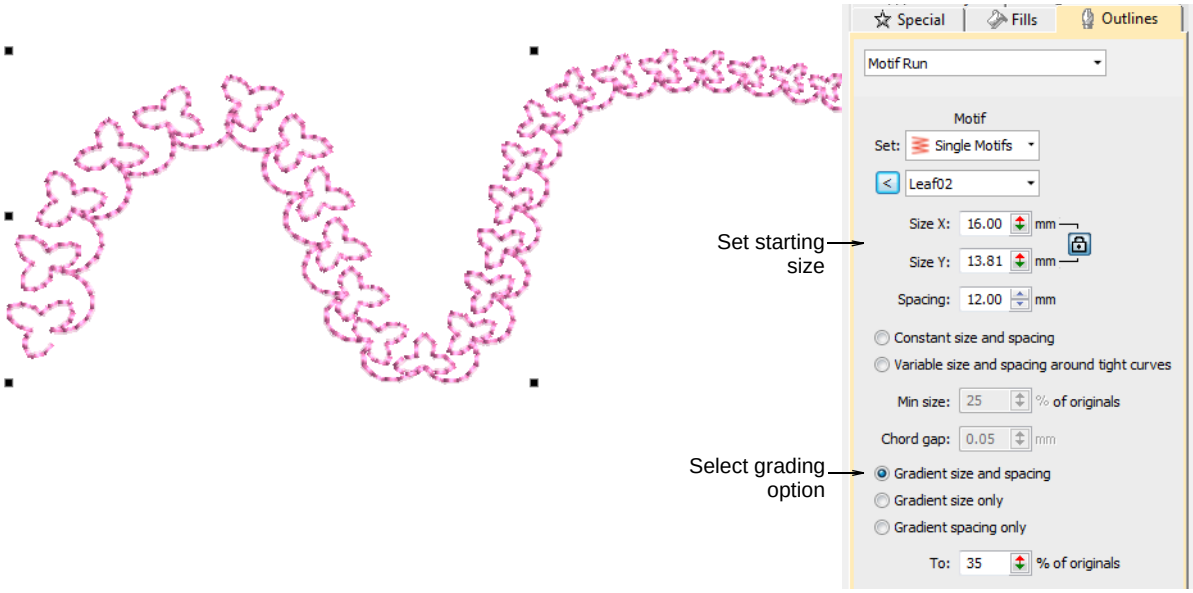
Graded motif size & spacing in motif runs

Use Outline Stitch Types > Motif Run to create a string of motifs along a digitized line.

Use Outline Tools > Motif Run to place a row of motifs along a digitized line.

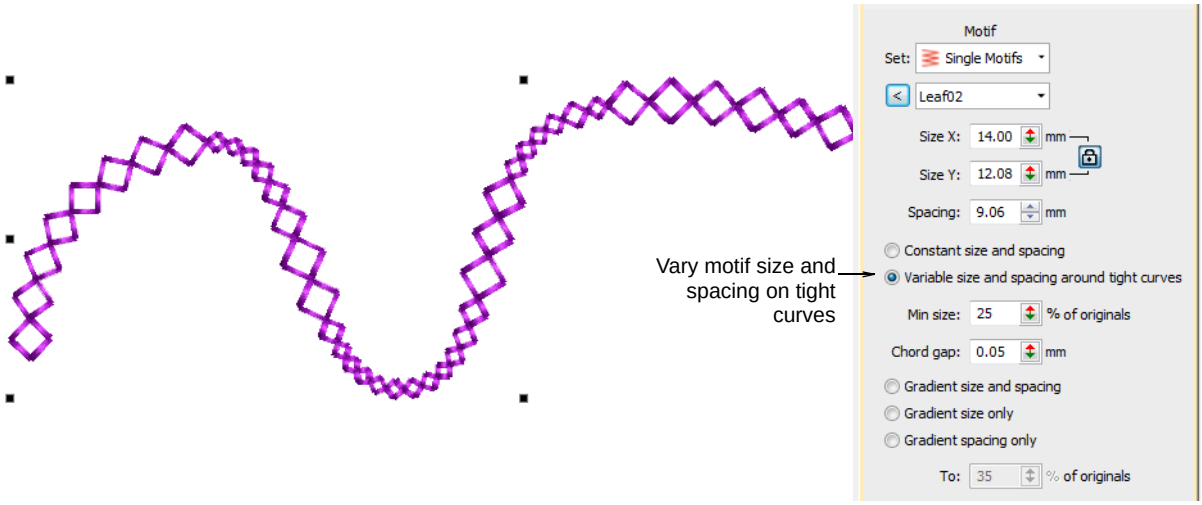
Part of the new **Advanced Motifs** Element, size and spacing settings allow you to automatically grade motif size and spacing in motif runs from

a specified starting size to finishing size. See also Motif runs (Reference Manual).

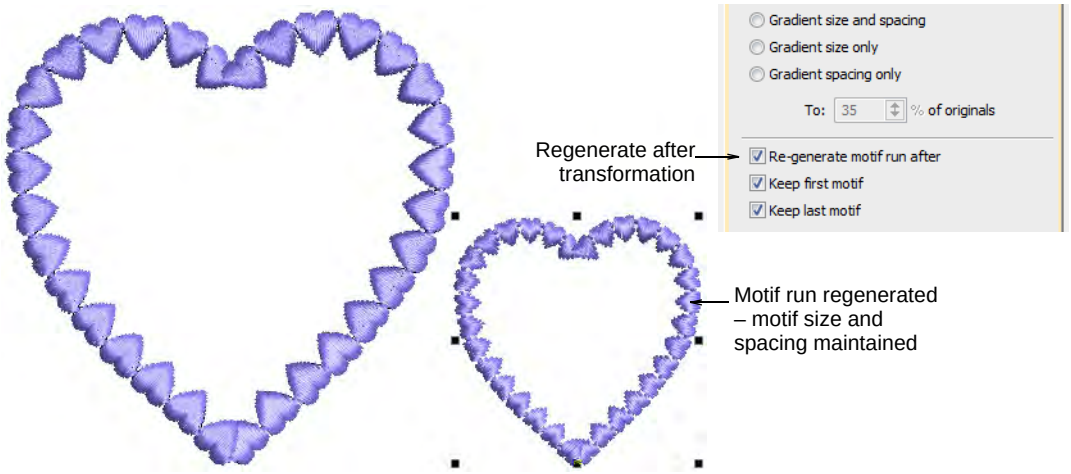


Options include:

- Grade motif size proportionally or maintain constant size.
- Grade motif spacing proportionally or maintain constant spacing.
- Vary motif size and spacing on tight curves. This option automatically reduces motif size and spacing in proportion to the sharpness of the curve, similar to variable run stitch length. Also similar, the 'chord length' setting controls how closely motifs follow the curve.



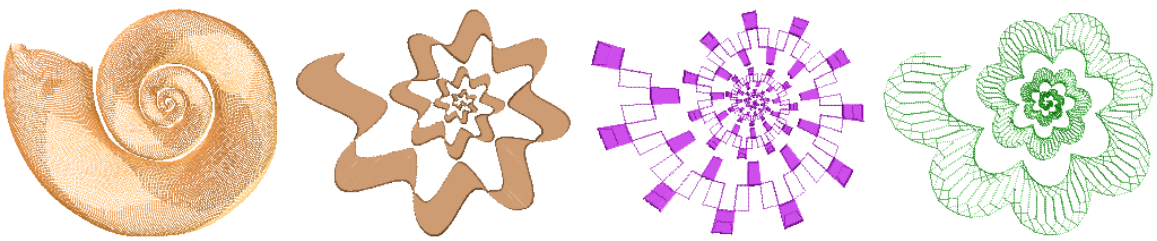
A new checkbox, ‘Re-generate motif run after transformation’, forces the system to re-generate motif runs based on current settings whenever an object is scaled or skewed. When left unchecked, the system will not re-generate and the number of motifs will remain unchanged after the transformation. See also Reshape motif runs (Reference Manual).



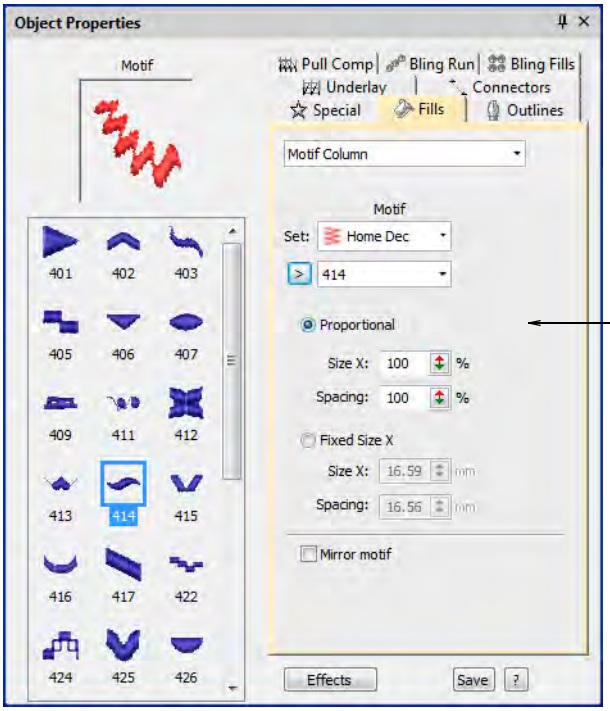
New motif column

Use Fill Stitch Types > Motif Column to place motifs along the center line of a column shape and resize to fit the shape. Right-clicking for settings.

The **Motif Column** feature is part of the new **Advanced Motifs** Element. Motifs dynamically resize to fit varying widths. Similar in concept to flexi-split with turning satin, you digitize a tapering shape using, for example, **Column A**. Apply **Motif Column** and select a motif. Motifs are automatically ‘enveloped’ to fit to the shape.



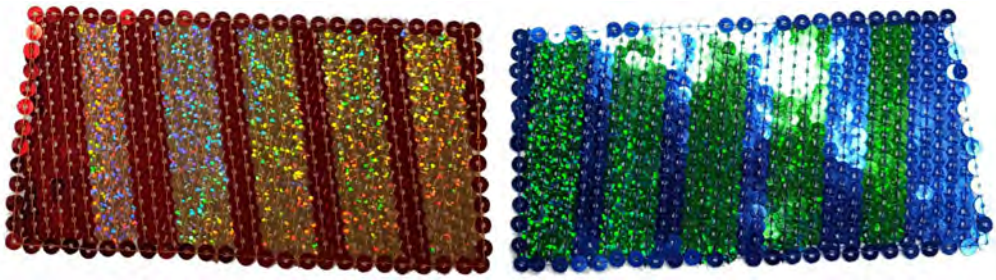
Right-clicking the **Motif Column** tool opens the **Object Properties** docker with its dedicated **Motif Column** fill stitch settings. See also Create graded motif columns (Reference Manual).



Motif Column settings for proportional or fixed spacings

Improved sequin fills

EmbroideryStudio provides significant improvements in sequin fills and runs.

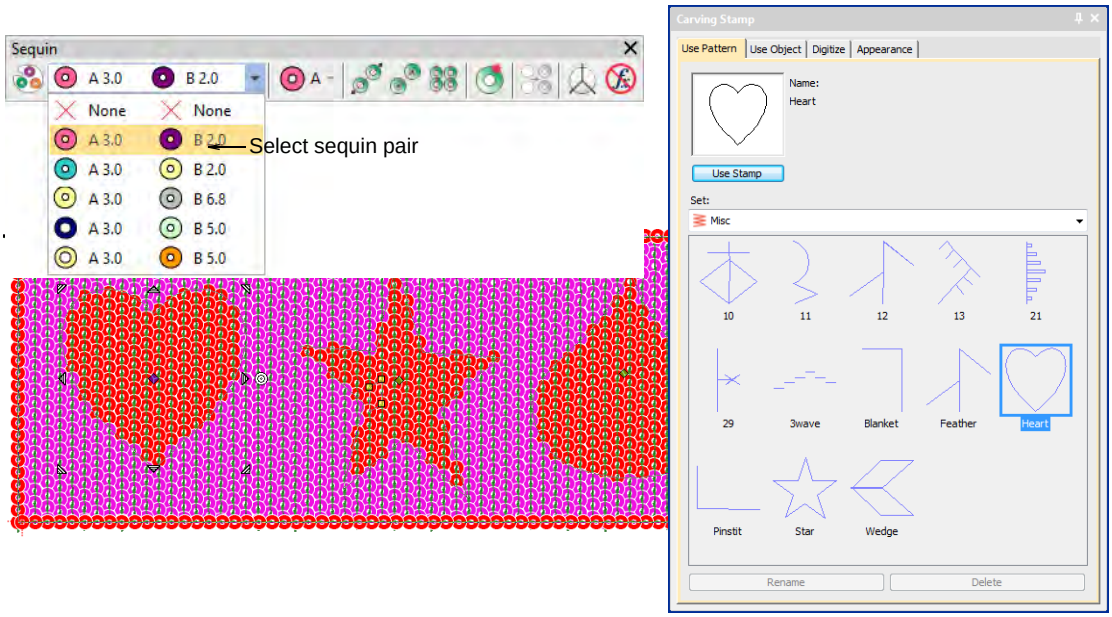


Pattern stamp re-coloring of twin-sequin fills

Use Sequin > Sequin Fill to digitize and fill large, irregular shapes with sequins.

Use Docker > Carving Stamp to define a pattern of needle penetrations using a ‘carving stamp’ as a template.

Sequin Fill can now be used in combination with **Carving Stamp** to digitize sequin fills with predefined twin sequin assignments. The stamp pattern takes the color of the other sequin in the currently selected pair. See also Flip sequins (Reference Manual).

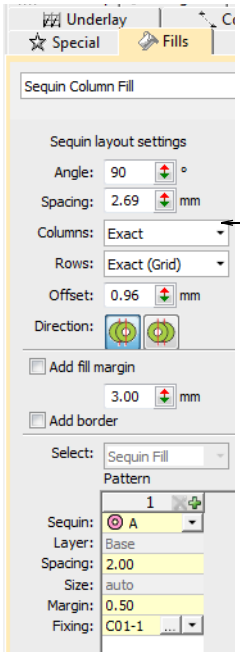


Smooth edges in sequin fills

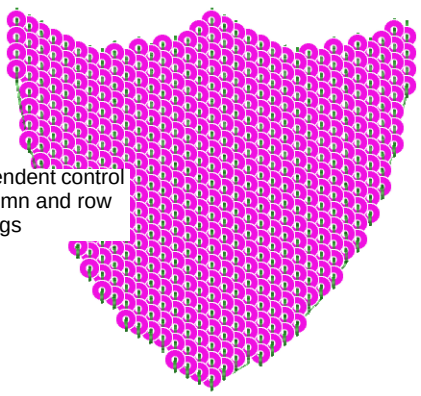
Use Sequin > Sequin Fill to digitize and fill large, irregular shapes with sequins.

Sequin Fill now provides independent control of column and row spacings. Set the nominal spacing in the **Spacing** field. Choose whether you want the fill to fit the grid exactly or to be adjusted line-by-line to fit the shape. You have the option of expanding or contracting spacings in either or both rows and columns. Each line is adjusted separately. The aim is to make sequins follow to the edge of the shape for all lines in the

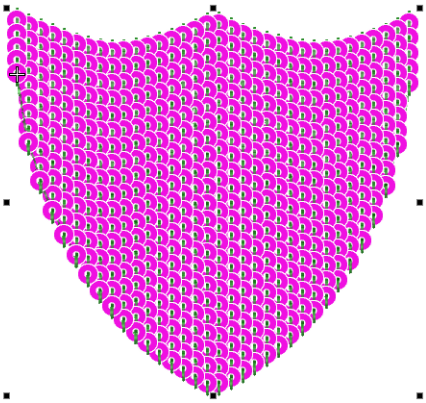
fill. This is less important if you add a border to the fill. See also Adjust sequin layouts (Reference Manual).



Independent control of column and row spacings



Exact grid spacing



Spacing adjusted to fit

Better default values for sequin fills

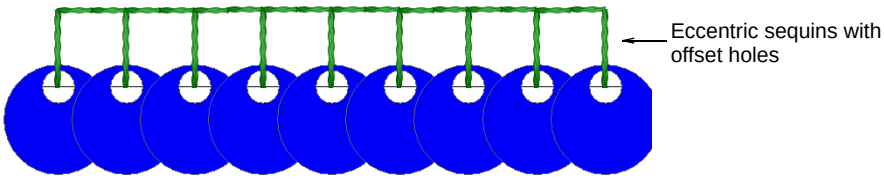
Sequin fill parameters have been modified as follows:

Parameter	Default
Direction	270°
Stitch spacing	2.75 mm (to allow small overlap for 3.0 mm sequins)
Offset	2.75
Layout	Progress to the right
Add border	B01-3 (better default fixing method)

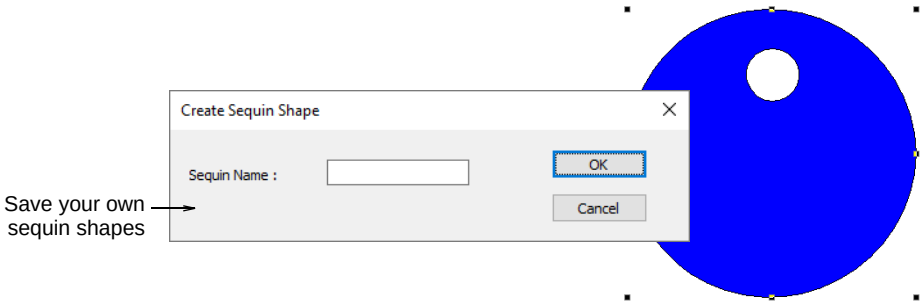
Custom sequin shapes & hole positions

ES e4.1 now supports sequin shapes with offset holes. Such sequin shapes can be utilized for flipping sequins on the fabric to form two

different sequin fill patterns. See also Custom sequins (Reference Manual).



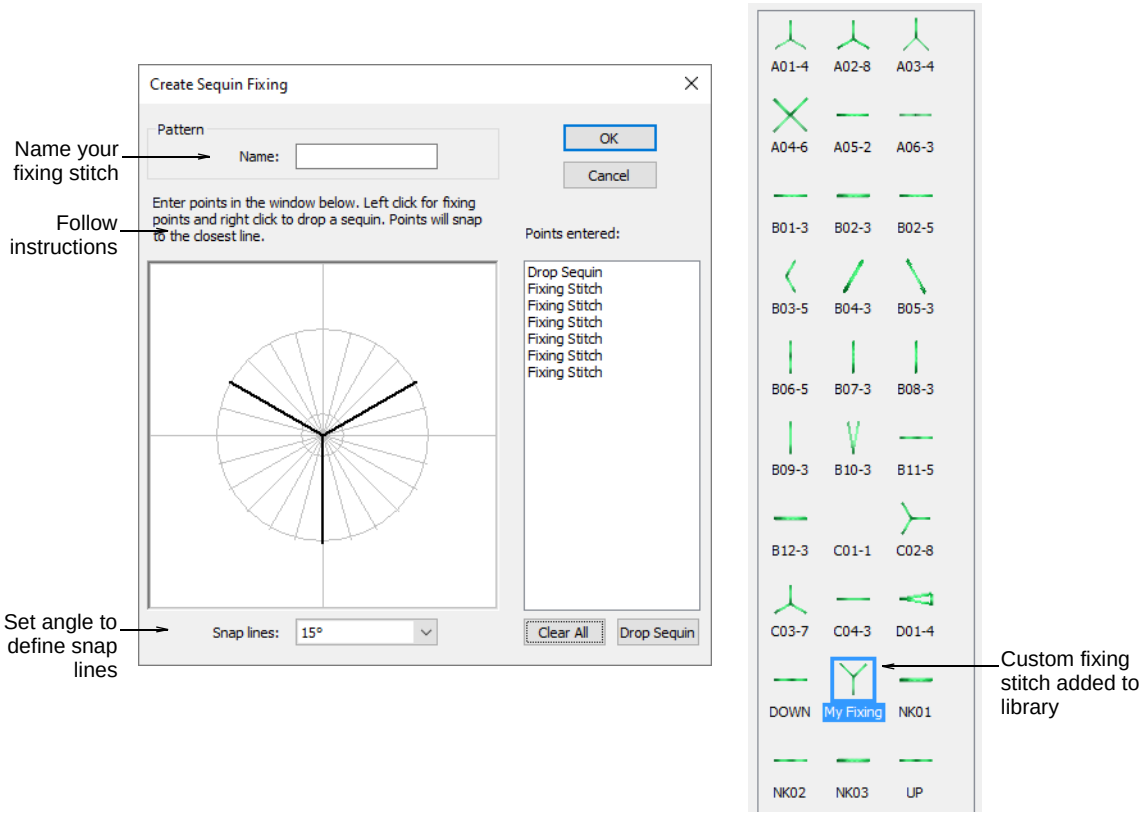
The software allows you to define your own shapes with their own hole position and size. Overlap allowance is automatically adjusted to accommodate different hole positions.



Custom sequin fixings

There is now a capability to define custom fixing stitches to support multi-head sequin devices. Some limitations might exist for older more

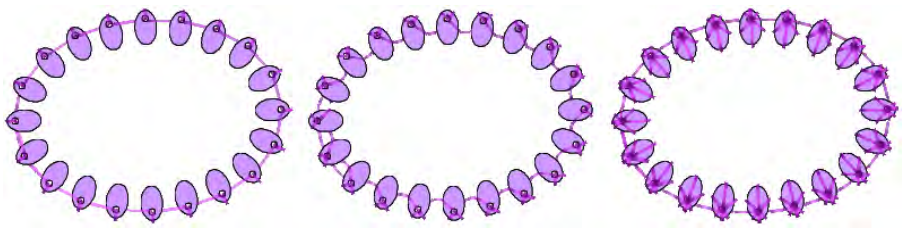
complicated sequin devices. Access the dialog via the **Object** menu. See also Custom sequins (Reference Manual).



Benefits of user-defined sequin fixings include:

- Create multiple layers of stitching for decorative effects, sometimes in different thread colors (Barudan).
- Reduce stitch counts in large sequin designs.
- Accommodate specific fixing requirements.
- Accommodate new capabilities – e.g. offset holes.

Tip: If you have chosen an eccentric sequin type such as 'ellipse', fixing stitches automatically adapt to fit.

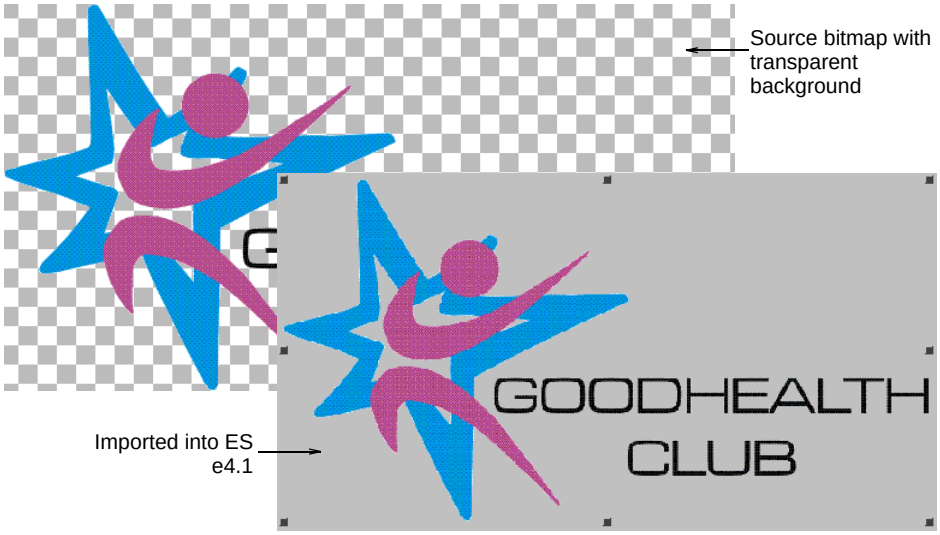


Auto-digitizing quality improvements

With the ES e4.1 release, auto-digitizing quality has been improved so that results look good in TrueView™ with corresponding improvements in production quality.

Support for image transparencies

Support is now provided for transparent backgrounds in 24 bit and 32 bit images. See also Preparing artwork for digitizing (Reference Manual).



If an image contains a transparent background:

- The background is automatically excluded from auto-digitizing.
- The image is automatically cropped to its visible extents.

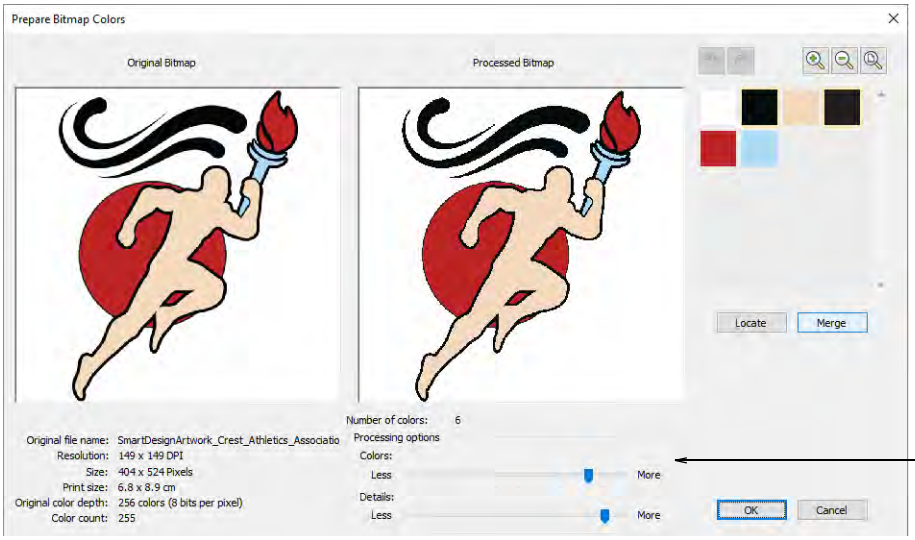
These improvements apply to both **Smart Design** and **Color PhotoStitch**.

Warning: Avoid using images that contain semi-transparent or transparent pixels **within** image color areas as these cause poor results when reducing the color count. The resulting pixels may end up as holes inside the image or significantly reduce color areas to the point where they are unnecessarily removed from the embroidery results.

Improved color reduction for logo type artwork

Use Auto-Digitizing Tools > Prepare Bitmap Colors to reduce the number of colors and remove image 'noise' in non-outlined images.

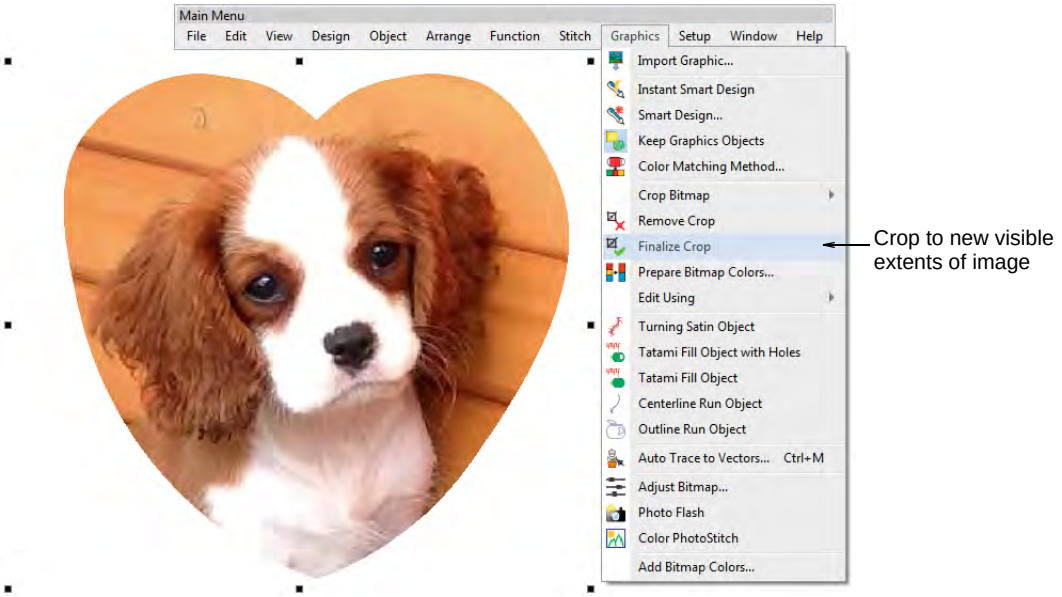
Color reduction has been improved for auto-digitizing logo type artwork with the aim of providing more accurate shapes for stitching. A new color-reduction method for logo style designs produces more reliable and predictable color reduction in ‘solid color’ designs. Unwanted edge artifacts are avoided with more complete removal of anti-aliasing effects. There have also been improvements in the treatment of gradient colors, including an option to remove/replace all gradients with solid colors. See also Preparing images for auto-digitizing (Reference Manual).



Finalize crop command

When you create a cropped area, it is considered ‘temporary’ and can be reshaped at will. The new **Finalize Crop** command turns a ‘virtual crop’ into a ‘hard crop’ by reducing an image to its new visible extents. The

only way to go back is via the **Undo** command or by reinserting the original bitmap. See also Crop bitmap images (Reference Manual).



Design output improvements

The ES e4.1 release includes a number of improvements in design output.

Easy access to machine file export

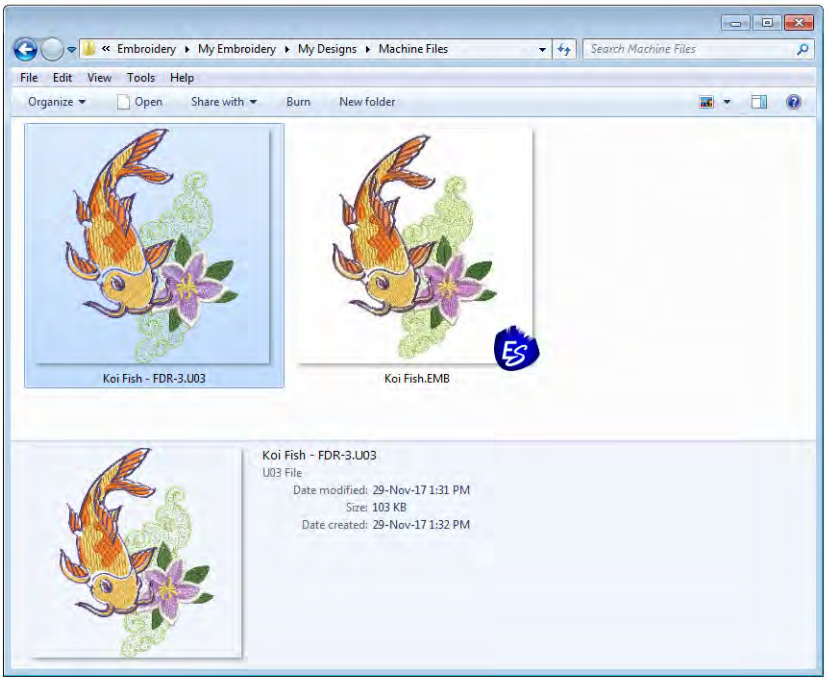
Use Standard > Export Machine File to export the current design to a machine file for stitching.

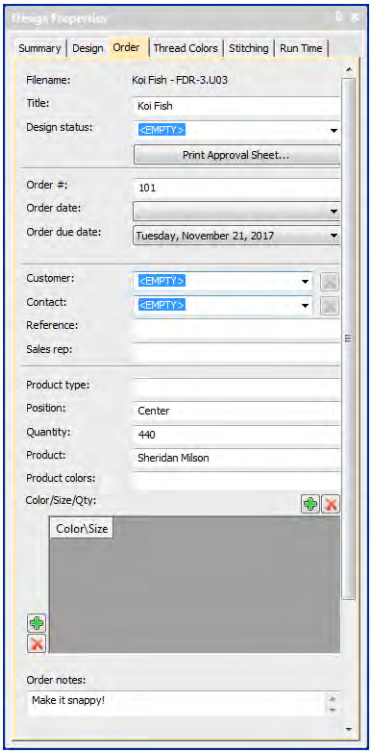
An **Export Machine File** button has been added to the **Standard** toolbar for easy export of the current design to machine file for stitching. A **Shift+E** shortcut has been included for the same purpose. See also Exporting designs for machine (Reference Manual).

Support for Barudan FDR-3 design format

ES e4.1 can now write Barudan FDR-3 format machine files. FDR-3 file thumbnails display in the correct thread colors in **Design Library** and **Design Explorer**, as well as on the machine. Summary production

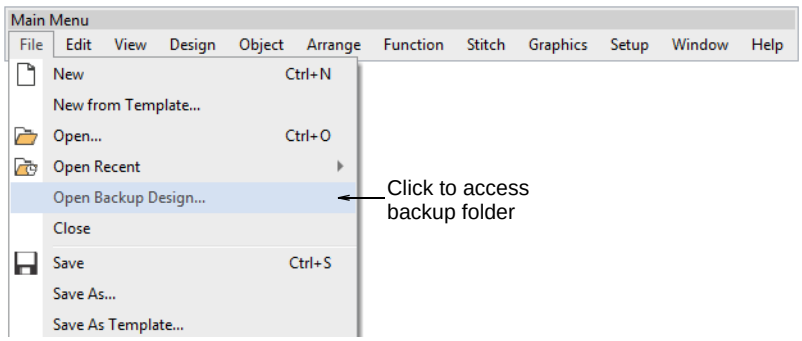
details are also included with the file, reducing the possibility of production errors.





Improved error handling of EMB files

Error handling and backup of EMB files has been improved with the latest ES e4.1 release. During the writing of EMB files, the software will now preserve the original file until it has successfully written the new file. If an error occurs while writing the new design file, the original file is restored. A new **File > Open Backup Design** command allows you to find your backup folder. See also Automatic save & backup options (Reference Manual).



What's new in ES e4.2?

The release of EmbroideryStudio e4 is minor in terms of version number but major in terms of the new features and benefits it provides Wilcom users. Not least is the fact that ES e4.2 provides 64-bit operating system support. It has enhanced features plus new design inclusions. These include:

- General improvements
- Lettering improvements
- Thread & color improvements
- Digitizing improvements
- Stitch quality improvements
- System performance improvements
- Output improvements

Note: This update is intended for installation with any released version (already installed) of ES e4.5. It contains all improvements up to this release plus any previous updates.

General improvements

The ES e4.2 software update includes the following general improvements...

New 64-bit operating system support

EmbroideryStudio e4 now supports 64-bit operating system. You'll notice a big improvement in speed and performance.

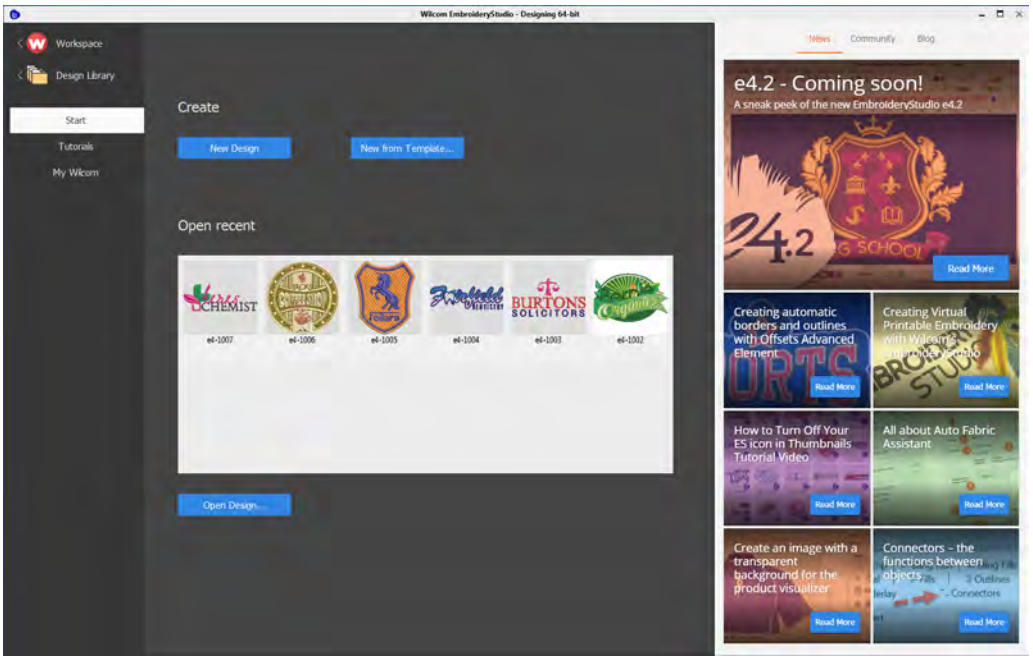
Note: Note that 32 bit systems are no longer supported by ES e4.2. It is installed in the 64 bit C:\Program Files\Wilcom\EmbroideryStudio_e4.5 folder. You can, however, still run previous versions of ES e4.5 on the same computer. See also System requirements.

Note: The VIP file format is not currently supported by the new 64-bit operating system.

New Wilcom Home screen

Click Mode > Home to return to the Home screen to get started with a new design, or access tutorials and other product information.

A new **Home** screen loads when EmbroideryStudio starts, offering you quick access to recent new designs, as well as value-add content, including tutorial videos and the latest Community Forum and Product Blog posts. You can also browse 'My Wilcom' which provides details of your Wilcom license, including product level, version, as well as compatible or enabled Elements. See also Operating modes (Reference Manual).



Wilcom Workspace

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

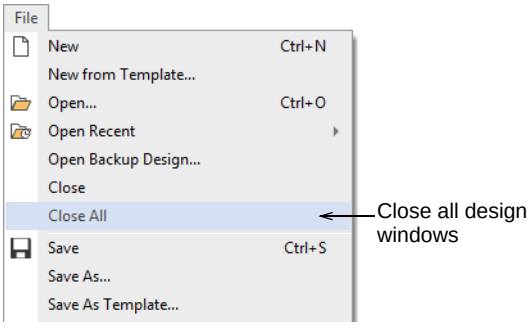
Depending on your level of product, there are two fundamental design modes in EmbroideryStudio:

- **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 that the **Wilcom Workspace** was previously known as **Wilcom Decoration**. See also Operating modes (Reference Manual).

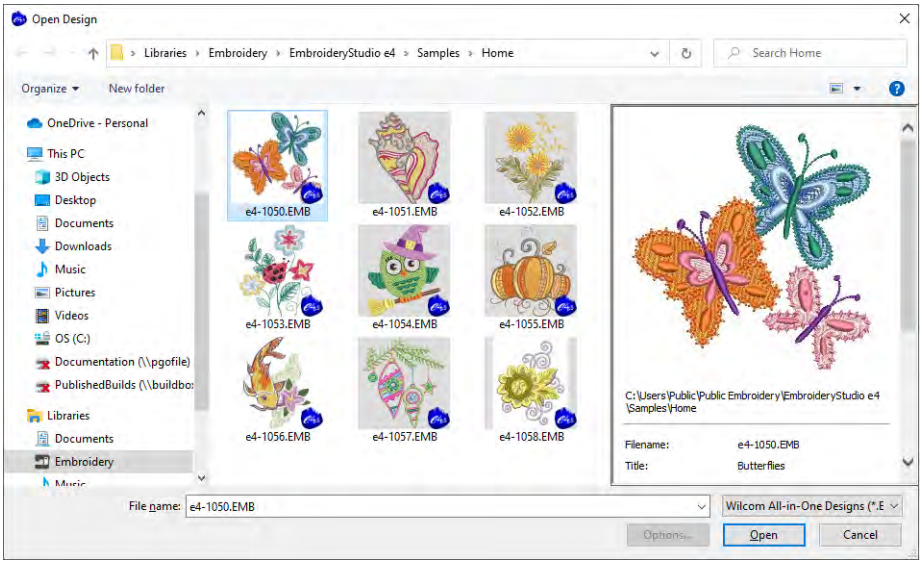
New Close All design windows

It is now possible to close all design windows at once with the **File > Close All** command. See also Save & close designs (Reference Manual).



Improved design thumbnail display

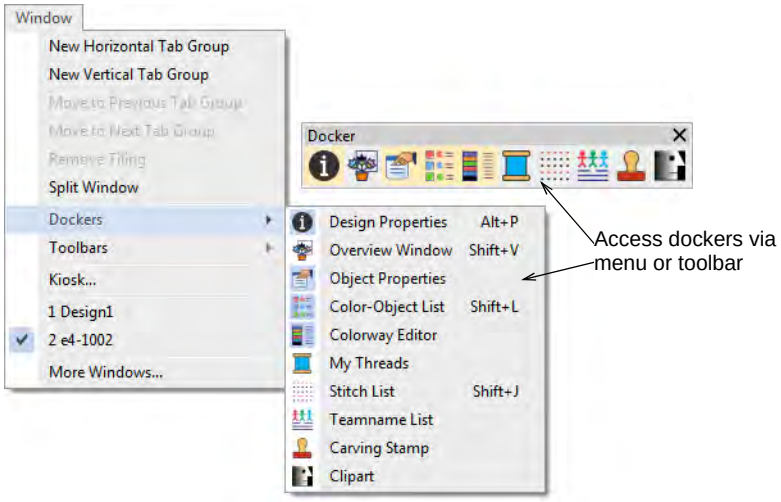
Design thumbnails now reflect display settings at the time of saving. When a design is saved, the design thumbnail is generated using all visible objects as well as the current design background. If you have bitmap or vector display turned on, these too appear in the thumbnail.



Note: Users with older designs have been affected by the load time involved in previewing them in Design Library or Windows Explorer. Thumbnails in some older designs can take many seconds to generate. This problem has been resolved in ES e4.2.

Access to dockers

For clarity and ease-of-use, the **Window > Dockers** menu has been resequenced to the same order as the **Docker** toolbar.



Note: The **Colorway Editor** and **Threads** buttons are mutually exclusive. One toggles the other.

Network dongle drivers

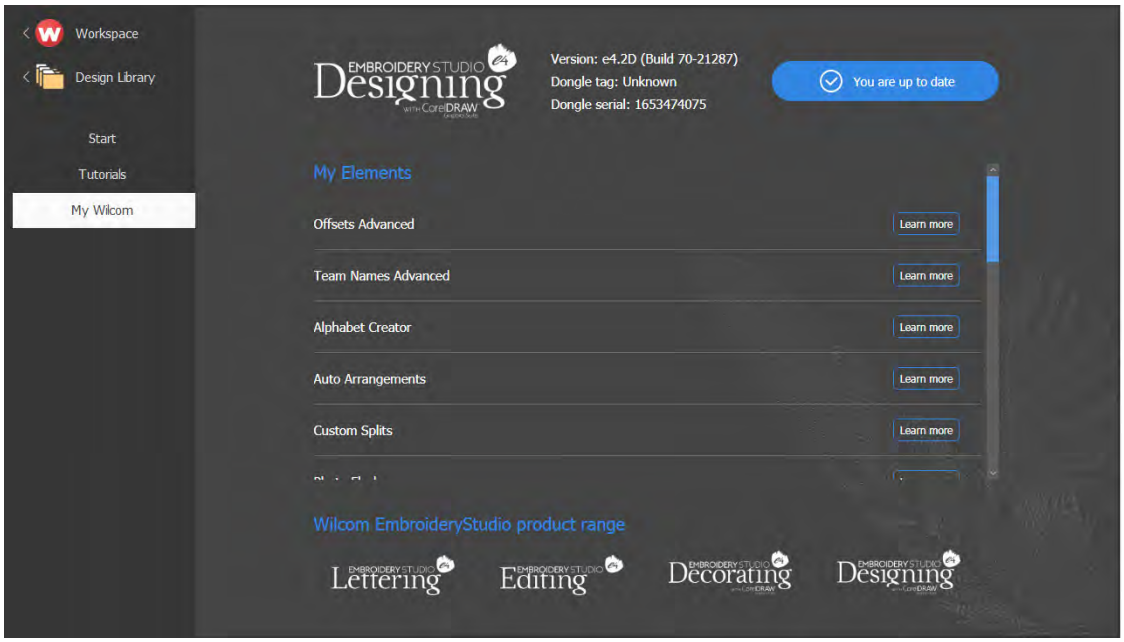
The latest HASP drivers for the Network Dongle have been packaged with ES e4.2. They will be updated automatically when you install ES e4.2 on the PC where the network dongle is connected. Alternatively, you can install them manually from the Support folder of the e4.2 Installation USB using the command line: haspdinst.exe /i /kp.

Software updates

Click Mode > Home to return to the Home screen to get started with a new design, or access tutorials and other product information.

With EmbroideryStudio e4, maintenance updates will be available periodically. You have the option of installing immediately or postponing

till later. Go the **My Wilcom** screen of the **Home** page to check your current status.



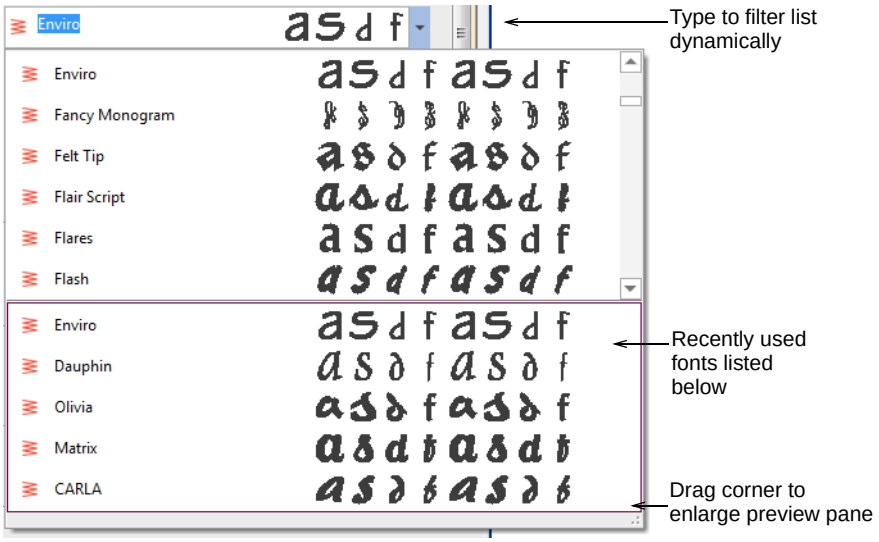
Lettering improvements

The ES e4.2 software update includes the following lettering improvements…

Improved font preview

The font preview of lettering objects is now a solid color making it easier to see your custom lettering in your selected font. Preview size can be

adjusted. The preview pane can be enlarged. Fonts can be more easily found. See also Select embroidery fonts (Reference Manual).



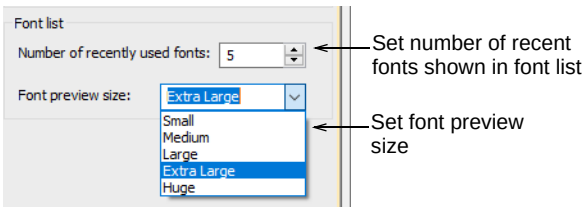
Improved font selection

Font selection has been improved in various ways:

- The font list now provides a preview of recently used fonts.
- If you know what you are looking for, simply start typing the font name and the list will update dynamically.
- When you open the font list, it remembers the previously selected font, allowing you to continue searching from this point.

New font list settings

You can set the size of your font preview via the **Options > General** tab. You can also adjust the number of recently used fonts. See also General options (Reference Manual).



Stitching for accented characters

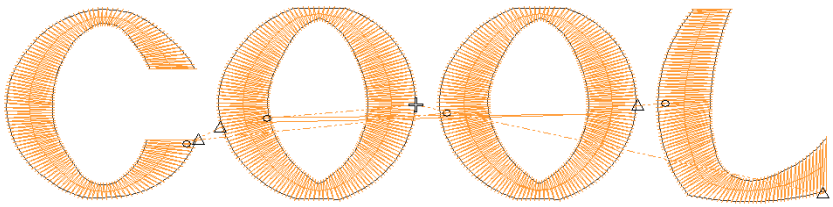
Problems have been reported with certain accented characters such as the Ã (A with tilde). Stitching was being unnecessarily duplicated. This problem has been resolved in ES e4.2.

Stitching for Glory Applique

Problems have been reported with Glory Applique lettering. Stitch spacing is too dense when created between the recommended minimum (30.00 mm) and maximum (100.00 mm) size. Furthermore, when text is entered directly into the design window, lettering is created with satin underlay of the same density as the cover stitch. This problem has been resolved in ES e4.2.

Unwanted 'zingers' in text

Problems have been reported when creating some text as shown. Unwanted 'zingers' are generated between certain letters. This problem has been resolved in ES e4.2.

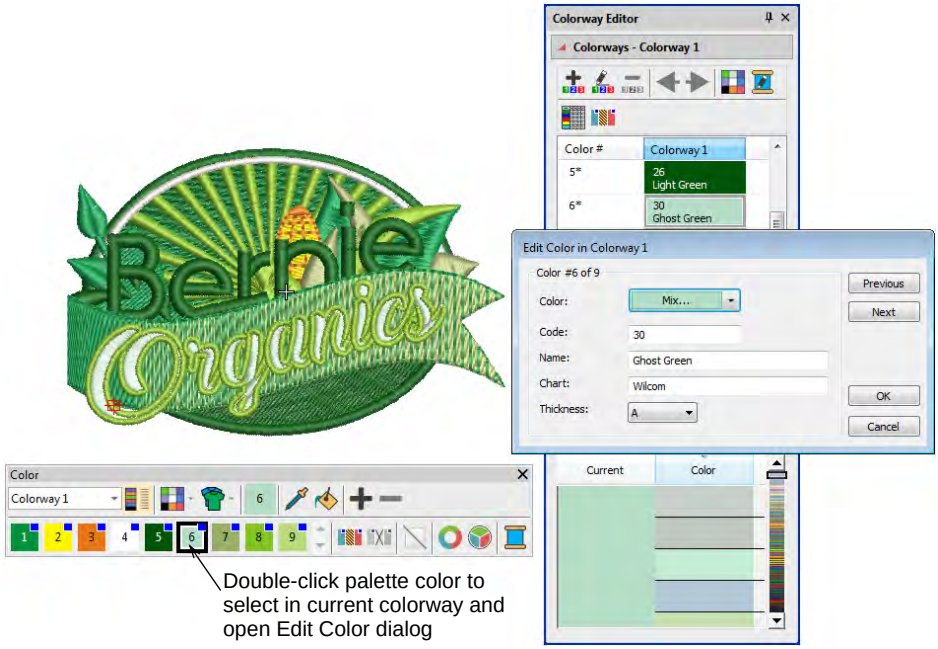


Thread & color improvements

The ES e4.2 software update includes the following thread and color improvements…

Improved color palette editing

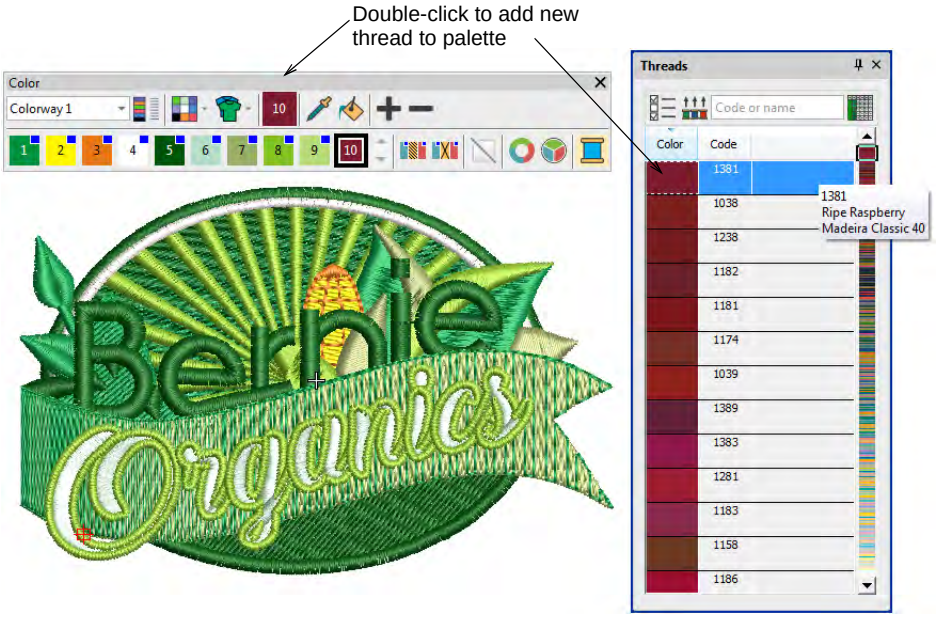
The mechanism for editing palette colors on the **Color** toolbar has been revised and improved. Double-clicking and right-clicking is the traditional way for digitizers to access color editing. This is the method adopted for ES e4.2. See also Choosing threads (Reference Manual).



Note the following changes:

- The name of the **My Threads** docker has changed to **Threads**.
- Right-click a palette color in the **Color** toolbar to open the **Threads** docker. If open, the **Colorway Editor** docker closes automatically.
- Double-click a palette slot to access the **Edit Color** dialog. The color is simultaneously selected in the **Colorway Editor** docker. The **Threads** docker closes automatically.
- When a color is changed, all objects using that color update immediately, whether selected or not. All other objects in the design remain unchanged.
- The **Assign Thread** button has been removed from the docker. Simply click a thread to assign it to the current color slot.

- Double-click to add a thread to the **Color** toolbar. The color is appended in a new color slot.



- The 'Current Color' on the **Color** toolbar is now more prominent.
- Multiple design colors contained in the current selection are now highlighted simultaneously in the toolbar.

- Thicker borders around selected colors make for more obvious color slot selection.

Isolate color blocks

To isolate a color block in the design window, you can now click and hold it in the **Color** toolbar. First press **Esc** to deselect all objects. See also View selected color blocks (Reference Manual).

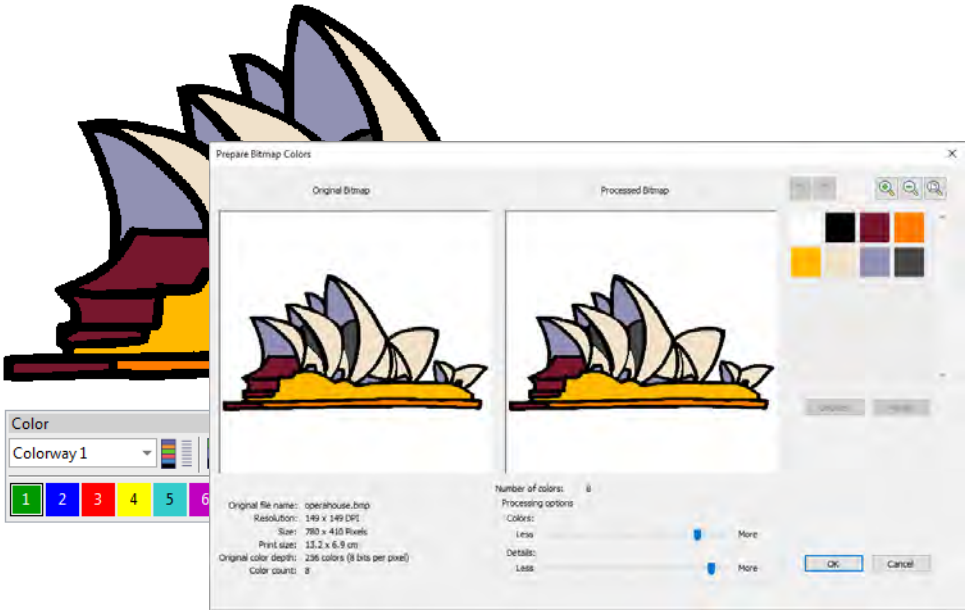
New auto-scroll to selected object in Color-Object List

When an object is selected in the design window, the Color-Object List automatically scrolls to the object and expands any closed color nodes.

This makes locating objects in the list easier and faster. See also Selecting objects (Reference Manual).

Improved procedure for adding bitmap colors

Now when you invoke **Graphics > Add Bitmap Colors**, the **Prepare Bitmap Colors** dialog opens by default. This lets you reduce design colors to the minimum necessary before adding to the color palette. See also Add & match image colors (Reference Manual).

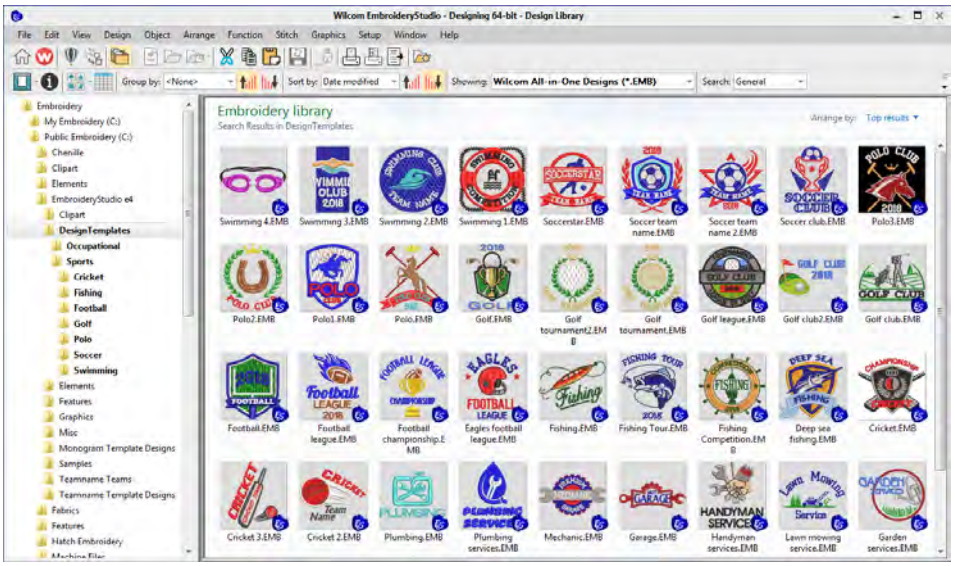


Digitizing improvements

The ES e4.2 software update includes the following digitizing and design creation improvements...

New design templates

EmbroideryStudio e4 includes a collection of over 40 new editable design templates in a range of categories, including sports and business logos such as cafés, construction, and other services. See the new **Design Templates** folder.

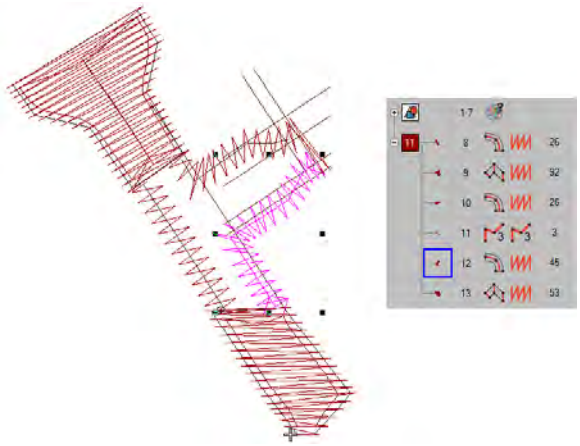


Improved Mirror Merge toolbar

Previously, **Mirror Merge** settings were separated from the main toolbar as two separate toolbars. This has now been reverted back to a single **Mirror Merge** tools and settings toolbar. See also Mirroring & reflecting selections (Reference Manual).

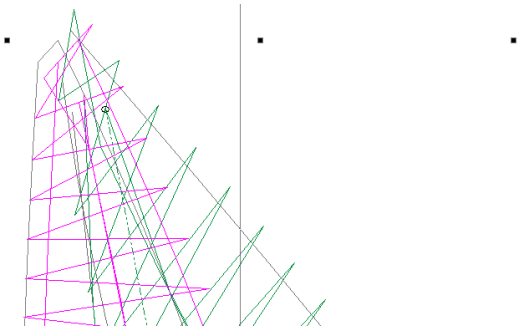
Unwanted travel runs in Column C objects

Problems have been reported with unnecessary travel runs in certain Column C objects. To remove them, stitches currently need to be regenerated. This problem has been resolved in ES e4.2.



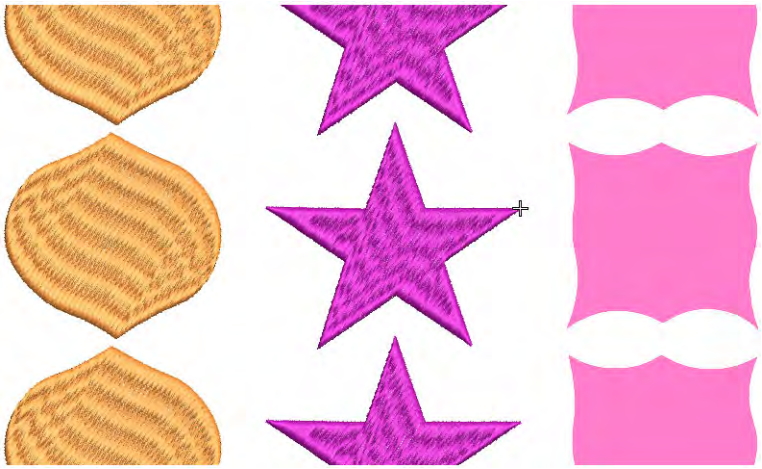
Nudging at high zoom factors

Problems have been reported when nudging objects at high zoom factors. If you zoom in too close, the object doesn't respond to nudging with arrow keys. This problem has been resolved in ES e4.2.



Vector objects used in repeats

A problem has been reported when using vector objects with **Show Repeats**. At high zoom factors, vectors fail to appear. This problem has been resolved in ES e4.2.



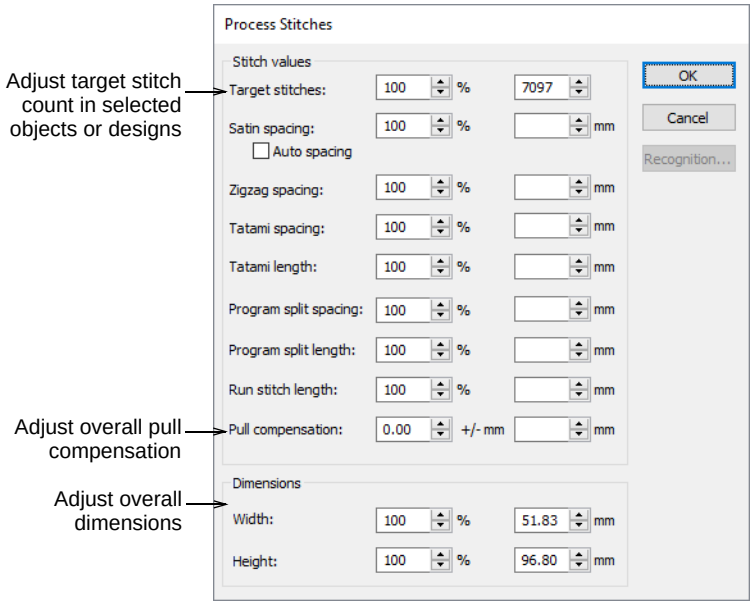
Stitch quality improvements

The ES e4.2 software update includes the following stitch quality improvements...

Stitch processing

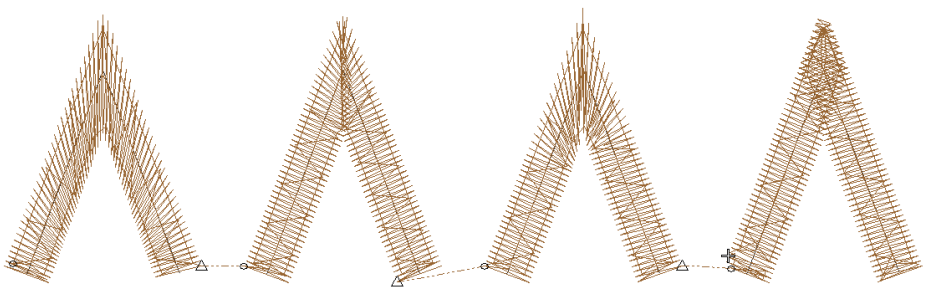
Some users like to use the **Process Stitches** function to adjust overall stitch density in objects and designs. Pull compensation and dimensions can be adjusted the same way. Some problems have been reported in the

way this function behaves. These have been resolved in ES e4.2. See also Adjusting stitch densities (Reference Manual).



Unwanted travel runs

Problems have been reported when using **Mitre** or **Cap** corners with Column C objects. Changing entry/exit points sometimes causes unwanted travel runs to appear. This problem has been resolved in ES e4.2. See also Controlling corner stitching (Reference Manual).



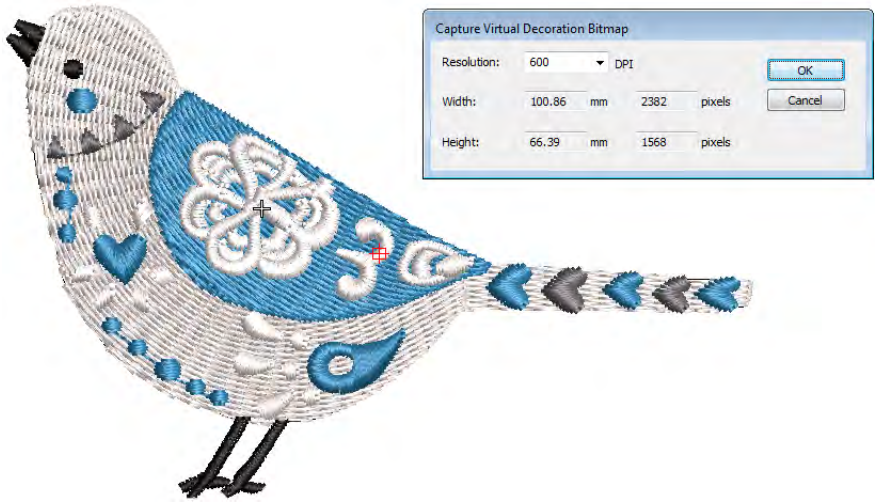
Some **Column C** shapes have also been generating bad stitches. Odd travel runs appear between underlay and cover stitches outside the object boundary. This problem has been resolved in ES e4.2.

System performance improvements

The ES e4.2 software update includes the following system performance improvements…

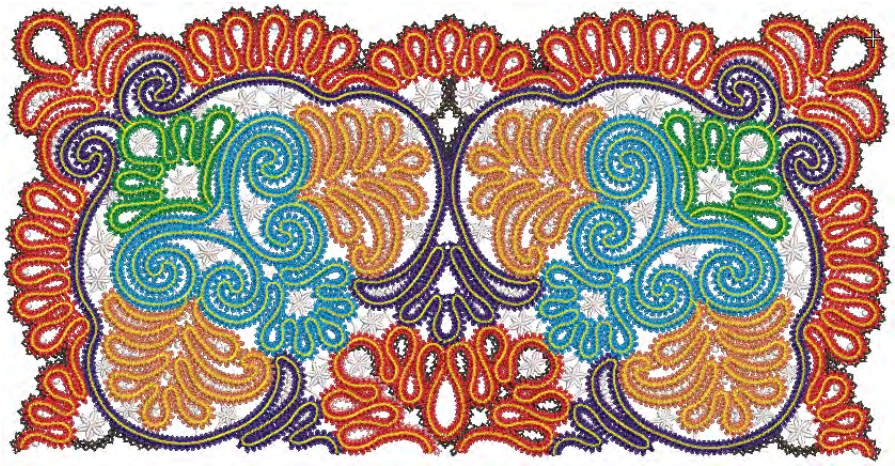
Capture of high resolution 'virtual decorations'

Problems have been reported when capturing virtual decoration bitmap at high resolution. The software may generate a 'Not enough memory for the operation' error and the PNG file is not created. This problem has been resolved in ES e4.2. See also Virtual embroidery.



Handling large design files

Problems have been reported when opening very large designs with thousands of stitches. Depending on the hardware, 'Not enough memory' messages can occur. This problem has been resolved in ES e4.2.

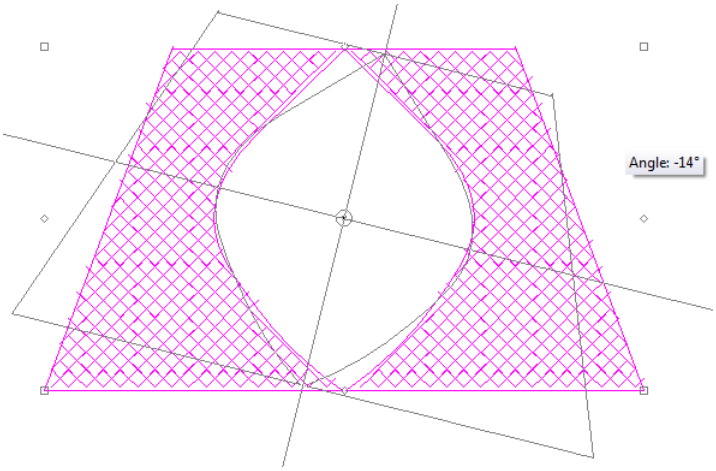


Importing large image files

Similarly, problems have been reported when importing very large image files – BMP, JPG or PNG – for use as design backdrops. These can cause memory problems. They can be very slow to save or result in unusable design files. This problem has been resolved in ES e4.2.

Rotating Cross Stitch objects

An 'Access Violation' has been reported when rotating cross stitch objects. This problem has been resolved in ES e4.2.

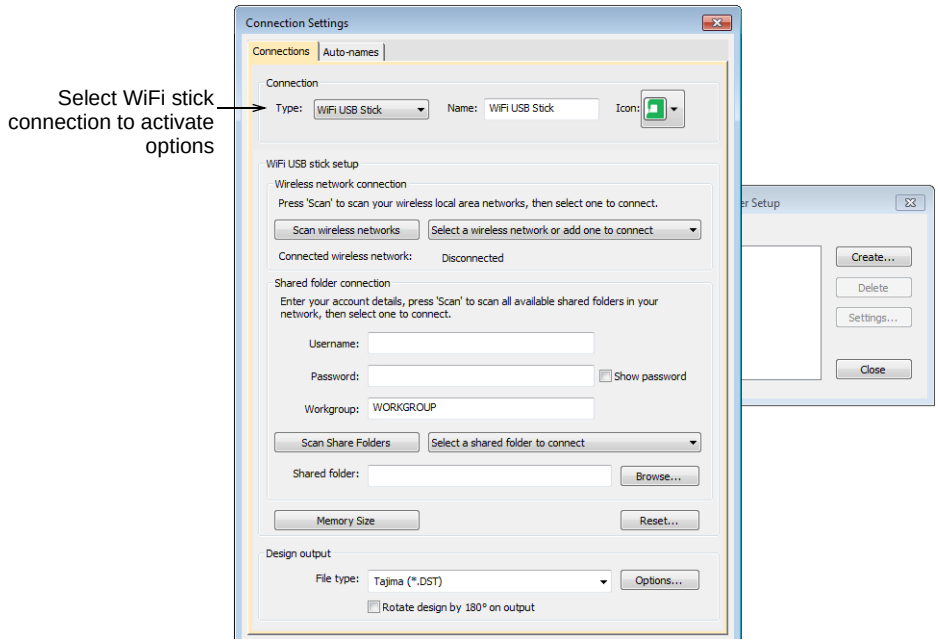


Output improvements

The ES e4.2 software update includes the following machine connection improvements…

Improved EmbroideryConnect setup

The setup process for EmbroideryConnect has been simplified to improve the setup process. The dialogs have been rearranged to reduce the number of manual steps necessary. See Machine Networking for details.

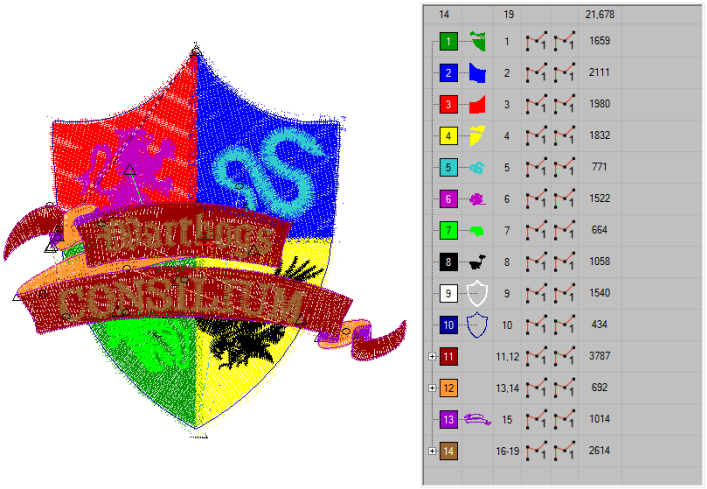


Note: The dialog now includes a **Reset** button. This allows you to clear all items on the EmbroideryConnect WiFi USB Stick.

Unwanted removal of small stitches

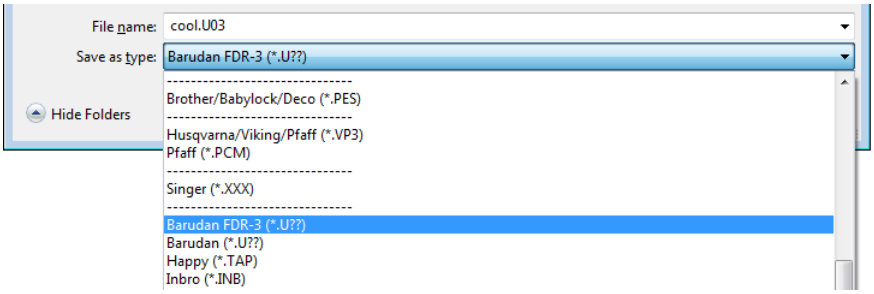
Problems have been reported with the unwanted removal of small stitches when saving to machine file format (DST, U01, U03, etc), even when **Remove Small Stitches** is set to 'Never'. This causes problems in

delicate objects such as small lettering. This problem has been resolved in ES e4.2. See also Eliminating small stitches (Reference Manual).



Exporting to FDR-3 format

Problems have been reported when exporting design files to FDR-3 format for use with Barudan V series machines. The file format is not fully compatible with the VS controller. This problem has been resolved in ES e4.2.



What's new in ES e4.5?

The release of EmbroideryStudio e4 is minor in terms of version number but major in terms of new features and benefits it provides Wilcom customers. The theme of this release is 'falling in love with embroidery again'. Let your creativity flow with the exciting new stitch types and effects. Sequins too have received a lot of attention in order to exploit the cutting edge sequin placement capabilities of the latest machines and controllers.

Note: This update is intended for installation with any released version (already installed) of ES e4.5. It contains all improvements up to this release plus any previous updates.

What's new in ES e4.5.8?

The ES e4.5.8 software update includes the following improvements...

Software hanging when sending designs to Stitch Manager

A problem has been reported in relation to the **Auto Exit** option in **Stitch Manager**. When the option is enabled and the design doesn't get to

Stitch Manager in time, EmbroideryStudio subsequently hangs. The problem has been rectified with the current update.

Related topics

- Setting up machines for Stitch Manager
- Send designs to Stitch Manager

Old EMB designs showing black thumbnails

A problem has been reported in relation to the display of old EMB designs created in ES V9 or ES 2006. These designs appear in **File Explorer** or **Design Library** as black thumbnails. (The problem does not affect designs created in later versions of EmbroideryStudio and saved as an older EMB version (2006).) The problem has been rectified with the current update.

What's new in ES e4.5.7?

The ES e4.5.7 software update includes the following improvements…

Design thumbnails on MACs with M-series chips

A problem has been reported with the display of design thumbnails on MAC computers with M-series chips. They are not appearing properly even after upgrading RAM. The problem has been rectified with the current update.

What's new in ES e4.5.6?

The ES e4.5.6 software update includes the following improvements…

Corrupted machine file user settings

A problem has been reported when viewing machine files in **File Explorer**. User settings – view options, screen calibration, etc – can become corrupted. As a result, user settings along with any machine connections setup for **Stitch Manager** are lost. The problem has been resolved with the release of ES e4.5.6.

What's new in ES e4.5.5?

The ES e4.5.5 software update provides the following improvements…

General improvements

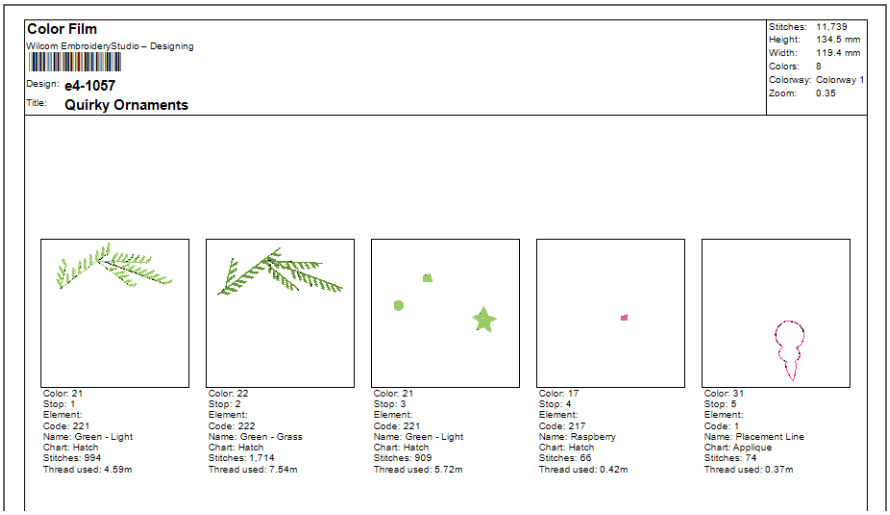
The ES e4.5.5 software update provides the following general improvements…

GEM thread chart

The GEM thread chart has been added to EmbroideryStudio and is available from the **Thread Charts** dialog.

Stop # returned to Color Film worksheet

Stop # information is useful when setting up threads on the machine. With the current update, Stop # information has been returned to the **Color Film** worksheet at top of the existing color slot number.



Editing issues

The ES e4.5.5 software update provides the following editing improvements…

Edit artwork using Paint disabled

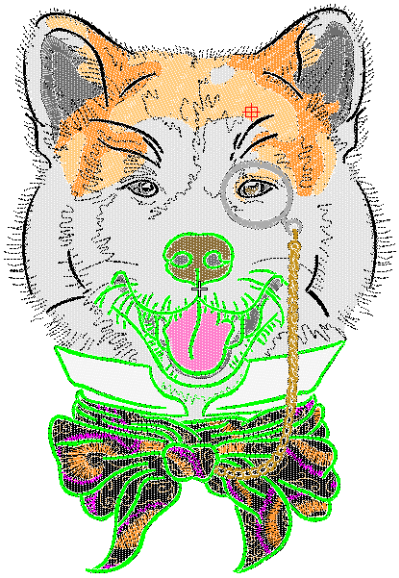
A problem has been reported in relation to the ‘Graphics > Edit Using >…’ feature. This is being disabled on Windows 11 systems and the relevant option in the **Graphics** menu grayed out. The problem has been rectified with the current update.

Stitch generation in branched Column A

A problem has been reported in relation to stitch generation in branched Column A objects. Stitches with Raised Satin fill are not being generated in certain cases. The issue may also affect lettering objects utilizing Raised Satin. This problem has been resolved with the current update.

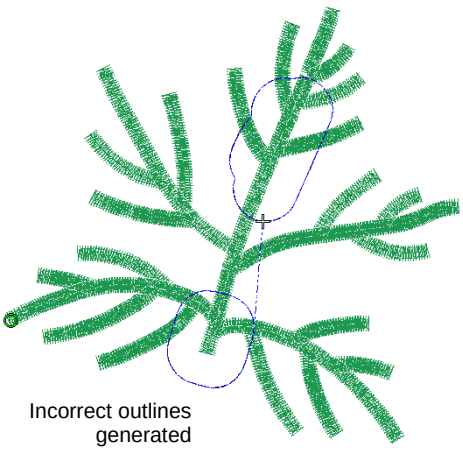
Branching producing unwanted trims/jumps

Another problem has been reported in relation to branching. EmbroideryStudio is producing unwanted connectors and trims. This problem has been resolved with the current update.

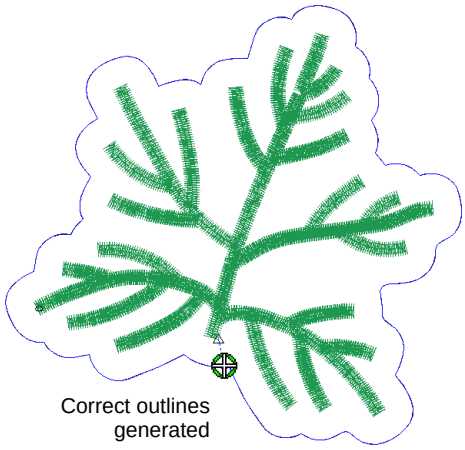


Offset objects in branched objects

A problem has been reported in relation offset objects in branched objects. The issue meant that the **Offset Outline** tool would fail to correctly recognize the outline of a branched object. With the current update, it now generates a much better outline:



Incorrect outlines generated



Correct outlines generated

TBF machine file issues

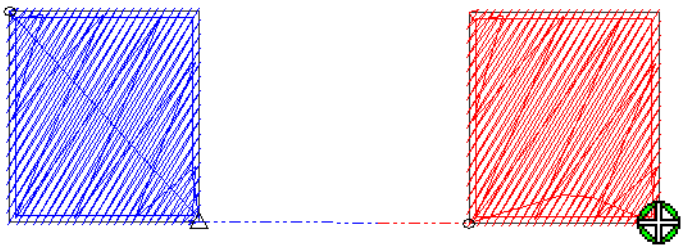
The ES e4.5.5 software update provides the following TBF machine file improvements...

Color sequence in TBF files

A problem has been reported in relation to color sequence in TBF files. When exporting a design containing more than 72 color changes or stops, the color sequence is incorrect. This problem has been resolved with the current update which now allows up to 256 color changes. Note, however, TBF format has a limit of 256 color changes. If the design exceeds this, EmbroideryStudio will now display the following warning:

Tajima TBF connector color changes

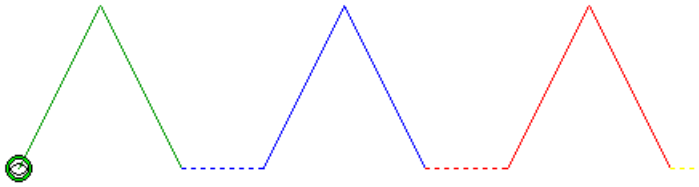
A problem has been reported in relation to unwanted color changes in Tajima TBF files occurring half-way along the connector. The connector should appear in the color of the second object. This problem has been resolved with the current update.



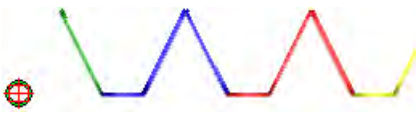
Missing data in TBF machine files

Two problems have been reported in relation to TBF machine files:

1. The software fails to insert trims between objects of different colors.



2. When loading a TBF file, the initial penetration is missing.



These problems have been resolved with the current update.

Team name problem with TBF machine files

A problem has been reported in relation to teamname designs utilizing TBF machine format. The issue here was that the exported machine file contained unwanted needle penetrations at each point where a stop was added between names. This problem has been resolved with the current update.

Other machine file issues

The ES e4.5.5 software update provides the following machine file improvements…

System crashes with JEF files

Problems have been reported when opening JEF files. System crashes occurred when invoking the **Open Options** dialog for JEF format designs, with or without object recognition activated. The problem has been rectified with the current update.

Trims in PES files

Problems have also occurred where additional jumps/trims are being inserted in exported PES files. This problem has been resolved with the current update.

A05 error sending designs with empty color code

A problem has been reported when loading U03 designs to new K-Series Barudan machines. The machine generates an A05 error and will not read

the design if the ‘Code’ field is left blank. This problem has been resolved with the current update.

System errors

The ES e4.5.5 software update provides the following system improvements…

Problem with screen display

A problem has been reported in relation to screen display while running EmbroideryStudio. The screen may flicker or become disabled while remotely connected. The fault appears to happen randomly. This problem has been resolved with the current update.

Barcode scan failures

A problem has been reported in relation to barcode scan events utilizing EmbroideryConnect. The device generates an exception error and the barcode scan fails. This problem has been resolved with the current update.

Problems after leaving software idle for some time

Two problems have been reported in relation to leaving EmbroideryStudio idle for some time:

- A ‘Sentinel LDK Error 85’ may have occurred, after which the software crashes.
- A warning ‘Unable to run software’ may have occurred, after which the software is disabled.

Both problems have been resolved with the current update.

System crashes when sending designs to Stitch Manager

A problem has been reported when sending designs using Stitch Manager. This is causing software crashes on some systems. The workaround was to disable the auto-save function and delete all designs from the BACKUP folder. This problem has been resolved with the current update.

What’s new in ES e4.5.4?

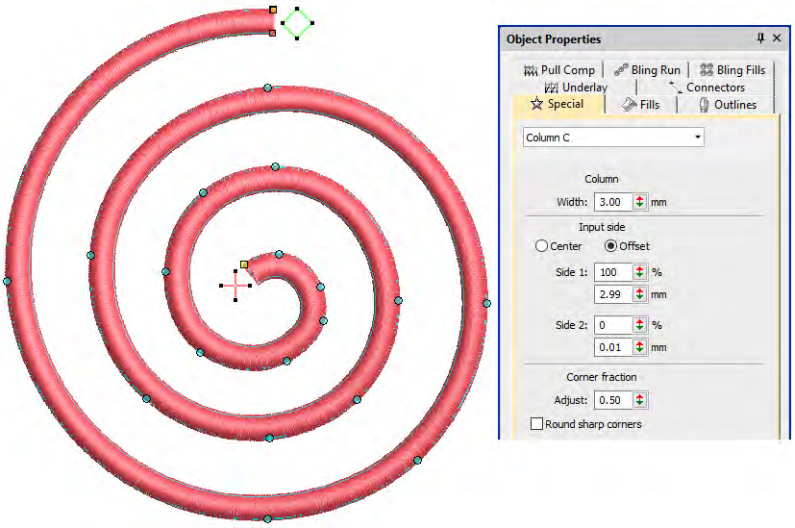
The ES e4.5.4 software update provides the following improvements…

Editing improvements

The ES e4.5.4 software update provides the following design editing improvements…

Moving Column C input nodes in Reshape mode

A problem has been reported in relation to Column C objects. In **Reshape** mode with the offset at 100%, moving the first input node becomes problematic. This problem has been resolved with the current update.



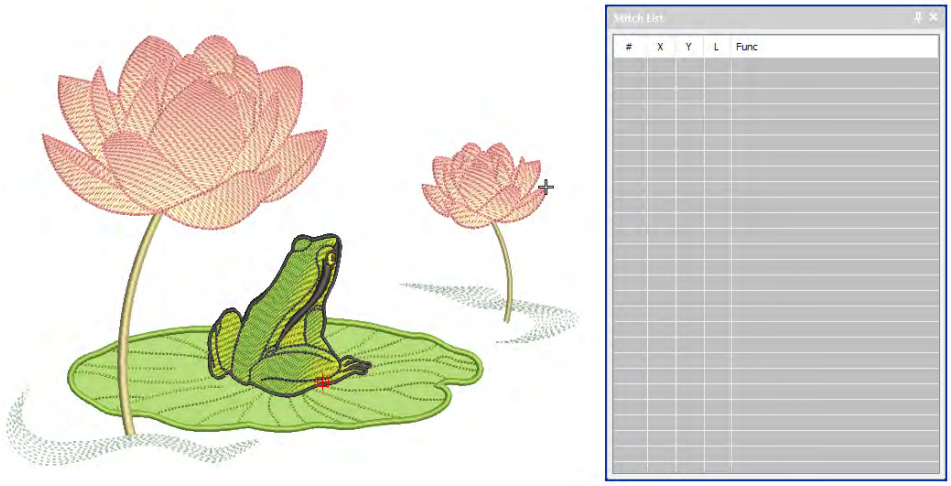
Related topics

- Reshape objects with reshape-nodes
- Reshape Column C objects

Stitch List display while digitizing

A problem has been reported with the **Stitch List** display. The list is not refreshing correctly while digitizing. This problem occurs when the

number of stitches is less than the number of rows displayed without scrolling. This problem has been resolved with the current update.

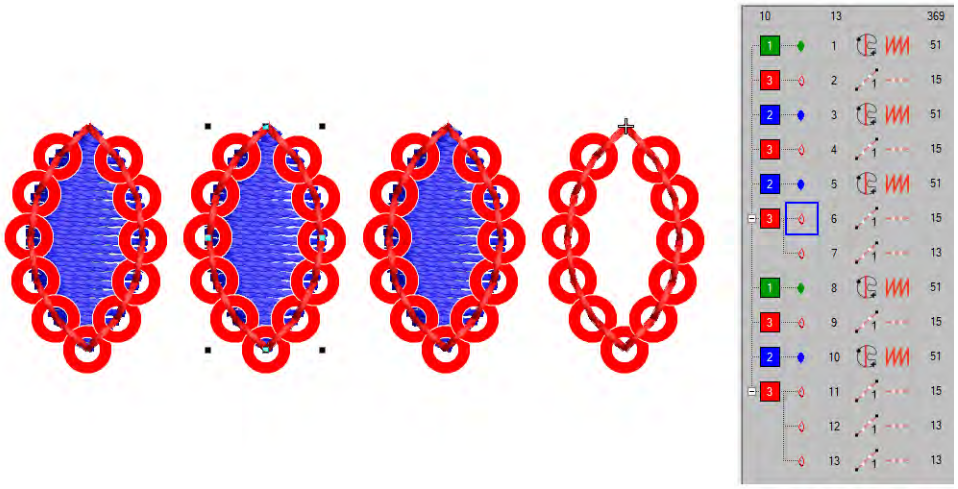


Related topics

- Select stitches with the Stitch List
- Edit stitches

Color sequence errors with duplicate twin-color objects

A problem has been reported when duplicating twin-color objects. Duplicate objects are misplaced in the color-object sequence. This problem has been resolved with the current update.



Related topics

- Sequencing embroidery objects

Start and end points in TrueView

A problem has been reported in relation to the visibility of start and end points in TrueView. At 100% zoom, Start and End points are slightly hidden. At large zoom factors, they disappear. This problem has been resolved with the current update.

Related topics

◂ Setting auto start & end

Sequin improvements

The ES e4.5.4 software update provides the following improvements in relation to sequins…

Changing machine formats while digitizing sequins

A problem has been reported when changing machine formats while digitizing sequin runs. This problem occurs after resizing a Sequin Run object or regenerating stitches after changing machine formats – e.g. Barudan FDR-II Twin Sequin. Pressing **Undo** can cause the object to disappear or crash the software. This problem has been resolved with the current update.

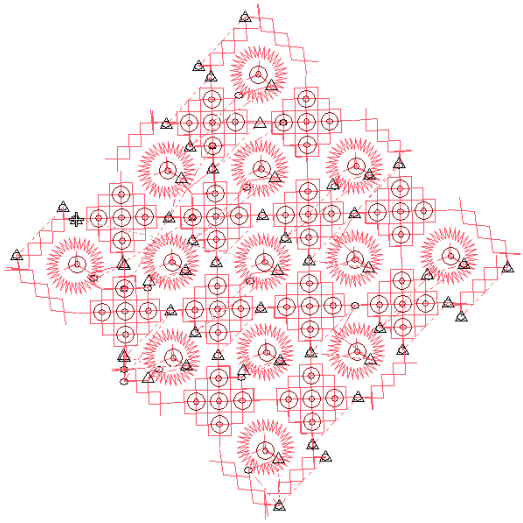
Related topics

◂ Embroidery machine formats

Unwanted trims added after sequins

A problem has been reported in relation to unwanted trims after sequin drops. When selecting a design and applying a sequin from the palette,

trims are added, stitches distorted, and stitching sequence broken. This problem has been resolved with the current update.

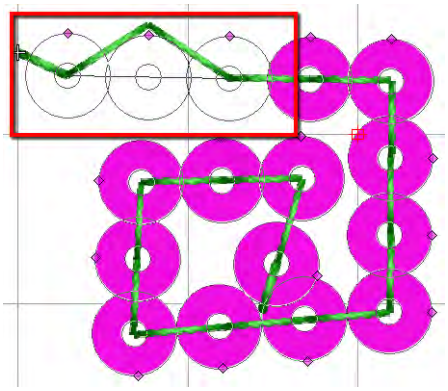


Related topics

- Visualizing sequin designs
- Editing sequin runs
- Editing sequin fills

Disappearing sequins when stitch editing

A problem has been reported when using **Stitch Edit** with sequin runs. Sequins disappear when stitches are reshaped. This problem affects sequin runs created with **Sequin Run Auto** as well as **Sequin Run Manual**. This problem has been resolved with the current update.

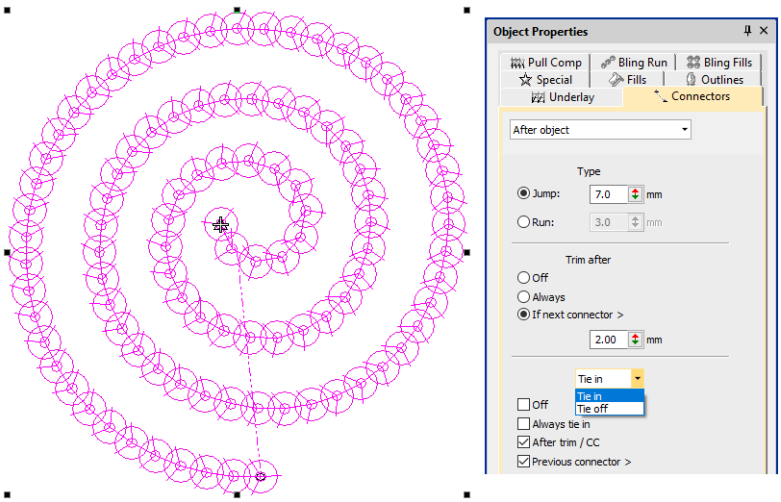


Related topics

- Visualizing sequin designs
- Editing sequin runs
- Editing sequin fills

Assigning connector properties to Sequin Run objects

A problem has been reported when attempting to assign connector properties to Sequin Run objects. The **Object Properties** docker accepts new values but then reverts to the old ones. This problem has been resolved with the current update.



Related topics

- Using automatic connectors
- Minimizing connectors

PES file improvements

The ES e4.5.4 software update provides the following improvements in relation to PES files...

Unwanted stitches in PES designs

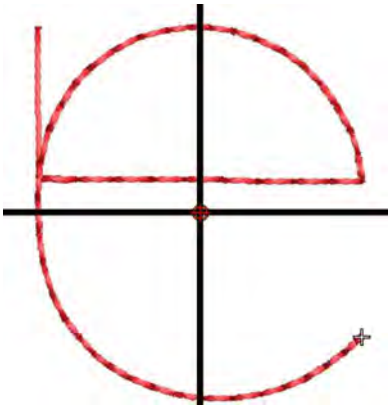
An intermittent problem has been reported when exporting to PES file format. The software sometimes adds stitch runs from the center of the design. While the unwanted lines don't appear in EmbroideryStudio, they appear in stitchout. This problem has been resolved with the current update.

Related topics

- Machine files
- Exporting designs for machine

Unwanted penetrations at start of PES files

A problem has been reported with unwanted penetrations appearing at the start point of PES files. This occurs when the first stitch is within 12.7mm of the start point at the top-left of design extents. This problem has been resolved with the current update.



Related topics

- Machine files
- Exporting designs for machine

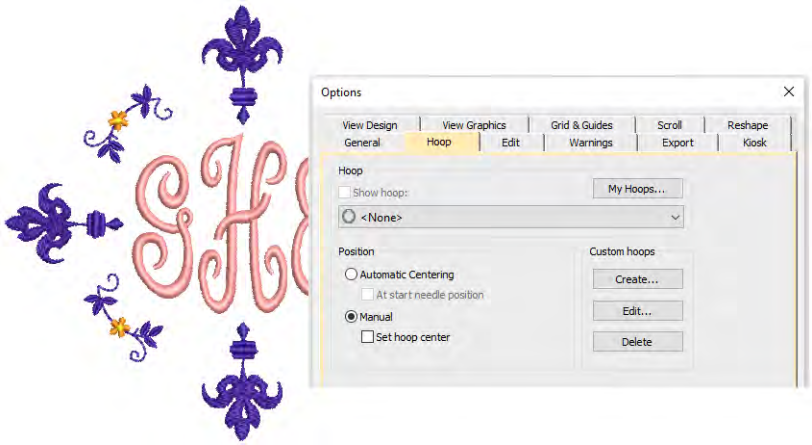
Machine connection improvements

The ES e4.5.4 software update provides the following improvements in relation to machine connections...

Hoop lost after saving and reopening an EMB design file

In earlier versions, the hoop saved with an EMB design file could be lost after re-opening the design. As a result, the software fails to validate the

design size when the design is exported to machine formats. This problem has been resolved in e4.5.4.

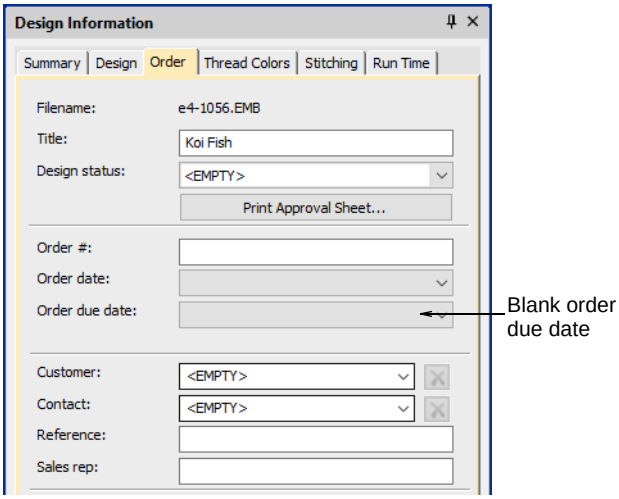


Related topics

- Machine files
- Exporting designs for machine

A05 error sending designs with empty 'order due date'

A problem has been reported when loading U03 designs to new K-Series Barudan machines. The machine generates an A05 error and will not read the design if the 'Order Due Date' field is left blank. This problem has been resolved with the current update.



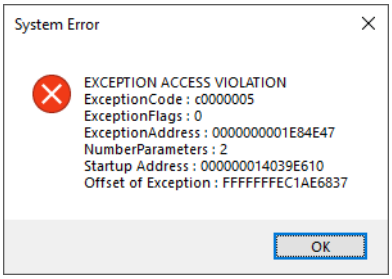
Note: This is only an issue with Barudan's newest K-Series machines, which fully read all the extra data in the U03 file. Older Bardan models ignore the empty field.

Related topics

- Sending designs to machine

Machine Manager crashes when invoking About box

Machine Manager crashes have been reported when invoking the **About** box. This problem has been resolved with the current update.



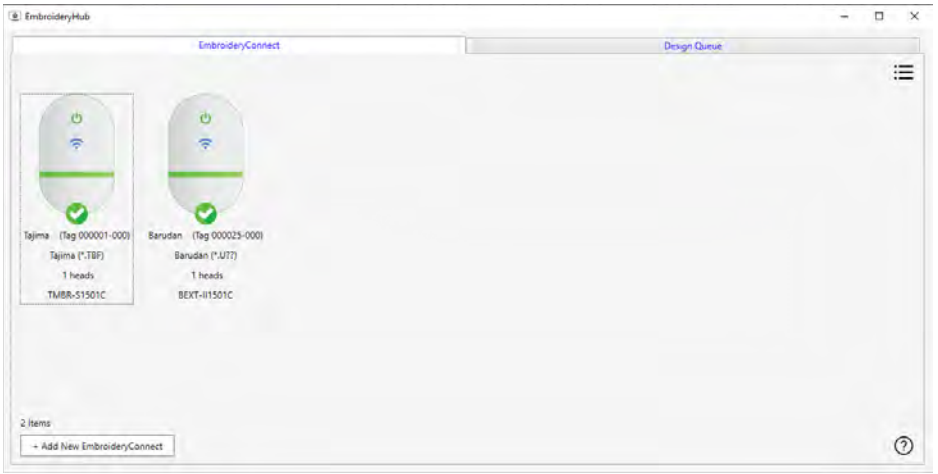
Related topics

- Sending designs to machine

EmbroideryHub crashes at network dongle user limit

A problem has been reported with EmbroideryHub while running it at the network dongle user limit. If too many instances of EmbroideryStudio are

running simultaneously, EmbroideryHub terminates without warning. This problem has been resolved with the current update.

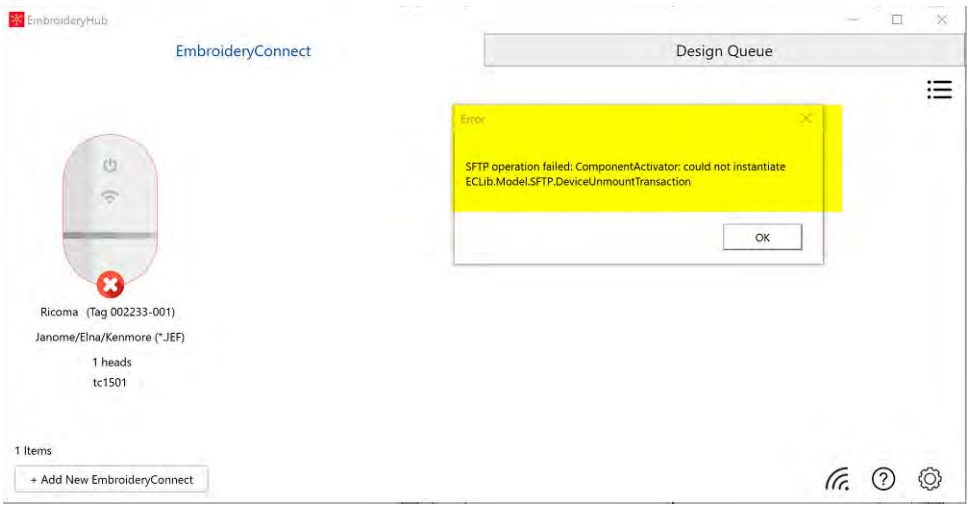


Related topics

- Network overview
- EmbroideryConnect setup

Failed SFTP operation in EmbroideryHub

A problem has been reported following the EmbroideryHub ES e4.5.1 R2 firmware update. EmbroideryHub fails to recognize the EC device. Deleting the device and setting up again appears to fix This problem but the device may fail to send designs. If it stops working, unplug, reconnect, and try again.



Related topics

- Network overview
- Sending designs to EmbroideryConnect

EC device firmware updates

The EC 1.1.0 firmware update (and all subsequent update files) is larger than the maximum device storage size of 32MB. This results in an error when trying to start the update process. This problem has been resolved with the current update.

Note: There is a new firmware update for the EC device. It is highly recommended to update your EC device firmware.

Related topics

- EmbroideryConnect setup
- Update the firmware

Lettering improvements

The ES e4.5.4 software update provides the following improvements to embroidery lettering…

Faux chenille fonts

It is possible to modify Stipple Stemstitch Fill settings for a dense coverage. Combined with a thicker thread type such as Madeira's Burmilana thread, it is possible to achieve a chenille effect. These dedicated fonts utilize this tested technique to create perfect faux chenille lettering. The latest release includes two new 'faux chenille' fonts – Vermicelli and Yale.

- Creating embroidery lettering

MS Mincho TTF conversion

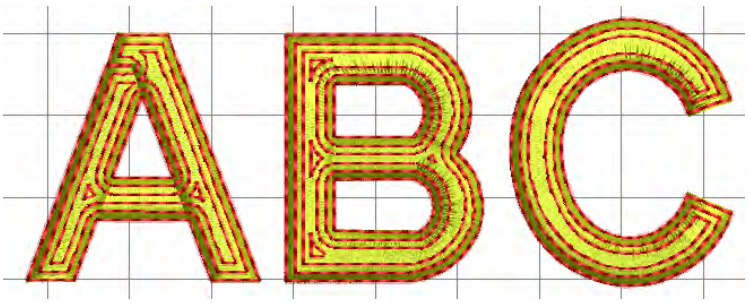
A number of problems have been reported in regards to conversion of MS Mincho TrueType font. Some letters become bunched at the end of lettering objects. Where there is a mixture of Kanji and Kana (Katakana or Hiragana) characters, text spacing may be uneven. Uneven spaces can also produce overlapping text. Empty lines are ignored. These problems have been resolved with the release of ES e4.5.4.

Related topics

◂ Converting TrueType fonts to embroidery

Offsets/outlines around Block2 font

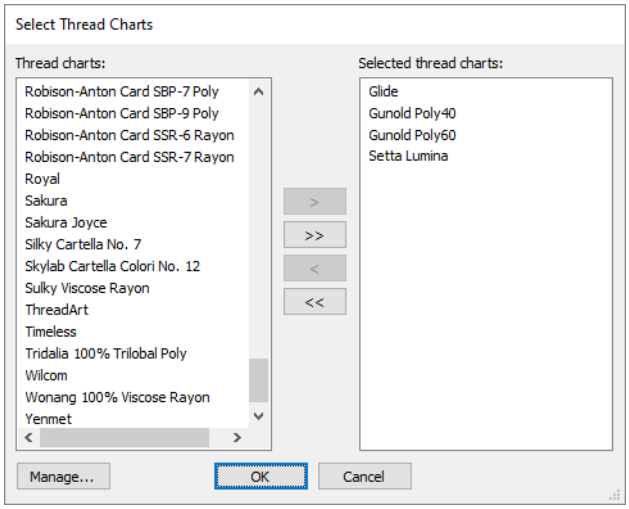
In earlier versions, unexpected results may occur when using offsets/outlines around Block2 font. This problem has been resolved with the current update.



New and updated thread charts

The ES e4.5.4 release includes many new and updated thread charts...

- New Glide thread chart
- New and updated Gunold thread charts – 16 in all
- New and updated Sulky thread charts – 15 in all
- Updated Setta Lumina thread chart
- Updated Robinson Anton SBP-10 Poly thread chart



Related topics

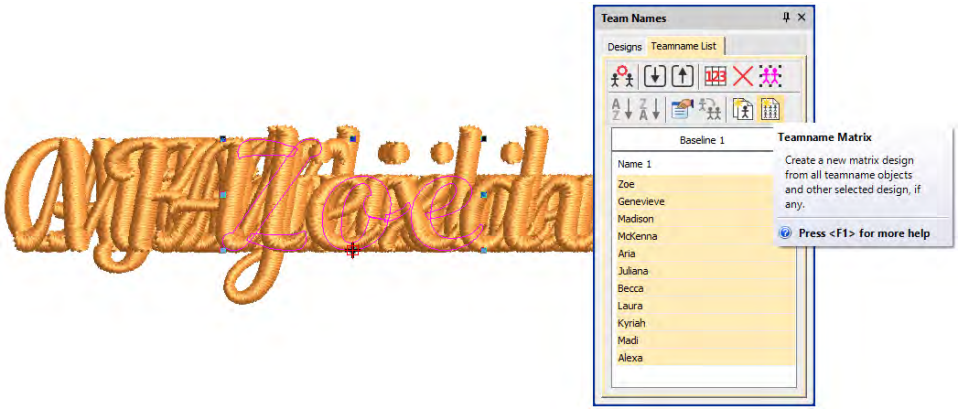
- Assign thread colors

Other improvements

The ES e4.5.4 software update provides the following miscellaneous improvements…

Crash occurring with Teamname Matrix

An intermittent problem has been reported when applying **Teamname Matrix** to team names copied from the clipboard to **Quick Names**. This problem has been resolved with the current update.

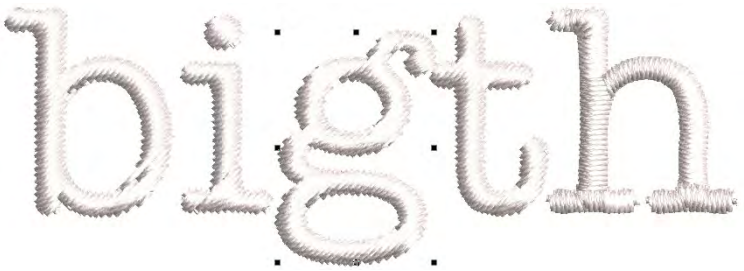


Related topics

- Create a matrix of designs

Auto-digitized stitch angles in complex fill objects

A problem has been reported in regards to **Auto-Digitizing** tools. Generated complex fill objects are frequently assigned a stitch angle of 45° rather than turning stitching. This problem has been resolved with the current update.

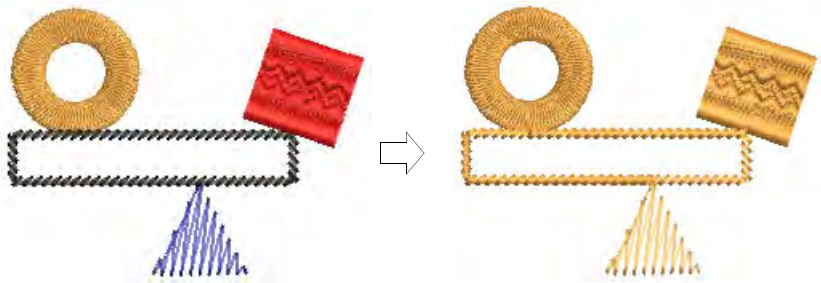


Related topics

- Auto-digitizing artwork

Branched objects containing Complex Fill

A problem has been reported where the software fails after generating stitches for branched objects containing Complex Fill. This problem has been resolved with the current update.

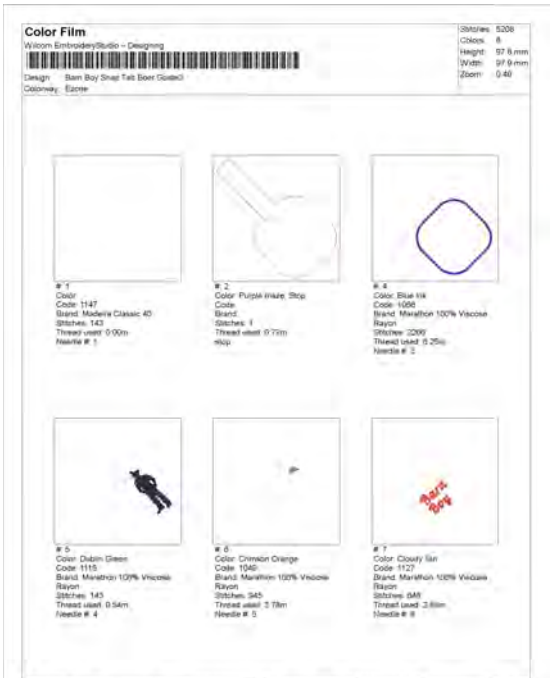


Related topics

- Automatic branching

Color film display when inserting Stops

A problem has been reported with thread color display in the **Color film** after inserting Stops. Additional boxes are added to the **Color Film**, one for each stop. This problem has been resolved with the current update.



Related topics

- Printing design reports

◂ Stop sequence options

Memory leaks

A problem has been reported in regards to ‘memory leaks’ causing sluggish system performance. This problem has been resolved with the current update.

What’s new in ES e4.5.3?

The ES e4.5.3 software update includes the following improvements…

General improvements

The ES e4.5.3 software update includes the following general improvements…

Processing speed

EmbroideryStudio e4 provides significant speed improvements. Processing of large complex designs containing many objects is now up to 100 times faster. This is especially significant when processing large sequin designs.

Installation improvements

EmbroideryStudio e4 provides significant improvements when installing updates and upgrades in relation to:

- Merging of existing custom assets
- Merging of existing settings when choosing to merge earlier installed versions.

User-defined assets such as styles, bling, sequin palette settings, toolbar layouts, and so on, are now correctly carried across from ESe3 and earlier installations.

New and improved product elements

EmbroideryStudio offers a number of exciting new ‘Elements’ for Creativity and Specialty processes.

Element	1	2	3	4	5
Creativity					

1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
● Included as standard ❍ Modular ‘element’

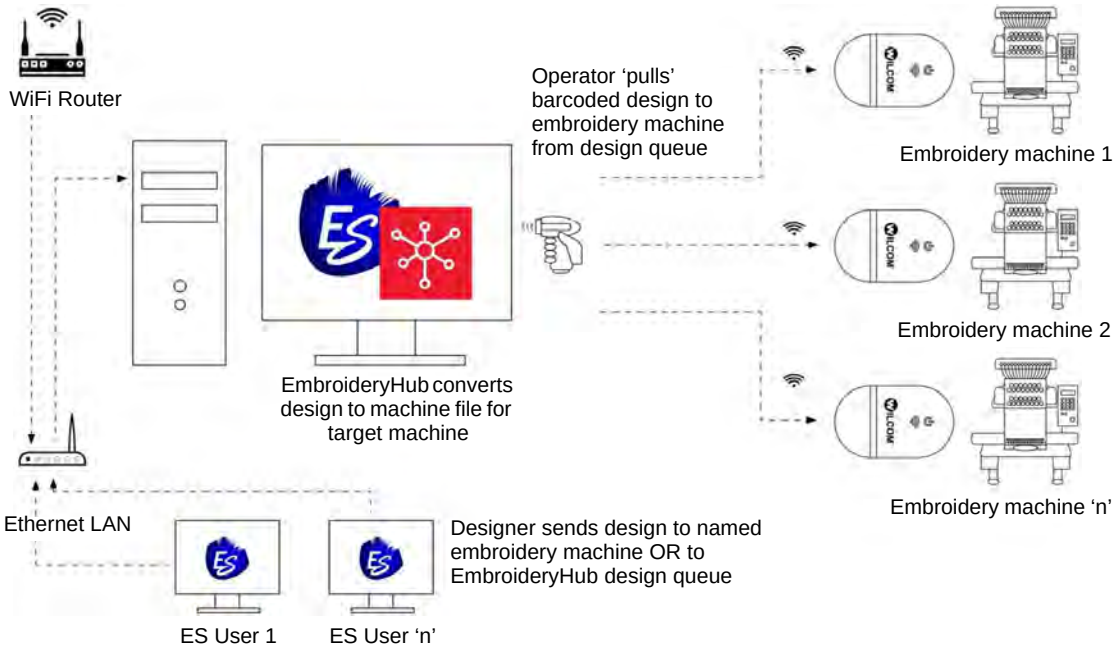
Element			1	2	3	4	5
	Hand Stitch	Create hand-stitch effects which combine randomized spacing and stitch angles for a more organic look. Apply to satin, tatami, run, backstitch, and other stitch types.	●	❍	❍	–	–
	Maze Fills	Automatically fill large areas with double-spiral stitching that never crosses itself.	❍	❍	–	–	–
	Reef PhotoStitch	Convert photos into embroidered designs in seconds. Automatically fill large areas with open stitching reminiscent of a coral reef.	❍	❍	❍	–	–
Productivity							
	EmbroideryConnect	EmbroideryConnect machine networking capability has had a complete overhaul in ES e4.5. See EmbroideryConnect networking for details.	●	●	●	●	●
Specialty							
	Sequins Advanced	Create embroidery files for single and twin-sequin dispensing machines. See Sequin improvements & new features for details.	❍	❍	–	–	–

1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
● Included as standard ❍ Modular 'element'

EmbroideryConnect networking

Wilcom's **EmbroideryConnect** network capability has just taken a giant leap forward with the new **EmbroideryHub** networking software and second generation **EmbroideryConnect** WiFi device. The concept

behind the EmbroideryConnect network is described by the following diagram...



EmbroideryHub

Quickly and easily send, scan, and queue your embroidery designs for production. EmbroideryHub software is included with the upgraded **EmbroideryConnect** element. See Machine Networking (Reference Manual) for details.

EmbroideryConnect

Now you can wirelessly manage and transfer embroidery designs from **EmbroideryHub** to the new second generation **EmbroideryConnect** WiFi device connected directly to your embroidery machines. Features include:

- Simple integration with your existing WiFi network.
- Color-coded LED light notifications.
- Barcode reader for super-fast design loading.

Sending designs to the EmbroideryConnect network

Use Standard > Send to EmbroideryConnect to send the current design to a named EmbroideryConnect device.

Use Standard > Queue Design to send the current design to the EmbroideryConnect design queue where they can be 'pulled' from the machine.

Once you have set up one or more EmbroideryConnect devices on your network, you have the choice of 'pushing' designs or 'pulling' them from the EmbroideryHub. The new **Send to EmbroideryConnect** button allows you to send a design to a named EC device. Alternatively, use the **Queue Design** to 'push' designs to a queue where they can be 'pulled' from the machine itself. See Sending designs to EmbroideryConnect (Reference Manual) for details.

Stitching improvements & new features

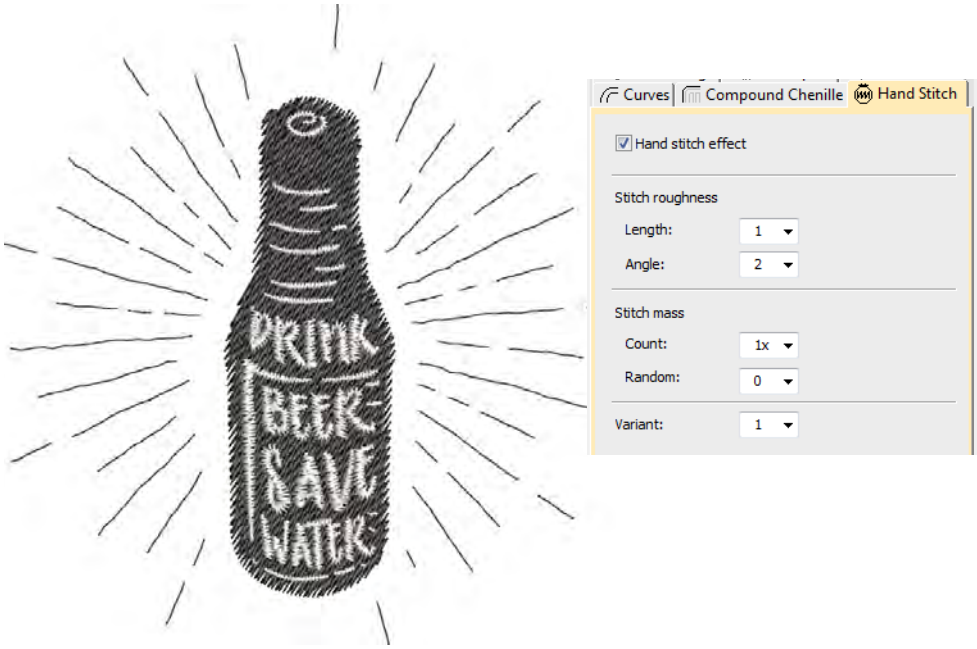
The ES e4.5.3 software update contains some exciting new stitch effects, with an emphasis on a more naturalistic, organic style of stitching, placing it at the cutting edge of contemporary embroidery digitizing. New features are summarized as follows...

New Hand Stitch

Use Stitch Effects > Hand Stitch to create hand-stitch effects which combine randomized spacing and stitch angles. Can be applied to satin, tatami, run, backstitch, and other stitch types.

Tired of perfect machine stitching every time? Fashion trends sometimes favor a more organic look which is very hard to achieve with current design tools. With the new **Hand Stitch** effect, you can easily and intuitively create hand-stitch effects which combine randomized spacing and stitch angles. This powerful new stitch effect can be applied to a

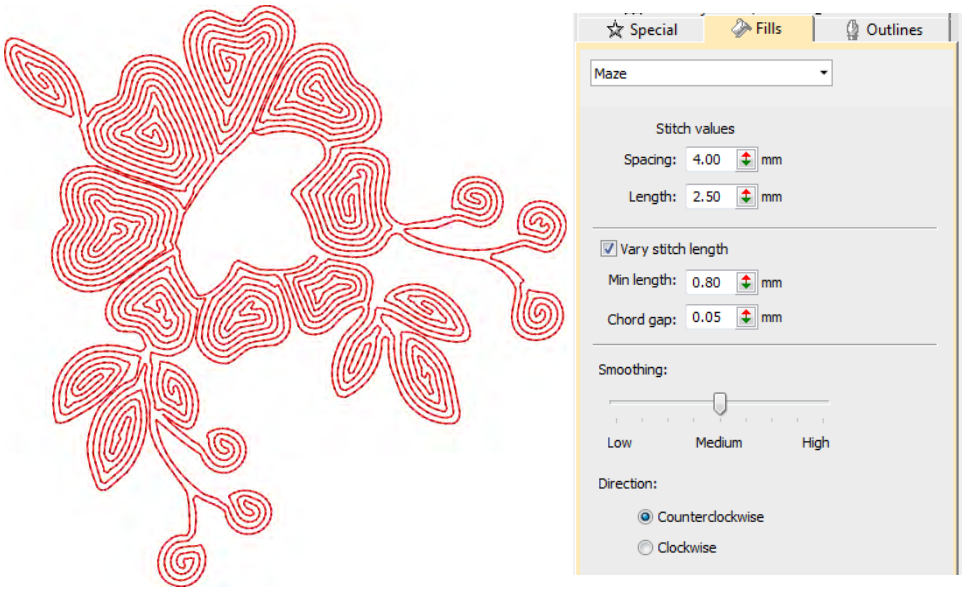
variety of stitch types, including satin, tatami, run, backstitch, and others. See Hand stitch effect (Reference Manual) for details.



New Maze Fill

Use Fill Stitch Types > Maze Fill to create maze-like stitching that never intersects. Right-click for settings.

New **Maze Fill** offers a double-spiral stitch that **never** crosses or jumps over itself. Automatically fill large areas with this unique stitch type. See also Maze fills (Reference Manual).

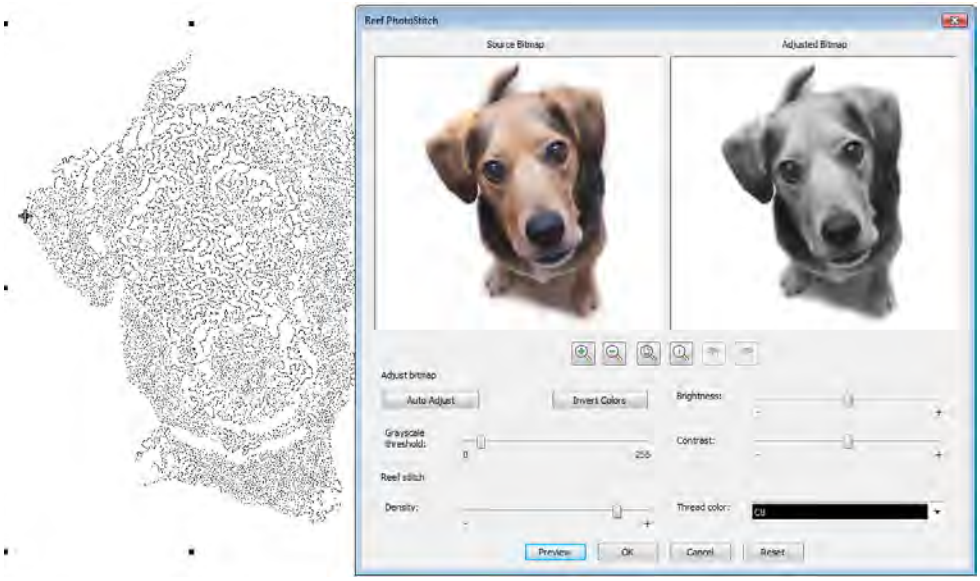


New Reef PhotoStitch

	Use Auto-Digitizing > Photo Flash to create embroidery designs directly from photographs.
	Use Auto-Digitizing > Reef PhotoStitch to turn photographs into a single embroidery field resembling a coral reef.

New **Reef PhotoStitch** expands on the **Photo Flash** auto-digitizing method to convert a photos into embroidered designs. Automatically fill large areas with open stitching reminiscent of a coral reef. Like **Maze Fill**,

this stitch never intersects itself. Adjust to the stitch resolution of choice. See also Auto-digitize with Reef PhotoStitch (Reference Manual).



Auto-digitizing improvements

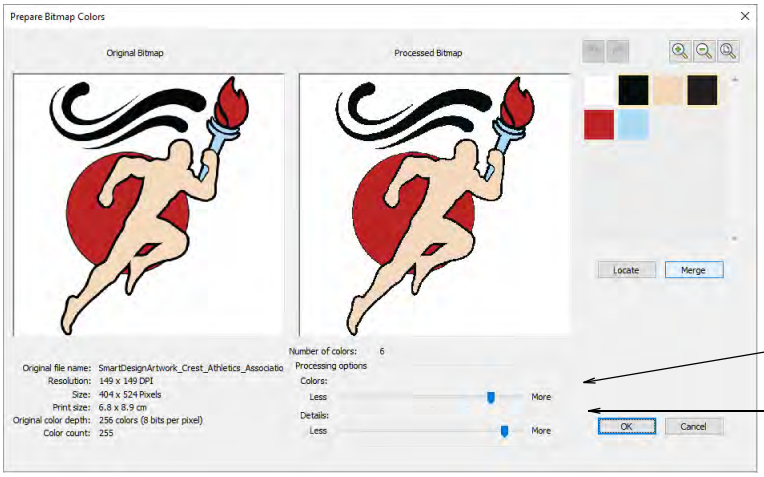
The ES e4.5.3 software update contains significant improvements in auto-digitizing capabilities.

Bitmap preparation

Bitmap preparation improvements have focused on the creation of logo-style designs for commercial decorators. Improvements include:

- Better sequencing
- Fewer color changes and trims

◂ Improved color reduction



Stitch estimation

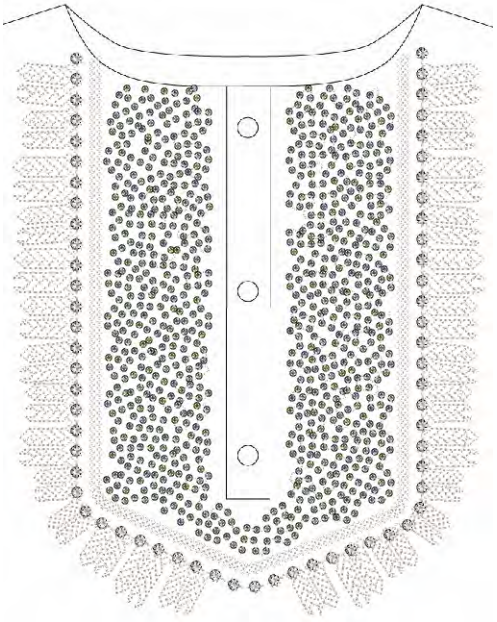
Again with and emphasis on the creation of logo-style designs for commercial decorators, ES e4.5.3 provides improvements in accurate stitch counts for quotes. This is to assist the growing trend (and cost) of outsourcing, as well as difficulties business owners and staff have in providing accurate estimates.

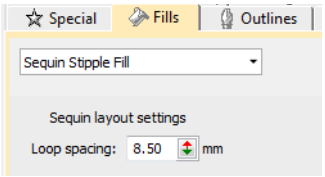
Sequin improvements & new features

The ES e4.5.3 software update also contains some exciting developments in sequin digitizing to exploit the cutting edge sequin placement capabilities of the latest machines and controllers. New features are summarized as follows...

Sequin stipple fill

Create variegated stipple fills automatically with single or multi-color sequin patterns. These can be reshaped and resized like any embroidery object. See Fancy sequin fills (Reference Manual) for details.





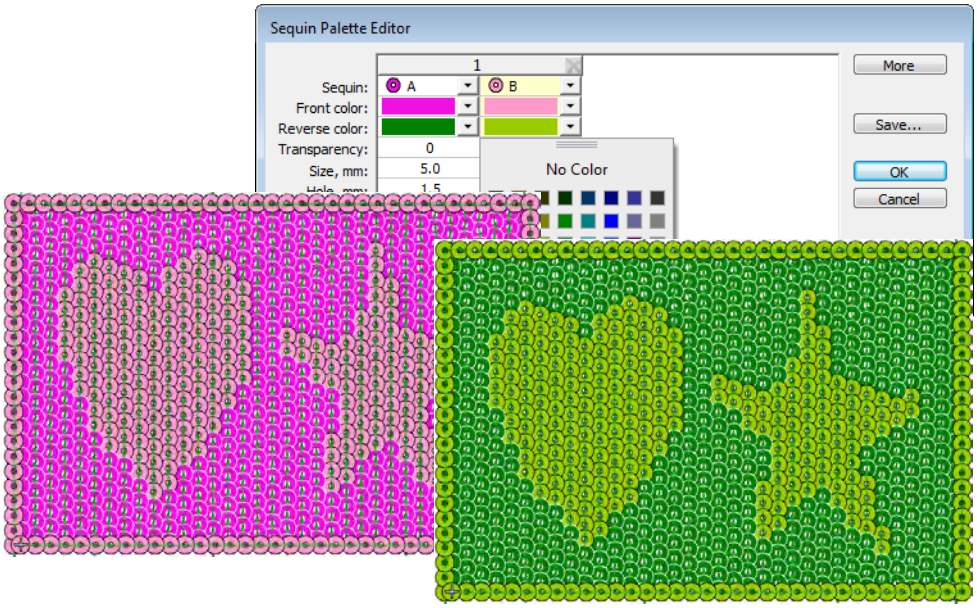
Flip sequins

Use View > Flip Sequins to toggle between front and reverse sides of sequin runs and fills in reversible sequin designs. Define colors in the Sequin Palette Editor.

Flip sequins, also known as reversible sequins, are a color-changing effect which has become very fashionable. Beginning with children's wear, flip sequins have found a wide variety of applications, from reversible sequin shirts, pillow cases, bags, cases, note books, and more. Their use is very simple – swipe up or down to reveal the reverse side, with sometimes surprising effects. A simple pink sequined heart on a

plain T-shirt can suddenly turn purple at the touch. Reverse sequin use has also found its way into high fashion.

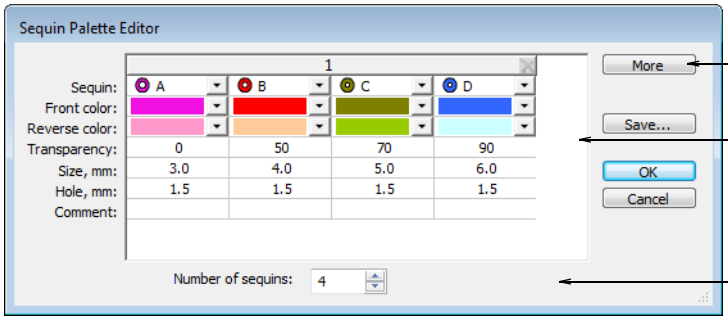
The software now allows you to define as many flip sequins as your machine will support, from as little as a single flip sequin, to 2-sequin, 4-sequin, 6-sequin or even 8-sequin devices. The **Flip Sequin** control allows you to visualize fills created with flip sequins. You can even design your own sequin and offset hole. See Visualizing sequin designs (Reference Manual) for details.



Multi-sequin support

EmbroideryStudio currently provides support for twin-sequin machines. However, Dahao machine controllers now support a much higher number of attached sequin devices. ES e4.5.3 provides multi-sequin support for

machines with 4-sequin, 6-sequin or even 8-sequin devices. See Setting up sequin palettes (Reference Manual) for details.



Machine capabilities

An increasing number of commercial machines can support various devices for additional decorative effects. The multi-sequin support now provided by ES e4.5.3 is designed to exploit the latest machine capabilities.

Multi-sequin dispenser

Double twin-sequin device with stacked sequin capability

The main sequin device configurations include...

- Machines supporting one sequin per device. These feed only one sequin at a time.

- Machines supporting one or two devices per machine head, usually on first or last needles.
- Machines supporting twin-sequin devices with no stack feeding – e.g. Barudan FDR-II Twin Sequin, Tajima TBF, SWF Twin Sequin.
- Machines supporting twin-sequin devices or even double twin-sequin devices with stack feeding – e.g. Dahao.
- Machines supporting multiple sequins per device – four, six, eight, and possibly more sequins – with or without stack feeding.

Note: An increasing number of machines support multiple decoration types including sequins in combination with chenille, beading, cording, and others.

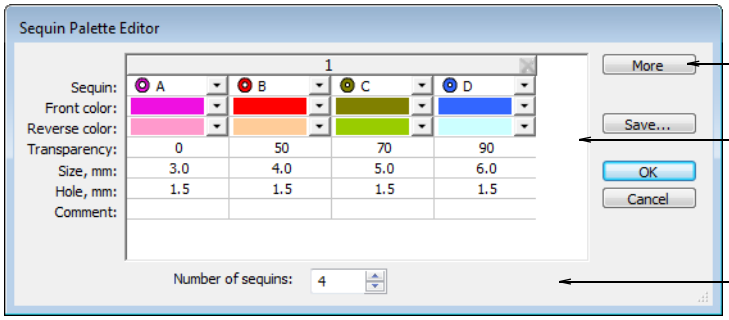
Machine formats

ES e4.5.3 supports the following sequin-capable machines:

Machine format	Sequin capability	File format
Barudan FDR-3	Twin	U??
Barudan FDR-3 Chenille Combination	Twin	U??
Barudan FDR-II Twin Sequin	Twin	U??
Barudan FDR-II Twin Sequin Chenille Combination	Twin	U??
Dahao	Multiple	DST (Dahao)
Schiffli	Single	ESS
SWF	Single	DST
SWF Twin Sequin	Twin	EBD
Tajima	Single	DST
Tajima TBF	Twin	TBF
ZSK	Single	ZSK

Sequin palette editor

In order to exploit multi-sequin machine capabilities, the **Sequin Palette Editor** has been updated as shown...



The following changes have been made:

- Up to 8 sequins per device can be specified.
- Colors can be defined for both front and reverse sides.
- A transparency factor from 0 to 90 can be defined for each sequin.

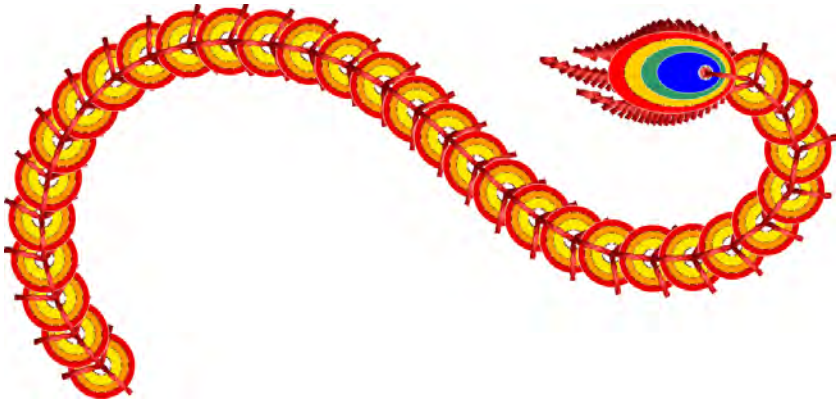
Set number of sequins per device. Sequin devices are normally attached to the first or last needle on the machine head. Sometimes both. (There may be multiple heads on the machine.)

Stacked sequins

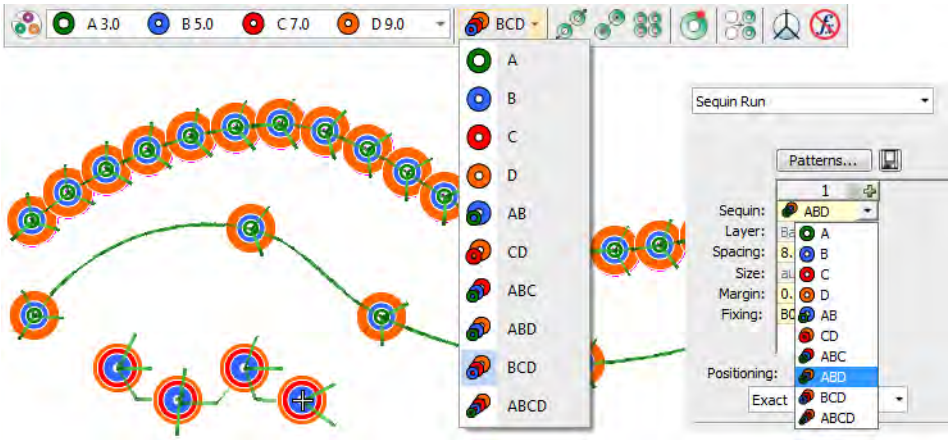
A	Use Sequin > Manual Sequin to digitize individual sequins.
	Use Sequin > Sequin Run Auto to create a string of sequins along a digitized line according to current settings.
	Use Sequin > Sequin Run Manual to manually digitize sequin-drops along a digitized line.

For those machines that support it, ES e4.5.3 allows you to define multiple sequin drops on the same needle. Fixing stitches are only

applied after all sequins have been dropped. See Stacked sequins (Reference Manual) for details.



Stacked sequins can be used with **Manual Sequin** and **Sequin Run** digitizing methods. Permutations are automatically defined according to the sequin palette.



What's new in ES e4.5.2?

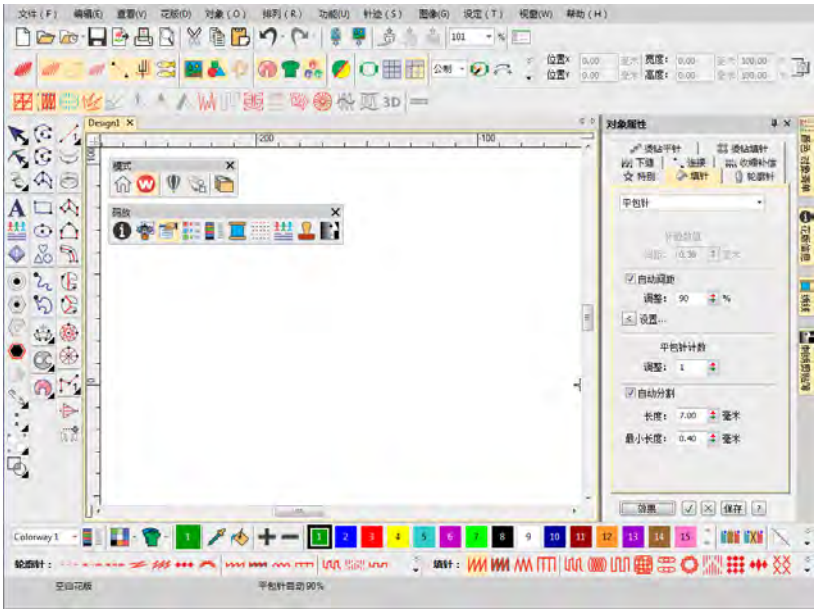
The ES e4.5.2 software update includes the following general improvements…

Installation crashes after accepting EULA

A problem was reported when running the ES e4.5 installation after accepting the 'Terms and Conditions'. The has been resolved with the release of ES e4.5.2.

Addition of Chinese Simplified interface

Simplified Chinese has been added to the main Wilcom ES e4.5.2 product interface.

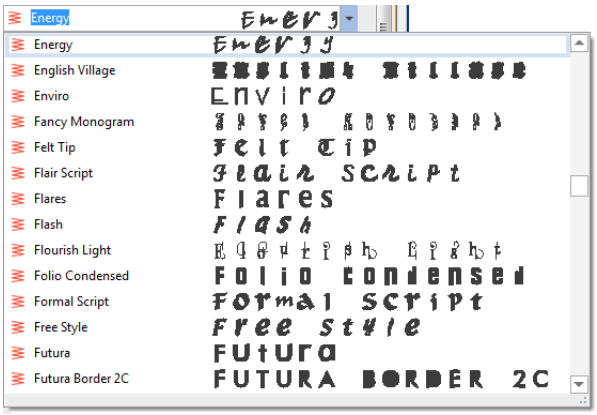


Setta Lumina thread chart

The Setta Lumina thread chart has been added to ES e4.5.2.

Font preview

There have been reports that the font preview is slow when opening the **Lettering** tab and scrolling through the font list. The problem has been resolved with the release of ES e4.5.2.

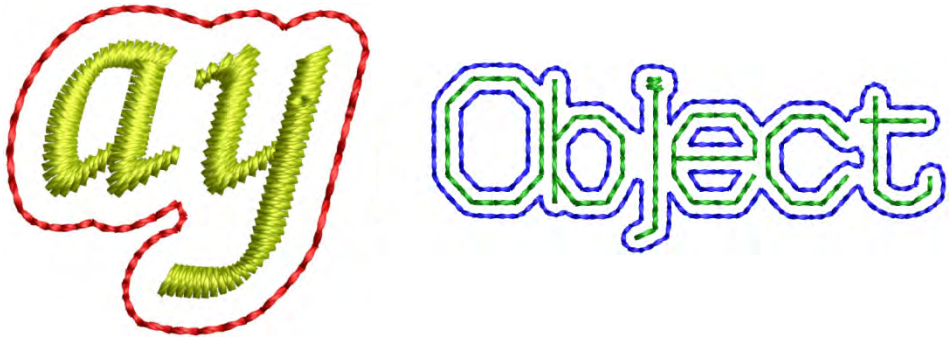


Offsets with lettering objects

Use Toolbox > Simple Offsets to create simple outlines for any filled embroidery or closed vector object.

Use Toolbox > Outlines & Offsets to create outlines and offsets of any type for any filled embroidery or closed vector object.

There have been reports of offsets not being properly created in certain lettering designs, including objects created from simple outline fonts. The problem has been resolved with the release of ES e4.5.2. See also Generating outlines & offsets.



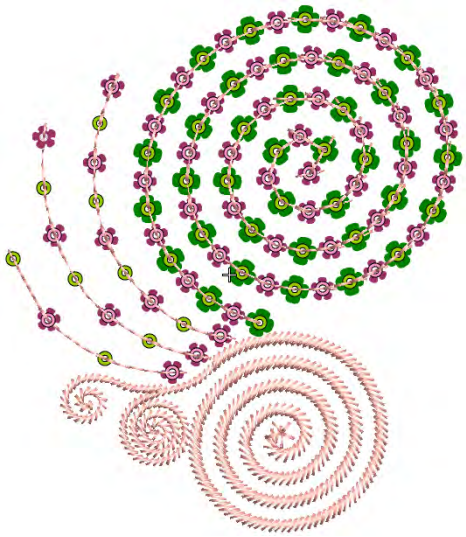
Break apart Japanese lettering

Problems have been reported when breaking apart Japanese lettering objects with the **Break Apart** tool. Native Japanese (ESA) fonts are being immediately broken into individual patches rather than characters. With the release of ES e4.5.2, lettering is correctly broken apart in stages – words, letters and then patches.

Regeneration of large manual sequin objects

Regeneration of large manual sequin objects can be very slow. When opening sequin machine files without object recognition, it can take a

long time to regenerate stitches. The problem has been resolved with the release of ES e4.5.2. See also Sequin Embroidery.



What's new in ES e4.5.1?

The ES e4.5.1 software update includes the following improvements...

General improvements

The ES e4.5.1 software update includes the following general improvements...

Integration of CorelDRAW 2019 & 2020

ES e4.5.1 is able to detect and integrate with CorelDRAW 2019 and CorelDRAW 2020.

Merging of custom assets from e4.0 and earlier to e4.5

Some custom assets and defaults are being lost when installing ES e4.5 over ES e4.0 and earlier versions. Asset classes affected include:

- Teamname template designs
- Teamname teams
- Kiosk designs
- Templates
- Applique fabrics
- Defaults
- Toolbar layouts
- Styles

This problem has been resolved with the release of ES e4.5.1. See also Asset Management (Reference Manual).

User interface languages

The user interface for EmbroideryStudio and EmbroideryHub is now available in the following languages:

- Czech
- Dutch
- German
- Spanish

- French
- Greek
- Italian
- Japanese
- Korean
- Portuguese
- Romanian
- Russian

Printed user guides

Printed user guides are now available from Amazon print-on-demand in the following languages:

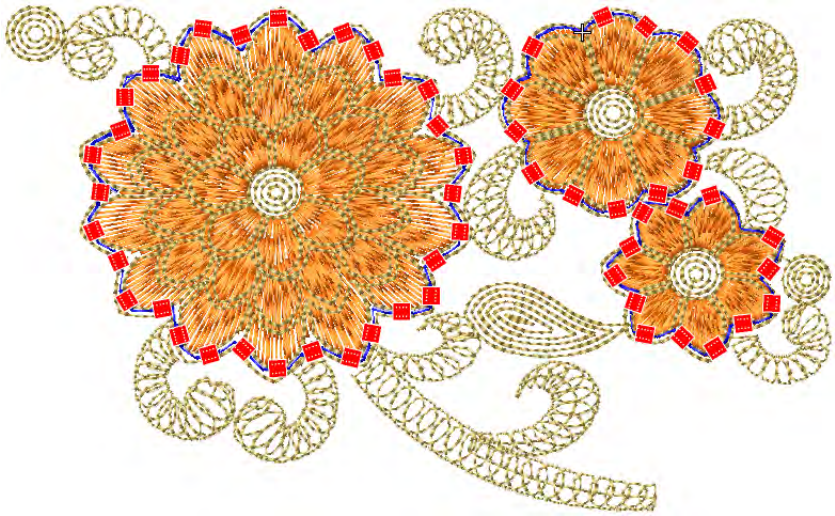
- English
- Japanese
- French
- German
- Italian
- Spanish

New Beading Element

Element			1	2	3	4	5
	Beading	Provide support for beading devices. Four fixing methods are available: Upright, Laid, and Above or Below the run line.	❍	❍	–	–	–

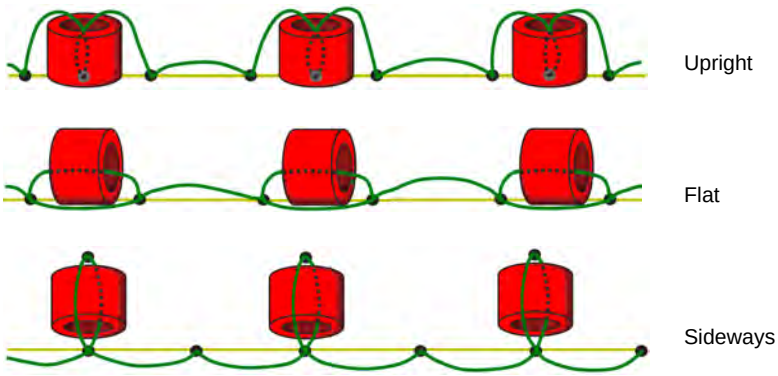
1 ES Designing 2 ES Digitizing 3 ES Decorating 4 ES Editing 5 ES Lettering
● Included as standard ❍ Modular 'element'

With the release of this update, EmbroideryStudio e4 includes the new specialty **Beading** Element which provides support for beading devices, single and mulitple. See Bead Embroidery (Reference Manual) for details.

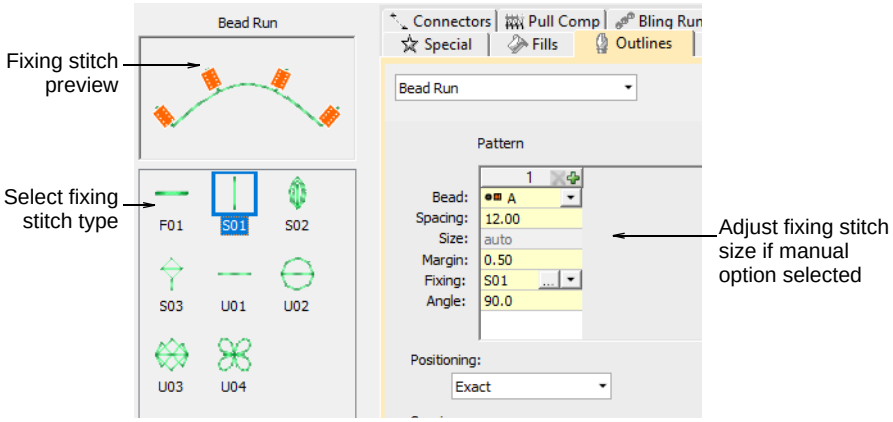


Fixing stitch support

Various layout methods are available on the machine. EmbroideryStudio supports the classic fixing stitch types – 'upright', 'flat', and 'sideways' – and others. See Bead fixings (Reference Manual) for details.



In addition to the classic fixing stitch types, the **Beading** feature includes a range of decorative fixing stitches for use in bead runs or individual bead drops. See Apply bead fixings (Reference Manual) for details.



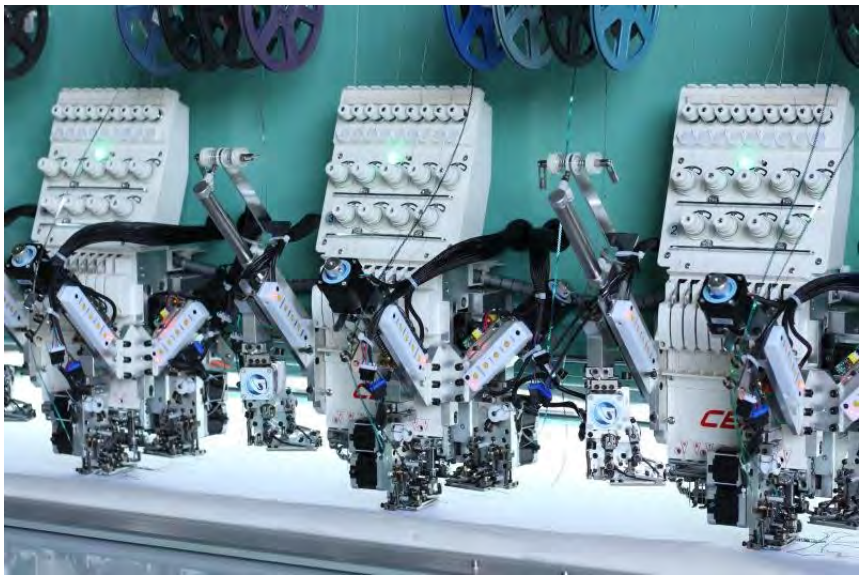
Tip: Before using the **Bead** tools, you need to choose a suitable machine format. Only some machine formats support beading – e.g. Tajima TBF, Dahao and SWF Twin Sequin. Refer to your machine manual for information about support for this type of decoration. See also Bead encoding & decoding (Reference Manual).

Dahao support

In support of Dahao's multi-sequin capabilities, EmbroideryStudio e4 provides the following support...

Quadruple sequins for Dahao machine format

The Dahao embroidery machine control unit is capable of quad sequins on a single needle bar. ES e4.5.3 now supports ‘ABCD’ on the first needle, and ‘EFGH’ on the last.



EmbroideryConnect networking

The ES e4.5.1 software update includes the following EmbroideryConnect improvements...

EmbroideryHub user interface languages

The EmbroideryHub user interface is now available in the same languages as EmbroideryStudio e4.

New shortcut keys for EmbroideryConnect icons

	Use Standard > Send to EmbroideryConnect to send the current design to a named EmbroideryConnect device.
	Use Standard > Queue Design to send the current design to the EmbroideryConnect design queue where they can be ‘pulled’ from the machine.

Shortcut keys have been added to support the new EmbroideryConnect icons:

- Send to EmbroideryConnect: **Shift+Alt+S**
- Queue Design: **Shift+Alt+Q**

‘Space Available’ for EC device sometimes shows 0MB

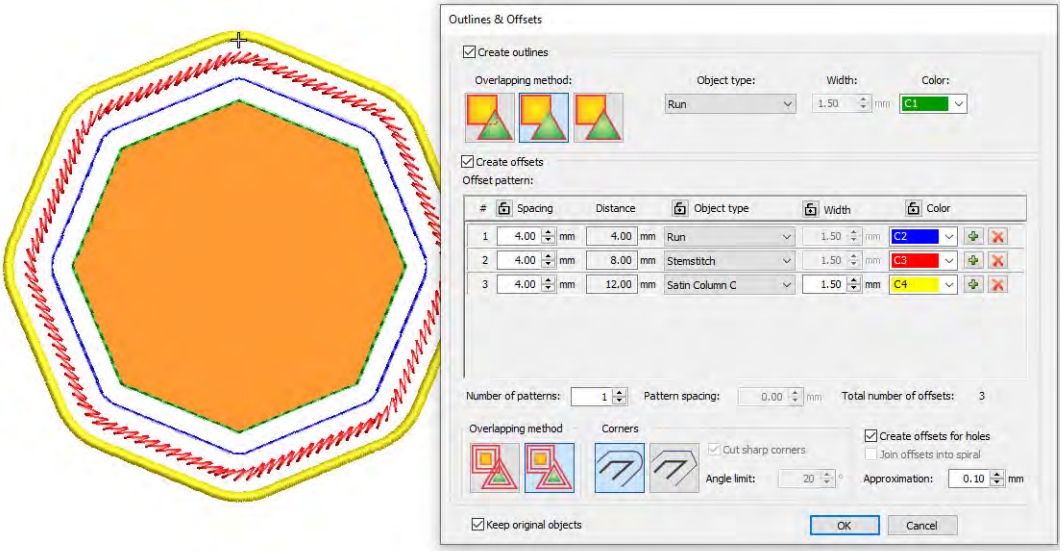
In some cases, when sending a design to an EC device, EmbroideryStudio e4 erroneously reports 0 MB available. This problem has been resolved with the release of ES e4.5.1.

Digitizing improvements

The ES e4.5.1 software update includes the following digitizing improvements…

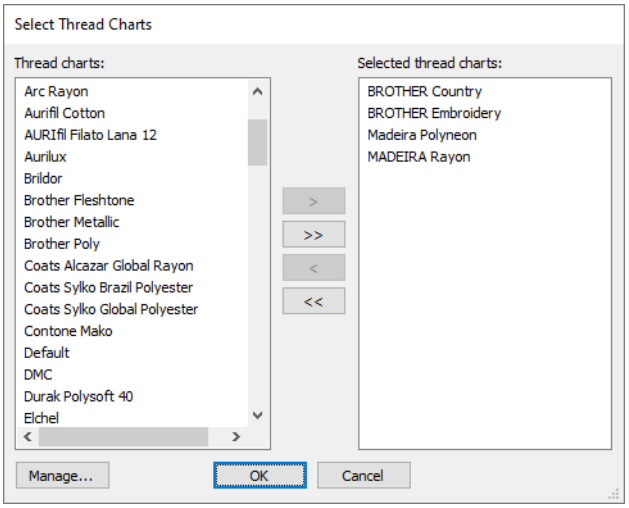
Outlines & offsets with vectors

The **Outlines & Offsets** feature now works with vector objects.



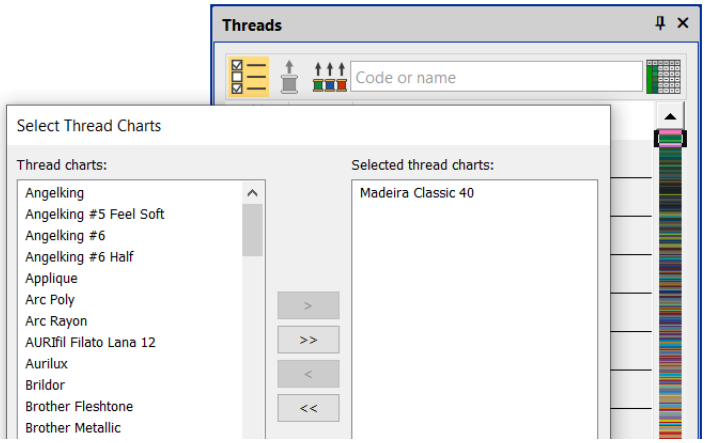
New thread charts

With the release of ES e4.5.1, four new thread charts are included – Madeira Polyneon, Madeira Rayon, BROTHER Country, and BROTHER Embroidery.



Thread chart colors unexpectedly turning to red and black

Problems have occurred in EmbroideryStudio e4 with thread chart colors turning to red and black shades following editing operations. This seems to have affected two Madeira charts in particular. The problem has been resolved with the release of ES e4.5.1.



Auto-digitizing improvements

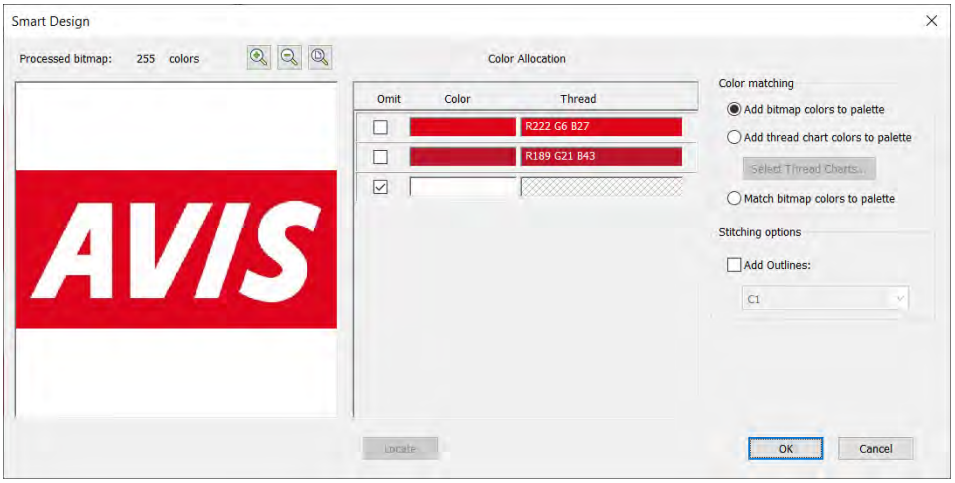
The ES e4.5.1 software update includes the following auto-digitizing improvements...

Branching of single objects in Smart Design

When using **Smart Design**, resultant single objects are being auto-branched unexpectedly. This problem has been resolved with the release of ES e4.5.1.

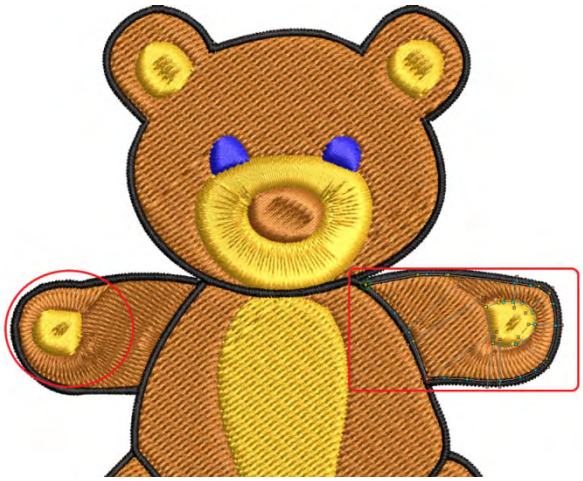
Segmenting of backgrounds in Smart Design

With certain designs, large backgrounds are being segmented unexpectedly, irrespective of values set in the **Smart Design** dialog. This problem has been resolved with the release of ES e4.5.1.



Unwanted stitch angles

Unwanted stitch angles are being added to some auto-digitized designs. This problem has been resolved with the release of ES e4.5.1.



Lettering improvements

The ES e4.5.1 software update includes the following lettering improvements…

Support for complex text layouts

ES e4.5.1 now provides support for ‘complex text layout’ (right-to-left) and non-European scripts including Arabic, Hebrew, and Thai.

With ‘RTL languages’ like Arabic and Hebrew, the order of characters is correctly rendered in the generated lettering objects. Complex text rendering is also supported in other languages which include combined characters. See also Select embroidery fonts (Reference Manual).

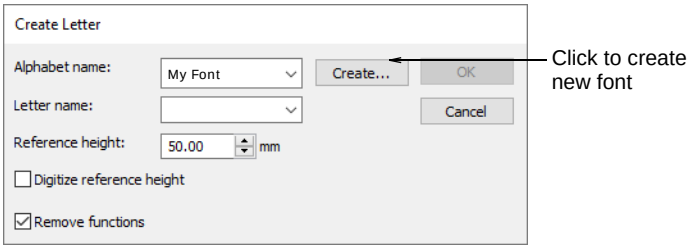
Ten (10) new fonts packaged

Ten (10) new fonts have been packaged with the latest update. These include:

- Albert
- Bounty
- Gypsy
- Lila
- Pastille
- Python Script
- Scope
- Spatial
- Vivid Script
- Yama

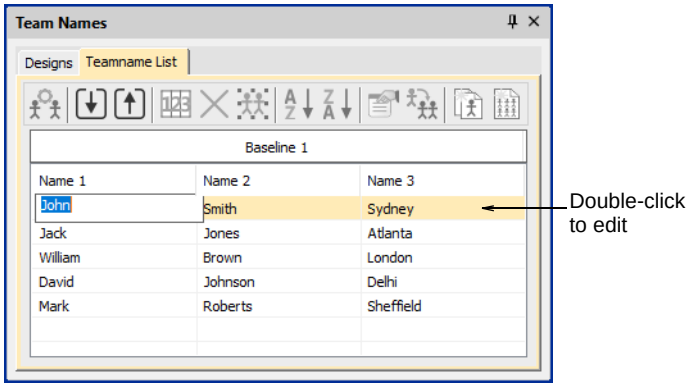
Last used font name remembered

The **Create Letter** dialog now remembers and displays the last selected font name. This is a useful productivity enhancement when creating multiple sets of new letters. The same details no longer have to be unnecessarily re-entered. See Create custom letters (Reference Manual) for details.



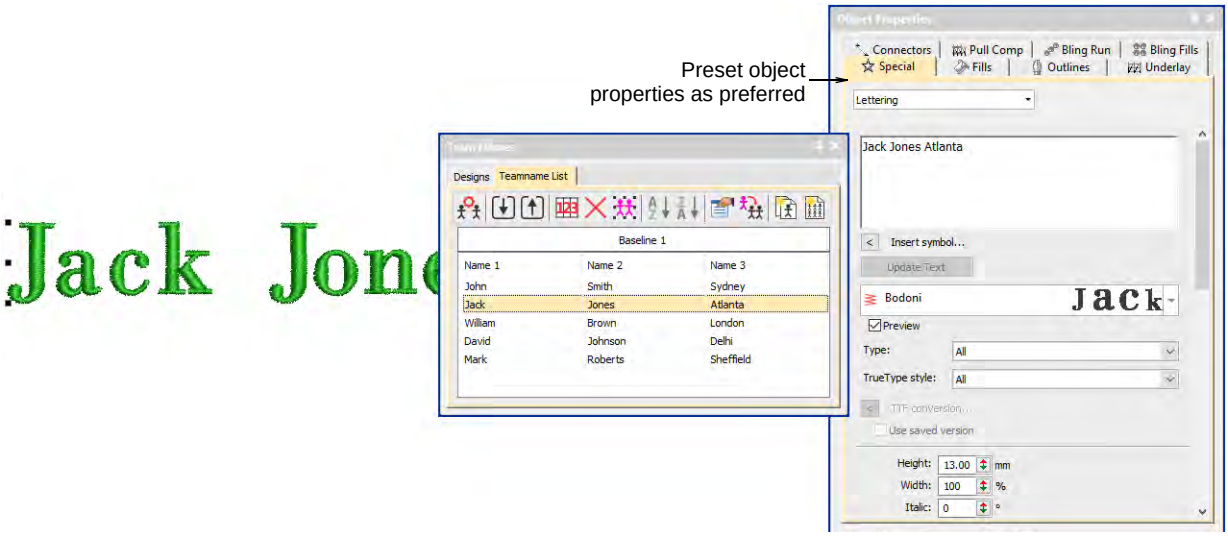
Editing names in Teamname List

Previously, when selecting a name in the **Teamname List**, it became editable. Now it remains highlighted and cannot be edited unless you double-click.



Changing stitch properties for lettering

With the latest release, you can preset object properties before adding members to your teamname list. This applies to both **Team Names** and other lettering objects. If you choose a fill that is not applicable to lettering, the system will default to the first applicable fill, usually Satin.

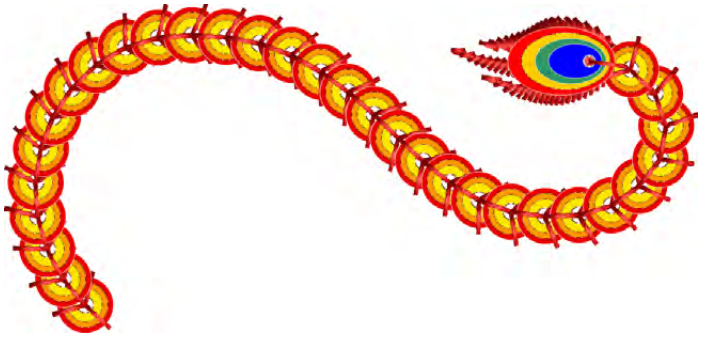


Sequin improvements

The ES e4.5.1 software update includes the following sequin improvements…

Multi-sequin export to machine file

Problems have occurred when exporting multi-sequin designs to DST file format for production. Multi-sequin objects are being exported with the one sequin type and same size sequin fixing stitch. This problem has been resolved with the release of ES e4.5.1.



System & file improvements

The ES e4.5.1 software update includes the following improvements...

Unexpected crashes

Unexpected software crashes have occurred in EmbroideryStudio e4 when...

- Opening some DST, INB, and ESS designs
- Resizing certain EMB designs
- Using the **B** key to zoom onto selected areas.

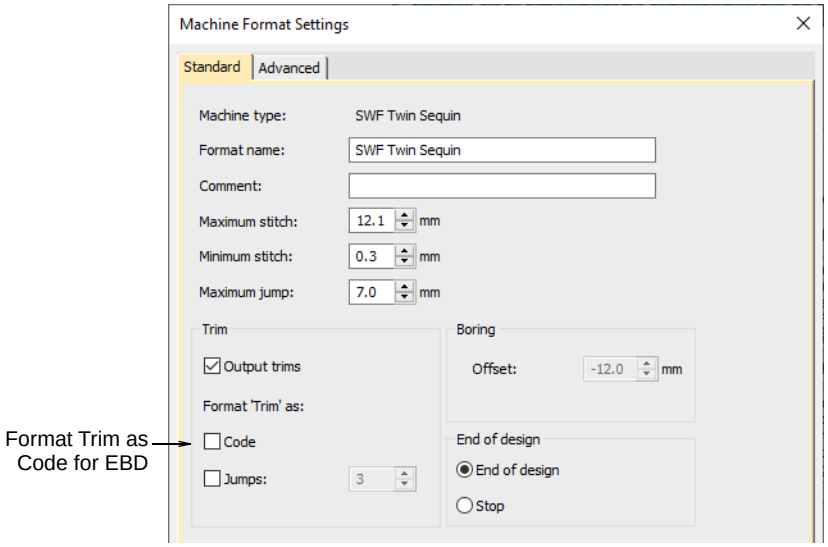
The problem has been resolved with the release of ES e4.5.1.

PES file start and end points

A problem has been reported when outputting PES files from EMB. Auto start and end points are not being properly maintained, causing the design to be off center. This problem has been resolved with the release of ES e4.5.1.

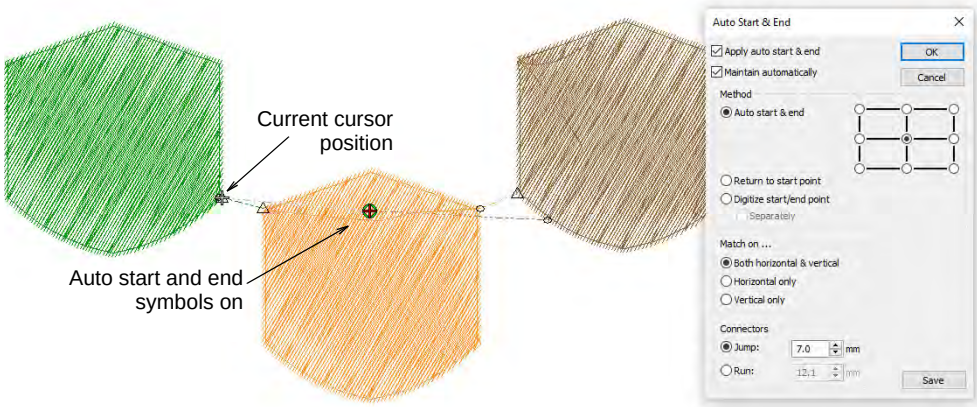
SWF (EBD) file format

The Wilcom SWF file format has been updated to support the latest version of EBD. Accordingly, the SWF Twin Sequin machine format includes a new trim format setting. You can now output 'Trim' as 'Code'.



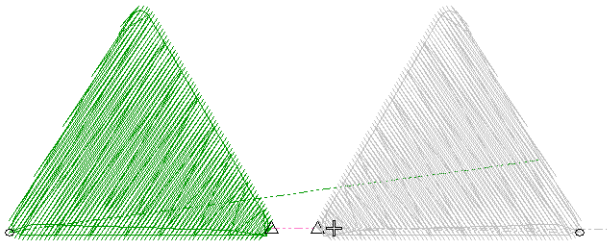
Auto-centering stitch cursor

Previously the stitch cursor always defaulted to the end of a design including start end connectors. With this release, the stitch cursor adjusts to the end of the last digitized object, not the auto-end point. If the object has a tie-off, the cursor jumps to the end of the tie-off instead of the beginning. All input methods behave the same way. Auto start and end symbols have been added – a green circle and a red cross. These are activated via **Options > View Design**.



Jump functions in the Stitch List

When digitizing objects with large jumps, the **Stitch List** now correctly shows Jump functions.



Stitch List

#	X	Y	L	Func
515	0.78	1.03	1.29	
516	-0.09	-0.14	0.17	TieOff
517	0.09	0.14	0.17	(used)
518	-0.30	-0.40	0.50	(used)
519	0.30	0.40	0.50	(used)
520	-0.09	-0.14	0.17	(used)
521	0.00	0.00	0.00	Color (15) (empty)
522	6.39	-0.08	6.39	jump
523	6.39	-0.08	6.39	jump
524	6.38	-0.08	6.38	jump
525	6.38	-0.08	6.38	jump
526	6.38	-0.08	6.38	
527	-0.77	0.22	0.79	
528	-0.94	0.34	0.99	
529	0.94	-0.34	0.99	
530	0.77	-0.22	0.79	
531	-0.77	0.22	0.79	
532	-1.57	0.57	1.67	
533	-2.06	-0.06	2.06	

Appendices

If you encounter a problem with the EmbroideryStudio e4 software update, refer to the following sources for help:

- Wilcom ES e4 Online Help – select Help > Online Help
- Wilcom ES e4 Reference Manual – select Help > Reference Manual.
- Windows help – select Start > Help and Support
- Windows manual – documentation supplied with your hardware.

Note Before seeking help, check that your PC meets the system requirements. See below.

Contact

If you have any questions, please contact your local Wilcom dealer or distributor in your country. For technical support please visit help.wilcom.com.

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 i3 (3rd Gen or later) or AMD Athlon™ FX-6350 or later	Latest Generation Intel Core i7 processor (4.0 GHz +)
Operating system ‡	Microsoft Windows 10 64-bit Edition	Microsoft Windows 10 64-bit Edition with the latest updates
Browser	IE 11.0 or later	Microsoft Edge or later
Memory	8 GB	32 GB or more
Hard disk size	80 GB	256 GB or more (Solid State Drive)
Free disk space †	40 GB	60 GB or more

Component	Minimum	Recommended
Graphics card	Support for Highest Color (32bit) and resolution (1600 x 900)	• Support for Highest Color (32bit) and resolution (1920 x 1080 or higher) • 2 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	USB mouse
USB port	Required for software installation and security device.	
Sound card	Required for online video help.	
Internet connection	Required for: • Product activation and registration • Periodic software updates • Access to news, community, product blog, tutorials, and product documentation • During installation, to download Windows features.	

Supported operating systems ‡

Since EmbroideryStudio no longer supports Windows® 32-bit operating systems, we recommend updating to Windows® 10 (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.

Free hard disk space †

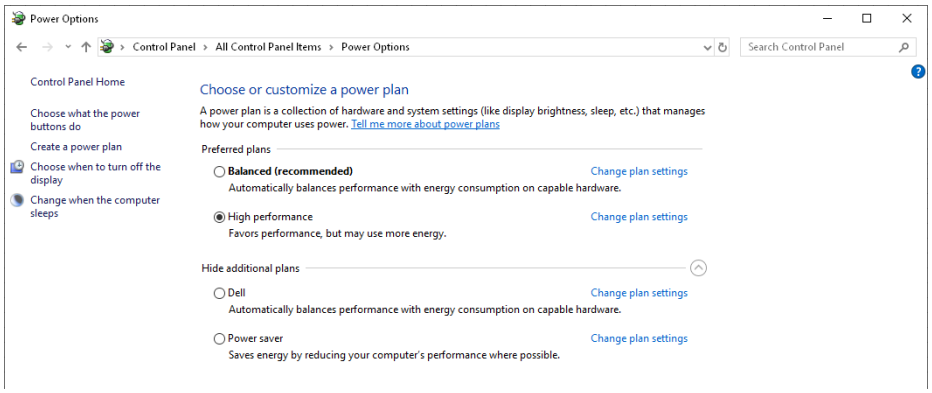
EmbroideryStudio occupies up to 5GB of hard disk space, depending on options installed. CorelDRAW® Graphics Suite also takes up an additional 3GB. However, you need additional free space for your applications to run smoothly.

Screen resolution ¥

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. If you experience visibility issues, try adjusting both screen resolution and font size. For example, a resolution of 1600 x 900 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.

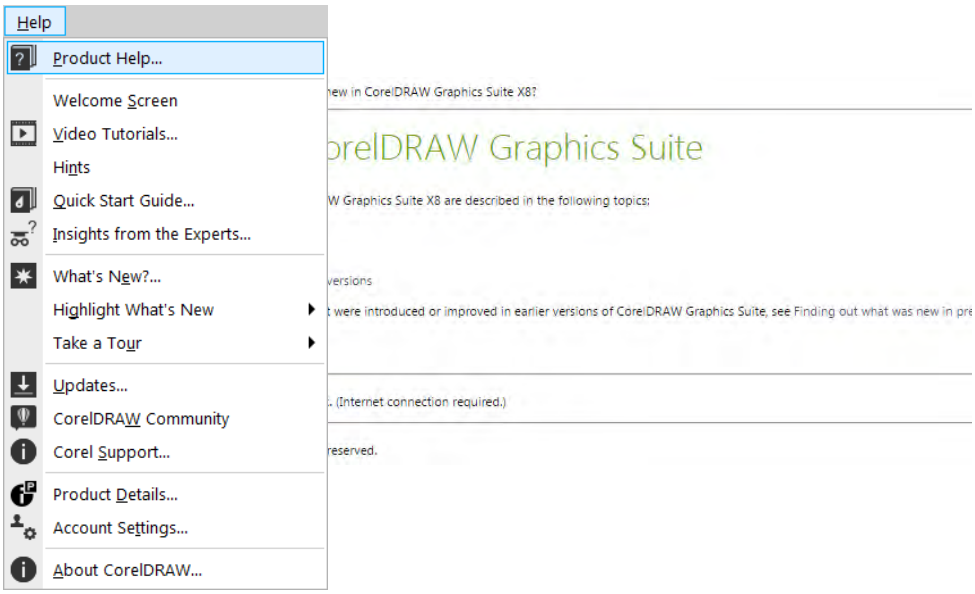


CorelDRAW® features & benefits

The CorelDRAW Graphics Suite of applications is included as standard with ES Designing and ES Decorating. Customers must register with Corel to enable permanently. Benefits include:

- Multi-page designs, layers and page layouts
- New content – heaps of clipart, photos and fonts
- Advanced OpenType support
- Enhanced compatibility with complex fonts (Asian, Arabic)
- Custom-built color harmonies
- Multiple trays in Corel CONNECT
- Creative vector shaping tools
- Document, objects and color styles
- Website design software

Note For more detail, please refer to the onscreen help available from the CorelDRAW® Graphics Suite **Help** menu.



New ES Decorating replaces DecoStudio

ES Decorating is a new product model positioned between ES Editing and ES Digitizing. It provides more embroidery capabilities that the now discontinued DecoStudio. It uses the same user interface as its companion digitizing products.

ES Decorating has far more functionality than DecoStudio

- Full professional lettering and editing – all the functionality of ES Editing
- Digitizing with many more capabilities than DecoStudio
- Auto digitizing from within EmbroideryStudio or from within CorelDRAW Graphics
- 6 optional e3 Elements now included as standard

And includes many new e4 Features

- Many new standard e4 features included in ES Decorating
- Three advanced e4 Elements now available in ES Decorating

Elements now standard in e4 ES Decorating

- Virtual Decoration

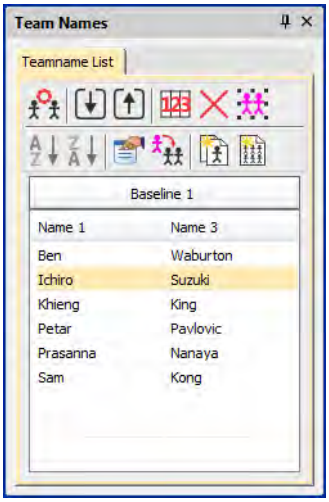
- Kiosk Mode Lettering
- Team Names Standard
- Offsets Standard
- Bling
- Auto-digitize Bitmaps

Virtual Decoration included

High Resolution TrueView Images...

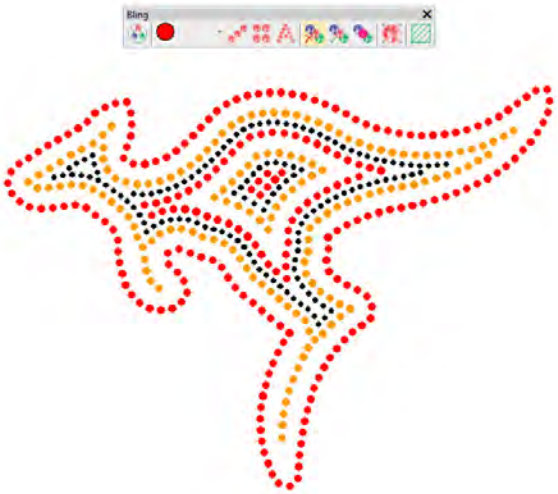
Kiosk Mode Lettering included

Team Names Standard included

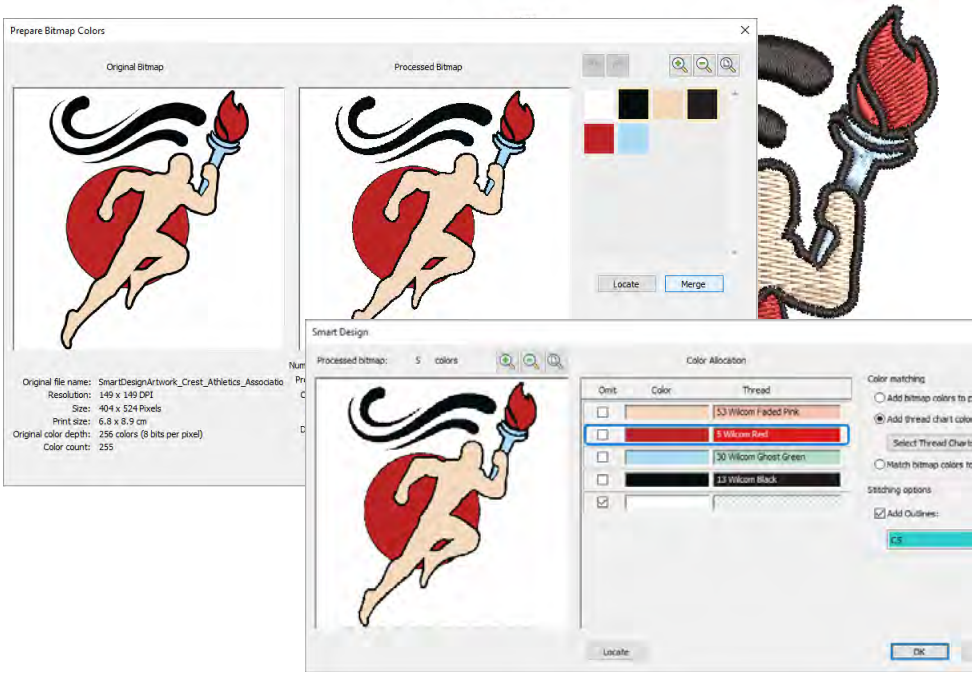


Offsets Standard included

Bling included



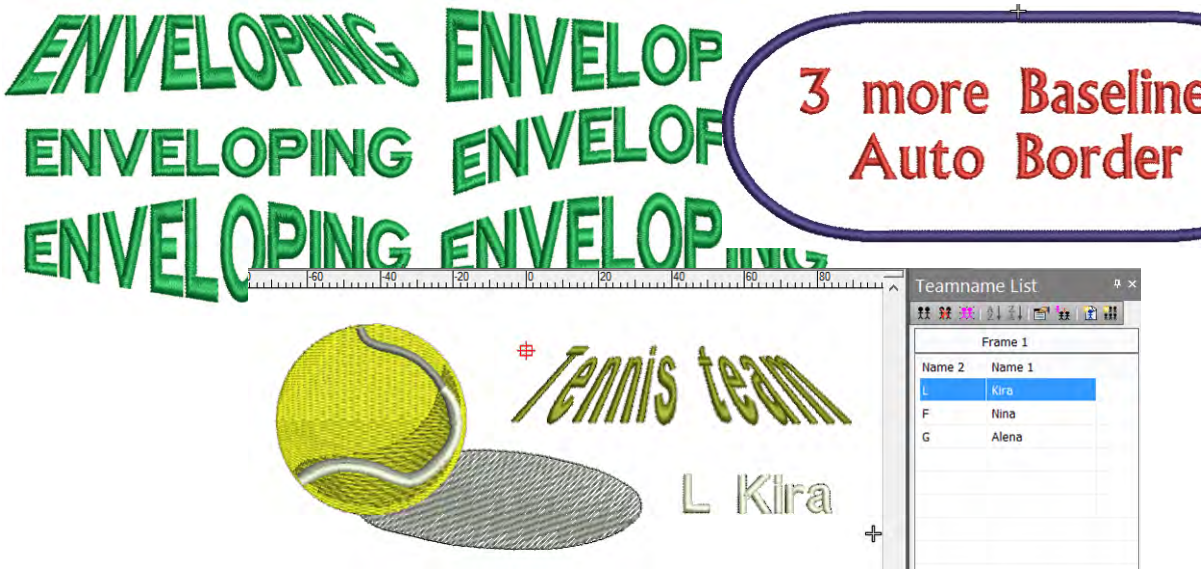
Auto-digitize Bitmaps included



ES Decorating over DecoStudio

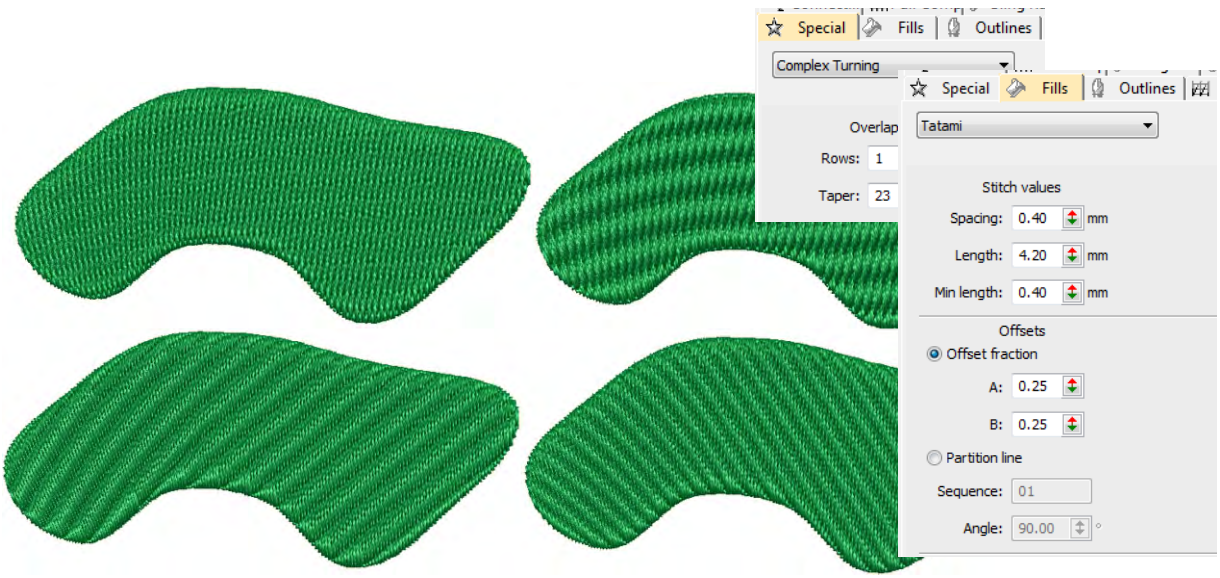
- More capable professional commercial embroidery software
- More Lettering functionality with full control of parameters
- More Editing functionality with full control of parameters
- More Digitizing Functionality with full control of parameters
- Same User Interface as other ES product models
- Plus additional new e4 functionality

More Lettering



More Digitizing

- Setup and digitize using own custom templates (from ES Editing)
- Professional tatami fill patterns with full control of parameters (from ES Editing)
- Professional underlay types with full control of parameters (from ES Editing)
- settings for Complex Turning



Advantages of ES Decorating vs DecoStudio

Category	Features	Benefits
More Lettering	• Enveloped Lettering • 9 vs 6 baselines • Automatic Kerning • More Spacing & Sequencing Controls • Team Name Standard Included • Auto Design Border • TrueType Font Conversion & Settings	• More artistic effects • Better quality stitching • Faster operations
More Control	• Manage Auto Fabric Settings • Create and Use Templates • Full Underlay controls • Full Stitch Type controls esp Tatami • Full Auto Start / End control • Full connector property control • Full machine function controls	• More artistic stitch results • More consistent quality control • Better quality for more circumstances
More UI	• Overview Window • Stitch List Docker • Kiosk Mode	• Ease of use • Detail control of stitch data • Faster operation simple jobs
More Auto-digitizing	Integrated Wilcom auto-digitizing as well as Corel based Auto-digitizing	Easier, quicker - no swapping to / from CorelDRAW® window
More Editing	• Full Object Properties • Process - Change densities by % • More Stitch Editing controls	More control for optimizing quality and production issues
More Digitizing	• Full tatami stitch type parameters • Full Underlay stitch type parameters • Auto corner controls • Variable run stitch control	• More artistic stitch fills • Full control for different circumstances
More Standard Features	• Team Names Standard • Offsets Standard • Virtual Decoration • Kiosk • Bling	• Automating team name jobs • High res TrueView images • Lettering productivity • Bling Design
Optional Elements	• Team Names Advanced • Offsets Advanced • Color Photo Flash	

New e4 Features in ES Decorating

- CorelDRAW® version X8
- New **Design Library**
- New order job feature

- New **Product Visualizer**
- New & Improved Lettering
- New Graphics Digitizing
- Other New & Improved Features

E4 Elements available in ES Decorating

- Team Names Advanced
- Offsets Advanced
- Photo Flash – including new Color Photo Flash

Known limitations

Notice is provided of the following known limitations in the EmbroideryStudio e4 software.

Even density contour

Use Outline Stitch Types > Contour to create outlines which follow object contours, creating a curved, light-and-shade effect. Right-click for settings.

Use Fill Stitch Types > Contour to create fills which follow object contours, creating a curved, light-and-shade effect. Right-click for settings.

Even Density contour stitching is suited to complex shapes as well as simple ones. Contour stitching follows the shape with uniform stitch density. EmbroideryStudio may not generate even-density contour stitching in certain shapes. Stitching will revert to standard contour stitching.

Branching limitations

Use Fill Stitch Types > Motif Column to place motifs along the center line of a column shape and resize to fit the shape. Right-clicking for settings.

Use Fills Stitch Types > Offset Fill to create offset fill stitching in any closed shape.

Use Fill Stitch Types > String to create string craftstitch fills. Apply to closed shapes.

Click Arrange > Branching to automatically sequence and group like embroidery objects.

There are limitations when it comes to branching the new **Motif Column**, **Offset Fill**, and **String** stitch types. Stitches may be ungenerated when branching two or more objects together using these stitch types.

NVIDIA nForce motherboards

NVIDIA nForce motherboards are not fully compatible with our security dongle.

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