Engage

User's Guide

DIGIMARC

Contents

Introducing Digimarc Engage

Engage unlocks an interactive communications channel, connecting brands and consumers to build deeper relationships, reveal consumer insights, and differentiate your brand.

This guide is for the brand manager, who creates the digital twins and engagements.

Device Requirements

The Illuminate™ Platform is intended for use on desktop computers and large tablets. Functionality is limited to view-only for devices with screens smaller than 601 x 1280 px.

Document Conventions

Following are the standards and conventions used in this documentation. See the Glossary for definitions of terms used in this guide.

Convention	Description
Numeric format	The fractional part of a numeric value is represented by the period character, such as pi =~ 3.14
Elements in the user interface	Formatting: Text in bold
Titles of tiles and dialogs	Formatting: Text in italics
User input (text that a user types)	Formatting: Text in a monospace font
File and directory paths	Formatting: Text in a monospace font
Variables or variable data	Formatting: Text in italics, often within angle brackets (< >)

What's an Engagement?

An engagement is a way to tie a user experience to a physical product. Engagements have one or more digital twins, each of which has a QR code that your production team puts on the product's package, hang tag, label, or promotional asset.

When a consumer scans the QR code with a mobile device, the embedded URL is displayed on the device as a link. Tapping the link takes consumers to the website and, from there, Engage determines where to forward them, based on the active engagement associated with that digital twin.

You can send all consumers to the same website, or you can send them to different sites depending on their device location, language setting, or a combination of these and other parameters.

For example, with an engagement, you can:

- send all consumers to the same website
- send consumers of a candy variant to a special holiday-themed website
- send French-speaking consumers to one website, and send English-speaking consumers to another
- send all consumers in the USA to a different website than consumers in Mexico
- send people who scan the QR code on a TV commercial or digital banner ad to a sign-up website

If a consumer doesn't meet the conditions selected for the engagement, such as a different location or device language, Engage redirects the consumer to an "unmatched" destination URL.

If you add an optional (provided) JavaScript code snippet on the destination pages, Engage collects data about the device and the scan activity itself for analytical reports. See Data Collection and Tracking View for more information.

Example

In this example of the *country and language* engagement type, you create an engagement for consumers who speak French (that is, consumers who set French as the primary language on their mobile device). You want the consumers in France to see Website A, consumers in Canada to see Website B, and consumers in the USA to see Website C. Consumers who don't meet these conditions see the "unmatched" destination, Website Z.

If the consumer is in...	and the device language is...	the engagement uses the...	and the consumer sees...
France	French	scan destination A	Website A
France	German	unmatched destination	Website Z
Canada	French	scan destination B	Website B
Canada	Spanish	unmatched destination	Website Z
USA	French	scan destination C	Website C
USA	Japanese	unmatched destination	Website Z
Germany	French	unmatched destination	Website Z

The consumer in Germany sees the unmatched destination website because the engagement has no scan destination for French-speaking consumers in Germany.

The engagement configuration might look like this:

About Activating and Deactivating Engagements

When you're ready for an engagement to start redirecting consumers, you activate it. When you want the engagement to stop redirecting consumers, you deactivate it. By activating and deactivating engagements, you can affect your consumers' web experience moment-by-moment as needed for your campaign. For instructions, see Activate or Deactivate an Engagement.

The engagement's status property determines whether consumer scans run the engagement. Engagement statuses are:

Draft

> Engagements with a status of DRAFT are being configured for future use. Scans don't run the engagement; following the link embedded in the digital twin's QR code might result in a 4xx HTTP error. No forwarding occurs.

Active

> Engagements whose status is ACTIVE are currently in use. Scans run the engagement; following the link embedded in the digital twin's QR code redirects the consumer to the configured scan destination (or unmatched destination, if present) based on the engagement type and the data Engage receives from the mobile device.

Inactive

> Engagements whose status is INACTIVE were in use at one time but have been deactivated. Scans don't run the engagement; following the link embedded in the digital twin's QR code might result in a 4xx HTTP error. No forwarding occurs.

What's a Digital Twin?

A digital twin is a digital counterpart of a physical product comprising events and attributes from and about the product. You customize the behavior of the digital twin to deliver an experience that benefits your consumers and brands across a wide variety of digital applications. Simply put, digital twins give physical things a digital life.

Each digital twin is associated with a data carrier (a digital watermark) that, when scanned with a Digimarc-enabled scanner, mobile phone, or tablet (by integration of detection technology), can respond in a variety of ways.

Each digital twin is associated with a data carrier (a QR code) that, when scanned with a mobile phone or tablet, delivers the web experience to the consumer.

Illuminate offers three digital twin types:

- product digital twins
- product variant digital twins
- promotional asset digital twins

When you create a product digital twin in Illuminate, you specify the details about the product such as the brand, product category, identifier (a GTIN or SKU, for example), and any other relevant information (such as size, color, variety, flavor, and so forth). Engage creates a data carrier for that digital twin with a unique URL embedded, which serves as the starting point for your engagements. The engagements then determine what website (destination) the consumers see.

The embedded URL points to a domain listed in your account settings. All your QR codes can use the same domain, or you can use different domains for different purposes.

> **Example**
>
> If your default domain is `example.com`, the "short URL" embedded in your QR codes might look something like this:
>
> ```
> https://example.com/AbCdEfG
> ```

When a consumer visits the embedded URL, Engage intervenes and redirects them to the appropriate scan destination for the active engagement associated with the digital twin.

If your account manager has added multiple domains to the account, you can choose which one to use when you create a QR code:

> **Example**
>
> ```
> https://brand1.example.com
> https://brandA.example.com
> ```

What's a Product Variant?

Some products have versions, called variants, that differ from the parent product or packaging in some small way, such as a minor artwork or marketing declaration change. A product variant carries the same product identifier as the parent product, but it includes a variant ID that makes differentiating it in reports easier. The digital twin carries information about that product variant throughout the Illuminate Platform.

Engage enables you to create digital twins for product variants and track engagements in which they're used. Product variant digital twins inherit some properties from the parent digital twins, such as brand and product category, but they have their own data carriers. This means the analytics views can show you how the variants perform compared to their parent products and other variants.

Sample product package
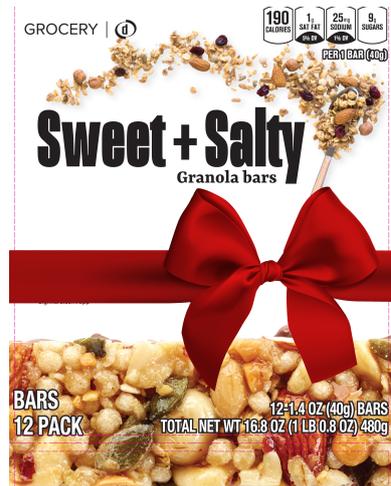
Sample product variant package

What's a Promotional Asset?

You might have assets intended only to promote your products. These promotional assets aren't sold to consumers but rather used in advertisements and store displays. Examples include TV commercials, brochures, posters, email marketing campaigns, digital banner ads, and life-sized cardboard displays.

Promotional assets don't have a GTIN, but they might have another identifier, such as an internal part number. You can create digital twins for your promotional assets and data carriers for them. You can include promotional asset digital twins in engagements with parent product digital twins, product variant digital twins, or by themselves.

What's a Data Carrier?

Data carriers are covert (digital watermarks) or overt (QR codes) graphical elements that embed or "carry" data. The embedded data can be simple text, such as contact information or a URL, or it can be much more complex, such as the data carried in a Digimarc digital watermark.

Each digital twin is intended to have one or two data carriers. Illuminate creates the data carriers according to the subscription type and the preferences you set while creating the digital twin and embeds the data directly into the data carriers.

Engage Analytics

As consumers scan products, Illuminate collects data about the scan activity, such as location, the primary device language, and whether the consumer has scanned digital twins before. The *Analytics* view shows these details about your engagements.

> **Important**
> Some Engage analytics depend on the JavaScript tracking code placed on the destination web pages. If the scan destination pages or the unmatched destination page configured for the engagement don't include the tracking code, or if the consumer doesn't consent to receive the tracking cookie, Engage can't collect data that differentiates new and returning consumers. In those cases, all scanning user types are "untracked."

To reach the *Analytics* view, click **Analytics** in the navigation pane. On the *Analytics* view you can:

- Filter the results
- Segment the data
- View graphs

For more information, see View Analytics.

> **Note**
> These analytics register only visitors who scan the digital twins. Those who browse to the destination URLs directly aren't reflected.

Filtering

A filter narrows the results (data set) to exactly match your criteria. The scan date period covers one or more dates and is always the first filter applied. For more information about filters, see Filters.

At the top of the *Analytics* view, Engage displays the number of scans, digital twins, countries, and engagements included in the current filter.

For each metric, a triangle icon shows whether the value is an increase (▲) or decrease (▼) (in percentage) compared to the previous period of the same length. For example, if you set the Scan date filter to the last seven days, the values shown are relative to the previous week's data.
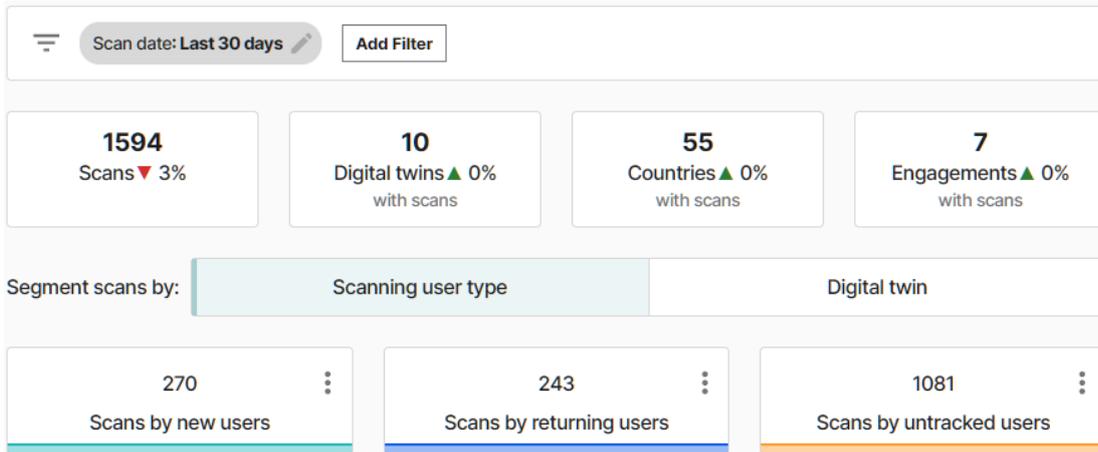
Segmenting

A segment groups the resulting (filtered) data in meaningful ways without changing the data set. You can segment the scan data by:

Scanning user type

When consumers scan data carriers, we can place cookies on their devices that help determine whether the device has scanned digital twins before. Scanning user types can be:

New

This consumer has not scanned a digital twin before or the cookie previously placed on their device has been deleted.

Returning

This consumer has scanned a digital twin before.

Untracked

This consumer has chosen not to permit Digimarc to place the cookie on their device or the scan destination doesn't use the tracking script.

Digital twin

Groups the data by the number of scanned digital twins. The menu for each digital twin displays the twin name, primary identifier, type, brand, and the number of scans.
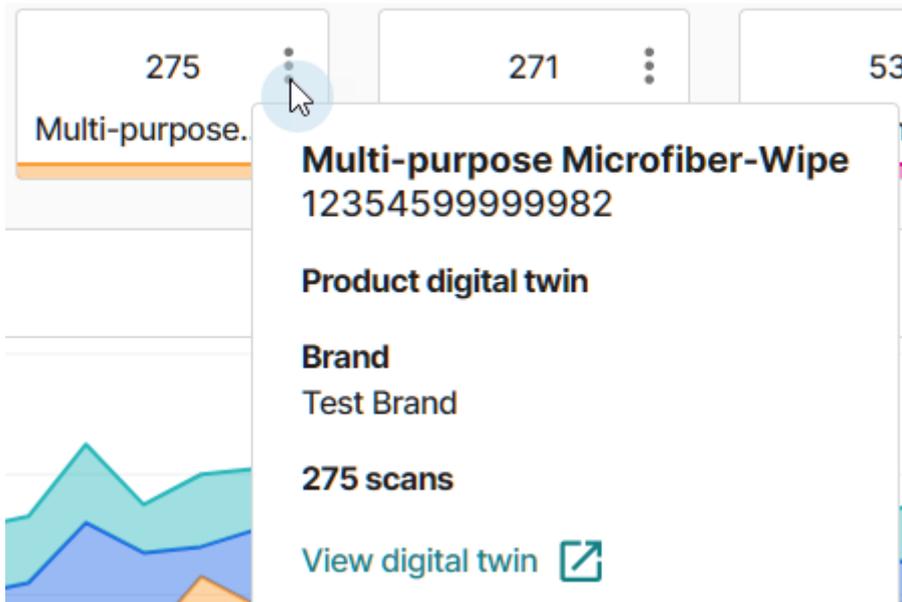
Graphs

Engage provides graphs to show the segmented and filtered data you selected. Each graph on the view has a menu icon (⋮) in the upper right corner, which enables you to expand the graph to a pop-up window. By default, the expanded view displays the top 20 items. If more than 20 are available, the **Show All** button shows all items.

When you hover the mouse over a graph, Engage displays the data points at the cursor location.
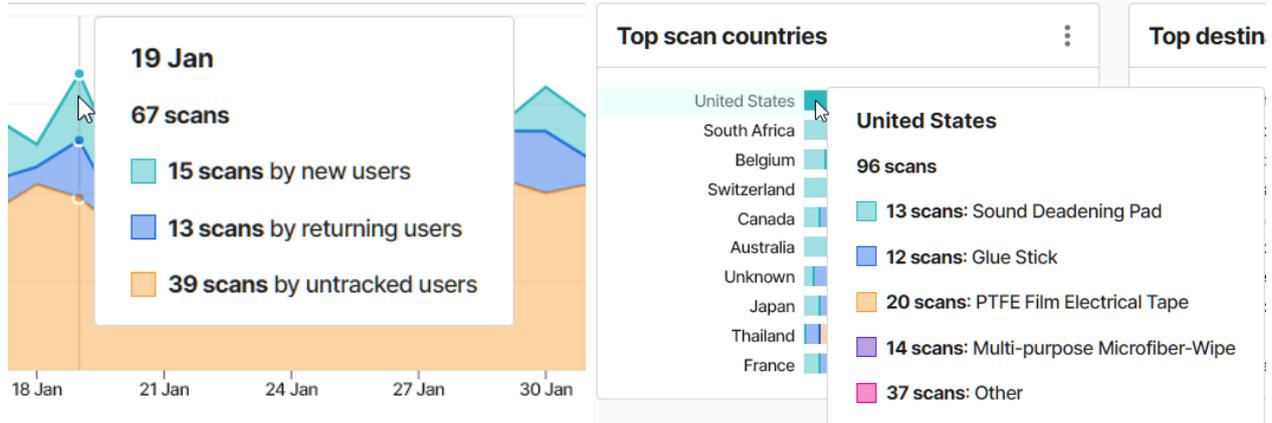
The graphs are:

Scans by date

> This line graph displays the scan data by date. By default, Engage displays data for the last 30 days, but you can change the date range. See View Analytics.

Top scan countries

> This bar graph displays the ten most common countries from which scans originate.

Top destinations

> This bar graph displays the ten most-viewed destination URLs (accessed through scanned digital twins). The URLs are displayed as entered in the Scan Destination fields for their engagements.

Top languages

> This bar graph displays the ten most common device languages from which scans originate.

Top digital twins

> This bar graph displays the ten most-scanned digital twins.

Get Started with Engage

To use Digimarc Engage, you must be invited by an account administrator.

1   If you've received an invitation to join an account on the Illuminate Platform, click **Sign Up** in the email to accept the invitation. If you haven't received the email invitation, contact your account administrator or Digimarc.

2   Type a password and re-enter it.

3   Click **Back to Illuminate Platform**. You may now sign in.

4   Before you can proceed, you must provide your name and agree to the terms of service.

Log In

1   Log in to Illuminate using your email address and the password you set. If you're logging in for the first time:

    1.1   Illuminate displays the *Welcome* dialog. Enter your **First name** and **Last name**.
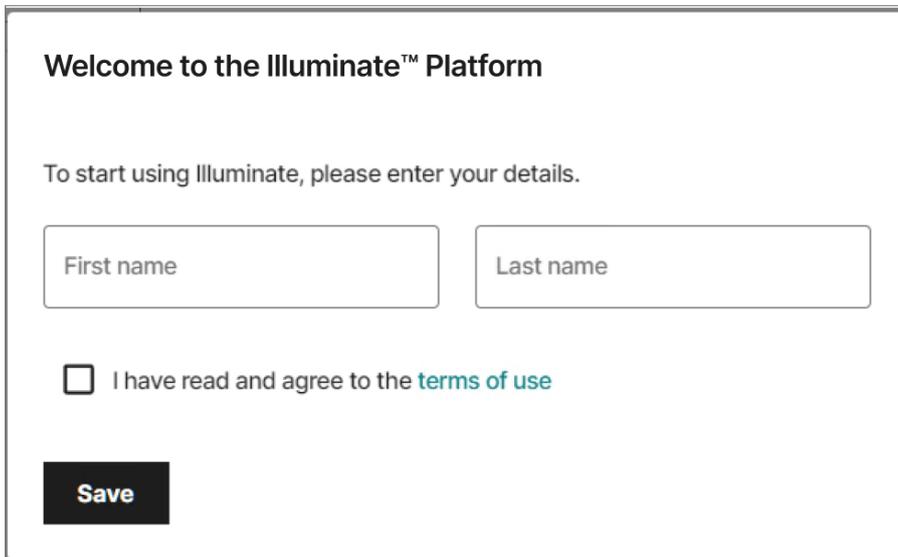
Welcome to the Illuminate™ Platform

To start using Illuminate, please enter your details.

| First name | | Last name |

☐ I have read and agree to the terms of use

Save

    1.2   Click the link to the **terms of use** and read the terms carefully.

    1.3   If you agree to the terms, enable **I have read and agree to the terms of use**.

    1.4   Click **Save**.

2   If you have access to multiple accounts, Engage displays the *All Accounts* view. Click the account you want to work with. If you have access to only one account, Engage displays the *Engagements listDigital Twins list* view.

> **Note**
> The remaining instructions throughout this guide assume you have logged in and selected an account to work with, if needed.

Steps for Using Engage

The high-level steps for creating and configuring your digital twins and engagements are:
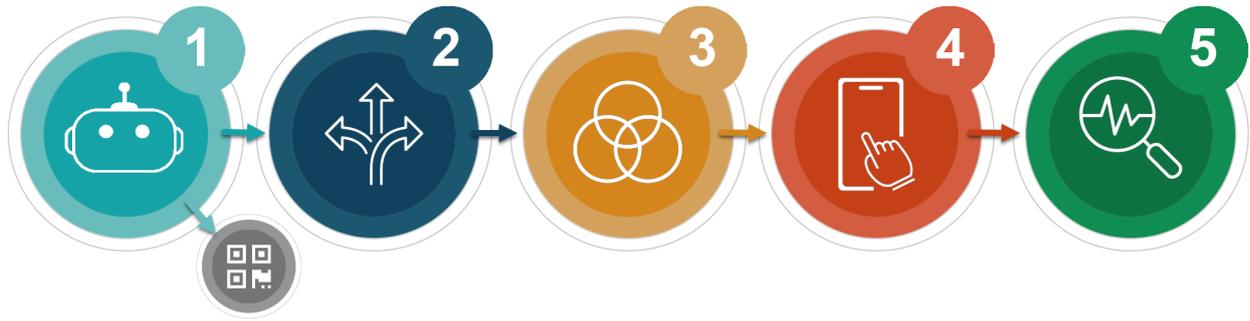
> **Note**
> Most of these functions aren't available on device screens smaller than 601 x 1280 px. See Device Requirements.

1 Create one or more digital twins.

> **Note**
> After you create the digital twin, your production team adds the twin's QR code to the product's package, hang tag, label, or promotional asset.

2 Create one or more engagements.
3 Add one or more digital twins to an engagement.
4 Activate the engagement.
5 View the analytics.

Manage Digital Twins

This section describes how to create and manage digital twins. For more information about digital twins, see What's a Digital Twin?.

Create a Digital Twin

You create digital twins from the *Digital Twins* view and associate each one with a specific product. The digital twin carries information about that product throughout the Illuminate Platform.

- To add digital twins one by one, use the Engage user interface. See the links in the table below.
- To create or update them in bulk, see Import Digital Twins.

Illuminate supports the following types of digital twins:

Twin Type	Purpose
Product digital twins	This twin represents the primary product. See Create a Product Digital Twin. To import multiple product twins from a spreadsheet, see Import Digital Twins.
Product variant digital twins	This twin represents a variation of the primary product. See Create a Product Variant Digital Twin. To import multiple product variant twins from a spreadsheet, see Import Digital Twins.
Promotional asset digital twins	This twin represents promotional material for the primary product or its variants. See Create a Promotional Asset Digital Twin. To import multiple promotional asset twins from a spreadsheet, see Import Digital Twins.

Create a Product Digital Twin

You create product digital twins from the *Digital Twins* view and associate each one with a specific product.

To create a digital twin:

1 Click **Digital Twins** in the navigation pane. If you have existing digital twins, they're listed.

2 Click **Create digital twin**. The *Create Digital Twin* view opens.

3 Select **Yes, create a product or variant digital twin for this *<primary identifier>***. The primary identifier was configured at the account level and could be a GTIN, SKU, or another suitable identifier, such as ISBN, a retailer-specific identifier, and so on.

4 Enter a unique value for the product identifier.

> **Note**
> If the identifier has already been entered for another digital twin, Illuminate opens the *Create Product Variant* view, enabling you to instead create a product variant digital twin. See Create a Product Variant Digital Twin.

If the item has a GTIN that's fewer than 14 characters:

- Illuminate adds one to six leading zeroes to support 8-, 12-, and 13-digit identifiers.
- Illuminate recognizes most barcode types, but if the GTIN has eight characters, the panel expands to display the barcode type options. Select the correct barcode type: EAN or UPC.

Create Digital Twin

Does the item have a GTIN?

◉ **Yes**, create a product or variant digital twin for this GTIN

GTIN
12345670   ✓

This is a valid GTIN-8

Barcode type

○ UPC (US markets)

○ EAN (Rest of world markets)

○ **No**, create a promotional asset digital twin without a GTIN

[Next]   [Cancel]

5 Click **Next**.

6 In each section, fill in as much information as you need for your digital twins.

Product Details

Name

The name of the product. The name can be up to 64 characters long.

Description

Optional. A brief description of the product. The description can be up to 512 characters long.

Brand

The brand name of the product. Select from the list, or type a brand name and press <Enter> to add it. The brand name can be up to 128 characters long.

Product type

Optional. The type or purpose of the product, such as "hand sanitizer" or "flour." This is the GS1 product functional name used to describe the use of the item or product by the consumer. The product type can be up to 64 characters long.

Category

The GS1 Global Product Classification (GPC) for this product. To view the list of available categories, click **Browse categories**. Select the appropriate category at the GPC *Family* level.

Identifiers

The fields displayed depend on whether the account owner is a GS1 member company.

GS1 Members

GTIN

The product's GTIN. This numeric field is read-only and visible only for GS1 member companies.

Barcode identifier

For GS1 member companies with a GTIN, indicates the barcode type.

{*additional identifier name*}

If the account was configured to allow an additional identifier, Engage displays the identifier name and the value that was entered, if any. The length of the identifier is configured for each account but must be 1–64 characters long.

Digital Link or Short URL

If the digital twin has a QR code, Engage displays its embedded URL with a copy icon (⧉), enabling you to copy the link.

Non-GS1 Members

{*primary identifier*}

Engage displays the name and value of the primary identifier that was configured for your account. The length of the identifier is configured for each account but must be 1–64 characters long. This field is read-only and visible only for non-GS1 member companies.

{*additional identifier name*}

If the account was configured to enable additional identifiers, Engage displays the identifier name and value, if any. The length of the identifier is configured for each account but must be 1–64 characters long.

Short URL

If the digital twin has a QR code, Engage displays its embedded URL with a copy icon (⧉), enabling you to copy the link.

Images

Each digital twin can have up to 25 images. See [Add Images](#) for detailed instructions.

Product Attributes

Available from

Specify the first date this product became or will become available.

Available to

Specify the last date this product was or will be available.

Size

The size variant of the product up to 256 characters.

Net content

Specify the net content of the product packaging up to 32 characters.

Countries of sale

Specify the countries in which this product is sold.

Custom Attributes

Custom attributes are optional. They enable you to specify a label and a corresponding value, such as "flavor" and "strawberry."

To create a custom attribute:

1 Click **Add attribute**. The section expands to display fields and controls for managing custom attributes.

2 Type an **Attribute label** for the custom attribute, such as "color," "flavor," or "edition."

> **Note**
> Attribute labels must be unique per digital twin. A twin can have only one custom attribute with the label "flavor," for example.

3 Enter the **Value** for the attribute. If the attribute label is "color," for example, the value might be "red" or "green."

4 To save the attribute label and value, click **Add**.

5 To remove an unwanted attribute, click **Delete *<label>* attribute**. The attribute is removed.

6 To add more custom attributes, repeat these steps.

Data Carrier

You can generate the data carrier now or select the option **Do not generate a data carrier** to do it later.

Generate data carriers from default settings

Engage creates the data carrier using the default settings configured for the account.

Generate data carriers from custom settings

Engage creates the QR code using the domain you choose from the **QR Code domain** drop-down list. GS1 members creating the data carrier for a product or variant digital twin can also choose the link format:

- **GS1 Digital Link**
- **Short URL**

Do not generate data carriers

Engage doesn't create the QR code. This option is available only while creating a digital twin. For instructions on creating a data carrier later, see Generate the Data Carrier.

7 Click **Create**. The *Digital Twin Created* view opens.

8 To see the details about the new digital twin, click its link. See *Digital Twin Details View* for more information about the screen.

Next Step

After you generate the QR code, you can download it. You can now add the digital twin to an engagement.

After you generate the data carrier, you can use the Digimarc Watermarking Plug-in to apply it to your artwork. To download the plug-in, click the Help icon and choose Digimarc Tools. You can get the documentation from within the plug-in.

Create a Product Variant Digital Twin

Like with creating a product digital twin, you create product variant digital twins from the *Digital Twins* view and associate each one with a specific product. For information about product variants, see What's a Product Variant?

To create a product variant digital twin:

1 Click **Digital Twins** in the navigation pane. If you have existing digital twins, they're displayed.

Engagements

Analytics

Digital Twins

2 Click **Create digital twin**. The *Create Digital Twin* view opens.

3 Select **Yes, create a product or variant digital twin for this *<primary identifier>***.

4 For the **Product identifier**, enter a value that matches the primary identifier of an existing product digital twin. The *Create Product Variant* view opens.

> **Note**
> If you enter an identifier that hasn't yet been used for a digital twin, a product digital twin is created rather than a product variant twin. See Create a Product Digital Twin for instructions.

5 If the item has a GTIN that's fewer than 14 characters:

- Illuminate adds one to six leading zeroes to support 8-, 12-, and 13-digit identifiers.

- Illuminate recognizes most barcode types, but if the GTIN has eight characters, the panel expands to display the barcode type options. Select the correct barcode type: EAN or UPC.

- If the account was configured to allow an additional identifier, such as a ISBN or online store product ID, you can enter it in the *Identifiers* section.

6 In each section, fill in as much information as you need for your engagements. See Digital Twins Overview Tab for more details about the fields on this view.

Variant Details

Variant name

The name of the product variant. Names can be up to 256 characters long and contain letters, numbers, and symbols.

Variant ID

An alphanumeric identifier for the product variant. The variant ID, up to 32 characters long, is an arbitrary value that you can use for your own purposes. The Variant ID is a required field that can help you differentiate them from the product twins in reports.

Variant reason

The reason the variant was created. The values shown in the list are the GS1 variant reasons listed in the Consumer Product Variant in GDSN Implementation Guide, section 3.1.1 Reason Codes & Definitions. Choose one of these reasons, even if your product variant has no GTIN.

Effective from

Optional. Enter the first date the variant was or will be available. This date is for analytics purposes only and must be on or before the Effective to date, if provided.

Effective to

Optional. Enter the last date the variant was or will be available. This date is for analytics purposes only and must be on or after the Effective from date, if provided.

Images

Images are optional. Each digital twin can have up to 25 images. For more information, see Manage Images.

Custom Attributes

Custom attributes are optional. They enable you to specify a label and a corresponding value, such as "flavor" and "strawberry." You can view them in Engage or get them programmatically using the Mobile REST API.

To create a custom attribute:

1   Click **Add attribute**. The section expands to display fields and controls for managing custom attributes.

2   Type an **Attribute label** for the custom attribute, such as "color," "flavor," or "edition."

> **Note**
> Attribute labels must be unique per digital twin. A twin can have only one custom attribute with the label "flavor," for example.

3   Enter the **Value** for the attribute. If the attribute label is "color," for example, the value might be "red" or "green."

4   To save the attribute label and value, click **Add**.

5   To remove an unwanted attribute, click **Delete** *<label>* **attribute**. The attribute is removed.

6   To add more custom attributes, repeat these steps.

Data Carriers

You can generate the data carrier now or select the option **Do not generate a data carrier** to do it later.

Generate data carriers from default settings

Engage creates the data carrier using the default settings configured for the account.

Generate data carriers from custom settings

Engage creates the QR code using the domain you choose from the **QR Code domain** drop-down list. GS1 members creating the data carrier for a product or variant digital twin can also choose the link format:

- **GS1 Digital Link**
- **Short URL**

Do not generate data carriers

Engage doesn't create the QR code. This option is available only while creating a digital twin. For instructions on creating a data carrier later, see Generate the Data Carrier.

7   Click **Create**. The *Digital Twin Created* view opens.

8   To see the details about the new digital twin, click its link. See Digital Twin Details View for more information about the screen.

Next Step

After you generate the QR code, you can download it. You can now add the digital twin to an engagement.

After you generate the data carrier, you can use the Digimarc Watermarking Plug-in to apply it to your artwork. To download the plug-in, click the Help icon and choose Digimarc Tools. You can get the documentation from within the plug-in.

Create a Promotional Asset Digital Twin

Like with creating a product or product variant digital twin, you create promotional asset digital twins from the *Digital Twins* view.

To create a promotional asset digital twin:

1   Click **Digital Twins** in the navigation pane. If you have existing digital twins, they're displayed.

Engagements

Analytics

Digital Twins   Digital Twins
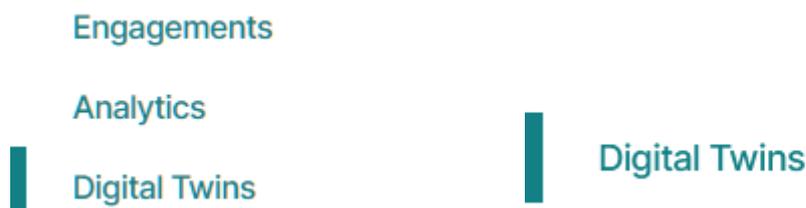
2   Click **Create digital twin**. The *Create Digital Twin* view opens.

3   Select **No, create a promotional asset digital twin**. The *Create Promotional Asset Digital Twin* view opens.

4   In each section, fill in as much information as you need for your engagements.

Promotional Asset Details

Description

A short description of the promotional asset. Descriptions can be up to 512 characters long and contain letters, numbers, and symbols.

Asset type

The type of asset you're creating, such as a poster, pamphlet, brochure, and so on. If the asset type you want isn't listed, type its name, click **Add <*asset type*>**, and confirm it on the *Add as New Value* dialog.

Promotional asset identifier

Optional. The identifier for the asset.

Brand

The brand name for the asset. If the brand you want isn't listed, type its name, click **Add <*brand*>**, and confirm it on the *Add as New Value* dialog.

Start date

Optional. The date the promotional asset was or will be first put into use. This date must be on or before the **End date**.

End date

Optional. The date the promotional asset was or will be removed from use. This date must be on or after the **Start date**.

Images

Each digital twin can have up to 25 images. See Add Images for detailed instructions.

Custom Attributes

Custom attributes are optional. They enable you to specify a label and a corresponding value, such as "flavor" and "strawberry."

To create a custom attribute:

1 Click **Add attribute**. The section expands to display fields and controls for managing custom attributes.

2 Type an **Attribute label** for the custom attribute, such as "color," "flavor," or "edition."

> **Note**
> Attribute labels must be unique per digital twin. A twin can have only one custom attribute with the label "flavor," for example.

3 Enter the **Value** for the attribute. If the attribute label is "color," for example, the value might be "red" or "green."

4 To save the attribute label and value, click **Add**.

5 To remove an unwanted attribute, click **Delete <*label*> attribute**. The attribute is removed.

6 To add more custom attributes, repeat these steps.

Related Digital Twins

You might find it helpful to link promotional assets to product or variant digital twins. To find a digital twin, see Find and View Digital Twins.

To add a related digital twin:

1   Click **Add digital twins**. The *Related Digital Twins* view opens.

2   To add a single digital twin, click **Add** next to the twin. Illuminate displays a success notice when the digital twin is added. Click the back arrow (<) in the page heading to return to the *Create Promotional Asset Digital Twin* view.

3   To add multiple digital twins, enable the check box for each digital twin to add. A small alert dialog, called a snackbar, opens near the bottom of the browser window. Click **Add** in the snackbar. Illuminate displays a success notice after the digital twins are added.

Data Carriers

You can generate the data carrier now or select the option **Do not generate a data carrier** to do it later.

Generate data carriers from default settings

Engage creates the data carrier using the default settings configured for the account.

Generate data carriers from custom settings

Engage creates the QR code using the domain you choose from the **QR Code domain** drop-down list. The link format for promotional assets is the short URL, regardless of the account's default link format.

Do not generate data carriers

Engage doesn't create the QR code. This option is available only while creating a digital twin. For instructions on creating a data carrier, see Generate the Data Carrier.

5   Click **Create**. The *Digital Twin Created* view opens.

6   To see the details about the new digital twin, click its link. See Digital Twin Details View for more information about the screen.

Next Step

After you generate the QR code, you can download it. You can now add the digital twin to an engagement.

After you generate the data carrier, you can use the Digimarc Watermarking Plug-in to apply it to your artwork. To download the plug-in, click the Help icon and choose Digimarc Tools. You can get the documentation from within the plug-in.

Import Digital Twins

You can use spreadsheet or CSV (comma-separated values) files to quickly import up to 2000 products, product variants, or promotional assets to create or update digital twins in a single operation.

> **Note**
> Because the Name of a promotional asset is the only mandatory unique field, you can't use the bulk import feature to rename existing promotional assets. Engage treats new names as assets to be created.

Download Templates

Engage offers templates you can download and fill in with the data for twins you want to create. You can also use the templates to update existing digital twins. For detailed information about the templates and the data you can import, see Templates for Bulk Import.

To download a template:

1 Click **Digital Twins** in the navigation pane to open the *Digital Twins* list view.

2 Click **Bulk import**. The *Import Digital Twins* view opens.

3 Click the download link for the template and format you want:
   - Spreadsheet file (.xlsx template)
   - Comma-separated values file (.csv template)

Import Products & Variants		Import Promotional Assets	
Download .xlsx template	Download .csv template	Download .xlsx template	Download .csv template
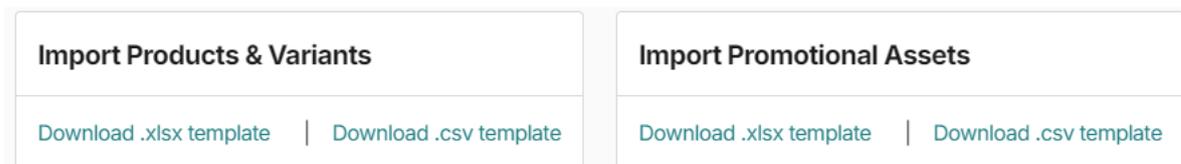
The template file is downloaded to your default `Downloads` folder.

4 Fill in the template with your product or asset data and save the completed spreadsheet or CSV file to a different location or file name. Don't use spaces in the file name.

> **Important**
> Leave the top rows of the template intact when filling in data. Because the template structure differs between the two formats (XLSX and CSV), don't convert one to the other before uploading. The import process requires the completed file to match the template layout.

Import Products, Variants, or Assets

When you import products, product variants, or promotional assets, a digital twin is created or updated on the Illuminate Platform for each row in the template. If a Product ID, Variant ID, or asset Name exists in Illuminate, the twin will be updated using the remaining fields in the file.

Notes

When updating a digital twin, removing optional field data in the file, such as net content or size, removes it from the digital twin's record in Illuminate.

Similarly, if you add custom attribute name/value pairs to a twin that already has the maximum number (12) of custom attributes, the most recent attributes are overwritten.

Multiple rows for a product, variant, or asset are ignored. You can't, for example, add multiple images by duplicating a row and changing only the Image URL field. To add more images, use the Engage user interface or do additional bulk import operations.

To import the completed XLSX or CSV file:

1   Click **Digital Twins** in the navigation pane to open the *Digital Twins* list view.

2   Click **Bulk import**. The *Import Digital Twins* view opens.

3   Click the **Import Products & Variants** tile or the **Import Promotional Assets** tile. The corresponding view opens.

4   On the *Import Products & Variants* or *Import Promotional Assets* view, click the hyperlinked text or **Upload** icon (⊡) to show the Open dialog, or drag the file and drop it onto the marked area.

Note
Ensure the file name doesn't contain spaces.

5   Engage evaluates the file contents to show how many digital twins will be updated and created and whether the file has any errors. Review the results to ensure the items will be imported as expected. If a new product type or brand will result, a warning is displayed.

Import Products & Variants

Bulk import guidelines

| | products-and-variants-batch3.csv | 3 items | 2 new items | 1 matches | ✕ |

⚠ Warnings

Warning type	New value	
New product type creation	Snacks	

⊗ To Create

Name	Brand	GTIN	Product Type	Type	
Gummy Sharks	DigiGrocery	00909091122564	Snacks	Product	
	DigiGrocery	00909091122564		Variant	

⊗ To Update

Name	Brand	GTIN	Product Type	Type	
Hot Delicious Buckwheat	DigiGrocery	00909091122342	Breakfast cereal	Product	

Upload

6   If Engage displays the **Errors in the File** tile, expand it to see the details. Multiple errors for the same row are displayed in the tooltip.

⊗ Errors in the File

Variant references product id that doesn't exist: 00909091122341; Invalid variant reason: MINOR_ARTWORKCHANGES

Row	Errors in row	Error	
3	2	Variant references product id that doesn't exist: 00909091122341 + 1 other error	

7   To make changes before continuing, click the **Close** icon (X) next to the file name and click **Discard current upload** in the dialog.

| | prod | | s | 0 matches | ✕ |

Discard the upload   ✕

Are you sure you want to leave the page? You've uploaded the file but have not started the process.

⊗ Errors

Discard current upload   Cancel

1 item

8   To continue with the import, click **Upload**. Engage extracts the information and creates or updates the digital twins. The screen changes to show you the results. You can see the created and updated items in the *Digital Twins* list view.

Find and View Digital Twins

As your list of digital twins grows, finding a specific digital twin becomes more challenging. For all digital twins, you can search by name or identifier, or you can use a filter.

- Find Product Digital Twins
- Find Product Variants
- Find Promotional Assets

For information about the digital twin's details, see Digital Twin Details View.

To find a digital twin by name or primary identifier:

1   Click **Digital Twins** in the navigation pane. Engage lists all the product and promotional asset digital twins in the account.

2   The **Products** tab is selected by default, listing product twins. Variant twins are listed in their parent product twin's record. To find promotional asset twins, click the **Promotional Assets** tab.

3   Type the twin's name or identifier in the search bar. Digital twins of the selected type matching the search string are listed.

4   Click the digital twin you want to view. For more information, see:
   - Digital Twins Overview Tab
   - Digital Twins Behavior Tab
   - Digital Twins Data Carriers Tab

Find Product Digital Twins

Besides searching by name or identifier, Engage provides filters to easily find product digital twins. For more information about using filters, see Filters.

To find product digital twins using a filter:

1   Click **Digital Twins** in the navigation pane. The Products tab is selected by default, listing all the product digital twins in the account.

2   Click the **Filter** icon (☰).

3   Click **Add Filter** and select the desired filter elements. See Digital Twin Filters for details.

4   Click **Apply**.

5   To further refine the results, you can apply additional filters.

> **Tip**
> To easily find these products in the future, you can bookmark the URL for the filtered list.

Find Product Variant Digital Twins

A product variant digital twin is automatically linked to its parent product digital twin by their shared primary identifier.

To find product variants:

1 Click **Digital Twins** in the navigation pane. The Products tab is selected by default, listing the product digital twins in the account.

2 Click the product digital twin whose variant you want to work with. The digital twin's detail view opens, displaying the number of product variants at the top.

Product digital twin	2 product variants	1 related promotional asset
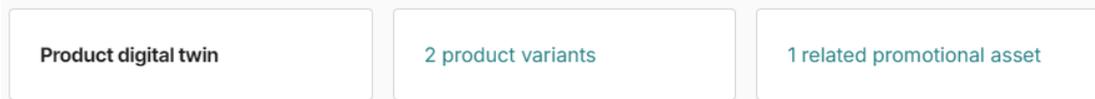
3 Click the number of product variants. Engage displays the expanded Related Product Variants list.

Related Product Variants			
Name	**GTIN**	**Last Updated** ↓	↗↙
Cilantro Rice Frozen Dinner - Winter Holiday	00856107006854	12 Jul 24	
Cilantro Rice Frozen Dinner - 2024 Olympics	00856107006854	12 Jul 24	

4 Click the variant you want to view.

Find Promotional Asset Digital Twins

Besides searching by name, Engage provides two additional ways to find promotional asset digital twins:

- From the product digital twin
- Using a filter

For more information about using filters, see Filters.

These instructions assume the product or variant digital twin has been added to the promotional asset twin as a related digital twin.

To find promotional assets from a product or variant twin:

1 Click **Digital Twins** in the navigation pane. Engage lists all the digital twins in the account. The Products tab is selected by default.

2 Click the product digital twin whose promotional asset you want to work with. The digital twin's detail view opens, displaying the number of promotional assets at the top.

Product digital twin	2 product variants	1 related promotional asset
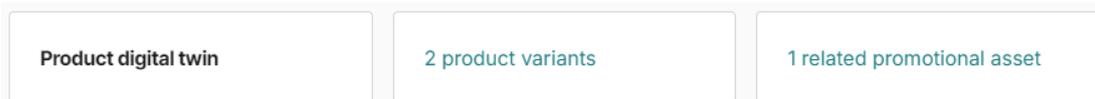
3 If the promotional asset you want to work with is linked only to a product variant digital twin, first click the relevant variant twin to see its related promotional assets.

Product variant digital twin of: Organic Strawberries	1 related promotional asset
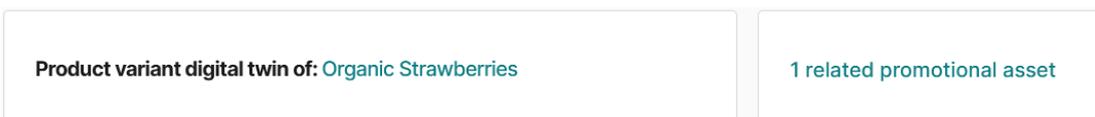
4 Click the number of related promotional assets at the top of the screen. Engage displays the expanded Related Promotional Assets section.

Related Promotional Assets		Add promotional assets
☐ Name	Last Updated ↓	⤡
☐ Organic Strawberries Banner Ad 600×40	22 Jan 24	Remove
☐ Strawberry Hero	09 Nov 23	Remove

5 Click the asset you want to view.
   - For information about the fields in the detail view, see Digital Twin Details View.
   - For instructions on adding or removing promotional assets, see Add or Remove a Related Digital Twin.

To find promotional assets using a filter:

1 Click **Digital Twins** in the navigation pane. Engage lists the digital twins in the account. The Products tab is selected by default.

2 Click the **Promotional Assets** tab.

3 Click the **Filter** icon (▼).

4 Click **Add Filter** and select the desired filter elements. See Digital Twin Filters for details.

5 To further refine the results, you can apply additional filters.

6 Click **Apply**.

> **Tip**
> To easily find the promotional assets in the future, you can save or bookmark the URL for the filtered list.

7 Click the asset you want to view.

Edit a Digital Twin

You can edit a digital twin at any time, whether it's part of an active engagement or not. Changes you make are effective immediately. The process for editing a digital twin is the same for all digital twin types.

To change the details for a digital twin:

1 Click **Digital Twins** in the navigation pane.

2 Click the digital twin you want to work with. For help finding a digital twin, see Find and View Digital Twins. The digital twin's detail view opens.

3 Click **Edit** for the section you want to change. See Digital Twin Details View for information about the fields in each section.

4 Click **Save** after editing each section.

5 To create or download a data carrier, click the Data Carriers tab at the top of the view.

Add or Remove a Related Digital Twin

By linking promotional asset digital twins to product or variant twins, you can see and manage the relationship from both the promotional asset twin's detail view and the product or variant twin's detail view.

There are two ways to add the link:

- from the promotional asset digital twin
- from the product or variant digital twin

You can also remove the association between a product or variant digital twin and their linked promotional assets:

- from the promotional asset digital twin
- from the product or variant digital twin

Add Related Digital Twins

To add a product or variant from a promotional asset digital twin:

1 From the Digital Twins list view, select the promotional asset you want to work with. For help finding a promotional asset, see Find and View Digital Twins.

2 Scroll to the *Related Digital Twins* section.

3 Click **Add digital twins**. The product and variant digital twins are displayed in a list.

4 Find the digital twins to add:

    4.1 To search for a digital twin, enter its name or primary identifier (such as its GTIN or SKU) in the search field.

    4.2 To narrow the list, click the **Filter** icon (≡), click **Add Filter**, and choose the filter. See Filters for more information.
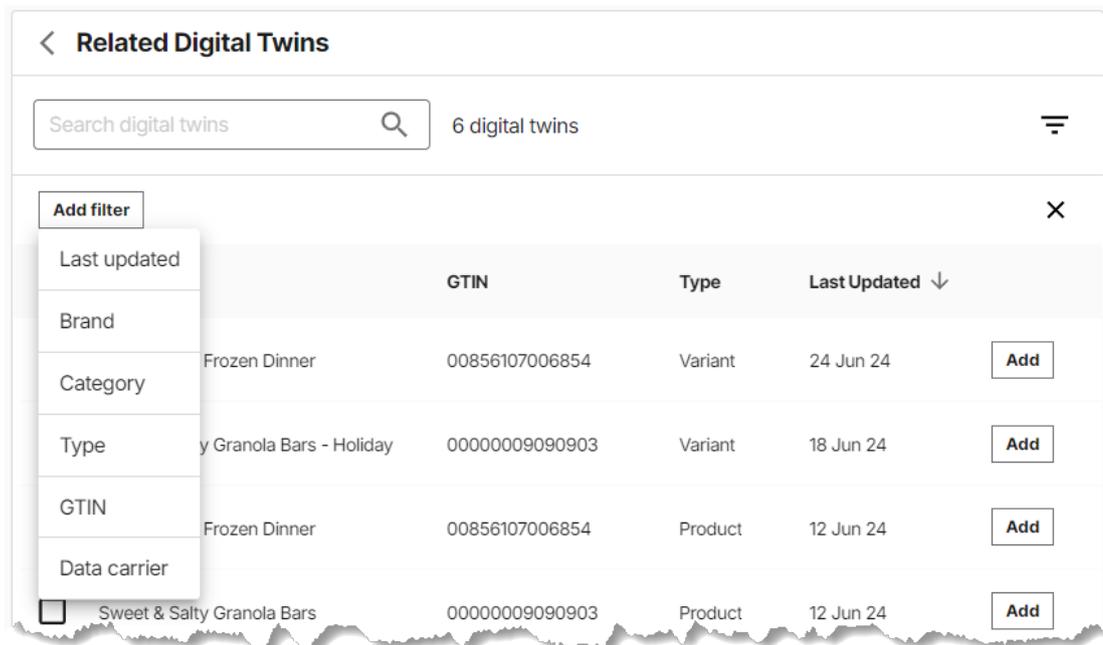
5 To add a single digital twin, click **Add** next to it. Engage displays a success notice when the related digital twin is added.

6 To add multiple digital twins, enable the check box for each product or variant twin to add. A small alert dialog, called a snackbar, opens near the bottom of the browser window. Click **Add** in the snackbar. Engage displays a success notice after the related digital twins are added.

7 To return to the previous screen, click the **Back** icon (〈) in the view's title bar.

To add a promotional asset from a product or variant digital twin:

1 From the Digital Twins list view, select the product or variant digital twin you want to work with. For help finding a digital twin, see Find and View Digital Twins.

2 Scroll to the *Related Promotional Assets* section.

3 Click **Add promotional assets**. The promotional asset digital twins are displayed in a list.

3.1 To add a single promotional asset, click **Add** next to it. Engage displays a success notice when the promotional asset twin is added.

3.2 To add multiple promotional assets, enable the check box for each promotional asset digital twin to add. A small alert dialog, called a snackbar, opens near the bottom of the browser window. Click **Add** in the snackbar. Engage displays a success notice after the asset twins are added.

4 To return to the previous screen, click the **Back** icon (〈) in the view's title bar.
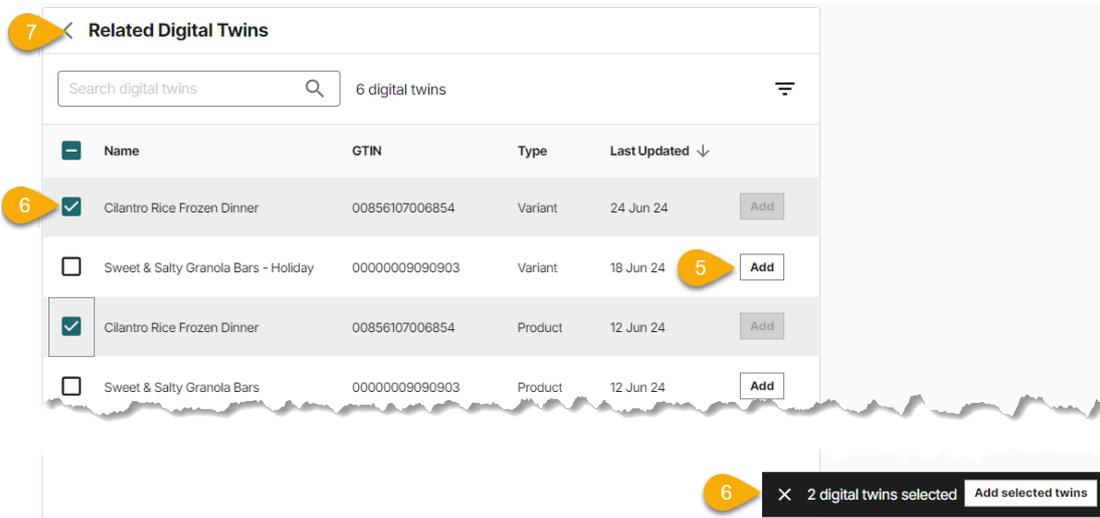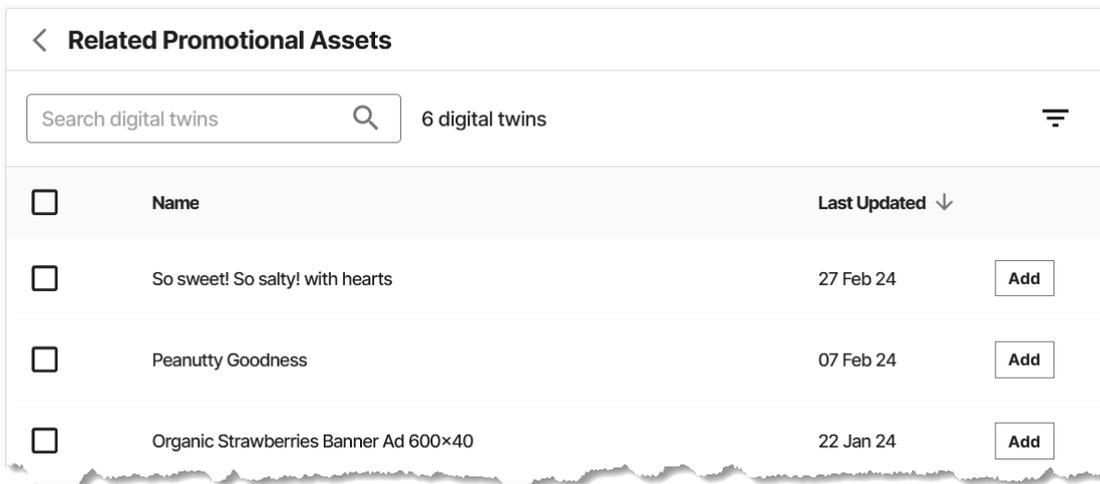
Remove Related Digital Twins

To remove a product or variant from a promotional asset digital twin:

1   From the Digital Twins list view, select the promotional asset you want to work with. For help finding a promotional asset, see Find and View Digital Twins.

2   Scroll to the *Related Digital Twins* section.

3   Click the **Expand** icon (↗) to view the list of related digital twins.

    3.1   To remove a single product or variant digital twin, click **Remove** next to it. Engage displays a success notice when the digital twin is removed.

    3.2   To remove multiple product or variant digital twins, enable the check box for each product or variant digital twin to remove. A small alert dialog, called a snackbar, opens near the bottom of the browser window. Click **Remove** in the snackbar. Engage displays a success notice after the digital twins are removed.

To remove a promotional asset from a product or variant digital twin:

1   From the Digital Twins list view, select the product or variant digital twin you want to work with. For help finding a digital twin, see Find and View Digital Twins.

2   Scroll to the *Related Promotional Assets* section.

Related Promotional Assets		Add promotional assets
☐ **Name**	Last Updated ↓	↙↗
☐ Organic Strawberries Banner Ad 600×40	22 Jan 24	Remove
☐ Strawberry Hero	09 Nov 23	Remove

3   Click the **Expand** icon (↗) to view the list of related promotional assets.

    3.1   To remove a single promotional asset, click **Remove** next to it. Engage displays a success notice when the asset twin is removed.

    3.2   To remove multiple promotional assets, enable the check box for each asset digital twin to remove. A small alert dialog, called a snackbar, opens near the bottom of the browser window. Click **Remove** in the snackbar. Engage displays a success notice after the asset twins are removed.

Manage Images

Each digital twin can have up to 25 images associated with it.

- To add images, see Add Images.
- To edit or download images or to select an image as the default, see Edit Images.
- To remove images, see Remove Images.

Add Images

Each digital twin can have up to twenty-five (25) images, with one marked as the default. You can click **Show guidelines** to display the requirements for each image.

The images you add to a digital twin aren't watermarked. They're intended to help you identify specific products or variants. To watermark images, add the Validate Media subscription to your account.

Before You Begin

If you're adding images to an existing digital twin, see [Find and View Digital Twins](#) for instructions on finding and viewing a twin.

To add images:

1   Scroll to the *Images* tile. If you're adding images to an existing digital twin, click **Edit**. The *Images* tile displays the controls for uploading them.
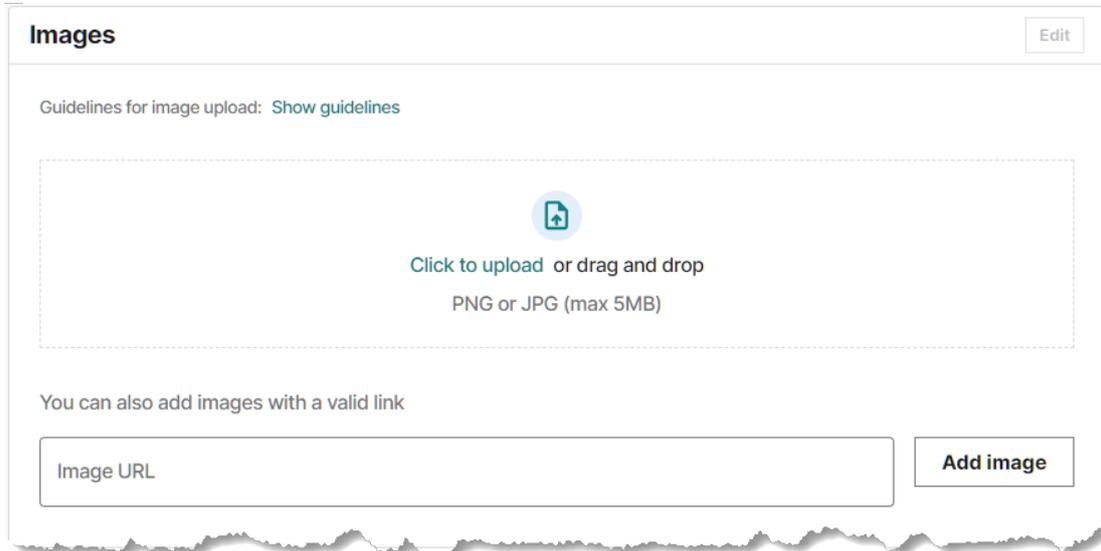
2   To see or hide the image requirements, click **Show guidelines** or **Hide guidelines**.

3   To upload an image from your computer, click the hyperlinked text or **Upload** icon (⬆), or drag the image and drop it onto the marked area. You can upload multiple images at a time.

> **Note**
> Image file names must be unique for each digital twin. If you upload an image with a duplicate file name, Illuminate appends a numeric value to the new file name to differentiate it.

4   To use a web-hosted image, paste the URL for the image in the **Image URL** text box and click **Add image**. The image must be on a secure website (accessed using `https`). Repeat this step for each image URL you want to add.

> **Note**
> If the image URL lacks a file name extension, Illuminate displays an error. If you know the file type, download the image, ensure it has the proper file name extension, and upload it from your computer. Show the image guidelines for more information.

5   One image is automatically marked as the default image. To set a different image as the default, select its thumbnail and enable the **Default image** toggle (◉). To change this later, see [Edit Images](#).

6   If you want to cancel the upload for an image, click its **Remove** icon (🗑) before you save.

> **Tip**
> You can add and remove images in the same operation. For more information about removing images, see [Remove Images](#).

7 For new digital twins, complete the remaining sections as needed and click **Create**.

8 For existing digital twins:

8.1 To cancel the entire upload operation, click **Cancel**. None of the images are uploaded.

8.2 To save the images, click **Save**.

The images are uploaded or retrieved and added to the digital twin. A thumbnail is automatically created for each image.

> **Important**
> You can navigate away from the page while images upload, but don't close the browser tab or window until the upload process is complete.

Edit Images

You can download, add, and remove images at anytime. If a digital twin has two or more images, one must be set as the default image.

To download an image, click its thumbnail and then click **Download image**.

Before You Begin

See Find and View Digital Twins for instructions on finding and viewing a twin.

To edit images:

1 Click **Edit** in the *Images* tile. The default image and its file name are displayed.
   - To add images, see Add Images.
   - To remove images, see Remove Images.

2 To set a different image as the default, select its thumbnail and click **Default image** (◎) to enable it. The previously designated default image is no longer the default.

3 To save changes, click **Save**. If you instead click **Cancel**, none of the changes are saved.

Remove Images

You can remove unwanted images from a digital twin, enabling you to replace them if needed.

Before You Begin

See Find and View Digital Twins for instructions on finding and viewing a twin.

To remove images:

1 Click **Digital Twins** in the navigation pane.

2 Click the digital twin you want to work with. For help finding a digital twin, see Find and View Digital Twins. The digital twin's detail view opens.

3   In the *Images* tile, click **Edit**.

4   Click the **Remove** icon (🗑) below each unwanted thumbnail image. The file is removed from the screen but hasn't been deleted yet.

> **Note**
>
> For digital twins with multiple images, one must be specified as the default. If you want to delete the default image, first set another image as the default by selecting its thumbnail and clicking **Default image (◎)** to turn it on. For more information, see Edit Images.

5   Click **Save**. Illuminate asks you to confirm you want to delete the marked images. If you instead click **Cancel**, the images are restored.

6   Click **Delete** on the *Confirm Deletion* dialog. The images selected for removal are permanently deleted. If you instead click **Cancel**, the save operation is canceled, but images aren't restored to the screen.

> **Tip**
>
> You can add and remove images in the same operation. See Add Images for instructions on adding images.

Generate the Data Carrier

Each digital twin needs a data carrier to provide the graphic element for consumers to scan. For Engage, the data carrier type is always QR code. You can generate the data carrier for a new digital twin when you create it, or you can add it later. The content and location of the options pane varies depending on when you generate the data carrier.

Before You Begin

To generate a data carrier, you must have a digital twin to work with, whether it's new (in progress) or has already been saved.

To generate a QR code for a new digital twin:

To generate a digital watermark for a new digital twin:

1. In the *Data Carriers* section, click **Generate data carrier from default settings** or **Generate data carrier from custom settings**. The default settings are managed by your Account Admin.

2. If you select the custom settings option:

   2.1 Choose a domain from the **QR code domain** drop-down list. The domain is a URL embedded in the QR code that serves as the starting point for your engagements. Some accounts have only one domain configured.

   2.2 Choose the link format. For GS1 member companies, you can choose GS1 Digital Link or Short URL. For non-GS1 companies, only the Short URL is available.

   > **Note**
   > The GS1 Digital Link format is available only for product and variant digital twins.
   > Promotional asset digital twins use the Short URL link format.

3. Click **Create**. Engage saves the digital twin and generates the data carrier.

To download the QR code image file, you can:

- Click **Download QR code**.
- Click the link for the new digital twin and click **Download data carrier** on the *Data carriers* tab.

To generate a QR code for an existing digital twin:

To generate a digital watermark for an existing digital twin:

1 Click **Digital Twins** in the navigation pane.

2 Click the digital twin you want to work with. The digital twin's detail view opens. See Digital Twin Settings View.

3 Click the **Data carriers** tab.

4 Click **Create data carrier**.

5 Enable **Digital watermark**.

6 Enable **QR code**.

    6.1 Choose a domain from the **QR code domain** drop-down list, if applicable. The domain is a URL embedded in the QR code that serves as the starting point for your engagements. Some accounts have only one domain.

    6.2 Choose the **data carrier format**. For GS1 member companies, you can choose GS1 Digital Link or Short URL. For non-GS1 companies, only the Short URL is available.

> **Note**
> The GS1 Digital Link format is available only for product and variant digital twins. Promotional asset digital twins use the Short URL link format.

7 Click **Create**.

Next Step

After you generate the QR code, you can download it. You can now add the digital twin to an engagement.

After you generate the data carrier, you can use the Digimarc Watermarking Plug-in to apply it to your artwork. To download the plug-in, click the Help icon and choose Digimarc Tools. You can get the documentation from within the plug-in.

Download the Data Carrier

After you generate the QR code for your digital twin, you download the QR code image that your production team puts on the product's package, hang tag, label, or promotional asset.

Before You Begin

Before you can download the data carrier, you must first create a digital twin and generate the QR code.

To download the data carrier:

1 Click **Digital Twins** in the navigation pane.

2 Click the digital twin you want to work with. For help finding a digital twin, see Find and View Digital Twins. The digital twin's detail view opens.

3 Click the **Data carriers** tab at the top of the view.

4 Click **Download data carrier**. The file is saved to your default downloads folder.

Manage Engagements

This section describes how to create and manage engagements. For more information about engagements, see What's an Engagement?.

Create an Engagement

You create engagements for products based on a particular consumer interaction type.

To create an engagement:

1 Click **Engagements** in the navigation pane. Engage displays the existing engagements.

Engagements

Analytics

Digital Twins

2 Click **Create engagement**. The *Engagement Type* view opens and provides the following options:

Simple engagement

All consumers are directed to the same web destination.

Scan country

Consumers are directed to a web destination based on their current location.

Device language

Consumers are directed to a web destination based on the device's language setting.

Country and language

Consumers are directed to a web destination based on their current location and the device's language.

Custom engagement

Consumers are directed to a web destination based on the selected parameters, such as digital twins, countries, and languages.

3 Click the type of engagement to create. The *Engagement Name* dialog opens.

> **Note**
> After it's set, the engagement type can't be changed.

4   Enter a name for the engagement and click **Create**. The engagement's details view opens with the
    engagement in DRAFT status. For detailed information about this screen, see Engagement Details View.

Add a Digital Twin to an Engagement

Adding a digital twin connects the product to the user experience that's defined by the engagement. You can add
any type of digital twin to an engagement.

Before You Begin

Be sure you've created a digital twin that has a QR code and an engagement.

To select an engagement:

1   Click **Engagements** in the navigation pane.

2   Click the engagement you want to work with. The engagement's details view opens.

To add a digital twin to an engagement:

1 Click **Add Digital Twins**. The *Add Digital Twins* view opens, listing the digital twins available in the account.

> **Note**
> Digital twins that lack a data carrier aren't displayed in the list. See Generate the Data Carrier to add a data carrier.
> If any of the digital twins in the engagement belong to an *active* engagement, Engage displays an alert. Expand the view to show the digital twins. The digital twin that prompted the alert is displayed in red text. See Troubleshooting for more information.
>
>
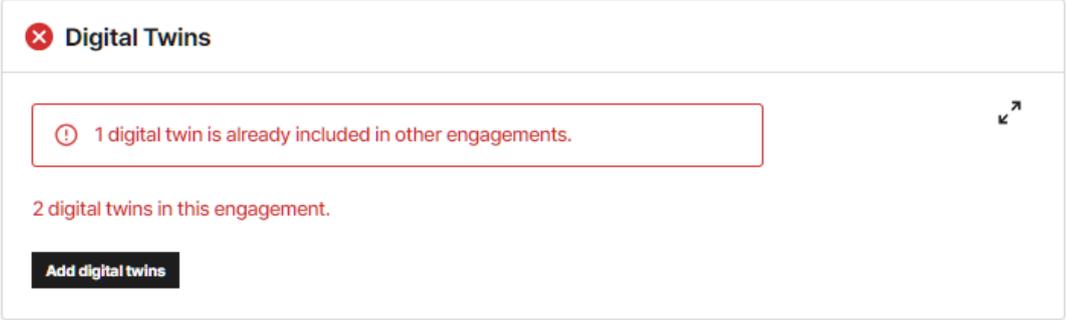
2 Find the desired digital twins:

   • To search for a digital twin, enter its name or primary identifier (such as its GTIN or SKU) in the search field.

   • To narrow the list, click the **Filter** icon (⇥), click **Add Filter**, and choose whether to filter by **Brand** or **Type**. A dialog opens to display additional options. See Filters for more information.

      - For Brand, choose **is one of** or **is not one of** and select the brands to include or exclude.

      - For Type, choose **Product, Product variant,** or **Promotional asset**.
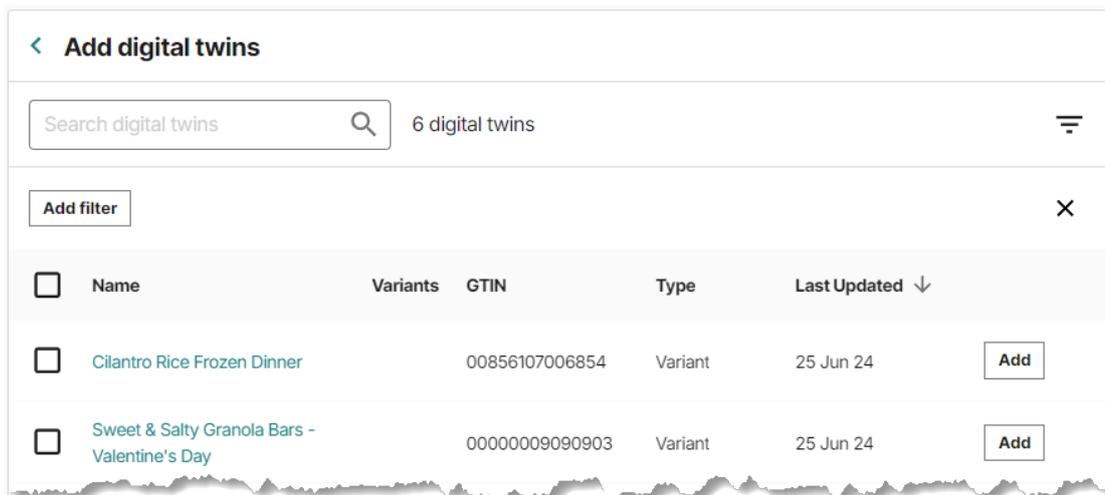
3 To add a single digital twin, click **Add** next to the twin. Engage displays a success notice when the digital twin is added.

4 To add multiple digital twins, enable the check box for each digital twin to add. A small alert dialog, called a snackbar, opens near the bottom of the browser window. Click **Add** in the snackbar. Engage displays a success notice after the digital twins are added.
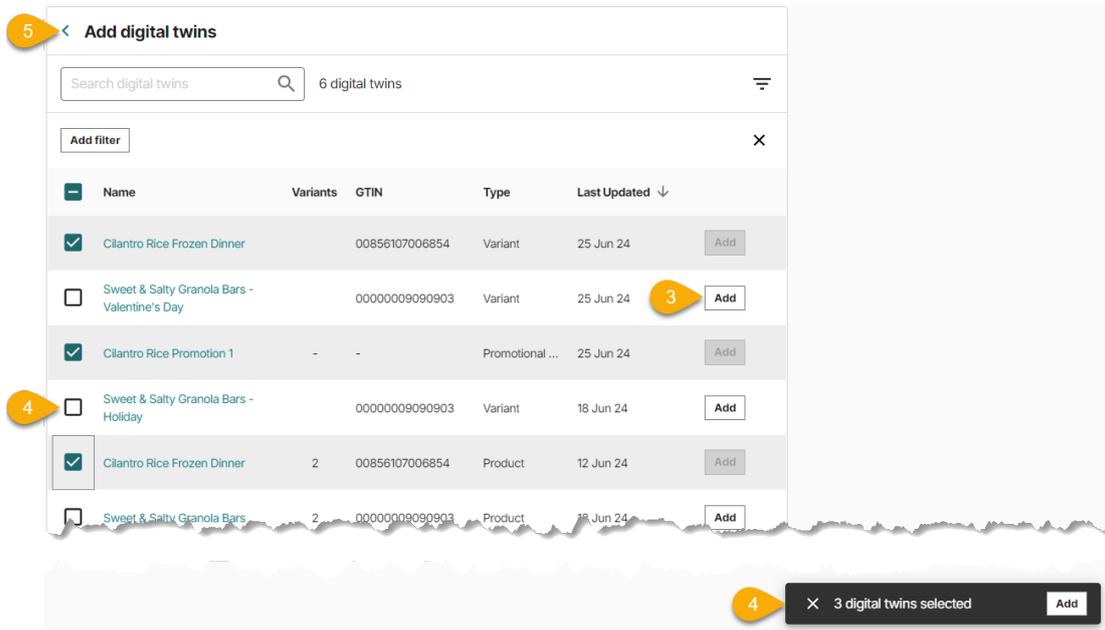
5 To return to the previous screen, click the **Back** icon (〈) in the view's title bar.

Next Step

After you add digital twins to the engagement, you can Set the Scan Destination.

Remove a Digital Twin from an Engagement

Removing a digital twin from an engagement deletes the association between the digital twin (and its data carriers) and the engagement (and its scan destinations). The digital twin itself isn't deleted and can be added to other engagements.

> **Notes**
> This function isn't available on device screens smaller than 601 x 1280 px. See Device Requirements. The only digital twin in an active engagement can't be removed without first deactivating the engagement. If you try to remove the last twin, a dialog opens to warn you that the engagement will be deactivated if you continue.
>
> **Confirm Deactivation**   ✕
>
> Please confirm that you wish to deactivate this engagement:
>
> **Simple**
>
> [Deactivate engagement]   [Cancel]

To begin:

1 Click **Engagements** in the navigation pane.

2 Click the engagement you want to work with. The engagement's details view opens.

To remove a digital twin from an engagement:
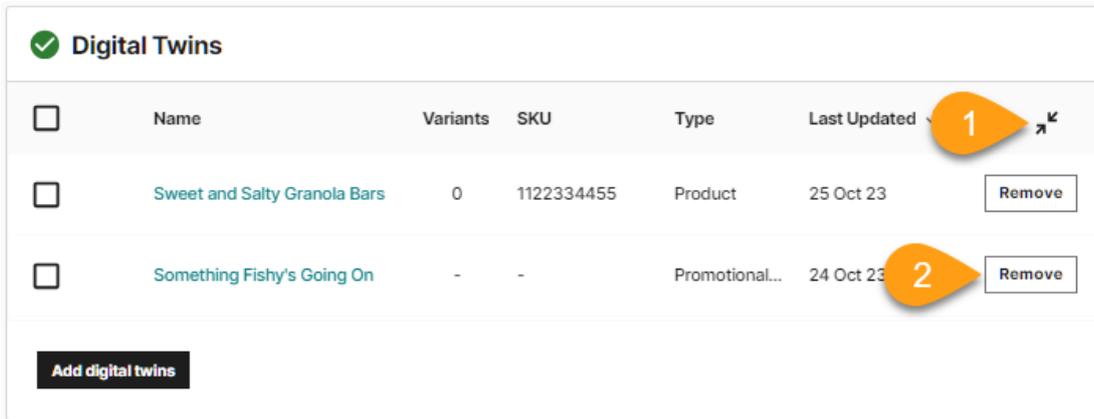
1   Click the **Expand** icon (↗) to view the list of digital twins.

2   Click **Remove** next to the unwanted digital twin.

To remove multiple digital twins at once:
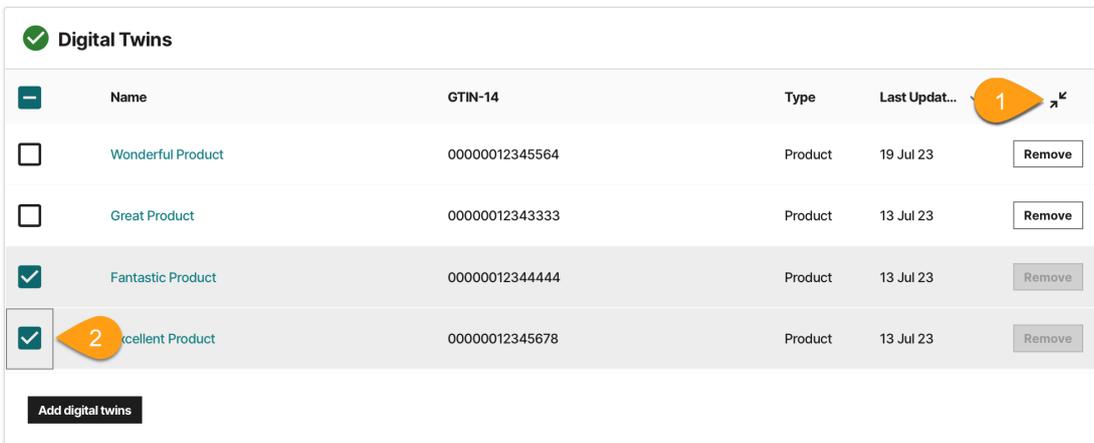
1   Click the **Expand** icon (↗) to view the list of digital twins.

2   Enable the check box next to each unwanted digital twin. A small alert dialog, called a snackbar, near the bottom of the browser window shows the number of digital twins selected.

3   Click **Remove** on the snackbar.

Set the Scan Destination

The scan destination is the website (URL) where Engage sends consumers after they scan a product's QR code. Each engagement has at least one scan destination, but some engagement types can have multiple. For detailed information about this screen, see Scan Destinations.

How you set scan destinations depends on the type of engagement:

- Simple engagements
- Scan country engagements
- Device language engagements
- Country and language engagements
- Custom engagements

Before You Begin

You must have an engagement to work with, whether you're in the process of [creating one](#) or you're [editing one](#). If you're creating a custom engagement, all digital twins used for a scan destination must already be in the engagement. See [Add a Digital Twin to an Engagement](#).

1   Click **Engagements** from the navigation pane. The *Engagements* view opens.

2   Click the engagement you want to work with. The engagement's detail view opens.

Notes

All fields displayed in the *Scan Destinations* tile are required.

To use dynamic data in the destination URLs, see [Using Dynamic Variables in URLs](#).

Tip

Scan destinations can be on any domain; they aren't necessarily on the same domain that Engage uses to create the data carrier.

For simple engagements:

Simple engagements have a single scan destination without country or language options.
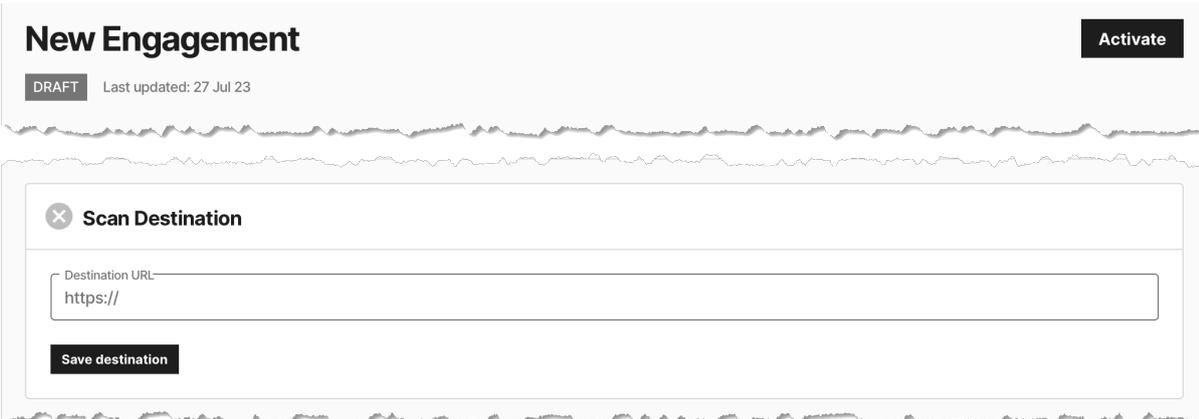
1   In the *Scan Destination* tile, enter the **Destination URL**.

2   Click **Save destination**.

For scan country engagements:

Scan country engagements can have up to 25 scan destinations, each with a specified country.

1 In the *Scan Destinations* tile, select the **country** for the engagement.

2 Type a **Destination URL** for the selected country.

3 *Optional*: Click **Add scan destination** to add more countries and destination URLs.

4 To remove an unwanted scan destination, click its **Close** icon (✕).

5 Enter a **Destination URL** for unmatched countries.

6 Click **Save destinations**.

For device language engagements:

Device language engagements can have up to 25 scan destinations, each with a specified language.

1   In the *Scan Destinations* tile, select the device language for the engagement.

2   Type a **Destination URL** for the selected language.

3   *Optional*: Click **Add scan destination** to add more languages and destination URLs.

4   To remove an unwanted scan destination, click its **Close** icon (✕).

5   Enter a **Destination URL** for unmatched languages.

6   Click **Save destinations**.

For country and language engagements:

Country and language engagements can have up to 25 scan destinations, each with a unique combination of country and language.

1　In the *Scan Destinations* tile, select the **country** for the engagement.

2　Select the **Language** for the engagement.

3　Type a **Destination URL** for the selected country and language combination.

4　*Optional*: Click **Add scan destination** to add more country, language, and destination URL combinations.

5　To remove an unwanted scan destination, click its **Close** icon (✕).

6　Enter a **Destination URL** for unmatched conditions.

7　Click **Save destinations**.

For custom engagements:

Custom engagements can have up to 25 scan destinations, each with a unique combination of country, language, and digital twin.
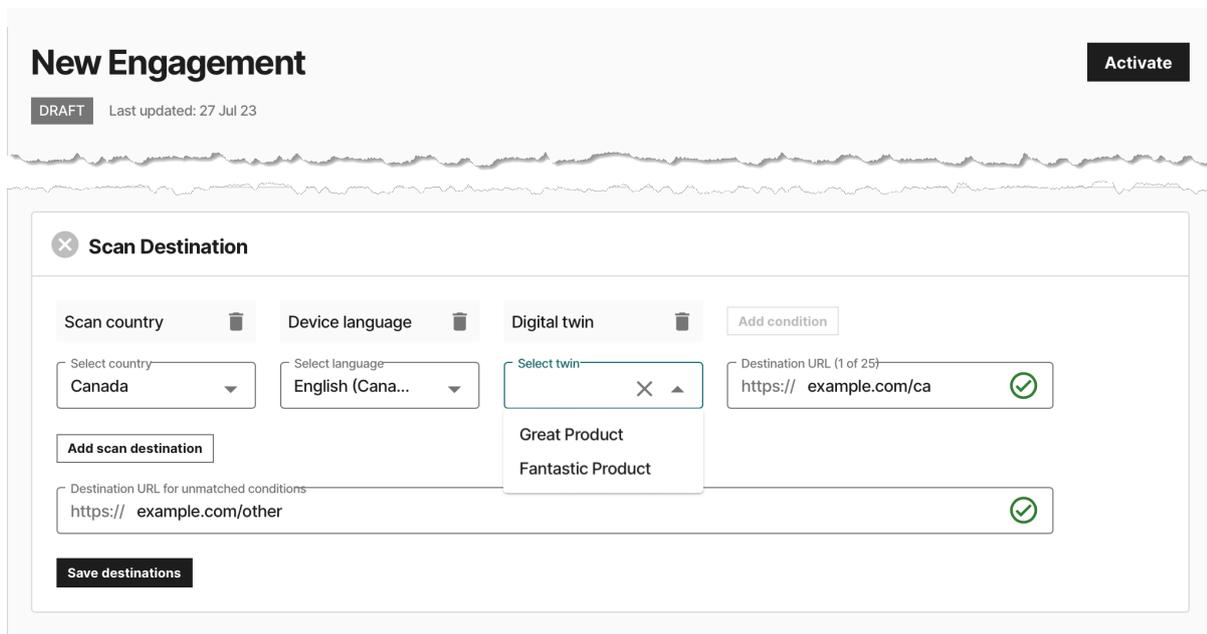
1　In the *Custom Scan Destinations* tile, click **Add condition** and choose the conditions to add:

- Scan country
- Digital twin
- Device language

You can add them in any order.

2　For each condition added, select the desired value in the corresponding drop-down list.

> **Note**
> You must add a digital twin to the engagement before you can include it as a condition in scan destinations. See Add a Digital Twin to an Engagement.

3　Enter a **Destination URL** for the condition.

4　*Optional*: Click **Add scan destination** to add more digital twin, country, language, and destination URL combinations. Each engagement can have up to 25 scan destinations.

5   To remove an unwanted scan destination, click its **Close** icon (✕).
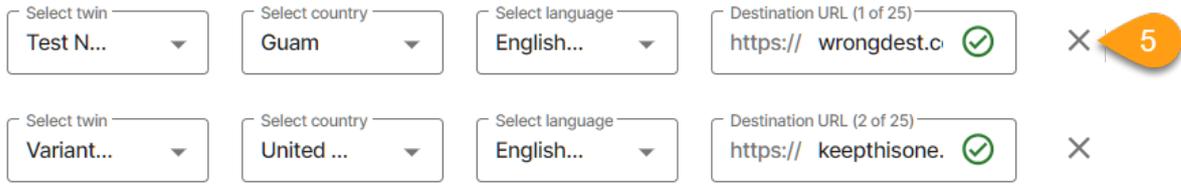
6   Enter a **Destination URL** for unmatched conditions. For digital twin, country, and language combinations that don't have a scan destination, consumer scans open the unmatched destination URL.

7   Click **Save destinations**.

Configure Data Collection and Tracking

By adding an optional JavaScript tracking code to the destination web page, you can collect data about new and returning consumers. For detailed information about this screen, see Data Collection and Tracking View.

To add the tracking code:

1   Click **Engagements** in the navigation pane. Engage displays the list of engagements.

2   Click the engagement you want to work with. The engagement's details view opens.

3   In the *Data collection and tracking* section, click **Configure**. The *Data Collection and Tracking* view opens.
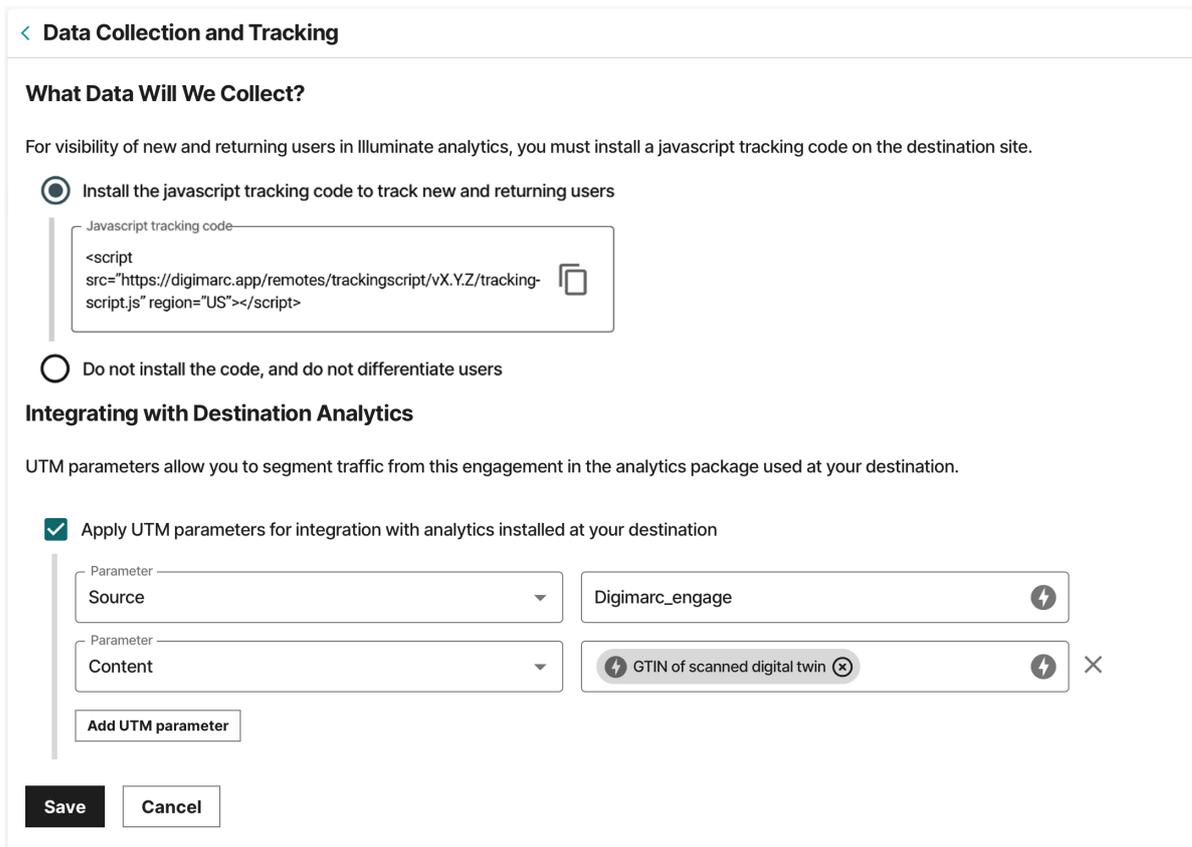
4   To collect metrics about whether consumers are new or returning, select the option to **Install the JavaScript tracking code**. Engage displays the JavaScript code snippet for you to copy. Your team must add the script snippet to the <head> section of each destination web page in each engagement for which you want to capture the data. For details, see Integrate the Tracking Code.

> **Important**
> To comply with privacy regulations, you must integrate this tracking script with your Consent Management Platform (CMP). This ensures that visitor tracking occurs only after receiving the necessary consent from your consumers. The process for integrating the script varies from one CMP to another and is beyond the scope of this document. For assistance, contact Digimarc support.

5   If you don't want to track new and returning consumers, select the option not to install the JavaScript code. Engage still captures other data points, such as device location and language.

6   If you use a third-party analytics tool on your web pages to gather information about visitors, Engage gives you the means to integrate that data collection with the Illuminate Platform. To use Urchin Tracking Module (UTM) parameters to segment traffic from this engagement in the analytics tool used by your website, enable **Apply UTM parameters**. The view expands to show new fields.

   6.1   Add the parameter you want to use by selecting it from the **Parameter** drop-down list.

   6.2   Enter the value for the selected parameter or click the options icon ( ) to choose a variable. A list opens to display the variable options:
   - GTIN (or other primary identifier) of scanned digital twin
   - Internal ID of scanned digital twin
   - Brand of scanned digital twin
   - Name of scanned digital twin

   6.3   To add another UTM parameter, click **Add UTM parameter** and repeat the two previous steps.

7   Click **Save**.

Next Step

After you add digital twins, set scan destinations, and configure data collection, you can activate the engagement.

Using Dynamic Variables in URLs

Urchin Tracking Module (UTM) parameters in a URL identify the marketing campaign that refers traffic to a destination website. Engage enables you to include UTM parameters to segment traffic from an engagement. We also provide dynamic variables that, if used, are appended to the destination URL when a consumer is redirected.

> **Tip**
> These variables are provided for the convenience of users whose marketing analytics system uses UTM parameters to track campaigns across multiple channels.

Available variables are:

- GTIN or other primary identifier of scanned digital twin
- Internal ID of scanned digital twin
- Brand of scanned digital twin
- Name of scanned digital twin

The use of these variables is optional. You can enter plain text values or use a variable for any of the UTM parameters.

Example UTM parameter values

Parameter	Purpose	Example Value
Source `utm_source`	Identifies the website that sent the traffic.	`digimarc_engage`
Medium `utm_medium`	Identifies the type of link that was clicked.	`cpc`
Campaign `utm_campaign`	Identifies a product promotion or strategic campaign.	`MLK_holiday_sale`
Term `utm_term`	Identifies search terms.	`mechanical+pencil`
Content `utm_content`	Identifies what was clicked to bring the user to the site.	`<internal ID of scanned digital twin>`

An example of a destination URL with the dynamic variable shown in the table is:

`https://www.example.com/destination1?utm_source=digimarc_engage&utm_content=`
`f3f1b20d-4c3b-44c7-b0a7-9afca7ee9aea`

Integrate the Tracking Code

To collect metrics about whether consumers are new or returning, you must install the JavaScript tracking code on your engagements' scan and unmatched destination pages. These steps are done by your technical team.

> **Important**
> To comply with privacy regulations, you must integrate this tracking script with your Consent Management Platform (CMP). This ensures that visitor tracking occurs only after receiving the necessary consent from your consumers. The process for integrating the script varies from one CMP to another and is beyond the scope of this document. For assistance, contact Digimarc support.

To integrate the tracking code:

1. Copy the JavaScript code snippet from the engagement's *Data Collection and Tracking* view. The tracking code snippet is the same for all engagements in the region (US or EU).

2. Paste the snippet in the <head> section of each destination web page used in the engagement.

3. Integrate your CMP with the Engage tracking script. When the tracking script loads, it begins emitting a `TRACKING_SCRIPT_INITIALIZATION_PING` event every 100ms.

4. After your destination loads, you must listen for the initialization ping event and emit a corresponding `TRACKING_SCRIPT_INITIALIZATION_PONG` event to complete initialization and clear the interval.

5. Communicate the consent status to the Engage tracking script:
   - Consent granted: `ENGAGE_CONSENT_GRANTED`
   - Consent rejected or revoked: `ENGAGE_CONSENT_REVOKED`

   This must be done on every scan. Engage makes no assumptions about whether consent was granted.

> **Note**
> You don't need to ask for consent on every scan, but you must communicate the consent status to the tracking script on every scan.

Example

```javascript
// Call this function after an initialization ping is received from the
// tracking script.
//
// Because there's no guarantee whether the destination or the tracking
// script will load first, the tracking script will send a ping every
// 100ms until it receives a corresponding pong.
function trackingScriptInitialized() {
  // Dispatching a pong event will tell the tracking script that
  // initialization is complete, and it can clear its interval.
  window.dispatchEvent(
    new Event('TRACKING_SCRIPT_INITIALIZATION_PONG')
  );

  // ------------------------------------------------------------------
  // Logic for requesting/retrieving consumer's tracking consent goes here
  // ------------------------------------------------------------------

  if (consentToTracking) {
    // Tells the tracking script that consent has been given or consent
    // still exists for the tracking.
    window.dispatchEvent(
      new Event('ENGAGE_CONSENT_GRANTED')
    );
  } else {
    // Tells the tracking script that consent was not given, or consent
    // has been revoked for tracking.
    window.dispatchEvent(
      new Event('ENGAGE_CONSENT_REVOKED'));
  }

  // Clean up the event listener to prevent additional events from being
  // fired.
  window.removeEventListener(
    'TRACKING_SCRIPT_INITIALIZATION_PING',
    trackingScriptInitialized
  );
}

// Add an event listener for the initialization ping
window.addEventListener(
  'TRACKING_SCRIPT_INITIALIZATION_PING',
  trackingScriptInitialized
);
```

Edit an Engagement

From the engagement's details view, you can edit the details for an engagement. You can also deactivate an engagement.

> **Notes**
> This function isn't available on device screens smaller than 601 x 1280 px. See Device Requirements. The engagement's type can't be changed. If you want a different engagement type, create another engagement and select the desired type.

To edit an engagement:

1 Click **Engagements** from the navigation pane. The *Engagements* list view opens.

2 Click the engagement you want to edit. The engagement's details view opens. Make the desired changes:

    2.1 To rename the engagement, click the edit icon (✎) next to the last updated date and status. On the *Engagement Name* dialog, change the engagement name as desired and click **Save**.

    2.2 To add one or more digital twins, see Add a Digital Twin to an Engagement.

    2.3 To remove one or more digital twins, see Remove a Digital Twin from an Engagement.

    2.4 To add, remove, or edit a scan destination, country, language, or digital twin, use the controls in the *Scan destination* section.

    2.5 To change the data collection and tracking options, see Configure Data Collection and Tracking.

    2.6 To deactivate an engagement, see Activate or Deactivate an Engagement.

Activate or Deactivate an Engagement

When you're ready to start redirecting consumers, you activate the engagement. When you want to stop redirecting consumers, you deactivate the engagement. For more information, see About Activating and Deactivating Engagements.

Before You Begin

Activating engagements is the final step in the engagement configuration process. Before activating an engagement, ensure it has at least one digital twin, each with a QR code, and at least one scan destination. After the engagement is activated, any consumers who scan the digital twin's QR code are redirected according to the engagement's criteria.

To activate a draft or inactive engagement:

1 Click **Engagements** from the navigation pane. The *Engagements* list view opens.

2 On the *Engagements* list view, click the engagement you want to activate. The engagement's details view opens.

> **Important**
> If any digital twins are included in an active engagement, Engage shows an alert on the engagement's details view. You must resolve the problem before you can activate the engagement. See Troubleshooting.

3 Click **Activate**. The *Confirm Activation* dialog opens.

4 Click **Activate engagement**. The status is set to Active. Consumer scans now redirect consumers to the engagement's destination URLs.

To deactivate an active engagement:

1 On the *Engagements* list view, click the engagement you want to edit. The engagement's details view opens.

2 Click **Deactivate**. The *Confirm Deactivation* dialog opens.

3 Click **Deactivate engagement**. The status is set to Inactive. Consumer scans no longer redirect consumers to the engagement's destination URL.

> **Note**
> Every digital twin that's in production needs to be associated with an **active** engagement; otherwise, consumers who scan the data carrier will see a 4*xx* HTTP error page. When you deactivate the engagement for a digital twin that's in production, be sure to activate another engagement that includes that digital twin.

View Analytics

You can filter the data your engagements collect to show only the date ranges and products you're interested in. For more information, see Engage Analytics.

To view analytics, click **Analytics** in the navigation pane.

Engagements

Analytics

Digital Twins

On the *Analytics* view you can:

- Filter the results
- Segment the data
- View graphs

Filter the Results

The filters change the data set—the number of scans, countries, digital twins and engagements for the selected date range. By default, Engage displays data for the last 30 days. You can also filter by one or more digital twins, data carrier types, digital twin types, engagements, and countries. For more information about filtering, see Filters.

To change the scan date range:

1   Click the **Scan date** filter to open the *Scan date* dialog.
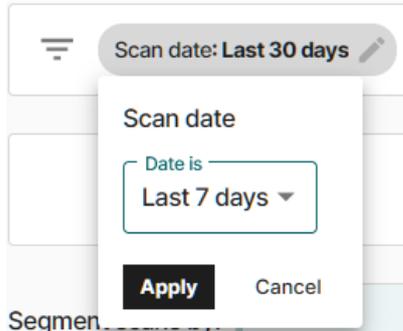
2   From the **Date is** drop-down, select the new date or date range. You can choose:
- Today
- Yesterday
- Last 7 days (inclusive)
- Last 30 days (inclusive)
- Between (inclusive) two dates you specify
- On a specific date

3   Click **Apply**.

To filter by digital twin type:

1 Click **Add filter**. The button expands to display the filter options.

2 Select **Digital twin type**. The *Digital twin type* filter dialog opens.

3 Choose **Product**, **Product variant**, or **Promotional asset** or a combination of these.
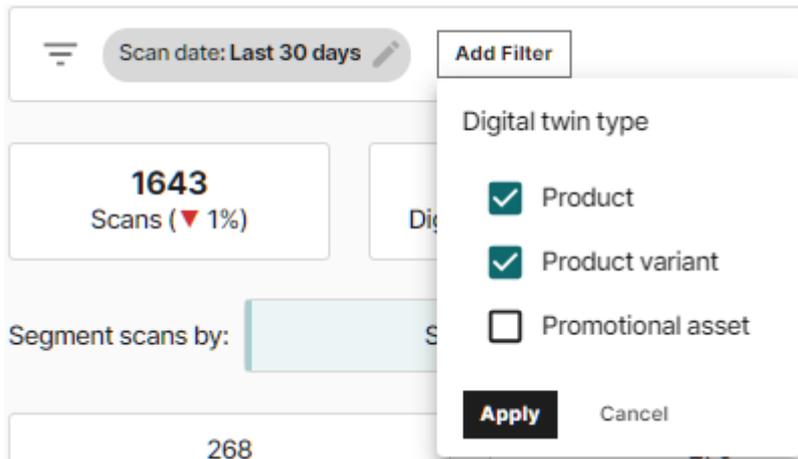
4 Click **Apply**.

5 To remove the filter, click its **Cancel** icon (⊗).

To filter by digital twin:

1 Click **Add filter**. The button expands to display the filter options.

2 Select **Digital twin**. The *Digital Twin* filter dialog opens.

3 Choose **is one of** or **is not one of** to set the context for the filter.

4 Select the digital twin to filter on. If the list of twins is long, you can type a name or primary identifier to narrow the list or find a specific digital twin. As you type, the list of values narrows to display only the digital twins that match the criteria.

5 To include variant digital twins' data into their parent twins' data, enable the **Show analytics for variants of selected twins** toggle. By default, they're displayed separately.

6 You can continue adding twins to the filter by selecting them from the list.

7 Click **Apply**.

8 To remove the filter, click its **Cancel** icon (⊗).

To filter by engagement:

1   Click **Add filter**. The button expands to display the filter options.

2   Select **Engagement**. The *Engagement* filter dialog opens.

3   Choose **is one of** or **is not one of** to set the context for the filter.

4   Select the engagement to filter on. If the list of engagements is long, you can type a name to narrow the list or find a specific engagement. As you type, the list of values narrows to display only the engagements that match.

5   You can continue adding engagements to the filter by selecting them from the list.

6   Click **Apply**.

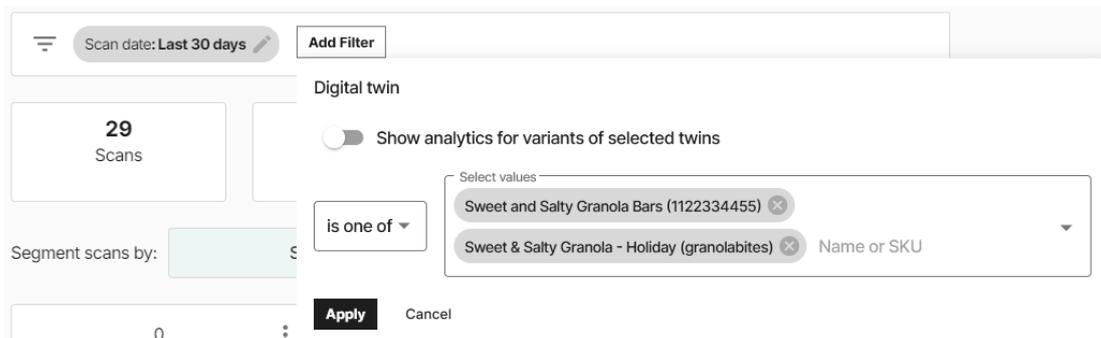7   To remove the filter, click its **Cancel** icon (⊗).

To filter by scan country:

1   Click **Add filter**. The button expands to display the filter options.

2   Select **Scan Country**. The *Scan Country* filter dialog opens.

3   Choose **is one of** or **is not one of** to set the context for the filter.

4   Select or type the country to filter on. As you type, the list of countries narrows to display only those that match.

5   You can continue adding countries to the filter by selecting them from the list.

6   Click **Apply**.

7   To remove the filter, click its **Cancel** icon (⊗).

Segment the Data

The segments don't affect the data set but rather the view or breakdown of the selected data set. To segment (group) the data, click the **Segment scans by** button for the segment to view. Choices are:

- Scanning user type
- Digital twin

For more information about segmenting, see [Segmenting](#).

View the Graphs

To see a larger version of a graph:

1   Click the **Menu** icon (⋮) in the graph's top-right corner to open the menu.

2   Click **Expand graph**. Engage displays the first 20 rows of data by default. If more are available, Engage displays a button on the expanded chart enabling you to show additional rows.

3 To view all the data, click the **Show all** button.
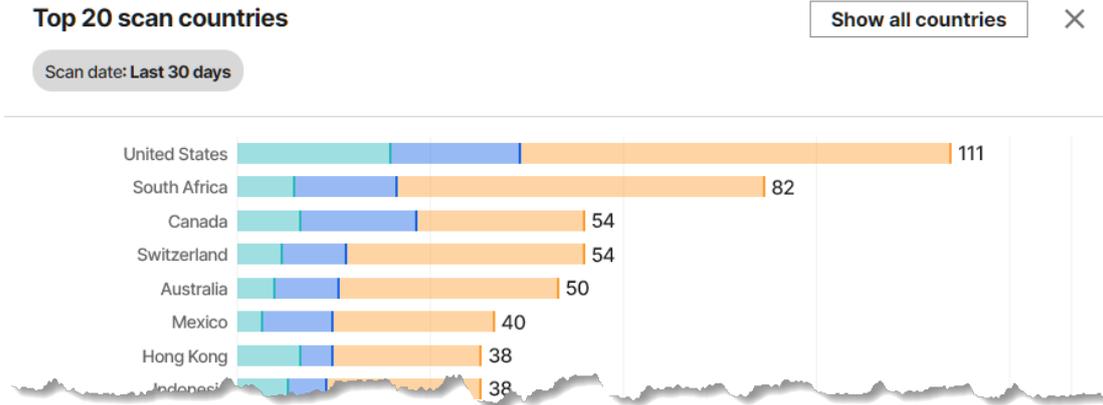
To view data points on a graph, hover the mouse over the graph.
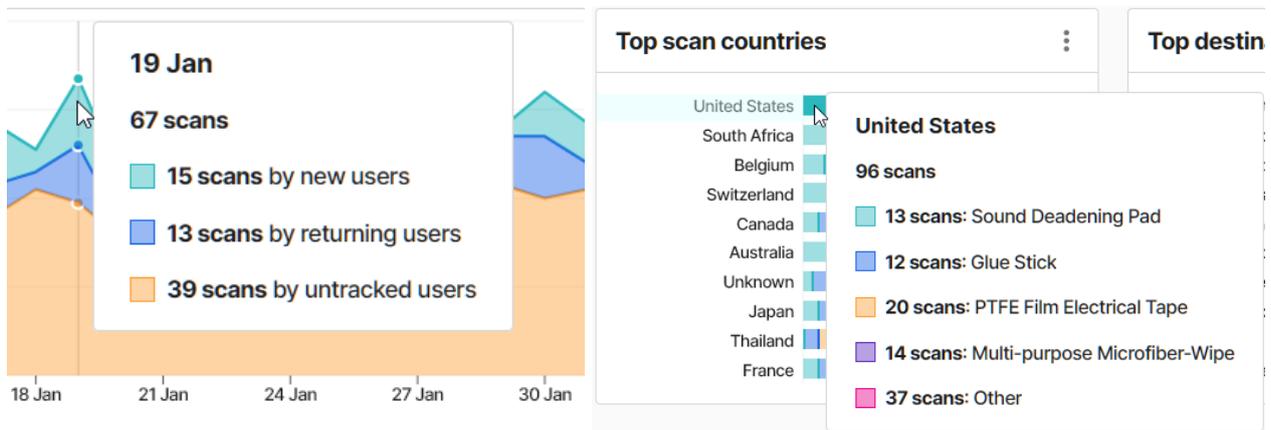
Reference

This appendix describes the views used in Illuminate, including parameters and properties on each screen.

Engagements List View

The Engagements list view displays all the engagements in the selected account.
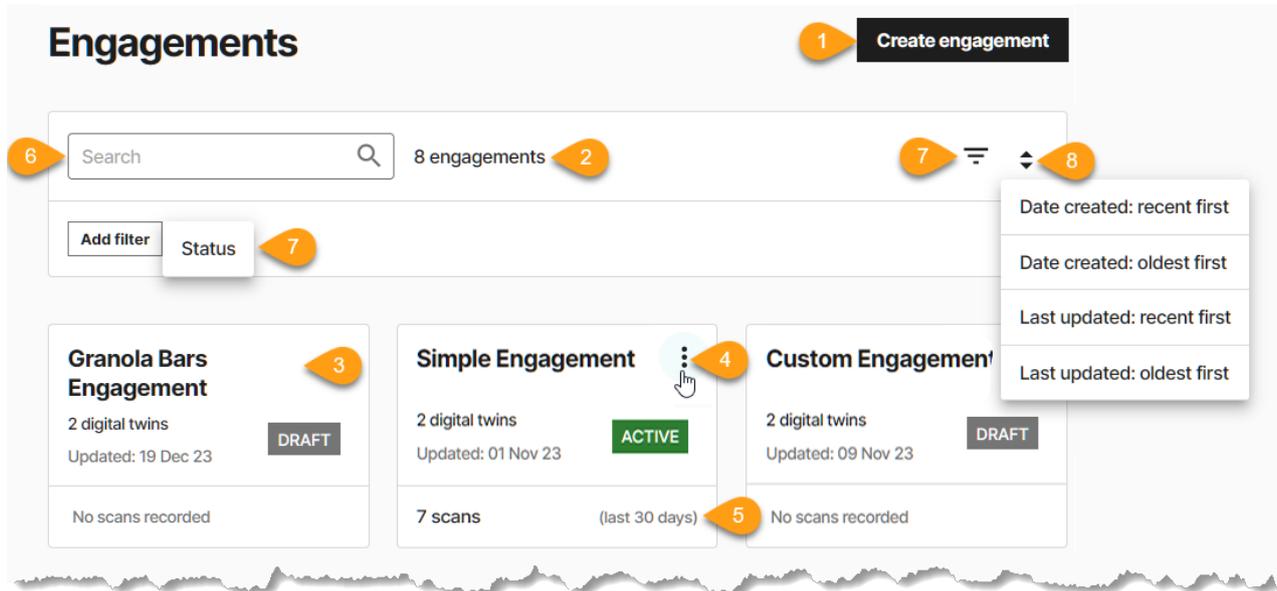
Engagements

#	Description
1	Creates an engagement. See Create an Engagement.
2	Displays the number of engagements in the account.
3	Opens the engagement to show the engagement's details view.
4	Opens the context menu enabling you to edit the engagement or open the analytics view with the engagement filter applied.
5	Opens the analytics view with the engagement filter applied.
6	Enables you to search for an engagement by name.
7	Enables you to filter the list of engagements by status. See Filters.
8	Enables you to sort the engagements by date created or date updated.

Engagement Details View

The properties associated with an engagement are described below. For instructions on creating an engagement, see Create an Engagement.

Status

Each engagement has a status property that determines whether consumer scans run the engagement.

Draft

Engagements with a status of DRAFT are being configured for future use. Scans don't run the engagement; following the link embedded in the digital twin's QR code might result in a 4xx HTTP error. No forwarding occurs.

Active

Engagements whose status is ACTIVE are currently in use. Scans run the engagement; following the link embedded in the digital twin's QR code redirects the consumer to the configured scan destination (or unmatched destination, if present) based on the engagement type and the data Engage receives from the mobile device.

Inactive

Engagements whose status is INACTIVE were in use at one time but have been deactivated. Scans don't run the engagement; following the link embedded in the digital twin's QR code might result in a 4xx HTTP error. No forwarding occurs.

Digital Twins

Engage lists the digital twins associated with the engagement and lets you add or remove digital twins.

> **Note**
> If any digital twins in the engagement belong to an *active* engagement, Engage displays an alert.
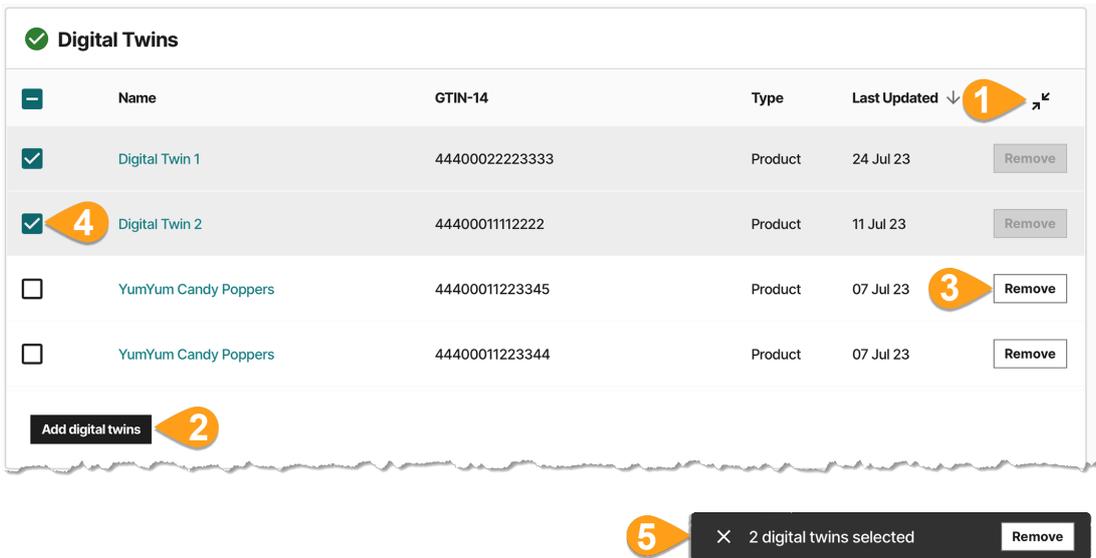
Digital twins in the engagement

#	Description
1	Expands or collapses the tile to show or hide the list of digital twins in the engagement.
2	Adds one or more digital twins to the engagement. See Add a Digital Twin to an Engagement.
3	Removes a single digital twin from the engagement. See Remove a Digital Twin from an Engagement.
4	Enables you to select multiple digital twins to remove from the engagement at one time.
5	A small alert dialog, called a snackbar, near the bottom of the browser window shows the number of digital twins selected and provides the means to remove them all at once. **Tip** Removing a digital twin removes the association between the digital twin and the engagement. The digital twin is not deleted from Engage.

Scan Destinations

The scan destinations represent the website (URL) where Engage sends consumers after they scan the QR code on the product's package, hang tag, label, or promotional asset. These destinations can be the same for all consumers, or they can be based on a combination of digital twin, scan country, or device language. See the Scan destinations and engagement types table below. Consumers who don't meet the criteria for any scan destination are sent to a default destination, labeled "unmatched."

The properties available for the scan destinations depend on the engagement type. Simple engagements have no "unmatched" destination; all consumers are directed to a single destination URL. For instructions, see Set the Scan Destination.

Tip
Scan destinations can be on any domain; they aren't necessarily on the same domain that Engage uses to create the data carrier.
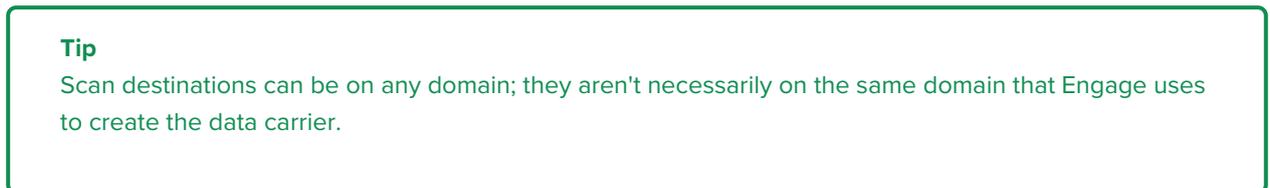
Scan destinations and engagement types

#	Label	Description	Engagement Types
1	Select twin	The digital twin whose QR code is scanned. An entry is required when the field is present. You must add a digital twin to the engagement before you can select it for a scan destination.	Custom
2	Select country	The location of the device used to scan the QR code. An entry is required when the field is present.	• Scan Country • Country and Language • Custom
3	Select language	The primary language for the device used to scan the QR code. An entry is required when the field is present.	• Device Language • Country and Language • Custom
4	Destination URL	The website where the consumer is redirected when the criteria for the engagement are met. At least one entry is required.	All
5	Add scan destination	Enables you to add more scan destinations.	• Scan Country • Device Language • Country and Language • Custom
6	Destination URL for unmatched countries, languages, or conditions	The website where the consumer is redirected when the criteria for the engagement are not met. An entry is required when the field is present.	• Scan Country • Device Language • Country and Language • Custom
7	Save destinations	Saves changes to the destination properties.	All

#	Label	Description	Engagement Types
8	X	Removes the corresponding scan destination.	• Scan Country • Device Language • Country and Language • Custom

Data Collection and Tracking View

The *Data Collection and Tracking* view enables you to instruct Digimarc Engage whether to collect tracking data about the consumer for the engagement. We provide a JavaScript code snippet that you insert in the web page for your engagements' scan and unmatched destinations.

For instructions on how to configure data collection, see Configure Data Collection and Tracking.

> **Important**
> To comply with privacy regulations, you must integrate this tracking script with your Consent Management Platform (CMP). This ensures that visitor tracking occurs only after receiving the necessary consent from your consumers. The process for integrating the script varies from one CMP to another and is beyond the scope of this document. For assistance, contact Digimarc support.

When a consumer scans a data carrier and follows the link that's presented, the JavaScript code, with the consumer's consent, places a persistent cookie on the mobile device. The cookie enables Engage to determine whether the device has scanned digital twins before.

- The tracking cookie's lifespan depends on the browser.
- If the cookie is deleted or expires, the next scan by that device is considered "new."
- If the consumer refuses or revokes consent to receive the cookie, scans by that device are "untracked."

> **Note**
> Without the tracking code on the destination web pages, Engage can't collect data that differentiates new and returning consumers. Engage still captures other data points that don't require the consumer's consent, such as device location and language.

Options for data collection and tracking are:

Install the JavaScript tracking code to track new and returning users
> When you choose this option, the JavaScript tracking code is displayed, enabling you to copy and paste it into the web page used in scan and unmatched destinations. You must install the code on every destination URL used in your engagements.

Don't install the code, and don't differentiate users
> When you choose this option, the JavaScript tracking code is hidden. Engage will not track whether consumers are new or returning (all consumers are "untracked").

For information about new, returning, and untracked consumer types, see Segmenting.

Tracking Code

If you choose the option to use the JavaScript tracking code to differentiate new and returning consumers, your technical team must add the code snippet to the destination pages for each engagement. This code must also be integrated with the consent management platform (CMP) you use. The specific process for doing so depends on the CMP, but we provide general guidance in Integrate the Tracking Code.

Integrating with Destination Analytics

If you use a third-party analytics tool on your web pages to gather information about visitors, Engage gives you the means to integrate that data collection with the Illuminate Platform also provides dynamic variables and can append them to the destination URLs.

Apply UTM parameters for integration with analytics installed at your destination

This option enables you to use Urchin Tracking Module (UTM) parameters to segment traffic from this engagement in the analytics tool used by your website. Enabling this option reveals additional fields:

Parameter

This drop-down list displays parameter types:

- **Source**: Identifies the site receiving the traffic (`utm_source`).
- **Medium**: Identifies the type of link (`utm_medium`).
- **Campaign**: Identifies the product promotion or campaign (`utm_campaign`).
- **Term**: Lists the search terms (`utm_term`).
- **Content**: Identifies what was clicked to bring the consumer to the page (`utm_content`).

Value

The value to use for the parameter selected.

Parameter Type	Example Value
Source	`digimarc_engage`
Medium	`cpc`
Campaign	`MLK_holiday_sale`
Term	`mechanical+pencil`
Content	`qr_code_scan`

Engage also provides dynamic variables that you can use for any of these parameter values. For information on using dynamic variables, see Using Dynamic Variables in URLs.

Add UTM parameter

Adds another row of parameter/value pairs.

Using Dynamic Variables in URLs

Urchin Tracking Module (UTM) parameters in a URL identify the marketing campaign that refers traffic to a destination website. Engage enables you to include UTM parameters to segment traffic from an engagement. We also provide dynamic variables that, if used, are appended to the destination URL when a consumer is redirected.

> **Tip**
> These variables are provided for the convenience of users whose marketing analytics system uses UTM parameters to track campaigns across multiple channels.

Available variables are:

- GTIN or other primary identifier of scanned digital twin
- Internal ID of scanned digital twin
- Brand of scanned digital twin
- Name of scanned digital twin

The use of these variables is optional. You can enter plain text values or use a variable for any of the UTM parameters.

Example UTM parameter values

Parameter	Purpose	Example Value
Source `utm_source`	Identifies the website that sent the traffic.	`digimarc_engage`
Medium `utm_medium`	Identifies the type of link that was clicked.	`cpc`
Campaign `utm_campaign`	Identifies a product promotion or strategic campaign.	`MLK_holiday_sale`
Term `utm_term`	Identifies search terms.	`mechanical+pencil`
Content `utm_content`	Identifies what was clicked to bring the user to the site.	`<internal ID of scanned digital twin>`

An example of a destination URL with the dynamic variable shown in the table is:

`https://www.example.com/destination1?utm_source=digimarc_engage&utm_content=`
`f3f1b20d-4c3b-44c7-b0a7-9afca7ee9aea`

Engagement Types

When a consumer scans a digitized product with a mobile device, the destination URL depends on the engagement type. The engagement types are:

Simple engagement
> All consumers are directed to the same web destination.

Scan country
> Consumers are directed to a web destination based on their current location.

Device language
> Consumers are directed to a web destination based on the device's primary language.

Country and language
> Consumers are directed to a web destination based on their current location and the device's primary language.

Custom engagement
> Consumers are directed to a web destination based on one or more parameters, such as digital twin + location + device language. This enables you to include multiple digital twins in an engagement and redirect consumers accordingly.

Digital Twins List View

The Digital Twins list view displays all the digital twins in the selected account. At the top are two tabs:

- **Products**—Lists product digital twins. Product variant twins are listed in the Related Product Variants section of a product twin's detail view.
- **Promotional Assets**—Lists promotional asset digital twins.
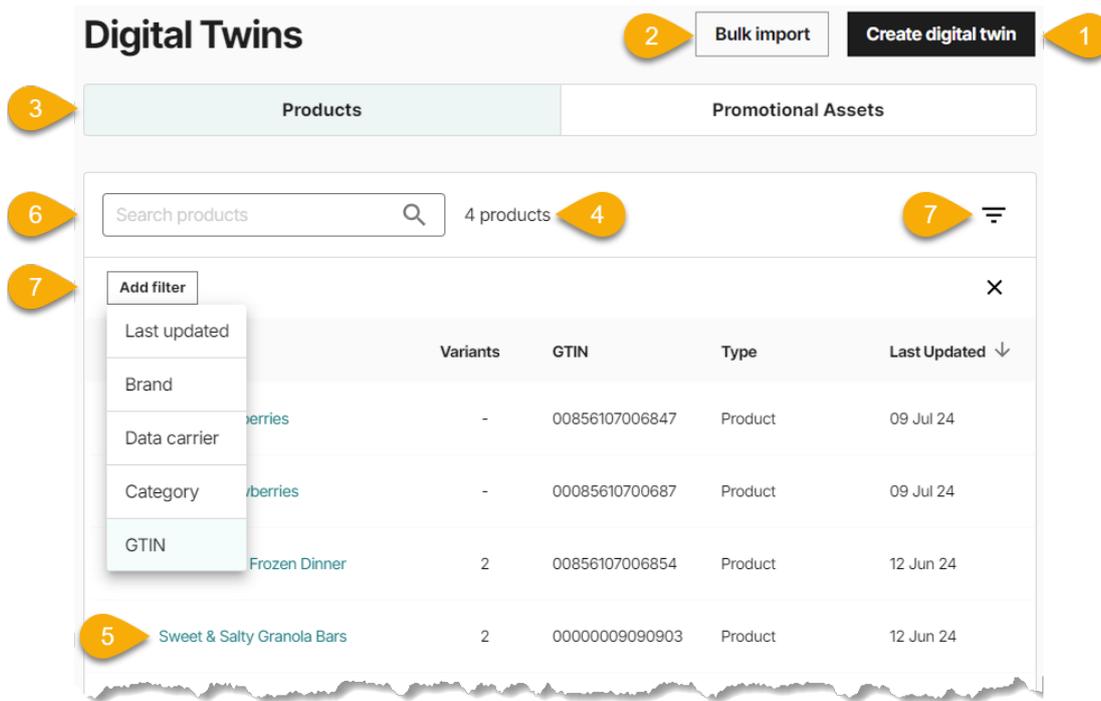
Digital Twins

#	Description
1	Creates a digital twin. See Create a Digital Twin.
2	Imports up to 2000 digital twins from a file. See Import Digital Twins.
3	Filters the list of digital twins by type: product or promotional asset.
4	Displays the number of digital twins.
5	Opens the digital twin in the digital twin's details view.
6	Enables you to search for a digital twin by name or primary identifier. See Find and View Digital Twins.
7	Enables you to further filter the list of digital twins. See Filters.

Digital Twin Details View

Each digital twin contains information about the product, variant, or asset, including the engagement it belongs to, and the data carrier Illuminate has created for it.

You reach the digital twin's details view by clicking a digital twin in the Digital Twins List View. The digital twin details view displays three tabs at the top:

Overview

Displays information related to the digital twin's primary characteristics, such as its name, description, images, and identifiers. This information varies slightly, depending on the twin type. For details, see Digital Twins Overview Tab.

Behavior

This tab applies to Digimarc Engage and Engage Premium.Displays the active engagements that include this digital twin. For details, see Digital Twins Behavior Tab.

Data Carriers

Displays the QR codedigital watermark that Engage created for the digital twin, along with its embedded URL. For details, see Digital Twins Data Carriers Tab.

Overview Tab

The *Overview* tab on the digital twin's details view displays information related to the product's primary characteristics. The sections displayed vary depending on the digital twin type:

Product Digital Twin	Product Variant Digital Twin	Promotional Asset Digital Twin
- Product Details - Identifiers - Images - Product Attributes - Custom Attributes - Related Product Variants - Related Promotional Assets	- Variant Details - Images - Custom Attributes - Related Promotional Assets	- Promotional Asset Details - Images - Custom Attributes - Related Digital Twins

For instructions on how to change the values on this screen, see Edit a Digital Twin.

Product Details

The Product Details section enables you to accurately describe the product digital twin.

Product Details   Edit

Name
Sweet and Salty Granola Bars

Description
Delicious and healthy granola bars that are a mix of sweet and salty flavors.

Brand
DigiFoods

Product type
–

Category
Prepared/Preserved Foods

Name
> The name of the product. The name can be up to 64 characters long.

Description
> *Optional*. A brief description of the product. The description can be up to 512 characters long.

Brand
> The brand name of the product. Select from the list, or type a brand name and press <Enter> to add it. The brand name can be up to 128 characters long.

Product type
> *Optional*. The type or purpose of the product, such as "hand sanitizer" or "flour." This is the GS1 product functional name used to describe the use of the item or product by the consumer. The product type can be up to 64 characters long.

Category
> The GS1 Global Product Classification (GPC) for this product. To view the list of available categories, click **Browse categories**. Select the appropriate category at the GPC *Family* level.

Variant Details

The Variant Details section enables you to accurately describe the product variant digital twin. The parent product digital twin is linked at the top of the view.

Variant name

> The name of the product variant. Names can be up to 256 characters long and contain letters, numbers, and symbols.

Variant ID

> An alphanumeric identifier for the product variant. The variant ID, up to 32 characters long, is an arbitrary value that you can use for your own purposes. The Variant ID is a required field that can help you differentiate them from the product twins in reports.

Variant reason

> The reason the variant was created. The values shown in the list are the GS1 variant reasons listed in the Consumer Product Variant in GDSN Implementation Guide, section 3.1.1 Reason Codes & Definitions. Choose one of these reasons, even if your product variant has no GTIN.

Effective from

> *Optional*. Enter the first date the variant was or will be available. This date is for analytics purposes only and must be on or before the Effective to date, if provided.

Effective to

> *Optional*. Enter the last date the variant was or will be available. This date is for analytics purposes only and must be on or after the Effective from date, if provided.

Promotional Asset Details

The Promotional Asset Details section enables you to accurately describe the promotional asset digital twin.

Promotional Asset Details   [Edit]

Description
So sweet! So salty!

Asset type
Life-size cardboard cut-out

Promotional asset identifier
sweet_salty_1

Brand
DigiFoods

Start date   **End date**
01 Mar 23   -

Description
> A short description of the promotional asset. Descriptions can be up to 512 characters long and contain letters, numbers, and symbols.

Asset type
> The type of asset you're creating, such as a poster, pamphlet, brochure, and so on. If the asset type you want isn't listed, type its name, click **Add *\<asset type\>***, and confirm it on the *Add as New Value* dialog.

Promotional asset identifier
> *Optional.* The identifier for the asset.

Brand
> The brand name for the asset. If the brand you want isn't listed, type its name, click **Add *\<brand\>***, and confirm it on the *Add as New Value* dialog.

Start date
> *Optional.* The date the promotional asset was or will be first put into use. This date must be on or before the **End date**.

End date
> *Optional.* The date the promotional asset was or will be removed from use. This date must be on or after the **Start date**.

Identifiers

Every product in the marketplace has an identifier that distinguishes it from other products. For GS1 member companies, it's a GTIN. For non-GS1 companies, it could be a SKU, ISBN, retailer-specific identification number, or other kind of identifier. The first digital twin created with a particular identifier is a product digital twin. Twins subsequently created with the same identifier are product variant digital twins. Promotional assets can have an optional identifier, but it's found in the Promotional Asset Details section.

The fields Illuminate displays in the *Identifiers* section depend on whether the company is a GS1 member.

GS1 Members

Only the additional identifier value, if provided, can be changed.

GTIN

The product's GTIN. This numeric field is read-only and visible only for GS1 member companies.

Barcode identifier

For GS1 member companies with a GTIN, indicates the barcode type.

{*additional identifier name*}

If the account was configured to allow an additional identifier, Engage displays the identifier name and the value that was entered, if any. The length of the identifier is configured for each account but must be 1–64 characters long.

Digital Link or Short URL

If the digital twin has a QR code, Engage displays its embedded URL with a copy icon ( ), enabling you to copy the link.

Non-GS1 Members

Only the additional identifier value, if provided, can be changed.

Identifiers [Edit]

SKU
020000009124

OnlineStoreA
storeA-0011-9124

Short URL
https://digigrocery.com/1HMv0Rkx ⧉

Identifiers

SKU
1133557799

Unknown Tag Type
–

{*primary identifier*}

Engage displays the name and value of the primary identifier that was configured for your account. The length of the identifier is configured for each account but must be 1–64 characters long. This field is read-only and visible only for non-GS1 member companies.

{*additional identifier name*}

If the account was configured to enable additional identifiers, Engage displays the identifier name and value, if any. The length of the identifier is configured for each account but must be 1–64 characters long.

Short URL

If the digital twin has a QR code, Engage displays its embedded URL with a copy icon (⧉), enabling you to copy the link.

Images

You can optionally include up to 25 images for each digital twin. For instructions on how to add, edit, or remove images, see Add Images, Edit Images, or Remove Images.

Images [Edit]

File name
granola_bars.png

[Download image]

File name

The internal file name for the uploaded image.

Download image

Click to download the selected image. Click a thumbnail for another image to download it.

Product Attributes

These optional fields let you specify the attributes of products or variants.

Available from

Specify the first date this product became or will become available.

Available to

Specify the last date this product was or will be available.

Size

The size variant of the product up to 256 characters.

Net content

Specify the net content of the product packaging up to 32 characters.

Countries of sale

Specify the countries in which this product is sold.

Custom Attributes

Optional custom attributes enable you to add properties and values that pertain to your product. Each attribute you add requires a corresponding value. For instructions on adding, editing, or deleting custom attributes, see Create a Product Digital Twin, Create a Product Variant Digital Twin, or Create a Promotional Asset Digital Twin.

Attribute label

> The name or label for the attribute you want to add, such as color or edition.

> **Note**
>
> Attribute labels must be unique per digital twin. A twin can have only one custom attribute with label "flavor," for example.

Value

> The value for the attribute, such as blue or deluxe.

Related Product Variants

When you create product variant digital twins, Engage automatically links them to their parent product twin because they share a primary identifier. You can't add related variants manually.

Related Product Variants

Name	GTIN	Last Updated ↓	↗↙
Cilantro Rice Frozen Dinner - Winter Holiday	00856107006854	12 Jul 24	
Cilantro Rice Frozen Dinner - 2024 Olympics	00856107006854	12 Jul 24	

Name

> The name of the related product variant twin.

GTIN or {*primary identifier*}

> Engage displays the name and value of the primary identifier that was configured for your account.

Last Updated

> The date the digital twin was last updated.

Related Promotional Assets

For product and variant digital twins, you can link promotional asset twins in the details view. See Add or Remove a Related Digital Twin.

Related Promotional Assets   **Add promotional assets**

	Name	Last Updated ↓	↗↙
☐	Organic Strawberries Banner Ad 600×40	22 Jan 24	Remove
☐	Strawberry Hero	09 Nov 23	Remove

Name

> The name of the promotional asset. Names can be up to 512 characters long and contain letters, numbers, and symbols.

Last Updated

> The date the promotional asset was last updated.

Related Digital Twins

For promotional asset digital twins, you might find it helpful to link twins together within Illuminate to assist with identifying relationships between them. See Add or Remove a Related Digital Twin.

☐ Name	Variants	SKU	Type	Last Updated ↓	↙
☐ Sweet and Salty Granola Bars	3	1122334455	Product	06 Dec 23	Remove
☐ Sweet & Salty Granola Bites	-	granolabites	Variant	28 Nov 23	Remove
☐ Sweet & Salty Granola Bar Chunks	-	granolabarchunks	Variant	28 Nov 23	Remove
☐ More Sweet Than Salty	-	moresweet	Variant	24 Oct 23	Remove

Name
> The name of the related digital twin.

Variants
> The number of variants the related twin has in Engage.

GTIN/Identifier
> The primary identifier of the related digital twin.

Type
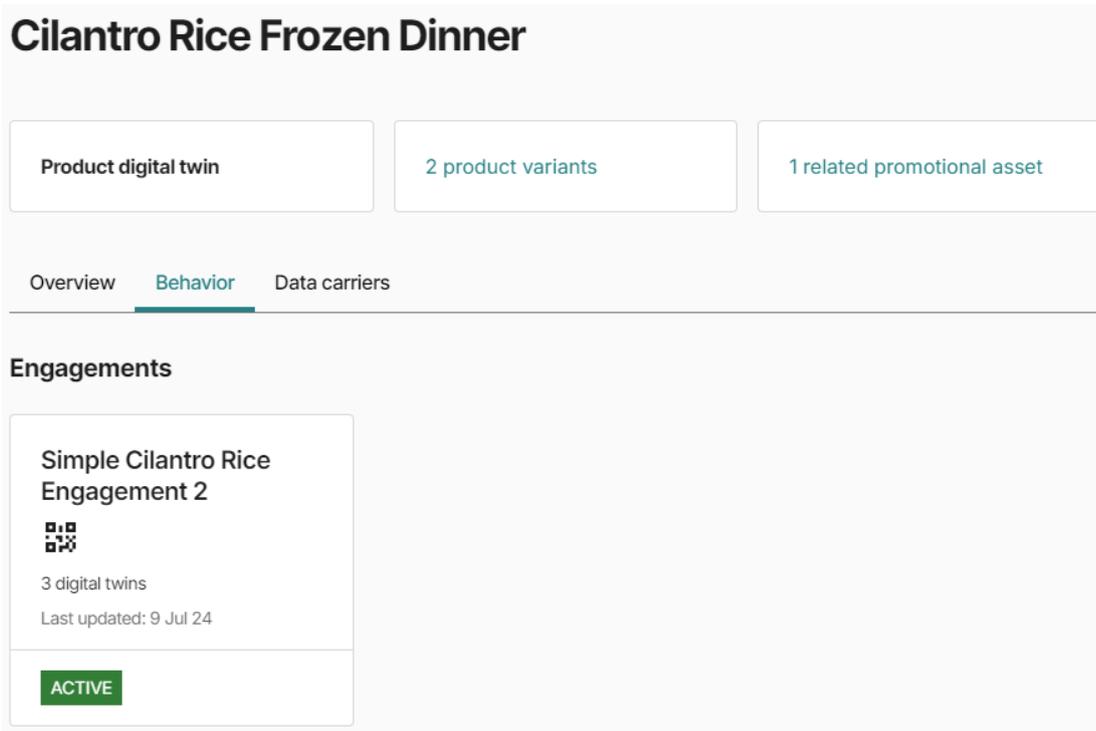> The type of the related digital twin. Types are:
> - Product
> - Variant

Last Updated
> The date the related digital twin was last updated.

Behavior Tab

The Behavior tab is used for the Validate Packaging, Engage, and Engage Premium subscriptions. For other subscription types, it's empty.

The Behavior tab on the *Digital Twins* details view displays the active engagements that include this digital twin. You can click an engagement to manage or view the details of the engagement.

Cilantro Rice Frozen Dinner

Product digital twin	2 product variants	1 related promotional asset

Overview   **Behavior**   Data carriers

Engagements

Simple Cilantro Rice
Engagement 2

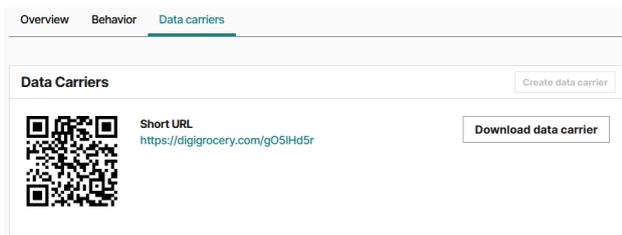3 digital twins
Last updated: 9 Jul 24

ACTIVE

Only active engagements are shown on the Behavior tab. A digital twin can be in only one *active* engagement at a time, but it can be in an unlimited number of draft and inactive engagements.

For instructions on adding or removing digital twins from an engagement, see Add a Digital Twin to an Engagement and Remove a Digital Twin from an Engagement.
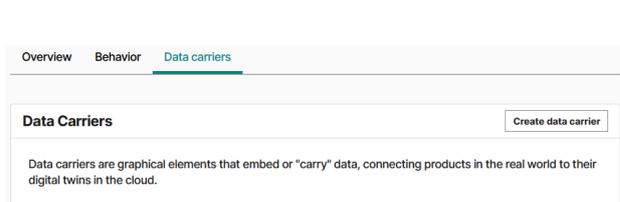
Data Carriers Tab

The *Data carriers* tab on the digital twin's details view displays the QR code that was created for the digital twin. If you haven't created the QR code yet, see Generate the Data Carrier.

The *Data carriers* tab on the digital twin's details view displays the digital watermark that was created for the digital twin. If you haven't created the digital watermark yet, see Generate the Data Carrier.

Overview   Behavior   Data carriers

Data Carriers   Create data carrier

Short URL
https://digigrocery.com/gO5lHd5r   Download data carrier

Overview   Behavior   Data carriers

Data Carriers   Create data carrier

Data carriers are graphical elements that embed or "carry" data, connecting products in the real world to their digital twins in the cloud.

Data carriers tab with existing digital watermark   *Data carriers tab with no data carriers*

Data carriers tab with existing QR code   *Data Carriers tab with no data carriers*

The **Short URL** is the generated web address that Engage embedded into the QR code. It's created based on the default or alternate domain configured for the account.

GS1 members can use a **GS1 Digital Link** instead of a short URL when generating the QR code. If GS1 Digital Link was selected for the link format, that URL is displayed instead.

Download data carrier lets you save the high-resolution (512 PPI, 576x576 PNG) QR code image file to your computer. Give this file to your production team to place on the product's package, hang tag, label, or promotional asset.

Filters

Filters enable you to shorten long lists of digital twins, engagements, or analytics by specifying property values to include or exclude.

You'll find filters for

- digital twins
- engagements
- analytics

Most digital twin and analytics filters have two components, where the first sets the context for the second.

> **Example**
>
> In the *Last updated* filter, when the **Date is** context is set to **On**, Engage displays an additional field, enabling you to set the date value.
>
>
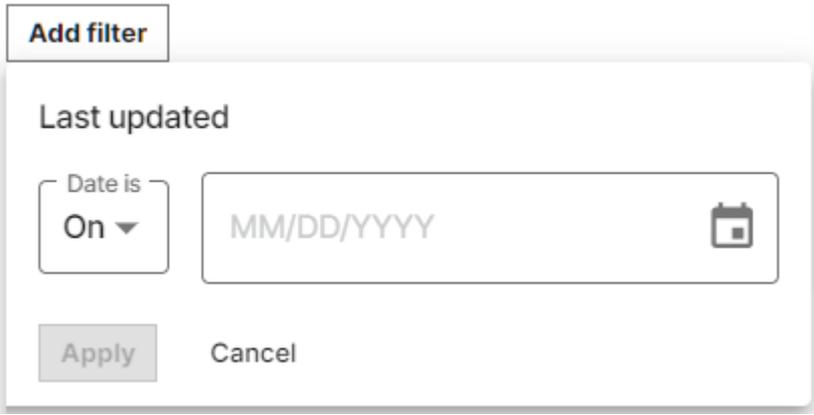
Some filters have only one context, **Is**, which returns the items that match the selected values.

> **Example**
>
> The *Brand* filter narrows the list of digital twins to one or more brands.
>
>
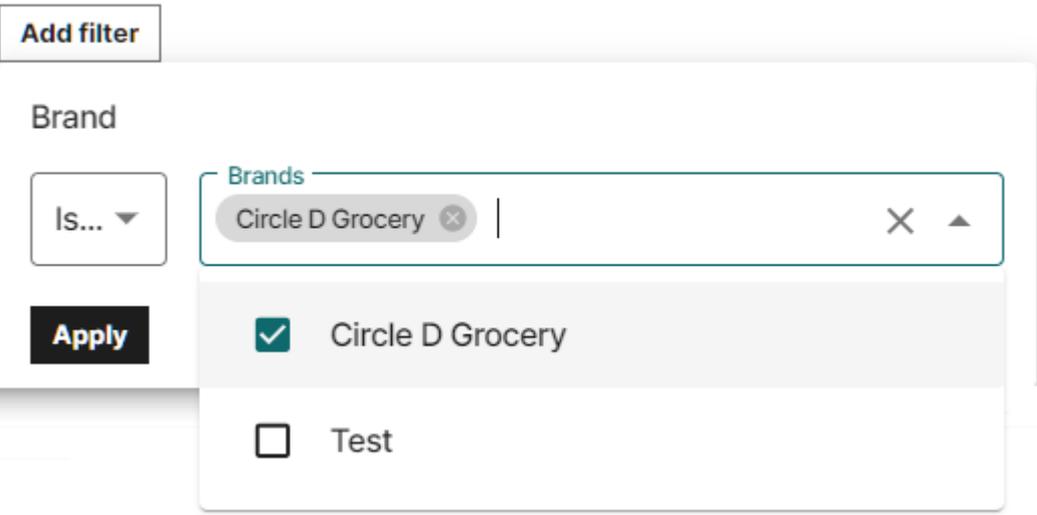
You can remove a filter by clicking its **Cancel** icon (⊗). You can change an existing filter by clicking it. Doing so enables you to add or remove values or change the context:

Digital Twin Filters

You can apply one or more filters to the digital twin list view to narrow the list of product and promotional asset digital twins. You can also apply some of these filters to product and variant digital twins when adding them to an engagement or as related digital twins for a promotional asset.

Products

The filters for product digital twins are:

Last updated

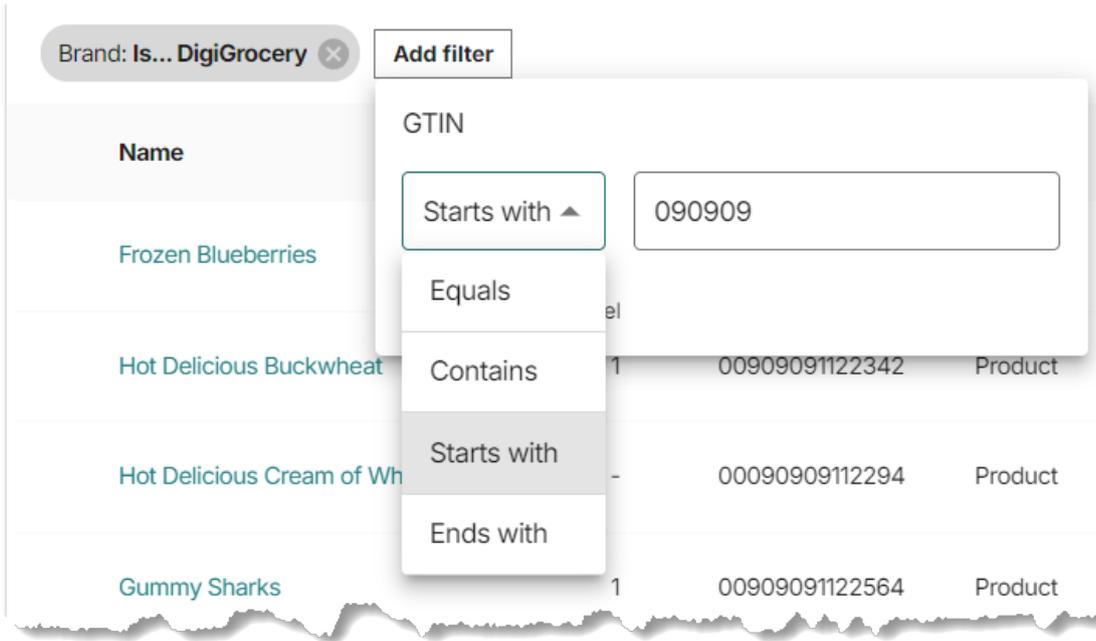> Enables you to filter digital twins by the date they were last changed. Options are **Today**, **Yesterday**, **Last 7 days**, **Last 30 days**, **Between** two dates (inclusive), or **On** a specific date. For the Between and On options, you must specify the date or dates for the filter.

> > **Example**
> >
> > The Between context with **Date from** set to `2024-01-01` and **Date to** set to `2024-01-31` displays digital twins last updated in January 2024.

Brand

> Enables you to filter digital twins by brand. You can begin typing a brand name to narrow the list of brands in the drop-down list.

Data Carrier

> Enables you to filter digital twins by their data carrier types. Options are **QR code**, **Digital watermark**, or **Digital watermark and QR code**. The difference between selecting the **Digital watermark and QR code** option and both **QR Code** and **Digital watermark** is that the former shows digital twins that have *both* data carrier types, and the other options display twins that have one or the other.

> > **Note**
> >
> > Digital watermarks and QR codes are relevant only for applications that use them. For example, the Digital watermark filter won't show results for Engage users.

> > **Note**
> >
> > Digital watermarks and QR codes are relevant only for applications that use them. For example, the QR code filter shows results only for Engage and Engage Premium users.

Category

> Enables you to filter digital twins by GS1 Global Product Classification (GPC). You can begin typing a category name to narrow the list of categories in the drop-down list.

Type

> To add a digital twin to an engagement or as a related digital twin for a promotional asset, this option enables you to filter twins by type. Options are:
> - **Product**
> - **Product variant**
> - **Promotional asset** (for engagements only)

<Product identifier type>

> Enables you to filter digital twins by product identifier values. The context options are **Equals**, **Contains**, **Starts with**, or **Ends with**. Enter the identifier value to filter on.

Promotional Assets

The filters for promotional asset twins are:

Last updated

Enables you to filter digital twins by the date they were last changed. Options are **Today**, **Yesterday**, **Last 7 days**, **Last 30 days**, **Between** two dates (inclusive), or **On** a specific date. For the Between and On options, you must specify the date or dates for the filter.

> **Example**
>
> The Between context with **Date from** set to `2024-01-01` and **Date to** set to `2024-01-31` displays digital twins last updated in January 2024

Brand

Enables you to filter digital twins by brand. You can begin typing a brand name to narrow the list of brands in the drop-down list.

Data Carrier

Enables you to filter digital twins by their data carrier types. Options are **QR code**, **Digital watermark**, or **Digital watermark and QR code**. The difference between selecting the **Digital watermark and QR code** option and both **QR Code** and **Digital watermark** is that the former shows digital twins that have *both* data carrier types, and the other options display twins that have one or the other.

> **Note**
> Digital watermarks and QR codes are relevant only for applications that use them. For example, the Digital watermark filter won't show results for Engage users.

Engagement Filters

In the Engagements list view, you can apply a single filter to narrow the list of engagements:

Status

Enables you to filter engagements by status. Options are **Active**, **Inactive**, or **Draft**. For more information about engagement statuses, see What's an Engagement?.

Analytics Filters

You can apply a filter to the analytics view to narrow the list of digital twins included in the analytics:

Scan date

> The **Scan date** filter is applied for all analytics. This enables you to filter analytics data for digital twins by the date they were scanned. Options are **Today**, **Yesterday**, **Last 7 days**, **Last 30 days** (default), **Between** two dates (inclusive), or **On** a specific date. The default is **Last 30 days**. For the Between and On context options, you must specify the date or dates for the filter. Dates are inclusive.
>
> > **Example**
> >
> > The Between context with **Date from** set to `2024-01-01` and **Date to** set to `2024-01-31` displays scan data for the entire month of January 2024.

Digital twin type

> Enables you to filter analytics data by digital twin type. Options are **Product**, **Product variant**, and **Promotional asset**. You can choose one or more types.

Digital twin

> Enables you to filter analytics data by digital twin. Context options are **Is one of** or **Is not one of**. You then type the names or primary identifiers for the twins you want to include or exclude.
>
> You can also include variant twins in their parent twins' data by enabling **Show analytics for variants of selected twins**. When it's enabled, only product and promotional asset twins are listed in the **Select values** drop-down.

Engagement

> Enables you to filter analytics data by engagement. Context options are **Is one of** or **Is not one of**. You then select or type the names of the engagements you want to include or exclude.

Scan country

> Enables you to filter analytics data by the country in which the digital twin was scanned. Context options are **Is one of** or **Is not one of**. You then select or type the countries you want to include or exclude.

To segment (group) the data, see Segment the Data in the *View Analytics* section.

Templates for Bulk Import

The Bulk Import feature lets you use XLSX or CSV templates to easily import products, product variants, or promotional assets in a single operation and create data carriers for them. For example, you can export product information from a database in your system to one of the supported file formats and create thousands of Illuminate digital twins within minutes. For instructions on importing digital twins, see Import Digital Twins.

> **Important**
>
> Leave the top rows of the template intact when filling in data. Because the template structure differs between the two formats (XLSX and CSV), don't convert one to the other before uploading. The import process requires the completed file to match the template layout.

Product and Variant Twins

Products and variants share some information, but each twin type also has its own set of fields. The table below describes the fields in the template, the digital twin type it pertains to, and whether the field is required or optional. For a more detailed description of the fields, see Digital Twins Overview Tab.

Twin Type	Field Name	Data Type/ Format	Required?	Note
Both	Twin type	String/Text	Yes	Use only *Product* or *Variant*.
	Brand	String/Text	Yes	If the brand isn't already in Illuminate, it's added automatically.
	Product ID	String/Text	Yes	Use the primary product identifier (such as the GTIN or SKU). If the identifier is a GTIN shorter than 14 digits, pad it with enough zeros at the beginning to make 14 digits, such as 00000012345678 or 00123456789012.
	Image URL	String/Text	No	You can add only one image per twin during a bulk import operation. If the twin has existing images, this image will be the new default.
	Create data carrier?	String/Text	No	Use Y to create the default data carrier with default options. Leave blank to skip data carrier creation.
	Attribute label	String/Text	No	Optional custom attributes enable you to add properties and values that pertain to your product or variant. You can add or edit up to four custom attribute label/value pairs during bulk import.
	Attribute value	String/Text	No*	* Required if the corresponding attribute label is provided.
Product	Name	String/Text	Yes	The product name.
	Category	String/ Numeric	Yes	The GS1 Category is required for all products, even those without a GTIN.
	Description	String/Text	No	The product description.
	Product type	String/Text	No	If the product type isn't already in Illuminate, it's added automatically.
	Available from	String/yyyy-mm-dd	No	If provided, it must use yyyy-mm-dd format and be on or before the Available to date.
	Available to	String/yyyy-mm-dd	No	If provided, it must use yyyy-mm-dd format and be on or after the Available from date.
	Size	String/Text	No	The size of the product.
	Net content	String/Text	No	The net content of the product package.
	Countries of sale	String/Text	No	Use the two-character country code (ISO 3166-1 alpha-2). Separate multiple countries with a comma.
	Secondary identifier	String/Text	No	The additional identifier if enabled on the account. The length of the identifier is configured for each account but must be 1–64 characters long.

Twin Type	Field Name	Data Type/ Format	Required?	Note
Variant	Variant ID	String/Text	Yes	The variant ID for the variant.
	Variant description	String/Text	Yes	The description of the variant.
	Variant reason	String/Text	Yes	This must match one of the GS1 variant reason codes. See the GS1 Consumer Product Variants list.
	Effective from	String/yyyy-mm-dd	No	If provided, it must use yyyy-mm-dd format and be on or before the Effective to date.
	Effective to	String/yyyy-mm-dd	No	If provided, it must use yyyy-mm-dd format and be on or after the Effective from date.

Promotional Asset Twins

The table below describes the fields in the promotional assets template and whether the field is required or optional. For a more detailed description of the fields, see Digital Twins Overview Tab.

Field Name	Data Type/ Format	Required?	Note
Brand	String/Text	Yes	If the brand isn't already in Illuminate, it's added automatically.
Name	String/Text	Yes	You can't change the name of an asset during bulk import; unique names are always treated as new assets.
Asset type	String/Text	Yes	If the asset type isn't already in Illuminate, it's added automatically.
Asset ID	String/Text	No	If provided, the asset ID must be a unique value for assets in the account.
Related twins	String/Text	No	A comma-separated string of product or variant identifiers this asset is associated with. If the asset is related to a product variant, use the form `parentID:variantID`, where *parentID* is the primary identifier (such as the GTIN or SKU) for the parent product. For example, `09090909123456:var1234`
Start date	String/yyyy-mm-dd	No	If provided, it must use yyyy-mm-dd format and be on or before the End date.
End date	String/yyyy-mm-dd	No	If provided, it must use yyyy-mm-dd format and be on or after the Start date.
Image URL	String/Text	No	You can add only one image per twin during a bulk import operation. If the twin has existing images, this image will be the new default.
Create data carrier?	String/Text	No	Use Y to create the default data carrier with default options. Leave blank to skip data carrier creation.
Attribute label	String/Text	No	Optional custom attributes enable you to add properties and values that pertain to your promotional asset.You can add up to four custom attribute name/value pairs during bulk import.
Value	String/Text	No*	* Required if the corresponding attribute label is provided.

Troubleshooting

If you experience problems while using Illuminate, you can try the solutions here or contact Digimarc support.

The GTIN-14 must have a valid check digit

If you see this message while creating a digital twin, confirm that the GTIN you're entering is correct. See the
🔗 Check digit calculator on the GS1 website for more information.

Can't perform some actions on a mobile device

The Illuminate Platform is intended for use on desktop computers and large tablets. Functionality is limited to view-only for devices with screens smaller than 601 x 1280 px.

Create engagement button isn't available

If your account has no available digital twins that were configured with a QR code, the **Create engagement** button is hidden. To resolve this, you can:

- create at least one digital twin with a QR code
- remove an existing digital twin from an active engagement
- deactivate an engagement that uses a digital twin

Digital twin is in another engagement

Engage displays this alert if any of the digital twins in the engagement are included in an *active* engagement. Expand the view to show the digital twins in the engagement. The digital twin that prompted the alert is displayed in red text. Hover the mouse over the digital twin to see the alert in a tooltip.

To remove the alert, you can:

- remove the digital twin from its active engagement
- deactivate the active engagement

> **Note**
> Digital twins can be in multiple draft and inactive engagements. You only need to remove the digital twin from its active engagement (or deactivate the engagement) if you want to activate another engagement that includes that twin.

Digimarc Support

For help using the Illuminate Platform, contact Digimarc Support or create a support request.

- ↗ Digimarc Support Website
- Send email to Digimarc Support

Create a Support Request

You can request support from within Illuminate. If you're unable to log in, use one of the methods above.

To create a support request:

1 Click the Help icon (⑦) in the upper right corner of any page. A panel opens on the right.

2 Click **Create Support Ticket**.

3 In the **I need help with** drop-down list, select the subject.

4 Type a brief **Summary** of the problem or question.

5 Type a more detailed **Description** of the problem or question. Be as thorough and detailed as possible so we can better assist you.

6 Click **Submit**. A Digimarc representative will contact you soon.

Glossary

barcode

The generic term for an optically machine-readable pattern that encodes data in a way that is generally not recognizable to human observation. Barcodes include one-dimensional symbols that encode data into a machine-readable pattern of adjacent, varying width, parallel, dark rectangular bars and pale spaces, and 2-Dimensional Symbols that encode data in the X and Y-axes (sometimes referred to as a 2D barcode), for example, in the case of a QR Code, Data Matrix, and Digimarc digital watermarks.

CMP

Consent Management Platform

CNAME

A canonical name (CNAME) is a type of database record in the Domain Name System (DNS) that "maps" a nickname (or alias) for one domain to another domain. This enables web traffic from QR code scans for a digital twin to be routed to Illuminate.

consumer scan

A consumer in the real world uses their mobile phone or tablet to scan the QR code on a product or package. Modern smartphone cameras automatically recognize QR codes and present the configured destination URL on the screen.

context

Most digital twin and analytics filters have two components, where the first sets the context for the second. Examples include: is one of and is not one of.

data carrier

Data carriers are graphical elements that embed or "carry" data, such as a website URL. QR codes and digital watermarks are examples of data carriers.

default domain

The domain configured for the account that provides the base URL when creating a QR code from the default settings.

destination URL

The web site (URL) to which a consumer is directed after a successful scan. You set the destination URLs when you create or edit an engagement.

device language

The primary language set for the device.

Digimarc digital watermark

A novel data carrier that encodes data in media in ways that are generally imperceptible to people, permitting the carrier to be repeated many times over the surface of the Enhanced media. It delivers unprecedented ease of use, reliability, and efficiency in identifying the media due to massive mathematical and graphical redundancy.

digital twin

A digital counterpart of a physical product comprising events and attributes from and about the product. The behavior of the digital twin is customized to deliver an experience that benefits customers and brands across a wide variety of digital applications.

digital watermark

In this guide, digital watermark refers specifically to the Digimarc digital watermark.

engagement

A collection of rules that send a consumer to a specific destination URL (experience), depending on the context and parameters. An engagement runs when a consumer uses a mobile phone or tablet to scan the associated data carrier typically on the product's package, hang tag, label, or promotional asset.

GS1 Digital Link

per GS1: GS1 Digital Link helps barcodes and other data carriers become web links - connecting a product's unique identity to online sources of real-time information that brands control.

GTIN

Global Trade Item Number used by GS1 members to identify trade items (products).

link format

When Engage embeds a URL into a QR code for a digital twin, it can do so using one of two link formats: GS1 Digital Link or a short URL.

metadata

Data that provides information about other data.

product variant

A product variant digital twin is a digital twin for a product variant. The variant's digital twin has the same primary identifier as its primary twin but with some difference, such as package size or additional marketing declaration.

QR code

A two-dimensional barcode (data carrier) that can store information such as a URL, contact information, or other information.

scan

The action taken by a consumer using the camera on their smartphone or tablet to view a QR code. When the camera detects the QR code, it displays a website URL, which provides the starting point for the web experience.

scan country

The country in which a consumer scanned a product's QR code with their mobile device.

scan destination

The scan destination is the website where Illuminate sends the consumer after they scan a product with their mobile device, provided the device meets the criteria (location, language, and so on) for the engagement.

segment

A segment groups filtered data in meaningful ways, such as by scanning user type (new versus returning).

short URL

A combination of a short domain (such as example.com) and a globally unique, automatically generated identifier.

snackbar

A small, non-modal dialog that displays feedback about the current operation. It sometimes includes a button or other control, such as a Close (X) icon.

unmatched

Most engagement types include a default destination for consumers who don't meet the criteria for the designated scan destinations. This could apply to device languages, countries, or digital twins that don't match the engagement's scan destination criteria.

untracked users

Users who scan products with their mobile devices but who opt not to share private data with Digimarc.

Urchin Tracking Module (UTM)

Parameters used by marketing departments to track the effectiveness of online campaigns.

validation

The process of checking that the data carried in a Digimarc digital watermark is both accurate and consistent. Also called verification.

variant

A variation of a product, such as a special event edition or holiday flavor.

verification

The process of checking that the data carried in a Digimarc digital watermark is both accurate and consistent. Also called validation.

web experience

The web-based experience a consumer has after scanning a QR code and tapping the link that's presented onscreen.